TOTAL ENVIRONMENTAL RESTORATION CONTRACT

2000 ISLANDWIDE SI/IRA/RI REPORT

AMAKNAK/UNALASKA ISLANDS, ALASKA

FINAL AUGUST 2001

Alaska District

JACOBS ENGINEERING GROUP INC.

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AMAKNAK/UNALASKA ISLANDS, ALASKA

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ABBREVIATIONS

AAC	*Alaska Administrative Code*
ACM	asbestos-containing materials
ACMP	Alaska Coastal Management Program
ADEC	Alaska Department of Environmental Conservation
AOPC	areas of potential concern
AST	aboveground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene and xylenes
CDQR	Chemical Data Quality Report
CFR	Code of Federal Regulations
CoC	chain-of-custody
CRSA	coastal resource service area
cy	cubic yards
DOD	Department of Defense
DOT	Department of Transportation (Alaska)
DPW	Department of Public Works
DQO	data quality objective
DRO	diesel-range organics
EPA	U.S. Environmental Protection Agency
FMGS	Fort Mears Gasoline Station
FSP	Field Sampling Plan
FUDS	formerly used defense sites
GC	gas chromatography
GC/MS	gas chromatography/mass spectroscopy
GPS	global positioning system
GRO	gasoline-range organics
HC	Humpy Cove
HCD	Humpy Cove Dispensary
HCL	Humpy Cove Latrine
HCPP	Humpy Cove Power Plant
HDPE	high-density polyethylene

ABBREVIATIONS
(continued)

IRA	Interim Removal Action
Jacobs	Jacobs Engineering Group Inc.
LCS	lab control samples/spikes
LEL	lower explosive limit
LQAPP	Laboratory Quality Assurance Project Plan
LSA	Little South America
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MS	matrix spike
MSD	matrix spike duplicates
MW	monitoring well
ND	nondetect
NFA	no further action
NOB	Naval Operating Base
NPS	National Park Service
OBS	oil burning specifications
OC	Ounalashka Corporation
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PID	photoionization detector
PLD1	Port Levashef Drum Group 1
PLD2	Port Levashef Drum Group 2
PLD3	Port Levashef Drum Group 3
PLD4	Port Levashef Drum Group 4
POL	petroleum, oil, and lubricants
ppm	parts per million
PVC	polyvinyl chloride
QA	quality assurance
QAPP	Quality Assurance Project Plan
QAR	quality assurance representative
QC	quality control
RA	Remedial Action

ABBREVIATIONS
(continued)

RI	Remedial Investigation
ROE	right-of-entry
RRF	relative response factors
RRO	residual-range organics
SEC	Southeast Construction
SHPO	State Historic Preservation Office
SI	Site Investigation
SIM	selective ion monitoring
SOP	standard operating procedures
SQL	sample quantitation limit
SVOC	semivolatile organic compound
TAH	total aromatic hydrocarbons
TAqH	total aqueous hydrocarbons
TDU	thermal desorption unit
TED	transformer extraction device
TERC	Total Environmental Restoration Contract
TOC	total organic carbon
TP	test pit
UCL	upper confidence level
USAED	U.S. Army Engineer District, Alaska
UST	underground storage tank
VOC	volatile organic compound
WRCC	Western Regional Climate Center
WWII	World War II
µg/L	micrograms per liter
>	greater than
<	less than
°F	degree Fahrenheit

EXECUTIVE SUMMARY

This report presents the findings and data results of field activities performed at 52 general areas, consisting of 73 individual sites, during the 2000 field season at Formerly Used Defense Sites (FUDS) on Amaknak and Unalaska Islands, Alaska for the U.S. Army Engineer District, Alaska (USAED). Jacobs Engineering Group Inc. (Jacobs) performed the fieldwork for the USAED under the Total Environmental Restoration Contract (TERC) DACA 85-95-D-0018, Task Order No. 02 from August through November 2000. The field activities included Site Investigations (SIs), Remedial Investigations (RIs), and Interim Removal Actions (IRAs).

The scope of work detailed in the 2000 Islandwide Work Plan was not conducted at four sites and is recommended for the 2001 field season. Of the remaining 69 sites investigated during the 2000 season, 42 sites are recommended for no further action (NFA), four sites are recommended for NFA with institutional controls, 21 sites are recommended for some form of further action (two of which also include institutional controls), and two sites are recommended for NFA pending eligibility issues. The conclusions reached for the 73 sites are summarized in Table ES-1. Brief descriptions of the recommended further actions and/or institutional controls follow.

ES.1 UNDERGROUND STORAGE TANKS 2664 AND 2667

NFA is recommended for underground storage tanks (USTs) 2664 and 2667; however, residual contamination remains in the underlying bedrock. Therefore, the levels of institutional controls required to manage the residual contamination should be coordinated between the USAED, Alaska Department of Environmental Conservation (ADEC), and the property owner.

ES.2 UST 3260

Limited further action is recommended for this site due to one soil diesel-range organics (DRO) result that marginally exceeds the calculated site-specific Method 3 regulatory criteria and due to the contaminants detected in the creek sediment.

Table ES-1
Recommendations for Amaknak/Unalaska Island Sites
Based on 2000 Field Activities

Report Section	Site Name	Recommendations
5.1	UST 2674	NFA
5.2	USTs 2664 AND 2667	NFA, Institutional Controls
5.3/7.1	UST 3260	Further Action
5.4	UST 3465	NFA
5.5	UST 3475	NFA
5.6	USTs 2762A AND 2762B	NFA, Institutional Controls
5.7	USTs 2766A AND 2766B	NFA
5.8	UST 3665	NFA
5.9	UPPER UNALASKA VALLEY 165TH ROAD AND UGADAGA ROAD (3760 and 3860)	NFA
5.10/7.2	UST 3065	Further Action, Institutional Controls
5.11	UST 3075	Further Action, Institutional Controls
5.12/7.3	LITTLE SOUTH AMERICA (LSA) SITES	
	LSA AST	NFA
	LSA Drums	Further Action
	Building 1154	NFA, Institutional Controls
	LSA Latrine 7	NFA
	Building 1205	NFA
	LSA Latrine 1	Further Action
	Building 1050	NFA
	Building 1128	NFA
	Building 1245	NFA
5.13	BUILDING 627 STEAM PLANT VAULT AND POL SITES	NFA pending resolution of eligibility issues
5.14	HUMPY COVE (HC)	
	HC Power Plant	NFA, Institutional Controls
	HC Dispensary	NFA
	HC Latrine 1	NFA
	HC Latrine 3	NFA
5.15	SUMMER BAY AST AND 55-GALLON DRUM	Conduct scope detailed in 2000 Work Plan
5.16/7.4	SUMMER BAY TRANSFORMERS, UTILIDORS, AND DRUMS	Further Action
5.17/7.5	MT. BALLYHOO/FORT SCHWATKA USTs AND TRANSFORMERS	
	Transformer Vaults	Further Action
	Bomb Shelter UST	NFA
	Building C UST	NFA, Institutional Controls
	Building H UST	NFA
	Ballyhoo Drums	NFA
	Building B UST	Further Action
5.18	BALLYHOO SPIT TANK FARM AND TANK FARM TO AIRPORT PIPELINE	Further Action
5.19/7.6	BALLYHOO BATTERIES AND STAND-ALONE TRANSFORMER	Further Action
5.20/7.7	PORT LEVASHEF DRUM GROUPS	Further Action
5.21	FORT MEARS LANDFILL (SOUTH)	NFA
5.22	FLOATING PUMPHOUSE, ILIULIUK LAKE, AND UNALASKA LAKE	
	Iliuliuk Lake	Further Action
	Unalaska Lake	Further Action
5.23	SUBMARINE BASE/SHIP REPAIR FACILITY	NFA
5.24/7.8	FORT MEARS LANDFILL (NORTH) AND GASOLINE STATION	
	Fort Mears Landfill (north)	Further Action
	Fort Mears Gas Station	NFA
5.25	CROWLEY DOCK	NFA
5.26	MILITARY FUEL DISTRIBUTION CENTER - 638	NFA

Table ES-1 (continued)
Recommendations for Amaknak/Unalaska Island Sites
Based on 2000 Field Activities

Report Section	Site Name	Recommendations
5.27	FORMER POWER HOUSE BUILDING – BLDG 854	NFA
5.28	FORMER PEST CONTROL SHOP – BLDG 852, AND FORMER PAINT SHOP – BLDG 751	NFA
5.29	FORMER REFRIGERATION MAINTENANCE SHOP – BLDG 871	NFA
5.30	FORMER LAUNDRY FACILITY – BLDG 727	NFA
5.31	VARIOUS BUILDINGS AT THE SUBMARINE BASE	NFA
5.32/7.9	SUSPECTED MERCURY CONTAMINATION AT THE AIRPORT	Further Action
5.33	UNDERGROUND TRANSFORMER VAULTS AT THE FORMER NAVAL AIR STATION	NFA pending resolution of eligibility issues
5.34	NAVAL LAUNDRY FACILITY	NFA
5.35/7.10	FORMER OIL AND LUBE STORAGE	Further Action
5.36	FORMER USTs ALONG POWER HOUSE ROAD	Further Action
5.37	GENERALS HILL UTILIDORS AND PIPELINE CORRIDORS	Conduct scope detailed in 2000 Work Plan
5.38/7.11	DRY CLEANING AND LAUNDRY FACILITIES (BLDG 2577 AND 2563), AND OTHER UNALASKA GARRISON FACILITIES	
	Building 2577	NFA
	Building 2563	Further Action
5.39	ARMY GARRISON POWER GENERATION FACILITIES	Further Action
5.40	POTENTIAL POL IMPACTED SOIL AT THE CORNER OF AIRPORT BEACH ROAD AND CAPTAINS BAY ROAD	NFA
5.41	PYRAMID VALLEY TO CROWLEY DOCKS UTILIDORS	Conduct scope detailed in 2000 Work Plan
5.42/7.12	DRUM DUMP AND WWII DEBRIS PILE ALONG CAPTAINS BAY ROAD	Further Action
5.43	MORRIS COVE/MANCIL LAKE AREA	NFA
5.44	HUMPY COVE AREA	NFA
5.45	LITTLE SOUTH AMERICA SUSPECTED DRUM DUMPS	NFA
5.46	ABANDONED ROMMEL STAKES	NFA
5.47/7.13	UNALASKA VALLEY BUILDINGS	
	Ski Bowl Generator Building (previously identified as Building 3165)	Further Action
	Building 3695	NFA
	Building 2569	NFA
5.48	BROADWAY AVENUE TRANSFORMER POLE	NFA
5.49	PRE-WWII TANK FARM AREA TRENCH	Conduct scope detailed in 2000 Work Plan
5.50	PRE-WWII MONITORING WELL 11 RE-DRILLING	NFA
5.51	TUNNEL CLOSURES	NFA
5.52	ABANDONED TRANSFORMER CANS	NFA

Notes: NA = Not applicable POL = Petroleum, oil, and lubricants
NFA = No further action WWII = World War II

Due to the wetland nature of the site, excavation work was not performed during the 2000 field season and is not recommended for future work. Excavation activities would be problematic due to the amount of surface water and shallow groundwater at the site and the poor condition of the site access road. In addition, the one soil result that exceeds the calculated Method 2 ingestion criteria for DRO was collected at one foot below ground surface (bgs).

Surface water in the downgradient creek and groundwater in the two downgradient well points do not exceed 18 *Alaska Administrative Code* (AAC) 75, Table C groundwater cleanup levels or 18 AAC 70 surface water cleanup levels. In addition, no parameters at the site exceed the calculated Method 3 migration to groundwater regulatory criteria. Since no parameters currently exceed the migration to groundwater criteria and contaminants have not migrated to the groundwater or surface water downgradient of the site, it is reasonable to conclude that contaminant migration is not occurring.

In order to ensure that contamination has not migrated off-site and will not migrate in the future, it is recommended that an additional well point be placed to the south of Building 3265 and that the three well points be sampled annually over the next two years. Additionally, it is recommended that a creek sediment and surface water sample be collected both upstream of the 2000 sample location (north of Building 3260) to represent the creek's natural condition and further downstream of the 2000 sample location to determine if contaminants have migrated to the creek.

If no contaminants are detected in the downgradient well points or in the creek sediment or surface water after sampling for two years, then the site will be recommended for NFA.

ES.3 USTs 2762A AND 2762B

Although DRO concentrations exceeding ADEC Method 2 cleanup levels remain in site soils, the presence of the building foundation prevented further soil excavation. Therefore, it is recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

ES.4 BUILDING 3760

Further action is recommended for Building 3760 due to the elevated levels of 2-Butanone detected in the sediment samples. Additional samples should be collected to confirm the presence of 2-Butanone, and if required, appropriate cleanup levels developed to address the contamination.

ES.5 UST 3065

Two soil samples contained DRO concentrations exceeding Method 3 regulatory levels. However, due to the shallow groundwater (approximately four feet bgs), proximity of the creek, and presence of the building foundation, future excavation activities at the site would be problematic, and are not recommended. Further excavation in the area would serve to disturb the contaminated soil and potentially entrain it in the groundwater and cause contaminant migration to the creek.

Surface water in the downgradient creek and groundwater in the well point immediately adjacent to the creek do not exceed 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. In addition, the sediment in the creek does not exceed the sediment regulatory criteria. Since contaminants have not migrated to the groundwater, surface water, or sediment downgradient of the site in 50 years, it is unlikely that they will migrate at this time.

In order to ensure that contamination has not migrated off-site and will not migrate in the future, it is recommended that the following actions be taken:

- Sample the existing well point annually over the next two years. It is anticipated that the DRO level detected in the well point during the 2000 field season will decrease without excavation activities occurring prior to sampling.
- Collect a creek sediment and surface water sample in the vicinity of the 2000 sample location annually over the next two years to monitor potential contaminant migration to the creek.
- Conduct two hand augers between the building foundation and the creek to determine the lateral extent of the potential contamination at the site.

If no contaminants are detected in hand auger samples, or in the well point or in the creek sediment or surface water after sampling for two years, then the site will be recommended for NFA.

It is also recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

ES.6 UST 3075

An additional groundwater sample is recommended to confirm that DRO concentrations are below groundwater cleanup levels. Since Hanby™ field screening results indicated the presence of contamination beneath Building 3075, it is recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

ES.7 LITTLE SOUTH AMERICA

Two Little South America (LSA) sites are recommended for further action. A third site is recommended for NFA with institutional controls. All three sites are discussed in the following subsections.

ES.7.1 LSA Drums

Further action is recommended for Drum Location #4 due to the chromium and selenium results above regulatory levels and the calculated cumulative risk above limitations. It is recommended that the soil in the immediate vicinity of Drum Location #4 be removed by hand tools, containerized, and shipped off-site for disposal. Confirmation samples collected after soil removal will confirm that elevated metals at the site have been removed. It is also recommended that samples be collected at all four drum sites to test for the presence of 2-Butanone, and if required, appropriate cleanup levels will be developed to address the contamination.

ES.7.2 LSA Building 1154

DRO concentrations were detected above the Method 2 regulatory criteria in a soil sample collected from the floor of the Building 1154 UST location. Since the remaining contamination is located in the fissures of bedrock, it would not be feasible to be removed and therefore, it is also recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

ES.7.3 LSA Latrine 1

Further action is recommended for the Latrine 1 Site due to the fuel results above regulatory levels. The severity of the slope immediately surrounding the site (see Appendix A for photographs of the site) and State Historic Preservation Office (SHPO) concerns preclude tank and soil removal. Therefore, additional site characterization is necessary to determine if contamination has migrated from the site in concentrations that exceed regulatory levels. The one sample collected during the 2000 field season was collected immediately beneath the tank and represents the "worst case" sample. It is recommended that additional downgradient samples be collected with a hand auger to determine the amount of contamination in the area and if contaminants have migrated from the immediate vicinity of the tank. Monitoring wells may be installed in the hand augered borings if groundwater is encountered. If installed, monitoring well(s) would be sampled for 2 years to determine if contaminants are migrating from the site.

ES.8 HUMPY COVE POWER PLANT

Confirmation samples collected from the excavation of the Power Plant UST revealed residual DRO concentrations; however, further excavation could not be conducted due to the proximity of groundwater. It is therefore recommended that the level of institutional controls required to manage the residual DRO contamination be coordinated between the USAED, ADEC, and the property owner.

ES.9 SUMMER BAY TRANSFORMERS, UTILIDORS, AND DRUMS

The three intact drums with contents should be removed from the site and analytical samples collected beneath the drums to ensure that contaminated soil is not present. After removal of the drums (and any residual contamination present) and the aboveground storage tank (AST) and drum at the observation station, no further action is recommended for the Summer Bay area.

ES.10 MT. BALLYHOO/FORT SCHWATKA USTS AND TRANSFORMERS

Two Mt. Ballyhoo/Fort Schwatka sites are recommended for further action. The sites are discussed in the following subsections. A third site is recommended for NFA with institutional controls.

ES.10.1 Transformer Vaults

Further action is recommended for all three of the transformer vaults due to polychlorinated biphenyls (PCBs) detected in each vault and the fuels detected in the Building B vault that are not attributed to biogenic interference. It is recommended that the transformer vaults be dry decontaminated by shoveling the accumulated soil from within each vault and transporting the soil off-site for disposal. It is also recommended that the vaults be permanently covered after dry decontamination. Covering of the vaults will require SHPO and National Park Service (NPS) coordination. Hand auger samples collected from a location immediately adjacent to the transformer vaults are also recommended to determine if PCB contamination has migrated from inside the vaults.

ES.10.2 Building C UST

One soil sample collected from the Building C UST contained a DRO concentration that marginally exceeded the Method 2 regulatory criteria. It is recommended that the level of institutional controls required to manage the residual contamination be coordinated between the USAED, ADEC, and the property owner.

ES.10.3 Building B UST

Further action is recommended for the Building B UST site due to the DRO result above regulatory levels. The severity of the slope that the UST is located on (see Appendix A for photographs of the site) and SHPO concerns preclude tank and soil removal. Therefore, additional site characterization is necessary to determine if contamination has migrated from the site in concentrations that exceed regulatory levels. The one sample collected during the 2000 field season was collected immediately beneath the tank and represents the "worst case" sample. Field observations only noted a slight fuel odor in the vicinity of the sample; therefore, it is not believed that a large volume of contamination is present at the site. It is recommended that additional downgradient samples be collected with a hand auger to determine the amount of contamination in the area and if contaminants have migrated from the immediate vicinity of the tank. Monitoring wells may be installed in the hand augered borings if groundwater is encountered. If installed, monitoring well(s) would be sampled for 2 years to determine if contaminants are migrating from the site.

ES.11 MT. BALLYHOO SPIT TANK FARM AND TANK FARM TO AIRPORT PIPELINE

An assessment of the underlying groundwater is recommended due to the presence of a sheen observed in the second test pit (TP-6). Since groundwater was not encountered in the area of the former revetments, a minimum of two well points should be installed where groundwater is encountered and sampled for DRO, gasoline-range organics (GRO), benzene, toluene, ethylbenze, and xylenes (BTEX), and polynuclear aromatic hydrocarbons (PAHs).

ES.12 BALLYHOO BATTERIES AND STAND-ALONE TRANSFORMER

Further action is recommended for this site due to fuel, metals, and PCB contamination. It is recommended that the soil underlying the former transformer and batteries be excavated and removed from the site. Confirmation samples are recommended to confirm the removal of the fuel, metals, and PCB contamination. In order to remove the underlying soil, the wood foundation that the transformer and batteries were previously placed on will also need to be removed. SHPO and NPS coordination will be required before this removal action can begin.

ES.13 PORT LEVASHEF DRUM GROUPS

The Port Levashef Drum Group 2 Site is recommended for limited further action. Due to the elevated cadmium detection, it is recommended that another groundwater sample be collected at the same location to determine if cadmium concentrations are elevated at the site. Because cadmium was not detected in the soil samples collected from the Drum Group 2 sampling grid, it is believed that the cadmium detection was a sampling anomaly. NFA is recommended for the remainder of the Drum Group 2 site.

Further action is recommended for the Port Levashef Drum Group 3 Site. Due to the metal exceedances, it is recommended that the sample grid be expanded because the metal detections were on the periphery of the grid. Samples should be collected from the edge of the expanded grid and from within the center of the year 2000 grid because this area was not sampled during the 2000 season. The screening grid should be expanded until the lateral extent of metals contamination is determined. Alternatives to remove soils that exhibit metals concentrations above regulatory criteria will be recommended based on the area and potential depth of contaminated soil and location of the subsurface landfill/drum dump. In addition, groundwater monitoring is recommended at one site for 2 years to determine if metals are migrating off-site.

ES.14 FLOATING PUMPHOUSE, ILIULIUK LAKE

Additional sediment sampling is recommended on Iliuliuk Lake, particularly near the pumphouse due to the presence of DRO and PAH in the 2000 analytical results. A sampling grid should be implemented to define where screening criteria for DRO and PAHs are exceeded.

ES.15 FORT MEARS LANDFILL (NORTH)

Limited further action is recommended for the Fort Mears Landfill (north) site. Additional groundwater sampling is recommended to confirm the previous results for both arsenic and selenium, which exceed the groundwater cleanup levels. Due to the lead exceedances in the beach sediment samples, it is also recommended that another sediment sample be collected to

confirm the 2000 results. Samples should also be collected to the east of the site to determine sediment background lead levels in the immediate vicinity. Because lead was not detected in the monitoring wells, it is believed the lead detected in the beach sediment was a sampling anomaly or reflects naturally occurring background levels.

ES.16 SUSPECTED MERCURY CONTAMINATION AT THE AIRPORT

Based on the findings of the SI and the detected mercury, further action is recommended at the site. The floor drain where mercury was detected should be traced, if possible, to determine the outfall. A sample should be collected from the outfall to determine if mercury migrated from the former Avionics Weather Building via the drain. In addition, samples should be collected along the edge of the building's foundation at areas likely to contain mercury contamination. Soils that are impacted by mercury should be removed from the site. If warranted, the building's drain should be cleaned as well to remove existing mercury contamination.

ES.17 FORMER OIL AND LUBE STORAGE

Based on the findings of the SI, investigative test pits are recommended in the vicinity of the documented magnetic anomalies. The recorded global positioning system (GPS) coordinates should be used to locate the magnetic anomalies in the future. If no contamination or buried drums are discovered, then no further action at the site will be recommended.

ES.18 FORMER USTS ALONG POWER HOUSE ROAD

Further research is recommended to locate the position of the former USTs, followed by two test pits to determine if subsurface contamination is present.

ES.19 LAUNDRY FACILITIES (BLDG 2563)

The presence of the half-inch pipe along the north end of the former Building 2563 foundation and the property owner's assertion that USTs have not been previously removed at the site indicate that a UST may still be present at the site. One test pit is recommended to the north of the foundation to determine if a UST is present at the site. If the test pit indicates the

presence of a UST or contamination, then additional work may be warranted based on a determination of FUDS eligibility. If no contamination or UST is discovered in the test pit then the site will be recommended for no further action. Prior to conducting any work at Building 2563, a signed Right-of-Entry (ROE) Access Permit must be obtained from Mr. DeMeo (property owner) and SHPO clearance must be granted.

ES.20 ARMY GARRISON POWER GENERATION FACILITIES

Further action is recommended at the Army Garrison Power Generation Facilities. Surface samples should be collected at random locations and analyzed for PCBs to evaluate exposure to site contaminants by children at the adjacent school.

ES.21 DRUM DUMP ALONG CAPTAINS BAY ROAD

It is recommended that drums containing materials be removed from the area. Areas surrounding empty drums should be investigated. If stressed vegetation, stained soil, or other evidence of contamination is noted, then field screening should be performed to confirm or deny the presence of contamination. If soil contamination is discovered, then limited IRAs should be performed.

ES.22 SKI BOWL GENERATOR BUILDING

Limited further action is recommended for the Ski Bowl generator building site (formerly referred to as Building 3165). Although high density polyethylene (HDPE) pipe was encountered in the 2000 excavation, the contamination detected appears to be related to the former building's UST. Because PAHs were not analyzed for at the site, Method 2 or Method 3 regulatory criteria cannot be applied to the site. In addition, only one total organic carbon (TOC) sample was collected for the site. Based on the one TOC sample, it appears that the site can be closed with no further excavation work if PAHs are collected from within the contaminated area and additional TOC data is collected from the site. Therefore, it is recommended that hand auger samples be collected in the vicinity of the limits of the 2000 excavation and analyzed for DRO, RRO, and PAHs. In addition, two additional TOC

samples should be collected in the vicinity of the site so that site-specific Method 3 regulatory criteria can be re-calculated for the site using more than one TOC sample.

1.0 INTRODUCTION

This report presents the findings and data results of field activities performed during the 2000 field season at formerly used defense sites (FUDS) on Amaknak and Unalaska Islands, Alaska for the U.S. Army Engineer District, Alaska (USAED). Jacobs Engineering Group Inc. (Jacobs) performed the fieldwork for the USAED under the Total Environmental Restoration Contract (TERC) DACA 85-95-D-0018, Task Order No. 02 from August through November 2000. The field activities included Site Investigations (SIs), remedial investigations (RIs), and interim removal actions (IRAs). Many of the SI/RI/IRA activities were recommended in the *Comprehensive Remedial Investigation Report* (USAED 2000a). The *2000 Islandwide Work Plan Addendum* (USAED 2000b) details the planned activities for the 2000 Islandwide work. Field activities were planned at 52 general areas, consisting of 73 individual sites, during the 4-month effort located in and around the City of Unalaska and the community of Dutch Harbor on Unalaska and Amaknak Islands, respectively. Figure 1-1 presents the site vicinity map for the Unalaska and Amaknak Islands area. Results for each of the investigations and actions are summarized in this SI/IRA/RI report.

This report is organized into the following sections:

- Section 1 presents general information regarding the Islandwide Project including previous investigations, project objectives, data quality objectives (DQOs), and an overview of project activities.
- Section 2 discusses the environmental conditions for Amaknak and Unalaska Islands including climate, geology, hydrogeology, and history of the area.
- Section 3 discusses the methodology used to evaluate the 2000 analytical data and details the regulatory framework the 2000 analytical results were compared to.
- Section 4 contains a summary of the field procedures used during the 2000 field season.
- Section 5 presents a site-specific summary table, briefly discusses previous activities at each site (a more thorough discussion of previous activities is included in the 2000 Islandwide Work Plan), describes the 2000 fieldwork conducted at each site, presents the analytical data collected at each site, and reaches a conclusion for each site.
- Section 6 presents information on the project laboratories, laboratory methods, and the analytical quality assurance/quality control (QA/QC) program. Sample handling procedures and data quality assessment are also presented.
- Section 7 presents a summary table containing the recommendations for all the sites and presents the conclusions for the further action sites.

- Section 8 lists the references.
- Appendix A presents the Islandwide photolog.
- Appendix B presents miscellaneous field forms.
- Appendix C provides the soil boring and monitoring well logs.
- Appendix D presents the Chain-of-Custody (CoCs), the analytical data summary table, and a complete copy of the analytical data.
- Appendix E presents the groundwater sampling forms.
- Appendix F provides a copy of the field log books.
- Appendix G presents an index of all the global positioning system (GPS) waypoints collected during the Islandwide activities.
- Appendix H presents the chromatograms used to determine biogenic interference at specific sites.
- Appendix I contains the waste manifests generated during the field effort.
- Appendix J contains the Method 3, hazard index, and cumulative risk calculation sheets.

1.1 SUMMARY OF PREVIOUS INVESTIGATIONS AT AMAKNAK AND UNALASKA ISLANDS

Previous investigations and studies have been conducted on Amaknak and Unalaska Islands to support various interests including those of Federal, State, and private parties. The USAED investigations and studies on Amaknak and Unalaska Islands were initiated in January of 1986. The objectives of the USAED investigations were the following:

- to identify and confirm unknown source areas
- to delineate known source areas
- to perform large-scale World War II (WWII) building demolition and debris removal
- to perform IRAs and remedial actions to mitigate or clean up contamination
- to identify potentially responsible parties

A detailed listing of previous investigations completed by the USAED and other parties since 1986 is presented in Table 3-1 of the *FUDS Project Management Plan*, Amaknak and Unalaska Islands (USAED 1999). This table presents key historical environmental reports, the contractors and clients completing the activity, and a summary of the investigation

BROAD BAY

MAKUSHIN VALLEY

UNALASKA BAY

ULAKTA HEAD

FORT SCHWATKA

MOUNT BALLYHOO (ELEVATION 1650 FT.)

AMAKNAK ISLAND

FORMER NAVAL AIR STATION

BALLYHOO SPIT TANK FARM

HOG ISLAND

UNALASKA/DUTCH HARBOR AIRPORT

CITY DOCK

DUTCH HARBOR

PRE WW II TANK FARM

FORMER NAVAL OPERATING BASE

FORMER FORT MEARS ARMY GARRISON #1

DELTA WESTERN FUEL DOCK

ROCKY POINT

ILIULIUK BAY

DEVILFISH POINT

EXPEDITION ISLAND FORMER SUBMARINE BASE

UNISEA

MARGARET BAY

ILIULIUK HARBOR

AMERICAN PRESIDENTS LINE DOCK

STRAWBERRY HILL

HILL 400

OLD UNALASKA TOWNSITE

LITTLE SOUTH AMERICA

MOUNT NEWHALL (ELEVATION 1600 FT.)

CITY OF UNALASKA

NATEEEKIN BAY

SOUTH CHANNEL ILIULIUK BAY

CITY OF UNALASKA

UNALASKA LAKE

NORTH

MORRIS COVE

MANCIL LAKE

SUMMER BAY

HUMPY COVE

SECOND PRIEST ROCK

MOUNT COXCOMB (ELEVATION 1700 FT.)

CITY OF UNALASKA LANDFILL

SUMMER BAY LAKE

0 2000 4000 8000

SCALE IN FEET

CAPTAINS BAY

RESERVOIR

CROWLEY DOCK

PYRAMID VALLEY

GENERAL HILLS

PYRAMID PEAK (ELEVATION 2166 FT.)

ILIULIUK RIVER

ALASKA

AREA OF DETAIL

PORT LEVASHEF

UNALASKA ISLAND

SITE VICINITY AND LOCATION MAP

AMAKNAK AND UNALASKA ISLAND, ALASKA

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findings. The following subsections provide a summary of significant work conducted by the USAED starting in 1996.

1.1.1 1996 USAED Investigations

IRAs and RIs were conducted by USAED in the Dutch Harbor area in 1996. IRAs consisted primarily of decommissioning underground storage tanks (USTs) and performing related activities, and to a lesser extent removing and treating soils from three previously excavated locations (i.e., Margaret Bay stockpiles, Mount Ballyhoo area, and the Old Submarine Base).

USTs were decommissioned at Generals Hill, Margaret Bay, Fort Mears Gas Station, and Mount Ballyhoo. Fifty-six USTs were decommissioned, and about 3,370 loose cubic yards of soil were excavated from the UST locations and treated at the thermal desorption unit (TDU). An additional 1,250 loose cubic yards of soil from the Margaret Bay stockpiles, Mount Ballyhoo area, and the Old Submarine Base were also removed, transported, and treated.

RI-related activities were conducted at Margaret Bay and the Pre-WWII Tank Farm. The RIs included excavating test pits, collecting soil and groundwater samples, and installing and sampling well points at Margaret Bay and the Pre-WWII Tank Farm. In addition, at the Pre-WWII Tank Farm, marine sediment, indoor air, and product sampling was performed.

Analytical results from the 1996 IRAs and RIs were evaluated to determine the nature and extent of contamination and used to perform risk-based screenings.

1.1.2 1997 USAED Investigations

Field activities conducted in 1997 included site reconnaissance, SIs, RIs, and IRAs. The majority of the 1997 field activities focused on locating and decommissioning USTs and removing the USTs and soils potentially contaminated with petroleum hydrocarbons and their associated constituents. An IRA was also performed at Tar Pond B, where free product was recovered and contaminated soils were excavated and thermally treated. SI and RI activities were performed at several sites to supplement data collected and evaluated from

investigations performed in 1996. Additionally, SI and RI activities were performed at several areas with the intention of generating data to support future IRAs.

USTs were decommissioned at the following areas: Margaret Bay, Unalaska Valley, and Pyramid Valley. The decommissioned USTs were decontaminated (if necessary), cut up, and disposed of in the City of Unalaska Landfill. Soils from around and below the USTs and liquid contents found inside some of the USTs were removed and treated at the TDU or the wastewater treatment area, respectively.

1.1.3 1998 USAED Investigations

Environmental field activities were conducted at over 20 sites in 1998. The project included three major classes of activities. SI activities were performed to evaluate the potential for environmental impacts, and RI activities were performed to further characterize areas with known impacts. For IRA activities, primary and secondary contaminant sources such as USTs, an aboveground storage tank (AST), pipelines, and associated petroleum, oil, and lubricants (POL)-impacted soil were removed and disposed of. The activities and procedures performed in 1998 were discussed in the 1996 Work Plan (USAED 1996) and/or the 1998 Work Plan Addendum (USAED 1998a).

Initial site reconnaissance was performed at each area to allow field crews to identify existing site conditions and determine the most logical order for fieldwork associated with subsequent RI or IRA activities. Site reconnaissance at potential UST and pipeline areas included SI work using magnetometers and other non-intrusive means to detect ferrous metals in the subsurface. SI activities also focused on determining the presence and estimating the extent of contamination at selected areas in support of IRA activities.

RI activities involved advancing soil borings and installing monitoring wells (MW) at eight areas (RI drilling program). Data compiled from soil and groundwater samples collected during the RI were used to determine if an area should be recommended for additional IRA or no further action. Data, such as boring logs, well completion diagrams, and cross-section figures can be found in the 1998 SI/RI/IRA Report (USAED 1998b). The bulk of the 1998 RI

program focused on the Pre-WWII Tank Farm/Ptarmigan Flats Area and included excavation of test pits and installation of monitoring wells to delineate the extent and magnitude of Bunker C contamination in the area.

The scope of IRA activities included UST and associated piping removal, drum characterization and removal, disposal of contaminated liquids and sludge, soil removal and treatment, field screening, and sampling and analysis.

1.1.4 1999 USAED Investigations

The IRA that was initiated during 1998 at the Pre-WWII Tank Farm was continued in 1999. The IRA consisted of excavation, segregation, washing, and stockpiling operations. The scope of the continued IRA activities also included sampling and analysis.

1.2 PROJECT OBJECTIVES

The objectives for the Islandwide activities on Amaknak and Unalaska Islands in 2000 were listed in the *2000 Islandwide Work Plan* (USAED 2000b) and are presented below:

- Investigate areas of potential concern (AOPCs) identified in the Technical Status for Areas of Potential Concern table (USAED 1999) using site reconnaissance and SI techniques and thoroughly document site conditions and findings.
- Further characterize impacts to environmental media at sites identified through previous RIs.
- Remove primary contaminant sources including contents of petroleum storage tanks and related pipelines, electrical transformers, steel drums, and other WWII-era containers.
- Remove secondary contaminant sources, including impacted soil, sediments, and building debris.
- Document constituent concentrations remaining in soils at each of the removal locations with analytical samples.
- Evaluate groundwater quality where visibly impacted soils cannot be completely removed and groundwater was encountered, or where impacts are extensive and groundwater was thought to be shallow.

1.3 PROJECT DATA QUALITY OBJECTIVES

Project DQOs are summarized in Table 1-1 of the *2000 Islandwide Work Plan Addendum* (USAED 2000b). Table 3-1 presents a summary of risk-based screening concentrations that were used to determine if a site has contamination that exceeds applicable regulations.

The objectives of data collection on Amaknak and Unalaska Islands in 2000 were the following:

- Identify locations where physical indications of historic FUDS impacts exist.
- Make informed decisions based on field screening to determine what materials should be removed at IRA sites in order to meet cleanup goals.
- Document concentrations of contaminants remaining and/or achievement of cleanup goals following IRA activities with defensible analytical laboratory results.
- Establish constituent-of-concern concentrations that exist at SI locations and in waste materials with representative analytical samples.
- Confirm or generate defensible chemical information to support decision making at RI locations.
- Provide usable inputs for the performance of risk assessments at locations where the most restrictive regulatory cleanup criteria are not met or do not exist, as required.
- Evaluate fate and transport pathways and potential receptors.

1.4 OVERVIEW OF 2000 PROJECT ACTIVITIES

Environmental field activities were proposed at 52 general locations for 2000. The Islandwide activities included three key categories of activities. SIs were proposed to document current site conditions, support findings in previous reports, and evaluate the potential for environmental impacts in the area. IRAs were proposed to remove primary and secondary contaminant sources such as USTs, pipelines and associated POL-impacted soil, partially filled 55-gallon drums, and to potentially remove and dispose of batteries and transformers if identified during SIs. Finally, RIs were proposed to further characterize areas with known impacts.

Initial site reconnaissance was performed at each area to allow field crews to identify existing site conditions and determine the most logical order of fieldwork for areas that require

subsequent RI or IRA activities. Generally, SI activities were focused on documenting current site conditions and locating existing facilities and/or structures. SI activities at potential UST and pipeline areas included using magnetometers and other non-intrusive means to detect ferrous metals in the subsurface.

The scope of IRA activities included removal of UST and associated pipeline; drum characterization and removal; and contaminated soil, sludge, and water removal.

RI activities involved digging test pits, advancing soil borings, and installing monitoring wells. Data collected from sampling soil and groundwater during the RIs were used to determine if an area should be recommended for additional IRAs, Remedial Actions (RAs), or no further action.

2.0 SITE DESCRIPTION AND HISTORY

Detailed descriptions of Islandwide environmental settings are presented in detail in a number of places, including the *1998 Work Plan Addendum* (USAED 1998a). The following brief descriptions of the climate, history, and other pertinent topics are presented to assist in understanding the activities presented in this report.

2.1 CLIMATE

The northern maritime climate of the Aleutian Islands is characterized by fast moving weather systems and is known for wind, rain, fog, overcast skies, and cool temperatures. Summertime temperatures range from 50 degrees Fahrenheit (°F) to 60 °F, while winter temperatures average 25 °F to 35 °F. Extreme summer and winter temperatures of 85 and 10 °F, respectively, have been recorded. Wind speeds average 9.6 knots from the southwest with gusts over 100 knots recorded during winter storms (Alaska Coastal Management Program [ACMP] 1995).

During brief periods of cold winter weather, ice up to two inches thick may occur on Iliuliuk Bay and Captains Bay, although most other bays remain free of ice year round (ACMP 1995). Snow cover is present at various times between December and April. Measurable amounts of precipitation fall approximately 221 days a year, with mean annual precipitation averaging around 60 inches.

Vegetation on Amaknak and Unalaska Islands is typical of the Aleutians, consisting of grasses and herbaceous plants. Trees are not native to the islands, although a few trees have been introduced. Vegetative growth is prolific during the mild summer months, allowing tundra plants in sheltered areas to reach six feet in height. Degradation of the vegetation is often slow in the cool temperatures, resulting in a buildup of duff and peat.

2.2 REGIONAL GEOLOGY

Unalaska Island is the second largest island west of the Alaskan Peninsula and is approximately 1,200 square miles in area. Most of the island is ruggedly mountainous and the

coastline deeply indented by fjords (ACMP 1995). The island is located along the Aleutian arc volcanic chain that extends approximately 1,500 miles from the Alaska Peninsula southwesterly to the Kamchatka Peninsula in Siberia. Amaknak Island is much smaller at only 4 miles in length.

The generally mountainous topography of Amaknak and Unalaska Islands was formed by a variety of volcanic and glacial events. The coastline consists of rocky outcrops and deeply indented fjords. The city center of Unalaska rests on alluvial and beach sediments and is located at the head of Iliuliuk Bay and the mouth of the Iliuliuk River. The town spreads onto the surrounding hillsides and up Unalaska Valley to the southeast, as well as onto fill areas along the shorelines. Iliuliuk Bay and Harbor separate Amaknak and Unalaska Islands. The majority of relatively flat land on Amaknak Island has been developed for commercial purposes, as well as some housing. The topography of the area has controlled the development pattern and influenced the location and nature of environmental impacts.

Unalaska Island, like all other high mountainous islands of the Aleutian chain, was severely glaciated during the Pleistocene Epoch by glaciers that originated on the mountain slopes and radiated toward the ocean in all directions (Capps 1934). In the mountainous portions of the island, U-shaped valleys and cirques are common. Benches that slope gently seaward are perched at various elevations on the walls of the many glaciated valleys. Many cirques hang above the valley floors and contain lakes. The erosional forms now observed are minimally altered by post-glacial erosion and probably reflect late-stage Pleistocene glaciation (ACMP 1995). Semi-permanent snowfields are common above 2,500 feet in elevation. Surficial deposits exist in the alluvial or till-filled valleys and consist of an assortment of material derived from mechanical decomposition of rock, as well as ground moraine and various pyroclastics.

2.3 SURFACE WATER

Precipitation is the primary factor controlling the amount and availability of surface water sources on Amaknak and Unalaska Islands. The islands receive approximately 60 inches of precipitation annually. Surface water on the islands can occur as lakes, ponds, wetlands,

streams, and seasonal drainages. Stream drainage systems are often short and steep due to extreme topographic gradients. Streams with suitable gradients for anadromous fish may provide rearing habitats for various salmon and trout species. Numerous lakes are found within glacially eroded cirques high in the mountains of Unalaska Island. These lakes drain into the ocean through a series of streams. Intermittent drainages are abundant to accommodate large amounts of precipitation.

Main drainage systems in the Dutch Harbor area include the Shaishnikoff River drainage system at the head of Captains Bay and the Iliuliuk River drainage system. The Shaishnikoff River watershed encompasses approximately 20 square miles and forms the primary tributary to Captains Bay. Iliuliuk River drains Unalaska Valley and flows into Unalaska Lake. Unalaska Lake is a 95-acre lake and wetland area within the City of Unalaska, which drains into Iliuliuk Harbor. Pyramid Valley, the watershed for Pyramid Creek, is used as a source of drinking water for Unalaska. Surface water impoundments constructed in Pyramid Valley are the primary source of process and drinking water on Amaknak and Unalaska Islands. A secondary source of drinking and processing water is obtained from City water wells in lower Unalaska Valley. Although not currently used, surface water on Amaknak Island has been historically used as drinking water.

2.4 GROUNDWATER

Available groundwater is generally limited to low-lying, relatively flat areas where alluvial or glacial deposits may contain water. Groundwater may also occur in fractured bedrock. Relatively little is known regarding specific groundwater conditions on Amaknak and Unalaska Islands. However, observations and measurements from recent environmental actions on the island have resulted in a better understanding of groundwater conditions at specific areas of the islands. This knowledge can be used to infer larger scale groundwater conditions for Amaknak and Unalaska Islands.

Groundwater probably occurs in most or all unconsolidated deposits in the flatter, low-lying areas of both islands. Typically, groundwater in unconsolidated deposits flows from higher to lower surface elevations and ultimately discharges near the coast as seeps or into coastal

waters as subsurface flow. Fluctuations of the groundwater surface in response to tidal changes are profound near coastal settings and rapidly decrease further inland. The composition of groundwater in coastal settings is salt or brackish water and becomes much less saline with increasing distance from the coast.

2.5 SITE HISTORY

The Aleutian Islands have a rich history of indigenous people, as well as visitors. Prehistoric peoples, Aleuts, Russian explorers and fur traders, fox farmers, whalers, and others have occupied and had an impact on the area. Site visits to Amaknak and Unalaska Islands with the USAED, National Park Service (NPS), and State Historic Preservation Office (SHPO) representatives, along with a contracted local archaeologist, were conducted in mid-May of 1997 and again in November and December of 1998. The purpose of these site visits was to ensure that SHPO and NPS archaeological interests were identified and regulatory compliance requirements were met (e.g., Section 106 of the Historic Preservation Act). Findings at some sites have limited remedial activities.

During WWII, several army posts and a Naval Operating Base were established on Amaknak and Unalaska Islands. At one time, approximately 65,000 military personnel were estimated to be living on the islands. The majority of the larger facilities were built around Margaret Bay as part of Fort Mears Army Garrison 1. An estimated peak population of 10,000 personnel were housed in Army Garrison 1. Japanese war planes bombed facilities on Amaknak Island, resulting in the construction of more defensive positions and movement of other facilities to better protected locations. Approximately 10,000 new troops occupied the Generals Hill (Army Garrison 2) and Pyramid Valley areas of Unalaska Island after the 1942 bombings. The population density for the war effort required large volumes of petroleum products for heating and fuel. Other potentially hazardous materials, such as PCBs, asbestos, various metals, etc. were used in construction, power distribution, and other activities typical of remote operations. The 1983 Defense Appropriations Act initiated Department of Defense (DOD) cleanup activities at FUDS (USAED 1999).

More recently, the Port of Dutch Harbor has become one of the largest fishing ports in the United States. From 1988 through 1996, Dutch Harbor had the highest volume of fish landings of any port. In 1996, the dollar value of fish landings at the port was also the highest in the United States.

3.0 DATA EVALUATION

The approach for the evaluation of data collected during the 2000 field season is discussed in this section. In general, chemical data was collected to determine the nature and lateral and vertical extent of contamination. Site data were compared to background values established in the *Comprehensive Remedial Investigation Report* (USAED 2000a) and appropriate regulatory standards.

3.1 OVERVIEW

The data evaluation process was developed to meet the requirements of Alaska Department of Environmental Conservation (ADEC) regulations in 18 AAC 75, Article 3, entitled *Oil and Hazardous Substances Pollution Control Regulations, Discharge Reporting, Cleanup, and Disposal of Oil and Other Hazardous Substances* (ADEC 2000c). Specifically, ADEC Method 2 and 3 are used to evaluate the data collected during the 2000 field season. The data evaluation process was also developed to comply with the ADEC water quality standards as specified in ADEC 18 AAC 70, *Water Quality Standards* (ADEC 1999b).

The data evaluation process incorporates the following steps:

- Collect laboratory analytical data during the 2000 field season.
- Assess the data quality by comparing the data to established QA/QC guidelines (see Section 6).
- Compare the data to appropriate regulatory criteria; if data exceeds the most stringent regulatory criteria then site-specific regulatory criteria may be calculated for certain media.
- Present conclusions and recommendations based on the above data.

3.2 REGULATORY CRITERIA

This section presents the regulatory criteria applicable to the 2000 Islandwide activities. Media specific criteria are discussed separately in the following subsections.

3.2.1 Soil Regulatory Criteria

18 AAC 75, Article 3, entitled *Oil and Hazardous Substances Pollution Control Regulations, Discharge Reporting, Cleanup, and Disposal of Oil and Other Hazardous Substances* (ADEC 2000c), regulates the cleanup of sites contaminated with oil or other hazardous substances. Sections of this regulation address the selection or development of cleanup levels for contaminated soil that are considered protective of human health, safety, and welfare, and the environment. The following discussion addresses the selection or development of soil cleanup levels for various sites investigated during the 2000 Islandwide activities.

Soil cleanup levels are specified in the "site cleanup rules" of 18 AAC 75.325 through 18 AAC 75.390. The regulations provide that "a responsible person shall propose soil cleanup levels for approval [by ADEC], [and] shall base those cleanup levels upon an estimate of the reasonable maximum exposure expected to occur under current and future site conditions." Furthermore, the responsible person "shall develop those cleanup levels using one or more ..." of four specified methods.

Method 1 was not used for the 2000 Islandwide activities and will not be discussed.

Method 2 applies to soils contaminated with petroleum hydrocarbons or other chemicals and is a risk based method. Under Method 2, a responsible person must apply tabulated soil cleanup levels for 94 specific organic chemicals; 16 inorganic chemicals; GRO, DRO, and RRO based on analytical methods AK101, 102, and 103; or aliphatic and aromatic fractions of GRO, DRO, and RRO based on analytical methods AK101AA, 102AA, and 103AA. For each chemical, different cleanup standards apply depending on whether the site is in an Arctic zone, a non-Arctic zone with annual precipitation of less than 40 inches, or a non-Arctic zone with annual precipitation of greater than or equal to 40 inches. In addition, for each of these categories, different cleanup levels apply depending on whether human exposure can occur directly by ingestion or inhalation or indirectly via migration from contaminated soil to groundwater. The most stringent of the pathway-specific cleanup levels applies at a site. The applicable risk-based screening levels are presented in Table 3-1. See Section 3.2.1.2 for a complete discussion.

Table 3-1
Risk-Based Screening Levels
Amaknak and Unalaska Islands, Alaska

	ADEC Table B Soil Levels		ADEC Table C Groundwater Levels		ADEC Water Quality Standards		Sediment Quailty Standards	
Analyte	(Drinking Water)[1]	(Non-drinking water)[2]	(Drinking Water)[3]	(Non-drinking water)[4]	Freshwater[5]	Marine[5]	Freshwater[6]	Marine[7]
Metals - ppm								
Aluminum	--	--	--	--	0.087	--	58030	--
Arsenic	1.8	4.5	0.05	0.5	0.19	0.036	12.1	8.2
Barium	982	5800	2	20	2	--	--	48000
Cadmium	4.5	45	0.005	0.05	0.0011+	0.0093	0.59	1.2
Calcium	--	--	--	--	--	--	--	--
Chromium	23	230	0.1	1	0.011+	0.05	56	81
Cobalt	--	--	--	--	--	--	--	--
Copper	--	--	--	--	0.012+	0.0024	28	34
Iron	--	--	--	--	1	--	20000	
Lead	400	400	0.015	0.15	0.0032+	0.0085	34.2	46.7
Magnesium	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	1673	--
Mercury	1.24	12.4	0.002	0.02	0.000012	0.000025	0.2	0.15
Nickel	78	--	--	--	--	--	39.6	20.9
Potassium	--	--	--	--	--	--	--	--
Selenium	3	30	0.05	0.5	0.005	0.071	--	--
Silicon	--	--	--	--	--	--	--	--
Silver	19	190	0.18	1.8	0.00012+	0.00092	--	1
Sodium	--	--	--	--	--	--	--	--
Strontium	--	--	--	--	--	--	--	--
Vanadium	580	--	--	--	--	--	--	--
Zinc	8100	25000	11	110	0.11+	0.086	159	150
Zirconium	--	--	--	--	--	--	--	--
Polychlorinated Biphenyls - ppm								
PCBs, Total (8)	1	10	0.0005	0.005	0.000014	0.00003	0.03162	0.0227
Petroleum Hydrocarbon Compounds - ppm								
Diesel Range Organics	230	2300	1.5	15	--	--	--	--
Gasoline Range Organics	260	1400	1.3	13	--	--	--	--
Residual Range Organics	8300	8300	1.1	11	--	--	--	--
Semi-volatile Organic Compounds - ppm								
2-Methylnaphthalene	--	--	--	--	--	0.3	--	0.07
Acenaphthene	190	1900	2.2	22	0.52	0.71	0.62	0.016
Acenaphthylene	--	--	--	--	--	--	--	0.044
Anthracene	3900	24900	11	110	--	0.3	0.22	0.0853
Benzo(a)anthracene	5.5	9	0.001	0.01	--	0.3	0.11	0.261
Benzo(a)pyrene	0.9	0.9	0.0002	0.002	--	0.3	0.14	0.43
Benzo(b)fluoranthene	9	9	0.001	0.01	--	0.3	0.0272	1.8
Benzo(g,h,i)perylene	--	--	--	--	--	0.3	0.29	0.33

Table 3-1
Risk-Based Screening Levels
Amaknak and Unalaska Islands, Alaska
(continued)

	ADEC Table B Soil Levels		ADEC Table C Groundwater Levels		ADEC Water Quality Standards		Sediment Quailty Standards	
Analyte	(Drinking Water)[1]	(Non-drinking water)[2]	(Drinking Water)[3]	(Non-drinking water)[4]	Freshwater[5]	Marine[5]	Freshwater[6]	Marine[7]
Benzo(k)fluoranthene	93	93	0.01	0.1	--	0.3	0.24	1.8
Chrysene	550	930	0.1	1	--	0.3	0.5	0.384
Dibenzo(a,h)anthracene	0.9	0.9	0.0001	0.001	--	0.3	0.0282	0.0634
Dibenzofuran	--	--	--	--	--	--	2	0.11
Fluoranthene	1900	3300	1.46	14.6	3.98	0.016	2.9	0.6
Fluorene	240	2400	1.46	14.6	--	0.3	0.54	0.019
Indeno(1,2,3-cd)pyrene	9	9	0.001	0.01	--	0.3	0.078	0.33
Naphthalene	38	380	1.46	14.6	0.62	2.35	0.48	0.16
Phenanthrene	--	--	--	--	0.0063	0.0046	0.85	0.24
Pyrene	1400	2500	1.1	11		0.3	0.57	0.665
Volatile Organic Compounds - ppm								
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	6	60	0.6	6	0.763++	0.129	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	--	--	--	--	0.763++	0.129	--	--
1,4-Dichlorobenzene	0.7	7	0.075	0.75	0.763++	0.129	--	--
4-Isopropyltoluene	--	--	--	--	--	--	--	--
Acetone	9	90	3.65	36.5	--	--	--	--
Benzene	0.02	0.2	0.005	0.05	5.3	0.7	--	--
Bromodichloromethane	0.3	3	0.1	1	--	6.4	--	--
Carbon disulfide	16	160	3.65	36.5	--	0.002	--	--
Chlorobenzene	0.5	5	0.1	1	0.05	0.129	--	--
Chloroethane	--	--	--	--	--	--	--	--
Chloroform	0.3	3	0.1	1	1.24	--	--	--
Ethylbenzene	5	50	0.7	7	32	0.43	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--
Methylene chloride	0.01	0.1	0.005	0.05	11	6.4	0.37	0.37
Tetrachloroethene	0.025	--	--	--	0.84	0.45	--	--
Toluene	4.8	48	1	10	17.5	5	--	--
Xylenes	69	81	10	100	--	--	--	--
cis-1,2-Dichloroethene	--	--	--	--	--	--	--	--
m,p-Xylene (Sum of Isomers	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--

Table 3-1
Risk-Based Screening Levels
Amaknak and Unalaska Islands, Alaska
(continued)

-- No regulatory criteria for this analyte

[1]Alaska Department of Environmental Convervation (ADEC) Method 2 Table B1 and B2 Soil Cleanup Levels. 18 AAC 75. 1999 (January). Cleanup level presented is based on groundwater being used as drinking water.

[2]ADEC Method 2 Table B1 and B2 Soil Cleanup Levels. 18 AAC 75. 1999 (January). Cleanup level presented is based on groundwater not being used as drinking water

[3]ADEC Table C Groundwater.Cleanup Levels. 18 AAC 75. 1999 (January). Value presented is based on groundwater being used as drinking water.

[4]ADEC Table C Groundwater Cleanup Levels. 18 AAC 75. 1999 (January). Value presented is based on groundwater not being used as drinking water.

[5]ADEC Water Quality Standards. 18 AAC 70. 1995 (January).

[6]Value based on EPA Secondary Chronic Value. Values selected from Toxicological Criteria for Screening contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision.

[7]Guideline is based on NOAA Effects Range-Low values. Guidelines selected from Toxicological Criteria for Screeneing Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision.

[8]For unrestricted land use, the PCB cleanup level in the top 2 feet of soil is 1 mg/kg. For soil greater than 2 feet below ground surface, the PCB cleanup level is 10 mg/kg.

+Hardness - dependent value with 25 mg/L as minimum and 400 mg/L as maximum calcium carbonate; value entered is for 100 mg/L calcium carbonate.

++Value for the summation of all isomers.

Method 3 allows a responsible person to propose a site-specific alternative cleanup level under specific conditions. See Section 3.2.1.3 for a complete discussion.

Method 4 allows the responsible person to propose a site-specific alternative cleanup level based on a site-specific risk assessment conducted according to the *Risk Assessment Procedures Manual* (ADEC 2000b). Method 4 is not used to develop alternate cleanup levels for 2000 Islandwide sites.

3.2.1.1 General Approach

In addition to the "site cleanup rules" of 18 AAC 75.325 through 18 AAC 75.390, ADEC has also published several guidance documents to aid in the determination of appropriate soil cleanup levels under a variety of conditions. The guidance documents include the following:

- *Draft Guidance on Developing Soil Cleanup Levels Under Methods Two and Three*, March 22, 1999 (ADEC 1999a)
- *Guidance on Cleanup Standards Equations and Input Parameters*, July 28, 1999 (ADEC 1998)
- *Risk Assessment Procedures Manual*, June 8, 2000 (ADEC 2000b)
- *Guidance on Calculating Cumulative Risk – Final Draft*, December 15, 2000 (ADEC 2000a)

In conformance with the regulations and guidance documents noted above, the following approach was developed to assess the Islandwide data.

ADEC Method 2 soil cleanup levels were applied as screening levels. Prior to applying the soil screening levels, any inorganic contaminants that did not exceed their background 95 percent upper confidence levels (UCLs) in soil or the maximum background concentrations for constituents with insufficient background samples to calculate UCLs were screened from further consideration. At each site, the maximum detected concentration of a given constituent was compared to the Method 2 cleanup levels (Table 3-1). In addition, the cumulative hazard and risk from all the site-specific constituents were calculated and compared to the allowable levels.

Alternative soil cleanup levels were established using Method 3 for any sites where Method 2 cleanup levels were exceeded. Such alternative cleanup levels were only developed for constituents that exceeded the Method 2 cleanup levels for a given site. However, where Method 3 was used, the cumulative hazard and risk from all the site-specific constituents were calculated and compared to the allowable levels.

Method 4 was not used to develop soil cleanup levels.

The development and application of Methods 2 and 3 are described in the following sections.

3.2.1.2 ADEC Method 2

ADEC Method 2 was applied to each site by first determining the maximum concentration of each contaminant present in site soils. For each contaminant detected, that maximum concentration was then compared to the most stringent of the tabulated pathway-specific soil cleanup levels for the "Over 40-inch Zone" as given in 18 AAC 75.341I and (d) (Tables B1 and B2, respectively). Annual average precipitation data for Dutch Harbor, obtained from the Western Regional Climate Center (WRCC) at the University of Nevada Desert Research Institute (WRCC 1999), ranges from 49.1 inches for the period of record 1961 to 1990, to 61.1 inches for the period of record 1984 to 1999. At sites where the maximum detected contaminant concentration exceeded the most stringent of the Method 2 cleanup levels, alternative soil cleanup levels were developed using Method 3.

At any site where the maximum concentration for each contaminant did not exceed the most stringent of the Method 2 cleanup levels for that contaminant, a cumulative risk determination was conducted pursuant to 18 AAC 75.325(g) (see Section 3.3.4).

3.2.1.3 ADEC Method 3

ADEC Method 3, as prescribed in 18 AAC 75.340(e), allows for the proposal of site-specific alternative soil cleanup levels under specific conditions. Specifically, the following modifications can be proposed:

- the Method 2 migration to groundwater or inhalation cleanup levels of Tables B1 and B2 can be modified by using site-specific soil data in equations published in the ADEC *Guidance on Cleanup Standards Equations and Input Parameters* (ADEC 1998a);
- the Method 2 migration to groundwater cleanup levels of Tables B1 and B2 can be modified by using site-specific soil data with a fate and transport model to demonstrate that the alternate soil cleanup levels are protective of applicable groundwater cleanup levels; or
- the Method 2 ingestion or inhalation cleanup levels of Tables B1 and B2 can be modified by using commercial/industrial exposure parameters listed in Appendix B of the ADEC *Guidance on Cleanup Standards Equations and Input Parameters* (ADEC 1998a).

In addition, the Method 3 migration to groundwater cleanup level can be further modified by multiplying the groundwater cleanup level by 10 in the appropriate equations published in the ADEC *Guidance on Cleanup Standards Equations and Input Parameters* (ADEC 1998a), if a determination is made under 18 AAC 75.350 that the groundwater is not a current or reasonably expected potential future drinking water source.

Site-specific soil and aquifer properties applied in the equations of the ADEC *Guidance on Cleanup Standards Equations and Input Parameters* (ADEC 1998a) include a variety of parameters including organic carbon content. In general, two total organic carbon (TOC) samples were collected from background locations at the same depth as the detected contamination at all the 2000 Islandwide sites. An average TOC concentration (reported in percent) was calculated for each site. The average TOC percent for specific sites was then used to calculate the Method 3 cleanup levels for sites that detected contaminant concentrations above Method 2 criteria. The ADEC Method 3 Web Calculator, a calculation tool developed by ADEC and provided at http://www.state.ak.us/dec/dspar/csites/index.htm, was used to calculate the Method 3 site-specific cleanup levels. Table 3-2 presents the TOC sample results for the sites where TOC data was used and the calculated Method 3 cleanup levels are discussed on a site-specific basis in Section 5. Appendix J contains the site-specific Method 3 calculation forms generated by the ADEC Method 3 Web Calculator.

3.2.2 Groundwater Regulatory Criteria

Criteria are established in 18 AAC 75.350 to evaluate the future potential of using groundwater as a drinking water source. Based on these criteria, if groundwater at a location

Table 3-2
TOC Results Used to Calculate Site-specific Method 3 Regulatory Criteria

Site	Sample ID	Sample Location	Depth (ft bgs)	Result (mg/kg)	Site Average (mg/kg)	Site Percent (%)
LSA UST 1154	AM-A502602	Uncontaminated stockpile	4	48,000.00	48,000.00	4.80
Ballyhoo Spit Tank Farm	AM-A502804	TP-8	0-0.5	14,000.00	15,025.00	1.50
	AM-A502807	TP-6	2	9,100.00		
	AM-A502808	TP-7	4.5	12,000.00		
	AM-A502812	TP-9	0-0.5	25,000.00		
UST 3475	AM-A504107	TP-2	2[1]	95,000.00	49,000.00	4.90
	AM-A504108	Uncontaminated stockpile	0-0.5	36,000.00		
	AM-A504109	TP-1	4	16,000.00		
UST 3465	AM-A504201	TP-1	4	310,000.00	240,000.00	24.00
	AM-A504406	Uncontaminated stockpile	0.5	170,000.00		
UST 3165	AM-A504604	Uncontaminated stockpile	0-0.5	31,000.00	31,000.00	3.10
UST 2674	AM-A505404	Uncontaminated stockpile	0-0.5	16,000.00	17,333.33	1.73
	AM-A505405	Uncontaminated stockpile	0-0.5	17,000.00		
	AM-A505406	Uncontaminated stockpile	0-0.5	19,000.00		
UST 3065	AM-A505808	Background location	2	26,000.00	23,333.33	2.33
	AM-A505809	Background location	2	18,000.00		
	AM-A505810	Background location	2	26,000.00		
UST 3075	AM-A506103	TP-1	2	33,000	24,500.00	2.45
	AM-A506104	TP-2	2	16,000		
UST 2766	AM-A506107	TP-4	4	39,000.00	29,750.00	2.98
	AM-A506401	Uncontaminated stockpile	0-0.5	16,000.00		
	AM-A506402	Uncontaminated stockpile	0-0.5	39,000.00		
	AM-A506403	Uncontaminated stockpile	0-0.5	25,000.00		
Ballyhoo Drainage Gully Drum	AM-A507409	Background location	0-0.5	24,000.00	24,000.00	2.40
Ballyhoo Bldg C UST	AM-A507414	Background location	0-0.6	76,000.00	59,000.00	5.90
	AM-A507415	Background location	0-0.6	42,000.00		
UST 3860	AM-A507607	Background location	0.005	17,000.00	33,000.00	3.30
	AM-A507608	Background location	0.006	49,000.00		
UST 3760	AM-A507704	Background location	0.5-3.5	48,000.00	54,000.00	5.40
	AM-A507705	Background location	0.5-3.5	60,000.00		
Building 627	AM-A508301	Background location	NA	34,000.00	38,500.00	3.85
	AM-A508302	Background location	NA	43,000.00		
Fort Mears Landfill (south)	AM-A508303	Background location	NA	3,700.00	3,700.00	0.37
	AM-A508304	Background location	NA	3,700.00		
Former Naval Laundry Facility	AM-A510603	MW-3	NA	1,300.00	1,650.00	0.17
	AM-A510620	MW-1	NA	2,000.00		
UST 3265	AM-A520610	WP-1	1.5-2.5	280,000.00	280,000.00	28.00
UST 3260	AM-A520603	HB-4	1.0-1.5	72,000.00	45,000.00	4.50
	AM-A520618	HB-18	1.0-1.5	34,000.00		
	AM-A520622	HB-19	1.0-1.5	21,000.00		
	AM-A520631	HB-12	1.5-2.5	53,000.00		

Note: Table does not include field duplicate results.

mg/kg – milligrams per kilogram NA – data not available

is determined to be unreasonable for future production, 10 times the level of values found in Table C of 18 AAC 75.345 can be used as cleanup levels in a Method 2 or Method 3 analysis. Although the 10 times rule has been addressed in the *Comprehensive RI Report* (USAED 2000a), it is not required to address the sites investigated during the 2000 field season, with one exception. Because the Fort Mears Landfill (north) site groundwater is subject to seawater intrusion; the developable freshwater lens will be relatively thin. Any extraction of groundwater from the area would increase the potential for seawater intrusion by reducing the local freshwater head. The potential for hydraulic connection between groundwater in unconsolidated coastal materials and that in underlying bedrock is unknown. Therefore, the regulatory criteria contained in 18 AAC 75.345 Table C were used to evaluate the sites discussed in Section 5, and the 10 times rule is applied to the Fort Mears Landfill (north) site only.

3.2.3 Surface Water and Sediment Regulatory Criteria

At sites where surface water or sediment data were collected, the data were compared directly with the water quality standards of 18 AAC 70 to determine whether contamination at the site had affected the surface water or sediment. For the evaluation of total aromatic hydrocarbons (TAH) and total aqueous hydrocarbons (TaqH) in surface water, the summed concentrations values were compared to their allowable values of 10 micrograms per liter (µg/L) and 15 µg/L, respectively. The TAH was the sum of the maximum detected concentration for all detected benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds, plus one half of the sample quantitation limit (SQL) for nondetected BTEX compounds. The TaqH was the sum of the TAH plus the maximum detected concentration for all detected PAH compounds, plus one half of the SQL for all nondetected PAH compounds. Sediment data were also compared to sediment quality guidelines established for freshwater and marine aquatic environments. Sediment quality guidelines were selected from *Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota* (Jones et al. 1997). Prior to applying the water quality standards, any inorganic contaminants that did not exceed their background 95 percent UCLs in surface water or sediment were screened from further consideration.

3.3 SCREENING APPROACH

At each site, the analytical data from various media were screened against appropriate ADEC cleanup levels or other criteria (i.e., background levels or sediment quality guidelines). For soils, the ADEC 18 AAC 75 Method 2 or Method 3 cleanup levels were applied. For groundwater, the ADEC 18 AAC 75 Table C groundwater cleanup levels were applied for groundwater potentially used as human drinking water. For groundwater potentially discharging into a surface water body, groundwater data were compared against the most stringent surface water quality criteria (18 AAC 70) for drinking water or non-drinking water groundwater standards. For surface water and sediment, appropriate surface water quality and sediment criteria were used.

Based on the results of the screening, appropriate conclusions and recommendations were developed. The conclusions and recommendations ranged from no further action (NFA) at sites that can be considered completely remediated (or essentially uncontaminated to begin with) to recommendations for further investigation or remediation at some sites. The overall screening approach is described below.

3.3.1 Initial Data Summary

A complete listing of all analytical data, including non-detect data, is included in Appendix D. Each site summary includes a tabulation of detected parameters and discussion of available data. For some sites, no data were available because site reconnaissance indicated no evidence of contamination or because site activities were deferred pending approval from SHPO or other agencies.

3.3.2 Preliminary Screening

For each site where analytical data were available, that data was compared to the most restrictive (i.e. smallest) of the ADEC Method 2 soil cleanup levels for ingestion, inhalation, and migration to groundwater; the ADEC Table C groundwater cleanup levels; and the surface water and sediment water quality standards of 18 AAC 70, as appropriate. If an inorganic parameter exceeded its background concentration established in the *Comprehensive*

RI Report (USAED 2000a) or an organic parameter was a result of biogenic interference, it is still indicated as a regulatory exceedance in the site-specific table in Section 5. However, the exceedance is discussed and discounted in the analytical results section for the site.

3.3.3 Method 3 Screening

If the maximum detected concentration for a compound exceeded the most restrictive Method 2 screening level, then ADEC Method 3 screening levels were applied, as appropriate, using the site-specific TOC data collected at each site.

3.3.4 Cumulative Risk Calculations

At sites where none of the detected compound concentrations exceeded Method 2 or Method 3 cleanup levels, cumulative risk calculations were conducted according to 18 AAC 75.325(g). Cumulative risk was calculated using the ADEC Method 3 Web Calculator. If the total cumulative risk calculated by the Web Calculator was less than 1×10^{-5}, then it was concluded that residual contamination at the site would not produce an unacceptable carcinogenic risk.

For noncarcinogenic compounds, a hazard quotient was calculated by the Web Calculator for each site using the maximum concentration detected. If the hazard index was less than 1, then it was concluded that residual contamination at the site would not produce an unacceptable noncarcinogenic hazard.

For sites where groundwater might be used as a drinking water source, the cumulative carcinogenic risk and noncarcinogenic hazard indexes were calculated as described above.

In all cumulative risk calculations, metals were excluded from the calculation if their maximum concentrations did not exceed their respective background values.

4.0 ISLANDWIDE ACTIVITIES

This section presents an overview of the Islandwide field activities completed during the 2000 field season on Amaknak and Unalaska Islands, Alaska. These activities included site reconnaissance, IRAs, Sis, and RIs. Because the techniques and methodologies used during the 2000 field season were detailed in the *2000 Islandwide Work Plan Addendum*, this section presents only an overview of the techniques and methodologies. The work performed during the 2000 field season using the techniques and methodologies are discussed in Section 5.

4.1 SITE RECONNAISSANCE

Site reconnaissance was conducted as the first step for most IRA, SI, and RI activities. The following activities were performed during site reconnaissance:

- Observed areas to determine current site conditions, identified potential safety concerns, located staging areas, and other related issues.
- Identified access issues. Several of the areas subject to fieldwork were located in unimproved portions of Amaknak and Unalaska Islands or on private property. Field crews identified adequate ingress and egress points for equipment required to perform field tasks and coordinated with appropriate land owners for site access.
- Confirmed accuracy of existing maps and aerial photographs. To the extent possible, verified accuracy of field maps based on visual surveys to ground-truth the areas.
- Located physical features and potential receptors. During the site reconnaissance, field crews walked portions of an area where features such as surface water bodies, seeps, etc. could be expected. Features of this type were documented in field notes.
- Determined order of fieldwork. Based on some or all of the above elements of the site reconnaissance, the most logical order of field activities was determined for each area.

4.1.1 Utility Locates

Site reconnaissance results were used to determine where active buried utilities should be located by the utility operator. All intrusive activities within developed areas of Amaknak and Unalaska Islands required utility locates. Utility location surveys were requested from the City of Unalaska Department of Public Works (DPW) and private utility personnel, as required. Buried utilities within 25 feet of each proposed investigation location were marked on the ground in a manner that would survive until the activity was underway or completed.

Based on the results of utility locates, it was necessary in some cases to adjust proposed sampling locations to avoid buried pipes, wires, or other utilities. If sampling locations could not be located to provide adequate clearance from buried utilities, local DPW personnel were recalled for additional coordination with the field sampling team.

4.1.2 Private Property Access

Various sites were located on or adjacent to private property or private industry activities. Site reconnaissance results were used to determine which sites needed additional coordination with private parties to gain access to the site. All necessary accommodations were afforded to affected land owners when scheduling and executing the field activities.

4.2 IRA PROGRAM

There were no types of IRA activities planned for the 2000 field effort which were not performed during previous field efforts. The general activities that were approved in the 1996 Work Plan (USAED 1996) include the following: UST and pipeline excavation, removal, and decommissioning; product and contaminated liquid, sludge, and soils removal; and treatment of liquid and solid materials. IRA activities involving paint drums, potential polychlorinated biphenyls (PCBs), and asbestos were approved in the 1998 Work Plan (USAED 1998a).

The majority of the IRA activities planned for the 2000 Islandwide work were continuations of previous IRA activities. Planned activities included further excavations at sites where previous IRAs were performed and removal of tanks, pipelines, and miscellaneous debris identified but not removed under previous investigations and removal actions. Site reconnaissance and site investigation activities were required at some sites before an IRA location, such as a UST, was determined. The presence of underground utilities such as active pipelines and existing structures was an issue at some IRA areas. Field crews coordinated with all operators or owners of underground utilities and existing structures to ensure that existing facilities were not adversely impacted during fieldwork.

Field crews made every effort to remove items identified in the work plan. However, some pipelines, USTs, or structures could not be removed due to factors such as safety, access, or

the presence of newer facilities. In these cases, the USAED Quality Assurance Representative (QAR) was consulted. Procedures not included in the *2000 Islandwide Work Plan* are discussed in the following subsections

4.2.1 Wetlands Approach

The procedures applied to wetland areas encountered during the 2000 field season were published via email on 22 September 2000 after the *2000 Islandwide Work Plan* was completed. The procedures are presented below to document the wetlands approach taken during the 2000 field season.

4.2.1.1 Well Point Installation

Well points were installed at wetland sites even though test pits were not conducted. The well points were installed where test pits were planned according to the workplan. If the well points were dry the well point was not sampled. If water was encountered then samples were collected as described in the workplan.

4.2.1.2 Site Characterization

A small excavation (50-80 cubic yards [cy] of soil) was planned for one site affected by wetlands (Section 5.3, UST 3260). Hand augers were conducted to the depth contamination was previously identified around the potentially impacted areas until the contaminated area was outlined through Hanby™ test kit "clean" results. Two analytical samples were collected from areas that were determined to be contaminated and two analytical samples from clean locations based on the Hanby™ screening results. In addition, TOC samples were collected from a nearby uncontaminated location at the same depth intervals as the contamination identified in previous investigations.

4.2.1.3 Test Kit Procedure

In order to counter natural interference expected in the wetlands areas, some background samples were collected from the wetlands area so that potential natural (biogenic) interference could be subtracted out of the screening samples.

4.2.2 Gravity Draining of Pipelines

The gravity draining procedures used to drain pipelines on Rocky Point were published in a technical memorandum dated 26 October 2000 and titled *Rocky Point Pipeline Draining Procedures* . The Rocky Point work, though conducted as part of the 2000 Islandwide work, will be discussed in a separate technical memorandum. The technical memorandum will present the pipeline draining procedures and discuss the work performed on Rocky Point during the 2000 field season.

4.3 SI PROGRAM

Activities performed under the SI program included magnetometer surveys, site walks, WWII drawing review and photo-documentation to identify structures remaining on sites, documentation of existing site conditions, and determination of potential further actions. SI procedures contained in the *2000 Islandwide Work Plan* were followed without deviation.

Of special note, WWII electrical system drawings that were available at the Ounalashka Corporation (OC) building were reviewed to determine locations of transformer vaults at locations where vaults are suspected. No new vaults were identified as a result of the review.

4.4 RI ACTIVITIES

The intent of the RI was to obtain data for identifying remedial alternatives, general design parameters for evaluating site cleanup technology, and costs. The RI program provided information about the geology, hydrogeology, extent of soil and/or groundwater contamination, and site-specific modeling parameters. RI activities consisted of installing groundwater monitoring wells and well points; collecting soil, sediment, groundwater, and surface water samples; and excavating test pits. See the *2000 Islandwide Work Plan Addendum* for specific RI procedures. No deviations to the workplan were conducted during the 2000 field season except as noted in Section 4.2.1.

4.5 BACKGROUND PROGRAM DATA

Background samples were collected during previous field efforts on Amaknak and Unalaska Islands. Samples for various analytical parameters were collected during the previous field efforts so that a background database could be developed for the future restoration programs at Amaknak and Unalaska Islands. These values were used in support of previous risk assessments and to calculate site-specific cleanup standards. The background results are presented for surface water, fresh water sediment, marine sediment, groundwater, and soil in Tables 5-1 through 5-5 in the *Comprehensive RI Report* dated May 2000.

In addition, TOC samples were collected at most sites during the 2000 Islandwide activities to enable calculation of Method 3 cleanup levels. In order to justify calculation of site-specific cleanup levels, TOC concentrations must average greater than 0.1% for a site. Table 3-2 presents the TOC data used to calculate Method 3 cleanup levels at specific sites.

4.6 POST-ACTIVITY LOCATION SURVEYS

After field activities were completed, all RI and SI monitoring wells/well points were marked for subsequent location by a land surveyor. Sample locations in IRA excavations and multiple test pit SI locations (if applicable) were documented using global positioning system (GPS) coordinates (see Appendix G for a listing of the program wide GPS coordinates). The site manager and QAR approved the areas selected for the survey. Surveying was conducted in accordance with procedures identified in the *2000 Islandwide Work Plan.*

5.0 NATURE AND EXTENT OF CONTAMINATION

A total of 52 general areas, consisting of 73 individual sites, were planned for IRA, RI, and/or SI activities during the 2000 Islandwide field effort. The work involving the Rocky Point pipelines, although included in the *2000 Islandwide Work Plan,* are presented in a separate technical memorandum and are not included in this section. The following subsections present a summary of previous activities, 2000 field activities, analytical results, and recommendations on a site-specific basis.

The majority of 2000 Islandwide sites have been previously investigated and have been subject to IRA, RI, and/or SI activities. Details pertaining to previous activities and in-depth site descriptions and histories can be found in the references presented in Table 1-3 of the 2000 Islandwide Work Plan Addendum. A detailed listing of previous investigations completed by the USAED and other parties is presented in Table 3-1 of the *FUDS Project Management Plan*, Amaknak and Unalaska Islands (USAED 1999).

5.1 UST 2674

The Building 2674 warehouse foundation is located on Broadway Avenue approximately 1200 feet northwest of its intersection with 165th Road. The former UST for Building 2674 was located on the northwest side of the building outside the assumed former mechanical room. The tank stored the heating oil for the Building 2674 heating system. Figure 5-1 presents the site location for UST 2674 and Figure 5-2 presents the site layout of UST 2674.

5.1.1 Previous Activities

In 1997 it was discovered that a UST in this location had been previously removed. 130 cy of POL-contaminated soil believed to have been contaminated from the former UST was removed. One of four soil samples collected from the bottom of the excavation pit exceeded the ADEC Method 2 DRO value. See Figure 5-2 for the sample locations and results.

CITY OF UNALASKA

ILIULIUK BAY

SCHOOL

MOUNT NEWHALL
(ELEVATION 1600 FT.)

NOTE:

FORMER BUILDING NUMBERS AND USES WERE IDENTIFIED FROM A BUILDING LIST FOR THE UNALASKA AND FORT MEARS GARRISONS, SHEET No. 2, AUGUST 30, 1945

LEGEND:

- FORMER BUILDING
- EXISTING BUILDING
- APPROXIMATE LOCATION OF 1997 UST REMOVAL
- APPROXIMATE LOCATION OF 1998 UST REMOVAL
- SURFACE WATER DRAINAGE

CEMETARY

FORMER GENERATOR BUILDING

UNALASKA LAKE

PTARMIGAN RD.

SKI BOWL AREA

BLDG. 3260, MESS HALL

BLDG. 3265, LATRINE

MESS HALL

BLDG. 3165, LATRINE

BLDG. 3465, LATRINE

BLDG. 3475, LATRINE

GARAGE

BLDG. 2193, GENERATOR HOUSE

BLDG. 2664,

BLDG. 2667, DPW

WHITTERN LANE

UNALASKA LAKE PAINT DRUMS (1998 IRA)

(MISCELLANEOUS DEBRIS)

LEAR RD.

BLDG. 2682, SUBSTATION

BLDG. 2673, POWER HOUSE

BLDG. 2605, POWER HOUSE

BLDG. 2562, BOILER HOUSE

BLDG. 2563, LAUNDRY

BLDG. 2577, DRY CLEANERS

BAKERY

SOIL EXCAVATED

UTILIDORS AND PIPELINES

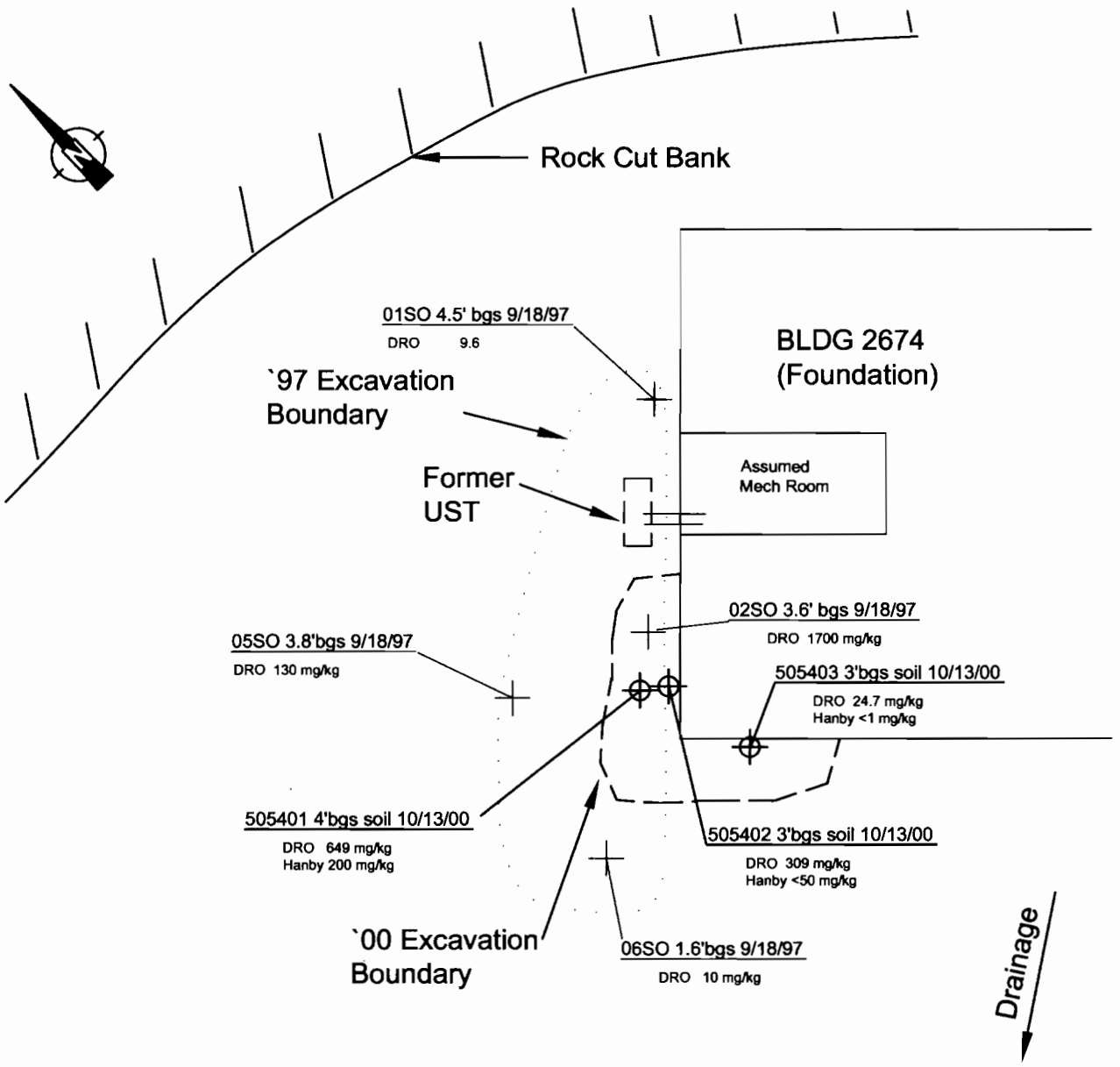
NORTH

0 300 600 1200

SCALE IN FEET

UNALASKA VALLEY (LOWER) AND UNALASKA LAKE SITE LOCATIONS UNALASKA ISLAND, ALASKA

PROJ. MGR:	ACAD FILE NAME:	FIGURE NO:
S. KOCH	RPT5-1	5-1
DRAWN BY:	FILE LOCATION:	DATE:
SBK/CJH/BY	Amaknak\30227\	Jan 2001



BROADWAY AVE

NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLE 5-1 AND/OR APPENDIX K FOR QUALIFIERS.

0 10 20 40

SCALE IN FEET

LEGEND

- Screening and Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
- Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)

UST-2674 SITE LAYOUT
and SAMPLE LOCATIONS
UNALASKA ISLAND, ALASKA

PROJ. MGR.:	ACAD FILE NAME:	FIGURE NO.:
S. KOCH	RPT5-2	5-2
DRAWN BY:	FILE LOCATION:	DATE:
CJH/BY	Amaknak\30227\	AUG 15, 01

5.1.2 2000 Work Completed

Due to the one 1997 exceedance, 35 additional cubic yards of soil was excavated during 12-13 October 2000 in the vicinity of the exceedance. During excavation, field-screening results indicated that the northwest portion of Building 2674's concrete slab would possibly need to be removed to access remaining contaminated soil.

Coe Whittern, the landowner of Building 2674, expressed that he did not want the concrete slab removed. Therefore, the excavation was halted at the edge of the concrete slab and confirmation samples were collected. Additionally at Mr. Whittern's request, non-TDU treated backfill material was used in addition to uncontaminated soils removed during the excavation to backfill the excavation and four tons of new gravel was used to cap the excavation. See Figure 5-2 for the excavation layout.

5.1.2.1 Field Screening Results

Three Hanby™ soil screening samples were collected while the excavation was in progress. Two screening samples were collected from the sidewall and one from the floor. The floor sample result indicated residual diesel contamination in the soil in the weathered bedrock (200 mg/kg) where the excavator could not remove any more soil due to refusal. The sidewall samples, collected under the edges of the foundation, contained less than (<)50 mg/kg on the north wall and <1 mg/kg on the west wall. Photoionization detector (PID) readings of contaminated soil were between 3.0 and 20.0 ppm with a noticeable fuel odor. While the Hanby™ screening samples did not indicate possible contamination in soil underneath the concrete slab foundation, elevated PID readings did indicate possible contamination. Figure 5-2 presents the screening sample locations, depths, and results.

5.1.2.2 Analytical Results

Three soil analytical samples were collected from the UST 2674 excavation. Two samples were collected from sidewalls and one from the floor. Uncontaminated soil was removed primarily from the north side of the excavation from between 0.0 to 4.0 ft bgs; this soil was stockpiled to the north of the excavation. Three TOC soil samples and one field duplicate

were also collected from the uncontaminated soil stockpile. The floor sample, collected where the excavation was terminated at contact with fractured bedrock, and the northwest sidewall sample exceeded Method 2 regulatory criteria for DRO. Therefore, Method 3 regulatory criteria was calculated for DRO using site-specific TOC data contained in Table 3-2. The resulting most stringent site-specific cleanup level for DRO is 3,880 mg/kg; therefore, no samples exceeded the Method 3 regulatory criteria. As required by 18 AAC 75.325(g), an assessment of cumulative risks and hazards was also conducted according to procedures described in Section 3.3.4. Since no carcinogenic compounds were detected, the total cumulative risk was not calculated. The hazard index for the site is 9.2×10^{-7}, well below the limitation of 1.0. Figure 5-2 presents the sample locations and Table 5-1 lists the complete suite of analyses and sample results above detection limits. A complete set of analytical results is included in Appendix D. The Method 3, cumulative risk, and hazard calculation sheets are included in Appendix J.

Table 5-1
UST 2674 Soil Analytical Results Above Detection Limits

5.1.2.2.1 Parameter	Units	ADEC Cleanup Level[1]	Proposed Method 3 Cleanup Level[2]	Sample Results		
				AM-A505401 (4.0 ft bgs)	AM-A505402 (3.0 ft bgs)	AM-A505403 (3.0 ft bgs)
Location	--	--	--	Floor	NW Sidewall	W Sidewall
Diesel-range Organics (AK102)	mg/kg	230	3,880	649 J	309 J	24.7 J
PAH (SW8270C SIM)						
Acenaphthylene	µg/kg	--	--	6.1	--	--
Pyrene	µg/kg	1,400,000	2,490,000	2.3	--	--

[1]18 AAC 75, Table B1, Method 2, over 40-inch zone, most stringent of the three pathways
[2]Note: The proposed Method 3 cleanup level for DRO is based on migration to groundwater and the proposed Method 3 cleanup level for pyrene is based on ingestion.
J = Estimated value; See Appendix K for more details.

5.1.3 Conclusions and Recommendations

The Building 2674 site is recommended for no further action (NFA). No samples exceeded the calculated Method 3 regulatory criteria and the site did not exceed the cumulative risk and hazard index limitations.

5.2 USTs 2664 AND 2667

The Building 2664 foundation is located on the southwest corner of the intersection of Broadway Avenue and Whittern Lane. The Building 2667 foundation is located approximately 200 feet to the east of the Building 2664 foundation on the east side of Broadway Avenue. The former USTs for Buildings 2664 and 2667 stored the heating oil for the respective buildings' heating system. UST 2664 was a single-wall steel vessel with an approximate capacity of 680 gallons. UST 2667 was a single-wall steel vessel with an approximate capacity of 1,000 gallons (USAED 2000b). Figure 5-1 presents the site location for UST 2664 and 2667 and Figure 5-3 presents the site layout.

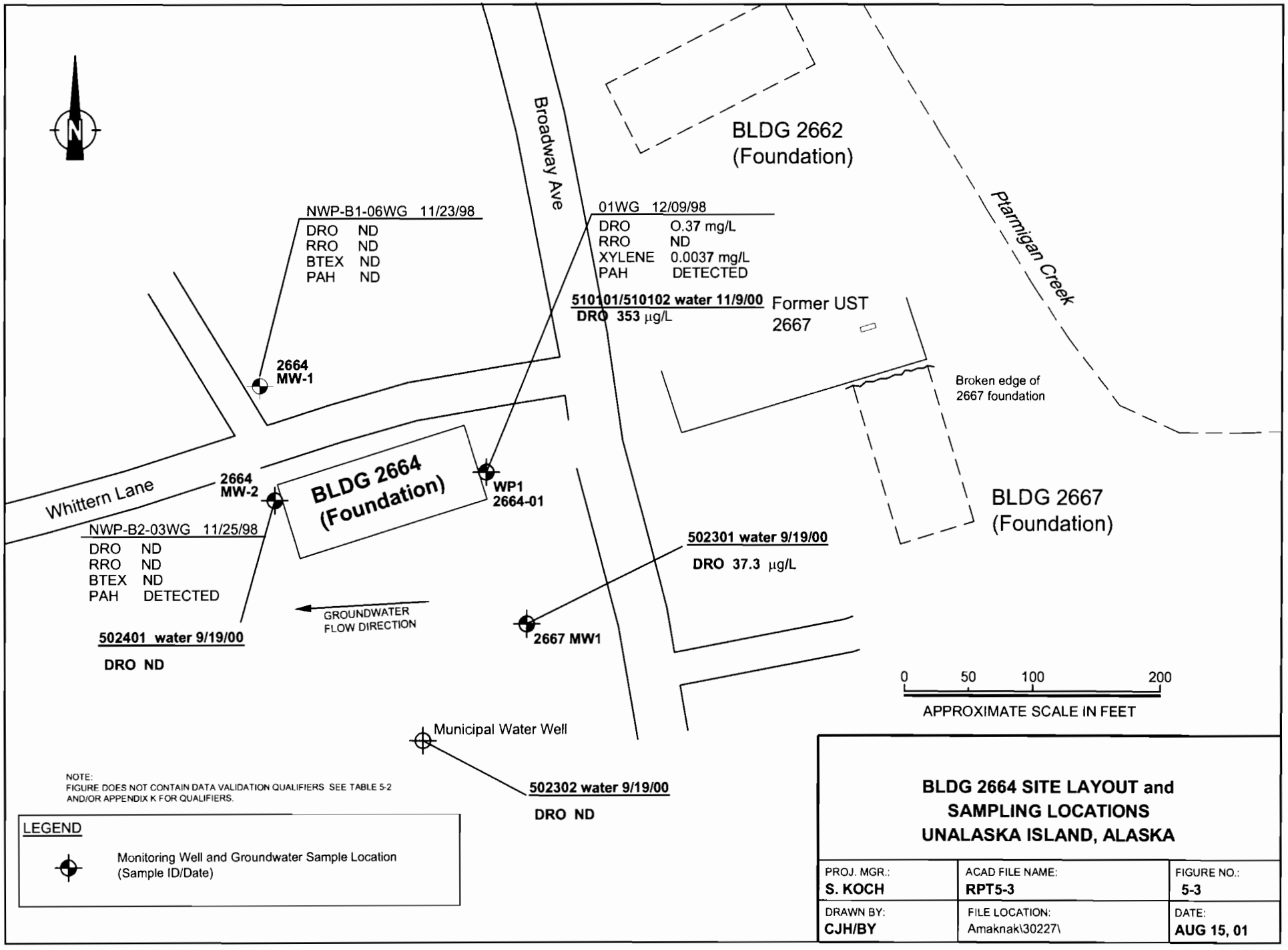
5.2.1 Previous Activities

A 680-gallon UST and approximately 290 cy of POL-impacted soil were removed from the UST 2664 area in 1997. Two of the five soil samples collected from the boundaries of the 1,500 square foot excavation exceeded ADEC Method 2 DRO cleanup levels. A monitoring well (2664MW-1) was installed in the excavation at the edge of the building utility room. Two additional monitoring wells (2664MW-2 and WP1 2664-01) were installed during the 1998 RI.

A 1000-gallon UST and approximately 150 cy of POL-impacted soil were removed from the UST 2667 area in 1998. Three of five soil samples collected from the boundaries of the 800 square foot excavation exceeded the ADEC Method 2 DRO cleanup levels. Additional excavation in this area was impossible because the new DPW building was constructed at this site.

5.2.2 2000 Work Completed

Although three monitoring wells were previously installed and sampled, it was still unclear if potential contamination from the former Building 2664 and 2667 USTs affected groundwater in the nearby Municipal Water Well when the pump in the well was operating (see Figure 5-3). Therefore, an additional monitoring well (2667 MW1) was installed during the 2000 field


N
Broadway Ave
BLDG 2662
(Foundation)
Ptarmigan Creek
NWP-B1-06WG 11/23/98
DRO ND
RRO ND
BTEX ND
PAH ND
01WG 12/09/98
DRO 0.37 mg/L
RRO ND
XYLENE 0.0037 mg/L
PAH DETECTED
510101/510102 water 11/9/00
DRO 353 µg/L
Former UST
2667
2664
MW-1
Broken edge of
2667 foundation
Whittern Lane
2664
MW-2
BLDG 2664
(Foundation)
WP1
2664-01
BLDG 2667
(Foundation)
NWP-B2-03WG 11/25/98
DRO ND
RRO ND
BTEX ND
PAH DETECTED
502301 water 9/19/00
DRO 37.3 µg/L
GROUNDWATER
FLOW DIRECTION
502401 water 9/19/00
DRO ND
2667 MW1
0 50 100 200
APPROXIMATE SCALE IN FEET
Municipal Water Well
502302 water 9/19/00
DRO ND
NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS SEE TABLE 5-2
AND/OR APPENDIX K FOR QUALIFIERS.
LEGEND
Monitoring Well and Groundwater Sample Location
(Sample ID/Date)
BLDG 2664 SITE LAYOUT and
SAMPLING LOCATIONS
UNALASKA ISLAND, ALASKA
PROJ. MGR.: S. KOCH
ACAD FILE NAME: RPT5-3
FIGURE NO.: 5-3
DRAWN BY: CJH/BY
FILE LOCATION: Amaknak\30227\
DATE: AUG 15, 01

activities. 2667-MW1 was drilled to 15 feet below ground surface (bgs) and groundwater was encountered at 7 feet bgs. The monitoring well screen was set from 5 to 15 feet bgs. The complete monitoring well log is included in Appendix C.

To determine whether contamination was flowing towards the municipal water well while it was being operated a test was conducted. The pump in the municipal well was operated at full capacity for 24 hours to obtain the maximum drawdown of the groundwater around it. At the end of the test, but while the pump was still operating, a groundwater sample was collected from the newly installed well. Groundwater samples were also collected from 2664-MW2 and WP1 2664-01 after purging the wells and stabilizing the field parameters. Water samples did not contain chemical constituents above the groundwater action levels. Table 5-2 lists the complete suite of analyses and sample results above detection limits. A complete set of analytical results is included in Appendix D, and Appendix E contains the groundwater field sampling forms.

Table 5-2
USTs 2664 and 2667 Groundwater Analytical Results Above Detection Limits
Unalaska Island, Alaska

Parameter	Units	ADEC Cleanup Level[1]	Sample Results			
			AM-A502401	AM-A502302	AM-A502301	AM-A510101 and 510102
Location	--	--	2664-MW2	Municipal Water Well	2667-MW1	WP1-2664-01
Diesel-range Organics (AK102)	µg/L	1,500	ND [100]	ND [100]	37.3 J	353 U J, UB/RL
Residual-range Organics (AK103)	µg/L	1,100	166	102 UB/RL	162 UB/RL	--
PAH (SW8270C SIM)						
2-Methylnaphthalene	µg/L	--	ND [0.05]	ND [0.05]	ND [0.05]	--
Acenaphthene	µg/L	2,200	ND [0.05]	ND [0.05]	ND [0.05]	0.154
Fluorene	µg/L	1,460	ND [0.05]	ND [0.05]	ND [0.05]	0.48
Naphthalene	µg/L	1,460	ND [0.05]	ND [0.05]	ND [0.05]	0.0896 UB/RL

[1]18 AAC 75, Table C for groundwater.
ND = nondetect
J = Estimated value; See Appendix K for more details
UB/RL = Analyte detected in Method Blank, the reported value is considered valid.

A water sample was also collected on 19 September from the Municipal Water Well at the end of this special draw down pumping event. These samples also met applicable cleanup and drinking water levels.

5.2.3 Conclusions and Recommendations

No further action is recommended for the Building 2664 and 2667 sites. The draw down test and subsequent sampling event indicated that contamination is not being drawn into the City Municipal Well or the installed sentinel wells surrounding the City Well. However, residual contamination remains in the underlying bedrock; therefore, it is recommended that the level of institutional controls required to manage the residual contamination be coordinated between the USAED, ADEC, and the property owner.

5.3 UST 3260

Building 3260 was a mess hall located in the northern valley of the Ski Bowl area on Unalaska Island. It is located immediately upgradient of UST 3265. The former 300-gallon UST for Building 3260 was located west of the northwest corner of the building. It is assumed that the tank stored the heating oil for the Building 3260 heating system. The heavily corroded, single-wall steel tank was covered with less than six inches of soil upon initial investigation. Low vegetation and some exposed gravel currently remain at the site. Figure 5-1 presents the general site location and Figure 5-4 presents the site layout.

5.3.1 Previous Activities

During the 1997 IRA, an 88 ft^2 area was excavated and the 300-gallon UST was removed. Approximately 325 gallons of water with diesel odor were pumped from the UST. Two soil samples collected from the excavation exceeded ADEC Method 2 cleanup levels. A test pit was advanced to the west (downgradient) of the UST, and a light diesel odor was noted. One soil sample collected from the test pit exceeded the ADEC Method 2 cleanup level for DRO. Due to access limitations, no soil was removed from the site and the excavation was backfilled with onsite soil. See Figure 5-4 for the sample locations and results.

In addition to these three soil samples collected as part of activities of UST 3260, analytical results from a test pit sample collected near the UST 3265 site were determined to be applicable for the UST 3260 site evaluation. Because DRO contamination was found at the test pit north of UST 3265, even though there was no POL contamination from UST 3265, it is most likely that the contamination in this test pit migrated from UST 3260. The test pit location in relation to UST 3260 and UST 3265 and sample results are presented in Figure 5-4.

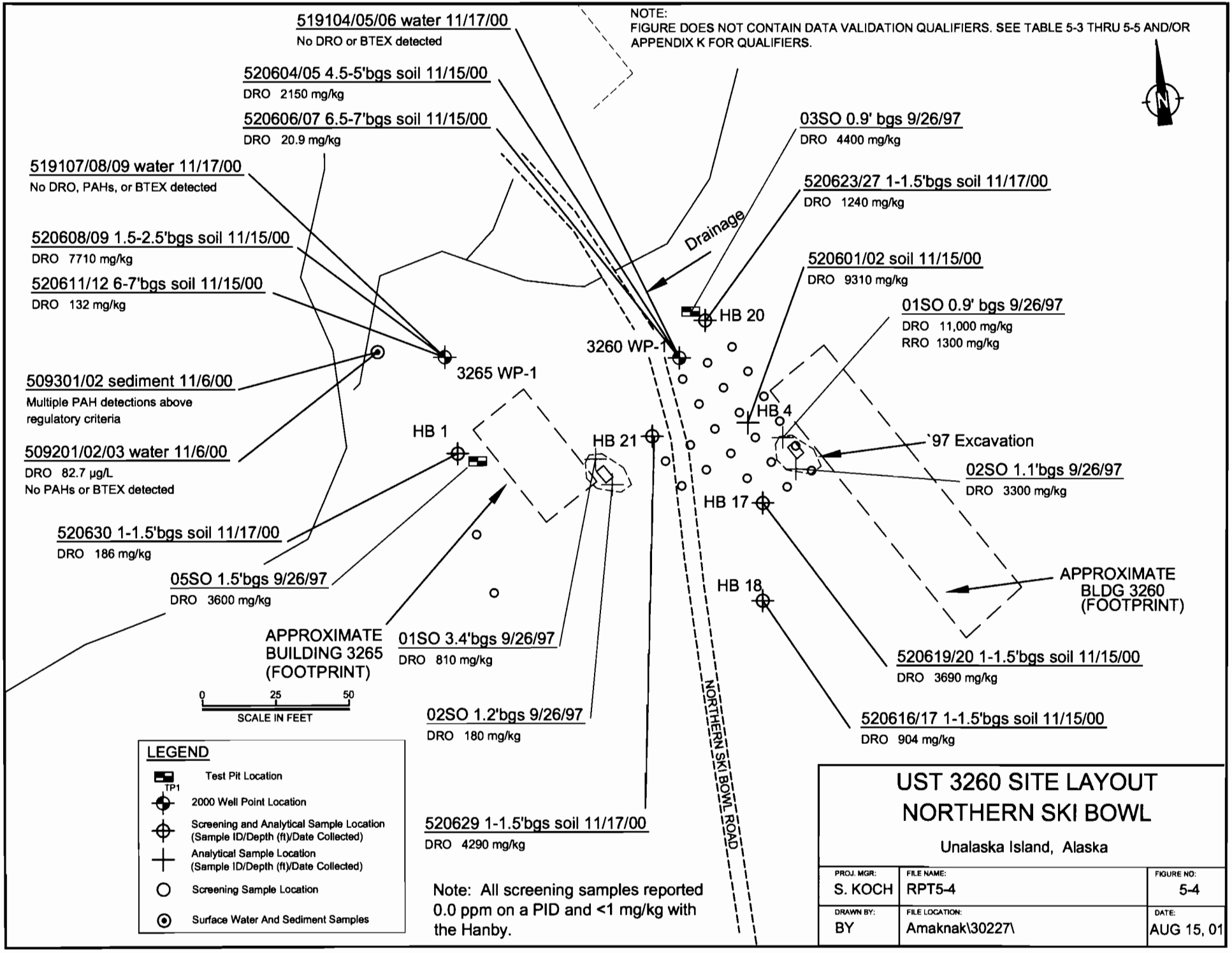
5.3.2 2000 Work Completed

Due to the 1997 exceedances of ADEC Method 2 cleanup levels, an excavation was planned for the UST 3260 site. However, wetlands in the area precluded the field crew's ability to conduct the planned excavations. It was decided that a screening grid would be conducted to determine the lateral extents of contamination in the area. Following the established wetlands guidance for the 2000 Islandwide field activities (see Section 4.2.1), hand augers were advanced at 21 locations in the vicinity of the former UST 3260 to the depth contamination was previously identified in an attempt to outline the contaminated area. In addition, three screening samples were collected west of the former Building 3265. The hand augers were conducted over the course of a week from 10 to 18 November. Figure 5-4 presents the location of the screening grid and individual screening nodes.

In addition to the screening grid, two well points were installed at the site. One well point (3265 WP-1) was installed on 15 November northwest of the former Building 3265. The other well point (3260 WP-1) was installed northwest of the former Building 3260. Both wells were installed using a hand augered boring to a depth of approximately seven feet bgs. Figure 5-4 presents the location of the two well points.

5.3.2.1 Field Screening Results

Each of the 21 Building 3260 and three Building 3265 screening nodes were field screened using a PID. All results indicated that no contamination was present at the locations (0.0 parts


NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLE 5-3 THRU 5-5 AND/OR APPENDIX K FOR QUALIFIERS.
519104/05/06 water 11/17/00
No DRO or BTEX detected
520604/05 4.5-5'bgs soil 11/15/00
DRO 2150 mg/kg
520606/07 6.5-7'bgs soil 11/15/00
DRO 20.9 mg/kg
519107/08/09 water 11/17/00
No DRO, PAHs, or BTEX detected
520608/09 1.5-2.5'bgs soil 11/15/00
DRO 7710 mg/kg
520611/12 6-7'bgs soil 11/15/00
DRO 132 mg/kg
509301/02 sediment 11/6/00
Multiple PAH detections above regulatory criteria
509201/02/03 water 11/6/00
DRO 82.7 µg/L
No PAHs or BTEX detected
520630 1-1.5'bgs soil 11/17/00
DRO 186 mg/kg
05SO 1.5'bgs 9/26/97
DRO 3600 mg/kg
APPROXIMATE BUILDING 3265 (FOOTPRINT)
01SO 3.4'bgs 9/26/97
DRO 810 mg/kg
02SO 1.2'bgs 9/26/97
DRO 180 mg/kg
520629 1-1.5'bgs soil 11/17/00
DRO 4290 mg/kg
03SO 0.9' bgs 9/26/97
DRO 4400 mg/kg
520623/27 1-1.5'bgs soil 11/17/00
DRO 1240 mg/kg
Drainage
520601/02 soil 11/15/00
DRO 9310 mg/kg
01SO 0.9' bgs 9/26/97
DRO 11,000 mg/kg
RRO 1300 mg/kg
HB 20
3260 WP-1
3265 WP-1
HB 1
HB 21
HB 4
`97 Excavation
02SO 1.1'bgs 9/26/97
DRO 3300 mg/kg
HB 17
HB 18
APPROXIMATE BLDG 3260 (FOOTPRINT)
520619/20 1-1.5'bgs soil 11/15/00
DRO 3690 mg/kg
520616/17 1-1.5'bgs soil 11/15/00
DRO 904 mg/kg
NORTHERN SKI BOWL ROAD
0 25 50
SCALE IN FEET
LEGEND
Test Pit Location
TP1
2000 Well Point Location
Screening and Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
Screening Sample Location
Surface Water And Sediment Samples
Note: All screening samples reported 0.0 ppm on a PID and <1 mg/kg with the Hanby.
UST 3260 SITE LAYOUT
NORTHERN SKI BOWL
Unalaska Island, Alaska
PROJ. MGR: S. KOCH
FILE NAME: RPT5-4
FIGURE NO: 5-4
DRAWN BY: BY
FILE LOCATION: Amaknak\30227\
DATE: AUG 15, 01

per million [ppm] readings). Five of the Building 3260 screening nodes exhibited a slight fuel-like odor; therefore, Hanby™ soil screening samples were collected from those locations. The Hanby™ results also indicated that no contamination was present at the site.

5.3.2.2 Analytical Results

Five soil analytical samples and one field duplicate were collected from the former Building 3260 sample grid, and one soil analytical sample was collected from the former Building 3265 sample area. DRO contamination was detected in all five of the Building 3260 grid samples above Method 2 regulatory criteria. No contamination was detected above Method 2 regulatory criteria in the Building 3265 soil analytical sample (HB 1).

In addition, two soil analytical samples were collected from both 3260 WP-1 and 3265 WP-1. A field duplicate sample was also collected from 3265 WP-1. DRO was detected above Method 2 regulatory criteria in the shallow soil samples collected in each well point but was not detected above regulatory criteria in the deeper samples.

Four TOC samples were also collected from the Building 3260 sampling grids, and one TOC sample was collected from 3265 WP-1. Because multiple soil samples at the site exceeded Method 2 regulatory criteria for DRO, Method 3 regulatory criteria was calculated for DRO using site-specific TOC data contained in Table 3-2. The resulting most stringent site-specific cleanup level for DRO is 8,300 mg/kg which is the Method 2 ingestion pathway; the calculated Method 3 migration to groundwater cleanup level is 12,500 mg/kg. Using the Method 3 ingestion regulatory criteria, only one soil sample exceeds the most stringent regulatory criteria.

One groundwater sample was collected from 3260 WP-1 and 3265 WP-1 after purging each well and stabilizing the field parameters. No sheen or odor was detected in either well during sampling, and no contaminants were detected above regulatory criteria.

One sediment and one surface water sample was collected from the creek approximately 150 feet west of the former Building 3260. Numerous PAH parameters in the sediment exceed

regulatory criteria. The surface water sample did not detect contaminants that exceeded 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels.

Figure 5-4 presents all the sample locations, Table 5-3 lists the complete suite of soil analyses and sample results above detection limits, Table 5-4 lists the complete suite of sediment analyses and sample results above detection limits, and Table 5-5 lists the complete suite of surface water analyses and sample results above detection limits. A complete set of analytical results is included in Appendix D. Appendix E contains the groundwater field sampling forms, and the chromatograms used to determine biogenic interference for the samples are included in Appendix H. The Method 3 calculation sheets are included in Appendix J.

5.3.3 Conclusions and Recommendations

Limited further action is recommended for this site due to the one soil DRO result that marginally exceeds the calculated site-specific Method 3 regulatory criteria and due to the contaminants detected in the creek sediment.

Due to the wetland nature of the site, excavation work was not performed during the 2000 field season and is not recommended for future work. Excavation activities would be problematic due to the amount of surface water and shallow groundwater at the site and the poor condition of the site access road. In addition, the one soil result that exceeds the Method 2 ingestion criteria for DRO was collected at one foot bgs.

Surface water in the downgradient creek and groundwater in the two downgradient well points do not exceed 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. In addition, no parameters at the site exceed the calculated Method 3 migration to groundwater regulatory criteria. Since no parameters currently exceed the migration to groundwater criteria and contaminants have not migrated to the groundwater or surface water downgradient of the site, it is reasonable to conclude that contaminant migration is not occurring.

Table 5-3
UST 3260 Soil Analytical Results Above Detection Limits

			Proposed Method 3 Cleanup Level[2]	AM-A520601 and 520602	Parameter	Units	ADEC Cleanup Level[1]		Sample Results	AM-A520630	AM-A520604 and 520605	AM-A520606 and A520607	AM-A520608 and 520609	AM-A520613 and 520614	AM-A520611 and 520612
Location	--	--	--	3260 HB-4 1' bgs	3260 HB 18 1-1.5' bgs	3260 HB-17 1-1.5' bgs	3260 HB-20 1-1.5' bgs	3260 HB-20 (FD) 1-1.5' bgs	3260 HB-21 1-1.5' bgs	3265 HB-1 1-1.5' bgs	3260 WP-1 4.5-5' bgs	3260 WP-1 6.5-7' bgs	3265 WP-1 1.5-2.5' bgs	3265 WP-1 1.5-2.5' bgs (FD)	3265 WP-1 6-7' bgs
Diesel-Range Organics (AK102)	mg/kg	230	8300	9310 J	904 J	3690 J	1240 J	--	4290 J	186	2150	20.9	7710 J	402 J	132
PAH (SW8270C SIM)															
2-Methylnaphthalene	µg/kg	--	--	75	14	210	19	14	530	ND [4.2]	ND [11]	ND [2.7]	ND [12]	9.9	ND [2.3]
Acenaphthene	µg/kg	190,000	4,980,000	130	ND [2.8]	19	ND [17]	ND [14]	110	ND [4.2]	ND [11]	ND [2.7]	ND [12]	ND [5.3]	ND [2.3]
Acenaphthylene	µg/kg	--	--	95	ND [2.8]	8.3	ND [17]	ND [14]	47	ND [4.2]	ND [11]	ND [2.7]	ND [12]	6.4	ND [2.3]
Anthracene	µg/kg	3,900,000	24,900,000	56	ND [2.8]	14	ND [17]	ND [14]	49	ND [4.2]	ND [11]	ND [2.7]	ND [12]	ND [5.3]	ND [2.3]
Benzo(a)anthracene	µg/kg	5,500	9,300	8.5	7	11	130	43	24	ND [4.2]	120	ND [2.7]	20	29	ND [2.3]
Benzo(a)pyrene	µg/kg	900	930	4.1	ND [2.8]	ND [3.6]	ND [17]	ND [14]	ND [8.1]	ND [4.2]	ND [11]	ND [2.7]	ND [12]	ND [5.3]	ND [2.3]
Benzo(b)fluoranthene	µg/kg	9,000	9,300	6	ND [2.8]	ND [3.6]	ND [17]	ND [14]	ND [8.1]	ND [4.2]	ND [11]	ND [2.7]	ND [12]	ND [5.3]	ND [2.3]
Benzo(g,h,i)perylene	µg/kg	--	--	ND [3.6]	ND [2.8]	ND [3.6]	ND [17]	ND [14]	ND [8.1]	ND [4.2]	ND [11]	ND [2.7]	ND [12]	ND [5.3]	ND [2.3]
Benzo(k)fluoranthene	µg/kg	93,000	--	ND [3.6]	ND [2.8]	ND [3.6]	ND [17]	ND [14]	ND [8.1]	ND [4.2]	ND [11]	ND [2.7]	ND [12]	ND [5.3]	ND [2.3]
Chrysene	µg/kg	550,000	930,000	34	10	11	130 J	34	16	ND [4.2]	140	ND [2.7]	16	24	ND [2.3]
Dibenzo(a,h)anthracene	µg/kg	900	--	ND [3.6]	ND [2.8]	ND [3.6]	ND [17]	ND [14]	ND [8.1]	ND [4.2]	ND [11]	ND [2.7]	ND [12]	ND [5.3]	ND [2.3]
Fluoranthene	µg/kg	1,900,000	3,320,000	34	ND [2.8]	9.2	ND [17]	ND [14]	25	ND [4.2]	ND [11]	ND [2.7]	ND [12]	ND [5.3]	ND [2.3]
Fluorene	µg/kg	240,000	3,320,000	280	3.2	58	ND [17]	ND [14]	460	ND [4.2]	ND [11]	ND [2.7]	15	ND [5.3]	ND [2.3]
Indeno(1,2,3-cd)pyrene	µg/kg	9,000	--	ND [3.6]	ND [2.8]	ND [3.6]	ND [17]	ND [14]	ND [8.1]	ND [4.2]	ND [11]	ND [2.7]	ND [12]	ND [5.3]	ND [2.3]
Naphthalene	µg/kg	38,000	3,200,000	38	8.4	61	100	41	50	ND [4.2]	ND [11]	ND [2.7]	ND [12]	11	ND [2.3]
Phenanthrene	µg/kg	--	--	100	8.2	38	ND [17]	ND [14]	530	ND [4.2]	ND [11]	ND [2.7]	ND [12]	ND [5.3]	ND [2.3]
Pyrene	µg/kg	1,400,000	2,490,000	36	ND [2.8]	28	ND [17]	ND [14]	24	ND [4.2]	ND [11]	ND [2.7]	ND [12]	ND [5.3]	ND [2.3]
BTEX (SW8260B)															
Toluene	µg/kg		202,000	--	--	--	7.6 J	ND [37]	--	--	--	--	--	--	--

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
[2]For all compounds except naphthalene and toluene, the proposed Method 3 cleanup levels are based on ingestion. The proposed Method 3 cleanup levels for naphthalene and toluene are based on migration to groundwater.
BTEX = benzene, toluene, ethylbenzene and xylenes
ND = nondetect
PAH = polynuclear aromatic hydrocarbnon

Table 5-4
UST 3260 Sediment Analytical Results Above Detection Limits

Parameter	Units	Screening Level[1]	Sample Results AM-A509301 and 509302
Location	--	--	Creek Sediment
Diesel-range Organics (AK102)	mg/kg	--	311 J
PAH (SW8270C SIM)			
2-Methylnaphthalene	µg/kg	--	180
Acenaphthene	µg/kg	620	1,300
Acenaphthylene	µg/kg	--	40
Anthracene	µg/kg	220	3100
Benzo(a)anthracene	µg/kg	110	5,100
Benzo(a)pyrene	µg/kg	140	4,600
Benzo(b)fluoranthene	µg/kg	27.2	4,900
Benzo(g,h,I)perylene	µg/kg	290	1,700
Benzo(k)fluoranthene	µg/kg	240	1,300
Chrysene	µg/kg	500	6,700
Dibenzo(a,h)anthracene	µg/kg	28.2	450
Fluoranthene	µg/kg	2,900	8,500
Fluorene	µg/kg	540	1,200
Indeno(1,2,3-cd)pyrene	µg/kg	78	1,600
Naphthalene	µg/kg	480	110
Phenanthrene	µg/kg	850	14,000
Pyrene	µg/kg	570	16,000
BTEX (SW8260B)	µg/kg	--	No analytes detected

[1]EPA Secondary Chronic Value. Values selected from Toxicological Criteria for Screening Contaminants of Potential Concern for Effects on Sediment Associated Biota: 1997 Revision.
J = Estimated value; See Appendix K for more details.

Table 5-5
UST 3260 Water Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results		
			AM-A509201 thru 509203	AM-A519104 thru 519106	AM-A519107 thru 519109
Location	--	--	Creek	3,260 WP-1	3,265 WP-1
Diesel-range Organics (AK102)	µg/L	1,500	82.7 J	ND [100]	ND [100]
PAH (SW8270C SIM)					
2-Methylnaphthalene	µg/kg	--	ND [0.05]	0.058	ND [0.05]
BTEX (SW8260B)	µg/kg	--	No analytes detected	No analytes detected	No analytes detected

[1]18 AAC 75, Table C for groundwater. Surface water regulatory criteria, contained in 18 AAC 70, includes total aromatic hydrocarbons (TAH) levels not to exceed 10 µg/L and total aqueous hydrocarbons (TaqH) levels not to exceed 15 µg/L. TAH is calculated by summing concentrations of BTEX analyte concentrations, and TaqH is calculated by summing concentrations of BTEX and PAH analytes.
J = Estimated value; See Appendix K for more details.

In order to ensure that contamination has not migrated off-site and will not migrate in the future, it is recommended that an additional well point be placed to the south of Building 3265 and that the three well points be sampled annually over the next two years. Although the sediment samples contain PAHs, they are not migrating to the surface water flowing over them at unacceptable levels. This may be because of the age of the contaminants in the sediments, or the area/volume of contaminated sediments may be small. Thus, it is recommended that a creek sediment and surface water sample be collected both upstream of the 2000 sample location (north of Building 3260) to represent the creek's natural condition and further downstream of the 2000 sediment location to determine the area of contaminated sediments. These samples will be analyzed for DRO and PAHs.

If no contaminants are detected in the downgradient well points, or in the creek's water for two years, and the area of contaminated creek sediment is relatively small, then this site will be recommended for NFA. Fish do not migrate to this area of the creek so they are not exposed to these sediments, and even the most careful excavation of the contaminated sediments in the creek bottom would release some of the contaminated sediments into the water which would flow to areas used by fish.

5.4 UST 3465

Building 3465 was a former latrine site southwest of Building 3360 in the main Ski Bowl valley on Unalaska Island. The former 300-gallon UST for Building 3465 was located north of the northeast corner of the building. It was situated just below ground surface in stiff, silty peat and contained heating oil. Only a gravel pad currently remains at the site. A small stream flows to the southwest approximately 20 feet from the tank site. Figure 5-1 presents the general site location and Figure 5-5 presents the site layout.

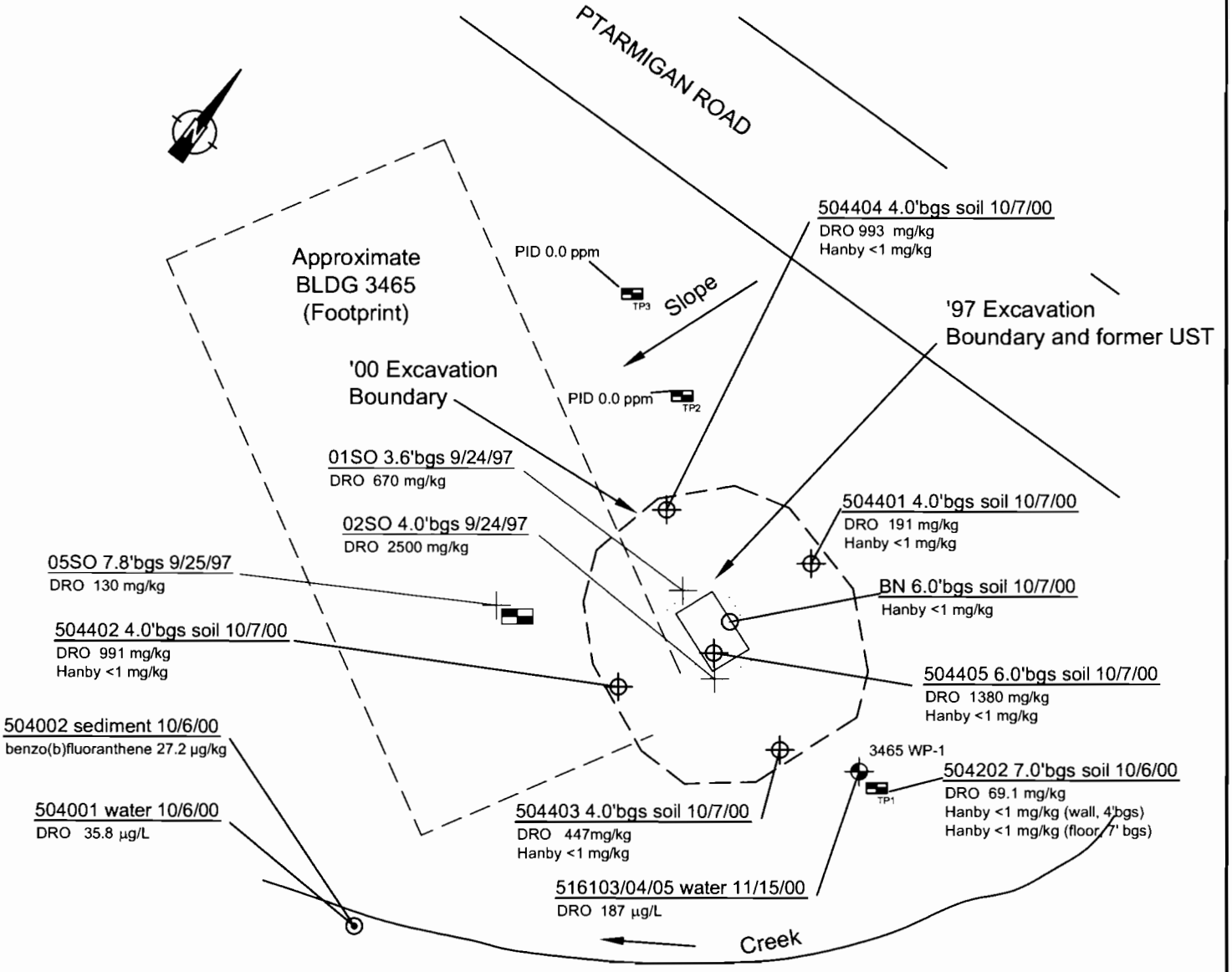
5.4.1 Previous Remedial/Removal Activities

During the 1997 IRA, a 15 ft^2 area was excavated and the 300-gallon UST was removed. Approximately 350 gallons of water were pumped from the heavily corroded tank. The two soil samples collected from the excavated area exceeded the ADEC Method 2 DRO cleanup level. One test pit (TP-1) was also dug to bedrock approximately 12 feet southwest (downgradient) of UST 3465; the one soil sample collected from the test pit did not exceed ADEC cleanup levels. See Figure 5-5 for the sample locations and results.

5.4.2 2000 Work Completed

Before work began at the site, Ptarmigan Road, leading to the Ski Bowl area, was repaired to allow equipment access. The road was graded and a culvert was installed. The rock and culvert material was donated by the City of Unalaska.

Due to the 1997 exceedances of ADEC Method 2 cleanup levels, a 16-foot by 20-foot area was excavated on 7 October 2000 in the vicinity of the previously detected contamination. The excavation was continued until groundwater was encountered at 6 feet bgs and field screening results indicated that no more contaminated soil remained at the site. Approximately 10 cy of potentially contaminated soil was removed from the center of the excavation and transported off-site for storage and treatment at the contaminated soil stockpile yard. The area was then backfilled with clean fill and seeded. Figure 5-5 presents the layout of the excavation.



NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLE 5-6 THRU 5-8 AND/OR APPENDIX K FOR QUALIFIERS.

LEGEND

- Test Pit and Sample Location (TP1)
- 2000 Well Point Location
- Screening and Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
- Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
- Screening Sample Location
- Surface Water And Sediment Samples

0 5 10 20

SCALE IN FEET

UST-3465 SITE LAYOUT and SAMPLE LOCATIONS

Unalaska Island, Alaska

PROJ. MGR:	FILE NAME:	FIGURE NO:
S. KOCH	RPT5-5	5-5
DRAWN BY:	FILE LOCATION:	DATE:
OM/BY	Amaknak\30227	AUG 15, 01

Three test pits were dug surrounding the excavation to confirm that all of the potential contamination was removed from the site. One test pit, TP-1, was dug immediately east of the excavation between the former UST location and the small creek. TP-1 was advanced until groundwater was encountered at 7 feet bgs. A well point (3465 WP-1) was installed at the west edge of TP-1. Two additional test pits, TP-2 and TP-3, were dug west of the excavation approximately 6 feet and 12 feet west of the edge of the excavated area, respectively. Both test pits were advanced to 5 feet bgs. Figure 5-5 presents the locations of the three test pits and one well point.

5.4.2.1 Field Screening Results

Six Hanby™ soil screening samples were collected from the excavation to confirm that all the potential contamination was removed. One screening sample was collected from each of the four sidewalls at approximately 3.5 feet bgs, and two screening samples were collected from the floor of the excavation at approximately 5.5 feet bgs. Additionally, one soil screening sample was collected from the uncontaminated soil stockpile. All Hanby™ results were less than 1 mg/kg. Figure 5-5 presents the screening locations and results.

Two Hanby™ soil screening samples and two headspace readings were collected from TP-1. One screening sample and headspace reading was collected from the floor and one from the north wall of the test pit. Both Hanby™ results were less than 1 mg/kg, and the headspace readings were 8.6 ppm and 5.4 ppm, respectively. Only headspace readings were collected from TP-2 and TP-3; readings and visual observations did not indicate any contamination at either test pit. Figure 5-5 presents the locations and screening results for both test pits.

5.4.2.2 Analytical Results

Five soil analytical samples were collected from the excavation: four samples from the sidewalls and one from the floor. One TOC sample was also collected from the uncontaminated soil stockpile and from an uncontaminated section of the TP-1 wall at 4 feet bgs. Three excavation sidewall samples and the floor sample, collected at contact with bedrock, all detected DRO concentrations above Method 2 regulatory criteria. Therefore,

Method 3 regulatory criteria was calculated for DRO using site-specific TOC data contained in Table 3-2. The resulting most stringent site-specific cleanup level for DRO is 8,300 mg/kg; therefore, no samples exceeded the Method 3 regulatory criteria. In addition, DRO detected in the three sidewall samples is attributed to biogenic interference, and the DRO detected in the floor sample is partially attributed to biogenic interference. Although an assessment of cumulative risks and hazards is required by 18 AAC 75.325(g), the assessment could not be conducted due to the PAH analysis not being performed by the analytical laboratory. However, due to the low levels of non-biogenic contamination detected at the site, it is assumed that the cumulative risk and hazard index would be below the respective limitations.

One soil analytical sample was collected from the floor of TP-1 at 7 feet bgs. The sample did not detect any contaminants that exceeded regulatory criteria.

One sediment and one surface water sample were collected from the creek approximately 15 feet east of the excavation. The creek flows to the south at approximately 15-20 gallons per minute. While the creek surface water sample did not detect contaminants that exceeded 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels, the sediment sample detected one PAH parameter above regulatory criteria.

One groundwater sample was collected from 3465 WP-1 after purging the well and stabilizing the field parameters. The sample did not detect contaminants that exceeded 18 AAC 75 or 18 AAC 70 regulatory criteria. See Appendix E for the groundwater field sampling forms.

Figure 5-5 presents the sample locations, Table 5-6 lists the complete suite of soil analyses and sample results above detection limits, Table 5-7 lists the complete suite of sediment analyses and sample results above detection limits, and Table 5-8 lists the complete suite of water analyses and sample results above detection limits. A complete set of analytical results is included in Appendix D, and the chromatograms used to determine biogenic interference for the samples are included in Appendix H. The Method 3 calculation sheets are included in Appendix J.

Table 5-6
UST 3465 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Proposed Method 3 Cleanup Level[2]	Sample Results					
				AM-A504202	AM-A504401	AM-A504402	AM-A504403	AM-A504404	AM-A504405
Location	--	--	--	TP1 Floor	North wall	South wall	East wall	West wall	Floor
Diesel-range Organics (AK102)	mg/kg	230	8,300	69.1 J	191	991 J	447 J	993 J	1,380 J
Residual-range Organics (AK103)	mg/kg	8,300	--	--	1,930 J	4,980 J	3,050 J	2,950 J	2,830 J
BTEX (SW8260B)	--	--	--	--	--	--	--	--	--

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
[2]Note: The propsed Method 3 cleanup level is based on ingestion.
J = Estimated value; See Appendix K for details.

Table 5-7
UST 3465 Sediment Analytical Results Above Detection Limits

Parameter	Units	Screening Level[1]	Sample Results AM-A504002
Location	--	--	Creek sediment
Diesel-range Organics (AK102)	mg/kg	--	172 J
BTEX (SW8260B)	µg/kg	--	No analytes detected
PAH (SW8270C SIM)			
2-Methylnaphthalene	µg/kg	--	8.6
Anthracene	µg/kg	220	12
Benzo(a)anthracene	µg/kg	110	29
Benzo(a)pyrene	µg/kg	140	31
Benzo(b)fluoranthene	µg/kg	27.2	47
Benzo(g,h,I)perylene	µg/kg	290	16
Benzo(k)fluoranthene	µg/kg	240	14
Chrysene	µg/kg	500	31
Fluoranthene	µg/kg	2900	79
Fluorene	µg/kg	540	15
Indeno(1,2,3-cd)pyrene	µg/kg	78	17
Naphthalene	µg/kg	480	7.5
Phenanthrene	µg/kg	850	73
Pyrene	µg/kg	570	72

[1]EPA Secondary Chronic Value. Values selected from Toxicological Criteria for Screening Contaminants of Potential Concern for Effects on Sediment Associated Biota: 1997 Revision.

J = Estimated value; See Appendix K for details.

Table 5-8
UST 3465 Water Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results AM-A504001	Sample Results AM-A516103, -104, -105
Location	--	--	Creek	WP-1
Diesel-range Organics (AK102)	µg/L	1,500	35.8 J, UB/RL	187 J
Residual-range Organics (AK103)	µg/L	1,100	--	702 J UB/RL
BTEX (SW8260B)				
Toluene	µg/L	1,000	ND [5]	3.2 J
PAH (SW8270C SIM)	µg/L	--	No analytes detected	No analytes detected

[1]18 AAC 75, Table C for groundwater. Surface water regulatory criteria, contained in 18 AAC 70, includes total aromatic hydrocarbons (TAH) levels not to exceed 10 µg/L and total aqueous hydrocarbons (TaqH) levels not to exceed 15 µg/L. TAH is calculated by summing concentrations of BTEX analyte concentrations, and TaqH is calculated by summing concentrations of BTEX and PAH analytes.

J = Estimated value; See Appendix for details

UB/RL = Analyte detected in Method Blank; reported value is considered valid.

5.4.3 Conclusions and Recommendations

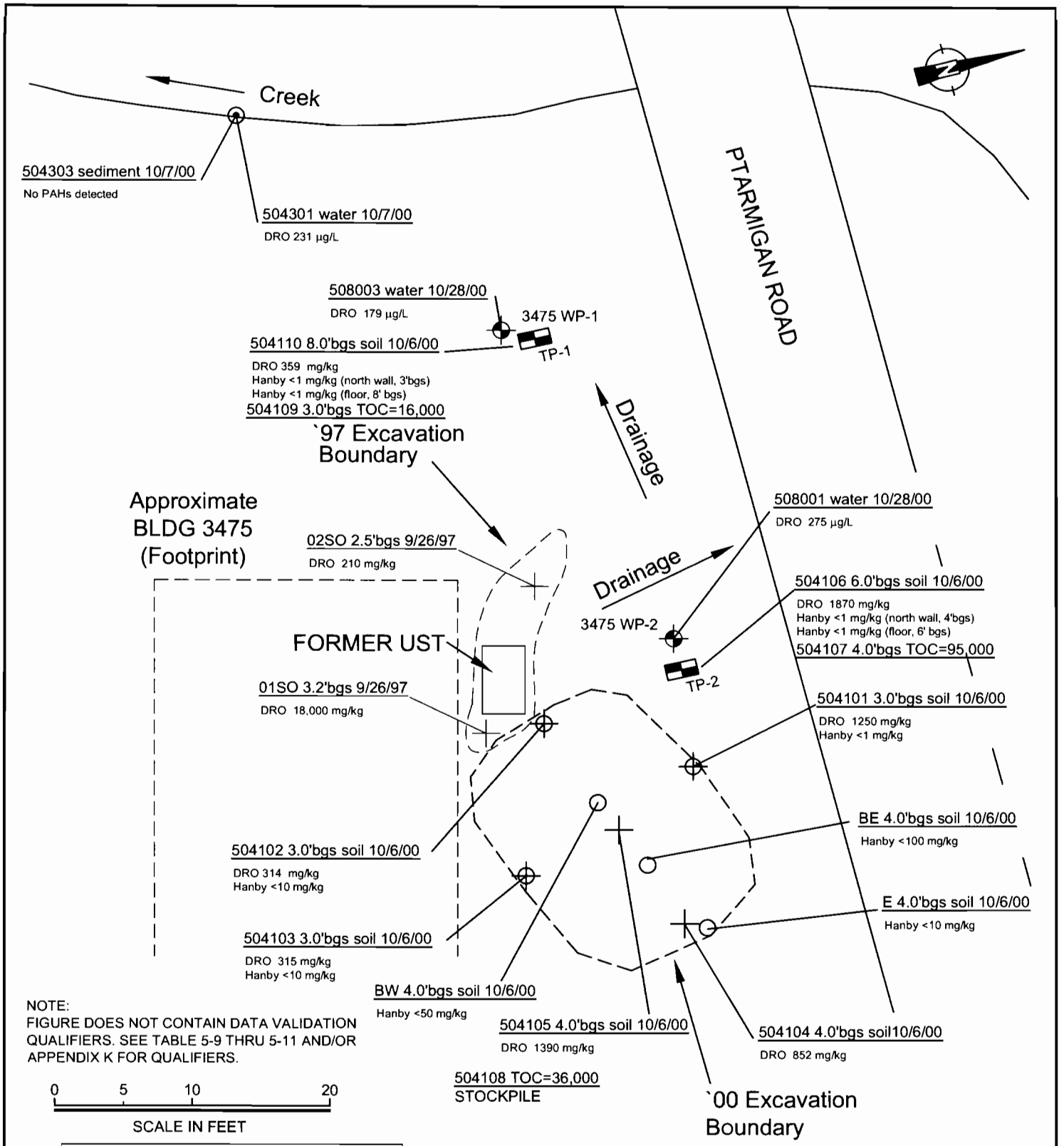
The Building 3465 site is recommended for NFA. No soil samples exceed the calculated Method 3 regulatory criteria. Although an assessment of cumulative risks and hazards is required by 18 AAC 75.325(g), the assessment could not be conducted due to the PAH analysis not being performed by the analytical laboratory. However, due to the low levels of non-biogenic contamination detected at the site, it is assumed that the cumulative risk and hazard index would be below the respective limitations.

One sediment sample exceeded the regulatory criteria for benzo(b)fluoranthene. The site is recommended for NFA for the following reasons:

- The primary (former UST) and secondary (contaminated soil) sources of contamination have been removed from the area.
- No soil contamination remains at the site
- The surface water in the downgradient creek and groundwater in the downgradient well point do not exceed 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. Since contaminants have not migrated to the groundwater or surface water downgradient of the site in 50 years it is unlikely that they will migrate in the future.
- The sediment sample contained one PAH at a level greater than, but within two times, the conservative Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota (Jones et al. 1997).

5.5 UST 3475

Building 3475 was a latrine site in similar condition to and located east of Building 3465 on Unalaska Island. The former 300-gallon UST for Building 3475 was located northeast of the north corner of the building. It was situated just below ground surface and contained heating oil. A small stream flows to the south approximately 40 feet to the west of the tank site. Figure 5-1 presents the general site location and Figure 5-6 presents the site layout.



UST-3475 SITE LAYOUT and SAMPLE LOCATIONS

Unalaska Island, Alaska

PROJ. MGR.	FILE NAME.	FIGURE NO:
S. KOCH	RPT5-6	5-6
DRAWN BY:	FILE LOCATION.	DATE:
OM/BY	Amaknak\30227	AUG 15, 0

5.5.1 Previous Remedial/Removal Activities

During the 1997 IRA, the 300-gallon UST was removed. One soil sample was collected from the eastern edge of the excavation at approximately 3 feet bgs; DRO in this sample exceeded the ADEC Method 2 cleanup level. One cy of POL-contaminated soil from the excavation was transported off-site for treatment. Sample locations and results are presented in Figure 5-6.

5.5.2 2000 Work Completed

As discussed previously for UST 3465, before starting work at the site, Ptarmigan Road was repaired to allow equipment access. The road was graded and new culverts were installed. The rock and culvert material was donated by the City of Unalaska.

Due to the 1997 exceedances of ADEC Method 2 cleanup levels, an 11-foot by 20-foot area was excavated on 6 October 2000 in the vicinity of the previously detected contamination. The excavation was continued to 4 feet bgs when field screening results indicated that all the contaminated soil had been removed from the site. Approximately 10 cy of contaminated soil was removed from the excavation and transported off-site to the contaminated soil stockpile yard for storage and treatment. The area was then backfilled with clean fill and seeded. Figure 5-6 presents the layout of the excavation.

Two test pits were dug in the vicinity of the excavation to confirm that all of the contamination was removed from the site. The first test pit , TP-1, was dug approximately 25 feet west of the excavation and 15 feet south of Ptarmigan Road between the excavation and a small creek. TP-1 was advanced until groundwater was encountered at 8 feet bgs. A well point (3475 WP-1) was installed at TP-1 to a depth of 8 feet bgs with the bottom three feet screened. The second test pit, TP-2, was an extension of the northeast corner of the excavation and stopped just short of Ptarmigan Road. TP-2 was advanced to 6 feet bgs, where water was observed to be seeping into the excavated area. A well point (3475 WP-2)

was installed at TP-2 to a depth of 6 feet bgs with the bottom 3 feet screened. Figure 5-6 presents the locations of the two test pits and two well points.

5.5.2.1 Field Screening Results

Six Hanby™ soil screening samples were collected from the excavation to confirm that all the contamination was removed. One screening sample was collected from each of the four sidewalls at approximately 3 feet bgs, and two screening samples were collected from the floor of the excavation at approximately 4 feet bgs. Additionally, one soil screening sample was collected from the uncontaminated soil stockpile. All Hanby™ results were less than 100 mg/kg. Figure 5-6 presents the locations and screening results.

Two Hanby™ soil screening samples and two headspace readings were collected from each of the two test pits. At TP-1, one screening sample and headspace reading was collected from the floor and one from 3 feet bgs on a wall of the test pit. Both Hanby™ results were less than 1 mg/kg, and the headspace readings were 3.6 ppm and 5.4 ppm, respectively. At TP-2, one screening sample and headspace reading was collected from the floor and one from 4 feet bgs on the north wall of the test pit. Both Hanby™ results were less than 1 mg/kg, and the headspace readings were 4.2 ppm and 4.1 ppm, respectively. No indication of contamination was present in either test pit. Figure 5-6 presents the locations and screening results for both test pits.

5.5.2.2 Analytical Results

Five soil analytical samples were collected from the excavation: four samples from the sidewalls and one from the floor. One soil analytical sample was collected from the floor of both TP-1 and TP-2 at 8 feet and 6 feet bgs, respectively. One TOC sample was also collected from the uncontaminated soil stockpile, and a TOC sample was also collected from an uncontaminated section of each test pit wall at 4 feet and 2 feet bgs, respectively. All the excavation and test pit samples detected DRO concentrations above Method 2 regulatory criteria. Therefore, Method 3 regulatory criteria was calculated for DRO using the most conservative TOC value contained in Table 3-2. The resulting most stringent site-specific

cleanup level for DRO is 8,300 mg/kg, therefore, no samples exceeded the Method 3 regulatory criteria. As required by 18 AAC 75.325(g), an assessment of cumulative risks and hazards was also conducted according to procedures described in Section 3.3.4. The total cumulative (cancer) risk for the site was 2.8×10^{-11}, well below the limitation of 1×10^{-5}; the hazard index for the site is 6.1×10^{-6}, well below the limitation of 1.0.

One sediment and one surface water sample were collected from the creek approximately 40 feet west of the excavation. The creek flows to the south at approximately one gallon per minute. Neither sample detected contaminants that exceeded 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels.

One groundwater sample was collected from both 3475 WP-1 and 3475 WP-2 after purging the wells and stabilizing the field parameters. Neither sample detected contaminants that exceeded 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. See Appendix E for the groundwater field sampling forms.

Figure 5-6 presents the sample locations, Table 5-9 lists the complete suite of soil analyses and sample results above detection limits, Table 5-10 lists the complete suite of sediment analyses and sample results above detection limits, and Table 5-11 lists the complete suite of water analyses and sample results above detection limits. A complete set of analytical results is included in Appendix D, and the chromatograms used to determine biogenic interference for the samples are included in Appendix H. The Method 3, cumulative risk, and hazard calculation sheets are included in Appendix J.

5.5.3 Conclusions and Recommendations

The Building 3475 site is recommended for NFA. No samples exceeded the calculated Method 3 regulatory criteria, and the site did not exceed the cumulative risk and hazard index limitations.

Table 5-9
UST 3475 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Proposed Method 3 Cleanup Level[2]	Sample Results						
				AM-A504101	AM-A504102	AM-A504103	AM-A504104	AM-A504105	AM-A504106	AM-A504110
Location	--	--	--	North wall	West wall	South wall	East wall	Floor	TP2 Floor	TP1 Floor
Diesel Range Organics (AK102)	mg/kg	230	3,580	1,250 J	314 J	315 J	852 J	1,390 J	1,870 J	359 J
Residual Range Organics (AK103)	mg/kg	8,300	--	--	--	--	--	--	--	--
BTEX (SW8260B)	--	--	--	--	--	--	--	--	--	--
PAH (SW8270C SIM)										
2-Methylnaphthalene	µg/kg	--	--	--	--	--	17	ND [2.2]	--	--
Chrysene	µg/kg	550,000	930,000	--	--	--	ND [3.8]	2.6	--	--
Fluorene	µg/kg	240,000	3,320,000	--	--	--	4.6	5.2	--	--
Naphthalene	µg/kg	38,000	560,000	--	--	--	7.6	ND [2.2]	--	--
Pyrene	µg/kg	1,400,000	2,489,000	--	--	--	5.6	4.5	--	--

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.

[2]Note: The proposed Method 3 cleanup levels for DRO and naphthalene are based on migration to groundwater and the proposed Method 3 cleanup levels for chrysene, fluorene, and pyrene are based on ingestion.

J = Estimated value, see Appendix K for details.

Table 5-10
UST 3475 Sediment Analytical Results Above Detection Limits

Parameter	Units	Screening Level[1]	Sample Results
			AM-A504303
Location	--	--	Creek sediment
Diesel-range Organics (AK102)	mg/kg	230	147 J
Residual-range Organics (AK103)	mg/kg	8300	788 J
BTEX (SW8260B)	--	--	No analytes detected
PAH (SW8270C SIM)	µg/kg	--	No analytes detected

[1]EPA Secondary Chronic Value. Values selected from Toxicological Criteria for Screening Contaminants of Potential Concern for Effects on Sediment Associated Biota: 1997 Revision.
J = Estimated value; see Appendix K for details.

Table 5-11
UST 3475 Water Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results		
			AM-A504301	AM-A508001	AM-A508003
Location	--	--	Creek	WP-2	WP-1
Diesel-range Organics (AK102)	µg/L	1,500	231 J, UB/RL	275 J	179 J
Residual-range Organics (AK103)	µg/L	1,100	651 J, UB/RL	--	--
BTEX (SW8260B)					
Toluene	µg/L	1,000	ND [5]	0.78 J	ND [5]
PAH (SW8270C SIM)					
Naphthalene	µg/L	1,460	ND [0.05] J	0.17	ND [0.05]

[1]18 AAC 75, Table C for groundwater. Surface water regulatory criteria, contained in 18 AAC 70, includes total aromatic hydrocarbons (TAH) levels not to exceed 10 µg/L and total aqueous hydrocarbons (TaqH) levels not to exceed 15 µg/L. TAH is calculated by summing concentrations of BTEX analyte concentrations, and TaqH is calculated by summing concentrations of BTEX and PAH analytes.

J = Estimated value; see Appendix K for details.
UB/RL = Analyte detected in Method Blank; reported value is considered valid.

5.6 USTS 2762A AND 2762B

Building 2762 was a two-story barracks and was located on Choate Lane near the upper Broadway Avenue Bridge. The approximately 300 and 600 gallon former USTs for Building 2762 were located adjacent to the indented west corner of the building. An active utility line

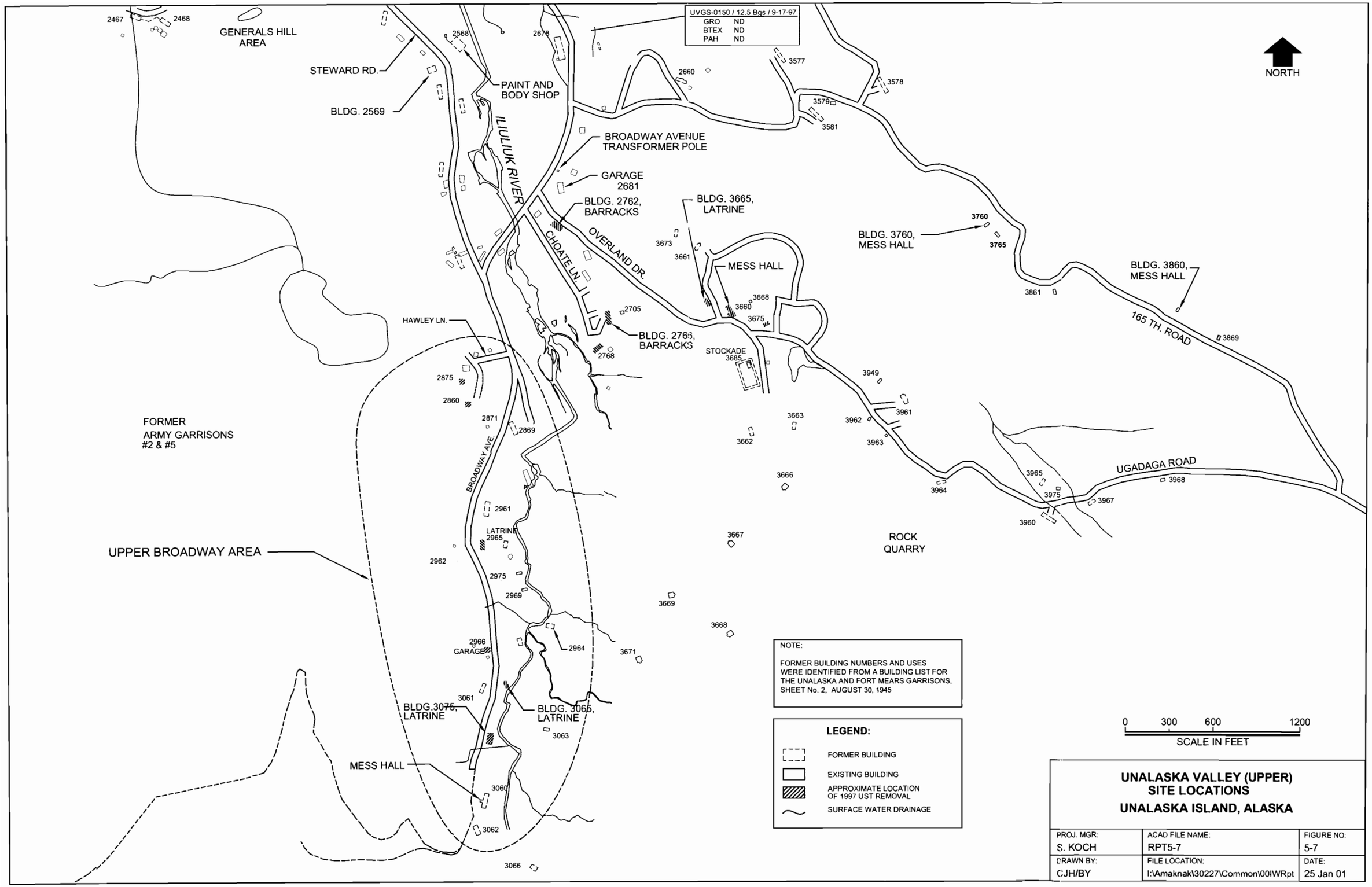
trends north south on the east side of the area excavated in 1997. Figure 5-7 presents the general site location and Figure 5-8 presents the site layout.

5.6.1 Previous Activities

During the 1997 IRA, water with a petroleum sheen was pumped from USTs 2762A and 2762B, and the tanks were removed. A total of 60 cy of POL-contaminated soil was removed from the UST 2762A excavation; 40 cy was removed from the UST 2762B excavation. All removed POL-contaminated soil was transported off-site for treatment. POL impacted soil was apparent under the building foundation, but the foundation prevented complete removal. A strong volatile odor and high PID readings were noted along the pipeline corridor by the northwest door of the building. Wet, coarse gravel with an oily sheen and diesel odor was encountered along the buried electrical line serving the property. Two of five soil samples exceeded ADEC Method 2 DRO cleanup levels. Sample locations and results are presented in Figure 5-8.

5.6.2 2000 Work Completed

Due to the 1997 exceedances of ADEC Method 2 cleanup levels, a 25-foot by 12-foot area was excavated on 17 October 2000 in the vicinity of the previously detected contamination. A power line split the excavated area and limited the removal of contaminated soil lying under the power line. The limits of the excavation were continued beyond the contamination detected by field screening methods to ensure that all contamination was removed from the site. The depth of the excavation was limited to 8 feet bgs where groundwater was encountered. Approximately 50 cy of contaminated soil was removed from the excavation and transported off-site to the contaminated soil stockpile yard for storage and treatment. The contaminated soil was stored separately at the yard until an analytical sample did not detect lead in the soil. The area was then backfilled with clean fill and seeded. Figure 5-8 presents the layout of the excavation.



NOTE:

FORMER BUILDING NUMBERS AND USES WERE IDENTIFIED FROM A BUILDING LIST FOR THE UNALASKA AND FORT MEARS GARRISONS, SHEET No. 2, AUGUST 30, 1945

LEGEND:

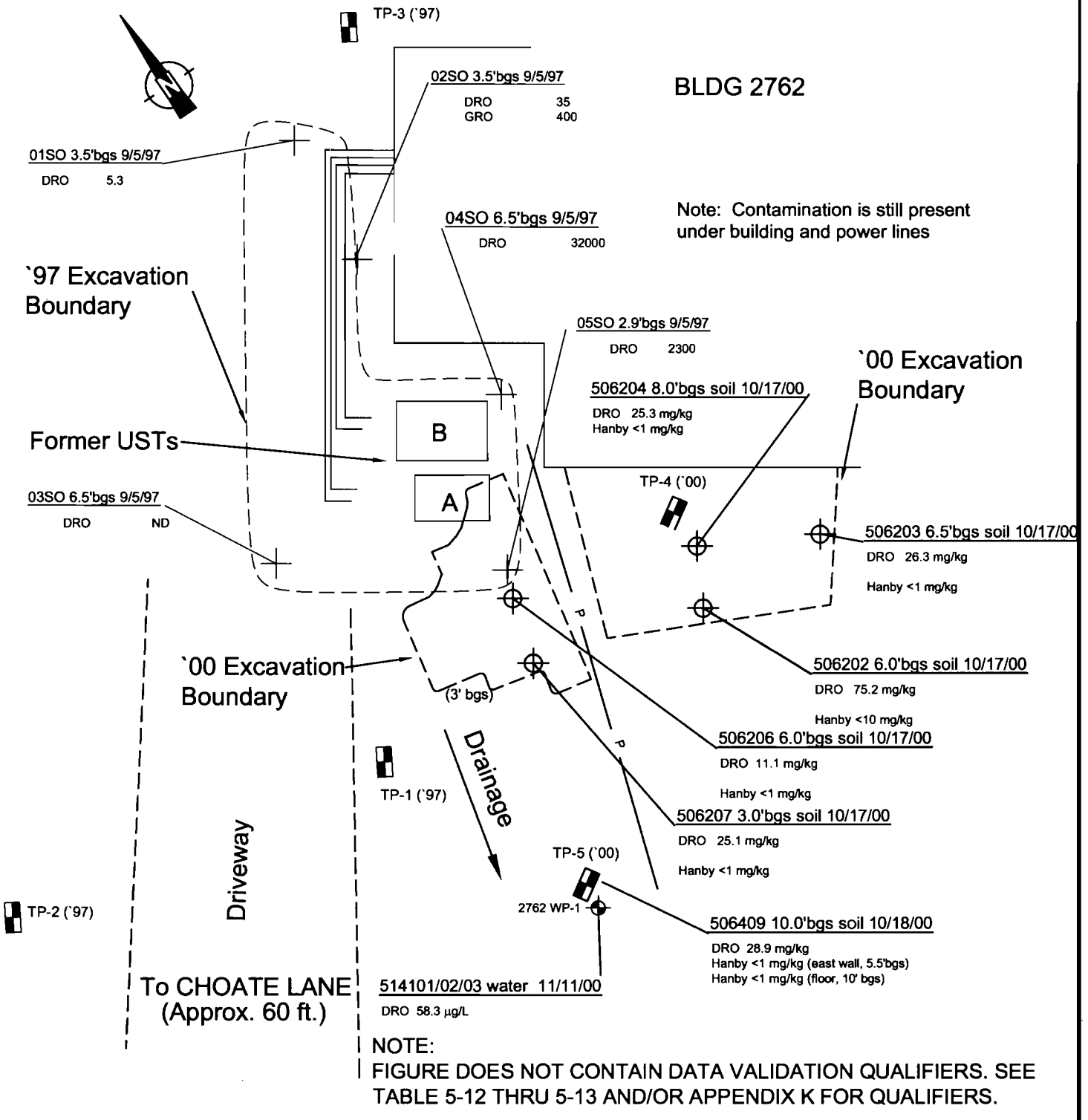
- FORMER BUILDING
- EXISTING BUILDING
- APPROXIMATE LOCATION OF 1997 UST REMOVAL
- SURFACE WATER DRAINAGE

0 300 600 1200

SCALE IN FEET

UNALASKA VALLEY (UPPER)
SITE LOCATIONS
UNALASKA ISLAND, ALASKA

PROJ. MGR:	ACAD FILE NAME:	FIGURE NO:
S. KOCH	RPT5-7	5-7
DRAWN BY:	FILE LOCATION:	DATE:
CJH/BY	I:\Amaknak\30227\Common\00IWRpt	25 Jan 01



NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLE 5-12 THRU 5-13 AND/OR APPENDIX K FOR QUALIFIERS.

LEGEND

- TP1 — Test Pit and Sample Location
- 2000 Well Point Location
- Screening and Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
- Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)

0 5 10 20

SCALE IN FEET

UST-2762 - A & B SITE LAYOUT and SAMPLE LOCATIONS

Unalaska Island, Alaska

PROJ. MGR.	FILE NAME:	FIGURE NO:
S. KOCH	RPT5-8	5-8
DRAWN BY:	FILE LOCATION:	DATE:
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Two test pits were dug in the vicinity of the excavation to confirm that all of the contamination was removed from the site. The first test pit, TP-4, resulted in becoming the southern portion of the excavation. The second test pit, TP-5, was dug approximately 30 feet west of Building 2762. TP-5 was advanced to 10 feet bgs, where water was observed. A well point (2762 WP-1) was installed at TP-5 to a depth of 10 feet bgs with the bottom 3 feet screened. Figure 5-8 presents the locations of the two test pits and one well point.

5.6.2.1 Field Screening Results

Five Hanby™ soil screening samples were collected from the excavation to confirm that all the contamination was removed. One screening sample was collected from each of the three sidewalls not adjacent to the Building 2672 foundation; two screening samples were collected from the floor of the excavation. All Hanby™ results were less than 10 mg/kg. In addition, one Hanby™ soil screening sample was collected from the uncontaminated soil stockpile. Figure 5-8 presents the locations and screening results.

Two Hanby™ soil screening samples and two headspace readings were collected from TP-5. One screening sample and headspace reading was collected from the floor and one from 5.5 feet bgs on the east wall of the test pit. Both Hanby™ results were less than 1 mg/kg, and the headspace readings were 0 ppm. Figure 5-8 presents the locations and screening results for both test pits.

5.6.2.2 Analytical Results

Five soil analytical samples were collected from the excavation: three samples from the sidewalls and two from the floor. A field duplicate sample was also collected from the floor of the excavation. Three TOC samples were also collected from the uncontaminated soil stockpile. In addition, one soil sample was collected from the contaminated soil stockpile and analyzed for lead (9.1 mg/kg detected). None of the samples detected contaminants that exceeded Method 2 regulatory criteria. As required by 18 AAC 75.325(g), an assessment of cumulative risks and hazards was also conducted according to procedures described in

Section 3.3.4. No PAH parameters were detected at the site; therefore the total cumulative (cancer) risk for the site and the hazard index were well below the respective limitations.

One soil analytical sample was collected from the floor of TP-5 at 10 feet bgs. The sample did not detect any contaminants that exceeded regulatory criteria.

One groundwater sample was collected from 2762 WP-1 after purging the well and stabilizing the field parameters. Duplicate and triplicate samples were also collected from 2762 WP-1. The samples did not detect any contaminants that exceeded 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. See Appendix E for the groundwater field sampling forms.

Figure 5-8 presents the sample locations, Table 5-12 lists the complete suite of soil analyses and sample results above detection limits, and Table 5-13 lists the complete suite of groundwater analyses and sample results above detection limits. A complete set of analytical results is included in Appendix D.

5.6.3 Conclusions and Recommendations

Two soil samples collected from the excavation sidewall adjacent to the building foundation exceeded ADEC Method 2 DRO cleanup levels. No other contaminants were detected in either soil or groundwater samples that exceeded Method 2 regulatory criteria or 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels; and the site did not exceed the cumulative risk and hazard index limitations.

Although DRO concentrations exceeding ADEC Method 2 cleanup levels remain in site soils, the presence of the building foundation prevented further soil excavation. Therefore, it is recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

Table 5-12
UST 2762 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results						
			AM-A506202	AM-A506203	AM-A506204	AM-A506205	AM-A506206	AM-A506207	AM-A506409
Location	--	--	South wall	Southeast wall	South floor	South floor (FD)	North floor	West wall	TP5 floor
Gasoline-range Organics (AK101)	mg/kg	260	1.68 UB/RL	1.15 J, UB/RL	0.559 UB/RL	ND [3.68] J	ND [3.99] J	1.26 J, UB/RL	2.64 J, UB/RL
Diesel-range Organics (AK102)	mg/kg	230	75.2 J	26.3 J	25.3 J	--	11.1 J	25.1 J	28.9 J
PAH (SW8270C SIM)	µg/kg	--	--	No analytes detected	--	--	No analytes detected	--	No analytes detected

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
J = Estimated value; see Appendix K for details.
UB/RL = Analyte detected in Method Blank; reported value is considered valid.

Table 5-13
UST 2762 Groundwater Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results	
			AM-A514101, -102, -103	AM-A514104, -105, -106
Location	--	--	2762 WP-1	2762 WP-1 (FD)
Gasoline-range Organics (AK101)	µg/L	1,300	42.7 J, UB/RL	26.9 J, UB/RL
Diesel-range Organics (AK102)	µg/L	1,500	58.3 J	47.1 J
BTEX (SW8260B)	µg/L	--	No analytes detected	No analytes detected
PAH (SW8270C SIM)	µg/L	--	No analytes detected	No analytes detected

[1]18 AAC 75, Table C for groundwater. Surface water regulatory criteria, contained in 18 AAC 70, includes total aromatic hydrocarbons (TAH) levels not to exceed 10 µg/L and total aqueous hydrocarbons (TaqH) levels not to exceed 15 µg/L. TAH is calculated by summing concentrations of BTEX analyte concentrations, and TaqH is calculated by summing concentrations of BTEX and PAH analytes.

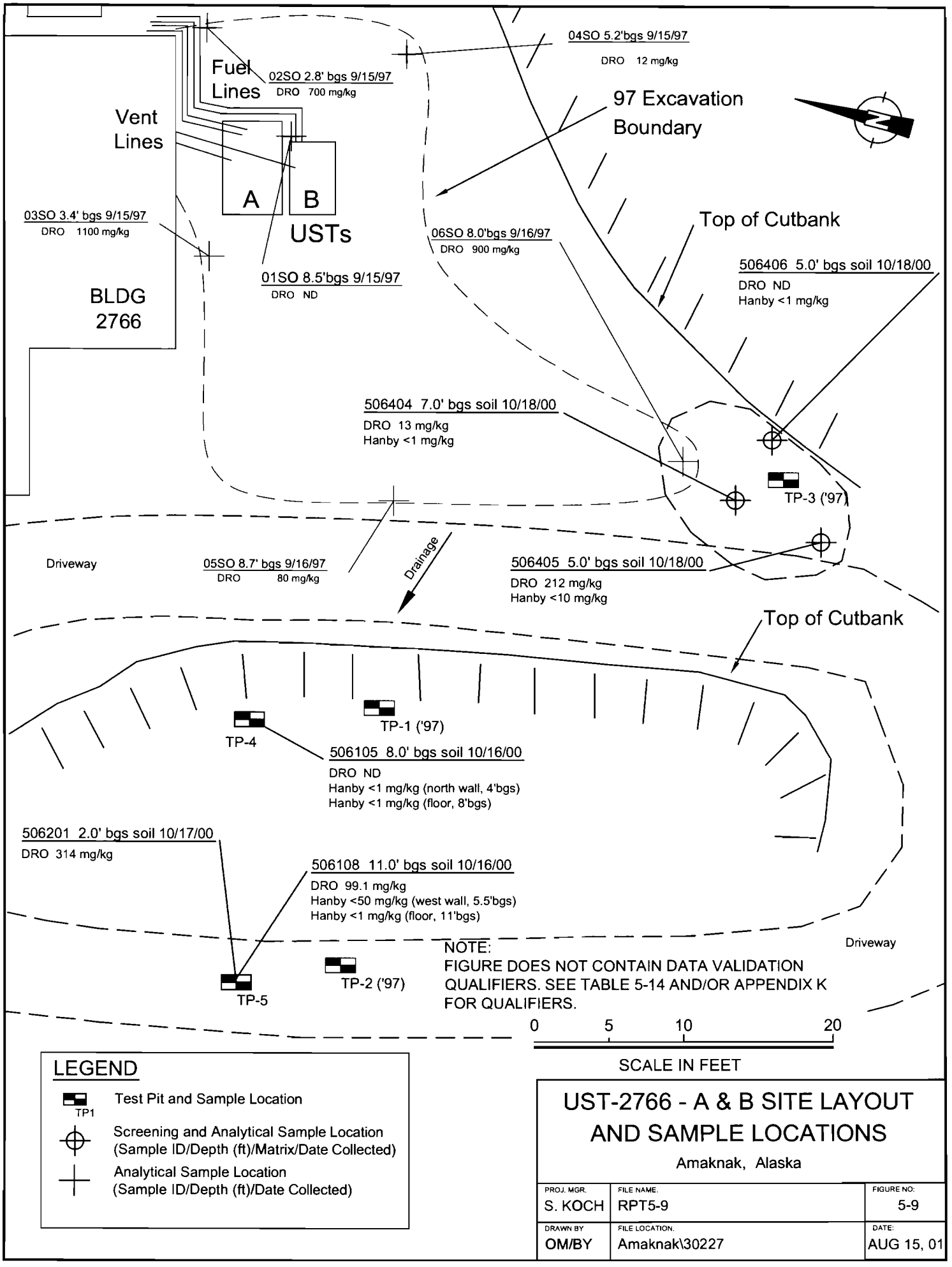
J = Estimated value; see Appendix K for details.
UB/RL = Analyte detected in Method Blank; reported value is considered valid.

5.7 USTs 2766A AND 2766B

Building 2766 is a large barracks currently being used as a residence and is located approximately 250 yards southeast of Building 2762 on Choate Lane. The former 600 and 300 gallon USTs for Building 2766 were located at the south end of the building in a small flat area between a cut bank and a driveway, and they contained heating oil. Figure 5-7 presents the general site location and Figure 5-9 presents the site layout.

5.7.1 Previous Remedial/Removal Activities

During the 1997 IRA, a 700 ft^2 area was excavated to bedrock and the 600- and 300-gallon capacity USTs were removed. Approximately 1,000 gallons of water were pumped from the two heavily corroded, single-walled steel tanks; an additional 200 gallons of water were pumped from the tanks the next day, suggesting that the tanks were perforated and the groundwater shallow. Approximately 158 cy of POL-impacted soil was removed from the excavation and transported off-site for treatment. Six soil samples were collected from the excavation; three exceeded the ADEC Method 2 DRO cleanup level. Two test pits were dug west of the excavation; no analytical samples were collected, but the test pits indicated the potential presence of petroleum hydrocarbons. One additional test pit was dug at the south



UST-2766 - A & B SITE LAYOUT AND SAMPLE LOCATIONS

Amaknak, Alaska

PROJ. MGR.	FILE NAME.	FIGURE NO:
S. KOCH	RPT5-9	5-9
DRAWN BY	FILE LOCATION.	DATE:
OM/BY	Amaknak\30227	AUG 15, 01

edge of the excavation and indicated that the extent of petroleum hydrocarbon contamination was reached. See Figure 5-9 for sample locations and results.

5.7.2 2000 Work Completed

Due to the 1997 exceedances of ADEC Method 2 cleanup levels, 35 cy of soil were excavated on 18 October 2000 in the vicinity of one of the exceedances. The other two samples that exceeded ADEC Method 2 cleanup levels were located immediately adjacent to the foundation of Building 2766; therefore, further excavation was not possible without destruction of the building foundation. The excavation was continued to seven feet bgs where field screening results indicated that no more contaminated soil remained at the site. Approximately 25 cy of contaminated soil was removed from the center of the excavation and transported off-site for storage and treatment at the contaminated soil stockpile yard. The area was then backfilled with clean fill and seeded. Figure 5-9 presents the layout of the excavation.

Two test pits were dug to the west of the excavation to determine if any contamination was migrating from the site. The first test pit, TP-4, was dug 10 feet downgradient (west) of the 1997 excavation. TP-4 was advanced until bedrock was encountered at 8 feet bgs. The second test pit, TP-5, was dug 20 feet west of TP-4, approximately 30 feet from the 1997 excavation. TP-5 was advanced until bedrock was encountered at 11 feet bgs. Fuel contaminated soil was immediately encountered at TP-5 at 0.5 feet bgs. Approximately 5 cy of contaminated soil was removed from the test pit and transported off-site for storage and treatment at the contaminated soil stockpile yar, and clean fill was used to backfill the test pit. The USAED QAR instructed field personnel to not remove additional soil from the area surrounding the test pit due to evidence that suggested the contamination was not FUDS eligible. No groundwater was encountered in either test pit. Figure 5-9 presents the locations of the two test pits.

5.7.2.1 Field Screening Results

Three Hanby™ soil screening samples were collected from the excavation to confirm that all the contamination was removed. Two screening samples were collected from the sidewalls and one from the floor of the excavation. All Hanby™ results were less than 10 mg/kg. Figure 5-9 presents the locations and screening results.

Two Hanby™ soil screening samples and two headspace readings were collected from each of the two test pits. At TP-4, one screening sample and headspace reading was collected from the floor and one from 4 feet bgs on the northwest wall of the test pit. Both Hanby™ results were less than 1 mg/kg, and the headspace readings were 0.0 ppm. At TP-5, one screening sample and headspace reading was collected from the floor and one from 5.5 feet bgs on the west wall of the test pit. Both Hanby™ results were less than 50 mg/kg, and the headspace readings were 40 ppm and 50 ppm, respectively. Additional direct screen PID readings were collected from TP-5 during contaminated soil removal. Direct screening levels were over 100 ppm and indicated that the contamination was from a "fresh" diesel spill. Figure 5-9 presents the locations and screening results for both test pits.

5.7.2.2 Analytical Results

Three soil analytical samples were collected from the excavation: two samples from the sidewalls and one from the floor. In addition, three TOC samples were collected from the uncontaminated soil stockpile. None of the samples detected contaminants that exceeded Method 2 regulatory criteria.

One soil analytical sample was collected from the floor of TP-4 at 8 feet bgs. A TOC sample was also collected at 4 feet bgs from an uncontaminated section of the sidewall of TP-4. One soil analytical sample was collected from the floor at 11 feet bgs and one from a section of the sidewall near the surface at 2 feet bgs from TP-5. The sidewall sample in TP-5 detected DRO concentrations above Method 2 regulatory criteria. Therefore, Method 3 regulatory criteria was calculated for DRO using site-specific TOC data contained in Table 3-2. The resulting most stringent site-specific cleanup level for DRO is 6,660 mg/kg; therefore, no samples

exceeded the Method 3 regulatory criteria. In addition, the DRO detected in the TP-5 sidewall sample is attributed to biogenic interference. As required by 18 AAC 75.325(g), an assessment of cumulative risks and hazards was also conducted according to procedures described in Section 3.3.4. No PAH parameters were detected at the site; therefore, the total cumulative (cancer) risk for the site and the hazard index were well below the respective limitations.

Figure 5-9 presents the sample locations and Table 5-14 lists the complete suite of analyses for each sample and sample results above detection limits. A complete set of analytical results is included in Appendix D, and the chromatograms used to determine biogenic interference for the samples are included in Appendix H. The Method 3 calculation sheets are included in Appendix J.

5.7.3 Conclusions and Recommendations

The Building 2766 site is recommended for NFA. No samples exceeded the calculated Method 3 regulatory criteria, and the site did not exceed the cumulative risk and hazard index limitations.

5.8 UST 3665

Building 3665 was a former latrine, but little evidence of the building site remains. The tank's position in relation to the former building was impossible to determine because there are no building remains. The tank was located approximately 100 feet west of Building 3660, north of Overland Drive and on the west side of the side street that connects with Overland Drive west of Building 3360. A "wet" area is located immediately north of the excavated area. Figure 5-7 presents the general site location and Figure 5-10 presents the site layout.

5.8.1 Previous Remedial/Removal Activities

During the 1997 IRA, a 2,250 ft^2 area was excavated to bedrock at a maximum depth of 12 feet bgs; 620 cy of POL-contaminated soil were transported off-site for treatment. Approximately 275 gallons of water were removed from the 300-gallon UST prior to its

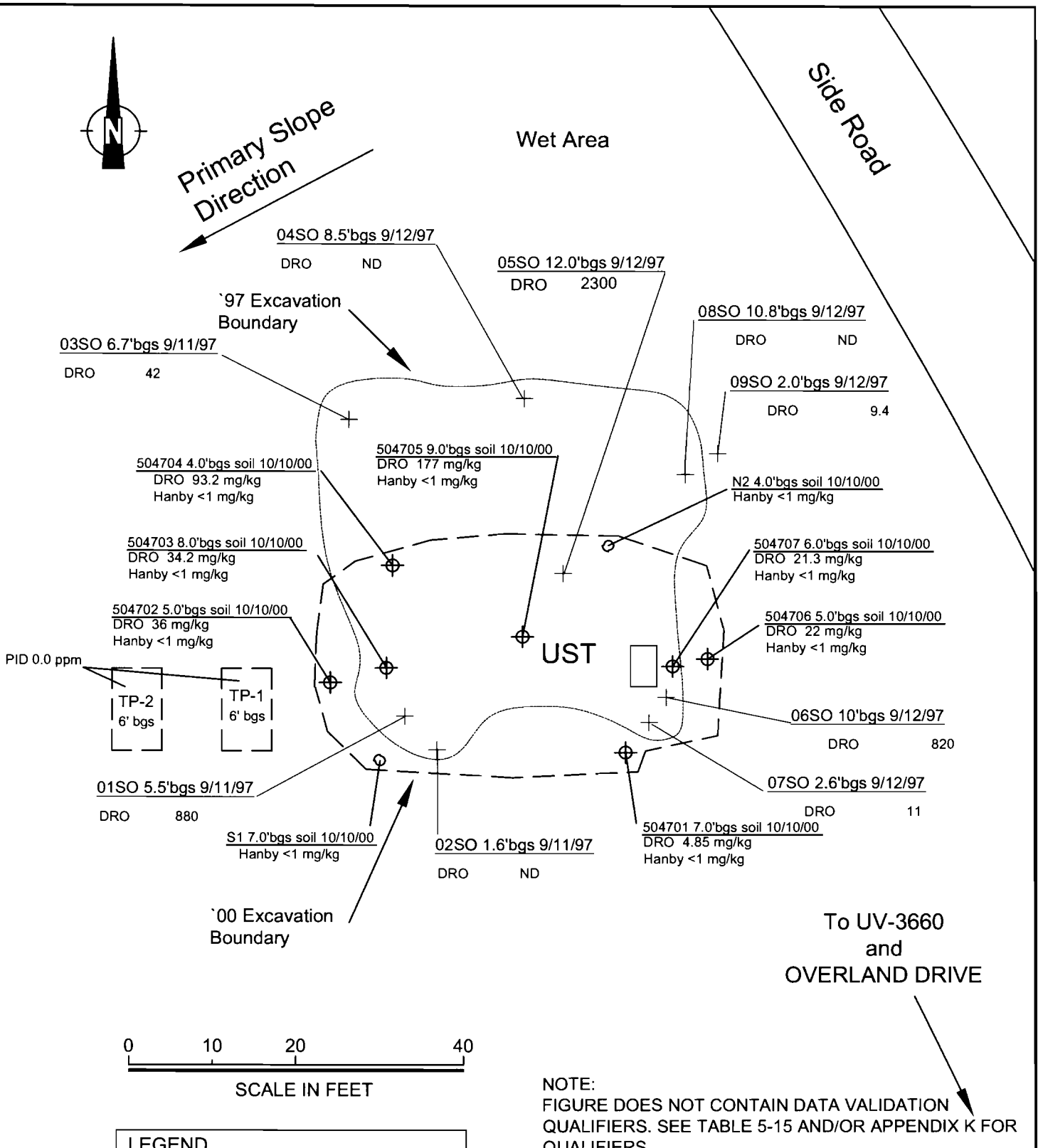
Table 5-14
UST 2766 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Proposed Method 3 Cleanup Level[2]	Sample Results						
				AM-A506105	AM-A506106	AM-A506108	AM-A506201	AM-A506404	AM-A506405	AM-A506406
Location	--	--	--	TP4 floor	TP4 floor (FD)	TP5 floor	TP5 wall	Floor	Southwest wall	East wall
Diesel-range Organics (AK102)	mg/kg	230	6,660	ND [4.44]	ND [4.43]	99.1 J	314 J	13 J	212 J	ND [4.73]
Residual-range Organics (AK103)	mg/kg	8,300	8,300	--	--	--	2,280 J	--	--	
PAH (SW8270C SIM)	µg/kg	--	--	No analytes detected	No analytes detected	--	--	No analytes detected	--	--

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.

[2]Note: The proposed Method 3 cleanup level for DRO is based on migration to groundwater and the proposed Method 3 cleanup level for RRO is based on ingestion.

J = Estimated value; see Appendix K for details.



NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLE 5-15 AND/OR APPENDIX K FOR QUALIFIERS.

UST-3665 2000 SITE LAYOUT and SAMPLE LOCATIONS

Unalaska Island, Alaska

PROJ. MGR.	FILE NAME:	FIGURE NO.
S. KOCH	RPT5-10	5-10
DRAWN BY.	FILE LOCATION:	DATE:
OM/BY	Amaknak\30227\	AUG 15, 01

removal. Although the UST was heavily corroded, no perforations were noted. The excavation was backfilled by pushing the excavated overburden into the excavation and recontouring the excavation walls. Additional soil was needed to fill the depression remaining after transporting 620 cy of POL-contaminated soil off-site for treatment.

Nine soil samples were collected from the excavated area at various depths; DRO in three samples exceeded the ADEC Method 2 cleanup levels. See Figure 5-10 for the sample locations and results.

5.8.2 2000 Work Completed

Due to the 1997 exceedances of ADEC Method 2 cleanup levels, a 25-foot by 40-foot area was excavated on 9-10 October 2000 in the vicinity of the previously detected contamination. Immediately after starting the excavation, the boundary of the 1997 excavation was discovered. At approximately six feet bgs, a strong fuel odor was encountered. The excavation was continued to an average of approximately 10 feet bgs where weathered bedrock was encountered. Approximately 450 cy of soil was excavated, and 110 cy of contaminated soil was transported off-site to the contaminated soil stockpile yard for storage and treatment.

A 4-foot high construction fence was erected around the excavation after the first day of activity. In addition, drainage control was constructed with a bulldozer upgradient of the excavation to prevent the excavation from filling up with surface run-off from heavy precipitation received during excavation activities. Some water was observed in the excavation but was attributed to the heavy precipitation and not to groundwater. Following the second day of excavation, the area was backfilled to pre-1997 elevation with clean fill, compacted with a bulldozer, regraded to level the site, and seeded. Figure 5-10 presents the layout of the excavation.

Two test trenches were dug to the west of the excavated area to confirm the limits of the contamination and ensure that all of the contamination was removed from the site. The first test trench, TP-1, was dug approximately 6 feet west of the excavation and was 8 feet long

and 6 feet deep. The second test trench, TP-2, was dug 6 feet west of TP-1 and was 10 feet long and 6 feet deep. No contamination was observed in either test trench. Well points were not installed in either test trench because groundwater was not encountered. Figure 5-10 presents the locations of the two test trenches.

5.8.2.1 Field Screening Results

Two Hanby™ soil screening samples were collected from contaminated soil (based on PID readings) and removed from the UST 3665 excavation. Results indicated less than 1 mg/kg (diesel) in the first, and 100 to 200 mg/kg (diesel) in the second sample. The soil had a noticeable odor but was not consistent with a diesel odor.

Nine Hanby™ soil screening samples were collected from the excavation to confirm that all the contamination was removed. Six screening samples were collected from the sidewalls; three screening samples were collected from the floor of the excavation. All Hanby™ results were less than 1 mg/kg. Figure 5-10 presents the locations and screening results. Additionally, three Hanby™ soil screening samples were collected from the uncontaminated soil stockpile. All Hanby™ results were less than 10 mg/kg.

Headspace readings were collected from TP-1 and TP-2. All results indicated that no contamination was present in the test trenches. Figure 5-10 presents the locations and screening results for both test trenches.

5.8.2.2 Analytical Results

Seven soil analytical samples were collected from the excavation: four samples from the sidewalls and three from the floor. The floor samples were collected from grey/gravelly sand in the cracks of the weathered bedrock, and the sidewall samples were collected from the same soil layer at approximately 1-2 feet above the bottom of the excavation. Three TOC samples were also collected from the uncontaminated soil stockpile. None of the samples detected contaminants that exceeded Method 2 regulatory criteria. As required by 18 AAC 75.325(g), an assessment of cumulative risks and hazards was also conducted according to procedures described in Section 3.3.4. No PAH parameters were detected at the site;

therefore, the total cumulative (cancer) risk for the site and the hazard index were well below the respective limitations.

Figure 5-10 presents the sample locations, and Table 5-15 lists the complete suite of soil analyses and sample results above detection limits. A complete set of analytical results is included in Appendix D.

5.8.3 Conclusions and Recommendations

No further action is recommended for the Building 3665 site. No contaminants were detected in the soil samples that exceeded Method 2 regulatory criteria.

5.9 UPPER UNALASKA VALLEY 165TH ROAD AND UGADAGA ROAD

Buildings 3760 and 3860 were mess halls, but little of the buildings remain. Building 3760 was located on the south side of 165th Road, and Building 3860 was located on the north side of 165th Road. The two mess halls supported the Army's Unalaska Army Garrison. The buildings are approximately 3 miles southeast of the City of Unalaska. Before work began at the sites, 165th Road was repaired to allow site access. Approximately 29 cubic yards of fill was added to the road to allow vehicle access. Figure 5-7 presents the general site location, and Figures 5-11 and 5-12 present the site layouts.

5.9.1 Previous Remedial/Removal Activities

During a 1998 site reconnaissance, the presence of the two USTs was confirmed. The tank locations were difficult to approach with excavation equipment because accessing the tanks would disturb remains of several other buildings considered historically significant. Permission to proceed with IRA activities was not received from SHPO; therefore, the tanks were not removed in 1998.

5.9.2 2000 Work Completed

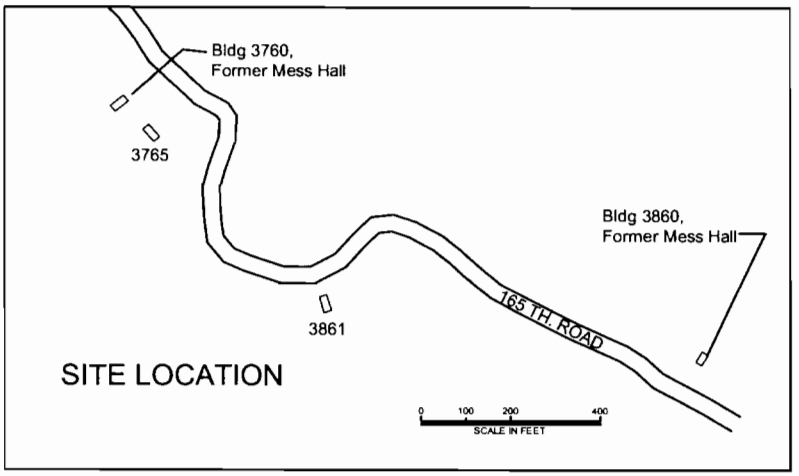
Due to the difficulty with accessing the tanks identified during the 1998 site reconnaissance, it was decided to close the USTs in place.

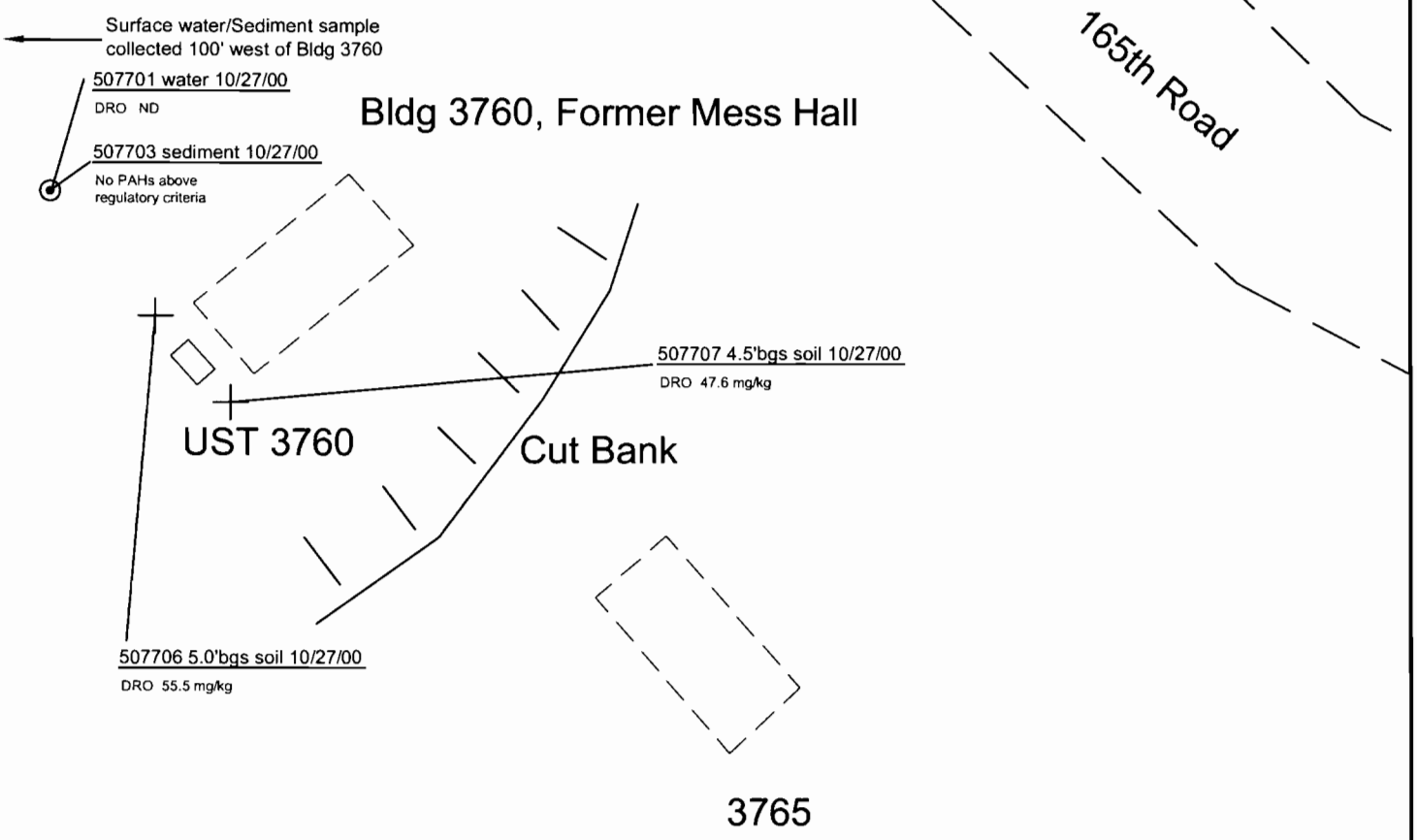
Table 5-15
UST 3665 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results						
			AM-A504701	AM-A504702	AM-A504703	AM-A504704	AM-A504705	AM-A504706	AM-A504707
Location	--	--	South wall	West wall	West floor	North wall	Middle floor	East wall	East floor
Diesel-range Organics (AK102)	mg/kg	230	4.85 J	36 J	34.2 J	93.2 J	177 J	22 J	21.3 J
PAH (SW8270C SIM)	--	--	No analytes detected	--	No analytes detected	--	--	--	No analytes detected

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.

J = Estimated value; see Appendix K for details.





NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLE 5-16 THRU 5-18 AND/OR APPENDIX K FOR QUALIFIERS.

0 5 10 20
SCALE IN FEET

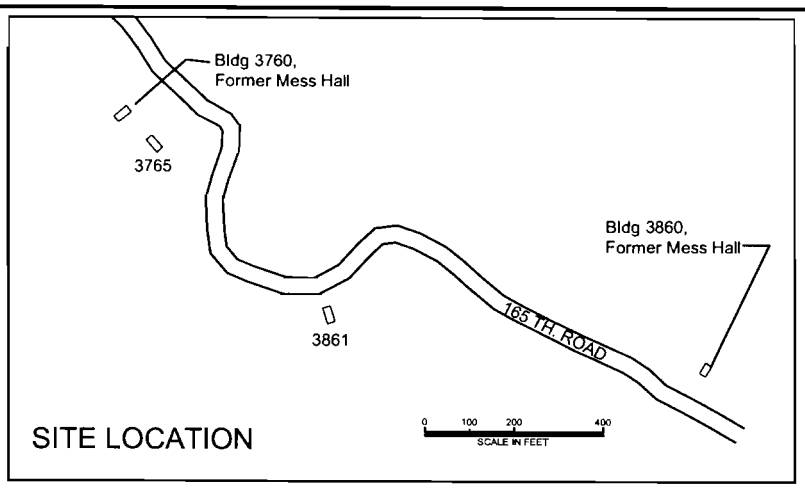
LEGEND

- Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
- Surface Water And Sediment Samples

UST-3760 SITE LAYOUT and SAMPLE LOCATIONS

Unalaska Island, Alaska

PROJ. MGR.	FILE NAME:	FIGURE NO:
S. KOCH	RPT5-11	5-11
DRAWN BY:	FILE LOCATION:	DATE:
OM/BY	Amaknak\30227	AUG 15, 01



Bldg 3860, Former Mess Hall

UST 3860

507606 5.0'bgs soil 10/26/00
DRO 90 mg/kg

507604 4.0'bgs soil 10/26/00
DRO 1070 mg/kg

165th Road

NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLE 5-19 AND/OR APPENDIX K FOR QUALIFIERS.

0 5 10 20
SCALE IN FEET

LEGEND

+ Analytical Sample Location
(Sample ID/Depth (ft)/Date Collected)

UST-3860 SITE LAYOUT and SAMPLE LOCATIONS

Unalaska Island, Alaska

PROJ. MGR.	FILE NAME.	FIGURE NO:
S. KOCH	RPT5-12	5-12
DRAWN BY:	FILE LOCATION:	DATE.
BY	Amaknak\30227	AUG 15, 01

UST 3760 is located on the south side of the Building 3760 remains. The top 6-inches of soil covering UST 3760 were removed by hand tools on 15 October 2000 to expose the tank. After uncovering the tank, it was noted that the tank was 3 feet in diameter and buried at 6-inches bgs. The tank contained water; therefore, a small opening was cut into the top of the tank and the water was pumped out. Approximately 190 gallons of water and 20 gallons of sludge was removed and containerized. No fuel was present. The inside of the tank was cleaned with sorbent wipes. After cleaning, the tank was filled with clean gravel and sand and reburied. Two hand augured borings were conducted at the site to determine the extent of potential contamination. One boring was conducted on each end of the tank. The east boring was placed two feet from the end of the tank and advanced to 4.5 feet bgs. Rust staining was encountered in the organic silt soil from 4 to 4.5 feet bgs but no odor was detected. The west boring was placed three feet from the end of the tank and advanced to 5 feet bgs. Rust staining was observed from 4 to 5 feet bgs and a slight fuel odor was noted. Two other hand augured borings were conducted to the east and northeast of the UST in order to collect TOC samples. Both borings were advanced to 2 feet bgs. See Figure 5-11 for the layout of the site and location of borings.

UST 3860 is located on the south side of the Building 3860 remains. The top 6-inches of soil covering UST 3860 were removed by hand tools on 13 October 2000 to expose the tank. After uncovering the tank, it was noted that the tank was 3 feet in diameter and buried at 6-inches bgs. The tank was also full of slightly turbid water that had a fuel odor. A small opening was cut into the top of the tank and 280 gallons of water were pumped out. Very little sludge was noted in the UST after removing the water, the small amount remaining after filling sample jars was wiped up with sorbent pads. During tank cleaning, water was observed to enter the tank through multiple perforations. After cleaning, the tank was filled with clean gravel and sand and reburied. Two hand augered borings were conducted at the site to determine the extent of potential contamination. One boring was conducted on each end of the tank. The northeast boring was placed immediately adjacent to the tank and advanced to 4 feet bgs. The southwest boring was placed three feet from the end of the tank and advanced to 5 feet bgs. Both borings were advanced to below the bottom of the tank and both encountered a strong fuel odor throughout the boring. An organic silt was also

encountered in both borings to approximately 4 feet bgs; the southwest boring encountered silty sand with some gravel from 4 to 5 feet bgs. Two other hand augered borings were conducted to the north of the UST in order to collect TOC samples. One boring was advanced to 2 feet bgs, and the other boring was advanced to 3 feet bgs. See Figure 5-12 for the layout of the site and location of borings.

5.9.2.1 Field Screening Results

Because USTs 3760 and 3860 were closed in place, no field screening tests were necessary.

5.9.2.2 Analytical Results

One soil analytical sample was collected from the bottom of each hand augered boring at UST 3760. The samples were collected from a depth one foot below the bottom of the tank. Two TOC samples were also collected from an uncontaminated area to the east of UST 3760. Although a slight fuel odor was noted in the west boring, methylene chloride, the only contaminant detected at the site above Method 2 regulatory criteria, was detected in the east hand auger location. Due to the methylene chloride detection, Method 3 regulatory criteria was calculated for the contaminant using site-specific TOC data contained in Table 3-2. The resulting most stringent site-specific cleanup level for methylene chloride is 50 µg/kg; therefore, methylene chloride did not exceed the Method 3 regulatory criteria. As required by 18 AAC 75.325(g), an assessment of cumulative risks and hazards was also conducted according to procedures described in Section 3.3.4. The total cumulative (cancer) risk for the site was 9.2×10^{-11}, well below the limitation of 1×10^{-5}; the hazard index for the site is 5.5×10^{-6}, well below the limitation of 1.0.

One sediment and one surface water sample was collected from the creek approximately 100 feet west of UST 3760. The sediment sample did not detect contaminants that exceeded regulatory criteria, and the surface water sample did not detected contaminants that exceeded 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. However, elevated levels of 2-Butanone were detected in sediment samples. The creek flows to the north at approximately 200-300 gallons per minute.

One sludge and one water waste characterization sample were collected from the sludge and water contained within UST 3760 prior to draining and cleaning.

Figure 5-11 presents the UST 3760 sample locations, Table 5-16 lists the complete suite of soil (non-waste characterization) analyses and sample results above detection limits, Table 5-17 lists the complete suite of sediment analyses and sample results above detection limits, and Table 5-18 lists the complete suite of water analyses and sample results above detection limits. A complete set of analytical results, including the UST waste characterization samples, is included in Appendix D. The Method 3, cumulative risk, and hazard calculation sheets are included in Appendix J.

One soil analytical sample was collected from the bottom of each hand augered boring at UST 3860. The samples were collected from a depth below the bottom of the tank. Two TOC samples and field duplicate sample were collected from an uncontaminated area to the east of UST 3860. A strong diesel odor was noted while advancing the hand auger borings, and DRO was detected in the northeast sample above Method 2 regulatory criteria. Therefore, Method 3 regulatory criteria was calculated for DRO using site-specific TOC data contained in Table 3-2. The resulting most stringent site-specific cleanup level for DRO is 7,390 mg/kg; therefore, no samples exceeded the Method 3 regulatory criteria. In addition, the DRO detected in the northeast sample is attributed to biogenic interference. As required by 18 AAC 75.325(g), an assessment of cumulative risks and hazards was also conducted according to procedures described in Section 3.3.4. The total cumulative (cancer) risk for the site is 2.4×10^{-7}, well below the limitation of 1×10^{-5}; the hazard index for the site is 3.4×10^{-4}, well below the limitation of 1.0.

One sludge and one water waste characterization sample were collected from the sludge and water contained within UST 3860 prior to draining and cleaning. The sludge sample was not analyzed because sludge needing characterization was not recovered and containerized from the tank.

Table 5-16
UST 3760 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Proposed Method 3 Cleanup Levels[2]	Sample Results	
				AM-A507706	AM-A507707
Location	--	--		West hand auger	East hand auger
Diesel-range Organics (AK102)	mg/kg	230	8,300	55.5 J	47.6 J
Residual-range Organics (AK103)	mg/kg	8300	8,300	332	270 J
PAH (SW8270C SIM)					
Acenaphthylene	µg/kg	--	--	22	ND [5.5]
Benzo(b)fluoranthene	µg/kg	9,000	--	ND [5.6]	ND [5.5]
Chrysene	µg/kg	550,000	--	ND [5.6]	ND [5.5]
Volatile Organic Compounds (SW8260B)					
2-Butanone	µg/kg	--	--	ND [190]	ND [210]
Methylene chloride	µg/kg	10	50	ND [36]	22

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.

[2]The proposed Method 3 cleanup level for DRO and RRO are based on ingestion and the proposed Method 3 cleanup level for methylene chloride is based on migration to groundwater.

J = Estimated value; see Appendix K for details.

Table 5-17
UST 3760 Sediment Analytical Results Above Detection Limits

Parameter	Units	Screening Level[1]	Sample Results
			AM-A507703
Location	--	--	Creek sediment
Diesel-range Organics (AK102)	mg/kg	--	33.2 J
Residual-range Organics (AK103)	mg/kg	--	174
PAH (SW8270C SIM)			
Acenaphthylene	µg/kg	--	ND [2.9]
Benzo(b)fluoranthene	µg/kg	27.2	3.7
Chrysene	µg/kg	500	4.4
Volatile Organic Compounds (SW8260B)			
2-Butanone	µg/kg	270	1200
Methylene chloride	µg/kg	370	ND [31]

[1] EPA Secondary Chronic Value. Values selected from Toxicological Criteria for Screening Contaminants of Potential Concern for Effects on Sediment Associated Biota: 1997 Revision.

J = Estimated value; see Appendix K for details.

Table 5-18
UST 3760 Surface Water Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Result AM-A507701
Location	--	--	Creek
Diesel-range Organics (AK102)	µg/L	1,500	ND [100]
Residual-range Organics (AK103)	µg/L	1,100	258
PAH (SW8270C SIM)			
2-Methylnaphthalene	µg/L	--	ND [0.05]
Acenaphthene	µg/L	2,200	ND [0.05]
Acenaphthylene	µg/L	--	ND [0.05]
Anthracene	µg/L	11,000	ND [0.05]
Fluorene	µg/L	1,460	ND [0.05]
Naphthalene	µg/L	1,460	ND [0.05]
Phenanthrene	µg/L	--	ND [0.05]
Volatile Organic Compounds (SW8260B)			
Toluene	µg/L	1,000	ND [5]

[1]18 AAC 75, Table C for groundwater. Surface water regulatory criteria, contained in 18 AAC 70, includes total aromatic hydrocarbons (TAH) levels not to exceed 10 µg/L and total aqueous hydrocarbons (TAqH) levels not to exceed 15 µg/L. TAH is calculated by summing concentrations of BTEX analyte concentrations, and TAqH is calculated by summing concentrations of BTEX and PAH analytes.

Figure 5-12 presents the UST 3860 sample locations and Table 5-19 lists the complete suite of analyses for each soil sample and sample results above detection limits. A complete set of analytical results, including the UST waste characterization sample, is included in Appendix D; the chromatograms used to determine biogenic interference for the sample is included in Appendix H. The Method 3, cumulative risk, and hazard calculation sheets are included in Appendix J.

5.9.3 Conclusions and Recommendations

Building 3860 is recommended for NFA. No samples exceeded the calculated Method 3 regulatory criteria, and the site did not exceed the cumulative risk and hazard index limitations. Further action, however, is recommended for Building 3760 due to the elevated levels of 2-Butanone in the sediment samples. Additional samples should be collected to confirm the presence of 2-Butanone and, if required, appropriate cleanup levels will be developed.

Table 5-19
UST 3860 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Proposed Method 3 Cleanup Level[2]	Sample Results		
				AM-A507604	AM-A507605	AM-A507606
Location	--	--		Northeast hand auger	Northeast hand auger (FD)	Southwest hand auger
Diesel-range Organics (AK102)	mg/kg	230	7,390	1070 J	275 J	90 J
Residual-range Organics (AK103)	mg/kg	8300	8,300	1180 J	515 J	302
PAH (SW8270C SIM)						
2-Methylnaphthalene	µg/kg	--		110	730 J	ND [4.1]
Acenaphthene	µg/kg	190,000	4,980,000	7.7	44	ND [4.1]
Acenaphthylene	µg/kg	--	--	11	12	ND [4.1]
Anthracene	µg/kg	3,900,000	24,900,000	ND [4.7]	ND [5.6]	4.5
Benzo(a)anthracene	µg/kg	5,500	9,300	13	ND [5.6]	18
Benzo(a)pyrene	µg/kg	900	930	ND [4.7]	ND [5.6]	17
Benzo(b)fluoranthene	µg/kg	9,000	9,300	6.1	ND [5.6]	21
Benzo(g,h,I)perylene	µg/kg	--	--	7.5	ND [5.6]	11
Benzo(k)fluoranthene	µg/kg	93,000	93,000	ND [4.7]	ND [5.6]	6.9
Chrysene	µg/kg	550,000	930,000	37	ND [5.6]	19
Fluoranthene	µg/kg	1,900,000	3,320,000	12	ND [5.6]	30
Fluorene	µg/kg	240,000	3,320,000	29	150	ND [4.1]
Indeno(1,2,3-cd)pyrene	µg/kg	9,000	9,300	5.4	ND [5.6]	12
Naphthalene	µg/kg	38,000	1,150,000	45	470 J	ND [4.1]
Phenanthrene	µg/kg	--	--	28	22 J	15
Pyrene	µg/kg	1,400,000	2,490,000	9.6	ND [5.6]	38
Volatile Organic Compounds (SW8260B)						
2-Butanone	µg/kg	--	--	3900	--	--
Acetone	µg/kg	9,000	9,530	970	--	--
Toluene	µg/kg	4,800	74,200	19	--	--

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
[2]The proposed Method 3 cleanup levels for DRO, naphthalene, toluene, and acetone are based on migration to groundwater. The proposed Method 3 cleanup levels for the remaining compounds are based on ingestion.
J = Estimated value; see Appendix K for details.

5.10 UST 3065

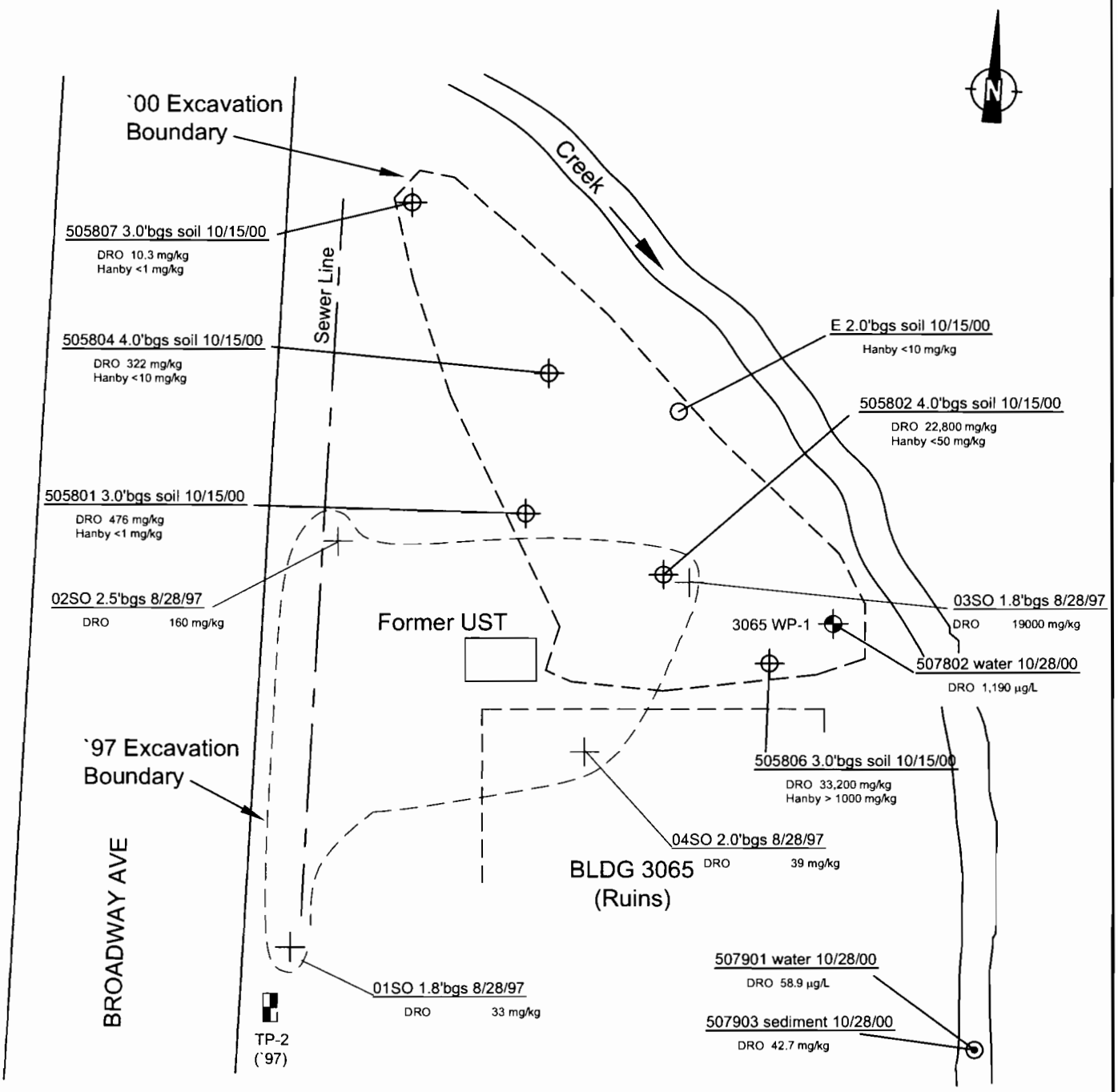
Building 3065 was a former latrine located next to a small creek on upper Broadway Avenue on Unalaska Island. The 300-gallon UST for Building 3065 was located less than 5 feet north of the north edge of the building. A small stream flows to the southeast approximately 30 feet north and 20 feet east of the tank site. Figure 5-7 presents the general site location and Figure 5-13 presents the site layout.

5.10.1 Previous Remedial/Removal Activities

During the 1997 IRA, a 500 ft^2 area was excavated to bedrock and the 300-gallon UST was removed. Approximately 350 gallons of water with a kerosene/diesel odor were pumped from the heavily corroded and perforated tank. Approximately 47 cy of POL-impacted soil was removed from the excavation and transported off-site for treatment. Approximately 5,000 gallons of water that collected in the excavation were pumped from the excavation to facilitate backfilling and transported off-site for treatment. The presence of bedrock and water entering the excavation prevented further excavation activities. Four soil samples were collected from the excavation; one exceeded the ADEC Method 2 DRO cleanup level. One test pit was dug west of the excavation, and one test pit was dug south of the excavation to determine if sources other than the UST were contributing to contamination detected in the excavation. No analytical samples were collected in either test pit; however, no indications of petroleum hydrocarbon contamination was present. See Figure 5-13 for sample locations and results.

5.10.2 2000 Work Completed

Due to the 1997 exceedance of ADEC Method 2 cleanup levels, a cone shaped 19-foot by 42-foot area was excavated on 13 and 15 October 2000 in the vicinity of the previously detected contamination. The excavated area was limited by the creek to the south and east of the site and the building foundation to the south and west of the site. The depth of the excavation was limited to 4 feet bgs where groundwater was encountered. Contaminated soil was encountered immediately after beginning the excavation. A noticeable odor of diesel was



NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLE 5-20 THRU 5-22 AND/OR APPENDIX K FOR QUALIFIERS.

LEGEND

- TP1 — Test Pit Location
- 2000 Well Point Location
- Screening and Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
- Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
- Screening Sample Location
- Surface Water And Sediment Samples

0 5 10 20
SCALE IN FEET

UST-3065 SITE LAYOUT and SAMPLE LOCATIONS

Unalaska, Alaska

PROJ. MGR:	FILE NAME.	FIGURE NO.
S. KOCH	RPT5-13	5-13
DRAWN BY.	FILE LOCATION	DATE:
OM/BY	Amaknak\30227	AUG 15, 01

noted during the excavation. Approximately 20 cy of contaminated soil was removed from the excavation on 13 October and transported off-site to the contaminated soil stockpile yard for storage and treatment. Excavation continued on 15 October when another 35 cy of contaminated soil was removed from the excavation and transported off-site to the contaminated soil stockpile yard for storage and treatment. Silt fencing and absorbent booms were installed between the excavation and the creek to prevent sediment from reaching the creek. A boom was also placed on the creek as a precaution to prevent contamination from migrating off site; no sheen was noted on the creek during excavation activities. One well point (3065 WP-1) was installed in the excavation to a depth of 4 feet bgs prior to backfilling the area with clean fill. The area was seeded after backfilling. Figure 5-13 presents the layout of the excavation.

5.10.2.1 Field Screening Results

Six Hanby™ soil screening samples were collected from the excavation to confirm that all the contamination was removed. Four screening samples were collected from the sidewalls; two screening samples were collected from the floor of the excavation. All but one Hanby™ result were less than 50 mg/kg. The Hanby™ result greater than 50 mg/kg was detected at the edge of the building foundation and indicated fuel contamination greater than 1000 mg/kg. Further excavation to remove the detected potential contamination was not possible due to the lack of SHPO clearance to remove portions of the building foundation. Figure 5-13 presents the locations and screening results.

5.10.2.2 Analytical Results

Five soil analytical samples were collected from the excavation: three samples from the sidewalls and two from the floor (collected at contact with groundwater). In addition, two field duplicate samples were collected from the two floor sample locations. The sidewall samples were collected from approximately 3 feet bgs. All of the samples, except the north wall sample, detected DRO concentrations above Method 2 regulatory criteria. Three TOC samples were collected from uncontaminated sections of the sidewall at 2 feet bgs. The soil encountered at this site was described as homogeneous gravelly sand with some organics

throughout the excavation. Therefore, the TOC values are not expected to vary greatly with depth. Therefore, Method 3 regulatory criteria was calculated for DRO using site-specific TOC data contained in Table 3-2. The resulting most stringent site-specific cleanup level for DRO is 5,220 mg/kg. However, two samples (south floor [and field duplicate] and south wall) exceeded the Method 3 regulatory criteria.

One sediment and one surface water sample were collected on 28 October from the creek approximately 30 feet south and downgradient of the excavation. The creek flows to the south at approximately 50 gallons per minute. At the time of sampling, the creek was clear and no odor or sheen was present. The sediment sample did not detect contaminants that exceeded regulatory criteria and the surface water sample did not detect contaminants that exceeded 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels.

One groundwater sample was collected on 28 October from 3065 WP-1 after purging the well and stabilizing the field parameters. The water was clear with no apparent sheen; however, there was a slight fuel odor present. Although DRO was detected, the sample did not exceed 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. The DRO concentration present in the well point might have been elevated at the time of sampling due to the excavation activities that occurred approximately two weeks prior to the sampling event. The excavation activities would have stirred up the contamination in the area and potentially entrained the contaminants in the groundwater. See Appendix E for the groundwater field sampling forms.

Figure 5-13 presents the sample locations, Table 5-20 lists the complete suite of soil analyses and sample results above detection limits, Table 5-21 lists the complete suite of sediment analyses and sample results above detection limits, and Table 5-22 lists the complete suite of water analyses and sample results above detection limits. A complete set of analytical results is included in Appendix D. The Method 3 calculation sheets are included in Appendix J.

Table 5-20
UST 3065 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Proposed Method 3 Cleanup Level[2]	Sample Results						
				AM-A505801	AM-A505802	AM-A505803	AM-A505804	AM-A505805	AM-A505806	AM-A505807
Location	--	--		West wall	South floor	South floor (FD)	North floor	North floor (FD)	South wall	North wall
Diesel-range Organics (AK102)	mg/kg	230	5220	476 J	22,800 J	15,500 J	322 J	230 J	33,200 J	10.3 J
BTEX (SW8260B)	µg/kg	--	--	--	--	--	--	--	--	--
PAH (SW8270C SIM)			--							
2-Methylnaphthalene	µg/kg	--	--	--	1500	1900	16	10	--	--
Acenaphthene	µg/kg	190,000	4,330,000	--	760 J	390	9.7	11	--	--
Acenaphthylene	µg/kg	--	--	--	730 J	300	ND [5.4]	ND [3.2]	--	--
Anthracene	µg/kg	3,900,000	24,900,000	--	330	100	9.3	16	--	--
Benzo(a)anthracene	µg/kg	5,500	9,300	--	17 J	20	25	36	--	--
Benzo(a)pyrene	µg/kg	900	930	--	ND [10]	ND [9.3]	32	35	--	--
Benzo(b)fluoranthene	µg/kg	9,000	9,300	--	13	11	85	42	--	--
Benzo(g,h,i)perylene	µg/kg	--	--	--	ND [10]	ND [9.3]	35	21	--	--
Benzo(k)fluoranthene	µg/kg	93,000	93,000	--	ND [10]	ND [9.3]	11	16	--	--
Chrysene	µg/kg	550,000	930,000	--	110	66	110	37	--	--
Dibenzo(a,h)anthracene	µg/kg	900	930	--	ND [10]	ND [9.3]	28	4.5	--	--
Fluoranthene	µg/kg	1,900,000	3,320,000	--	57 J	38	49	60	--	--
Fluorene	µg/kg	240,000	3,320,000	--	2300 J	1200	10	12	--	--
Indeno(1,2,3-cd)pyrene	µg/kg	9,000	9,300	--	ND [10]	ND [9.3]	22	17	--	--
Naphthalene	µg/kg	38,000	814,000	--	350	270	8.4	5.6	--	--
Phenanthrene	µg/kg	--	--	--	3500 J	1100	52	86	--	--
Pyrene	µg/kg	1,400,000	2,490,000	--	45 J	33	60	110	--	--

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.

[2]Note: The proposed Method 3 cleanup level for acenaphthene, DRO, and naphthalene are based on migration to groundwater. The proposed Method 3 cleanup level for the remaining compounds are based on ingestion.

J = Estimated value; see Appendix K for details.

Table 5-21
UST 3065 Sediment Analytical Results Above Detection Limits

Parameter	Units	Screening Level[1]	Sample Results
			AM-A507903
Location	--	--	Creek Sediment
Diesel-range Organics (AK102)	mg/kg	230	42.7 J
BTEX (SW8260B)	µg/kg	--	No analytes detected
PAH (SW8270C SIM)			
Acenaphthylène	µg/kg	--	2.6

[1]EPA Secondary Chronic Value. Values selected from Toxicological Criteria for Screening Contaminants of Potential Concern for Effects on Sediment Associated Biota: 1997 Revision.

J = Estimated value; see Appendix K for details

Table 5-22
UST 3065 Water Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results	
			AM-A507802	AM-A507901
Location	--	--	3065 WP-1	Creek
Diesel-range Organics (AK102)	µg/L	1,500	1190 J	58.9 J
BTEX (SW8260B)	µg/L	--	No analytes detected	No analytes detected
PAH (SW8270C SIM)	µg/L	--	No analytes detected	No analytes detected

[1]18 AAC 75, Table C for groundwater. Surface water regulatory criteria, contained in 18 AAC 70, includes total aromatic hydrocarbons (TAH) levels not to exceed 10 µg/L and total aqueous hydrocarbons (TAqH) levels not to exceed 15 µg/L. TAH is calculated by summing concentrations of BTEX analyte concentrations, and TAqH is calculated by summing concentrations of BTEX and PAH analytes.

J = Estimated value; see Appendix K for details.

5.10.3 Conclusions and Recommendations

Two soil samples contained DRO concentrations exceeding Method 3 regulatory levels. However, due to the shallow groundwater (approximately four feet bgs), proximity of the creek, and presence of the building foundation, future excavation activities at the site would be problematic and are not recommended. Further excavation in the area would disturb the

contaminated soil and potentially entrain it in the groundwater causing contaminant migration to the creek.

Surface water in the downgradient creek and groundwater in the well point immediately adjacent to the creek do not exceed 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. In addition, the sediment in the creek does not exceed the sediment regulatory criteria. Since contaminants have not migrated to the groundwater, surface water, or sediment downgradient of the site in 50 years it is unlikely that they will migrate at this time.

In order to ensure that contamination has not migrated off-site and will not migrate in the future, it is recommended that the following actions be taken:

- Sample the existing well point annually over the next two years. It is anticipated that the DRO level detected in the well point during the 2000 field season will decrease without excavation activities occurring prior to sampling.
- Collect a creek sediment and surface water sample in the vicinity of the 2000 sample location annually over the next two years to monitor potential contaminant migration to the creek.
- Conduct two hand augers between the building foundation and the creek to determine the lateral extent of potential contamination at the site. It is also recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

If no contaminants are detected in hand auger samples, in the well point, or in the creek sediment or surface water after sampling for two years, then the site will be recommended for NFA. It is also recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

5.11 UST 3075

Building 3075 was a former latrine located on a small bluff near the upper end of south Broadway Avenue where the road has been washed out. The site is bound by the Iliuliuk River and a small creek. The 300-gallon UST for Building 3075 was located approximately

10 feet south of the southeast corner of Building 3075. A small stream flows to the east approximately 30 feet south of the tank and flows into the Iliuliuk River. The Iliuliuk River flows to the south approximately ten feet to the east of the former UST 3075 excavation. Figure 5-7 presents the general site location and Figure 5-14 presents the site layout.

5.11.1 Previous Remedial/Removal Activities

During the 1997 IRA, a 184 ft^2 area was excavated to bedrock and the 300-gallon UST was removed. Approximately 80 gallons of water were pumped from the single walled, heavily corroded and perforated, steel tank. Approximately 40 to 45 cy of POL-impacted soil was removed from the excavation and transported off-site for treatment. The presence of bedrock and the steep cut bank of the Iliuliuk River immediately to the east of the site prevented further excavation activities. Four soil samples were collected from the excavation; two exceeded the ADEC Method 2 DRO cleanup level. One sample that exceeded cleanup levels was collected from an area of obvious contamination. The soil was left in place to prevent direct releases of contaminated soil and/or groundwater into the adjacent Iliuliuk River. One well point was installed in the northeast corner of the excavation and a groundwater grab sample was collected; the sample exceeded ADEC Table C cleanup levels. One test pit was dug west of the excavation and one test pit was dug south of the excavation to determine if sources other than the UST were contributing to contamination detected in the excavation. No analytical samples were collected in either test pit; however, no indications of petroleum hydrocarbon contamination were present. See Figure 5-14 for sample locations and results.

5.11.2 2000 Work Completed

Due to the 1997 exceedance of ADEC soil and groundwater cleanup levels, two test pits were dug to the north of the 1997 excavation to determine the limits of contamination. Additional excavation in the vicinity of the 1997 exceedances was not possible due to the proximity of the Iliuliuk River. See Figure 5-14 for the test pit locations.

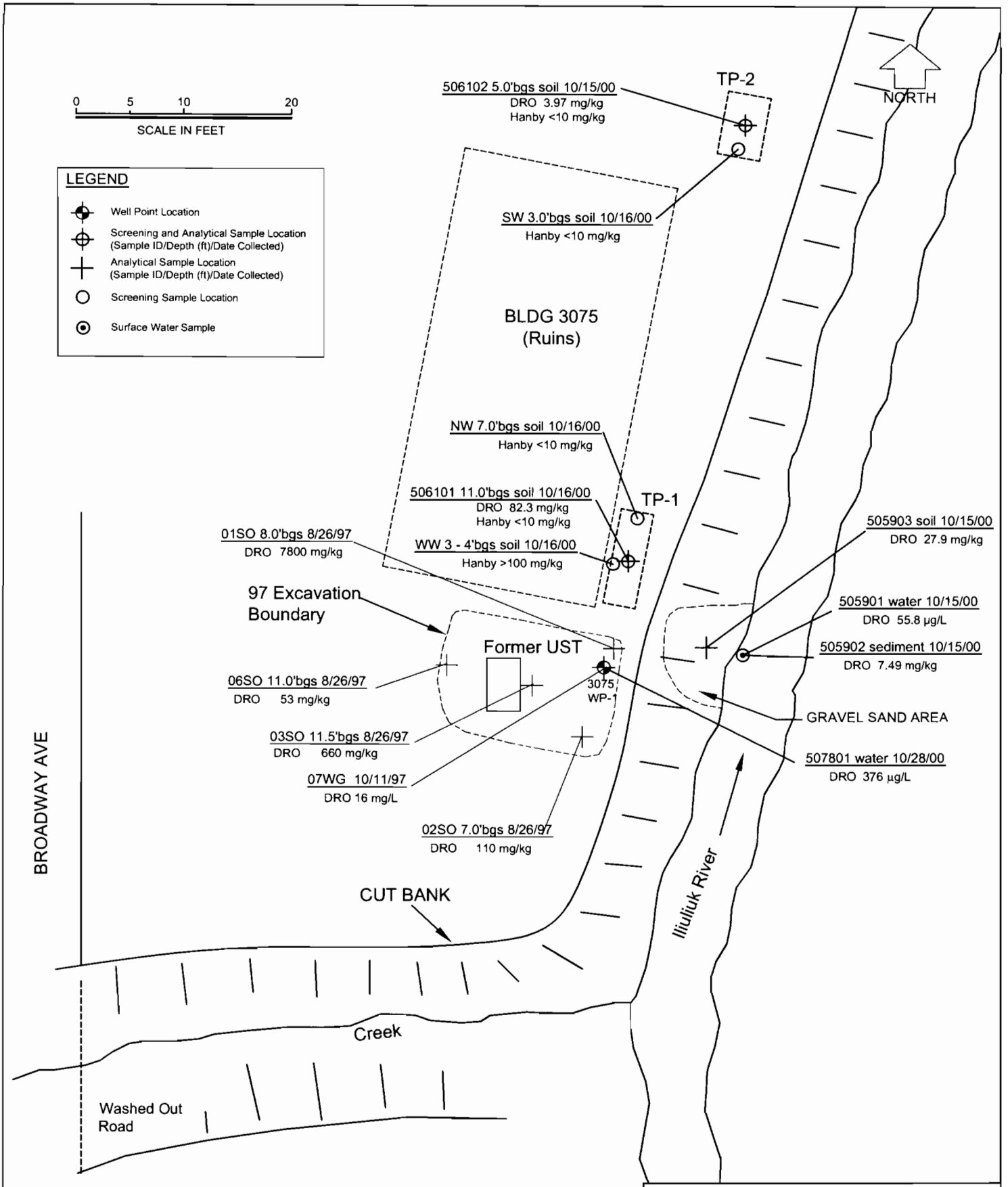
The first test pit, TP-1, was dug immediately north of the 1997 excavation area. TP-1 was started on 13 October and encountered potentially contaminated soil at 4 feet bgs. The

sidewall adjacent to Building 3075 exhibited high PID levels and a noticeable diesel odor. TP-1 was completed on 16 October and was advanced until refusal at bedrock at 11 feet bgs; no groundwater was encountered in the test pit. Peat was observed in the top two feet of TP-1, followed by organic silt from 2 to 7 feet bgs, and iron-stained gravelly sand from 7 to 11 feet bgs. The potential contamination was observed within the organic silt layer of soil. Approximately 15 cy of soil were removed from the 27 ft^2 test pit and transported off-site to the contaminated soil stockpile yard for storage and treatment. The test pit was then backfilled with clean fill and seeded.

The second test pit, TP-2, was dug on 16 October approximately 35 feet north of TP-1 and 7 feet east of the east corner of Building 3075. TP-2 was advanced until bedrock was encountered at 5 feet bgs; no groundwater was encountered in the test pit. Peat was observed in the top 1.5 feet of TP-2, followed by organic silt from 1.5 to 3 feet bgs, and iron-stained gravelly sand from 3 to 5 feet bgs. No potential contamination was observed in TP-2; therefore, the test pit was backfilled with removed soil and seeded.

5.11.2.1 Field Screening Results

Three Hanby™ soil screening samples were collected from TP-1, and 10 cy of removed soil was direct screened in the excavator bucket using a PID. PID readings ranged from 2.0 to 15.0 ppm; elevated PID readings were mainly encountered along the sidewall adjacent to Building 3075. The Hanby™ soil screening samples were collected from the north sidewall, the floor, and contaminated soil along the west sidewall of the test pit. The north sidewall sample was collected at 7 feet bgs at the organic silt and iron-stained gravelly stained interface. The floor sample was collected at 11 feet bgs. Both Hanby™ results were less than 1 mg/kg. The west sidewall sample was collected at approximately 3-4 feet bgs and indicated contamination greater than 100 mg/kg; an analytical sample was not collected at this location because a nearby sample collected in 1997 also indicated remaining contamination (7,800 mg/kg). Figure 5-14 presents the locations and screening results.



NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLE 5-23 THRU 5-25 AND/OR APPENDIX K FOR QUALIFIERS.

UST-3075 SITE LAYOUT and SAMPLE LOCATIONS

Unalaska, Alaska

PROJ MGR	FILE NAME	FIGURE NO
S. KOCH	RPT5-14	5-14
DRAWN BY	FILE LOCATION	DATE
OM/BY	Amaknak\30227	AUG 15, 01

Two Hanby™ soil screening samples were collected from TP-2 and removed soil was direct screened in the excavator bucket using a PID. PID readings did not indicate contamination in the test pit. The Hanby™ soil screening samples were collected from the south sidewall and floor of the test pit. The south sidewall sample was collected at 3 feet bgs at the organic silt and iron-stained gravelly stained interface. The floor sample was collected at 5 feet bgs. Both Hanby™ results were less than 10 mg/kg. Figure 5-14 presents the locations and screening results.

5.11.2.2 Analytical Results

One soil analytical sample was collected from the floor of TP-1 at 11 feet bgs, and one soil analytical sample was collected from the floor of TP-2 at 5 feet bgs. A TOC sample was also collected at 2 feet bgs from an uncontaminated section of each test pit's sidewall. Both samples collected from the floors of the test pits were collected from the iron-stained gravelly sand soil; no odors were detected in either sample. Neither of the samples detected contaminants that exceeded Method 2 regulatory criteria.

One surface soil sample was collected from the cut bank below the former UST location and approximately 8 feet above the Iliuliuk River. The sample was collected at 0 to 0.5 feet bgs in gravelly sand that did not support any vegetation; vegetation (grass) was noted all around the periphery of the sampled area. The sample did not detect any contaminants that exceeded Method 2 regulatory criteria.

As required by 18 AAC 75.325(g), an assessment of cumulative risks and hazards was also conducted according to procedures described in Section 3.3.4. Only three PAH parameters were detected at low levels in the sediment at the site; therefore, the total cumulative (cancer) risk for the site and the hazard index were well below the respective limitations.

One sediment and one surface water sample were collected on 15 October from Iliuliuk River immediately east of TP-1. At the time of sampling, the creek was clear and no odor or sheen was present. The sediment sample did not detect contaminants that exceeded regulatory

criteria, and the surface water sample did not detected contaminants that exceeded 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels.

One groundwater sample was collected on 28 October from 3075 WP-1 after purging the well and stabilizing the field parameters. The water was clear but had a strong fuel odor. However, the sample did not detect any contaminants that exceeded 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. See Appendix E for the groundwater field sampling forms.

Figure 5-14 presents the sample locations, Table 5-23 lists the complete suite of soil analyses and sample results above detection limits, Table 5-24 lists the complete suite of sediment analyses and sample results above detection limits, and Table 5-25 lists the complete suite of water analyses and sample results above detection limits. A complete set of analytical results is included in Appendix D.

5.11.3 Conclusions and Recommendations

Limited action is recommended for the Building 3075 site. No contaminants were detected in the soil, sediment, surface water, or groundwater samples collected in 2000 that exceeded regulatory criteria, and the site did not exceed the cumulative risk and hazard index limitations. Although Hanby™ field screening results in the sidewall of TP-1 indicated that contamination extended beneath Building 3075, no contamination was detected in the floor of the test pit or in the downgradient riverbank and river sediment samples. Although DRO was detected in the 1997 excavation above Method 2 cleanup levels, no contaminants were detected downgradient of the site.

It is therefore recommended that one additional groundwater sample be collected from 3075 WP-1 to confirm levels are below groundwater cleanup levels. It is also recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

Table 5-23
UST 3075 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results		
			AM-A505903	AM-A506101	AM-A506102
Location	--	--	Iliuliuk River Bank	TP-1 Floor	TP-2 Floor
Diesel-range Organics (AK102)	mg/kg	230	27.9 J	82.3 J	3.97 J
PAH (SW8270C SIM)	µg/kg	--	No analytes detected	No analytes detected	--

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
J = Estimated value; see Appendix K for details.

Table 5-24
UST 3075 Sediment Analytical Results Above Detection Limits

Parameter	Units	Screening Level[1]	Sample Results
			AM-A505902
Location	--	--	Iliuliuk River Sediment
Diesel-range Organics (AK102)	mg/kg	--	7.49 J
PAH (SW8270C SIM)			
Fluoranthene	µg/kg	2900	3.3
Phenanthrene	µg/kg	850	6.2
Pyrene	µg/kg	570	5.8

[1]EPA Secondary Chronic Value. Values selected from Toxicological Criteria for Screening Contaminants of Potential Concern for Effects on Sediment Associated Biota: 1997 Revision.
J = Estimated value; see Appendix K for details.

Table 5-25
UST 3075 Water Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results	
			AM-A505901	AM-A507801
Location	--	--	Iliuliuk River	3075 WP-1
Diesel-range Organics (AK102)	µg/L	1,500	55.8 J, UB/RL	376 J
PAH (SW8270C SIM)				
2-Methylnaphthalene	µg/L	--	0.075	ND [0.05]
Naphthalene	µg/L	1,460	0.094	ND [0.05]

[1]18 AAC 75, Table C for groundwater. Surface water regulatory criteria, contained in 18 AAC 70, includes total aromatic hydrocarbons (TAH) levels not to exceed 10 µg/L and total aqueous hydrocarbons (TAqH) levels not to exceed 15 µg/L. TAH is calculated by summing concentrations of BTEX analyte concentrations, and TAqH is calculated by summing concentrations of BTEX and PAH analytes.
J = Estimated value; see Appendix K for details.
UB/RL = Analyte detected in Method Blank; reported value is considered valid.

5.12 LITTLE SOUTH AMERICA

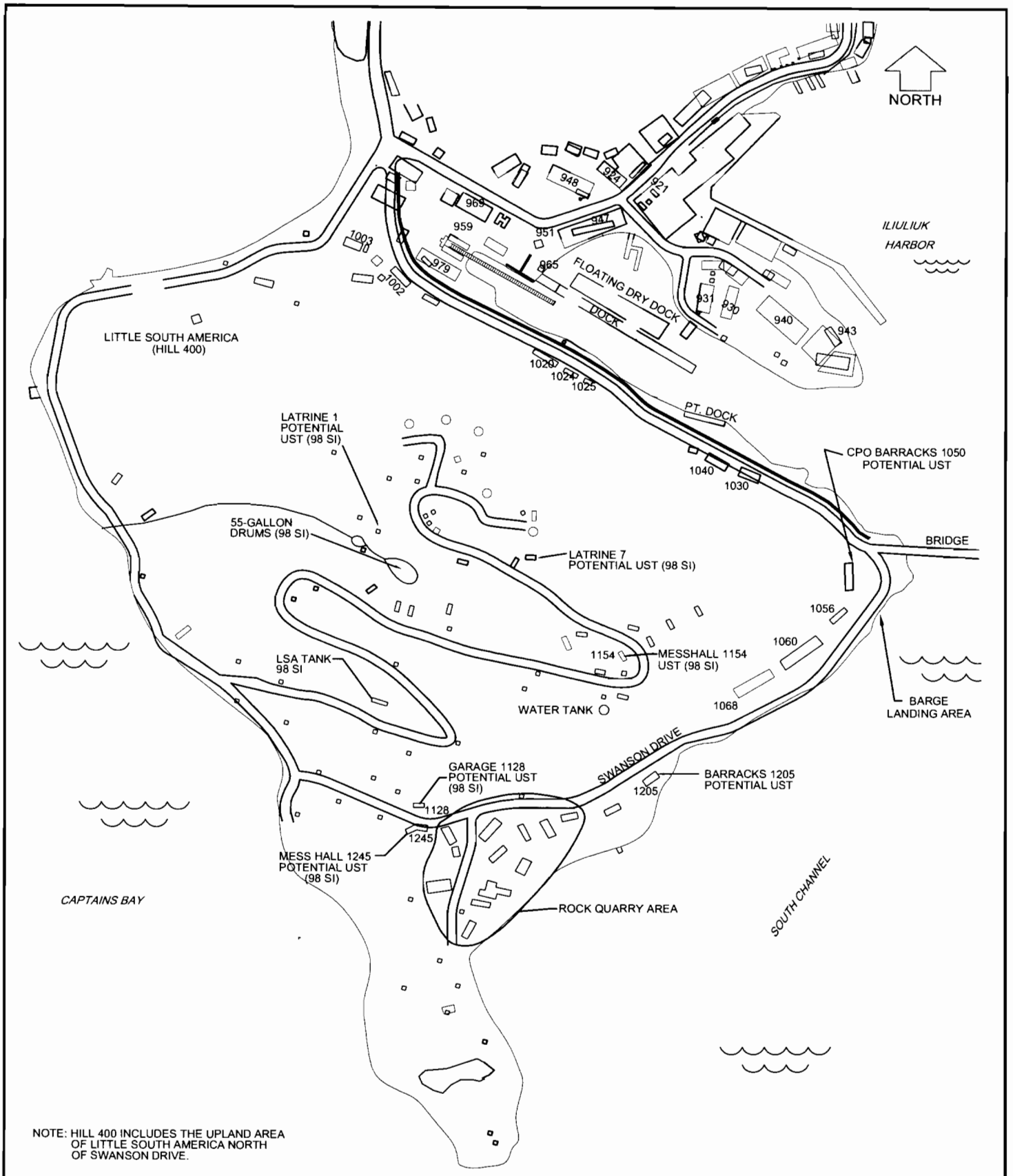
The Little South America/Hill 400 area is located at the southern end of Amaknak Island. The Little South America (LSA) area includes the upper defensive positions on Hill 400, lower service facilities related to the Fort Mears Naval Operating Base (NOB) (includes the area surrounding the Metal Shop and shoreline toward the barge area), and munitions storage magazines. The LSA sites investigated during the 2000 field season are located throughout the Little South America peninsula, although most were located on the southeast side of the peninsula. Figure 5-15 presents the general site location of the sites investigated during the 2000 field season.

5.12.1 Previous Remedial/Removal Activities

On 17 July 1998, a site reconnaissance was conducted with the purpose of locating USTs, pipelines/utilidors, and other primary sources of potential contamination. The reconnaissance utilized a magnetometer, a 1946 as-built plan, visual observation, and professional judgment. The location of each structure indicated on the as-built plan was visited.

Reconnaissance activities identified the following areas that warranted additional investigation and/or removal actions:

- LSA Tank - A perforated 3.1-foot diameter, 5-foot long steel tank was found lying in the valley between the arms of the lower switchback leading to Hill 400. Crushed, decaying vegetation beneath the tank suggested that it had rolled to its present location.
- 55-Gallon Drums - Five empty and rusted 55-gallon drums and one newer empty 55-gallon drum were observed at the dry lake bed in the drainage west of Mess Hall 1154. The drums were likely rolled to this location from the surrounding road or Quonset huts.
- Building 1154 (Mess Hall) - An intact UST was discovered southwest of the regraded former location of Building 1154. The 3.1-foot diameter tank contained 2 feet of water.
- Latrine 7 - A magnetic anomaly was identified along the southeast side of a former latrine area that had been regraded.
- Building 1205 (Barracks) - A magnetic anomaly was detected at Building 1205 in a location corresponding to where USTs were removed from other barracks in 1997.
- Latrine 1 - A partially-buried, 2-foot wide, 3-foot high, and 6-foot long oval-shaped fuel tank was observed next to the ruins of a Quonset-style latrine. The tank was perforated with rust, contained 50 to 100 gallons of water, and was not easily accessible by vehicle.



NOTE: HILL 400 INCLUDES THE UPLAND AREA OF LITTLE SOUTH AMERICA NORTH OF SWANSON DRIVE.

LEGEND

- EXISTING BUILDING
- FORMER BUILDING

LITTLE SOUTH AMERICA SITE LAYOUT AMAKNAK ISLAND, ALASKA

PROJ MGR	FILE NAME	FIGURE NO
S. KOCH	RPT5-15	5-15
DRAWN BY	FILE LOCATION	DATE
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- Building 1050 (Barracks) - A magnetic anomaly was detected near the south end of Building 1050.
- Building 1128 (Garage) and Building 1245 (Mess Hall) - An active rock quarry has engulfed the location of a number of military buildings south of Hill 400. Two magnetic anomalies were detected at the edge of the quarry, in the approximate locations of Building 1128 and 1245.

See Figure 5-15 for the site locations.

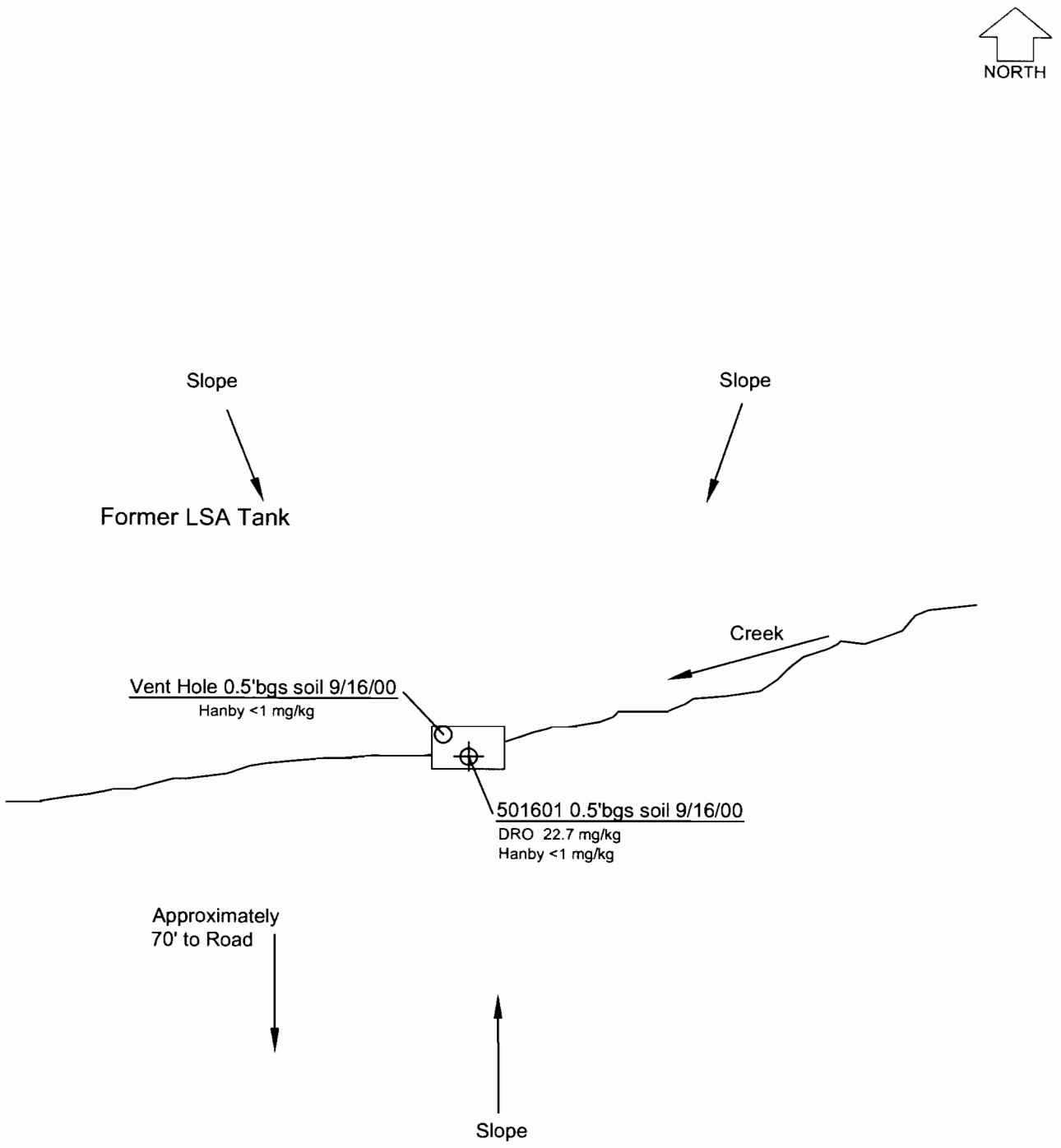
5.12.2 2000 Work Completed

Before beginning work at LSA, the road leading to the top of Hill 400 was repaired to allow equipment access. Approximately 200 cubic yards of rock was added to the road to allow truck traffic and facilitate removal of UST's and contaminated soil. All road repairs were approved by OC.

The LSA Tank was located on 16 September 2000 in a small drainage in the valley between the arms of the lower switchback leading to Hill 400. The tank contained approximately 30 gallons of water. Prior to pumping the water out, the tank was cut open to facilitate collecting water samples. The tank was removed without excavating any soil. Figure 5-16 presents the site layout.

Five 55-gallon drums were located on 16 September in the dry lake bed. Crews located five of six drums specified in the work plan. All five of the drums were removed from the site; no soil was removed. Figure 5-17 presents the site layout.

The Building 1154 tank was located on 18 September 2000. Approximately 110 gallons of rusty/turbid water was pumped out of the tank. No fuel was noted in the tank; however, a fuel odor emanated from the tank. A 150 ft^2 area was excavated on 18-19 September while removing the tank. The depth of the excavation was limited by bedrock encountered at 5 feet bgs; no groundwater was encountered. The soil on the top and sides of the tank was primarily organic peat with some silt; the soil on the bottom of the tank was primarily silt and clay. Approximately 10 cy of contaminated soil was removed from the excavation and transported off-site for storage and treatment at the contaminated soil stockpile yard. Approximately 25



NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLE 5-26 AND/OR APPENDIX K FOR QUALIFIERS.

0 5 10 20

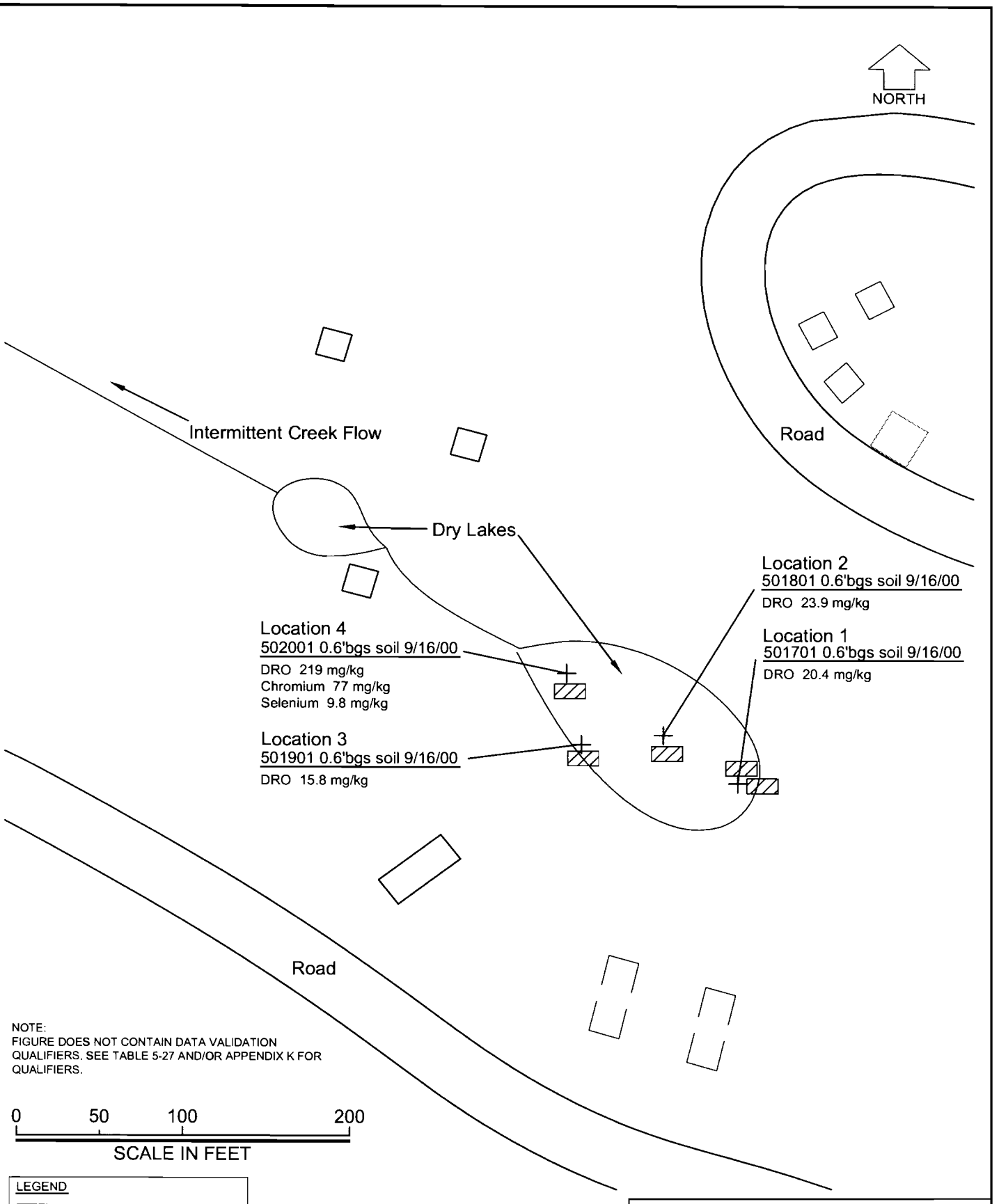
SCALE IN FEET

LEGEND

- Screening and Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
- Screening Sample Location

LITTLE SOUTH AMERICA
TANK (AST) SITE LAYOUT
AMAKNAK ISLAND, ALASKA

PROJ MGR	FILE NAME	FIGURE NO
S. KOCH	RPT5-16	5-16
DRAWN BY	FILE LOCATION	DATE
BY	Amaknak\30227\	AUG 15, 01



LITTLE SOUTH AMERICA
55-GALLON DRUMS SITE LAYOUT
AMAKNAK ISLAND, ALASKA

PROJ MGR	FILE NAME	FIGURE NO
S. KOCH	RPT5-17	5-17
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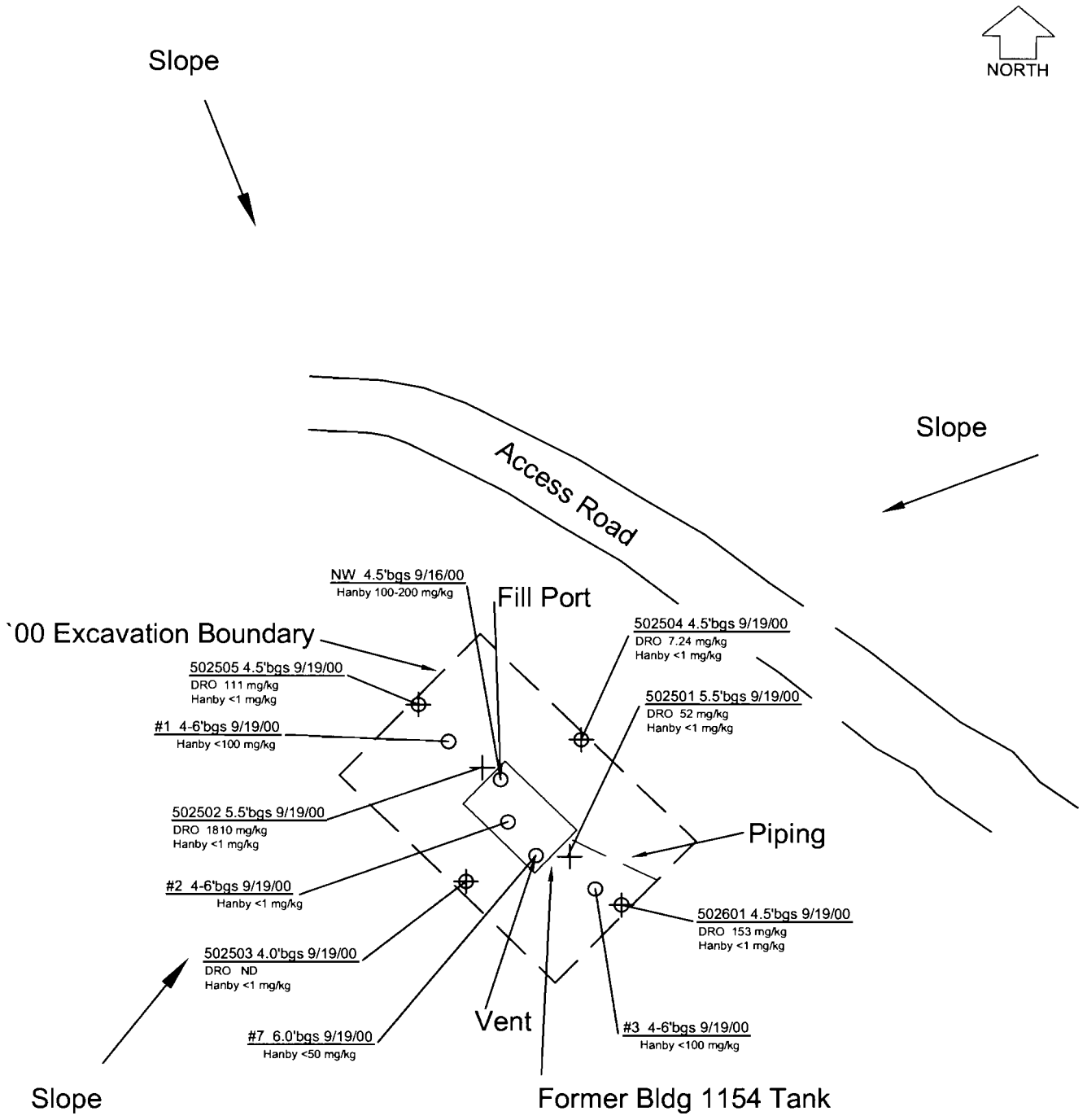
BY	Amaknak\30227	Aug 15, 01

cy of uncontaminated soil was replaced back into the excavation after removing the tank. An additional 10 cy of clean fill was added to the excavation prior to grading and seeding. In addition to removing the tank, three 30 foot sections of ½ inch diameter pipe were removed to the east of the tank. Figure 5-18 presents the site layout.

One 20 foot by 15 foot test pit was dug on 19 September to five feet bgs at Latrine 7 at the location of the magnetic anomaly staked in 1998. No UST, piping, or soil contamination was encountered. A magnetic survey was completed on the entire area and no anomalies suggesting a potential UST were observed. The test pit was backfilled and seeded. Figure 5-19 presents the site layout.

One 12 foot by 12 foot test pit was dug on 19 September at the northwest edge of Building 1205's foundation. Three separate ½ inch diameter fuel pipes were discovered in the test pit at approximately 6 inches bgs. The pipe was in 5 foot sections and was not connected to anything. No UST or soil contamination was encountered. All discovered sections of pipe were removed and the test pit was backfilled and seeded. Figure 5-20 presents the site layout.

Site reconnaissance of the Latrine 1 site revealed access to the 300-gallon UST was difficult and potential adverse effects may have occurred if removal actions were pursued. One corner of the tank was exposed and rusted through. Approximately 55 gallons of water were removed from the tank using buckets because the tank was too far downhill to pump. The water had a fuel odor and did display a sheen. Approximately 10 gallons of sludge was then removed from the tank using sorbent wipes. The sludge had a noticeable fuel odor and contained significant amounts of organics. There was no practical method of washing and rinsing the tank other than using sorbent wipes; therefore, the tank was filled with clean soil and closed in place. All activities at Latrine 1 were performed on 20 September. Figure 5-21 present the site layout.



Note: All samples are soil samples

NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLE 5-28 AND/OR APPENDIX K FOR QUALIFIERS.

0 5 10

SCALE IN FEET

LEGEND

- Screening and Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
- Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
- Screening Sample Location

LITTLE SOUTH AMERICA
BLDG 1154 UST SITE LAYOUT
AMAKNAK ISLAND, ALASKA

PROJ MGR	FILE NAME	FIGURE NO
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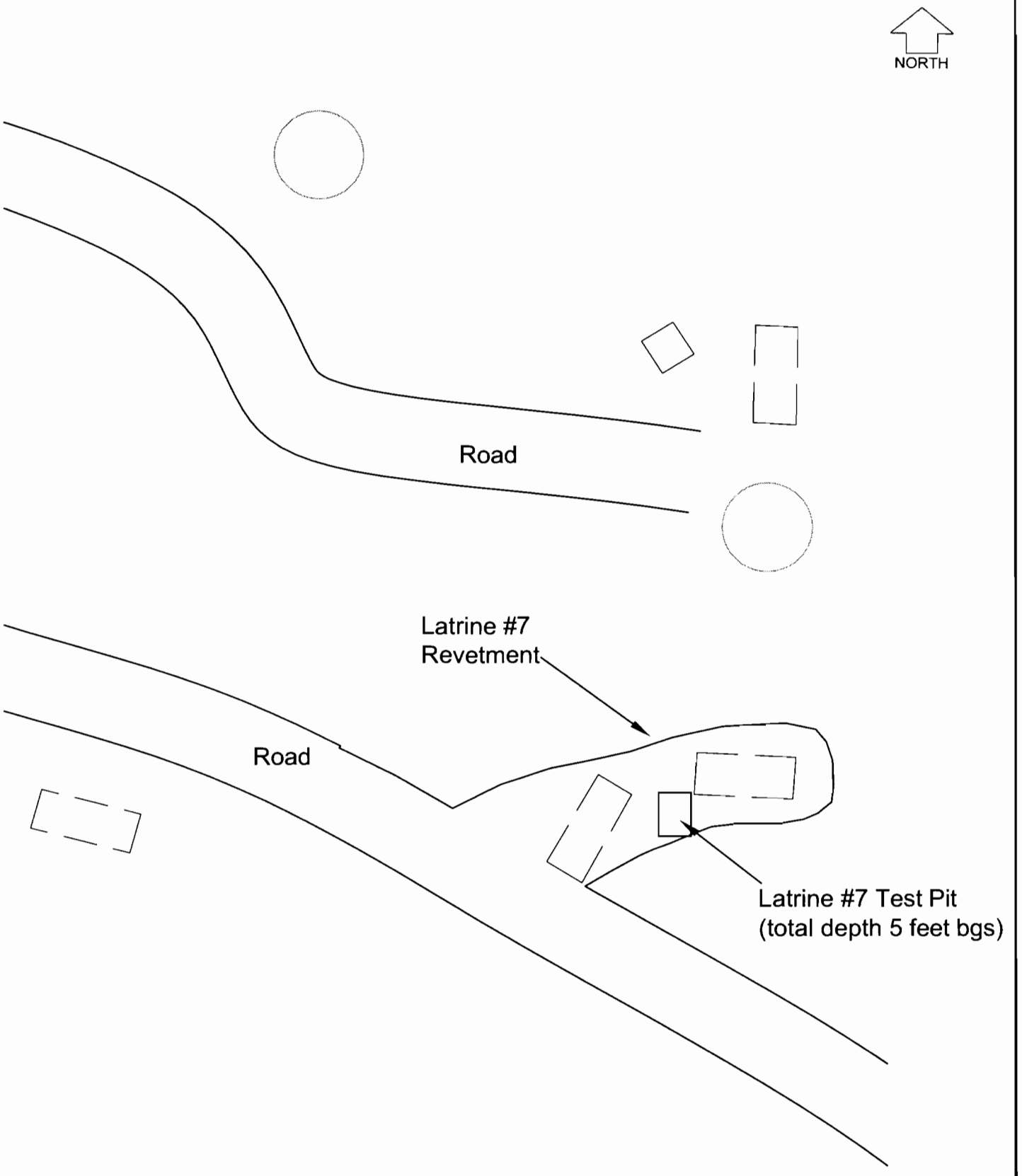
DRAWN BY	FILE LOCATION	DATE
BY	Amaknak\30227	Aug 15, 01



LITTLE SOUTH AMERICA
LATRINE 7 SITE LAYOUT
AMAKNAK ISLAND, ALASKA

PROJ MGR	FILE NAME	FIGURE NO
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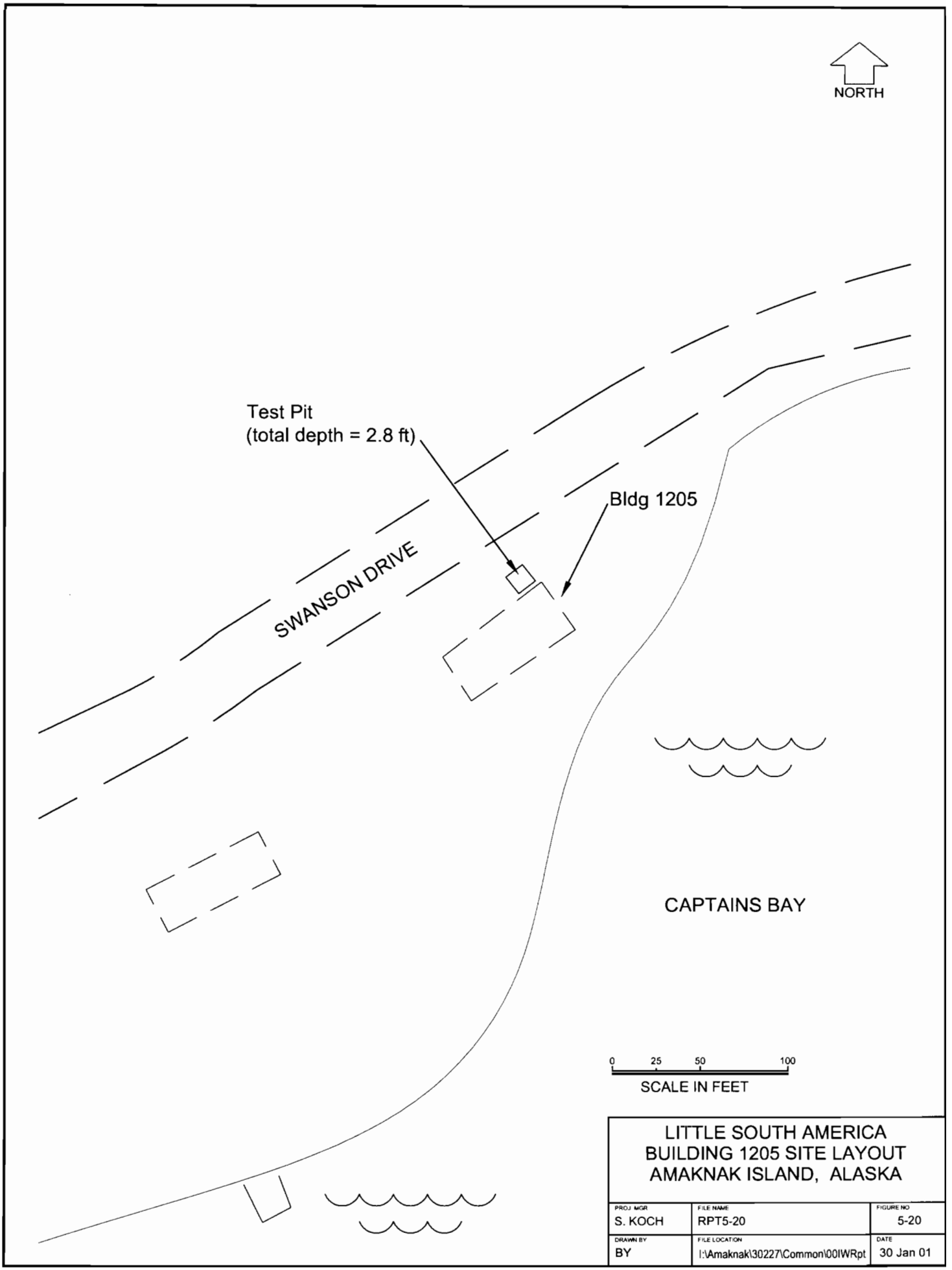
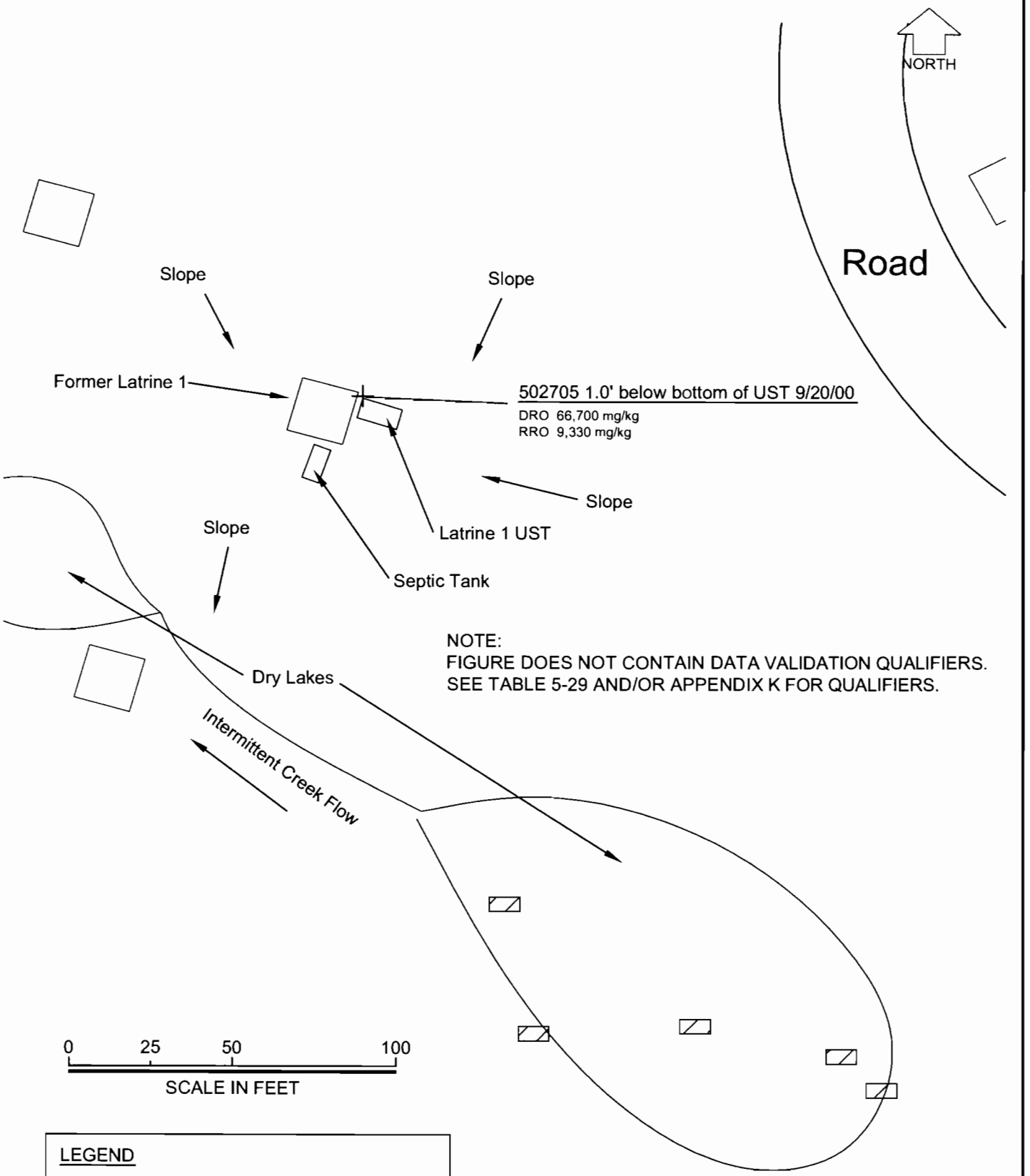
DRAWN BY	FILE LOCATION	DATE
BY	I:\Amaknak\30227\Common\00IWRpt	30 Jan 01



LITTLE SOUTH AMERICA
BUILDING 1205 SITE LAYOUT
AMAKNAK ISLAND, ALASKA

PROJ MGR	FILE NAME	FIGURE NO
S. KOCH	RPT5-20	5-20
DRAWN BY	FILE LOCATION	DATE
BY	I:\Amaknak\30227\Common\00IWRpt	30 Jan 01



LITTLE SOUTH AMERICA
LATRINE 1 SITE LAYOUT
AMAKNAK ISLAND, ALASKA

PROJ MGR	FILE NAME	FIGURE NO
S. KOCH	RPT5-21	5-21
DRAWN BY	FILE LOCATION	DATE
BY	Amaknak\30227\	Aug 15, 01

Two test pits were dug at Building 1050 on 9 October to attempt to locate the suspected UST. Each test pit was approximately 2 cy. No evidence of petroleum hydrocarbon contamination or UST was encountered.

A site investigation was conducted at the former Buildings 1128 and 1245. No evidence of USTs were noted and no evidence indicated a logical location to collect laboratory samples. A magnetometer was used to survey the respective areas, but no anomalies indicating the presence of a potential UST were detected. Photographs documenting the current site conditions are included in Appendix A.

5.12.2.1 Field Screening Results

Two Hanby™ soil screening samples were collected from beneath the LSA Tank following tank removal. One screening sample was collected from the center of the tank footprint and the other sample was collected from beneath a vent hole which was the lowermost opening of the tank. Both results were less than 1 mg/kg. Figure 5-16 presents the screening locations and results.

No field screening was conducted at the 55-gallon drum site.

One Hanby™ soil screening sample and numerous PID readings were collected from the Building 1154 excavation to guide the excavation. PID readings did not indicate contamination in the soil on the top and sides of the tank. One Hanby™ screening sample was collected from the northwest end of the tank, just below the tank, while excavating the soil. The result indicated 100-200 mg/kg. A direct screen PID reading in the same area indicated 3.9 ppm. Therefore, the excavation continued until bedrock was encountered at 5 feet bgs. Eight Hanby™ soil screening samples were then collected to determine if all the contamination was removed. One screening sample was collected from each of the four sidewalls at approximately 4 feet bgs, and four screening samples were collected from the floor of the excavation from 4 to 6 feet bgs. Seven PID readings were also collected from the floor of the excavation. Additionally, one soil screening sample was collected from the approximately 25 cy uncontaminated soil stockpile (less than 10 mg/kg result). All PID

readings were less than 50 ppm and all Hanby™ results were less than 100 mg/kg; therefore, the excavation was backfilled after collecting confirmation analytical samples. Figure 5-18 presents the screening locations and results.

No field screening was performed at any of the other locations.

5.12.2.2 Analytical Results

One soil analytical sample was collected from underneath the LSA Tank; one sludge and one liquid characterization sample was collected from inside the tank. The soil sample did not detect any contaminants that exceeded Method 2 regulatory criteria. Figure 5-16 presents the sample location, and Table 5-26 lists the complete suite of analyses and soil sample results above detection limits. A complete set of analytical results, including the AST sludge and liquid characterization samples, is included in Appendix D.

Table 5-26
LSA Tank Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results
			AM-A501601
Location	--	--	Under AST
Diesel-range Organics (AK102)	mg/kg	230	22.7 J
Residual-range Organics (AK103)	mg/kg	8300	107 J
BTEX (SW8260B)	mg/kg	--	No analytes detected (data rejected)
PAH (SW8270C SIM)	mg/kg	--	No analytes detected

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
J = Estimated data; see Appendix K for details.

Four soil samples were collected at locations where drums were removed from the dry lake area on Hill 400. One soil sample was collected at each drum location. Arsenic concentrations in all four samples were above Method 2 regulatory criteria but below accepted background concentrations contained in the Comprehensive RI Report (USAED 2000a) at all but Drum Location #4, which only marginally exceeded the background concentration of 9.85 mg/kg. The Drum Location #4 sample also detected selenium and chromium above Method 2 regulatory criteria and accepted background concentrations. As

required by 18 AAC 75.325(g), an assessment of cumulative risks and hazards was also conducted according to procedures described in Section 3.3.4. The total cumulative (cancer) risk for Drum Location #4 is 2.2×10^{-5}, above the limitation of 1×10^{-5}; the hazard index for the site is 0.64, below the limitation of 1.0. The other three drum locations had total cumulative (cancer) risk and hazard index values well below the respective limitations. Figure 5-17 presents the sample locations and Table 5-27 lists the complete suite of analyses and sample results above detection limits. A complete set of analytical results is included in Appendix D. The cumulative risk and hazard calculation sheets for each drum location are included in Appendix J.

The analysis of soil samples collected from the four drum locations also revealed 2-Butanone, at potentially elevated concentrations. However, these results were identified as rejected during the data quality assessment as included in Appendix K.

Six soil analytical samples were collected from the Building 1154 excavation: four sidewall samples and two floor samples. One additional soil sample (includes TOC analysis) was collected from the approximately 25 cy uncontaminated soil stockpile. The floor sample, which was collected where the excavation was terminated at contact with fractured bedrock, detected DRO concentrations above Method 2 regulatory criteria. One sludge and one water waste characterization sample were collected from the Building 1154 UST. No fuel was present inside the UST so an oil-burning specifications (OBS) sample was not collected. Figure 5-18 presents the sample locations, and Table 5-28 lists the complete suite of analyses and soil sample results above detection limits. A complete set of analytical results, including the UST sludge and water samples, is included in Appendix D. The Method 3, cumulative risk, and hazard calculation sheets are included in Appendix J.

One soil analytical sample was collected from one foot below the Latrine 1 UST and included the TOC analysis. The sample detected DRO and RRO above Method 2 regulatory criteria. Because the TOC sample was collected from contaminated soil and the contamination concentrations were elevated, a Method 3 calculation was not performed. One sludge and one water waste characterization sample were also collected from the Latrine 1 UST. No fuel was present inside the UST so an OBS sample was not collected. Figure 5-21 presents the sample

Table 5-27
LSA Drums Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results			
			AM-A501701	AM-A501801	AM-A501901	AM-A502001
Location	--	--	Drum Loc. 1	Drum Loc. 2	Drum Loc. 3	Drum Loc. 4
Gasoline-range Organics (AK101)	mg/kg	260	ND [9.11] J	0.983 J, UB/RL	0.896 J, UB/RL	5.88 J, UB/RL
Diesel-range Organics (AK102)	mg/kg	230	20.4 J	23.9 J	15.8 J	219 J
Residual-range Organics (AK103)	mg/kg	8300	214	163	142	1230
Metals (SW6010, SW6010B, SW7471A)						
Barium	mg/kg	982	40	46	29	41
Chromium	mg/kg	23	6.6	7.9	3.4	77
Silver	mg/kg	19	ND [1.7]	ND [1.6]	ND [1.4]	ND [5.7]
Arsenic	mg/kg	1.8	5	3.8	1.8	10
Cadmium	mg/kg	4.5	0.098 J, UB/RL	ND [0.31] J	ND [0.29] J	ND [1.1] J
Lead	mg/kg	400	13	3.6	12	220
Selenium	mg/kg	3	ND [0.86]	1.8	1.5	9.8
Mercury	mg/kg	1.24	0.0489	0.0716	0.039	0.243
PCBs (SW8082)	mg/kg	--	No analytes detected	No analytes detected	No analytes detected	No analytes detected
PAH (SW8270C SIM)	µg/kg	--	No analytes detected	No analytes detected	No analytes detected	No analytes detected
VOC (SW8260B)						
2-Butanone	µg/kg	--	1100 R	910 R	880 R	3200 R
Acetone	µg/kg	9,000	ND [430] R	470 R	ND [360] R	ND [1400] R
Chloromethane	µg/kg	--	ND [430] R	ND [390] R	ND [360] R	200 R
Toluene	µg/kg	4,800	24 R	ND [390] R	ND [360] R	ND [1400] R

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.

J = Estimated data; see Appendix K for details.
R = Rejected data; see Appendix K for details.
UB/RL = Analyte detected in Method Blank; reported value is considered valid.

locations, and Table 5-29 lists the complete suite of analyses and sample results above detection limits for the soil samples. A complete set of analytical results, including the UST sludge and water waste characterization samples, is included in Appendix D.

Table 5-28
UST 1154 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results						
			AM-A502501	AM-A502502	AM-A502503	AM-A502504	AM-A502505	AM-A502601	AM-A502602
Location	--	--	East floor	West floor	South wall	North wall	West wall	East wall	Uncont. soil
Diesel-range Organics (AK102)	mg/kg	230	52 J	1810 J	ND [6.86]	7.24 J	111 J	153 J	10.3 J
Residual-range Organics (AK103)	mg/kg	8300	78.6 J, UB/RL	80.5 J, UB/RL	31 UB/RL	53.3 UB/RL	58 J, UB,RL	62.8 UB/RL	37.2 UB/RL
BTEX (SW8260B)	mg/kg	--	No analytes detected	No analytes detected	No analytes detected	No analytes detected	No analytes detected	No analytes detected	No analytes detected
PAH (SW8270C SIM)									
Acenaphthene	µg/kg	190,000	ND [5.2]	25	ND [2.9]	ND [2.2]	ND [6.1]	ND [3.2]	ND [3.4]
Acenaphthylene	µg/kg	--	ND [5.2]	26	ND [2.9]	ND [2.2]	ND [6.1]	ND [3.2]	ND [3.4]
Chrysene	µg/kg	550,000	ND [5.2]	9.3	ND [2.9]	ND [2.2]	ND [6.1]	ND [3.2]	ND [3.4]
Fluoranthene	µg/kg	1,900,000	ND [5.2]	11	ND [2.9]	ND [2.2]	ND [6.1]	ND [3.2]	ND [3.4]
Fluorene	µg/kg	240,000	ND [5.2]	15	ND [2.9]	ND [2.2]	ND [6.1]	ND [3.2]	ND [3.4]
Pyrene	µg/kg	1,400,000	ND [5.2]	11	ND [2.9]	ND [2.2]	ND [6.1]	ND [3.2]	ND [3.4]

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.

J = Estimated value; see Appendix K for details.

UB/RL = Analyte detected in Method Blank; reported value is considered valid.

Table 5-29
LSA Latrine 1 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results
			AM-A502705
Location	--	--	Under Latrine 1
Diesel-range Organics (AK102)	mg/kg	230	66,700 J
Residual-range Organics (AK103)	mg/kg	8300	9330 J
BTEX (SW8260B)	mg/kg	--	No analytes detected
PAH (SW8270C SIM)			
Acenaphthene	µg/kg	190,000	310
Acenaphthylene	µg/kg	--	490
Chrysene	µg/kg	550,000	180
Fluorene	µg/kg	240,000	230
Pyrene	µg/kg	1,400,000	390

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
J = Estmiated value; see Appendix K for details.

5.12.3 Conclusions and Recommendations

No further action is recommended for the LSA Tank site. No contaminants were detected in the soil beneath the removed tank that exceeded Method 2 regulatory criteria, and the site did not exceed the cumulative risk and hazard index limitations.

Further action is recommended for Drum Location #4 due to the chromium and selenium results above regulatory levels and the calculated cumulative risk above limitations. It is recommended that the soil in the immediate vicinity of Drum Location #4 be removed with hand tools, containerized, and shipped off-site for disposal. Confirmation samples collected after soil removal will confirm that elevated metals at the site have been removed.

Further action is also recommended for all four drum locations to the potential presence of 2-Butanone; samples should be collected and, if required, appropriate cleanup levels will be developed.

One soil sample collected from the floor of the Building 1154 UST excavation contained a DRO concentration above the Method 2 regulatory criteria. However, the remaining contamination is located in the fissures of bedrock, and would not be feasible to be removed. Therefore, it is recommended that the level of institutional controls required to manage the residual contamination be coordinated between the USAED, ADEC, and the property owner.

No further action is recommended for the Latrine 7 site. No evidence of a UST or contamination was found in the test pit conducted at the site.

No further action is recommended for the Building 1205 site. No evidence of a UST or contamination was found in the test pit conducted at the site.

Further action is recommended for the Latrine 1 site due to the fuel results above regulatory levels. The severity of the slope immediately surrounding the site (see Appendix A for photographs of the site) and SHPO concerns preclude tank and soil removal. Therefore, additional site characterization is necessary to determine if contamination has migrated from the site in concentrations that exceed regulatory levels. A single sample collected during the 2000 field season was collected immediately beneath the tank and represents the "worst case" sample. It is recommended that additional downgradient samples be collected with a hand auger to determine the amount of contamination in the area and if contaminants have migrated from the immediate vicinity of the tank. Monitoring wells may be installed in the hand augered borings if groundwater is encountered. If installed, monitoring well(s) would be sampled for 2 years to determine if contaminants are migrating from the site.

No further action is recommended for the Building 1050 site. No evidence of a UST or contamination was found in the two test pits conducted at the site.

No further action is recommended for the Building 1128 and Building 1245 sites. No evidence of a UST or contamination was found at either site.

5.13 BUILDING 627 STEAM PLANT VAULT AND POL SITES

Building 627 is located on Strawberry Hill, which is located on the south central end of Amaknak Island. The building was constructed by the U.S. Navy during WWII as part of the Dutch Harbor NOB and was used to generate steam heat and power to facilitate the flow of fuel oil between fuel handling facilities. The building was demolished by the USAED in 1991; only the foundation remains at the site (USAED-Huntsville 1994). Figure 5-22 presents the general site location and Figure 5-23 presents the site layout.

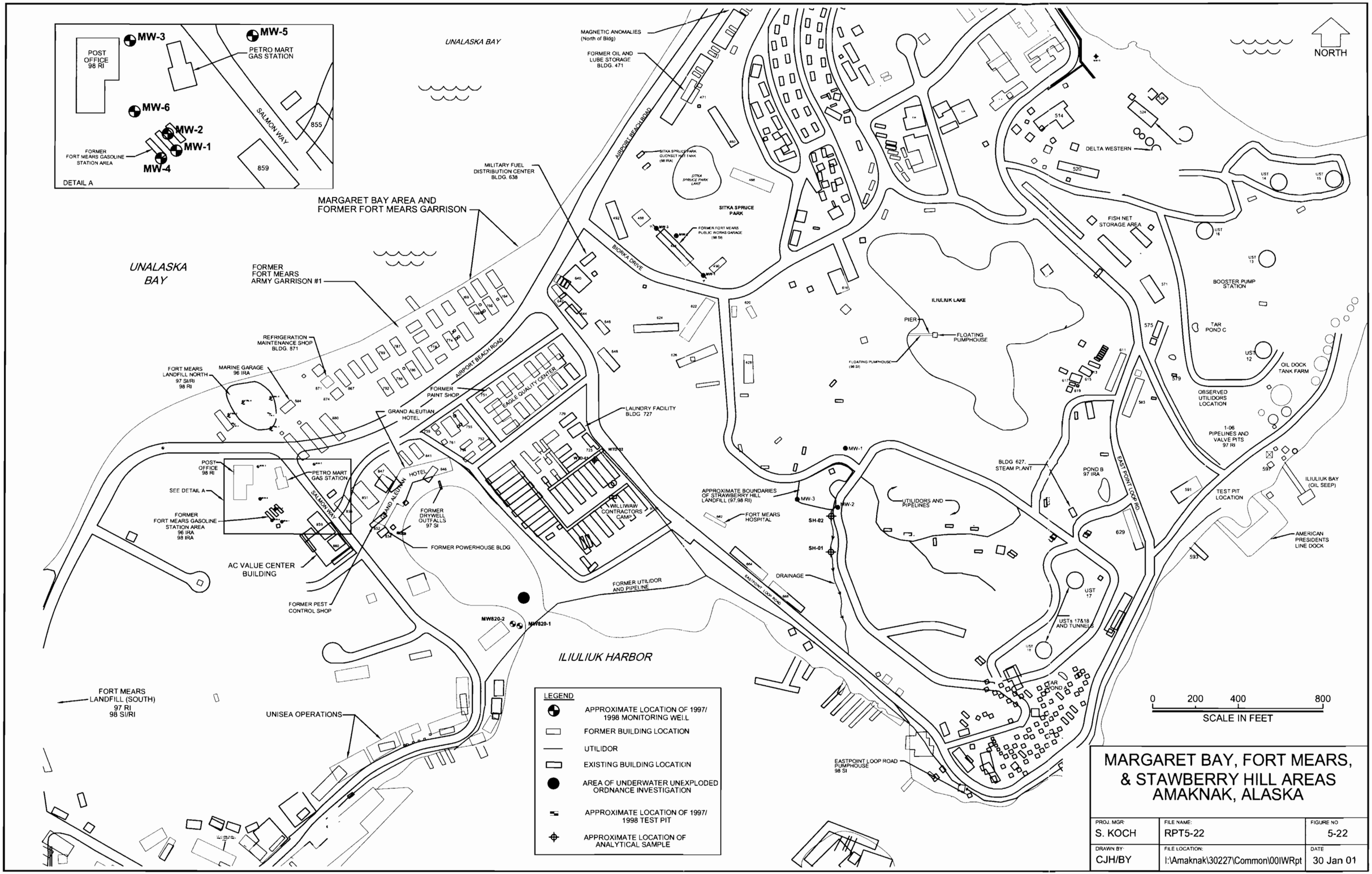
5.13.1 Previous Remedial/Removal Activities

Previous investigations identified a vault containing oil, water, and sludge, and a potential release of fuel associated with the demolished steam plant. Two documented POL spills occurred at Building 627 and are described in Section 3.13.2 of the 2000 Islandwide Work Plan Addendum. In addition, ADEC records indicate that a concrete sump in front of Building 627 may have been tied into a wood-stave drain pipe that discharged onto the hillside approximately 200 feet away. The pipe was severed and blocked with soil in 1991 during an AST removal from a building adjacent to Building 627.

5.13.2 2000 Work Completed

In an attempt to locate the reported buried concrete vault, a test pit was dug on 9 October 2000 in front of the former Building 627. Visual contamination was encountered in the test pit at approximately 2 feet bgs.

The following day (10 October), nine test pits were dug to attempt to delineate the visual extent of presumed Bunker-C soil contamination. The east and south extent of contamination was not delineated due to a cliff on the east side of the building revetment and possible utilities south of the site. The test pits were dug until bedrock was reached, typically at 5 to 11 feet bgs. Gross Bunker C fuel oil contamination was encountered at approximately 2 feet bgs in each test pit and continued until bedrock was reached. The area of contaminated soil



MARGARET BAY, FORT MEARS, & STAWBERRY HILL AREAS AMAKNAK, ALASKA

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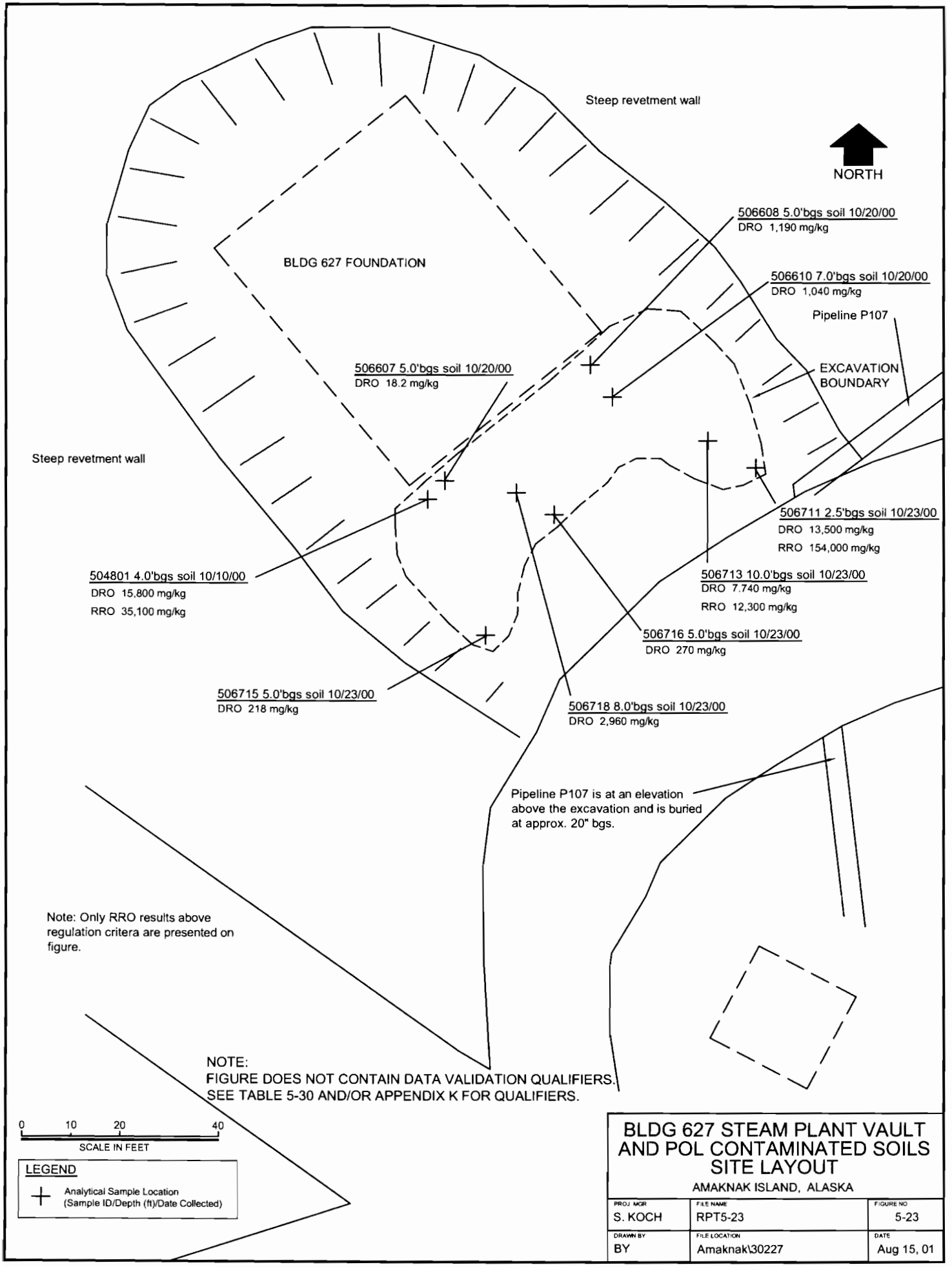


BLDG 627 STEAM PLANT VAULT AND POL CONTAMINATED SOILS SITE LAYOUT

AMAKNAK ISLAND, ALASKA

PROJ MGR	FILE NAME	FIGURE NO
S. KOCH	RPT5-23	5-23
DRAWN BY	FILE LOCATION	DATE
BY	Amaknak\30227	Aug 15, 01

was estimated to be approximately 50 feet by 50 feet, and the depth of contamination was estimated to average approximately 5 feet bgs. Therefore, the estimated total volume of contaminated soil was 500 cy.

A decision to excavate up to 500 cy of contaminated soil was made on 19 October, and excavation activities at the site commenced. Seventy cy of contaminated soil was removed on 19 October followed by 250 cy on 20 October and 180 cy on 23 October. All excavated contaminated soil was transported off-site for storage and treatment at the contaminated soil stockpile yard. After excavating the 500 cy of contaminated soil, visual contamination was still observed on all four sidewalls (under Building 627's foundation, under two revetment walls and extending under the road south of the building foundation). The southeast corner of the excavation exhibited the most visibly contaminated soil remaining. A strong diesel odor was noted in the area and heavily impacted soil was clearly visible in the southeast sidewall. Other areas of the excavation exhibited more "streaked" contamination. Depth to bedrock varied across the excavation from five to ten feet bgs. A fence was installed around the perimeter of the excavation pending backfilling.

Backfilling with clean material from the Pre-WWII Tank Farm began on 24 October and continued until complete on 27 October. Water that accumulated in the excavation slowed the backfilling process. Seventy-six tons of pit run rock was added to the site to keep the accumulated water in the excavation from overflowing. The excavation was closed on 27 October with 60 tons of pit run rock.

5.13.2.1 Field Screening Results

Hanby™ samples were collected on 20 October to determine if the extents of contamination had been reached. Results indicated that the soil contamination (>200 mg/kg diesel) continued underneath the Building 627 foundation and under the revetment walls to the east and west sides of the area. After completing the excavation of the 500 cy of contaminated soil on 23 October, one Hanby™ sample was collected from a sidewall of the Building 627 excavation. The result indicated contamination of >1,000 mg/kg. Visible contamination

precluded the need to collect additional Hanby™ confirmation samples from the sidewalls and floor of the Building 627 excavation.

5.13.2.2 Analytical Results

Because the excavation at Building 627 took place over several days, the soil samples were not collected during that time. Soil samples were collected separately and are discussed in the following paragraphs. Figure 5-23 presents the sample locations and Table 5-30 lists the complete suite of analyses for each sample and the sample results above detection limits. A complete set of analytical results is included in Appendix D.

One soil analytical sample (AM-A504801) was collected on 10 October from visually contaminated soil in one of the initial test pits. The sample was collected to determine the concentrations of contamination at the site. DRO, RRO, and chromium were detected above Method 2 regulatory criteria in the sample. See Table 5-30 for the analytical results.

During the excavation activities, one waste characterization sample was collected for every 50 cy of removed contaminated soil. Therefore, ten waste characterization samples were collected and analyzed for lead and PCBs to characterize the soil for disposal. The results did not indicate any lead above regulatory criteria and did not detect PCBs. After receiving the sample results, the contaminated soil was mixed in with other Islandwide soils at the contaminated soil stockpile yard.

Three soil analytical samples were collected on 20 October from the excavation: one from the northeast sidewall (and one field duplicate), one from the northwest sidewall, and one from the northeast floor. The samples were collected from the north limit of the excavation. The samples were collected before the excavation was complete because the width of the excavation would have precluded sampling of the north wall with the limited reach of the excavator. All the samples detected DRO, arsenic, or both parameters above Method 2 regulatory criteria. See Table 5-30 for the analytical results.

Five soil analytical samples were collected on 23 October from the excavation: one from the southeast corner wall (and one field duplicate), one from the southeast floor (and one field duplicate), one from the west wall, one from the south wall (and one field duplicate), and one from the south floor. All the samples detected a combination of DRO, arsenic, PAH, and/or semivolatile organic compound (SVOC) contamination above Method 2 regulatory criteria. See Table 5-30 for the analytical results.

Two TOC samples were collected on 31 October from an uncontaminated area near the excavated area.

5.13.3 Conclusions and Recommendations

Further action is recommended for the area surrounding the Building 627 site; however, the contamination remaining at the Building 627 site is not related to any potential contaminant sources associated with Building 627. Because the foundation of Building 627 is located within a depression surrounded by steep revetment walls, the excavation conducted during the 2000 field season was able to uncover bedrock above the actual level of the Building 627 foundation. Fuel contamination was observed "flowing" across this exposed portion of bedrock into the excavation (particularly at the southwest corner). This evidence indicates the contaminated soil removed from the excavation and the remaining contamination at the site is attributed to a source upgradient of the former Building 627. A possible source was the 7,000-gallon AST removed by the Corps of Engineers in 1991 in response to a spill. Further action is recommended for the area and should include addressing possible contamination sources and subsequent cleanup of identified sources. Other sources may include tanks and/or pipelines located upgradient of the site or the pipeline located immediately adjacent to the site. Before investigative work continues at the site, eligibility concerns should be addressed with other potentially responsible parties that have used facilities in the Rocky Point area.

A Method 3 calculation was performed using site-specific TOC data contained in Table 3-2 solely to determine appropriate cleanup levels for potential future work that may be conducted at the site. The Method 3 calculation sheet (including the calculated regulatory criteria) are included in Appendix J.

Table 5-30
Building 627 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results											
			AM-A504801	AM-A506607	AM-A506608	AM-A506609	AM-A506610	AM-A506711	AM-A506712	AM-A506713	AM-A506714	AM-A506715	AM-A506716	AM-A506717	AM-A506718
Location	--	--	TP-1 (north west floor)	Northwest wall	Northeast wall	Northeast wall (FD)	Northeast floor	Southeast corner wall	Southeast corner wall (FD)	Southeast floor	Southeast floor (FD)	West wall	South wall	South wall (FD)	South floor
Gasoline-Range Organics (AK101)	mg/kg	260	15.8	3.77 J, UB/RL	0.555UB/RL	3.18 UB/RL	ND [3.16]	13.4 J	41 J	9.15 J	--	1.97 J	0.571 J	0.902 UB/RL	0.921 UB/RL
Diesel-Range Organics (AK102)	mg/kg	230	15800 J	18.2 J	1190 J	1290 J	1040	13500 J	11300 J	7740 J	4080 J	218 J	270 J	631 J	2960 J
Residual-Range Organics (AK103)	mg/kg	8,300	35100 J	175 J	6040 J	6440 J	3500 J	154000 J	127000 J	12300 J	7560 J	654 J	856 J	1650 J	6200 J
Metals (SW6010, SW6010B, SW7471A)															
Arsenic	mg/kg	1.8	8.1	40	19	19	34	16	--	28	--	34	21	--	23
Cadmium	mg/kg	4.5	0.14 J,UB/RL	ND [0.23]	ND [0.24]	ND [0.24]	ND [0.23]	ND [0.4]	--	ND [0.24]	--	ND [0.3]	ND [0.32]	--	ND [0.21]
Lead	mg/kg	400	6.3	5.9	26 J	5.4 J	18	7	--	6.1	--	13	8.9	--	7.4
Selenium	mg/kg	3	ND [0.68]	0.62	0.86	0.71	0.7	2.3	--	0.94	--	0.98	1.1	--	0.52
Barium	mg/kg	982	23	25	50	46	62	26	--	30	--	40	35	--	28
Chromium	mg/kg	23	88	ND [1.2] J	14	19	12	7.1	--	22	--	4.9	6.3	--	14
Silver	mg/kg	19	ND [1.4]	ND [1.2]	ND [1.2]	ND [1.2]	ND [1.2]	ND [2]	--	ND [1.2]	--	ND [1.5]	ND [1.6]	--	ND [1]
Mercury	mg/kg	1.24	0.7188 J	0.113	0.0817	0.0636	0.291	0.105	--	0.0822	--	0.0864	0.0849	--	0.0945
PCBs (SW8082)	mg/kg	--	No analytes detected	No analytes detected	No analytes detected	No analytes detected	No analytes detected	No analytes detected	--	No analytes detected	--	No analytes detected	No analytes detected	--	No analytes detected
PAH (SW8270C SIM)															
2-Methylnaphthalene	µg/kg	--	780 J	ND [2]	ND [2.1]	2.5	ND [2]	250000	--	13000 J	--	ND [2.5]	7.7	--	650 J
Acenaphthene	µg/kg	190,000	1300 J	ND [2]	3.6	3.7	7.4	15000	--	1300 J	--	ND [2.5]	16	--	280 J
Acenaphthylene	µg/kg	--	350 J	ND [2]	3.1	3.7	3.1	4300	--	370 J	--	ND [2.5]	3	--	80 J
Anthracene	µg/kg	3,900,000	1000 J	ND [2]	7.7	4.2	21	10000	--	920 J	--	ND [2.5]	18	--	320 J
Benzo(a)anthracene	µg/kg	5,500	700 J	ND [2]	16	19	23	4500	--	360 J	--	ND [2.5]	29	--	180 J
Benzo(a)pyrene	µg/kg	900	460 J	ND [2]	22	28	17	1700	--	150 J	--	ND [2.5]	15	--	91 J
Benzo(b)fluoranthene	µg/kg	9,000	350 J	ND [2]	31	36	14	1100	--	100 J	--	ND [2.5]	14	--	65 J
Benzo(g,h,i)perylene	µg/kg	--	360 J	ND [2]	40	35	15	ND [1000]	--	96 J	--	3.1	7.8	--	65 J
Benzo(k)fluoranthene	µg/kg	93,000	ND [140]	ND [2]	13	13	2.4	ND [1000]	--	15 J	--	ND [2.5]	4.3	--	20 J
Chrysene	µg/kg	550,000	1600 J	ND [2]	47 J	69 J	51 J	8600	--	870 J	--	3.3	54	--	360 J
Dibenzo(a,h)anthracene	µg/kg	900	ND [140] J	ND [2]	5.6	9.7	2.9	ND [1000]	--	ND [41]	--	ND [2.5]	ND [2.7]	--	ND [18]
Fluoranthene	µg/kg	1,900,000	1000 J	ND [2]	21	32	29	4100	--	270 J	--	ND [2.5]	29	--	200 J
Fluorene	µg/kg	240,000	2100 J	ND [2]	4.5	4.5	7.2	20000	--	1900 J	--	ND [2.5]	9.8	--	410 J
Indeno(1,2,3-cd)pyrene	µg/kg	9,000	170 J	ND [2]	22	27	6.6	ND [1000]	--	ND [41]	--	ND [2.5]	6.6	--	28 J
Naphthalene	µg/kg	38,000	500 J	ND [2]	3.9	5.8	ND [2]	66000	--	1900 J	--	ND [2.5]	7.1	--	200 J
Phenanthrene	µg/kg	--	4100 J	ND [2]	16	16	40	53000	--	4800 J	--	2.8	9.4	--	1200 J
Pyrene	µg/kg	1,400,000	4400 J	2.7	50	74	140	24000	--	1900 J	--	5	95	--	1100 J
VOC (SW8260B)															
2-Butanone	µg/kg	--	900	61 J	ND [78]	94	ND [64]	180 J	170 J	ND [130]	ND [160]	ND [65]	ND [95]	--	ND [62]
Acetone	µg/kg	9,000	ND [200]	ND [64]	ND [78]	ND [89]	ND [64]	480 J	310 J	ND [130]	ND [160]	ND [65]	ND [95]	--	ND [62]
Ethylbenzene	µg/kg	5,000	ND [41]	ND [13]	ND [16]	ND [18]	ND [13]	350 J	240 J	37 J	38 J	ND [13]	ND [19]	--	4.1 J
Methylene chloride	µg/kg	10	ND [41]	ND [13]	ND [16]	ND [18]	ND [13]	17 J, UB/RL	10 J, UB/RL	15 J, UB/RL	14 J, UB/RL	8.6 J, UB/RL	20 J, UB/RL	--	11 J, UB/RL
Toluene	µg/kg	4,800	ND [41]	ND [13]	ND [16]	ND [18]	ND [13]	37J, UB/RL	24 J, UB/RL	ND [26]	ND [32]	ND [13]	ND [19]	--	ND [12]
Xylenes	µg/kg	69,000	ND [41]	ND [13]	ND [16]	ND [18]	ND [13]	1700 J	1200	88 J	83 J	ND [13]	ND [19]	--	17 J

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.

5.14 HUMPY COVE UST SITES

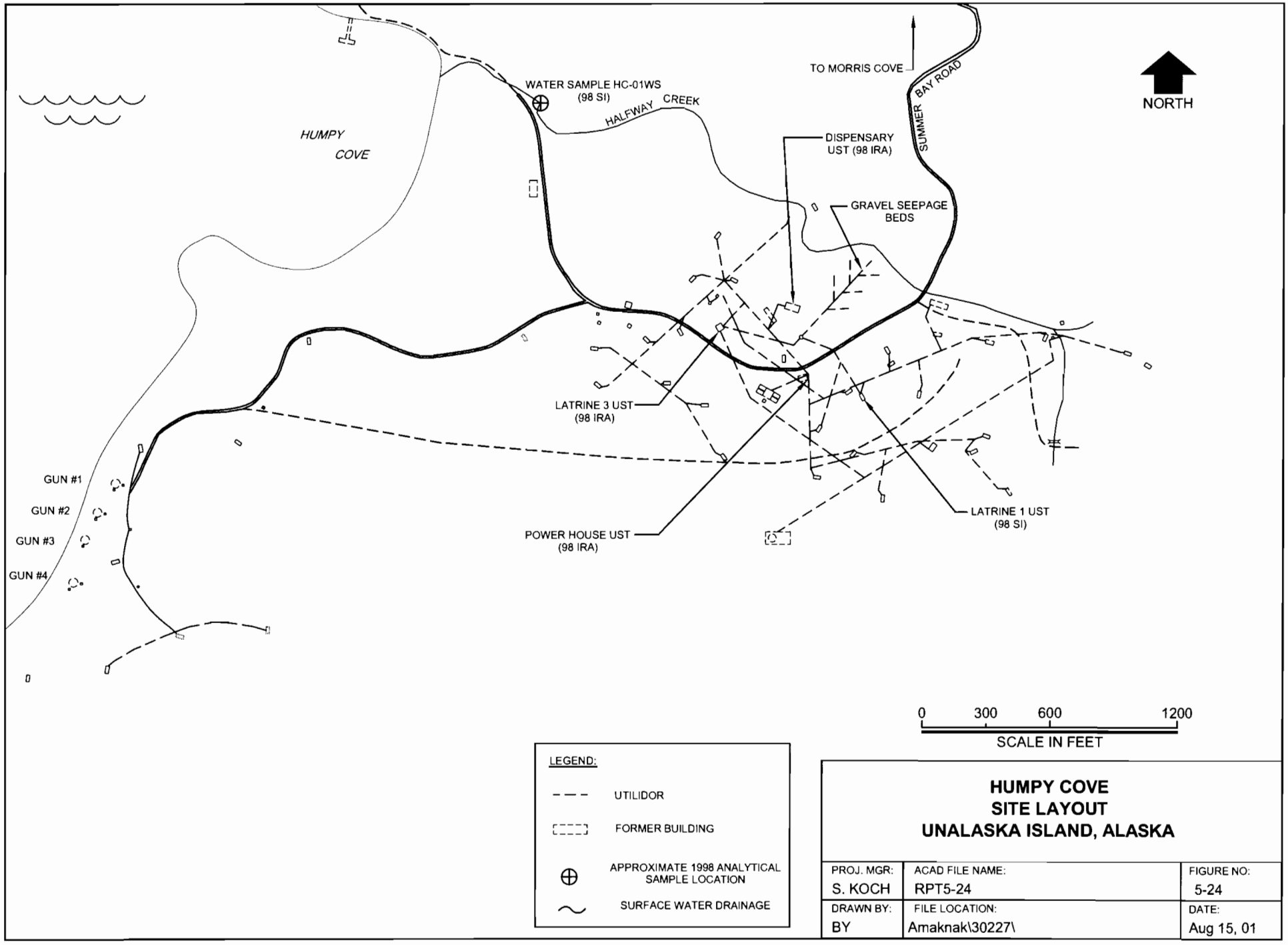
The Humpy Cove (HC) site is located approximately 8 miles north of the City of Unalaska on Unalaska Island. The site is situated 1,200 feet east of Humpy Cove on both sides of Summer Bay Road in rolling terrain. The site is part of the former Fort Brumback which was a tactical artillery area and contained troop housing, a mess hall, latrines, power generation facilities, a dispensary, and utility systems. Most of the development of AOPCs was taken from a study of 1946 as-built drawings, as well as 1994 aerial photographs (USAED 1997). A 1946 plot plan indicated water, sewage, and electrical lines at Fort Brumback. Very little visual evidence of the buildings associated with the former Fort Brumback remain and the entire site is vegetated. Building designations and former locations are indicated in Figure 5-24.

The area is currently uninhabited and used primarily for recreational and subsistence type activities. Halfway Creek runs along the north side of the site and an unnamed mountain rises to the south. The USTs found at this site likely supplied the former buildings with heating oil, except for the UST found by the former power house, which may have supplied fuel for power generation. The water table is shallow across much of the area. The site is currently zoned as marine related industrial. However, based on recent discussions with personnel from the City of Unalaska and the OC, it is anticipated that the Humpy Cove area will remain undeveloped and will be used primarily for recreational and subsistence activities.

5.14.1 Previous Remedial/Removal Activities

Investigation activities at Humpy Cove occurred between 22 and 26 July 1998. During these activities, USTs were discovered at the former power plant, the mess hall, the dispensary, and at two of the former latrines (Latrine No. 1 and No. 3). Other sites were investigated, however, no other USTs were discovered.

From 27 July to 20 August 1998, IRA activities included pumping the contents of the USTs; removing and disposing the USTs; excavating, hauling, and treating contaminated soils; field screening; soil sampling; backfilling the excavations with treated soil; and grading the



HUMPY COVE
SITE LAYOUT
UNALASKA ISLAND, ALASKA

PROJ. MGR:	ACAD FILE NAME:	FIGURE NO:
S. KOCH	RPT5-24	5-24
DRAWN BY:	FILE LOCATION:	DATE:
BY	Amaknak\30227\	Aug 15, 01

individual sites. In most of the excavations, gross contamination was readily discernible. At the Humpy Cove Dispensary (HCD) and the power plant excavations, groundwater was encountered before the vertical limits of POL-impacted soil were reached. The groundwater in both excavations was visibly impacted; therefore, well points were installed around these excavations.

A surface water sample was collected in Halfway Creek as it passes through the second moraine to measure possible impacts from the development in Humpy Cove. The water sample was collected downstream of the USTs as shown in Figure 5-24.

5.14.2 2000 Work Completed

In order to determine if POL contamination affects the groundwater at specific Humpy Cove locations, six soil borings were drilled during the 2000 field season. The six soil borings were drilled at four locations where insufficient groundwater information was available to determine if the groundwater was adversely impacted. Two of the six soil borings were converted to monitoring wells and both encountered groundwater. Each of the four locations are discussed separately in the following paragraphs.

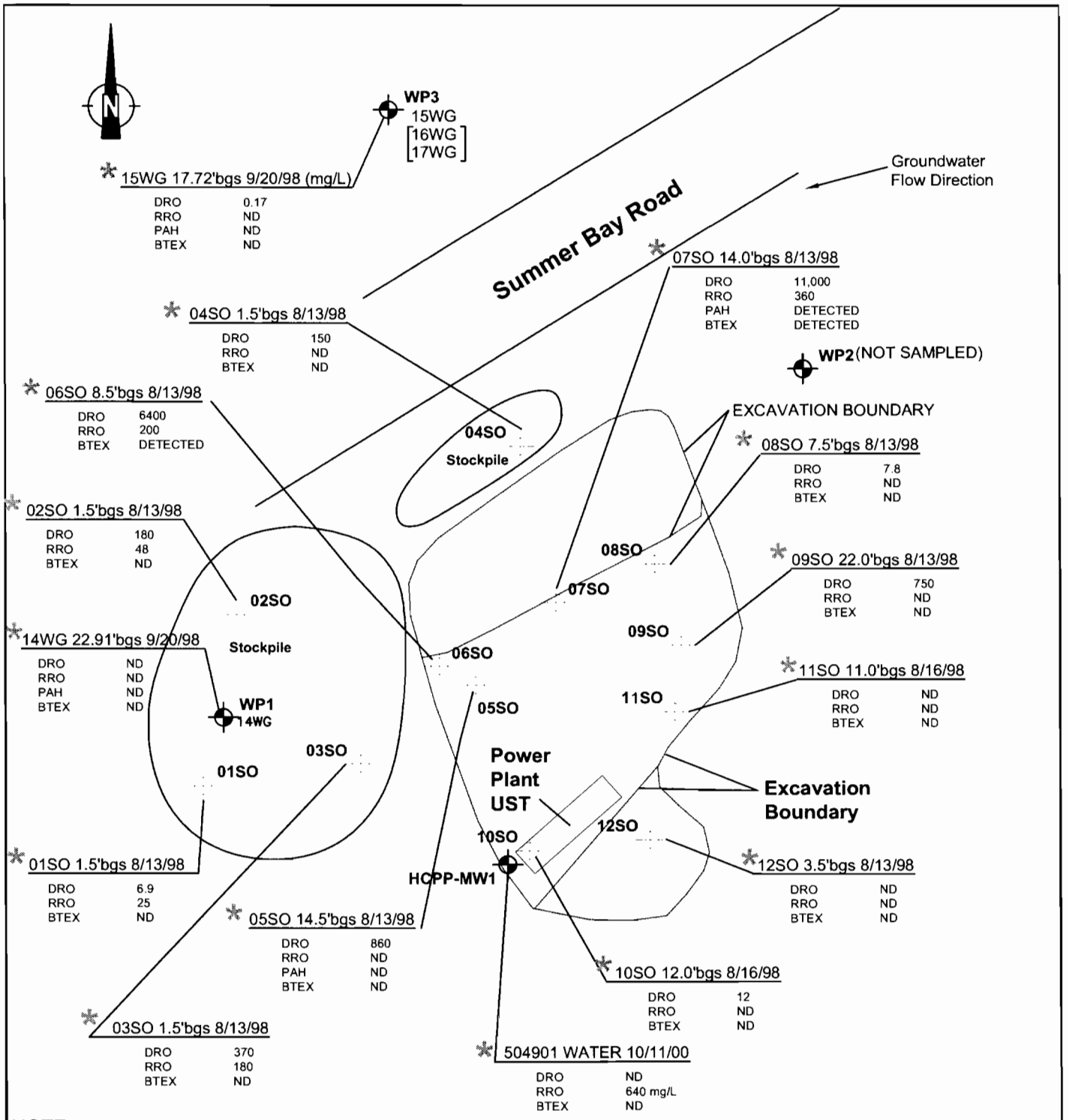
Two soil borings were drilled at the former Power Plant location. The first soil boring (HCPP-MW1) was drilled on 29 and 30 August and met refusal at bedrock at 24.5 feet bgs. The boring did not detect any soil contamination and did not encounter groundwater. The auger flights were left in HCPP-MW1 and the boring was rechecked for groundwater on 31 August, 1 September, and 3 September. Although the boring was drilled to below the groundwater elevation in the existing wells at the former Power Plant, no water was detected in soil boring HCPP-MW1. A joint decision was made by the USAED, ADEC, and the field crew on 5 September to abandon HCPP-MW1 and redrill the well to see if groundwater could be found. The second soil boring (HCPP-MW1 Replacement) was drilled on 6 September and met refusal at bedrock at 30.0 feet bgs. The boring encountered potentially contaminated soil from 18 to 30 feet bgs based on PID screening levels (see Section 5.14.2.1). Moist soil was encountered at 27.5 feet bgs and continued to the termination of the boring at 30.0 feet bgs. Water suddenly appeared in the boring at the termination of the boring and rose to 21.5

feet bgs, indicating the presence of a confined aquifer. A 2-inch diameter polyvinyl chloride (PVC) well was installed in HCPP-MW1 Replacement and was screened from 20 to 30 feet bgs. Figure 5-25 presents the location of the installed monitoring well. Appendix C presents the soil boring exploration logs, and the monitoring well log and the groundwater field sampling forms are included in Appendix E.

One soil boring was drilled at the former Dispensary location. The soil boring was drilled on 31 August and met refusal at bedrock at 11.0 feet bgs. The boring (HCD-MW1) did not detect any soil contamination and did not encounter groundwater. A second boring was offset five feet from the first boring and drilled to refusal at 10.5 feet bgs. The second boring was power-drilled to confirm that there was no groundwater at the site and, therefore, was not logged or provided a boring designation. No soil contamination or groundwater was encountered in the second boring. The auger flights were left in both borings, and both borings were rechecked for groundwater on 1 September and 3 September. A joint decision was made by the USAED, ADEC, and the field crew on 5 September to abandon both borings without installing a monitoring well. Figure 5-26 presents the location of the soil borings. Appendix C presents the soil boring exploration log.

One soil boring was drilled at the former Latrine 1 location and the Latrine 1 UST was closed in place. The soil boring was drilled on 11 September and met refusal at bedrock at 28.5 feet bgs. The boring (HCL1-MW1) did not detect any soil contamination and did not encounter groundwater. However, a monitoring well was installed in accordance with the joint decision made by the USAED and ADEC on 5 September. The monitoring well was rechecked for groundwater on 11 October but was still dry. The monitoring well was rechecked again for groundwater during a December groundwater sampling trip, and groundwater was detected and subsequently sampled. Figure 5-27 presents the location of the soil boring. Appendix C presents the soil boring exploration log, and monitoring well log and the groundwater field sampling forms are included in Appendix E.

The Latrine 1 UST was closed in place on 18 October. The top of the 300-gallon UST was exposed using hand tools to remove approximately 2 feet of overlying soil. There was a 2 inch opening in the top of the tank through which approximately 5-6 inches of water was



NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS.
SEE TABLE 5-31 AND/OR APPENDIX K FOR QUALIFIERS.

0 10 20 40
APPROXIMATE SCALE IN FEET

LEGEND

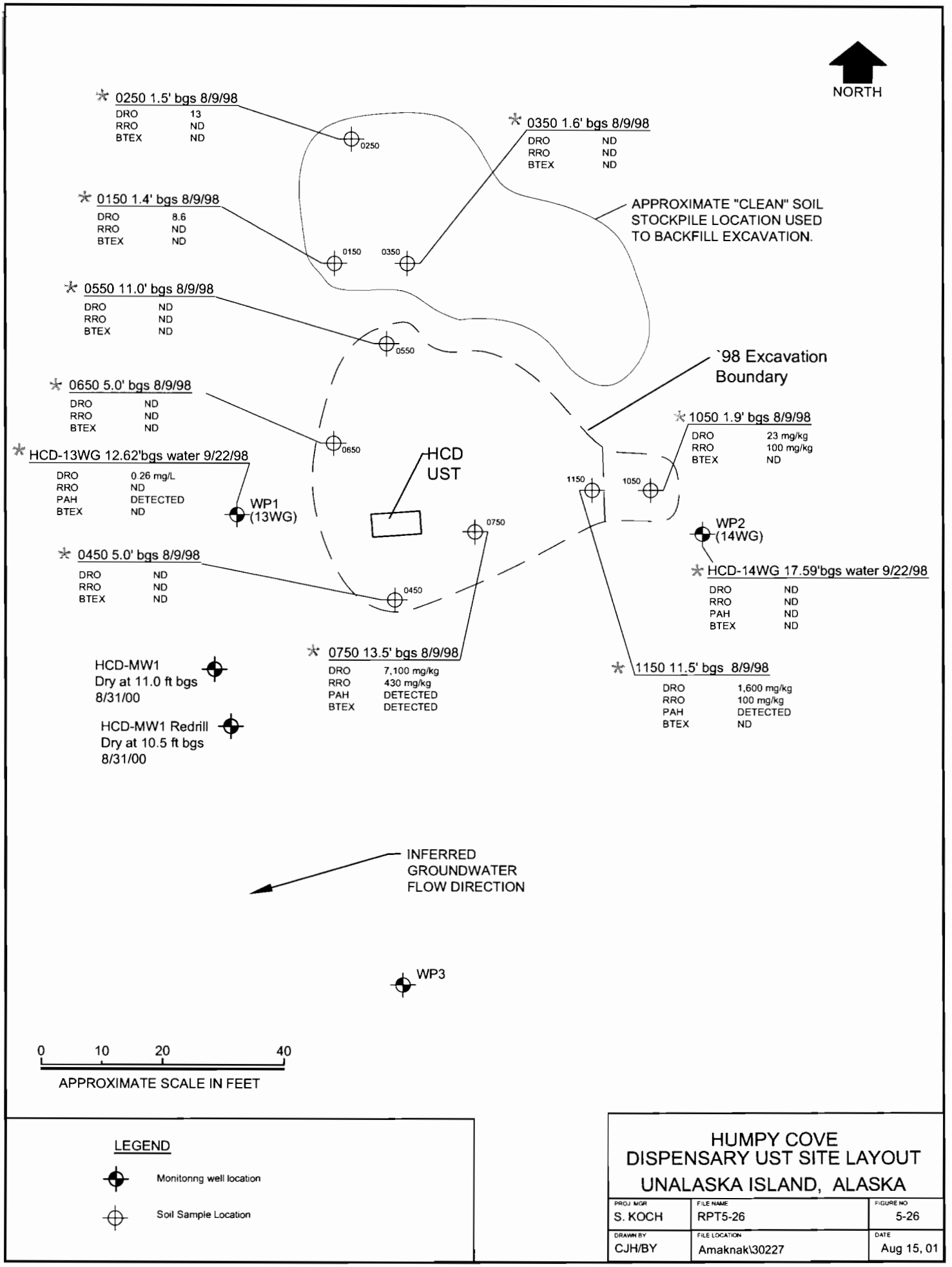
SOIL SAMPLE CONCENTRATIONS IN mg/kg

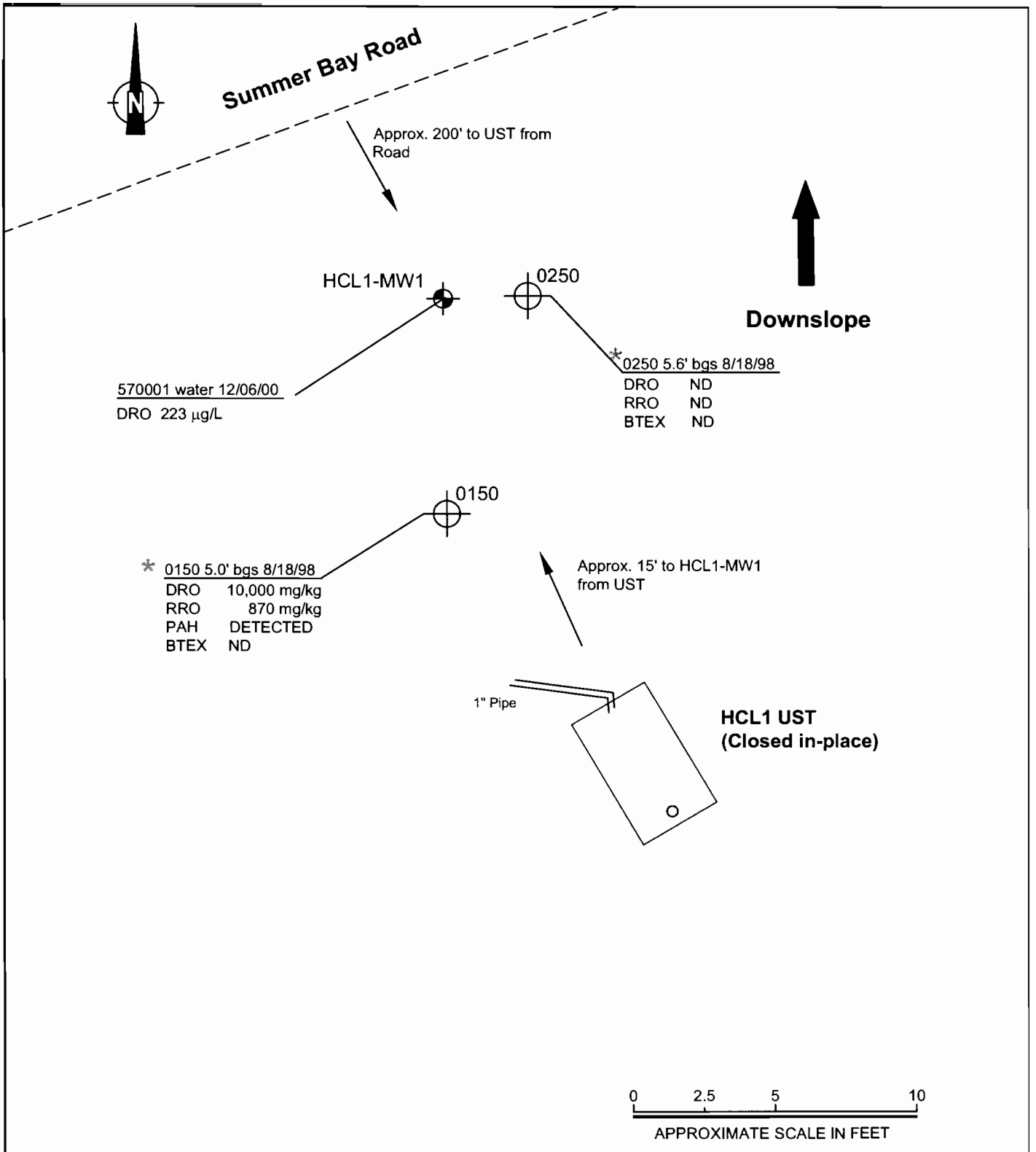
MONITORING WELL LOCATION

SOIL SAMPLE LOCATION

HUMPY COVE
POWER PLANT SITE LAYOUT
UNALASKA ISLAND, ALASKA

PROJ. MGR.:	ACAD FILE NO:	FIGURE NO.:
S. KOCH	RPT5-25	5-25
DRAWN BY:	FILE LOCATION:	DATE:
BP	AMAKNAK\30227	30 JAN, 01


NORTH
0250 1.5' bgs 8/9/98
DRO 13
RRO ND
BTEX ND
0350 1.6' bgs 8/9/98
DRO ND
RRO ND
BTEX ND
0150 1.4' bgs 8/9/98
DRO 8.6
RRO ND
BTEX ND
APPROXIMATE "CLEAN" SOIL STOCKPILE LOCATION USED TO BACKFILL EXCAVATION.
0550 11.0' bgs 8/9/98
DRO ND
RRO ND
BTEX ND
`98 Excavation Boundary
0650 5.0' bgs 8/9/98
DRO ND
RRO ND
BTEX ND
1050 1.9' bgs 8/9/98
DRO 23 mg/kg
RRO 100 mg/kg
BTEX ND
HCD-13WG 12.62'bgs water 9/22/98
DRO 0.26 mg/L
RRO ND
PAH DETECTED
BTEX ND
WP1 (13WG)
HCD UST
WP2 (14WG)
HCD-14WG 17.59'bgs water 9/22/98
DRO ND
RRO ND
PAH ND
BTEX ND
0450 5.0' bgs 8/9/98
DRO ND
RRO ND
BTEX ND
0750 13.5' bgs 8/9/98
DRO 7,100 mg/kg
RRO 430 mg/kg
PAH DETECTED
BTEX DETECTED
1150 11.5' bgs 8/9/98
DRO 1,600 mg/kg
RRO 100 mg/kg
PAH DETECTED
BTEX ND
HCD-MW1
Dry at 11.0 ft bgs
8/31/00
HCD-MW1 Redrill
Dry at 10.5 ft bgs
8/31/00
INFERRED GROUNDWATER FLOW DIRECTION
WP3
0 10 20 40
APPROXIMATE SCALE IN FEET
LEGEND
Monitoring well location
Soil Sample Location
HUMPY COVE
DISPENSARY UST SITE LAYOUT
UNALASKA ISLAND, ALASKA
PROJ MGR S. KOCH
FILE NAME RPT5-26
FIGURE NO 5-26
DRAWN BY CJH/BY
FILE LOCATION Amaknak\30227
DATE Aug 15, 01



LEGEND

Soil Sample Locations

Approximate 2000 monitoring well location

HUMPY COVE
LATRINE No.1 UST SITE LAYOUT
UNALASKA ISLAND, ALASKA

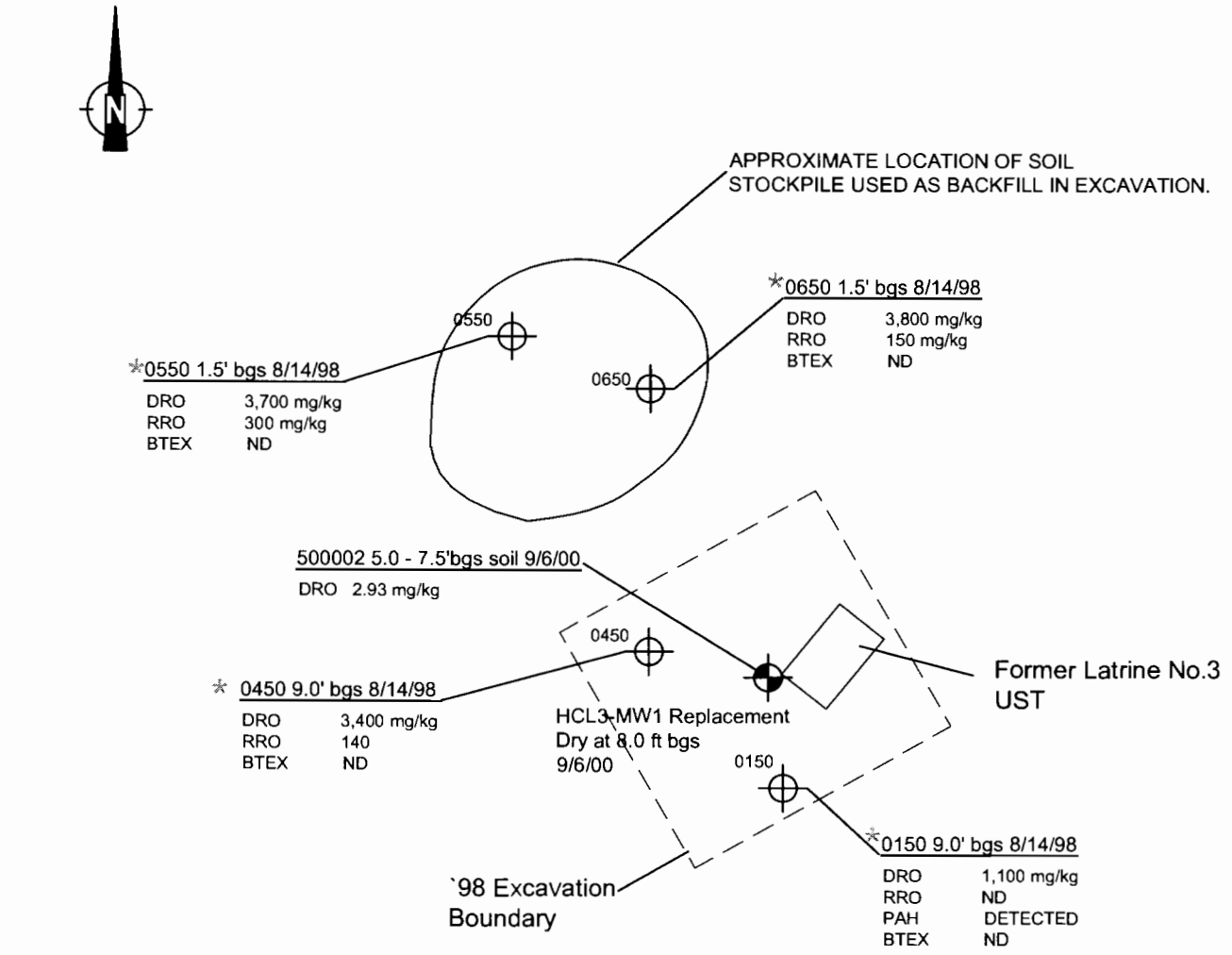
PROJ. MGR.:	ACAD FILE NO:	FIGURE NO.:
S. KOCH	RPT5-27	5-27
DRAWN BY:	FILE LOCATION:	DATE:
BY	Amaknak\30227	Aug 20, 01

observed in the bottom of the tank. The water had a noticeable fuel odor. A volatile organic compound (VOC) sample was collected from the water inside the tank using a ½ inch bailer. The top of the tank was then cut open to facilitate sample collection, water removal, and tank closure. After collecting the remaining water samples from inside the tank, the remaining water was removed using a 5-gallon bucket. The water was noted to be turbid, dark gray, water with floating diesel scum. Approximately 35-gallons of water was removed from the UST. Sorbents were then used to wipe approximately 2-gallons of sludge from inside the UST; the sorbents were collected in a 5-gallon bucket which was transported to the contaminated soil stockpile yard. Perforations were noted in the UST. The tank was then filled with gravel, backfilled, and seeded. The bare patch of trail leading to the UST was also seeded. A sample of the UST sludge was collected from the 5-gallon bucket containing the sludge material on 19 October.

Two soil borings were drilled at the former Latrine 3 location. The first soil boring (HCL3-MW1) was drilled on 31 August and met refusal at bedrock at 9 feet bgs. The boring did not detect any soil contamination and did not encounter groundwater. The auger flights were left in HCL3-MW1 and the boring was rechecked for groundwater on 1 September and 3 September. A joint decision was made by the USAED, ADEC, and the field crew on 5 September to abandon HCL3-MW1 and redrill the well to see if groundwater could be located. The second soil boring (HCL3-MW1 Replacement) was drilled on 6 September and met refusal at bedrock at 8.0 feet bgs. The boring did not detect any soil contamination and did not encounter groundwater; therefore, no monitoring wells were installed. Figure 5-28 presents the location of the soil borings. Appendix C presents the soil boring exploration logs.

5.14.2.1 Field Screening Results

PID readings were conducted during the drilling of the six Humpy Cove soil borings. The following paragraphs discuss the PID readings for the soil borings. PID readings for each sampled interval in all of the soil borings are included in the soil boring exploration logs in Appendix C.



NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS.
SEE TABLE 5-33 AND/OR APPENDIX K FOR QUALIFIERS.

LEGEND

- Monitoring well location
- Soil Sample Location

HUMPY COVE
LATRINE No.3 UST SITE LAYOUT
UNALASKA ISLAND, ALASKA

PROJ. MGR.:	ACAD FILE NO:	FIGURE NO.:
S. KOCH	RPT5-28	5-28
DRAWN BY:	FILE LOCATION:	DATE:
BY	Amaknak\30227	Aug 20, 01

One of the two soil borings drilled at the former Power Plant detected soil contamination based on PID readings. Potentially POL contaminated soil was detected in HCPP-MW1 Replacement from 18 to 30 feet bgs. PID readings ranged from 2.3 ppm (18 feet bgs) to 17.7 ppm (22 feet bgs). PID readings in HCPP-MW1 did not exceed levels consistent with background.

The soil boring drilled at the former Dispensary did not detect soil contamination based on PID readings. The second soil boring was power-drilled to confirm that groundwater was not present and, therefore, was not field screened.

The soil boring drilled at the former Latrine 1 did not detect soil contamination based on PID readings.

The soil borings drilled at the former Latrine 3 did not detect soil contamination based on PID readings.

5.14.2.2 Analytical Results

Analytical soil samples were collected from three of the six Humpy Cove soil borings. The various samples are discussed in the following paragraphs. Figures 5-26 through 5-28 present the sample locations, and Tables 5-31 through 5-33 list the complete suite of analyses for each sample and the sample results above detection limits. Complete sets of analytical results are included in Appendix D, and the groundwater field sampling forms are included in Appendix E.

One TOC sample was collected on 6 September at 25 to 27.5 feet bgs from HCPP-MW1 Replacement. A groundwater sample was also collected from HCPP-MW1 Replacement on 11 September after purging the well and stabilizing the field parameters. The water was clear with no odor or sheen observed. The analytical laboratory exceeded the holding time for the sample; therefore, the sample was cancelled and another groundwater sample was collected on 11 October. The re-sampled groundwater was again clear with no odor or sheen. The

Table 5-31
Humpy Cove Power Plant Water Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results
			AM-A504901
Location	--	--	HCPP-MW1 Replacement
Diesel-range Organics (AK102)	µg/L	1,500	ND [100]
Residual-range Organics (AK103)	µg/L	1,100	640 J, UB/RL
PAH (SW8270C SIM)	µg/L	--	No analytes detected

[1]18 AAC 75, Table C for groundwater. Surface water regulatory criteria, contained in 18 AAC 70, includes total aromatic hydrocarbons (TAH) levels not to exceed 10 µg/L and total aqueous hydrocarbons (TAqH) levels not to exceed 15 µg/L. TAH is calculated by summing concentrations of BTEX analyte concentrations, and TAqH is calculated by summing concentrations of BTEX and PAH analytes.
J =Estimated value; see Appendix K for details.
UB/RL = Analyte detected in Method Blank; reported value is considered valid.

Table 5-32
Humpy Cove Latrine 1 Water Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results
			AM-A570001
Location	--	--	HCL1-MW1
Diesel-range Organics (AK102)	µg/L	1,500	223 J, UB/RL
PAH (SW8270C SIM)			
2-Methylnaphthalene	µg/L	--	0.074
Naphthalene	µg/L	1,460	0.064

[1]18 AAC 75, Table C for groundwater. Surface water regulatory criteria, contained in 18 AAC 70, includes total aromatic hydrocarbons (TAH) levels not to exceed 10 µg/L and total aqueous hydrocarbons (TAqH) levels not to exceed 15 µg/L. TAH is calculated by summing concentrations of BTEX analyte concentrations, and TAqH is calculated by summing concentrations of BTEX and PAH analytes.
J =Estimated value; see Appendix K for details.
UB/RL = Analyte detected in Method Blank; reported value is considered valid.

Table 5-33
Humpy Cove Latrine 3 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results
			AM-A500002
Location	--	--	HCL3-MW1 Replacement
Diesel-range Organics (AK102)	mg/kg	230	2.93 J
Residual-range Organics (AK103)	mg/kg	8,300	ND [115]
PAH (SW8270C SIM)	µg/kg	--	No analytes detected

[1]18 AAC 75, Table B1, Method 2, over 40-inch zone, most stringent of the three pathways.
J =Estimated value; see Appendix K for details.

groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. Table 5-31 lists the complete suite of analyses for each sample and the sample results above detection limits.

One TOC sample was collected on 11 September at 25 to 27.5 feet bgs from HCL1-MW1. A groundwater sample was also collected from HCL1-MW1 on 6 December 2000 after purging the well and stabilizing the field parameters. The water was moderately turbid with no odor or sheen observed. The well began to dry up as the final sample bottles were being filled. The groundwater sample did not detect any contaminants that exceeded 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. One water and one sludge waste characterization sample were collected from UST on 18 and 19 October, respectively. Table 5-32 lists the complete suite of analyses for the groundwater sample and the sample results above detection limits. A complete set of analytical results, including the UST sludge and water waste characterization samples, is included in Appendix D.

One soil analytical sample, including TOC, was collected on 6 September at 5 to 7.5 feet bgs from HCL3-MW1 Replacement. The soil sample did not detect any contaminants that exceeded regulatory criteria. A groundwater sample was not collected from HCL3-MW1 Replacement because the boring did not contain groundwater. Table 5-33 lists the complete suite of analyses for each sample and the sample results above detection limits.

5.14.3 Conclusions and Recommendations

No further action is recommended for the Humpy Cove Power Plant (HCPP) site. No contaminants were detected in the site's groundwater that exceeded regulatory criteria. During the removal of the former Power Plant UST in July 1998, approximately 540 cy of contaminated soil was transported off site for treatment. Confirmation samples collected from the excavation sidewall revealed residual DRO concentrations. The highest remaining DRO concentration, 11,000 mg/kg, was collected from the center of the northwest wall at a depth of 14 feet bgs, just above the groundwater level. Although residual DRO levels exceed ADEC Method 2 clean levels, further excavation of contaminated soils of this site is not recommended because of the proximity of the residual DRO concentrations to groundwater. Therefore, it is recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

No further action is recommended for the Humpy Cove Dispensary site. Although two soil borings were drilled at the site, no groundwater was encountered. As discussed during the 5 September 2000 teleconference with the USAED and DEC, the two dry borings were abandoned and the site is recommended for no further action.

No further action is recommended for the Humpy Cove Latrine (HCL) 1 site. A soil boring drilled downgradient of the UST, as discussed during the 5 September 2000 teleconference with the USAED and DEC, did not encounter groundwater. In addition, no contaminants were detected in the soil from the boring. Groundwater was later observed in the monitoring well installed there; however, the groundwater sample did not contain contaminants above applicable cleanup levels.

No further action is recommended for the Humpy Cove Latrine 3 site. Although two soil borings were drilled at the site, no groundwater was encountered.

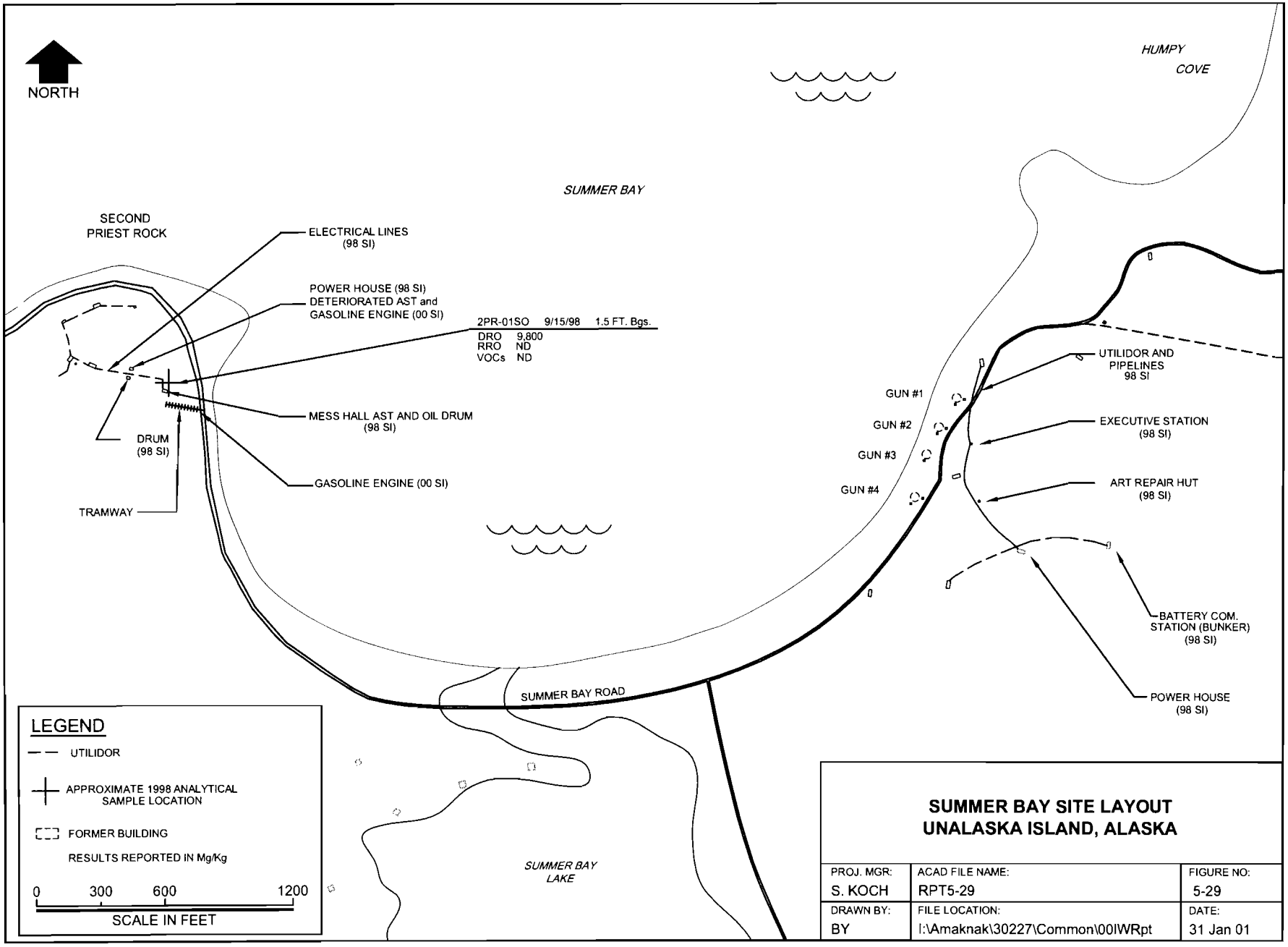
5.15 SUMMER BAY AST AND 55-GALLON DRUM

The Summer Bay site is located on Unalaska Island along Summer Bay, approximately 7 miles north of the City of Unalaska on Summer Bay Road. The site is located south of Summer Bay Road in generally steep terrain. Summer Bay is located to the north of the site and Mount Coxcomb rises to the southwest. Summer Bay Lake lies in a valley to the south and Humpy Cove is located to the northeast. This area includes historical structures associated with the former tactical artillery area called Fort Brumback Army Garrison #6 and is currently uninhabited. The site contained four large gun mounts, a bunker, an executive station, power generation facilities, a mess hall, and utility systems. Troops were housed in an area of Fort Brumback, which included housing, mess halls, power generation facilities, recreation facilities, utility systems, a maintenance facility, and a dock. Most of the development of AOPCs was taken from a study of 1946 as-built drawings, as well as 1994 aerial photographs (USAED 1997). Figure 5-29 presents the site layout.

In 1998, there were two primary areas of interest addressed at Summer Bay. The first is above the eastern portion of the bay where there were four gun mounts and associated buildings. The second is above the western portion of the bay where the remains of an observation station, including an AST and 55-gallon drum, is located above Second Priest Rock. Both areas are perched on hillsides several hundred feet above the bay.

5.15.1 Previous Remedial/Removal Activities

Investigation activities at the Summer Bay AST and 55-gallon drum site on Second Priest Rock occurred on 26 July 1998. During these activities, a 55-gallon drum partially full of a mid-weight oil and an empty AST next to the former mess hall location were found at the observation station overlooking Second Priest Rock. Field tests were performed on the oil found in the drum and a soil sample collected from the ground beneath the mess hall AST. The oil was tested for PCBs and chlorinated halogens. The results were non-detect for both compounds. See Figure 5-29 for sample locations and results.


NORTH
HUMPY
COVE
SUMMER BAY
SECOND
PRIEST ROCK
ELECTRICAL LINES
(98 SI)
POWER HOUSE (98 SI)
DETERIORATED AST and
GASOLINE ENGINE (00 SI)
2PR-01SO 9/15/98 1.5 FT. Bgs.
DRO 9,800
RRO ND
VOCs ND
MESS HALL AST AND OIL DRUM
(98 SI)
DRUM
(98 SI)
GASOLINE ENGINE (00 SI)
TRAMWAY
GUN #1
GUN #2
GUN #3
GUN #4
UTILIDOR AND
PIPELINES
98 SI
EXECUTIVE STATION
(98 SI)
ART REPAIR HUT
(98 SI)
BATTERY COM.
STATION (BUNKER)
(98 SI)
POWER HOUSE
(98 SI)
SUMMER BAY ROAD
SUMMER BAY
LAKE
LEGEND
UTILIDOR
APPROXIMATE 1998 ANALYTICAL
SAMPLE LOCATION
FORMER BUILDING
RESULTS REPORTED IN Mg/Kg
0 300 600 1200
SCALE IN FEET
SUMMER BAY SITE LAYOUT
UNALASKA ISLAND, ALASKA
PROJ. MGR: S. KOCH
ACAD FILE NAME: RPT5-29
FIGURE NO: 5-29
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FILE LOCATION: I:\Amaknak\30227\Common\00IWRpt
DATE: 31 Jan 01

5.15.2 2000 Work Completed

Planned field activities at the Summer Bay AST and 55-gallon drum site on Second Priest Rock were not conducted during the 2000 field season. Before field activities could occur, a Determination of Eligibility and Assessment of Effect was required. Although a Determination of Eligibility was previously conducted by a certified archaeologist, an Assessment of Effect was not completed and approved by the SHPO.

However, during a site investigation of the area on 4 November, an additional AST was found at the Search Light Base Power Plant. The AST appeared to be deteriorated and partially buried. Two four-cylinder gasoline engines were also discovered. One of the engines was beyond the top of the Tramway and one was at the Power Plant. See Figure 5-29 for the approximate locations of the AST and engines.

No field screening samples or analytical samples were collected during the 2000 field season.

5.15.3 Conclusions and Recommendations

Work planned for the 2000 field season was not conducted due to the lack of SHPO clearance. Therefore, the planned 2000 field activities and the additional sites discovered during the 2000 field season will be summarized in the 2001 Islandwide Work Plan and performed during the 2001 field season. SHPO coordination will be performed prior to the start of the 2001 field season to ensure that the activities can be completed.

5.16 SUMMER BAY TRANSFORMERS, UTILIDORS, AND DRUMS

See Section 5.15 for a description of the Summer Bay site. Figure 5-29 presents the site layout.

5.16.1 Previous Remedial/Removal Activities

An investigation occurred at Summer Bay in July 1998 to investigate the structures associated with the gun battery above the eastern portion of the bay. No USTs, transformers, or POL-contaminated soil were discovered in the area. In a comparison of seven sheets of a 1946

Summer Bay as-built plot plan to a series of 1994 aerial photographs, several buildings at the Summer Bay site were determined to have potential USTs based on their former facility mission. Building designations and locations are indicated in Figure 5-29.

5.16.2 2000 Work Completed

A site investigation was conducted at the Summer Bay site during the 2000 field season. Photographs were taken of the sites and GPS coordinates were recorded for each site. No evidence of USTs or ASTs were noted. Five drums were located at the site; three drums were intact with contents.

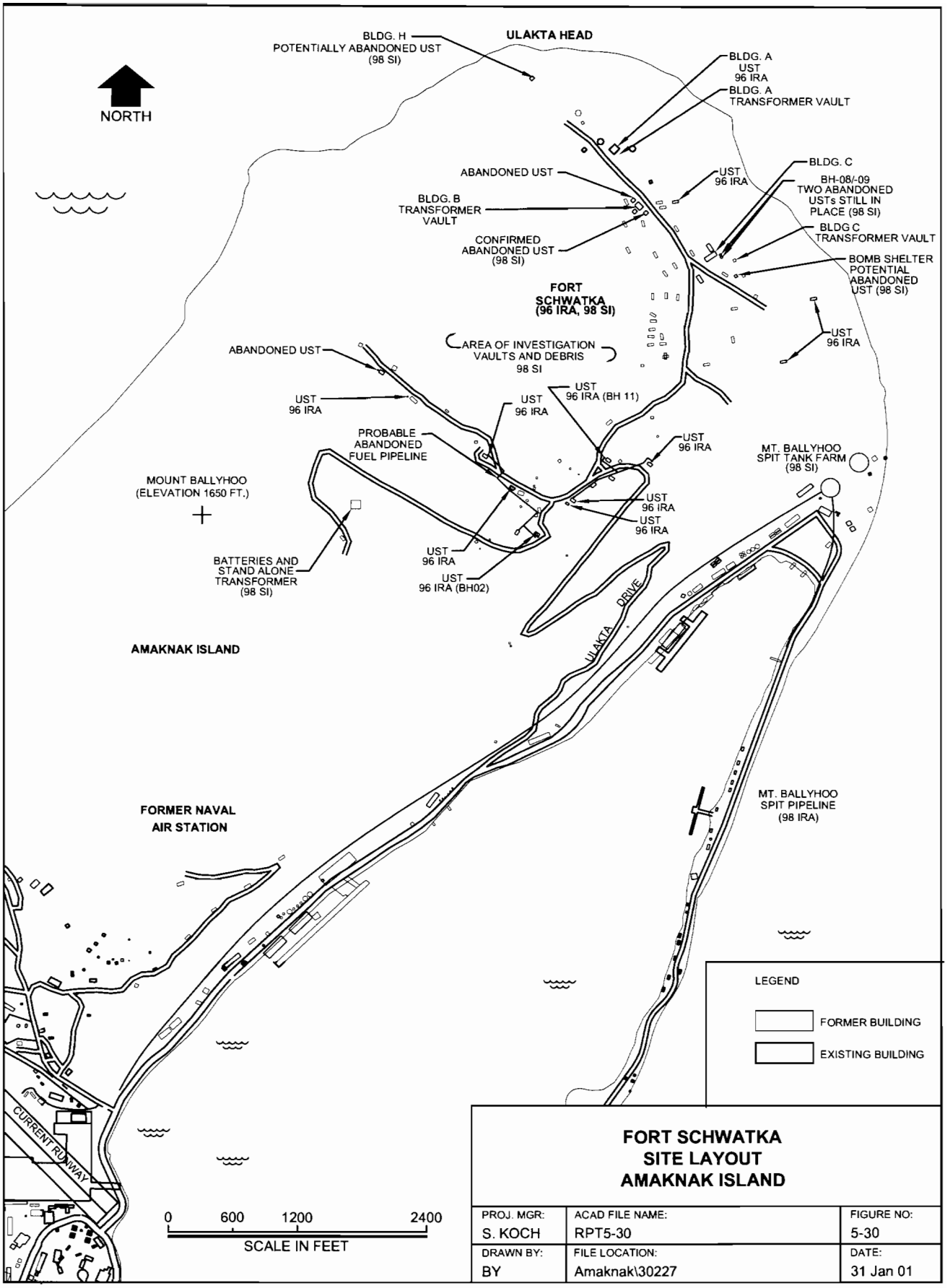
5.16.3 Conclusions and Recommendations

The three intact drums with contents should be removed from the site and analytical samples collected beneath the drums to ensure that contaminated soil is not present. After removal of the drums and the AST and drum at the observation station, no further action is recommended for the Summer Bay area. SHPO coordination will be completed to ensure this work can be accomplished during the 2001 field season.

5.17 MT. BALLYHOO/FORT SCHWATKA USTs AND TRANSFORMERS

The Mount Ballyhoo site is an undeveloped area located on the northern spur of Amaknak Island. The Fort Schwatka area, which has been designated a National Historic Landmark, is located approximately halfway to the summit of Mount Ballyhoo off Ulakta Drive. During WWII, the Army constructed a variety of above and below ground bunkers, planning rooms, tunnels, and barracks. Many of these structures, in piles of building debris, remain on Mount Ballyhoo. As with other military structures on Amaknak and Unalaska Islands, USTs were associated with many of the Mount Ballyhoo structures.

Most of the Mount Ballyhoo structures and associated USTs were situated in a semicircle (see Figure 5-30) surrounding the primary drainage route on the northeast corner of Amaknak Island. The primary access road to Mount Ballyhoo merges with the road around this


NORTH
ULAKTA HEAD
BLDG. H
POTENTIALLY ABANDONED UST
(98 SI)
BLDG. A
UST
96 IRA
BLDG. A
TRANSFORMER VAULT
BLDG. C
BH-08/-09
TWO ABANDONED
USTs STILL IN
PLACE (98 SI)
ABANDONED UST
UST
96 IRA
BLDG. B
TRANSFORMER
VAULT
CONFIRMED
ABANDONED UST
(98 SI)
BLDG C
TRANSFORMER VAULT
BOMB SHELTER
POTENTIAL
ABANDONED
UST (98 SI)
FORT
SCHWATKA
(96 IRA, 98 SI)
UST
96 IRA
ABANDONED UST
AREA OF INVESTIGATION
VAULTS AND DEBRIS
98 SI
UST
96 IRA
UST
96 IRA (BH 11)
UST
96 IRA
PROBABLE
ABANDONED
FUEL PIPELINE
UST
96 IRA
MT. BALLYHOO
SPIT TANK FARM
(98 SI)
MOUNT BALLYHOO
(ELEVATION 1650 FT.)
UST
96 IRA
UST
96 IRA
BATTERIES AND
STAND ALONE
TRANSFORMER
(98 SI)
UST
96 IRA
UST
96 IRA (BH02)
ULAKTA DRIVE
AMAKNAK ISLAND
MT. BALLYHOO
SPIT PIPELINE
(98 IRA)
FORMER NAVAL
AIR STATION
CURRENT RUNWAY
0
600
1200
2400
SCALE IN FEET
LEGEND
FORMER BUILDING
EXISTING BUILDING
FORT SCHWATKA
SITE LAYOUT
AMAKNAK ISLAND
PROJ. MGR: S. KOCH
ACAD FILE NAME: RPT5-30
FIGURE NO: 5-30
DRAWN BY: BY
FILE LOCATION: Amaknak\30227
DATE: 31 Jan 01

semicircle. No surface water features (including surficial seeps and springs) have been observed at the site.

The Fort Schwatka area is unoccupied. At least 15 removed or existing USTs, ranging in capacity from 55 to 10,000 gallons, have been identified in the area. Four electrical transformer bodies have also been identified at Fort Schwatka.

The OC currently owns the property defined as Mount Ballyhoo. Several privately owned residential and commercial properties occur along the access roads to Mount Ballyhoo; however, there are no permanent human dwellings on the property. As with its other properties on Unalaska Island, the OC charges visitors a fee for the recreational use of these areas. Access is controlled and must be planned and approved by the OC. The area of Mount Ballyhoo is currently used primarily for recreational purposes. The future use of Mount Ballyhoo is unknown. Similar to other locations of historical importance throughout the Aleutian Islands, the Mount Ballyhoo area has been considered for historical preservation and interpretation. Mount Ballyhoo is currently zoned as a marine related/industrial area. Groundwater is not used as drinking water.

The geology of Mount Ballyhoo consists of unconsolidated deposits, which are present in a relatively thin layer above bedrock. The unconsolidated deposits consist primarily of peat or loam on the east side of Mount Ballyhoo and sandy or clayey gravel on the west side of Mount Ballyhoo. Gravel, when encountered during the 1996 field activities (discussed in Section 4.17.2), was typically angular. It is not known if the above conditions represent naturally occurring or fill materials.

Bedrock was not encountered in any of the 1996 excavations, but is probably very shallow because outcrops were commonly observed in the general vicinity. Bedrock was observed in outcrops to be volcanically derived and somewhat fractured.

Groundwater was not observed in any of the 1996 excavations at the Mount Ballyhoo area; therefore, the presence of groundwater can only be inferred. Considering the apparent shallow depth and the fractured nature of bedrock, along with the topographical relief of the

area, it is likely that groundwater occurs to some extent in the fractured bedrock. Depths to groundwater in excess of 100 feet bgs are probable.

5.17.1 Previous Remedial/Removal Activities

Previous investigations and fieldwork conducted in 1996 located 15 USTs (designated BH-01 through BH-15) and removed 13. The two remaining USTs (BH-08 and BH-09) were left in place because of safety and access issues. Most of the USTs stored heating oil, although one stored gasoline. Field observations were used to estimate the quantity of soils that required excavation after the tanks were removed. With the exception of BH-07, where approximately 10 cy of soil was removed, no soil was thought to be impacted by petroleum releases. However, confirmation sample results from tank locations indicated that soil remaining at BH-02 and BH-11 still contained fuel contamination above regulatory criteria. Figure 5-30 illustrates the location of the 1996 IRA activities and the USTs that were left in place.

Between 11 July and 14 July 1998, a site reconnaissance was conducted at this site to evaluate the two remaining USTs (BH-08 and BH-09) identified during 1996 operations. UST BH-08, identified as a 1,000-gallon gasoline tank, held about 1 inch of gasoline. UST BH-09, identified as a 750-gallon diesel oil tank, was found to contain 0.9 foot of heating oil. Soil samples were not collected. In addition, one confirmed UST site was identified adjacent to the Plotting and Spotting Bunker (Building B) and two potential sites at the Base End Station (Building H) and a bomb shelter east of Building C. Electrical transformer bodies were also identified in three below-ground concrete vaults along the ridge leading to Ulakta Head.

On 19 November 1998, the locations identified during the 1998 site reconnaissance were visited by representatives from the USAED, NPS, ADEC, and Jacobs. Intrusive field activities were not performed pending a programmatic agreement with the stakeholders to protect the cultural resources of the area during additional environmental work.

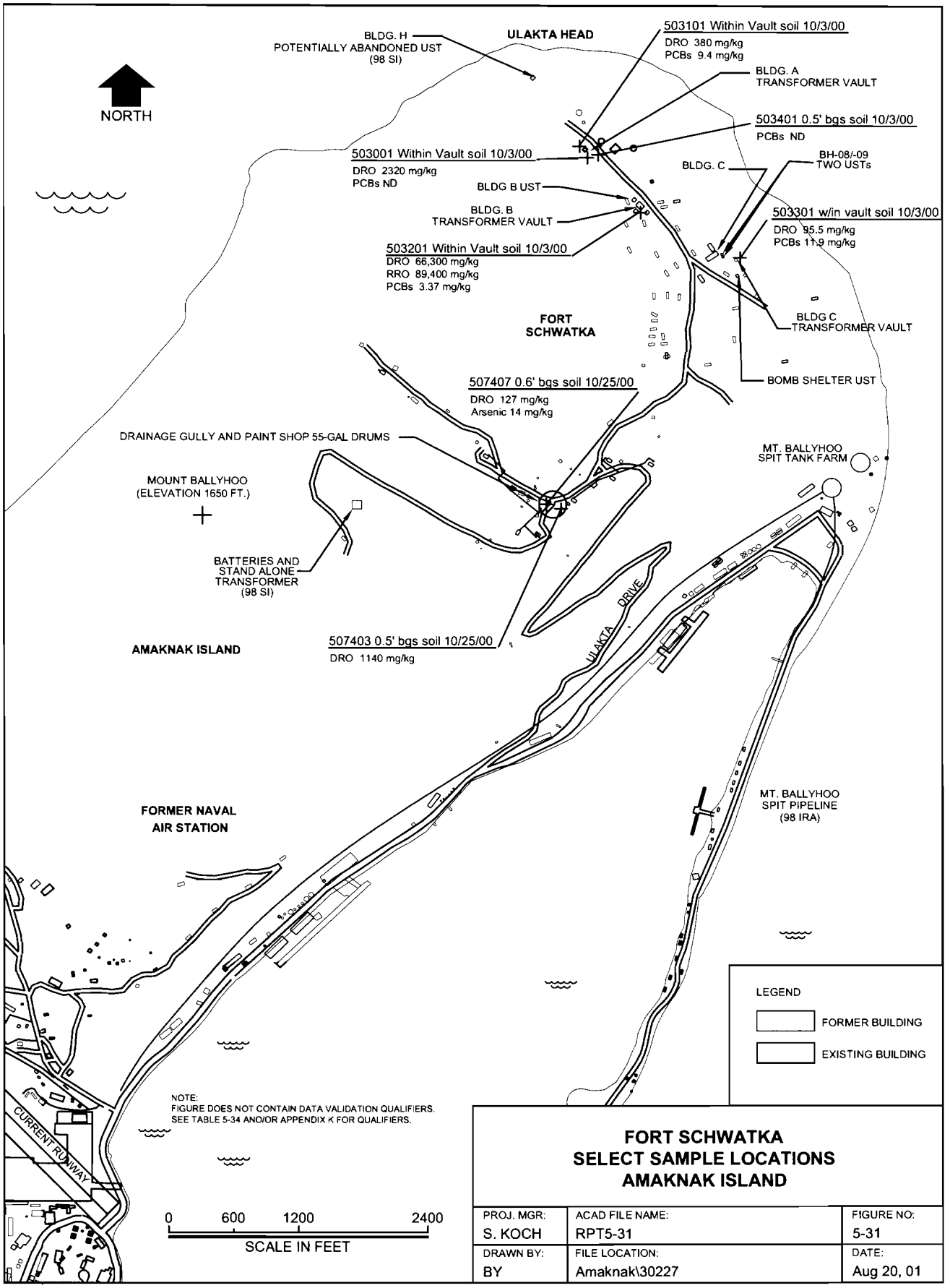
5.17.2 2000 Work Completed

Four transformers were removed, four USTs were closed in place, one suspected UST was determined not to exist, and three drums were removed during the 2000 field season. The

following paragraphs discuss each event in detail. Figure 5-31 presents the locations of the 2000 fieldwork.

Two transformers were removed from the vault 75 feet south of Building A on Mount Ballyhoo on 2 October. Field personnel entered the vault after determining that the lower explosive limit (LEL) and oxygen and carbon dioxide levels were safe. Wires connected to the transformers were removed and straps were attached to the transformers. The straps were routed through a tripod set above the vault to make sure that the vault was not damaged during transformer removal. After the transformers were winched from the vault using the tripod, the transformers were wrapped in plastic and absorbent wipes as a precautionary measure. Once the transformers were wrapped, they were strapped to a transformer extraction device (TED), which consisted of an old truck hood and pulled to the top of the steep embankment. The transformers were then packaged in overpack drums using a backhoe and transported to the contaminated soil stockpile yard to await transport off the island for disposal. While transporting the transformers on the TED, a small amount of oil leaked from one of the transformers. The majority of the oil was either soaked up by the absorbent pads wrapped around the transformer or contained in the TED. However, a minor amount of oil (< 10 milliliters) reached the ground. The soil impacted by the oil was shoveled into the transformer's overpack drum and an analytical sample was collected from the area (see Section 5.17.2.2).

Two more transformers were removed from the Building B and Building C vaults on 3 October. The field crew followed the same procedures used to remove the transformers on 2 October with the following exceptions. The lid of the Building B transformer was loose and approximately 2 to 2.5 gallons of water was drained from the transformer into a five gallon bucket prior to placing it on the TED for removal. The five gallon bucket was emptied into a bung-top drum. The Building C transformer was also full of liquid which was pumped directly into a bung-top drum. No liquids were spilled from either transformer during removal procedures.



FORT SCHWATKA
SELECT SAMPLE LOCATIONS
AMAKNAK ISLAND

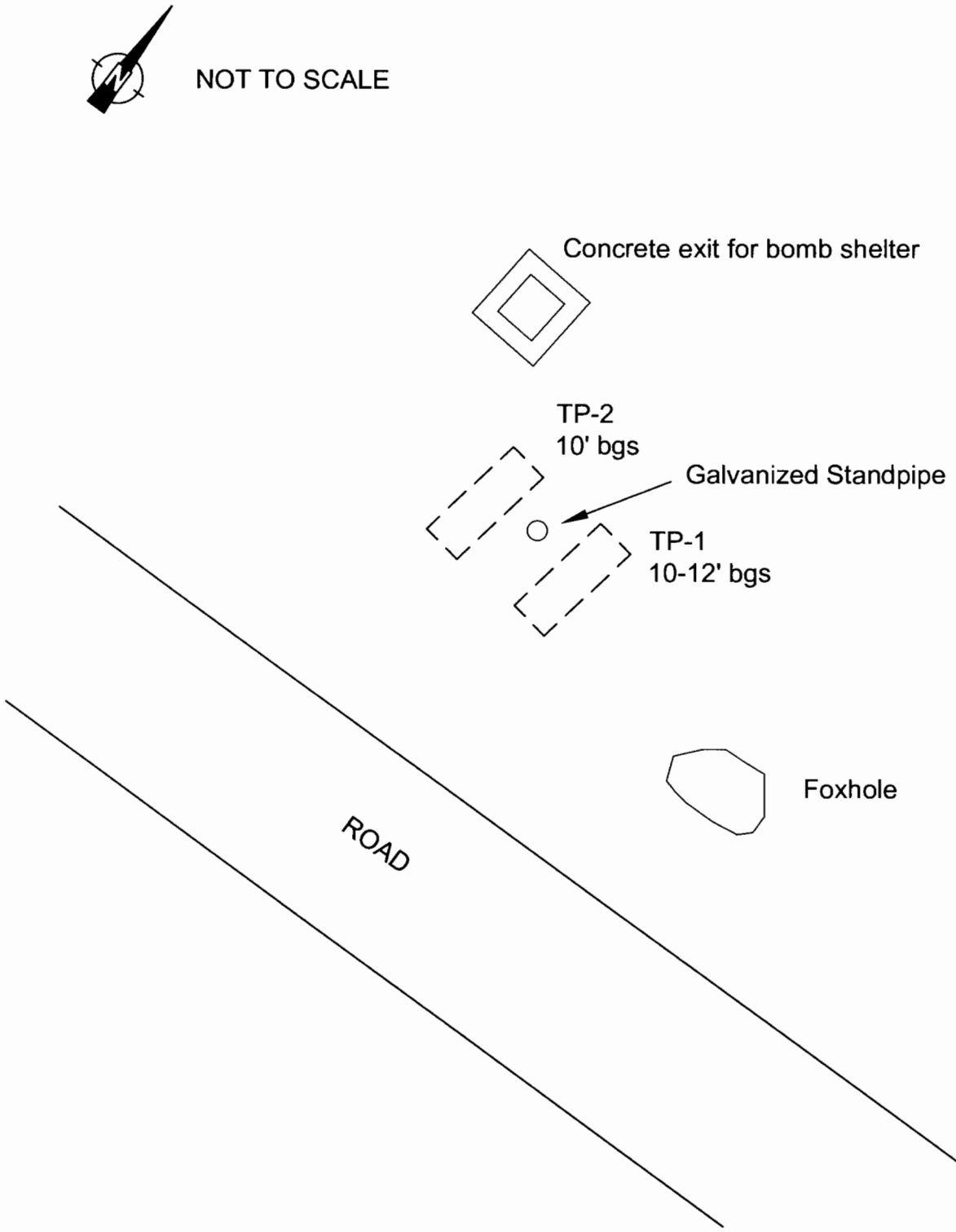
PROJ. MGR:	ACAD FILE NAME:	FIGURE NO:
S. KOCH	RPT5-31	5-31
DRAWN BY:	FILE LOCATION:	DATE:
BY	Amaknak\30227	Aug 20, 01

Two test pits were dug at the suspected Bomb Shelter UST location on 4 October. The first test pit was dug east of the galvanized standpipe to 10 to 12 feet bgs. No evidence of soil contamination or a UST was discovered. The second test pit was dug west of the galvanized standpipe to 10 feet bgs and encountered pieces of wood and concrete chunks but no evidence of soil contamination or a UST. Both test pits were backfilled and seeded. See Figure 5-31 for the location of the site and Figure 5-32 for the site layout.

The south ends of the two Building C USTs (BH-08 and BH-09) were uncovered using hand tools on 4 October. Product levels in each tank were then measured. BH-08 contained approximately 0.81 feet of product and BH-09 contained 0.02 feet of product. The fluids in both tanks were pumped out and collected in separate 55-gallon drums. Approximately 125 gallons of diesel and water was pumped from BH-08 into three drums and approximately 18 gallons of gasoline and water was pumped from BH-09 into one drum. Due to safety concerns and the historic significance of the site, both USTs were closed in place. The fill ports were sealed with grout and the hand-dug holes were backfilled and seeded. See Figure 5-31 for the location of the site and Figure 5-33 for the site layout.

The Building H UST was located on 4 October. An attempt to measure the product level inside the tank was made; however, the probe could not be inserted into the tank. After consultation with the NPS, a decision was made to leave the UST in place. The NPS did not want any intrusive work performed at the site and the excavation work would be dangerous due to the proximity of the site to a sheer cliff face that dropped approximately 800 feet to the ocean below. Therefore, the fill pipe of the tank was grouted closed and the tank was left in place. See Figure 5-31 for the location of the UST.

Three drums were removed from Mount Ballyhoo on 5 October. Two drums were located in a drainage gully and one drum was located near the old paint shop. The two drums in the drainage gully were empty, and the one drum near the old paint shop contained approximately one gallon of water and one gallon of a dried paint type sludge. See Figure 5-31 for the location of the drums.

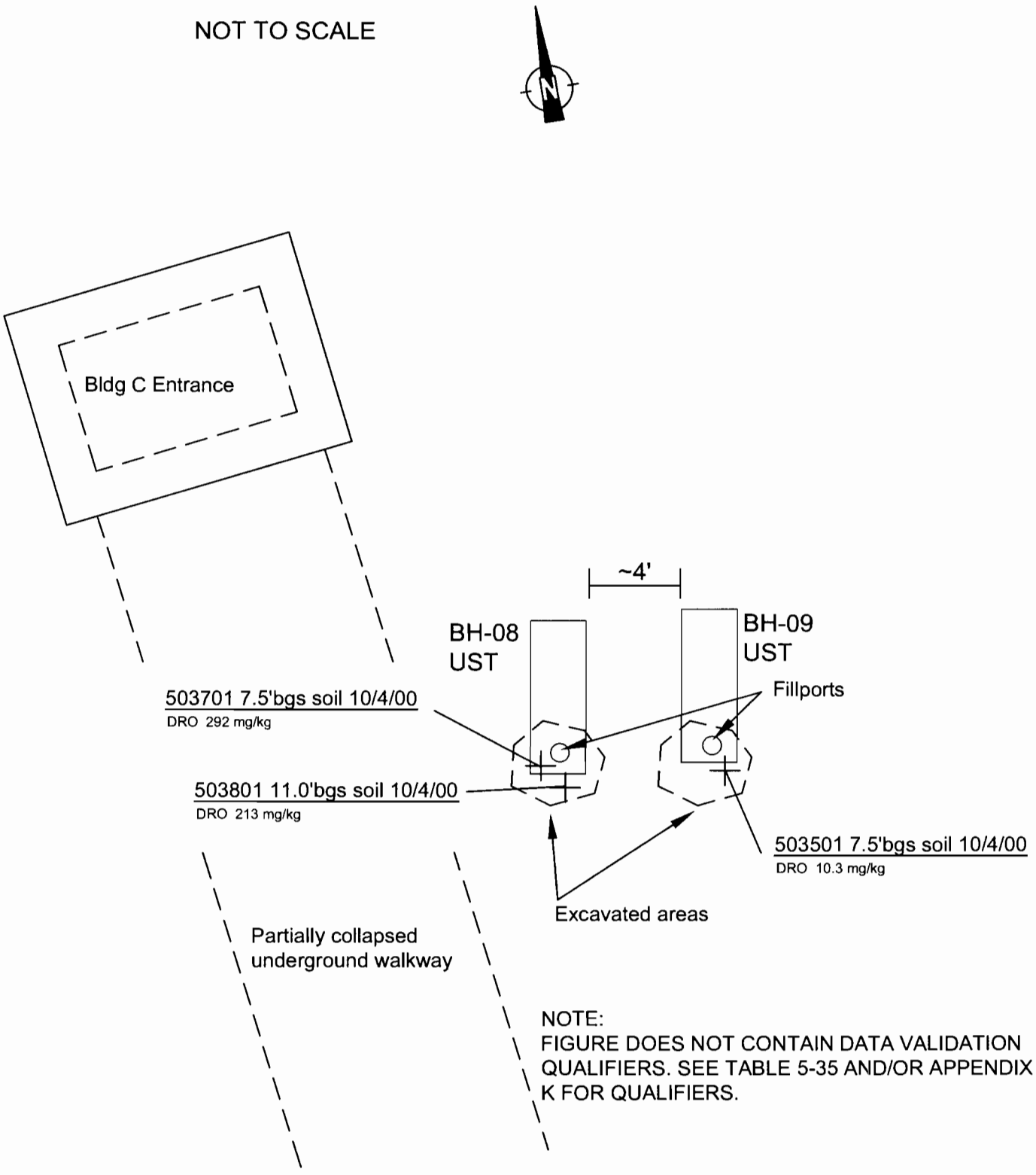


Note: No evidence of UST or soil contamination was encountered in either test pit.

FORT SCHWATKA
BOMB SHELTER UST SITE LAYOUT

Amaknak, Alaska

PROJ. MGR:	FILE NAME:	FIGURE NO.
S. KOCH	RPT5-32	5-32
DRAWN BY:	FILE LOCATION:	DATE:
BY	Amaknak\30227	Aug 20, 01



FORT SCHWATKA
BLDG C USTs SITE LAYOUT

Amaknak, Alaska

PROJ. MGR:	FILE NAME.	FIGURE NO.
S. KOCH	RPT5-33	5-33
DRAWN BY:	FILE LOCATION.	DATE.
BY	Amaknak\30227	Aug 20, 01

The southwest end of the Building B UST was uncovered using hand tools on 26 October. The soil was a sandy gravel and shale. A slight fuel odor was detected while uncovering the UST. The hole was dug until it was approximately one foot beneath the end of the UST. The tank appeared to be a 300-gallon UST; no fluids were observed within the tank. The tank was closed in place on 28 October by grouting the 2-inch standpipe, re-covering the tank, and laying seed on the disturbed soil. See Figure 5-31 for the location of the UST and Figure 5-34 for the site layout.

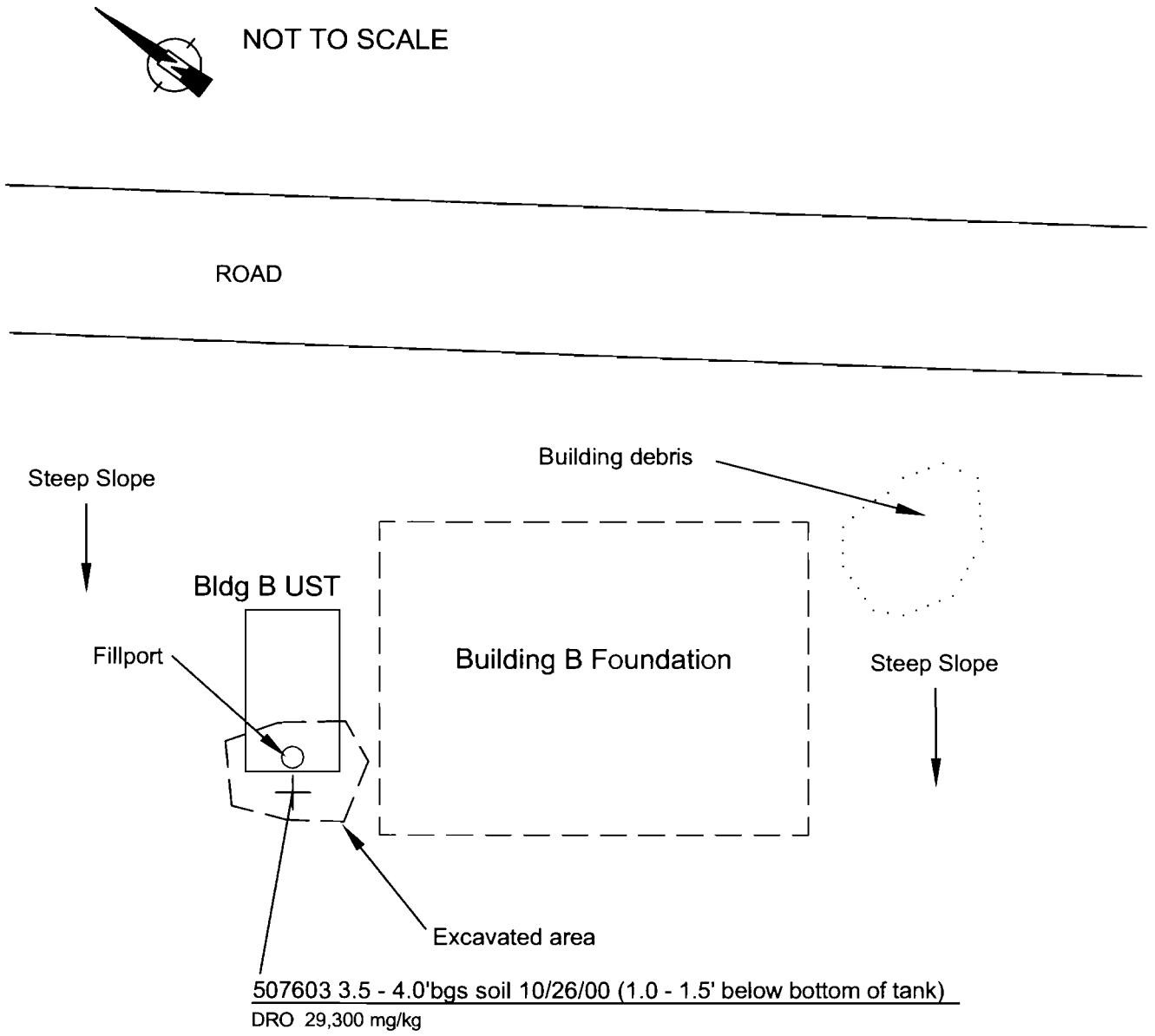
5.17.2.1 Field Screening Results

Because no USTs were removed from Mount Ballyhoo and no exploratory test pits were dug, no screening samples were collected.

5.17.2.2 Analytical Results

Analytical samples collected at the various sites are discussed in the following paragraphs. Tables 5-34 through 5-37 list the complete suite of analyses for each non-waste characterization sample and the sample results above detection limits. The complete sets of analytical results, including waste characterization samples, are included in Appendix D.

Two soil analytical samples were collected on 3 October from the Building A transformer vault, and one soil analytical sample was collected from each of the Building B and Building C transformer vaults after the removal of the transformers. The samples were collected from the soil in the bottom of the vaults. In addition, one surface soil analytical sample was collected on 3 October from the area on the road where the small amount of PCB oil spilled while moving the Building A transformers on the TED. The Building A and Building B transformer vault samples detected fuel contamination above Method 2 regulatory criteria, although the Building A samples appear to be attributed to biogenic interference. PCBs were detected in each sample, except the road sample, and PCBs exceeded the unrestricted cleanup criteria (1 mg/kg) in the Building A, B, and C transformer vaults. TOC samples were also collected on 25 October from soil near the Building A, B, and C transformer vaults (one TOC



NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS.
SEE TABLE 5-37 AND/OR APPENDIX K FOR QUALIFIERS.

LEGEND

+ Analytical Sample Location
(Sample ID/Depth (ft)/Date Collected)

FORT SCHWATKA
BLDG B UST SITE LAYOUT

Amaknak, Alaska

PROJ. MGR:	FILE NAME:	FIGURE NO.
S. KOCH	RPT5-34	5-34
DRAWN BY:	FILE LOCATION:	DATE:
BY	Amaknak\30227	Aug 20, 01

Table 5-34
Ballyhoo Transformer Vaults Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results				
			AM-A503001	AM-A503101	AM-A503201	AM-A503301	AM-A503401
Location	--	--	Bldg A Vault (Vault 1, Xfrmr 1)	Bldg A Vault (Vault 1, Xfrmr 2)	Bldg B Vault (Vault 2, Xfrmr 3)	Bldg C Vault (Vault 3, Xfrmr 4)	Road
Diesel-range Organics (AK102)	mg/kg	230	2320 J	380 J	66,300 J	95.5	--
Residual-range Organics (AK103)	mg/kg	8300	5890 J	3860 J	89,400 J	2330	--
PCBs (SW8082)							
PCB-1016 (Aroclor 1016)	mg/kg	--	ND [5.3]	9.4	ND [0.824]	ND [0.713]	ND [0.0369]
PCB-1221 (Aroclor 1221)	mg/kg	--	ND [10.6]	ND [12.9]	ND [1.65]	ND [1.43]	ND [0.0739]
PCB-1232 (Aroclor 1232)	mg/kg	--	ND [5.3]	ND [6.43]	ND [0.824]	ND [0.713]	ND [0.0369]
PCB-1242 (Aroclor 1242)	mg/kg	--	ND [5.3]	ND [6.43]	ND [0.824]	ND [0.713]	ND [0.0369]
PCB-1248 (Aroclor 1248)	mg/kg	--	ND [5.3]	ND [6.43]	ND [0.824]	ND [0.713]	ND [0.0369]
PCB-1254 (Aroclor 1254)	mg/kg	--	ND [5.3]	ND [6.43]	ND [0.824]	11.9	ND [0.0369]
PCB-1260 (Aroclor 1260)	mg/kg	--	ND [5.3]	ND [6.43]	3.37 J	ND [0.713]	ND [0.0369]

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.

J = Estimated value; see Appendix K for details.

Table 5-35
Ballyhoo Bldg C Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results		
			AM-A503501	AM-A503701	AM-A503801
Location	--	--	BH-09, 7.5'bgs	BH-08, 7.5'bgs	BH-08, 11'bgs
Gasoline-range Organics (AK101)	mg/kg	260	0.961 UB/RL	0.799 UB/RL	1.09 UB/RL
Diesel-range Organics (AK102)	mg/kg	230	10.3 J	292 J	213 J
Residual-range Organics (AK103)	mg/kg	8300	89.5 J, UB/RL	125 J	106 J, UB/RL

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
J = Estimated value; see Appendix K for details.
UB/RL = Analyte detected in Method Blank; reported value is considered valid.

sample near each vault and a duplicate and triplicate sample from the Building C vault). The TOC samples were collected from six inches bgs. Site-specific Method 3 regulatory criteria were not calculated for the transformer vaults due to the PCB exceedances. Figure 5-31 presents the locations of the samples, and Table 5-34 lists the complete suite of analyses for each soil sample and the soil sample results above detection limits. A complete set of analytical results is included in Appendix D, and the chromatograms used to determine biogenic interference for the samples are included in Appendix H.

An oil sample was collected on 23 October from each transformer, except for the Building B transformer which did not contain any oil. All the transformers were contained within their respective 85-gallon overpack drums. One Building A transformer (Transformer 1) had very little oil in it; the other Building A transformer (Transformer 2) was full of oil. No PCBs were detected in the Transformer 1 sample, but 3.23 ppm PCBs was detected in the Transformer 2 sample. The Building C transformer oil sample was collected from the 55-gallon drum that the oil had previously been drained into; 3.15 ppm PCBs were detected in the sample. The Building B transformer did not contain any oil, but some residual sludge was present in the transformer so a sludge sample was collected. No PCBs were detected in the sludge sample. The transformer oil and sludge waste characterization samples are included in Appendix D.

Table 5-36
Ballyhoo Drums Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Proposed Method 3 Cleanup Level[2]	Sample Results		
				AM-A507403	AM-A507406	AM-A507407
Location	--	--	--	Drainage Gully	Drainage Gully (FD)	Drum 2
Gasoline-range Organics (AK101)	mg/kg	260	--	1.31 UB/RL	--	0.776 J, UB/RL
Diesel-range Organics (AK102)	mg/kg	230	5,380	1,140 J	1,030 J	127 J
Residual-range Organics (AK103)	mg/kg	8,300	8,300	1,790 J	627 J	1,990
Metals (SW6010, SW6010B, SW7471A)						
Arsenic	mg/kg	1.8	--	6.1	--	14
Cadmium	mg/kg	4.5	--	ND [0.28]	--	0.068 UB/RL
Lead	mg/kg	400	--	39 J	--	180 J
Selenium	mg/kg	3	--	0.67	--	1.2
Barium	mg/kg	982	982	63	--	54
Chromium	mg/kg	23	--	5.2 J	--	17 J
Silver	mg/kg	19	--	ND [1.4]	--	ND [1.9]
Zinc	mg/kg	8,100	8,150	110	140 J	900
Mercury	mg/kg	1.24	--	0.0434	--	0.158
PCBs (SW8082)	mg/kg	--	--	No analytes detected	No analytes detected	No analytes detected
PAH (SW8270C SIM)						
2-Methylnaphthalene	µg/kg	--	--	70 J	--	ND [6.6]
Acenaphthene	µg/kg	190,000	4,460,000	10 J	--	ND [6.6]
Acenaphthylene	µg/kg	--	--	20 J	--	ND [6.6]
Anthracene	µg/kg	3,900,000	24,900,000	80 J	--	ND [6.6]
Benzo(a)anthracene	µg/kg	5,500	9,300	230 J	--	21
Benzo(a)pyrene	µg/kg	900	930	340 J	--	23
Benzo(b)fluoranthene	µg/kg	9,000	930	390 J	--	76
Benzo(g,h,i)perylene	µg/kg	--	--	350 J	--	58
Benzo(k)fluoranthene	µg/kg	93,000	9,300	130 J	--	15
Chrysene	µg/kg	550,000	930,000	280 J	--	58
Dibenzo(a,h)anthracene	µg/kg	900	930	50 J	--	13
Fluoranthene	µg/kg	1,900,000	3,320,000	450 J	--	41
Fluorene	µg/kg	240,000	3,320,000	17 J	--	ND [6.6]
Indeno(1,2,3-cd)pyrene	µg/kg	9,000	9,300	310 J	--	32
Naphthalene	µg/kg	38,000	838,000	71 J	--	ND [6.6]
Phenanthrene	µg/kg	--	--	350 J	--	28
Pyrene	µg/kg	1,400,000	2,490,000	540 J	--	32
VOC (SW8260B)						
2-Butanone	µg/kg	--	--	500	--	780

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
[2]Note: The proposed Method 3 cleanup levels for DRO, naphthalene, zinc, Acenaphthene, and barium are based on migration to groundwater. The proposed Method 3 cleanup levels for the remaining compounds are based on ingestion.

J = Estimated value; see Appendix K for details.
UB/RL = Analyte detected in Method Blank; reported value is considered valid.

Table 5-37
Ballyhoo Building B UST Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results AM-A507603
Location	--	--	Bldg B UST
Gasoline-range Organics	mg/kg	260	14.7 J
Diesel-range Organics (AK102)	mg/kg	230	29,300 J
Residual-range Organics (AK103)	mg/kg	8300	1610 J
Lead (SW6010B)	mg/kg	400	79
PAH (SW8270C SIM)			
Acenaphthene	µg/kg	3,900,000	140 J
Acenaphthylene	µg/kg	--	200 J
Chrysene	µg/kg	550,000	130 J
Fluoranthene	µg/kg	1,900,000	90
Fluorene	µg/kg	240,000	64 J
Phenanthrene	µg/kg	--	360 J
Pyrene	µg/kg	1,400,000	260
Volatile Organic Compounds (SW8260B)			
2-Butanone	µg/kg	--	1200
Toluene	µg/kg	4,800	9 J

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
J = Estimated value; see Appendix K for details.

No soil analytical samples were collected from the test pits dug at the suspected Bomb Shelter UST because no evidence of contamination was observed and no UST was discovered. In addition, no soil analytical samples were collected from the Building H UST because no intrusive activities could be performed at this location.

One soil analytical sample was collected on 4 October from BH-08 (Building C UST) near where the fillport entered the UST at 7.5 feet bgs and one soil analytical sample was collected from beneath the UST at 11 feet bgs using a hand auger. The sample collected below the UST did not detect contamination above Method 2 regulatory criteria; however, the sample collected where the fillport entered the UST at 7.5 feet bgs detected DRO marginally above Method 2 regulatory criteria. One soil analytical sample was also collected from BH-09 near where the fillport entered the UST at 7.5 feet bgs; the sample did not detect contamination

above Method 2 regulatory criteria. A sample from beneath BH-09 was not collected because the hand auger could not be advanced through the rocky soil. In addition, two TOC samples were collected on 25 October from soil six inches bgs to the north and south of BH-08 and BH-09. One fluid sample was collected on 19 October from each of the drums that contained the fluids pumped from BH-08 and BH-09. The samples were collected directly from the drums that were stored in the contaminated soil stockpile yard. Figure 5-33 presents the sample locations, and Table 5-35 lists the complete suite of analyses for each soil sample and the sample results above detection limits. A complete set of analytical results, including the UST waste characterization samples, is included in Appendix D. The Method 3 calculation sheets are included in Appendix J.

One soil sample was collected on 25 October at six inches bgs from the location where two drums were removed from a drainage gully on 5 October. Duplicate and triplicate samples were also collected from this same location. One soil sample was also collected on 25 October at six inches bgs from the location where the paint drums was removed on 5 October. The soil at both locations was noted to be sandy with some fines and rust flakes from the drums. There was no apparent odor or other physical evidence of contamination. In addition, one TOC soil sample was collected ten feet from each drum location at six inches bgs. DRO was detected above Method 2 regulatory criteria where the two drums were removed from the drainage gully. Therefore, Method 3 regulatory criteria was calculated for DRO using site-specific TOC data contained in Table 3-2. The resulting most stringent site-specific cleanup level for DRO is 5,380 mg/kg; therefore, the sample does not exceed the Method 3 regulatory criteria. As required by 18 AAC 75.325(g), an assessment of cumulative risks and hazards was also conducted according to procedures described in Section 3.3.4. The total cumulative (cancer) risk for the site is 5.2×10^{-6}, well below the limitation of 1×10^{-5}; the hazard index for the site is 0.016, well below the limitation of 1.0. Arsenic concentrations at both sample locations were above regulatory criteria, but the drainage gully sample was below accepted background concentrations (9.85 mg/kg) contained in the Comprehensive RI Report (USAED 2000a). The paint drum sample marginally exceeded the background concentration. A calculated Method 3 cleanup level would not increase the arsenic regulatory criteria; therefore, it was not calculated for the paint drum location. One sludge analytical sample was

collected on 19 October from the drum containing the assumed paint sludge that was stored at the contaminated soil stockpile yard. Figure 5-31 presents the sample locations, and Table 5-36 lists the complete suite of analyses for each soil sample and the soil sample results above detection limits. A complete set of analytical results, including the drum sludge waste characterization sample, is included in Appendix D. The Method 3, cumulative risk, and hazard calculation sheets for the drainage gully drums are included in Appendix J.

One soil analytical sample was collected on 26 October from approximately 0.5 to 1.0 foot below the west end of the Building B UST (approximately 3.5 to 4 feet bgs). The soil was a sandy gravel and broken angular rock 2 to 3 inches in diameter. A slight fuel odor was noted at the time of sample collection. A second soil sample could not be collected from beneath the east end of the UST due to the steep angle of the slope (and subsequent depth to the bottom of the tank) and the rocky soil. The sample detected DRO above regulatory criteria. A TOC sample was also collected from the uncontaminated soil at Building B; duplicate and triplicate TOC samples were also collected from this same location. Method 3 regulatory criteria was not calculated using site-specific TOC data because of the elevated detected concentrations of DRO. Figure 5-34 presents the sample locations, and Table 5-37 lists the complete suite of analyses for each sample and the sample results above detection limits.

5.17.3 Conclusions and Recommendations

Further action is recommended for all three of the transformer vaults due to the PCBs detected in each vault and the fuels detected in the Building B vault that are not attributed to biogenic interference. It is recommended that the transformer vaults be dry decontaminated by shoveling the accumulated soil from within each vault and transporting the soil off-site for disposal. It is also recommended that the vaults be permanently covered after dry decontamination. Covering the vaults will require SHPO and NPS coordination. Hand auger samples collected from a location immediately adjacent to the transformer vaults are also recommended to determine if PCB contamination has migrated from inside the vaults.

No further action is recommended for the Bomb Shelter UST. No evidence of a UST or contamination was found in the two test pits conducted at the site.

One soil sample collected from the Building C USTs contained a DRO concentration that marginally exceeded the Method 2 regulatory criteria. Field notes and an analytical sample did not associate any contamination with BH-09. Due to the low concentrations of fuel detected at the site, PAHs were not analyzed at the site as required by 18 AAC 75.325(g) in order to use Method 2 or Method 3 regulatory criteria. It is assumed, however, that PAHs are not present at the site that would exceed the cumulative risk and/or hazard index limitations. It is recommended that the level of institutional controls required to manage the residual contamination be coordinated between the USAED, ADEC, and the property owner.

No further action is recommended for the Building H UST. The tank was closed in place but no intrusive work was performed at the site at the NPS's request and due to the proximity of the site to the top of a sheer cliff face.

No further action is recommended for both drum locations. At the drainage gully site, no samples exceeded the calculated Method 3 regulatory criteria and the site did not exceed the cumulative risk and hazard index limitations. Although arsenic was detected above regulatory criteria at the paint drum location, the site is recommended for NFA for the following reason:

- The sample, collected at only six inches bgs immediately beneath the removed drum, represents the "worst case" sample from the site. The arsenic concentration detected at the site only marginally exceeds the accepted background concentration. Because the contaminant source was a single 55-gallon drum, the amount of marginal contamination at the site is assumed to be extremely small.

Further action is recommended for the Building B UST site due to the DRO result above regulatory levels. The severity of the slope that the UST is located on (see Appendix A for photographs of the site) and SHPO concerns preclude tank and soil removal. Therefore, additional site characterization is necessary to determine if contamination has migrated from the site in concentrations that exceed regulatory levels. The one sample collected during the 2000 field season was collected immediately beneath the tank and represents the "worst case" sample. Field observations only noted a slight fuel odor in the vicinity of the sample; therefore, it is not believed that a large volume of contamination is present at the site. It is recommended that additional downgradient samples be collected with a hand auger to determine the amount of contamination in the area and if contaminants have migrated from

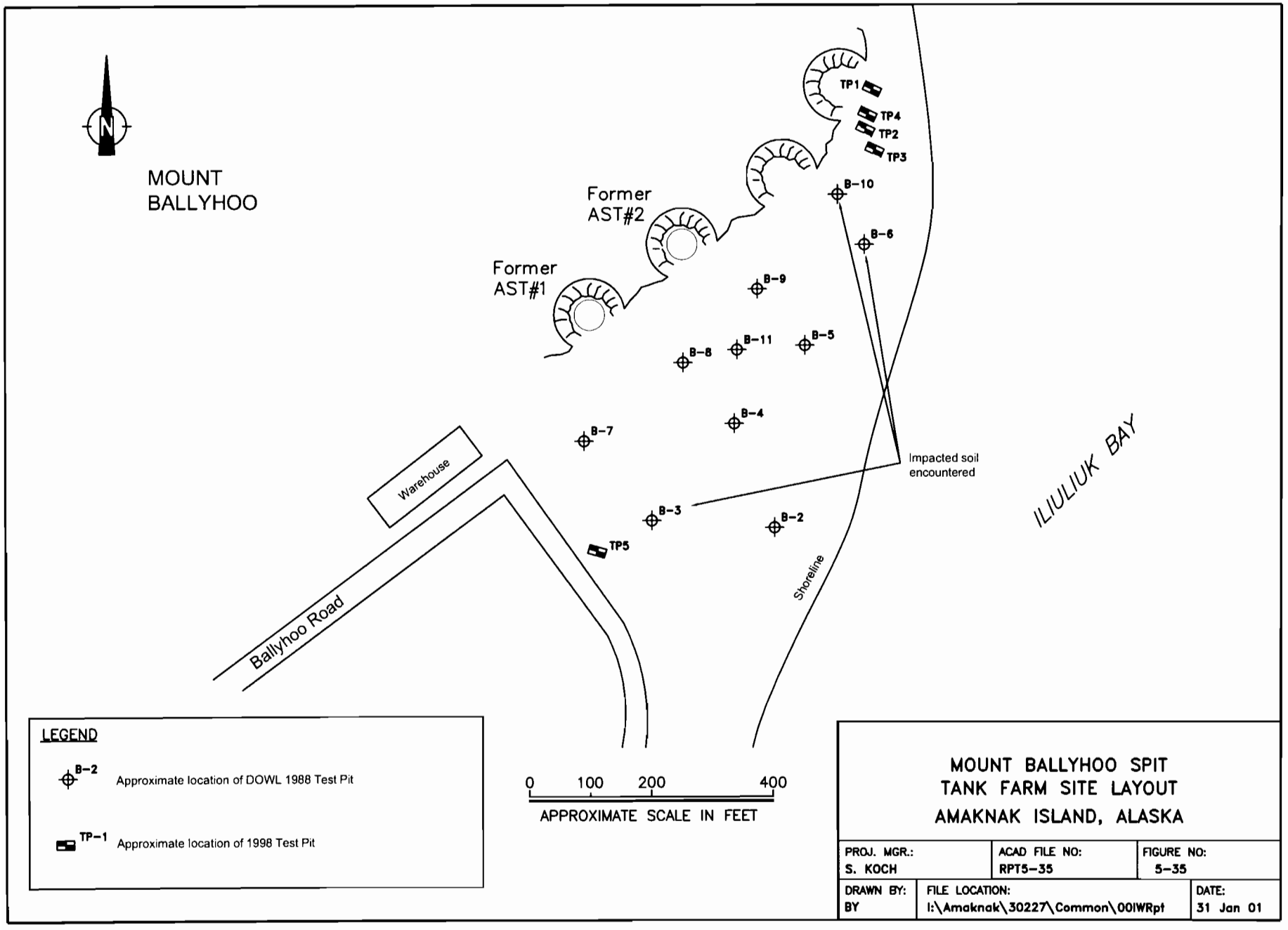
the immediate vicinity of the tank. Although considered highly unlikely, monitoring wells may be installed in the hand augered borings if groundwater is encountered. If installed, monitoring well(s) would be sampled for 2 years to determine if contaminants are migrating from the site.

5.18 BALLYHOO SPIT TANK FARM AND TANK FARM TO AIRPORT PIPELINE

The Mount Ballyhoo Spit is located on the northeast end of Amaknak Island and is a narrow peninsula, approximately 1.4 miles long, that extends to the south-southwest. This area includes known and suspected fuel tanks, pipelines, and utilidors along the spit. The tank farm was the site of two large aviation fuel tanks with fuel lines thought to be running to the airport (USAED 1997). Figure 5-30 presents the general location, and Figure 5-35 presents the tank farm site layout.

A January 1946 as-built drawing indicated the presence of two aboveground storage tanks (size unknown), an 8-inch pipeline running to the airport, an aviation fuel dock (spit dock), a pumphouse, and a truck loading stand. The aviation fuel dock, pumphouse, and truck-loading stand also appeared to be connected to the two fuel tanks by fuel pipelines. Aerial photographs show the tanks present in 1951, 1976, and 1981. The tanks were removed during the mid-1980s by the USAED. Also noted in the aerial photographs prior to 1981 was the presence of a lagoon between the fuel tanks and Iliuliuk Bay. By 1994, the lagoon had been filled (1994 aerial photograph). Aerial photographs from 1951, 1976, and 1980 show ships docked at the aviation fuel dock. The 1994 aerial photograph indicated that the aviation fuel dock had been improved and was in use (USAED 1997).

The Mount Ballyhoo Spit Tank Farm and Pipeline areas are currently zoned for marine-related industrial activities. The area between the former ASTs and Iliuliuk Bay is used to store large quantities of crab pots and other fishing-related materials, allowing only very limited access to this area. The area where the Spit joins Amaknak Island has also been designated as an archeological site.


N
MOUNT
BALLYHOO
Former
AST#2
Former
AST#1
TP1
TP4
TP2
TP3
B-10
B-6
B-9
B-11
B-5
B-8
B-4
B-7
B-3
B-2
TP5
Warehouse
Ballyhoo Road
Shoreline
Impacted soil
encountered
ILIULIUK BAY
LEGEND
B-2 Approximate location of DOWL 1988 Test Pit
TP-1 Approximate location of 1998 Test Pit
0 100 200 400
APPROXIMATE SCALE IN FEET
MOUNT BALLYHOO SPIT
TANK FARM SITE LAYOUT
AMAKNAK ISLAND, ALASKA
PROJ. MGR.: S. KOCH
ACAD FILE NO: RPT5-35
FIGURE NO: 5-35
DRAWN BY: BY
FILE LOCATION: I:\Amaknak\30227\Common\00IWRpt
DATE: 31 Jan 01

5.18.1 Previous Remedial/Removal Activities

An investigation conducted in 1988 encountered POL-impacted soils in three of ten test pits excavated by DOWL engineers for Icicle Seafoods of Seattle. Figure 5-35 illustrates the location of the test pits.

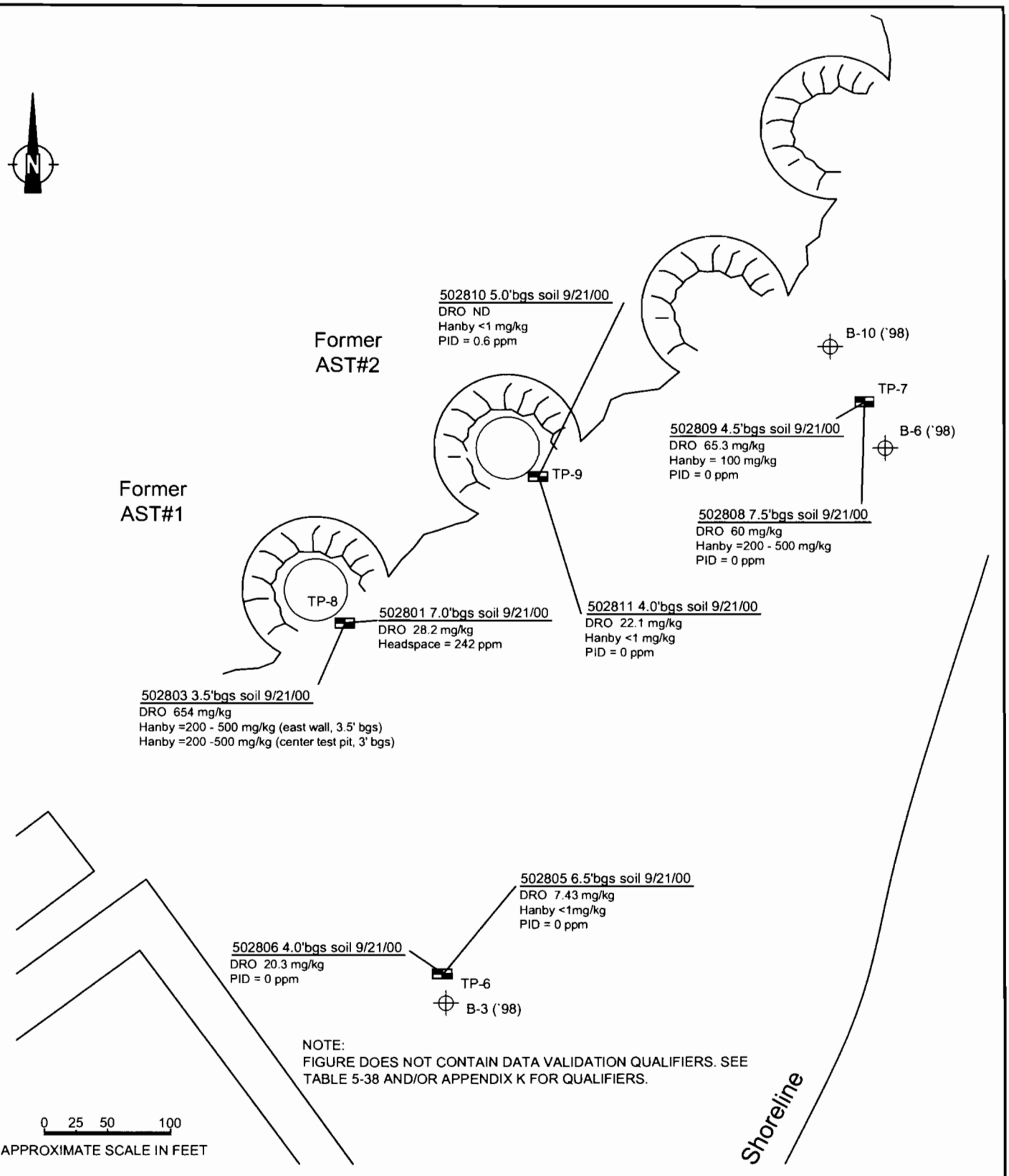
ADEC reports indicate that when city workers were installing the Ballyhoo Dock lights there was a concern that a fuel line was pierced because Bunker C-like oil flowed into the holes. Confirmation of this occurrence could not be made. Additionally, since the two ASTs held aviation gas, possible Bunker C contamination could not have originated from a fuel line from the tanks.

Between 2 and 7 September 1998, field activities conducted at the former location of the Mount Ballyhoo Spit Tank Farm included locating utilities, excavating five test pits, soil sampling, backfilling the excavations, and grading the site. The test pits were dug from 4.0 to 19.5 feet bgs. Groundwater was encountered at 8 feet bgs to the southwest of the former tank farm and at 19.5 feet northeast of the former tank farm. No POL-impacted soil was encountered. Figure 5-35 presents the locations of the test pits.

5.18.2 2000 Work Completed

Four test pits were dug on 21 September to investigate the presence of POL-impacted soil in the Ballyhoo Spit Tank Farm area. Figure 5-36 presents the locations of the four test pits.

The first test pit (TP-8) was dug in the farthest west former AST revetment. A large amount of junked crab pots were moved to allow access to the revetment. At three feet bgs, a strong gasoline odor was encountered. Field screening results (PID) confirmed the presence of a petroleum product (see Section 5.18.2.1). Fill material was encountered to 3 feet bgs, then a peat/organic rich soil was present to 5 feet bgs, followed by a reddish gravelly sand to 10 feet bgs where bedrock was encountered. No groundwater was observed in the test pit; therefore, the test pit was backfilled after reaching refusal at 10 feet bgs.



MOUNT BALLYHOO SPIT
TANK FARM SITE LAYOUT

Amaknak, Alaska

PROJ. MGR.	FILE NAME:	FIGURE NO:
S. KOCH	RPT5-36	5-36
DRAWN BY.	FILE LOCATION:	DATE:
BY	Amaknak\30227	Aug 20, 01

The second test pit (TP-6) was dug approximately 270 feet south of the farthest west revetment in the vicinity of the DOWL 1988 B-3 test pit (see Figure 5-36). The test pit was dug between large stacks of crab pots. Large shot rock, up to three feet in diameter, was encountered in the first four feet of the test pit. A one foot thick layer of organic silt was then encountered and followed by 1.5 feet of beach gravels. Groundwater was encountered at 6.5 feet bgs and the test pit was stopped. No odor was observed in the test pit; however, a sheen was noted on the groundwater. It was not possible to tell if the sheen was a natural organic or hydrocarbon sheen. The test pit was backfilled without installing a well point. Installation of a well point was planned for later in the field season when the drillers subcontracted by Southeast Construction (SEC) would return to the site and install a well point using a direct push drill rig. However, the drillers did not return to the site because SEC went bankrupt and was removed from the fieldwork.

The third test pit (TP-7) was dug approximately 100 feet south of the third revetment in the vicinity of the DOWL 1988 B-6 and B-10 test pits (see Figure 5-36). Fill material with miscellaneous debris (i.e., wood, wires, and a large log) was encountered in the first two feet of the test pit. A two foot thick layer of organic silt was then encountered. The organic silt contained some miscellaneous rubbish and a landfill odor was noted. Following the organic silt, a reddish brown sandy gravel was encountered from 4 to 7.5 feet bgs; a strong landfill odor was also noted. Groundwater was encountered at 7.5 feet bgs and the test pit was stopped. The test pit was backfilled without installing a well point for the same reasons described for TP-6.

The fourth test pit (TP-9) was dug in the revetment immediately east of the TP-8 revetment (see Figure 5-36). Fill material was encountered in the first two feet of the test pit followed by sporadic pockets of organic silt within large shot rock. Refusal was encountered at five feet bgs at contact with semi-solid rock. No groundwater was observed in the test pit; therefore, the test pit was backfilled.

In addition, a thorough search of historic maps and drawings uncovered a 5 January 1946 as-built drawing that contained the layout of the pipelines from the Ballyhoo Spit Tank Farm and the Airport. The drawing revealed that the suspected fuel lines between the two facilities

were a 6-inch water line and a power line. Therefore, the lines running between the facilities were not investigated further during the 2000 field season.

5.18.2.1 Field Screening Results

Two Hanby™ soil screening samples and multiple PID headspace readings were collected from TP-8 to determine the extent and degree of contamination within the test pit. The Hanby™ soil screening samples were collected at approximately three feet bgs where a strong gasoline odor was encountered. PID headspace readings were collected while digging the test pit and ranged from 105 ppm at three feet bgs to 242 ppm on the floor and 742 from the east sidewall at 3.5 feet bgs. Figure 5-36 presents the locations and screening results.

One Hanby™ soil screening samples and two PID readings were collected from TP-6 to determine the extent and degree of contamination within the test pit. The Hanby™ soil screening sample was collected at 6.5 feet bgs immediately above contact with the groundwater. The two direct screen PID readings were collected from the analytical sample locations. All screening results did not indicated contamination. Figure 5-36 presents the locations and screening results.

Two Hanby™ soil screening samples and two PID readings were collected from TP-7 to determine the extent and degree of contamination within the test pit. The Hanby™ soil screening samples and the direct screen PID readings were collected from the analytical sample locations. While the Hanby™ results indicated contamination within the test pit, the direct screen results did not. The discrepancy may be due to the direct screen PID readings versus a heated headspace reading or interference with the Hanby™ test from material from the suspected landfill material. Figure 5-36 presents the locations and screening results.

Two Hanby™ soil screening samples and multiple PID headspace readings were collected from TP-9 to determine the extent and degree of contamination within the test pit. The Hanby™ soil screening samples were collected from the analytical sample locations at the bottom and south sidewall of the test pit (five and four feet bgs, respectively). While the Hanby™ results did not indicate contamination, direct screen PID readings did indicate

contamination at shallower depths. Direct screen PID readings of 300 ppm were encountered at three feet bgs and direct screen readings jumped from 0.0 ppm up to 100.0 ppm along the south sidewall face. Figure 5-36 presents the locations and screening results.

5.18.2.2 Analytical Results

Analytical samples were collected on 21 September from the four test pits. The results are discussed in the following paragraphs. Figure 5-36 presents the locations of the samples, and Table 5-38 lists the complete suite of analyses for each sample and the sample results above detection limits. The complete sets of analytical results are included in Appendix D, and the chromatograms used to determine biogenic interference for the samples are included in Appendix H. The Method 3, cumulative risk, and hazard calculation sheets are included in Appendix J.

Two soil analytical samples and one TOC sample was collected from TP-8. The soil analytical samples were collected from the floor of the test pit from brown gravelly sand and from the east sidewall from a sandy silt organic rich soil that had a strong fuel odor. The TOC sample was collected from the shallow soils approximately in the test pit that were considered clean. DRO contamination was detected in the sidewall sample above Method 2 regulatory criteria. Therefore, Method 3 regulatory criteria was calculated for DRO using site-specific TOC data collected from all four 2000 test pits contained in Table 3-2. The resulting most stringent site-specific cleanup level for DRO is 3,360 mg/kg; therefore, the sample did not exceed the Method 3 regulatory criteria. In addition, the detected DRO is partially attributed to biogenic interference. No other contaminants were detected above regulatory criteria in TP-8. While the analytical results are difficult to reconcile with the field screening readings, the analytical results are the definitive tool for characterizing the site. Furthermore, a review of laboratory QA/QC was conducted to attempt to rectify the discrepancy.

Table 5-38
Ballyhoo Spit Tank Farm Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Proposed Method 3 Cleanup Levels[2]	Sample Results							
				AM-A502801	AM-A502803	AM-A502805	AM-A502806	AM-A502808	AM-A502809	AM-A502810	AM-A502811
Location	--	--	--	TP8 floor	TP8 sidewall	TP6 floor	TP6 sidewall	TP7 floor	TP7 sidewall	TP9 floor	TP9 sidewall
Gasoline Range Organics	mg/kg	260	1,400	1.19 J, UB/RL	134 J	0.683 J, UB/RL	0.791 J, UB/RL	0.404 J, UB/RL	0.803 J, UB/RL	0.501 J, UB/RL	0.536 J, UB/RL
Diesel Range Organics (AK102)	mg/kg	230	3,360	28.2 J	654 J	7.43 J	20.3 J	60 J	65.3 J	ND [4.27]	22.1 J
Residual Range Organics (AK103)	mg/kg	8300	8,300	52 UB/RL	1740 J	39.6 UB/RL	62.2 UB/RL	271	302	10.1 UB/RL	92.6 J, UB/RL
BTEX (SW8260B)											
Ethylbenzene	µg/kg	5,000	47,300	ND [200] J	2800	ND [120] J	ND [210] J	ND [220] J	ND [370] J	ND [200] J	ND [300] J
Xylenes	µg/kg	69,000	675,000	ND [610] J	10000	ND [360] J	ND [630] J	ND [660] J	ND [1100] J	ND [590] J	ND [900] J
PAH (SW8270C SIM)											
2-Methylnaphthalene	µg/kg	--	--	--	1300	ND [2.3]	--	ND [2.3]	--	--	--
Acenaphthene	µg/kg	190,000	2,790,000	--	89	ND [2.3]	--	ND [2.3]	--	--	--
Acenaphthylene	µg/kg	--	--	--	22	ND [2.3]	--	ND [2.3]	--	--	--
Anthracene	µg/kg	3,900,000	2,490,000	--	57	ND [2.3]	--	ND [2.3]	--	--	--
Benzo(a)anthracene	µg/kg	5,500	9,300	--	18	ND [2.3]	--	ND [2.3]	--	--	--
Benzo(a)pyrene	µg/kg	900	930	--	15	ND [2.3]	--	ND [2.3]	--	--	--
Benzo(b)fluoranthene	µg/kg	9,000	9,300	--	13	ND [2.3]	--	ND [2.3]	--	--	--
Benzo(g,h,i)perylene	µg/kg	--	--	--	12	ND [2.3]	--	10	--	--	--
Chrysene	µg/kg	550,000	930,000	--	43	ND [2.3]	--	ND [2.3]	--	--	--
Fluoranthene	µg/kg	1,900,000	3,320,000	--	20	ND [2.3]	--	ND [2.3]	--	--	--
Fluorene	µg/kg	240,000	3,320,000	--	160	ND [2.3]	--	ND [2.3]	--	--	--
Indeno(1,2,3-cd)pyrene	µg/kg	9,000	9,300	--	5.6	ND [2.3]	--	2.6	--	--	--
Naphthalene	µg/kg	38,000	525,000	--	110	ND [2.3]	--	ND [2.3]	--	--	--
Phenanthrene	µg/kg	--	--	--	280	2.8	--	ND [2.3]	--	--	--
Pyrene	µg/kg	1,400,000	2,490,000	--	50	ND [2.3]	--	ND [2.3]	--	--	--

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
[2]Note: The proposed Method 3 cleanup level for DRO, ethylbenzene, naphthalene, xylenes, and aenaphthene are based on migration to groundwater. The proposed Method 3 cleanup levels for the remaining compounds are based on ingestion.
J = Estimated ve detected in Method Blank; reported value is considered valid.

Two soil analytical samples and one TOC sample was collected from TP-6. The soil analytical samples were collected from immediately above contact with groundwater from moist sandy gravel (beach gravel) sand and from the north sidewall from moist sandy gravel. The TOC sample was collected from the soil stockpile from soil that came from approximately two feet bgs. No contaminants were detected in TP-6 that exceeded regulatory criteria.

Two soil analytical samples and one TOC sample were collected from TP-7. The soil analytical samples were collected from immediately above contact with groundwater from moist dark reddish brown sandy gravel and from the north sidewall from dark brown organic rich silt and gravel. The TOC sample was also collected from the sidewall location. No contaminants were detected in TP-7 that exceeded regulatory criteria.

Two soil analytical samples and one TOC sample was collected from TP-9. The soil analytical samples were collected from the floor of the test pit from broken weathered rock with some sand and from the south sidewall from a dark brown organic silt soil that had a strong fuel odor. The TOC sample was collected from the uncontaminated soil stockpile from soils that came from approximately six inches bgs. No contaminants were detected in TP-6 that exceeded regulatory criteria. Again, while the analytical results are difficult to reconcile with the field screening readings, the analytical results are the definitive tool for characterizing the site.

As required by 18 AAC 75.325(g), an assessment of cumulative risks and hazards was conducted for the site according to procedures described in Section 3.3.4. The total cumulative (cancer) risk for the site is 2.0×10^{-7}, well below the limitation of 1×10^{-5}; the hazard index for the site is 7.8×10^{-4}, well below the limitation of 1.0.

5.18.3 Conclusions and Recommendations

Soils at the Ballyhoo Spit Tank Farm site are recommended for NFA. No samples exceeded the calculated Method 3 regulatory criteria, and the site did not exceed the cumulative risk and hazard index limitations. While the analytical results at the site do not support the field

screening results, as previously stated, the analytical results are the definitive tool in characterizing the site. The inconsistencies encountered at the site between the field screening results and the analytical results may be due to an extremely volatile contaminant that is immediately released from the soil upon excavation or one that is easily detected by the PID at concentrations that do not exceed regulatory criteria.

A sheen was observed on the groundwater at TP-6; however, it could not be identified as biogenic or POL-related. Therefore, an assessment of the underlying groundwater is recommended. Since groundwater was not encountered in the area of the former utilidors, a minimum of two well points should be installed where groundwater is encountered and sampled for DRO, GRO, BTEX, and PAHs.

5.19 BALLYHOO BATTERIES AND STAND-ALONE TRANSFORMER

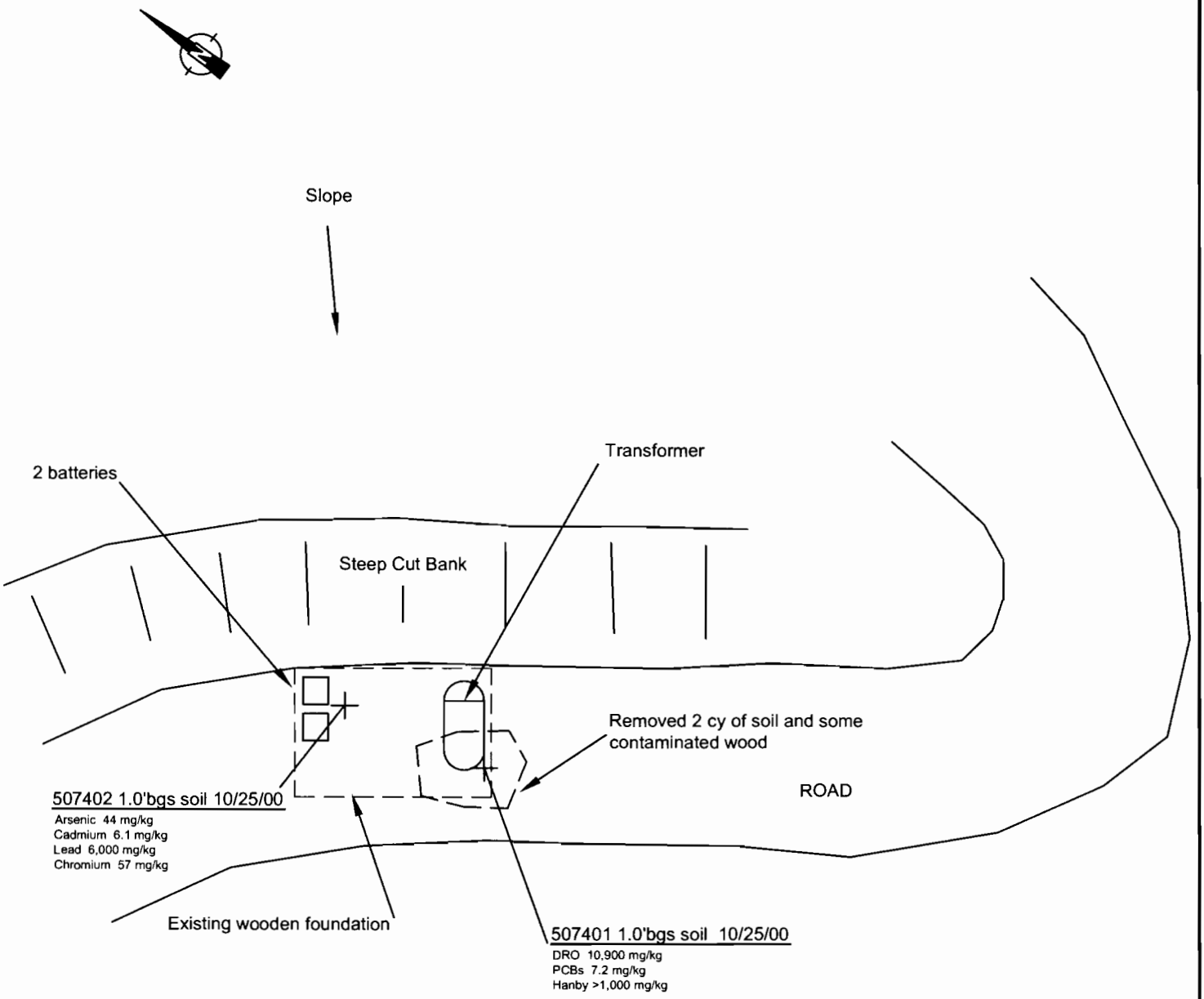
The Ballyhoo batteries and stand-alone transformer are located on the west side of Fort Schwatka. See Section 5.17 for a thorough description of the area. Figure 5-31 presents the site location and Figure 5-37 presents the site layout.

5.19.1 Previous Activities

A site reconnaissance conducted at Mt. Ballyhoo on 13 July 1998 identified four batteries and a stand-alone transformer originally identified during the 1996 field effort. The batteries were cracked and empty of battery acid. They had a legible manufacturer's label and were thought to be of a more recent vintage than WWII. In addition, the standalone transformer's appearance and attached associated plastic coated wiring indicated it was potentially manufactured post-WWII.

5.19.2 2000 Work Completed

The standalone transformer was removed from Mount Ballyhoo on 26 October after recording the faceplate information on 5 October and researching the FUDS eligibility of the transformer. The manufacturer of the transformer were Moloney Electric Company from ST Louis, MO; the serial number of the transformer was 707067. The transformer and the oil



NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLE 5-39 AND/OR APPENDIX K FOR QUALIFIERS.

Slope

0 5 10 20
SCALE IN FEET

LEGEND

+ Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)

BALLYHOO BATTERIES and STAND-ALONE TRANSFORMER

Amaknak, Alaska

PROJ. MGR:	FILE NAME.	FIGURE NO.
S. KOCH	RPT5-37	5-37
DRAWN BY.	FILE LOCATION:	DATE:
BY	Amaknak\30227	Aug 20, 01

soaked wood foundation beneath the transformer was placed in an overpack and supersacks. The four batteries next to the transformer were also placed in a supersack. Approximately two cy of visibly contaminated soil was excavated beneath the removed wood foundation. It was impossible to excavate more soil unless more of the building's wood foundation was removed. See Figure 5-31 for the location of the stand-alone transformer and Figure 5-37 for the site layout.

5.19.2.1 Field Screening Results

One Hanby™ sample was collected at the bottom of the excavation beneath the wood foundation that the transformer and battery were resting on. The Hanby™ result indicated transformer oil contamination remained at the site. See Figure 5-37 for the Hanby™ sample location and result.

5.19.2.2 Analytical Results

One soil analytical sample was collected on 25 October from the bottom of the excavation directly beneath where the standalone transformer was located and one soil analytical sample was collected beneath where the batteries were located. The samples were collected at one foot bgs in sandy/gravelly soils. The samples detected DRO and metals concentrations above Method 2 regulatory criteria. A calculated Method 3 cleanup level would not increase the metals regulatory criteria and the detected DRO concentration was elevated; therefore, a Method 3 level was not calculated for the site. In addition, PCBs were detected beneath the removed transformer at concentrations above the unrestricted criteria.

One TOC sample was collected on 25 October from 6 inches bgs near the standalone transformer site and an oil sample was collected from the transformer on 26 October. Figure 5-37 presents the sample locations, and Table 5-39 lists the complete suite of analyses for each soil sample and the sample results above detection limits. The complete set of analytical results, including the transformer oil waste characterization sample, is included in Appendix D.

Table 5-39
Ballyhoo Standalone Transformer and Batteries
Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results	
			AM-A507401	AM-A507402
Location	--	--	Beneath transformer	Beneath batteries
Diesel-range Organics (AK102)	mg/kg	230	10,900 J	--
Residual-range Organics (AK103)	mg/kg	8300	3,530 J	--
Metals (SW6010, SW6010B, SW7471A)				
Arsenic	mg/kg	1.8	--	44
Cadmium	mg/kg	4.5	--	6.1
Lead	mg/kg	400	--	6000 J
Selenium	mg/kg	3	--	1
Barium	mg/kg	982	--	85
Chromium	mg/kg	23	--	57 J
Silver	mg/kg	19	--	ND [1.8]
Mercury	mg/kg	1.24	--	0.0666
PCBs (SW8082)				
PCB-1260 (Aroclor 1260)	mg/kg	1	7.2 J	--

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
J = Estimated value; see Appendix K for details.

5.19.3 Conclusions and Recommendations

Further action is recommended for the Ballyhoo batteries and stand-alone transformer site. Specifically, it is recommended that the contaminated soil underlying the former transformer and batteries be excavated and removed from the site. Confirmation samples are recommended after soil excavation to confirm the removal of the fuel, metals, and PCB contamination. In order to remove the underlying soil, the wood foundation that the transformer and batteries were previously placed on will also need to be removed. SHPO and NPS coordination will be required before this removal action can begin.

5.20 PORT LEVASHEF DRUM GROUPS

Port Levashef is located at the southern end of Captains Bay, approximately 4 miles southwest of the City of Unalaska on Unalaska Island. This area was used by the U.S.

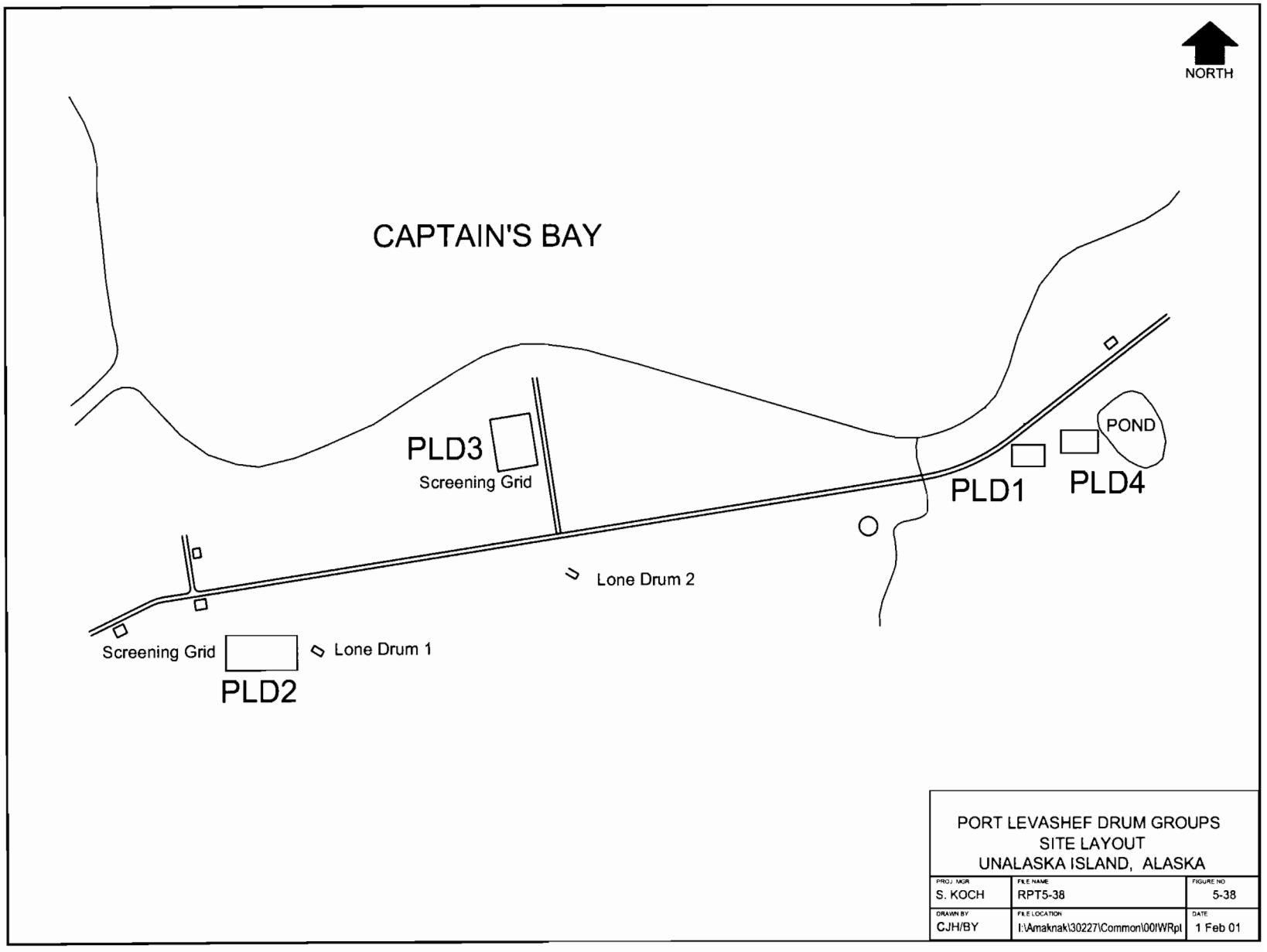
military as a small port during the early 1940s and historical records and photos indicate a small dock and pier at Port Levashef.

The Port Levashef Drum Group was discovered during the 1997 field activities. This site includes areas where several 55-gallon drums were abandoned by the U.S. military. There are a number of munitions magazines and revetments for tents and Quonset huts in the area.

An area of vegetation-covered mounds and partially buried debris is located between the mouth of the Shaishnikoff River and the dock, just north of Captains Bay Road. Local residents report that the mounds did not exist before WWII, but were created during the WWII-era. Relocated families noticed the presence of the mounds after they were allowed to return to Unalaska after WWII. Two deep pits south of the road are reported to be munitions demolition craters.

For investigation purposes, the buried debris was grouped into four general locations as shown in Figure 5-38. Groups of drums were visible on the ground surface at three locations and present but not readily visible at a fourth location. The drums were mostly empty or contained limited quantities of residual sludge, water, and soil. Port Levashef Drum Group 1 (PLD1) is located on the eastern portion of the alluvial fan south of the road. Port Levashef Drum Group 2 (PLD2) is located on the western edge of the alluvial fan south of the road. Port Levashef Drum Group 3 (PLD3) drums were scattered in an area of mounds and debris. The location of the buried drums at Port Levashef Drum Group 4 (PLD4) was identified by a landowner. The buried drums at Group 4 were encountered while excavating soil to create a shooting range (USAED 1999).

On 3 November 1998, Mr. Richard Chagin, the owner of one of the two cabins at Port Levashef, described the sources of water for the vacation cabins. The Chagins and Nick Shaishnikoff (Mr. Chagin's brother-in-law who occupies the other cabin) haul drinking water 5.20.1 to the cabins. Hoses collect water from a small creek adjacent to one cabin and a spring south of the other cabin to fill flush toilet reservoirs. The cabins are not currently connected to city utilities (USAED 1999). Groundwater could be used as a drinking water source if wells were installed by residents.


NORTH
CAPTAIN'S BAY
PLD3
Screening Grid
POND
PLD1
PLD4
Lone Drum 2
Screening Grid
Lone Drum 1
PLD2
PORT LEVASHEF DRUM GROUPS
SITE LAYOUT
UNALASKA ISLAND, ALASKA
PROJ. MGR
S. KOCH
FILE NAME
RPT5-38
FIGURE NO
5-38
DRAWN BY
CJH/BY
FILE LOCATION
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DATE
1 Feb 01

5.20.1 Previous Remedial/Removal Activities

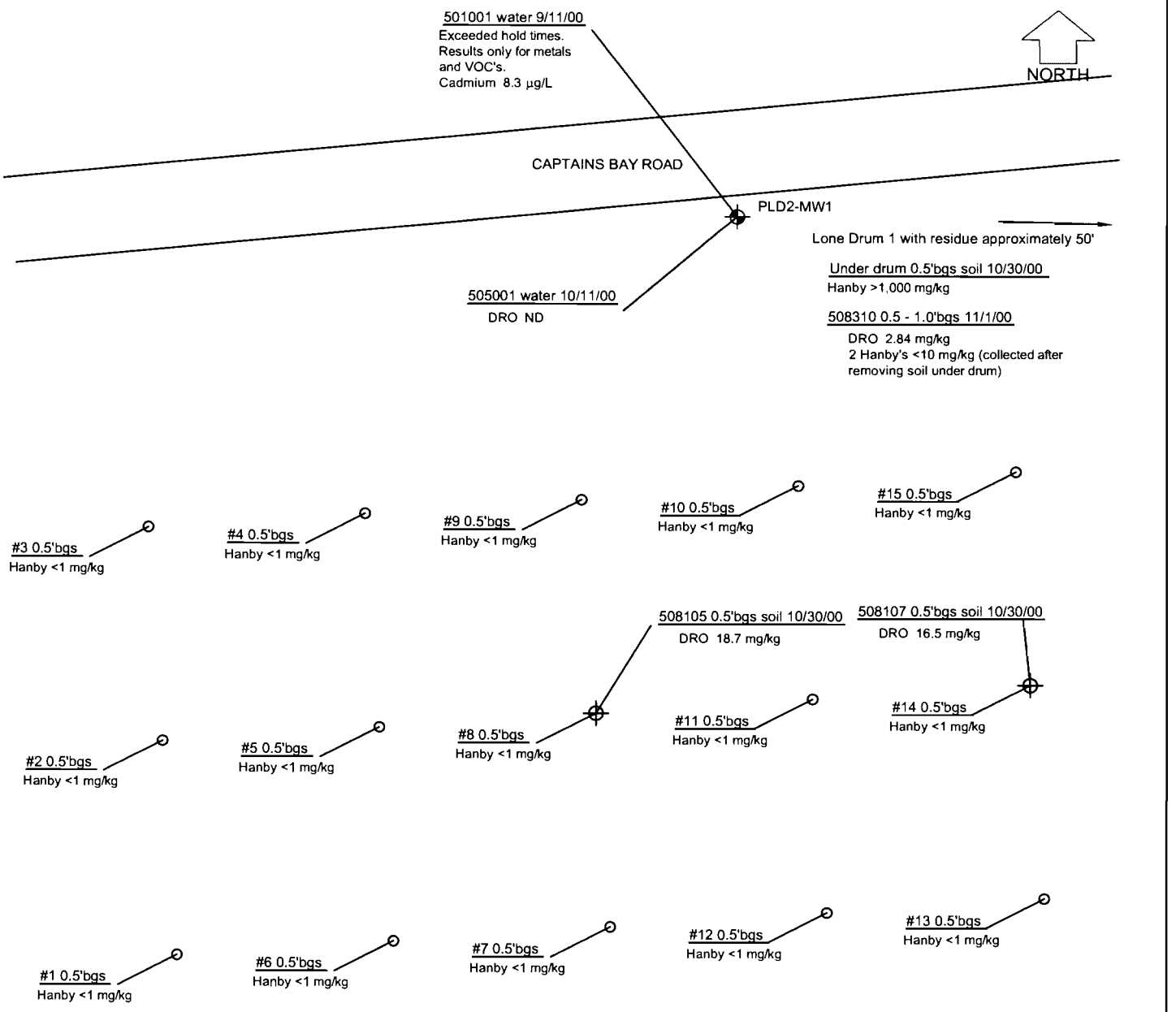
There are no known investigations prior to 1997 at Port Levashef Drum Groups. During the 1998 field season, a site reconnaissance was conducted. As a result of the reconnaissance, sampling and characterization of debris, soils, and groundwater and removal and disposal of drums, debris, and impacted soils was performed. IRA activities included removing empty drums and debris, excavating impacted soils, and characterizing soil remaining in place. Three well points were installed in test pits and two soil borings were completed as monitor wells in the vicinity of PLD1 and PLD4. Post removal confirmation samples were collected at these locations as well.

5.20.2 2000 Work Completed

Port Levashef Drum Groups 2 and 3 were investigated during the 2000 field season. A downgradient well was installed at each of the two drum groups, and soil screening and sampling was performed across each area. The following paragraphs discuss each site in detail. Figures 5-39 and 5-40 present the locations of the 2000 fieldwork.

One soil boring was drilled at Drum Group 2 on 4 September and was terminated at 20.6 feet bgs. Groundwater was encountered at 14 feet bgs and no contamination (based on PID readings) was detected in the boring. A 2-inch diameter PVC well, PLD2-MW1, was installed in the boring and was screened from 11 to 20.6 feet bgs. Figure 5-39 presents the location of the soil boring and the installed monitoring well. Appendix C presents the soil boring exploration log and the monitoring well log. In order to characterize the surface soil in the area, a 50 foot by 100 foot soil screening grid was laid out overlying the Drum Group 2 location on 30 October. The sampling grid had 15 sampling nodes. See Figure 5-39 for the location of the installed monitoring well and the layout of the sampling grid.

Two lone drums were also discovered to the east of the Drum Group 2 screening grid location. The drums were far enough removed from the Drum Group 2 location that they were not included in the screening grid. Drum 1 contained a paint/tar type substance and was previously staked during the 1998 site investigation. The drum was laying on its side and was



Note: All Hanby grid screening samples were collected on 10/30/00

NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLES 5-40 AND 5-41 AND/OR APPENDIX K FOR QUALIFIERS.

0 5 10 20
SCALE IN FEET

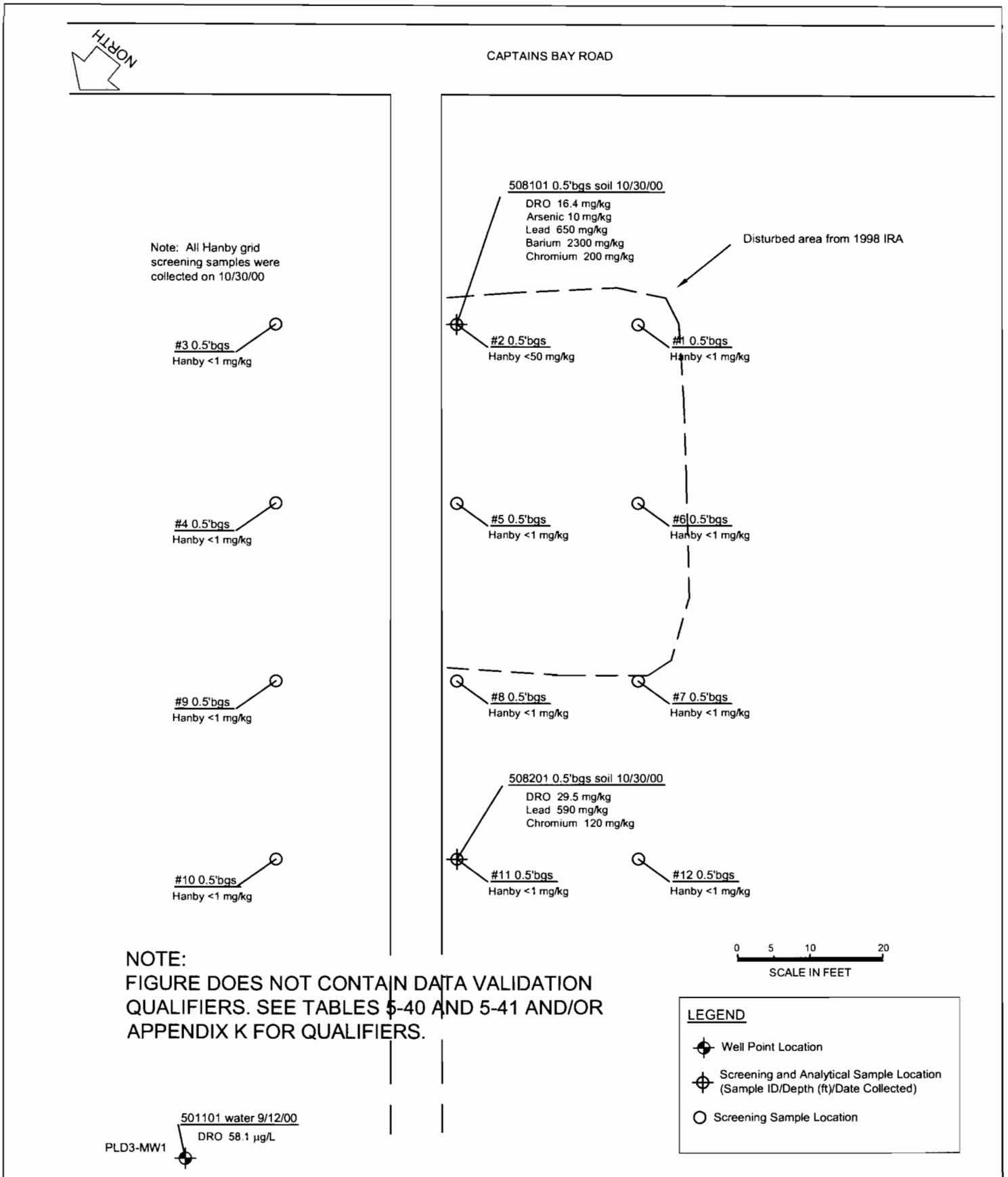
LEGEND

- Well Point Location
- Screening and Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
- Screening Sample Location

PORT LEVASHEF DRUM GROUP 2 SITE LAYOUT

Amaknak, Alaska

PROJ MGR	FILE NAME	FIGURE NO
S. KOCH	RPT5-39	5-39
DRAWN BY	FILE LOCATION	DATE
BY	Amaknak\30227	Aug 20, 01



PORT LEVASHEF DRUM GROUP 3 SITE LAYOUT

Amaknak, Alaska

PROJ. MGR	FILE NAME	FIGURE NO
S. KOCH	RPT5-40	5-40
DRAWN BY	FILE LOCATION	DATE
BY	Amaknak\30227	Aug 20, 01

peppered with bullet holes; a small amount of the paint/tar substance was on the outside of the drum and on the ground surface around the drum. The drum was removed on 1 November 2000 and the area surrounding the drum was excavated. Five drums were filled with excavated soil and the site was recontoured and seeded. Drum 2 was about ¼ full of rusty water, and the large bung was missing from the top of the drum. The drum was removed on 9 November 2000. See Figures 5-38 and 5-39 for the location of the lone drums.

One soil boring was drilled at Drum Group 3 on 3 September and was terminated at 9.5 feet bgs. Groundwater was encountered at 3.5 feet bgs and no contamination was detected in the boring. A 2-inch diameter PVC well, PLD3-MW1, was installed in the boring and was screened from 4 to 9.5 feet bgs. Appendix C presents the soil boring exploration log and the monitoring well log. In order to characterize the surface soil in the area, a 50 foot by 75 foot soil screening grid was laid out overlying the Drum Group 3 location on 30 October. The disturbed area from the 1998 IRA was completely covered with the screening grid. The sampling grid had 12 sampling nodes. See Figure 5-40 for the location of the installed monitoring well and the layout of the sampling grid.

5.20.2.1 Field Screening Results

Fifteen Hanby™ soil screening samples were collected from the Drum Group 2 screening grid. A screening sample was collected from each node at approximately six inches bgs. In addition, a Hanby™ soil screening sample was collected from beneath the lone Drum 1 to the east of the screening grid. The Hanby™ results from the screening grid did not indicate any contamination; the Hanby™ result from beneath the drum indicated significant contamination. Following excavation of the potentially contaminated soil under Drum 1, two Hanby™ soil screening samples were collected to confirm the limits of potential contamination reached. Both Hanby™ results indicated that all potential contamination was removed. See Figure 5-39 for the Hanby™ sample locations and results.

Twelve Hanby™ soil screening samples were collected from the Drum Group 3 screening grid. A screening sample was collected from each node at approximately six inches bgs.

Only one of the Hanby™ results indicated potential contamination. See Figure 5-40 for the Hanby™ sample locations and results.

5.20.2.2 Analytical Results

A groundwater sample was collected from PLD2-MW1 on 11 September 2000 after purging the well and stabilizing the field parameters. The water was clear with no odor or sheen observed. The analytical laboratory exceeded the DRO, RRO, PAH, and PCB holding times for the sample. Therefore, those analytes were cancelled for the original sample and another groundwater sample, along with a duplicate and triplicate sample, was collected on 11 October 2000 for DRO, RRO, PAH, and PCB analysis only. The re-sampled groundwater was again clear with no odor or sheen. Cadmium was the only parameter detected above regulatory criteria in the sample. Table 5-40 lists the complete suite of analyses for the sample and the sample results above detection limits. A complete set of analytical results is included in Appendix D.

Two soil analytical samples were collected from the Drum Group 2 screening grid. The samples were collected from node 8 (middle of the screening grid) and 14 (downgradient location) at six inches bgs. In addition, a TOC sample was collected from both sample locations, and duplicate and triplicate TOC samples were also collected from the node 8 location. Arsenic concentrations in both soil samples were above Method 2 regulatory criteria but below accepted background concentrations contained in the Comprehensive RI Report (USAED 2000a). Methylene chloride was also detected above Method 2 regulatory criteria in the node 8 sample. Figure 5-39 presents the sample locations and results, and Table 5-41 lists the complete suite of analyses for the soil samples and the soil sample results above detection limits. A complete set of analytical results is included in Appendix D.

One soil analytical sample was collected from the excavation beneath the removed Drum 1. The soil sample was collected after Hanby™ results indicated that all the potential contamination was removed from the site. Arsenic concentrations in the sample were

Table 5-40
Port Levashef Drum Groups 2 and 3 Water Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results		
			AM-A505001 and AM-A501001[2]	AM-A505101	AM-A501101
Location	--	--	PLD2-MW1	PLD2-MW1 (FD)	PLD3-MW1
Diesel-range Organics (AK102)	µg/L	1,500	ND [100]	ND [100]	58.1 J
Residual-range Organics (AK103)	µg/L	1,100	602 J, UB/RL	652J, UB/RL	ND [100]
Metals (SW6010, SW6010B, SW7471A)					
Cadmium	µg/L	5	8.3 J	--	2.4 J
Lead	µg/L	15	ND [2]	--	0.28 UB/RL
Chromium	µg/L	100	ND [5]	--	3.1 J
PCBs (SW8082)	µg/L	--	No analytes detected	No analytes detected	No analytes detected
PAH (SW8270C SIM)	µg/L	--	No analytes detected	No analytes detected	No analytes detected
Volatile Organic Compounds (SW8260B)					
Acetone	µg/L	3,650	5.7 UB/RL	--	7.3 UB/RL

[1]18 AAC 75, Table C for groundwater. Surface water regulatory criteria, contained in 18 AAC 70, includes total aromatic hydrocarbons (TAH) levels not to exceed 10 µg/L and total aqueous hydrocarbons (TAqH) levels not to exceed 15 µg/L. TAH is calculated by summing concentrations of BTEX analyte concentrations, and TAqH is calculated by summing concentrations of BTEX and PAH analytes.
[2]Sample AM-A501001 was collected on 11 September from PLD2-MW1 but exceeded hold times for DRO/RRO, PAHs, and PCBs. Therefore, the well was resampled on 11 October for those parameters under sample ID AM-A505001.
J = Estimated value; see Appendix K for details.
UB/RL = Analyte detected in Method Blank; reported value is considered valid.

detected at 14 mg/kg, marginally above both Method 2 regulatory criteria and background concentrations. A calculated Method 3 cleanup level would not increase the arsenic regulatory criteria; therefore, it was not calculated for Drum 1 location. A sludge waste characterization sample was also collected from the paint/tar substance contained within Drum 1. The waste characterization sample detected arsenic at only 6.6 mg/kg, indicating that the arsenic concentrations detected in the soil were not related to the paint/tar substance within the drum but reflect naturally occurring arsenic concentrations.

Table 5-41
Port Levashef Drum Groups 2 and 3 Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results						
			AM-A508105	AM-A508107	AM-A508101	AM-A508103	AM-A508104	AM-A508310	AM-A511601 thru 604
Location	--	--	PLD2 Loc. #8	PLD2 Loc. #14	PLD3 Loc. #2	PLD3 Loc. #2 (FD)	PLD3 Loc. #11	Lone Drum 1	Lone Drum 2
Gasoline-range Organics	mg/kg	260	--	--	--	--	--	2.42 J, UB/RL	ND [9.84]
Diesel-range Organics (AK102)	mg/kg	230	18.7 J	16.5 J	16.4 J	23.4 J	29.5 J	2.84 J	104 J
Residual-range Organics (AK103)	mg/kg	8300	148 J	118	190	339	261	41 UB/RL	198 J
Metals (SW6010, SW6010B)									
Arsenic	mg/kg	1.8	3.2	1.8	10	10	9.5	14	3.7
Cadmium	mg/kg	4.5	ND [0.32]	ND [0.3]	ND [0.27]	ND [0.29]	0.54	ND [0.44]	ND [0.32]
Lead	mg/kg	400	2.2	2.1	650 J	110 J	590	8.9	5
Selenium	mg/kg	3	1.2	0.62 J	0.82 J	0.3 J	1.7	2.4	1.5
Barium	mg/kg	982	65	39	2300 J	69 J	120	92	62
Chromium	mg/kg	23	4.2	2.7	200 J	23 J	120	20	4.4
Silver	mg/kg	19	ND [1.6] J	1.2 J	ND [1.4] J	ND [1.5] J	ND [1.8] J	ND [2.2]	ND [1.6]
Mercury	mg/kg	1.24	--[2]	--[2]	--[2]	--[2]	--[2]	--[2]	0.0292 J
PCBs (SW8082)	mg/kg	--	No analytes detected	No analytes detected	No analytes detected	No analytes detected	No analytes detected	No analytes detected	--
PAH (SW8270C SIM)									
2-Methylnaphthalene	µg/kg	--	6.2 UB/RL	--	15 UB/RL	5.4 UB/RL	--	ND [3.7]	ND [2.6]
Benzo(a)anthracene	µg/kg	5,500	ND [2.7]	--	2.3	4	--	ND [3.7]	4.2
Benzo(a)pyrene	µg/kg	900	ND [2.7]	--	2.5	5.4	--	ND [3.7]	8.7
Benzo(b)fluoranthene	µg/kg	9,000	ND [2.7]	--	3.5	7.8	--	ND [3.7]	14
Benzo(g,h,i)perylene	µg/kg	--	ND [2.7]	--	2.8	7.5	--	ND [3.7]	9.8
Benzo(k)fluoranthene	µg/kg	93,000	ND [2.7]	--	11	ND [2.5]	--	ND [3.7]	4.4

Table 5-41
Port Levashef Drum Groups 2 and 3 Soil Analytical Results Above Detection Limits
(continued)

Parameter	Units	ADEC Cleanup Level[1]	Sample Results						
			AM-A508105	AM-A508107	AM-A508101	AM-A508103	AM-A508104	AM-A508310	AM-A511601 thru 604
Location	--	--	PLD2 Loc. #8	PLD2 Loc. #14	PLD3 Loc. #2	PLD3 Loc. #2 (FD)	PLD3 Loc. #11	Lone Drum 1	Lone Drum 2
PAH (SW8270C SIM) (continued)									
Chrysene	µg/kg	550,000	ND [2.7]	--	3.3	7.2	--	ND [3.7]	12
Dibenzo(a,h)anthracene	µg/kg	900	ND [2.7]	--	ND [2.3]	2.5	--	ND [3.7]	ND [2.6]
Fluoranthene	µg/kg	1,900,000	ND [2.7]	--	4.1	6.9	--	ND [3.7]	21
Indeno(1,2,3-cd)pyrene	µg/kg	9,000	ND [2.7]	--	18	5.8	--	ND [3.7]	9.1
Naphthalene	µg/kg	38,000	4.4	--	9.5	7.6	--	ND [3.7]	ND [2.6]
Phenanthrene	µg/kg	--	ND [2.7]	--	6.9	6.1	--	ND [3.7]	17
Pyrene	µg/kg	1,400,000	ND [2.7]	--	5.1	11	--	ND [3.7]	29
Volatile Organic Compounds (SW8260B)									
Acetone	µg/kg	9,000	360	ND [110]	ND [100]	ND [95]	ND [110]	ND [180]	ND [180]
Chloroform	µg/kg	300	ND [27]	22 UB/RL	ND [21]	ND [20]	9.9 UB/RL	19 UB/RL	ND [35]
Methylene chloride	µg/kg	10	15 UB/RL	ND [23]	ND [21]	ND [20]	ND [22]	ND [35]	ND [35]
Toluene	µg/kg	4,800	18 UB/RL	140 UB/RL	ND [21]	ND [20]	16 UB/RL	320 UB/RL	ND [35]

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
[2]Mercury analyses requested but not performed by laboratory.
J = Estimated value; see Appendix K for details
UB/RL = Analyte detected in Method Blank; reported value is considered valid.

One soil analytical sample was also collected beneath the removed Drum 2. Arsenic concentrations in the soil sample were above regulatory criteria but below accepted background concentrations contained in the Comprehensive RI Report (USAED 2000a). A waste characterization water sample was also collected within the drum. Figure 5-39 presents the sample locations and results, and Table 5-41 lists the complete suite of analyses for the soil samples and the soil sample results above detection limits. A complete set of analytical results, including the drum waste characterization samples, is included in Appendix D.

A groundwater sample was collected from PLD3-MW1 on 12 September after purging the well and stabilizing the field parameters. The water was clear with no odor or sheen observed. No contaminants were detected in the well. Table 5-40 lists the complete suite of analyses for the sample and the sample results, above detection limits.80

Two soil analytical samples were collected from the Drum Group 3 screening grid. The samples were collected from node 2 (highest Hanby™ reading) and 11 (downgradient location) at six inches bgs. A duplicate and triplicate sample was also collected from the node 2 location. While no POL contamination was detected in the samples, arsenic, lead, barium, and chromium exceeded Method 2 regulatory criteria and accepted background concentrations. In addition, a TOC sample was collected from both of the sample locations. A calculated Method 3 cleanup level would not increase the metals regulatory criteria, therefore, it was not calculated for the site. Figure 5-40 presents the sample locations and results, and Table 5-41 lists the complete suite of analyses for the sample and the sample results above detection limits.

5.20.3 Conclusions and Recommendations

The Port Levashef Drum Group 2 site is recommended for limited further action. Due to the cadmium detection in PLD2-MW1, it is recommended that another groundwater sample be collected from PLD2-MW1 to determine if cadmium concentrations are indeed elevated at the site. Because cadmium was not detected in the soil samples collected from the Drum Group 2 sampling grid, it is believed that the cadmium detection was a sampling anomaly. No further action (NFA) is recommended for the remainder of the Drum Group 2 site. Although one

sample from the site exceeded Method 2 regulatory criteria for methylene chloride and both samples exceeded the arsenic regulatory criteria, NFA is recommended for the following reasons:

- Methylene chloride, which only marginally exceeded the regulatory criteria at Drum Group 2, is considered a common laboratory contaminant. The trip blank associated with the sample detected methylene chloride at 22 µg/kg (sample ID AM-A508102). Therefore, the methylene chloride detection will be qualified as "non-detect" after the CDQR is issued based on the trip blank detection.
- Arsenic concentrations at the site were above regulatory criteria but below accepted background concentrations contained in the Comprehensive RI Report (USAED 2000a)

No further action is recommended for lone Drum 1. Although arsenic concentrations detected in the soil beneath the removed drum were marginally above regulatory criteria and background concentrations, arsenic was not detected in concentrations exceeding background concentrations in the paint/tar substance contained within the removed drum. Therefore, the arsenic concentrations detected in the soil beneath the drum likely reflect naturally occurring concentrations.

No further action is recommended for lone Drum 2. Although arsenic concentrations were above regulatory criteria, the detected concentration was below accepted background concentrations.

Further action is recommended for the Port Levashef Drum Group 3 site. Due to the metal exceedances, it is recommended that the sample grid be expanded because the metal detections were on the periphery of the grid. Samples should be collected from the edge of the expanded grid and from within the center of the year 2000 grid because this area was not sampled during the 2000 season. The screening grid should be expanded until the lateral extent of metals contamination is determined. Alternatives to remove soils that exhibit metals concentrations above regulatory criteria will be recommended based on the area and potential depth of contaminated soil and location of the subsurface landfill/drum dump. In addition, it is recommended that PLD3 MW-1 be monitored for two years to determine if metals are migrating off-site.

5.21 FORT MEARS LANDFILL (SOUTH)

The Fort Mears Landfill (South) is a flat open area located on the west side of Airport Beach Road, between the road and Unalaska Bay, approximately 3,000 feet southwest of the intersection of Salmon Way and Airport Beach. The 30 June 1944 map of the former NOB and aerial photography indicate that a WWII-era "Garbage Dump" was located at this site. A 10 May 1942 aerial photograph shows miscellaneous debris scattered in the area of the dump and aerial photographs from 1984 and 1994 show underwater shadows of either rock outcrops or debris in the same area in which the landfill is reportedly located. A large mass of melted metal debris is located along the shoreline and appears to extend approximately 30 feet into Unalaska Bay. Figure 5-41 presents the general site location and site layout.

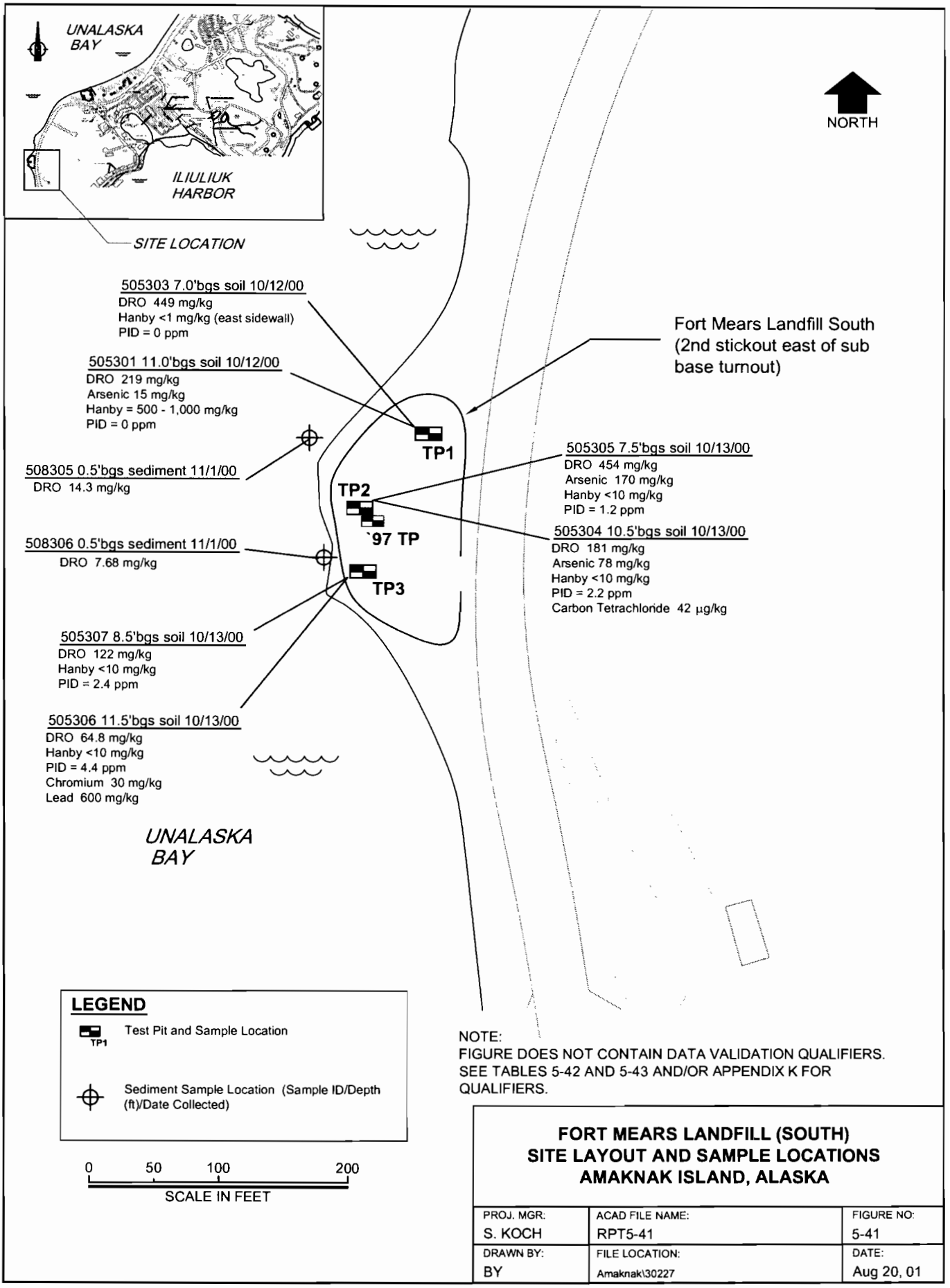
5.21.1 Previous Remedial/Removal Activities

During a 1997 investigation, a backhoe was mobilized to the site to excavate a large test pit. Large rocks and cobbles limited the depth that the backhoe could excavate to 4 feet bgs. No iron, metal, or wood debris was observed in this shallow test pit. Figure 5-41 presents the location of the test pit.

5.21.2 2000 Work Completed

Three test pits were dug on 12 and 13 October to investigate the potential presence of landfill-associated contamination and to determine if groundwater in the vicinity of the landfill is impacted. Figure 5-41 presents the locations of the three test pits.

The first test pit (TP-1) was dug approximately 25 feet off Airport Beach Road and 15 feet east of the three yellow bollards (see Figure 5-41). Sandy gravel fill was encountered in the first five feet of the test pit. Large chunks of concrete (five feet in diameter) and fill was encountered from 5- to 8 feet bgs. After 8 feet bgs, moist beach gravel was mixed with miscellaneous debris assumed to be from the landfill. The debris consisted of scrap metal, wood, various piping, and rebar. A significant item discovered within the debris were scraps of microfiche that contained a parts list for Catepillar® heavy equipment (particularly a



NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE TABLES 5-42 AND 5-43 AND/OR APPENDIX K FOR QUALIFIERS.

FORT MEARS LANDFILL (SOUTH)
SITE LAYOUT AND SAMPLE LOCATIONS
AMAKNAK ISLAND, ALASKA

PROJ. MGR:	ACAD FILE NAME:	FIGURE NO:
S. KOCH	RPT5-41	5-41
DRAWN BY:	FILE LOCATION:	DATE:
BY	Amaknak\30227	Aug 20, 01

D8 track-type tractor). The parts list was for equipment manufactured in the mid 1980s, which provides evidence that the landfill was used by parties after WWII. This finding indicates that the landfill likely has other potentially responsible parties. The test pit was terminated at 11 feet bgs because the beach gravel was sloughing into the hole due to the low angle of repose; no odor was observed while digging the test pit. While moist gravel was encountered, no groundwater entered the test pit, therefore, a well point was not installed. Although the test pit was backfilled with material removed from the test pit, compaction was difficult due to the large chunks of concrete.

The second test pit (TP-2) was dug approximately 90 feet west of TP-1 (see Figure 5-41). Sandy gravel fill ("fresh fill") was encountered in the first 3.5 feet of the test pit. "Old fill" was encountered from 3.5 to 6.5 feet bgs. After 6.5 feet bgs, moist sandy beach gravel was mixed with miscellaneous debris consistent with the debris noted in TP-1. The test pit was terminated at 10.5 feet bgs because the large chunks of concrete present in the hole made further digging impossible. No odor was observed while digging the test pit. While moist gravel was encountered, no groundwater entered the test pit; therefore, a well point was not installed. The test pit was backfilled with material removed from the test pit. While digging TP-2, a hydraulic line on the 580 excavator broke and a small amount of hydraulic fluid spilled onto the ground surface. Approximately 1/8 cy of impacted soil was removed and transported to the contaminated soil stockpile yard and added to the contaminated soil stockpile.

The third test pit (TP-3) was dug approximately 60 feet west of TP-2 (see Figure 5-41). Sandy gravel fill ("fresh fill") was encountered in the first 5.5 feet of the test pit. "Old fill" was encountered from 5.5 to 7.0 feet bgs and moist sandy beach gravel mixed with miscellaneous debris was encountered from 7.0 to 10.0 feet bgs. Sandy gravel was encountered in the final 1.5 feet of the test pit and refusal was met at 11.5 feet bgs. No odor was observed while digging the test pit. No groundwater was encountered in the test pit; therefore, a well point was not installed. The test pit was backfilled with material removed from the test pit.

Two sediment samples were also collected at low tide off-shore of the site. The samples were collected by waiting for low tide conditions and walking out to a site that is typically underwater at higher tides. The samples were collected using hand tools.

5.21.2.1 Field Screening Results

Two Hanby™ soil screening samples and multiple PID headspace readings were collected from TP-1 to determine the extent and degree of contamination within the test pit. The Hanby™ soil screening samples were collected from the floor and sidewall analytical sample locations. The floor soil screening sample, collected at 11 feet bgs, detected 500 to 1,000 mg/kg contamination. Direct screen PID readings were collected throughout the digging process and did not detect any contamination. Figure 5-41 presents the Hanby™ locations and screening results.

Two Hanby™ soil screening samples and multiple PID headspace readings were collected from both TP-2 and TP-3. The Hanby™ soil screening samples were collected from the floor and sidewall analytical sample locations in each test pit. All of the Hanby™ soil screening samples and PID direct screen readings did not detect any contamination. Figure 5-41 presents the Hanby™ locations and screening results.

5.21.2.2 Analytical Results

Analytical samples were collected on 12 and 13 October from the three test pits. The results are discussed in the following paragraphs, and Table 5-42 lists the complete suite of analyses for each sample and the sample results above detection limits. The complete sets of analytical results are included in Appendix D. In addition, two TOC sampled were collected on 31

Table 5-42
Fort Mears Landfill (South) Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results					
			AM-A505301	AM-A505303	AM-A505304	AM-A505305	AM-A505306	AM-A505307
Location			TP1 floor	TP1 sidewall	TP2 floor	TP2 sidewall	TP3 floor	TP3 sidewall
Diesel-range Organics (AK102)	mg/kg	230	219 J	449 J	181 J	454 J	64.8 J	122 J
Residual-range Organics (AK103)	mg/kg	8300	3300 J	681 J	1970 J	4590 J	1120 J	1530 J
Metals (SW6010, SW6010B, SW7471A)								
Arsenic	mg/kg	1.8	15	8.6	78	170	6.9	9.1
Barium	mg/kg	982	33	35	35	70	61	30
Cadmium	mg/kg	4.5	0.19 UB/RL	ND [0.25]	0.81	1.9	ND [0.23]	ND [0.23]
Chromium	mg/kg	23	15	16	23	19	30	10
Lead	mg/kg	400	180 J	17 J	82 J	150 J	600 J	28 J
Selenium	mg/kg	3	ND [0.6]	0.69	ND [0.59]	ND [0.7]	ND [0.58]	ND [0.58]
Silver	mg/kg	19	ND [1.2]	ND [1.3]	4.5	9.8	0.83	0.63
Mercury	mg/kg	1.24	0.146 J	0.0431 J	0.0665 J	0.08 J	0.1 J	0.0643 J
PAH (SW8270C SIM)								
2-Methylnaphthalene	µg/kg	--	10	5	12	34	3.4	4.2
Acenaphthene	µg/kg	190,000	ND [4.1]	ND [2.2]	6.7	19	ND [2]	ND [2]
Acenaphthylene	µg/kg	--	ND [4.1]	4.1	4.6	17	ND [2]	ND [2]
Anthracene	µg/kg	3,900,000	8.8	5.3	30	110	5	2.8
Benzo(a)anthracene	µg/kg	5,500	26	15	84	230	13	11
Benzo(a)pyrene	µg/kg	900	33	19	93	340	20	25
Benzo(b)fluoranthene	µg/kg	9,000	45	32	200	640	32	26
Benzo(g,h,i)perylene	µg/kg	--	58	24	89	270	23	22
Benzo(k)fluoranthene	µg/kg	93,000	15	9.1	59	220	9.7	6.1
Chrysene	µg/kg	550,000	32	21	130	420	19	18
Dibenzo(a,h)anthracene	µg/kg	900	10	3.7	4.9	74	3.8	4.1
Fluoranthene	µg/kg	1,900,000	46	27	160	370	18	16
Fluorene	µg/kg	240,000	4.6	4.4	8.4	29	ND [2]	ND [2]
Indeno(1,2,3-cd)pyrene	µg/kg	9,000	32	17	93	300	18	14
Naphthalene	µg/kg	38,000	9.8	4.7	24	71	3.4	4.7
Phenanthrene	µg/kg	--	39	14	110	300	15	9
Pyrene	µg/kg	1,400,000	64	37	130	350	34	33
Volatile Organic Compounds (SW8260B)								
2-Butanone	µg/kg	--	340	440	690	350	210	250
Carbon tetrachloride	µg/kg	30	ND [9.7]	ND [12]	42	11	8.8	11
Styrene	µg/kg	1,200	24	ND [12]	ND [18]	ND [11]	ND [6.5]	ND [7.1]
Toluene	µg/kg	4,800	ND [9.7]	ND [9.7]	ND [18]	ND [11]	ND [6.5]	ND [7.1]

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.

J = Estimated value; see Appendix K for details.

UB/RL = Analyte detected in Method Blank; reported value is considered valid.

October along the underhang of the bank west of the test pits. The first TOC sample was collected approximately three feet below grade and one foot into the bank from gravelly sand. The second TOC sample was collected approximately 15 feet to the north of the first TOC sample. It was collected in the same manner as the first TOC sample.

Two soil analytical samples were collected from TP-1. The soil analytical samples were collected from the floor of the test pit from beach gravel and from the east sidewall from sandy beach gravel in the blocky concrete layer. The floor sample detected arsenic concentrations above regulatory criter, and background concentrations contained in the Comprehensive RI Report (USAED 2000a). The sidewall sample detected DRO concentrations above Method 2 regulatory criteria and arsenic levels above regulatory criteria but below background concentrations. Therefore, Method 3 regulatory criteria was calculated for DRO using site-specific TOC data contained in Table 3-2. The resulting most stringent site-specific cleanup level for DRO is 832 mg/kg; therefore, the detected DRO does not exceed the Method 3 regulatory criteria. However, arsenic regulatory criteria remain the same. The Method 3 calculation sheets are included in Appendix J. Figure 5-41 presents the locations of the samples, and Table 5-42 lists the complete suite of analyses for each sample and the sample results above detection limits.

Two soil analytical samples were collected from TP-2. The soil analytical samples were collected from the floor of the test pit from sandy gravel and from the sidewall from a sandy/loam material with some fines. The sidewall sample detected DRO above Method 2 regulatory criteria, but below the calculated Method 3 criteria, and arsenic concentrations above regulatory criteria and background concentrations contained in the Comprehensive RI Report (USAED 2000a). The floor sample detected carbon tetrachloride above Method 2 regulatory criteria, but below the calculated Method 3 criteria, and arsenic concentrations above regulatory criteria and background concentrations. The Method 3 calculation sheets are included in Appendix J. Figure 5-41 presents the locations of the samples, and Table 5-42 lists the complete suite of analyses for each sample and the sample results above detection limits.

Two soil analytical samples were collected from TP-3. The soil analytical samples were collected from the floor of the test pit from sandy gravel and from the sidewall from gravelly sand. The floor sample detected chromium and lead above regulatory criteria and background concentrations contained in the Comprehensive RI Report (USAED 2000a). The arsenic concentrations were below accepted background concentrations. Figure 5-41 presents the locations of the samples, and Table 5-42 lists the complete suite of analyses for each sample and the sample results above detection limits.

Two sediment samples were collected on 1 November from the beach sediment adjacent to the site. The first sediment sample was collected approximately 30 feet north of TP-1 in the low tide sediments accessible for sample collection. The second sediment sample was collected 75 feet south of the first sediment sample. Both samples detected cadmium concentrations above regulatory criteria. However, cadmium concentrations are below accepted sediment background concentrations (3 mg/kg) contained in the Comprehensive RI Report (USAED 2000a). Figure 5-41 presents the locations of the samples, and Table 5-43 lists the complete suite of analyses for each sediment sample and the sample results above detection limits.

5.21.3 Conclusions and Recommendations

The Fort Mears Landfill (South) site is recommended for NFA. Although parameters were detected in concentrations that exceed regulatory criteria, the site is recommended for NFA under the FUDS program for the following reasons:

- This site is a known landfill. Based on the microfiche found in TP-1 that contained a parts list for a late 1970s piece of Catepillar® equipment, a determination can be made that the landfill was used for beneficial use up to at least the late 1970s. This information makes any further work at the landfill an issue until eligibility issues are resolved.

Although the site cannot be addressed under the FUDS program, based on the following reasons it is recommended that no further action involving site cleanup be taken even by other parties or under other cleanup programs:

- The DRO and carbon tetrachloride detected at the site above Method 2 regulatory criteria did not exceed the calculated site-specific Method 3 regulatory criteria.

Table 5-43
Fort Mears Landfill (South) Sediment Analytical Results Above Detection Limits

Parameter	Units	Screening Level[1]	Sample Results	
			AM-A508305	AM-A508306
Location	--	--	North sediment	South sediment
Diesel-range Organics (AK102)	mg/kg	230	14.3 J	7.68 J
Residual-range Organics (AK103)	mg/kg	8300	64.9 UB/RL	25 UB/RL
Metals (SW6010, SW6010B, SW7471A)				
Arsenic	mg/kg	8.2	2.4	2.1
Barium	mg/kg	48,000	ND [0.21]	ND [0.21]
Cadmium	mg/kg	1.2	1.6	1.3
Chromium	mg/kg	81	ND [0.52]	ND [0.53]
Lead	mg/kg	46.7	5.2	5.8
Selenium	mg/kg	--	5	3.7
Silver	mg/kg	1.0	0.63 J	0.54 J
PAH (SW8270C SIM)	µg/kg	--	No analytes detected	No analytes detected
Volatile Organic Compounds (SW8260B)				
Toluene	µg/kg	50	3.5 J, UB/RL	3.8 J, UB/RL

[1]Guideline is based on NOAA Effects Range-Low values. Guidelines selected from Toxicological Criteria for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision.

J = Estimated value; see Appendix K for details.

UB/RL = Analyte detected in Method Blank; reported value is considered valid.

- Arsenic concentrations are below accepted background concentrations except in both TP-2 sample and the floor sample in TP-1. While the arsenic concentrations in the test pits are above accepted background concentrations, the arsenic concentrations in the sediment adjacent to the landfill are less than the NOAA effects range low (ERLs) for marine sediment (8.2 mg/kg) and well below the accepted background sediment concentrations. This indicates that arsenic is not leaching out of the landfill into the adjacent marine environment and no exposure pathway exists for the arsenic detected within the landfill.
- Cadmium was detected in both sediment samples at concentrations above regulatory criteria. However, the cadmium concentrations are below accepted sediment background concentrations (3 mg/kg) contained in the Comprehensive RI Report (USAED 2000a).
- Lead does exceed the most stringent residential cleanup level (400 mg/kg) but does not exceed the industrial regulatory level of 1,000 mg/kg.
- Chromium concentrations marginally exceed cleanup level. Non-detects for chromium in the beach sediments immediately adjacent to the site indicate that the contaminants are not

migrating from the site. Therefore, a completed exposure pathway does not exist for the site.

5.22 FLOATING PUMPHOUSE, ILIULIUK LAKE, AND UNALASKA LAKE

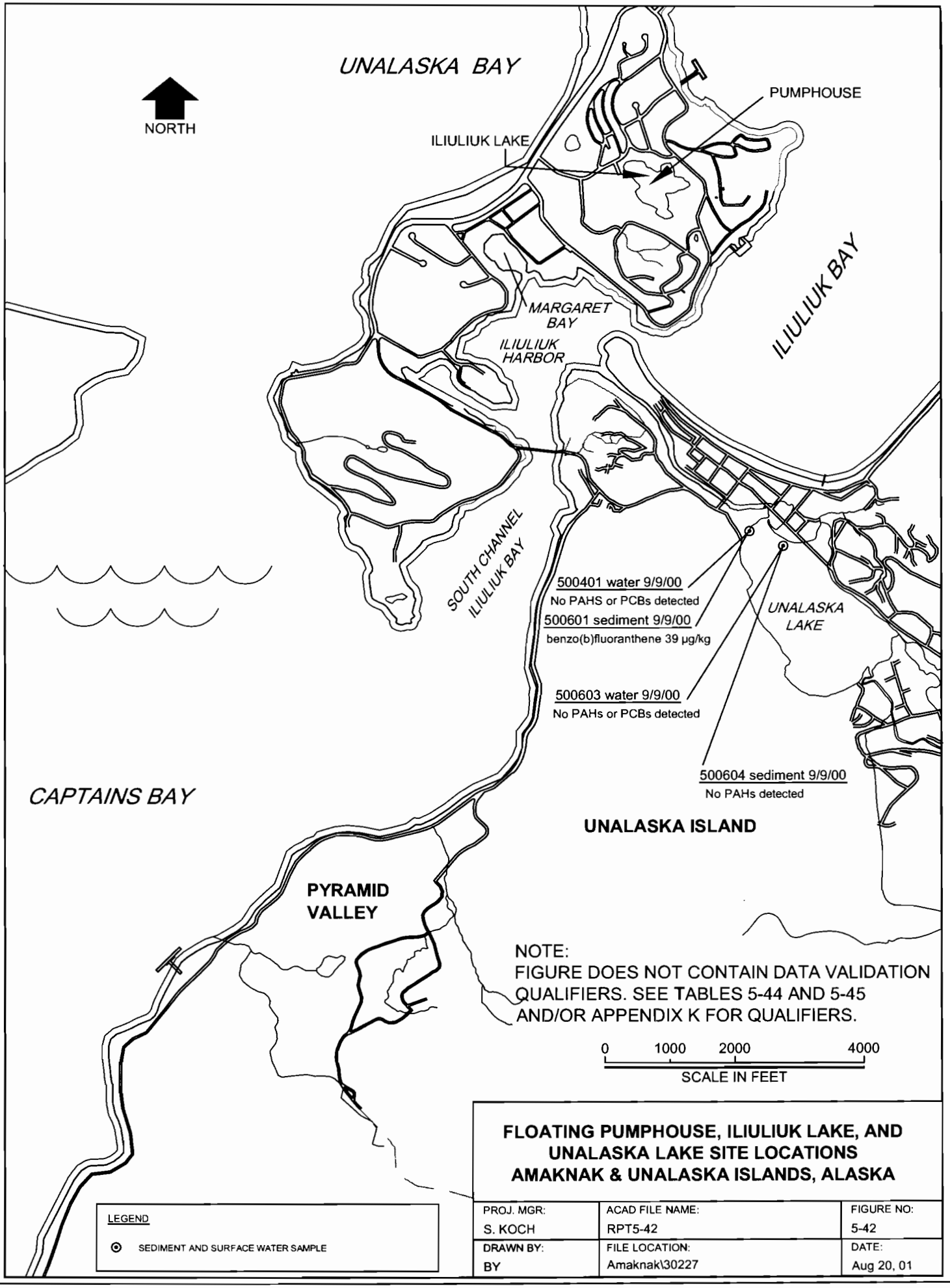
Iliuliuk Lake is located near the southern end of Amaknak Island. The Floating Pumphouse is located on the west side of Iliuliuk Lake, approximately 400 feet east of Biorka Drive. The Floating Pumphouse area consists of the pumphouse and a dock leading to the pumphouse. Both of these structures are in a dilapidated state; the pumphouse structure has collapsed into the lake. Very little factual information exists for this area; however, the Iliuliuk Lake in general could contain potentially contaminated lake-bottom sediments or contamination caused by the pumphouse or other historical activities. During the early 1940s Iliuliuk Lake was reportedly used as a fresh drinking water source for Fort Mears. The pumphouse appears to have been powered by electric pumps (parts of which are still present) rather than fuel-powered. Electric pumps were presumably used to eliminate the potential for fuel spills into the drinking water supply. During 1997 site reconnaissance activities, no product lines were found in, or leading to, the pumphouse.

Unalaska Lake is located on Unalaska Island and is fed by the Iliuliuk River; it drains through the City of Unalaska to Iliuliuk Harbor. Residential dwellings and light industry complexes surround the lake.

Figure 5-42 presents the general site location, and Figure 5-43 presents the Floating Pumphouse and Iliuliuk Lake site layout. The proposed fieldwork includes RI activities.

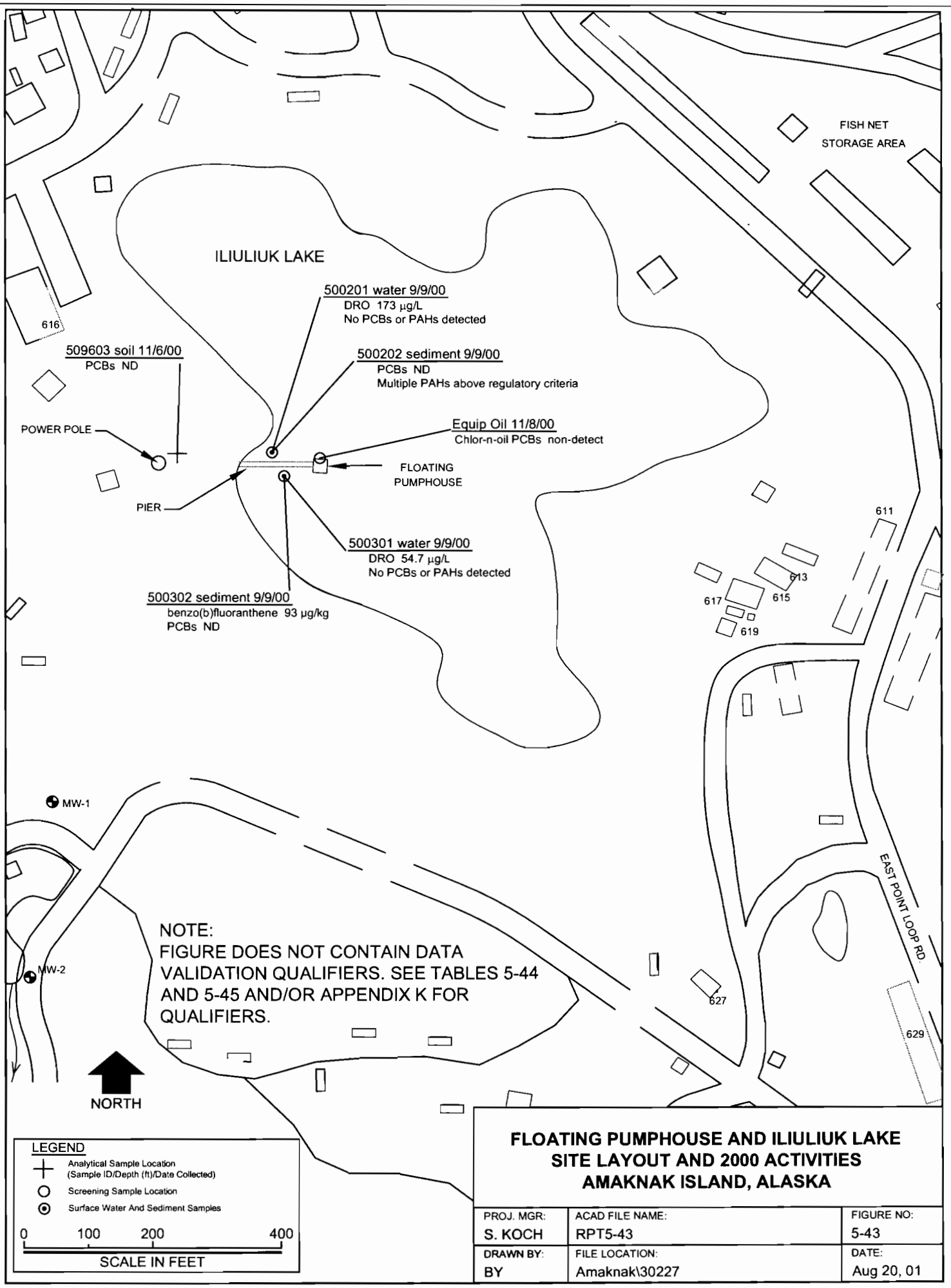
5.22.1 Previous Remedial/Removal Activities

A site reconnaissance conducted on 16 July 1998 at the Floating Pumphouse did not detect any evidence of past fuel handling practices. A possible PCB oil-containing immersed-line starter and a three-phase connector were identified, but these items were not sampled due to the necessity of dismantling the equipment in order to collect a sample. Seven samples were collected from possible asbestos-containing materials (ACM) in the floating pumphouse. ACM removal is not authorized under the DERP-FUDS program.



FLOATING PUMPHOUSE, ILIULIUK LAKE, AND UNALASKA LAKE SITE LOCATIONS AMAKNAK & UNALASKA ISLANDS, ALASKA

PROJ. MGR:	ACAD FILE NAME:	FIGURE NO:
S. KOCH	RPT5-42	5-42
DRAWN BY:	FILE LOCATION:	DATE:
BY	Amaknak\30227	Aug 20, 01



FLOATING PUMPHOUSE AND ILIULIUK LAKE SITE LAYOUT AND 2000 ACTIVITIES AMAKNAK ISLAND, ALASKA

PROJ. MGR:	ACAD FILE NAME:	FIGURE NO:
S. KOCH	RPT5-43	5-43
DRAWN BY:	FILE LOCATION:	DATE:
BY	Amaknak\30227	Aug 20, 01

Permission to proceed with IRA activities was dependent upon FUDS eligibility determination and coordination with SHPO and their determination of the historical value of the structure. Thus, IRA activities did not take place.

The concern about contaminated lake-bottom debris was identified as a result of a community questionnaire response provided by Abi Woodbridge, a board member of the coastal resource service area (CRSA). Ms. Woodbridge had talked to some WWII veterans who told her they used to leave "stuff" in barrels on the winter ice for spring thaw. The term "stuff" was never defined. The community concerns were compiled by Jacobs as a result of a community questionnaire survey (USAED 1998b).

5.22.2 2000 Work Completed

Two sediment and two water samples were collected from both Iliuliuk Lake and Unalaska Lake on 9 September. The samples were collected using an inflatable 8-foot Zodiac® boat. The sediment samples were collected from the bottom of the lakes using a Ponar® dredge. The water samples were collected using a disposable bailer that was lowered to the bottom of the lake and allowed to fill. Figure 5-42 presents the sample locations for Unalaska Lake and Figure 5-43 presents the sample locations for Iliuliuk Lake.

The Unalaska Lake water and sediment samples were collected from the bottom of the lake at a north and south location approximately 75 feet apart (see Figure 5-42). While performing the sampling activities, the bottom of the shallow lake was visually inspected in an attempt to locate any drums or other WWII related debris. No evidence of drums or debris was noted. The water samples were collected first at both locations; the water was clear with no observed sheen or odor at both locations. Neither sample detected contaminants that exceeded regulatory criteria. The first sediment sample (north location) was collected from approximately six feet below the surface of the water and the second sediment sample (south location) was collected from approximately seven feet below the surface of the water. Both sediment samples were collected from dark fine-grained sands. One PAH parameter was detected in the north location above the conservative U.S. Environmental Protection Agency (EPA) Secondary Chronic Value regulatory criteria. DRO (which has no regulatory criteria in

sediment) detected in the south location appears to be partially attributed to biogenic interference. Table 5-44 lists the complete suite of analyses for each sediment sample and the sample results above detection limits, and Table 5-45 lists the complete suite of analyses for each surface water sample and the sample results above detection limits. A complete set of analytical results is included in Appendix D, and the chromatograms used to determine biogenic interference for the samples are included in Appendix H.

The Iliuliuk Lake water and sediment samples were collected from the bottom of the lake to the north and south of the submerged walkway to the floating pumphouse (see Figure 5-43). The water samples were collected first at both locations; the water was clear with no observed sheen or odor at both locations. Neither sample detected contaminants that exceeded regulatory criteria. The sediment samples were difficult to collect due to the amount of miscellaneous wood debris that litters the lake bottom in the vicinity of the floating pumphouse and interfered with the operation of the Ponar® dredge. The first sediment sample was collected north of the floating dock approximately eight feet below the surface of the water. The second sediment sample was collected south of the floating dock from approximately 20 feet below the surface of the water. Multiple PAH parameters were detected in the north sample above regulatory criteria, and one PAH parameter was detected in the south sample above regulatory criteria. Again, DRO (which has no regulatory criteria in sediment) detected in the north location appears to be partially attributed to biogenic interference. Table 5-44 lists the complete suite of analyses for each sediment sample and the sample results above detection limits, and Table 5-45 lists the complete suite of analyses for each surface water sample and the sample results above detection limits. A complete set of analytical results is included in Appendix D, and the chromatograms used to determine biogenic interference for the samples are included in Appendix H.

One soil sample was collected on 6 November from the base of the power pole located near the base of the dock on Iliuliuk Lake. The sample was collected from the shallow subsurface soil using hand tools. The sample was analyzed for PCBs to determine if a transformer previously located on the power pole leaked PCB oil. No PCBs were detected.

Table 5-44
Unalaska and Iliuliuk Lakes
Soil and Sediment Analytical Results Above Detection Limits

Parameter	Units	Screening Level[1]	Sample Results					
			AM-A500202	AM-A500302	AM-A500601	AM-A500602	AM-A500604	AM-A509603
Location	--	--	Iliuliuk Lake (north)	Iliuliuk Lake (south)	Unalaska Lake (north)	Unalaska Lake (FD for 500601)	Unalaska Lake (south)	Iliuliuk Lake Power Pole
Diesel Range Organics (AK102)	mg/kg	--	337 J	63.8 J	111 J	108 J	483 J	--
Residual Range Organics (AK103)	mg/kg	--	379 J	133 J	175 J	180 J	698 J	--
PCBs (SW8082)	mg/kg	--	No analytes detected	No analytes detected	No analytes detected	No analytes detected	No analytes detected	No analytes detected
PAH (SW8270C SIM)								
2-Methylnaphthalene	µg/kg	--	130	7.9	3.3	2.3	ND [2]	--
Acenaphthene	µg/kg	620	770	28	2.2	ND [1.8]	ND [2]	--
Acenaphthylene	µg/kg	--	14	2.5	ND [1.8]	ND [1.8]	ND [2]	--
Anthracene	µg/kg	220	930	48	11	6.7	ND [2]	--
Benzo(a)anthracene	µg/kg	110	1200	100	31	22	5	--
Benzo(a)pyrene	µg/kg	140	1000	66	25	21	7	--
Benzo(b)fluoranthene	µg/kg	27.2	1100	93	39	30	10	--
Benzo(g,h,i)perylene	µg/kg	290	510	43	26	20	12	--
Benzo(k)fluoranthene	µg/kg	240	250	22	9.4 J	6.4 J	4	--
Chrysene	µg/kg	500	1200	83	18 J	14 J	4.3	--
Dibenzo(a,h)anthracene	µg/kg	28.2	130	14	7.8	5.4	7	--
Fluoranthene	µg/kg	2,900	2000	190	74	54	9.6	--
Fluorene	µg/kg	540	520	22	4.9	3.2	ND [2]	--
Indeno(1,2,3-cd)pyrene	µg/kg	78	640	53	32	25	15	--
Naphthalene	µg/kg	480	67	4.6	3.6	2.8	ND [2]	--
Phenanthrene	µg/kg	850	3600	200	26	18	4.8	--
Pyrene	µg/kg	570	3600	270	72	59	12	--

[1]EPA Secondary Chronic Value. Values selected from Toxicological Criteria for Screening Contaminants of Potential Concern for Effects on Sediment Associated Biota: 1997 Revision.

J = Estimated value; see Appendix K for details.

Table 5-45
Unalaska and Iliuliuk Lakes Water Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results				
			AM-A500201	AM-A500301	AM-A500401	AM-A500402	AM-A500603
Location	--	--	Iliuliuk Lake (north)	Iliuliuk Lake (south)	Unalaska Lake (north)	Unalaska Lake (FD for 500401)	Unalaska Lake (south)
Diesel-range Organics (AK102)	µg/L	1,500	173 UB/RL	54.7 UB/RL	86.4 UB/RL	ND [100]	51.7 UB/RL
Residual-range Organics (AK103)	µg/L	1,100	282 UB/RL	76.4 UB/RL	35.7 UB/RL	ND [100]	ND [100]
PCBs (SW8082)	µg/L	--	No analytes detected	No analytes detected	No analytes detected	No analytes detected	No analytes detected
PAH (SW8270C SIM)	µg/L	--	No analytes detected	No analytes detected	No analytes detected	No analytes detected	No analytes detected

[1]18 AAC 70

UB/RL = Analyte detected in Method Blank; reported value is considered valid.

On 8 November, an inspection of the equipment still present at the floating pumphouse was conducted to determine which remaining components contained oil. After a thorough inspection, three medium sized pumps and associated machinery and one large size pump and associated machinery were identified. Only one of the pumps still contained oil. This oil, contained in the bearing oil housing, was subsequently drained into a 4-oz and 8-oz sample jar. The oil was noted to consist primarily of water. A chlor-n-oil™ field screening test was performed on the collected oil/water mix to determine if any PCBs were present. The test indicated that no PCBs were present. Therefore, due to the limited amount of collected sample and the screening indication that PCBs were not present, no samples were sent to the analytical laboratory.

5.22.3 Conclusions and Recommendations

Unalaska Lake is recommended for NFA. Although the north sample marginally exceeded the conservative EPA Secondary Chronic Value for one PAH parameter, it is impossible to determine what caused the low level exceedance. Contamination in the lake from previous military activities was suspected to have originated from drums dumped in the lake. While

sampling the lake, the bottom of the lake was visually inspected and no drums were discovered. Therefore, no further action is recommended for the lake.

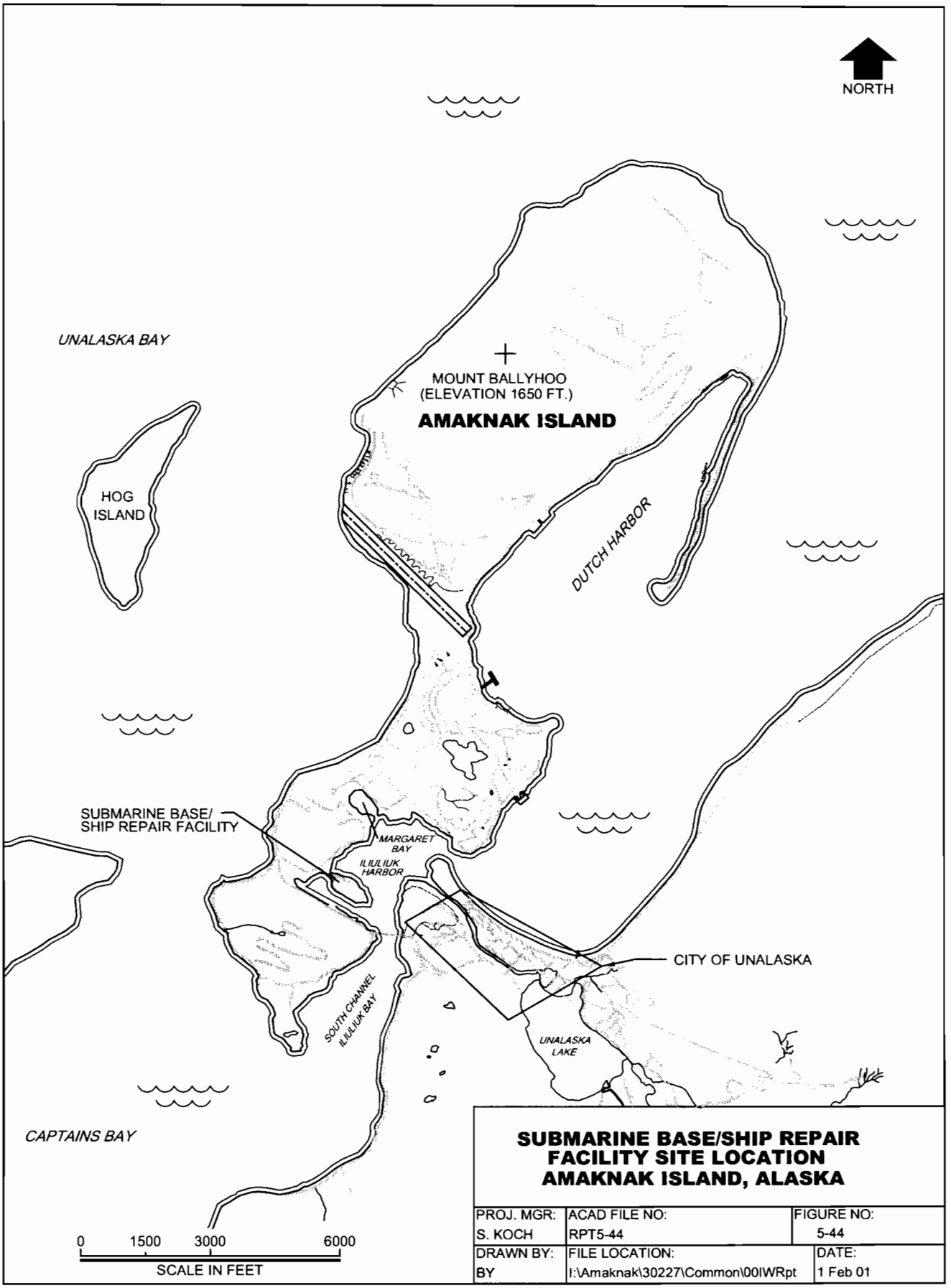
Additional sediment sampling on Iliuliuk Lake is recommended, particularly around the pumphouse (north side). It is recommended that a grid sampling regime be implemented for DRO and PAHs to define the area where screening criteria are exceeded.

No further action is recommended for the equipment on the floating pumphouse and the transformer pole situated near the floating pumphouse dock. Both areas were investigated and no evidence of PCBs or other contamination was identified.

5.23 SUBMARINE BASE/SHIP REPAIR FACILITY

The former Submarine Base/Ship Repair facility, commissioned in 1942, was located on and around a small peninsula known as Expedition Island, located on the Iliuliuk Harbor side of Amaknak Island between Margaret Bay and Little South America. Historical documents indicate that during WWII there were paint lockers, a power plant, boiler house, power substation, transformer house, gymnasium, battery shop, foundry, electrical warehouse, torpedo overhaul shop, ordnance shop, and other buildings in this area. After decommission in 1945, the area was left to deteriorate. In the late 1950s and early 1960s, portions of this area were leased to commercial developers. The site is presently occupied by Walashek Ship Repair, Unisea Inn, and Unisea seafood processing facilities. Most of the WWII-era structures have been removed and many new structures have been added during the past 20 years.

Previous investigations indicate the soils are typically large shot-rock overlying beach deposits. The soils were generally coarse with few fines to a depth of 11 feet bgs. Groundwater appears to be within the tidal influence zone at a depth of 8 to 11 feet bgs and flows to the southeast, towards Iliuliuk Harbor. Figure 5-44 presents the general site location and Figure 5-45 presents the site layout.



SUBMARINE BASE/SHIP REPAIR FACILITY SITE LOCATION AMAKNAK ISLAND, ALASKA

PROJ. MGR:	ACAD FILE NO:	FIGURE NO:
S. KOCH	RPT5-44	5-44
DRAWN BY:	FILE LOCATION:	DATE:
BY	I:\Amaknak\30227\Common\00IWRpt	1 Feb 01

NOTE:
FIGURE DOES NOT CONTAIN DATA VALIDATION QUALIFIERS. SEE APPENDIX K FOR QUALIFIERS.

MUNICIPAL WASTE WATER FACILITY THE BUNKHOUSE

DUTCH HARBOR MALL FORMER TRANSFORMER VAULT

924

948

921

947

969

959

951

1003

979

1002

MW-1

SB-05A

SB-05B

SBR4

SB-05

SB-06

MW-5

SB-02

SB-01

SB-07

METAL SHOP

MW-3

SB-05

MW-4

SB-03

MW-2

B6

READY-MIX CONCRETE PLANT

NC MACHINERY

509601 3.0'bgs soil 11/6/00
PCBs (Arochlor 1260) 0.523 mg/kg

509602 2.0'bgs (collected in steep cut bank) soil 11/6/00
PCBs ND

965

FLOATING DRY DOCK

DOCK

NORTH

LEGEND

- Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
- SB-05 — Approximate location of 1997 Monitoring Well
- SB-05 — Approximate location of 1997 Test Pit
- Existing Building
- Former Building

0 50 100 200
SCALE IN FEET

SUBMARINE BASE / SHIP REPAIR FACILITY SITE LAYOUT AMAKNAK ISLAND, ALASKA

PROJ. MGR:	ACAD FILE NO:	FIGURE NO:
S. KOCH	RPT5-45	5-45
DRAWN BY:	FILE LOCATION:	DATE:
BY	Amaknak\30227	Aug 20, 01

5.23.1 Previous Activities

Various IRA and RI activities were conducted at the site during 1996, 1997, and 1998. However, no investigations were specifically conducted at Building 965, a former transformer vault.

5.23.2 2000 Work Completed

A site investigation was performed at the former Submarine Base/Ship Repair facility. An approximate location of Building 965, the former transformer vault, was identified. No evidence of Building 965 remains at the site except for some rubble concrete that may have been the former foundation of the transformer vault. The area is currently strewn with miscellaneous debris consisting of timbers, scrap wood, and other discarded items. A refrigerator connex sits directly atop the suspected location of the former vault. Two soil samples were collected on 6 November from the area around the suspected transformer vault location. One sample was collected near the northeast corner of the former Building 965 and the other sample was collected from the steep cut bank immediately to the east of the former building. The samples were analyzed for PCBs to determine if the transformer vault previously leaked PCB oil onto the surrounding area. Both results were non-detect for PCBs except one sample detected Aroclor 1260 at 0.523 J mg/kg which is below the unrestricted land use regulatory concentration (1 mg/kg). Figure 5-45 presents the sample locations and the one PCB detection.

5.23.3 Conclusions and Recommendations

No further action is recommended for the former Submarine Base/Ship Repair facility site. No PCBs were detected above unrestricted land use cleanup levels in the vicinity of Building 965.

5.24 FORT MEARS LANDFILL (NORTH) AND GASOLINE STATION

The Fort Mears Landfill (North) is located on the north side of the intersection of Salmon Way and Airport Beach Road and between Airport Beach Road and Unalaska Bay. The Fort

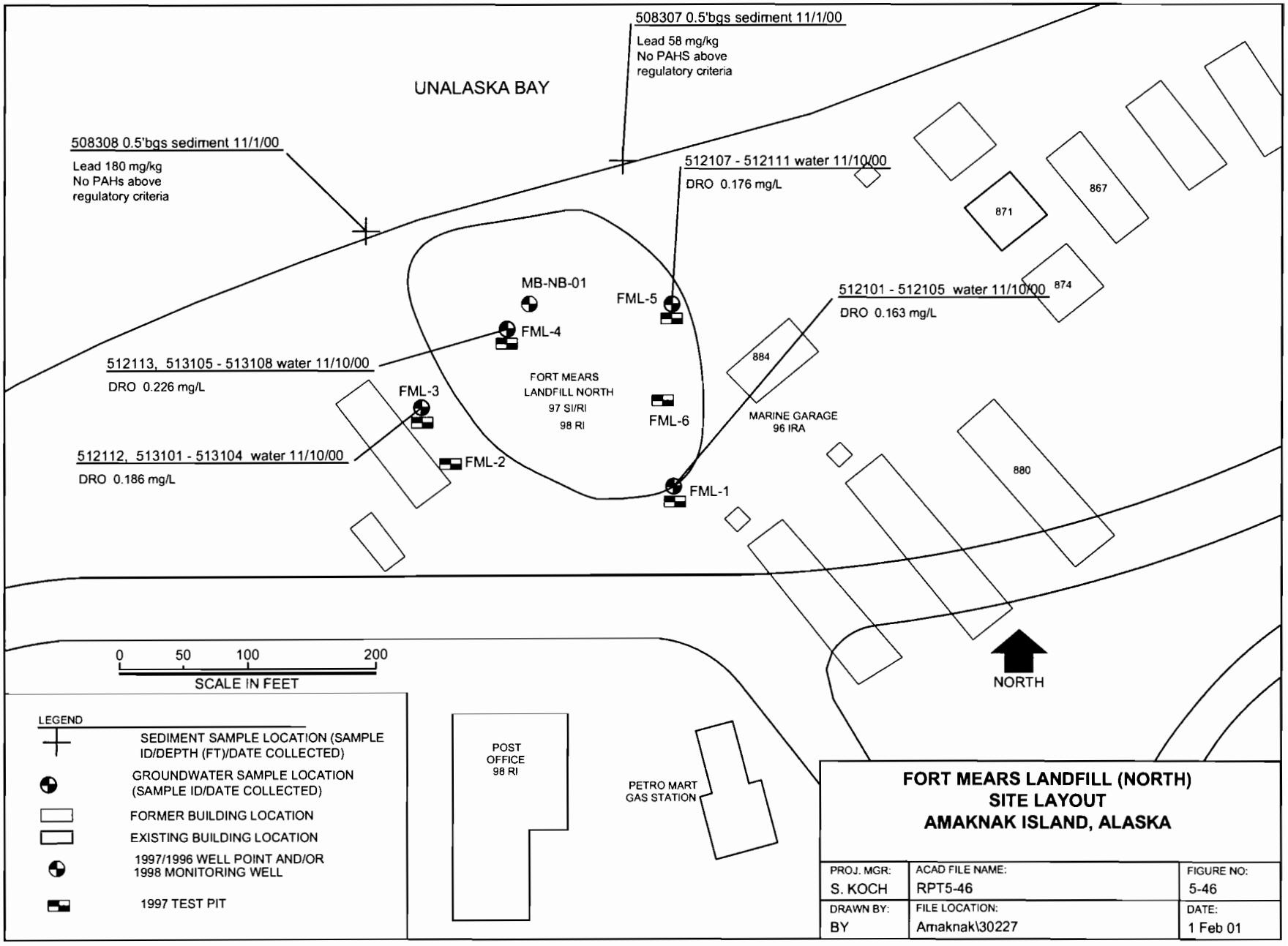
Mears Gasoline Station (FMGS) is located on the southwest side of Salmon Way between Airport Beach Road and Sea Lion Circle, approximately 100 feet south of the Dutch Harbor Post Office. See Figure 5-22 for the general site location and Figures 5-46 and 5-47 for the site layouts.

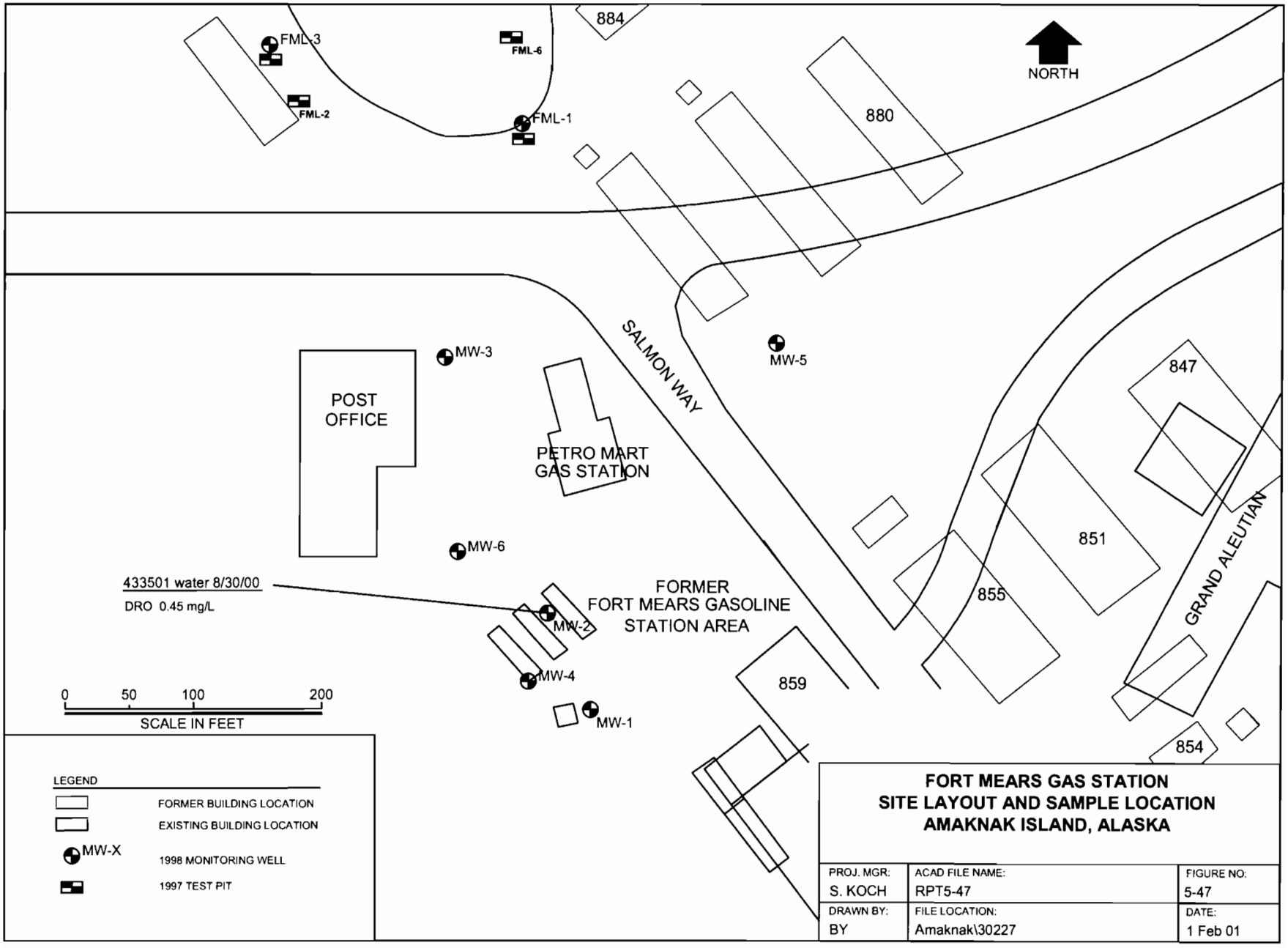
Building debris from the Fort Mears Army post was thought to have been placed in the Fort Mears Landfill (North) after the Japanese bombing in 1942. The landfill area is currently covered by irregular and sparse vegetation. Recent reports from the local community indicate that solid waste may extend out into the bay (USAED 1999). During initial reconnaissance in 1997, several old pits or excavations up to five feet in depth were observed. Remnants of two USTs were partially exposed at one of the former excavations. No seeps were observed along the shoreline below the landfill. Beach deposits consisted of cobbles and boulders, with sands and gravels present below the exposed beach surface. During low tide, a variety of marine plants and invertebrates were observed downgradient of the North Landfill.

The FMGS is partly covered with asphalt and is part of the AC Value Center parking lot. A large bedrock knoll separates this site from Sea Lion Circle. To the east of the knoll is an unpaved area that is sparsely vegetated and has a gravel surface. The FMGS was used to dispense gasoline and diesel fuel for motor vehicles. Fuel was stored in one diesel UST and nine gasoline USTs.

5.24.1 Previous Remedial/Removal Activities

Investigations conducted at the FMGS and the Fort Mears Landfill (North) under the USAED were performed in 1996, 1997, and 1998. Activities included UST removals and contaminated soil excavations, soil borings and associated soil sampling, monitoring well installation, and groundwater sampling.


508307 0.5'bgs sediment 11/1/00
Lead 58 mg/kg
No PAHS above
regulatory criteria
UNALASKA BAY
508308 0.5'bgs sediment 11/1/00
Lead 180 mg/kg
No PAHs above
regulatory criteria
512107 - 512111 water 11/10/00
DRO 0.176 mg/L
867
871
874
MB-NB-01
FML-5
FML-4
512101 - 512105 water 11/10/00
DRO 0.163 mg/L
512113, 513105 - 513108 water 11/10/00
DRO 0.226 mg/L
884
FML-3
FORT MEARS
LANDFILL NORTH
97 SI/RI
98 RI
FML-6
MARINE GARAGE
96 IRA
512112, 513101 - 513104 water 11/10/00
DRO 0.186 mg/L
FML-2
880
FML-1
0 50 100 200
SCALE IN FEET
NORTH
LEGEND
SEDIMENT SAMPLE LOCATION (SAMPLE ID/DEPTH (FT)/DATE COLLECTED)
GROUNDWATER SAMPLE LOCATION (SAMPLE ID/DATE COLLECTED)
FORMER BUILDING LOCATION
EXISTING BUILDING LOCATION
1997/1996 WELL POINT AND/OR 1998 MONITORING WELL
1997 TEST PIT
POST OFFICE 98 RI
PETRO MART GAS STATION
FORT MEARS LANDFILL (NORTH)
SITE LAYOUT
AMAKNAK ISLAND, ALASKA
PROJ. MGR: S. KOCH
ACAD FILE NAME: RPT5-46
FIGURE NO: 5-46
DRAWN BY: BY
FILE LOCATION: Amaknak\30227
DATE: 1 Feb 01


FML-3
FML-6
FML-2
FML-1
884
NORTH
880
MW-3
POST
OFFICE
SALMON WAY
MW-5
847
PETRO MART
GAS STATION
MW-6
851
433501 water 8/30/00
DRO 0.45 mg/L
FORMER
FORT MEARS GASOLINE
STATION AREA
855
GRAND ALEUTIAN
MW-2
MW-4
859
0 50 100 200
SCALE IN FEET
MW-1
854
LEGEND
FORMER BUILDING LOCATION
EXISTING BUILDING LOCATION
MW-X
1998 MONITORING WELL
1997 TEST PIT
FORT MEARS GAS STATION
SITE LAYOUT AND SAMPLE LOCATION
AMAKNAK ISLAND, ALASKA
PROJ. MGR: S. KOCH
ACAD FILE NAME: RPT5-47
FIGURE NO: 5-47
DRAWN BY: BY
FILE LOCATION: Amaknak\30227
DATE: 1 Feb 01

Five monitoring points were installed at the Fort Mears Landfill (North) in 1996 and 1997. Groundwater samples were collected from the well points in 1997 and 1998; results showed low concentrations of VOCs and metals in the groundwater. In addition, visual shoreline surveys, focusing on the identification of groundwater seeps and apparent impacts to marine organisms, were completed in 1997. A groundwater level study was also conducted in 1997 to determine the tidal effects on the groundwater in the vicinity during a tidal cycle.

In 1996, ten USTs were removed at the FMGS site. A total of 2,950 cy of petroleum-contaminated soil from the excavation was removed and treated. Analytical results of remaining soil showed elevated concentrations of GRO, DRO, and lead at the FMGS site. In 1998, six soil borings were drilled and converted to monitoring wells. The locations of the borings and monitoring wells were based on determining the contaminant concentrations in the soil and the groundwater; evaluating the horizontal extent of soil contamination; and determining the groundwater flow direction, gradient, and the effect of tidal changes on groundwater elevation and flow direction. During well development, it was noted that purge water from FMGS-MW2 (located near the former UST area) exhibited a strong fuel odor and had a visible sheen. Analytical results indicate that concentrations of DRO were present in site groundwater; however, no other contaminants were detected. See Figure 5-47 for the monitoring well locations.

5.24.2 2000 Work Completed

Groundwater samples were collected on 10 November from four Fort Mears Landfill (North) well points and on 30 August from one FMGS monitoring well (FMGS-MW2). The groundwater at the Fort Mears Landfill (North) and FMGS was collected after purging the wells and stabilizing the field parameters. The water in all the wells was clear with no apparent sheen or odor. No contaminants were detected in FMGS-MW2 that exceeded regulatory criteria. However, arsenic concentrations at FML-4 and FML-5 exceeded regulatory criteria and marginally exceeded the accepted background concentrations contained in the Comprehensive RI Report (USAED 2000a), and selenium exceeded regulatory criteria and background concentrations contained in the Comprehensive RI Report (USAED 2000a) at all the FML wells. However, as discussed in Section 3.2.2, the Fort Mears

Landfill (North) site groundwater is subject to seawater intrusion; therefore, the developable freshwater lens will be relatively thin. Any extraction of groundwater from the area would increase the potential for seawater intrusion by reducing the local freshwater head. The potential for hydraulic connection between groundwater in unconsolidated coastal materials and that in underlying bedrock is unknown. See Appendix E for the groundwater field sampling forms.

Two sediment samples were collected on 1 November from the Fort Mears Landfill (North) site. The samples were collected using hand tools from an area below the high tide mark during a low tide period. Both samples detected lead above regulatory criteria and accepted background concentrations contained in the Comprehensive RI Report (USAED 2000a), and the west sample detected arsenic above regulatory criteria but below accepted background concentrations

Figures 5-46 and 5-47 present the sample locations. Table 5-46 lists the complete suite of analyses and groundwater sample results above detection limits. Table 5-47 lists the complete suite of analyses and groundwater sample results above detection limits. A complete set of analytical results is included in Appendix D.

5.24.3 Conclusions and Recommendations

No further action is recommended for the former Fort Mears Gas Station site; no contaminants were detected above regulatory criteria. FMGS-MW2 is recommended for decommissioning.

Limited further action is recommended for the Fort Mears Landfill (North) site. The arsenic (two samples) and selenium (four samples) concentrations detected in the groundwater exceed the groundwater cleanup levels. In addition, the arsenic in the sediment at one location was marginally above regulatory criteria but below background concentrations, and selenium was not detected in both sediment samples. Therefore, additional groundwater sampling is recommended to confirm the previous results for both arsenic and selenium. Due to the lead exceedances in the beach sediment samples, it is also recommended that another round of

Table 5-46
Fort Mears Landfill (North) and Fort Mears Gas Station MW-2 Groundwater Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results				
			AM-A512101 thru 512105	AM-A512112, AM-A513101 thru AM-A513104	AM-A512113, AM-A513105 thru AM-A513108	AM-A512107 thru 512111	AM-A433501
Location	--	--	FML-1	FML-3	FML-4	FML-5	Fort Mears Gas Station MW-2
Diesel-range Organics (AK102)	mg/L	1.5	0.163 J, UB/RL	0.186	0.226	0.176 J, UB/RL	0.45
Residual-range Organics (AK103)	mg/L	1.1	ND [0.505]	ND [0.521]	1.06	0.515	0.171
Metals (SW6010, SW6010B, SW7471A)							
Arsenic	µg/L	50	46	46.5	75.9	89.7	ND [5]
Barium	µg/L	2,000	5.08 J	5.9	26	11.7	13
Cadmium	µg/L	5	ND [1.11]	ND [1.11]	ND [1.11]	ND [1.11]	0.254
Chromium	µg/L	100	ND [22.2]	ND [22.2]	ND [22.2]	ND [22.2]	0.365
Lead	µg/L	15	ND [13.9]	ND [13.9]	ND [13.9]	ND [13.9]	ND [3]
Selenium	µg/L	50	169	169	273	324	ND [5]
Silver	µg/L	180	ND [4.44]	ND [4.44]	ND [4.44]	ND [4.44]	ND [10]
Mercury	mg/L	0.002	ND [0.0002]	ND [0.0002]	ND [0.0002]	ND [0.0002]	ND [0.1]
PCBs (SW8082)							
PCB-1254 (Aroclor 1254)	µg/L	0.5	0.386	ND [0.0909]	ND [0.0909]	ND [0.0909]	--
PAH (SW8270C SIM)							
Benzo(a)anthracene	µg/L	1.0	0.0298 J	ND [0.0455]	0.0212	ND [0.0455]	ND [0.05]
Benzo(b)fluoranthene	µg/L	1.0	0.0501	ND [0.0455]	ND [0.0455]	ND [0.0455]	ND [0.05]
Benzo(g,h,i)perylene	µg/L	--	0.0294 J	ND [0.0455]	ND [0.0455]	ND [0.0455]	ND [0.05]
Benzo(k)fluoranthene	µg/L	10	0.0546 UB/RL	ND [0.0455]	ND [0.0455]	ND [0.0455]	ND [0.05]
Chrysene	µg/L	100	0.025 J	ND [0.0455]	ND [0.0455]	ND [0.0455]	ND [0.05]
Volatile Organic Compounds (SW8260B)							
Methylene chloride	mg/L	0.005	ND [0.005]	ND [0.005]	ND [0.005]	ND [0.005]	0.00049
Tetrachloroethene	mg/L	0.005	ND [0.001]	ND [0.001]	ND [0.001]	0.0009	ND [0.005]
Trichloroethene	mg/L	0.005	ND [0.001]	ND [0.001]	0.0004	ND [0.001]	ND [0.005]
cis-1,2-Dichloroethene	mg/L	0.07	ND [0.001]	ND [0.001]	0.0006	ND [0.001]	ND [5]
Acetone	mg/L	3.65	--	--	--	--	0.0068

[1]18 AAC 75, Table C.
J = Estimated value; see Appendix K for details
UB/RL = Analyte detected in Method Blank; reported value is considered valid.

Table 5-47
Fort Mears Landfill (North) Sediment Analytical Results Above Detection Limits

Parameter	Units	Screening Level[1]	Sample Results	
			AM-A508307	AM-A508308
Location	--	--	East sediment	West sediment
Diesel-range Organics (AK102)	mg/kg	--	3.71	4.54
Residual-range Organics (AK103)	mg/kg	--	23.5	23.1
Metals (SW6010, SW6010B, SW7471A)				
Arsenic	mg/kg	8.2	5.6	8.7
Cadmium	mg/kg	1.2	ND [0.21]	ND [0.21]
Lead	mg/kg	46.7	58	180
Selenium	mg/kg	--	ND [0.53]	ND [0.52]
Barium	mg/kg	48,000	9	4.2
Chromium	mg/kg	81	8.8	19
Silver	mg/kg	1.0	ND [1.1]	ND [1]
PAH (SW8270C SIM)				
Benzo(b)fluoranthene	µg/kg	1,800	ND [1.8]	2.2
Chrysene	µg/kg	384	ND [1.8]	2.3
Fluoranthene	µg/kg	600	ND [1.8]	3.2
Phenanthrene	µg/kg	240	2.2	ND [1.8]
Pyrene	µg/kg	665	ND [1.8]	3.2
Volatile Organic Compounds (SW8260B)				
Carbon tetrachloride	µg/kg	--	ND [11]	18
Chloroform	µg/kg	--	ND [11]	21
Methylene chloride	µg/kg	370	ND [11]	13
Toluene	µg/kg	--	15	270

[1]Guideline is based on NOAA Effects Range-Low values. Guidelines selected from Toxicological Criteria for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision.

sediment samples be collected to confirm the 2000 results. Samples should also be collected to the east of the site to determine sediment background lead levels in the immediate vicinity. Because lead was not detected in the Fort Mears Landfill (north) monitoring wells, it is believed the lead detected in the beach sediment was a sampling anomaly or reflect naturally occurring background levels.

5.25 CROWLEY DOCK

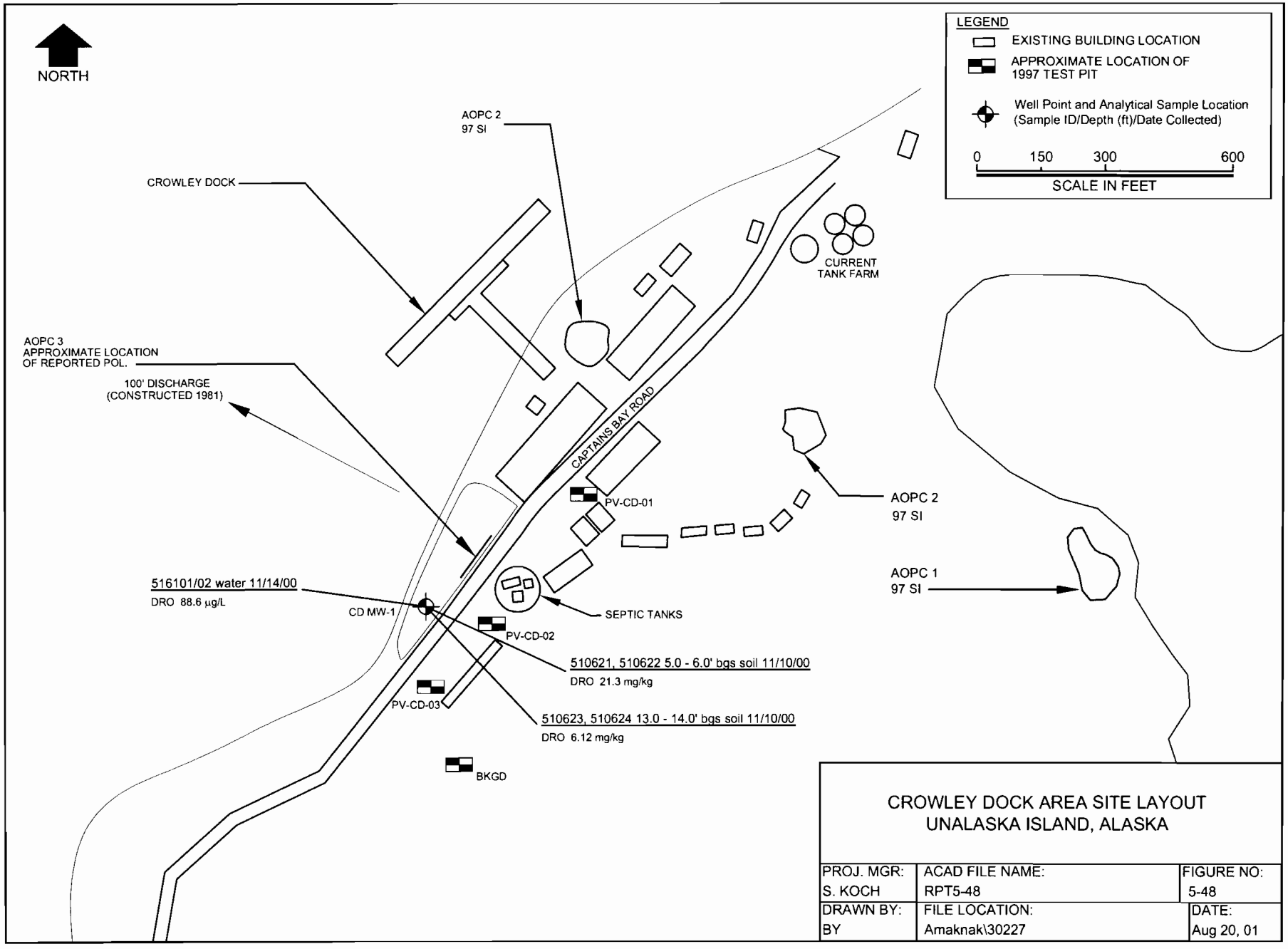
The Crowley Dock site is located along the southeast shore of Captains Bay on Unalaska Island at the mouth of Pyramid Creek. The Crowley Dock area is considered part of the Pyramid Valley area. Crowley Maritime, Inc. owns and operates the dock area near Iay Creek. Current structures include various buildings and a tank farm. Figure 5-48 presents the site layout.

5.25.1 Previous Remedial/Removal Activities

Three AOPCs were investigated in the Crowley Dock area in 1997. AOPC 1 consisted of a pile of debris located on the slopes to the east of the dock area near Icy Creek. The second AOPC consisted of two potential areas of soil staining noted near buildings in the Crowley Dock area. The third Crowley Dock AOPC was an area where POL was reported during excavation activities along the Captains Bay Road. No further action was recommended for AOPC 1 and 2.

At AOPC 3, Bunker C oil was reported to be at 5 to 8 feet bgs on the western side of Captains Bay Road, just south of the main dock. The City of Unalaska Department of Public Works crew encountered the oil while installing utility lines for renovation of the Crowley Dock facility in 1988. A septic tank was also installed on the eastern side and a leach field was constructed on the western side of Captains Bay Road. Crowley Marine Services personnel were involved with the septic tank and leach field installation work and did not recall encountering oil in the subsurface.

Three test pits were dug in 1997 east of Captains Bay Road to determine if POL contamination was present at the site. The test pits were not dug on the west side of Captains Bay Road due to the presence of utilities and the leach field. A fourth test pit was dug approximately 250 south of the test pits to document background conditions. Soil and groundwater samples were collected from the test pits. None of the samples exceeded their respective regulatory criteria or background concentrations.


NORTH
LEGEND
EXISTING BUILDING LOCATION
APPROXIMATE LOCATION OF 1997 TEST PIT
Well Point and Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)
0 150 300 600
SCALE IN FEET
AOPC 2 97 SI
CROWLEY DOCK
CURRENT TANK FARM
AOPC 3 APPROXIMATE LOCATION OF REPORTED POL.
100' DISCHARGE (CONSTRUCTED 1981)
CAPTAINS BAY ROAD
PV-CD-01
AOPC 2 97 SI
AOPC 1 97 SI
516101/02 water 11/14/00
DRO 88.6 µg/L
CD MW-1
SEPTIC TANKS
PV-CD-02
510621, 510622 5.0 - 6.0' bgs soil 11/10/00
DRO 21.3 mg/kg
PV-CD-03
510623, 510624 13.0 - 14.0' bgs soil 11/10/00
DRO 6.12 mg/kg
BKGD
CROWLEY DOCK AREA SITE LAYOUT
UNALASKA ISLAND, ALASKA
PROJ. MGR: S. KOCH
ACAD FILE NAME: RPT5-48
FIGURE NO: 5-48
DRAWN BY: BY
FILE LOCATION: Amaknak\30227
DATE: Aug 20, 01

Another area of concern was identified in a community questionnaire. A respondent indicated that there are discarded 55-gallon drums in the "gullies" in the Crowley Dock area.

5.25.2 2000 Work Completed

One soil boring was drilled at Crowley Dock to determine if the subsurface soil is contaminated with Bunker C oil as previously reported. The boring was drilled on 10 November and was advanced to 14 feet below ground surface (bgs); groundwater was encountered at 7 feet bgs. Due to the presence of a leach field at the site, the soil bring was positioned as close as possible to the suspected area of potential contamination. No contamination was encountered in the soil boring. A monitoring well (CD MW-1) was installed in the boring so that the groundwater could be sampled. Protective bollards were placed around the monitoring well. Figure 5-48 presents the location of the soil boring. Appendix C presents the soil boring exploration and monitoring well log.

No drums were discovered during a site investigation that was conducted in an attempt to locate the discarded 55-gallon drums in the "gullies" surrounding the Crowley Dock area.

5.25.2.1 Analytical Results

Two soil analytical samples were collected on 10 November at 5 to 6 and 13 to 14 feet bgs from CD-MW1. A groundwater sample was also collected from CD-MW1 on 14 November after purging the well and stabilizing the field parameters. A hydrocarbon sheen was noted on the groundwater while purging the well prior to sampling. Table 5-48 lists the complete suite of analyses for each soil sample and the sample results above detection limits. Table 5-49 lists the complete suite of analyses for the groundwater sample and the sample results above detection limits.

Table 5-48
Crowley Dock Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results	
			AM-A510621 and 510622	AM-A510623 and 510624
Location	--	--	CD-MW1, 5-6' bgs	CD-MW1, 13-14' bgs
Diesel-range Organics (AK102)	mg/kg	230	21.3	6.12
Residual-range Organics (AK103)	mg/kg	8300	77.7	12
PAH (SW8270C SIM)				
Acenaphthene	µg/kg	190,000	ND [4.38]	24.3
Anthracene	µg/kg	3,900,000	4.85	19.8
Benzo(a)anthracene	µg/kg	5,500	13.3	19
Benzo(a)pyrene	µg/kg	900	9.09	7.05
Benzo(b)fluoranthene	µg/kg	9,000	37.9	20.3
Benzo(g,h,i)perylene	µg/kg	--	8.14	3.65
Chrysene	µg/kg	550,000	29.7	15.5
Dibenzo(a,h)anthracene	µg/kg	900	ND [4.38]	1.29
Fluoranthene	µg/kg	1,900,000	26.8	75.5
Fluorene	µg/kg	240,000	ND [4.38]	32.6
Indeno(1,2,3-cd)pyrene	µg/kg	9,000	7.4	3.26
Naphthalene	µg/kg	38,000	3.39	12.9
Phenanthrene	µg/kg	--	12.1	89
Pyrene	µg/kg	1,400,000	24.6	57.7
Volatile Organic Compounds (SW8260B)				
2-Butanone	µg/kg	--	210	ND [170]

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.

Table 5-49
Crowley Dock Groundwater Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results
			AM-A516101 and 516102
Location	--	--	CD-MW1, 5-6' bgs
Diesel-range Organics (AK102)	µg/L	1,500	88.6
Residual-range Organics (AK103)	µg/L	1,100	498
PAH (SW8270C SIM)			
2-Methylnaphthalene	µg/L	--	0.079
Naphthalene	µg/L	1,460	0.052

[1]18 AAC 75, Table C for groundwater. Surface water regulatory criteria, contained in 18 AAC 70, includes total aromatic hydrocarbons (TAH) levels not to exceed 10 µg/L and total aqueous hydrocarbons (TAqH) levels not to exceed 15 µg/L. TAH is calculated by summing concentrations of BTEX analyte concentrations, and TAqH is calculated by summing concentrations of BTEX and PAH analytes.

5.25.3 Conclusions and Recommendations

No further action is recommended for the Crowley Dock area. No contaminants were detected in soil that exceeded regulatory criteria or groundwater samples that exceeded 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels.

5.26 MILITARY FUEL DISTRIBUTION CENTER – BLDG 638

The former military fuel distribution center (Building 638) was part of the Fort Mears Army Garrison. The building, located across Biorka Drive from the former public works maintenance garage (Building 484), is believed to have been an administration center for fueling operations. Figure 5-22 presents the general site location.

5.26.1 Previous Activities

A preliminary assessment was conducted at the site in 1996.

5.26.2 2000 Work Completed

A site investigation was conducted at the former Military Fuel Distribution Center to confirm or deny the presence of underground pipelines entering/leaving the former building and to

collect sufficient documentation to determine if further action is warranted and be able to accurately relocate the site in the future. No evidence of the building or foundation was observed at the site. Short cut-off sections of 6- and 8-inch steel pipe were observed in adjacent berms. Interviews with contractors that performed work in the area in the 70's through 90's indicated that all debris and pipelines in the vicinity of the former Military Fuel Distribution Center was removed. The area has recently been covered with two feet of clean fill and is currently used as a Kard-Lok® gas station with a 5,000 gallon petroleum tank. Photographs documenting the site conditions are included in Appendix A, and GPS coordinates for the site are included in Appendix G.

5.26.3 Conclusions and Recommendations

Based on the findings of the site investigation, no further action at the former Military Fuel Distribution Center is recommended.

5.27 FORMER POWER HOUSE BUILDING – BLDG 854

The former power house building (Building 854), identified in the 1944 map of the NOB as a former transformer building adjacent to Building 860, was located immediately adjacent to the southwest corner of the Grand Aleutian Hotel. Figure 5-22 presents the general site location.

5.27.1 Previous Activities

A preliminary assessment and limited remedial investigation were conducted at the site in 1996.

5.27.2 2000 Work Completed

A site investigation was conducted at the former power house building to collect sufficient documentation to determine if further action is required and be able to accurately relocate the site in the future. The site is currently the service entrance and rear driveway for the Grand Aleutian Hotel; no evidence of the building foundation remains. During construction of the Grand Aleutian, the area was covered with approximately five feet of clean fill and capped

with asphalt. Photographs documenting the site conditions are included in Appendix A, and GPS coordinates for the site are included in Appendix G.

5.27.3 Conclusions and Recommendations

Based on the findings of the site investigation, no further action at the former power house building is recommended.

5.28 FORMER PEST CONTROL SHOP – BLDG 852, AND FORMER PAINT SHOP – BLDG 751

The former pest control shop (Building 852), identified in the 1944 map of the NOB, was located immediately north of the former power house building (Building 854) and partially underneath the northwest corner of the existing Grand Aleutian Hotel. Figure 5-22 presents the general site location.

The former paint shop (Building 751) was located approximately 50 feet north of the northwest corner of the existing Eagle Quality Center, as depicted on the 30 June 1944 map. Figure 5-22 presents the general site location.

5.28.1 Previous Activities

A preliminary assessment and limited remedial investigation was conducted at the sites in 1996.

5.28.2 2000 Work Completed

Site investigations were conducted at the former pest control shop and paint shop to collect sufficient documentation to determine if further actions are required and be able to accurately relocate the sites in the future. The former pest control shop was immediately adjacent to the former power house building (see Section 5.27.2). A new shed is currently located in the area and is used for propane tank storage. No evidence of the building foundation remains because the area was covered with approximately five of clean fill and capped with asphalt during the construction of the Grand Aleutian Hotel. The former paint shop is located in the Eagle

asphalt parking lot; therefore, no evidence of the building foundation remains because the area is capped with clean fill and asphalt. Photographs documenting the site conditions are included in Appendix A, and GPS coordinates for the site are included in Appendix G.

5.28.3 Conclusions and Recommendations

Based on the findings of the site investigation, no further action at the former pest control shop and the former paint shop is recommended.

5.29 FORMER REFRIGERATION MAINTENANCE SHOP – BLDG 871

The former refrigeration maintenance shop (Building 871), identified in the 1944 map of the NOB, was located approximately 200 feet east of the Fort Mears Landfill (North) along the Unalaska Bay shoreline. Figure 5-22 presents the general site location.

5.29.1 Previous Activities

The UST associated with the former refrigeration maintenance shop was removed in 1996 (USAED 1998b). Soil analytical results indicated that residual contamination did not remain at the site after tank removal.

5.29.2 2000 Work Completed

A site investigation was conducted at the former refrigeration maintenance shop to collect sufficient documentation to determine if further action is required and be able to accurately relocate the site in the future. The 25 foot by 60 foot building foundation is still present at the site. A four inch cast iron drain was noted immediately north of the slab center point and a 1.5 inch galvanized pipe was noted on the adjacent edge of the foundation. Because the drain is located close to the center of the foundation, it is impossible to tell if the outlet of the drain is a sump or gravel bed without destroying the foundation. The galvanized pipe is assumed to be a former water line. The immediate area surrounding the foundation was investigated and no drain outlets or stained soil was noted. Photographs documenting the site conditions are included in Appendix A, and GPS coordinates for the site are included in Appendix G.

5.29.3 Conclusions and Recommendations

Based on the findings of the site investigation, no further action at the former refrigeration maintenance shop (Building 871) is recommended.

5.30 FORMER LAUNDRY FACILITY – BLDG 727

The former laundry facility (Building 727), identified in the 1944 map of the NOB, was located approximately 150 feet southeast of the Eagle Quality Center on the west side of Eastpoint Loop Road. Figure 5-22 presents the general site location.

5.30.1 Previous Activities

A preliminary assessment and limited remedial investigation was conducted at the site in 1996.

5.30.2 2000 Work Completed

A site investigation was conducted at the former laundry facility. Although building foundations surrounding the former laundry facility are no longer visible, the outline of the former building foundation is still present. A sump in the northeast corner of the foundation is assumed to have led to the old sewer system. Attempts to trace several pipes in the foundation were unsuccessful due to assumed rebar interties. A few galvanized pipes in the soil surrounding the foundation were traced, but none connected to the building foundation. Three test pits were dug along the edge of the foundation in an attempt to find contamination from previous activities. The test pits were dug along the southeast, south, and southwest sides of the foundation. No evidence of contamination was encountered (i.e., stained soil, floor drains, pipelines, tanks, utility lines, etc.). Photographs documenting the site conditions are included in Appendix A, and GPS coordinates for the site are included in Appendix G.

5.30.3 Conclusions and Recommendations

Based on the findings of the site investigation and the absence of contamination found in the three test pits, no further action is recommended for the former laundry facility (Building 727).

5.31 VARIOUS BUILDINGS AT THE SUBMARINE BASE

The former Submarine Base/Ship Repair Facility, commissioned in 1942, was located on and around a small peninsula known as Expedition Island, located on the Iliuliuk Harbor side of Amaknak Island between Margaret Bay and Little South America. Historical documents indicate that during WWII there were paint lockers, a power plant, boiler house, power substation, transformer house, gymnasium, battery shop, foundry, electrical warehouse, torpedo overhaul shop, ordnance shop, and other buildings in this area. After decommission in 1945, the area was left to deteriorate. In the late 1950s and early 1960s, portions of this area were leased to commercial developers. The site is presently occupied by Walashek Ship Repair, Unisea Inn, and Unisea seafood processing facilities. Most of the WWII-era structures have been removed and many new structures have been added during the past 20 years. Figure 5-44 presents the general site location, and Figure 5-45 presents the site layout.

5.31.1 Previous Activities

Various IRA and RI activities were conducted at the site during 1996, 1997, and 1998.

5.31.2 2000 Work Completed

A site investigation was conducted at the former Submarine Base/Ship Repair Facility to collect sufficient documentation to determine if further action is required and be able to accurately relocate the individual sites in the future. The locations of 16 former buildings were determined by reviewing microfiche documents archived by the OC and the Museum of the Aleutians. The 16 buildings were visited and the current conditions at each of the 16 sites were photo documented.

Only two of the buildings that formerly comprised the Submarine Base/Ship Repair Facility remain. Building 959, the former ship repair building and marine railway, is still in use by the current lessee, Walashek Shipyards. The building is virtually intact as originally constructed with upgrades to the interior of the structure to include apartments and offices. Building 969 is still in use by several retailers on the ground floor (i.e., appliance repair shop, restaurant, and ship supply store) and tenants in apartments on the second floor. The building underwent major repairs in 1988 when the roof was torn off by a November storm.

The foundations of Buildings 965 (former transformer vault and power distribution building) and 955 (former recreation hall) are still visible. The foundation of Building 965 is not intact; however, some rubble concrete that is assumed to be the former foundation is visible amid a pile of miscellaneous debris. The foundation of Building 955 is intact and is currently used as a storage pad for a small wooden boat (the Hu Sun K).

While the foundation for the former Building 1002 (former Galley) is not intact, the bulldozed pile of debris along the north face of Hill 400 adjacent to the existing Cement Batch Plant is assumed to be the remains of the former building.

No evidence of the other 11 former buildings remain at the former Submarine Base/Ship Repair Facility. No evidence of contamination was encountered at any of the sites except for reports of potential contamination at the former Building 965 which is addressed in Section 5.23. Photographs documenting the site conditions at each of the 16 former buildings are included in Appendix A, and GPS coordinates for the site are included in Appendix G.

5.31.3 Conclusions and Recommendations

Based on the findings of the site investigation, no further action is recommended for the 16 former buildings at the former Submarine Base/Ship Repair Facility, including Building 965, which is addressed separately in Section 5.23.

5.32 SUSPECTED MERCURY CONTAMINATION AT THE AIRPORT

The "old shop" and "old control tower" are suspected to have potential mercury contamination. These sites were located near the south end of the current runway. Figure 5-49 presents the general site location.

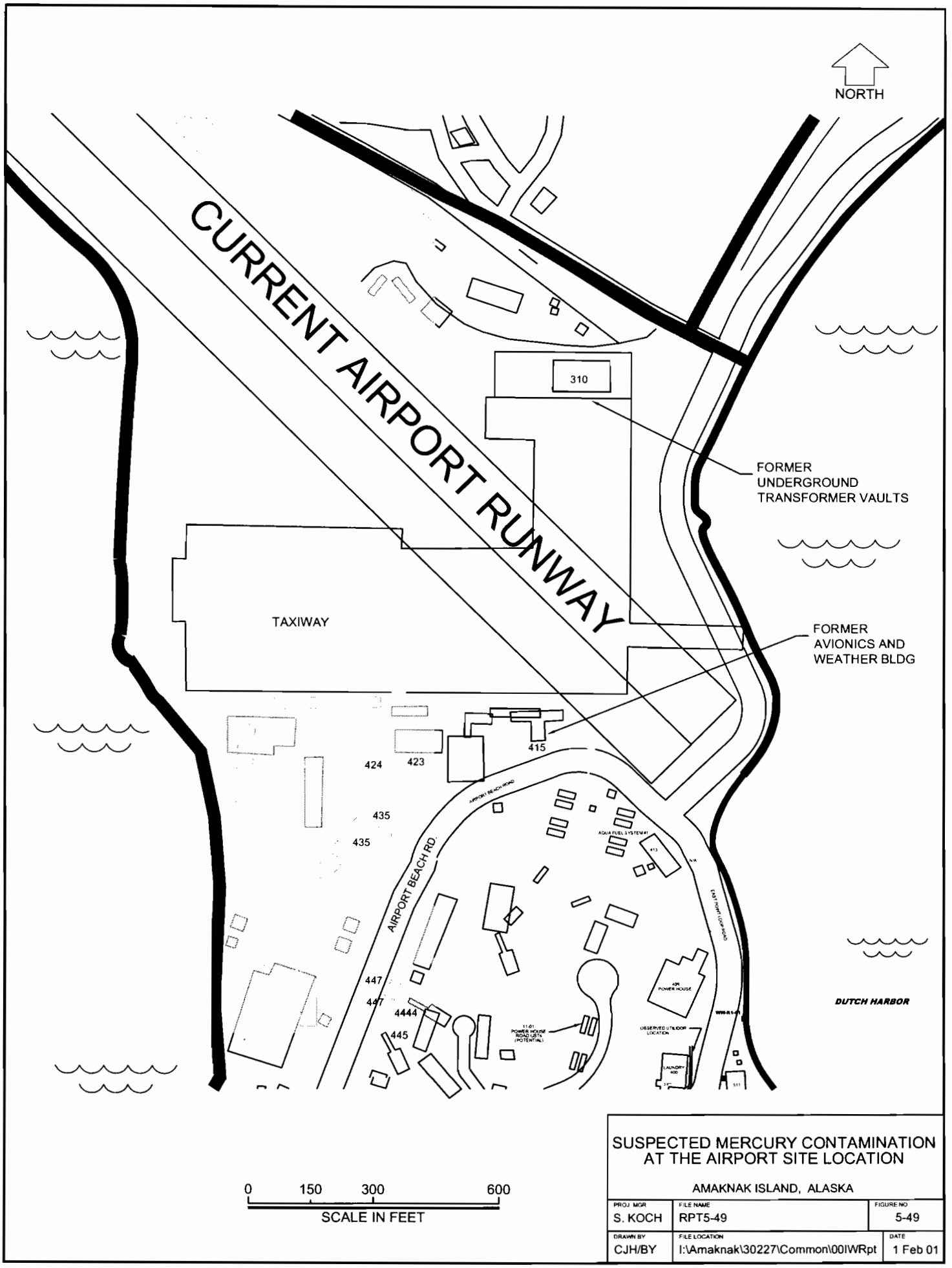
5.32.1 Previous Activities

A preliminary assessment was conducted at the site in 1993.

5.32.2 2000 Work Completed

A site investigation was conducted at the former Avionics Weather Building, which is assumed to be the "old shop," located adjacent to the former Aerology Building. The Aerology Building was originally suspected to contain the potential mercury contamination because it was suspected to house the weather station shop. However, a review of the building blueprints, which are being used to renovate the structure, did not reveal evidence of a weather station being located in the Aerology Building.

A WWII photograph showing a PB4Y-2 (bomber) being repaired at a building adjacent to the former Aerology Building led to a review of archival maps to determine the use of former buildings surrounding the Aerology Building. The review resulted in identifying the Avionics Weather Building. Although the former Avionics Weather Building is not currently standing, the foundation remains. An investigation of the area surrounding the foundation discovered a floor drain in the center of the foundation. An analytical soil sample was collected from the floor drain and analyzed for mercury. The laboratory results indicate that mercury is present at the site at concentrations that exceed regulatory criteria. Mercury was detected at 1.41 mg/kg which exceeds the regulatory criteria of 1.24 mg/kg. Photographs documenting the site conditions are included in Appendix A, and GPS coordinates for the site are included in Appendix G.



SUSPECTED MERCURY CONTAMINATION
AT THE AIRPORT SITE LOCATION

AMAKNAK ISLAND, ALASKA

PROJ. MGR	FILE NAME	FIGURE NO
S. KOCH	RPT5-49	5-49
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5.32.3 Conclusions and Recommendations

Based on the findings of the site investigation and the detected mercury, further action is recommended at the site. The floor drain where mercury was detected should be traced, if possible, to determine the outfall. A sample should be collected from the outfall to determine if mercury migrated from the former Avionics Weather Building via the drain. In addition, samples should be collected along the edge of the building's foundation at areas likely to contain mercury contamination. Soils that are impacted by mercury should be removed from the site. If warranted, the building's drain should be cleaned as well to remove existing mercury contamination.

5.33 UNDERGROUND TRANSFORMER VAULTS AT THE FORMER NAVAL AIR STATION

The former naval air station was located on Amaknak Island approximately 500 feet northwest of the City Dock and extends to the north edge of the WWII Tank Farm. Former utilidors ran through the former naval air station and underground vaults along the former utilidor housed transformers.

5.33.1 Previous Activities

A preliminary assessment was conducted at the site in 1996. Building 310 was found to contain oil-immersed switches, water, and oil in 1998. The vaults were noted to be often filled with water or a water/fuel mixture.

5.33.2 2000 Work Completed

A site investigation was attempted at the former Building 310; however, this area is sealed from access by the Alaska Department of Transportation (DOT) and airport personnel for security reasons. Manhole #36, adjacent to the southwest corner of the hangar, was investigated to determine if PCB contaminated oil was present in the utilidor. A 10-foot wide by 12-foot long by 7-foot deep vault was accessible from Manhole #36. No transformer was present in the vault but an oil bath switch was noted. Approximately six inches of sediment and 18 inches of water topped with a thick layer of oil was present in the vault. Two

analytical samples of the water/oil mix were collected and analyzed for PCBs. The sample results indicate that PCBs were not present in the water/oil mix. Photographs documenting the site conditions are included in Appendix A, GPS coordinates for the site are included in Appendix G, and sample results are included in Appendix D.

5.33.3 Conclusions and Recommendations

Analytical results indicate that PCB contamination is not present in the Manhole #36 vault. While the utilidors and vaults potentially require some cleanup work, available information shows that the transformer vaults and utilidors are part of the electrical system that has been used for airport operations since WWII. Currently, the utilidors in front of the airport hanger are used for power, plane, and sewer lines. Since these facilities appear to have been used by the State they are not eligible under the FUDs program.

5.34 NAVAL LAUNDRY FACILITY

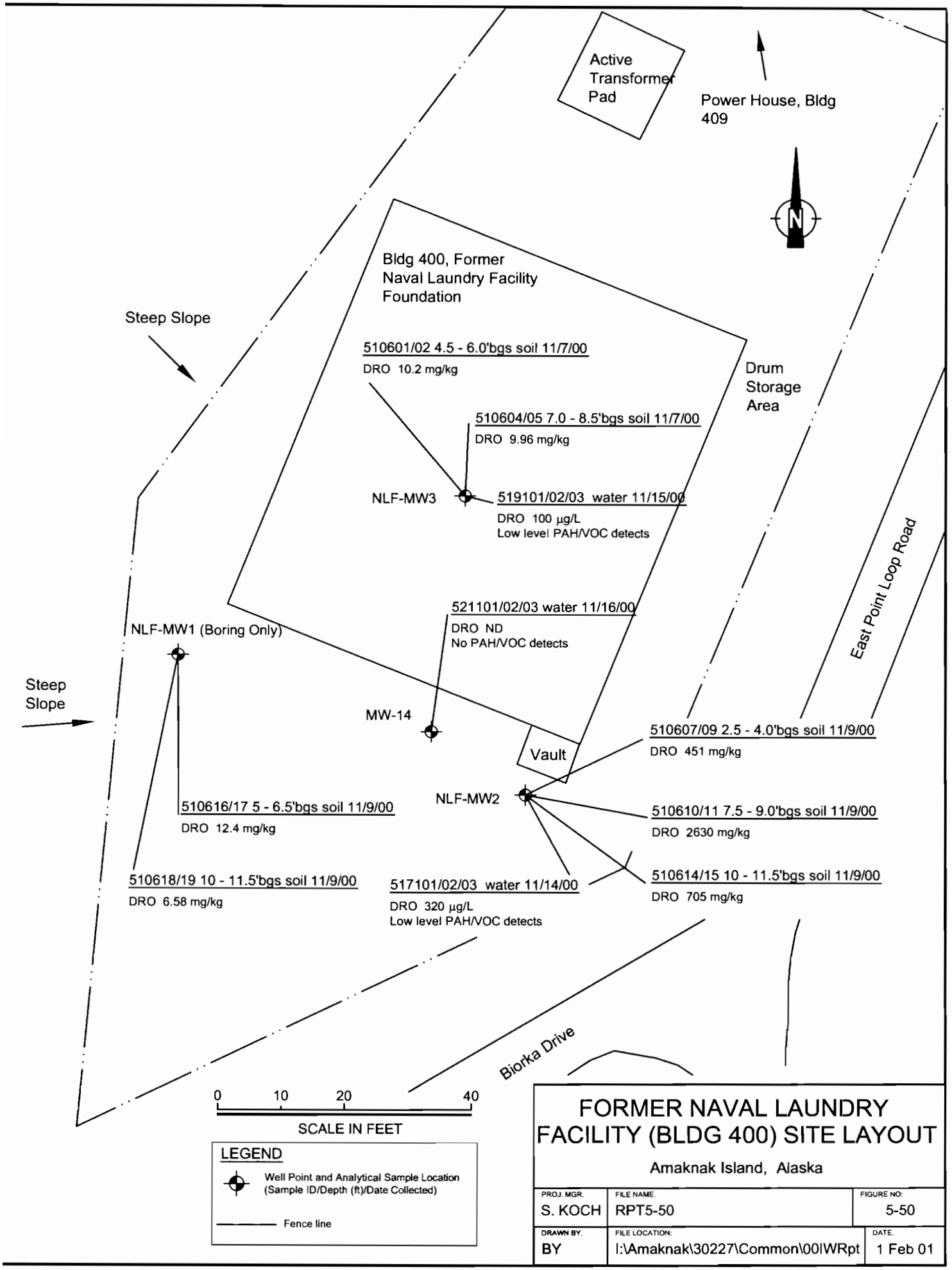
The former naval laundry facility (Building 400), identified in the 1944 map of the NOB, was located immediately north of the WWII Tank Farm area and immediately south of the City of Unalaska's power plant. The site has the potential for fuel or solvent-impacted soil from improperly stored or discarded chemicals associated with WWII dry cleaning processes. Figure 5-50 presents the general site location.

5.34.1 Previous Activities

A preliminary assessment was conducted at the site in 1996. A monitoring well (MW-14) was installed immediately to the south of the former laundry facility in 1998 as part of the Pre-WWII/Ptarmigan Flats groundwater monitoring program (USAED 2000b).

5.34.2 2000 Work Completed

A site investigation was conducted at the former Naval Laundry Facility to collect sufficient documentation to determine if further action is required and to accurately relocate the site in the future. The 70 foot by 60 foot foundation is still present at the site and the City of Unalaska uses the area for miscellaneous equipment and transformer storage. A concrete



FORMER NAVAL LAUNDRY FACILITY (BLDG 400) SITE LAYOUT

Amaknak Island, Alaska

PROJ. MGR.	FILE NAME.	FIGURE NO:
S. KOCH	RPT5-50	5-50
DRAWN BY.	FILE LOCATION:	DATE.
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utilidor approximately four feet bgs runs parallel to the east side of the foundation. Significant soil staining was noted in the general area of the foundation and was attributed to the City's storage of transformers and other operations conducted by the City of Unalaska's power plant.

A groundwater sample collected in August 2000 from MW-14 as part of a quarterly groundwater sampling event detected volatile organic compounds (VOCs) above regulatory limits. A sample collected from MW-14 in early October confirmed the original analytical results. As a result of the previously undetected contamination, three soil borings were drilled around Building 400's foundation. The soil borings were drilled on 7 and 9 November and were advanced until refusal was encountered at 11.5 to 13.0 feet bgs. Groundwater was encountered in two of the three soil borings; therefore, two 2-inch diameter PVC wells (NLF-MW2 and –MW-3) were installed. NLF-MW2 encountered groundwater at 9.5 feet bgs and was screened from 5 to 13 feet bgs. NLF-MW3 encountered groundwater at 8.5 feet bgs and was screened from 4 to 11.5 feet bgs. Figure 5-50 presents the locations of the soil borings and the installed monitoring wells. Appendix C presents the soil boring exploration log and the monitoring well log.

5.34.2.1 Field Screening Results

Field screening results from the soil borings indicated potential contamination in only one of the three borings. Potential contamination was detected in NLF-MW2 from 10 to 13 feet bgs based on PID results of 30.0 and 38.9 ppm. All other PID readings from NLF-MW2 and the other two soil borings did not detect contamination above 0 ppm.

5.34.2.2 Analytical Results

Two soil analytical samples were collected on 9 November at 5 to 6.5 and 10 to 11.5 feet bgs from NLF-MW1. Methylene chloride was detected in the deeper sample marginally above Method 2 regulatory criteria. One TOC sample was also collected from 5 to 6.5 feet bgs. Because groundwater was not encountered in the soil boring, a monitoring well was not

installed and a groundwater sample was not collected from NLF-MW1. Table 5-50 lists the complete suite of analyses for each soil sample and the sample results above detection limits.

Three soil analytical samples were collected on 9 November at 2.5 feet to 4 feet bgs, 7.5 feet to 9 feet bgs (included a duplicate and triplicate sample), and 10 feet to 11.5 feet bgs from NLF-MW2. One TOC sample was also collected from 2.5 feet to 4 feet bgs. DRO was detected above Method 2 regulatory criteria in all three of the sampled intervals. A groundwater sample was also collected from NLF-MW2 on 14 November after purging the well and stabilizing the field parameters. Duplicate and triplicate groundwater samples were also collected at the same time. Table 5-50 lists the complete suite of analyses for each soil sample and the sample results above detection limits. Table 5-51 lists the complete suite of analyses for the groundwater sample and the sample results above detection limits.

Two soil analytical samples were collected on 7 November at 4.5 feet to 6 feet bgs and 7 feet to 8.5 feet bgs from NLF-MW3. One TOC sample was also collected from 4.5 feet to 6 feet bgs. No parameters exceeded Method 2 regulatory criteria. A groundwater sample was also collected from NLF-MW3 on 15 November after purging the well and stabilizing the field parameters. Table 5-50 lists the complete suite of analyses for each soil sample and the sample results above detection limits. Table 5-51 lists the complete suite of analyses for the groundwater sample and the sample results above detection limits.

Due to the DRO detected in the soil samples collected from NLF-MW2 and the methylene chloride detected in the deep soil sample collected from NLF-MW1, Method 3 regulatory criteria was calculated using site-specific TOC data contained in Table 3-2. Because the TOC collected from NLF-MW2 was collected from a contaminated interval, it was not used when calculating the Method 3 criteria. The resulting most stringent site-specific cleanup level for DRO is 373 mg/kg, which does not increase the regulatory criteria enough to make a difference at the site. However, the methylene chloride Method 3 regulatory criteria is 35.5 µg/kg; therefore, the detected methylene chloride does not exceed the calculated Method 3 regulatory criteria. An assessment of cumulative risks and hazards was not necessary at the

Table 5-50
Former Naval Laundry Facility Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Proposed Method 3 Cleanup Level[2]	5.34.2.2.1 Sample Results							
				AM-A510601 and 510602	AM-A510604 and 510605	AM-A510607 and 510609	AM-A510610 and 510611	AM-A510612 and 510613	AM-A510614 and 510615	AM-A510616 and 510617	AM-A510618 and 510619
Location	--	--	--	NLF-MW3, 4.5-6' bgs	NLF-MW3, 7-8.5' bgs	NLF-MW2, 2.5-4' bgs	NLF-MW2, 7.5-9' bgs	NLF-MW2, 7.5-9' bgs (FD)	NLF-MW2, 10-11.5' bgs	NLF-MW1, 5-6.5' bgs	NLF-MW1, 10-11.5' bgs
Diesel-range Organics (AK102)	mg/kg	230	373	10.2	9.96	451	2,630	5,140	705	12.4	6.58
Residual-range Organics (AK103)	mg/kg	8,300	8,300	33.3	42.7	484	2,280	4,220	671	62.5	15
PAH (SW8270C SIM)											
Acenaphthene	µg/kg	190,000	--	1.37	ND [3.95]	57.3	742	863	405	ND [3.02]	ND [2.75]
Anthracene	µg/kg	3,900,000	--	4.63	ND [3.95]	101	834	947	510	ND [3.02]	ND [2.75]
Benzo(a)anthracene	µg/kg	5,500	--	9.48	4.65	49.2	373	457	210	ND [3.02]	ND [2.75]
Benzo(a)pyrene	µg/kg	900	--	7.76	5.28	ND [24]	ND [45.4]	ND [48.9]	ND [49.7]	ND [3.02]	ND [2.75]
Benzo(b)fluoranthene	µg/kg	9,000	--	13.3	6.82	28.4	126	157	76.2	ND [3.02]	ND [2.75]
Benzo(g,h,i)perylene	µg/kg	--	--	4.71	5.25	25.4	76.4	96.8	50.7	ND [3.02]	ND [2.75]
Chrysene	µg/kg	550,000	--	11.3	5.12	95.9	896	1,070	470	ND [3.02]	ND [2.75]
Dibenzo(a,h)anthracene	µg/kg	900	--	1.34	ND [3.95]	ND [24]	ND [45.4]	ND [48.9]	ND [49.7]	ND [3.02]	ND [2.75]
Fluoranthene	µg/kg	1,900,000	--	16.9	6.68	43.3	325	385	169	ND [3.02]	ND [2.75]
Fluorene	µg/kg	240,000	--	ND [2.67]	ND [3.95]	123	1,280	1,570	734	ND [3.02]	ND [2.75]
Indeno(1,2,3-cd)pyrene	µg/kg	9,000	--	3.78	ND [3.95]	ND [24]	50.9	73.8	ND [49.7]	ND [3.02]	ND [2.75]
Naphthalene	µg/kg	38,000	--	1.13	1.95	20.2	3,990	4,470	744	2.67	1.39
Phenanthrene	µg/kg	--	--	14.7	4.77	260	4,470	4,940	2,490	ND [7.24]	ND [6.58]
Pyrene	µg/kg	1,400,000	--	17.7	8.52	135	891	1,070	599	ND [3.02]	ND [2.75]
Volatile Organic Compounds (SW8260B)											
2-Butanone	µg/kg	--	--	ND [110]	130	80	130	34	100	84	120
Ethylbenzene	µg/kg	5,000	--	ND [22]	ND [22]	ND [20]	150	33	38	ND [19]	ND [37]
Methylene chloride	µg/kg	10	--	ND [22]	ND [22]	ND [20]	ND [23]	ND [8.2]	ND [18]	ND [19]	29
Toluene	µg/kg	4,800	--	10	11	3.8	22	5.1	8.0	53	ND [37]
Xylenes	µg/kg	69,000	--	ND [22]	ND [22]	ND [20]	620	150	130	ND [19]	ND [37]

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
[2]Note: The proposed Method 3 cleanup level for DRO is based on migration to groundwater and the proposed Method 3 cleanup level for RRO is based on ingestion.

Table 5-51
Former Naval Laundry Facility Groundwater Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Sample Results			
			AM-A517101 thru 517103	AM-A517104 thru 517106	AM-A519101 thru 519103	AM-A521101 thru 521103
Location	--	--	NLF-MW2	NLF-MW2 (FD)	NLF-MW3	Pre-WWII MW-14
Diesel-range Organics (AK102)	µg/L	1,500	320	350	100	ND [100]
Residual-range Organics (AK103)	µg/L	1,100	ND [250]	ND [250]	ND [250]	466
PAH (SW8270C SIM)						
Acenaphthene	µg/L	2,200	0.260	0.240	ND [0.05]	ND [0.05]
Acenaphthylene	µg/L	--	0.072	0.055	ND [0.05]	ND [0.05]
Fluorene	µg/L	1,460	0.230	0.210	ND [0.05]	ND [0.05]
Naphthalene	µg/L	1,460	0.210	0.210	ND [0.05]	ND [0.05]
Phenanthrene	µg/L	--	0.081	0.085	ND [0.05]	ND [0.05]
Pyrene	µg/L	1,100	0.068	0.067	ND [0.05]	ND [0.05]
Volatile Organic Compounds (SW8260B)						
4-Isopropyltoluene	µg/L	--	2.4	2.5	2.4	ND [5]
Carbon tetrachloride	µg/L	5	ND [1]	ND [1]	1.4	ND [5]
Naphthalene	µg/L	1,460	1.5	1.9	ND [1]	ND [5]
Toluene	µg/L	1,000	ND [1]	0.53	0.54	ND [5]
n-Propylbenzene	µg/L	--	2.5	2.6	ND [1]	ND [5]
sec-Butylbenzene	µg/L	--	ND [1]	2.3	ND [1]	ND [5]

[1]18 AAC 75, Table C for groundwater. Surface water regulatory criteria, contained in 18 AAC 70, includes total aromatic hydrocarbons (TAH) levels not to exceed 10 µg/L and total aqueous hydrocarbons (TaqH) levels not to exceed 15 µg/L. TAH is calculated by summing concentrations of BTEX analyte concentrations, and TaqH is calculated by summing concentrations of BTEX and PAH analytes.

site due to the DRO exceedances. The Method 3 calculation sheets are included in Appendix J.

A groundwater sample was also collected from MW-14 on 16 November after purging the well and stabilizing the field parameters. Table 5-51 lists the complete suite of analyses for the groundwater sample and the sample results above detection limits.

5.34.3 Conclusions and Recommendations

The former naval laundry facility (Building 400) site is recommended for NFA for the following reasons:

- The site was being investigated for the presence of VOC contamination in the groundwater and/or soil due to the VOC compounds detected in a MW-14 groundwater sample collected in August and October 2000. VOC contamination was not detected in either the soil or groundwater samples collected at the site.
- The DRO that was detected in NLF-MW2 above Method 3 regulatory criteria was expected. Bunker C oil was noted in the subsurface soils when drilling MW-14 in 1998 and Bunker C contamination is known to exist in the subsurface soils at the Pre-WWII Tank Farm and Ptarmigan Flats areas. Therefore, this contamination is being addressed as part of the Pre-WWII Tank Farm area.
- No contaminants were detected in the groundwater samples collected from the three monitoring wells located in the vicinity of the former naval laundry facility that exceeded 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels.
- Methylene chloride, detected in NLF MW-1, did not exceed the calculated site-specific Method 3 regulatory criteria.

It is recommended that MW-14 continue to be sampled as part of the Pre-WWII Tank Farm and Ptarmigan Flats area groundwater monitoring program.

5.35 FORMER OIL AND LUBE STORAGE

The former oil and lube storage facility (Building 471), identified in the 1944 map of the NOB, was located approximately 50 feet off the west edge of Airport Beach Road and approximately 700 north of the Airport Beach Road and Biorka Drive Intersection. Figure 5-22 presents the general site location.

5.35.1 Previous Activities

A preliminary assessment was conducted at the site in 1996.

5.35.2 2000 Work Completed

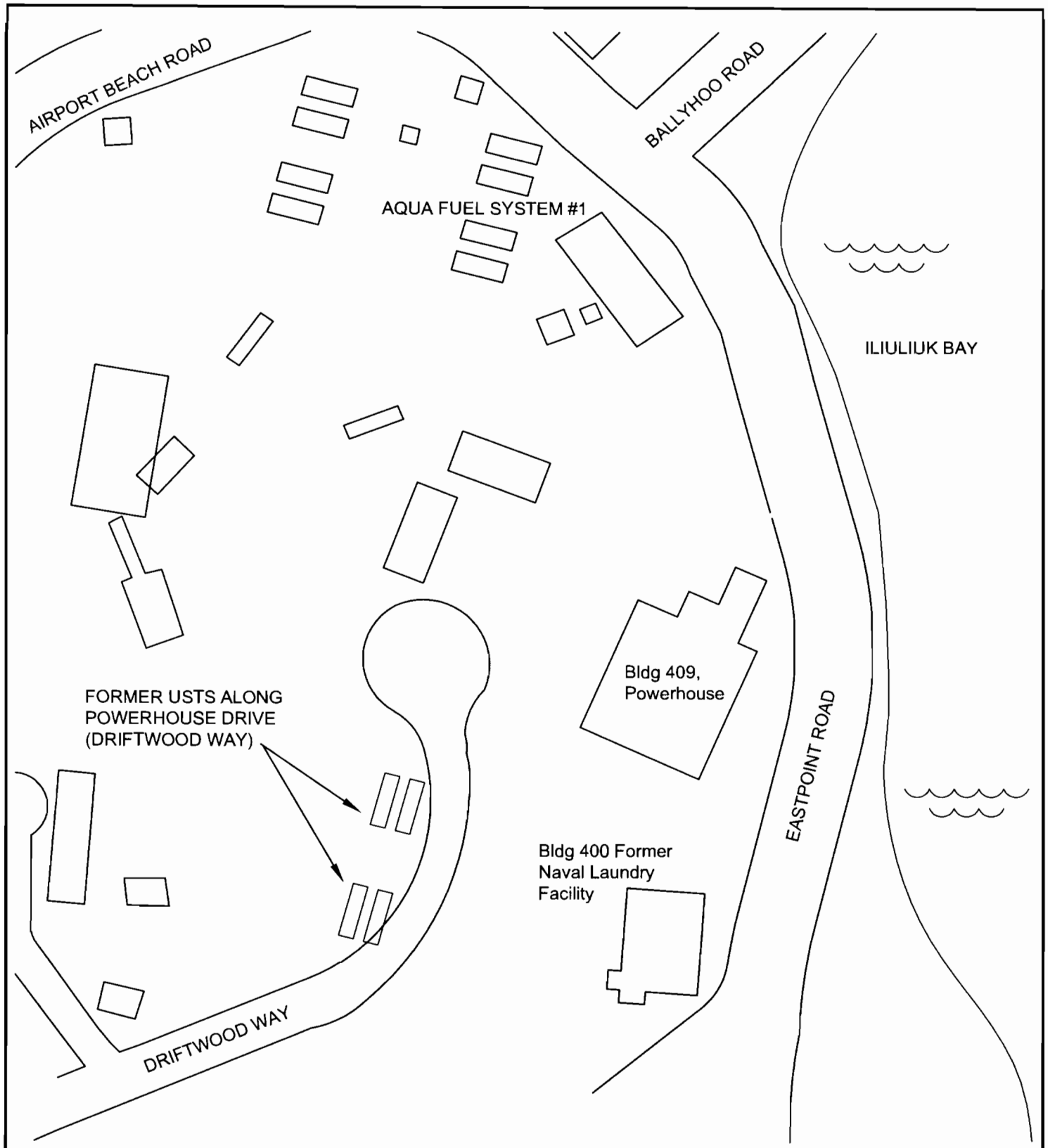
A site investigation was conducted at the former oil and lube storage facility. A new building constructed over the former location of Building 471 is currently being used as a warehouse and office building. During unrelated work at the site in the early 1990s, workers alledgedly encountered two drums of Bunker C-type product. The drums were left in place and later re-buried during road construction between the building and area to the northeast (personal communication with K. Thompson 2001). Reports of buried drums resulted in a magnetometer search to the north of the building. Magnetic anomalies were detected at three locations (including the locations of the suspected buried drums); however, test pits were not dug due to a lack of SHPO coordination. The approximate locations of the magnetic anomalies are included on Figure 5-22, and the respective GPS coordinates are included in Appendix G. Photographs documenting the site conditions are included in Appendix A.

5.35.3 Conclusions and Recommendations

Based on the findings of the site investigation, investigative test pits are recommended in the vicinity of the documented magnetic anomalies. The recorded GPS coordinates should be used to locate the magnetic anomalies in the future. If no contamination or buried drums are discovered than no further action at the site will be recommended.

5.36 FORMER USTs ALONG POWER HOUSE ROAD

The four former USTs along Power House Road (currently renamed Driftwood Way) were located on southwest of the bluff overlooking Building 409 (Power Plant) on the small bluff overlooking the Power Plant. The USTs were identified in the 30 June 1944 map and in WWII aerial photographs. The aerial photographs show one of the USTs lying on the ground surface prior to being placed below ground. Figure 5-51 presents the general site location.



FORMER USTS ALONG POWERHOUSE RD SITE LAYOUT

Amaknak, Alaska

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5.36.1 Previous Activities

The four USTs are suspected of being removed in the mid 1980's; however, it can not be confirmed that all four USTs were removed at the same time. No investigative or remedial activities have been performed at the site, except for the actual tank removals.

5.36.2 2000 Work Completed

A site investigation was conducted on 18 October at the former UST site to determine if any of the tanks remain buried at the site. Much of the area has been reconfigured since WWII, and the area east of Driftwood Way is filled and leveled for the City of Unalaska to use as a storage area for the power plant operation. No surface evidence of contamination or evidence indicating that USTs remain at the site was noted. A magnetometer survey of the area did not detect any magnetic anomalies. Test pits were not performed at the site because potential test pit locations were not identified. Photographs documenting the site conditions are included in Appendix A, and GPS coordinates for the site are included in Appendix G.

5.36.3 Conclusions and Recommendations

Limited further action is recommended for the former USTs along Power House Road/Driftwood Way. Magnetic anomalies were not detected during the 2000 site investigation suggesting that no USTs remain buried at the site. Further research is recommended to locate the position of the former USTs followed by two test pits to determine if subsurface soil contamination is present.

5.37 GENERALS HILL UTILIDORS AND PIPELINE CORRIDORS

The Generals Hill utilidors and pipeline corridors are located through-out the Generals Hill area. The Generals Hill area is located at the end of Eagle Drive, overlooking the south end of Unalaska Lake. Historically, the area contained several structures, including the General's residence during the WWII campaign. Several concrete footings, foundations, and slabs are currently all that remain of the former structures. Except for residential developments on Eagle Drive, the Generals Hill area is largely surrounded by undeveloped properties. The

property is currently owed by the OC and is used by visitors to access the surrounding high alpine lakes. Figure 5-52 presents the general site layout.

5.37.1 Previous Activities

In June 1995, EMCON, Alaska, Inc. conducted a geophysical survey of the Generals Hill area. The objective was to identify potential USTs using a magnetometer and ground penetrating radar. As a result of the survey, five USTs were removed from the area in 1996. Utilidors and pipelines in the area were not addressed in either investigation.

5.37.2 2000 Work Completed

A site investigation to locate utilidors was not conducted in the Generals Hill area during the 2000 field season.

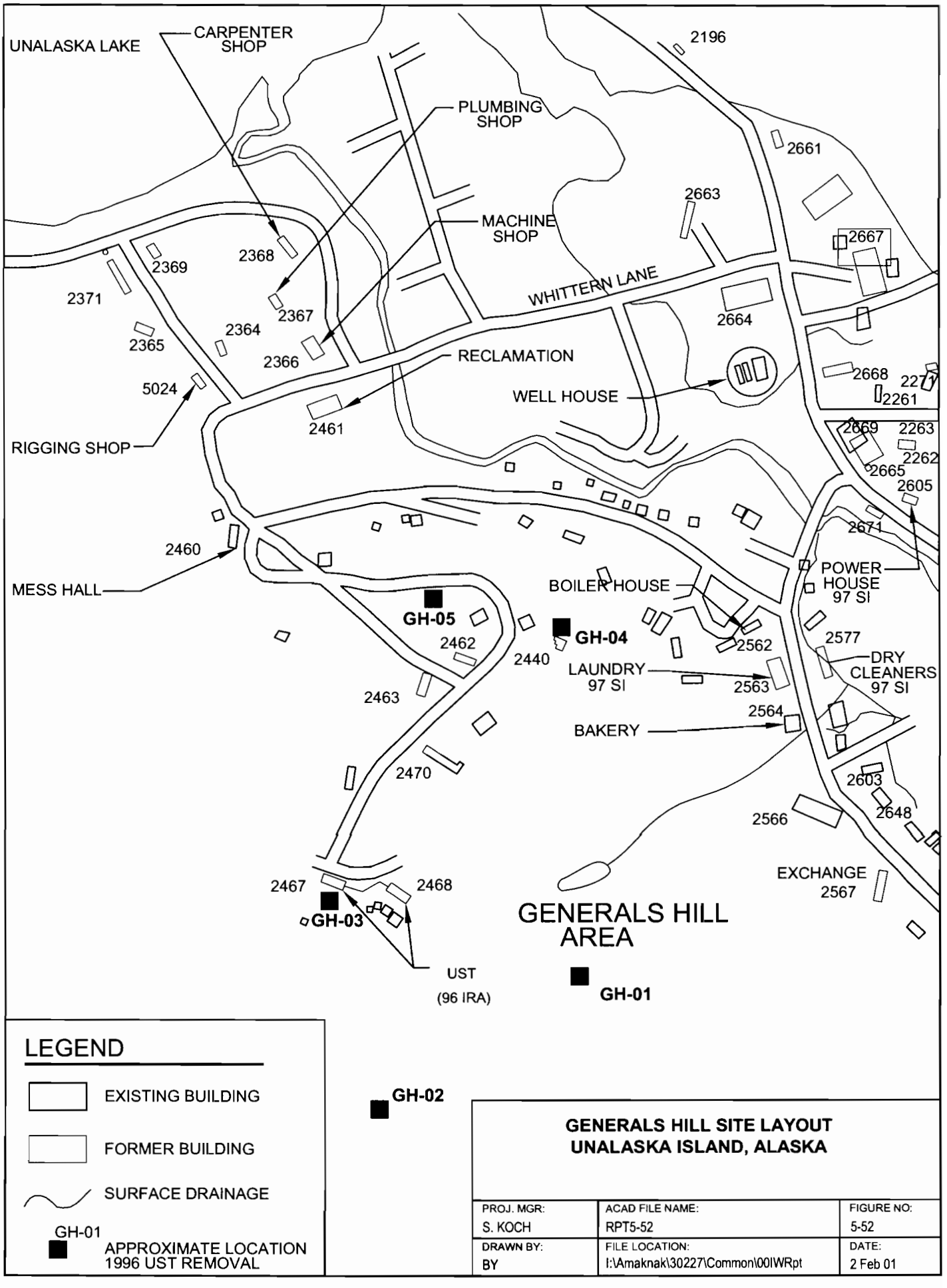
5.37.3 Conclusions and Recommendations

It is recommended that the site investigation detailed in the *2000 Islandwide Work Plan* be conducted in the Generals Hill area during the 2001 field season.

5.38 DRY CLEANING AND LAUNDRY FACILITIES (BLDG 2577 AND 2563), AND OTHER UNALASKA GARRISON FACILITIES

The Unalaska Garrison Facilities cover a large area and are located on Unalaska Island southeast of Unalaska Lake. The Garrison Facilities are located along Stewart Road, Broadway Avenue, and other roads in the area. Historical documents indicate that during WWII there were dry cleaning and laundry facilities, paint and wood shops, photo processing facilities, and electrical equipment shops located in the area. Specifically, Buildings 2577 and 2563 have been identified as dry cleaning and laundry facilities, respectively.

After decommission following WWII, the area was left to deteriorate. The structures were demolished in 1984 and the debris was removed from the area. Figure 5-53 presents the general site layout of the Garrison Facilities and the location of Buildings 2577 and 2563.



GENERALS HILL SITE LAYOUT
UNALASKA ISLAND, ALASKA

PROJ. MGR:	ACAD FILE NAME:	FIGURE NO:
S. KOCH	RPT5-52	5-52
DRAWN BY:	FILE LOCATION:	DATE:
BY	I:\Amaknak\30227\Common\00IWRpt	2 Feb 01

CITY OF UNALASKA

ILIULIUK BAY

SCHOOL

MOUNT NEWHALL
(ELEVATION 1600 FT.)

SUSPECTED ROMMEL STAKES

CEMETARY

FORMER GENERATION BLDG

UNALASKA LAKE

PTARMIGAN RD

SKI BOWL AREA

GENERATOR HOUSE

WHITTERN LANE

LEAR RD.

POWER HOUSE

BOILER HOUSE

DRY CLEANERS

SUBSTATION

POWER HOUSE

LAUNDRY

FORMER BLDG 3165

SKI BOWL GENERATOR BLDG

NOTE:

FORMER BUILDING NUMBERS AND USES WERE IDENTIFIED FROM A BUILDING LIST FOR THE UNALASKA AND FORT MEARS GARRISONS, SHEET No. 2, AUGUST 30, 1945

1998 UST REMOVAL AT FORMER BUILDING 1765 (NOT SHOWN).

LEGEND:

- FORMER BUILDING
- EXISTING BUILDING
- APPROXIMATE LOCATION OF 1997 UST REMOVAL
- APPROXIMATE LOCATION OF 1998 UST REMOVAL
- APPROXIMATE LOCATION OF 1997 UST REMOVAL
- SURFACE WATER DRAINAGE
- NEW 1 mil. gal/DAY WELL. ALWAYS RUNNING TO FILL TANK-PUMPS ON DEMAND. (3) 400 gal WELLS FOR SURGE

NORTH

0 300 600 1200
SCALE IN FEET

UNALASKA GARRISON and POWER GENERATION FACILITIES SITE LAYOUT

UNALASKA ISLAND, ALASKA

PROJ. MGR:	FILE NAME:	FIGURE NO.
S.KOCH	RPT5-53	5-53
DRAWN BY:	FILE LOCATION:	DATE:
SBK\BY	Amaknak\30227	2 Feb 01

5.38.1 Previous Activities

Various preliminary assessments were conducted in the area in 1996, and various site investigations were conducted in 1997. As-builts from the early 1940s identified USTs associated with the dry cleaning building (Building 2577) and laundry building (Building 2563).

5.38.2 2000 Work Completed

A site investigation was conducted at the former Building 2577 and Building 2563. No evidence of Building 2577 remains, and the site and the area have been filled with approximately two feet of fill and are the backyard for a residential house. The approximately 25 feet by 50 feet foundation for the former Building 2563 is still present. Miscellaneous sewer, water, and steam blow down pipes were identified at the southwest corner of the foundation. Half inch (1/2-inch) pipe was found in the berm along the north end of the foundation. The pipe may be associated with a potential UST still present at the site. Discussions with the land owner indicated that USTs have not been previously removed from the site. Test pits were not performed at the site due to SHPO clearance and Right-of-Entry clearance from the property owner (Mr. Robert DeMeo). Photographs documenting the site conditions are included in Appendix A.

5.38.3 Conclusions and Recommendations

Based on the findings of the site investigation at Building 2577, no further action at the site is recommended.

The presence of the ½-inch pipe along the north end of the former Building 2563 foundation and the property owner's assertion that USTs have not been previously removed at the site indicate that a UST may still be present at the site. One test pit is recommended to the north of the foundation to determine if a UST is present at the site. If the test pit indicates the presence of a UST or contamination then additional work may be warranted based on a determination of FUDS eligibility. If no contamination or UST is discovered in the test pit then the site will be recommended for no further action.

Prior to conducting any work at Building 2563, a signed ROE must be obtained from Mr. DeMeo (property owner) and SHPO clearance must be granted.

5.39 ARMY GARRISON POWER GENERATION FACILITIES

The Unalaska Army Garrison Power Generation Facilities include six buildings. The buildings were located on Unalaska Island southeast of Unalaska Lake along Stewart Road and Broadway Avenue. The buildings included: two generator houses (Building 2193 and building northwest of the Unalaska school), two power houses (Buildings 2605 and 2673), a boiler house (Building 2562), and a substation (Building 2682). After decommission following WWII, the area was left to deteriorate. The structures were demolished in 1984 and the debris was removed from the area.

5.39.1 Previous Activities

A preliminary assessment was conducted in the area in 1996.

5.39.2 2000 Work Completed

A site investigation was conducted at the former Unalaska Army Garrison Power Generation Buildings to collect sufficient documentation to determine if further action is required and to be able to accurately relocate the sites in the future. No evidence of any of the six buildings remain. Only the locations of four of the buildings (2193, 2605, 2682, and 2673) could be determined based on historical information. Only the general location of the remaining two buildings could be determined. The area where Building 2562 used to be is a parking lot and the area northwest of the Unalaska school is a snow storage lot; GPS coordinates were not obtained from these locations. Photographs documenting the site conditions for some of the buildings are included in Appendix A.

5.39.3 Conclusions and Recommendations

Based on the findings of the site investigation, limited further action at the former Unalaska Army Garrison Power Generation Buildings is recommended. Surface soil samples should be

collected at random locations and analyzed for PCBs to evaluate potential exposure to site contaminants by children of the adjacent school.

5.40 POTENTIAL POL-IMPACTED SOIL AT THE CORNER OF AIRPORT BEACH ROAD AND CAPTAINS BAY ROAD

The potentially POL-impacted soil near the corner of Airport Beach Road and Captains Bay Road was identified by island residents. The individuals report observing oil and fuel-affected soils at probable locations of abandoned USTs that may have formerly been used by the military.

5.40.1 Previous Activities

No previous investigations have been conducted at this area.

5.40.2 2000 Work Completed

A site investigation was conducted at the site. The former owner of the property, the late Mr. Vern Robinson, utilized the site as a storage area for many WWII relics. Evidence of contamination ranging from stained soil and visible asbestos material was present throughout the site. However, it appeared that the soil staining was not FUDS-related, but related to more recent activities on the site. All of the soil staining was along the base of the hill below the current Public Safety (Police) Department. Evidence of other potential contamination included racks of glass batteries and a single transformer thought to have been moved to this location after the military left the island. Photographs documenting the site conditions are included in Appendix A.

5.40.3 Conclusions and Recommendations

No further action is recommended for the corner of Airport Beach Road and Captains Bay Road area. The potential contamination present at the site is not FUDS eligible because the items were moved to their present locations after military personnel left the islands.

5.41 PYRAMID VALLEY TO CROWLEY DOCKS UTILIDORS

The Crowley Dock site is located along the southeast shore of Captains Bay on Unalaska Island at the mouth of Pyramid Creek. The Crowley Dock area is considered part of the Pyramid Valley area. Crowley Maritime, Inc. owns and operates the dock area. Current structures include various buildings and a tank farm. The former Pyramid Valley military structures were located east of Crowley Dock along Pyramid Creek Road. The former military structures located in Pyramid Valley were established after the June 1942 bombing of Amaknak Island. Few structures remain at the site. Figure 5-54 presents the site layout.

5.41.1 Previous Activities

No previous activities have addressed the utilidors from Pyramid Valley to Crowley Docks.

5.41.2 2000 Work Completed

A site investigation to locate utilidors was not conducted in the Pyramid Valley area during the 2000 field season.

5.41.3 Conclusions and Recommendations

It is recommended that the site investigation detailed in the *2000 Islandwide Work Plan* be conducted in the Pyramid Valley area during the 2001 field season.

5.42 DRUM DUMP AND WWII DEBRIS PILE ALONG CAPTAINS BAY ROAD

The drum dump and WWII debris pile along Captains Bay Road is located along the edge of Captains Bay Road opposite the munitions magazines at the first half mile south of the Tyson Group facilities. There are a number of 55-gallon drums located on the ground surface and some are partly covered by fill, which is the base of the Captains Bay Road roadway. Miscellaneous WWII debris is also located in the area.

5.42.1 Previous Activities

A previous site reconnaissance of the area revealed approximately 40 drums.

LEGEND

- 5286 — Building Location where USTs were Removed in 1997
- Existing Building
- Former Building
- UST Investigation Test Pits Performed

NORTH

CAPTAINS BAY

CAPTAINS BAY ROAD

PYRAMID CREEK ROAD

CROWLEY DOCK

100' DISCHARGE (CONSTRUCTED 1981)

LEACH FIELD

CURRENT TANK FARM

5460? 5465 FORMER MESS HALL & LATRINE

WARD AREA 1: 5161, 5162, 5163, 5164, 5166, 5167

WARD AREA 2: 5168, 5169, 5170

OFFICERS REC. HALL 5264

MESS HALL 5260

5261, 5262, 5263, 5265, 5266, 5267, 5268, 5271, 5272, 5273, 5274, 5276, 5277, 5278, 5281, 5282, 5283, 5284

WARD AREA 3

WARD AREA 4

WARD AREA 5: 5191, 5192, 5194

WARD AREA 6

5160, 5165, 5173, 5174, 5175, 5178

MESS HALL

5181 POWER HOUSE / MAINT. SHOP

5186, 5187, 5188, 5189

WATER TANK

PYRAMID CREEK

5286 GARAGE

MW5286-1

TP5266-1

PUMP HOUSE

0 250 500 1000

SCALE IN FEET

PYRAMID VALLEY to CROWLEY DOCK UTILIDOR SITE LAYOUT
UNALASKA ISLAND, ALASKA

PROJ. MGR:	FILE NAME:	FIGURE NO.
S. KOCH	RPT5-54	5-54
DRAWN BY:	FILE LOCATION:	DATE:
S&W\BY	Amaknak\30227	2 Feb 01

5.42.2 2000 Work Completed

A site investigation of the area revealed the presence of miscellaneous disposed drums. None of the drums were completely intact and most were empty and decayed to various extents. However, some were partially intact and contained water. The area is currently not used by local residents. Emperor geese have been noted to feed in the intertidal zone approximately 100 feet downgradient of where some of the drums are located.

5.42.3 Conclusions and Recommendations

It is recommended that any drums containing materials be removed from the area. Areas surrounding empty drums should be investigated. If stressed vegetation, stained soil, or other evidence of contamination is noted then field screening should be performed to confirm or deny the presence of contamination. If soil contamination is discovered then limited IRAs should be performed.

5.43 MORRIS COVE/MANCIL LAKE AREA

The Morris Cove/Mancil Lake area is located near Morris Cove at the end of Summer Bay Road, approximately 9 miles north of the City of Unalaska. The Morris Cove site is part of a former tactical artillery area called Fort Brumback, which contained troop housing, a mess hall, a recreation hall, power generation facilities, and utility systems. The site is located in a valley bordered by Morris Cove to the west and Mancil Lake to the south. Unnamed mountains rise to the north and east. Very little visual evidence of the former military structures remain and the site is vegetated. A creek flows from Mancil Lake into Morris Cove near the southwest portion of the site. Figure 5-55 presents the site layout.

5.43.1 Previous Activities

Field activities performed as part of the 1998 field season included a field reconnaissance to determine impacts, if any, in the area. The AOPCs investigated in 1998 were identified based on an evaluation and comparison of the 1946 as-built drawings and 1994 aerial photographs of the area (USAED 1997).

The AOPCs were identified by comparing seven sheets of a 1946 Summer Bay plot plan to a series of 1994 aerial photographs. This approach identified six buildings to be potential UST locations based on former building use. Building designations and locations are indicated in Figure 5-55. Each site was visually inspected and suspect piping was exposed by hand digging, to determine the presence of possible USTs. No USTs or ASTs were discovered. One surface oily stain was found at the pad for the former mess hall. The presence of empty plastic motor oil containers suggests that it was created by post-WWII domestic usage. No samples were collected.

Because suspected USTs and associated piping were not discovered, no IRA activities were conducted.

5.43.2 2000 Work Completed

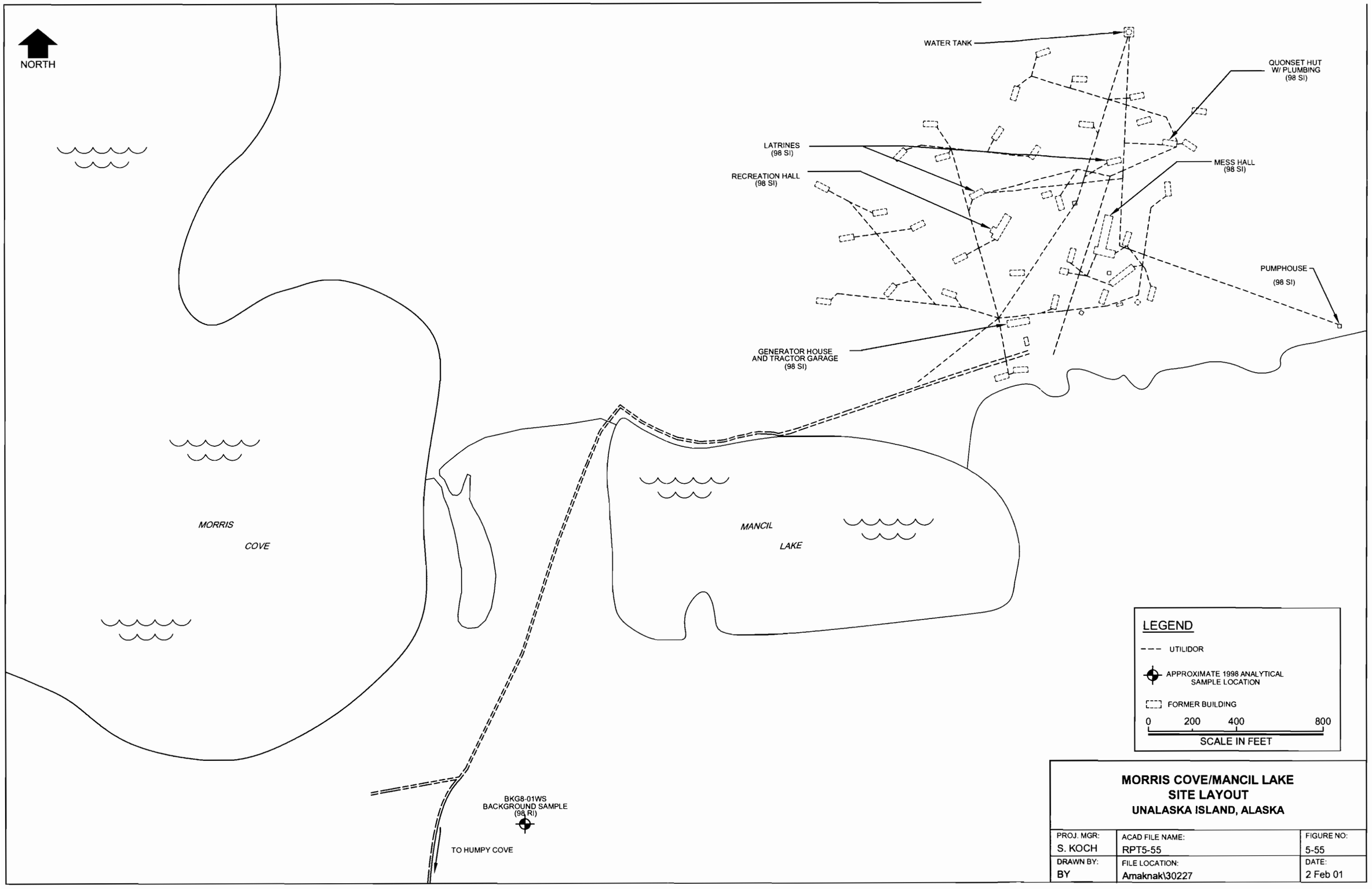
Site investigations were conducted at the Morris Cove/Mancil Lake area to collect sufficient documentation to determine if further actions are required and be able to accurately relocate the sites in the future. Various building foundations and a few intact buildings remain at the site; however, no evidence existed to indicate a logical location for collection of laboratory samples. A magnetometer was used to survey the areas surrounding building foundations, but no anomalies indicating the presence of a potential UST were detected.

5.43.3 Conclusions and Recommendations

Based on the findings of the site investigation, no further action at the Morris Cove/Mancil Lake area is recommended.

5.44 HUMPY COVE AREA

The Humpy Cove site is located on both sides of Summer Bay Road in rolling terrain approximately 1,200 feet east of Humpy Cove and approximately 6 miles north of the City of Unalaska on Unalaska Island. Figure 5-24 presents the site layout.



MORRIS COVE/MANCIL LAKE
SITE LAYOUT
UNALASKA ISLAND, ALASKA

PROJ. MGR:	ACAD FILE NAME:	FIGURE NO:
S. KOCH	RPT5-55	5-55
DRAWN BY:	FILE LOCATION:	DATE:
BY	Amaknak\30227	2 Feb 01

The site is part of the former Fort Brumback which was a tactical artillery area and contained troop housing, a mess hall, latrines, power generation facilities, a dispensary, and utility systems. Most of the development of AOPCs was taken from a study of 1946 as-built drawings as well as 1994 aerial photographs (USAED 1997). Building designations and former locations are indicated in Figure 5-24. A 1946 plot plan indicated water, sewage, and electrical lines at Fort Brumback. Very little visual evidence of the buildings associated with the former Fort Brumback remain and the entire site is vegetated. The area is currently uninhabited and used primarily for recreational and subsistence type activities.

5.44.1 Previous Activities

Refer to Section 5.14.1 for a complete discussion of the 1998 field activities.

5.44.2 2000 Work Completed

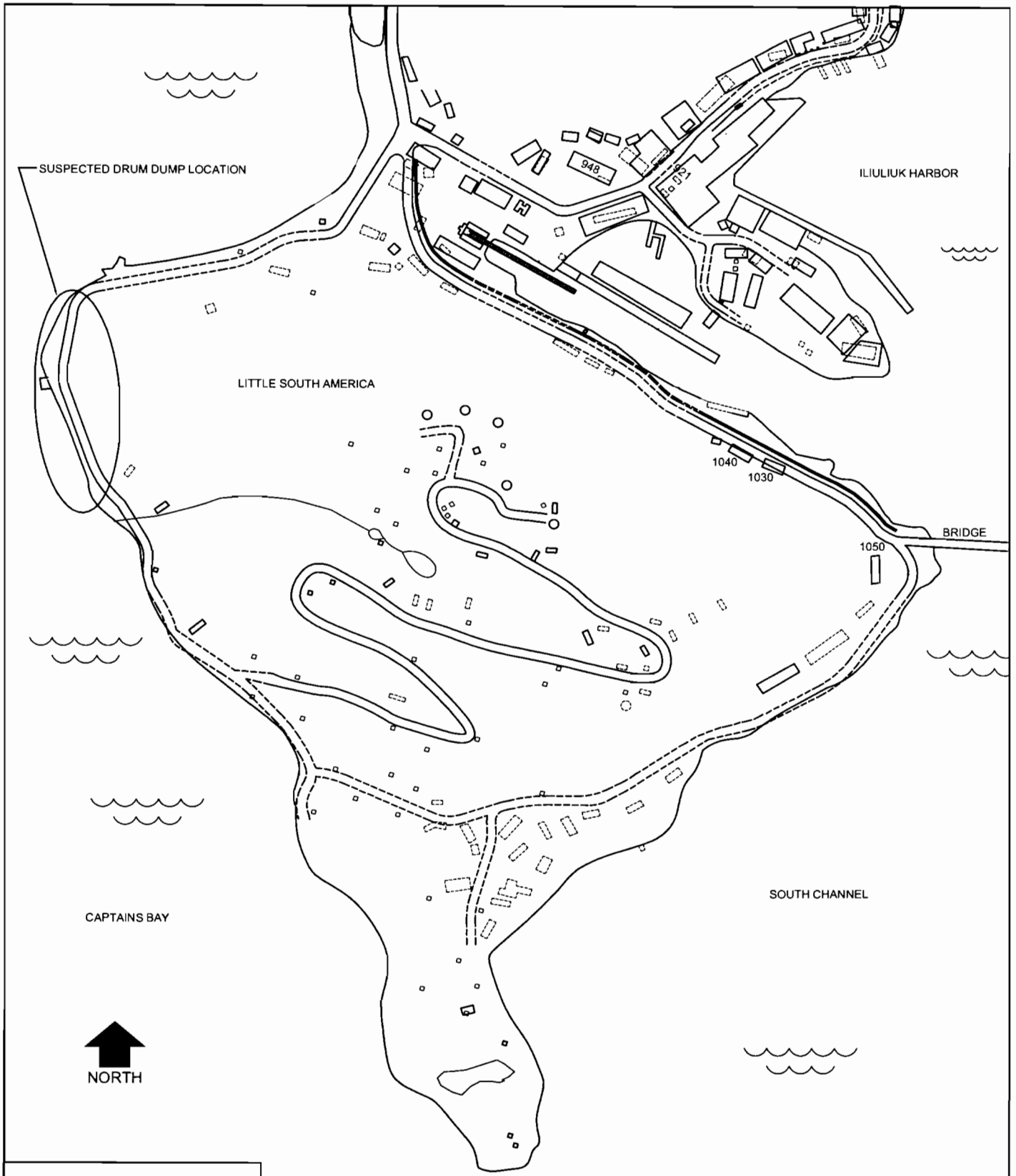
A site investigation was conducted at the Humpy Cove site to collect sufficient documentation to determine if further actions are required and be able to accurately relocate the sites in the future. Few building foundations remain in the area. However, a magnetometer was used to survey areas that were likely the former locations of buildings. The survey locations were based on the areas of site development shown in the 1946 as-built drawings and the 1994 aerial photographs. No anomalies indicating the presence of potential USTs or utilidors were detected.

5.44.3 Conclusions and Recommendations

Based on the findings of the site investigation, no further action at the Humpy Cove area is recommended.

5.45 LITTLE SOUTH AMERICA SUSPECTED DRUM DUMPS

The Little South America/Hill 400 area is located at the southern end of Amaknak Island. The suspected location of the drum dump was along the northwest shoreline along Swanson Drive. Figure 5-56 presents the site location.



LEGEND

EXISTING BUILDING

FORMER BUILDING

LITTLE SOUTH AMERICA SUSPECTED DRUM DUMPS SITE LOCATION
AMAKNAK ISLAND, ALASKA

PROJ. MGR:	ACAD FILE NAME:	FIGURE NO:
S. KOCH	RPT5-56	5-56
DRAWN BY:	FILE LOCATION:	DATE:
BY	Amaknak\30227	2 Feb 01

5.45.1 Previous Activities

No previous activities have been conducted at this area. The area was identified by a community member during an April 2000 public meeting; drums were reportedly visible from the road.

5.45.2 2000 Work Completed

A site investigation was conducted at the suspected Little South America drum dump during the 2000 field season. A thorough ground survey of the area was also conducted. No evidence of drums or contamination was discovered in the reported area. A rusted hot water heater was found in the area and is suspected to have been mistaken for a drum.

5.45.3 Conclusions and Recommendations

Based on the findings of the site investigation, no further action at the suspected Little South America drum dump along Swanson Drive is recommended.

5.46 ABANDONED ROMMEL STAKES

Two abandoned Rommel stakes (rebar positioned in concrete blocks) were reportedly located at the southeast and southwest corners of the cemetery located east of the City of Unalaska. See Figure 5-53 for their reported locations. Rommel stakes are also reportedly located on Strawberry Hill and Rocky Point.

5.46.1 Previous Activities

No previous activities have been conducted involving the removal of Rommel stakes. The City of Unalaska cemetery stakes were identified during an April 2000 public meeting by a community member. The community member stated that the stakes pose a hazard to recreational activities (sledding) that occur in the area.

5.46.2 2000 Work Completed

A site investigation was conducted during the 2000 field season to locate the reported Rommel stakes. However, no Rommel stakes were located. Therefore, community members familiar with the area and who original brought the issue to light were contacted. It was then discovered that the suspected Rommel stake was a severely rusted bicycle that had a crank sticking out into the air. The bicycle was removed and disposed in the City of Unalaska Landfill.

5.46.3 Conclusions and Recommendations

No further action is necessary with regards to Rommel stakes at the cemetery site. Rommel stakes are still present at Strawberry Hill, Rocky Point, and Mount Ballyhoo; these may be removed in future field efforts pending eligibility under the FUDs program and coordination and approval from SHPO and the NPS.

5.47 UNALASKA VALLEY BUILDINGS

Buildings 3165, 3695, and 2569 were situated in Upper Unalaska Valley at different locations.

5.47.1 Previous Activities

Buildings 3165, 3695, and 2569 were observed to have magnetic anomalies or other indications of possible USTs, as noted in the 1999 Comprehensive RI (USAED 2000a).

5.47.2 2000 Work Completed

Building 3695 was not located during the 2000 field season; therefore, no work was performed at the site.

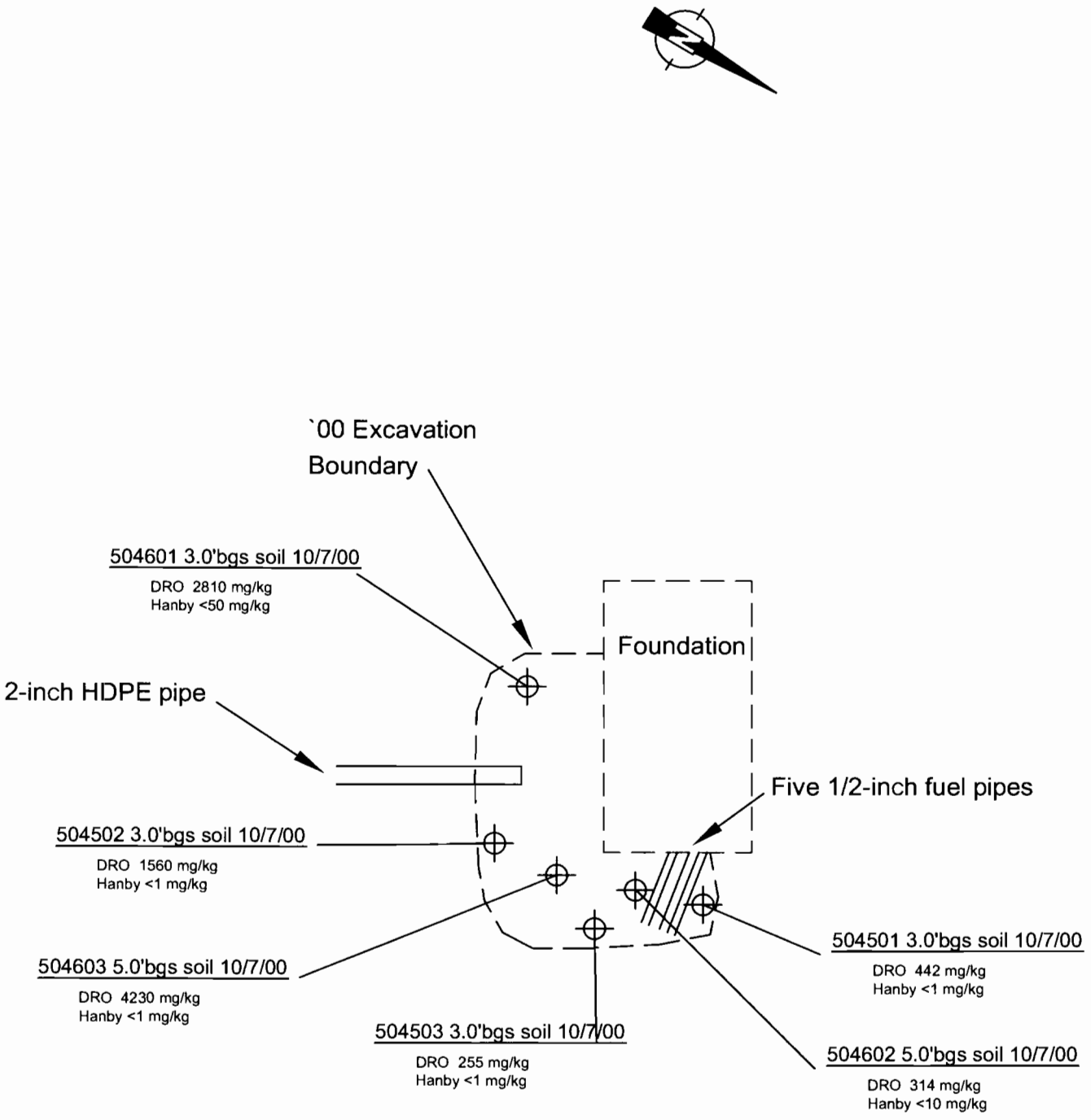
Buildings 2569 and 3165 were located. A site investigation at Building 2569 discovered pipes entering the still existing building. The lines were traced but no UST was discovered.

It is suspected that the lines were attached to an AST or the UST associated with the building that was previously removed.

A site investigation at the former Building 3165 did not detect any evidence of contamination or magnetic anomalies. However, a stake marking a magnetic anomaly from the 1998 field season was discovered at a building south of the former Building 3165. It is believed that this unnumbered former building was previously mistaken for Building 3165. It appeared from the dimensions of the building's foundation that the building was a previous generator building. Therefore, the building will be called the Ski Bowl generator building.

The Ski Bowl generator building foundation and three foot high concrete walls remain at the site. During the site investigation, ½ inch fuel piping was noted entering the east wall of the existing foundation. A test pit was dug on 7 October along the east wall of the foundation to determine if a UST or fuel contamination remained at the site. Four lengths of the ½ inch diameter pipe was uncovered, and all four of the pipes ended approximately five feet from the former building's foundation; a UST was not encountered. Field screening results indicated that contamination remained at the site; therefore, the test pit was continued until 10 cy of contaminated soil was removed and field screening results indicated that the contamination was removed. The area was then backfilled with clean fill and seeded. The test pit was advanced to five feet bgs where weathered bedrock was encountered. The removed soil was compromised mainly of organic rich silt with some sands. Figure 5-53 presents the general site location and Figure 5-57 presents the site layout.

The discovery of a two inch HDPE pipe encountered along the south edge of the excavation raises the issue of FUDS eligibility for this site. Research has indicated that squatters settled in the area in the early 1980's and constructed temporary living facilities using some of the existing WWII structures and foundations. The presence of HDPE pipe in the excavated area indicates that the area was potentially put to beneficial use of some form after the military abandoned the site.



LEGEND

⊕ Screening and Analytical Sample Location (Sample ID/Depth (ft)/Date Collected)

SKI BOWL GENERATOR BLDG SITE LAYOUT and SAMPLE LOCATIONS

Amaknak, Alaska

PROJ. MGR:	FILE NAME.	FIGURE NO.
S. KOCH	RPT5-57	5-57
DRAWN BY.	FILE LOCATION.	DATE:
BY	Amaknak\30227	12 Feb 01

5.47.2.1 Field Screening Results

Direct screen PID readings of 25 ppm were encountered during the digging of the initial test pit. This led to the expansion of the test pit into the 10 cy excavation. Six Hanby™ soil screening samples were collected from the test pit/excavation to confirm that all the contamination was removed. One screening sample was collected from the each of the four sidewalls; two screening samples were collected from the floor of the excavation. Figure 5-57 presents the locations and screening results.

5.47.2.2 Analytical Results

Six soil analytical samples were collected from the excavation: four samples from the sidewalls and two from the floor. One TOC sample was also collected from the uncontaminated soil stockpile. DRO was detected in every analytical sample, and methylene chloride was detected in three samples above Method 2 regulatory criteria. Therefore, Method 3 regulatory criteria was calculated for DRO using site-specific TOC data contained in Table 3-2. The resulting most stringent site-specific cleanup level for DRO is 6,940 mg/kg; therefore, no samples exceeded the DRO Method 3 regulatory criteria. The site-specific cleanup level for methylene chloride is 260,000 µg/kg. Groundwater was not encountered at the site, thus cleanup level based on inhalation was used instead of migration to groundwater. Therefore, the methylene chloride detected at the site does not exceed the calculated Method 3 regulatory criteria. An assessment of cumulative risks and hazards could not be conducted according to procedures described in Section 3.3.4 because PAHs were not analyzed for the site. Figure 5-57 presents the sample locations and Table 5-52 lists the complete suite of analyses for each sample and sample results above detection limits. A complete set of analytical results is included in Appendix D. The Method 3 calculation sheets are included in Appendix J.

5.47.3 Conclusions and Recommendations

Limited further action is recommended for the Ski Bowl generator building site. Although HDPE pipe was encountered in the 2000 excavation, the contamination detected appears to be related to the former building's UST. Because PAHs were not analyzed for at the site,

Table 5-52
Ski Bowl Generator Building Soil Analytical Results Above Detection Limits

Parameter	Units	ADEC Cleanup Level[1]	Proposed Method 3 Cleanup Levels[2]	Sample Results					
				AM-A504501	AM-A504502	AM-A504503	AM-A504601	AM-A504602	AM-A504603
Location	--	--	--	North wall	South wall	East wall	West wall	North floor	South floor
Diesel Range Organics (AK102)	mg/kg	230	6940	442	1560	255	2810	314	4230
Residual Range Organics (AK103)	mg/kg	8300	8300	1630	1280	1340	1580	681	684
Volatile Organic Compounds (SW8260B)									
2-Butanone	µg/kg	--	--	720	570	1500	ND [430]	1500	2300
Methylene chloride	µg/kg	10	260,000	130	100	ND [84]	56	ND [67]	ND [110]

[1]18 AAC 75, Table B1, Method 2, Over 40-inch zone, most stringent of the three pathways.
[2]Note: The proposed Method 3 cleanup levels for DRO is based on migration to groundwater and the proposed Method 3 cleanup level for RRO is based on ingestion. The proposed Method 3 cleanup level for Methylene chloride is based on inhalation and is greater than the migration to groundwater because groundwater was not encountered at the site to the depth bedrock was encountered.

Method 2 or Method 3 regulatory cannot be applied to the site. In addition, only one TOC sample was collected for the site. Based on the one TOC sample, it appears that the site can be closed with no further excavation work if PAHs are collected from within the contaminated area and additional TOC data is collected from the site. Therefore, it is recommended that hand auger samples be collected in the vicinity of the limits of the 2000 excavation and analyzed for DRO, RRO, and PAHs. Care must be taken to not sample the 2000 field season backfill material. In addition, two additional TOC samples should be collected in the vicinity of the site so that site-specific Method 3 regulatory criteria can be re-calculated for the site using more than one TOC sample.

5.48 BROADWAY AVENUE TRANSFORMER POLE

This site consists of a transformer mounted on a utility pole on the east side of Broadway Avenue approximately 200 feet north of the Overland Drive and Broadway Avenue intersection.

5.48.1 Previous Activities

No previous activities have been conducted at this area. The area was identified during an April 2000 Public Meeting by a community member.

5.48.2 2000 Work Completed

A site investigation was conducted at the Broadway Avenue transformer pole, and utility records were researched during the 2000 field season. Based on historical records, the transformer was determined to have been used by the City of Unalaska and a private citizen. This citizen, who owns the adjacent property, also stated that the transformer was disconnected by the City of Unalaska about 15 years ago, but could not be removed because the equipment could not reach the transformer. Therefore, the transformer was deemed not FUDS eligible.

5.48.3 Conclusions and Recommendations

Based on the findings of the site investigation, no further action at the Broadway Avenue transformer pole is recommended.

5.49 PRE-WWII TANK FARM AREA TRENCH

The Pre-WWII Tank Farm Area is located on the west side of East Point Loop Road between Biorka Drive and Delta Way. Figure 5-58 presents the location of the Pre-WWII Tank Farm Area and the trench excavated in June 1999.

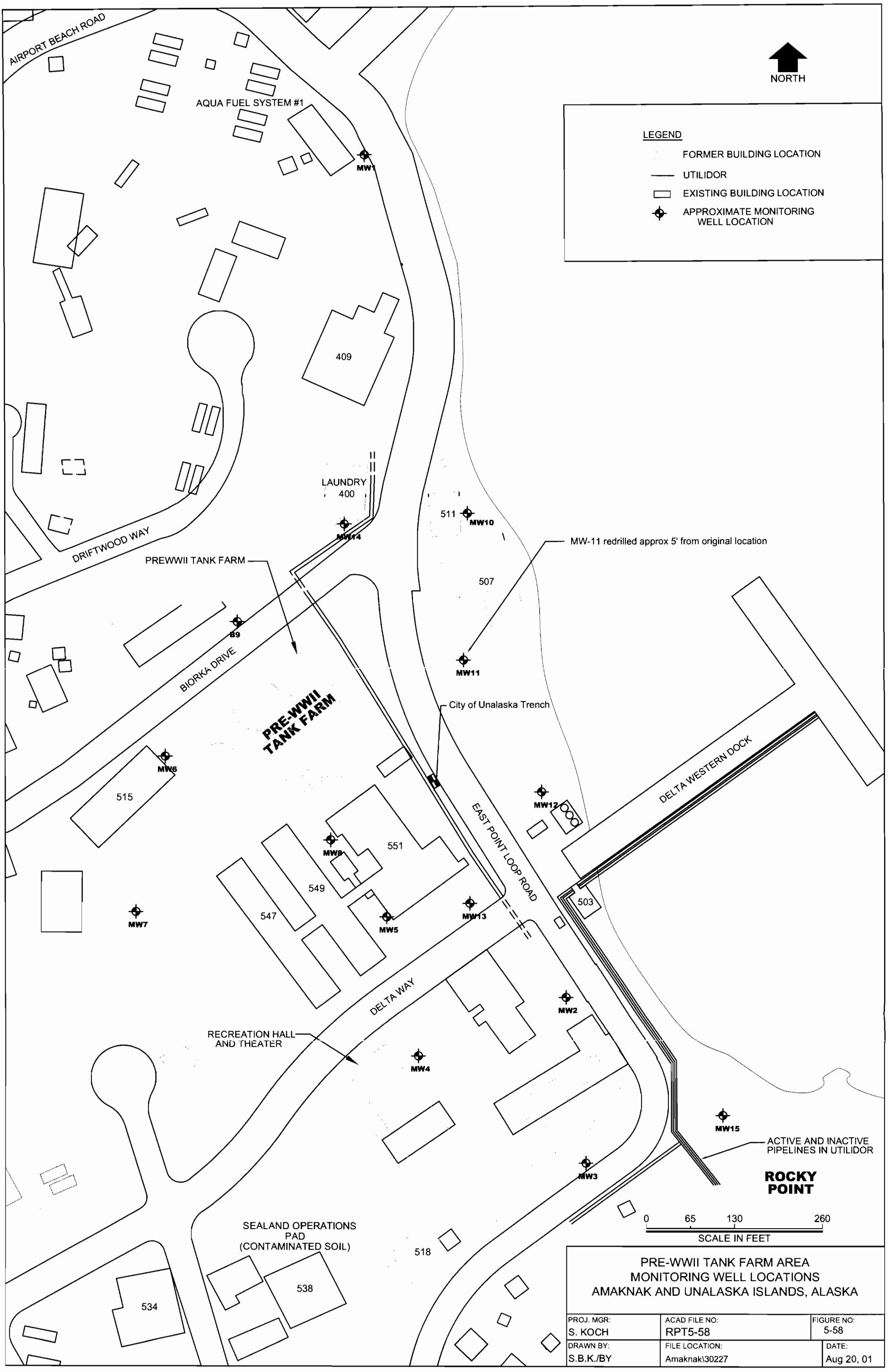
5.49.1 Previous Activities

The City of Unalaska excavated a trench between East Point Loop Road and the utilidor that parallels the road to the west in June 1999. Beach cobbles in the excavation were noted to be lightly coated with oil. Jacobs field personnel visually inspected the product and noted that the product was "flowing." Their visual inspection concluded that the product was not Bunker C oil but more likely diesel fuel. However, analytical samples were not collected to confirm the visual inspection.

Quarterly groundwater sampling is attempted at MW-13, a monitoring well located approximately 225 feet south of the excavated trench. Free product has been detected in MW-13 since it was first sampled in November 1998; therefore, groundwater samples have not been collected. A sample of the product was collected in May 2000 and it was determined to be Bunker C oil laced with a light-end fuel product. The light-end fuel product is from a source other than the Pre-WWII Tank Farm Area Bunker C oil and could be migrating into the area from Rocky Point to the South.

5.49.2 2000 Work Completed

The planned work at the Pre-WWII Tank Farm Area was not identified until after the final *2000 Islandwide Work Plan* was completed and published; therefore, the planned work was described in the *2000 Islandwide Work Plan Technical Memorandum.* The activities


AIRPORT BEACH ROAD
AQUA FUEL SYSTEM #1
NORTH
LEGEND
FORMER BUILDING LOCATION
UTILIDOR
EXISTING BUILDING LOCATION
APPROXIMATE MONITORING WELL LOCATION
MW1
409
LAUNDRY
400
MW14
DRIFTWOOD WAY
PREWWII TANK FARM
511
MW10
MW-11 redrilled approx 5' from original location
507
B9
BIORKA DRIVE
MW11
PRE-WWII TANK FARM
City of Unalaska Trench
MW6
515
MW12
DELTA WESTERN DOCK
EAST POINT LOOP ROAD
MW8
551
549
503
MW7
547
MW5
MW13
DELTA WAY
MW2
RECREATION HALL AND THEATER
MW4
MW15
ACTIVE AND INACTIVE PIPELINES IN UTILIDOR
MW3
ROCKY POINT
0 65 130 260
SCALE IN FEET
SEALAND OPERATIONS PAD (CONTAMINATED SOIL)
518
538
534
PRE-WWII TANK FARM AREA
MONITORING WELL LOCATIONS
AMAKNAK AND UNALASKA ISLANDS, ALASKA
PROJ. MGR: S. KOCH
ACAD FILE NO: RPT5-58
FIGURE NO: 5-58
DRAWN BY: S.B.K./BY
FILE LOCATION: Amaknak\30227
DATE: Aug 20, 01

discussed in the Addendum were not performed during the 2000 field season because there was not sufficient time to complete SHPO coordination for the site.

5.49.3 Conclusions and Recommendations

It is recommended that the activities detailed in the *2000 Islandwide Work Plan Technical Memorandum* for the Pre-WWII Tank Farm Area be conducted during the 2001 field season.

5.50 PRE-WWII MONITORING WELL 11 RE-DRILLING

Monitoring well 11 (MW-11) is located at the Pre-WWII Tank Farm Area, east of East Point Loop Road, in an area that is typically used for crab pot storage. The monitoring well was drilled as part of the groundwater monitoring program at the Pre-WWII Tank Farm/Ptarmigan Flats site.

Heavy equipment frequently moves the crab pots in the vicinity of the monitoring well and in the winter heavy equipment is used in the area to dump plowed snow. The frequent use of heavy equipment in the area has caused repeated damage to the well and has compromised the integrity of the well casing. Figure 5-58 presents the location of the Pre-WWII Tank Farm Area and MW-11.

5.50.1 Previous Activities

The outer flush mount protector casing (Christy box) for monitoring well MW-11 was found to be severely damaged during the November 1999 Pre-WWII Tank Farm Area groundwater sampling event. Crab pot storage activities in the area were the likely cause of this damage. The field crew installed a new Christy box at MW-11 on 20 November 1999; however, it was once again observed to be severely damaged during the February 2000 groundwater sampling event. Snow removal operations in the vicinity of MW-11 were believed to be the cause of the damage. A new Christy box was again installed at MW-11 during the May 2000 groundwater sampling event. While sampling MW-11 during the May event, it was noted that suspended solids could not be purged from the well. It was concluded that the well's integrity may have been compromised by repeated damage to the top of the well casing and

Christy box. The Christy Box was again severely damaged prior to the August 2000 groundwater sampling event. It was decided that the integrity of MW-11 was indeed compromised and that a new well would be drilled.

5.50.2 2000 Work Completed

A new MW-11 was redrilled on 2 September 2000 approximately 5-feet from the original MW-11. The new well was drilled to 20-feet below ground surface (bgs). After coordination with OC, permission was granted to install three permanent metal protective bollards around MW-11. During drilling, hydrocarbon contamination was evident from approximately 10 to 20 feet bgs and water was encountered at 11-feet bgs. A 2-inch diameter PVC well was installed in MW-11 and was screened from 10 to 20 feet bgs. Figure 5-58 presents the location of the new MW-11. Appendix C presents the soil boring exploration logs and the monitoring well logs.

5.50.3 Conclusions and Recommendations

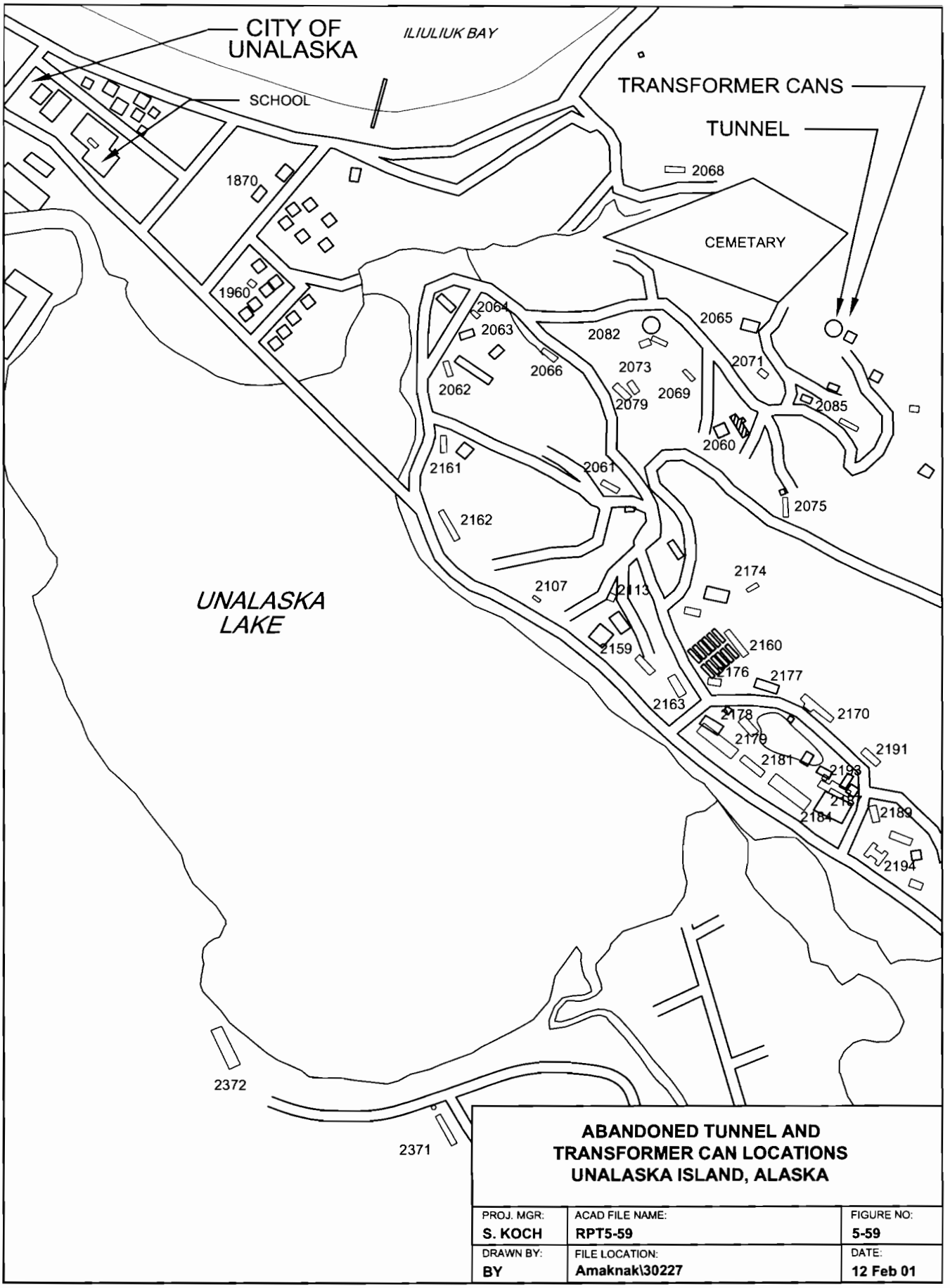
No further action is necessary for this site. MW-11 should continue to be sampled as part of the Pre-WWII Tank Farm area and Ptarmigan Flats area groundwater sampling program.

5.51 TUNNEL CLOSURES

A tunnel was identified during an April 2000 public meeting by a community member as a community safety concern. The tunnel had open access and was located within an existing housing area; it harbored a risk that children playing inside the tunnel could injure themselves if the tunnel collapsed. See Figure 5-59 for the location of the tunnel.

5.51.1 Previous Activities

No previous activities have been conducted in the tunnel area.



ABANDONED TUNNEL AND TRANSFORMER CAN LOCATIONS UNALASKA ISLAND, ALASKA

PROJ. MGR:	ACAD FILE NAME:	FIGURE NO:
S. KOCH	RPT5-59	5-59
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BY	Amaknak\30227	12 Feb 01

5.51.2 2000 Work Completed

The planned fieldwork to close the tunnel was not identified until after the final *2000 Islandwide Work Plan* was completed and published; therefore, the planned work was described in the *2000 Islandwide Work Plan Technical Memorandum.*

A site investigation of the tunnel area was conducted by field personnel to include the on-site archeologist. It was determined that the tunnel opening could be filled in to prevent site access and eliminate the risk of injury to a person entering the tunnel. On 26 October the tunnel entrance was filled in with clean fill. Photographs documenting the site conditions are included in Appendix A.

5.51.3 Conclusions and Recommendations

No further action at the site is warranted.

5.52 ABANDONED TRANSFORMER CANS

Two abandoned empty transformer cans located at the end of Nirvana Drive were identified during a community meeting. Figure 5-59 presents the general location of the cans.

5.52.1 Previous Activities

No previous activities have been conducted at this site.

5.52.2 2000 Work Completed

The planned work to investigate the transformer cans was not identified until after the final *2000 Islandwide Work Plan* was completed and published; therefore, the planned work was described in the *2000 Islandwide Work Plan Technical Memorandum.*

A site investigation of the area where the transformer cans were reported was conducted by field personnel. No sign of transformer cans were present in the area. The reported area was currently being developed and the road was being improved to allow access for construction

equipment to build new houses in the general area. It is believed that, during construction of the new houses and improvement of the road, the transformer cans were removed from the area by the construction crews. Photographs documenting the site conditions are included in Appendix A.

5.52.3 Conclusions and Recommendations

No further action at the site is warranted.

6.0 LABORATORY ANALYSES

Fixed laboratory analyses were performed on surface soil, subsurface soil, marine and freshwater sediments, surface water, groundwater, and waste characterization samples collected during the 2000 field season.

Information on the laboratories used, laboratory methods, and the analytical QA/QC program for the 2000 field season is presented in the following sections. Section 6.1 presents the analytical parameters used in support of the project. A discussion of sample handling procedures is presented in Section 6.2, and a summary of the data quality assessment is presented in Section 6.3. Analytical results above detection limits are presented in site-specific tables in Section 5 and a complete set of analytical data is included in Appendix D.

Laboratories. DataChem Laboratories, based in Salt Lake City, Utah, supported the analytical requirements for the 2000 field effort. Laucks Laboratories functioned as the U.S. Army Corps of Engineers' quality assurance (QA) laboratory.

Analytical QA/QC Program Requirements. A QA/QC program was incorporated into data collection to ensure control over field collection accuracy and laboratory measurements and to address the uncertainty of measurement results. To assess laboratory performance, QC sampling and analysis was incorporated into the program to provide information concerning contamination, bias, and variability. In addition, QC sample results were used to detect possible method error and to direct corrective actions. Standard analytical methods, standardized data collection forms, CoC procedures, and standard sample holding times were used to enhance the representativeness of the measurement process. Types of laboratory QC samples and frequency of QC sample analysis for each method used are presented in the TERC Standard Quality Assurance Project Plan (QAPP).

6.1 ANALYTICAL PARAMETERS

As part of field activities, laboratory chemical analyses were performed on samples of soils, sediments, surface water, groundwater, and various waste media. For these activities, the laboratory analytical procedures primarily followed *Test Methods for Evaluating Solid Waste,*

Physical and Chemical Methods, SW-846 Third Edition (EPA 1996). GRO, DRO, and RRO analyses were directed to be performed according to the 18 AAC 78 State of Alaska Methods AK101, AK102, and AK103, respectively. Select chemical analyses were also taken from the Code of Federal Regulations (CFR) 40, Part 136 and *Methods for Chemical Analysis of Water and Wastes* (EPA 1996).

6.1.1 Chemical Testing Methods

The analytical suite applied at any given area was based on (1) existing information such as the types of contaminants that were known or suspected, (2) results from previous studies at similar areas, (3) field observations, and (4) guidance documents prepared by the ADEC. The rationale for analytical suite selection was presented in the *2000 Islandwide Work Plan* and are generally discussed below. The actual analytical suites for each area are found in the site-specific tables contained in Section 5 of this report and are discussed in Appendix A of the *2000 Islandwide Work Plan.*

6.2 SAMPLE HANDLING

The possession and handling of individual samples must be traceable from the time of sample collection until the time the analytical laboratory reports the results of chemical analysis to the appropriate parties. The sample handling procedures followed during the 2000 field season are detailed in the *2000 Islandwide Work Plan.* The following sections present the sample handling documentation procedures implemented during Amaknak and Unalaska Islands IRA and investigation activities.

6.3 DATA QUALITY ASSESSMENT

This section discusses the data quality of the 2000 Islandwide data. An assessment of whether sample collection, handling, analysis and reporting procedures defined in the field sampling and quality assurance project plans were followed will be included in the final report. At this time, none of the data included in the report is appropriately flagged.

6.3.1 Data Evaluation Approach

A data quality review, including an evaluation of both hardcopy and electronic results, will be performed to determine the overall quality and usability of the data. Data quality will be evaluated against requirements of the QAPP and subsequent addenda, laboratory standard operating procedures (SOPs), specific laboratory method and Laboratory QAPP (LQAPP) acceptance limits and QA frequency criteria. The EPA National Functional Guidelines (EPA 1994a, b) for inorganic and organic analyses will be used to determine qualification of data when acceptance criteria were not met. This will include the assigning of data qualifier codes that qualify the use of the affected data.

Data validity is a function of both the magnitude of data qualification and overall data quality. That is, nonqualified data and estimated ("J") data will be considered to be valid, usable data. Data that are rejected ("R") because of failure to meet established QC limits or had systemic problems will not be used for risk-based screening or will be downgraded to field screening use only. Section 6.3.2 will summarize the validity of the data, specifically addressing any data requiring qualification and identifing usability impacts. Any gross violation of QC criteria that will be cause for rejection of the data will also be identified.

The analytical data were provided by the laboratories in both hardcopy and electronic formats. On a project-wide basis, one hundred percent of the analytical hardcopy data will be reviewed. All results being identified during the hardcopy review as outside the project acceptance criteria will be evaluated and qualified as appropriate. In addition, a predetermined portion of the electronic data will also be reviewed by the Jacobs project chemist to assess its validity and completeness. This review will compare electronic analytical results and associated QC data to the corresponding values within the hardcopy data.

The validation contractor will review the analytical data. This will include a review of summary forms, CoC records, run logs, and extraction logs. Formulas and sample calculations will not be reviewed unless the hardcopy or electronic deliverables indicate a systemic problem.

To determine if analytical DQOs for this field investigation were met, the quality of the sample data will be reviewed against the data quality indicators and performance objective requirements as defined in the field sampling plan (FSP), QAPP, LQAPP, and analytical methods. Compliance with the analytical DQOs will be evaluated under the data quality assessment process and consist of a review of the following QA parameters and criteria:

- PRECISION
  - Matrix Spike Duplicates (MSD)
  - Field Duplicates
- ACCURACY
  - Calibrations - initial and continuing; acceptance, frequency
  - Surrogates - recovery, frequency
  - Lab Control Samples/Spikes (LCS)
  - Matrix Spikes (MS)
  - Retention Times
  - Relative Response Factors (RRFs)
  - Relative Standard Deviation (RSD)
  - Method Blanks
  - Gas Chromatography (GC) confirmation
  - Tune Criteria gas chromatography/mass spectroscopy (GC/MS) - acceptability, frequency
  - Internal Standards (GC/MS) - acceptability, frequency
- REPRESENTATIVENESS
  - Sample Chain-of-Custody
  - Holding Times and Preservation
  - Work Plans
- COMPARABILITY
  - SOPs
  - Established analytical methods
- COMPLETENESS
  - Samples (field, QA, and QC)
  - Data Packages (forms, runlogs, extraction logs, etc.)
  - Ninety-five percent completeness

- SENSITIVITY
  - Analytical laboratory reporting limits

6.3.2 Data Quality Summary

After the completion of the data review, a Chemical Data Quality Report (CDQR) will be generated. This report will summarize the data quality review performed by the data validation contractor and include validation worksheets. It will also provide case narrative and cooler receipt forms, as well as a summary of the laboratory nonconformance issues, a description of laboratory-implemented corrective actions, and document sample receipt conditions. In addition, it will contain CoC records, which provide sample identification information, method requirements, sampling dates, and identify QA/QC samples. The Jacobs project chemist will review the CDQR to fully assess data usability and apply validation qualifiers to data, if required. The CDQR will be included in the final report as an appendix.

There were some systemic problems identified during completeness checks of hardcopy deliverables. Initial integration of DRO and RRO chromatograms by DataChem was done using an inappropriate valley to valley type of integration. Jacobs requested reintegration using a forced horizontal baseline and resubmittal of all the DRO and RRO data. An initial review of some of the QC data suggest that much of the data will be estimated based on QC data above acceptance criteria creating a high bias for DRO and RRO data project wide. DataChem also integrated the RRO out to C44 rather than C36, as is appropriate for the method. This will also tend to bias the RRO data high. However, both of these high biases are more favorable for protection of the environment and make the conclusions and recommendations in this report conservative.

Another systemic problem was uncovered during review of the hardcopy data. The laboratory used an assumed sample and/or tare weight for approximately 32 data points associated with methanol preservation (i.e. GRO/BTEX/VOC in soil). There were approximately 12 GRO, 1 VOC, and 9 BTEX results where the laboratory assumed an average tare weight. This data will likely be estimated. The laboratory used an assumed sample weight of 25 grams for 6 BTEX and 5 VOC results. This data will most likely be rejected and used as screening data.

However, of the 11 rejected samples, only four samples relate to characterizing a site investigated during the Islandwide activities. Of the other seven samples, two were collected for waste characterization and five were collected to document the baseline conditions at the contaminated soil stockpile. Table 6-1 presents the 11 sample results that will be rejected and used as screening data.

Table 6-1
Assumed Tare Weight and/or Sample Weight Rejected Data

Site	Sample ID	Location	Method Affected
LSA Tank	AM-A501501 and AM-A501601	AST waste characterization sample	SW8260B, VOCs (includes BTEX)
LSA Drums	AM-A501701	Drum Location 1	SW8260B, VOCs
	AM-A501801	Drum Location 2	SW8260B, VOCs
	AM-A501901	Drum Location 3	SW8260B, VOCs
	AM-A502001	Drum Location 4	SW8260B, VOCs
Contaminated Soil Stockpile Yard	AM-A501201 thru 501205	Baseline samples collected from the contaminated soil stockpile area	SW8260B, VOCs

BTEX - benzene, toluene, ethylbenzene, and xylenes
VOCs - volatile organic compounds

A final determination of data quality will be included in the final report. All flagged data will be noted in the site-specific data tables contained in Section 5 and in the complete set of analytical data contained in Appendix D.

7.0 CONCLUSIONS AND RECOMMENDATIONS

This section summarizes the conclusions and recommendations contained in Section 5. Fifty two areas consisting of 73 individual sites were investigated during the 2000 field season. Fifty-two sites are recommended for NFA, 21 sites are recommended for some form of further action, two sites are recommended for NFA pending eligibility issues, 4 sites do not require further action, but institutional controls are recommended. The scope of work detailed in the 2000 Islandwide Work Plan was not conducted at four sites and is recommended for the 2001 sampling season. The conclusions reached for each of the 73 sites addressed during the 2000 field season are summarized in Table 7-1. A more thorough discussion of the further action sites is included in the following subsections and in the site-specific sections in Section 5.

7.1 USTs 2664 and 2667

No further action is recommended for the Building 2664 and 2667 sites. The draw down test and subsequent sampling event indicated that contamination is not being drawn into the City Municipal Well or the installed sentinel wells surrounding the City Well. However, residual contamination remains in the underlying bedrock; therefore, it is recommended that the level of institutional controls required to manage the residual contamination be coordinated between the USAED, ADEC, and the property owner.

7.2 UST 3260

Limited further action is recommended for this site due to the one soil DRO result that marginally exceeds the calculated site-specific Method 3 regulatory criteria and due to the contaminants detected in the creek sediment. Lack of correlation between field screening and laboratory analytical results may be partly attributable to biogenic interference (See Appendix H).

Due to the wetland nature of the site, excavation work was not performed during the 2000 field season and is not recommended for future work. Excavation activities would be problematic due amount of surface water and shallow groundwater at the site and the poor

condition of the site access road. In addition, the one soil result that exceeds the calculated Method 2 ingestion criteria for DRO was collected at one foot bgs.

Surface water in the downgradient creek and groundwater in the two downgradient well points do not exceed 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. In addition, no parameters at the site exceed the calculated Method 3 migration to groundwater regulatory criteria. Since no parameters currently exceed the migration to groundwater criteria and contaminants have not migrated to the groundwater or surface water downgradient of the site, it is reasonable to conclude that contaminant migration is not occurring.

In order to ensure that contamination has not migrated off-site and will not migrate in the future, it is recommended that an additional well point be placed to the south of Building 3265 and that the three well points be sampled annually over the next two years. Additionally, it is recommended that a creek sediment and surface water sample be collected both upstream of the 2000 sample location (north of Building 3260) to represent the creek's natural condition and further downstream of the 2000 sample location to determine if contaminants have migrated to the creek. These samples will be analyzed for DRO and PAHs.

If no contaminants are detected in the downgradient well points or in the creek sediment or surface water after sampling for two years, then the site will be recommended for NFA. Fish do not migrate to this area of the creek so they are not exposed to these sediments, and even the most careful excavation of the contaminated sediments in the creek bottom would release some of the contaminated sediments into the water which would flow to areas used by fish.

7.3 USTs 2762A AND 2762B

Two soil samples collected from the excavation sidewall adjacent to the building foundation exceeded ADEC Method 2 DRO cleanup levels. No other contaminants were detected in either soil or groundwater samples that exceeded Method 2 regulatory criteria or 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels; the site did not exceed the cumulative risk and hazard index limitations.

Table 7-1
Recommendations for Amaknak/Unalaska Island Sites
Based on 2000 Field Activities

Report Section	Site Name	Recommendations
5.1	UST 2674	NFA
5.2	USTs 2664 AND 2667	NFA, Institutional Controls
5.3/7.1	UST 3260	Further Action
5.4	UST 3465	NFA
5.5	UST 3475	NFA
5.6	USTs 2762A AND 2762B	NFA, Institutional Controls
5.7	USTs 2766A AND 2766B	NFA
5.8	UST 3665	NFA
5.9	UPPER UNALASKA VALLEY 165TH ROAD AND UGADAGA ROAD (3760 and 3860)	NFA
5.10/7.2	UST 3065	Further Action, Institutional Controls
5.11	UST 3075	Further Action, Institutional Controls
5.12/7.3	LITTLE SOUTH AMERICA (LSA) SITES	
	LSA AST	NFA
	LSA Drums	Further Action
	Building 1154	NFA, Institutional Controls
	LSA Latrine 7	NFA
	Building 1205	NFA
	LSA Latrine 1	Further Action
	Building 1050	NFA
	Building 1128	NFA
	Building 1245	NFA
5.13	BUILDING 627 STEAM PLANT VAULT AND POL SITES	NFA pending resolution of eligibility issues
5.14	HUMPY COVE (HC)	
	HC Power Plant	NFA, Institutional Controls
	HC Dispensary	NFA
	HC Latrine 1	NFA
	HC Latrine 3	NFA
5.15	SUMMER BAY AST AND 55-GALLON DRUM	Conduct scope detailed in 2000 Work Plan
5.16/7.4	SUMMER BAY TRANSFORMERS, UTILIDORS, AND DRUMS	Further Action
5.17/7.5	MT. BALLYHOO/FORT SCHWATKA USTs AND TRANSFORMERS	
	Transformer Vaults	Further Action
	Bomb Shelter UST	NFA
	Building C UST	NFA, Institutional Controls
	Building H UST	NFA
	Ballyhoo Drums	NFA
	Building B UST	Further Action
5.18	BALLYHOO SPIT TANK FARM AND TANK FARM TO AIRPORT PIPELINE	Further Action
5.19/7.6	BALLYHOO BATTERIES AND STAND-ALONE TRANSFORMER	Further Action
5.20/7.7	PORT LEVASHEF DRUM GROUPS	Further Action
5.21	FORT MEARS LANDFILL (SOUTH)	NFA
5.22	FLOATING PUMPHOUSE, ILIULIUK LAKE, AND UNALASKA LAKE	
	Iliuliuk Lake	Further Action
	Unalaska Lake	Further Action
5.23	SUBMARINE BASE/SHIP REPAIR FACILITY	NFA
5.24/7.8	FORT MEARS LANDFILL (NORTH) AND GASOLINE STATION	
	Fort Mears Landfill (north)	Further Action
	Fort Mears Gas Station	NFA
5.25	CROWLEY DOCK	NFA
5.26	MILITARY FUEL DISTRIBUTION CENTER - 638	NFA

Table 7-1 (continued)
Recommendations for Amaknak/Unalaska Island Sites
Based on 2000 Field Activities

Report Section	Site Name	Recommendations
5.27	FORMER POWER HOUSE BUILDING – BLDG 854	NFA
5.28	FORMER PEST CONTROL SHOP – BLDG 852, AND FORMER PAINT SHOP – BLDG 751	NFA
5.29	FORMER REFRIGERATION MAINTENANCE SHOP – BLDG 871	NFA
5.30	FORMER LAUNDRY FACILITY – BLDG 727	NFA
5.31	VARIOUS BUILDINGS AT THE SUBMARINE BASE	NFA
5.32/7.9	SUSPECTED MERCURY CONTAMINATION AT THE AIRPORT	Further Action
5.33	UNDERGROUND TRANSFORMER VAULTS AT THE FORMER NAVAL AIR STATION	NFA pending resolution of eligibility issues
5.34	NAVAL LAUNDRY FACILITY	NFA
5.35/7.10	FORMER OIL AND LUBE STORAGE	Further Action
5.36	FORMER USTs ALONG POWER HOUSE ROAD	Further Action
5.37	GENERALS HILL UTILIDORS AND PIPELINE CORRIDORS	Conduct scope detailed in 2000 Work Plan
5.38/7.11	DRY CLEANING AND LAUNDRY FACILITIES (BLDG 2577 AND 2563), AND OTHER UNALASKA GARRISON FACILITIES	
	Building 2577	NFA
	Building 2563	Further Action
5.39	ARMY GARRISON POWER GENERATION FACILITIES	Further Action
5.40	POTENTIAL POL IMPACTED SOIL AT THE CORNER OF AIRPORT BEACH ROAD AND CAPTAINS BAY ROAD	NFA
5.41	PYRAMID VALLEY TO CROWLEY DOCKS UTILIDORS	Conduct scope detailed in 2000 Work Plan
5.42/7.12	DRUM DUMP AND WWII DEBRIS PILE ALONG CAPTAINS BAY ROAD	Further Action
5.43	MORRIS COVE/MANCIL LAKE AREA	NFA
5.44	HUMPY COVE AREA	NFA
5.45	LITTLE SOUTH AMERICA SUSPECTED DRUM DUMPS	NFA
5.46	ABANDONED ROMMEL STAKES	NFA
5.47/7.13	UNALASKA VALLEY BUILDINGS	
	Ski Bowl Generator Building (previously identified as Building 3165)	Further Action
	Building 3695	NFA
	Building 2569	NFA
5.48	BROADWAY AVENUE TRANSFORMER POLE	NFA
5.49	PRE-WWII TANK FARM AREA TRENCH	Conduct scope detailed in 2000 Work Plan
5.50	PRE-WWII MONITORING WELL 11 RE-DRILLING	NFA
5.51	TUNNEL CLOSURES	NFA
5.52	ABANDONED TRANSFORMER CANS	NFA

Notes: NA = Not applicable POL = Petroleum, oil, and lubricants
NFA = No further action WWII = World War II

Although DRO concentrations exceeding ADEC Method 2 cleanup levels remain in site soils, the presence of the building foundation prevented further soil excavation. Therefore, it is recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

7.4 BUILDING 3760

Further action is recommended for Building 3760 due to the elevated levels of 2-Butanone in the sediment samples. Additional samples should be collected to confirm the presence of 2-Butanone and, if required, appropriate cleanup levels will be developed.

7.5 UST 3065

Two soil samples contained DRO concentrations exceeding Method 3 regulatory levels. Due to the shallow groundwater (approximately four feet bgs), proximity of the creek, and presence of the building foundation, future excavation activities at the site would be problematic and are not recommended. Further excavation in the area would serve to disturb contaminated soil and potentially entrain it in the groundwater and cause contaminant migration to the creek.

Surface water in the downgradient creek and groundwater in the well point immediately adjacent to the creek do not exceed 18 AAC 75, Table C groundwater cleanup levels or 18 AAC 70, surface water cleanup levels. In addition, the sediment in the creek does not exceed the sediment regulatory criteria. Since contaminants have not migrated to the groundwater, surface water, or sediment downgradient of the site in 50 years it is unlikely that they will migrate at this time.

In order to ensure that contamination has not migrated off-site and will not migrate in the future, it is recommended that the following actions be taken:

- Sample the existing well point annually over the next two years. It is anticipated that the DRO level detected in the well point during the 2000 field season will decrease without excavation activities occurring prior to sampling.
- Collect a creek sediment and surface water sample in the vicinity of the 2000 sample location annually over the next two years to monitor potential contaminant migration to

the creek.

- Conduct two hand augers between the building foundation and the creek to determine the lateral extent of the potential contamination at the site.

If no contaminants are detected in hand auger samples, well point, creek sediment, or surface water after sampling for two years, then the site will be recommended for NFA. It is also recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

7.6 UST 3075

Limited action is recommended for the Building 3075 site. No contaminants were detected in the soil, sediment, surface water, or groundwater samples collected in 2000 that exceeded regulatory criteria, and the site did not exceed the cumulative risk and hazard index limitations. Although Hanby™ field screening results in the sidewall of TP-1 indicated that contamination extended beneath Building 3075, no contamination was detected in the floor of the test pit or in the downgradient riverbank and river sediment samples. Although DRO was detected in the 1997 excavation above Method 2 cleanup levels, no contaminants were detected downgradient of the site.

It is recommended that one additional groundwater sample be collected from 3075 WP-1 to confirm levels are below groundwater cleanup levels. It is also recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

7.7 LITTLE SOUTH AMERICA

Two Little South America sites are recommended for further action. An additional site is recommended for NFA with institutional controls. The sites are discussed in the following subsections.

7.7.1 LSA Drums

Further action is recommended for Drum Location #4 due to the chromium and selenium results above regulatory levels and the calculated cumulative risk above limitations. It is

7.7.1 LSA Drums

Further action is recommended for Drum Location #4 due to the chromium and selenium results above regulatory levels and the calculated cumulative risk above limitations. It is recommended that the soil in the immediate vicinity of Drum Location #4 be removed with hand tools, containerized, and shipped off-site for disposal. Confirmation samples collected after soil removal will confirm that metals at the site have been removed. Samples will also be collected for semi-volatile organic compound (SVOC) analysis. Further action is also recommended for all four drum locations due to the presence of 2-Butanone; samples should be collected and if required, appropriate cleanup levels will be developed.

7.7.2 LSA Building 1154

One soil sample collected from the floor of building 1154 UST excavation contained a DRO concentration above the Method 2 regulatory criteria. However, the remaining contamination is located in the fissures of bedrock and would not be feasible to be removed. Therefore, it is recommended that the level of institutional controls required to manage the residual contamination be coordinated between the USAED, ADEC, and the property owner.

7.7.3 LSA Latrine 1

Further action is recommended for the Latrine 1 site due to the fuel results above regulatory levels. The severity of the slope immediately surrounding the site (see Appendix A for photographs of the site) and SHPO concerns preclude tank and soil removal. Therefore, additional site characterization is necessary to determine if contamination has migrated from the site in concentrations that exceed regulatory levels. The one sample collected during the 2000 field season was collected immediately beneath the tank and represents the "worst case" sample. It is recommended that additional downgradient samples be collected with a hand auger to determine the amount of contamination in the area and if contaminants have migrated from the immediate vicinity of the tank. Monitoring wells may be installed in the hand augered borings if groundwater is encountered. If installed, monitoring well(s) would be sampled for 2 years to determine if contaminants are migrating from the site.

7.8 HUMPY COVE POWER PLANT

No further action is recommended for the Humpy Cove Power Plant (HCPP) site. No contaminants were detected in the site's groundwater that exceeded regulatory criteria. During the removal of the former Power Plant UST in July 1998, approximately 540 cy of contaminated soil was transported off site for treatment. Confirmation samples collected from the excavation sidewall revealed residual DRO concentrations. The highest remaining DRO concentration, 11,000 mg/kg, was collected from the center of the northwest wall at a depth of 14 feet bgs, just above the groundwater level. Although residual DRO levels exceed ADEC Method 2 clean levels, further excavation of contaminated soils of this site is not recommended because of the proximity of the residual DRO concentrations to groundwater. Therefore, it is recommended that the level of institutional controls required to manage the residual soil contamination be coordinated between the USAED, ADEC, and the property owner.

7.9 SUMMER BAY TRANSFORMERS, UTILIDORS, AND DRUMS

The three intact drums with contents should be removed from the site and analytical samples collected beneath the drums to ensure that contaminated soil is not present. After removal of the drums and the AST and drum at the observation station, no further action is recommended for the Summer Bay area. SHPO coordination should begin immediately to ensure this work can be completed during the 2001 field season.

7.10 MT. BALLYHOO/FORT SCHWATKA USTs AND TRANSFORMERS

Two MT. Ballyhoo/Fort Schwatka sites are recommended for further action; one site is recommended for NFA with institutional controls. The sites are discussed in the following subsections.

7.10.1 Transformer Vaults

Further action is recommended for all three of the transformer vaults due to the PCBs detected in each vault and the fuels detected in the Building B vault that are not attributed to biogenic interference. It is recommended that the transformer vaults be dry decontaminated by

shoveling the accumulated soil from within each vault and transporting the soil off-site for disposal. It is also recommended that the vaults be permanently covered after dry decontamination. Covering of the vaults will require SHPO and NPS coordination. Hand auger samples collected from immediately adjacent to the transformer vaults are also recommended to determine if PCB contamination has migrated from inside the vaults.

7.10.2 Building C UST

One soil sample collected from the Building C USTs contained a DRO concentration that marginally exceeded the Method 2 regulatory criteria. Field notes and an analytical sample did not associate any contamination with BH-09. Due to the low concentrations of fuel detected at the site, PAHs were not analyzed at the site as required by 18 AAC 75.325(g) in order to use Method 2 or Method 3 regulatory criteria. It is assumed, however, that PAHs are not present at the site that would exceed the cumulative risk and/or hazard index limitations. It is recommended that the level of institutional controls required to manage the residual contamination be coordinated between the USAED, ADEC, and the property owner.

7.10.3 Building B UST

Further action is recommended for the Building B UST site due to the DRO result above regulatory levels. The severity of the slope that the UST is located on (see Appendix A for photographs of the site) and SHPO concerns preclude tank and soil removal. Therefore, additional site characterization is necessary to determine if contamination has migrated from the site in concentrations that exceed regulatory levels. The one sample collected during the 2000 field season was collected immediately beneath the tank and represents the "worst case" sample. Field observations only noted a slight fuel odor in the vicinity of the sample; therefore, it is not believed that a large volume of contamination is present at the site. It is recommended that additional downgradient samples be collected with a hand auger to determine the amount of contamination in the area and if contaminants have migrated from the immediate vicinity of the tank. Although considered highly unlikely, monitoring wells may be installed in the hand augered borings if groundwater is encountered. If installed, monitoring well(s) would be sampled for 2 years to determine if contaminants are migrating from the site.

7.11 MT. BALLYHOO SPIT TANK FARM AND TANK FARM TO AIRPORT PIPELINE

Soils at the Ballyhoo Spit Tank Farm site are recommended for NFA. No samples exceeded the calculated Method 3 regulatory criteria, and the site did not exceed the cumulative risk and hazard index limitations. While the analytical results at the site do not support the field screening results, as previously stated, the analytical results are the definitive tool in characterizing the site. The inconsistencies encountered at the site between the field screening results and the analytical results may be due to an extremely volatile contaminant that is immediately released from the soil upon excavation or one that is easily detected by the PID at concentrations that do not exceed regulatory criteria.

A sheen was observed on the groundwater at TP-6, however, it could not be identified as biogenic or POL-related. Therefore, an assessment of the underlying groundwater is recommended. Since groundwater was not encountered in the area of the former utilidors, a minimum of two well points should be installed where groundwater is encountered and sampled for DRO, GRO, BTEX, and PAHs.

7.12 BALLYHOO BATTERIES AND STAND-ALONE TRANSFORMER

Further action is recommended for Ballyhoo batteries and the stand-alone transformer site due to fuel, metals, and PCB contamination detected at the site. It is recommended that the soil underlying the former transformer and batteries be excavated and removed from the site. Confirmation samples are recommended after soil excavation to confirm the removal of the fuel, metals, and PCB contamination. In order to remove the underlying soil, the wood foundation that the transformer and batteries were previously placed on will also need to be removed. SHPO and NPS coordination will be required before this removal action can begin.

7.13 PORT LEVASHEF DRUM GROUPS

The Port Levashef Drum Group 2 site is recommended for limited further action. Due to the cadmium detection in PLD2-MW1, it is recommended that another groundwater sample be collected from PLD2-MW1 to determine if cadmium concentrations are indeed elevated at the site. Because cadmium was not detected in the soil samples collected from the Drum Group 2

sampling grid, it is believed that the cadmium detection was a sampling anomaly. NFA is recommended for the remainder of the Drum Group 2 site. Although one sample from the site exceeded Method 2 regulatory criteria for methylene chloride and both samples exceeded the arsenic regulatory criteria, NFA is recommended for the following reasons:

- Methylene chloride, which only marginally exceeded the regulatory criteria at Drum Group 2, is considered a common laboratory contaminant. The trip blank associated with the sample detected methylene chloride at 22 µg/kg (sample ID AM-A508102). Therefore, the methylene chloride detection will be qualified as "non-detect" after the CDQR Report is issued based on the trip blank detection.
- Arsenic concentrations at the site were above regulatory criteria but below accepted background concentrations contained in the Comprehensive RI Report (USAED 2000a).

Further action is recommended for the Port Levashef Drum Group 3 site. Due to the metal exceedances, it is recommended that the sample grid be expanded because the metal detections were on the periphery of the grid. Samples should be collected from the edge of the expanded grid and from within the center of the year 2000 grid because this area was not sampled during the 2000 season. The screening grid should be expanded until the lateral extent of metals contamination is determined. Alternatives to remove soils that exhibit metals concentrations above regulatory criteria will be recommended based on the area and potential depth of contaminated soil and location of the subsurface landfill/drum dump. In addition, it is recommended that PLD3 MW-1 be monitored for two years to determine if metals are migrating off-site.

7.14 FLOATING PUMPHOUSE, ILIULIUK LAKE

Additional sediment sampling on Iliuliuk Lake is recommended, particularly around the pumphouse (north side). It is recommended a grid sampling regime be implemented for DRO and PAHs to define the area where screening criteria are exceeded.

7.15 FORT MEARS LANDFILL (NORTH)

Limited further action is recommended for the Fort Mears Landfill (North) site. The arsenic (two samples) and selenium (four samples) concentrations detected in the groundwater exceed the groundwater cleanup levels regulatory criteria. Therefore, additional sampling is recommended to confirm the previous results for both arsenic and selenium. Due to the lead

exceedances in the beach sediment samples, it is recommended that another round of sediment samples be collected to confirm the 2000 results. Samples should also be collected to the east of the site to determine sediment background lead levels in the immediate vicinity. Because lead was not detected in the Fort Mears Landfill (North) monitoring wells, it is believed the lead detected in the beach sediment was a sampling anomaly or reflect naturally occurring background levels.

7.16 SUSPECTED MERCURY CONTAMINATION AT THE AIRPORT

Based on the findings of the site investigation and the detected mercury, further action is recommended at the site. The floor drain where mercury was detected should be traced, if possible, to determine the outfall. A sample should be collected from the outfall to determine if mercury migrated from the former Avionics Weather Building via the drain. In addition, samples should be collected along the edge of the building's foundation at areas likely to contain mercury contamination. Soils that are impacted by mercury should be removed from the site. If warranted, the building's drain should be cleaned as well to remove existing mercury contamination.

7.17 FORMER OIL AND LUBE STORAGE

Based on the findings of the site investigation, investigative test pits are recommended in the vicinity of the documented magnetic anomalies. The recorded GPS coordinates should be used to locate the magnetic anomalies in the future. If no contamination or buried drums are discovered then no further action at the site will be recommended.

7.18 FORMER USTs ALONG POWER HOUSE ROAD

Limited further action is recommended for the former USTs along Power House Road/Driftwood Way. Magnetic anomalies were not detected during the 2000 site investigation suggesting that no USTs remain buried at the site. Further research is recommended to locate the position of the former USTs followed by two test pits to determine if subsurface soil contamination is present.

7.19 LAUNDRY FACILITIES (BLDG 2563)

The presence of the half-inch pipe along the north end of the former Building 2563 foundation and the property owner's assertion that USTs have not been previously removed at the site indicate that a UST may still be present at the site. One test pit is recommended to the north of the foundation to determine if a UST is present at the site. If the test pit indicates the presence of a UST or contamination then additional work may be warranted based on a determination of FUDS eligibility. If no contamination or UST is discovered in the test pit then the site will be recommended for no further action. Prior to conducting any work at Building 2563, a signed ROE must be obtained from Mr. DeMeo (property owner) and SHPO clearance must be granted.

7.20 ARMY GARRISON POWER GENERATION FACILITIES

Based on the findings of the site investigation, further action at the former Unalaska Army Garrison Power Generation Buildings is recommended. Surface soil samples should be collected at random locations and analyzed for PCBs to evaluate potential exposure to site contaminants by children of the adjacent school.

7.21 DRUM DUMP AND WWII DEBRIS PILE ALONG CAPTAINS BAY ROAD

It is recommended that drums containing materials be removed from the area. Areas surrounding empty drums should be investigated. If stressed vegetation, stained soil, or other evidence of contamination is noted then field screening should be performed to confirm or deny the presence of contamination. If soil contamination is discovered then limited IRAs should be performed.

7.22 SKI BOWL GENERATOR BUILDING

Limited further action is recommended for the Ski Bowl generator building site. Although high-density polyethylene (HDPE) pipe was encountered in the 2000 excavation, the contamination detected appears to be related to the former building's UST. Because PAHs were not analyzed for at the site, Method 2 or Method 3 regulatory cannot be applied to the site. In addition, only one TOC sample was collected for the site. Based on the one TOC

sample, it appears that the site can be closed with no further excavation work if PAHs are collected from within the contaminated area and additional TOC data is collected from the site. Therefore, it is recommended that hand auger samples be collected in the vicinity of the limits of the 2000 excavation and analyzed for DRO, RRO, and PAHs. Care must be taken to not sample the 2000 field season backfill material. In addition, two additional TOC samples should be collected in the vicinity of the site so that site-specific Method 3 regulatory criteria can be re-calculated for the site using more then one TOC sample.

8.0 REFERENCES

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TOTAL ENVIRONMENTAL RESTORATION CONTRACT

2000 ISLANDWIDE SI/IRA/RI REPORT

APPENDICES A-K

AMAKNAK/UNALASKA ISLANDS, ALASKA

FINAL
AUGUST 2001

Alaska District

JACOBS ENGINEERING GROUP INC.

APPENDIX A

Photograph Log

d:\Report Section 5.01\Bldg 2674 [010222_1509]

2764 looking south

Bldg. 2674

corner of slab

more soil under slab

soil under slab

d:\Report Section 5.02\Bldg 2664 [010222_1509]

UST 2664 MW1_Sampling

d:\Report Section 5.03\Bldg 3260 [010222_1509]

3260 Ground water with sheen

Bldg 3260 from 3265

Typical 3260 groundwater

UG Bldg 3260

UST 3260 Drainage

UST 3260 SW and SE Sample

UST_3260 Hand Auger_1

UST_3260 Hand Auger_2

d:\Report Section 5.04\Bldg 3465 [010222_1509]

Garrison Bldg 3465

wellpointsampling

d:\Report Section 5.05\Bldg 3475 [010222_1509]

Bldg 3475

UG Bldg 3475

d:\Report Section 5.06\Bldg 2762 [010222_1509]

bldg 2762

Bldg. 2762 site assesment

Exc at Bldg 2762

looking north

looking northeast

north excavation

south excavation

sw wall

Test Pit at 2762

Well Point Installation at 2762

d:\Report Section 5.07\Bldg 2766 [010222_1509]

2766 looking south

2766 Test Pit #4

Bldg 2766 TestyPit

Bldg. 2766 Site assesment

Ops at 2766

Test Pits at 2766

TP at 2766

TP5 hole

TP5 looking east

TP5

d:\Report Section 5.07\Bldg 2766\Non FUDs Behind Bldg [010222_1509]

Drums above Site

Fuel Line on Cutbank

Misc Drum(s)

Post FUDs AST

Proximity to Bldg

d:\Report Section 5.08\Bldg 3665 [010222_1509]

SI at 3665

d:\Report Section 5.09\Bldg 3760 [010222_1509]

cutting open tank

Location of UST 3760

Sampling at 3760

ust3760_2

d:\Report Section 5.09\Bldg. 3765 [010222_1509]

1 of 2 tanks at Bldg 3765

d:\Report Section 5.09\Bldg. 3860 [010222_1509]

exposed 3860 tank and grounded

ust 3860 auger sampling

UST 3860 location

UST 3860

UST at Bldg 3860

d:\Report Section 5.10\Bldg 3065 [010222_1509]

3065 south part of excavation

boom in small creek

excavation looking southeast

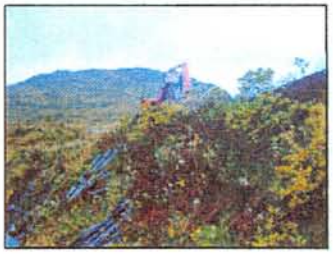
excavation looking sw

excavation looking west

silt fence

d:\Report Section 5.11\Bldg 3075 [010222_1509]

3075 from south



3075 looking south

TP1 looking east

TP1 looking southeast

TP1 next to building

TP1 west wall

TP2 west wall

d:\Report Section 5.12\CPO Barracks [010222_1509]

Access from Hwy

Access2

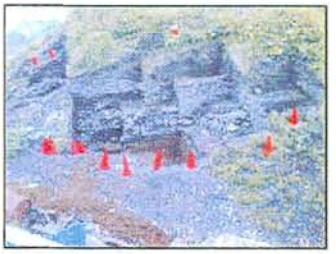
Archaeological Site to East

CPO Access

CPO upper

Debris at Dig

Dig Access



Dig adjacent to Site

Dig from East

Guardrail to be Removed for access

Marker above Dig

d:\Report Section 5.12\Hill 400\1128 & 1245 [010222_1509]

1245 on 121500

Current Site Cond atb 1128

Lower 1128 in Dec 00

No UST at 1254

d:\Report Section 5.12\Hill 400\1980 Photo [010222_1509]

Drum Dump

Hill 400

Messhall 1254

More Drums

d:\Report Section 5.12\Hill 400\Barracks 1205 Test Pit [010222_1509]

1205 test pit at barracks

1205 test pit backfilling

fuel piping at barracks 1205

d:\Report Section 5.12\Hill 400\Latrine No. 1 [010222_1509]

goat trail to Latrine No 1

Hill 400 Latrine No 1

Inside Latrine no 1 UST

Latrine No 1 location

Latrine No 1

soil sampling below Latrine no 1 UST

Using wheelbarrow to fill UST

UST Latrine No 1 after cleaning

d:\Report Section 5.12\Hill 400\Latrine No. 7 [010222_1509]

Latrine no 7 test pit

test pit at Latrine no 7

d:\Report Section 5.12\Hill 400\LSA Drums [010222_1509]

Drum 1,2 & 3 location

Drum 4 location

Drum 5 location

d:\Report Section 5.12\Hill 400\LSA Tank [010222_1509]

LSA AST cut open showing water

LSA AST from road

LSA AST hole

LSA AST location

Pumping water from LSA AST

Rigging around LSA AST

Sampling LSA AST

d:\Report Section 5.12\Hill 400\Mess Hall 1154 [010222_1509]

1154 backfill

1154 backfilled

compacting 1154 backfill

piping removed from 1154

pipingremovalat1154

UST 1154 at Mess Hall

UST 1154 Removed

UST 1154

d:\Report Section 5.13\Bldg 627 [010222_1509]

627 Excavation

Bldg. 627 site assessment

End of P216 above revetment

Ground water at 627 Exc

Hoe at West Wall

Hoe Bucket during Exc

N wall from S

NE Corner from Pipe

NE Corner

NWcorner

NWcorner2

Rommel Stakes 100yds North

Rommel Stakes This Area

SE Cnr of 627 Exc

SW wall

West wall from N

West wall

d:\Report Section 5.14\Humpy Cove UST [010222_1509]

Humpy Cove Backfill2

Humpy Cove UST Backfill 1

Humpy Cove UST Removal

Humpy Cove UST

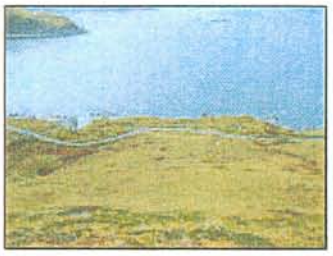
d:\Report Section 5.14\Humpy Cove UST\GW sampling [010222_1509]

GW sampling at HCPPMW1

d:\Report Section 5.16\Summer Bay Utilidors [010222_1509]

Range finder Bunker at Battery

Roadside Quanset



Utilidors from Bunker

d:\Report Section 5.17\Ballyhoo Trans & UST Removal [010222_1509]

2nd transformer being raised

Air Check prior to entry

At top next to road

BH Bldg B

BH Drum near Bldg B

BHDRUM #4

BHT3 in Vault2 at Bldg B

BHT5 in Vault4 at Bldg C

BHTVault4at Bldg C

BHUST Bldg B

BHUST Found at Bldg B

BHUSTs 08 & 09

Crewusingsafetyrope

Exposed stand pipe at UST

Extracting 2nd transformer

Overpacking of transformer

Prepping tripod for operation

Pulling transformer up hill

Raising transformer with tripod

ready to extract transformer

Stand Pipe Near Bldg C

Transformer almost at top

Transformer being hoisted

Transformer into overpack

Transformer just about out

Transformer on road at TED

Transformer on vault roof

Transformer setting on the roof of the

TransformerwrappedtieddownonTED

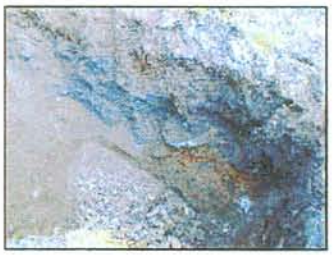
Wrapped transformer being pulled up

d:\Report Section 5.18\Ballyhoo Tank Farm [010222_1509]

Av Gas Valve

BHTank Farm Test Pit

BHTF Test Pit 07



BHTF Test Pit 1

BHTF test Pit 2

BHTF Test Pit 3

BHTF Test Pit 4

BHTF Test Pit 5

BHTF Test Pit 6

BHTF Test Pit 7

BHTF Test Pit 8

BHTF Test Pit Excavation

Step-outs Here 1st

Step-outs Here, Huh

TP at BHTF06

d:\Report Section 5.19\Stand Alone Transformer [010222_1509]

BH Batteries

Exc at Stand Alone Transformer

standalone_batteryLocation

StandAloneXFMR-Ballyhoo

d:\Report Section 5.19\Stand Alone Transformer\BHT-01 Oil Bath Switch [010222_1509]

BHT-01 Detail

BHT-01 Switch

BHT-01 View

Oil Bath Switch Ballyhoo

Oil Bath Switch Vault

d:\Report Section 5.20\Port Levashef [010222_1509]

PLDR-1

PLDR-2

Port Levashef Drum_2_Sample

Port Levashef_Sunk Ship

d:\Report Section 5.21\Ft Mears Landfill South [010222_1509]

Fort Mears Landfill South

molten metal at FMLS

north shore of LSA

d:\Report Section 5.22\Floating Pumphouse [010222_1509]

Floating Pump & Lg Motor

Floating Pump & Med Motor

Floating Pump Bearing Fluid

Floating Pump No Oil_1

Floating Pump No Oil_2

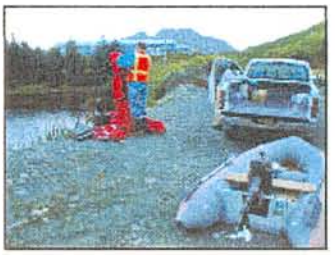
loading zodiac

Lost at sea

Pumphouse

Pumphouse on Lake

sediment sampling on Iliuliuk Lake



suiting up for lake sampling

Trained professionals

Walkway to pumphouse

zodiac

zodiac2

d:\Report Section 5.22\Sampling at Iliuliuk Lake [010222_1509]

sediment sampling on Iliuliuk Lake

Trained professionals

Trained professionals1

d:\Report Section 5.23\Bldg 965 [010222_1509]

Bldg 965_Sample 1 Location1

Bldg 965_Sample 1 Location2

Bldg 965_Sample 2 Location

Bldg 965_Site Photo

d:\Report Section 5.24\FT Mears North [010222_1509]

FM Landfill North

FMBldg 727b

Fort Mears TOC_3

Fort Mears TOC_3A

Ft Mears Ammo Cart

Ft Mears Beachfront

Ft Mears Pit

FT Mears Wellpoint

d:\Report Section 5.25\Crowley [010222_1509]

AST at Bldg Remnants

CD-TP1 Locale

Crowley Drums

Crowly Dock_MW Install

Soil Stain at APOC2

d:\Report Section 5.25\Crowley\Test Pit [010222_1509]

Adjacent Debris and Drums

CD-TR1 Locale)

CD-TR1

Site from South

d:\Report Section 5.26\Fuel Distribution(638) [010222_1509]

Former Site of 638

Old Fuel Dist Pipe

d:\Report Section 5.27\Bldg 854 [010222_1509]

FM Bldgs 852 & 854

d:\Report Section 5.28\Bldg 751 [010222_1509]

FM Bldg 751

d:\Report Section 5.28\Bldg 852 [010222_1509]

FM Bldgs 852 & 854

d:\Report Section 5.29\Bldg 871 [010222_1509]

FM Bldg 871

d:\Report Section 5.30\Bldg 727 [010222_1509]

Drain in 727 Sump

FM Bldg 727a

Sump at 727

1002 dozed up in a pile

1003 former location

1006 and 1002

923 former location

955 foundation under boat

964 looking west

965 looking north

969 looking north

969 west side

969

bldg 946

bldg 947

bldg 951 location

bldg 959

bldg 964

bldg 965 location

former location 924 & 923

former location of 975

former location of 980

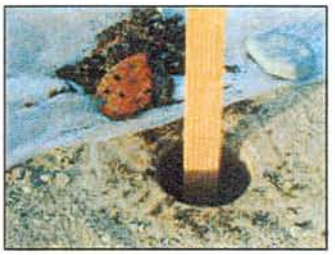
north shore of LSA

north side of 964

west side of 964

d:\Report Section 5.32\Mercury at Airport [010222_1509]

Airport Shop Locale



Suspected Hg at Airport

d:\Report Section 5.33\Bldg 310 [010222_1509]

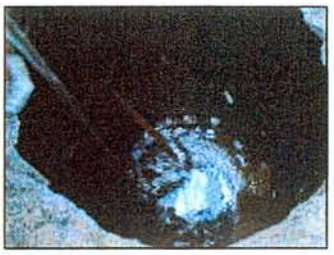
Manhole #336 Oil and Water Sample

Manhole #36 Fuzzy Oil

Manhole #36 Inside

Manhole #36 Kiwi Sampler Special

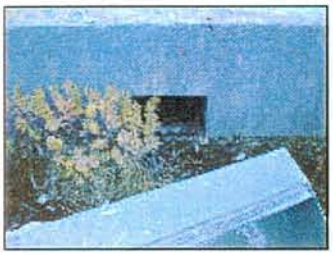
Manhole #36 Oil Closeup



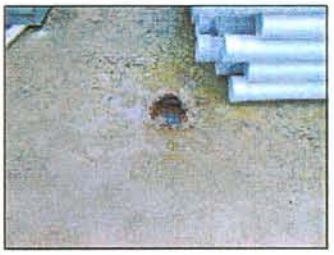
Manhole #36 Oil on Water

Manhole #36 Sampling

d:\Report Section 5.34\NAS Laundry Bldg 400 [010222_1509]



N Laundry Sump



Naval Laundry Drain

d:\Report Section 5.35\Former Lube Oil Storage [010222_1509]

Former AvGas storage

Former Gas Loading Dock

Former Oil Storage

Remnant fuel distrubution pipe

d:\Report Section 5.36\Former USTs [010222_1509]

Proposed Test Pit Locale at Powerhou

d:\Report Section 5.38\Bldg 2563 [010222_1509]

Bldg 2563

North End Berm

South End Berm

d:\Report Section 5.39\Unalaska Power Distribution [010222_1509]

Former Power Distribution Bldg Site

Former Site of Bldg 2605

Formerly Bldg 2682

Pipe at 2193

Possible Site of Bldg 2673

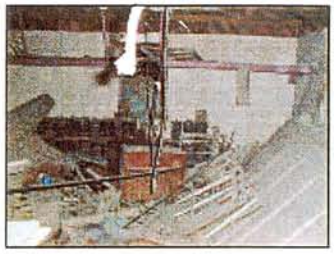
d:\Report Section 5.40\Agnes Beach [010222_1509]

agnes-beach asbestos

agnes-beach batteries

agnes-beach equipment can and fresagnes001

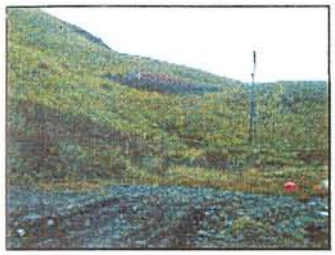
agnes002



Glass Batteries

More Stain Here

Soil Stain below UDPS



Soil Stained below This Bank

Soil Stained.Below UDPS

d:\Report Section 5.42\Capts Bay [010222_1509]

Capt Bay UST Debris

Capts Bay Chem Drum

Capts Bay Drum Dump

Drum at Roadside

d:\Report Section 5.44\Humpy Cove Utilidors [010222_1509]

Humpy Cove UST Removal

d:\Report Section 5.45\Possible Drum Dump [010222_1509]

Drum Dump

Hill 400

Large Bldg

More Drums

d:\Report Section 5.46\Rommel Stakes [010222_1509]

Not a Rommel Stake

d:\Report Section 5.47 [010222_1509]

Remnants of 3961

d:\Report Section 5.47\Bldg 2569 [010222_1509]

AST connection

Formerly Bldg 2568

Fuel Line

d:\Report Section 5.47\Bldg 3165 [010222_1509]

3165 Messhall from Ptarmigan

d:\Report Section 5.48\Broadway Transformer [010222_1509]

WP# 3-48 Transformer (25)

d:\Report Section 5.51\Tunnel, before Closure [010222_1509]

Camo Net next to tunnel

Tunnel Detail

tunnel entrance clo

Tunnel Entrance Close-up

Tunnel Locale

d:\Report Section 5.51\Tunnel, Post Closure [010222_1509]

In Dec from South

Tunnel after closure

d:\Report Section 5.52 [010222_1509]

cans are gone

General Location per Report

Possible location of cans

Presumed Location of Cans

Reported can location

SI at Alt Site of Trans Cans

APPENDIX B

Field Forms

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M.30 227 Location: HC PP - MW1

Driller: GARY CORMER (DISCOVERY DRILLING " ") Date: 8/29/00

Assistants: TIM BECKNER

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
1	Drilling Mob/Demob		each
	Development Mob/Demob		each
	Relocation (>3 mi)		hours
	Drilling Permits		each
	Site Preparation/Restoration		well site
	Air Rotary Casing Hammer in Soil		Lf
	Air Rotary Casing Hammer in Rock		Lf
	6" Stainless Steel Sleeves & Teflon Caps		each
	Core Boxes		each
	2" PVC Well Construction		Lf
	Conductor Coring – Steel		Lf
	2" PVC Schedule 40 Casing		Lf
	Coring Centralizers – 2" Wells		each
	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
	No. 1C Sand – 16 x 40		sack
	No. 3 Sand – 8 x 20		sack
	Bentonite Pellets		sack
	Grout Material – Cement/Grout		sack
	Cement/Concrete for Surface Pads		sack
	Mobile Decon. Trailer		day
	Tricone Reaming		Lf
3	Soil Samples		sample
	NX Rock Core Samples		Lf
	HQ Oreinted Core		Lf
	Standby – Hammer Percussion		hour
	Standby – Coring		hour
	Well Development		hour
	Decontamination		hour
	Transport Drummed Waste		drum
	Drums		each
	Flush Mount Monitoring Well Surface Completion		each
	Above Grade Monitoring Well Protective Cases		each
	Security Posts		each
	Banker Tank Lease (21,000 gal)		mob/demob
	Misc.		month
	Misc.		days
	Misc.		

Bruce D. McDonald — 8/29/00

Jacobs Field Technical Representative — Date

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: Hump Cove

Driller: GARY COMTIER (DISCOVERY DRILLING) Date: 8/30/00

Assistants: TIM BECKNER (" ")

DESCRIPTION	LINE ITEM	UNIT OF MEASURE
Drilling Mob/Demob		each
Development Mob/Demob		each
Relocation (>3 mi)		hours
Drilling Permits		each
Site Preparation/Restoration		well site
Air Rotary Casing Hammer in Soil		Lf
Air Rotary Casing Hammer in Rock		Lf
6" Stainless Steel Sleeves & Teflon Caps		each
Core Boxes		each
2" PVC Well Construction		Lf
Conductor Coring – Steel		Lf
2" PVC Schedule 40 Casing		Lf
Coring Centralizers – 2" Wells		each
Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
No. 1C Sand – 16 x 40		sack
No. 3 Sand – 8 x 20		sack
Bentonite Pellets		sack
Grout Material – Cement/Grout		sack
Cement/Concrete for Surface Pads		sack
Mobile Decon. Trailer		day
Tricone Reaming		Lf
Soil Samples		sample
NX Rock Core Samples		Lf
HQ Oreinted Core		Lf
Standby – Hammer Percussion		hour
Standby – Coring		hour
Well Development		hour
Decontamination		hour
Transport Drummed Waste		drum
Drums		each
Flush Mount Monitoring Well Surface Completion		each
Above Grade Monitoring Well Protective Cases		each
Security Posts		each
Benker Tank Lease (21,000 gal)		mob/demob
Misc.		month
Misc.		days
Misc.		

REPAIR to clutch CONTROL ARM

Bruce D. McDonald — 8/30/00

Jacobs Field Technical Representative — Date

Subcontractor's Representative — Date

a:\shy\tables\dailyrep 10-May-93

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: HE PP-mw1

Driller: GARY CORMIER (DISCOVERY DRILLING) Date: 8-31-00

Assistants: TIM BECKNER (" ")

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
____	Drilling Mob/Demob		each
____	Development Mob/Demob		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
____	2" PVC Well Construction		Lf
____	Conductor Coring – Steel		Lf
____	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
____	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
____	No. 1C Sand – 16 x 40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
____	Grout Material – Cement/Grout		sack
____	Cement/Concrete for Surface Pads		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
8	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oreinted Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
____	Well Development		hour
____	Decontamination		hour
____	Transport Drummed Waste		drum
1	Drums		each
____	Flush Mount Monitoring Well Surface Completion		each
____	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
____	Misc.		month
____	Misc.		days
____	Misc.		

Bruce D. McDonald
Jacobs Field Technical Representative

8-31-00
Date

_____
Subcontractor's Representative

_____
Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: 2667 MW-1

Driller: GARY CORMIER (DISCOVERY DRILLING) Date: 9-1-00 (1430 HRS.)

Assistants: TIM BECKNER (" ")

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
1	Drilling Mob/Demob		each
1	Development Mob/Demob 9/5/00		each
___	Relocation (>3 mi)		hours
___	Drilling Permits		each
___	Site Preparation/Restoration		well site
___	Air Rotary Casing Hammer in Soil		Lf
___	Air Rotary Casing Hammer in Rock		Lf
___	6" Stainless Steel Sleeves & Teflon Caps		each
___	Core Boxes		each
10	2" PVC Well Construction 10 SLOT		Lf
___	Conductor Coring – Steel		Lf
5	2" PVC Schedule 40 Casing		Lf
___	Coring Centralizers – 2" Wells		each
1	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
8	No. 1C Sand – ~~10x40~~ 20x40		sack
___	No. 3 Sand – 8 x 20		sack
___	Bentonite Pellets BENTONITE CHIP		sack
3	Grout Material – Cement/Grout		sack
4	Cement/Concrete for Surface Pads		sack
___	Mobile Decon. Trailer		day
___	Tricone Reaming		Lf
6	Soil Samples		sample
___	NX Rock Core Samples		Lf
___	HQ Oreinted Core		Lf
___	Standby – Hammer Percussion		hour
___	Standby – Coring		hour
1.5	Well Development 9/5/00		hour
___	Decontamination		hour
___	Transport Drummed Waste		drum
1	Drums		each
___	Flush Mount Monitoring Well Surface Completion		each
1	Above Grade Monitoring Well Protective Cases		each
___	Security Posts		each
___	Banker Tank Lease (21,000 gal)		mob/demob
1	Misc. Top cap (J-plug)		month
___	Misc.		days
___	Misc.		

Bruce D. McDonald
Jacobs Field Technical Representative

9-1-00
Date

Subcontractor's Representative

Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: PWWTF - MW 11 ABANDONMENT

Project Code: 05M30227 Location: MW-11 Replacement

Driller: GARY CORMIER (DISCOVERY DRILLING) Date: 9-2-00

Assistants: TIM BECKNER " " 9-1-00

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
1	Drilling Mob/Demob		each
	Development Mob/Demob		each
	Relocation (>3 mi)		hours
	Drilling Permits		each
	Site Preparation/Restoration		well site
	Air Rotary Casing Hammer in Soil		Lf
	Air Rotary Casing Hammer in Rock		Lf
	6" Stainless Steel Sleeves & Teflon Caps		each
	Core Boxes		each
10	2" PVC Well Construction /0 Slot		Lf
	Conductor Coring – Steel		Lf
15	2" PVC Schedule 40 Casing		Lf
	Coring Centralizers – 2" Wells		each
1	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
11	No. 1C Sand – ~~16x40~~ 20X40		sack
	No. 3 Sand – 8 x 20		sack
	Bentonite Pellets		sack
12	Grout Material – Cement/~~Grout~~ BENTONITE CHIP		sack
6	Cement/Concrete for Surface Pads		sack
	Mobile Decon. Trailer		day
	Tricone Reaming		Lf
8	Soil Samples		sample
	NX Rock Core Samples		Lf
	HQ Oreinted Core		Lf
	Standby – Hammer Percussion		hour
	Standby – Coring		hour
	Well Development		hour
1	Decontamination		hour
	Transport Drummed Waste		drum
2	Drums		each
	Flush Mount Monitoring Well Surface Completion		each
1	Above Grade Monitoring Well Protective Cases		each
3	Security Posts		each
	Banker Tank Lease (21,000 gal)		mob/demob
1	Misc. TOP CAP (J-Plug)		month
	Misc.		days
	Misc.		

Bruce D. McDonald — 9-2-00

Jacobs Field Technical Representative — Date

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: PORT LEVASSEUR (PLD-WP1,3 & 2, PLD-MW4)

Driller: GARY CORMIER (Discovery Drilling) Date: 9-2-00

Assistants: TIM BECKNER (" ")

ABANDONMENTS

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
____	Drilling Mob/Demob		each
____	Development Mob/Demob		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
____	2" PVC Well Construction		Lf
____	Conductor Coring – Steel		Lf
____	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
____	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
____	No. 1C Sand – 16 x 40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
7	Grout Material – Cement/Grout BENTONITE CHIP		sack
____	Cement/Concrete for Surface Pads		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
____	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oriented Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
____	Well Development		hour
____	Decontamination		hour
____	Transport Drummed Waste		drum
____	Drums		each
____	Flush Mount Monitoring Well Surface Completion		each
____	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
____	Misc.		month
____	Misc.		days
____	Misc.		

Bruce D. McDonald — Jacobs Field Technical Representative

9-2-00 — Date

_____ — Subcontractor's Representative

_____ — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: PLD3-MW1

Driller: GARY CORMIER (DISCOVERY DRILLING) Date: 9-3-00

Assistants: TIM BECKNER (" ")

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
1	Drilling Mob/Demob		each
1	Development Mob/Demob 9/7/00		each
___	Relocation (>3 mi)		hours
___	Drilling Permits		each
___	Site Preparation/Restoration		well site
___	Air Rotary Casing Hammer in Soil		Lf
___	Air Rotary Casing Hammer in Rock		Lf
___	6" Stainless Steel Sleeves & Teflon Caps		each
___	Core Boxes		each
5	2" PVC Well Construction 10 SLOT		Lf
___	Conductor Coring – Steel		Lf
2.5	2" PVC Schedule 40 Casing		Lf
___	Coring Centralizers – 2" Wells		each
1	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
3	No. 1C Sand – ~~16 x 40~~ 20 x 40		sack
___	No. 3 Sand – 8 x 20		sack
___	Bentonite Pellets		sack
1	Grout Material – Cement/~~Grout~~ BENTONITE CHIP		sack
2	Cement/Concrete for Surface Pads		sack
___	Mobile Decon. Trailer		day
___	Tricone Reaming		Lf
4	Soil Samples		sample
___	NX Rock Core Samples		Lf
___	HQ Oreinted Core		Lf
___	Standby – Hammer Percussion		hour
___	Standby – Coring		hour
1.5	Well Development 9/7/00		hour
___	Decontamination		hour
___	Transport Drummed Waste		drum
1	Drums		each
___	Flush Mount Monitoring Well Surface Completion		each
1	Above Grade Monitoring Well Protective Cases		each
___	Security Posts		each
___	Banker Tank Lease (21,000 gal)		mob/demob
1	Misc. TOP CAP (J-PLUG)		month
___	Misc.		days
___	Misc.		

Bruce D. McDonald — 9-3-00

Jacobs Field Technical Representative — Date

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: PLD-MW2

Driller: GARY CORMIER (DISCOVERY DRILLING) Date: 9-3-00

Assistants: TIM BECKNER (" ")

ABANDONMENT

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
____	Drilling Mob/Demob		each
____	Development Mob/Demob		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
____	2" PVC Well Construction		Lf
____	Conductor Coring – Steel		Lf
____	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
____	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
____	No. 1C Sand – 16 x 40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
7	Grout Material – Cement/Grout BENTONITE CHIP		sack
____	Cement/Concrete for Surface Pads		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
____	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oreinted Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
____	Well Development		hour
____	Decontamination		hour
____	Transport Drummed Waste		drum
____	Drums		each
____	Flush Mount Monitoring Well Surface Completion		each
____	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
____	Misc.		month
____	Misc.		days
____	Misc.		

Bruce D. McDonald — 9-3-00

Jacobs Field Technical Representative — Date

_____ — _____

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: PLD2-MW1

Driller: GARY CORMIER (DISCOVERY DRILLING) Date: 9-4-00

Assistants: TIM BECKNER (" ")

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
1	Drilling Mob/Demob		each
1	Development Mob/Demob 9-7-00		each
	Relocation (>3 mi)		hours
	Drilling Permits		each
	Site Preparation/Restoration		well site
	Air Rotary Casing Hammer in Soil		Lf
	Air Rotary Casing Hammer in Rock		Lf
	6" Stainless Steel Sleeves & Teflon Caps		each
	Core Boxes		each
10	2" PVC Well Construction 10 SLOT		Lf
	Conductor Coring – Steel		Lf
13	2" PVC Schedule 40 Casing		Lf
	Coring Centralizers – 2" Wells		each
1	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
8	No. 1C Sand – ~~16 x 40~~ 20 x 40		sack
	No. 3 Sand – 8 x 20		sack
	Bentonite Pellets		sack
2	Grout Material – Cement/Grout BENTONITE CHIP		sack
4	Cement/Concrete for Surface Pads		sack
	Mobile Decon. Trailer		day
	Tricone Reaming		Lf
8	Soil Samples		sample
	NX Rock Core Samples		Lf
	HQ Oreinted Core		Lf
	Standby – Hammer Percussion		hour
	Standby – Coring		hour
1.5	Well Development 9-7-00		hour
	Decontamination		hour
	Transport Drummed Waste		drum
1	Drums		each
	Flush Mount Monitoring Well Surface Completion		each
1	Above Grade Monitoring Well Protective Cases		each
2	Security Posts		each
	Banker Tank Lease (21,000 gal)		mob/demob
1	Misc. TOP CAP (J-PLUG)		month
	Misc.		days
	Misc.		

Bruce D. McDonald — 9-4-00

Jacobs Field Technical Representative — Date

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: 5286-WP1 / ULPD 32 (mw1)

Driller: GREG CORMIER (DISCOVERY DRILLING) Date: 9-4-00

Assistants: TIM BECKNER (" ")

ABANDONMENT 3

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
____	Drilling Mob/Demob		each
____	Development Mob/Demob		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
____	2" PVC Well Construction		Lf
____	Conductor Coring – Steel		Lf
____	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
____	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
____	No. 1C Sand – 16 x 40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
7	Grout Material – Cement/Grout Bentonite chip		sack
____	Cement/Concrete for Surface Pads		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
____	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oreinted Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
____	Well Development		hour
____	Decontamination		hour
____	Transport Drummed Waste		drum
____	Drums		each
____	Flush Mount Monitoring Well Surface Completion		each
____	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
____	Misc.		month
____	Misc.		days
____	Misc.		

Bruce D. McDonald — 9-4-00

Jacobs Field Technical Representative — Date

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: UPD-B1(MW2), HCL3-MW1,

Driller: Gary Cormier (Discovery Drilling) Date: HCD-MW1 Borings

Assistants: Tim Beckner (" ") 9-5-00

ABANDONMENTS

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
____	Drilling Mob/Demob		each
____	Development Mob/Demob		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
____	2" PVC Well Construction		Lf
____	Conductor Coring – Steel		Lf
____	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
____	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
____	No. 1C Sand – 16 x 40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
9	Grout Material – Cement/Grout Bentonite chip		sack
____	Cement/Concrete for Surface Pads		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
____	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oreinted Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
____	Well Development		hour
____	Decontamination		hour
____	Transport Drummed Waste		drum
____	Drums		each
____	Flush Mount Monitoring Well Surface Completion		each
____	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
____	Misc.		month
____	Misc.		days
____	Misc.		

Bruce D. McDonald
Jacobs Field Technical Representative — Date

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: HCPP-MW1/MW-1R

Driller: Gary Cormier } Discovery Drilling Date: 9-6-00

Assistants: Tim Beckner } " "

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
1	Drilling Mob/Demob		each
1	Development Mob/Demob 9-8-00		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
10	2" PVC Well Construction 10 Slot		Lf
____	Conductor Coring – Steel		Lf
33	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
1	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
10	No. 1C Sand – ~~16 x 40~~ 20X40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
10	Grout Material – Cement/Grout BENTONITE CHIP		sack
3	Cement/Concrete for Surface Pads		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
12	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oreinted Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
1.0	Well Development 9-8-00		hour
____	Decontamination		hour
____	Transport Drummed Waste		drum
3	Drums		each
____	Flush Mount Monitoring Well Surface Completion		each
1	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
1	Misc. TOP CAP (J-plug)		month
____	Misc.		days
____	Misc.		

Bruce D. McDonald — 9-6-00

Jacobs Field Technical Representative — Date

_____ _____

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: OSM30227 Location: HCL3-MW1R

Driller: GARY CORMIER (DISCOVERY DRILLING) Date: 9-6-00

Assistants: TIM BECKNER (" ")

ABANDONMENTS

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
____	Drilling Mob/Demob		each
____	Development Mob/Demob		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
____	2" PVC Well Construction		Lf
____	Conductor Coring – Steel		Lf
____	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
____	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
____	No. 1C Sand – 16 x 40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
4	Grout Material – Cement/Grout Bentonite chip		sack
____	Cement/Concrete for Surface Pads		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
____	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oreinted Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
____	Well Development		hour
____	Decontamination		hour
____	Transport Drummed Waste		drum
____	Drums		each
____	Flush Mount Monitoring Well Surface Completion		each
____	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
____	Misc.		month
____	Misc.		days
____	Misc.		

Bruce D. McDonald — 9-6-00

Jacobs Field Technical Representative — Date

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: SHLF-MW1, SHLF-MW2

Driller: GARY CORMIER (DISCOVERY DRILLING) Date: 9-7-00

Assistants: TIM BECKNER " "

ABANDONMENTS

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
____	Drilling Mob/Demob		each
____	Development Mob/Demob		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
____	2" PVC Well Construction		Lf
____	Conductor Coring – Steel		Lf
____	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
____	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
____	No. 1C Sand – 16 x 40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
17	Grout Material – Cement/Grout BENTONITE CHIP		sack
____	Cement/Concrete for Surface Pads		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
____	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oreintad Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
____	Well Development		hour
____	Decontamination		hour
____	Transport Drummed Waste		drum
2	Drums		each
____	Flush Mount Monitoring Well Surface Completion		each
____	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
____	Misc.		month
____	Misc.		days
____	Misc.		

Bruce D. McDonald — Jacobs Field Technical Representative

9-7-00 — Date

_____ — Subcontractor's Representative

_____ — Date

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EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: FEMPW-MW 1, 2, 3

Driller: Gary Cormier (Discovery Drilling) Date: 9-8-00

Assistants: Jim Beckner (" ")

ABANDONMENTS

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
____	Drilling Mob/Demob		each
____	Development Mob/Demob		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
____	2" PVC Well Construction		Lf
____	Conductor Coring – Steel		Lf
____	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
____	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
____	No. 1C Sand – 16 x 40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
13	Grout Material – Cement/Grout BENTONITE CHIP		sack
____	Cement/Concrete for Surface Pads		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
____	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oreinted Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
____	Well Development		hour
____	Decontamination		hour
____	Transport Drummed Waste		drum
1	Drums		each
____	Flush Mount Monitoring Well Surface Completion		each
____	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
____	Misc.		month
____	Misc.		days
____	Misc.		

Bruce D. McDonald — 9-8-00

Jacobs Field Technical Representative — Date

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: 05M30227

Project Code: _____ Location: FMGS-MW1,4,5,6

Driller: GARY CORMIER Date: 9-9-00

Assistants: JIM BECKNER

ABANDONMENTS

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
____	Drilling Mob/Demob		each
____	Development Mob/Demob		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
____	2" PVC Well Construction		Lf
____	Conductor Coring – Steel		Lf
____	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
____	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
____	No. 1C Sand – 16 x 40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
21	Grout Material – Cement/Grout Bentonite chip		sack
2	Cement/Concrete for ~~Surface Pads~~ PAVEMENT		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
____	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oreinted Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
____	Well Development		hour
____	Decontamination		hour
____	Transport Drummed Waste		drum
5	Drums		each
____	Flush Mount Monitoring Well Surface Completion		each
____	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
____	Misc.		month
____	Misc.		days
3	Misc. VOLCLAY GROUT		

Bruce D McDonald — Jacobs Field Technical Representative

9-9-00 — Date

_____ — Subcontractor's Representative

_____ — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: HCL1-MW1 /MW-1R

Driller: GARY CORMIER (DISCOVERY DRILLING) Date: 9-11-00

Assistants: TIM BECKNER (" ")

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
1	Drilling Mob/Demob		each
___	Development Mob/Demob		each
___	Relocation (>3 mi)		hours
___	Drilling Permits		each
___	Site Preparation/Restoration		well site
___	Air Rotary Casing Hammer in Soil		Lf
___	Air Rotary Casing Hammer in Rock		Lf
___	6" Stainless Steel Sleeves & Teflon Caps		each
___	Core Boxes		each
10	2" PVC Well Construction 10 SLOT		Lf
___	Conductor Coring – Steel		Lf
20	2" PVC Schedule 40 Casing		Lf
___	Coring Centralizers – 2" Wells		each
1	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
12	No. 1C Sand – ~~#6 x #8~~ 20x40		sack
___	No. 3 Sand – 8 x 20		sack
___	Bentonite Pellets		sack
4	Grout Material – Cement/Grout BENTONITE CHIP		sack
3	Cement/Concrete for Surface Pads		sack
___	Mobile Decon. Trailer		day
___	Tricone Reaming		Lf
12	Soil Samples		sample
___	NX Rock Core Samples		Lf
___	HQ Oreinted Core		Lf
___	Standby – Hammer Percussion		hour
___	Standby – Coring		hour
___	Well Development		hour
___	Decontamination		hour
___	Transport Drummed Waste		drum
2	Drums		each
___	Flush Mount Monitoring Well Surface Completion		each
1	Above Grade Monitoring Well Protective Cases		each
___	Security Posts		each
___	Banker Tank Lease (21,000 gal)		mob/demob
1	Misc. TOP CAP (J-PLUG)		month
___	Misc.		days
___	Misc.		

Bruce D. McDaniel — 9-11-00

Jacobs Field Technical Representative — Date

_____ _____

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: SHLF-MW3

Driller: GARY CORMIER (DISCOVERY DRILLING) Date: 9-12-00

Assistants: TIM BEEKSER (" ")

ABANDONMENT

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
____	Drilling Mob/Demob		each
____	Development Mob/Demob		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
____	2" PVC Well Construction		Lf
____	Conductor Coring – Steel		Lf
____	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
____	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
____	No. 1C Sand – 16 x 40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
8	Grout Material – Cement/Grout BENTONITE CHIP		sack
1	Cement/Concrete for Surface Pads		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
____	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oreinted Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
____	Well Development		hour
____	Decontamination		hour
1 DRUM FURNISHED BY JACOBS	Transport Drummed Waste		drum
2	Drums		each
____	Flush Mount Monitoring Well Surface Completion		each
____	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
____	Misc.		month
____	Misc.		days
1	Misc. VOLCLAY GROUT		

Bruce D McDonald — 9-12-00

Jacobs Field Technical Representative — Date

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: FMGS - Mw2

Driller: GARY CORMIER (Discovery Drilling) Date: 9-12-00

Assistants: TIM BECKNER (" ")

ABANDONMENT

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
1	Drilling Mob/Demob		each
____	Development Mob/Demob		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
____	2" PVC Well Construction		Lf
____	Conductor Coring – Steel		Lf
____	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
____	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
____	No. 1C Sand – 16 x 40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
3	Grout Material – Cement/Grout Bentonite chip		sack
1	Cement/Concrete for Surface Pads		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
____	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oriented Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
____	Well Development		hour
____	Decontamination		hour
____	Transport Drummed Waste		drum
2	Drums (JACOBS 1 DRUMS →)		each
____	Flush Mount Monitoring Well Surface Completion		each
____	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
____	Misc.		month
____	Misc.		days
____	Misc.		

Bruce D. McDonald — 9-12-00

Jacobs Field Technical Representative — Date

Subcontractor's Representative — Date

EXAMPLE DAILY FIELD ACTIVITY REPORT

JACOBS ENGINEERING GROUP INC.
BORING/MONITORING WELL DRILLING AND INSTALLATION
DAILY FIELD ACTIVITY REPORT

Task Order No.: _____

Project Code: 05M30227 Location: PWWTF-MW11

Driller: GARY CORMIER (DISCOVERY Drilling) Date: 9-13-00

Assistants: TIM BECKNER

	DESCRIPTION	LINE ITEM	UNIT OF MEASURE
1	Drilling Mob/Demob		each
1	Development Mob/Demob		each
____	Relocation (>3 mi)		hours
____	Drilling Permits		each
____	Site Preparation/Restoration		well site
____	Air Rotary Casing Hammer in Soil		Lf
____	Air Rotary Casing Hammer in Rock		Lf
____	6" Stainless Steel Sleeves & Teflon Caps		each
____	Core Boxes		each
____	2" PVC Well Construction		Lf
____	Conductor Coring – Steel		Lf
____	2" PVC Schedule 40 Casing		Lf
____	Coring Centralizers – 2" Wells		each
____	Sediment Sump with Bottom Cap – 2" Schedule 40		Lf
____	No. 1C Sand – 16 x 40		sack
____	No. 3 Sand – 8 x 20		sack
____	Bentonite Pellets		sack
____	Grout Material – Cement/Grout		sack
____	Cement/Concrete for Surface Pads		sack
____	Mobile Decon. Trailer		day
____	Tricone Reaming		Lf
____	Soil Samples		sample
____	NX Rock Core Samples		Lf
____	HQ Oriented Core		Lf
____	Standby – Hammer Percussion		hour
____	Standby – Coring		hour
1.25	Well Development		hour
____	Decontamination		hour
____	Transport Drummed Waste		drum
____	Drums		each
____	Flush Mount Monitoring Well Surface Completion		each
____	Above Grade Monitoring Well Protective Cases		each
____	Security Posts		each
____	Banker Tank Lease (21,000 gal)		mob/demob
1	Misc. 2"ø STAINLESS STEEL BAILER		month
____	Misc.		days
____	Misc.		

Bruce D. McDonald
Jacobs Field Technical Representative

9-13-00
Date

Subcontractor's Representative

Date

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-96

DATE 9-1-00

CLIENT JACOBS GEO.

WELL# MW-11

WELL DIA 4"

WELL DEPTH 17½

MONUMENT- Aboveground _____ Flush X

METHOD - Overdrill & remove casing 4¼ AUGER-HS
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout PULL FIRST 10'
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout _____
Bentonite Chips 50 BAG
Other _____

NOTES PULLING 4" WELL TOP 10' BROKE
OVER DRILL WITH 4¼ TO 12½
BACK FILL CHIPS

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-4-00

CLIENT JACOBS

WELL# UCPD-MW-1

WELL DIA 2"

WELL DEPTH 14

MONUMENT- Aboveground X Flush _____

METHOD - Overdrill & remove casing ✓
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout _____
Bentonite Chips ✓
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00196

DATE 9-5-00

CLIENT JACOBS

WELL# ~~[illegible]~~ ULPD B1 MW2

WELL DIA 2"

WELL DEPTH 15

MONUMENT- Aboveground X Flush _____

METHOD - Overdrill & remove casing X
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout _____
Bentonite Chips ✓
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-2-00

CLIENT JACOBS ENCO

WELL # PLD - MW-1 P.L

WELL DIA 2"

WELL DEPTH 14'

MONUMENT- Aboveground X Flush _____

METHOD (Overdrill) & remove casing _____
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other PULL CASING

GROUT MATERIAL - Portland cement _____
Voiclay Grout _____
Bentonite Chips X?
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-3-00

CLIENT JACOBS

WELL# BLO-MW-2

WELL DIA 2"

WELL DEPTH 14'

MONUMENT- Aboveground X Flush ____

METHOD (Overdrill) & remove casing X
Grout & remove top 5' ____
Perforate & grout ____
Pull casing & grout ____
Other Pull Casing

GROUT MATERIAL - Portland cement ____
Volclay Grout ____
Bentonite Chips 7
Other ____

NOTES ____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-2-00

CLIENT Jacobs

WELL # PLO-WP-1

WELL DIA 1½"

WELL DEPTH 15

MONUMENT- Aboveground_____ Flush_____

METHOD - Overdrill & remove casing_____
Grout & remove top 5'_____
Perforate & grout_____
Pull casing & grout Chip X
Other_____

GROUT MATERIAL - Portland cement_____
Volclay Grout_____
Bentonite Chips X
Other_____

NOTES_____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-126

DATE 9-2-00

CLIENT SAECOS

WELL# PLD-WP-2

WELL DIA 1 1/2"

WELL DEPTH 15

MONUMENT- Aboveground_____ Flush_____

METHOD - Overdrill & remove casing_____
Grout & remove top 5'_____
Perforate & grout_____
Pull casing & grout Chip
Other [redacted]

GROUT MATERIAL - Portland cement_____
Volclay Grout_____
Bentonite Chips ✓
Other_____

NOTES_____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-2-00

CLIENT JACOBS

WELL# PLO-WP3

WELL DIA 1½"

WELL DEPTH 15'

MONUMENT- Aboveground _____ Flush _____

METHOD - Overdrill & remove casing _____
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout CH-P
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout _____
Bentonite Chips X
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00196

DATE 9-4-00

CLIENT Jacobs

WELL# MP 5286-1

WELL DIA 2"

WELL DEPTH 11

MONUMENT- Aboveground _____ Flush _____

METHOD - Overdrill & remove casing _____
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout Chip
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout _____
Bentonite Chips /
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-8-00

CLIENT JACOBS

WELL# FFMPW-MW-1

WELL DIA 2"

WELL DEPTH 7'

MONUMENT- Aboveground _____ Flush ✓

METHOD - Overdrill & remove casing ✓
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout _____
Bentonite Chips ✓
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-8-00

CLIENT JACOBS

WELL# EFMPW-MW-2

WELL DIA 2"

WELL DEPTH 7'

MONUMENT- Aboveground_____ Flush ✓

METHOD - Overdrill & remove casing ✓
Grout & remove top 5'_____
Perforate & grout_____
Pull casing & grout_____
Other_____

GROUT MATERIAL - Portland cement_____
Volclay Grout_____
Bentonite Chips ✓
Other_____

NOTES_____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-8-00

CLIENT JACOBS

WELL# ~~2~~ FFMPW-MW3

WELL DIA 2"

WELL DEPTH 17'

MONUMENT- Aboveground _____ Flush ✓

METHOD - Overdrill & remove casing ✓
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout _____
Bentonite Chips ✓
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-9-00

CLIENT SAC&S

WELL# FFGS-mw-1

WELL DIA 2"

WELL DEPTH 23'

MONUMENT- Aboveground _____ Flush ✓

METHOD - Overdrill & remove casing ✓
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout ✓
Bentonite Chips ✓
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 100-196

DATE 9-12-00

CLIENT Jacobs

WELL # FMGS MW-2

WELL DIA 2"

WELL DEPTH 20

MONUMENT- Aboveground _____ Flush ✓

METHOD - Overdrill & remove casing ✓
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement ✓
Volclay Grout _____
Bentonite Chips ✓
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-10-00

CLIENT JACOBS

WELL# MW-3

WELL DIA 2"

WELL DEPTH 22½

MONUMENT- Aboveground _____ Flush ✓

METHOD - Overdrill & remove casing ✓
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout _____
Bentonite Chips ✓
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-096

DATE 9-9-00

CLIENT JACOBS

WELL# FMGS-MW-4

WELL DIA 2"

WELL DEPTH 14

MONUMENT- Aboveground _____ Flush ✓

METHOD - Overdrill & remove casing ✓
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout _____
Bentonite Chips ✓
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00196

DATE 9-9-00

CLIENT JACOBS

WELL# FMGS-MW-5

WELL DIA 2"

WELL DEPTH 197

MONUMENT- Aboveground _____ Flush ✓

METHOD - Overdrill & remove casing ✓
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout ✓
Bentonite Chips ✓
Other _____

NOTES _____

Discovery Drilling Inc.
P O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-9-00

CLIENT JACOBS

WELL# FMES-MW-6

WELL DIA 2"

WELL DEPTH 19½

MONUMENT- Aboveground _____ Flush ✓

METHOD - Overdrill & remove casing _____
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout _____
Bentonite Chips _____
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-12-00

CLIENT JACOBS

WELL # SHLF-MW-3

WELL DIA 2"

WELL DEPTH 20

MONUMENT- Aboveground ✓ Flush _____

METHOD - Overdrill & remove casing ✓
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement ✓
Volclay Grout ✓
Bentonite Chips ✓
Other _____

NOTES _____

Discovery Drilling Inc
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-7-00

CLIENT JACOBS

WELL# SHLF-MW-2

WELL DIA 2"

WELL DEPTH 13

MONUMENT- Aboveground ✓ Flush _____

METHOD - Overdrill & remove casing ✓
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout _____
Bentonite Chips ✓
Other _____

NOTES _____

Discovery Drilling Inc.
P.O. Box 111165
Anchorage, Alaska 99511

WELL DECOMMISSIONING LOG

PROJECT # 1-00-196

DATE 9-7-00

CLIENT Jacobs

WELL# SftLFmw-1

WELL DIA 2"

WELL DEPTH 25

MONUMENT- Aboveground ✓ Flush _____

METHOD - Overdrill & remove casing ✓
Grout & remove top 5' _____
Perforate & grout _____
Pull casing & grout _____
Other _____

GROUT MATERIAL - Portland cement _____
Volclay Grout _____
Bentonite Chips ✓
Other _____

NOTES _____

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 | DATE: 8-28-00
LOCATION: DUTCH. H. | CLIENT: JACOBS
JACOBS [illegible] | GEOLOGIST: BRUCE - ERIC
GEOTECH: | ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
8:30	7:00	GET PAPER WORK							
	10:10	TRAVEL TO AIRPORT							
10:10		Check in WAITE							
		FLY							
	12:30	ARRIVE DUTCH H.							
		GET GEAR							
		ERIC PICKS UP AT AIRPORT							
		TRAVEL GET RIG TRAVEL -							
		TO JACOBS STAGING AREA.							
		UNLOAD NOI WELL							
		TRAVEL check in Room 3							
		MAKE PHONE CALL.							
3:00		TRAVEL TO S.C. VEHICLE RENTAL							
	3:30	GET TRUCK. (Pickup)							
3:30	5:00	Look over SITE'S WITH ERIC							
5:00	6:15	WORK on RIG							
6:15	6:30	TRAVEL							
		TOTALS							

Rig Type: me 55 Carrier: Y84 Support Equip: NOI WELL - TRAILER

2 inch:	4 inch:	
___10 ft. screen___slot PVC/SS	___10 ft. screen___slot PVC/SS	___Sand 100 lb___size
___5 ft. screen___slot PVC/SS	___5 ft. screen___slot PVC/SS	___Bentonite chips___size
___10 ft. riser PVC/SS	___10 ft. riser PVC/SS	___Volclay grout
___5 ft. riser PVC/SS	___5 ft. riser PVC/SS	___Portland cement
___Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
___Bottom cap, thread, slip, plug	___Bottom cap, thread, slip, plug	___Concrete mix
___Auger bit, ___Teeth		___Flush overcasings
___2.5 Sampler/Shoe/Catcher		___Stickup overcasings
___1.4 Sampler/Shoe/Catcher		___Visqueen___ft
		___Alconox
		___Traffic cone
		___Wood plugs___size
		___55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	CORMIER	10			
Helper:	BECKNER	10			
:					
:					

Signature of Driller: Clifford D Cormier Signature of Client: ERIC DETZEL

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 | DATE: 8-29-00

LOCATION: DUTCH, H. | CLIENT: JACOBS ENG.

GEOLOGIST: BRUCE - ERIC

GEOTECH: | ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:15		TRAVEL TO DECON AREA							
		TRAVEL TO JACOBS - SHACK							
		SAFTEY MEETING & SIGN							
		MORE. DECON GET READY							
		TO DRILL. STOP TO EAT							
		WORK ON BACKUP ALARM							
		FUEL UP							
		TRAVEL TO PICKUP SAND -							
		AND REST OF DRUMS							
		MEET HARTGROUSER GEO							
		SAFTEY MEETING							
3:00	4:00	TRAVEL TO SITE							
		SAFTEY MEETING							
		SET UP ON HOLE							
		GET READY TO DRILL/SAMP							
		DRILL & SAMP 0 TO 5	5						
		PICK UP FOR THE NITE							
		STOP AT STAGING AREA							
	2:00	TRAVEL							
		TOTALS	5						

Rig Type: CME 55 Carrier: 4X4 Support Equip: NODWELL & TRAILER

2 inch:	4 inch:	
___10 ft. screen___slot PVC/SS	___10 ft. screen___slot PVC/SS	___Sand 100 lb___size
___5 ft. screen___slot PVC/SS	___5 ft. screen___slot PVC/SS	___Bentonite chips___size
___10 ft. riser PVC/SS	___10 ft. riser PVC/SS	___Volclay grout
___5 ft. riser PVC/SS	___5 ft. riser PVC/SS	___Portland cement
___Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
___Bottom cap, thread, slip, plug	___Bottom cap, thread, slip, plug	___Concrete mix
___Auger bit, ___Teeth		___Flush overcasings
2 2.5 Sampler/Shoe/Catcher		___Stickup overcasings
___1.4 Sampler/Shoe/Catcher		1 Visqueen___ft
		___Alconox
		___Traffic cone
		___Wood plugs___size
		2 55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	Cormier	12 1/4			
Helper:	Beckner	12 1/4			
:					
:					

Signature of Driller: Clifford H. Cormier Signature of Client: Eric Dietz

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 DATE: 8-30-00
LOCATION: DUTCH. H. CLIENT: JACOBS ENG.
GEOLOGIST: BRUCE
GEOTECH: ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:30		TRAVEL TO JACOBS office							
		SAFETY MEETING & JSA							
		TRAVEL TO STAGING AREA							
		LOAD							
7:45	8:15	ARRIVE SITE. GET READY TO DRILL							
		CLUTCH HANDLE BROKE							
8:30	7:55	TRAVEL - HAVE SOME WELDING							
		DONE ON SHIFTER HANDLE. TRAVEL							
7:55		PUT BACK ON. NOT RIGHT. TAKE							
		BACK OFF - BRING BACK TO BE							
		WELDED AGAIN - HAVE TO WAIT							
		RUN FOR PARTS.							
		TRAVEL BACK TO RIG							
		PUT BACK ON ALARMOND							
		FIX CLUTCH							
		PICK UP FOR THE NITE							
		DRILL 5 TO 7½							
		DRILL IS OK. READY	2½						
		TO SAMPLE							
6:30	7:00	TRAVEL							
		TOTALS	7½						

Rig Type: CME 55 Carrier: 4X4 Support Equip: NORWELL & TRAILER

2 inch:	4 inch:	
___10 ft. screen___slot PVC/SS	___10 ft. screen___slot PVC/SS	___Sand 100 lb___size
___5 ft. screen___slot PVC/SS	___5 ft. screen___slot PVC/SS	___Bentonite chips___size
___10 ft. riser PVC/SS	___10 ft. riser PVC/SS	___Volclay grout
___5 ft. riser PVC/SS	___5 ft. riser PVC/SS	___Portland cement
___Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
___Bottom cap, thread, slip, plug	___Bottom cap, thread, slip, plug	___Concrete mix
___Auger bit, ___Teeth		___Flush overcasings
___2.5 Sampler/Shoe/Catcher		___Stickup overcasings
___1.4 Sampler/Shoe/Catcher		___Visqueen__ft
		___Alconox
		___Traffic cone
		___Wood plugs__size
		___55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	CARRIER	12			
Helper:	BECKNER	12			
:					
:					

Signature of Driller: Clifford A Carrier Signature of Client: ERIC DOSHER

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 | DATE: 8-31-00
LOCATION: DUTCH. H. | CLIENT: JACOBS ENG
GEOLOGIST: BRUCE
GEOTECH: | ENVIRONMENTAL: X

HOURS Start	Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
8:45		TRAVEL TO JACOBS							
		SAFTEY MEETING & SIGN							
	8:00	TRAVEL TO SITE; SAFTEY MEETING							
8:01		DRILL FROM 2½ TO 24½	16½						
	10:30	BED ROCK - HC-D - PP - MW1							
10:30		STAND BY - BRUCE Going							
		TO CALL ERIC.						1½	
		TOLD TO LEVE AUGERS in hole							
	12:00	TO SEE IF WATER comes in							
		MOVE TO HOLE - HC-D MW 2							
	1:00	SET UP - ~~SHOT~~							
1:00		DRILL SAMPLE TO 10'	10'						
	5:30	MOVE 6 FEET DRILL TO 11	11						
5:30		WAITE - MOVE TO HOLE HC-43 -							
		SET UP - DRILL SAMP - MW1 - 9							
		BEDROCK AT 8							
7:00	5:00	BAILE WELL POINTS -							
5:00	5:15	PICK UP FOR THE NITE							
5:15	5:45	TRAVEL TO STAGING AREA							
5:45		UNLOAD AUGERS & DRUMS, DUMP DRILL WATER							
		LOAD DRUMS & CHIPS - GET RIG							
	7:00	TRAVEL TOTALS							

Rig Type: CME 75 Carrier: 4XE Support Equip: MUD TRUCK & TRAILER

2 inch:	4 inch:	
___10 ft. screen___slot PVC/SS	___10 ft. screen___slot PVC/SS	___Sand 100 lb___size
___5 ft. screen___slot PVC/SS	___5 ft. screen___slot PVC/SS	___Bentonite chips___size
___10 ft. riser PVC/SS	___10 ft. riser PVC/SS	___Volclay grout
___5 ft. riser PVC/SS	___5 ft. riser PVC/SS	___Portland cement
___Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
___Bottom cap, thread, slip, plug	___Bottom cap, thread, slip, plug	___Concrete mix
___Auger bit, ___Teeth		___Flush overcasings
___2.5 Sampler/Shoe/Catcher		___Stickup overcasings
___1.4 Sampler/Shoe/Catcher		___Visqueen__ft
		___Alconox
		___Traffic cone
		___Wood plugs__size
		1 55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	Carmen	12			
Helper:	Brecken	12			
:					
:					

Signature of Driller: C Clifford SZ Carmen Signature of Client: ERIC Dysart

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00196 DATE: 9-1-00
LOCATION: Dutch H. CLIENT: JACOBS ENG
GEOLOGIST: BRUCE McDonald
GEOTECH: ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Foot-age	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:15		TRAVEL TO JACOBS							
		SAFTEY MEETING SIGNS							
	8:00	TRAVEL							
8:00		STANDBY - GLO - CHECKING FOR WATER WITH ERIC AND -						1½	
	9:30	MAKEING PHONE CALL							
9:30		TOLD TO LEVE AUGERS in holes,							
	10:00	PACK up move BACK TO TOWN SITE							
10:00	10:30	TRAVEL TO hole #266? - MW-1							
10:30	11:00	SET UP ON #266? - MW-1							
11:00		DRILL 8" hole - SET WELL	15						
2:15	2:30	TRAVEL TO hole MW 1!							
2:30		ABANDON 4" WELL - SET UP							
		PULL 10' 4" - BROKE OFF							
		PUT WOOD PLUG in							
		DRILL TO 17½ - DRILLOUT	17½						
		4" WELL PVC. BACKFILL -							
		with CHIPS while pulling AUGER							
		CHIP TWO TO FEET							
		HULL TRASH							
		HULL TWO DRUMS TO STAGING AREA							
		CHECK in ROOMS							
	7:00	TRAVEL TOTALS	32½						

Rig Type: Mme 75 Carrier: GKY Support Equip: MUD well & TRAILER

1 or 2 inch:	4 inch:	
1 10 ft. screen ___ slot PVC/SS	___ 10 ft. screen ___ slot PVC/SS	8 Sand 100 lb ___ size 20-40
___ 5 ft. screen ___ slot PVC/SS	___ 5 ft. screen ___ slot PVC/SS	3 Bentonite chips ___ size ½
1 10 ft. riser PVC/SS	___ 10 ft. riser PVC/SS	___ Volclay grout
___ 5 ft. riser PVC/SS	___ 5 ft. riser PVC/SS	___ Portland cement
1 Top cap, thread, slip, plug	___ Top cap, thread, slip, plug	___ Pea gravel
1 Bottom cap, thread, slip, plug	___ Bottom cap, thread, slip, plug	4 Concrete mix
___ Auger bit, ___ Teeth	2-CAPSCREW	___ Flush overcasings
___ 2.5 Sampler/Shoe/Catcher		1 Stickup overcasings
___ 1.4 Sampler/Shoe/Catcher		___ Visqueen ___ ft
		___ Alconox
		___ Traffic cone
		1 Wood plugs 4/4 size
		2 55 gal. waste drums
		___ Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	CORMIER	12			
Helper:	BECKNER	12			
:					
:					

Signature of Driller: Clifford J. Cormier (12) Signature of Client: ERIC

Form419 Revised 2/00

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-186 | DATE: 9-2-00
LOCATION: DuTeil H | CLIENT: JACOBS
GEOLOGIST: BRUCE
GEOTECH: | ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:45		TRAVEL TO JACOBS							
	7:30	SAFETY MEETING & SIGNS							
7:30		TRAVEL TO STAGING AREA							
8:00	8:30	SET up on hole MW-11							
8:30		SAMPLED TO 20	20						
		SET WELL - DRILL RIG STALL							
	11:00	3 BALLARDS							
11:00		TRAVEL TO DECON AREA							
		DECON							
	2:40	TRAVEL FT. LEWASHER-							
2:40		FUEL UP RIG. TRAVEL.							
	3:15	ARRIVE SITE							
3:15									
		SET UP & PULL 3 well points							
		SET UP ON 2" WELL - PULL -							
		STICKUP OVERCASING - PULL WELL							
		PUT WOOD PLUG IN							
		DRILL OUT - BACKFILL chip	14						
5:40		TRAVEL PULL AUGERS TO							
	2:00	DECON PAD - CLEAN							
		TOTALS	34						

Rig Type: CME 75 Carrier: YXY Support Equip: NORWELL & TRAILER

2 or 4 inch:
- 1 10 ft. screen ___ slot PVC/SS
- ___ 5 ft. screen ___ slot PVC/SS
- 1 10 ft. riser PVC/SS
- ___ 5 ft. riser PVC/SS
- 1 Top cap, thread, slip, plug
- 1 Bottom cap, thread, slip, plug
- ___ Auger bit, ___ Teeth
- 2 2.5 Sampler/Shoe/Catcher
- ___ 1.4 Sampler/Shoe/Catcher

4 inch:
- ___ 10 ft. screen ___ slot PVC/SS
- ___ 5 ft. screen ___ slot PVC/SS
- ___ 10 ft. riser PVC/SS
- ___ 5 ft. riser PVC/SS
- ___ Top cap, thread, slip, plug
- ___ Bottom cap, thread, slip, plug

- 11 Sand 100 lb ___ size
- 9 Bentonite chips ___ size
- ___ Volclay grout
- ___ Portland cement
- ___ Pea gravel
- 6 Concrete mix
- ___ Flush overcasings
- 1 Stickup overcasings
- ___ Visqueen ___ ft
- ___ Alconox
- ___ Traffic cone
- 1 Wood plugs 4/4 size
- 1 55 gal. waste drums
- ___ Supersacks
- 3 BALLARDS

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	CORNER	12			
Helper:	BECKNER	12			
:					
:					

(22)

Signature of Driller: Clifford D Corner Signature of Client: ERIC DEWAR

Form419 Revised: 2/99

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 DATE: 9-3-00

LOCATION: DUTCH H CLIENT: JACOBS ENG

GEOLOGIST: BRUCE

GEOTECH: ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:45		TRAVEL TO JACOBS.							
		SAFETY MEETING - SIGN AND							
	7:30	TAILGATE WORK. SIGN.							
7:30	8:00	TRAVEL - GET FUEL FOR STEAM CLEANER							
8:00		DECON AUGERS & RODS							
		HAVE NOT DONE BUNKER STEM							
		AUGERS YET. TRAVEL TO SITE							
		SET UP - PULL OVERCASING & WELL							
	11:15	DRILL TO 14'. BACKFILL CHIPS	14						
11:15		TRAVEL TO DECON PAD							
	12:30	DECON & CLEAN PAD.							
12:30	1:15	TRAVEL TO SITE. SET UP ON							
1:15		HOLE DH-3-MW-1							
		DRILL & SAMPLE TO 8	8						
		SET WELL AT 8'							
		HAVE TO TAKE OVERCASING TO							
		STICKING AREA IT IS TO LONG							
		CUT 1' OFF TRAVEL -							
		DECON - STOP TO FISH							
		OUT BAILER IN WELL.							
		TRAVEL BACK OUT TO SITE							
		SET OVERCASING - MIX & POUR							
	6:45	TRAVEL							
		TOTALS							

Rig Type: CME 75 Carrier: 4x4 Support Equip: NOVAEC + TRAILER

2 inch:	4 inch:	
___10 ft. screen___slot PVC/SS	___10 ft. screen___slot PVC/SS	3 Sand 100 lb bags 20/40 size
1 5 ft. screen 010 slot PVC/SS	___5 ft. screen___slot PVC/SS	8 Bentonite chips___size
___10 ft. riser PVC/SS	___10 ft. riser PVC/SS	___Volclay grout
1 5 ft. riser PVC/SS	___5 ft. riser PVC/SS	___Portland cement
1 Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
1 Bottom cap, thread, slip, plug	___ Bottom cap, thread, slip, plug	2 Concrete mix
___Auger bit, ___Teeth		___Flush overcasings
___2.5 Sampler/Shoe/Catcher		1 Stickup overcasings
___1.4 Sampler/Shoe/Catcher		___Visqueen___ft
		___Alconox
		___Traffic cone
		___Wood plugs___size
		___55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	Colmer	12			
Helper:	Beckner	12			

Signature of Driller: Clifford A Colmer (12) Signature of Client: ERIC DAVIS

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 | DATE: 9-7-00
LOCATION: DITCH H. | CLIENT: JACOBS
GEOLOGIST: BRUCE
GEOTECH: | ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:45		TRAVEL TO JACOBS							
	7:30	SAFETY MEETING & SIGN							
7:30		TRAVEL TO DECON AREA							
	8:30	UNLOAD - DECON							
8:30		TRAVEL							
	9:15	SET UP ON PLD-2-MW1							
9:15		DRILL & SAMPLE TO 20	20						
	12:30	SET WELL AT 20'							
12:30		INSTALL OVERCASING							
		SET TWO BALLARDS -							
		SET 2' IN GROUND DRILLED							
	1:00	MIX & POUR CONCRETE	4						
1:00	1:15	CLEAN UP							
1:15	2:15	TRAVEL & DECONNISSION							
2:15		PULL WELL - BACKFILL CHIPS	11						
		TRAVEL - PLD-MW-1							
		DECON							
		TRAVEL TO SITE							
		SET UP - PULL OVERCASING							
		PULL WELL - DRILLED	19						
	6:30	BACKFILL CHIPS							
6:30	6:45	TRAVEL DECON							
		TOTALS							

Rig Type: CME 75 Carrier: 4X4 Support Equip: NAD well + TRAILER

2 Inch:
- 1 10 ft. screen 010 slot PVC/SS
- ___ 5 ft. screen ___ slot PVC/SS
- 1 10 ft. riser PVC/SS
- ___ 5 ft. riser PVC/SS
- 1 Top cap, thread, slip, plug
- 1 Bottom cap, thread, slip, plug

4 Inch:
- ___ 10 ft. screen ___ slot PVC/SS
- ___ 5 ft. screen ___ slot PVC/SS
- ___ 10 ft. riser PVC/SS
- ___ 5 ft. riser PVC/SS
- ___ Top cap, thread, slip, plug
- ___ Bottom cap, thread, slip, plug

- ___ Auger bit, ___ Teeth
- ___ 2.5 Sampler/Shoe/Catcher
- ___ 1.4 Sampler/Shoe/Catcher

JACOBS needed 5 locking caps

- 2 Sand 100 lb ___ size
- 4 Bentonite chips ___ size
- ___ Volclay grout
- ___ Portland cement
- ___ Pea gravel
- 4 Concrete mix
- ___ Flush overcasings
- 1 Stickup overcasings
- ___ Visqueen ___ ft
- ___ Alconox
- ___ Traffic cone
- ___ Wood plugs ___ size
- 1 55 gal. waste drums
- ___ Supersacks
- 2 BALLARDS

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	CARMEN	12			
Helper:	BECKNER	12			
:					
:					

Signature of Driller: Clifford McCormick Signature of Client: Eric Dorf

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 DATE: 8-5-00

LOCATION: DUTCH H CLIENT: JACOBS

GEOLOGIST: BRUCE

GEOTECH: ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:45		TRAVEL TO JACOBS							
	7:30	SAFTEY MEETING & SIGN							
7:30		MAKE CALL IN TIMES							
		TRAVEL TO STAGING AREA							
	8:00	LOAD AUGERS.							
8:00		TRAVEL TO SITE.							
		LOOK FOR ACCESS							
		MOVE INTO HOLE VLPD B-1							
	9:45	GET STUCK - GET OUT							
9:45		SET UP - PULL OVERCASING							
		PULL WELL - DRILL TO 15'	15						
	10:15	BACKFILL CHIPS							
10:45	11:00	TRAVEL - DECON - HAUL TRASH							
11:00	12:30	DEVLOPE WELL # 2662 mw-4							
12:30		HAUL DRUM OF DEVLOPE WATER							
		DECON AUGERS							
12:45	2:20	TRAVEL TO Humpie Point							
2:20		SET UP on holes							
		PULL AUGER & BACKFILL chips							
		MOVE & SET BACKUP on hole							
		PULL & BACKFILL							
4:45	4:45	TRAVEL TO Decon AREA - UNLOAD							
4:45	5:45	Decon - CLEAN PAD - TRAVEL							
		TOTALS							

Rig Type: CME 75 Carrier: 4 X 4 Support Equip: AUX WELL [redacted] TRAILER

2 inch:	4 inch:	
___10 ft. screen___slot PVC/SS	___10 ft. screen___slot PVC/SS	Sand 100 lb___size
___5 ft. screen___slot PVC/SS	___5 ft. screen___slot PVC/SS	18 Bentonite chips___size
___10 ft. riser PVC/SS	___10 ft. riser PVC/SS	___Volclay grout
___5 ft. riser PVC/SS	___5 ft. riser PVC/SS	___Portland cement
___Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
___Bottom cap, thread, slip, plug	___Bottom cap, thread, slip, plug	___Concrete mix
___Auger bit, ___Teeth	5 Locking CAP's	___Flush overcasings
___2.5 Sampler/Shoe/Catcher		___Stickup overcasings
___1.4 Sampler/Shoe/Catcher		___Visqueen___ft
		___Alconox
		___Traffic cone
		___Wood plugs___size
		1 55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	CARMEN	12			
Helper:	RECKNER	12			
:					
:					

Please call if pages are missing or illegible or if you receive wrong page(s).

Signature of Driller: Clifford A Carmen Signature of Client: Eric Detrick

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 | DATE: 7-6-00

LOCATION: Outfit Hc | CLIENT: JACOBS

GEOLOGIST: BRUCE

GEOTECH: | ENVIRONMENTAL: X

HOURS Start	Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:45		TRAVEL TO JACOBS,							
		SAFTEY MEETING & SIGN							
	8:00	SEND PAPPER WORK IN-							
		LOAD SAND & OTHER-(FAX							
	8:30	TRAVEL TO SITE & SETUP ON-							
		HOLE # HCPP-MW-1B							
9:00		DRILL & SAMPLE OTO 30'	30						
		SET WELL AT 30'							
		INSTALL OVERCASING-							
		MIX & POUR CONCRETE							
		CLEAN UP SITE							
		MOVE TO HOLE HCL3-MW-1							
		SETUP DRILL OTO 8'							
		BEDROCK 8'-PULL & CHIP	8						
		CLEAN UP SITE							
	3:15	LOAD AUGERS							
		HULL 4 DRUMS							
		TRAVEL TO HOLE SITE-MW-1							
		SETUP ON HOLE							
		PULL OVERCASING-PULLING WELL							
		BROKE OFF - START TO DRILL OUT	20						
	6:45	OTO 20 NEED WATER TRAVEL TO GET SOME							
6:45	7:00	PICK UP FOR TOTAL 8 HR NITE-TRAVEL							

Rig Type: _____ **Carrier:** _____ **Support Equip:** _____

1 or 2 inch:	4 inch:	
1 10 ft. screen ___ slot PVC/SS	___ 10 ft. screen ___ slot PVC/SS	10 Sand 100 lb ___ size
___ 5 ft. screen ___ slot PVC/SS	___ 5 ft. screen ___ slot PVC/SS	14 Bentonite chips ___ size
3 10 ft. riser PVC/SS	___ 10 ft. riser PVC/SS	___ Volclay grout
___ 5 ft. riser PVC/SS	___ 5 ft. riser PVC/SS	___ Portland cement
1 Top cap, thread, slip, plug	___ Top cap, thread, slip, plug	___ Pea gravel
1 Bottom cap, thread, slip, plug	___ Bottom cap, thread, slip, plug	3 Concrete mix
___ Auger bit, ___ Teeth	HULL 4 DRUMS	___ Flush overcasings
___ 2.5 Sampler/Shoe/Catcher		1 Stickup overcasings
___ 1.4 Sampler/Shoe/Catcher		___ Visqueen ___ ft
		___ Alconox
		___ Traffic cone
		___ Wood plugs ___ size
		4 55 gal. waste drums
		___ Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	CORMIER	12			
Helper:	BECKER	12			
:					
:					

Signature of Driller: Clifford J Cormier Signature of Client: Eric Dorak

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 | DATE: 9-7-00
LOCATION: DUTCH. H | CLIENT: JACOBS
GEOLOGIST: BRUCE
GEOTECH: | ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:45		TRAVEL TO JACOBS							
	7:30	SAFETY MEETING & SIGN							
7:30	8:00	TRAVEL-GET WATER-TRAVEL TO SITE							
8:00		Finish-DRILL 20 TO 25	5'						
		PULL AUGERS & BACKFILL CHIPS							
	9:30	CLEAN UP SITE: TRAVEL							
9:30		TO DECON AREA - UNLOAD							
		DRUMS & AUGERS - DECON							
	12:45	FILL WATER TANK ON RIG							
12:45		TRAVEL TO HOLE # SHLF-MW2							
		SET UP - PULL OVERCASING							
		PULL WELL - DRILL OUT 0 TO 13	13						
		BACKFILL CHIPS - CLEAN UP SITE							
		TRAVEL TO DECON AREA							
		UNLOAD; WELD CLUTCH HANDLE							
		GET DECON PAD CLEAN UP							
		GET READY TO GO DEVELOPE							
		MAKE CALL CHECK ON - BENTONITE.							
3:30		TRAVEL - DEVELOPE WELLS							
	6:00								
6:00		TRAVEL TO DECON AREA							
	6:30	DUMP WATER							
6:30	6:45	TRAVEL TOTALS							

Rig Type: **Carrier:** **Support Equip:**

2 inch:	4 inch:	
___10 ft. screen___slot PVC/SS	___10 ft. screen___slot PVC/SS	___Sand 100 lb___size
___5 ft. screen___slot PVC/SS	___5 ft. screen___slot PVC/SS	18 Bentonite chips___size
___10 ft. riser PVC/SS	___10 ft. riser PVC/SS	___Volclay grout
___5 ft. riser PVC/SS	___5 ft. riser PVC/SS	___Portland cement
___Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
___Bottom cap, thread, slip, plug	___Bottom cap, thread, slip, plug	___Concrete mix
___Auger bit, ___Teeth	HULL ONE DRUM	___Flush overcasings
___2.5 Sampler/Shoe/Catcher		___Stickup overcasings
___1.4 Sampler/Shoe/Catcher		___Visqueen__ft
		___Alconox
		___Traffic cone
		___Wood plugs__size
		1 55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	Cormier	12			
Helper:	Becker	12			
:					
:					

Signature of Driller: Clifford J. Cormier Signature of Client: Eric Detzel

Discovery Drilling, Inc.

Daily Drilling Report

PROJECT NO: 1-00-196 | DATE: 9-8-00

LOCATION: DUTCH. IN. | CLIENT: JACOBS ENG

GEOLOGIST: BRUCE

GEOTECH: | ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:45		TRAVEL TO JACOBS							
	7:30	SAFETY MEETING & SIGN & PAPER WORK							
7:30		TRAVEL TO STAGING AREA							
		AND OUT TO HUMP POINT							
8:30	9:30	DEVLOPE WELL #HCPP-MW-1-R							
9:30		TRAVEL TO DECON PAD							
	10:00	DUMP WATER - DECON AUGER							
10:00	11:00	TRAVEL TO SITE, SET UP TO							
11:00		DECOMMISSION WELLS -							
		FF MPW - MW1 - MW2 - MW-3							
		DIG OUT FLUSH MOUNTS							
		PULL WELLS - DRILL OUT	17						
		BACK FILL CHIPS							
	3:00	CLEAN UP SITES, HAUL TRASH	7						
3:00		TRAVEL - HAUL 2 DRUMS	7						
		UNLOAD AUGERS - RODS							
		START TO DECON - HELP -							
		REPLACE FIRE HOSES							
		TRAVEL - GET FUEL - PICK							
5:00	5:30	UP BENTONITE AT AIRPORT							
		TRAVEL UNLOAD AT STAGING AREA							
		WORK ON DECON							
6:30	6:45	TRAVEL							
		TOTALS							

Rig Type: CME 75 Carrier: 4X4 Support Equip: NO WELL & TRAILER

2 inch:	4 inch:	
___10 ft. screen___slot PVC/SS	___10 ft. screen___slot PVC/SS	___Sand 100 lb___size
___5 ft. screen___slot PVC/SS	___5 ft. screen___slot PVC/SS	12 Bentonite chips___size
___10 ft. riser PVC/SS	___10 ft. riser PVC/SS	___Volclay grout
___5 ft. riser PVC/SS	___5 ft. riser PVC/SS	___Portland cement
___Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
___Bottom cap, thread, slip, plug	___Bottom cap, thread, slip, plug	___Concrete mix
___Auger bit, ___Teeth		___Flush overcasings
___2.5 Sampler/Shoe/Catcher		___Stickup overcasings
___1.4 Sampler/Shoe/Catcher		___Visqueen__ft
		___Alconox
		___Traffic cone
		___Wood plugs__size
		2 55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	CORMIER	12			
Helper:	BECKNER	12			
:					
:					

Signature of Driller: Clifford J Cormier Signature of Client: Eric Denzel

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 | DATE: 9-9-00

LOCATION: DUTCH. H. | CLIENT: JACOBS ENG

GEOLOGIST: BRUCE

GEOTECH: | ENVIRONMENTAL: x

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:45	7:00	TRAVEL TO JACOBS ENG.							
7:00	7:30	SAFTEY MEETING & Sign & PAPER WORK							
7:30		TRAVEL TO Decon PAD - Flush							
	8:00	AUGERS Hose Broken							
		TRAVEL To SITE							
8:00		SET UP on hole # FMGS-MW-1							
	8:45	Dig out Flush mount							
8:45		Pull casing - Drill out	23						
		BACKFill Chips							
		MOVE & SET up on hole							
		Dig out Flush mount FMGS-MW							
	12:30	Pull well - DRILL out (4							
12:30	2:00	TRAVEL - To Decon & Decon	14						
2:00		SET up at hole # FMGS-MW-5							
		Dig out Flush mount	19						
		Pull well - DRILL To 19							
		MIX Volclay - POUR - plus Chip							
		CLEAN up SITE							
		TRAVEL To hole FMGS-mw-6	19½						
		SET up - Dig out what was -							
		LEFT of Flush mount - Pull CASING							
		DRILL TO 19½ - Pull AUGERS &							
	6:15	BACKFILL CHIPS - MIX & pour CONCRETE							
6:45	7:00	TRAVEL TOTALS	56						

Rig Type: CME 75 Carrier: 4x4 Support Equip: MUDWELL & TRAILER

2 inch:	4 inch:	
___10 ft. screen___slot PVC/SS	___10 ft. screen___slot PVC/SS	___Sand 100 lb___size
___5 ft. screen___slot PVC/SS	___5 ft. screen___slot PVC/SS	22 Bentonite chips___size
___10 ft. riser PVC/SS	___10 ft. riser PVC/SS	3 Volclay grout
___5 ft. riser PVC/SS	___5 ft. riser PVC/SS	___Portland cement
___Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
___Bottom cap, thread, slip, plug	___Bottom cap, thread, slip, plug	2 Concrete mix
1 Auger bit, 5 Teeth	HULL 2 DRUMS	___Flush overcasings
___2.5 Sampler/Shoe/Catcher	3 - CAPSCREW	___Stickup overcasings
___1.4 Sampler/Shoe/Catcher		___Visqueen__ft
		___Alconox
		___Traffic cone
		___Wood plugs__size
		1 55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	Cormier	12			
Helper:	Beckder	12			
:					
:					

Signature of Driller: Clifford J. Cormier Signature of Client: Eric Denz

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 | DATE: 9-10-00

LOCATION: DUTCH. H | CLIENT: JACOBS ENG

GEOLOGIST: ERIC

GEOTECH: | ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:45		TRAVEL TO JACOBS ENG.							
		SAFTEY MEETING & SIGN							
		DO PAPPER WORK. TRAVEL TO -		1					
		STAGING AREA. DECON SOME AUGERS							
		TRAVEL TO WELL MW-3							
11:00		SETUP - DIG OUT FLUSH MOUNT							
		PULL WELL - DRILL TO 22½							
		PULL AUGERS & BACKFILL-CHIPS	22½						
		TRAVEL TO STAGING AREA UNLOAD							
		DECON AUGERS - RIG							
		TAKE RIG OFF TRUCK PUT ON NO DWELL							
		LOAD ON TRAILER (NO) WELL							
		TRAVEL FOR FUEL							
		TOTALS							

Rig Type: CME 75 Carrier: 4x4 Support Equip: NO DWELL & TRAILER

2 inch:	4 inch:	
___10 ft. screen___slot PVC/SS	___10 ft. screen___slot PVC/SS	___Sand 100 lb___size
___5 ft. screen___slot PVC/SS	___5 ft. screen___slot PVC/SS	7 Bentonite chips___size
___10 ft. riser PVC/SS	___10 ft. riser PVC/SS	___Volclay grout
___5 ft. riser PVC/SS	___5 ft. riser PVC/SS	___Portland cement
___Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
___Bottom cap, thread, slip, plug	___ Bottom cap, thread, slip, plug	___Concrete mix
___Auger bit, ___Teeth	HULL 1 DRILLING	___Flush overcasings
___2.5 Sampler/Shoe/Catcher		___Stickup overcasings
___1.4 Sampler/Shoe/Catcher		___Visqueen__ft
		___Alconox
		___Traffic cone
		___Wood plugs__size
		1 55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	CORNIER	12			
Helper:	BECKNER	12			
:					
:					

Signature of Driller: Clifford G Cornier Signature of Client: Randy Boyer

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 | DATE: 9-11-00

LOCATION: DUTCH H. | CLIENT: JACOBS ENG

GEOLOGIST: BRUCE

GEOTECH: | ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:45		TRAVEL TO JACOBS							
		SAFTEY MEETING & SIGN							
	7:30	PAPERWORK & SIGN							
7:30		HULL NOD WELL #OUT PO-							
	8:30	HUMPE POINT - ARIVE							
8:30		UNLOAD NOD WELL. LOAD-							
		WITH TOOLS AND WELL MATERIALS							
		SET UP ON HOLE # HULL-MW-1							
		DRILL & SAMPLE TO 8½	8½						
		BEDROCK ? - MOVE & SET UP (BOO)							
		DRILL & SAMPLE TO 28½ BOO	28½						
		SET WELL AT 28½'							
		SET OVERCASING - MIX & POUR							
		HOLE WAS VERY HOT - CONCRETE							
		FROM DRILL. LET SET. BEFOR-							
		SETTING WELL. DID NOT WONT PVC TO MELT							
		CLEAN UP SITE, WALK NOD WELL -							
		TO TRUCK - LOAD & CHAIN DOWN							
		TRAVEL TO NEXT NOD WELL SITE.							
	6:00	UNLOAD NOD WELL - SET UP ON HOLE							
6:00		PARK TRUCK & TRAILER - TRAVEL -							
	6:30	TO DECON PAD - UNLOAD AUGERS							
6:30		TRAVEL FOR FUEL - TRAVEL							
	7:00	TOTALS							

Rig Type: CME 75 Carrier: NODWELL Support Equip: TRUCK & TRAILER PICK UP

2 inch:	4 inch:	
1 10 ft. screen 010 slot PVC/SS	___10 ft. screen___slot PVC/SS	3 Sand 100 lb___size
___5 ft. screen___slot PVC/SS	___5 ft. screen___slot PVC/SS	7 Bentonite chips___size
2 10 ft. riser PVC/SS	___10 ft. riser PVC/SS	___Volclay grout
___5 ft. riser PVC/SS	___5 ft. riser PVC/SS	___Portland cement
1 Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
1 Bottom cap, thread, slip, plug	___ Bottom cap, thread, slip, plug	3 Concrete mix
1 Auger bit, 5 Teeth	HULL TWO DRUMS	___Flush overcasings
___2.5 Sampler/Shoe/Catcher	3 CAP SCREW	1 Stickup overcasings
___1.4 Sampler/Shoe/Catcher		___Visqueen___ft
		___Alconox
		___Traffic cone
		___Wood plugs___size
		2 55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	CORMIER	12			
Helper:	BECKNER	12			
:					
:					

Signature of Driller: Clifford J Cormier Signature of Client: Randy Jones

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-196 | DATE: 9-12-00

LOCATION: DUTCH. H | CLIENT: JACOBS ENG

GEOLOGIST: BRUCE

GEOTECH: | ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:45		TRAVEL TO JACOBS							
		SAFTEY MEETING & SIGNS							
	7:30	GET HOT WORK PERMIT FOR-							
7:30		AUGER DECON, TRAVEL TO STAGING							
		AREA - DECON AUGERS FOR-							
	9:20	LAST TWO HOLES. (4 SHLF-MW-3							
9:20	9:30	TRAVEL ARIVE SITE, FUEL RIG							
9:30		PULL OVERCASING -PULL WELL #							
		DRILL TO 20- BACKFILL	20						
		CHIPS - VOLCLAY - CEMENT CAP							
		LOAD RIG - HULL TO SITE							
		UNLOAD - SET UP ON HOLE # MWS-MW-2							
		DIG OUT FLUSH MOUNT							
		PULL WELL - DRILL TO 20	20						
		BACKFILL - CHIPS & CONCRETE							
	3:00	CLEAN UP SITE							
3:00		LOAD NOWELL AND HULL							
	3:30	TO STAGING AREA, UNLOAD							
3:30		PUT RIG BACK ON TRUCK.							
		DECON							
		START TO DEMOBE							
		MAKE CALL TO OFFICE							
	6:30								
6:30	6:45	TRAVEL TOTALS							

Rig Type: CME 75 Carrier: NOWELL Support Equip: TRUCK & TRAILER - PICKUP

2 inch:	4 inch:	
___10 ft. screen___slot PVC/SS	___10 ft. screen___slot PVC/SS	___Sand 100 lb___size
___5 ft. screen___slot PVC/SS	___5 ft. screen___slot PVC/SS	11 Bentonite chips___size
___10 ft. riser PVC/SS	___10 ft. riser PVC/SS	1 Volclay grout
___5 ft. riser PVC/SS	___5 ft. riser PVC/SS	1 Portland cement
___Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
___Bottom cap, thread, slip, plug	___ Bottom cap, thread, slip, plug	___Concrete mix
___Auger bit, ___Teeth		___Flush overcasings
___2.5 Sampler/Shoe/Catcher		___Stickup overcasings
___1.4 Sampler/Shoe/Catcher		___Visqueen__ft
		___Alconox
		___Traffic cone
		___Wood plugs__size
		___55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	CORMIER	12			
Helper:	BECKER	12			
:					
:					

Signature of Driller: Clifford J Cormier Signature of Client:

Discovery Drilling, Inc.
Daily Drilling Report

PROJECT NO: 1-00-186 | DATE: 9-13-00

LOCATION: DUTCH H. | CLIENT: JACOBS ENG.

GEOLOGIST: BRUCE

GEOTECH: | ENVIRONMENTAL: X

HOURS Start	HOURS Stop	DESCRIPTION OF WORK	Footage	Mobe to Site	Travel on Site	Rig Work	Other	Stand-by	Down time
6:45		TRAVEL TO JACOBS							
		SAFTEY MEETING & SING							
	7:30	ISO PAPPER WORK							
7:30		TRAVEL TO STAGING AREA							
		START DEMOBE							
		DECON AUGERS							
		TOOK TIME TO CLEAN							
10:15		TRAVEL TO MW-11							
	11:30	DEVLOPE - TAKE OUT 30 GAL							
		DEMOBE							
	3:45	TRAVEL DROP RIG OFF							
5:00		FUEL PICKUP - TRAVEL							
		RETURN TRUCK							
		CHECK IN AT AIRPORT							
		FLY TO ANCHORAGE							
	8:15	ARIVE SHOP - TAKE CAB							
		TOTALS							

Rig Type: CME 25 Carrier: 4x4 Support Equip: NOOWELL-Pickup-TRUCK-WATER

2 inch:	4 inch:	
___10 ft. screen___slot PVC/SS	___10 ft. screen___slot PVC/SS	___Sand 100 lb___size
___5 ft. screen___slot PVC/SS	___5 ft. screen___slot PVC/SS	___Bentonite chips___size
___10 ft. riser PVC/SS	___10 ft. riser PVC/SS	___Volclay grout
___5 ft. riser PVC/SS	___5 ft. riser PVC/SS	___Portland cement
___Top cap, thread, slip, plug	___Top cap, thread, slip, plug	___Pea gravel
___Bottom cap, thread, slip, plug	___Bottom cap, thread, slip, plug	___Concrete mix
___Auger bit, ___Teeth		___Flush overcasings
___2.5 Sampler/Shoe/Catcher		___Stickup overcasings
___1.4 Sampler/Shoe/Catcher		___Visqueen__ft
		___Alconox
		___Traffic cone
		___Wood plugs__size
		___55 gal. waste drums
		___Supersacks

Title	Name	Hrs.	Title	Name	Hrs.
Driller:	CORMIER	12			
Helper:	BECKNER	12			
:					
:					

Signature of Driller: Clifford Cormier Signature of Client: Bruce Dent

JE

JACOBS ENGINEERING GROUP INC.

WATER LEVEL ELEVATIONS

Site No. _____

Project No. 05M30227 ~~05G41600~~

Well Number	Date	Initials	Water Level (Top of Casing)	Top of Casing to Land Surface	Top of Casing Elevation	Land Surface Elevation	Land Surface to Water Level	Water Level Elevation
HCD-WP1	8-30-00	BDM	16.81		56.17			39.36
HCD-WP2	"	"	DRY		53.35			< 40.85
HCD-WP3	"	"	10.70		51.25			40.55
HCPP-WP1	"	"	21.15		61.63			40.48
HCPP-WP2	"	"	18.07		59.11			41.04
HCPP WP3	"	"	16.41		57.39			40.98
HCPP-WP1	8-31-00	"	21.20		61.63			40.43
HCPP-WP2	"	"	18.11		59.11			41.00
HCPP-WP3	"	"	16.47		57.39			40.92
HCPP WP1	9-1-00	"	21.20		61.63			40.43
HCPP-WP2	"	"	18.10		59.11			41.01
HCPP-WP3	"	"	16.50		57.39			40.89
PLD2-MW1	9-7-00	"	16.83		TO BE DETERMINED			TO BE DETERMINED
PLD3-MW1	"	"	6.00		"			"
HCPP-MW1R	9-8-00	"	23.56		"			"
2667MW1	9-13-00	"	10.62		"			"
PLD3-MW1	"	"	6.32		"			"
PLD2-MW1	"	"	16.64		"			"
HCPP-MW1R	"	"	23.80		"			"
HCLI-MW1R	"	"	DRY		"			"

BAILED DOWN 8-31-00 following 1 MEASUREMENTS

RE-MEASURED 9-1-00

JACOBS ENGINEERING GROUP INC.

WASTE TRACKING FORM

PROJECT NUMBER: 05M30227

SOURCE AREA

~~Drum No.~~	Date ~~Sealed~~	NUMBER / Contents	Storage Location
Humpy Cove	9-12-00	6 / SOIL	DE-CON PAD
FMGS	9-12-00	5 / SOIL	" "
FMGS-MW2	9-12-00	2 / SOIL	" "
SHLF	9-12-00	4 / SOIL	" "
FMPW	9-12-00	1 / SOIL	" "
2667-MW1	9-12-00	1 / SOIL	" "
PLD	9-12-00	2 / SOIL	" "
MW-11	9-12-00	2 / SOIL	" "
MW-11	9-13-00	1 / WATER	" "

JACOBS ENGINEERING GROUP INC.

WASTE TRACKING FORM

PROJECT NUMBER: 05M30227

SOURCE AREA

~~Drum No.~~	Date ~~Sealed~~	NUMBER / Contents	Storage Location
Humpy Cove	9-12-00	6 / SOIL	DE-COND PAD
FMGS	9-12-00	5 / SOIL	" "
FMGS-MW2	9-12-00	2 / SOIL	" "
SHLF	9-12-00	4 / SOIL	" "
FMPW	9-12-00	1 / SOIL	" "
2667-MW1	9-12-00	1 / SOIL	" "
PLD	9-12-00	2 / SOIL	" "
MW-11	9-12-00	2 / SOIL	" "
MW-11	9-13-00	1 / WATER	" "

APPENDIX C

Soil Boring and Monitoring Well Logs

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*

Date: *1 Sep 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *2667-MW1*

Driller: *Gary Cormier/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: *7.00 ft*

Depth Drilled: *15.0 ft*

Total Depth: *15.0 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	%Sand	%Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
0		S-1			1 1 2 3	ML	**SILT**	0	0	100		0.0		**Red-brown, soft organic silt. Scattered small root fragments.**
2		S-2			1 2 2 2	ML	**Sandy SILT**	0	15	85		0.0		**Brown, soft fine sandy silt. Trace scattered small root fragments.**
4		S-3			1 1 5 5	ML	**Sandy SILT**	0	15	85		0.0		**Brown, soft fine sandy silt. Trace scattered root fragments.**
6		S-4			11 11 6 1	GP	**Poorly graded GRAVEL with Sand**	70	30	0		0.0		**Brown to gray, loose to medium dense, sandy, angular to subangular gravel.**
8		S-5			1 1 9 9	GP	**Poorly graded GRAVEL with Sand**	70	30	0		0.0		**Brown to gray, loose to medium dense, sandy, angular to subangular gravel.**
10		S-6			5 8 12 13	GP	**Poorly graded GRAVEL with Sand**	70	30	0		0.0		**Brown to gray, loose to medium dense, sandy, angular to subangular gravel.**
12														**Bottom of Hole 15.0 ft** **PID = Photo Ionization Detector**
14														
16														
18														

EXPLORATION LOG ISWIDE.GPJ ACE_ANC.GDT 2/16/01

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Humpy Cove Power Plant

Date: *29 Aug 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *HCPP-MW1*

Driller: *Gary Cormer/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater:

Depth Drilled: *24.5 ft*

Total Depth: *24.5 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	Grain Size %Sand	Grain Size %Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
0		S-1			1 2 1 1	ML	SILT			100		0.6		Red-brown, soft organic silt. Trace scattered small roots.
2		S-2			1 2 9 8	GP-GM	Poorly graded GRAVEL with Silt and Sand	50	30	20		0.8		Gray to brown, medium to dense, silty, sandy angular to subrounded gravel with zones of silty, gravelly sand.
4		S-3			4 8 8 8	GP-GM	Poorly graded GRAVEL with Silt and Sand	50	30	20		0.6		Gray to brown, medium to dense, silty, sandy angular to subrounded gravel with zones of silty, gravelly sand.
6		S-4			7 11 25 26	GP-GM	Poorly graded GRAVEL with Silt and Sand	50	30	20		0.0		Gray to brown, medium to dense, silty, sandy angular to subrounded gravel with zones of silty, gravelly sand.
8		S-5			11 12 16 16	GP-GM	Poorly graded GRAVEL with Silt and Sand	50	30	20		0.0		Gray to brown, medium to dense, silty, sandy angular to subrounded gravel with zones of silty, gravelly sand.
10		S-6			9 24 21 27	SM	Silty SAND with Gravel	40	40	20		0.0		Gray to brown, silty, gravelly sand to sandy gravel.
12		S-7			14 13 10 14	SM	Silty SAND with Gravel	40	40	20		0.0		Gray to brown, silty, gravelly sand to sandy gravel.
14		S-8			8 16 21 40	SM	Silty SAND with Gravel	40	40	20		0.0		Gray to brown, silty, gravelly sand to sandy gravel.
16														
18														

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Humpy Cove Power Plant

Date: *29 Aug 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *HCPP-MW1*

Driller: *Gary Cormer/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater:

Depth Drilled: *24.5 ft*

Total Depth: *24.5 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	Grain Size %Sand	Grain Size %Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
22		S-9			16 50 50 40	GP-GM	Poorly graded GRAVEL with Silt and Sand	50	40	10		0.0		Gray to brown, very dense, slightly silty, sandy, angular to subrounded gravel.
		S-10			15 100 0	SM	Silty SAND with Gravel	20	60	20		0.0		Gray to brown, very dense, silty, gravelly sand.
24														Bottom of Hole 24.5 ft PID = Photo Ionization Detector Groundwater not encountered. Possible refusal on bedrock.
26														
28														
30														
32														
34														
36														
38														

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Humpy Cove Power Plant

Date: *6 Sep 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *HCPP-MW1 Replacement*

Driller: *Gary Cormer/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: *21.50 ft*

Depth Drilled: *30.0 ft*

Total Depth: *30.0 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	Grain Size %Sand	Grain Size %Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
0		S-1			4 4 5 4	GP-GM	Poorly graded GRAVEL with Silt and Sand	50	35	15		0.0		Dark brown to black, loose, silty, sandy gravel to silty, gravelly sand (fill). Grains are angular to subrounded.
2		S-2			5 5 3 3	GP-GM	Poorly graded GRAVEL with Silt and Sand	50	35	15		0.1		Dark brown to black, loose, silty, sandy gravel to silty, gravelly sand (fill). Grains are angular to subrounded.
4		S-3			2 3 3 4	SP-SM	Poorly graded SAND with Silt and Gravel	30	55	15		0.7		Dark brown to black, loose, silty, sandy gravel to silty, gravelly sand (fill). Grains are angular to subrounded.
6		S-4			2 2 1 1	SP-SM	Poorly graded SAND with Silt and Gravel	30	55	15		1.1		Dark brown to black, loose, silty, sandy gravel to silty, gravelly sand (fill). Grains are angular to subrounded.
8		S-5			3 2 2 2	SP-SM	Poorly graded SAND with Silt and Gravel	30	55	15		1.1		Dark brown to black, loose, silty, sandy gravel to silty, gravelly sand (fill). Grains are angular to subrounded.
10		S-6			3 17 17 19	GP-GM	Poorly graded GRAVEL with Silt and Sand	70	25	5		0.5		Brown, dense to very dense, sandy, angular to subrounded gravel.
12		S-7			10 17 18 17	GP-GM	Poorly graded GRAVEL with Silt and Sand	70	25	5		0.5		Brown, dense to very dense, sandy, angular to subrounded gravel.
14		S-8			13 26 32 31	GP-GM	Poorly graded GRAVEL with Silt and Sand	70	30	0		2.3		Brown, dense to very dense, sandy, angular to subrounded gravel.
16														
18														

EXPLORATION LOG ISWIDE.GPJ ACE_ANC.GDT 2/16/01

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Humpy Cove Power Plant

Date: *6 Sep 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *HCPP-MW1 Replacement*

Driller: *Gary Cormer/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: *21.50 ft*

Depth Drilled: *30.0 ft*

Total Depth: *30.0 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	Grain Size %Sand	Grain Size %Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
22		S-9			15 21 22 21	GP-GM	Poorly graded GRAVEL with Silt and Sand	70	30	0		5.4		Brown to gray, dense to very dense, sandy, very angular gravel.
24		S-10			20 27 32 32	GP-GM	Poorly graded GRAVEL with Silt and Sand	70	30	0		17.7		Brown to gray, dense to very dense, sandy, very angular gravel.
26		S-11			16 26 36 36	GP-GM	Poorly graded GRAVEL with Silt and Sand	70	30	0		5.4		Brown to gray, dense to very dense, sandy very angular gravel. Collected soil sam AM-A500001 from 25.0 - 27.0 feet bgs.
28		S-12			8 12 18 37	GP-GM	Poorly graded GRAVEL with Silt and Sand	70	30	10		9.1		Dense, slightly silty, sandy gravel with fine to coarse sand interbeds.
30														Bottom of Hole 30.0 ft PID = Photo Ionization Detector Possible refusal on bedrock.
32														
34														
36														
38														

ALASKA DISTRICT
CORPS OF ENGINEERS
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Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Humpy Cove Dispensary

Page 1 of 1

Date: *31 Aug 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *HCD-MW1*

Driller: *Gary Cormier/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other _____
☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater:

Depth Drilled: *11.0 ft*

Total Depth: *11.0 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	Grain Size %Sand	Grain Size %Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
0		S-1			4 2 2 2	ML	SILT	0	0	100		0.0		Dark brown, soft, organic silt. Few scattered small roots.
2		S-2			1 1 1 2	PT	PEAT					0.0		Dark brown, soft, fibrous peat.
4		S-3			2 2 4 2	SM	Silty SAND	0	70	30		0.0		Brown, loose, silty sand.
8		S-4			7 115	GP-GM	Poorly graded GRAVEL with Silt and Sand	70	20	10		0.0		Brown-gray, very dense, slightly silty, sandy, angular to subrounded gravel.
10		S-5			23 50	GP-GM	Poorly graded GRAVEL with Silt and Sand	70	20	10		0.0		Brown-gray, very dense, slightly silty, sandy, angular to subrounded gravel.
12														Bottom of Hole 11.0 ft PID = Photo Ionization Detector Groundwater not encountered. Possible refusal on bedrock.
14														
16														
18														

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ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Humpy Cove Latrine #1

Date: *11 Sep 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *HCL1-MW1*

Driller: *Gary Cormier/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater:

Depth Drilled: *28.5 ft*

Total Depth: *28.5 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	%Sand	%Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
		S-1			1 1 4 2	ML	Gravelly SILT	5	0	95		0.0		Red-brown, medium stiff, organic silt. Trace scattered gravel. Occasional small roots.
2		S-2			1 1 3 10	ML	Gravelly SILT	5	0	95		0.0		Red-brown, medium stiff, organic silt. Trace scattered gravel. Occasional small roots.
4														
6		S-3			8 12 12 10	GP-GM	Poorly graded GRAVEL with Silt and Sand	80	15	5		0.0		Brown-gray, dense to very dense, slightly silty, sandy, angular to subrounded gravel. Occasional angular to subrounded scattered cobble.
8		S-4			8 50	GP-GM	Poorly graded GRAVEL with Silt and Sand	80	15	5		0.0		Brown-gray, dense to very dense, slightly silty, sandy, angular to subrounded gravel. Occasional angular to subrounded scattered cobble.
10		S-5			12 12 13 21	GP-GM	Poorly graded GRAVEL with Silt and Sand	80	15	5		0.0		Brown-gray, dense to very dense, slightly silty, sandy, angular to subrounded gravel. Occasional angular to subrounded scattered cobble.
12		S-6			25 116	GP-GM	Poorly graded GRAVEL with Silt and Sand	80	15	5		0.0		Brown-gray, dense to very dense, slightly silty, sandy, angular to subrounded gravel. Occasional angular to subrounded scattered cobble.
14														
16		S-7			23 26 32 51	GP-GM	Poorly graded GRAVEL with Silt and Sand	80	15	5		0.0		Brown-gray, dense to very dense, slightly silty, sandy, angular to subrounded gravel. Occasional angular to subrounded scattered cobble.
18		S-8			16 21 21 55	GP-GM	Poorly graded GRAVEL with Silt and Sand	80	15	5		0.0		Brown-gray, dense to very dense, slightly silty, sandy, angular to subrounded gravel. Occasional angular to subrounded scattered cobble.

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Humpy Cove Latrine #1

Date: *11 Sep 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *HCL1-MW1*

Driller: *Gary Cormier/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater:

Depth Drilled: *28.5 ft*

Total Depth: *28.5 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	Grain Size %Sand	Grain Size %Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
22		S-9			12 12 16 32	GP-GM	Poorly graded GRAVEL with Silt and Sand	80	15	5		0.0		Brown-gray, dense to very dense, slightly silty, sandy, angular to subrounded gravel. Occasional angular to subrounded scattered cobble.
24		S-10			6 42 90 100	GP-GM	Poorly graded GRAVEL with Silt and Sand	80	15	5		0.0		Brown-gray, dense to very dense, slightly silty, sandy, angular to subrounded gravel. Occasional angular to subrounded scattered cobble.
26		S-11			18 30 50 61	GP-GM	Poorly graded GRAVEL with Silt and Sand	80	15	5		0.0		Brown-gray, dense to very dense, slightly silty, sandy, angular to subrounded gravel. Occasional angular to subrounded scattered cobble. Collected AM-A500802 at 25.0 - 27.0 feet bgs.
28		S-12			17 100	GP-GM	Poorly graded GRAVEL with Silt and Sand	80	15	5		0.0		Brown-gray, dense to very dense, slightly silty, sandy, angular to subrounded gravel. Occasional angular to subrounded scattered cobble.
30														Bottom of Hole 28.5 ft PID = Photo Ionization Detector Groundwater not encountered. Possible refusal on bedrock.
32														
34														
36														
38														

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Humpy Cove Latrine #3

Date: *31 Aug 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *HCL3-MW1*

Driller: *Gary Cormier/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater:

Depth Drilled: *9.0 ft*

Total Depth: *9.0 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	%Sand	%Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
0					1 1 1 1	ML	**Sandy SILT**	0	15	85		0.0		**Brown to dark brown, very soft to soft silt with zones of fine sandy silt. Scattered small root fragments.**
		S-1												
2														
					1 2 2 3	ML	**Sandy SILT**	0	15	85		0.0		**Brown to dark brown, very soft to soft silt with zones of fine sandy silt. Scattered small root fragments.**
		S-2												
4														
					7 53 27 39	ML	**Sandy SILT**	0	15	85		0.0		**Brown to dark brown, very soft to soft silt with zones of fine sandy silt. Scattered small root fragments.**
6		S-3												
					7 100	GP-GM	**Poorly graded GRAVEL with Silt and Sand**	70	15	15		0.0		**Gray-brown, very dense, silty, sandy, angular to subrounded gravel.**
8		S-4												
10														**Bottom of Hole 9.0 ft** **PID = Photo Ionization Detector** **Groundwater not encountered. Possible refusal on bedrock.**
12														
14														
16														
18														

ALASKA DISTRICT
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Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Humpy Cove Latrine #3

Page 1 of 1

Date: *6 Sep 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *HCL3-MW1 Replacement*

Driller: *Gary Cormier/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater:

Depth Drilled: *8.0 ft*

Total Depth: *8.0 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	Grain Size %Sand	Grain Size %Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
0		S-1			1 1 2 1	ML	Sandy SILT	0	10	90		0.0		Brown to red-brown, soft, organic silt and fine sandy silt. Trace scattered small roots.
2					1 2	GP-GM	Poorly graded GRAVEL with Silt and Sand	55	30	15		0.0		Brown to gray, medium dense to dense, silty, sandy angular to subangular gravel.
4		S-2			11 13									
6		S-3			15 20 20 21	GP-GM	Poorly graded GRAVEL with Silt and Sand	55	30	15		0.0		Brown to gray, medium dense to dense, silty, sandy angular to subangular gravel. Collected AM-A500002.
8		S-4			50	GP-GM	Poorly graded GRAVEL with Silt and Sand	55	30	15		0.0		Brown to gray, medium dense to dense, silty, sandy angular to subangular gravel. Bottom of Hole 8.0 ft PID = Photo Ionization Detector Groundwater not encountered. Possible refusal on bedrock.
10														
12														
14														
16														
18														

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Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Port Levashef

Page 1 of 1

Date: *3 Sep 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *PLD3-MW1*

Driller: *Gary Cormier/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other
☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: *3.50 ft*

Depth Drilled: *9.5 ft*

Total Depth: *9.5 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	Grain Size %Sand	Grain Size %Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
0		S-1			4 6 8 8	GP	Poorly graded GRAVEL with Sand	70	30	0		0.0		Brown to gray, medium dense, sandy, very angular gravel (fill).
2		S-2			6 13 13 13	GP	Poorly graded GRAVEL with Sand	60	40	0		0.0	▼	Brown, dense to very dense, sandy, angular to subrounded gravel.
4		S-3			5 15 15 12	GP	Poorly graded GRAVEL with Sand	60	40	0		0.0		Brown, dense to very dense, sandy, angular to subrounded gravel.
6		S-4			24 26 49 56	GP	Poorly graded GRAVEL with Sand	60	40	0		0.0		Brown, dense to very dense, sandy, angular to subrounded gravel.
8														Bottom of Hole 9.5 ft PID = Photo Ionization Detector
10														
12														
14														
16														
18														

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Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Crowley Dock

Page 1 of 1

Date: *10 Nov 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Denali Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *CD-MW1*

Driller: *Ryan Kaston/Orville Emes*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: *7.00 ft*

Depth Drilled: *14.0 ft*

Total Depth: *14.0 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *Mobile B-61*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	Grain Size %Sand	Grain Size %Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
0		S-1			6 17 20	GP	Poorly graded GRAVEL with Sand	65	30	5		0.0		Gray/brown, dense, sandy gravel.
2		S-2			5 2 3	OL	Organic SILT			100		0.0		Dark brown, medium stiff, organic silt.
4		S-3			1 3 10	OL	Organic SILT			100		0.0		Dark brown, medium stiff, organic silt. Collected sample AM-A510621 and AM-A510622.
6		S-4			50/6"	GP-GM	Poorly graded GRAVEL with Silt and Sand	60	25	15		0.0		Brown, medium dense, silty, sandy gravel. Very gravelly drill action - no sample recovery.
8		S-5			6 7 6	GP-GM	Poorly graded GRAVEL with Silt and Sand	55	30	15		0.0		Gray/brown, medium dense, silty, sandy gravel.
10		S-6			7 6 7	GP-GM	Poorly graded GRAVEL with Silt and Sand	55	30	15		0.0		Gray to brown, silty, sandy gravel with silty fine to medium sand zones. Collected sample AM-A510623 and AM-A510624.
12														Bottom of Hole 14.0 ft PID = Photo Ionization Detector
14														
16														
18														

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ALASKA DISTRICT
CORPS OF ENGINEERS
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Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Former Naval Laundry Facility

Date: *9 Nov 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Denali Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *NLF-MW1*

Driller: *Ryan Kaston/Orville Emes*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: *NE*

Depth Drilled: *12.0 ft*

Total Depth: *12.0 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *Mobile B-61*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	Grain Size %Sand	Grain Size %Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
0		S-1			2 7 11	GP-GM	Poorly graded GRAVEL with Silt and Sand					0.0		Brown/gray, medium dense, silty, sandy gravel. Fill material.
2		S-2			3 4 3	GP-GM	Poorly graded GRAVEL with Silt and Sand					0.0		Brown/gray, medium dense, silty, sandy gravel. Fill material.
4		S-3			4 6 10	GP-GM	Poorly graded GRAVEL with Silt and Sand					0.0		Brown, medium dense, silty, sandy gravel with organic silt zones. Collected AM-A510616 and AM-A510617.
6		S-4			6 7 10	GP-GM	Poorly graded GRAVEL with Silt and Sand					0.0		Dark brown, medium dense, silty, sandy gravel with organics.
8		S-5			11 12 14	SP-SM	Poorly graded SAND with Silt					0.0		Brown, medium dense, silty sand. Collected AM-A510618, AM-A510619, and AM-A510620.
10														Bottom of Hole 12.0 ft Groundwater Not Encounted PID = Photo Ionization Detector Possible refusal on bedrock.
12														
14														
16														
18														

ALASKA DISTRICT
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ENGINEERING SERVICES

Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Former Naval Laundry Facility

Date: *9 Nov 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Denali Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *NLF-MW2*

Driller: *Ryan Kaston/Orville Emes*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: *9.50 ft*

Depth Drilled: *13.0 ft*

Total Depth: *13.0 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *Mobile B-61*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	%Sand	%Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
0		S-1			2 2 1	GP-GM	Poorly graded GRAVEL with Silt and Sand					0.0		Gray/brown, loose, silty, sandy gravel. Fill material.
2		S-2			6 6 9	GP-GM	Poorly graded GRAVEL with Silt and Sand	65	20	15		0.0		Brown, medium dense, silty, sandy gravel. Collected AM-A510607, AM-A510608, and AM-A510609.
4		S-3			6 4 4	GP-GM	Poorly graded GRAVEL with Silt and Sand	65	20	15		0.0		Brown, loose, silty, sandy gravel with trace small roots.
6		S-4			7 12 14	GP-GM	Poorly graded GRAVEL with Silt and Sand	65	20	15		0.0		Brown to gray, medium to very dense, slightly silty, sandy gravel. Odor/visible product. Collected AM-A510610, AM-A510611, AM-A510612, and AM-A510613.
8													▼	
10		S-5			27 29 33	GP-GM	Poorly graded GRAVEL with Silt and Sand	75	20	5		30.0		Brown to gray, medium to very dense, slightly silty, sandy gravel. Odor/visible product. Collected AM-A510614 and AM-A510615.
12		S-6			29 50/3"	GP-GM	Poorly graded GRAVEL with Silt and Sand	75	20	5		38.9		Brown to gray, medium to very dense, slightly silty, sandy gravel. Odor/visible product.
14														Bottom of Hole 13.0 ft PID = Photo Ionization Detector Possible refusal on bedrock.
16														
18														

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ALASKA DISTRICT
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Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Former Naval Laundry Facility

Page 1 of 1

Date: *7 Nov 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Denali Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *NLF-MW3*

Driller: *Ryan Kaston/Orville Emes*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other _____
☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: *8.00 ft*

Depth Drilled: *11.5 ft*

Total Depth: *11.5 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow Stem Auger*

Type of Equipment: *Mobile B-61*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	%Sand	%Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
														Concrete Slab
0		S-1			7 9 11	GP-GM	Poorly graded GRAVEL with Silt and Sand					0.0		Brown/gray, medium dense, slightly silty, sandy gravel. Fill material.
2		S-2			3 11 11	GP-GM	Poorly graded GRAVEL with Silt and Sand					0.0		Brown/gray, medium dense, slightly silty, sandy gravel. Fill material.
4		S-3			6 10 11	GP-GM	Poorly graded GRAVEL with Silt and Sand	65	20	15		0.0		Brown, medium dense, silty, sandy gravel. Collected AM-A510601 and AM-A510602.
6		S-4			2 3 1	GP-GM	Poorly graded GRAVEL with Silt and Sand	65	20	15		0.0		Brown, medium dense, silty, sandy gravel. Collected AM-A510604 and AM-A510605.
8		S-5			3 3 50/1"	GP-GM	Poorly graded GRAVEL with Silt and Sand	65	20	15		0.0		Brown, medium dense, silty, sandy gravel.
10														Bottom of Hole 11.5 ft PID = Photo Ionization Detector Possible refusal on bedrock.
12														
14														
16														
18														

EXPLORATION LOG ISWIDE.GPJ ACE_ANC.GDT 2/16/01

ALASKA DISTRICT
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Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak and Unalaska Islands, Alaska*
Pre-WWII Tank Farm

Date: *2 Sep 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *MW-11Replacement*

Driller: *Gary Cormer/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: *11.50 ft*

Depth Drilled: *20.0 ft*

Total Depth: *20.0 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow stem auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	Grain Size %Sand	Grain Size %Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
		S-1			14 26 27 35	GP-GM	Poorly graded GRAVEL with Silt and Sand	60	30	10		3.0		Brown to gray, medium dense to very dense, slightly silty, sandy gravel (fill). Grains are angular to subrounded. Occasional metal debris.
2														
		S-2			26 70 103 20	GP-GM	Poorly graded GRAVEL with Silt and Sand	60	30	10		1.2		Brown to gray, medium dense to very dense, slightly silty, sandy gravel (fill). Grains are angular to subrounded. Occasional metal debris.
4														
		S-3			11 14 13 7	GP-GM	Poorly graded GRAVEL with Silt and Sand	60	30	10		1.4		Brown to gray, medium dense to very dense, slightly silty, sandy gravel (fill). Grains are angular to subrounded. Occasional metal debris.
6														
		S-4			40 138	GP-GM	Poorly graded GRAVEL with Silt and Sand	60	30	10		3.4		Brown to gray, medium dense to very dense, slightly silty, sandy gravel (fill). Grains are angular to subrounded. Occasional metal debris.
8														
10		S-5			9 8 5 5	GP-GM	Poorly graded GRAVEL with Silt and Sand	50	40	10		60.2		Dark gray to black, medium dense, slightly silty sandy gravel. Grains are angular to subrounded. Product is visible.
12		S-6			7 9 14 12	GP-GM	Poorly graded GRAVEL with Silt and Sand	50	40	10		97.3		Dark gray to black, medium dense, slightly silty, sandy gravel. Grains are angular to subrounded. Product is visible.
14														
16		S-7			10 12 10 10	GP	Poorly graded GRAVEL with Sand	80	20	0		91.3		Dark gray to black, medium dense, sandy gravel. Grains are angular to subrounded. Product is visible.
18		S-8			5 6 8 9	GP	Poorly graded GRAVEL with Sand	80	20	0		59.7		Dark gray to black, medium dense, sandy gravel. Grains are angular to subrounded. Product is visible.

ALASKA DISTRICT
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Soils and Geology Section

EXPLORATION LOG

Project: *Amaknak and Unalaska Islands, Alaska*
Pre-WWII Tank Farm

Date: *2 Sep 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *MW-11Replacement*

Driller: *Gary Cormer/Tim Beckner*

Inspector: *Bruce McDonald*

Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: *11.50 ft*

Depth Drilled: *20.0 ft*

Total Depth: *20.0 ft*

Hammer Weight: *300 lbs*

Split Spoon I.D.: *3.0 in*

Size and Type of Bit: *4.25 in Hollow stem auger*

Type of Equipment: *CME75*

Type of Samples: *Split Spoon*

Depth (ft)	Lithology	Sample	Frozen ASTM D 4083	Frost Class. TM 5-822-5	Blow Count	Symbol	Classification ASTM: D 2487 or D 2488	Grain Size %Gravel	Grain Size %Sand	Grain Size %Fines	Max Size (in)	PID (ppm)	% Water	Description and Remarks
22														**Bottom of Hole 20.0 ft**
24														**PID = Photo Ionization Detector**
26														
28														
30														
32														
34														
36														
38														

EXPLORATION LOG TO_02.GPJ ACE_ANC.GDT 2/16/01

ALASKA DISTRICT
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Soils and Geology Section

MONITORING WELL LOG

Project: ***Amaknak/Unalaska Islands, Alaska 2000 Islandwide***

Page 1 of 1

Date: ***1 Sep 2000***

Drilling Agency: ☐ Alaska District ☒ Other ***Discovery Drilling***

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: ***2667-MW1***

Driller: ***Gary Cormier/Tim Beckner***

Inspector: ***Bruce McDonald***

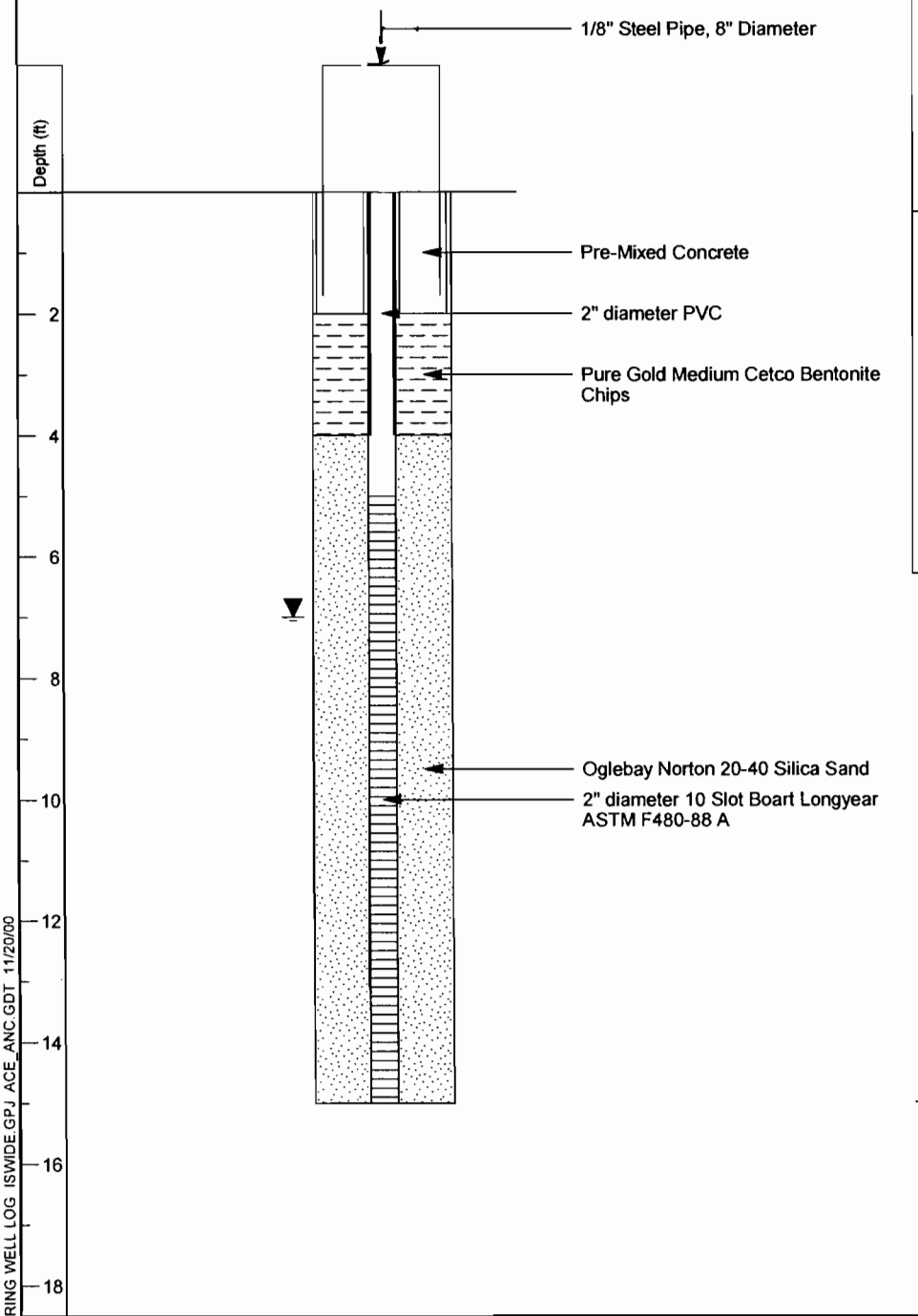
Type of Hole: ☐ other _____
☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: ***7.00 ft***

Depth Drilled: ***15.0 ft***

Total Depth: ***15.0 ft***

Hammer Weight:	Split Spoon I.D.:	Size and Type of Bit:	Type of Equipment:	Type of Samples:
300 lbs	***3.0 in***	***4.25 in Hollow Stem Auger***	***CME75***	***Split Spoon***



NOTE:

None.

SUMMARY OF MATERIALS USED

Pre-mixed Concrete
Pure Gold Medium Cetco Bentonite Chips
Oglebay Norton 20-40 Silica Sand
2" Diameter PVC Casing
2" Diameter10 Slot Boart Longyear (ASTM F480-88 A) Screen

Bottom of Hole 15.0 ft

MONITORING WELL LOG ISWIDE.GPJ ACE_ANC.GDT 11/20/00

ALASKA DISTRICT
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Soils and Geology Section

MONITORING WELL LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Humpy Cove Latrine #1

Page 1 of 2

Date: *11 Sep 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *HCL1-MW1*

Driller: *Gary Cormier/Tim Beckner*

Inspector: *Bruce McDonald*

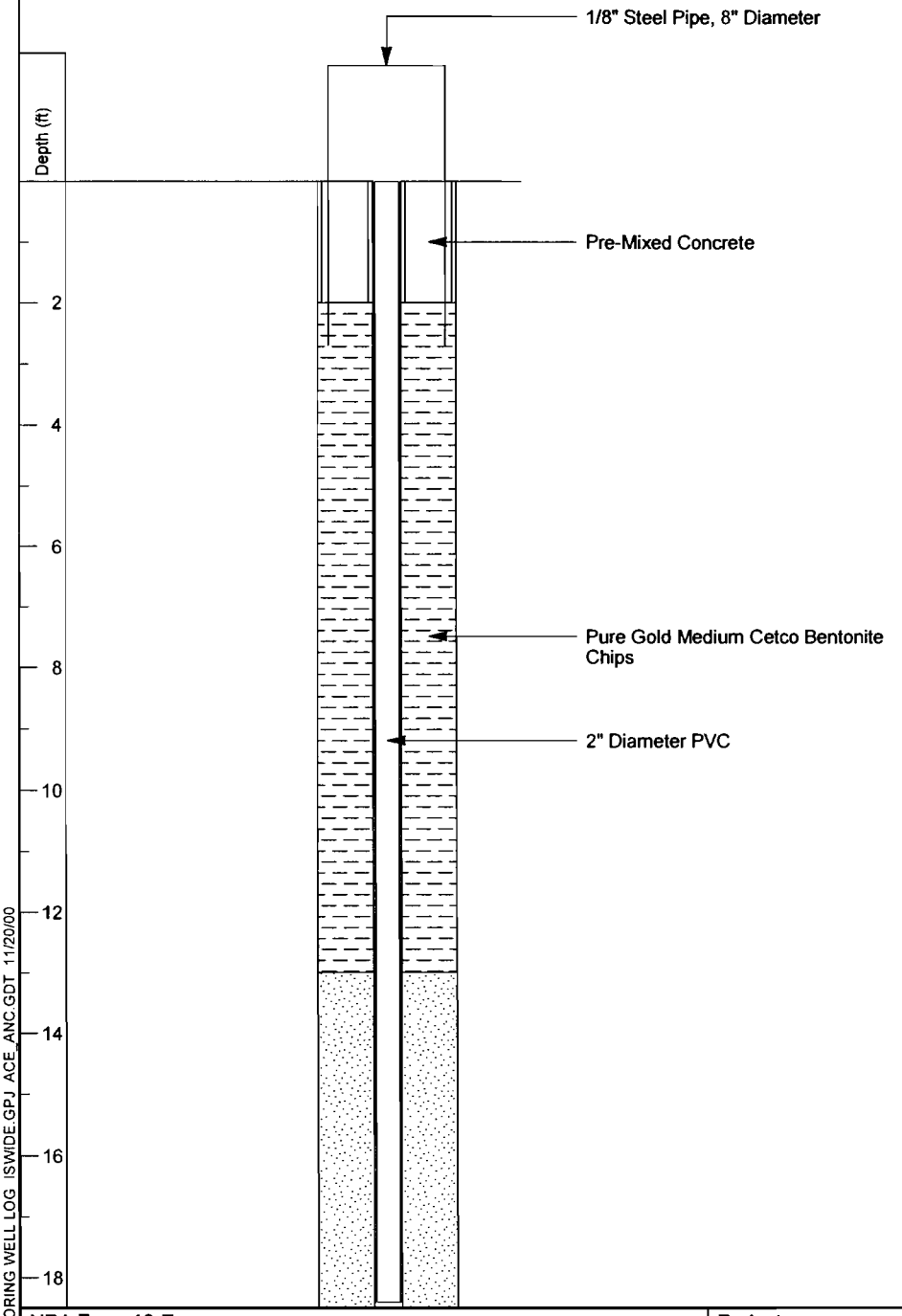
Type of Hole: ☐ other _____
☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater:

Depth Drilled: *28.5 ft*

Total Depth: *28.5 ft*

Hammer Weight:	Split Spoon I.D:	Size and Type of Bit:	Type of Equipment:	Type of Samples:
300 lbs	*3.0 in*	*4.25 in Hollow Stem Auger*	*CME75*	*Split Spoon*



NOTE:

Hole became very hot during drilling. Allowed to cool for 1/2-hour before setting well to ensure that PVC did not melt.

SUMMARY OF MATERIALS USED

Pre-mixed Concrete
Pure Gold Medium Cetco Bentonite Chips
Oglebay Norton 20-40 Silica Sand
2" Diameter PVC Casing
2" Diameter10 Slot Boart Longyear (ASTM F480-88 A) Screen

MONITORING WELL LOG ISWIDE.GPJ ACE_ANC.GDT 11/20/00

ALASKA DISTRICT
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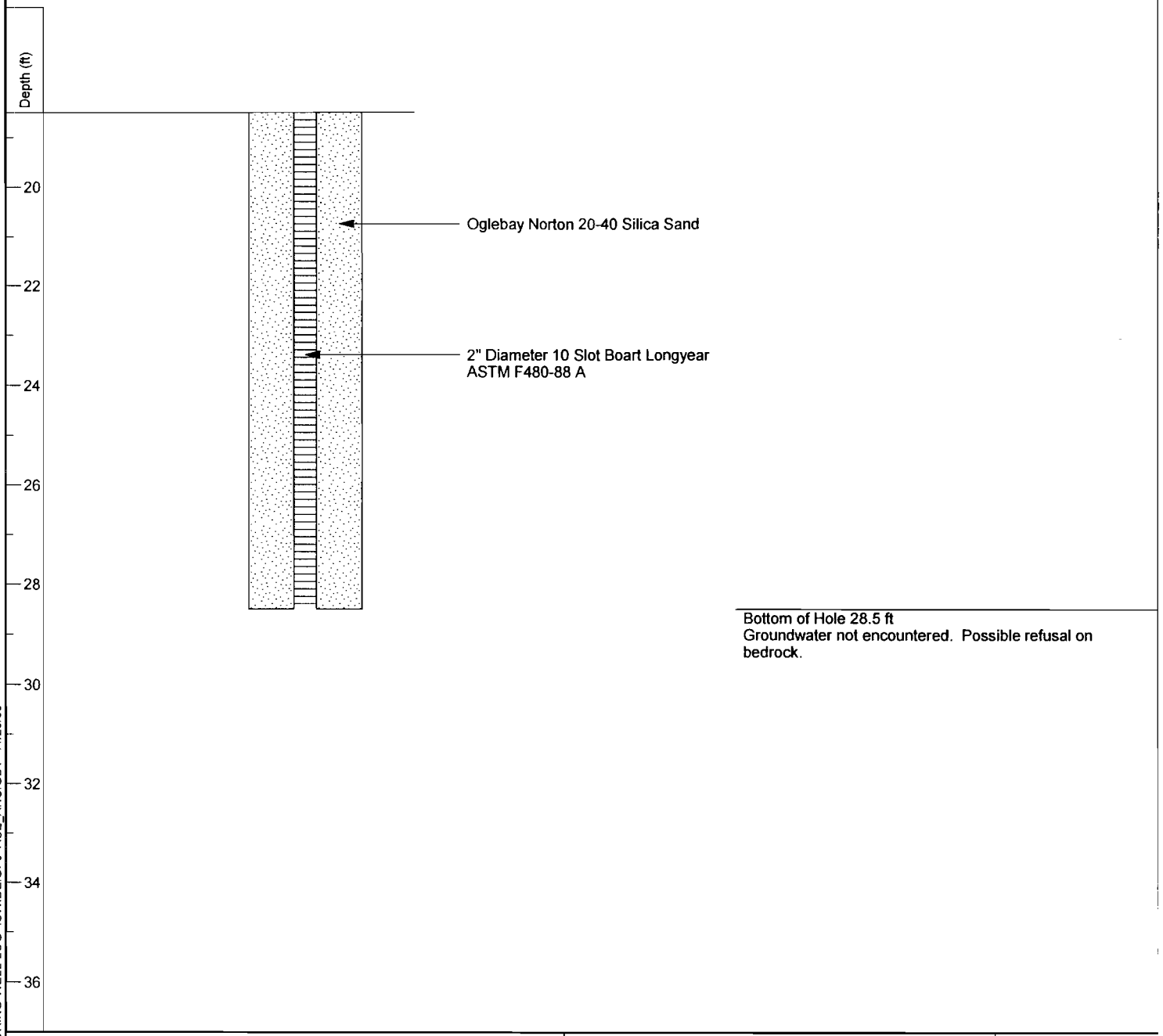
MONITORING WELL LOG

Project:	*Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
	Humpy Cove Latrine #1
Page	2 of 2
Date:	*11 Sep 2000*
Drilling Agency:	☐ Alaska District ☒ Other *Discovery Drilling*
Elevation Datum:	☒ MSL ☐ other
Location:	Northing: Easting:
Top of Hole Elevation:	
Hole Number, Field: Permanent:	*HCL1-MW1*
Driller:	*Gary Cormier/Tim Beckner*
Inspector:	*Bruce McDonald*
Type of Hole:	☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer
Depth to Groundwater:	
Depth Drilled:	*28.5 ft*
Total Depth:	*28.5 ft*
Hammer Weight:	*300 lbs*
Split Spoon I.D:	*3.0 in*
Size and Type of Bit:	*4.25 in Hollow Stem Auger*
Type of Equipment:	*CME75*
Type of Samples:	*Split Spoon*



MONITORING WELL LOG ISWIDE.GPJ ACE_ANC.GDT 11/20/00

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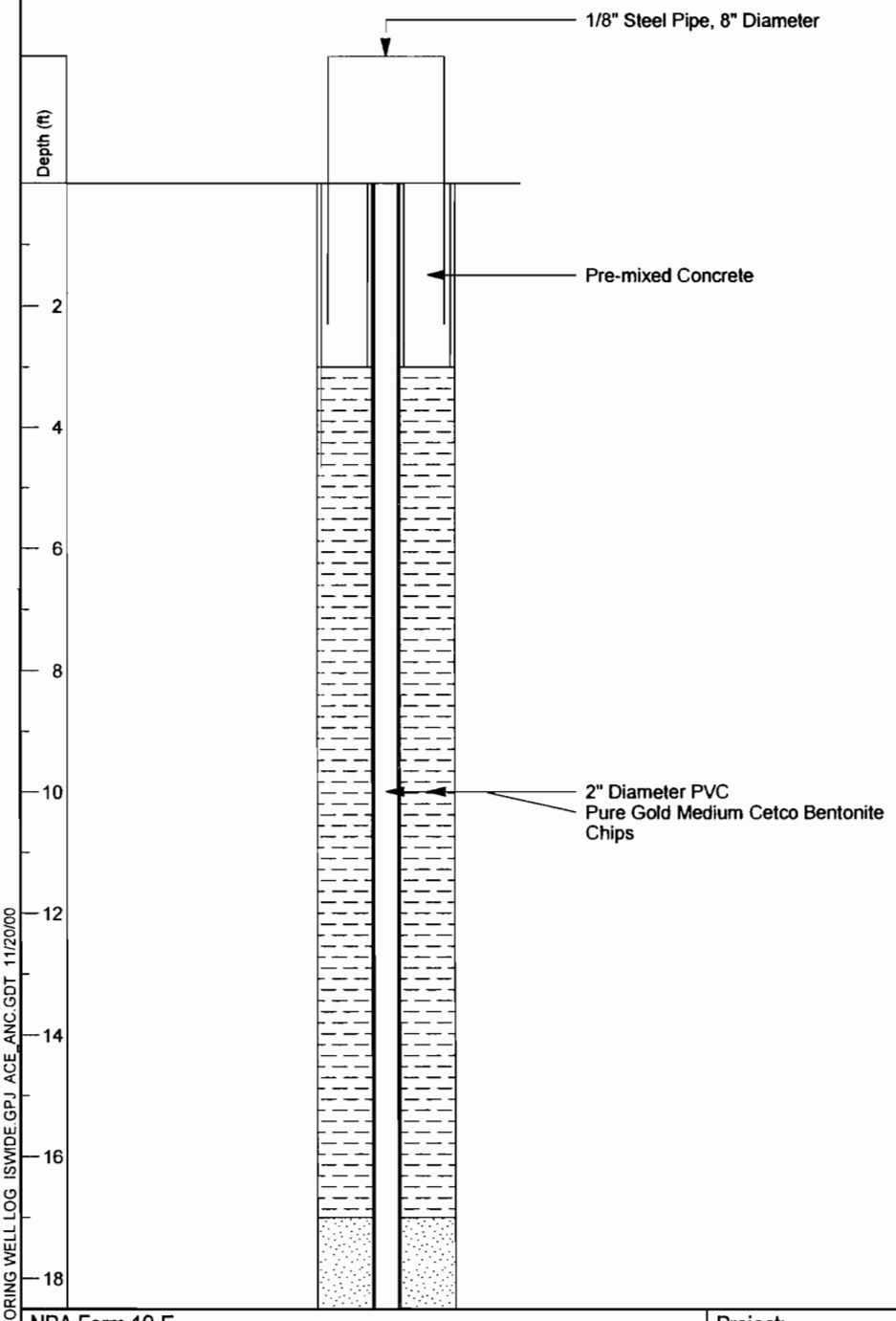
ENGINEERING SERVICES

Soils and Geology Section

MONITORING WELL LOG

Project: ***Amaknak/Unalaska Islands, Alaska 2000 Islandwide*** ***Humpy Cove Power Plant***		Page 1 of 2 Date: ***6 Sep 2000***
Drilling Agency: ☐ Alaska District ☒ Other ***Discovery Drilling***		Elevation Datum: ☒ MSL ☐ other
Location: Northing: Easting:		Top of Hole Elevation:
Hole Number, Field: Permanent: ***HCPP-MW1 Replacement***	Driller: ***Gary Cormer/Tim Beckner***	Inspector: ***Bruce McDonald***
Type of Hole: ☐ other _____ ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer	Depth to Groundwater: ***21.50 ft***	Depth Drilled: ***30.0 ft*** / Total Depth: ***30.0 ft***
Hammer Weight: ***300 lbs***	Split Spoon I.D.: ***3.0 in***	Size and Type of Bit: ***4.25 in Hollow Stem Auger***
Type of Equipment: ***CME75***		Type of Samples: ***Split Spoon***



NOTE:

None.

SUMMARY OF MATERIALS USED

Pre-mixed Concrete
Pure Gold Medium Cetco Bentonite Chips
Oglebay Norton 20-40 Silica Sand
2" Diameter PVC Casing
2" Diameter10 Slot Boart Longyear (ASTM F480-88 A) Screen

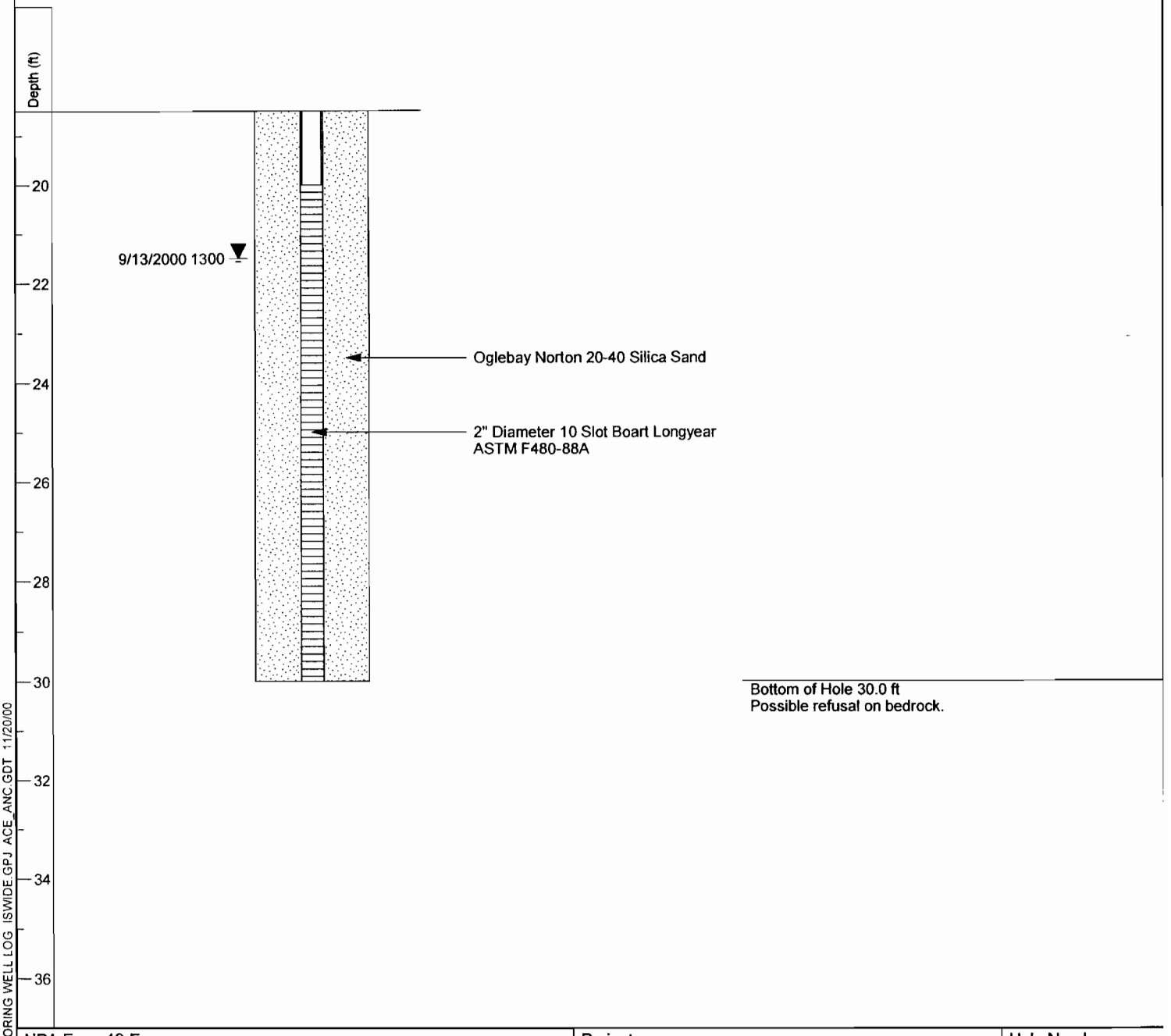
MONITORING WELL LOG ISWIDE.GPJ ACE_ANC.GDT 11/20/00

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

MONITORING WELL LOG

Project: ***Amaknak/Unalaska Islands, Alaska 2000 Islandwide*** ***Humpy Cove Power Plant***		Page 2 of 2 Date: ***6 Sep 2000***
Drilling Agency: ☐ Alaska District ☒ Other ***Discovery Drilling***		Elevation Datum: ☒ MSL ☐ other
Location: Northing: Easting:		Top of Hole Elevation:
Hole Number, Field: Permanent: ***HCPP-MW1 Replacement***	Driller: ***Gary Cormer/Tim Beckner***	Inspector: ***Bruce McDonald***
Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer	Depth to Groundwater: ***21.50 ft***	Depth Drilled: ***30.0 ft*** / Total Depth: ***30.0 ft***
Hammer Weight: ***300 lbs***	Split Spoon I.D: ***3.0 in***	Size and Type of Bit: ***4.25 in Hollow Stem Auger*** / Type of Equipment: ***CME75*** / Type of Samples: ***Split Spoon***



ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

MONITORING WELL LOG

Project: ***Amaknak/Unalaska Islands, Alaska 2000 Islandwide***
Port Levashef

Date: ***4 Sep 2000***

Drilling Agency: ☐ Alaska District ☒ Other ***Discovery Drilling***

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: ***PLD2-MW1***

Driller: ***Gary Cormier/Tim Beckner***

Inspector: ***Bruce McDonald***

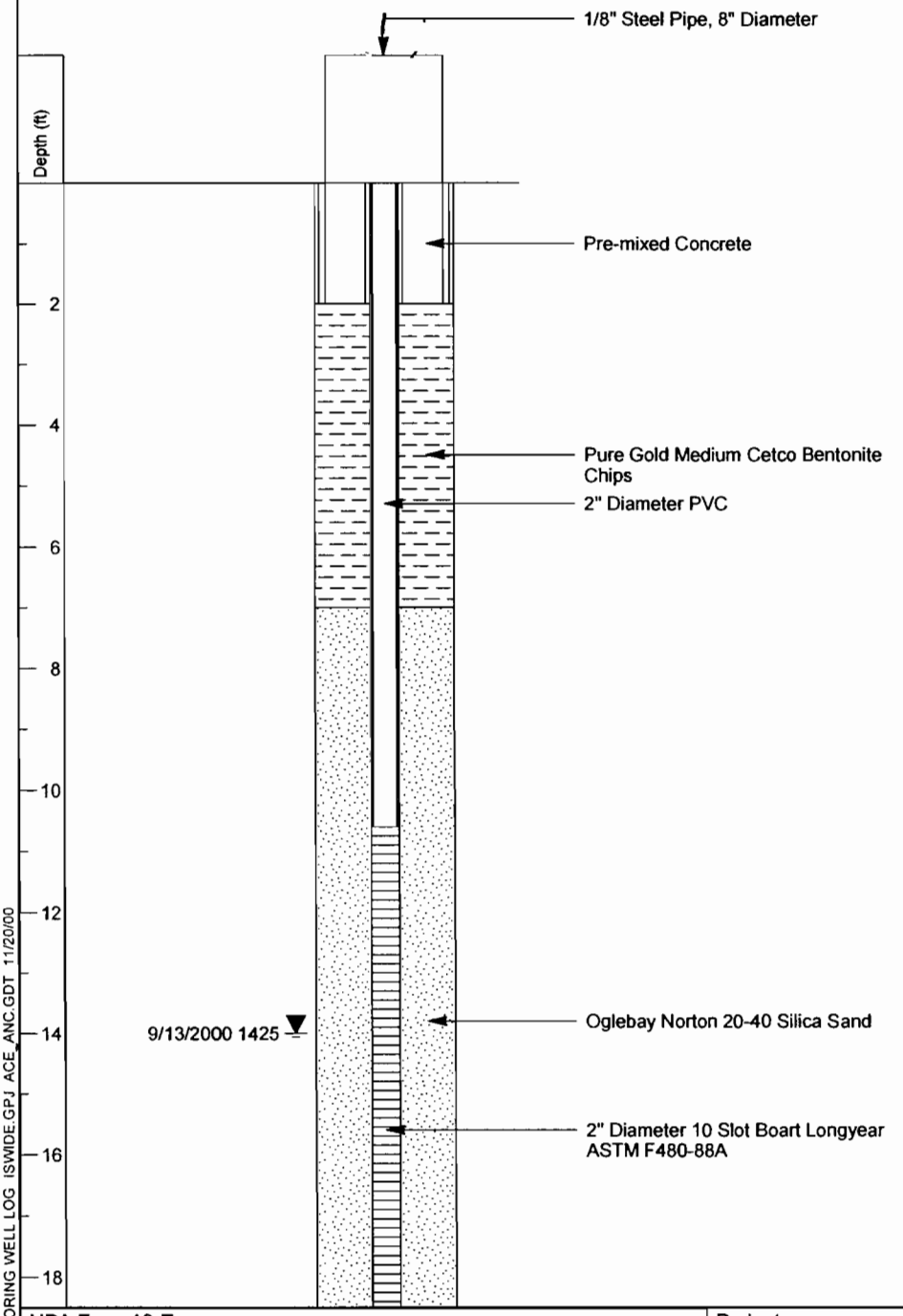
Type of Hole: ☐ other _____
☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: ***14.00 ft***

Depth Drilled: ***20.6 ft***

Total Depth: ***20.6 ft***

Hammer Weight:	Split Spoon I.D.:	Size and Type of Bit:	Type of Equipment:	Type of Samples:
300 lbs	***3.0 in***	***4.25 in Hollow Stem Auger***	***CME75***	***Split Spoon***



NOTE:

None.

SUMMARY OF MATERIALS USED

Pre-mixed Concrete
Pure Gold Medium Cetco Bentonite Chips
Oglebay Norton 20-40 Silica Sand
2" Diameter PVC Casing
2" Diameter10 Slot Boart Longyear (ASTM F480-88 A) Screen

MONITORING WELL LOG ISWIDE.GPJ ACE_ANC.GDT 11/20/00

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

MONITORING WELL LOG

Project: ***Amaknak/Unalaska Islands, Alaska 2000 Islandwide***
Port Levashef

Date: ***4 Sep 2000***

Drilling Agency: ☐ Alaska District ☒ Other ***Discovery Drilling***

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: ***PLD2-MW1***

Driller: ***Gary Cormier/Tim Beckner***

Inspector: ***Bruce McDonald***

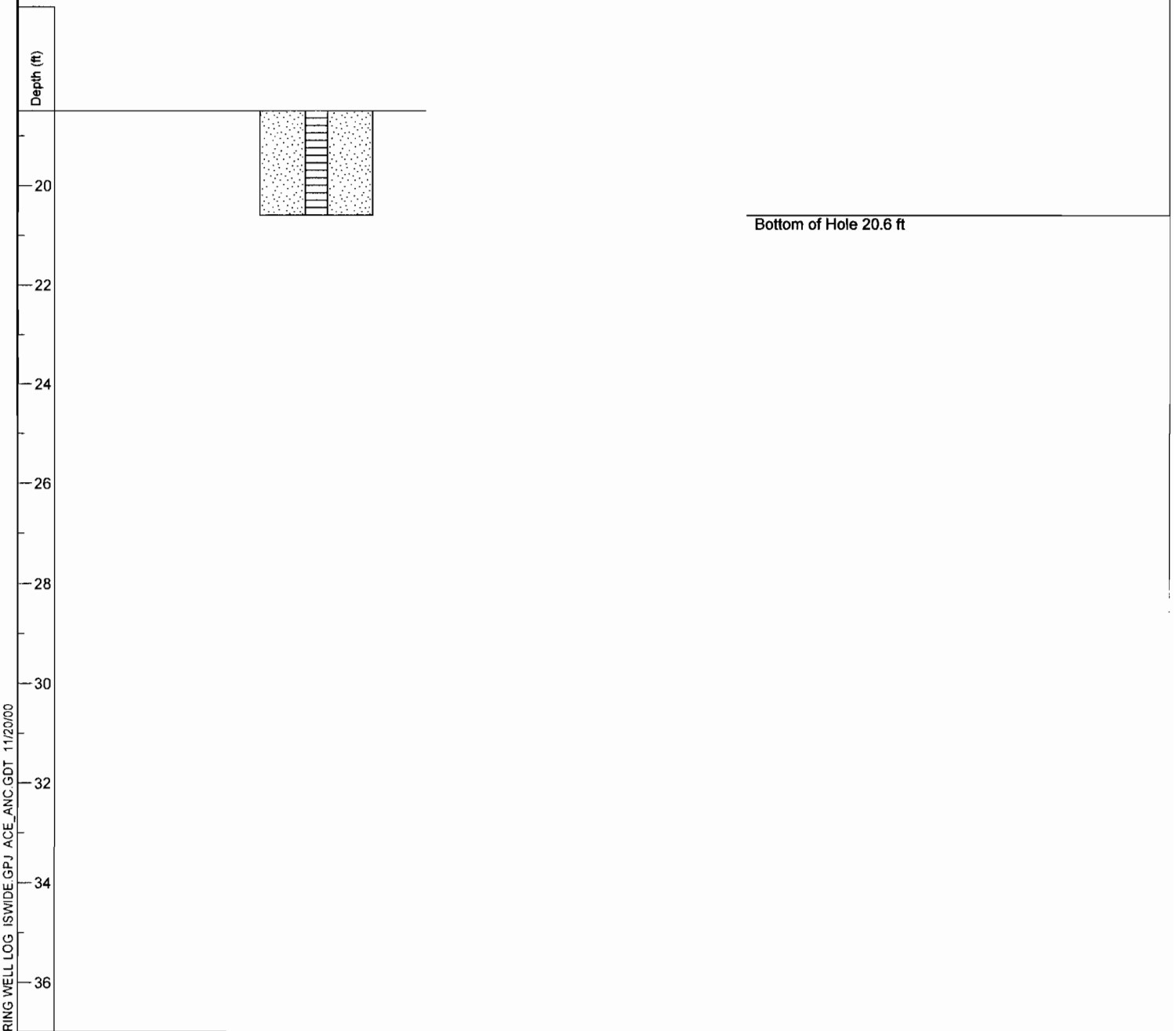
Type of Hole: ☐ other _____
☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: ***14.00 ft***

Depth Drilled: ***20.6 ft***

Total Depth: ***20.6 ft***

Hammer Weight:	Split Spoon I.D:	Size and Type of Bit:	Type of Equipment:	Type of Samples:
300 lbs	***3.0 in***	***4.25 in Hollow Stem Auger***	***CME75***	***Split Spoon***



MONITORING WELL LOG ISWIDE.GPJ ACE_ANC.GDT 11/20/00

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

MONITORING WELL LOG

Project: ***Amaknak/Unalaska Islands, Alaska 2000 Islandwide***
Port Levashef

Page 1 of 1

Date: ***3 Sep 2000***

Drilling Agency: ☐ Alaska District ☒ Other ***Discovery Drilling***

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: ***PLD3-MW1***

Driller: ***Gary Cormier/Tim Beckner***

Inspector: ***Bruce McDonald***

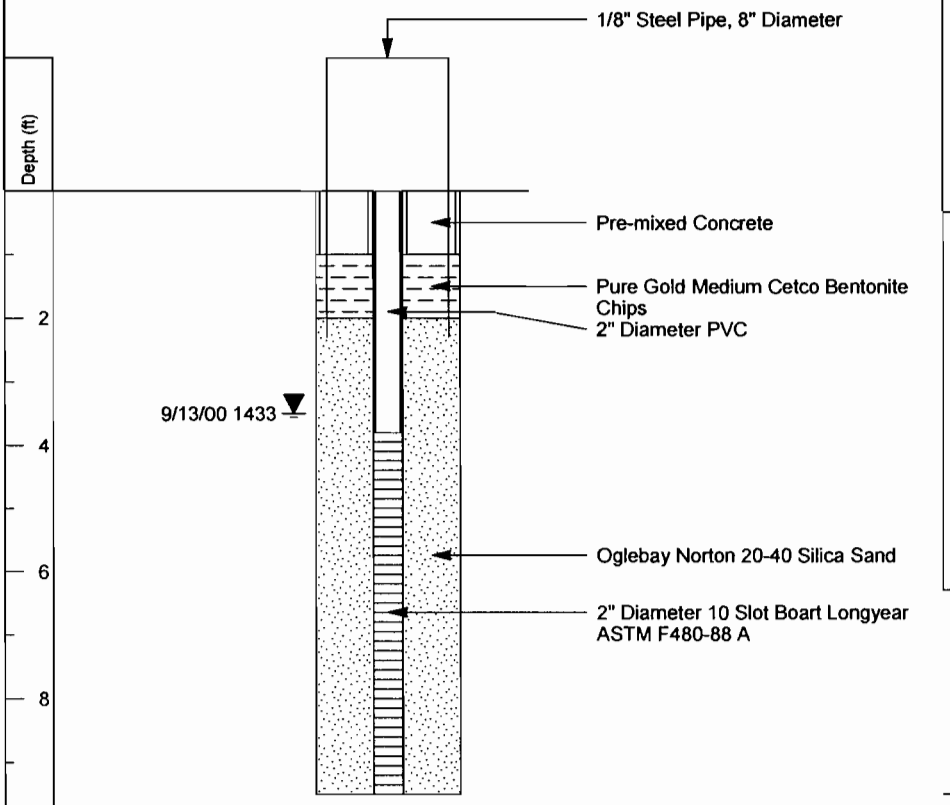
Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: ***3.50 ft***

Depth Drilled: ***9.5 ft***

Total Depth: ***9.5 ft***

Hammer Weight:	Split Spoon I.D:	Size and Type of Bit:	Type of Equipment:	Type of Samples:
300 lbs	***3.0 in***	***4.25 in Hollow Stem Auger***	***CME75***	***Split Spoon***



NOTE:

Protective casing length modified for top of seal.

SUMMARY OF MATERIALS USED

Pre-mixed Concrete
Pure Gold Medium Cetco Bentonite Chips
Oglebay Norton 20-40 Silica Sand
2" Diameter PVC Casing
2" Diameter10 Slot Boart Longyear (ASTM F480-88 A) Screen

Bottom of Hole 9.5 ft

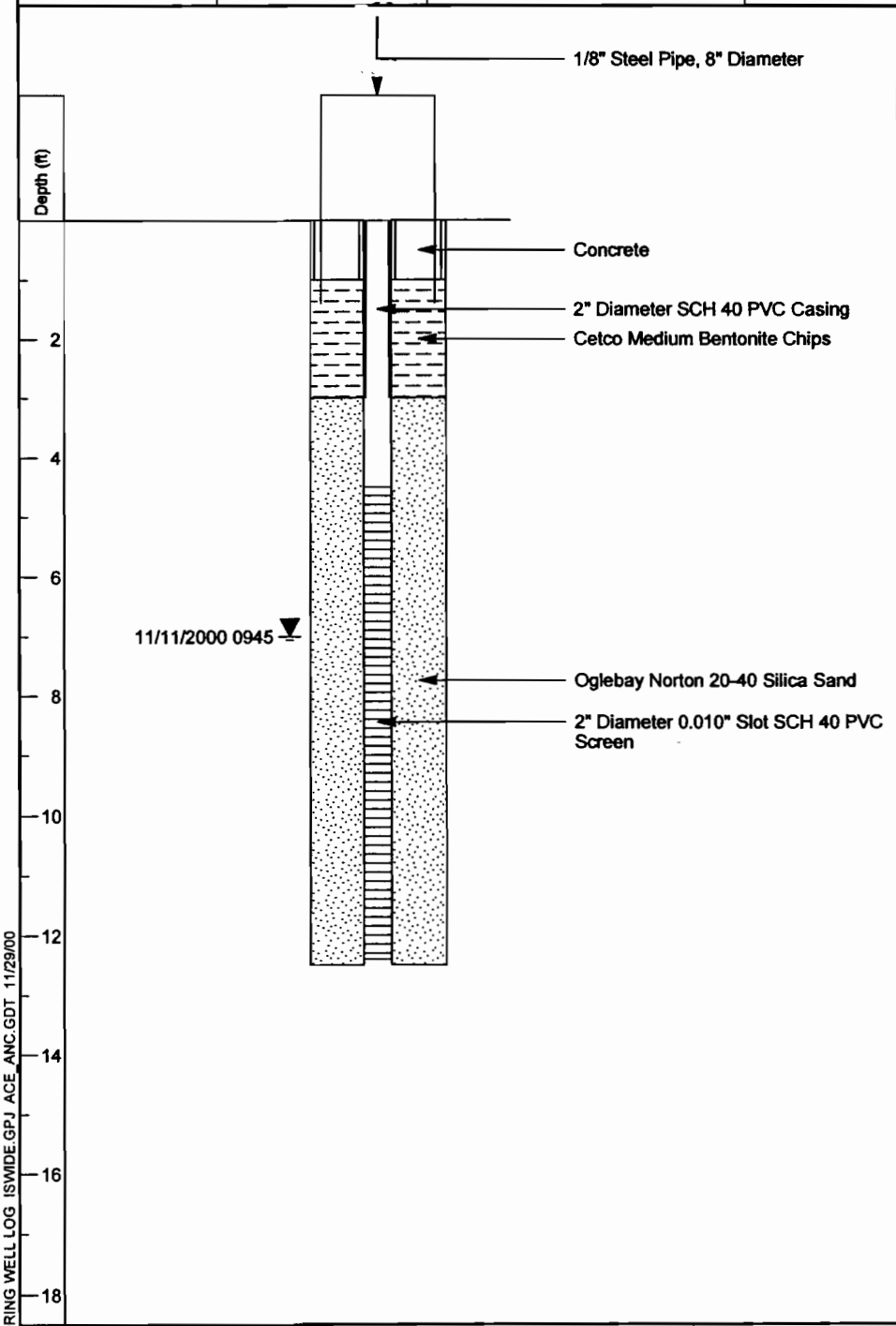
MONITORING WELL LOG ISWIDE.GPJ ACE_ANC.GDT 11/20/00

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

MONITORING WELL LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide* *Crowley Dock*		Page 1 of 1 Date: *10 Nov 2000*
Drilling Agency: ☐ Alaska District ☒ Other *Denali Drilling*		Elevation Datum: ☒ MSL ☐ other
Location: Northing: Easting:		Top of Hole Elevation:
Hole Number, Field: Permanent: *CD-MW1*	Driller: *Ryan Kaston/Orville Emes*	Inspector: *Bruce McDonald*
Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer	Depth to Groundwater: *7.00 ft*	Depth Drilled: *14.0 ft* / Total Depth: *14.0 ft*
Hammer Weight: *300 lbs*	Split Spoon I.D.: *3.0 in*	Size and Type of Bit: *4.25 in Hollow Stem Auger* / Type of Equipment: *Mobile B-61* / Type of Samples: *Split Spoon*



NOTE:

None.

SUMMARY OF MATERIALS USED

Concrete
Cetco Medium Bentonite Chips
Oglebay Norton 20-40 Silica Sand
2" Diameter PVC Casing
2" Diameter 0.010" Slot SCH 40 PVC Screen

Bottom of Hole 14.0 ft

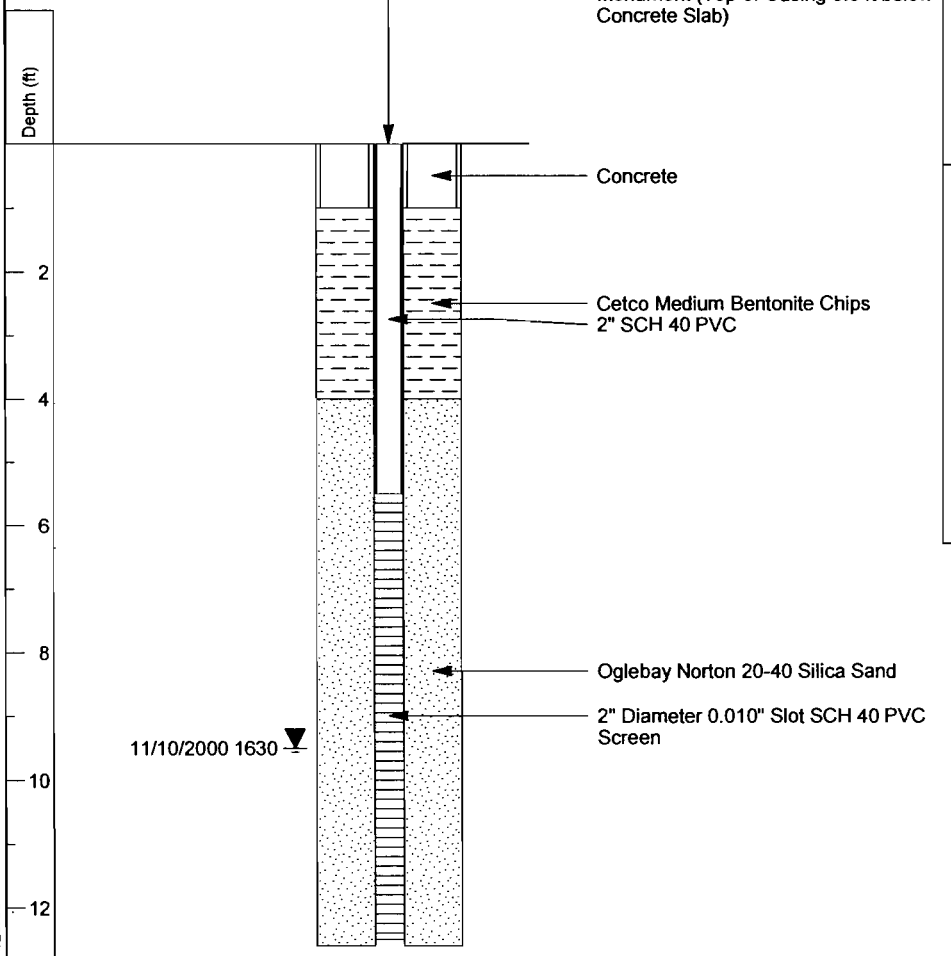
MONITORING WELL LOG ISWIDE.GPJ ACE_ANC.GDT 11/29/00

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

MONITORING WELL LOG

Project: ***Amaknak/Unalaska Islands, Alaska 2000 Islandwide*** ***Former Naval Laundry Facility***		Page 1 of 1 Date: ***9 Nov 2000***
Drilling Agency: ☐ Alaska District ☒ Other ***Denali Drilling***		Elevation Datum: ☒ MSL ☐ other
Location: Northing: Easting:		Top of Hole Elevation:
Hole Number, Field: Permanent: ***NLF-MW2***	Driller: ***Ryan Kaston/Orville Emes***	Inspector: ***Bruce McDonald***
Type of Hole: ☐ other ☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer	Depth to Groundwater: ***9.50 ft***	Depth Drilled: ***13.0 ft*** / Total Depth: ***13.0 ft***
Hammer Weight: ***300 lbs***	Split Spoon I.D.: ***3.0 in***	Size and Type of Bit: ***4.25 in Hollow Stem Auger***
Type of Equipment: ***Mobile B-61***		Type of Samples: ***Split Spoon***



NOTE:

None.

SUMMARY OF MATERIALS USED

Imported Gravel Fill
Concrete
Cetco Medium Bentonite Chips
Oglebay Norton 20-40 Silica Sand
2" Diameter PVC Casing
2" Diameter 0.010" Slot SCH 40 PVC Screen

Bottom of Hole 13.0 ft
Possible refusal on bedrock.

MONITORING WELL LOG ISWIDE.GPJ ACE_ANC.GDT 11/28/00

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

MONITORING WELL LOG

Project: *Amaknak/Unalaska Islands, Alaska 2000 Islandwide*
Former Naval Laundry Facility

Page 1 of 1

Date: *7 Nov 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Denali Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *NLF-MW3*

Driller: *Ryan Kaston/Orville Emes*

Inspector: *Bruce McDonald*

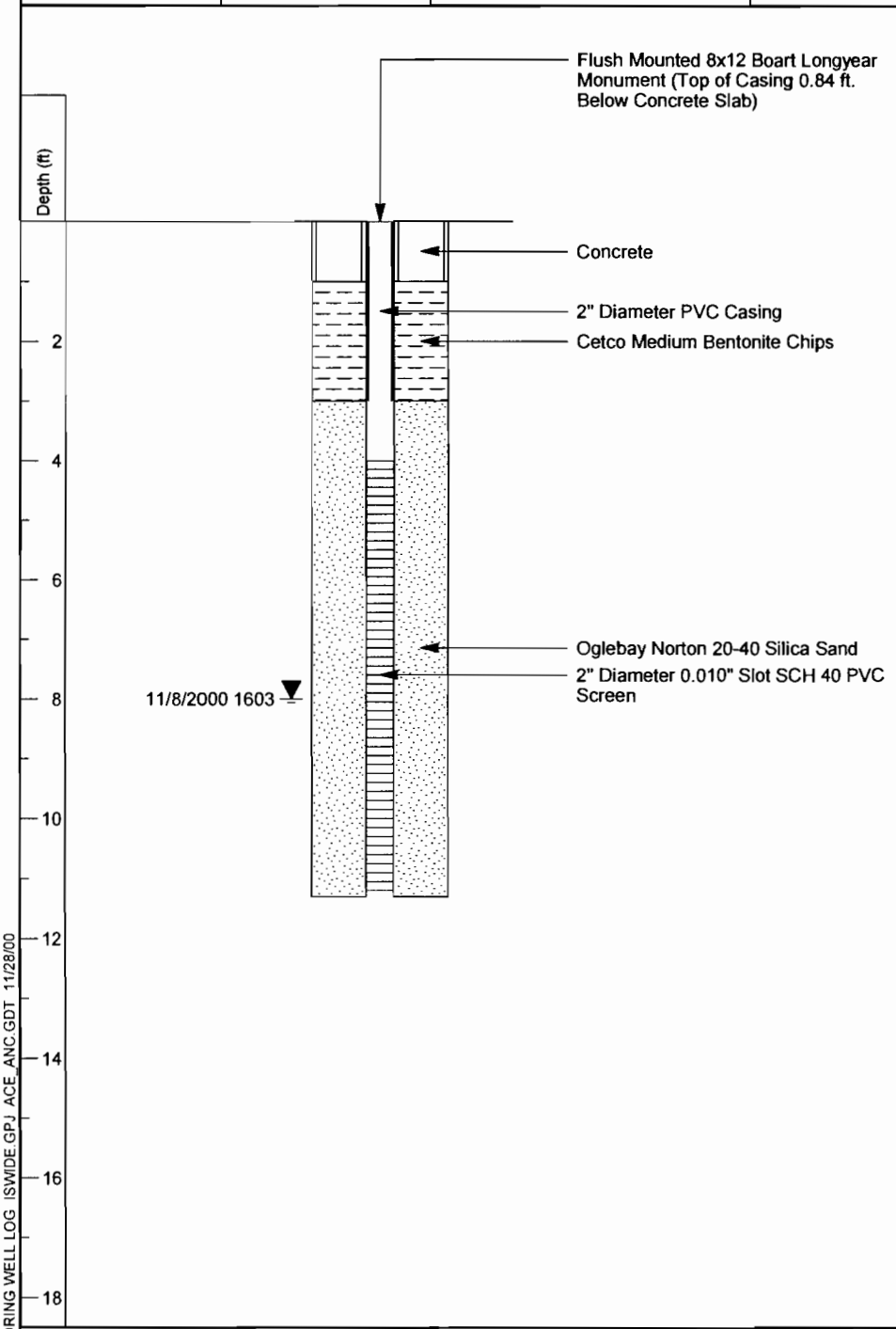
Type of Hole: ☐ other _____
☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: *8.00 ft*

Depth Drilled: *11.5 ft*

Total Depth: *11.5 ft*

Hammer Weight:	Split Spoon I.D:	Size and Type of Bit:	Type of Equipment:	Type of Samples:
300 lbs	*3.0 in*	*4.25 in Hollow Stem Auger*	*Mobile B-61*	*Split Spoon*



NOTE:

None.

SUMMARY OF MATERIALS USED

Concrete
Cetco Medium Bentonite Chips
Oglebay Norton 20-40 Silica Sand
2" Diameter PVC Casing
2" Diameter 0.010" Slot SCH 40 PVC Screen

Bottom of Hole 11.5 ft
Possible refusal on bedrock.

MONITORING WELL LOG ISWIDE.GPJ ACE_ANC.GDT 11/28/00

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

MONITORING WELL LOG

Project: ***Amaknak and Unalaska Islands, Alaska***
Pre-WWII Tank Farm

Date: ***2 Sep 2000***

Drilling Agency: ☐ Alaska District ☒ Other ***Discovery Drilling***

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: ***MW-11Replacement***

Driller: ***Gary Cormer/Tim Beckner***

Inspector: ***Bruce McDonald***

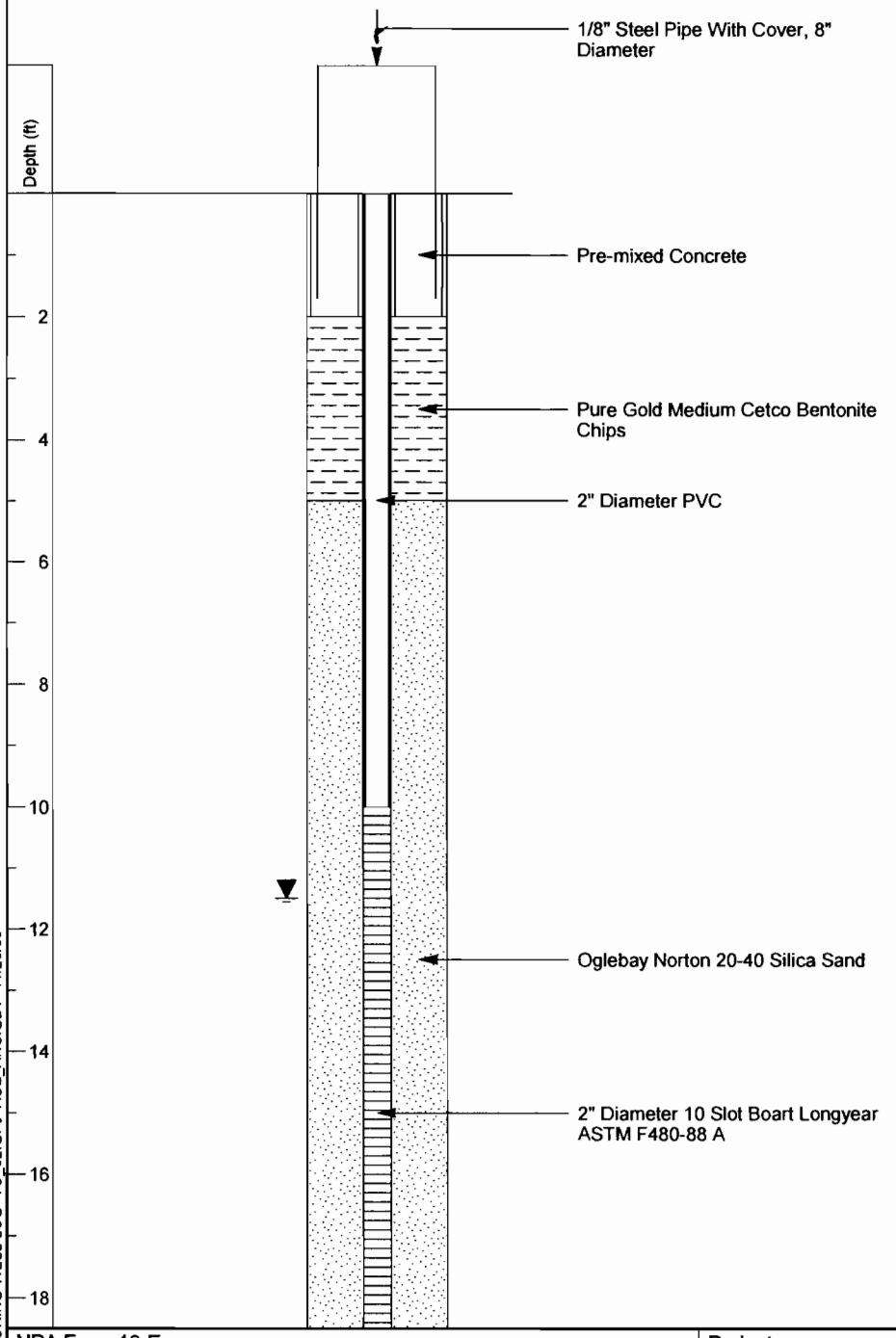
Type of Hole: ☐ other _____
☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: ***11.50 ft***

Depth Drilled: ***20.0 ft***

Total Depth: ***20.0 ft***

Hammer Weight:	Split Spoon I.D:	Size and Type of Bit:	Type of Equipment:	Type of Samples:
300 lbs	***3.0 in***	***4.25 in Hollow stem auger***	***CME75***	***Split Spoon***



NOTE:

Slow setting 20-40 sand pack.

SUMMARY OF MATERIALS USED

Pre-mixed Concrete
Pure Gold Medium Cetco Bentonite Chips
Oglebay Norton 20-40 Silica Sand
2" Diameter PVC Casing
2" Diameter 10 Slot Boart Longyear (ASTM F480-88 A) Screen

MONITORING WELL LOG TO_02.GPJ ACE_ANC.GDT 11/20/00

ALASKA DISTRICT
CORPS OF ENGINEERS
ENGINEERING SERVICES

Soils and Geology Section

MONITORING WELL LOG

Project: *Amaknak and Unalaska Islands, Alaska*
Pre-WWII Tank Farm

Date: *2 Sep 2000*

Drilling Agency: ☐ Alaska District ☒ Other *Discovery Drilling*

Elevation Datum: ☒ MSL ☐ other

Location: Northing: Easting:

Top of Hole Elevation:

Hole Number, Field: Permanent: *MW-11Replacement*

Driller: *Gary Cormer/Tim Beckner*

Inspector: *Bruce McDonald*

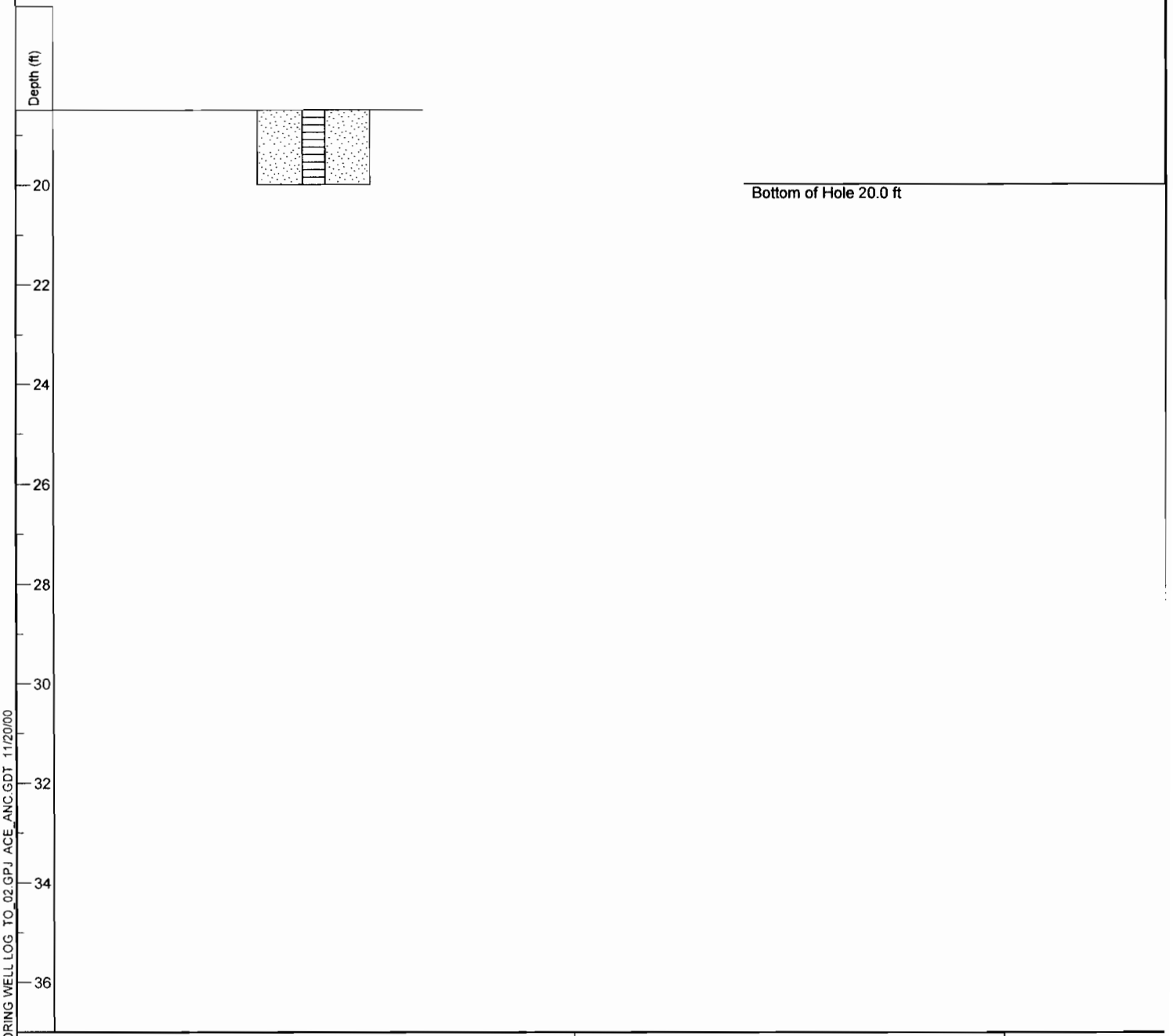
Type of Hole: ☐ other _____
☐ Test Pit ☐ Auger Hole ☒ Monitoring Well ☐ Piezometer

Depth to Groundwater: *11.50 ft*

Depth Drilled: *20.0 ft*

Total Depth: *20.0 ft*

Hammer Weight:	Split Spoon I.D:	Size and Type of Bit:	Type of Equipment:	Type of Samples:
300 lbs	*3.0 in*	*4.25 in Hollow stem auger*	*CME75*	*Split Spoon*



MONITORING WELL LOG TO_02.GPJ ACE_ANC.GDT 11/20/00

APPENDIX D

Analytical Results

APPENDIX D-1

Soil Analytical Sample Summary

QA/QC Summary

	DRO AK102				DRO/RRO AK102/103				GRO				AK101				PAH				SW8270Csim				PCB				SW8082				RCRA Metals SW6010B SW7060A SW7131A SW7191 SW7421				VOCs				SW8260B				BTEX				SW8021B				TOC				Lead				Zinc			
Number of Primary Samples	61				95				35								88								31								31				50								27								65				1				2			
Number of QA dups/ QC triplicates required	6.1				9.3				3.5								8.8								3.1								3.1				8								2.7								6.5				0.1				0.2			
Number of QC dups collected	4				9				3								9								3								2				5								1								8				0				1			
DUP DEFICIENCY	1.1				0.3				0.5								-0.2								0.1								1.1				0								1.7								0.5				0.1				-0.8			
Number of QA triplicates collected	4				9				3								9								3								2				5								1								8				0				1			
QA TRIPLICATE DEFICIENCY	1.1				0.3				0.5								-0.2								0.1								1.1				0								1.7								0.5				0.1				-0.8			
Number of MS/MSD Required	2.56				4.65				1.75								4.4								1.55								1.55				2.5								1.35								3.25				0.05				0.1			
Number of MS/MSD Collected	3				3				2								4								1								2				2								1								3				0				1			
MS/MSD DEFICIENCY	-0.45				1.65				-0.25								0.4								0.55								-0.45				0.5								0.35								0.25				0.05				-0.9			
Total Number of Samples	69				111				41								106								37								35				60								29								77				1				4			
	!!				!!				!!																!!								!!												!!								!!											

| No. Samples | ID/Sample Control Number | USACE Sample Location I.D. | # of Containers | Analyses | DRO AK102 pr | DRO AK102 QC dup | DRO AK102 QA trip | DRO AK102 MS/MSD | DRO/RRO AK102/103 pr | DRO/RRO AK102/103 QC dup | DRO/RRO AK102/103 QA trip | DRO/RRO AK102/103 MS/MSD | GRO pr | GRO QC dup | GRO QA trip | GRO MS/MSD | AK101 pr | AK101 QC dup | AK101 QA trip | AK101 MS/MSD | PAH pr | PAH QC dup | PAH QA trip | PAH MS/MSD | SW8270Csim pr | SW8270Csim QC dup | SW8270Csim QA trip | SW8270Csim MS/MSD | PCBs pr | PCBs QC dup | PCBs QA trip | PCBs MS/MSD | SW8082 pr | SW8082 QC dup | SW8082 QA trip | SW8082 MS/MSD | RCRA Metals SW6010B SW7060A SW7131A SW7181 SW7421 pr | RCRA Metals SW6010B SW7060A SW7131A SW7181 SW7421 QC dup | RCRA Metals SW6010B SW7060A SW7131A SW7181 SW7421 QA trip | RCRA Metals SW6010B SW7060A SW7131A SW7181 SW7421 MS/MSD | VOCs pr | VOCs QC dup | VOCs QA trip | VOCs MS/MSD | SW8260B pr | SW8260B QC dup | SW8260B QA trip | SW8260B MS/MSD | BTEX pr | BTEX QC dup | BTEX QA trip | BTEX MS/MSD | SW8021B pr | SW8021B QC dup | SW8021B QA trip | SW8021B MS/MSD | TOC pr | TOC QC dup | TOC QA trip | TOC MS/MSD | Lead pr | Lead QC dup | Lead QA trip | Lead MS/MSD | Zinc pr | Zinc QC dup | Zinc QA trip | Zinc MS/MSD | Date | Time | QA/QC | Lab | TAT | Cooler no. | Ship Date | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

			# of Containers		DRO AK102				DRO/RRO AK102/103				GRO AK101				PAH SW8270C/sim				PCBs SW8082				RCRA Metals SW6010B SW7060A SW7131A SW7191 SW7421				VOCs SW8260B				BTEX SW8021B				TOC				Lead				Zinc									
77	AM-A504403	00-AMA-SKBWL3465-EWALL-001-SO	1						1																																												
78	AM-A504404	00-AMA-SKBWL3465-WWALL-001-SO	1						1																																											
79	AM-A504405	00-AMA-SKBWL3465-FLOOR-001-SO	1						1								0																																				
80	AM-A504406	00-AMA-SKBWL3465-STCKPL-001-SO	1																																		1															
81	AM-A504501	00-AMA-SKBWL3165-NWALL-001-SO	3						1																						1																					
82	AM-A504502	00-AMA-SKBWL3165-SWALL-001-SO	3						1																						1																					
83	AM-A504503	00-AMA-SKBWL3165-EWALL-001-SO	3						1																						1																					
84	AM-A504601	00-AMA-SKBWL3165-WWALL-001-SO	3						1																						1																					
85	AM-A504602	00-AMA-SKBWL3165-NFLOOR-001-SO	3						1																						1																					
86	AM-A504603	00-AMA-SKBWL3165-SFLOOR-001-SO	3						1																						1																					
87	AM-A504604	00-AMA-SKBWL3165-STCKPL-001-SO	1																																		1															
88	AM-A504701	00-AMA-UST3665-SWALL-001-SO	1		1												1																																				
89	AM-A504702	00-AMA-UST3665-WWALL-001-SO	1		1																																															
90	AM-A504703	00-AMA-UST3665-WFLOOR-001-SO	1		1												1																																				
91	AM-A504704	00-AMA-UST3665-NWALL-001-SO	1		1																																															
92	AM-A504705	00-AMA-UST3665-MFLOOR-001-SO	1		1																																															
93	AM-A504706	00-AMA-UST3665-EWALL-001-SO	1		1																																															
94	AM-A504707	00-AMA-UST3665-EFLOOR-001-SO	1		1												1																																				
95	AM-A504708	00-AMA-UST3665-STCKPL-001-SO	1																																		1															
96	AM-A504709	00-AMA-UST3665-STCKPL-001-SO	1																																		1															
97	AM-A504710	00-AMA-UST3665-STCKPL-001-SO	1																																		1															
98	AM-A504801	00-AMA-BLDG627-TP1-001-SO	4						1				1				1				1				1				1				1																		
99	AM-A504802	00-AMA-BLDG627-TRIPBLANK-SO	1	SW8260B, AK101									x																x																								
100	AM-A505301	00-AMA-FMLFS-TP1-001-SO	3						1			x					1			x					1			1	1			1																				
101	AM-A505302	00-AMA-FMLFS-TRIPBLANK-SO	1	SW8260B																									x																								
102	AM-A505303	00-AMA-FMLFS-TP1-002-SO	3						1								1												1																								
103	AM-A505304	00-AMA-FMLFS-TP2-001-SO	3						1								1												1																								
104	AM-A505305	00-AMA-FMLFS-TP2-002-SO	3						1			x					1			x					1			1	1			1																				
105	AM-A505306	00-AMA-FMLFS-TP3-001-SO	3					1									1												1																								
106	AM-A505307	00-AMA-FMLFS-TP3-002-SO	3						1								1												1																								
107	AM-A505401	00-AMA-UST2674-FLOOR-001-SO	1		1			1									1																																				
108	AM-A505402	00-AMA-UST2674-NWWALL-001-SO	1		1																																															
109	AM-A505403	00-AMA-UST2674-WWWALL-001-SO	1		1																																															
110	AM-A505404	00-AMA-UST2674-STCKPL-001-SO	1																																		1						1									
111	AM-A505405	00-AMA-UST2674-STCKPL-002-SO	1																																		1															
112	AM-A505406	00-AMA-UST2674-STCKPL-003-SO	1																																		1															
113	AM-A505407	00-AMA-UST2674-STCKPL-003-SO	1																																							1									
114	~~AM-A505601~~	~~00-AMA-UST3860-001-SL~~	~~2~~																				x						x				x																		
115	~~AM-A505602~~	~~00-AMA-UST3860-TRIPBLANK-SL~~	~~1~~																				-						-				-																		
116	AM-A505603	00-AMA-UST3760-001-SL	2																				X						X				X																		
117	AM-A505701	00-AMA-UST2674-STCKPL-003-SO	1																																								1									
118	AM-A505702	00-AMA-UST3065-SFLOOR-001-SO	1				1												1																																	
119	AM-A505703	00-AMA-UST3065-NFLOOR-001-SO	1				1												1																																	
120	AM-A505704	00-AMA-UST2766-TP4-FLOOR-001-SO	1				1												1																																	
121	AM-A505801	00-AMA-UST3065-WWALL-001-SO	1		1																																														
122	AM-A505802	00-AMA-UST3065-SFLOOR-001-SO	1		1												1																																			
123	AM-A505803	00-AMA-UST3065-SFLOOR-001-SO	1			1												1																																	
124	AM-A505804	00-AMA-UST3065-NFLOOR-001-SO	1		1												1																																			
125	AM-A505805	00-AMA-UST3065-NFLOOR-001-SO	1			1												1																																	
126	AM-A505806	00-AMA-UST3065-SWALL-001-SO	1		1																																														
127	AM-A505807	00-AMA-UST3065-NWALL-001-SO	1		1																																														
128	AM-A505808	00-AMA-UST3065-TOC-001-SO	1																																		1															
129	AM-A505809	00-AMA-UST3065-TOC-002-SO	1																																		1															
130	AM-A505810	00-AMA-UST3065-TOC-003-SO	1																																		1															
131	AM-A505902	00-AMA-UST3075-RVR-001-SE	1		1												1																																			
132	AM-A505903	00-AMA-UST3075-BANK-001-SO	1		1												1																																			
133	AM-A506101	00-AMA-UST3075-TP1-FLOOR-001-SO	1		1												1																																			
134	AM-A506102	00-AMA-UST3075-TP2-FLOOR-001-SO	1		1																																														
135	AM-A506103	00-AMA-UST3075-TP1-TOC-001-SO	1																																		1															
136	AM-A506104	00-AMA-UST3075-TP2-TOC-001-SO	1																																		1															
137	AM-A506105	00-AMA-UST2766-TP4-FLOOR-001-SO	1		1												1																																			
138	AM-A506106	00-AMA-UST2766-TP4-FLOOR-001-SO	1			1												1																																	
139	AM-A506107	00-AMA-UST2766-TP4-TOC-001-SO	1																																		1															
140	AM-A506108	00-AMA-UST2766-TP5-FLOOR-001-SO	1		1																																														
141	AM-A506201	00-AMA-UST2766-TP5-WALL?-001-SO	1						1				1																																						
142	AM-A506202	00-AMA-UST2762-SWWWALL-001-SO	2		1								1																																						
143	AM-A506203	00-AMA-UST2762-SWWALL-001-SO	2		1								1				?				1																														
144	AM-A506204	00-AMA-UST2762-SFLOOR-001-SO	3		1			1					1																																						
145	AM-A506205	00-AMA-UST2762-SFLOOR-001-SO	1											1																																						
146	AM-A506206	00-AMA-UST2762-NFLOOR-001-SO	2		1								1				1																																			
147	AM-A506207	00-AMA-UST2762-WWALL-001-SO	2		1								1																																						
148	AM-A506208	00-AMA-UST2672-STCKPL-001-SO	1																																		1						1									
149	AM-A506209	00-AMA-UST2672-STCKPL-002-SO	1																																		1															
150	AM-A506210	00-AMA-UST2672-STCKPL-003-SO	1																																		1															
151	AM-A506211	00-AMA-UST2672-CSTCKPL-001-SO	1																																								X									
152	AM-A506212	00-AMA-UST2672-TRIPBLANK-001-SO	1	AK101																																															
153	AM-A506301	00-AMA-UST2762-SFLOOR-001-SO	1												1																																					
154	AM-A506302	00-AMA-UST2672-TRIPBLANK-001-SO	1	AK101/SW8260B																																															
155	AM-A506303	00-AMA-BLDG627-NEWALL-001-SO	3								1				1				1						1				1																							
156	AM-A506401	00-AMA-UST2766-STCKPL-001-SO	1																																		1															
157	AM-A506402	00-AMA-UST2766-STCKPL-002-SO	1																																		1															
158	AM-A506403	00-AMA-UST2766-STCKPL-003-SO	1																																		1															
159	AM-A506404	00-AMA-UST2766-FLOOR-001-SO	1		1												1																																			
160	AM-A506405	00-AMA-UST2766-SWWALL-001-SO	1		1																																														
161	AM-A506406	00-AMA-UST2766-EWALL-001-SO	1		1																																														
162	AM-A506409	00-AMA-UST2762-TP5FLOOR-001-SO	2		1								1				1																																			
163	AM-A506410	00-AMA-UST2762-TP5-TRIPBLANK-001-SO	1	AK101									x																x																								
164	AM-A506501	00-AMA-HCL1-USTSLUDGE-001-SL	2																				X						X																								
165	AM-A506502	00-AMA-LSA1154-USTSLUDGE-001-SL	2																				X						X																								
166	AM-A506505	00-AMA-BHOO-DRUM WITH SOLID-001-SH	1						X				X				X						X						X																								
167	AM-A506506	00-AMA-BLDG627-CSTCIKPL-001-SO	1																				X																														
168	AM-A506601	00-AMA-BLDG627-CSTCIKPL-002-SO	1																				X																														
169	AM-A506602	00-AMA-BLDG627-CSTCIKPL-003-SO	1																				X																														
170	AM-A506603	00-AMA-BLDG627-CSTCIKPL-004-SO	1																				X																														
171	AM-A506604	00-AMA-BLDG627-CSTCIKPL-005-SO	1																				X																														
172	AM-A506605	00-AMA-BLDG627-CSTCIKPL-006-SO	1																				X																														
173	~~AM-A506606~~	~~00-AMA-BLDG627-CSTCIKPL-007-SO~~	~~1~~																				X																														
174	AM-A506607	00-AMA-BLDG627-NWWALL-001-SO	3						1				1				1												1																								
175	AM-A506608	00-AMA-BLDG627-NEWALL-001-SO	3						1				1				1												1																								
176	AM-A506609	00-AMA-BLDG627-NEWALL-001-SO	3					1				1				1				1										1																							
177	AM-A506610	00-AMA-BLDG627-NEFLOOR-001-SO	3						1				1				1												1																								
178	AM-A506611	00-AMA-BLDG627-TRIPBLANK-001-SO	1	AK101/SW8260B									x																x																								

10/07/00	1220		DCHM	30DAYS	1009B	10/8/00	
10/07/00	1222		DCHM	30DAYS	1009B	10/8/00	
10/07/00	1225		DCHM	30DAYS	1009B	10/8/00	sample sent to lab not analyzed due to lab oversight
10/07/00	1300		DCHM	30DAYS	1009B	10/8/00	
10/07/00	1625		DCHM	30DAYS	1009B	10/8/00	
10/07/00	1630		DCHM	30DAYS	1009B	10/8/00	
10/07/00	1635		DCHM	30DAYS	1009B	10/8/00	
10/07/00	1640		DCHM	30DAYS	1009B	10/8/00	
10/07/00	1645		DCHM	30DAYS	1009B	10/8/00	
10/07/00	1650		DCHM	30DAYS	1009B	10/8/00	
10/07/00	1700		DCHM	30DAYS	1009B	10/8/00	
10/10/00	1400		DCHM	30DAYS	WADSWORTH	10/14/00	7.0' BGS
10/10/00	1410		DCHM	30DAYS	WADSWORTH	10/14/00	5.0' BGS
10/10/00	1420		DCHM	30DAYS	WADSWORTH	10/14/00	8.0' BGS
10/10/00	1425		DCHM	30DAYS	WADSWORTH	10/14/00	4.0' BGS
10/10/00	1430		DCHM	30DAYS	WADSWORTH	10/14/00	9.0' BGS
10/10/00	1437		DCHM	30DAYS	WADSWORTH	10/14/00	5.0' BGS
10/10/00	1442		DCHM	30DAYS	WADSWORTH	10/14/00	6.0' BGS
10/10/00	1505		DCHM	30DAYS	WADSWORTH	10/14/00	
10/10/00	1505		DCHM	30DAYS	WADSWORTH	10/14/00	
10/10/00	1505		DCHM	30DAYS	WADSWORTH	10/14/00	
10/10/00	1550		DCHM	7DAYS	WADSWORTH	10/14/00	
10/10/00	1550	TB	DCHM	30DAYS	WADSWORTH	10/14/00	
10/12/00	1630		DCHM	30DAYS	WINDY	10/15/00	cancel MS/MSD based on limited sample quantity collected
10/12/00	1630		DCHM	30DAYS	WINDY	10/15/00	
10/12/00	1635		DCHM	30DAYS	WINDY	10/15/00	
10/13/00	1550		DCHM	30DAYS	WINDY	10/15/00	
10/13/00	1555		DCHM	30DAYS	WINDY	10/15/00	cancel MS/MSD based on limited sample quantity collected
10/13/00	1645		DCHM	30DAYS	WINDY	10/15/00	
10/13/00	1655		DCHM	30DAYS	WINDY	10/15/00	
10/13/00	945		DCHM	30DAYS	WINDY	10/15/00	
10/13/00	950		DCHM	30DAYS	WINDY	10/15/00	
10/13/00	955		DCHM	30DAYS	WINDY	10/15/00	
10/13/00	1000		DCHM	30DAYS	WINDY	10/15/00	
10/13/00	1005		DCHM	30DAYS	WINDY	10/15/00	
10/13/00	1010		DCHM	30DAYS	WINDY	10/15/00	
10/13/00	1010		DCHM	30DAYS	WINDY	10/15/00	
~~10/13/00~~	~~1530~~		~~DCHM~~	~~30DAYS~~	~~OPENER~~	10/16/00	sample not sent to lab re.Eric
~~10/13/00~~	~~1530~~		~~DCHM~~	~~30DAYS~~	~~OPENER~~	10/16/00	cancelled/waste samples don't need TB
10/15/00	1230		DCHM	30DAYS	OPENER	10/16/00	
10/13/00	1010		LTL	30DAYS	BLOWIN	10/17/00	
10/15/00	1400		LTL	30DAYS	BLOWIN	10/17/00	
10/15/00	1410		LTL	30DAYS	BLOWIN	10/17/00	
10/16/000	1530		LTL	30DAYS	BLOWIN	10/17/00	
10/15/00	1420		DCHM	30DAYS	OPENER	10/16/00	
10/15/00	1400		DCHM	30DAYS	OPENER	10/16/00	
10/15/00	1400		DCHM	30DAYS	OPENER	10/16/00	
10/15/00	1410		DCHM	30DAYS	OPENER	10/16/00	
10/15/00	1410		DCHM	30DAYS	OPENER	10/16/00	
10/15/00	1415		DCHM	30DAYS	OPENER	10/16/00	
10/15/00	1425		DCHM	30DAYS	OPENER	10/16/00	
10/15/00	1430		DCHM	30DAYS	OPENER	10/16/00	
10/15/00	1435		DCHM	30DAYS	OPENER	10/16/00	
10/15/00	1440		DCHM	30DAYS	OPENER	10/16/00	
10/15/00	1635		DCHM	30DAYS	OPENER	10/16/00	
10/15/00	1640		DCHM	30DAYS	OPENER	10/16/00	
10/16/000	1120		DCHM	30DAYS	BOSS	10/18/00	
10/16/000	1230		DCHM	30DAYS	BOSS	10/18/00	
10/16/000	1400		DCHM	30DAYS	BOSS	10/18/00	
10/16/000	1405		DCHM	30DAYS	BOSS	10/18/00	
10/16/000	1530		DCHM	30DAYS	BOSS	10/18/00	
10/16/000	1530		DCHM	30DAYS	BOSS	10/18/00	
10/16/000	1535		DCHM	30DAYS	BOSS	10/18/00	
10/16/000	1715		DCHM	30DAYS	BOSS	10/18/00	
10/17/00	1200		DCHM	72HOURS	BOSS	10/18/00	
10/17/00	1415		DCHM	30DAYS	BOSS	10/18/00	
10/17/00	1425		DCHM	30DAYS	BOSS	10/18/00	
10/17/00	1430		DCHM	30DAYS	BOSS	10/18/00	
10/17/00	1430		DCHM	30DAYS	BOSS	10/18/00	
10/17/00	1600		DCHM	30DAYS	BOSS	10/18/00	
10/17/00	1605		DCHM	30DAYS	BOSS	10/18/00	
10/17/00	1600		DCHM	30DAYS	BOSS	10/18/00	
10/17/00	1602		DCHM	30DAYS	BOSS	10/18/00	
10/17/00	1605		DCHM	30DAYS	BOSS	10/18/00	
10/17/00	1700		DCHM	24HOURS	BOSS	10/18/00	
10/17/00	1415		DCHM	30DAYS	BOSS	10/18/00	
10/17/00	1430		LTL	30DAYS	GRUBBIN	10/22/00	
10/17/00	1430		LTL	30DAYS	GRUBBIN	10/22/00	
10/20/00	1500		LTL	30DAYS	CRAB	10/22/00	
10/18/00	1545		DCHM	30DAYS	BLANK	10/22/00	
10/18/00	1548		DCHM	30DAYS	BLANK	10/22/00	
10/18/00	1550		DCHM	30DAYS	BLANK	10/22/00	
10/18/00	1600		DCHM	30DAYS	BLANK	10/22/00	
10/18/00	1610		DCHM	30DAYS	BLANK	10/22/00	
10/18/00	1620		DCHM	30DAYS	BLANK	10/22/00	
10/18/00	1100		DCHM	30DAYS	BLANK	10/22/00	
10/18/00	1100		DCHM	30DAYS	BLANK	10/22/00	
10/19/00	1055		DCHM	48HOURS	JILLIAN	10/22/00	
10/19/00	1100		DCHM	48HOURS	JILLIAN	10/22/00	
10/19/00	1145		DCHM	48HOURS	JILLIAN	10/22/00	
10/19/00	1500		DCHM	48HOURS	JILLIAN	10/22/00	
10/20/00	1200		DCHM	48HOURS	CRAB	10/22/00	
10/20/00	1245		DCHM	48HOURS	CRAB	10/22/00	
10/20/00	1345		DCHM	48HOURS	CRAB	10/22/00	
10/20/00	1535		DCHM	48HOURS	CRAB	10/22/00	
10/20/00	1640		DCHM	48HOURS	CRAB	10/22/00	
~~10/21/00~~	~~—?~~		~~DCHM~~	~~48HOURS~~	CRAB	10/22/00	didn't collect as planned due to weather
10/20/00	1449		DCHM	30DAYS	CRAB	10/22/00	
10/20/00	1500		DCHM	30DAYS	CRAB	10/22/00	
10/20/00	1500		DCHM	30DAYS	CRAB	10/22/00	
10/20/00	1520		DCHM	30DAYS	CRAB	10/22/00	
10/20/00	1449		DCHM	30DAYS	CRAB	10/22/00	

			# of Containers		DRO AK102				DRO/RRO AK102/103				GRO AK101				PAH SW8270Csim				PCBs SW8082				RCRA Metals SW6010B SW7060A SW7131A SW7191 SW7421				VOCs SW8260B				BTEX SW8021B				TOC				Lead				Zinc											
179	AM-A506706	00-AMA-BHOO-TRAN3VAULT2-001-SL	1																		X																																	
180	AM-A506707	00-AMA-BLDG627-CSTCIKPL-007-SO	1																		X																																	
181	AM-A506708	00-AMA-BLDG627-CSTCIKPL-008-SO	1																		X																																	
182	AM-A506709	00-AMA-BLDG627-CSTCIKPL-009-SO	1																		X																																	
183	AM-A506710	00-AMA-BLDG627-CSTCIKPL-010-SO	1																		X																																	
184	AM-A506711	00-AMA-BLDG627-SECORWALL-001-SO	3						1				1			1	1				1				1				1																								
185	AM-A506712	00-AMA-BLDG627-SECORWALL-001-SO	2							1				1																1																								
186	AM-A506713	00-AMA-BLDG627-SEFLOOR-001-SO	3						1				1				1				1				1				1																								
187	AM-A506714	00-AMA-BLDG627-SEFLOOR-001-SO	2							1																				1																								
188	AM-A506715	00-AMA-BLDG627-WWALL-001-SO	3						1				1				1				1				1				1																								
189	AM-A506716	00-AMA-BLDG627-SWALL-001-SO	3						1				1				1				1				1				1																								
190	AM-A506717	00-AMA-BLDG627-SWALL-001-SO	2							1		1	1																																								
191	AM-A506718	00-AMA-BLDG627-SFLOOR-001-SO	3						1				1				1				1				1				1																								
192	AM-A506719	00-AMA-BLDG627-TRIPBLANK-001-SO	1	SW8260B/AK101													x												x																								
193	AM-A506801	00-AMA-BLDG627-SECORWALL-001-SO	2								1				1																1																								
194	AM-A506802	00-AMA-BLDG627-SEFLOOR-001-SO	2								1																				1																								
195	AM-A506803	00-AMA-BLDG627-QATRIPBLANK-001-SO	1	SW8260B/AK101																																																
196	AM-A506804	00-AMA-BLDG627-SWALL-001-SO	1								1																																									
197	AM-A507401	00-AMA-BHOO-STANDTRAN-001-SO	2						1			1					1							1																													
198	AM-A507402	00-AMA-BHOO-STANDTRAN-BATT-001-SO	1																						1																												
199	AM-A507403	00-AMA-BHOO-DR1-001-SO	4						1				1				1				1				1				1																								
200	AM-A507404	00-AMA-BHOO-DR1-TRIPBLANK-001-SO	1	AK101									x																																							
201	AM-A507405	00-AMA-BHOO-DR1-TRIPBLANK-001-SO	1	SW8260B																									X																								
202	AM-A507406	00-AMA-BHOO-DR1-001-SO	1							1								1																																		
203	AM-A507407	00-AMA-BHOO-DR2-001-SO	5						1				1				1			1	1				1				1																								
204	AM-A507408	00-AMA-BHOO-DR2-TOC-001-SO	1																																		1															
205	AM-A507409	00-AMA-BHOO-DR1-TOC-001-SO	1																																		1															
206	AM-A507410	00-AMA-BHOO-ATV-TOC-001-SO	1																																		1															
207	AM-A507411	00-AMA-BHOO-BTV-TOC-001-SO	1																																		1															
208	AM-A507412	00-AMA-BHOO-CTV-TOC-001-SO	1																																			1														
209	AM-A507413	00-AMA-BHOO-CTV-TOC-001-SO	1																																		1															
210	AM-A507414	00-AMA-BHOO-CUS-TOC1-001-SO	1																																		1															
211	AM-A507415	00-AMA-BHOO-CUS-TOC2-001-SO	1																																		1															
212	AM-A507416	00-AMA-BHOO-TRANBATT-TOC-001-SO	1																																		1															
213	AM-A507501	00-AMA-BHOO-DR1-001-SO	1								1												1																													
214	AM-A507502	00-AMA-BHOO-CTV-TOC-001-SO	1																																						1											
215	AM-A507503	00-AMA-BHOO-BLDGBUST-TOC-001-SO	1																																						1											
216	AM-A507504	00-AMA-UST3860-NEBORING-001-SO-FR	1								1																																									
217	AM-A507505	00-AMA-UST3860-TOC2-001-SO	1																																						1											
218	AM-A507601	00-AMA-BHOO-BLDGBUST-TOC-001-SO	1																																		1															
219	AM-A507602	00-AMA-BHOO-BLDGBUST-TOC-001-SO	1																																			1														
220	AM-A507603	00-AMA-BHOO-BLDGBUST-001-SO	4						1				1			1	1			1					1														1												
221	AM-A507604	00-AMA-UST3860-NEBORING-001-SO	3						1								1								1																										
222	AM-A507605	00-AMA-UST3860-NEBORING-001-SO-FD	1							1							1																																		
223	AM-A507606	00-AMA-UST3860-SWBORING-001-SO	3						1								1								0																										
224	AM-A507607	00-AMA-UST3860-TOC1-001-SO	1																																		1															
225	AM-A507608	00-AMA-UST3860-TOC2-001-SO	1																																		1															
226	AM-A507609	00-AMA-UST3860-TOC2-001-SO	1																																			1														
227	AM-A507703	00-AMA-UST3760-001-SE	2						1								1								1																										
228	AM-A507704	00-AMA-UST3760-TOC1-001-SO	1																																		1															
229	AM-A507705	00-AMA-UST3760-TOC2-001-SO	1																																		1															
230	AM-A507706	00-AMA-UST3760-WBORING-001-SO	2						1								1								1																										
231	AM-A507707	00-AMA-UST3760-EBORING-001-SO	2						1								1								1																										
232	AM-A507903	00-AMA-UST3065-001-SE	2		1												1																																		
233	AM-A507904	00-AMA-UST3065-TRIPBLANK-001-S	1	BTEX																									x																								
234	AM-A508101	00-AMA-PLD3-LOC2-001-SO	4						1				1				1				1				1				1																								
235	AM-A508102	00-AMA-PLD3-TRIPBLANK-001-SO	1	SW8260B																									x																								
236	AM-A508103	00-AMA-PLD3-LOC2-001-SO-FD	3							1				1				1				1				1																										
237	AM-A508104	00-AMA-PLD3-LOC11-001-SO	4						1				1				1				1				1				1																								
238	AM-A508105	00-AMA-PLD2-LOC8-001-SO	4						1				1				1				1				1				1																								
239	AM-A508106	00-AMA-PLD2-LOC8-001-SO-FD	1																																																
240	AM-A508107	00-AMA-PLD2-LOC14-001-SO	4						1								1				1				1				1																								
241	AM-A508201	00-AMA-PLD3-LOC2-001-SO-FR	3								1				1				1				1				1																								
242	AM-A508202	00-AMA-PLD2-LOC8-001-SO-FR	1																																															
243	AM-A508203	00-AMA-PLD3-TRIPBLANK-001-SO	1	SW8260B																																														
244	AM-A508301	00-AMA-627-TOC1-001-SO	1																																		1															
245	AM-A508302	00-AMA-627-TOC2-001-SO	1																																		1															
246	AM-A508303	00-AMA-FMLS-TOC1-001-SO	1																																		1															
247	AM-A508304	00-AMA-FMLS-TOC2-001-SO	1																																		1															
248	AM-A508305	00-AMA-FMLS-SED1-001-SO	2						1												1				1				1																								
249	AM-A508306	00-AMA-FMLS-SED2-001-SO	2						1												1				1				1																								
250	AM-A508307	00-AMA-FMLN-SED1-001-SO	2						1												1				1				1																								
251	AM-A508308	00-AMA-FMLN-SED2-001-SO	2						1												1				1				1																								
252	AM-A508309	00-AMA-PLD-DRUM-001-SL	4						X				X				X				X				X				X																								
253	AM-A508310	00-AMA-PLD-DRUM-001-SO	4						1				1				1				1				1				1																								
254	AM-A508311	00-AMA-WHITEPOW-DRUM1-001-S	1	SW6010B/9040B																																															
255	AM-A508312	00-AMA-WHITEPOW-DRUM2-001-S	1	SW6010B/9040B																																															
256	AM-A509301	00-AMA-UST3260-001-SE	1		1												1																																		
257	AM-A509302	00-AMA-UST3260-001-SE	1																																		1															
258	AM-A509303	00-AMA-UST3260-TRIPBLANK-001-SE	1	SW8021B																																															
259	AM-A509401	00-AMA-RPP-ISO-001-LH	1	OBS																																															
260	AM-A509501	00-AMA-RPP-VLTB-001-SL	1	SW8082/ TCLP METALS																					X																										
261	AM-A509502	00-AMA-RPP-VLTB-001-SL	1																																															
262	AM-A509503	00-AMA-RPP-VLTC-001-SL	1	SW8082/ TCLP METALS																					X																										
263	AM-A509504	00-AMA-RPP-VLTC-001-SL	1																																															
264	AM-A509601	00-AMA-BLG965-001-SO	1																																															
265	AM-A509602	00-AMA-BLG965-001-SO	1																																															
266	AM-A509603	00-AMA-FP-PP-001-SO	1																																															
267	AM-A510401	00-AMA-MH310-001-LH	1																																															
268	AM-A510501	00-AMA-RPP-VLTG-001-SL	1	SW8082, RCRA METALS																					X																										
269	AM-A510502	00-AMA-RPP-VLTG-001-SL	1																																															
270	AM-A510601	00-AMA-NLF-MW3-001-SO	1						1								1												1																								
271	AM-A510602	00-AMA-NLF-MW3-001-SO	1																																						1											
272	AM-A510603	00-AMA-LFL-MW3-001-SO	1																																						1											
273	AM-A510604	00-AMA-NLF-MW3-001-SO	1						1								1																																			
274	AM-A510605	00-AMA-NLF-MW3-001-SO	1																																						1											
275	AM-A510606	00-AMA-NLF-TRIPBLANK-001-SO	1	SW8260B																									x																								
276	AM-A510607	00-AMA-NLF-MW2-001-SO	1						1								1																																			
277	AM-A510608	00-AMA-NLF-MW2-001-SO	1																																						1											
278	AM-A510609	00-AMA-NLF-MW2-001-SO	1																																						1											
279	AM-A510610	00-AMA-NLF-MW2-001-SO	1						1								1																																			
280	AM-A510611	00-AMA-NLF-MW2-001-SO	1																																						1											
281	AM-A510612	00-AMA-NLF-MW2-001-SO-FD	1							1								1																																		
282	AM-A510613	00-AMA-NLF-MW2-001-SO-FD	1																																						1											
283	AM-A510614	00-AMA-NLF-MW2-001-SO	1						1								1																																			
284	AM-A510615	00-AMA-NLF-MW2-001-SO	1																																						1											
285	AM-A510616	00-AMA-NLF-MW1-001-SO	1						1								1																																			

10/23/00	1545		DCHM	48HOURS	BLISS	10/25/00	SLUDGE IN TRANSFORMER CAN
10/23/00	1325		DCHM	48HOURS	BLISS	10/25/00	
10/23/00	1415		DCHM	48HOURS	BLISS	10/25/00	
10/23/00	1510		DCHM	48HOURS	BLISS	10/25/00	
10/23/00	1620		DCHM	48HOURS	BLISS	10/25/00	
10/23/00	1525		DCHM	30DAYS	BLISS	10/25/00	
10/23/00	1525		DCHM	30DAYS	BLISS	10/25/00	
10/23/00	1625		DCHM	30DAYS	BLISS	10/25/00	
10/23/00	1625		DCHM	30DAYS	BLISS	10/25/00	
10/23/00	1635		DCHM	30DAYS	BLISS	10/25/00	
10/23/00	1645		DCHM	30DAYS	BLISS	10/25/00	
10/23/00	1645		DCHM	30DAYS	BLISS	10/25/00	
10/23/00	1655		DCHM	30DAYS	BLISS	10/25/00	
10/23/00	1525		DCHM	30DAYS	BLISS	10/25/00	
10/23/00	1525		LTL	30DAYS	AHAB	10/25/00	
10/23/00	1625		LTL	30DAYS	AHAB	10/25/00	
10/23/00	1525		LTL	30DAYS	AHAB	10/25/00	
10/23/00	1645		LTL	30DAYS	AHAB	10/25/00	
10/25/00	1420		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1425		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1500		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1500	TB	DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1500	TB	DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1500		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1510		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1515		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1520		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1550		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1555		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1612		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1612		DCHM	30DAYS	LEROY	10/28/00	
10/25/00	1620		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1625		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1635		DCHM	30DAYS	LEROY	10/29/00	
10/25/00	1500		LTL	30DAYS	N E S	10/31/00	
10/25/00	1612		LTL	30DAYS	N E S	10/31/00	
10/26/00	1100	FR	LTL	30DAYS	N.E.S.	10/31/00	2.0' BGS
10/26/00	1445	FR	LTL	30DAYS	N.E.S.	10/31/00	4.0' BGS
10/27/00	1355	FR	LTL	30DAYS	N.E.S.	10/31/00	
10/26/00	1100		DCHM	30DAYS	LEROY	10/29/00	2.0' BGS
10/26/00	1100	FD	DCHM	30DAYS	LEROY	10/29/00	2.0' BGS
10/26/00	1130		DCHM	30DAYS	LEROY	10/29/00	3.5-4.0' BGS
10/26/00	1445		DCHM	30DAYS	LEROY	10/29/00	4.0' BGS
10/26/00	1445	FD	DCHM	30DAYS	LEROY	10/29/00	4.0' BGS
10/26/00	1515		DCHM	30DAYS	LEROY	10/29/00	5.0' BGS - sample sent to the lab not analyzed due to lab error
10/26/00	1345		DCHM	30DAYS	LEROY	10/29/00	3.0' BGS
10/26/00	1355		DCHM	30DAYS	LEROY	10/29/00	2.0' BGS
10/27/00	1355	FD	DCHM	30DAYS	LEROY	10/29/00	
10/27/00	1220		DCHM	30DAYS	BUBBLES	10/29/00	
10/27/00	1250		DCHM	30DAYS	BUBBLES	10/29/00	2.0' BGS
10/27/00	1253		DCHM	30DAYS	BUBBLES	10/29/00	2.0' BGS
10/27/00	1255		DCHM	30DAYS	BUBBLES	10/29/00	5.0' BGS
10/27/00	1315		DCHM	30DAYS	BUBBLES	10/29/00	4.5' BGS
10/28/00	1225		DCHM	30DAYS	BUBBLES	10/29/00	
10/28/00	1225		DCHM	30DAYS	BUBBLES	10/29/00	
10/30/00	1305		DCHM	30DAYS	STUCK	11/6/00	0.5' BGS - mercury not logged in by lab
10/30/00	1305	TB	DCHM	30DAYS	STUCK	11/6/00	
10/30/00	1305	FD	DCHM	30DAYS	STUCK	11/6/00	0.5' BGS
10/30/00	1315		DCHM	30DAYS	STUCK	11/6/00	0.5' BGS - mercury not logged in by lab
10/30/00	1520		DCHM	30DAYS	STUCK	11/6/00	0.5' BGS - mercury not logged in by lab
10/30/00	1520	FD	DCHM	30DAYS	STUCK	11/6/00	0.5' BGS
10/30/00	1530		DCHM	30DAYS	STUCK	11/6/00	0.5' BGS - mercury not logged in by lab
10/30/00	1305	FR	LTL	30DAYS	STUCK	11/6/00	0.5' BGS
10/30/00	1520	FR	LTL	30DAYS	STUCK	11/6/00	0.5' BGS
10/30/00	1305	TB	LTL	30DAYS	STUCK	11/6/00	
10/31/00	1400		DCHM	30DAYS	STUCK	11/6/00	
10/31/00	1415		DCHM	30DAYS	STUCK	11/6/00	
10/31/00	1505		DCHM	30DAYS	STUCK	11/6/00	
10/31/00	1515		DCHM	30DAYS	STUCK	11/6/00	
11/01/00	900		DCHM	30DAYS	STUCK	11/6/00	mercury not logged in by lab
11/01/00	915		DCHM	30DAYS	STUCK	11/6/00	mercury not logged in by lab
11/01/00	940		DCHM	30DAYS	STUCK	11/6/00	mercury not logged in by lab
11/01/00	950		DCHM	30DAYS	STUCK	11/6/00	mercury not logged in by lab
11/01/00	1200		DCHM	~~30DAYS~~	STUCK	11/6/00	CHANGED TO 48 HRS, AK101 had 1330 as collect time on CoC
11/01/00	1330		DCHM	30DAYS	STUCK	11/6/00	
11/02/00	930		DCHM	~~30DAYS~~	STUCK	11/6/00	CHANGED TO 48 HRS
11/02/00	945		DCHM	~~30DAYS~~	STUCK	11/6/00	CHANGED TO 48 HRS
11/06/00	1635		DCHM	30DAYS	1107A	11/7/00	
11/06/00	1633		DCHM	30DAYS	1107A	11/7/00	
11/06/00	1637	TB	DCHM	30DAYS	1107A	11/7/00	
11/06/00	1800		DCHM	48HRS	1107A	11/7/00	TAT changed from CoC
11/06/00	1705		DCHM	48HRS	1107A	11/7/00	TAT changed from CoC
11/06/00	1705		DCHM	48HRS	1107A	11/7/00	TAT changed from CoC
11/06/00	1815		DCHM	48HRS	1107A	11/7/00	TAT changed from CoC
11/06/00	1815		DCHM	48HRS	1107A	11/7/00	TAT changed from CoC
11/06/00	1215		DCHM	30DAYS	1107A	11/7/00	
11/06/00	1225		DCHM	30DAYS	1107A	11/7/00	
11/06/00	1300		DCHM	30DAYS	1107A	11/7/00	
11/08/00	1630		DCHM	48HOURS	SOILS	11/15/00	
11/08/00	1405		CT&E	48HOURS	1109A	11/15/00	SAMPLE CHARACTERIZATION
11/08/00	1405		DCHM	48HOURS	SOILS	11/15/00	SAMPLE CHARACTERIZATION
11/07/00	1525		CT&E	30DAYS	1109A	11/15/00	
11/07/00	1525		DCHM	30DAYS	SOILS	11/15/00	
11/07/00	1525		DCHM	30DAYS	SOILS	11/15/00	
11/07/00	1504		CT&E	48HRS	1109A	11/15/00	ORIGINALLY ON COC AS 30 DAY TAT
11/07/00	1504		DCHM	48HRS	SOILS	11/15/00	
11/07/00	1525	TB	DCHM	30DAYS	SOILS	11/15/00	
11/09/00	1438		CT&E	30DAYS	1109A	11/15/00	
11/09/00	1438		DCHM	30DAYS	SOILS	11/15/00	
11/09/00	1438		DCHM	30DAYS	SOILS	11/15/00	
11/09/00	1448		CT&E	30DAYS	1109A	11/15/00	
11/09/00	1448		DCHM	30DAYS	SOILS	11/15/00	
11/09/00	1458	FD	CT&E	30DAYS	1109A	11/15/00	
11/09/00	1458	FD	DCHM	30DAYS	SOILS	11/15/00	
11/09/00	1508		CT&E	48HRS	1109A	11/15/00	ORIGINALLY ON COC AS 30 DAY TAT
11/09/00	1508		DCHM	48HRS	SOILS	11/15/00	
11/09/00	1150		CT&E	48HRS	1109A	11/15/00	ORIGINALLY ON COC AS 30 DAY TAT

			# of Containers		DRO AK102				DRO/RRO AK102/103				GRO AK101				PAH SW8270Calm				PCBs SW8082				RCRA Metals SW6010B SW7060A SW7131A SW7191 SW7421				VOCs SW8260B				BTEX SW8021B				TOC				Lead				Zinc										
286	AM-A510617	00-AMA-NLF-MW1-001-SO	1																										1																				11/09/00	1150		DCHM	48HRS	SOILS	11/15/00	
287	AM-A510618	00-AMA-NLF-MW1-001-SO	1						1								1																																11/09/00	1210		CT&E	30DAYS	1109A	11/15/00	
288	AM-A510619	00-AMA-NLF-MW1-001-SO	1																										1																				11/09/00	1210		DCHM	30DAYS	SOILS	11/15/00	
289	AM-A510620	00-AMA-NLF-MW1-001-SO	1																																		1												11/09/00	1210		DCHM	30DAYS	SOILS	11/15/00	
290	AM-A510621	00-AMA-CD-MW1-001-SO	1						1								1																																11/10/00	1040		CT&E	48HOURS	1109A	11/15/00	ORIGINALLY ON COC AS 30 DAY TAT
291	AM-A510622	00-AMA-CD-MW1-001-SO	1																										1																				11/10/00	1040		DCHM	48HOURS	SOILS	11/15/00	
292	AM-A510623	00-AMA-CD-MW1-001-SO	1						1								1																																11/10/00	1047		CT&E	30DAYS	1109A	11/15/00	
293	AM-A510624	00-AMA-CD-MW1-001-SO	1																										1																				11/10/00	1047		DCHM	30DAYS	SOILS	11/15/00	
294	AM-A510625	00-AMA-CD-MW1-001-SO	1																																		1												11/10/00	1047		DCHM	30DAYS	SOILS	11/15/00	
295	AM-A510626	00-AMA-NLF-MW2-001-SO-FR	1								1						1																																11/09/00	1458	FR	LTL	30DAYS	LAUCHS	11/15/00	
296	AM-A510627	00-AMA-NLF-MW2-001-SO-FR	1																														1																11/09/00	1458	FR	LTL	30DAYS	LAUCHS	11/15/00	
297	AM-A510628	00-AMA-NLF-TRIPBLANK-001-SO-FR	1	SW8260B																											x																				11/09/00	1458	FR, TB	LTL	30DAYS	LAUCHS	11/15/00	
298	AM-A511601	00-AMA-PDL2-DRUM2-001-SO	1																											X																				11/09/00	1440		DCHM	30DAYS	SOILS	11/15/00	
299	AM-A511602	00-AMA-PDL2-DRUM2-001-SO	1										X				1																	X																11/09/00	1440		DCHM	30DAYS	SOILS	11/15/00	
300	AM-A511603	00-AMA-PDL2-DRUM2-001-SO	1					X									X																																11/09/00	1440		DCHM	30DAYS	SOILS	11/15/00	
301	AM-A511604	00-AMA-PDL2-DRUM2-001-SO	1																											X																				11/09/00	1440		DCHM	30DAYS	SOILS	11/15/00	
302	AM-A513601	00-AMA-FLMS-SED3-001-SO	1																																		1												11/12/00	1035		CT&E	30DAYS	1110B	11/15/00	
303	AM-A518601	00-AMA-UST3265-WP1-001-SO-FR	1			1																									1																				11/15/00	1315	FR	LTL	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.5-2.5'
304	AM-A518602	00-AMA-UST3265-WP1-001-SO-FR	1														1																																11/15/00	1315	FR	LTL	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.5-2.5'
305	AM-A518603	00-AMA-UST3265-WP1-001-SO-FR	1																																													11/15/00	1315	FR	LTL	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.5-2.5'
306	AM-A519601	00-AMA-UST3260-HB20-001-SO	1																																														11/17/00	1320		LTL	30DAYS	LAUCKS UST3260	11/20/00	
307	AM-A519602	00-AMA-UST3260-HB20-001-SO	1														1																																		11/17/00	1320		LTL	30DAYS	LAUCKS UST3260	11/20/00	
308	AM-A520601	00-AMA-UST3260-HB4-001-SO	1		1																																												11/15/00	1135		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1'
309	AM-A520602	00-AMA-UST3260-HB4-001-SO	1														1																																		11/15/00	1135		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1'
310	AM-A520603	00-AMA-UST3260-HB4-001-SO	1																																		1												11/15/00	1135		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1'
311	AM-A520604	00-AMA-UST3260-WP1-001-SO	1		1																																												11/15/00	1200		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 4.5-5.0'
312	AM-A520605	00-AMA-UST3260-WP1-001-SO	1														1																																		11/15/00	1200		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 4.5-5.0'
313	AM-A520606	00-AMA-UST3260-WP1-001-SO	1		1																																												11/15/00	1215		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 6.5-7.0'
314	AM-A520607	00-AMA-UST3260-WP1-001-SO	1														1																																		11/15/00	1215		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 6.5-7.0'
315	AM-A520608	00-AMA-UST3265-WP1-001-SO	1		1																																												11/15/00	1315		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.5-2.5'
318	AM-A520609	00-AMA-UST3265-WP1-001-SO	1														1																																		11/15/00	1315		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.5-2.5'
317	AM-A520610	00-AMA-UST3265-WP1-001-SO	1																																		1												11/15/00	1315		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.5-2.5'
318	AM-A520611	00-AMA-UST3265-WP1-001-SO	1		1																																												11/15/00	1335		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 6.0-7.0'
319	AM-A520612	00-AMA-UST3265-WP1-001-SO	1														1																																		11/15/00	1335		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 6.0-7.0'
320	AM-A520613	00-AMA-UST3265-WP1-001-SO-FD	1			1																																											11/15/00	1315	FD	DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.5-2.5'
321	AM-A520614	00-AMA-UST3265-WP1-001-SO-FD	1														1																																		11/15/00	1315	FD	DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.5-2.5'
322	AM-A520615	00-AMA-UST3265-WP1-001-SO-FD	1																																														11/15/00	1315	FD	DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.5-2.5'
323	AM-A520616	00-AMA-UST3260-HB18-001-SO	1		1																																												11/15/00	1445		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.0-1.5'
324	AM-A520617	00-AMA-UST3260-HB18-001-SO	1														1																																		11/15/00	1445		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.0-1.5'
325	AM-A520618	00-AMA-UST3260-HB18-001-SO	1																																		1												11/15/00	1445		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.0-1.5'
326	AM-A520619	00-AMA-UST3260-HB17-001-SO	1		1																																												11/15/00	1800		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.0-1.5'
327	AM-A520620	00-AMA-UST3260-HB17-001-SO	1														1																																		11/15/00	1800		DCHM	30DAYS	UST3260/3265	11/19/00	BORING DOWN TO 1.0-1.5'
328	~~AM-A520621~~	~~00-AMA-UST3260-HB19-001-SO~~	~~1~~																																														~~11/17/00~~	~~1245~~		~~DCHM~~	~~30DAYS~~	~~UST3260/3265~~	~~11/19/00~~	cancelled by KAM, sample extra/not necessary
329	AM-A520622	00-AMA-UST3260-HB19-001-SO	1																																		1											1	11/17/00	1245		DCHM	30DAYS	UST3260/3265	11/19/00	
330	AM-A520623	00-AMA-UST3260-HB20-001-SO	1																																														11/17/00	1320		DCHM	30DAYS	UST3260/3265	11/19/00	
331	AM-A520624	00-AMA-UST3260-HB20-001-SO	1																																														11/17/00	1320		DCHM	30DAYS	UST3260/3265	11/19/00	
332	~~AM-A520625~~	~~00-AMA-UST3260-HB20-001-SO~~	~~1~~																																														~~11/17/00~~	~~1320~~		~~DCHM~~	~~30DAYS~~	~~UST3260/3265~~	~~11/19/00~~	sample id not used
333	~~AM-A520626~~	~~00-AMA-UST3260-HB20-001-SO~~	~~1~~																																														~~11/17/00~~	~~1320~~		~~DCHM~~	~~30DAYS~~	~~UST3260/3265~~	~~11/19/00~~	cancelled by KAM, sample extra/not necessary
334	AM-A520627	00-AMA-UST3260-HB20-001-SO	2		1				1								1				1																												11/17/00	1320		DCHM	30DAYS	UST3260/3265	11/19/00	
335	AM-A520628	00-AMA-UST3260-HB20-001-SO	1															1																																11/17/00	1320		DCHM	30DAYS	UST3260/3265	11/19/00	
336	AM-A520629	00-AMA-UST3260-HB21-001-SO	1		1												1																																11/17/00	1515		DCHM	30DAYS	UST3260/3265	11/19/00	
337	AM-A520630	00-AMA-UST3265-HB1-2-001-SO	1		1												1																																11/17/00	1650		DCHM	30DAYS	UST3260/3265	11/19/00	
338	AM-A520631	00-AMA-UST3265-HB1-2-001-SO	1																																														11/17/00	1650		DCHM	30DAYS	UST3260/3265	11/19/00	
339	AM-A520632	00-AMA-DECONPAD-001-SL	1																																														11/18/00	1415		DCHM	48HRS	PWW2-MW14	11/20/00	WASTE CHARACTERIZATION - enterred on CoCs on SO
340	AM-A520633	00-AMA-DECONPAD-001-SL	1																																														11/18/00	1415		DCHM	48HRS	PWW2-MW14	11/20/00	WASTE CHARACTERIZATION
341	AM-A520634	00-AMA-DECONPAD-001-SL	1																																														11/18/00	1415		DCHM	48HRS	PWW2-MW14	11/20/00	WASTE CHARACTERIZATION
342	AM-A520635	00-AMA-TS-CARBON-001-S	1																																														11/18/00	1500		DCHM	48HRS	PWW2-MW14	11/20/00	WASTE CHARACTERIZATION - composite?
343	AM-A520636	00-AMA-TS-CARBON-001-S	1																																														11/18/00	1500		DCHM	48HRS	PWW2-MW14	11/20/00	WASTE CHARACTERIZATION
344	AM-A520637	00-AMA-TS-CARBON-001-S	1																																														11/18/00	1500		DCHM	48HRS	PWW2-MW14	11/20/00	WASTE CHARACTERIZATION
345	AM-A520638	00-AMA-UST3260/3265-TB-001-SO	1																																														11/19/00	1400		DCHM	30DAYS	UST3260/3265	11/19/00	
346	AM-A520639	00-AMA-LAUCKSUST3260-TB-001	1																																														11/19/00	1505		LTL	30DAYS	LAUCKS UST3260	11/20/00	
347	AM-A521201	00-AMA-BHOO-STANDTRAN-001-LH	1	OBS, SW8082																	X																												11/16/00	1630		DCHM	48HRS	PWW2-MW14	11/20/00	WASTE CHARACTERIZATION
348	AM-A570002	00-AMA-APT-HG-SO	1	MERCURY																																													12/06/00	1600		DCHM	30DAYS	HEFE	12/7/00	
349		525	1	ASBESTOS																																																	BOX		
350		PIPE COATING	1	ASBESTOS																																																BOX		

APPENDIX D-2

Water Analytical Sample Summary

QA/QC Summary

	DRO AK102				DRO/RRO AK102/103				GRO				AK101	PAH			SW8270Csim	PCB			SW8082	RCRA Metals SW6010B SW7060A SW7131A SW7191 SW7421				VOCs				SW8260B	BTEX			SW8021B	TOC			
Number of Primary Samples	14				24				1					38				11				7				12					12				0				3			
Number of QA dups/ QC triplicates required	1.4				2.4				0.1					3.8				1.1				0.7				1.2					1.2				0				0.3			
Number of QC dups collected	1				3				1					4				1				0				1					1				0				0			
DUP DEFICIENCY	0.4				-0.6				-0.9					-0.2				0.1				0.7				0.2					0.2				0				0.3			
Number of QA triplicates collected	1				3				1					4				1				0				1					1				0				0			
QA TRIPLICATE DEFICIENCY	0.4				-0.6				-0.9					-0.2				0.1				0.7				0.2					0.2				0				0.3			
Number of MS/MSD Required	0.7				1.2				0.05					1.9				0.55				0.35				0.6					0.6				0				0.15			
Number of MS/MSD Collected	2				1				0					1				0				1				1					0				0				0			
MS/MSD DEFICIENCY	-1.3				0.2				0.05					0.9				0.55				-0.65				0.6					0.6				0				0.15			
Total Number of Samples	16				30				3					48				13				7				14					14				0				2			
	!!																	!!				!!				!!													!!			

| No. Samples | ID/Sample Control Number | USACE Sample Location I.D. | # of Containers | Analyses | DRO AK102 pr | DRO AK102 QC dup | DRO AK102 QA trip | DRO AK102 MS/MSD | DRO/RRO AK102/103 pr | DRO/RRO AK102/103 QC dup | DRO/RRO AK102/103 QA trip | DRO/RRO AK102/103 MS/MSD | GRO pr | GRO QC dup | GRO QA trip | GRO MS/MSD | AK101 pr | AK101 QC dup | AK101 QA trip | AK101 MS/MSD | PAH pr | PAH QC dup | PAH QA trip | PAH MS/MSD | SW8270Csim pr | SW8270Csim QC dup | SW8270Csim QA trip | SW8270Csim MS/MSD | PCBs pr | PCBs QC dup | PCBs QA trip | PCBs MS/MSD | SW8082 pr | SW8082 QC dup | SW8082 QA trip | SW8082 MS/MSD | RCRA Metals SW6010B SW7060A SW7131A SW7191 SW7421 pr | RCRA Metals SW6010B SW7060A SW7131A SW7191 SW7421 QC dup | RCRA Metals SW6010B SW7060A SW7131A SW7191 SW7421 QA trip | RCRA Metals SW6010B SW7060A SW7131A SW7191 SW7421 MS/MSD | VOCs pr | VOCs QC dup | VOCs QA trip | VOCs MS/MSD | SW8260B pr | SW8260B QC dup | SW8260B QA trip | SW8260B MS/MSD | BTEX pr | BTEX QC dup | BTEX QA trip | BTEX MS/MSD | SW8021B pr | SW8021B QC dup | SW8021B QA trip | SW8021B MS/MSD | TOC pr | TOC QC dup | TOC QA trip | TOC MS/MSD | OBS pr | OBS QC dup | OBS QA trip | OBS MS/MSD | Date | Time | QA/QC | Lab | TAT | Cooler no. | Ship Date | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

			# of Containers		DRO AK102	DRO/RRO AK102/103	GRO AK101	PAH SW8270Csim	PCBs SW8082	RCRA Metals SW6010B SW7060A SW7131A SW7191 SW7421	VOCs SW8260B	BTEX SW8021B	TOC	OBS								
84	AM-A512113	00-AMA-FMLN-MW4-001-WG	3								1				11/10/00	1835		CT&E	30DAYS	1110A	11/15/00	
85	AM-A513101	00-AMA-FMLN-MW3-001-WG	2			1									11/10/00	1715		CT&E	30DAYS	1110B	11/15/00	
86	AM-A513102	00-AMA-FMLN-MW3-001-WG	2					1							11/10/00	1715		CT&E	30DAYS	1110B	11/15/00	
87	AM-A513103	00-AMA-FMLN-MW3-001-WG	2						1						11/10/00	1715		CT&E	30DAYS	1110B	11/15/00	
88	AM-A513104	00-AMA-FMLN-MW3-001-WG	1							1					11/10/00	1715		CT&E	30DAYS	1110B	11/15/00	
89	AM-A513105	00-AMA-FMLN-MW4-001-WG	2			1									11/10/00	1835		CT&E	30DAYS	1110B	11/15/00	
90	AM-A513106	00-AMA-FMLN-MW4-001-WG	2					1							11/10/00	1835		CT&E	30DAYS	1110B	11/15/00	
91	AM-A513107	00-AMA-FMLN-MW4-001-WG	2						1						11/10/00	1835		CT&E	30DAYS	1110B	11/15/00	
92	AM-A513108	00-AMA-FMLN-MW4-001-WG	1							1					11/10/00	1835		CT&E	30DAYS	1110B	11/15/00	
93	AM-A510701	00-AMA-MH310-001-LH	2						X						11/8/00	1635		CT&E	30DAYS	1109A	11/15/00	SLUDGE/OIL MIXTURE
94	AM-A510101	00-AMA-UST2664-WP1-001-WG	2		1										11/9/00	1800		CT&E	30DAYS	1109A	11/15/00	
95	AM-A510102	00-AMA-UST2664-WP1-001-WG	2					1							11/9/00	1800		CT&E	30DAYS	1109A	11/15/00	
96	AM-A514101	00-AMA-UST2762A/B-001-WG	3				1					1			11/11/00	1545		DCHM	30DAYS	UST2762A/B	11/15/00	
97	AM-A514102	00-AMA-UST2762A/B-001-WG	2		1										11/11/00	1545		DCHM	30DAYS	UST2762A/B	11/15/00	
98	AM-A514103	00-AMA-UST2762A/B-001-WG	2					1							11/11/00	1545		DCHM	30DAYS	UST2762A/B	11/15/00	
99	AM-A514104	00-AMA-UST2762A/B-001-WG-FD	3				1					1			11/11/00	1705	FD	DCHM	30DAYS	UST2762A/B	11/15/00	
100	AM-A514105	00-AMA-UST2762A/B-001-WG-FD	2		1										11/11/00	1705	FD	DCHM	30DAYS	UST2762A/B	11/15/00	
101	AM-A514106	00-AMA-UST2762A/B-001-WG-FD	2					1							11/11/00	1705	FD	DCHM	30DAYS	UST2762A/B	11/15/00	
102	AM-A514107	00-AMA-UST2762A/B-TRIPBLANK-001-WG	3	AK101, SW8021B			X					X			11/11/00	1705	TB	DCHM	30DAYS	UST2762A/B	11/15/00	
103	AM-A514108	00-AMA-UST2762A/B-001-WG-FR	3					1					1		11/11/00	1802	FR	LTL	30DAYS	LAUCHS	11/15/00	
104	AM-A514109	00-AMA-UST2762A/B-001-WG-FR	2			1									11/11/00	1802	FR	LTL	30DAYS	LAUCHS	11/15/00	
105	AM-A514110	00-AMA-UST2762A/B-001-WG-FR	2						1						11/11/00	1802	FR	LTL	30DAYS	LAUCHS	11/15/00	
106	AM-A515101	00-AMA-TWATER-15000-001-W	3									X			11/10/00	1135		CT&E	48HRS	1109B	11/15/00	CHARACTERIZATION SAMPLE, 15000 GALLONS
107	AM-A515102	00-AMA-TWATER-15000-001-W	2		X										11/10/00	1135		CT&E	48HRS	1109B	11/15/00	CHARACTERIZATION SAMPLE, 15000 GALLONS
108	AM-A515103	00-AMA-TWATER-15000-001-W	2					X							11/10/00	1135		CT&E	48HRS	1109B	11/15/00	CHARACTERIZATION SAMPLE, 15000 GALLONS
109	AM-A514111	00-AMA-UST2762A/B-TRIPBLANK-001-WG-FR	3	AK101, SW8021B											11/11/00	1802	FR, TB	LTL	30DAYS	LAUCHS	11/15/00	
110	AM-A516101	00-AMA-CD-MW1-001-WG	2					1							11/14/00	1458		DCHM	30DAYS	CROWLEY	11/16/00	
111	AM-A516102	00-AMA-CD-MW1-001-WG	4			1	1								11/14/00	1458	MS/MSD	DCHM	30DAYS	CROWLEY	11/16/00	
112	AM-A517101	00-AMA-NLF-MW2-001-WG	2			1									11/14/00	1805		STLA	30DAYS	NLF MW2	11/16/00	
113	AM-A517102	00-AMA-NLF-MW2-001-WG	3								1				11/14/00	1805		STLA	30DAYS	NLF MW2	11/16/00	
114	AM-A517103	00-AMA-NLF-MW2-001-WG	2					1							11/14/00	1805		STLA	30DAYS	NLF MW2	11/16/00	
115	AM-A517104	00-AMA-NLF-MW2-001-WG-FD	2						1						11/14/00	1822	FD	STLA	30DAYS	NLF MW2	11/16/00	
116	AM-A517105	00-AMA-NLF-MW2-001-WG-FD	2				1								11/14/00	1822	FD	STLA	30DAYS	NLF MW2	11/16/00	
117	AM-A517106	00-AMA-NLF-MW2-001-WG-FD	3									1			11/14/00	1822	FD	STLA	30DAYS	NLF MW2	11/16/00	
118	AM-A517107	00-AMA-NLF-MW2-TRIPBLANK-001-WG	3	SW8260B							X				11/14/00	1805	TB	STLA	30DAYS	NLF MW2	11/16/00	
119	AM-A518101	00-AMA-NLF-MW2-001-WG-FR	2				1								11/14/00	1835	FR	LTL	30DAYS	LAUCHS MW2	11/16/00	
120	AM-A518102	00-AMA-NLF-MW2-001-WG-FR	2						1						11/14/00	1835	FR	LTL	30DAYS	LAUCHS MW2	11/16/00	
121	AM-A518103	00-AMA-NLF-MW2-001-WG-FR	3										1		11/14/00	1835	FR	LTL	30DAYS	LAUCHS MW2	11/16/00	
122	AM-A518104	00-AMA-NLF-TRIPBLANK-W	3	SW8260B									X		11/14/00	1835		LTL	30DAYS	LAUCHS MW2	11/16/00	
123	AM-A516103	00-AMA-UST3465-001-WG	2			1									11/15/00	1513		DCHM	30DAYS	CROWLEY/UST3465	11/16/00	
124	AM-A516104	00-AMA-UST3465-001-WG	2-					1							11/15/00	1513		DCHM	30DAYS	CROWLEY/UST3465	11/16/00	
125	AM-A516105	00-AMA-UST3465-001-WG	3								1				11/15/00	1513	TB	DCHM	30DAYS	CROWLEY/UST3465	11/16/00	
126	AM-A516106	00-AMA-UST3465-TRIPBLANK001-WG	3	SW8260B							X				11/15/00	1830		STLA	30DAYS	NLF MW2	11/16/00	
127	AM-A519101	00-AMA-NLF-MW3-001-WG	2					1							11/15/00	1830		STLA	30DAYS	NLF MW2	11/16/00	
128	AM-A519102	00-AMA-NLF-MW3-001-WG	2			1									11/15/00	1830		STLA	30DAYS	NLF MW2	11/16/00	
129	AM-A519103	00-AMA-NLF-MW3-001-WG	3								1				11/17/00	1435		DCHM	30DAYS	RAIN	11/20/00	
130	AM-A519104	00-AMA-UST-3260-001-WG	4		1	1									11/17/00	1435		DCHM	30DAYS	RAIN	11/20/00	
131	AM-A519105	00-AMA-UST-3260-001-WG	2					1							11/17/00	1435		DCHM	30DAYS	RAIN	11/20/00	
132	AM-A519106	00-AMA-UST-3260-001-WG	3										1		11/17/00	1815		DCHM	30DAYS	RAIN	11/20/00	
133	AM-A519107	00-AMA-UST-3265-001-WG	1		1										11/17/00	1815		DCHM	30DAYS	RAIN	11/20/00	
134	AM-A519108	00-AMA-UST-3265-001-WG	1					1							11/17/00	1815		DCHM	30DAYS	RAIN	11/20/00	
135	AM-A519109	00-AMA-UST-3265-001-WG	3										1		11/17/00	1815		DCHM	30DAYS	RAIN	11/20/00	
136	AM-A520110	00-AMA-3260-3265-TRIPBLANK-W	3									X			11/20/00	900		DCHM	30DAYS	RAIN	11/20/00	
137	~~AM-A520111~~	~~00-AMA-PWW2-MW14-TRIPBLANK-01-W~~	~~3~~									X			~~11/20/00~~	~~900~~		DCHM	~~30DAYS~~	~~RAIN~~	11/20/00	cancelled by KAM, sample extra/not necessary
138	AM-A521101	00-AMA-PWW2-MW14-001-WG	2					1							11/16/00	1525		DCHM	30DAYS	PWW2-MW14	11/20/00	
139	AM-A521102	00-AMA-PWW2-MW14-001-WG	2			1									11/16/00	1525		DCHM	30DAYS	PWW2-MW14	11/20/00	
140	AM-A521103	00-AMA-PWW2-MW14-001-WG	3								1				11/16/00	1525		DCHM	30DAYS	PWW2-MW14	11/20/00	
141	AM-A521104	00-AMA-PWW2-MW14-TRIPBLANK-01-W	3								x				11/16/00	1525		DCHM	30DAYS	PWW2-MW14	11/20/00	
142	AM-A570001	00-AMA-HCL1-MW1	4		1			1							12/6/00	1145		DCHM	30DAYS	HEFE	12/7/00	

APPENDIX D-3

Analytical Results

	Sample ID	AM-A511701	AM-A511702	AM-A511703	AM-A511704
	Laboratory	CTE	CTE	CTE	CTE
	Lab Sample ID	1007220001	1007220002	1007220003	1007220004
	Collection Date	11/9/00	11/9/00	11/9/00	11/9/00
	Matrix	WX	WX	WX	WX
Analyte	**Method**	**Units**			
Gasoline Range Organics	AK101	mg/L	- -	ND [0.09]	- -	- -
Diesel Range Organics	AK102	mg/L	- -	- -	0.352 [0.273] B	- -
Residual Range Organics	AK103	mg/L	- -	- -	ND [0.455]	- -
Acenaphthene	SW8270C SIM	µg/L	- -	- -	- -	ND [0.0455]
Acenaphthylene	SW8270C SIM	µg/L	- -	- -	- -	ND [0.0455]
Anthracene	SW8270C SIM	µg/L	- -	- -	- -	ND [0.0455]
Benzo(a)anthracene	SW8270C SIM	µg/L	- -	- -	- -	ND [0.0455]
Benzo(a)pyrene	SW8270C SIM	µg/L	- -	- -	- -	ND [0.0455]
Benzo(b)fluoranthene	SW8270C SIM	µg/L	- -	- -	- -	ND [0.0455]
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	- -	- -	- -	ND [0.0455]
Benzo(k)fluoranthene	SW8270C SIM	µg/L	- -	- -	- -	ND [0.0455]
Chrysene	SW8270C SIM	µg/L	- -	- -	- -	0.292 [0.0455]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	- -	- -	- -	ND [0.0455]
Fluoranthene	SW8270C SIM	µg/L	- -	- -	- -	ND [0.0455]
Fluorene	SW8270C SIM	µg/L	- -	- -	- -	0.0699 [0.0455]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	- -	- -	- -	ND [0.0455]
Naphthalene	SW8270C SIM	µg/L	- -	- -	- -	1.55 [0.0455]
Phenanthrene	SW8270C SIM	µg/L	- -	- -	- -	0.0866 [0.0455]
Pyrene	SW8270C SIM	µg/L	- -	- -	- -	ND [0.0455]
Arsenic	SW6020A	µg/L	- -	- -	- -	- -
Barium	SW6020A	µg/L	- -	- -	- -	- -
Cadmium	SW6020A	µg/L	- -	- -	- -	- -
hromium	SW6020A	µg/L	- -	- -	- -	- -
ead	SW6020A	µg/L	- -	- -	- -	- -
Selenium	SW6020A	µg/L	- -	- -	- -	- -
Silver	SW6020A	µg/L	- -	- -	- -	- -
Mercury	SW7470A	mg/L	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	- -	- -	- -
1,1,1,2-Tetrachloroethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -
1,1-Dichloroethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -
1,1-Dichloroethene	SW8260B	mg/L	ND [0.001]	- -	- -	- -
1,1-Dichloropropene	SW8260B	mg/L	ND [0.001]	- -	- -	- -
1,2,3-Trichlorobenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -
1,2,3-Trichloropropane	SW8260B	mg/L	ND [0.001]	- -	- -	- -
1,2,4-Trichlorobenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -
1,2,4-Trimethylbenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -
1,2-Dibromo-3-chloropropane	SW8260B	mg/L	ND [0.001]	- -	- -	- -
1,2-Dibromoethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A511701	AM-A511702	AM-A511703	AM-A511704		
	Laboratory	CTE	CTE	CTE	CTE		
	Lab Sample ID	1007220001	1007220002	1007220003	1007220004		
	Collection Date	11/9/00	11/9/00	11/9/00	11/9/00		
	Matrix	WX	WX	WX	WX		
Analyte	**Method**	**Units**					
1,2-Dichlorobenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
1,2-Dichloroethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
1,3,5-Trimethylbenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
1,3-Dichlorobenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
1,3-Dichloropropane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
1,4-Dichlorobenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
2,2-Dichloropropane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
2-Butanone	SW8260B	mg/L	ND [0.01]	- -	- -	- -	- -
2-Chloroethyl vinyl ether	SW8260B	mg/L	ND [0.01]	- -	- -	- -	- -
2-Chlorotoluene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
2-Hexanone	SW8260B	mg/L	ND [0.01]	- -	- -	- -	- -
4-Chlorotoluene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
4-Isopropyltoluene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	mg/L	ND [0.01]	- -	- -	- -	- -
Benzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Bromobenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Bromochloromethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Bromodichloromethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Bromoform	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Bromomethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Carbon disulfide	SW8260B	mg/L	ND [0.01]	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Chlorobenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Chloroethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Chloroform	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Chloromethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Dibromochloromethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Dibromomethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Dichlorodifluoromethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Ethylbenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Hexachlorobutadiene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Isopropylbenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Methyl-t-butyl ether	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Methylene chloride	SW8260B	mg/L	ND [0.005]	- -	- -	- -	- -
Naphthalene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Styrene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Tetrachloroethene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Toluene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Trichloroethene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Trichlorofluoromethane	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
Vinyl chloride	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
cis-1,2-Dichloroethene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
m,p-Xylene (Sum of Isomers)	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
n-Butylbenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
n-Propylbenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
o-Xylene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
sec-Butylbenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
tert-Butylbenzene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	mg/L	ND [0.001]	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A511705	AM-A511706	AM-A515101	AM-A515102
	Laboratory	CTE	CTE	CTE	CTE
	Lab Sample ID	1007220005	1007220006	1007220007	1007220008
	Collection Date	11/9/00	11/9/00	11/10/00	11/10/00
	Matrix	WX	WX	WX	WX
Analyte	**Method**	**Units**			
Gasoline Range Organics	AK101	mg/L	-	-	-
Diesel Range Organics	AK102	mg/L	-	-	12.6 [0.273]
Residual Range Organics	AK103	mg/L	-	-	-
Acenaphthene	SW8270C SIM	µg/L	-	-	-
Acenaphthylene	SW8270C SIM	µg/L	-	-	-
Anthracene	SW8270C SIM	µg/L	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/L	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/L	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/L	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/L	-	-	-
Chrysene	SW8270C SIM	µg/L	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	-	-	-
Fluoranthene	SW8270C SIM	µg/L	-	-	-
Fluorene	SW8270C SIM	µg/L	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	-	-	-
Naphthalene	SW8270C SIM	µg/L	-	-	-
Phenanthrene	SW8270C SIM	µg/L	-	-	-
Pyrene	SW8270C SIM	µg/L	-	-	-
Arsenic	SW6020A	µg/L	-	57.9 [100]J	-
Barium	SW6020A	µg/L	-	ND [200]	-
Cadmium	SW6020A	µg/L	-	110 [10]	-
hromium	SW6020A	µg/L	-	9920 [200]	-
ead	SW6020A	µg/L	-	504 [125]	-
Selenium	SW6020A	µg/L	-	150 [100]	-
Silver	SW6020A	µg/L	-	11.9 [40]J	-
Mercury	SW7470A	mg/L	-	ND [0.002]	-
PCB-1016 (Aroclor 1016)	SW8082	µg/L	ND [0.0909]	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	ND [0.0909]	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	ND [0.0909]	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	ND [0.0909]	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	ND [0.0909]	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	ND [0.0909]	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	ND [0.0909]	-	-
1,1,1,2-Tetrachloroethane	SW8260B	mg/L	-	-	ND [0.001]
1,1,1-Trichloroethane	SW8260B	mg/L	-	-	ND [0.001]
1,1,2,2-Tetrachloroethane	SW8260B	mg/L	-	-	ND [0.001]
1,1,2-Trichloroethane	SW8260B	mg/L	-	-	ND [0.001]
1,1-Dichloroethane	SW8260B	mg/L	-	-	ND [0.001]
1,1-Dichloroethene	SW8260B	mg/L	-	-	ND [0.001]
1,1-Dichloropropene	SW8260B	mg/L	-	-	ND [0.001]
1,2,3-Trichlorobenzene	SW8260B	mg/L	-	-	ND [0.001]
1,2,3-Trichloropropane	SW8260B	mg/L	-	-	ND [0.001]
1,2,4-Trichlorobenzene	SW8260B	mg/L	-	-	ND [0.001]
1,2,4-Trimethylbenzene	SW8260B	mg/L	-	-	ND [0.001]
1,2-Dibromo-3-chloropropane	SW8260B	mg/L	-	-	ND [0.001]
1,2-Dibromoethane	SW8260B	mg/L	-	-	ND [0.001]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A511705	AM-A511706	AM-A515101	AM-A515102
	Laboratory	CTE	CTE	CTE	CTE
	Lab Sample ID	1007220005	1007220006	1007220007	1007220008
	Collection Date	11/9/00	11/9/00	11/10/00	11/10/00
	Matrix	WX	WX	WX	WX
Analyte	**Method**	**Units**								
1,2-Dichlorobenzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
1,2-Dichloroethane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
1,2-Dichloropropane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
1,3,5-Trimethylbenzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
1,3-Dichlorobenzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
1,3-Dichloropropane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
1,4-Dichlorobenzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
2,2-Dichloropropane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
2-Butanone	SW8260B	mg/L	-	-	-	-	0.0129 [0.01]	-	-
2-Chloroethyl vinyl ether	SW8260B	mg/L	-	-	-	-	ND [0.01]	-	-
2-Chlorotoluene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
2-Hexanone	SW8260B	mg/L	-	-	-	-	ND [0.01]	-	-
4-Chlorotoluene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
4-Isopropyltoluene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
4-Methyl-2-pentanone	SW8260B	mg/L	-	-	-	-	ND [0.01]	-	-
Benzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Bromobenzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Bromochloromethane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Bromodichloromethane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Bromoform	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Bromomethane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Carbon disulfide	SW8260B	mg/L	-	-	-	-	ND [0.01]	-	-
Carbon tetrachloride	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Chlorobenzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Chloroethane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Chloroform	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Chloromethane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Dibromochloromethane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Dibromomethane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Dichlorodifluoromethane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Ethylbenzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Hexachlorobutadiene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Isopropylbenzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Methyl-t-butyl ether	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Methylene chloride	SW8260B	mg/L	-	-	-	-	ND [0.005]	-	-
Naphthalene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Styrene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Tetrachloroethene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Toluene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Trichloroethene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Trichlorofluoromethane	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
Vinyl chloride	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
cis-1,2-Dichloroethene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
cis-1,3-Dichloropropene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
n-Butylbenzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
n-Propylbenzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
o-Xylene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
sec-Butylbenzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
tert-Butylbenzene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
trans-1,2-Dichloroethene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-
trans-1,3-Dichloropropene	SW8260B	mg/L	-	-	-	-	ND [0.001]	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A515103	
		Laboratory	CTE	
		Lab Sample ID	1007220009	
		Collection Date	11/10/00	
		Matrix	WX	
Analyte	**Method**	**Units**		
Gasoline Range Organics	AK101	mg/L	-	-
Diesel Range Organics	AK102	mg/L	-	-
Residual Range Organics	AK103	mg/L	-	-
Acenaphthene	SW8270C SIM	µg/L	0.37	[0.455] J
Acenaphthylene	SW8270C SIM	µg/L	ND	[0.455]
Anthracene	SW8270C SIM	µg/L	ND	[0.455]
Benzo(a)anthracene	SW8270C SIM	µg/L	1.42	[0.455]
Benzo(a)pyrene	SW8270C SIM	µg/L	1.25	[0.455]
Benzo(b)fluoranthene	SW8270C SIM	µg/L	2.84	[0.455]
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	1.31	[0.455]
Benzo(k)fluoranthene	SW8270C SIM	µg/L	1.1	[0.455]
Chrysene	SW8270C SIM	µg/L	1.84	[0.455]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	0.323	[0.455] J
Fluoranthene	SW8270C SIM	µg/L	1.16	[0.455]
Fluorene	SW8270C SIM	µg/L	ND	[0.455]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	1.14	[0.455]
Naphthalene	SW8270C SIM	µg/L	ND	[0.455]
Phenanthrene	SW8270C SIM	µg/L	ND	[0.455]
Pyrene	SW8270C SIM	µg/L	1.63	[0.455]
Arsenic	SW6020A	µg/L	-	-
Barium	SW6020A	µg/L	-	-
Cadmium	SW6020A	µg/L	-	-
Chromium	SW6020A	µg/L	-	-
Lead	SW6020A	µg/L	-	-
Selenium	SW6020A	µg/L	-	-
Silver	SW6020A	µg/L	-	-
Mercury	SW7470A	mg/L	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/L	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	-	-
1,1,1,2-Tetrachloroethane	SW8260B	mg/L	-	-
1,1,1-Trichloroethane	SW8260B	mg/L	-	-
1,1,2,2-Tetrachloroethane	SW8260B	mg/L	-	-
1,1,2-Trichloroethane	SW8260B	mg/L	-	-
1,1-Dichloroethane	SW8260B	mg/L	-	-
1,1-Dichloroethene	SW8260B	mg/L	-	-
1,1-Dichloropropene	SW8260B	mg/L	-	-
1,2,3-Trichlorobenzene	SW8260B	mg/L	-	-
1,2,3-Trichloropropane	SW8260B	mg/L	-	-
1,2,4-Trichlorobenzene	SW8260B	mg/L	-	-
1,2,4-Trimethylbenzene	SW8260B	mg/L	-	-
1,2-Dibromo-3-chloropropane	SW8260B	mg/L	-	-
1,2-Dibromoethane	SW8260B	mg/L	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

Sample ID	AM-A515103
Laboratory	CTE
Lab Sample ID	1007220009
Collection Date	11/10/00
Matrix	WX

Analyte	Method	Units		
1,2-Dichlorobenzene	SW8260B	mg/L	-	-
1,2-Dichloroethane	SW8260B	mg/L	-	-
1,2-Dichloropropane	SW8260B	mg/L	-	-
1,3,5-Trimethylbenzene	SW8260B	mg/L	-	-
1,3-Dichlorobenzene	SW8260B	mg/L	-	-
1,3-Dichloropropane	SW8260B	mg/L	-	-
1,4-Dichlorobenzene	SW8260B	mg/L	-	-
2,2-Dichloropropane	SW8260B	mg/L	-	-
2-Butanone	SW8260B	mg/L	-	-
2-Chloroethyl vinyl ether	SW8260B	mg/L	-	-
2-Chlorotoluene	SW8260B	mg/L	-	-
2-Hexanone	SW8260B	mg/L	-	-
4-Chlorotoluene	SW8260B	mg/L	-	-
4-Isopropyltoluene	SW8260B	mg/L	-	-
4-Methyl-2-pentanone	SW8260B	mg/L	-	-
Benzene	SW8260B	mg/L	-	-
Bromobenzene	SW8260B	mg/L	-	-
Bromochloromethane	SW8260B	mg/L	-	-
Bromodichloromethane	SW8260B	mg/L	-	-
Bromoform	SW8260B	mg/L	-	-
Bromomethane	SW8260B	mg/L	-	-
Carbon disulfide	SW8260B	mg/L	-	-
Carbon tetrachloride	SW8260B	mg/L	-	-
Chlorobenzene	SW8260B	mg/L	-	-
Chloroethane	SW8260B	mg/L	-	-
Chloroform	SW8260B	mg/L	-	-
Chloromethane	SW8260B	mg/L	-	-
Dibromochloromethane	SW8260B	mg/L	-	-
Dibromomethane	SW8260B	mg/L	-	-
Dichlorodifluoromethane	SW8260B	mg/L	-	-
Ethylbenzene	SW8260B	mg/L	-	-
Hexachlorobutadiene	SW8260B	mg/L	-	-
Isopropylbenzene	SW8260B	mg/L	-	-
Methyl-t-butyl ether	SW8260B	mg/L	-	-
Methylene chloride	SW8260B	mg/L	-	-
Naphthalene	SW8260B	mg/L	-	-
Styrene	SW8260B	mg/L	-	-
Tetrachloroethene	SW8260B	mg/L	-	-
Toluene	SW8260B	mg/L	-	-
Trichloroethene	SW8260B	mg/L	-	-
Trichlorofluoromethane	SW8260B	mg/L	-	-
Vinyl chloride	SW8260B	mg/L	-	-
cis-1,2-Dichloroethene	SW8260B	mg/L	-	-
cis-1,3-Dichloropropene	SW8260B	mg/L	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	mg/L	-	-
n-Butylbenzene	SW8260B	mg/L	-	-
n-Propylbenzene	SW8260B	mg/L	-	-
o-Xylene	SW8260B	mg/L	-	-
sec-Butylbenzene	SW8260B	mg/L	-	-
tert-Butylbenzene	SW8260B	mg/L	-	-
trans-1,2-Dichloroethene	SW8260B	mg/L	-	-
trans-1,3-Dichloropropene	SW8260B	mg/L	-	-

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

Sample ID	AM-A506407
Laboratory	DCHM
Lab Sample ID	00E04050
Collection Date	10/18/00
Matrix	WW

Analyte	Method	Units		
Diesel Range Organics	AK102	µg/L	468000	[100]
Residual Range Organics	AK103	µg/L	1110000	[100]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510101		AM-A510102		AM-A510701		AM-A513101	
	Laboratory	CTE		CTE		CTE		CTE	
	Lab Sample ID	1007217001		1007217002		1007217013		1007219001	
	Collection Date	11/9/00		11/9/00		11/8/00		11/10/00	
	Matrix	WS		WS		WS		WS	
Analyte	**Method**	**Units**							
Diesel Range Organics	AK102	mg/L	0.353	[0.273]	-	-	-	-	0.186 [0.313] J, B
Residual Range Organics	AK103	mg/L	-	-	-	-	-	-	ND [0.521]
Acenaphthene	SIM	µg/L	-	-	0.154	[0.0455]	-	-	- -
Acenaphthylene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Anthracene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Benzo(a)anthracene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Benzo(a)pyrene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Benzo(b)fluoranthene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Benzo(g,h,i)perylene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Benzo(k)fluoranthene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Chrysene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Dibenzo(a,h)anthracene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Fluoranthene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Fluorene	SIM	µg/L	-	-	0.48	[0.0455]	-	-	- -
Indeno(1,2,3-cd)pyrene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Naphthalene	SIM	µg/L	-	-	0.0896	[0.0455]	-	-	- -
Phenanthrene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Pyrene	SIM	µg/L	-	-	ND	[0.0455]	-	-	- -
Arsenic	SW6020A	µg/L	-	-	-	-	-	-	- -
Barium	SW6020A	µg/L	-	-	-	-	-	-	- -
Cadmium	SW6020A	µg/L	-	-	-	-	-	-	- -
Chromium	SW6020A	µg/L	-	-	-	-	-	-	- -
Lead	SW6020A	µg/L	-	-	-	-	-	-	- -
Selenium	SW6020A	µg/L	-	-	-	-	-	-	- -
Silver	SW6020A	µg/L	-	-	-	-	-	-	- -
Mercury	SW7470A	mg/L	-	-	-	-	-	-	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	- -
1,1,1,2-Tetrachloroethane	SW8260B	mg/L	-	-	-	-	-	-	- -
1,1,1-Trichloroethane	SW8260B	mg/L	-	-	-	-	-	-	- -
1,1,2,2-Tetrachloroethane	SW8260B	mg/L	-	-	-	-	-	-	- -
1,1,2-Trichloroethane	SW8260B	mg/L	-	-	-	-	-	-	- -
1,1-Dichloroethane	SW8260B	mg/L	-	-	-	-	-	-	- -
1,1-Dichloroethene	SW8260B	mg/L	-	-	-	-	-	-	- -
1,1-Dichloropropene	SW8260B	mg/L	-	-	-	-	-	-	- -
1,2,3-Trichlorobenzene	SW8260B	mg/L	-	-	-	-	-	-	- -
1,2,3-Trichloropropane	SW8260B	mg/L	-	-	-	-	-	-	- -
1,2,4-Trichlorobenzene	SW8260B	mg/L	-	-	-	-	-	-	- -
1,2,4-Trimethylbenzene	SW8260B	mg/L	-	-	-	-	-	-	- -
1,2-Dibromo-3-chloropropane	SW8260B	mg/L	-	-	-	-	-	-	- -
1,2-Dibromoethane	SW8260B	mg/L	-	-	-	-	-	-	- -
1,2-Dichlorobenzene	SW8260B	mg/L	-	-	-	-	-	-	- -
1,2-Dichloroethane	SW8260B	mg/L	-	-	-	-	-	-	- -
1,2-Dichloropropane	SW8260B	mg/L	-	-	-	-	-	-	- -

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510101	AM-A510102	AM-A510701	AM-A513101			
	Laboratory	CTE	CTE	CTE	CTE			
	Lab Sample ID	1007217001	1007217002	1007217013	1007219001			
	Collection Date	11/9/00	11/9/00	11/8/00	11/10/00			
	Matrix	WS	WS	WS	WS			
Analyte	**Method**	**Units**						
1,3,5-Trimethylbenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,3-Dichloropropane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
2,2-Dichloropropane	SW8260B	mg/L	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	mg/L	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	SW8260B	mg/L	-	-	-	-	-	-	-	-
2-Chlorotoluene	SW8260B	mg/L	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	mg/L	-	-	-	-	-	-	-	-
4-Chlorotoluene	SW8260B	mg/L	-	-	-	-	-	-	-	-
4-Isopropyltoluene	SW8260B	mg/L	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	mg/L	-	-	-	-	-	-	-	-
Benzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
Bromobenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
Bromochloromethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
Bromoform	SW8260B	mg/L	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	mg/L	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	mg/L	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
Chloroform	SW8260B	mg/L	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
Dibromomethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
Hexachlorobutadiene	SW8260B	mg/L	-	-	-	-	-	-	-	-
Isopropylbenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
Methyl-t-butyl ether	SW8260B	mg/L	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	mg/L	-	-	-	-	-	-	-	-
Naphthalene	SW8260B	mg/L	-	-	-	-	-	-	-	-
Styrene	SW8260B	mg/L	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	mg/L	-	-	-	-	-	-	-	-
Toluene	SW8260B	mg/L	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	mg/L	-	-	-	-	-	-	-	-
Trichlorofluoromethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	mg/L	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	mg/L	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	mg/L	-	-	-	-	-	-	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	mg/L	-	-	-	-	-	-	-	-
n-Butylbenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
n-Propylbenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
o-Xylene	SW8260B	mg/L	-	-	-	-	-	-	-	-
sec-Butylbenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
tert-Butylbenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	mg/L	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	mg/L	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A513102		AM-A513103		AM-A513104		AM-A513105	
	Laboratory	CTE		CTE		CTE		CTE	
	Lab Sample ID	1007219002		1007219003		1007219004		1007219005	
	Collection Date	11/10/00		11/10/00		11/10/00		11/10/00	
	Matrix	WS		WS		WS		WS	
Analyte	**Method**	**Units**							
Diesel Range Organics	AK102	mg/L	-	-	-	-	-	-	0.226	[0.313] J, B
Residual Range Organics	AK103	mg/L	-	-	-	-	-	-	1.06	[0.521]
Acenaphthene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Acenaphthylene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Anthracene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Benzo(a)anthracene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Benzo(a)pyrene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Benzo(b)fluoranthene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Benzo(g,h,i)perylene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Benzo(k)fluoranthene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Chrysene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Fluoranthene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Fluorene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Naphthalene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Phenanthrene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Pyrene	SIM	µg/L	ND	[0.0455]	-	-	-	-	-	-
Arsenic	SW6020A	µg/L	-	-	-	-	46.5	[11.1]	-	-
Barium	SW6020A	µg/L	-	-	-	-	5.9	[22.2] J	-	-
Cadmium	SW6020A	µg/L	-	-	-	-	ND	[1.11]	-	-
Chromium	SW6020A	µg/L	-	-	-	-	ND	[22.2]	-	-
Lead	SW6020A	µg/L	-	-	-	-	ND	[13.9]	-	-
Selenium	SW6020A	µg/L	-	-	-	-	169	[11.1]	-	-
Silver	SW6020A	µg/L	-	-	-	-	ND	[4.44]	-	-
Mercury	SW7470A	mg/L	-	-	-	-	ND	[0.0002]	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/L	-	-	ND	[0.0909]	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	-	-	ND	[0.0909]	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	-	-	ND	[0.0909]	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	-	-	ND	[0.0909]	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	-	-	ND	[0.0909]	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	-	-	ND	[0.0909]	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	-	-	ND	[0.0909]	-	-	-	-
1,1,1,2-Tetrachloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,1-Dichloropropene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2-Dibromoethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	mg/L	-	-	-	-	-	-	-	-

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A513102	AM-A513103	AM-A513104	AM-A513105
	Laboratory	CTE	CTE	CTE	CTE
	Lab Sample ID	1007219002	1007219003	1007219004	1007219005
	Collection Date	11/10/00	11/10/00	11/10/00	11/10/00
	Matrix	WS	WS	WS	WS
Analyte	**Method**	**Units**			
1,3,5-Trimethylbenzene	SW8260B	mg/L	-	-	-
1,3-Dichlorobenzene	SW8260B	mg/L	-	-	-
1,3-Dichloropropane	SW8260B	mg/L	-	-	-
1,4-Dichlorobenzene	SW8260B	mg/L	-	-	-
2,2-Dichloropropane	SW8260B	mg/L	-	-	-
2-Butanone	SW8260B	mg/L	-	-	-
2-Chloroethyl vinyl ether	SW8260B	mg/L	-	-	-
2-Chlorotoluene	SW8260B	mg/L	-	-	-
2-Hexanone	SW8260B	mg/L	-	-	-
4-Chlorotoluene	SW8260B	mg/L	-	-	-
4-Isopropyltoluene	SW8260B	mg/L	-	-	-
4-Methyl-2-pentanone	SW8260B	mg/L	-	-	-
Benzene	SW8260B	mg/L	-	-	-
Bromobenzene	SW8260B	mg/L	-	-	-
Bromochloromethane	SW8260B	mg/L	-	-	-
Bromodichloromethane	SW8260B	mg/L	-	-	-
Bromoform	SW8260B	mg/L	-	-	-
Bromomethane	SW8260B	mg/L	-	-	-
Carbon disulfide	SW8260B	mg/L	-	-	-
Carbon tetrachloride	SW8260B	mg/L	-	-	-
Chlorobenzene	SW8260B	mg/L	-	-	-
Chloroethane	SW8260B	mg/L	-	-	-
Chloroform	SW8260B	mg/L	-	-	-
Chloromethane	SW8260B	mg/L	-	-	-
Dibromochloromethane	SW8260B	mg/L	-	-	-
ibromomethane	SW8260B	mg/L	-	-	-
Dichlorodifluoromethane	SW8260B	mg/L	-	-	-
Ethylbenzene	SW8260B	mg/L	-	-	-
Hexachlorobutadiene	SW8260B	mg/L	-	-	-
Isopropylbenzene	SW8260B	mg/L	-	-	-
Methyl-t-butyl ether	SW8260B	mg/L	-	-	-
Methylene chloride	SW8260B	mg/L	-	-	-
Naphthalene	SW8260B	mg/L	-	-	-
Styrene	SW8260B	mg/L	-	-	-
Tetrachloroethene	SW8260B	mg/L	-	-	-
Toluene	SW8260B	mg/L	-	-	-
Trichloroethene	SW8260B	mg/L	-	-	-
Trichlorofluoromethane	SW8260B	mg/L	-	-	-
Vinyl chloride	SW8260B	mg/L	-	-	-
cis-1,2-Dichloroethene	SW8260B	mg/L	-	-	-
cis-1,3-Dichloropropene	SW8260B	mg/L	-	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	mg/L	-	-	-
n-Butylbenzene	SW8260B	mg/L	-	-	-
n-Propylbenzene	SW8260B	mg/L	-	-	-
o-Xylene	SW8260B	mg/L	-	-	-
sec-Butylbenzene	SW8260B	mg/L	-	-	-
tert-Butylbenzene	SW8260B	mg/L	-	-	-
trans-1,2-Dichloroethene	SW8260B	mg/L	-	-	-
trans-1,3-Dichloropropene	SW8260B	mg/L	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A513106	AM-A513107	AM-A513108	AM-A512101
	Laboratory	CTE	CTE	CTE	CTE
	Lab Sample ID	1007219006	1007219007	1007219008	1007221001
	Collection Date	11/10/00	11/10/00	11/10/00	11/10/00
	Matrix	WS	WS	WS	WS
Analyte	**Method**	**Units**			
Diesel Range Organics	AK102	mg/L	-	-	-
Residual Range Organics	AK103	mg/L	-	-	-
Acenaphthene	SIM	µg/L	ND [0.0455]	-	-
Acenaphthylene	SIM	µg/L	ND [0.0455]	-	-
Anthracene	SIM	µg/L	ND [0.0455]	-	-
Benzo(a)anthracene	SIM	µg/L	0.0212 [0.0455] J	-	-
Benzo(a)pyrene	SIM	µg/L	ND [0.0455]	-	-
Benzo(b)fluoranthene	SIM	µg/L	ND [0.0455]	-	-
Benzo(g,h,i)perylene	SIM	µg/L	ND [0.0455]	-	-
Benzo(k)fluoranthene	SIM	µg/L	ND [0.0455]	-	-
Chrysene	SIM	µg/L	ND [0.0455]	-	-
Dibenzo(a,h)anthracene	SIM	µg/L	ND [0.0455]	-	-
Fluoranthene	SIM	µg/L	ND [0.0455]	-	-
Fluorene	SIM	µg/L	ND [0.0455]	-	-
Indeno(1,2,3-cd)pyrene	SIM	µg/L	ND [0.0455]	-	-
Naphthalene	SIM	µg/L	ND [0.0455]	-	-
Phenanthrene	SIM	µg/L	ND [0.0455]	-	-
Pyrene	SIM	µg/L	ND [0.0455]	-	-
Arsenic	SW6020A	µg/L	-	-	75.9 [11.1]
Barium	SW6020A	µg/L	-	-	26 [22.2]
Cadmium	SW6020A	µg/L	-	-	ND [1.11]
Chromium	SW6020A	µg/L	-	-	ND [22.2]
Lead	SW6020A	µg/L	-	-	ND [13.9]
Selenium	SW6020A	µg/L	-	-	273 [11.1]
Silver	SW6020A	µg/L	-	-	ND [4.44]
Mercury	SW7470A	mg/L	-	-	ND [0.0002]
PCB-1016 (Aroclor 1016)	SW8082	µg/L	-	ND [0.0909]	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	-	ND [0.0909]	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	-	ND [0.0909]	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	-	ND [0.0909]	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	-	ND [0.0909]	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	-	ND [0.0909]	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	-	ND [0.0909]	-
1,1,1,2-Tetrachloroethane	SW8260B	mg/L	-	-	-
1,1,1-Trichloroethane	SW8260B	mg/L	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	mg/L	-	-	-
1,1,2-Trichloroethane	SW8260B	mg/L	-	-	-
1,1-Dichloroethane	SW8260B	mg/L	-	-	-
1,1-Dichloroethene	SW8260B	mg/L	-	-	-
1,1-Dichloropropene	SW8260B	mg/L	-	-	-
1,2,3-Trichlorobenzene	SW8260B	mg/L	-	-	-
1,2,3-Trichloropropane	SW8260B	mg/L	-	-	-
1,2,4-Trichlorobenzene	SW8260B	mg/L	-	-	-
1,2,4-Trimethylbenzene	SW8260B	mg/L	-	-	-
1,2-Dibromo-3-chloropropane	SW8260B	mg/L	-	-	-
1,2-Dibromoethane	SW8260B	mg/L	-	-	-
1,2-Dichlorobenzene	SW8260B	mg/L	-	-	-
1,2-Dichloroethane	SW8260B	mg/L	-	-	-
1,2-Dichloropropane	SW8260B	mg/L	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A513106	AM-A513107	AM-A513108	AM-A512101
	Laboratory	CTE	CTE	CTE	CTE
	Lab Sample ID	1007219006	1007219007	1007219008	1007221001
	Collection Date	11/10/00	11/10/00	11/10/00	11/10/00
	Matrix	WS	WS	WS	WS
Analyte	**Method**	**Units**			
1,3,5-Trimethylbenzene	SW8260B	mg/L	- - - - - -		ND [0.001]
1,3-Dichlorobenzene	SW8260B	mg/L	- - - - - -		ND [0.001]
1,3-Dichloropropane	SW8260B	mg/L	- - - - - -		ND [0.001]
1,4-Dichlorobenzene	SW8260B	mg/L	- - - - - -		ND [0.001]
2,2-Dichloropropane	SW8260B	mg/L	- - - - - -		ND [0.001]
2-Butanone	SW8260B	mg/L	- - - - - -		ND [0.01]
2-Chloroethyl vinyl ether	SW8260B	mg/L	- - - - - -		ND [0.01]
2-Chlorotoluene	SW8260B	mg/L	- - - - - -		ND [0.001]
2-Hexanone	SW8260B	mg/L	- - - - - -		ND [0.01]
4-Chlorotoluene	SW8260B	mg/L	- - - - - -		ND [0.001]
4-Isopropyltoluene	SW8260B	mg/L	- - - - - -		ND [0.001]
4-Methyl-2-pentanone	SW8260B	mg/L	- - - - - -		ND [0.01]
Benzene	SW8260B	mg/L	- - - - - -		ND [0.001]
Bromobenzene	SW8260B	mg/L	- - - - - -		ND [0.001]
Bromochloromethane	SW8260B	mg/L	- - - - - -		ND [0.001]
Bromodichloromethane	SW8260B	mg/L	- - - - - -		ND [0.001]
Bromoform	SW8260B	mg/L	- - - - - -		ND [0.001]
Bromomethane	SW8260B	mg/L	- - - - - -		ND [0.001]
Carbon disulfide	SW8260B	mg/L	- - - - - -		ND [0.01]
Carbon tetrachloride	SW8260B	mg/L	- - - - - -		ND [0.001]
Chlorobenzene	SW8260B	mg/L	- - - - - -		ND [0.001]
Chloroethane	SW8260B	mg/L	- - - - - -		ND [0.001]
Chloroform	SW8260B	mg/L	- - - - - -		ND [0.001]
Chloromethane	SW8260B	mg/L	- - - - - -		ND [0.001]
Dibromochloromethane	SW8260B	mg/L	- - - - - -		ND [0.001]
ibromomethane	SW8260B	mg/L	- - - - - -		ND [0.001]
Dichlorodifluoromethane	SW8260B	mg/L	- - - - - -		ND [0.001]
Ethylbenzene	SW8260B	mg/L	- - - - - -		ND [0.001]
Hexachlorobutadiene	SW8260B	mg/L	- - - - - -		ND [0.001]
Isopropylbenzene	SW8260B	mg/L	- - - - - -		ND [0.001]
Methyl-t-butyl ether	SW8260B	mg/L	- - - - - -		ND [0.001]
Methylene chloride	SW8260B	mg/L	- - - - - -		ND [0.005]
Naphthalene	SW8260B	mg/L	- - - - - -		ND [0.001]
Styrene	SW8260B	mg/L	- - - - - -		ND [0.001]
Tetrachloroethene	SW8260B	mg/L	- - - - - -		ND [0.001]
Toluene	SW8260B	mg/L	- - - - - -		ND [0.001]
Trichloroethene	SW8260B	mg/L	- - - - - -		ND [0.001]
Trichlorofluoromethane	SW8260B	mg/L	- - - - - -		ND [0.001]
Vinyl chloride	SW8260B	mg/L	- - - - - -		ND [0.001]
cis-1,2-Dichloroethene	SW8260B	mg/L	- - - - - -		ND [0.001]
cis-1,3-Dichloropropene	SW8260B	mg/L	- - - - - -		ND [0.001]
m,p-Xylene (Sum of Isomers)	SW8260B	mg/L	- - - - - -		ND [0.001]
n-Butylbenzene	SW8260B	mg/L	- - - - - -		ND [0.001]
n-Propylbenzene	SW8260B	mg/L	- - - - - -		ND [0.001]
o-Xylene	SW8260B	mg/L	- - - - - -		ND [0.001]
sec-Butylbenzene	SW8260B	mg/L	- - - - - -		ND [0.001]
tert-Butylbenzene	SW8260B	mg/L	- - - - - -		ND [0.001]
trans-1,2-Dichloroethene	SW8260B	mg/L	- - - - - -		ND [0.001]
trans-1,3-Dichloropropene	SW8260B	mg/L	- - - - - -		ND [0.001]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A512102		AM-A512103		AM-A512104		AM-A512105	
	Laboratory	CTE		CTE		CTE		CTE	
	Lab Sample ID	1007221002		1007221003		1007221004		1007221005	
	Collection Date	11/10/00		11/10/00		11/10/00		11/10/00	
	Matrix	WS		WS		WS		WS	
Analyte	**Method**	**Units**							
Diesel Range Organics	AK102	mg/L	0.163	[0.303] J,B	-	-	-	-	-	-
Residual Range Organics	AK103	mg/L	ND	[0.505]	-	-	-	-	-	-
Acenaphthene	SIM	µg/L	-	-	ND	[0.0455]	-	-	-	-
Acenaphthylene	SIM	µg/L	-	-	ND	[0.0455]	-	-	-	-
Anthracene	SIM	µg/L	-	-	ND	[0.0455]	-	-	-	-
Benzo(a)anthracene	SIM	µg/L	-	-	0.0298	[0.0455] J	-	-	-	-
Benzo(a)pyrene	SIM	µg/L	-	-	ND	[0.0455]	-	-	-	-
Benzo(b)fluoranthene	SIM	µg/L	-	-	0.0501	[0.0455]	-	-	-	-
Benzo(g,h,i)perylene	SIM	µg/L	-	-	0.0294	[0.0455] J	-	-	-	-
Benzo(k)fluoranthene	SIM	µg/L	-	-	0.0546	[0.0455] B	-	-	-	-
Chrysene	SIM	µg/L	-	-	0.025	[0.0455] J	-	-	-	-
Dibenzo(a,h)anthracene	SIM	µg/L	-	-	ND	[0.0455]	-	-	-	-
Fluoranthene	SIM	µg/L	-	-	ND	[0.0455]	-	-	-	-
Fluorene	SIM	µg/L	-	-	ND	[0.0455]	-	-	-	-
Indeno(1,2,3-cd)pyrene	SIM	µg/L	-	-	ND	[0.0455]	-	-	-	-
Naphthalene	SIM	µg/L	-	-	ND	[0.0455]	-	-	-	-
Phenanthrene	SIM	µg/L	-	-	ND	[0.0455]	-	-	-	-
Pyrene	SIM	µg/L	-	-	ND	[0.0455]	-	-	-	-
Arsenic	SW6020A	µg/L	-	-	-	-	-	-	46	[11.1]
Barium	SW6020A	µg/L	-	-	-	-	-	-	5.08	[22.2] J
Cadmium	SW6020A	µg/L	-	-	-	-	-	-	ND	[1.11]
Chromium	SW6020A	µg/L	-	-	-	-	-	-	ND	[22.2]
Lead	SW6020A	µg/L	-	-	-	-	-	-	ND	[13.3]
Selenium	SW6020A	µg/L	-	-	-	-	-	-	169	[
Silver	SW6020A	µg/L	-	-	-	-	-	-	ND	[4.44]
Mercury	SW7470A	mg/L	-	-	-	-	-	-	ND	[0.0002]
PCB-1016 (Aroclor 1016)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	-	-	-	-	0.386	[0.0909]	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	-	-	-	-	ND	[0.0909]	-	-
1,1,1,2-Tetrachloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,1-Dichloropropene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2-Dibromoethane	SW8260B	mg/L	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	SW8260B	mg/L	-	-	-	-	-	-	-	
1,2-Dichloroethane	SW8260B	mg/L	-	-	-	-	-	-	-	
1,2-Dichloropropane	SW8260B	mg/L	-	-	-	-	-	-	-	-

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A512102	AM-A512103	AM-A512104	AM-A512105
	Laboratory	CTE	CTE	CTE	CTE
	Lab Sample ID	1007221002	1007221003	1007221004	1007221005
	Collection Date	11/10/00	11/10/00	11/10/00	11/10/00
	Matrix	WS	WS	WS	WS
Analyte	**Method**	**Units**			
1,3,5-Trimethylbenzene	SW8260B	mg/L	-	-	-
1,3-Dichlorobenzene	SW8260B	mg/L	-	-	-
1,3-Dichloropropane	SW8260B	mg/L	-	-	-
1,4-Dichlorobenzene	SW8260B	mg/L	-	-	-
2,2-Dichloropropane	SW8260B	mg/L	-	-	-
2-Butanone	SW8260B	mg/L	-	-	-
2-Chloroethyl vinyl ether	SW8260B	mg/L	-	-	-
2-Chlorotoluene	SW8260B	mg/L	-	-	-
2-Hexanone	SW8260B	mg/L	-	-	-
4-Chlorotoluene	SW8260B	mg/L	-	-	-
4-Isopropyltoluene	SW8260B	mg/L	-	-	-
4-Methyl-2-pentanone	SW8260B	mg/L	-	-	-
Benzene	SW8260B	mg/L	-	-	-
Bromobenzene	SW8260B	mg/L	-	-	-
Bromochloromethane	SW8260B	mg/L	-	-	-
Bromodichloromethane	SW8260B	mg/L	-	-	-
Bromoform	SW8260B	mg/L	-	-	-
Bromomethane	SW8260B	mg/L	-	-	-
Carbon disulfide	SW8260B	mg/L	-	-	-
Carbon tetrachloride	SW8260B	mg/L	-	-	-
Chlorobenzene	SW8260B	mg/L	-	-	-
Chloroethane	SW8260B	mg/L	-	-	-
Chloroform	SW8260B	mg/L	-	-	-
Chloromethane	SW8260B	mg/L	-	-	-
Dibromochloromethane	SW8260B	mg/L	-	-	-
ibromomethane	SW8260B	mg/L	-	-	-
Dichlorodifluoromethane	SW8260B	mg/L	-	-	-
Ethylbenzene	SW8260B	mg/L	-	-	-
Hexachlorobutadiene	SW8260B	mg/L	-	-	-
Isopropylbenzene	SW8260B	mg/L	-	-	-
Methyl-t-butyl ether	SW8260B	mg/L	-	-	-
Methylene chloride	SW8260B	mg/L	-	-	-
Naphthalene	SW8260B	mg/L	-	-	-
Styrene	SW8260B	mg/L	-	-	-
Tetrachloroethene	SW8260B	mg/L	-	-	-
Toluene	SW8260B	mg/L	-	-	-
Trichloroethene	SW8260B	mg/L	-	-	-
Trichlorofluoromethane	SW8260B	mg/L	-	-	-
Vinyl chloride	SW8260B	mg/L	-	-	-
cis-1,2-Dichloroethene	SW8260B	mg/L	-	-	-
cis-1,3-Dichloropropene	SW8260B	mg/L	-	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	mg/L	-	-	-
n-Butylbenzene	SW8260B	mg/L	-	-	-
n-Propylbenzene	SW8260B	mg/L	-	-	-
o-Xylene	SW8260B	mg/L	-	-	-
sec-Butylbenzene	SW8260B	mg/L	-	-	-
tert-Butylbenzene	SW8260B	mg/L	-	-	-
trans-1,2-Dichloroethene	SW8260B	mg/L	-	-	-
trans-1,3-Dichloropropene	SW8260B	mg/L	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A512106		AM-A512107		AM-A512108		AM-A512109	
	Laboratory	CTE		CTE		CTE		CTE	
	Lab Sample ID	1007221006		1007221007		1007221008		1007221009	
	Collection Date	11/10/00		11/10/00		11/10/00		11/10/00	
	Matrix	WS		WS		WS		WS	
Analyte	**Method**	**Units**							
Diesel Range Organics	AK102	mg/L	-	-	-	-	0.176	[0.303] J,B	-	-
Residual Range Organics	AK103	mg/L	-	-	-	-	0.515	[0.505]	-	-
Acenaphthene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Acenaphthylene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Anthracene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Benzo(a)anthracene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Benzo(a)pyrene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Benzo(b)fluoranthene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Benzo(g,h,i)perylene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Benzo(k)fluoranthene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Chrysene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Dibenzo(a,h)anthracene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Fluoranthene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Fluorene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Indeno(1,2,3-cd)pyrene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Naphthalene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Phenanthrene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Pyrene	SIM	µg/L	-	-	-	-	-	-	ND	[0.0455]
Arsenic	SW6020A	µg/L	-	-	-	-	-	-	-	-
Barium	SW6020A	µg/L	-	-	-	-	-	-	-	-
Cadmium	SW6020A	µg/L	-	-	-	-	-	-	-	-
Chromium	SW6020A	µg/L	-	-	-	-	-	-	-	-
Lead	SW6020A	µg/L	-	-	-	-	-	-	-	
Selenium	SW6020A	µg/L	-	-	-	-	-	-	-	
Silver	SW6020A	µg/L	-	-	-	-	-	-	-	-
Mercury	SW7470A	mg/L	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	-	-	-	-	-	-	-	-
1,1,1,2-Tetrachloroethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,1,1-Trichloroethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,1,2-Trichloroethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,1-Dichloroethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,1-Dichloroethene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,1-Dichloropropene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,2,3-Trichlorobenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,2,3-Trichloropropane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,2,4-Trichlorobenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,2,4-Trimethylbenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,2-Dibromo-3-chloropropane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,2-Dibromoethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,2-Dichlorobenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	
1,2-Dichloroethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	
1,2-Dichloropropane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A512106		AM-A512107		AM-A512108		AM-A512109	
	Laboratory	CTE		CTE		CTE		CTE	
	Lab Sample ID	1007221006		1007221007		1007221008		1007221009	
	Collection Date	11/10/00		11/10/00		11/10/00		11/10/00	
	Matrix	WS		WS		WS		WS	
Analyte	**Method**	**Units**							
1,3,5-Trimethylbenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,3-Dichlorobenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,3-Dichloropropane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
1,4-Dichlorobenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
2,2-Dichloropropane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
2-Butanone	SW8260B	mg/L	ND	[0.01]	ND	[0.01]	-	-	-	-
2-Chloroethyl vinyl ether	SW8260B	mg/L	ND	[0.01]	ND	[0.01]	-	-	-	-
2-Chlorotoluene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
2-Hexanone	SW8260B	mg/L	ND	[0.01]	ND	[0.01]	-	-	-	-
4-Chlorotoluene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
4-Isopropyltoluene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
4-Methyl-2-pentanone	SW8260B	mg/L	ND	[0.01]	ND	[0.01]	-	-	-	-
Benzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Bromobenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Bromochloromethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Bromodichloromethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Bromoform	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Bromomethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Carbon disulfide	SW8260B	mg/L	ND	[0.01]	ND	[0.01]	-	-	-	-
Carbon tetrachloride	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Chlorobenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Chloroethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Chloroform	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Chloromethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Dibromochloromethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
ibromomethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Dichlorodifluoromethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Ethylbenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Hexachlorobutadiene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Isopropylbenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Methyl-t-butyl ether	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Methylene chloride	SW8260B	mg/L	0.0011	[0.005] J	ND	[0.005]	-	-	-	-
Naphthalene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Styrene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Tetrachloroethene	SW8260B	mg/L	ND	[0.001]	0.0009	[0.001] J	-	-	-	-
Toluene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Trichloroethene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Trichlorofluoromethane	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
Vinyl chloride	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
n-Butylbenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
n-Propylbenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
o-Xylene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
sec-Butylbenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
tert-Butylbenzene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	mg/L	ND	[0.001]	ND	[0.001]	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A512110	AM-A512111	AM-A512112	AM-A512113
	Laboratory	CTE	CTE	CTE	CTE
	Lab Sample ID	1007221010	1007221011	1007221012	1007221013
	Collection Date	11/10/00	11/10/00	11/10/00	11/10/00
	Matrix	WS	WS	WS	WS
Analyte	**Method**	**Units**			
Diesel Range Organics	AK102	mg/L	- -	- -	- -	- -
Residual Range Organics	AK103	mg/L	- -	- -	- -	- -
Acenaphthene	SIM	µg/L	- -	- -	- -	- -
Acenaphthylene	SIM	µg/L	- -	- -	- -	- -
Anthracene	SIM	µg/L	- -	- -	- -	- -
Benzo(a)anthracene	SIM	µg/L	- -	- -	- -	- -
Benzo(a)pyrene	SIM	µg/L	- -	- -	- -	- -
Benzo(b)fluoranthene	SIM	µg/L	- -	- -	- -	- -
Benzo(g,h,i)perylene	SIM	µg/L	- -	- -	- -	- -
Benzo(k)fluoranthene	SIM	µg/L	- -	- -	- -	- -
Chrysene	SIM	µg/L	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SIM	µg/L	- -	- -	- -	- -
Fluoranthene	SIM	µg/L	- -	- -	- -	- -
Fluorene	SIM	µg/L	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SIM	µg/L	- -	- -	- -	- -
Naphthalene	SIM	µg/L	- -	- -	- -	- -
Phenanthrene	SIM	µg/L	- -	- -	- -	- -
Pyrene	SIM	µg/L	- -	- -	- -	- -
Arsenic	SW6020A	µg/L	- -	89.7 [11.1]	- -	- -
Barium	SW6020A	µg/L	- -	11.7 [22.2] J	- -	- -
Cadmium	SW6020A	µg/L	- -	ND [1.11]	- -	- -
Chromium	SW6020A	µg/L	- -	ND [22.2]	- -	- -
Lead	SW6020A	µg/L	- -	ND [13.9]	- -	- -
Selenium	SW6020A	µg/L	- -	324 [11.1]	- -	- -
Silver	SW6020A	µg/L	- -	ND [4.44]	- -	- -
Mercury	SW7470A	mg/L	- -	ND [0.0002]	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	ND [0.0909]	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	ND [0.0909]	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	ND [0.0909]	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	ND [0.0909]	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	ND [0.0909]	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	ND [0.0909]	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	ND [0.0909]	- -	- -	- -
1,1,1,2-Tetrachloroethane	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,1,1-Trichloroethane	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,1,2,2-Tetrachloroethane	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,1,2-Trichloroethane	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,1-Dichloroethane	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,1-Dichloroethene	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,1-Dichloropropene	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,2,3-Trichlorobenzene	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,2,3-Trichloropropane	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,2,4-Trichlorobenzene	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,2,4-Trimethylbenzene	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,2-Dibromo-3-chloropropane	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,2-Dibromoethane	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,2-Dichlorobenzene	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,2-Dichloroethane	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]
1,2-Dichloropropane	SW8260B	mg/L	- -	- -	ND [0.001]	ND [0.001]

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A512110	AM-A512111	AM-A512112	AM-A512113
	Laboratory	CTE	CTE	CTE	CTE
	Lab Sample ID	1007221010	1007221011	1007221012	1007221013
	Collection Date	11/10/00	11/10/00	11/10/00	11/10/00
	Matrix	WS	WS	WS	WS
Analyte	**Method**	**Units**			
1,3,5-Trimethylbenzene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
1,3-Dichlorobenzene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
1,3-Dichloropropane	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
1,4-Dichlorobenzene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
2,2-Dichloropropane	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
2-Butanone	SW8260B	mg/L	- - - -	ND [0.01]	ND [0.01]
2-Chloroethyl vinyl ether	SW8260B	mg/L	- - - -	ND [0.01]	ND [0.01]
2-Chlorotoluene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
2-Hexanone	SW8260B	mg/L	- - - -	ND [0.01]	ND [0.01]
4-Chlorotoluene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
4-Isopropyltoluene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
4-Methyl-2-pentanone	SW8260B	mg/L	- - - -	ND [0.01]	ND [0.01]
Benzene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Bromobenzene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Bromochloromethane	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Bromodichloromethane	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Bromoform	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Bromomethane	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Carbon disulfide	SW8260B	mg/L	- - - -	ND [0.01]	ND [0.01]
Carbon tetrachloride	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Chlorobenzene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Chloroethane	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Chloroform	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Chloromethane	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Dibromochloromethane	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Dibromomethane	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Dichlorodifluoromethane	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Ethylbenzene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Hexachlorobutadiene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Isopropylbenzene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Methyl-t-butyl ether	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Methylene chloride	SW8260B	mg/L	- - - -	ND [0.005]	ND [0.005]
Naphthalene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Styrene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Tetrachloroethene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Toluene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Trichloroethene	SW8260B	mg/L	- - - -	ND [0.001]	0.0004 [0.001] J
Trichlorofluoromethane	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
Vinyl chloride	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
cis-1,2-Dichloroethene	SW8260B	mg/L	- - - -	ND [0.001]	0.0006 [0.001] J
cis-1,3-Dichloropropene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
m,p-Xylene (Sum of Isomers)	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
n-Butylbenzene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
n-Propylbenzene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
o-Xylene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
sec-Butylbenzene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
tert-Butylbenzene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
trans-1,2-Dichloroethene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]
trans-1,3-Dichloropropene	SW8260B	mg/L	- - - -	ND [0.001]	ND [0.001]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A517101	AM-A517102	AM-A517103	AM-A517104	
	Laboratory	STLA	STLA	STLA	STLA	
	Lab Sample ID	0K200160001	L0K200160002	L0K200160003	L0K200160004	L
	Collection Date	11/14/00	11/14/00	11/14/00	11/14/00	
	Matrix	WG	WG	WG	WG	
Analyte	**Method**	**Units**				
Acenaphthene	SW8270C SIM	ng/L	- -	- -	260 [50]	240 [50]
Acenaphthylene	SW8270C SIM	ng/L	- -	- -	72 [50]	55 [50]
Anthracene	SW8270C SIM	ng/L	- -	- -	ND [50]	ND [50]
Benzo(a)anthracene	SW8270C SIM	ng/L	- -	- -	ND [50]	ND [50]
Benzo(a)pyrene	SW8270C SIM	ng/L	- -	- -	ND [50]	ND [50]
Benzo(b)fluoranthene	SW8270C SIM	ng/L	- -	- -	ND [50]	ND [50]
Benzo(g,h,i)perylene	SW8270C SIM	ng/L	- -	- -	ND [50]	ND [50]
Benzo(k)fluoranthene	SW8270C SIM	ng/L	- -	- -	ND [50]	ND [50]
Chrysene	SW8270C SIM	ng/L	- -	- -	ND [50]	ND [50]
Dibenzo(a,h)anthracene	SW8270C SIM	ng/L	- -	- -	ND [50]	ND [50]
Fluoranthene	SW8270C SIM	ng/L	- -	- -	ND [50]	ND [50]
Fluorene	SW8270C SIM	ng/L	- -	- -	230 [50]	210 [50]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	ng/L	- -	- -	ND [50]	ND [50]
Naphthalene	SW8270C SIM	ng/L	- -	- -	210 [50]	210 [50]
Phenanthrene	SW8270C SIM	ng/L	- -	- -	81 [50]	85 [50]
Pyrene	SW8270C SIM	ng/L	- -	- -	68 [50]	67 [50]
Diesel Range Organics	AK102	µg/L	320 [100]	- -	- -	- -
Residual Range Organics	AK103	µg/L	ND [250]	- -	- -	- -
1,1,1,2-Tetrachloroethane	SW8260B	µg/L	- -	ND [1]	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/L	- -	ND [1]	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	- -	ND [1]	- -	- -
trifluoroethane	SW8260B	µg/L	- -	ND [1]	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/L	- -	ND [1]	- -	- -
1,1-Dichloroethane	SW8260B	µg/L	- -	ND [1]	- -	- -
1,1-Dichloroethene	SW8260B	µg/L	- -	ND [1]	- -	- -
1,1-Dichloropropene	SW8260B	µg/L	- -	ND [1]	- -	- -
1,2,3-Trichlorobenzene	SW8260B	µg/L	- -	ND [1]	- -	- -
1,2,3-Trichloropropane	SW8260B	µg/L	- -	ND [1]	- -	- -
1,2,4-Trichlorobenzene	SW8260B	µg/L	- -	ND [1]	- -	- -
1,2,4-Trimethylbenzene	SW8260B	µg/L	- -	ND [1]	- -	- -
1,2-Dibromo-3-chloropropane	SW8260B	µg/L	- -	ND [10]	- -	- -
1,2-Dibromoethane	SW8260B	µg/L	- -	ND [1]	- -	- -
1,2-Dichlorobenzene	SW8260B	µg/L	- -	ND [1]	- -	- -
1,2-Dichloroethane	SW8260B	µg/L	- -	ND [1]	- -	- -
1,2-Dichloropropane	SW8260B	µg/L	- -	ND [1]	- -	- -
1,3,5-Trimethylbenzene	SW8260B	µg/L	- -	ND [1]	- -	- -
1,3-Dichlorobenzene	SW8260B	µg/L	- -	ND [1]	- -	- -
1,3-Dichloropropane	SW8260B	µg/L	- -	ND [1]	- -	- -
1,4-Dichlorobenzene	SW8260B	µg/L	- -	ND [1]	- -	- -
1-Chlorohexane	SW8260B	µg/L	- -	ND [1]	- -	- -
2,2-Dichloropropane	SW8260B	µg/L	- -	ND [1]	- -	- -
2-Chloroethyl vinyl ether	SW8260B	µg/L	- -	ND [5]	- -	- -
2-Chlorotoluene	SW8260B	µg/L	- -	ND [1]	- -	- -
4-Chlorotoluene	SW8260B	µg/L	- -	ND [1]	- -	- -
4-Isopropyltoluene	SW8260B	µg/L	- -	2.4 [1]	- -	- -
Benzene	SW8260B	µg/L	- -	ND [1]	- -	- -
Bromobenzene	SW8260B	µg/L	- -	ND [1]	- -	- -
Bromochloromethane	SW8260B	µg/L	- -	ND [1]	- -	- -
Bromodichloromethane	SW8260B	µg/L	- -	ND [1]	- -	- -
Bromoform	SW8260B	µg/L	- -	ND [1]	- -	- -
Bromomethane	SW8260B	µg/L	- -	ND [2]	- -	- -
Carbon disulfide	SW8260B	µg/L	- -	ND [1]	- -	- -
Carbon tetrachloride	SW8260B	µg/L	- -	ND [1]	- -	- -
Chlorobenzene	SW8260B	µg/L	- -	ND [1]	- -	- -

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A517101		AM-A517102		AM-A517103		AM-A517104		
	Laboratory	STLA		STLA		STLA		STLA		
	Lab Sample ID	0K200160001		L0K200160002		L0K200160003		L0K200160004		L
	Collection Date	11/14/00		11/14/00		11/14/00		11/14/00		
	Matrix	WG		WG		WG		WG		
Analyte	**Method**	**Units**								
Chloroethane	SW8260B	µg/L	- -	ND	[2]	- -		- -		
Chloroform	SW8260B	µg/L	- -	ND	[1]	- -		- -		
Chloromethane	SW8260B	µg/L	- -	ND	[2]	- -		- -		
Dibromochloromethane	SW8260B	µg/L	- -	ND	[1]	- -		- -		
Dibromomethane	SW8260B	µg/L	- -	ND	[1]	- -		- -		
Dichlorodifluoromethane	SW8260B	µg/L	- -	ND	[2]	- -		- -		
Ethylbenzene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
Hexachlorobutadiene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
Isopropylbenzene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
Methylene chloride	SW8260B	µg/L	- -	ND	[1]	- -		- -		
Naphthalene	SW8260B	µg/L	- -	1.5	[1]	- -		- -		
Styrene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
Tetrachloroethene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
Toluene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
Trichloroethene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
Trichlorofluoromethane	SW8260B	µg/L	- -	ND	[2]	- -		- -		
Unknown	SW8260B	µg/L	- -	-	-	- -		- -		
Vinyl acetate	SW8260B	µg/L	- -	ND	[2]	- -		- -		
Vinyl chloride	SW8260B	µg/L	- -	ND	[2]	- -		- -		
cis-1,2-Dichloroethene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
cis-1,3-Dichloropropene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	- -	ND	[1]	- -		- -		
n-Butylbenzene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
n-Propylbenzene	SW8260B	µg/L	- -	2.5	[1]	- -		- -		
o-Xylene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
ɜc-Butylbenzene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
‹ert-Butylbenzene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
trans-1,2-Dichloroethene	SW8260B	µg/L	- -	ND	[1]	- -		- -		
trans-1,3-Dichloropropene	SW8260B	µg/L	- -	ND	[1]	- -		- -		

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A517105		AM-A517106		AM-A517107		AM-A519101		
	Laboratory	STLA		STLA		STLA		STLA		
	Lab Sample ID	0K200160005		L0K200160006		L0K200160007		L0K200160008		L
	Collection Date	11/14/00		11/14/00		11/14/00		11/15/00		
	Matrix	WG		WG		WG		WG		
Analyte	**Method**	**Units**								
Acenaphthene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Acenaphthylene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Anthracene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Benzo(a)anthracene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Benzo(a)pyrene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Benzo(b)fluoranthene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Benzo(g,h,i)perylene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Benzo(k)fluoranthene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Chrysene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Dibenzo(a,h)anthracene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Fluoranthene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Fluorene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Indeno(1,2,3-cd)pyrene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Naphthalene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Phenanthrene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Pyrene	SW8270C SIM	ng/L	-	-	-	-	-	-	ND [50]	
Diesel Range Organics	AK102	µg/L	350 [100]		-	-	-	-	-	-
Residual Range Organics	AK103	µg/L	ND [250]		-	-	-	-	-	-
1,1,1,2-Tetrachloroethane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,1,1-Trichloroethane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
trifluoroethane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,1,2-Trichloroethane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,1-Dichloroethane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	
1,1-Dichloroethene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,1-Dichloropropene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,2,3-Trichlorobenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,2,3-Trichloropropane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,2,4-Trichlorobenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,2,4-Trimethylbenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,2-Dibromo-3-chloropropane	SW8260B	µg/L	-	-	ND [10]		ND [10]		-	-
1,2-Dibromoethane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,2-Dichlorobenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,2-Dichloroethane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,2-Dichloropropane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,3,5-Trimethylbenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,3-Dichlorobenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,3-Dichloropropane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1,4-Dichlorobenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
1-Chlorohexane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
2,2-Dichloropropane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
2-Chloroethyl vinyl ether	SW8260B	µg/L	-	-	ND [5]		ND [5]		-	-
2-Chlorotoluene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
4-Chlorotoluene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
4-Isopropyltoluene	SW8260B	µg/L	-	-	2.5 [1]		2.4 [1]		-	-
Benzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Bromobenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Bromochloromethane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Bromodichloromethane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Bromoform	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Bromomethane	SW8260B	µg/L	-	-	ND [2]		ND [2]		-	-
Carbon disulfide	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	
Carbon tetrachloride	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Chlorobenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A517105		AM-A517106		AM-A517107		AM-A519101		
	Laboratory	STLA		STLA		STLA		STLA		
	Lab Sample ID	0K200160005		L0K200160006		L0K200160007		L0K200160008		L
	Collection Date	11/14/00		11/14/00		11/14/00		11/15/00		
	Matrix	WG		WG		WG		WG		
Analyte	**Method**	**Units**								
Chloroethane	SW8260B	µg/L	-	-	ND [2]		ND [2]		-	-
Chloroform	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Chloromethane	SW8260B	µg/L	-	-	ND [2]		ND [2]		-	-
Dibromochloromethane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Dibromomethane	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Dichlorodifluoromethane	SW8260B	µg/L	-	-	ND [2]		ND [2]		-	-
Ethylbenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Hexachlorobutadiene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Isopropylbenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Methylene chloride	SW8260B	µg/L	-	-	ND [1]		0.72 [1] J,B		-	-
Naphthalene	SW8260B	µg/L	-	-	1.9 [1]		ND [1]		-	-
Styrene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Tetrachloroethene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Toluene	SW8260B	µg/L	-	-	0.53 [1] J		ND [1]		-	-
Trichloroethene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
Trichlorofluoromethane	SW8260B	µg/L	-	-	ND [2]		ND [2]		-	-
Unknown	SW8260B	µg/L	-	-	-	-	-	-	-	-
Vinyl acetate	SW8260B	µg/L	-	-	ND [2]		ND [2]		-	-
Vinyl chloride	SW8260B	µg/L	-	-	ND [2]		ND [2]		-	-
cis-1,2-Dichloroethene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
cis-1,3-Dichloropropene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
n-Butylbenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
n-Propylbenzene	SW8260B	µg/L	-	-	2.6 [1]		2.5 [1]		-	-
o-Xylene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
ec-Butylbenzene	SW8260B	µg/L	-	-	2.3 [1]		ND [1]		-	-
tert-Butylbenzene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
trans-1,2-Dichloroethene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-
trans-1,3-Dichloropropene	SW8260B	µg/L	-	-	ND [1]		ND [1]		-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A519102		AM-A519103	
		Laboratory	STLA		STLA	
		Lab Sample ID	0K200160009		L0K200160010	
		Collection Date	11/15/00		11/15/00	
		Matrix	WG		WG	
Analyte	**Method**	**Units**				
Acenaphthene	SW8270C SIM	ng/L	-	-	-	-
Acenaphthylene	SW8270C SIM	ng/L	-	-	-	-
Anthracene	SW8270C SIM	ng/L	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	ng/L	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	ng/L	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	ng/L	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	ng/L	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	ng/L	-	-	-	-
Chrysene	SW8270C SIM	ng/L	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	ng/L	-	-	-	-
Fluoranthene	SW8270C SIM	ng/L	-	-	-	-
Fluorene	SW8270C SIM	ng/L	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	ng/L	-	-	-	-
Naphthalene	SW8270C SIM	ng/L	-	-	-	-
Phenanthrene	SW8270C SIM	ng/L	-	-	-	-
Pyrene	SW8270C SIM	ng/L	-	-	-	-
Diesel Range Organics	AK102	µg/L	100	[100]	-	-
Residual Range Organics	AK103	µg/L	ND	[250]	-	-
1,1,1,2-Tetrachloroethane	SW8260B	µg/L	-	-	ND	[1]
1,1,1-Trichloroethane	SW8260B	µg/L	-	-	ND	[1]
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	-	-	ND	[1]
trifluoroethane	SW8260B	µg/L	-	-	ND	[1]
1,1,2-Trichloroethane	SW8260B	µg/L	-	-	ND	[1]
1,1-Dichloroethane	SW8260B	µg/L	-	-	ND	[1]
1,1-Dichloroethene	SW8260B	µg/L	-	-	ND	[1]
1,1-Dichloropropene	SW8260B	µg/L	-	-	ND	[1]
1,2,3-Trichlorobenzene	SW8260B	µg/L	-	-	ND	[1]
1,2,3-Trichloropropane	SW8260B	µg/L	-	-	ND	[1]
1,2,4-Trichlorobenzene	SW8260B	µg/L	-	-	ND	[1]
1,2,4-Trimethylbenzene	SW8260B	µg/L	-	-	ND	[1]
1,2-Dibromo-3-chloropropane	SW8260B	µg/L	-	-	ND	[10]
1,2-Dibromoethane	SW8260B	µg/L	-	-	ND	[1]
1,2-Dichlorobenzene	SW8260B	µg/L	-	-	ND	[1]
1,2-Dichloroethane	SW8260B	µg/L	-	-	ND	[1]
1,2-Dichloropropane	SW8260B	µg/L	-	-	ND	[1]
1,3,5-Trimethylbenzene	SW8260B	µg/L	-	-	ND	[1]
1,3-Dichlorobenzene	SW8260B	µg/L	-	-	ND	[1]
1,3-Dichloropropane	SW8260B	µg/L	-	-	ND	[1]
1,4-Dichlorobenzene	SW8260B	µg/L	-	-	ND	[1]
1-Chlorohexane	SW8260B	µg/L	-	-	ND	[1]
2,2-Dichloropropane	SW8260B	µg/L	-	-	ND	[1]
2-Chloroethyl vinyl ether	SW8260B	µg/L	-	-	ND	[5]
2-Chlorotoluene	SW8260B	µg/L	-	-	ND	[1]
4-Chlorotoluene	SW8260B	µg/L	-	-	ND	[1]
4-Isopropyltoluene	SW8260B	µg/L	-	-	2.4	[1]
Benzene	SW8260B	µg/L	-	-	ND	[1]
Bromobenzene	SW8260B	µg/L	-	-	ND	[1]
Bromochloromethane	SW8260B	µg/L	-	-	ND	[1]
Bromodichloromethane	SW8260B	µg/L	-	-	ND	[1]
Bromoform	SW8260B	µg/L	-	-	ND	[1]
Bromomethane	SW8260B	µg/L	-	-	ND	[2]
Carbon disulfide	SW8260B	µg/L	-	-	ND	[1]
Carbon tetrachloride	SW8260B	µg/L	-	-	1.4	[1]
Chlorobenzene	SW8260B	µg/L	-	-	ND	[1]

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A519102		AM-A519103	
	Laboratory	STLA		STLA	
	Lab Sample ID	0K200160009		L0K200160010	
	Collection Date	11/15/00		11/15/00	
	Matrix	WG		WG	
Analyte	**Method**	**Units**			
Chloroethane	SW8260B	µg/L	-	-	ND [2]
Chloroform	SW8260B	µg/L	-	-	ND [1]
Chloromethane	SW8260B	µg/L	-	-	ND [2]
Dibromochloromethane	SW8260B	µg/L	-	-	ND [1]
Dibromomethane	SW8260B	µg/L	-	-	ND [1]
Dichlorodifluoromethane	SW8260B	µg/L	-	-	ND [2]
Ethylbenzene	SW8260B	µg/L	-	-	ND [1]
Hexachlorobutadiene	SW8260B	µg/L	-	-	ND [1]
Isopropylbenzene	SW8260B	µg/L	-	-	ND [1]
Methylene chloride	SW8260B	µg/L	-	-	ND [1]
Naphthalene	SW8260B	µg/L	-	-	ND [1]
Styrene	SW8260B	µg/L	-	-	ND [1]
Tetrachloroethene	SW8260B	µg/L	-	-	ND [1]
Toluene	SW8260B	µg/L	-	-	0.54 [1] J
Trichloroethene	SW8260B	µg/L	-	-	ND [1]
Trichlorofluoromethane	SW8260B	µg/L	-	-	ND [2]
Unknown	SW8260B	µg/L	-	-	21 TI[0] J
Vinyl acetate	SW8260B	µg/L	-	-	ND [2]
Vinyl chloride	SW8260B	µg/L	-	-	ND [2]
cis-1,2-Dichloroethene	SW8260B	µg/L	-	-	ND [1]
cis-1,3-Dichloropropene	SW8260B	µg/L	-	-	ND [1]
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	-	-	ND [1]
n-Butylbenzene	SW8260B	µg/L	-	-	ND [1]
n-Propylbenzene	SW8260B	µg/L	-	-	ND [1]
o-Xylene	SW8260B	µg/L	-	-	ND [1]
ɜc-Butylbenzene	SW8260B	µg/L	-	-	ND [1]
,ert-Butylbenzene	SW8260B	µg/L	-	-	ND [1]
trans-1,2-Dichloroethene	SW8260B	µg/L	-	-	ND [1]
trans-1,3-Dichloropropene	SW8260B	µg/L	-	-	ND [1]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A501001	AM-1502401	AM-A433501	AM-A433502
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03037	00E03291	00E02661	00E02662
	Collection Date	9/11/00	9/19/00	8/30/00	8/30/00
	Matrix	W	W	W	W
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Acenaphthene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Acenaphthylene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Anthracene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Benzo(a)anthracene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Benzo(a)pyrene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Chrysene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Fluoranthene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Fluorene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Naphthalene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Phenanthrene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Pyrene	SW8270C SIM	µg/L	- -	ND [0.05]	ND [0.05]	- -
Gasoline Range Organics	AK101	µg/L	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/L	- -	ND [100]	450 [100]	- -
Residual Range Organics	AK103	µg/L	- -	166 [100]	171 [100]	- -
Arsenic	SW6010B	µg/L	ND [5]	- -	- -	- -
Barium	SW6010B	µg/L	8.3 [20]	- -	13 [20]	- -
Cadmium	SW6010B	µg/L	ND [2]	- -	- -	- -
Chromium	SW6010B	µg/L	ND [10]	- -	- -	- -
Lead	SW6010B	µg/L	ND [3]	- -	- -	- -
Selenium	SW6010B	µg/L	ND [5]	- -	- -	- -
Silver	SW6010B	µg/L	ND [10]	- -	- -	- -
Cadmium	SW6020A	µg/L	- -	- -	0.254 [5]	- -
Chromium	SW6020A	µg/L	- -	- -	0.365 [5]	- -
Silver	SW6020A	µg/L	- -	- -	ND [10]	- -
Arsenic	SW7060A	µg/L	- -	- -	ND [5]	- -
Lead	SW7421	µg/L	- -	- -	ND [3]	- -
Mercury	SW7470A	µg/L	ND [0.1]	- -	ND [0.1]	- -
Selenium	SW7740	µg/L	- -	- -	ND [5]	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A501001		AM-1502401		AM-A433501		AM-A433502	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E03037		00E03291		00E02661		00E02662	
		Collection Date	9/11/00		9/19/00		8/30/00		8/30/00	
		Matrix	W		W		W		W	
Analyte	**Method**	**Units**								
1,1,1-Trichloroethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
1,1,2-Trichloroethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
1,1-Dichloroethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
1,1-Dichloroethene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
1,2-Dichloroethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
1,2-Dichloropropane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
2-Butanone	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
2-Hexanone	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
4-Methyl-2-pentanone	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Acetone	SW8260B	µg/L	-	-	-	-	6.8	[5]	8.7	[5]
Benzene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Bromodichloromethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Bromoform	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Bromomethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Carbon disulfide	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Carbon tetrachloride	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Chlorobenzene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Chloroethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Chloroform	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Chloromethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Dibromochloromethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Ethylbenzene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Methylene chloride	SW8260B	µg/L	-	-	-	-	0.49	[5]	1.5	[5]
Styrene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
etrachloroethene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
oluene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Trichloroethene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Vinyl chloride	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Xylenes	SW8260B	µg/L	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
cis-1,3-Dichloropropene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	-	-	-	-	ND	[10]	ND	[10]
o-Xylene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
trans-1,2-Dichloroethene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
trans-1,3-Dichloropropene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A500201	AM-A500301	AM-A500401	AM-A500402
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E02837	00E02839	00E02841	00E02842
	Collection Date	9/9/00	9/9/00	9/9/00	9/9/00
	Matrix	W	W	W	W
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Acenaphthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Acenaphthylene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Benzo(a)anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Benzo(a)pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Benzo(b)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Benzo(k)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Chrysene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Fluorene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Naphthalene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Phenanthrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	ND [0.05]
Gasoline Range Organics	AK101	µg/L	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/L	173 [100]	54.7 [100]	86.4 [100]	ND [100]
Residual Range Organics	AK103	µg/L	282 [100]	76.4 [100]	35.7 [100]	ND [100]
Arsenic	SW6010B	µg/L	- -	- -	- -	- -
Barium	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6010B	µg/L	- -	- -	- -	- -
Chromium	SW6010B	µg/L	- -	- -	- -	- -
Lead	SW6010B	µg/L	- -	- -	- -	- -
Selenium	SW6010B	µg/L	- -	- -	- -	- -
Silver	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6020A	µg/L	- -	- -	- -	- -
Chromium	SW6020A	µg/L	- -	- -	- -	- -
Silver	SW6020A	µg/L	- -	- -	- -	- -
Arsenic	SW7060A	µg/L	- -	- -	- -	- -
Lead	SW7421	µg/L	- -	- -	- -	- -
Mercury	SW7470A	µg/L	- -	- -	- -	- -
Selenium	SW7740	µg/L	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	ND [0.1]	ND [0.1]	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	ND [0.2]	ND [0.2]	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	ND [0.1]	ND [0.1]	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	ND [0.1]	ND [0.1]	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	ND [0.1]	ND [0.1]	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	ND [0.1]	ND [0.1]	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	ND [0.1]	ND [0.1]	- -	- -

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A500201	AM-A500301	AM-A500401	AM-A500402
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E02837	00E02839	00E02841	00E02842
	Collection Date	9/9/00	9/9/00	9/9/00	9/9/00
	Matrix	W	W	W	W
Analyte	**Method**	**Units**			
1,1,1-Trichloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -
1,2-Dichloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/L	- -	- -	- -	- -
2-Butanone	SW8260B	µg/L	- -	- -	- -	- -
2-Hexanone	SW8260B	µg/L	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/L	- -	- -	- -	- -
Acetone	SW8260B	µg/L	- -	- -	- -	- -
Benzene	SW8260B	µg/L	- -	- -	- -	- -
Bromodichloromethane	SW8260B	µg/L	- -	- -	- -	- -
Bromoform	SW8260B	µg/L	- -	- -	- -	- -
Bromomethane	SW8260B	µg/L	- -	- -	- -	- -
Carbon disulfide	SW8260B	µg/L	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/L	- -	- -	- -	- -
Chlorobenzene	SW8260B	µg/L	- -	- -	- -	- -
Chloroethane	SW8260B	µg/L	- -	- -	- -	- -
Chloroform	SW8260B	µg/L	- -	- -	- -	- -
Chloromethane	SW8260B	µg/L	- -	- -	- -	- -
Dibromochloromethane	SW8260B	µg/L	- -	- -	- -	- -
Ethylbenzene	SW8260B	µg/L	- -	- -	- -	- -
Methylene chloride	SW8260B	µg/L	- -	- -	- -	- -
Styrene	SW8260B	µg/L	- -	- -	- -	- -
etrachloroethene	SW8260B	µg/L	- -	- -	- -	- -
oluene	SW8260B	µg/L	- -	- -	- -	- -
Trichloroethene	SW8260B	µg/L	- -	- -	- -	- -
Vinyl chloride	SW8260B	µg/L	- -	- -	- -	- -
Xylenes	SW8260B	µg/L	- -	- -	- -	- -
cis-1,2-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/L	- -	- -	- -	- -
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	- -	- -	- -	- -
o-Xylene	SW8260B	µg/L	- -	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/L	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A500603	AM-A500901	AM-A501001	AM-A501002
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E02845	00E03039	00E03037	00E03038
	Collection Date	9/9/00	9/11/00	9/11/00	9/11/00
	Matrix	W	W	W	W
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Anthracene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Chrysene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Fluorene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Naphthalene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Pyrene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	- -
Gasoline Range Organics	AK101	µg/L	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/L	51.7 [100]	- -	- -	- -
Residual Range Organics	AK103	µg/L	ND [100]	- -	- -	- -
Arsenic	SW6010B	µg/L	- -	- -	- -	- -
Barium	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6010B	µg/L	- -	- -	- -	- -
Chromium	SW6010B	µg/L	- -	- -	- -	- -
Lead	SW6010B	µg/L	- -	- -	- -	- -
Selenium	SW6010B	µg/L	- -	- -	- -	- -
Silver	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6020A	µg/L	- -	- -	- -	- -
Chromium	SW6020A	µg/L	- -	- -	- -	- -
Silver	SW6020A	µg/L	- -	- -	- -	- -
Arsenic	SW7060A	µg/L	- -	- -	- -	- -
Lead	SW7421	µg/L	- -	- -	- -	- -
Mercury	SW7470A	µg/L	- -	- -	- -	- -
Selenium	SW7740	µg/L	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	ND [0.1]	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	ND [0.2]	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	ND [0.1]	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	ND [0.1]	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	ND [0.1]	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	ND [0.1]	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	ND [0.1]	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A500603		AM-A500901		AM-A501001		AM-A501002	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E02845		00E03039		00E03037		00E03038	
		Collection Date	9/9/00		9/11/00		9/11/00		9/11/00	
		Matrix	W		W		W		W	
Analyte	**Method**	**Units**								
1,1,1-Trichloroethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
1,1,2-Trichloroethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
1,1-Dichloroethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
1,1-Dichloroethene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
1,2-Dichloroethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
1,2-Dichloropropane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
2-Butanone	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
2-Hexanone	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
4-Methyl-2-pentanone	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Acetone	SW8260B	µg/L	-	-	-	-	5.7	[5]	5.8	[5]
Benzene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Bromodichloromethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Bromoform	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Bromomethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Carbon disulfide	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Carbon tetrachloride	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Chlorobenzene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Chloroethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Chloroform	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Chloromethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Dibromochloromethane	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Ethylbenzene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Methylene chloride	SW8260B	µg/L	-	-	-	-	ND	[5]	1.2	[5]
Styrene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
etrachloroethene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
oluene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Trichloroethene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Vinyl chloride	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
Xylenes	SW8260B	µg/L	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
cis-1,3-Dichloropropene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	-	-	-	-	ND	[10]	ND	[10]
o-Xylene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
trans-1,2-Dichloroethene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]
trans-1,3-Dichloropropene	SW8260B	µg/L	-	-	-	-	ND	[5]	ND	[5]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A501101		AM-A501101		AM-A501102		AM-A501401	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03035		00E03035		00E03036		00E03107	
	Collection Date	9/11/00		9/12/00		9/12/00		9/16/00	
	Matrix	W		W		W		W	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Acenaphthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Acenaphthylene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Anthracene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(a)anthracene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(a)pyrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(b)fluoranthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(k)fluoranthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Chrysene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Fluoranthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Fluorene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Naphthalene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Phenanthrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Pyrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Gasoline Range Organics	AK101	µg/L	- -	-	-	- -	- -	-	-
Diesel Range Organics	AK102	µg/L	- -	58.1	[100]	- -		47.2	[100]
Residual Range Organics	AK103	µg/L	- -	ND	[100]	- -		ND	[100]
Arsenic	SW6010B	µg/L	- -	ND	[5]	- -		3.4	[5]
Barium	SW6010B	µg/L	- -	2.4	[20]	- -		13	[20]
Cadmium	SW6010B	µg/L	- -	0.28	[2]	- -		1.3	[2]
Chromium	SW6010B	µg/L	- -	ND	[10]	- -		35	[10]
Lead	SW6010B	µg/L	- -	ND	[3]	- -		260	[3]
Selenium	SW6010B	µg/L	- -	3.1	[5]	- -		ND	[5]
Silver	SW6010B	µg/L	- -	ND	[10]	- -		ND	[10]
Cadmium	SW6020A	µg/L	- -	-	-	- -	- -	-	-
Chromium	SW6020A	µg/L	- -	-	-	- -	- -	-	-
Silver	SW6020A	µg/L	- -	-	-	- -	- -	-	-
Arsenic	SW7060A	µg/L	- -	-	-	- -	- -	-	-
Lead	SW7421	µg/L	- -	-	-	- -	- -	-	-
Mercury	SW7470A	µg/L	- -	ND	[0.1]	- -		0.0517	[0.1]
Selenium	SW7740	µg/L	- -	-	-	- -	- -	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/L	ND [0.1]	-	-	- -	- -	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	ND [0.2]	-	-	- -	- -	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	ND [0.1]	-	-	- -	- -	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	ND [0.1]	-	-	- -	- -	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	ND [0.1]	-	-	- -	- -	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	ND [0.1]	-	-	- -	- -	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	ND [0.1]	-	-	- -	- -	-	-

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A501101		AM-A501101		AM-A501102		AM-A501401	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03035		00E03035		00E03036		00E03107	
	Collection Date	9/11/00		9/12/00		9/12/00		9/16/00	
	Matrix	W		W		W		W	
Analyte	**Method**	**Units**							
1,1,1-Trichloroethane	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
1,1,2-Trichloroethane	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
1,1-Dichloroethane	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
1,1-Dichloroethene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
1,2-Dichloroethane	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
1,2-Dichloropropane	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
2-Butanone	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
2-Hexanone	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
4-Methyl-2-pentanone	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Acetone	SW8260B	µg/L	- -	7.3	[5]	6.3	[5]	-	-
Benzene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	ND	[5]
Bromodichloromethane	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Bromoform	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Bromomethane	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Carbon disulfide	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Carbon tetrachloride	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Chlorobenzene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Chloroethane	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Chloroform	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Chloromethane	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Dibromochloromethane	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Ethylbenzene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	ND	[5]
Methylene chloride	SW8260B	µg/L	- -	ND	[5]	1.2	[5]	-	-
Styrene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
etrachloroethene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
oluene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	ND	[5]
Trichloroethene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Vinyl chloride	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
Xylenes	SW8260B	µg/L	- -	-	-	-	-	ND	[15]
cis-1,2-Dichloroethene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
cis-1,3-Dichloropropene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	- -	ND	[10]	ND	[10]	-	-
o-Xylene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
trans-1,2-Dichloroethene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-
trans-1,3-Dichloropropene	SW8260B	µg/L	- -	ND	[5]	ND	[5]	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A501402	AM-A502201	AM-A502202	AM-A502301
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03108	00E03167	00E03168	00E03289
	Collection Date	9/16/00	9/18/00	9/18/00	9/19/00
	Matrix	W	W	W	W
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Acenaphthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Acenaphthylene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Benzo(a)anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Benzo(a)pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Benzo(b)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Benzo(k)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Chrysene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Fluorene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Naphthalene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Phenanthrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]
Gasoline Range Organics	AK101	µg/L	- -	- -	- -
Diesel Range Organics	AK102	µg/L	233000 [100]	- -	37.3 [100]
Residual Range Organics	AK103	µg/L	18300 [100]	- -	162 [100]
Arsenic	SW6010B	µg/L	- -	- -	- -
Barium	SW6010B	µg/L	- -	- -	- -
Cadmium	SW6010B	µg/L	- -	- -	- -
Chromium	SW6010B	µg/L	- -	- -	- -
Lead	SW6010B	µg/L	- -	- -	- -
Selenium	SW6010B	µg/L	- -	- -	- -
Silver	SW6010B	µg/L	- -	- -	- -
Cadmium	SW6020A	µg/L	- -	- -	- -
Chromium	SW6020A	µg/L	- -	- -	- -
Silver	SW6020A	µg/L	- -	- -	- -
Arsenic	SW7060A	µg/L	- -	- -	- -
Lead	SW7421	µg/L	- -	- -	- -
Mercury	SW7470A	µg/L	- -	- -	- -
Selenium	SW7740	µg/L	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	- -	- -

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A501402		AM-A502201		AM-A502202		AM-A502301	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03108		00E03167		00E03168		00E03289	
	Collection Date	9/16/00		9/18/00		9/18/00		9/19/00	
	Matrix	W		W		W		W	
Analyte	**Method**	**Units**							
1,1,1-Trichloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
1,1,2-Trichloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
1,1-Dichloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
1,1-Dichloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
1,2-Dichloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
1,2-Dichloropropane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
2-Butanone	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
2-Hexanone	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
4-Methyl-2-pentanone	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Acetone	SW8260B	µg/L	-	-	6.7	[5]	4.9	[5]	-	-
Benzene	SW8260B	µg/L	ND	[5]	ND	[5]	ND	[5]	-	-
Bromodichloromethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Bromoform	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Bromomethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Carbon disulfide	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Carbon tetrachloride	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Chlorobenzene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Chloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Chloroform	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Chloromethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Dibromochloromethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Ethylbenzene	SW8260B	µg/L	ND	[5]	ND	[5]	ND	[5]	-	-
Methylene chloride	SW8260B	µg/L	-	-	ND	[5]	1.1	[5]	-	-
Styrene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
etrachloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
oluene	SW8260B	µg/L	ND	[5]	ND	[5]	ND	[5]	-	-
Trichloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Vinyl chloride	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Xylenes	SW8260B	µg/L	ND	[15]	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
cis-1,3-Dichloropropene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	-	-	ND	[10]	ND	[10]	-	-
o-Xylene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
trans-1,2-Dichloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
trans-1,3-Dichloropropene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A502302	AM-A502701	AM-A502702	AM-A502901
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03290	00E03370	00E03371	00E03448
	Collection Date	9/19/00	9/20/00	9/20/00	9/26/00
	Matrix	W	W	W	W
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Acenaphthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Acenaphthylene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Benzo(a)anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Benzo(a)pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Benzo(b)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Benzo(k)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Chrysene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	0.065 [0.05]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	0.059 [0.05]
Fluorene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Naphthalene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Phenanthrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	0.15 [0.05]
Gasoline Range Organics	AK101	µg/L	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/L	ND [100]	456 [100]	- -	607 [100]
Residual Range Organics	AK103	µg/L	102 [100]	930 [100]	- -	- -
Arsenic	SW6010B	µg/L	- -	- -	- -	- -
Barium	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6010B	µg/L	- -	- -	- -	- -
Chromium	SW6010B	µg/L	- -	- -	- -	- -
Lead	SW6010B	µg/L	- -	- -	- -	- -
Selenium	SW6010B	µg/L	- -	- -	- -	- -
Silver	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6020A	µg/L	- -	- -	- -	- -
Chromium	SW6020A	µg/L	- -	- -	- -	- -
Silver	SW6020A	µg/L	- -	- -	- -	- -
Arsenic	SW7060A	µg/L	- -	- -	- -	- -
Lead	SW7421	µg/L	- -	- -	- -	- -
Mercury	SW7470A	µg/L	- -	- -	- -	- -
Selenium	SW7740	µg/L	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A502302		AM-A502701		AM-A502702		AM-A502901	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03290		00E03370		00E03371		00E03448	
	Collection Date	9/19/00		9/20/00		9/20/00		9/26/00	
	Matrix	W		W		W		W	
Analyte	**Method**	**Units**							
1,1,1-Trichloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
1,1,2-Trichloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
1,1-Dichloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
1,1-Dichloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
1,2-Dichloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
1,2-Dichloropropane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
2-Butanone	SW8260B	µg/L	-	-	3.9	[5]	ND	[5]	ND	[5]
2-Hexanone	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
4-Methyl-2-pentanone	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Acetone	SW8260B	µg/L	-	-	ND	[5]	6.6	[5]	6.5	[5]
Benzene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Bromodichloromethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Bromoform	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Bromomethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Carbon disulfide	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Carbon tetrachloride	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Chlorobenzene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Chloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Chloroform	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Chloromethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	2.6	[5]
Dibromochloromethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Ethylbenzene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Methylene chloride	SW8260B	µg/L	-	-	ND	[5]	1.2	[5]	ND	[5]
Styrene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
etrachloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
oluene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Trichloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Vinyl chloride	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
Xylenes	SW8260B	µg/L	-	-	ND	[15]	ND	[15]	-	-
cis-1,2-Dichloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
cis-1,3-Dichloropropene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	-	-	ND	[10]	ND	[10]	ND	[10]
o-Xylene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
trans-1,2-Dichloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]
trans-1,3-Dichloropropene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	ND	[5]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A502902		AM-A504001		AM-A504003		AM-A504301	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03449		00E03658		00E03660		00E03674	
	Collection Date	9/26/00		10/6/00		10/6/00		10/6/00	
	Matrix	W		W		W		W	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Acenaphthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Acenaphthylene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Anthracene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(a)anthracene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(a)pyrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(b)fluoranthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(k)fluoranthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Chrysene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Fluoranthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Fluorene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Naphthalene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Phenanthrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Pyrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Gasoline Range Organics	AK101	µg/L	- -	-	-	- -		-	-
Diesel Range Organics	AK102	µg/L	- -	35.8	[100]	- -		231	[100]
Residual Range Organics	AK103	µg/L	- -	-	-	- -		651	[100]
Arsenic	SW6010B	µg/L	- -	-	-	- -		-	-
Barium	SW6010B	µg/L	- -	-	-	- -		-	-
Cadmium	SW6010B	µg/L	- -	-	-	- -		-	-
Chromium	SW6010B	µg/L	- -	-	-	- -		-	-
Lead	SW6010B	µg/L	- -	-	-	- -		-	-
Selenium	SW6010B	µg/L	- -	-	-	- -		-	-
Silver	SW6010B	µg/L	- -	-	-	- -		-	-
Cadmium	SW6020A	µg/L	- -	-	-	- -		-	-
Chromium	SW6020A	µg/L	- -	-	-	- -		-	-
Silver	SW6020A	µg/L	- -	-	-	- -		-	-
Arsenic	SW7060A	µg/L	- -	-	-	- -		-	-
Lead	SW7421	µg/L	- -	-	-	- -		-	-
Mercury	SW7470A	µg/L	- -	-	-	- -		-	-
Selenium	SW7740	µg/L	- -	-	-	- -		-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	-	-	- -		-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	-	-	- -		-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	-	-	- -		-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	-	-	- -		-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	-	-	- -		-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	-	-	- -		-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	-	-	- -		-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A502902		AM-A504001		AM-A504003		AM-A504301	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E03449		00E03658		00E03660		00E03674	
		Collection Date	9/26/00		10/6/00		10/6/00		10/6/00	
		Matrix	W		W		W		W	
Analyte	**Method**	**Units**								
1,1,1-Trichloroethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
2-Butanone	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Acetone	SW8260B	µg/L	7	[5]	-	-	-	-	-	-
Benzene	SW8260B	µg/L	ND	[5]	ND	[5]	ND	[5]	-	-
Bromodichloromethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Bromoform	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Bromomethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Chloroethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Chloroform	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Chloromethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/L	ND	[5]	ND	[5]	ND	[5]	-	-
Methylene chloride	SW8260B	µg/L	0.98	[5]	-	-	-	-	-	-
Styrene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
'etrachloroethene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Toluene	SW8260B	µg/L	ND	[5]	ND	[5]	ND	[5]	-	-
Trichloroethene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Xylenes	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
cis-1,2-Dichloroethene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	ND	[10]	-	-	-	-	-	-
o-Xylene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504301	AM-A504302	AM-A504901	AM-A505001
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03674	00E03675	00E03748	00E03749
	Collection Date	10/7/00	10/7/00	10/11/00	10/11/00
	Matrix	W	W	W	W
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Acenaphthene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Acenaphthylene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Anthracene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Benzo(a)anthracene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Benzo(a)pyrene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Benzo(b)fluoranthene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Benzo(k)fluoranthene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Chrysene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Fluoranthene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Fluorene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Naphthalene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Phenanthrene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Pyrene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	ND [0.05]
Gasoline Range Organics	AK101	µg/L	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/L	- -	- -	ND [100]	ND [100]
Residual Range Organics	AK103	µg/L	- -	- -	640 [100]	602 [100]
Arsenic	SW6010B	µg/L	- -	- -	- -	- -
Barium	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6010B	µg/L	- -	- -	- -	- -
Chromium	SW6010B	µg/L	- -	- -	- -	- -
Lead	SW6010B	µg/L	- -	- -	- -	- -
Selenium	SW6010B	µg/L	- -	- -	- -	- -
Silver	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6020A	µg/L	- -	- -	- -	- -
Chromium	SW6020A	µg/L	- -	- -	- -	- -
Silver	SW6020A	µg/L	- -	- -	- -	- -
Arsenic	SW7060A	µg/L	- -	- -	- -	- -
Lead	SW7421	µg/L	- -	- -	- -	- -
Mercury	SW7470A	µg/L	- -	- -	- -	- -
Selenium	SW7740	µg/L	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	- -	- -	ND [0.1]
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	- -	- -	ND [0.2]
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	- -	- -	ND [0.1]
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	- -	- -	ND [0.1]
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	- -	- -	ND [0.1]
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	- -	- -	ND [0.1]
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	- -	- -	ND [0.1]

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A504301	AM-A504302	AM-A504901	AM-A505001
		Laboratory	DCHM	DCHM	DCHM	DCHM
		Lab Sample ID	00E03674	00E03675	00E03748	00E03749
		Collection Date	10/7/00	10/7/00	10/11/00	10/11/00
		Matrix	W	W	W	W
Analyte	**Method**	**Units**				
1,1,1-Trichloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -
1,2-Dichloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/L	- -	- -	- -	- -
2-Butanone	SW8260B	µg/L	- -	- -	- -	- -
2-Hexanone	SW8260B	µg/L	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/L	- -	- -	- -	- -
Acetone	SW8260B	µg/L	- -	- -	- -	- -
Benzene	SW8260B	µg/L	ND [5]	ND [5]	- -	- -
Bromodichloromethane	SW8260B	µg/L	- -	- -	- -	- -
Bromoform	SW8260B	µg/L	- -	- -	- -	- -
Bromomethane	SW8260B	µg/L	- -	- -	- -	- -
Carbon disulfide	SW8260B	µg/L	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/L	- -	- -	- -	- -
Chlorobenzene	SW8260B	µg/L	- -	- -	- -	- -
Chloroethane	SW8260B	µg/L	- -	- -	- -	- -
Chloroform	SW8260B	µg/L	- -	- -	- -	- -
Chloromethane	SW8260B	µg/L	- -	- -	- -	- -
Dibromochloromethane	SW8260B	µg/L	- -	- -	- -	- -
Ethylbenzene	SW8260B	µg/L	ND [5]	ND [5]	- -	- -
Methylene chloride	SW8260B	µg/L	- -	- -	- -	- -
Styrene	SW8260B	µg/L	- -	- -	- -	- -
etrachloroethene	SW8260B	µg/L	- -	- -	- -	- -
Toluene	SW8260B	µg/L	ND [5]	ND [5]	- -	- -
Trichloroethene	SW8260B	µg/L	- -	- -	- -	- -
Vinyl chloride	SW8260B	µg/L	- -	- -	- -	- -
Xylenes	SW8260B	µg/L	ND [5]	ND [5]	- -	- -
cis-1,2-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/L	- -	- -	- -	- -
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	- -	- -	- -	- -
o-Xylene	SW8260B	µg/L	- -	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/L	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505101	AM-A505501	AM-A505502	AM-A505901
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03750	00E03783	00E03784	00E03880
	Collection Date	10/11/00	10/13/00	10/13/00	10/15/00
	Matrix	W	W	W	W
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/L	ND [0.05]	0.19 [0.05]	- -	0.075 [0.05]
Acenaphthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Acenaphthylene	SW8270C SIM	µg/L	ND [0.05]	0.066 [0.05]	- -	ND [0.05]
Anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Benzo(a)anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Benzo(a)pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Benzo(b)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Benzo(k)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Chrysene	SW8270C SIM	µg/L	ND [0.05]	0.062 [0.05]	- -	ND [0.05]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Fluorene	SW8270C SIM	µg/L	ND [0.05]	0.079 [0.05]	- -	ND [0.05]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Naphthalene	SW8270C SIM	µg/L	ND [0.05]	0.19 [0.05]	- -	0.094 [0.05]
Phenanthrene	SW8270C SIM	µg/L	ND [0.05]	0.13 [0.05]	- -	ND [0.05]
Pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	- -	ND [0.05]
Gasoline Range Organics	AK101	µg/L	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/L	ND [100]	18500 [100]	- -	55.8 [100]
Residual Range Organics	AK103	µg/L	652 [100]	957 [100]	- -	- -
Arsenic	SW6010B	µg/L	- -	- -	- -	- -
Barium	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6010B	µg/L	- -	- -	- -	- -
Chromium	SW6010B	µg/L	- -	- -	- -	- -
Lead	SW6010B	µg/L	- -	- -	- -	- -
Selenium	SW6010B	µg/L	- -	- -	- -	- -
Silver	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6020A	µg/L	- -	- -	- -	- -
Chromium	SW6020A	µg/L	- -	- -	- -	- -
Silver	SW6020A	µg/L	- -	- -	- -	- -
Arsenic	SW7060A	µg/L	- -	- -	- -	- -
Lead	SW7421	µg/L	- -	- -	- -	- -
Mercury	SW7470A	µg/L	- -	- -	- -	- -
Selenium	SW7740	µg/L	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	ND [0.1]	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	ND [0.2]	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	ND [0.1]	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	ND [0.1]	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	ND [0.1]	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	ND [0.1]	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	ND [0.1]	- -	- -	- -

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A505101		AM-A505501		AM-A505502		AM-A505901	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E03750		00E03783		00E03784		00E03880	
		Collection Date	10/11/00		10/13/00		10/13/00		10/15/00	
		Matrix	W		W		W		W	
Analyte	**Method**	**Units**								
1,1,1-Trichloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
1,1,2-Trichloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
1,1-Dichloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
1,1-Dichloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
1,2-Dichloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
1,2-Dichloropropane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
2-Butanone	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
2-Hexanone	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
4-Methyl-2-pentanone	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Acetone	SW8260B	µg/L	-	-	4.5	[5]	6	[5]	-	-
Benzene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Bromodichloromethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Bromoform	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Bromomethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Carbon disulfide	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Carbon tetrachloride	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Chlorobenzene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Chloroethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Chloroform	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Chloromethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Dibromochloromethane	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Ethylbenzene	SW8260B	µg/L	-	-	0.99	[5]	ND	[5]	-	-
Methylene chloride	SW8260B	µg/L	-	-	ND	[5]	1.1	[5]	-	-
Styrene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
etrachloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
oluene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Trichloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Vinyl chloride	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
Xylenes	SW8260B	µg/L	-	-	5.7	[5]	ND	[5]	-	-
cis-1,2-Dichloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
cis-1,3-Dichloropropene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	-	-	-	-	-	-	-	-
o-Xylene	SW8260B	µg/L	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-
trans-1,3-Dichloropropene	SW8260B	µg/L	-	-	ND	[5]	ND	[5]	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A506001	AM-A506002	AM-A506407	AM-A506408
		Laboratory	DCHM	DCHM	DCHM	DCHM
		Lab Sample ID	00E03883	00E03884	00E04050	00E04051
		Collection Date	10/15/00	10/15/00	10/18/00	10/18/00
		Matrix	W	W	W	W
Analyte	**Method**	**Units**				
2-Methylnaphthalene	SW8270C SIM	µg/L	53 [0.15]	- -	1700 [6.3]	- -
Acenaphthene	SW8270C SIM	µg/L	1.2 [0.15]	- -	220 [6.3]	- -
Acenaphthylene	SW8270C SIM	µg/L	0.6 [0.15]	- -	76 [6.3]	- -
Anthracene	SW8270C SIM	µg/L	0.18 [0.15]	- -	45 [6.3]	- -
Benzo(a)anthracene	SW8270C SIM	µg/L	ND [0.15]	- -	9.3 [6.3]	- -
Benzo(a)pyrene	SW8270C SIM	µg/L	ND [0.15]	- -	ND [6.3]	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/L	ND [0.15]	- -	ND [6.3]	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	ND [0.15]	- -	ND [6.3]	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/L	ND [0.15]	- -	ND [6.3]	- -
Chrysene	SW8270C SIM	µg/L	ND [0.15]	- -	41 [6.3]	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	ND [0.15]	- -	ND [6.3]	- -
Fluoranthene	SW8270C SIM	µg/L	ND [0.15]	- -	34 [6.3]	- -
Fluorene	SW8270C SIM	µg/L	4.2 [0.15]	- -	390 [6.3]	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	ND [0.15]	- -	ND [6.3]	- -
Naphthalene	SW8270C SIM	µg/L	7.1 [0.15]	- -	120 [6.3]	- -
Phenanthrene	SW8270C SIM	µg/L	4.4 [0.15]	- -	830 [6.3]	- -
Pyrene	SW8270C SIM	µg/L	ND [0.15]	- -	34 [6.3]	- -
Gasoline Range Organics	AK101	µg/L	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/L	4840 [100]	- -	- -	- -
Residual Range Organics	AK103	µg/L	225 [100]	- -	- -	- -
Arsenic	SW6010B	µg/L	- -	- -	- -	- -
Barium	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6010B	µg/L	- -	- -	- -	- -
Chromium	SW6010B	µg/L	- -	- -	- -	- -
Lead	SW6010B	µg/L	- -	- -	- -	- -
Selenium	SW6010B	µg/L	- -	- -	- -	- -
Silver	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6020A	µg/L	- -	- -	- -	- -
Chromium	SW6020A	µg/L	- -	- -	- -	- -
Silver	SW6020A	µg/L	- -	- -	- -	- -
Arsenic	SW7060A	µg/L	- -	- -	- -	- -
Lead	SW7421	µg/L	- -	- -	- -	- -
Mercury	SW7470A	µg/L	- -	- -	- -	- -
Selenium	SW7740	µg/L	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506001	AM-A506002	AM-A506407	AM-A506408
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03883	00E03884	00E04050	00E04051
	Collection Date	10/15/00	10/15/00	10/18/00	10/18/00
	Matrix	W	W	W	W
Analyte	**Method**	**Units**			
1,1,1-Trichloroethane	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
1,1,2-Trichloroethane	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
1,1-Dichloroethane	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
1,1-Dichloroethene	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
1,2-Dichloroethane	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
1,2-Dichloropropane	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
2-Butanone	SW8260B	µg/L	ND [5]	ND [5]	ND [50]	ND [5]
2-Hexanone	SW8260B	µg/L	ND [5]	ND [5]	ND [50]	ND [5]
4-Methyl-2-pentanone	SW8260B	µg/L	ND [5]	ND [5]	ND [50]	ND [5]
Acetone	SW8260B	µg/L	ND [5]	7.1 [5]	ND [50]	7 [5]
Benzene	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Bromodichloromethane	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Bromoform	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Bromomethane	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Carbon disulfide	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Carbon tetrachloride	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Chlorobenzene	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Chloroethane	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Chloroform	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Chloromethane	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Dibromochloromethane	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Ethylbenzene	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Methylene chloride	SW8260B	µg/L	ND [5]	0.93 [5]	ND [10]	1.2 [5]
Styrene	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
etrachloroethene	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
oluene	SW8260B	µg/L	0.22 [5]	ND [5]	ND [10]	ND [5]
Trichloroethene	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Vinyl chloride	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
Xylenes	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
cis-1,2-Dichloroethene	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
cis-1,3-Dichloropropene	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	- -	- -	- -	- -
o-Xylene	SW8260B	µg/L	- -	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]
trans-1,3-Dichloropropene	SW8260B	µg/L	ND [5]	ND [5]	ND [10]	ND [5]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A506612		AM-A506613		AM-A506701		AM-A506702	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04071		00E04072		00E04173		00E04174	
		Collection Date	10/20/00		10/20/00		10/23/00		10/23/00	
		Matrix	W		W		W		W	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/L	0.082	[0.05]	-	-	14	[0.05]	-	-
Acenaphthene	SW8270C SIM	µg/L	ND	[0.05]	-	-	1.8	[0.05]	-	-
Acenaphthylene	SW8270C SIM	µg/L	ND	[0.05]	-	-	0.57	[0.05]	-	-
Anthracene	SW8270C SIM	µg/L	ND	[0.05]	-	-	1.6	[0.05]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/L	ND	[0.05]	-	-	1.5	[0.05]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/L	ND	[0.05]	-	-	0.67	[0.05]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/L	ND	[0.05]	-	-	0.51	[0.05]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	ND	[0.05]	-	-	0.39	[0.05]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/L	ND	[0.05]	-	-	0.087	[0.05]	-	-
Chrysene	SW8270C SIM	µg/L	ND	[0.05]	-	-	2.6	[0.05]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	ND	[0.05]	-	-	0.084	[0.05]	-	-
Fluoranthene	SW8270C SIM	µg/L	ND	[0.05]	-	-	1.3	[0.05]	-	-
Fluorene	SW8270C SIM	µg/L	ND	[0.05]	-	-	2.2	[0.05]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	ND	[0.05]	-	-	0.19	[0.05]	-	-
Naphthalene	SW8270C SIM	µg/L	0.056	[0.05]	-	-	1.7	[0.05]	-	-
Phenanthrene	SW8270C SIM	µg/L	ND	[0.05]	-	-	8.6	[0.05]	-	-
Pyrene	SW8270C SIM	µg/L	0.091	[0.05]	-	-	5.7	[0.05]	-	-
Gasoline Range Organics	AK101	µg/L	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/L	4510	[100]	-	-	3280	[100]	-	-
Residual Range Organics	AK103	µg/L	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/L	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/L	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/L	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/L	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/L	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/L	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/L	-	-	-	-	-	-	-	-
Cadmium	SW6020A	µg/L	-	-	-	-	-	-	-	-
Chromium	SW6020A	µg/L	-	-	-	-	-	-	-	-
Silver	SW6020A	µg/L	-	-	-	-	-	-	-	-
Arsenic	SW7060A	µg/L	-	-	-	-	-	-	-	-
Lead	SW7421	µg/L	-	-	-	-	-	-	-	-
Mercury	SW7470A	µg/L	-	-	-	-	-	-	-	-
Selenium	SW7740	µg/L	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A506612		AM-A506613		AM-A506701		AM-A506702	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04071		00E04072		00E04173		00E04174	
		Collection Date	10/20/00		10/20/00		10/23/00		10/23/00	
		Matrix	W		W		W		W	
Analyte	**Method**	**Units**								
1,1,1-Trichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/L	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/L	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/L	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/L	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/L	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/L	ND	[1]	ND	[5]	ND	[1]	ND	[1]
Bromodichloromethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/L	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/L	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/L	ND	[1]	ND	[5]	ND	[1]	ND	[1]
Methylene chloride	SW8260B	µg/L	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/L	-	-	-	-	-	-	-	-
etrachloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
oluene	SW8260B	µg/L	ND	[1]	ND	[5]	ND	[1]	ND	[1]
Trichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/L	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/L	ND	[1]	ND	[5]	ND	[1]	ND	[1]
cis-1,2-Dichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/L	-	-	-	-	-	-	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	-	-	-	-	-	-	-	-
o-Xylene	SW8260B	µg/L	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/L	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A507701	AM-A507801	AM-A507802	AM-A507803
		Laboratory	DCHM	DCHM	DCHM	DCHM
		Lab Sample ID	00E04282	00E04288	00E04289	00E04290
		Collection Date	10/27/00	10/28/00	10/28/00	10/28/00
		Matrix	W	W	W	W
Analyte	**Method**	**Units**				
2-Methylnaphthalene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Acenaphthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Acenaphthylene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Benzo(a)anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Benzo(a)pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Chrysene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Fluoranthene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Fluorene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Naphthalene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Phenanthrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Pyrene	SW8270C SIM	µg/L	ND [0.05]	ND [0.05]	ND [0.05]	- -
Gasoline Range Organics	AK101	µg/L	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/L	ND [100]	376 [100]	1190 [100]	- -
Residual Range Organics	AK103	µg/L	258 [100]	- -	- -	- -
Arsenic	SW6010B	µg/L	- -	- -	- -	- -
Barium	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6010B	µg/L	- -	- -	- -	- -
Chromium	SW6010B	µg/L	- -	- -	- -	- -
Lead	SW6010B	µg/L	- -	- -	- -	- -
Selenium	SW6010B	µg/L	- -	- -	- -	- -
Silver	SW6010B	µg/L	- -	- -	- -	- -
Cadmium	SW6020A	µg/L	- -	- -	- -	- -
Chromium	SW6020A	µg/L	- -	- -	- -	- -
Silver	SW6020A	µg/L	- -	- -	- -	- -
Arsenic	SW7060A	µg/L	- -	- -	- -	- -
Lead	SW7421	µg/L	- -	- -	- -	- -
Mercury	SW7470A	µg/L	- -	- -	- -	- -
Selenium	SW7740	µg/L	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A507701		AM-A507801		AM-A507802		AM-A507803	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04282		00E04288		00E04289		00E04290	
		Collection Date	10/27/00		10/28/00		10/28/00		10/28/00	
		Matrix	W		W		W		W	
Analyte	**Method**	**Units**								
1,1,1-Trichloroethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
2-Butanone	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Acetone	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Benzene	SW8260B	µg/L	ND	[5]	-	-	ND	[5]	ND	[5]
Bromodichloromethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Bromoform	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Bromomethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Chloroethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Chloroform	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Chloromethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/L	ND	[5]	-	-	ND	[5]	ND	[5]
Methylene chloride	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Styrene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
etrachloroethene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
oluene	SW8260B	µg/L	ND	[5]	-	-	ND	[5]	ND	[5]
Trichloroethene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
Xylenes	SW8260B	µg/L	ND	[5]	-	-	ND	[5]	ND	[5]
cis-1,2-Dichloroethene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	-	-	-	-	-	-	-	-
o-Xylene	SW8260B	µg/L	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/L	ND	[5]	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A507901		AM-A507902		AM-A508001		AM-A508002	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04291		00E04292		00E04295		00E04296	
		Collection Date	10/28/00		10/28/00		10/28/00		10/28/00	
		Matrix	W		W		W		W	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Acenaphthene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Acenaphthylene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Anthracene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Chrysene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Fluoranthene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Fluorene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Naphthalene	SW8270C SIM	µg/L	ND	[0.05]	-	-	0.17	[0.05]	-	-
Phenanthrene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Pyrene	SW8270C SIM	µg/L	ND	[0.05]	-	-	ND	[0.05]	-	-
Gasoline Range Organics	AK101	µg/L	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/L	58.9	[100]	-	-	275	[100]	-	-
Residual Range Organics	AK103	µg/L	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/L	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/L	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/L	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/L	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/L	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/L	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/L	-	-	-	-	-	-	-	-
Cadmium	SW6020A	µg/L	-	-	-	-	-	-	-	-
Chromium	SW6020A	µg/L	-	-	-	-	-	-	-	-
Silver	SW6020A	µg/L	-	-	-	-	-	-	-	-
Arsenic	SW7060A	µg/L	-	-	-	-	-	-	-	-
Lead	SW7421	µg/L	-	-	-	-	-	-	-	-
Mercury	SW7470A	µg/L	-	-	-	-	-	-	-	-
Selenium	SW7740	µg/L	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	-	-	-	-	-	-	-	-

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507901	AM-A507902	AM-A508001	AM-A508002
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04291	00E04292	00E04295	00E04296
	Collection Date	10/28/00	10/28/00	10/28/00	10/28/00
	Matrix	W	W	W	W
Analyte	**Method**	**Units**			
1,1,1-Trichloroethane	SW8260B	µg/L	- -	ND [5]	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	- -	ND [5]	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/L	- -	ND [5]	- -	- -
1,1-Dichloroethane	SW8260B	µg/L	- -	ND [5]	- -	- -
1,1-Dichloroethene	SW8260B	µg/L	- -	ND [5]	- -	- -
1,2-Dichloroethane	SW8260B	µg/L	- -	ND [5]	- -	- -
1,2-Dichloropropane	SW8260B	µg/L	- -	ND [5]	- -	- -
2-Butanone	SW8260B	µg/L	- -	ND [5]	- -	- -
2-Hexanone	SW8260B	µg/L	- -	ND [5]	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/L	- -	ND [5]	- -	- -
Acetone	SW8260B	µg/L	- -	6.3 [5]	- -	- -
Benzene	SW8260B	µg/L	ND [5]	ND [5]	ND [5]	ND [5]
Bromodichloromethane	SW8260B	µg/L	- -	ND [5]	- -	- -
Bromoform	SW8260B	µg/L	- -	ND [5]	- -	- -
Bromomethane	SW8260B	µg/L	- -	ND [5]	- -	- -
Carbon disulfide	SW8260B	µg/L	- -	ND [5]	- -	- -
Carbon tetrachloride	SW8260B	µg/L	- -	ND [5]	- -	- -
Chlorobenzene	SW8260B	µg/L	- -	ND [5]	- -	- -
Chloroethane	SW8260B	µg/L	- -	ND [5]	- -	- -
Chloroform	SW8260B	µg/L	- -	ND [5]	- -	- -
Chloromethane	SW8260B	µg/L	- -	ND [5]	- -	- -
Dibromochloromethane	SW8260B	µg/L	- -	ND [5]	- -	- -
Ethylbenzene	SW8260B	µg/L	ND [5]	ND [5]	ND [5]	ND [5]
Methylene chloride	SW8260B	µg/L	- -	0.88 [5]	- -	- -
Styrene	SW8260B	µg/L	- -	ND [5]	- -	- -
etrachloroethene	SW8260B	µg/L	- -	ND [5]	- -	- -
oluene	SW8260B	µg/L	ND [5]	ND [5]	0.78 [5]	ND [5]
Trichloroethene	SW8260B	µg/L	- -	ND [5]	- -	- -
Vinyl chloride	SW8260B	µg/L	- -	ND [5]	- -	- -
Xylenes	SW8260B	µg/L	ND [5]	ND [5]	ND [5]	ND [5]
cis-1,2-Dichloroethene	SW8260B	µg/L	- -	ND [5]	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/L	- -	ND [5]	- -	- -
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	- -	- -	- -	- -
o-Xylene	SW8260B	µg/L	- -	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/L	- -	ND [5]	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/L	- -	ND [5]	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508003		AM-A509201		AM-A509202		AM-A509203	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04297		00E04441		00E04442		00E04443	
	Collection Date	10/28/00		11/6/00		11/6/00		11/6/00	
	Matrix	W		W		W		W	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Acenaphthene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Acenaphthylene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Anthracene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Benzo(a)anthracene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Benzo(a)pyrene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Chrysene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Fluoranthene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Fluorene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Naphthalene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Phenanthrene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Pyrene	SW8270C SIM	µg/L	ND [0.05]	-	-	ND [0.05]		-	-
Gasoline Range Organics	AK101	µg/L	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/L	179 [100]		82.7 [100]		-	-	-
Residual Range Organics	AK103	µg/L	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/L	-	-	-	-	-	-	-
Barium	SW6010B	µg/L	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/L	-	-	-	-	-	-	-
Chromium	SW6010B	µg/L	-	-	-	-	-	-	-
Lead	SW6010B	µg/L	-	-	-	-	-	-	-
Selenium	SW6010B	µg/L	-	-	-	-	-	-	-
Silver	SW6010B	µg/L	-	-	-	-	-	-	-
Cadmium	SW6020A	µg/L	-	-	-	-	-	-	-
Chromium	SW6020A	µg/L	-	-	-	-	-	-	-
Silver	SW6020A	µg/L	-	-	-	-	-	-	-
Arsenic	SW7060A	µg/L	-	-	-	-	-	-	-
Lead	SW7421	µg/L	-	-	-	-	-	-	-
Mercury	SW7470A	µg/L	-	-	-	-	-	-	-
Selenium	SW7740	µg/L	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/L	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	-	-	-	-	-	-	-

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508003		AM-A509201		AM-A509202		AM-A509203	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04297		00E04441		00E04442		00E04443	
	Collection Date	10/28/00		11/6/00		11/6/00		11/6/00	
	Matrix	W		W		W		W	
Analyte	**Method**	**Units**							
1,1,1-Trichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/L	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/L	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/L	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/L	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/L	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/L	ND	[5]	-	-	-	-	ND	[5]
Bromodichloromethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/L	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/L	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/L	ND	[5]	-	-	-	-	ND	[5]
Methylene chloride	SW8260B	µg/L	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/L	-	-	-	-	-	-	-	-
etrachloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
oluene	SW8260B	µg/L	ND	[5]	-	-	-	-	ND	[5]
Trichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/L	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/L	ND	[5]	-	-	-	-	ND	[5]
cis-1,2-Dichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/L	-	-	-	-	-	-	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	-	-	-	-	-	-	-	-
o-Xylene	SW8260B	µg/L	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/L	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A514101		AM-A514102		AM-A514103		AM-A514104	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04669		00E04670		00E04671		00E04672	
	Collection Date	11/11/00		11/11/00		11/11/00		11/11/00	
	Matrix	W		W		W		W	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Acenaphthene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Acenaphthylene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Anthracene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Chrysene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Fluoranthene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Fluorene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Naphthalene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Phenanthrene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Pyrene	SW8270C SIM	µg/L	-	-	-	-	ND [0.05]	-	-
Gasoline Range Organics	AK101	µg/L	42.7 [100]		-	-	-	-	26.9 [100]
Diesel Range Organics	AK102	µg/L	-	-	58.3 [100]		-	-	-	-
Residual Range Organics	AK103	µg/L	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/L	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/L	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/L	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/L	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/L	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/L	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/L	-	-	-	-	-	-	-	-
Cadmium	SW6020A	µg/L	-	-	-	-	-	-	-	-
Chromium	SW6020A	µg/L	-	-	-	-	-	-	-	-
Silver	SW6020A	µg/L	-	-	-	-	-	-	-	-
Arsenic	SW7060A	µg/L	-	-	-	-	-	-	-	-
Lead	SW7421	µg/L	-	-	-	-	-	-	-	-
Mercury	SW7470A	µg/L	-	-	-	-	-	-	-	-
Selenium	SW7740	µg/L	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A514101		AM-A514102		AM-A514103		AM-A514104	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04669		00E04670		00E04671		00E04672	
		Collection Date	11/11/00		11/11/00		11/11/00		11/11/00	
		Matrix	W		W		W		W	
Analyte	**Method**	**Units**								
1,1,1-Trichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/L	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/L	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/L	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/L	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/L	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/L	ND	[5]	-	-	-	-	ND	[5]
Bromodichloromethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/L	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/L	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/L	ND	[5]	-	-	-	-	ND	[5]
Methylene chloride	SW8260B	µg/L	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/L	-	-	-	-	-	-	-	-
etrachloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
oluene	SW8260B	µg/L	ND	[5]	-	-	-	-	ND	[5]
Trichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/L	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/L	ND	[5]	-	-	-	-	ND	[5]
cis-1,2-Dichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/L	-	-	-	-	-	-	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	-	-	-	-	-	-	-	-
o-Xylene	SW8260B	µg/L	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/L	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A514105		AM-A514106		AM-A514107		AM-A516101	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04673		00E04674		00E04675		00E04663	
	Collection Date	11/11/00		11/11/00		11/11/00		11/14/00	
	Matrix	W		W		W		W	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		0.079	[0.05]
Acenaphthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Acenaphthylene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Anthracene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(a)anthracene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(a)pyrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(b)fluoranthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Benzo(k)fluoranthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Chrysene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Fluoranthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Fluorene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Naphthalene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		0.052	[0.05]
Phenanthrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Pyrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		ND	[0.05]
Gasoline Range Organics	AK101	µg/L	- -	-	-	38.8	[100]	-	-
Diesel Range Organics	AK102	µg/L	47.1 [100]	-	-	-	-	-	-
Residual Range Organics	AK103	µg/L	- -	-	-	-	-	-	-
Arsenic	SW6010B	µg/L	- -	-	-	-	-	-	-
Barium	SW6010B	µg/L	- -	-	-	-	-	-	-
Cadmium	SW6010B	µg/L	- -	-	-	-	-	-	-
Chromium	SW6010B	µg/L	- -	-	-	-	-	-	-
Lead	SW6010B	µg/L	- -	-	-	-	-	-	-
Selenium	SW6010B	µg/L	- -	-	-	-	-	-	-
Silver	SW6010B	µg/L	- -	-	-	-	-	-	-
Cadmium	SW6020A	µg/L	- -	-	-	-	-	-	-
Chromium	SW6020A	µg/L	- -	-	-	-	-	-	-
Silver	SW6020A	µg/L	- -	-	-	-	-	-	-
Arsenic	SW7060A	µg/L	- -	-	-	-	-	-	-
Lead	SW7421	µg/L	- -	-	-	-	-	-	-
Mercury	SW7470A	µg/L	- -	-	-	-	-	-	-
Selenium	SW7740	µg/L	- -	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	-	-	-	-	-	-

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A514105		AM-A514106		AM-A514107		AM-A516101	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04673		00E04674		00E04675		00E04663	
		Collection Date	11/11/00		11/11/00		11/11/00		11/14/00	
		Matrix	W		W		W		W	
Analyte	**Method**	**Units**								
1,1,1-Trichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/L	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/L	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/L	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/L	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/L	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/L	-	-	-	-	ND	[5]	-	-
Bromodichloromethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/L	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/L	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/L	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/L	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/L	-	-	-	-	ND	[5]	-	-
Methylene chloride	SW8260B	µg/L	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/L	-	-	-	-	-	-	-	-
etrachloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
oluene	SW8260B	µg/L	-	-	-	-	ND	[5]	-	-
Trichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/L	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/L	-	-	-	-	ND	[5]	-	-
cis-1,2-Dichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/L	-	-	-	-	-	-	-	-
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	-	-	-	-	-	-	-	-
o-Xylene	SW8260B	µg/L	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/L	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/L	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A516102	AM-A516103	AM-A516104	AM-A516105	AM-A516106
	Laboratory	DCHM	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04664	00E04665	00E04666	00E04667	00E04668
	Collection Date	11/14/00	11/15/00	11/15/00	11/15/00	11/15/00
	Matrix	W	W	W	W	W
Analyte	**Method**	**Units**				
2-Methylnaphthalene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Acenaphthene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Acenaphthylene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Anthracene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Chrysene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Fluoranthene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Fluorene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Naphthalene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Phenanthrene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Pyrene	SW8270C SIM	µg/L	- -	- -	ND [0.05]	- -	- -
Gasoline Range Organics	AK101	µg/L	- -	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/L	88.6 [100]	187 [100]	- -	- -	- -
Residual Range Organics	AK103	µg/L	498 [100]	702 [100]	- -	- -	- -
Arsenic	SW6010B	µg/L	- -	- -	- -	- -	- -
Barium	SW6010B	µg/L	- -	- -	- -	- -	-
Cadmium	SW6010B	µg/L	- -	- -	- -	- -	-
Chromium	SW6010B	µg/L	- -	- -	- -	- -	- -
Lead	SW6010B	µg/L	- -	- -	- -	- -	- -
Selenium	SW6010B	µg/L	- -	- -	- -	- -	- -
Silver	SW6010B	µg/L	- -	- -	- -	- -	- -
Cadmium	SW6020A	µg/L	- -	- -	- -	- -	- -
Chromium	SW6020A	µg/L	- -	- -	- -	- -	- -
Silver	SW6020A	µg/L	- -	- -	- -	- -	- -
Arsenic	SW7060A	µg/L	- -	- -	- -	- -	- -
Lead	SW7421	µg/L	- -	- -	- -	- -	- -
Mercury	SW7470A	µg/L	- -	- -	- -	- -	- -
Selenium	SW7740	µg/L	- -	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A516102	AM-A516103	AM-A516104	AM-A516105	AM-A516106
		Laboratory	DCHM	DCHM	DCHM	DCHM	DCHM
		Lab Sample ID	00E04664	00E04665	00E04666	00E04667	00E04668
		Collection Date	11/14/00	11/15/00	11/15/00	11/15/00	11/15/00
		Matrix	W	W	W	W	W
Analyte	**Method**	**Units**					
1,1,1-Trichloroethane	SW8260B	µg/L	- -	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	- -	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/L	- -	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/L	- -	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -	- -
1,2-Dichloroethane	SW8260B	µg/L	- -	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/L	- -	- -	- -	- -	- -
2-Butanone	SW8260B	µg/L	- -	- -	- -	- -	- -
2-Hexanone	SW8260B	µg/L	- -	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/L	- -	- -	- -	- -	- -
Acetone	SW8260B	µg/L	- -	- -	- -	- -	- -
Benzene	SW8260B	µg/L	- -	- -	- -	ND [5]	ND [5]
Bromodichloromethane	SW8260B	µg/L	- -	- -	- -	- -	- -
Bromoform	SW8260B	µg/L	- -	- -	- -	- -	- -
Bromomethane	SW8260B	µg/L	- -	- -	- -	- -	- -
Carbon disulfide	SW8260B	µg/L	- -	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/L	- -	- -	- -	- -	- -
Chlorobenzene	SW8260B	µg/L	- -	- -	- -	- -	- -
Chloroethane	SW8260B	µg/L	- -	- -	- -	- -	- -
Chloroform	SW8260B	µg/L	- -	- -	- -	- -	- -
Chloromethane	SW8260B	µg/L	- -	- -	- -	- -	- -
Dibromochloromethane	SW8260B	µg/L	- -	- -	- -	- -	- -
Ethylbenzene	SW8260B	µg/L	- -	- -	- -	ND [5]	ND [5]
Methylene chloride	SW8260B	µg/L	- -	- -	- -	- -	- -
Styrene	SW8260B	µg/L	- -	- -	- -	- -	- -
Tetrachloroethene	SW8260B	µg/L	- -	- -	- -	- -	- -
Toluene	SW8260B	µg/L	- -	- -	- -	3.2 [5]	ND [5]
Trichloroethene	SW8260B	µg/L	- -	- -	- -	- -	- -
Vinyl chloride	SW8260B	µg/L	- -	- -	- -	- -	- -
Xylenes	SW8260B	µg/L	- -	- -	- -	ND [5]	ND [5]
cis-1,2-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/L	- -	- -	- -	- -	- -
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	- -	- -	- -	- -	- -
o-Xylene	SW8260B	µg/L	- -	- -	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/L	- -	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A519104		AM-A519105		AM-A519106		AM-A519107	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04676		00E04677		00E04678		00E04679	
	Collection Date	11/17/00		11/17/00		11/17/00		11/17/00	
	Matrix	W		W		W		W	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/L	- -	0.058	[0.05]	- -		- -	
Acenaphthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Acenaphthylene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Anthracene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Benzo(a)anthracene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Benzo(a)pyrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Benzo(b)fluoranthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Benzo(k)fluoranthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Chrysene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Fluoranthene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Fluorene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Naphthalene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Phenanthrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Pyrene	SW8270C SIM	µg/L	- -	ND	[0.05]	- -		- -	
Gasoline Range Organics	AK101	µg/L	- -	-	-	- -		- -	
Diesel Range Organics	AK102	µg/L	ND [100]	-	-	- -		ND [100]	
Residual Range Organics	AK103	µg/L	- -	-	-	- -		- -	
Arsenic	SW6010B	µg/L	- -	-	-	- -		- -	
Barium	SW6010B	µg/L	- -	-	-	- -		- -	
Cadmium	SW6010B	µg/L	- -	-	-	- -		- -	
Chromium	SW6010B	µg/L	- -	-	-	- -		- -	
Lead	SW6010B	µg/L	- -	-	-	- -		- -	
Selenium	SW6010B	µg/L	- -	-	-	- -		- -	
Silver	SW6010B	µg/L	- -	-	-	- -		- -	
Cadmium	SW6020A	µg/L	- -	-	-	- -		- -	
Chromium	SW6020A	µg/L	- -	-	-	- -		- -	
Silver	SW6020A	µg/L	- -	-	-	- -		- -	
Arsenic	SW7060A	µg/L	- -	-	-	- -		- -	
Lead	SW7421	µg/L	- -	-	-	- -		- -	
Mercury	SW7470A	µg/L	- -	-	-	- -		- -	
Selenium	SW7740	µg/L	- -	-	-	- -		- -	
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	-	-	- -		- -	
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	-	-	- -		- -	
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	-	-	- -		- -	
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	-	-	- -		- -	
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	-	-	- -		- -	
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	-	-	- -		- -	
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	-	-	- -		- -	

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A519104	AM-A519105	AM-A519106	AM-A519107
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04676	00E04677	00E04678	00E04679
	Collection Date	11/17/00	11/17/00	11/17/00	11/17/00
	Matrix	W	W	W	W
Analyte	**Method**	**Units**			
1,1,1-Trichloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -
1,2-Dichloroethane	SW8260B	µg/L	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/L	- -	- -	- -	- -
2-Butanone	SW8260B	µg/L	- -	- -	- -	- -
2-Hexanone	SW8260B	µg/L	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/L	- -	- -	- -	- -
Acetone	SW8260B	µg/L	- -	- -	- -	- -
Benzene	SW8260B	µg/L	- -	- -	ND [5]	- -
Bromodichloromethane	SW8260B	µg/L	- -	- -	- -	- -
Bromoform	SW8260B	µg/L	- -	- -	- -	- -
Bromomethane	SW8260B	µg/L	- -	- -	- -	- -
Carbon disulfide	SW8260B	µg/L	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/L	- -	- -	- -	- -
Chlorobenzene	SW8260B	µg/L	- -	- -	- -	- -
Chloroethane	SW8260B	µg/L	- -	- -	- -	- -
Chloroform	SW8260B	µg/L	- -	- -	- -	- -
Chloromethane	SW8260B	µg/L	- -	- -	- -	- -
Dibromochloromethane	SW8260B	µg/L	- -	- -	- -	- -
Ethylbenzene	SW8260B	µg/L	- -	- -	ND [5]	- -
Methylene chloride	SW8260B	µg/L	- -	- -	- -	- -
Styrene	SW8260B	µg/L	- -	- -	- -	- -
etrachloroethene	SW8260B	µg/L	- -	- -	- -	- -
oluene	SW8260B	µg/L	- -	- -	ND [5]	- -
Trichloroethene	SW8260B	µg/L	- -	- -	- -	- -
Vinyl chloride	SW8260B	µg/L	- -	- -	- -	- -
Xylenes	SW8260B	µg/L	- -	- -	ND [5]	- -
cis-1,2-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/L	- -	- -	- -	- -
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	- -	- -	- -	- -
o-Xylene	SW8260B	µg/L	- -	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/L	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A519108	AM-A519109	AM-A520110	AM-A521101	AM-A521102
		Laboratory	DCHM	DCHM	DCHM	DCHM	DCHM
		Lab Sample ID	00E04680	00E04681	00E04682	00E04721	00E04722
		Collection Date	11/17/00	11/17/00	11/20/00	11/16/00	11/16/00
		Matrix	W	W	W	W	W
Analyte	**Method**	**Units**					
2-Methylnaphthalene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Acenaphthene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Acenaphthylene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Anthracene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Benzo(a)anthracene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Benzo(a)pyrene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Chrysene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Fluoranthene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Fluorene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Naphthalene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Phenanthrene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Pyrene	SW8270C SIM	µg/L	ND [0.05]	- -	- -	ND [0.05]	- -
Gasoline Range Organics	AK101	µg/L	- -	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/L	- -	- -	- -	- -	ND [100]
Residual Range Organics	AK103	µg/L	- -	- -	- -	- -	466 [100]
Arsenic	SW6010B	µg/L	- -	- -	- -	- -	- -
Barium	SW6010B	µg/L	- -	- -	- -	- -	-
Cadmium	SW6010B	µg/L	- -	- -	- -	- -	-
Chromium	SW6010B	µg/L	- -	- -	- -	- -	-
Lead	SW6010B	µg/L	- -	- -	- -	- -	- -
Selenium	SW6010B	µg/L	- -	- -	- -	- -	- -
Silver	SW6010B	µg/L	- -	- -	- -	- -	- -
Cadmium	SW6020A	µg/L	- -	- -	- -	- -	- -
Chromium	SW6020A	µg/L	- -	- -	- -	- -	- -
Silver	SW6020A	µg/L	- -	- -	- -	- -	- -
Arsenic	SW7060A	µg/L	- -	- -	- -	- -	- -
Lead	SW7421	µg/L	- -	- -	- -	- -	- -
Mercury	SW7470A	µg/L	- -	- -	- -	- -	- -
Selenium	SW7740	µg/L	- -	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/L	- -	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/L	- -	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/L	- -	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/L	- -	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/L	- -	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/L	- -	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/L	- -	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A519108	AM-A519109	AM-A520110	AM-A521101	AM-A521102
	Laboratory	DCHM	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04680	00E04681	00E04682	00E04721	00E04722
	Collection Date	11/17/00	11/17/00	11/20/00	11/16/00	11/16/00
	Matrix	W	W	W	W	W
Analyte	**Method**	**Units**				
1,1,1-Trichloroethane	SW8260B	µg/L	- -	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	- -	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/L	- -	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/L	- -	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -	- -
1,2-Dichloroethane	SW8260B	µg/L	- -	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/L	- -	- -	- -	- -	- -
2-Butanone	SW8260B	µg/L	- -	- -	- -	- -	- -
2-Hexanone	SW8260B	µg/L	- -	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/L	- -	- -	- -	- -	- -
Acetone	SW8260B	µg/L	- -	- -	- -	- -	- -
Benzene	SW8260B	µg/L	- -	ND [5]	ND [5]	- -	- -
Bromodichloromethane	SW8260B	µg/L	- -	- -	- -	- -	- -
Bromoform	SW8260B	µg/L	- -	- -	- -	- -	- -
Bromomethane	SW8260B	µg/L	- -	- -	- -	- -	- -
Carbon disulfide	SW8260B	µg/L	- -	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/L	- -	- -	- -	- -	- -
Chlorobenzene	SW8260B	µg/L	- -	- -	- -	- -	- -
Chloroethane	SW8260B	µg/L	- -	- -	- -	- -	- -
Chloroform	SW8260B	µg/L	- -	- -	- -	- -	- -
Chloromethane	SW8260B	µg/L	- -	- -	- -	- -	- -
Dibromochloromethane	SW8260B	µg/L	- -	- -	- -	- -	- -
Ethylbenzene	SW8260B	µg/L	- -	ND [5]	ND [5]	- -	- -
Methylene chloride	SW8260B	µg/L	- -	- -	- -	- -	- -
Styrene	SW8260B	µg/L	- -	- -	- -	- -	- -
etrachloroethene	SW8260B	µg/L	- -	- -	- -	- -	- -
oluene	SW8260B	µg/L	- -	ND [5]	ND [5]	- -	- -
Trichloroethene	SW8260B	µg/L	- -	- -	- -	- -	- -
Vinyl chloride	SW8260B	µg/L	- -	- -	- -	- -	- -
Xylenes	SW8260B	µg/L	- -	ND [5]	ND [5]	- -	- -
cis-1,2-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/L	- -	- -	- -	- -	- -
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	- -	- -	- -	- -	- -
o-Xylene	SW8260B	µg/L	- -	- -	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/L	- -	- -	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/L	- -	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A521103		AM-A521104		AM-A570001	
		Laboratory	DCHM		DCHM		DCHM	
		Lab Sample ID	00E04723		00E04724		00E04867	
		Collection Date	11/16/00		11/16/00		12/6/00	
		Matrix	W		W		W	
Analyte	**Method**	**Units**						
2-Methylnaphthalene	SW8270C SIM	µg/L	-	-	-	-	0.074	[0.05]
Acenaphthene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Acenaphthylene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Anthracene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Benzo(a)anthracene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Benzo(a)pyrene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Benzo(b)fluoranthene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Benzo(k)fluoranthene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Chrysene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Fluoranthene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Fluorene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Naphthalene	SW8270C SIM	µg/L	-	-	-	-	0.064	[0.05]
Phenanthrene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Pyrene	SW8270C SIM	µg/L	-	-	-	-	ND	[0.05]
Gasoline Range Organics	AK101	µg/L	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/L	-	-	-	-	223	[100]
Residual Range Organics	AK103	µg/L	-	-	-	-	-	-
Arsenic	SW6010B	µg/L	-	-	-	-	-	-
Barium	SW6010B	µg/L	-	-	-	-	-	-
Cadmium	SW6010B	µg/L	-	-	-	-	-	-
Chromium	SW6010B	µg/L	-	-	-	-	-	-
Lead	SW6010B	µg/L	-	-	-	-	-	-
Selenium	SW6010B	µg/L	-	-	-	-	-	-
Silver	SW6010B	µg/L	-	-	-	-	-	-
Cadmium	SW6020A	µg/L	-	-	-	-	-	-
Chromium	SW6020A	µg/L	-	-	-	-	-	-
Silver	SW6020A	µg/L	-	-	-	-	-	-
Arsenic	SW7060A	µg/L	-	-	-	-	-	-
Lead	SW7421	µg/L	-	-	-	-	-	-
Mercury	SW7470A	µg/L	-	-	-	-	-	-
Selenium	SW7740	µg/L	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/L	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/L	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/L	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/L	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/L	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/L	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/L	-	-	-	-	-	-

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A521103	AM-A521104	AM-A570001	
	Laboratory	DCHM	DCHM	DCHM	
	Lab Sample ID	00E04723	00E04724	00E04867	
	Collection Date	11/16/00	11/16/00	12/6/00	
	Matrix	W	W	W	
Analyte	**Method**	**Units**			
1,1,1-Trichloroethane	SW8260B	µg/L	ND [5]	ND [5]	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	ND [5]	ND [5]	- -
1,1,2-Trichloroethane	SW8260B	µg/L	ND [5]	ND [5]	- -
1,1-Dichloroethane	SW8260B	µg/L	ND [5]	ND [5]	- -
1,1-Dichloroethene	SW8260B	µg/L	ND [5]	ND [5]	- -
1,2-Dichloroethane	SW8260B	µg/L	ND [5]	ND [5]	- -
1,2-Dichloropropane	SW8260B	µg/L	ND [5]	ND [5]	- -
2-Butanone	SW8260B	µg/L	ND [5]	ND [5]	- -
2-Hexanone	SW8260B	µg/L	ND [5]	ND [5]	- -
4-Methyl-2-pentanone	SW8260B	µg/L	ND [5]	ND [5]	- -
Acetone	SW8260B	µg/L	- -	ND [5]	- -
Benzene	SW8260B	µg/L	ND [5]	ND [5]	- -
Bromodichloromethane	SW8260B	µg/L	ND [5]	ND [5]	- -
Bromoform	SW8260B	µg/L	ND [5]	ND [5]	- -
Bromomethane	SW8260B	µg/L	ND [5]	ND [5]	- -
Carbon disulfide	SW8260B	µg/L	ND [5]	ND [5]	- -
Carbon tetrachloride	SW8260B	µg/L	ND [5]	ND [5]	- -
Chlorobenzene	SW8260B	µg/L	ND [5]	ND [5]	- -
Chloroethane	SW8260B	µg/L	ND [5]	ND [5]	- -
Chloroform	SW8260B	µg/L	ND [5]	ND [5]	- -
Chloromethane	SW8260B	µg/L	ND [5]	ND [5]	- -
Dibromochloromethane	SW8260B	µg/L	ND [5]	ND [5]	- -
Ethylbenzene	SW8260B	µg/L	ND [5]	ND [5]	- -
Methylene chloride	SW8260B	µg/L	ND [5]	0.51 [5]	- -
Styrene	SW8260B	µg/L	ND [5]	ND [5]	- -
etrachloroethene	SW8260B	µg/L	ND [5]	ND [5]	- -
oluene	SW8260B	µg/L	ND [5]	ND [5]	- -
Trichloroethene	SW8260B	µg/L	ND [5]	ND [5]	- -
Vinyl chloride	SW8260B	µg/L	ND [5]	ND [5]	- -
Xylenes	SW8260B	µg/L	ND [5]	ND [5]	- -
cis-1,2-Dichloroethene	SW8260B	µg/L	ND [5]	ND [5]	- -
cis-1,3-Dichloropropene	SW8260B	µg/L	ND [5]	ND [5]	- -
m,p-Xylene (Sum of Isomers)	SW8260B	µg/L	- -	- -	- -
o-Xylene	SW8260B	µg/L	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/L	ND [5]	ND [5]	- -
trans-1,3-Dichloropropene	SW8260B	µg/L	ND [5]	ND [5]	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520616		AM-A520617		AM-A520618		AM-A520619	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04705		00E04706		00E04707		00E04708	
	Collection Date	11/15/00		11/15/00		11/15/00		11/15/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SIM	µg/kg	- -	14	[2.8]	- -		- -	
Acenaphthene	SIM	µg/kg	- -	ND	[2.8]	- -		- -	
Acenaphthylene	SIM	µg/kg	- -	ND	[2.8]	- -		- -	
Anthracene	SIM	µg/kg	- -	ND	[2.8]	- -		- -	
Benzo(a)anthracene	SIM	µg/kg	- -	7	[2.8]	- -		- -	
Benzo(a)pyrene	SIM	µg/kg	- -	ND	[2.8]	- -		- -	
Benzo(b)fluoranthene	SIM	µg/kg	- -	ND	[2.8]	- -		- -	
Benzo(g,h,i)perylene	SIM	µg/kg	- -	ND	[2.8]	- -		- -	
Benzo(k)fluoranthene	SIM	µg/kg	- -	ND	[2.8]	- -		- -	
Chrysene	SIM	µg/kg	- -	10	[2.8]	- -		- -	
Dibenzo(a,h)anthracene	SIM	µg/kg	- -	ND	[2.8]	- -		- -	
Fluoranthene	SIM	µg/kg	- -	ND	[2.8]	- -		- -	
Fluorene	SIM	µg/kg	- -	3.2	[2.8]	- -		- -	
Indeno(1,2,3-cd)pyrene	SIM	µg/kg	- -	ND	[2.8]	- -		- -	
Naphthalene	SIM	µg/kg	- -	8.4	[2.8]	- -		- -	
Phenanthrene	SIM	µg/kg	- -	8.2	[2.8]	- -		- -	
Pyrene	SIM	µg/kg	- -	ND	[2.8]	- -		- -	
Diesel Range Organics	AK102	µg/g	904	[6.84]	- -		- -	3690	[16.5]
Solids, %	D2216	%	- -		- -		- -	- -	
(TOC)	KAHNTOC	mg/kg	- -		- -	34000	[1800]	- -	
Arsenic	SW6010B	µg/g	- -		- -		- -	- -	
Cadmium	SW6010B	µg/g	- -		- -		- -	- -	
Lead	SW6010B	µg/g	- -		- -		- -	- -	
Selenium	SW6010B	µg/g	- -		- -		- -	- -	
Barium	SW6010B	µg/g	- -		- -		- -	- -	
Chromium	SW6010B	µg/g	- -		- -		- -	- -	
Silver	SW6010B	µg/g	- -		- -		- -	- -	
Mercury	SW7471A	µg/g	- -		- -		- -	- -	
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -		- -		- -	- -	
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -		- -		- -	- -	
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -		- -		- -	- -	
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -		- -		- -	- -	
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -		- -		- -	- -	
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -		- -		- -	- -	
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -		- -		- -	- -	

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520616		AM-A520617		AM-A520618		AM-A520619	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04705		00E04706		00E04707		00E04708	
	Collection Date	11/15/00		11/15/00		11/15/00		11/15/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520620	AM-A520622	AM-A520623	AM-A520624
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04709	00E04711	00E04712	00E04713
	Collection Date	11/15/00	11/17/00	11/17/00	11/17/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SIM	µg/kg	210 [3.6]	- -	- -	- -
Acenaphthene	SIM	µg/kg	19 [3.6]	- -	- -	- -
Acenaphthylene	SIM	µg/kg	8.3 [3.6]	- -	- -	- -
Anthracene	SIM	µg/kg	14 [3.6]	- -	- -	- -
Benzo(a)anthracene	SIM	µg/kg	11 [3.6]	- -	- -	- -
Benzo(a)pyrene	SIM	µg/kg	ND [3.6]	- -	- -	- -
Benzo(b)fluoranthene	SIM	µg/kg	ND [3.6]	- -	- -	- -
Benzo(g,h,i)perylene	SIM	µg/kg	ND [3.6]	- -	- -	- -
Benzo(k)fluoranthene	SIM	µg/kg	ND [3.6]	- -	- -	- -
Chrysene	SIM	µg/kg	11 [3.6]	- -	- -	- -
Dibenzo(a,h)anthracene	SIM	µg/kg	ND [3.6]	- -	- -	- -
Fluoranthene	SIM	µg/kg	9.2 [3.6]	- -	- -	- -
Fluorene	SIM	µg/kg	58 [3.6]	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SIM	µg/kg	ND [3.6]	- -	- -	- -
Naphthalene	SIM	µg/kg	61 [3.6]	- -	- -	- -
Phenanthrene	SIM	µg/kg	38 [3.6]	- -	- -	- -
Pyrene	SIM	µg/kg	28 [3.6]	- -	- -	- -
Diesel Range Organics	AK102	µg/g	- -	- -	- -	- -
Solids, %	D2216	%	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	21000 [2000]	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520620	AM-A520622	AM-A520623	AM-A520624
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04709	00E04711	00E04712	00E04713
	Collection Date	11/15/00	11/17/00	11/17/00	11/17/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/kg	- -	- -	- -	- -
2-Butanone	SW8260B	µg/kg	- -	- -	- -	- -
2-Hexanone	SW8260B	µg/kg	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	- -	- -	- -
Acetone	SW8260B	µg/kg	- -	- -	- -	- -
Benzene	SW8260B	µg/kg	- -	- -	ND [25]	ND [32]
Bromodichloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Bromoform	SW8260B	µg/kg	- -	- -	- -	- -
Bromomethane	SW8260B	µg/kg	- -	- -	- -	- -
Carbon disulfide	SW8260B	µg/kg	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/kg	- -	- -	- -	- -
Chlorobenzene	SW8260B	µg/kg	- -	- -	- -	- -
Chloroethane	SW8260B	µg/kg	- -	- -	- -	- -
Chloroform	SW8260B	µg/kg	- -	- -	- -	- -
Chloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Dibromochloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Ethylbenzene	SW8260B	µg/kg	- -	- -	ND [25]	ND [32]
Methylene chloride	SW8260B	µg/kg	- -	- -	- -	- -
tyrene	SW8260B	µg/kg	- -	- -	- -	- -
etrachloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Toluene	SW8260B	µg/kg	- -	- -	7.6 [25]	ND [32]
Trichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Vinyl chloride	SW8260B	µg/kg	- -	- -	- -	- -
Xylenes	SW8260B	µg/kg	- -	- -	ND [25]	ND [32]
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520627		AM-A520628		AM-A520629		AM-A520630	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04715		00E04716		00E04717		00E04718	
	Collection Date	11/17/00		11/17/00		11/17/00		11/17/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SIM	µg/kg	19 [17]	14	[14]	530	[8.1]	ND	[4.2]
Acenaphthene	SIM	µg/kg	ND [17]	ND	[14]	110	[8.1]	ND	[4.2]
Acenaphthylene	SIM	µg/kg	ND [17]	ND	[14]	47	[8.1]	ND	[4.2]
Anthracene	SIM	µg/kg	ND [17]	ND	[14]	49	[8.1]	ND	[4.2]
Benzo(a)anthracene	SIM	µg/kg	130 [17]	43	[14]	24	[8.1]	ND	[4.2]
Benzo(a)pyrene	SIM	µg/kg	ND [17]	ND	[14]	ND	[8.1]	ND	[4.2]
Benzo(b)fluoranthene	SIM	µg/kg	ND [17]	ND	[14]	ND	[8.1]	ND	[4.2]
Benzo(g,h,i)perylene	SIM	µg/kg	ND [17]	ND	[14]	ND	[8.1]	ND	[4.2]
Benzo(k)fluoranthene	SIM	µg/kg	ND [17]	ND	[14]	ND	[8.1]	ND	[4.2]
Chrysene	SIM	µg/kg	130 [17]	34	[14]	16	[8.1]	ND	[4.2]
Dibenzo(a,h)anthracene	SIM	µg/kg	ND [17]	ND	[14]	ND	[8.1]	ND	[4.2]
Fluoranthene	SIM	µg/kg	ND [17]	ND	[14]	25	[8.1]	ND	[4.2]
Fluorene	SIM	µg/kg	ND [17]	ND	[14]	460	[8.1]	ND	[4.2]
Indeno(1,2,3-cd)pyrene	SIM	µg/kg	ND [17]	ND	[14]	ND	[8.1]	ND	[4.2]
Naphthalene	SIM	µg/kg	100 [17]	41	[14]	50	[8.1]	ND	[4.2]
Phenanthrene	SIM	µg/kg	ND [17]	ND	[14]	530	[8.1]	ND	[4.2]
Pyrene	SIM	µg/kg	ND [17]	ND	[14]	24	[8.1]	ND	[4.2]
Diesel Range Organics	AK102	µg/g	1240 [19.7]	-	-	4290	[9.48]	186	[9.85]
Solids, %	D2216	%	- -	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	- -	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	- -	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	- -	-	-	-	-	-	-
Lead	SW6010B	µg/g	- -	-	-	-	-	-	-
Selenium	SW6010B	µg/g	- -	-	-	-	-	-	-
Barium	SW6010B	µg/g	- -	-	-	-	-	-	-
Chromium	SW6010B	µg/g	- -	-	-	-	-	-	-
Silver	SW6010B	µg/g	- -	-	-	-	-	-	-
Mercury	SW7471A	µg/g	- -	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520627		AM-A520628		AM-A520629		AM-A520630	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04715		00E04716		00E04717		00E04718	
	Collection Date	11/17/00		11/17/00		11/17/00		11/17/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
tyrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A520631		AM-A520632		AM-A520633		AM-A520634	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04719		00E04684		00E04685		00E04686	
		Collection Date	11/17/00		11/18/00		11/18/00		11/18/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SIM	µg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	-	-	-	-	-	-
Solids, %	D2216	%	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	53000	[2500]	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	9.6	[0.85]	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	ND	[0.34]	-	-
Lead	SW6010B	µg/g	-	-	-	-	18	[0.51]	-	-
Selenium	SW6010B	µg/g	-	-	-	-	1.1	[0.85]	-	-
Barium	SW6010B	µg/g	-	-	-	-	36	[3.4]	-	-
Chromium	SW6010B	µg/g	-	-	-	-	33	[1.7]	-	-
Silver	SW6010B	µg/g	-	-	-	-	ND	[1.7]	-	-
Mercury	SW7471A	µg/g	-	-	-	-	0.0792	[0.0339]	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	ND	[0.0535]	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	ND	[0.107]	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	ND	[0.0535]	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	ND	[0.0535]	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	ND	[0.0535]	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	ND	[0.0535]	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	ND	[0.0535]	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520631	AM-A520632	AM-A520633	AM-A520634
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04719	00E04684	00E04685	00E04686
	Collection Date	11/17/00	11/18/00	11/18/00	11/18/00
	Matrix	SO	SO	SO	SO

Analyte	Method	Units							
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	58 [75]
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	ND [75]
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	ND [75]
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	ND [75]
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	48 [15]
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
tyrene	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
etrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	8.8 [15]
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	210 [15]
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	ND [15]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520635	AM-A520636	AM-A520637	AM-A520638
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04687	00E04688	00E04689	00E04720
	Collection Date	11/18/00	11/18/00	11/18/00	11/19/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SIM	µg/kg	- -	- -	- -	- -
Acenaphthene	SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SIM	µg/kg	- -	- -	- -	- -
Anthracene	SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SIM	µg/kg	- -	- -	- -	- -
Chrysene	SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SIM	µg/kg	- -	- -	- -	- -
Fluorene	SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SIM	µg/kg	- -	- -	- -	- -
Pyrene	SIM	µg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	- -	- -	- -	- -
Solids, %	D2216	%	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	6.3 [0.94]	- -	- -
Cadmium	SW6010B	µg/g	- -	ND [0.38]	- -	- -
Lead	SW6010B	µg/g	- -	4.5 [0.56]	- -	- -
Selenium	SW6010B	µg/g	- -	1.6 [0.94]	- -	- -
Barium	SW6010B	µg/g	- -	52 [3.8]	- -	- -
Chromium	SW6010B	µg/g	- -	5.3 [1.9]	- -	- -
Silver	SW6010B	µg/g	- -	ND [1.9]	- -	- -
Mercury	SW7471A	µg/g	- -	ND [0.0375]	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND [0.0594]	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND [0.119]	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND [0.0594]	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND [0.0594]	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND [0.0594]	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND [0.0594]	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND [0.0594]	- -	- -	- -

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520635	AM-A520636	AM-A520637	AM-A520638
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04687	00E04688	00E04689	00E04720
	Collection Date	11/18/00	11/18/00	11/18/00	11/19/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	ND [24]	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	ND [24]	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	ND [24]	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	ND [24]	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	ND [24]	- -
1,2-Dichloroethane	SW8260B	µg/kg	- -	- -	ND [24]	- -
1,2-Dichloropropane	SW8260B	µg/kg	- -	- -	ND [24]	- -
2-Butanone	SW8260B	µg/kg	- -	- -	3500 [120]	- -
2-Hexanone	SW8260B	µg/kg	- -	- -	ND [120]	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	- -	ND [120]	- -
Acetone	SW8260B	µg/kg	- -	- -	ND [120]	- -
Benzene	SW8260B	µg/kg	- -	- -	ND [24]	ND [19]
Bromodichloromethane	SW8260B	µg/kg	- -	- -	ND [24]	- -
Bromoform	SW8260B	µg/kg	- -	- -	ND [24]	- -
Bromomethane	SW8260B	µg/kg	- -	- -	ND [24]	- -
Carbon disulfide	SW8260B	µg/kg	- -	- -	ND [24]	- -
Carbon tetrachloride	SW8260B	µg/kg	- -	- -	ND [24]	- -
Chlorobenzene	SW8260B	µg/kg	- -	- -	ND [24]	- -
Chloroethane	SW8260B	µg/kg	- -	- -	ND [24]	- -
Chloroform	SW8260B	µg/kg	- -	- -	ND [24]	- -
Chloromethane	SW8260B	µg/kg	- -	- -	66 [24]	- -
Dibromochloromethane	SW8260B	µg/kg	- -	- -	ND [24]	- -
Ethylbenzene	SW8260B	µg/kg	- -	- -	ND [24]	ND [19]
Methylene chloride	SW8260B	µg/kg	- -	- -	ND [24]	- -
Styrene	SW8260B	µg/kg	- -	- -	ND [24]	- -
Tetrachloroethene	SW8260B	µg/kg	- -	- -	ND [24]	- -
Toluene	SW8260B	µg/kg	- -	- -	ND [24]	ND [19]
Trichloroethene	SW8260B	µg/kg	- -	- -	ND [24]	- -
Vinyl chloride	SW8260B	µg/kg	- -	- -	ND [24]	- -
Xylenes	SW8260B	µg/kg	- -	- -	ND [24]	ND [19]
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	ND [24]	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	ND [24]	- -
trans-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	ND [24]	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	ND [24]	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A570002	
	Laboratory	DCHM	
	Lab Sample ID	00E04868	
	Collection Date	12/6/00	
	Matrix	SO	
Analyte	**Method**	**Units**	
2-Methylnaphthalene	SIM	µg/kg	- -
Acenaphthene	SIM	µg/kg	- -
Acenaphthylene	SIM	µg/kg	- -
Anthracene	SIM	µg/kg	- -
Benzo(a)anthracene	SIM	µg/kg	- -
Benzo(a)pyrene	SIM	µg/kg	- -
Benzo(b)fluoranthene	SIM	µg/kg	- -
Benzo(g,h,i)perylene	SIM	µg/kg	- -
Benzo(k)fluoranthene	SIM	µg/kg	- -
Chrysene	SIM	µg/kg	- -
Dibenzo(a,h)anthracene	SIM	µg/kg	- -
Fluoranthene	SIM	µg/kg	- -
Fluorene	SIM	µg/kg	- -
Indeno(1,2,3-cd)pyrene	SIM	µg/kg	- -
Naphthalene	SIM	µg/kg	- -
Phenanthrene	SIM	µg/kg	- -
Pyrene	SIM	µg/kg	- -
Diesel Range Organics	AK102	µg/g	- -
Solids, %	D2216	%	84.2 [1]
(TOC)	KAHNTOC	mg/kg	- -
Arsenic	SW6010B	µg/g	- -
Cadmium	SW6010B	µg/g	- -
Lead	SW6010B	µg/g	- -
Selenium	SW6010B	µg/g	- -
Barium	SW6010B	µg/g	- -
Chromium	SW6010B	µg/g	- -
Silver	SW6010B	µg/g	- -
Mercury	SW7471A	µg/g	1.41 [0.0238]
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

Sample ID	AM-A570002
Laboratory	DCHM
Lab Sample ID	00E04868
Collection Date	12/6/00
Matrix	SO

Analyte	Method	Units		
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-
2-Butanone	SW8260B	µg/kg	-	-
2-Hexanone	SW8260B	µg/kg	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-
Acetone	SW8260B	µg/kg	-	-
Benzene	SW8260B	µg/kg	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-
Bromoform	SW8260B	µg/kg	-	-
Bromomethane	SW8260B	µg/kg	-	-
Carbon disulfide	SW8260B	µg/kg	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-
Chlorobenzene	SW8260B	µg/kg	-	-
Chloroethane	SW8260B	µg/kg	-	-
Chloroform	SW8260B	µg/kg	-	-
Chloromethane	SW8260B	µg/kg	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-
Ethylbenzene	SW8260B	µg/kg	-	-
Methylene chloride	SW8260B	µg/kg	-	-
tyrene	SW8260B	µg/kg	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-
Toluene	SW8260B	µg/kg	-	-
Trichloroethene	SW8260B	µg/kg	-	-
Vinyl chloride	SW8260B	µg/kg	-	-
Xylenes	SW8260B	µg/kg	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507602		AM-A507603		AM-A507604		AM-A507605	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04274		00E04275		00E04276		00E04277	
	Collection Date	10/26/00		10/26/00		10/26/00		10/26/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	ND	[28]	110	[4.7]	730	[5.6]
Acenaphthene	SW8270C SIM	µg/kg	-	-	140	[28]	7.7	[4.7]	44	[5.6]
Acenaphthylene	SW8270C SIM	µg/kg	-	-	200	[28]	11	[4.7]	12	[5.6]
Anthracene	SW8270C SIM	µg/kg	-	-	ND	[28]	ND	[4.7]	ND	[5.6]
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	ND	[28]	13	[4.7]	ND	[5.6]
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	ND	[28]	ND	[4.7]	ND	[5.6]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	ND	[28]	6.1	[4.7]	ND	[5.6]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	ND	[28]	7.5	[4.7]	ND	[5.6]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	ND	[28]	ND	[4.7]	ND	[5.6]
Chrysene	SW8270C SIM	µg/kg	-	-	130	[28]	37	[4.7]	ND	[5.6]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	ND	[28]	ND	[4.7]	ND	[5.6]
Fluoranthene	SW8270C SIM	µg/kg	-	-	90	[28]	12	[4.7]	ND	[5.6]
Fluorene	SW8270C SIM	µg/kg	-	-	64	[28]	29	[4.7]	150	[5.6]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	ND	[28]	5.4	[4.7]	ND	[5.6]
Naphthalene	SW8270C SIM	µg/kg	-	-	ND	[28]	45	[4.7]	470	[5.6]
Phenanthrene	SW8270C SIM	µg/kg	-	-	360	[28]	28	[4.7]	22	[5.6]
Pyrene	SW8270C SIM	µg/kg	-	-	260	[28]	9.6	[4.7]	ND	[5.6]
Total Solids	A2540G	%	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	14.7	[5.52]	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	29300	[5.59]	1070	[11.1]	275	[6.62]
Residual Range Organics	AK103	µg/g	-	-	1610	[140]	1180	[279]	515	[166]
(TOC)	E415.2	mg/kg	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	19000	[1400]	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507602	AM-A507603	AM-A507604	AM-A507605
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04274	00E04275	00E04276	00E04277
	Collection Date	10/26/00	10/26/00	10/26/00	10/26/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	79 [0.42]	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
1,2-Dichloroethane	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
,2-Dichloropropane	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
2-Butanone	SW8260B	µg/kg	- -	1200 [98]	3900 [150]	- -
2-Hexanone	SW8260B	µg/kg	- -	ND [98]	ND [150]	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	ND [98]	ND [150]	- -
Acetone	SW8260B	µg/kg	- -	ND [98]	970 [150]	- -
Benzene	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Bromodichloromethane	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Bromoform	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Bromomethane	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Carbon disulfide	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Carbon tetrachloride	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Chlorobenzene	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Chloroethane	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Chloroform	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Chloromethane	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Dibromochloromethane	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Ethylbenzene	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Methylene chloride	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Styrene	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Tetrachloroethene	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Toluene	SW8260B	µg/kg	- -	9 [20]	19 [31]	- -
Trichloroethene	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Vinyl chloride	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
Xylenes	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
trans-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
*rans-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND [20]	ND [31]	- -
pH	SW9045B	PH UNITS	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507606		AM-A507607		AM-A507608		AM-A507609	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04278		00E04279		00E04280		00E04281	
	Collection Date	10/26/00		10/26/00		10/26/00		10/26/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND [4.1]	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	ND [4.1]	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	ND [4.1]	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	4.5 [4.1]	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	18 [4.1]	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	17 [4.1]	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	21 [4.1]	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	11 [4.1]	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	6.9 [4.1]	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	19 [4.1]	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND [4.1]	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	30 [4.1]	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	ND [4.1]	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	12 [4.1]	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	ND [4.1]	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	15 [4.1]	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	38 [4.1]	-	-	-	-	-	-
Total Solids	A2540G	%	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	90 [9.76]	-	-	-	-	-	-
Residual Range Organics	AK103	µg/g	302 [244]	-	-	-	-	-	-
(TOC)	E415.2	mg/kg	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	17000	[1300]	49000	[2000]	49000 [2300]
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507606		AM-A507607		AM-A507608		AM-A507609	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04278		00E04279		00E04280		00E04281	
	Collection Date	10/26/00		10/26/00		10/26/00		10/26/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
∠-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
ρH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507703		AM-A507704		AM-A507705		AM-A507706	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04283		00E04284		00E04285		00E04286	
	Collection Date	10/27/00		10/27/00		10/27/00		10/27/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Acenaphthene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -		- -		22	[5.6]
Anthracene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Chrysene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Fluoranthene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Fluorene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Naphthalene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Phenanthrene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Pyrene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[5.6]
Total Solids	A2540G	%	- -	- -		- -		-	-
Gasoline Range Organics	AK101	mg/kg	- -	- -		- -		-	-
Diesel Range Organics	AK102	µg/g	33.2	[6.81]	- -	- -		55.5	[13.3]
Residual Range Organics	AK103	µg/g	174	[170]	- -	- -		332	[332]
(TOC)	E415.2	mg/kg	- -	- -		- -		-	-
(TOC)	KAHNTOC	mg/kg	- -	- -	48000	[2000]	60000 [2400]	-	-
Acenaphthene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Anthracene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Chrysene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Fluoranthene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Fluorene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Naphthalene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Phenanthrene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Pyrene	SW8270C SIM	µg/kg	- -	- -		- -		-	-
Arsenic	SW6010B	µg/g	- -	- -		- -		-	-
Cadmium	SW6010B	µg/g	- -	- -		- -		-	-
Lead	SW6010B	µg/g	- -	- -		- -		-	-
Selenium	SW6010B	µg/g	- -	- -		- -		-	-

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507703		AM-A507704		AM-A507705		AM-A507706	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04283		00E04284		00E04285		00E04286	
	Collection Date	10/27/00		10/27/00		10/27/00		10/27/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
1,1-Dichloroethane	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
1,1-Dichloroethene	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
1,2-Dichloroethane	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
,2-Dichloropropane	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
2-Butanone	SW8260B	µg/kg	1200	[140]	-	-	-	-	ND	[190]
2-Hexanone	SW8260B	µg/kg	ND	[140]	-	-	-	-	ND	[190]
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[140]	-	-	-	-	ND	[190]
Acetone	SW8260B	µg/kg	ND	[140]	-	-	-	-	ND	[190]
Benzene	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Bromodichloromethane	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Bromoform	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Bromomethane	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Carbon disulfide	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Carbon tetrachloride	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Chlorobenzene	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Chloroethane	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Chloroform	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Chloromethane	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Dibromochloromethane	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Ethylbenzene	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Methylene chloride	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Styrene	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Tetrachloroethene	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Toluene	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Trichloroethene	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Vinyl chloride	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
Xylenes	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[29]	-	-	-	-	ND	[36]
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507707		AM-A507903		AM-A507904		AM-A508101		
	Laboratory	DCHM		DCHM		DCHM		DCHM		
	Lab Sample ID	00E04287		00E04293		00E04294		00E04422		0
	Collection Date	10/27/00		10/28/00		10/28/00		10/30/00		
	Matrix	SO		SO		SO		SO		
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	15	[2.3]
Acenaphthene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	ND	[2.3]
Acenaphthylene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	ND	[2.3]
Anthracene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	ND	[2.3]
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	2.3	[2.3]
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	2.5	[2.3]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	3.5	[2.3]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	2.8	[2.3]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	ND	[2.3]
Chrysene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	3.3	[2.3]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	ND	[2.3]
Fluoranthene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	4.1	[2.3]
Fluorene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	ND	[2.3]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	ND	[2.3]
Naphthalene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	12	[2.3]
Phenanthrene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	6.9	[2.3]
Pyrene	SW8270C SIM	µg/kg	ND	[5.5]	-	-	-	-	5.1	[2.3]
Total Solids	A2540G	%	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	47.6	[12.9]	42.7	[4.73]	-	-	16.4	[4]
Residual Range Organics	AK103	µg/g	270	[322]	-	-	-	-	190	[137]
(TOC)	E415.2	mg/kg	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	45000	[1400]
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	10	[0.68]
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	ND	[0.27]
Lead	SW6010B	µg/g	-	-	-	-	-	-	650	[0.41]
Selenium	SW6010B	µg/g	-	-	-	-	-	-	0.82	[0.68]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507707	AM-A507903	AM-A507904	AM-A508101	
	Laboratory	DCHM	DCHM	DCHM	DCHM	
	Lab Sample ID	00E04287	00E04293	00E04294	00E04422	0
	Collection Date	10/27/00	10/28/00	10/28/00	10/30/00	
	Matrix	SO	SO	SO	SO	

Analyte	Method	Units								
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	2300	[2.7]
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	200	[1.4]
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	ND	[1.4]
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	ND	[0.0456]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	ND	[0.0912]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	ND	[0.0456]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	ND	[0.0456]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	ND	[0.0456]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	ND	[0.0456]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	ND	[0.0456]
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
1,1-Dichloroethane	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
1,1-Dichloroethene	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
1,2-Dichloroethane	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
,2-Dichloropropane	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
2-Butanone	SW8260B	µg/kg	ND	[190]	-	-	-	-	ND	[95]
2-Hexanone	SW8260B	µg/kg	ND	[190]	-	-	-	-	ND	[95]
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[190]	-	-	-	-	ND	[95]
Acetone	SW8260B	µg/kg	ND	[190]	-	-	-	-	ND	[95]
Benzene	SW8260B	µg/kg	ND	[38]	ND	[11]	ND	[20]	ND	[20]
Bromodichloromethane	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Bromoform	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Bromomethane	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Carbon disulfide	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Carbon tetrachloride	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Chlorobenzene	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Chloroethane	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Chloroform	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Chloromethane	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Dibromochloromethane	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Ethylbenzene	SW8260B	µg/kg	ND	[38]	ND	[11]	ND	[20]	ND	[20]
Methylene chloride	SW8260B	µg/kg	22	[38]	-	-	-	-	ND	[20]
Styrene	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Tetrachloroethene	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Toluene	SW8260B	µg/kg	ND	[38]	ND	[11]	6.2	[20]	ND	[20]
Trichloroethene	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Vinyl chloride	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
Xylenes	SW8260B	µg/kg	ND	[38]	ND	[11]	ND	[20]	ND	[20]
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
rans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[38]	-	-	-	-	ND	[20]
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A508101		AM-A508102		AM-A508103		AM-A508103	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04422R1		00E04423		00E04424		00E04424R1	
		Collection Date	10/30/00		10/30/00		10/30/00		10/30/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND	[9.3]	-	-	5.4	[2.5]	ND	[10]
Acenaphthene	SW8270C SIM	µg/kg	ND	[9.3]	-	-	ND	[2.5]	ND	[10]
Acenaphthylene	SW8270C SIM	µg/kg	ND	[9.3]	-	-	ND	[2.5]	ND	[10]
Anthracene	SW8270C SIM	µg/kg	ND	[9.3]	-	-	ND	[2.5]	ND	[10]
Benzo(a)anthracene	SW8270C SIM	µg/kg	16	[9.3]	-	-	4	[2.5]	13	[10]
Benzo(a)pyrene	SW8270C SIM	µg/kg	22	[9.3]	-	-	5.4	[2.5]	12	[10]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	26	[9.3]	-	-	7.8	[2.5]	15	[10]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	18	[9.3]	-	-	7.5	[2.5]	12	[10]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	11	[9.3]	-	-	ND	[2.5]	ND	[10]
Chrysene	SW8270C SIM	µg/kg	19	[9.3]	-	-	7.2	[2.5]	18	[10]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[9.3]	-	-	2.5	[2.5]	ND	[10]
Fluoranthene	SW8270C SIM	µg/kg	24	[9.3]	-	-	6.9	[2.5]	23	[10]
Fluorene	SW8270C SIM	µg/kg	ND	[9.3]	-	-	ND	[2.5]	ND	[10]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	18	[9.3]	-	-	5.8	[2.5]	ND	[10]
Naphthalene	SW8270C SIM	µg/kg	9.5	[9.3]	-	-	7.6	[2.5]	ND	[10]
Phenanthrene	SW8270C SIM	µg/kg	12	[9.3]	-	-	6.1	[2.5]	46	[10]
Pyrene	SW8270C SIM	µg/kg	35	[9.3]	-	-	11	[2.5]	43	[10]
Total Solids	A2540G	%	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	4.65	[4.88]	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	-	-	23.4	[4]	-	-
Residual Range Organics	AK103	µg/g	-	-	-	-	339	[147]	-	-
(TOC)	E415.2	mg/kg	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	10	[0.73]	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	ND	[0.29]	-	-
Lead	SW6010B	µg/g	-	-	-	-	110	[0.44]	-	-
Selenium	SW6010B	µg/g	-	-	-	-	0.3	[0.73]	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508101	AM-A508102	AM-A508103	AM-A508103
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04422R1	00E04423	00E04424	00E04424R1
	Collection Date	10/30/00	10/30/00	10/30/00	10/30/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	69 [2.9]	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	23 [1.5]	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	ND [1.5]	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	ND [0.0489]	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	ND [0.0979]	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	ND [0.0489]	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	ND [0.0489]	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	ND [0.0489]	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	ND [0.0489]	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	ND [0.0489]	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
1,2-Dichloroethane	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
,2-Dichloropropane	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
2-Butanone	SW8260B	µg/kg	- -	ND [100]	ND [95]	- -
2-Hexanone	SW8260B	µg/kg	- -	ND [100]	ND [95]	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	ND [100]	ND [95]	- -
Acetone	SW8260B	µg/kg	- -	ND [100]	ND [95]	- -
Benzene	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Bromodichloromethane	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Bromoform	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Bromomethane	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Carbon disulfide	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Carbon tetrachloride	SW8260B	µg/kg	- -	25 [20]	ND [20]	- -
Chlorobenzene	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Chloroethane	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Chloroform	SW8260B	µg/kg	- -	23 [20]	ND [20]	- -
Chloromethane	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Dibromochloromethane	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Ethylbenzene	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Methylene chloride	SW8260B	µg/kg	- -	22 [20]	ND [20]	- -
Styrene	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Tetrachloroethene	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Toluene	SW8260B	µg/kg	- -	75 [20]	ND [20]	- -
Trichloroethene	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Vinyl chloride	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
Xylenes	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
trans-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND [20]	ND [20]	- -
pH	SW9045B	PH UNITS	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508104		AM-A508105		AM-A508105		AM-A508106	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04425		00E04426		00E04426R1		00E04427	
	Collection Date	10/30/00		10/30/00		10/30/00		10/30/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	6.2	[2.7]	ND	[2.7]	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	4.4	[2.7]	ND	[2.7]	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	ND	[2.7]	ND	[2.7]	-	-
Total Solids	A2540G	%	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	29.5	[4]	18.7	[4]	-	-	-	-
Residual Range Organics	AK103	µg/g	261	[180]	148	[162]	-	-	-	-
(TOC)	E415.2	mg/kg	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	71000	[1800]	61000	[1600]	-	-	47000	[1500]
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	9.5	[0.9]	3.2	[0.81]	-	-	-	-
Cadmium	SW6010B	µg/g	0.54	[0.36]	ND	[0.32]	-	-	-	-
Lead	SW6010B	µg/g	590	[0.54]	2.2	[0.48]	-	-	-	-
Selenium	SW6010B	µg/g	1.7	[0.9]	1.2	[0.81]	-	-	-	-

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508104		AM-A508105		AM-A508105		AM-A508106	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04425		00E04426		00E04426R1		00E04427	
	Collection Date	10/30/00		10/30/00		10/30/00		10/30/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	120	[3.6]	65	[3.2]	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	120	[1.8]	4.2	[1.6]	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	ND	[1.8]	ND	[1.6]	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.06]	ND	[0.0538]	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.12]	ND	[0.108]	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.06]	ND	[0.0538]	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.06]	ND	[0.0538]	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.06]	ND	[0.0538]	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.06]	ND	[0.0538]	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.06]	ND	[0.0538]	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
,2-Dichloropropane	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
2-Butanone	SW8260B	µg/kg	ND	[99]	ND	[130]	-	-	-	-
2-Hexanone	SW8260B	µg/kg	ND	[99]	ND	[130]	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[99]	ND	[130]	-	-	-	-
Acetone	SW8260B	µg/kg	ND	[99]	360	[130]	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Bromoform	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Bromomethane	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Chloroethane	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Chloroform	SW8260B	µg/kg	9.9	[20]	ND	[26]	-	-	-	-
Chloromethane	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Methylene chloride	SW8260B	µg/kg	ND	[20]	15	[26]	-	-	-	-
Styrene	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Toluene	SW8260B	µg/kg	16	[20]	18	[26]	-	-	-	-
Trichloroethene	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
Xylenes	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[20]	ND	[26]	-	-	-	-
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A508107		AM-A508301		AM-A508302		AM-A508303	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04428		00E04429		00E04430		00E04431	
		Collection Date	10/30/00		10/31/00		10/31/00		10/31/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Total Solids	A2540G	%	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	16.5	[4]	-	-	-	-	-	-
Residual Range Organics	AK103	µg/g	118	[152]	-	-	-	-	-	-
(TOC)	E415.2	mg/kg	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	40000	[1500]	34000	[1800]	43000	[1700]	3700	[1200]
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	1.8	[0.76]	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	ND	[0.3]	-	-	-	-	-	-
Lead	SW6010B	µg/g	2.1	[0.46]	-	-	-	-	-	-
Selenium	SW6010B	µg/g	0.62	[0.76]	-	-	-	-	-	-

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508107		AM-A508301		AM-A508302		AM-A508303	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04428		00E04429		00E04430		00E04431	
	Collection Date	10/30/00		10/31/00		10/31/00		10/31/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	39	[3]	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	2.7	[1.5]	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	1.2	[1.5]	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.0508]	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.102]	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.0508]	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.0508]	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.0508]	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.0508]	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.0508]	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
,2-Dichloropropane	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	ND	[110]	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	ND	[110]	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[110]	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	ND	[110]	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	22	[23]	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	140	[23]	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[23]	-	-	-	-	-	-
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508304	AM-A508305	AM-A508305	AM-A508306
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04432	00E04433	00E04433R1	00E04434
	Collection Date	10/31/00	11/1/00	11/1/00	11/1/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Acenaphthene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Acenaphthylene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Anthracene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Chrysene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Fluoranthene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Fluorene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Naphthalene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Phenanthrene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Pyrene	SW8270C SIM	µg/kg	- -	ND [1.8]	ND [1.8]	ND [1.8]
Total Solids	A2540G	%	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	- -	14.3 [4]	- -	7.68 [4]
Residual Range Organics	AK103	µg/g	- -	64.9 [104]	- -	25 [106]
(TOC)	E415.2	mg/kg	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	3700 [1100]	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	2.4 [0.52]	- -	2.1 [0.53]
Cadmium	SW6010B	µg/g	- -	ND [0.21]	- -	ND [0.21]
Lead	SW6010B	µg/g	- -	1.6 [0.31]	- -	1.3 [0.32]
Selenium	SW6010B	µg/g	- -	ND [0.52]	- -	ND [0.53]

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A508304		AM-A508305		AM-A508305		AM-A508306	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04432		00E04433		00E04433R1		00E04434	
		Collection Date	10/31/00		11/1/00		11/1/00		11/1/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	5.2	[2.1]	-	-	5.8	[2.1]
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	5	[1]	-	-	3.7	[1.1]
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	0.63	[1]	-	-	0.54	[1.1]
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
1,1-Dichloroethane	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
1,1-Dichloroethene	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
1,2-Dichloroethane	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
,2-Dichloropropane	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
2-Butanone	SW8260B	µg/kg	-	-	ND	[46]	-	-	ND	[53]
2-Hexanone	SW8260B	µg/kg	-	-	ND	[46]	-	-	ND	[53]
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	ND	[46]	-	-	ND	[53]
Acetone	SW8260B	µg/kg	-	-	ND	[46]	-	-	ND	[53]
Benzene	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Bromodichloromethane	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Bromoform	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Bromomethane	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Carbon disulfide	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Carbon tetrachloride	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Chlorobenzene	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Chloroethane	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Chloroform	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Chloromethane	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Dibromochloromethane	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Ethylbenzene	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Methylene chloride	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Styrene	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Tetrachloroethene	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Toluene	SW8260B	µg/kg	-	-	3.5	[8.8]	-	-	3.8	[11]
Trichloroethene	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Vinyl chloride	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
Xylenes	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	ND	[8.8]	-	-	ND	[11]
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508306	AM-A508307	AM-A508307	AM-A508308
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04434R1	00E04435	00E04435R1	00E04436
	Collection Date	11/1/00	11/1/00	11/1/00	11/1/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	ND [1.8]
Acenaphthene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	ND [1.8]
Acenaphthylene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	ND [1.8]
Anthracene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	ND [1.8]
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	ND [1.8]
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	ND [1.8]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	2.2 [1.8]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	ND [1.8]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	ND [1.8]
Chrysene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	2.3 [1.8]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	ND [1.8]
Fluoranthene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	3.2 [1.8]
Fluorene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	ND [1.8]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	ND [1.8]
Naphthalene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	ND [1.8]
Phenanthrene	SW8270C SIM	µg/kg	ND [1.8]	2.2 [1.8]	ND [1.8]	ND [1.8]
Pyrene	SW8270C SIM	µg/kg	ND [1.8]	ND [1.8]	ND [1.8]	3.2 [1.8]
Total Solids	A2540G	%	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	- -	3.71 [4]	- -	4.54 [4]
Residual Range Organics	AK103	µg/g	- -	23.5 [106]	- -	23.1 [104]
(TOC)	E415.2	mg/kg	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	5.6 [0.53]	- -	8.7 [0.52]
Cadmium	SW6010B	µg/g	- -	ND [0.21]	- -	ND [0.21]
Lead	SW6010B	µg/g	- -	58 [0.32]	- -	180 [0.31]
Selenium	SW6010B	µg/g	- -	ND [0.53]	- -	ND [0.52]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508306		AM-A508307		AM-A508307		AM-A508308	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04434R1		00E04435		00E04435R1		00E04436	
	Collection Date	11/1/00		11/1/00		11/1/00		11/1/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	- -	-	-	-	-	-	-
Barium	SW6010B	µg/g	- -	9	[2.1]	-	-	4.2	[2.1]
Cadmium	SW6010B	µg/g	- -	-	-	-	-	-	-
Chromium	SW6010B	µg/g	- -	8.8	[1.1]	-	-	19	[1]
Lead	SW6010B	µg/g	- -	-	-	-	-	-	-
Selenium	SW6010B	µg/g	- -	-	-	-	-	-	-
Silver	SW6010B	µg/g	- -	ND	[1.1]	-	-	ND	[1]
Mercury	SW7471A	µg/g	- -	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
1,1-Dichloroethane	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
1,1-Dichloroethene	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
1,2-Dichloroethane	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
,2-Dichloropropane	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
2-Butanone	SW8260B	µg/kg	- -	ND	[48]	-	-	ND	[68]
2-Hexanone	SW8260B	µg/kg	- -	ND	[48]	-	-	ND	[68]
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	ND	[48]	-	-	ND	[68]
Acetone	SW8260B	µg/kg	- -	ND	[48]	-	-	ND	[68]
Benzene	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Bromodichloromethane	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Bromoform	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Bromomethane	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Carbon disulfide	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Carbon tetrachloride	SW8260B	µg/kg	- -	ND	[10]	-	-	18	[13]
Chlorobenzene	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Chloroethane	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Chloroform	SW8260B	µg/kg	- -	ND	[10]	-	-	21	[13]
Chloromethane	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Dibromochloromethane	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Ethylbenzene	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Methylene chloride	SW8260B	µg/kg	- -	ND	[10]	-	-	13	[13]
Styrene	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Tetrachloroethene	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Toluene	SW8260B	µg/kg	- -	15	[10]	-	-	270	[13]
Trichloroethene	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Vinyl chloride	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
Xylenes	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
trans-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[10]	-	-	ND	[13]
pH	SW9045B	PH UNITS	- -	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508308		AM-A508309		AM-A508310		AM-A508310	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04436R1		00E04437		00E04438		00E04438R1	
	Collection Date	11/1/00		11/1/00		11/1/00		11/1/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND [1.8]	300	[58]	ND	[3.7]	ND	[3.7]
Acenaphthene	SW8270C SIM	µg/kg	ND [1.8]	98	[58]	ND	[3.7]	ND	[3.7]
Acenaphthylene	SW8270C SIM	µg/kg	ND [1.8]	ND	[58]	ND	[3.7]	ND	[3.7]
Anthracene	SW8270C SIM	µg/kg	ND [1.8]	110	[58]	ND	[3.7]	ND	[3.7]
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND [1.8]	110	[58]	ND	[3.7]	ND	[3.7]
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND [1.8]	ND	[58]	ND	[3.7]	ND	[3.7]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND [1.8]	ND	[58]	ND	[3.7]	ND	[3.7]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND [1.8]	ND	[58]	ND	[3.7]	ND	[3.7]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND [1.8]	ND	[58]	ND	[3.7]	ND	[3.7]
Chrysene	SW8270C SIM	µg/kg	ND [1.8]	480	[58]	ND	[3.7]	ND	[3.7]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND [1.8]	ND	[58]	ND	[3.7]	ND	[3.7]
Fluoranthene	SW8270C SIM	µg/kg	ND [1.8]	ND	[58]	ND	[3.7]	ND	[3.7]
Fluorene	SW8270C SIM	µg/kg	ND [1.8]	480	[58]	ND	[3.7]	ND	[3.7]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND [1.8]	ND	[58]	ND	[3.7]	ND	[3.7]
Naphthalene	SW8270C SIM	µg/kg	ND [1.8]	77	[58]	ND	[3.7]	ND	[3.7]
Phenanthrene	SW8270C SIM	µg/kg	ND [1.8]	4200	[58]	ND	[3.7]	ND	[3.7]
Pyrene	SW8270C SIM	µg/kg	ND [1.8]	ND	[58]	ND	[3.7]	ND	[3.7]
Total Solids	A2540G	%	- -	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	- -	18.9	[22.2]	2.42	[9.01]	-	-
Diesel Range Organics	AK102	µg/g	- -	2470	[5.46]	2.84	[4]	-	-
Residual Range Organics	AK103	µg/g	- -	1190000	[137]	41	[218]	-	-
(TOC)	E415.2	mg/kg	- -	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	- -	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	- -	6.6	[0.68]	14	[1.1]	-	-
Cadmium	SW6010B	µg/g	- -	0.02	[0.27]	ND	[0.44]	-	-
Lead	SW6010B	µg/g	- -	77000	[0.41]	8.9	[0.66]	-	-
Selenium	SW6010B	µg/g	- -	3.2	[0.68]	2.4	[1.1]	-	-

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508308		AM-A508309		AM-A508310		AM-A508310	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04436R1		00E04437		00E04438		00E04438R1	
	Collection Date	11/1/00		11/1/00		11/1/00		11/1/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	- -	-	-	-	-	-	-
Barium	SW6010B	µg/g	- -	14	[2.7]	92	[4.4]	-	-
Cadmium	SW6010B	µg/g	- -	-	-	-	-	-	-
Chromium	SW6010B	µg/g	- -	4.3	[1.4]	20	[2.2]	-	-
Lead	SW6010B	µg/g	- -	-	-	-	-	-	-
Selenium	SW6010B	µg/g	- -	-	-	-	-	-	-
Silver	SW6010B	µg/g	- -	2.1	[1.4]	ND	[2.2]	-	-
Mercury	SW7471A	µg/g	- -	0.31	[0.0273]	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	ND	[0.455]	ND	[0.0727]	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	ND	[0.911]	ND	[0.146]	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	ND	[0.455]	ND	[0.0727]	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	ND	[0.455]	ND	[0.0727]	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	ND	[0.455]	ND	[0.0727]	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	ND	[0.455]	ND	[0.0727]	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	ND	[0.455]	ND	[0.0727]	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
1,1-Dichloroethane	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
1,1-Dichloroethene	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
1,2-Dichloroethane	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
2-Dichloropropane	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
2-Butanone	SW8260B	µg/kg	- -	ND	[440]	ND	[170]	-	-
2-Hexanone	SW8260B	µg/kg	- -	ND	[440]	ND	[170]	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	ND	[440]	ND	[170]	-	-
Acetone	SW8260B	µg/kg	- -	ND	[440]	ND	[170]	-	-
Benzene	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Bromodichloromethane	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Bromoform	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Bromomethane	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Carbon disulfide	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Carbon tetrachloride	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Chlorobenzene	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Chloroethane	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Chloroform	SW8260B	µg/kg	- -	ND	[91]	19	[33]	-	-
Chloromethane	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Dibromochloromethane	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Ethylbenzene	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Methylene chloride	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Styrene	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Tetrachloroethene	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Toluene	SW8260B	µg/kg	- -	430	[91]	300	[33]	-	-
Trichloroethene	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Vinyl chloride	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
Xylenes	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[91]	ND	[33]	-	-
pH	SW9045B	PH UNITS	- -	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508311	AM-A508312	AM-A509301	AM-A509301
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04439	00E04440	00E04445	00E04445R1
	Collection Date	11/2/00	11/2/00	11/6/00	11/6/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	48 [10]	180 [41]
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	180 [10]	1300 [41]
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	10 [10]	40 [41]
Anthracene	SW8270C SIM	µg/kg	- -	- -	530 [10]	3100 [41]
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	1400 [10]	5100 [41]
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	1200 [10]	4600 [41]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	1200 [10]	4900 [41]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	570 [10]	1700 [41]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	280 [10]	1300 [41]
Chrysene	SW8270C SIM	µg/kg	- -	- -	1900 [10]	6700 [41]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	160 [10]	450 [41]
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	2100 [10]	8500 [41]
Fluorene	SW8270C SIM	µg/kg	- -	- -	180 [10]	1200 [41]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	510 [10]	1600 [41]
Naphthalene	SW8270C SIM	µg/kg	- -	- -	28 [10]	110 [41]
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	2800 [10]	14000 [41]
Pyrene	SW8270C SIM	µg/kg	- -	- -	4000 [10]	16000 [41]
Total Solids	A2540G	%	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	- -	- -	311 [4]	- -
Residual Range Organics	AK103	µg/g	- -	- -	- -	- -
(TOC)	E415.2	mg/kg	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	ND [0.75]	ND [0.82]	- -	- -
Cadmium	SW6010B	µg/g	ND [0.3]	ND [0.33]	- -	- -
Lead	SW6010B	µg/g	ND [0.45]	0.33 [0.49]	- -	- -
Selenium	SW6010B	µg/g	0.71 [0.75]	0.56 [0.82]	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A508311		AM-A508312		AM-A509301		AM-A509301	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04439		00E04440		00E04445		00E04445R1	
	Collection Date	11/2/00		11/2/00		11/6/00		11/6/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	ND	[3]	0.14	[3.3]	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	ND	[1.5]	0.59	[1.6]	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	0.91	[1.5]	2	[1.6]	-	-	-	-
Mercury	SW7471A	µg/g	0.0302	[0.03]	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
pH	SW9045B	PH UNITS	2.5	[0.1]	2.6	[0.1]	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A509302		AM-A509303		AM-A509501		AM-A509502	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04446		00E04444		00E04448		00E04449	
		Collection Date	11/6/00		11/6/00		11/6/00		11/6/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Total Solids	A2540G	%	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	-	-	-	-	-	-
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-	-
(TOC)	E415.2	mg/kg	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	12	[0.5]	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	0.28	[0.2]	-	-
Lead	SW6010B	µg/g	-	-	-	-	23	[0.3]	-	-
Selenium	SW6010B	µg/g	-	-	-	-	2.5	[0.5]	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A509302		AM-A509303		AM-A509501		AM-A509502	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04446		00E04444		00E04448		00E04449	
	Collection Date	11/6/00		11/6/00		11/6/00		11/6/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	33	[10]	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	12	[5]	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	ND	[5]	-	-
Mercury	SW7471A	µg/g	-	-	-	-	0.0865	[0.0391]	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	ND	[0.652]	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	ND	[1.31]	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	ND	[0.652]	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	ND	[0.652]	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	ND	[0.652]	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	ND	[0.652]	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	ND	[0.652]	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
∠-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	ND	[220]
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	ND	[220]
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	ND	[220]
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	ND	[220]
Benzene	SW8260B	µg/kg	ND	[28]	ND	[20]	-	-	ND	[44]
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Ethylbenzene	SW8260B	µg/kg	ND	[28]	ND	[20]	-	-	110	[44]
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Toluene	SW8260B	µg/kg	ND	[28]	23	[20]	-	-	ND	[44]
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
Xylenes	SW8260B	µg/kg	ND	[28]	ND	[20]	-	-	360	[44]
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[44]
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A509503		AM-A509504		AM-A509601		AM-A509602	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04450		00E04451		00E04452		00E04453	
		Collection Date	11/6/00		11/6/00		11/6/00		11/6/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Total Solids	A2540G	%	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	-	-	-	-	-	-
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-	-
(TOC)	E415.2	mg/kg	-	-	-	-	-	-	-	
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	5.2	[0.5]	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	0.3	[0.2]	-	-	-	-	-	-
Lead	SW6010B	µg/g	20	[0.3]	-	-	-	-	-	-
Selenium	SW6010B	µg/g	5.2	[0.5]	-	-	-	-	-	-

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A509503		AM-A509504		AM-A509601		AM-A509602	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04450		00E04451		00E04452		00E04453	
	Collection Date	11/6/00		11/6/00		11/6/00		11/6/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	13	[10]	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	ND	[5]	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	ND	[5]	-	-	-	-	-	-
Mercury	SW7471A	µg/g	ND	[0.0367]	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.611]	-	-	ND	[0.0399]	ND	[0.0409]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[1.22]	-	-	ND	[0.08]	ND	[0.0818]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.611]	-	-	ND	[0.0399]	ND	[0.0409]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.611]	-	-	ND	[0.0399]	ND	[0.0409]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.611]	-	-	ND	[0.0399]	ND	[0.0409]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.611]	-	-	ND	[0.0399]	ND	[0.0409]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.611]	-	-	0.523	[0.0399]	ND	[0.0409]
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
,2-Dichloropropane	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	ND	[180]	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	ND	[180]	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	ND	[180]	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	ND	[180]	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	21	[36]	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	110	[36]	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	200	[36]	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	ND	[36]	-	-	-	-
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A509603		AM-A510401		AM-A510502		AM-A510601	
	Laboratory	DCHM		DCHM		DCHM		CTE	
	Lab Sample ID	00E04454		00E04642		00E04643		1007217003	
	Collection Date	11/6/00		11/8/00		11/8/00		11/7/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Total Solids	A2540G	%	-	-	-	-	-	-	84.6	[0]
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	-	-	-	-	10.2	[15.3] J
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	33.3	[25.3]
(TOC)	E415.2	mg/kg	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	1.37	[2.67] J
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	ND	[2.67]
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	4.63	[2.67]
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	9.48	[2.67]
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	7.76	[2.67]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	13.3	[2.67]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	4.71	[2.67]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	ND	[2.67]
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	11.3	[2.67]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	1.34	[2.67] J
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	16.9	[2.67]
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	ND	[2.67]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	3.78	[2.67]
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	1.13	[2.67] J
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	14.7	[6.39]
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	17.7	[2.67]
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A509603		AM-A510401		AM-A510502		AM-A510601	
	Laboratory	DCHM		DCHM		DCHM		CTE	
	Lab Sample ID	00E04454		00E04642		00E04643		1007217003	
	Collection Date	11/6/00		11/8/00		11/8/00		11/7/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.0769]	ND	[0.361]	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.154]	ND	[0.723]	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.0769]	ND	[0.361]	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.0769]	ND	[0.361]	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.0769]	ND	[0.361]	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.0769]	ND	[0.361]	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.0769]	ND	[0.361]	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	ND	[100]	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	ND	[100]	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	ND	[100]	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	ND	[100]	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	43	[20]	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	7.2	[20]	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	260	[20]	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	ND	[20]	-	-
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510602		AM-A510603		AM-A510604		AM-A510605	
	Laboratory	DCHM		DCHM		CTE		DCHM	
	Lab Sample ID	00E04644		00E04645		1007217004		00E04646	
	Collection Date	11/7/00		11/7/00		11/7/00		11/7/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Anthracene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Chrysene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Fluorene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Pyrene	SW8270C SIM	µg/kg	- -	- -		-	-	-	-
Total Solids	A2540G	%	- -	- -		83.8	[0]	-	-
Gasoline Range Organics	AK101	mg/kg	- -	- -		-	-	-	-
Diesel Range Organics	AK102	µg/g	- -	- -		9.96	[11.4] J	-	-
Residual Range Organics	AK103	µg/g	- -	- -		42.7	[18.8]	-	-
(TOC)	E415.2	mg/kg	- -	- -		-	-	-	-
(TOC)	KAHNTOC	mg/kg	- -	1300	[1200]	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	- -	- -		ND	[3.95]	-	-
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -		ND	[3.95]	-	-
Anthracene	SW8270C SIM	µg/kg	- -	- -		ND	[3.95]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -		4.65	[3.95]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -		5.28	[3.95]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -		6.82	[3.95]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -		5.25	[3.95]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -		ND	[3.95]	-	-
Chrysene	SW8270C SIM	µg/kg	- -	- -		5.12	[3.95]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -		ND	[3.95]	-	-
Fluoranthene	SW8270C SIM	µg/kg	- -	- -		6.68	[3.95]	-	-
Fluorene	SW8270C SIM	µg/kg	- -	- -		ND	[3.95]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -		ND	[3.95]	-	-
Naphthalene	SW8270C SIM	µg/kg	- -	- -		1.95	[3.95] J	-	-
Phenanthrene	SW8270C SIM	µg/kg	- -	- -		4.77	[9.47] J	-	-
Pyrene	SW8270C SIM	µg/kg	- -	- -		8.52	[3.95]	-	-
Arsenic	SW6010B	µg/g	- -	- -		-	-	-	-
Cadmium	SW6010B	µg/g	- -	- -		-	-	-	-
Lead	SW6010B	µg/g	- -	- -		-	-	-	-
Selenium	SW6010B	µg/g	- -	- -		-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510602		AM-A510603		AM-A510604		AM-A510605	
	Laboratory	DCHM		DCHM		CTE		DCHM	
	Lab Sample ID	00E04644		00E04645		1007217004		00E04646	
	Collection Date	11/7/00		11/7/00		11/7/00		11/7/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
1,1-Dichloroethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
1,1-Dichloroethene	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
1,2-Dichloroethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
,2-Dichloropropane	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
2-Butanone	SW8260B	µg/kg	ND	[100]	-	-	-	-	130	[110]
2-Hexanone	SW8260B	µg/kg	ND	[100]	-	-	-	-	ND	[110]
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[100]	-	-	-	-	ND	[110]
Acetone	SW8260B	µg/kg	ND	[100]	-	-	-	-	ND	[110]
Benzene	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Bromodichloromethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Bromoform	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Bromomethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Carbon disulfide	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Carbon tetrachloride	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Chlorobenzene	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Chloroethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Chloroform	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Chloromethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Dibromochloromethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Ethylbenzene	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Methylene chloride	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Styrene	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Tetrachloroethene	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Toluene	SW8260B	µg/kg	10	[20]	-	-	-	-	11	[22]
Trichloroethene	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Vinyl chloride	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
Xylenes	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[20]	-	-	-	-	ND	[22]
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510606		AM-A510607		AM-A510608		AM-A510609	
	Laboratory	DCHM		CTE		DCHM		DCHM	
	Lab Sample ID	00E04647		1007217005		00E04648		00E04649	
	Collection Date	11/7/00		11/9/00		11/9/00		11/9/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	- -	-	-	-	-	-	-
Total Solids	A2540G	%	- -	84.2	[0]	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	- -	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	- -	451	[10.9]	-	-	-	-
Residual Range Organics	AK103	µg/g	- -	484	[17.9]	-	-	-	-
(TOC)	E415.2	mg/kg	- -	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	- -	-	-	8100	[1200]	-	-
Acenaphthene	SW8270C SIM	µg/kg	- -	57.3	[24]	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	- -	ND	[24]	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	- -	101	[24]	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	49.2	[24]	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	ND	[24]	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	28.4	[24]	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	25.4	[24]	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	ND	[24]	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	- -	95.9	[24]	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	ND	[24]	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	- -	43.3	[24]	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	- -	123	[24]	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	ND	[24]	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	- -	20.2	[24] J	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	- -	260	[57.5]	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	- -	135	[24]	-	-	-	-
Arsenic	SW6010B	µg/g	- -	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	- -	-	-	-	-	-	-
Lead	SW6010B	µg/g	- -	-	-	-	-	-	-
Selenium	SW6010B	µg/g	- -	-	-	-	-	-	-

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510606	AM-A510607	AM-A510608	AM-A510609
	Laboratory	DCHM	CTE	DCHM	DCHM
	Lab Sample ID	00E04647	1007217005	00E04648	00E04649
	Collection Date	11/7/00	11/9/00	11/9/00	11/9/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
1,1,2-Trichloroethane	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
1,1-Dichloroethane	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
1,1-Dichloroethene	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
1,2-Dichloroethane	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
,2-Dichloropropane	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
∠-Butanone	SW8260B	µg/kg	ND [95]	- -	- -	80 [90]
2-Hexanone	SW8260B	µg/kg	ND [95]	- -	- -	ND [90]
4-Methyl-2-pentanone	SW8260B	µg/kg	ND [95]	- -	- -	ND [90]
Acetone	SW8260B	µg/kg	ND [95]	- -	- -	ND [90]
Benzene	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Bromodichloromethane	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Bromoform	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Bromomethane	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Carbon disulfide	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Carbon tetrachloride	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Chlorobenzene	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Chloroethane	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Chloroform	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Chloromethane	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Dibromochloromethane	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Ethylbenzene	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Methylene chloride	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Styrene	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Tetrachloroethene	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Toluene	SW8260B	µg/kg	9.4 [19]	- -	- -	3.8 [18]
Trichloroethene	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Vinyl chloride	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
Xylenes	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND [19]	- -	- -	ND [18]
pH	SW9045B	PH UNITS	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510610		AM-A510611		AM-A510612		AM-A510613	
	Laboratory	CTE		DCHM		CTE		DCHM	
	Lab Sample ID	1007217006		00E04650		1007217007		00E04651	
	Collection Date	11/9/00		11/9/00		11/9/00		11/9/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Total Solids	A2540G	%	88.8	[0]	-	-	89.2	[0]	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	2630	[109]	-	-	5140	[111]	-	-
Residual Range Organics	AK103	µg/g	2280	[180]	-	-	4220	[183]	-	-
(TOC)	E415.2	mg/kg	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	742	[45.4]	-	-	863	[48.9]	-	-
Acenaphthylene	SW8270C SIM	µg/kg	ND	[45.4]	-	-	ND	[48.9]	-	-
Anthracene	SW8270C SIM	µg/kg	834	[45.4]	-	-	947	[48.9]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	373	[45.4]	-	-	457	[48.9]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND	[45.4]	-	-	ND	[48.9]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	126	[45.4]	-	-	157	[48.9]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	76.4	[45.4]	-	-	96.8	[48.9]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND	[45.4]	-	-	ND	[48.9]	-	-
Chrysene	SW8270C SIM	µg/kg	896	[45.4]	-	-	1070	[48.9]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[45.4]	-	-	ND	[48.9]	-	-
Fluoranthene	SW8270C SIM	µg/kg	325	[45.4]	-	-	385	[48.9]	-	-
Fluorene	SW8270C SIM	µg/kg	1280	[45.4]	-	-	1570	[48.9]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	50.9	[45.4]	-	-	73.8	[48.9]	-	-
Naphthalene	SW8270C SIM	µg/kg	3990	[227]	-	-	4470	[244]	-	-
Phenanthrene	SW8270C SIM	µg/kg	4470	[544]	-	-	4940	[585]	-	-
Pyrene	SW8270C SIM	µg/kg	891	[45.4]	-	-	1070	[48.9]	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510610		AM-A510611		AM-A510612		AM-A510613	
	Laboratory	CTE		DCHM		CTE		DCHM	
	Lab Sample ID	1007217006		00E04650		1007217007		00E04651	
	Collection Date	11/9/00		11/9/00		11/9/00		11/9/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
1,1-Dichloroethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
1,1-Dichloroethene	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
1,2-Dichloroethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
2-Dichloropropane	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
2-Butanone	SW8260B	µg/kg	-	-	130	[95]	-	-	34	[37]
2-Hexanone	SW8260B	µg/kg	-	-	ND	[95]	-	-	ND	[37]
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	ND	[95]	-	-	ND	[37]
Acetone	SW8260B	µg/kg	-	-	ND	[95]	-	-	ND	[37]
Benzene	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Bromodichloromethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Bromoform	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Bromomethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Carbon disulfide	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Carbon tetrachloride	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Chlorobenzene	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Chloroethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Chloroform	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Chloromethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Dibromochloromethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Ethylbenzene	SW8260B	µg/kg	-	-	150	[19]	-	-	33	[7.4]
Methylene chloride	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Styrene	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Tetrachloroethene	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Toluene	SW8260B	µg/kg	-	-	22	[19]	-	-	5.1	[7.4]
Trichloroethene	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Vinyl chloride	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
Xylenes	SW8260B	µg/kg	-	-	620	[19]	-	-	150	[7.4]
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	ND	[19]	-	-	ND	[7.4]
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510614				AM-A510615			
	Laboratory	CTE				DCHM			
	Lab Sample ID	1007217008				00E04652			
	Collection Date	11/9/00				11/9/00			
	Matrix	SO				SO			
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Total Solids	A2540G	%	89.5	[0]	-	-	72.8	[0]	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	705	[11.1]	-	-	12.4	[13.6] J	-	-
Residual Range Organics	AK103	µg/g	671	[18.3]	-	-	62.5	[22.5]	-	-
(TOC)	E415.2	mg/kg	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	405	[49.7]	-	-	ND	[3.02]	-	-
Acenaphthylene	SW8270C SIM	µg/kg	ND	[49.7]	-	-	ND	[3.02]	-	-
Anthracene	SW8270C SIM	µg/kg	510	[49.7]	-	-	ND	[3.02]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	210	[49.7]	-	-	ND	[3.02]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND	[49.7]	-	-	ND	[3.02]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	76.2	[49.7]	-	-	ND	[3.02]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	50.7	[49.7]	-	-	ND	[3.02]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND	[49.7]	-	-	ND	[3.02]	-	-
Chrysene	SW8270C SIM	µg/kg	470	[49.7]	-	-	ND	[3.02]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[49.7]	-	-	ND	[3.02]	-	-
Fluoranthene	SW8270C SIM	µg/kg	169	[49.7]	-	-	ND	[3.02]	-	-
Fluorene	SW8270C SIM	µg/kg	734	[49.7]	-	-	ND	[3.02]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND	[49.7]	-	-	ND	[3.02]	-	-
Naphthalene	SW8270C SIM	µg/kg	744	[49.7]	-	-	2.67	[3.02] J	-	-
Phenanthrene	SW8270C SIM	µg/kg	2490	[595]	-	-	ND	[7.24]	-	-
Pyrene	SW8270C SIM	µg/kg	599	[49.7]	-	-	ND	[3.02]	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510614		AM-A510615		AM-A510616		AM-A510617	
	Laboratory	CTE		DCHM		CTE		DCHM	
	Lab Sample ID	1007217008		00E04652		1007217009		00E04653	
	Collection Date	11/9/00		11/9/00		11/9/00		11/9/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
1,1-Dichloroethane	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
1,1-Dichloroethene	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
1,2-Dichloroethane	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
,2-Dichloropropane	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
2-Butanone	SW8260B	µg/kg	-	-	100 [85]		-	-	84 [85]	
2-Hexanone	SW8260B	µg/kg	-	-	ND [85]		-	-	ND [85]	
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	ND [85]		-	-	ND [85]	
Acetone	SW8260B	µg/kg	-	-	ND [85]		-	-	ND [85]	
Benzene	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Bromodichloromethane	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Bromoform	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Bromomethane	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Carbon disulfide	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Carbon tetrachloride	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Chlorobenzene	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Chloroethane	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Chloroform	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Chloromethane	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Dibromochloromethane	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Ethylbenzene	SW8260B	µg/kg	-	-	38 [17]		-	-	ND [17]	
Methylene chloride	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Styrene	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Tetrachloroethene	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Toluene	SW8260B	µg/kg	-	-	8 [17]		-	-	53 [17]	
Trichloroethene	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Vinyl chloride	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
Xylenes	SW8260B	µg/kg	-	-	130 [17]		-	-	ND [17]	
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	ND [17]		-	-	ND [17]	
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510618		AM-A510619		AM-A510620		AM-A510621	
	Laboratory	CTE		DCHM		DCHM		CTE	
	Lab Sample ID	1007217010		00E04654		00E04655		1007217011	
	Collection Date	11/9/00		11/9/00		11/9/00		11/10/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Total Solids	A2540G	%	81.7	[0]	-	-	-	-	51.1	[0]
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	6.58	[12] J	-	-	-	-	21.3	[19.1]
Residual Range Organics	AK103	µg/g	15	[19.9] J	-	-	-	-	77.7	[31.5]
(TOC)	E415.2	mg/kg	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	2000	[1300]	-	-
Acenaphthene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	ND	[4.38]
Acenaphthylene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	ND	[4.38]
Anthracene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	4.85	[4.38]
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	13.3	[4.38]
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	9.09	[4.38]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	37.9	[4.38]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	8.14	[4.38]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	ND	[4.38]
Chrysene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	29.7	[4.38]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	ND	[4.38]
Fluoranthene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	26.8	[4.38]
Fluorene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	ND	[4.38]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	7.4	[4.38]
Naphthalene	SW8270C SIM	µg/kg	1.39	[2.75] J	-	-	-	-	3.39	[4.38] J
Phenanthrene	SW8270C SIM	µg/kg	ND	[6.58]	-	-	-	-	12.1	[10.5]
Pyrene	SW8270C SIM	µg/kg	ND	[2.75]	-	-	-	-	24.6	[4.38]
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510618	AM-A510619	AM-A510620	AM-A510621
	Laboratory	CTE	DCHM	DCHM	CTE
	Lab Sample ID	1007217010	00E04654	00E04655	1007217011
	Collection Date	11/9/00	11/9/00	11/9/00	11/10/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
Arsenic	SW6010B	µg/g	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- - ND [27]	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- - ND [27]	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- - ND [27]	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- - ND [27]	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- - ND [27]	- -	- -
1,2-Dichloroethane	SW8260B	µg/kg	- - ND [27]	- -	- -
,2-Dichloropropane	SW8260B	µg/kg	- - ND [27]	- -	- -
2-Butanone	SW8260B	µg/kg	- - 120 [140]	- -	- -
2-Hexanone	SW8260B	µg/kg	- - ND [140]	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	- - ND [140]	- -	- -
Acetone	SW8260B	µg/kg	- - ND [140]	- -	- -
Benzene	SW8260B	µg/kg	- - ND [27]	- -	- -
Bromodichloromethane	SW8260B	µg/kg	- - ND [27]	- -	- -
Bromoform	SW8260B	µg/kg	- - ND [27]	- -	- -
Bromomethane	SW8260B	µg/kg	- - ND [27]	- -	- -
Carbon disulfide	SW8260B	µg/kg	- - ND [27]	- -	- -
Carbon tetrachloride	SW8260B	µg/kg	- - ND [27]	- -	- -
Chlorobenzene	SW8260B	µg/kg	- - ND [27]	- -	- -
Chloroethane	SW8260B	µg/kg	- - ND [27]	- -	- -
Chloroform	SW8260B	µg/kg	- - ND [27]	- -	- -
Chloromethane	SW8260B	µg/kg	- - ND [27]	- -	- -
Dibromochloromethane	SW8260B	µg/kg	- - ND [27]	- -	- -
Ethylbenzene	SW8260B	µg/kg	- - ND [27]	- -	- -
Methylene chloride	SW8260B	µg/kg	- - 29 [27]	- -	- -
Styrene	SW8260B	µg/kg	- - ND [27]	- -	- -
Tetrachloroethene	SW8260B	µg/kg	- - ND [27]	- -	- -
Toluene	SW8260B	µg/kg	- - ND [27]	- -	- -
Trichloroethene	SW8260B	µg/kg	- - ND [27]	- -	- -
Vinyl chloride	SW8260B	µg/kg	- - ND [27]	- -	- -
Xylenes	SW8260B	µg/kg	- - ND [27]	- -	- -
cis-1,2-Dichloroethene	SW8260B	µg/kg	- - ND [27]	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	- - ND [27]	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/kg	- - ND [27]	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	- - ND [27]	- -	- -
pH	SW9045B	PH UNITS	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510622		AM-A510623		AM-A510624		AM-A510625	
	Laboratory	DCHM		CTE		DCHM		DCHM	
	Lab Sample ID	00E04656		1007217012		00E04657		00E04658	
	Collection Date	11/10/00		11/10/00		11/10/00		11/10/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Acenaphthene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Acenaphthylene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Anthracene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Chrysene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Fluoranthene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Fluorene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Naphthalene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Phenanthrene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Pyrene	SW8270C SIM	µg/kg	- -	-	-	- -	-	- -	
Total Solids	A2540G	%	- -	-	83 [0]	- -	-	- -	
Gasoline Range Organics	AK101	mg/kg	- -	-	- -	- -	-	- -	
Diesel Range Organics	AK102	µg/g	- -	-	6.12 [11.3] J	- -	-	- -	
Residual Range Organics	AK103	µg/g	- -	-	12 [18.6] J	- -	-	- -	
(TOC)	E415.2	mg/kg	- -	-	- -	- -	-	- -	
(TOC)	KAHNTOC	mg/kg	- -	-	- -	- -	-	9900 [1200]	
Acenaphthene	SW8270C SIM	µg/kg	- -	-	24.3 [2.71]	- -	-	- -	
Acenaphthylene	SW8270C SIM	µg/kg	- -	-	ND [2.71]	- -	-	- -	
Anthracene	SW8270C SIM	µg/kg	- -	-	19.8 [2.71]	- -	-	- -	
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	-	19 [2.71]	- -	-	- -	
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	-	7.05 [2.71]	- -	-	- -	
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	-	20.3 [2.71]	- -	-	- -	
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	-	3.65 [2.71]	- -	-	- -	
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	-	ND [2.71]	- -	-	- -	
Chrysene	SW8270C SIM	µg/kg	- -	-	15.5 [2.71]	- -	-	- -	
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	-	1.29 [2.71] J	- -	-	- -	
Fluoranthene	SW8270C SIM	µg/kg	- -	-	75.5 [2.71]	- -	-	- -	
Fluorene	SW8270C SIM	µg/kg	- -	-	32.6 [2.71]	- -	-	- -	
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	-	3.26 [2.71]	- -	-	- -	
Naphthalene	SW8270C SIM	µg/kg	- -	-	12.9 [2.71]	- -	-	- -	
Phenanthrene	SW8270C SIM	µg/kg	- -	-	89 [6.49]	- -	-	- -	
Pyrene	SW8270C SIM	µg/kg	- -	-	57.7 [2.71]	- -	-	- -	
Arsenic	SW6010B	µg/g	- -	-	- -	- -	-	- -	
Cadmium	SW6010B	µg/g	- -	-	- -	- -	-	- -	
Lead	SW6010B	µg/g	- -	-	- -	- -	-	- -	
Selenium	SW6010B	µg/g	- -	-	- -	- -	-	- -	

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A510622	AM-A510623	AM-A510624	AM-A510625
	Laboratory	DCHM	CTE	DCHM	DCHM
	Lab Sample ID	00E04656	1007217012	00E04657	00E04658
	Collection Date	11/10/00	11/10/00	11/10/00	11/10/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
1,1-Dichloroethane	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
1,1-Dichloroethene	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
1,2-Dichloroethane	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
,2-Dichloropropane	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
2-Butanone	SW8260B	µg/kg	210 [180]	- -	ND [130]	- -
2-Hexanone	SW8260B	µg/kg	ND [180]	- -	ND [130]	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	ND [180]	- -	ND [130]	- -
Acetone	SW8260B	µg/kg	ND [180]	- -	ND [130]	- -
Benzene	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Bromodichloromethane	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Bromoform	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Bromomethane	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Carbon disulfide	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Carbon tetrachloride	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Chlorobenzene	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Chloroethane	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Chloroform	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Chloromethane	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Dibromochloromethane	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Ethylbenzene	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Methylene chloride	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Styrene	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Tetrachloroethene	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Toluene	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Trichloroethene	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Vinyl chloride	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
Xylenes	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND [35]	- -	ND [26]	- -
pH	SW9045B	PH UNITS	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A511601	AM-A511602	AM-A511603	AM-A511604
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04659	00E04660	00E04661	00E04662
	Collection Date	11/9/00	11/9/00	11/9/00	11/9/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	ND [2.6]	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	ND [2.6]	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	ND [2.6]	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	ND [2.6]	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	4.2 [2.6]	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	8.7 [2.6]	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	14 [2.6]	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	9.8 [2.6]	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	4.4 [2.6]	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	12 [2.6]	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	ND [2.6]	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	21 [2.6]	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	ND [2.6]	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	9.1 [2.6]	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	ND [2.6]	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	17 [2.6]	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	29 [2.6]	- -
Total Solids	A2540G	%	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	ND [9.84]	- -	- -
Diesel Range Organics	AK102	µg/g	- -	- -	104 [6.15]	- -
Residual Range Organics	AK103	µg/g	- -	- -	198 [154]	- -
(TOC)	E415.2	mg/kg	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A511601	AM-A511602	AM-A511603	AM-A511604
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04659	00E04660	00E04661	00E04662
	Collection Date	11/9/00	11/9/00	11/9/00	11/9/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
Arsenic	SW6010B	µg/g	- -	- -	- -	3.7 [0.81]
Barium	SW6010B	µg/g	- -	- -	- -	62 [3.2]
Cadmium	SW6010B	µg/g	- -	- -	- -	ND [0.32]
Chromium	SW6010B	µg/g	- -	- -	- -	4.4 [1.6]
Lead	SW6010B	µg/g	- -	- -	- -	5 [0.49]
Selenium	SW6010B	µg/g	- -	- -	- -	1.5 [0.81]
Silver	SW6010B	µg/g	- -	- -	- -	ND [1.6]
Mercury	SW7471A	µg/g	- -	- -	- -	0.0292 [0.0324]
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	ND [28]	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND [28]	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	ND [28]	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	ND [28]	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	ND [28]	- -	- -	- -
1,2-Dichloroethane	SW8260B	µg/kg	ND [28]	- -	- -	- -
,2-Dichloropropane	SW8260B	µg/kg	ND [28]	- -	- -	- -
2-Butanone	SW8260B	µg/kg	ND [140]	- -	- -	- -
2-Hexanone	SW8260B	µg/kg	ND [140]	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	ND [140]	- -	- -	- -
Acetone	SW8260B	µg/kg	ND [140]	- -	- -	- -
Benzene	SW8260B	µg/kg	ND [28]	ND [33]	- -	- -
Bromodichloromethane	SW8260B	µg/kg	ND [28]	- -	- -	- -
Bromoform	SW8260B	µg/kg	ND [28]	- -	- -	- -
Bromomethane	SW8260B	µg/kg	ND [28]	- -	- -	- -
Carbon disulfide	SW8260B	µg/kg	ND [28]	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/kg	ND [28]	- -	- -	- -
Chlorobenzene	SW8260B	µg/kg	ND [28]	- -	- -	- -
Chloroethane	SW8260B	µg/kg	ND [28]	- -	- -	- -
Chloroform	SW8260B	µg/kg	ND [28]	- -	- -	- -
Chloromethane	SW8260B	µg/kg	ND [28]	- -	- -	- -
Dibromochloromethane	SW8260B	µg/kg	ND [28]	- -	- -	- -
Ethylbenzene	SW8260B	µg/kg	ND [28]	ND [33]	- -	- -
Methylene chloride	SW8260B	µg/kg	ND [28]	- -	- -	- -
Styrene	SW8260B	µg/kg	ND [28]	- -	- -	- -
Tetrachloroethene	SW8260B	µg/kg	ND [28]	- -	- -	- -
Toluene	SW8260B	µg/kg	ND [28]	ND [33]	- -	- -
Trichloroethene	SW8260B	µg/kg	ND [28]	- -	- -	- -
Vinyl chloride	SW8260B	µg/kg	ND [28]	- -	- -	- -
Xylenes	SW8260B	µg/kg	ND [28]	ND [33]	- -	- -
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND [28]	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND [28]	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND [28]	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND [28]	- -	- -	- -
pH	SW9045B	PH UNITS	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A513601		AM-A520601		AM-A520602		AM-A520603	
	Laboratory	CTE		DCHM		DCHM		DCHM	
	Lab Sample ID	1007219009		00E04690		00E04691		00E04692	
	Collection Date	11/12/00		11/15/00		11/15/00		11/15/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	75 [3.6]	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	130 [3.6]	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	95 [3.6]	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	56 [3.6]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	8.5 [3.6]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	4.1 [3.6]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	6 [3.6]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	ND [3.6]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	ND [3.6]	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	34 [3.6]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	ND [3.6]	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	34 [3.6]	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	280 [3.6]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	ND [3.6]	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	38 [3.6]	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	100 [3.6]	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	36 [3.6]	-	-
Total Solids	A2540G	%	86.6	[0]	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	9310	[7.63]	-	-	-	-
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-	-
(TOC)	E415.2	mg/kg	7606	[1100]	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	72000	[3100]
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A513601		AM-A520601		AM-A520602		AM-A520603	
	Laboratory	CTE		DCHM		DCHM		DCHM	
	Lab Sample ID	1007219009		00E04690		00E04691		00E04692	
	Collection Date	11/12/00		11/15/00		11/15/00		11/15/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520604	AM-A520605	AM-A520606	AM-A520607
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04693	00E04694	00E04695	00E04696
	Collection Date	11/15/00	11/15/00	11/15/00	11/15/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Acenaphthene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Acenaphthylene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Anthracene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	120 [11]	- -	ND [2.7]
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Chrysene	SW8270C SIM	µg/kg	- -	140 [11]	- -	ND [2.7]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Fluoranthene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Fluorene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Naphthalene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Phenanthrene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Pyrene	SW8270C SIM	µg/kg	- -	ND [11]	- -	ND [2.7]
Total Solids	A2540G	%	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	2150 [13.8]	- -	20.9 [6.38]	- -
Residual Range Organics	AK103	µg/g	- -	- -	- -	- -
(TOC)	E415.2	mg/kg	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520604		AM-A520605		AM-A520606		AM-A520607	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04693		00E04694		00E04695		00E04696	
	Collection Date	11/15/00		11/15/00		11/15/00		11/15/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520608		AM-A520609		AM-A520610		AM-A520611	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04697		00E04698		00E04699		00E04700	
	Collection Date	11/15/00		11/15/00		11/15/00		11/15/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Acenaphthene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Acenaphthylene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Anthracene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	20	[12]	- -		- -	
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Chrysene	SW8270C SIM	µg/kg	- -	16	[12]	- -		- -	
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Fluoranthene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Fluorene	SW8270C SIM	µg/kg	- -	15	[12]	- -		- -	
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Naphthalene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Phenanthrene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Pyrene	SW8270C SIM	µg/kg	- -	ND	[12]	- -		- -	
Total Solids	A2540G	%	- -	-	-	- -		- -	
Gasoline Range Organics	AK101	mg/kg	- -	-	-	- -		- -	
Diesel Range Organics	AK102	µg/g	7710	[16.3]	- -	- -		132	[5.41]
Residual Range Organics	AK103	µg/g	- -	-	-	- -		- -	
(TOC)	E415.2	mg/kg	- -	-	-	- -		- -	
(TOC)	KAHNTOC	mg/kg	- -	-	-	280000	[3300]	- -	
Acenaphthene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Acenaphthylene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Anthracene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Chrysene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Fluoranthene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Fluorene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Naphthalene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Phenanthrene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Pyrene	SW8270C SIM	µg/kg	- -	-	-	- -		- -	
Arsenic	SW6010B	µg/g	- -	-	-	- -		- -	
Cadmium	SW6010B	µg/g	- -	-	-	- -		- -	
Lead	SW6010B	µg/g	- -	-	-	- -		- -	
Selenium	SW6010B	µg/g	- -	-	-	- -		- -	

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A520608		AM-A520609		AM-A520610		AM-A520611	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04697		00E04698		00E04699		00E04700	
		Collection Date	11/15/00		11/15/00		11/15/00		11/15/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
.2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520612	AM-A520613	AM-A520614	AM-A520615
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04701	00E04702	00E04703	00E04704
	Collection Date	11/15/00	11/15/00	11/15/00	11/15/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND [2.3]	- -	9.9 [5.3]	- -
Acenaphthene	SW8270C SIM	µg/kg	ND [2.3]	- -	ND [5.3]	- -
Acenaphthylene	SW8270C SIM	µg/kg	ND [2.3]	- -	6.4 [5.3]	- -
Anthracene	SW8270C SIM	µg/kg	ND [2.3]	- -	ND [5.3]	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND [2.3]	- -	29 [5.3]	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND [2.3]	- -	ND [5.3]	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND [2.3]	- -	ND [5.3]	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND [2.3]	- -	ND [5.3]	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND [2.3]	- -	ND [5.3]	- -
Chrysene	SW8270C SIM	µg/kg	ND [2.3]	- -	24 [5.3]	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND [2.3]	- -	ND [5.3]	- -
Fluoranthene	SW8270C SIM	µg/kg	ND [2.3]	- -	ND [5.3]	- -
Fluorene	SW8270C SIM	µg/kg	ND [2.3]	- -	ND [5.3]	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND [2.3]	- -	ND [5.3]	- -
Naphthalene	SW8270C SIM	µg/kg	ND [2.3]	- -	11 [5.3]	- -
Phenanthrene	SW8270C SIM	µg/kg	ND [2.3]	- -	ND [5.3]	- -
Pyrene	SW8270C SIM	µg/kg	ND [2.3]	- -	ND [5.3]	- -
Total Solids	A2540G	%	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	- -	402 [9.2]	- -	- -
Residual Range Organics	AK103	µg/g	- -	- -	- -	- -
(TOC)	E415.2	mg/kg	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	330000 [3600]
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A520612		AM-A520613		AM-A520614		AM-A520615	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04701		00E04702		00E04703		00E04704	
	Collection Date	11/15/00		11/15/00		11/15/00		11/15/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
pH	SW9045B	PH UNITS	-	-	-	-	-	-	-	-

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505302		AM-A505303		AM-A505304		AM-A505305	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03786		00E03787		00E03788		00E03789	
	Collection Date	10/12/00		10/12/00		10/13/00		10/13/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	5	[2.2]	12	[2]	34	[4.8]
Acenaphthene	SW8270C SIM	µg/kg	- -	ND	[2.2]	6.7	[2]	19	[4.8]
Acenaphthylene	SW8270C SIM	µg/kg	- -	4.1	[2.2]	4.6	[2]	17	[4.8]
Anthracene	SW8270C SIM	µg/kg	- -	5.3	[2.2]	30	[2]	110	[4.8]
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	15	[2.2]	84	[2]	230	[4.8]
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	19	[2.2]	93	[2]	340	[4.8]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	32	[2.2]	200	[2]	640	[4.8]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	24	[2.2]	89	[2]	270	[4.8]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	9.1	[2.2]	59	[2]	220	[4.8]
Chrysene	SW8270C SIM	µg/kg	- -	21	[2.2]	130	[2]	420	[4.8]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	3.7	[2.2]	4.9	[2]	74	[4.8]
Fluoranthene	SW8270C SIM	µg/kg	- -	27	[2.2]	160	[2]	370	[4.8]
Fluorene	SW8270C SIM	µg/kg	- -	4.4	[2.2]	8.4	[2]	29	[4.8]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	17	[2.2]	93	[2]	300	[4.8]
Naphthalene	SW8270C SIM	µg/kg	- -	4.7	[2.2]	24	[2]	71	[4.8]
Phenanthrene	SW8270C SIM	µg/kg	- -	14	[2.2]	110	[2]	300	[4.8]
Pyrene	SW8270C SIM	µg/kg	- -	37	[2.2]	130	[2]	350	[4.8]
Gasoline Range Organics	AK101	mg/kg	- -	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	- -	449	[5.09]	181	[4.71]	454	[5.6]
Residual Range Organics	AK103	µg/g	- -	681	[127]	1970	[118]	4590	[140]
(TOC)	KAHNTOC	mg/kg	- -	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	- -	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	- -	-	-	-	-	-	-
Lead	SW6010B	µg/g	- -	-	-	-	-	-	-
Selenium	SW6010B	µg/g	- -	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	- -	8.6	[0.64]	78	[0.59]	170	[0.7]
Barium	SW6010B	µg/g	- -	35	[2.5]	35	[2.4]	70	[2.8]
Cadmium	SW6010B	µg/g	- -	ND	[0.25]	0.81	[0.24]	1.9	[0.28]
Chromium	SW6010B	µg/g	- -	16	[1.3]	23	[1.2]	19	[1.4]
Lead	SW6010B	µg/g	- -	17	[0.38]	82	[0.35]	150	[0.42]
Selenium	SW6010B	µg/g	- -	0.69	[0.64]	ND	[0.59]	ND	[0.7]
Silver	SW6010B	µg/g	- -	ND	[1.3]	4.5	[1.2]	9.8	[1.4]
Zinc	SW6010B	µg/g	- -	-	-	-	-	-	-
Mercury	SW7471A	µg/g	- -	0.0431	[0.0254]	0.0665	[0.0236]	0.08	[0.028]
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	ND [20]	ND	[12]	ND	[16]	ND	[10]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND [20]	ND	[12]	ND	[16]	ND	[10]
1,1,2-Trichloroethane	SW8260B	µg/kg	ND [20]	ND	[12]	ND	[16]	ND	[10]
1,1-Dichloroethane	SW8260B	µg/kg	ND [20]	ND	[12]	ND	[16]	ND	[10]
1,1-Dichloroethene	SW8260B	µg/kg	ND [20]	ND	[12]	ND	[16]	ND	[10]
1,2-Dichloroethane	SW8260B	µg/kg	ND [20]	ND	[12]	ND	[16]	ND	[10]
1,2-Dichloropropane	SW8260B	µg/kg	ND [20]	ND	[12]	ND	[16]	ND	[10]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505302		AM-A505303		AM-A505304		AM-A505305	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03786		00E03787		00E03788		00E03789	
	Collection Date	10/12/00		10/12/00		10/13/00		10/13/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	ND	[100]	440	[58]	690	[77]	350	[51]
2-Hexanone	SW8260B	µg/kg	ND	[100]	ND	[58]	ND	[77]	ND	[51]
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[100]	ND	[58]	ND	[77]	ND	[51]
Acetone	SW8260B	µg/kg	ND	[100]	ND	[58]	ND	[77]	ND	[51]
Benzene	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Bromodichloromethane	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Bromoform	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Bromomethane	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Carbon disulfide	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Carbon tetrachloride	SW8260B	µg/kg	ND	[20]	ND	[12]	42	[16]	11	[10]
Chlorobenzene	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Chloroethane	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Chloroform	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Chloromethane	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Dibromochloromethane	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Ethylbenzene	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Methylene chloride	SW8260B	µg/kg	22	[20]	ND	[12]	ND	[16]	ND	[10]
Styrene	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Tetrachloroethene	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Toluene	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Trichloroethene	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Vinyl chloride	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
Xylenes	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
ans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]
rans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[20]	ND	[12]	ND	[16]	ND	[10]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A505306		AM-A505307		AM-A505401		AM-A505402	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E03790		00E03791		00E03792		00E03793	
		Collection Date	10/13/00		10/13/00		10/13/00		10/13/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	3.4	[2]	4.2	[2]	ND	[1.8]	-	-
Acenaphthene	SW8270C SIM	µg/kg	ND	[2]	ND	[2]	ND	[1.8]	-	-
Acenaphthylene	SW8270C SIM	µg/kg	ND	[2]	ND	[2]	6.1	[1.8]	-	-
Anthracene	SW8270C SIM	µg/kg	5	[2]	2.8	[2]	ND	[1.8]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	13	[2]	11	[2]	ND	[1.8]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	20	[2]	25	[2]	ND	[1.8]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	32	[2]	26	[2]	ND	[1.8]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	23	[2]	22	[2]	ND	[1.8]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	9.7	[2]	6.1	[2]	ND	[1.8]	-	-
Chrysene	SW8270C SIM	µg/kg	19	[2]	18	[2]	ND	[1.8]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	3.8	[2]	4.1	[2]	ND	[1.8]	-	-
Fluoranthene	SW8270C SIM	µg/kg	18	[2]	16	[2]	ND	[1.8]	-	-
Fluorene	SW8270C SIM	µg/kg	ND	[2]	ND	[2]	ND	[1.8]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	18	[2]	14	[2]	ND	[1.8]	-	-
Naphthalene	SW8270C SIM	µg/kg	3.4	[2]	4.7	[2]	ND	[1.8]	-	-
Phenanthrene	SW8270C SIM	µg/kg	15	[2]	9	[2]	ND	[1.8]	-	-
Pyrene	SW8270C SIM	µg/kg	34	[2]	33	[2]	2.3	[1.8]	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	64.8	[4.68]	122	[4.63]	649	[4.31]	309	[5.1]
Residual Range Organics	AK103	µg/g	1120	[117]	1530	[116]	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	6.9	[0.58]	9.1	[0.58]	-	-	-	-
Barium	SW6010B	µg/g	61	[2.3]	30	[2.3]	-	-	-	-
Cadmium	SW6010B	µg/g	ND	[0.23]	ND	[0.23]	-	-	-	-
Chromium	SW6010B	µg/g	30	[1.2]	10	[1.2]	-	-	-	-
Lead	SW6010B	µg/g	600	[0.35]	28	[0.35]	-	-	-	-
Selenium	SW6010B	µg/g	ND	[0.58]	ND	[0.58]	-	-	-	-
Silver	SW6010B	µg/g	0.83	[1.2]	0.63	[1.2]	-	-	-	-
Zinc	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	0.1	[0.0234]	0.0643	[0.0232]	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505306		AM-A505307		AM-A505401		AM-A505402	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03790		00E03791		00E03792		00E03793	
	Collection Date	10/13/00		10/13/00		10/13/00		10/13/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	210	[30]	250	[33]	-	-	-	-
2-Hexanone	SW8260B	µg/kg	ND	[30]	ND	[33]	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[30]	ND	[33]	-	-	-	-
Acetone	SW8260B	µg/kg	ND	[30]	ND	[33]	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Bromoform	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Bromomethane	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	8.8	[6.2]	11	[6.8]	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Chloroethane	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Chloroform	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Chloromethane	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Methylene chloride	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Styrene	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Toluene	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Trichloroethene	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
Xylenes	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
ans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[6.2]	ND	[6.8]	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505403	AM-A505404	AM-A505405	AM-A505406
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03794	00E03795	00E03796	00E03797
	Collection Date	10/13/00	10/13/00	10/13/00	10/13/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	24.7 [5.36]	- -	- -	- -
Residual Range Organics	AK103	µg/g	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	16000 [1300]	17000 [1400]	19000 [1500]
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Zinc	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505403	AM-A505404	AM-A505405	AM-A505406
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03794	00E03795	00E03796	00E03797
	Collection Date	10/13/00	10/13/00	10/13/00	10/13/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Butanone	SW8260B	µg/kg	- - - - - - - -		
2-Hexanone	SW8260B	µg/kg	- - - - - - - -		
4-Methyl-2-pentanone	SW8260B	µg/kg	- - - - - - - -		
Acetone	SW8260B	µg/kg	- - - - - - - -		
Benzene	SW8260B	µg/kg	- - - - - - - -		
Bromodichloromethane	SW8260B	µg/kg	- - - - - - - -		
Bromoform	SW8260B	µg/kg	- - - - - - - -		
Bromomethane	SW8260B	µg/kg	- - - - - - - -		
Carbon disulfide	SW8260B	µg/kg	- - - - - - - -		
Carbon tetrachloride	SW8260B	µg/kg	- - - - - - - -		
Chlorobenzene	SW8260B	µg/kg	- - - - - - - -		
Chloroethane	SW8260B	µg/kg	- - - - - - - -		
Chloroform	SW8260B	µg/kg	- - - - - - - -		
Chloromethane	SW8260B	µg/kg	- - - - - - - -		
Dibromochloromethane	SW8260B	µg/kg	- - - - - - - -		
Ethylbenzene	SW8260B	µg/kg	- - - - - - - -		
Methylene chloride	SW8260B	µg/kg	- - - - - - - -		
Styrene	SW8260B	µg/kg	- - - - - - - -		
Tetrachloroethene	SW8260B	µg/kg	- - - - - - - -		
Toluene	SW8260B	µg/kg	- - - - - - - -		
Trichloroethene	SW8260B	µg/kg	- - - - - - - -		
Vinyl chloride	SW8260B	µg/kg	- - - - - - - -		
Xylenes	SW8260B	µg/kg	- - - - - - - -		
cis-1,2-Dichloroethene	SW8260B	µg/kg	- - - - - - - -		
cis-1,3-Dichloropropene	SW8260B	µg/kg	- - - - - - - -		
·ans-1,2-Dichloroethene	SW8260B	µg/kg	- - - - - - - -		
ıans-1,3-Dichloropropene	SW8260B	µg/kg	- - - - - - - -		

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505407		AM-A505603		AM-A505801		AM-A505802	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03798		00E03869		00E03870		00E03871	
	Collection Date	10/13/00		10/15/00		10/15/00		10/15/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -		- -		1500	[10]
Acenaphthene	SW8270C SIM	µg/kg	- -	- -		- -		760	[10]
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -		- -		730	[10]
Anthracene	SW8270C SIM	µg/kg	- -	- -		- -		330	[10]
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -		- -		17	[10]
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[10]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -		- -		13	[10]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[10]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[10]
Chrysene	SW8270C SIM	µg/kg	- -	- -		- -		110	[10]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[10]
Fluoranthene	SW8270C SIM	µg/kg	- -	- -		- -		57	[10]
Fluorene	SW8270C SIM	µg/kg	- -	- -		- -		2300	[10]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -		- -		ND	[10]
Naphthalene	SW8270C SIM	µg/kg	- -	- -		- -		350	[10]
Phenanthrene	SW8270C SIM	µg/kg	- -	- -		- -		3500	[10]
Pyrene	SW8270C SIM	µg/kg	- -	- -		- -		45	[10]
Gasoline Range Organics	AK101	mg/kg	- -	- -		- -		-	-
Diesel Range Organics	AK102	µg/g	- -	- -		476	[6.3]	22800	[11.8]
Residual Range Organics	AK103	µg/g	- -	- -		- -		-	-
(TOC)	KAHNTOC	mg/kg	19000	[1500]	- -	- -		-	-
Arsenic	SW6010B	µg/g	- -	1.6	[3.2]	- -		-	-
Cadmium	SW6010B	µg/g	- -	2.6	[1.3]	- -		-	-
Lead	SW6010B	µg/g	- -	170	[1.9]	- -		-	-
Selenium	SW6010B	µg/g	- -	0.27	[3.2]	- -		-	-
Arsenic	SW6010B	µg/g	- -	1.6	[3.2]	- -		-	-
Barium	SW6010B	µg/g	- -	8.5	[13]	- -		-	-
Cadmium	SW6010B	µg/g	- -	2.6	[1.3]	- -		-	-
Chromium	SW6010B	µg/g	- -	18	[6.4]	- -		-	-
Lead	SW6010B	µg/g	- -	170	[1.9]	- -		-	-
Selenium	SW6010B	µg/g	- -	0.27	[3.2]	- -		-	-
Silver	SW6010B	µg/g	- -	ND	[6.4]	- -		-	-
Zinc	SW6010B	µg/g	- -	-	-	- -		-	-
Mercury	SW7471A	µg/g	- -	0.6	[0.127]	- -		-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	ND	[0.212]	- -		-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	ND	[0.425]	- -		-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	ND	[0.212]	- -		-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	ND	[0.212]	- -		-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	ND	[0.212]	- -		-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	ND	[0.212]	- -		-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	ND	[0.212]	- -		-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	ND	[96]	- -		-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	ND	[96]	- -		-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	ND	[96]	- -		-	-
1,1-Dichloroethane	SW8260B	µg/kg	- -	ND	[96]	- -		-	-
1,1-Dichloroethene	SW8260B	µg/kg	- -	ND	[96]	- -		-	-
1,2-Dichloroethane	SW8260B	µg/kg	- -	ND	[96]	- -		-	-
1,2-Dichloropropane	SW8260B	µg/kg	- -	ND	[96]	- -		-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505407		AM-A505603		AM-A505801		AM-A505802	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03798		00E03869		00E03870		00E03871	
	Collection Date	10/13/00		10/15/00		10/15/00		10/15/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	- -	1700	[480]	- -	- -		
2-Hexanone	SW8260B	µg/kg	- -	ND	[480]	- -	- -		
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	ND	[480]	- -	- -		
Acetone	SW8260B	µg/kg	- -	ND	[480]	- -	- -		
Benzene	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Bromodichloromethane	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Bromoform	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Bromomethane	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Carbon disulfide	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Carbon tetrachloride	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Chlorobenzene	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Chloroethane	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Chloroform	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Chloromethane	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Dibromochloromethane	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Ethylbenzene	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Methylene chloride	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Styrene	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Tetrachloroethene	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Toluene	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Trichloroethene	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Vinyl chloride	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
Xylenes	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
·ans-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[96]	- -	- -		
ıans-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[96]	- -	- -		

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505803		AM-A505804		AM-A505805		AM-A505806	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03872		00E03873		00E03874		00E03875	
	Collection Date	10/15/00		10/15/00		10/15/00		10/15/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	1900	[9.3]	16	[5.4]	10	[3.2]	- -
Acenaphthene	SW8270C SIM	µg/kg	390	[9.3]	9.7	[5.4]	11	[3.2]	- -
Acenaphthylene	SW8270C SIM	µg/kg	300	[9.3]	ND	[5.4]	ND	[3.2]	- -
Anthracene	SW8270C SIM	µg/kg	100	[9.3]	9.3	[5.4]	16	[3.2]	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	20	[9.3]	25	[5.4]	36	[3.2]	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND	[9.3]	32	[5.4]	35	[3.2]	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	11	[9.3]	85	[5.4]	42	[3.2]	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND	[9.3]	35	[5.4]	21	[3.2]	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND	[9.3]	11	[5.4]	16	[3.2]	- -
Chrysene	SW8270C SIM	µg/kg	66	[9.3]	110	[5.4]	37	[3.2]	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[9.3]	28	[5.4]	4.5	[3.2]	- -
Fluoranthene	SW8270C SIM	µg/kg	38	[9.3]	49	[5.4]	60	[3.2]	- -
Fluorene	SW8270C SIM	µg/kg	1200	[9.3]	10	[5.4]	12	[3.2]	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND	[9.3]	22	[5.4]	17	[3.2]	- -
Naphthalene	SW8270C SIM	µg/kg	270	[9.3]	8.4	[5.4]	5.6	[3.2]	- -
Phenanthrene	SW8270C SIM	µg/kg	1100	[9.3]	52	[5.4]	86	[3.2]	- -
Pyrene	SW8270C SIM	µg/kg	33	[9.3]	60	[5.4]	110	[3.2]	- -
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	- -
Diesel Range Organics	AK102	µg/g	15500	[10.9]	322	[6.32]	230	[7.43]	33200 [10.4]
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	- -
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	- -
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	- -
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	- -
Lead	SW6010B	µg/g	-	-	-	-	-	-	- -
Selenium	SW6010B	µg/g	-	-	-	-	-	-	- -
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	- -
Barium	SW6010B	µg/g	-	-	-	-	-	-	- -
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	- -
Chromium	SW6010B	µg/g	-	-	-	-	-	-	- -
Lead	SW6010B	µg/g	-	-	-	-	-	-	- -
Selenium	SW6010B	µg/g	-	-	-	-	-	-	- -
Silver	SW6010B	µg/g	-	-	-	-	-	-	- -
Zinc	SW6010B	µg/g	-	-	-	-	-	-	- -
Mercury	SW7471A	µg/g	-	-	-	-	-	-	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	- -
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	- -
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	- -
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	- -
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505803	AM-A505804	AM-A505805	AM-A505806
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03872	00E03873	00E03874	00E03875
	Collection Date	10/15/00	10/15/00	10/15/00	10/15/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Butanone	SW8260B	µg/kg	- -	- -	- -	- -
2-Hexanone	SW8260B	µg/kg	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	- -	- -	- -
Acetone	SW8260B	µg/kg	- -	- -	- -	- -
Benzene	SW8260B	µg/kg	- -	- -	- -	- -
Bromodichloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Bromoform	SW8260B	µg/kg	- -	- -	- -	- -
Bromomethane	SW8260B	µg/kg	- -	- -	- -	- -
Carbon disulfide	SW8260B	µg/kg	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/kg	- -	- -	- -	- -
Chlorobenzene	SW8260B	µg/kg	- -	- -	- -	- -
Chloroethane	SW8260B	µg/kg	- -	- -	- -	- -
Chloroform	SW8260B	µg/kg	- -	- -	- -	- -
Chloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Dibromochloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Ethylbenzene	SW8260B	µg/kg	- -	- -	- -	- -
Methylene chloride	SW8260B	µg/kg	- -	- -	- -	- -
Styrene	SW8260B	µg/kg	- -	- -	- -	- -
Tetrachloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Toluene	SW8260B	µg/kg	- -	- -	- -	- -
Trichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Vinyl chloride	SW8260B	µg/kg	- -	- -	- -	- -
Xylenes	SW8260B	µg/kg	- -	- -	- -	- -
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -
ans-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
rans-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505807		AM-A505808		AM-A505809		AM-A505810	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03876		00E03877		00E03878		00E03879	
	Collection Date	10/15/00		10/15/00		10/15/00		10/15/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	10.3	[5.01]	-	-	-	-	-	-
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	26000	[1400]	18000	[1300]	26000	[1500]
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Zinc	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505807	AM-A505808	AM-A505809	AM-A505810
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03876	00E03877	00E03878	00E03879
	Collection Date	10/15/00	10/15/00	10/15/00	10/15/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Butanone	SW8260B	µg/kg	- -	- -	- -	- -
2-Hexanone	SW8260B	µg/kg	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	- -	- -	- -
Acetone	SW8260B	µg/kg	- -	- -	- -	- -
Benzene	SW8260B	µg/kg	- -	- -	- -	- -
Bromodichloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Bromoform	SW8260B	µg/kg	- -	- -	- -	- -
Bromomethane	SW8260B	µg/kg	- -	- -	- -	- -
Carbon disulfide	SW8260B	µg/kg	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/kg	- -	- -	- -	- -
Chlorobenzene	SW8260B	µg/kg	- -	- -	- -	- -
Chloroethane	SW8260B	µg/kg	- -	- -	- -	- -
Chloroform	SW8260B	µg/kg	- -	- -	- -	- -
Chloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Dibromochloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Ethylbenzene	SW8260B	µg/kg	- -	- -	- -	- -
Methylene chloride	SW8260B	µg/kg	- -	- -	- -	- -
Styrene	SW8260B	µg/kg	- -	- -	- -	- -
Tetrachloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Toluene	SW8260B	µg/kg	- -	- -	- -	- -
Trichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Vinyl chloride	SW8260B	µg/kg	- -	- -	- -	- -
Xylenes	SW8260B	µg/kg	- -	- -	- -	- -
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -
ans-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505902		AM-A505903		AM-A506101		AM-A506102	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03881		00E03882		00E03927		00E03928	
	Collection Date	10/15/00		10/15/00		10/16/00		10/16/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Acenaphthene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Acenaphthylene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Anthracene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Chrysene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Fluoranthene	SW8270C SIM	µg/kg	3.3	[2.2]	ND	[2.6]	ND	[2.2]	- -
Fluorene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Naphthalene	SW8270C SIM	µg/kg	ND	[2.2]	ND	[2.6]	ND	[2.2]	- -
Phenanthrene	SW8270C SIM	µg/kg	6.2	[2.2]	ND	[2.6]	ND	[2.2]	- -
Pyrene	SW8270C SIM	µg/kg	5.8	[2.2]	ND	[2.6]	ND	[2.2]	- -
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	- -
Diesel Range Organics	AK102	µg/g	7.49	[5.24]	27.9	[6.13]	82.3	[5.07]	3.97 [6.22]
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	- -
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	- -
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	- -
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	- -
Lead	SW6010B	µg/g	-	-	-	-	-	-	- -
Selenium	SW6010B	µg/g	-	-	-	-	-	-	- -
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	- -
Barium	SW6010B	µg/g	-	-	-	-	-	-	- -
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	- -
Chromium	SW6010B	µg/g	-	-	-	-	-	-	- -
Lead	SW6010B	µg/g	-	-	-	-	-	-	- -
Selenium	SW6010B	µg/g	-	-	-	-	-	-	- -
Silver	SW6010B	µg/g	-	-	-	-	-	-	- -
Zinc	SW6010B	µg/g	-	-	-	-	-	-	- -
Mercury	SW7471A	µg/g	-	-	-	-	-	-	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	- -
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	- -
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	- -
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	- -
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	- -

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A505902		AM-A505903		AM-A506101		AM-A506102	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03881		00E03882		00E03927		00E03928	
	Collection Date	10/15/00		10/15/00		10/16/00		10/16/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
ans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506103	AM-A506104	AM-A506105	AM-A506106
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03929	00E03930	00E03931	00E03932
	Collection Date	10/16/00	10/16/00	10/16/00	10/16/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Anthracene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Chrysene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Fluorene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Naphthalene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Pyrene	SW8270C SIM	µg/kg	- -	- -	ND [1.9]	ND [1.9]
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	- -	- -	ND [4.44]	ND [4.43]
Residual Range Organics	AK103	µg/g	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	33000 [1900]	16000 [1600]	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Zinc	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/kg	- -	- -	- -	- -

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506103	AM-A506104	AM-A506105	AM-A506106
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03929	00E03930	00E03931	00E03932
	Collection Date	10/16/00	10/16/00	10/16/00	10/16/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Butanone	SW8260B	µg/kg	- -	- -	- -	- -
2-Hexanone	SW8260B	µg/kg	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	- -	- -	- -
Acetone	SW8260B	µg/kg	- -	- -	- -	- -
Benzene	SW8260B	µg/kg	- -	- -	- -	- -
Bromodichloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Bromoform	SW8260B	µg/kg	- -	- -	- -	- -
Bromomethane	SW8260B	µg/kg	- -	- -	- -	- -
Carbon disulfide	SW8260B	µg/kg	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/kg	- -	- -	- -	- -
Chlorobenzene	SW8260B	µg/kg	- -	- -	- -	- -
Chloroethane	SW8260B	µg/kg	- -	- -	- -	- -
Chloroform	SW8260B	µg/kg	- -	- -	- -	- -
Chloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Dibromochloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Ethylbenzene	SW8260B	µg/kg	- -	- -	- -	- -
Methylene chloride	SW8260B	µg/kg	- -	- -	- -	- -
Styrene	SW8260B	µg/kg	- -	- -	- -	- -
Tetrachloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Toluene	SW8260B	µg/kg	- -	- -	- -	- -
Trichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Vinyl chloride	SW8260B	µg/kg	- -	- -	- -	- -
Xylenes	SW8260B	µg/kg	- -	- -	- -	- -
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -
ans-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506107	AM-A506108	AM-A506201	AM-A506201
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03933	00E03934	00E03935	00E03935
	Collection Date	10/16/00	10/16/00	10/16/00	10/17/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	- -	99.1 [6.99]	- -	314 [6.97]
Residual Range Organics	AK103	µg/g	- -	- -	2280 [174]	- -
(TOC)	KAHNTOC	mg/kg	39000 [2200]	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Zinc	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/kg	- -	- -	- -	- -

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506107		AM-A506108		AM-A506201		AM-A506201	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03933		00E03934		00E03935		00E03935	
	Collection Date	10/16/00		10/16/00		10/16/00		10/17/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
ans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506202		AM-A506203		AM-A506204		AM-A506205	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03936		00E03937		00E03938		00E03939	
	Collection Date	10/17/00		10/17/00		10/17/00		10/17/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Acenaphthene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Acenaphthylene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Anthracene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Chrysene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Fluoranthene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Fluorene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Naphthalene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Phenanthrene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Pyrene	SW8270C SIM	µg/kg	- -	ND	[4]	- -		- -	
Gasoline Range Organics	AK101	mg/kg	1.68 [10.5]	1.15	[6.82]	0.559 [4.02]		ND [3.68]	
Diesel Range Organics	AK102	µg/g	75.2 [10]	26.3	[9.3]	25.3 [5.87]		- -	
Residual Range Organics	AK103	µg/g	- -	-	-	- -		- -	
(TOC)	KAHNTOC	mg/kg	- -	-	-	- -		- -	
Arsenic	SW6010B	µg/g	- -	-	-	- -		- -	
Cadmium	SW6010B	µg/g	- -	-	-	- -		- -	
Lead	SW6010B	µg/g	- -	-	-	- -		- -	
Selenium	SW6010B	µg/g	- -	-	-	- -		- -	
Arsenic	SW6010B	µg/g	- -	-	-	- -		- -	
Barium	SW6010B	µg/g	- -	-	-	- -		- -	
Cadmium	SW6010B	µg/g	- -	-	-	- -		- -	
Chromium	SW6010B	µg/g	- -	-	-	- -		- -	
Lead	SW6010B	µg/g	- -	-	-	- -		- -	
Selenium	SW6010B	µg/g	- -	-	-	- -		- -	
Silver	SW6010B	µg/g	- -	-	-	- -		- -	
Zinc	SW6010B	µg/g	- -	-	-	- -		- -	
Mercury	SW7471A	µg/g	- -	-	-	- -		- -	
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	-	-	- -		- -	
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	-	-	- -		- -	
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	-	-	- -		- -	
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	-	-	- -		- -	
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	-	-	- -		- -	
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	-	-	- -		- -	
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	-	-	- -		- -	
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	-	-	- -		- -	
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	-	-	- -		- -	
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	-	-	- -		- -	
1,1-Dichloroethane	SW8260B	µg/kg	- -	-	-	- -		- -	
1,1-Dichloroethene	SW8260B	µg/kg	- -	-	-	- -		- -	
1,2-Dichloroethane	SW8260B	µg/kg	- -	-	-	- -		- -	
1,2-Dichloropropane	SW8260B	µg/kg	- -	-	-	- -		- -	

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506202		AM-A506203		AM-A506204		AM-A506205	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03936		00E03937		00E03938		00E03939	
	Collection Date	10/17/00		10/17/00		10/17/00		10/17/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
ans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506206		AM-A506207		AM-A506208		AM-A506209	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03940		00E03941		00E03942		00E03943	
	Collection Date	10/17/00		10/17/00		10/17/00		10/17/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	ND [2.1]	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	ND [3.99]	1.26	[7.29]	-	-	-	-
Diesel Range Organics	AK102	µg/g	11.1 [4.97]	25.1	[7.68]	-	-	-	-
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	50000 [2000]	35000	[2000]
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-
Zinc	SW6010B	µg/g	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A506206		AM-A506207		AM-A506208		AM-A506209	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E03940		00E03941		00E03942		00E03943	
		Collection Date	10/17/00		10/17/00		10/17/00		10/17/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
ans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506210	AM-A506211	AM-A506211	AM-A506401
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03944	00E03945	00E03946	00E04044
	Collection Date	10/17/00	10/17/00	10/17/00	10/18/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	0.562 [3.71]	- -
Diesel Range Organics	AK102	µg/g	- -	- -	- -	- -
Residual Range Organics	AK103	µg/g	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	130000 [3800]	- -	- -	16000 [1100]
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	9.1 [0.53]	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Zinc	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506210		AM-A506211		AM-A506211		AM-A506401	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03944		00E03945		00E03946		00E04044	
	Collection Date	10/17/00		10/17/00		10/17/00		10/18/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
ans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
rans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506402		AM-A506403		AM-A506404		AM-A506405	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04045		00E04046		00E04047		00E04048	
	Collection Date	10/18/00		10/18/00		10/18/00		10/18/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.6]	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	-	-	13	[6.08]	212	[5.16]
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	39000	[1600]	25000	[1500]	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Zinc	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A506402		AM-A506403		AM-A506404		AM-A506405	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04045		00E04046		00E04047		00E04048	
		Collection Date	10/18/00		10/18/00		10/18/00		10/18/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
ans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
,rans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506406	AM-A506409	AM-A506410	AM-A506501
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04049	00E04052	00E04053	00E04054
	Collection Date	10/18/00	10/18/00	10/18/00	10/19/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	ND [2.4]	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	2.64 [4.29]	ND [4.92]	- -
Diesel Range Organics	AK102	µg/g	ND [4.73]	28.9 [5.56]	- -	- -
Residual Range Organics	AK103	µg/g	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	ND [1.1]
Cadmium	SW6010B	µg/g	- -	- -	- -	0.073 [0.44]
Lead	SW6010B	µg/g	- -	- -	- -	33 [0.66]
Selenium	SW6010B	µg/g	- -	- -	- -	ND [1.1]
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	18 [4.4]
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	6.3 [2.2]
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	ND [2.2]
Zinc	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	0.0383 [0.0442]
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	ND [0.0737]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	ND [0.148]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	ND [0.0737]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	ND [0.0737]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	ND [0.0737]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	ND [0.0737]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	ND [0.0737]
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	ND [24]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	ND [24]
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	ND [24]
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	ND [24]
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	ND [24]
1,2-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	ND [24]
1,2-Dichloropropane	SW8260B	µg/kg	- -	- -	- -	ND [24]

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506406		AM-A506409		AM-A506410		AM-A506501	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04049		00E04052		00E04053		00E04054	
	Collection Date	10/18/00		10/18/00		10/18/00		10/19/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	1200	[120]
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	ND	[120]
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	ND	[120]
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	ND	[120]
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
ans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]
rans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	ND	[24]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506502		AM-A506505		AM-A506506		AM-A506601	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04055		00E04058		00E04059		00E04060	
	Collection Date	10/19/00		10/19/00		10/19/00		10/20/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	380000	[12000]	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	630000	[12000]	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	ND	[12000]	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	660000	[12000]	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	470000	[12000]	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	420000	[12000]	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	450000	[12000]	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	150000	[12000]	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	180000	[12000]	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	460000	[12000]	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	52000	[12000]	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	1400000	[12000]	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	520000	[12000]	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	190000	[12000]	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	1200000	[12000]	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	2100000	[12000]	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	440000	[12000]	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	1540	[757]	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	-	-	-	-	-	-
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	9.6	[0.93]	1	[0.7]	-	-	-	
Cadmium	SW6010B	µg/g	32	[0.37]	ND	[0.28]	-	-	-	
Lead	SW6010B	µg/g	440	[0.56]	29	[0.42]	20	[0.37]	9.1	[0.36]
Selenium	SW6010B	µg/g	0.48	[0.93]	3.5	[0.7]	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	24	[3.7]	4	[2.8]	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	35	[1.9]	1.9	[1.4]	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	ND	[1.9]	0.84	[1.4]	-	-	-	-
Zinc	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	0.0555	[0.0371]	ND	[0.0282]	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.0618]	ND	[4.69]	ND	[0.0406]	ND	[0.0405]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.124]	ND	[9.39]	ND	[0.0812]	ND	[0.0811]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.0618]	ND	[4.69]	ND	[0.0406]	ND	[0.0405]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.0618]	ND	[4.69]	ND	[0.0406]	ND	[0.0405]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.0618]	ND	[4.69]	ND	[0.0406]	ND	[0.0405]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.0618]	ND	[4.69]	ND	[0.0406]	ND	[0.0405]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.0618]	ND	[4.69]	ND	[0.0406]	ND	[0.0405]
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	
1,1-Dichloroethene	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	
1,2-Dichloroethane	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	
1,2-Dichloropropane	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506502		AM-A506505		AM-A506506		AM-A506601	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04055		00E04058		00E04059		00E04060	
	Collection Date	10/19/00		10/19/00		10/19/00		10/20/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	1000	[89]	ND	[2400]	-	-	-	-
2-Hexanone	SW8260B	µg/kg	ND	[89]	ND	[2400]	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[89]	ND	[2400]	-	-	-	-
Acetone	SW8260B	µg/kg	ND	[89]	ND	[2400]	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Bromoform	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Bromomethane	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Chloroethane	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Chloroform	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Chloromethane	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[18]	7900	[480]	-	-	-	-
Methylene chloride	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Styrene	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Toluene	SW8260B	µg/kg	11	[18]	1600	[480]	-	-	-	-
Trichloroethene	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
Xylenes	SW8260B	µg/kg	62	[18]	78000	[480]	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
ans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-
rans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[18]	ND	[480]	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506602	AM-A506603	AM-A506604	AM-A506605
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04061	00E04062	00E04063	00E04064
	Collection Date	10/20/00	10/20/00	10/20/00	10/20/00
	Matrix	SO	SO	SO	SO

Analyte	Method	Units							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	-	-	-	-	-	-
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	9.6	[0.35]	39	[0.4]	4.2	[0.38]	26	[0.42]
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Zinc	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.039]	ND	[0.0445]	ND	[0.042]	ND	[0.0471]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.0781]	ND	[0.0892]	ND	[0.0841]	ND	[0.0943]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.039]	ND	[0.0445]	ND	[0.042]	ND	[0.0471]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.039]	ND	[0.0445]	ND	[0.042]	ND	[0.0471]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.039]	ND	[0.0445]	ND	[0.042]	ND	[0.0471]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.039]	ND	[0.0445]	ND	[0.042]	ND	[0.0471]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.039]	ND	[0.0445]	ND	[0.042]	ND	[0.0471]
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506602	AM-A506603	AM-A506604	AM-A506605
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04061	00E04062	00E04063	00E04064
	Collection Date	10/20/00	10/20/00	10/20/00	10/20/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Butanone	SW8260B	µg/kg	- - - - - - - -		
2-Hexanone	SW8260B	µg/kg	- - - - - - - -		
4-Methyl-2-pentanone	SW8260B	µg/kg	- - - - - - - -		
Acetone	SW8260B	µg/kg	- - - - - - - -		
Benzene	SW8260B	µg/kg	- - - - - - - -		
Bromodichloromethane	SW8260B	µg/kg	- - - - - - - -		
Bromoform	SW8260B	µg/kg	- - - - - - - -		
Bromomethane	SW8260B	µg/kg	- - - - - - - -		
Carbon disulfide	SW8260B	µg/kg	- - - - - - - -		
Carbon tetrachloride	SW8260B	µg/kg	- - - - - - - -		
Chlorobenzene	SW8260B	µg/kg	- - - - - - - -		
Chloroethane	SW8260B	µg/kg	- - - - - - - -		
Chloroform	SW8260B	µg/kg	- - - - - - - -		
Chloromethane	SW8260B	µg/kg	- - - - - - - -		
Dibromochloromethane	SW8260B	µg/kg	- - - - - - - -		
Ethylbenzene	SW8260B	µg/kg	- - - - - - - -		
Methylene chloride	SW8260B	µg/kg	- - - - - - - -		
Styrene	SW8260B	µg/kg	- - - - - - - -		
Tetrachloroethene	SW8260B	µg/kg	- - - - - - - -		
Toluene	SW8260B	µg/kg	- - - - - - - -		
Trichloroethene	SW8260B	µg/kg	- - - - - - - -		
Vinyl chloride	SW8260B	µg/kg	- - - - - - - -		
Xylenes	SW8260B	µg/kg	- - - - - - - -		
cis-1,2-Dichloroethene	SW8260B	µg/kg	- - - - - - - -		
cis-1,3-Dichloropropene	SW8260B	µg/kg	- - - - - - - -		
ans-1,2-Dichloroethene	SW8260B	µg/kg	- - - - - - - -		
trans-1,3-Dichloropropene	SW8260B	µg/kg	- - - - - - - -		

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506607		AM-A506608		AM-A506609		AM-A506610	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04066		00E04067		00E04068		00E04069	
	Collection Date	10/20/00		10/20/00		10/20/00		10/20/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND	[2]	ND	[2.1]	2.5	[2]	ND	[2]
Acenaphthene	SW8270C SIM	µg/kg	ND	[2]	3.6	[2.1]	3.7	[2]	7.4	[2]
Acenaphthylene	SW8270C SIM	µg/kg	ND	[2]	3.1	[2.1]	3.7	[2]	3.1	[2]
Anthracene	SW8270C SIM	µg/kg	ND	[2]	7.7	[2.1]	4.2	[2]	21	[2]
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND	[2]	16	[2.1]	19	[2]	23	[2]
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND	[2]	22	[2.1]	28	[2]	17	[2]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND	[2]	31	[2.1]	36	[2]	14	[2]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND	[2]	40	[2.1]	35	[2]	15	[2]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND	[2]	13	[2.1]	13	[2]	2.4	[2]
Chrysene	SW8270C SIM	µg/kg	ND	[2]	47	[2.1]	69	[2]	51	[2]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[2]	5.6	[2.1]	9.7	[2]	2.9	[2]
Fluoranthene	SW8270C SIM	µg/kg	ND	[2]	21	[2.1]	32	[2]	29	[2]
Fluorene	SW8270C SIM	µg/kg	ND	[2]	4.5	[2.1]	4.5	[2]	7.2	[2]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND	[2]	22	[2.1]	27	[2]	6.6	[2]
Naphthalene	SW8270C SIM	µg/kg	ND	[2]	3.9	[2.1]	5.8	[2]	ND	[2]
Phenanthrene	SW8270C SIM	µg/kg	ND	[2]	16	[2.1]	16	[2]	40	[2]
Pyrene	SW8270C SIM	µg/kg	2.7	[2]	50	[2.1]	74	[2]	140	[2]
Gasoline Range Organics	AK101	mg/kg	3.77	[3.13]	0.555	[3.93]	3.18	[4.38]	ND	[3.16]
Diesel Range Organics	AK102	µg/g	18.2	[4.64]	1190	[4.83]	1290	[4.73]	1040	[4.63]
Residual Range Organics	AK103	µg/g	175	[116]	6040	[121]	6440	[118]	3500	[116]
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	40	[0.58]	19	[0.6]	19	[0.59]	34	[0
Cadmium	SW6010B	µg/g	ND	[0.23]	ND	[0.24]	ND	[0.24]	ND	[0.23]
Lead	SW6010B	µg/g	5.9	[0.35]	26	[0.36]	5.4	[0.36]	18	[0.35]
Selenium	SW6010B	µg/g	0.62	[0.58]	0.86	[0.6]	0.71	[0.59]	0.7	[0.58]
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	25	[2.3]	50	[2.4]	46	[2.4]	62	[2.3]
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	ND	[1.2]	14	[1.2]	19	[1.2]	12	[1.2]
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	ND	[1.2]	ND	[1.2]	ND	[1.2]	ND	[1.2]
Zinc	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	0.113	[0.0232]	0.0817	[0.0241]	0.0636	[0.0237]	0.291	[0.0232]
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.0386]	ND	[0.0402]	ND	[0.0394]	ND	[0.0386]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.0774]	ND	[0.0805]	ND	[0.0789]	ND	[0.0773]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.0386]	ND	[0.0402]	ND	[0.0394]	ND	[0.0386]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.0386]	ND	[0.0402]	ND	[0.0394]	ND	[0.0386]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.0386]	ND	[0.0402]	ND	[0.0394]	ND	[0.0386]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.0386]	ND	[0.0402]	ND	[0.0394]	ND	[0.0386]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.0386]	ND	[0.0402]	ND	[0.0394]	ND	[0.0386]
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
1,1-Dichloroethane	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[
1,1-Dichloroethene	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	
1,2-Dichloroethane	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
1,2-Dichloropropane	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506607		AM-A506608		AM-A506609		AM-A506610	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04066		00E04067		00E04068		00E04069	
	Collection Date	10/20/00		10/20/00		10/20/00		10/20/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	61	[58]	ND	[72]	94	[77]	ND	[64]
2-Hexanone	SW8260B	µg/kg	ND	[58]	ND	[72]	ND	[77]	ND	[64]
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[58]	ND	[72]	ND	[77]	ND	[64]
Acetone	SW8260B	µg/kg	ND	[58]	ND	[72]	ND	[77]	ND	[64]
Benzene	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Bromodichloromethane	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Bromoform	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Bromomethane	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Carbon disulfide	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Carbon tetrachloride	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Chlorobenzene	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Chloroethane	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Chloroform	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Chloromethane	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Dibromochloromethane	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Ethylbenzene	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Methylene chloride	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Styrene	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Tetrachloroethene	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Toluene	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Trichloroethene	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Vinyl chloride	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
Xylenes	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
ans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[12]	ND	[14]	ND	[16]	ND	[13]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506611	AM-A506706	AM-A506707	AM-A506708
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04070	00E04178	00E04179	00E04180
	Collection Date	10/20/00	10/23/00	10/23/00	10/23/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	ND [5.02]	- -	- -	- -
Diesel Range Organics	AK102	µg/g	- -	- -	- -	- -
Residual Range Organics	AK103	µg/g	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	11 [0.42]	18 [0.5]
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Zinc	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	ND [0.624]	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	ND [1.25]	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	ND [0.624]	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	ND [0.624]	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	ND [0.624]	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	ND [0.624]	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	ND [0.624]	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	ND [20]	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND [20]	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	ND [20]	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	ND [20]	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	ND [20]	- -	- -	- -
1,2-Dichloroethane	SW8260B	µg/kg	ND [20]	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/kg	ND [20]	- -	- -	- -

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506611		AM-A506706		AM-A506707		AM-A506708	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04070		00E04178		00E04179		00E04180	
	Collection Date	10/20/00		10/23/00		10/23/00		10/23/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	ND	[100]	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	ND	[100]	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[100]	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	ND	[100]	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	13	[20]	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
ans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[20]	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506709	AM-A506710	AM-A506711	AM-A506712
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04181	00E04182	00E04183	00E04184
	Collection Date	10/23/00	10/23/00	10/23/00	10/23/00
	Matrix	SO	SO	SO	SO

Analyte	Method	Units							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	250000	[1000]	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	15000	[1000]	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	4300	[1000]	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	10000	[1000]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	4500	[1000]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	1700	[1000]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	1100	[1000]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	ND	[1000]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	ND	[1000]	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	8600	[1000]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	ND	[1000]	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	4100	[1000]	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	20000	[1000]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	ND	[1000]	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	66000	[1000]	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	53000	[1000]	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	24000	[1000]	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	13.4	[16.5]	41	[16.3]
Diesel Range Organics	AK102	µg/g	-	-	-	-	13500	[8.02]	11300	[8.11]
Residual Range Organics	AK103	µg/g	-	-	-	-	154000	[200]	127000	[203]
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	16	[1]	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	ND	[0.4]	-	-
Lead	SW6010B	µg/g	-	-	-	-	7	[0.6]	-	-
Selenium	SW6010B	µg/g	-	-	-	-	2.3	[1]	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	26	[4]	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	7.1	[2]	-	-
Lead	SW6010B	µg/g	7.2	[0.58]	3.6	[0.33]	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	ND	[2]	-	-
Zinc	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	0.105	[0.0401]	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	ND	[0.0667]	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	ND	[0.134]	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	ND	[0.0667]	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	ND	[0.0667]	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	ND	[0.0667]	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	ND	[0.0667]	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	ND	[0.0667]	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A506709		AM-A506710		AM-A506711		AM-A506712	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04181		00E04182		00E04183		00E04184	
		Collection Date	10/23/00		10/23/00		10/23/00		10/23/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Butanone	SW8260B	µg/kg	-	-	-	-	180	[140]	170	[140]
2-Hexanone	SW8260B	µg/kg	-	-	-	-	ND	[140]	ND	[140]
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	ND	[140]	ND	[140]
Acetone	SW8260B	µg/kg	-	-	-	-	480	[140]	310	[140]
Benzene	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Bromoform	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Bromomethane	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Chloroethane	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Chloroform	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Chloromethane	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	350	[28]	240	[28]
Methylene chloride	SW8260B	µg/kg	-	-	-	-	17	[28]	10	[28]
Styrene	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Toluene	SW8260B	µg/kg	-	-	-	-	37	[28]	24	[28]
Trichloroethene	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
Xylenes	SW8260B	µg/kg	-	-	-	-	1700	[28]	1200	[28]
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
ans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]
rans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	ND	[28]	ND	[28]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A506713		AM-A506714		AM-A506715		AM-A506716	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04185		00E04186		00E04187		00E04188	
		Collection Date	10/23/00		10/23/00		10/23/00		10/23/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	13000	[41]	-	-	ND	[2.5]	7.7	[2.7]
Acenaphthene	SW8270C SIM	µg/kg	1300	[41]	-	-	ND	[2.5]	16	[2.7]
Acenaphthylene	SW8270C SIM	µg/kg	370	[41]	-	-	ND	[2.5]	3	[2.7]
Anthracene	SW8270C SIM	µg/kg	920	[41]	-	-	ND	[2.5]	18	[2.7]
Benzo(a)anthracene	SW8270C SIM	µg/kg	360	[41]	-	-	ND	[2.5]	29	[2.7]
Benzo(a)pyrene	SW8270C SIM	µg/kg	150	[41]	-	-	ND	[2.5]	15	[2.7]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	100	[41]	-	-	ND	[2.5]	14	[2.7]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	96	[41]	-	-	3.1	[2.5]	7.8	[2.7]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	15	[41]	-	-	ND	[2.5]	4.3	[2.7]
Chrysene	SW8270C SIM	µg/kg	870	[41]	-	-	3.3	[2.5]	54	[2.7]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[41]	-	-	ND	[2.5]	ND	[2.7]
Fluoranthene	SW8270C SIM	µg/kg	270	[41]	-	-	ND	[2.5]	29	[2.7]
Fluorene	SW8270C SIM	µg/kg	1900	[41]	-	-	ND	[2.5]	9.8	[2.7]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND	[41]	-	-	ND	[2.5]	6.6	[2.7]
Naphthalene	SW8270C SIM	µg/kg	1900	[41]	-	-	ND	[2.5]	7.1	[2.7]
Phenanthrene	SW8270C SIM	µg/kg	4800	[41]	-	-	2.8	[2.5]	9.4	[2.7]
Pyrene	SW8270C SIM	µg/kg	1900	[41]	-	-	5	[2.5]	95	[2.7]
Gasoline Range Organics	AK101	mg/kg	9.15	[5.25]	-	-	1.97	[3.19]	0.571	[4.65]
Diesel Range Organics	AK102	µg/g	7740	[4.84]	4080	[4.43]	218	[5.97]	270	[6.35]
Residual Range Organics	AK103	µg/g	12300	[121]	7560	[111]	654	[149]	856	[159]
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	28	[0.61]	-	-	34	[0.75]	21	[0.79]
Cadmium	SW6010B	µg/g	ND	[0.24]	-	-	ND	[0.3]	ND	[0.32]
Lead	SW6010B	µg/g	6.1	[0.36]	-	-	13	[0.45]	8.9	[0.48]
Selenium	SW6010B	µg/g	0.94	[0.61]	-	-	0.98	[0.75]	1.1	[0.79]
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	30	[2.4]	-	-	40	[3]	35	[3.2]
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	22	[1.2]	-	-	4.9	[1.5]	6.3	[1.6]
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	ND	[1.2]	-	-	ND	[1.5]	ND	[1.6]
Zinc	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	0.0822	[0.0242]	-	-	0.0864	[0.0299]	0.0849	[0.0317]
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.0403]	-	-	ND	[0.0497]	ND	[0.0529]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.0808]	-	-	ND	[0.0996]	ND	[0.106]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.0403]	-	-	ND	[0.0497]	ND	[0.0529]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.0403]	-	-	ND	[0.0497]	ND	[0.0529]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.0403]	-	-	ND	[0.0497]	ND	[0.0529]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.0403]	-	-	ND	[0.0497]	ND	[0.0529]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.0403]	-	-	ND	[0.0497]	ND	[0.0529]
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
1,1-Dichloroethane	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
1,1-Dichloroethene	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
1,2-Dichloroethane	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
1,2-Dichloropropane	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506713		AM-A506714		AM-A506715		AM-A506716	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04185		00E04186		00E04187		00E04188	
	Collection Date	10/23/00		10/23/00		10/23/00		10/23/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	ND	[130]	ND	[140]	ND	[62]	ND	[87]
2-Hexanone	SW8260B	µg/kg	ND	[130]	ND	[140]	ND	[62]	ND	[87]
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[130]	ND	[140]	ND	[62]	ND	[87]
Acetone	SW8260B	µg/kg	ND	[130]	ND	[140]	ND	[62]	ND	[87]
Benzene	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Bromodichloromethane	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Bromoform	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Bromomethane	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Carbon disulfide	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Carbon tetrachloride	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Chlorobenzene	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Chloroethane	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Chloroform	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Chloromethane	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Dibromochloromethane	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Ethylbenzene	SW8260B	µg/kg	37	[25]	38	[29]	ND	[12]	ND	[18]
Methylene chloride	SW8260B	µg/kg	15	[25]	14	[29]	8.6	[12]	20	[18]
Styrene	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Tetrachloroethene	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Toluene	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Trichloroethene	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Vinyl chloride	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
Xylenes	SW8260B	µg/kg	88	[25]	83	[29]	ND	[12]	ND	[18]
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
ans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[25]	ND	[29]	ND	[12]	ND	[18]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A506717		AM-A506718		AM-A506719		AM-A507401	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E04189		00E04190		00E04191		00E04257	
		Collection Date	10/23/00		10/23/00		10/23/00		10/25/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	650	[18]	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	280	[18]	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	80	[18]	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	320	[18]	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	180	[18]	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	91	[18]	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	65	[18]	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	65	[18]	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	20	[18]	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	360	[18]	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	ND	[18]	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	200	[18]	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	410	[18]	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	28	[18]	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	200	[18]	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	1200	[18]	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	1100	[18]	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	0.902	[5.96]	0.921	[3.18]	2.13	[4.88]	-	-
Diesel Range Organics	AK102	µg/g	631	[5.53]	2960	[4.19]	-	-	10900	[6.85]
Residual Range Organics	AK103	µg/g	1650	[138]	6200	[105]	-	-	3530	[171]
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	23	[0.52]	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	ND	[0.21]	-	-	-	-
Lead	SW6010B	µg/g	-	-	7.4	[0.31]	-	-	-	-
Selenium	SW6010B	µg/g	-	-	0.52	[0.52]	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	28	[2.1]	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	14	[1]	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	ND	[1]	-	-	-	-
Zinc	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	0.0945	[0.0209]	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	ND	[0.0349]	-	-	ND	[0.057]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	ND	[0.0698]	-	-	ND	[0.114]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	ND	[0.0349]	-	-	ND	[0.057]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	ND	[0.0349]	-	-	ND	[0.057]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	ND	[0.0349]	-	-	ND	[0.057]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	ND	[0.0349]	-	-	ND	[0.057]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	ND	[0.0349]	-	-	7.2	[0.057]
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	ND	[11]	ND	[20]	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	ND	[11]	ND	[20]	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	ND	[11]	ND	[20]	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	ND	[11]	ND	[20]	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	ND	[11]	ND	[20]	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	ND	[11]	ND	[20]	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	ND	[11]	ND	[20]	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506717		AM-A506718		AM-A506719		AM-A507401	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04189		00E04190		00E04191		00E04257	
	Collection Date	10/23/00		10/23/00		10/23/00		10/25/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	- -	ND	[57]	ND	[100]	-	-
2-Hexanone	SW8260B	µg/kg	- -	ND	[57]	ND	[100]	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	ND	[57]	ND	[100]	-	-
Acetone	SW8260B	µg/kg	- -	ND	[57]	ND	[100]	-	-
Benzene	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Bromodichloromethane	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Bromoform	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Bromomethane	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Carbon disulfide	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Carbon tetrachloride	SW8260B	µg/kg	- -	ND	[11]	50	[20]	-	-
Chlorobenzene	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Chloroethane	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Chloroform	SW8260B	µg/kg	- -	ND	[11]	34	[20]	-	-
Chloromethane	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Dibromochloromethane	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Ethylbenzene	SW8260B	µg/kg	- -	4.1	[11]	ND	[20]	-	-
Methylene chloride	SW8260B	µg/kg	- -	11	[11]	43	[20]	-	-
Styrene	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Tetrachloroethene	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Toluene	SW8260B	µg/kg	- -	ND	[11]	23	[20]	-	-
Trichloroethene	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Vinyl chloride	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
Xylenes	SW8260B	µg/kg	- -	17	[11]	14	[20]	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
ans-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[11]	ND	[20]	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507402		AM-A507403		AM-A507404		AM-A507405	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04258		00E04259		00E04260		00E04261	
	Collection Date	10/25/00		10/25/00		10/25/00		10/25/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	70	[2.3]	- -		- -	
Acenaphthene	SW8270C SIM	µg/kg	- -	10	[2.3]	- -		- -	
Acenaphthylene	SW8270C SIM	µg/kg	- -	20	[2.3]	- -		- -	
Anthracene	SW8270C SIM	µg/kg	- -	80	[2.3]	- -		- -	
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	230	[2.3]	- -		- -	
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	340	[2.3]	- -		- -	
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	390	[2.3]	- -		- -	
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	350	[2.3]	- -		- -	
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	130	[2.3]	- -		- -	
Chrysene	SW8270C SIM	µg/kg	- -	280	[2.3]	- -		- -	
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	50	[2.3]	- -		- -	
Fluoranthene	SW8270C SIM	µg/kg	- -	450	[2.3]	- -		- -	
Fluorene	SW8270C SIM	µg/kg	- -	17	[2.3]	- -		- -	
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	310	[2.3]	- -		- -	
Naphthalene	SW8270C SIM	µg/kg	- -	71	[2.3]	- -		- -	
Phenanthrene	SW8270C SIM	µg/kg	- -	350	[2.3]	- -		- -	
Pyrene	SW8270C SIM	µg/kg	- -	540	[2.3]	- -		- -	
Gasoline Range Organics	AK101	mg/kg	- -	1.31	[3.23]	1.7	[4.99]	- -	
Diesel Range Organics	AK102	µg/g	- -	1140	[5.52]	- -		- -	
Residual Range Organics	AK103	µg/g	- -	1790	[138]	- -		- -	
(TOC)	KAHNTOC	mg/kg	- -	-	-	- -		- -	
Arsenic	SW6010B	µg/g	44	[0.92]	6.1	[0.69]	- -		- -
Cadmium	SW6010B	µg/g	6.1	[0.37]	ND	[0.28]	- -		- -
Lead	SW6010B	µg/g	6000	[0.55]	39	[0.41]	- -		- -
Selenium	SW6010B	µg/g	1	[0.92]	0.67	[0.69]	- -		- -
Arsenic	SW6010B	µg/g	- -	-	-	- -		- -	
Barium	SW6010B	µg/g	85	[3.7]	63	[2.8]	- -		- -
Cadmium	SW6010B	µg/g	- -	-	-	- -		- -	
Chromium	SW6010B	µg/g	57	[1.8]	5.2	[1.4]	- -		- -
Lead	SW6010B	µg/g	- -	-	-	- -		- -	
Selenium	SW6010B	µg/g	- -	-	-	- -		- -	
Silver	SW6010B	µg/g	ND	[1.8]	ND	[1.4]	- -		- -
Zinc	SW6010B	µg/g	- -	110	[2.8]	- -		- -	
Mercury	SW7471A	µg/g	0.0666	[0.0368]	0.0434	[0.0276]	- -		- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	ND	[0.0459]	- -		- -	
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	ND	[0.092]	- -		- -	
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	ND	[0.0459]	- -		- -	
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	ND	[0.0459]	- -		- -	
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	ND	[0.0459]	- -		- -	
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	ND	[0.0459]	- -		- -	
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	ND	[0.0459]	- -		- -	
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
1,1-Dichloroethane	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
1,1-Dichloroethene	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
1,2-Dichloroethane	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
1,2-Dichloropropane	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507402		AM-A507403		AM-A507404		AM-A507405	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04258		00E04259		00E04260		00E04261	
	Collection Date	10/25/00		10/25/00		10/25/00		10/25/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	- -	500	[59]	- -		ND	[100]
2-Hexanone	SW8260B	µg/kg	- -	ND	[59]	- -		ND	[100]
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	ND	[59]	- -		ND	[100]
Acetone	SW8260B	µg/kg	- -	ND	[59]	- -		ND	[100]
Benzene	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Bromodichloromethane	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Bromoform	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Bromomethane	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Carbon disulfide	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Carbon tetrachloride	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Chlorobenzene	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Chloroethane	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Chloroform	SW8260B	µg/kg	- -	ND	[12]	- -		8.8	[20]
Chloromethane	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Dibromochloromethane	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Ethylbenzene	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Methylene chloride	SW8260B	µg/kg	- -	ND	[12]	- -		34	[20]
Styrene	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Tetrachloroethene	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Toluene	SW8260B	µg/kg	- -	ND	[12]	- -		17	[20]
Trichloroethene	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Vinyl chloride	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
Xylenes	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
ans-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[12]	- -		ND	[20]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507406		AM-A507407		AM-A507408		AM-A507409	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04262		00E04263		00E04264		00E04265	
	Collection Date	10/25/00		10/25/00		10/25/00		10/25/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	ND	[6.6]	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	ND	[6.6]	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	ND	[6.6]	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	ND	[6.6]	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	21	[6.6]	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	23	[6.6]	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	76	[6.6]	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	58	[6.6]	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	15	[6.6]	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	58	[6.6]	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	13	[6.6]	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	41	[6.6]	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	ND	[6.6]	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	32	[6.6]	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	ND	[6.6]	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	28	[6.6]	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	32	[6.6]	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	0.776	[5.36]	-	-	-	-
Diesel Range Organics	AK102	µg/g	1030	[6.1]	127	[7.72]	-	-	-	-
Residual Range Organics	AK103	µg/g	627	[152]	1990	[193]	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	47000	[1700]	24000	[1500]
Arsenic	SW6010B	µg/g	-	-	14	[0.97]	-	-	-	
Cadmium	SW6010B	µg/g	-	-	0.068	[0.39]	-	-	-	-
Lead	SW6010B	µg/g	-	-	180	[0.58]	-	-	-	-
Selenium	SW6010B	µg/g	-	-	1.2	[0.97]	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	54	[3.9]	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	17	[1.9]	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	ND	[1.9]	-	-	-	-
Zinc	SW6010B	µg/g	140	[3]	900	[3.9]	-	-	-	-
Mercury	SW7471A	µg/g	-	-	0.158	[0.0386]	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.0508]	ND	[0.0643]	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.102]	ND	[0.129]	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.0508]	ND	[0.0643]	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.0508]	ND	[0.0643]	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.0508]	ND	[0.0643]	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.0508]	ND	[0.0643]	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.0508]	ND	[0.0643]	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	ND	[19]	-	-	-	
1,2-Dichloroethane	SW8260B	µg/kg	-	-	ND	[19]	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	ND	[19]	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507406		AM-A507407		AM-A507408		AM-A507409	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04262		00E04263		00E04264		00E04265	
	Collection Date	10/25/00		10/25/00		10/25/00		10/25/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	- -	780	[97]	- -	- -		
2-Hexanone	SW8260B	µg/kg	- -	ND	[97]	- -	- -		
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	ND	[97]	- -	- -		
Acetone	SW8260B	µg/kg	- -	ND	[97]	- -	- -		
Benzene	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Bromodichloromethane	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Bromoform	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Bromomethane	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Carbon disulfide	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Carbon tetrachloride	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Chlorobenzene	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Chloroethane	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Chloroform	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Chloromethane	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Dibromochloromethane	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Ethylbenzene	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Methylene chloride	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Styrene	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Tetrachloroethene	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Toluene	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Trichloroethene	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Vinyl chloride	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
Xylenes	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
ans-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[19]	- -	- -		
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[19]	- -	- -		

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507410		AM-A507411		AM-A507412		AM-A507413	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04266		00E04267		00E04268		00E04269	
	Collection Date	10/25/00		10/25/00		10/25/00		10/25/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	-	-	-	-	-	-
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	48000	[1600]	52000	[1700]	40000	[1700]	37000	[1700]
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Zinc	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507410	AM-A507411	AM-A507412	AM-A507413
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04266	00E04267	00E04268	00E04269
	Collection Date	10/25/00	10/25/00	10/25/00	10/25/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Butanone	SW8260B	µg/kg	- -	- -	- -
2-Hexanone	SW8260B	µg/kg	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	- -	- -
Acetone	SW8260B	µg/kg	- -	- -	- -
Benzene	SW8260B	µg/kg	- -	- -	- -
Bromodichloromethane	SW8260B	µg/kg	- -	- -	- -
Bromoform	SW8260B	µg/kg	- -	- -	- -
Bromomethane	SW8260B	µg/kg	- -	- -	- -
Carbon disulfide	SW8260B	µg/kg	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/kg	- -	- -	- -
Chlorobenzene	SW8260B	µg/kg	- -	- -	- -
Chloroethane	SW8260B	µg/kg	- -	- -	- -
Chloroform	SW8260B	µg/kg	- -	- -	- -
Chloromethane	SW8260B	µg/kg	- -	- -	- -
Dibromochloromethane	SW8260B	µg/kg	- -	- -	- -
Ethylbenzene	SW8260B	µg/kg	- -	- -	- -
Methylene chloride	SW8260B	µg/kg	- -	- -	- -
Styrene	SW8260B	µg/kg	- -	- -	- -
Tetrachloroethene	SW8260B	µg/kg	- -	- -	- -
Toluene	SW8260B	µg/kg	- -	- -	- -
Trichloroethene	SW8260B	µg/kg	- -	- -	- -
Vinyl chloride	SW8260B	µg/kg	- -	- -	- -
Xylenes	SW8260B	µg/kg	- -	- -	- -
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -
ans-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507414		AM-A507415		AM-A507416		AM-A507601	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04270		00E04271		00E04272		00E04273	
	Collection Date	10/25/00		10/25/00		10/25/00		10/26/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	-	-	-	-	-	-
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	76000	[1700]	42000	[1400]	28000	[1700]	19000	[1400]
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Zinc	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507414		AM-A507415		AM-A507416		AM-A507601	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04270		00E04271		00E04272		00E04273	
	Collection Date	10/25/00		10/25/00		10/25/00		10/26/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
ans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A500001	AM-A500002	AM-A500202	AM-A500302
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E02782	00E02783	00E02838	00E02840
	Collection Date	9/6/00	9/6/00	9/9/00	9/9/00
	Matrix	SO	SO	SO	SO

Analyte	Method	Units								
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	ND	[2]	130	[11]	7.9	[2.1]
Acenaphthene	SW8270C SIM	µg/kg	-	-	ND	[2]	770	[11]	28	[2.1]
Acenaphthylene	SW8270C SIM	µg/kg	-	-	ND	[2]	14	[11]	2.5	[2.1]
Anthracene	SW8270C SIM	µg/kg	-	-	ND	[2]	930	[11]	48	[2.1]
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	ND	[2]	1200	[11]	100	[2.1]
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	ND	[2]	1000	[11]	66	[2.1]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	ND	[2]	1100	[11]	93	[2.1]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	ND	[2]	510	[11]	43	[2.1]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	ND	[2]	250	[11]	22	[2.1]
Chrysene	SW8270C SIM	µg/kg	-	-	ND	[2]	1200	[11]	83	[2.1]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	ND	[2]	130	[11]	14	[2.1]
Fluoranthene	SW8270C SIM	µg/kg	-	-	ND	[2]	2000	[11]	190	[2.1]
Fluorene	SW8270C SIM	µg/kg	-	-	ND	[2]	520	[11]	22	[2.1]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	ND	[2]	640	[11]	53	[2.1]
Naphthalene	SW8270C SIM	µg/kg	-	-	ND	[2]	67	[11]	4.6	[2.1]
Phenanthrene	SW8270C SIM	µg/kg	-	-	ND	[2]	3600	[11]	200	[2.1]
Pyrene	SW8270C SIM	µg/kg	-	-	ND	[2]	3600	[11]	270	[2.1]
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	2.93	[4.6]	337	[5.33]	63.8	[4.98]
Residual Range Organics	AK103	µg/g	-	-	ND	[115]	379	[133]	133	[125]
(TOC)	KAHNTOC	mg/kg	ND	[1100]	920	[1200]	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	ND	[0.0443]	ND	[0.0415]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	ND	[0.0888]	ND	[0.0831]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	ND	[0.0443]	ND	[0.0415]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	ND	[0.0443]	ND	[0.0415]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	ND	[0.0443]	ND	[0.0415]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	ND	[0.0443]	ND	[0.0415]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	ND	[0.0443]	ND	[0.0415]
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A500001		AM-A500002		AM-A500202		AM-A500302	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E02782		00E02783		00E02838		00E02840	
		Collection Date	9/6/00		9/6/00		9/9/00		9/9/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
is-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A500601		AM-A500602		AM-A500604		AM-A500802	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E02843		00E02844		00E02846		00E03041	
		Collection Date	9/9/00		9/9/00		9/9/00		9/11/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	3.3	[1.8]	2.3	[1.8]	ND	[2]	-	-
Acenaphthene	SW8270C SIM	µg/kg	2.2	[1.8]	ND	[1.8]	ND	[2]	-	-
Acenaphthylene	SW8270C SIM	µg/kg	ND	[1.8]	ND	[1.8]	ND	[2]	-	-
Anthracene	SW8270C SIM	µg/kg	11	[1.8]	6.7	[1.8]	ND	[2]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	31	[1.8]	22	[1.8]	5	[2]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	25	[1.8]	21	[1.8]	7	[2]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	39	[1.8]	30	[1.8]	10	[2]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	26	[1.8]	20	[1.8]	12	[2]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	9.4	[1.8]	6.4	[1.8]	4	[2]	-	-
Chrysene	SW8270C SIM	µg/kg	18	[1.8]	14	[1.8]	4.3	[2]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	7.8	[1.8]	5.4	[1.8]	7	[2]	-	-
Fluoranthene	SW8270C SIM	µg/kg	74	[1.8]	54	[1.8]	9.6	[2]	-	-
Fluorene	SW8270C SIM	µg/kg	4.9	[1.8]	3.2	[1.8]	ND	[2]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	32	[1.8]	25	[1.8]	15	[2]	-	-
Naphthalene	SW8270C SIM	µg/kg	3.6	[1.8]	2.8	[1.8]	ND	[2]	-	-
Phenanthrene	SW8270C SIM	µg/kg	26	[1.8]	18	[1.8]	4.8	[2]	-	-
Pyrene	SW8270C SIM	µg/kg	72	[1.8]	59	[1.8]	12	[2]	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	111	[4.35]	108	[4.16]	483	[4.65]	-	-
Residual Range Organics	AK103	µg/g	175	[109]	180	[104]	698	[116]	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	510	[1100]
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.0362]	ND	[0.0347]	ND	[0.0387]	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.0726]	ND	[0.0694]	ND	[0.0775]	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.0362]	ND	[0.0347]	ND	[0.0387]	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.0362]	ND	[0.0347]	ND	[0.0387]	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.0362]	ND	[0.0347]	ND	[0.0387]	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.0362]	ND	[0.0347]	ND	[0.0387]	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.0362]	ND	[0.0347]	ND	[0.0387]	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A500601		AM-A500602		AM-A500604		AM-A500802	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E02843		00E02844		00E02846		00E03041	
		Collection Date	9/9/00		9/9/00		9/9/00		9/11/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
is-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A501201	AM-A501202	AM-A501203	AM-A501204
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03101	00E03102	00E03103	00E03104
	Collection Date	9/14/00	9/14/00	9/14/00	9/14/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	265 [4.48]	462 [4.52]	321 [4.77]	606 [4.61]
Residual Range Organics	AK103	µg/g	6480 [112]	10100 [113]	5710 [119]	7750 [115]
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A501201		AM-A501202		AM-A501203		AM-A501204	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03101		00E03102		00E03103		00E03104	
	Collection Date	9/14/00		9/14/00		9/14/00		9/14/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[280]	ND	[290]	ND	[300]	13	[290]
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[280]	ND	[290]	ND	[300]	ND	[290]
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	28	[280]	23	[290]	20	[300]	22	[290]
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	ND	[850]	ND	[850]	ND	[900]	ND	[850]
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A501205	AM-A501206	AM-A501501	AM-A501502
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03105	00E03106	00E03158	00E03159
	Collection Date	9/14/00	9/14/00	9/16/00	9/16/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	134 [4.32]	- -	- -	- -
Residual Range Organics	AK103	µg/g	3460 [108]	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	9.9 [1.3]	- -
Barium	SW6010B	µg/g	- -	- -	7.2 [5.2]	- -
Cadmium	SW6010B	µg/g	- -	- -	5.2 [0.52]	- -
Chromium	SW6010B	µg/g	- -	- -	220 [2.6]	- -
Lead	SW6010B	µg/g	- -	- -	1300 [0.77]	- -
Selenium	SW6010B	µg/g	- -	- -	ND [1.3]	- -
Silver	SW6010B	µg/g	- -	- -	ND [2.6]	- -
Mercury	SW7471A	µg/g	- -	- -	0.059 [0.0515]	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	ND [0.0858]	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	ND [0.172]	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	ND [0.0858]	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	ND [0.0858]	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	ND [0.0858]	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	ND [0.0858]	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	ND [0.0858]	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A501205	AM-A501206	AM-A501501	AM-A501502
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03105	00E03106	00E03158	00E03159
	Collection Date	9/14/00	9/14/00	9/16/00	9/16/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
1,2-Dichloroethane	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
1,2-Dichloropropane	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
2-Butanone	SW8260B	µg/kg	- -	- -	770 [650]	ND [250]
2-Hexanone	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Acetone	SW8260B	µg/kg	- -	- -	670 [650]	ND [250]
Benzene	SW8260B	µg/kg	ND [270]	ND [250]	ND [650]	ND [250]
Bromodichloromethane	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Bromoform	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Bromomethane	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Carbon disulfide	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Carbon tetrachloride	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Chlorobenzene	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Chloroethane	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Chloroform	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Chloromethane	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Dibromochloromethane	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Ethylbenzene	SW8260B	µg/kg	ND [270]	ND [250]	ND [650]	ND [250]
Methylene chloride	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Styrene	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Tetrachloroethene	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Toluene	SW8260B	µg/kg	17 [270]	ND [250]	ND [650]	ND [250]
Trichloroethene	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Vinyl chloride	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
Xylenes	SW8260B	µg/kg	ND [800]	ND [750]	ND [2000]	ND [750]
is-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
trans-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	ND [650]	ND [250]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A501601		AM-A501602		AM-A501701		AM-A501801	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03160		00E03161		00E03162		00E03164	
	Collection Date	9/16/00		9/16/00		9/16/00		9/16/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Acenaphthene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Acenaphthylene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Anthracene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Chrysene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Fluoranthene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Fluorene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Naphthalene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Phenanthrene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Pyrene	SW8270C SIM	µg/kg	ND	[2.5]	- -	ND	[2.9]	ND	[2.7]
Gasoline Range Organics	AK101	mg/kg	-	-	- -	-	-	-	-
Diesel Range Organics	AK102	µg/g	22.7	[5.97]	- -	20.4	[6.91]	23.9	[6.28]
Residual Range Organics	AK103	µg/g	107	[149]	- -	214	[173]	163	[157]
(TOC)	KAHNTOC	mg/kg	-	-	- -	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	- -	-	-	-	-
Barium	SW6010B	µg/g	-	-	- -	40	[3.5]	46	[3.1]
Cadmium	SW6010B	µg/g	-	-	- -	-	-	-	-
Chromium	SW6010B	µg/g	-	-	- -	6.6	[1.7]	7.9	[1.6]
Lead	SW6010B	µg/g	-	-	- -	-	-	-	-
Selenium	SW6010B	µg/g	-	-	- -	-	-	-	-
Silver	SW6010B	µg/g	-	-	- -	ND	[1.7]	ND	[1.6]
Arsenic	SW6010B	µg/g	-	-	- -	5	[0.86]	3.8	[0.78]
Barium	SW6010B	µg/g	-	-	- -	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	- -	0.098	[0.35]	ND	[0.31]
Chromium	SW6010B	µg/g	-	-	- -	-	-	-	-
Lead	SW6010B	µg/g	-	-	- -	13	[0.52]	3.6	[0.47]
Selenium	SW6010B	µg/g	-	-	- -	ND	[0.86]	1.8	[0.78]
Silver	SW6010B	µg/g	-	-	- -	-	-	-	-
Mercury	SW7471A	µg/g	-	-	- -	0.0489	[0.0345]	0.0716	[0.0314]
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	- -	ND	[0.0575]	ND	[0.0523]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	- -	ND	[0.115]	ND	[0.105]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	- -	ND	[0.0575]	ND	[0.0523]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	- -	ND	[0.0575]	ND	[0.0523]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	- -	ND	[0.0575]	ND	[0.0523]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	- -	ND	[0.0575]	ND	[0.0523]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	- -	ND	[0.0575]	ND	[0.0523]
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	- -	ND	[430]	ND	[390]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	- -	ND	[430]	ND	[390]
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	- -	ND	[430]	ND	[390]
1,1-Dichloroethane	SW8260B	µg/kg	-	-	- -	ND	[430]	ND	[390]
1,1-Dichloroethene	SW8260B	µg/kg	-	-	- -	ND	[430]	ND	[390]

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A501601		AM-A501602		AM-A501701		AM-A501801	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E03160		00E03161		00E03162		00E03164	
		Collection Date	9/16/00		9/16/00		9/16/00		9/16/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
2-Butanone	SW8260B	µg/kg	-	-	-	-	1100	[430]	910	[390]
2-Hexanone	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Acetone	SW8260B	µg/kg	-	-	-	-	ND	[430]	470	[390]
Benzene	SW8260B	µg/kg	ND	[380]	ND	[250]	ND	[430]	ND	[390]
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Bromoform	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Bromomethane	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Chloroethane	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Chloroform	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Chloromethane	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Ethylbenzene	SW8260B	µg/kg	ND	[380]	ND	[250]	ND	[430]	ND	[390]
Methylene chloride	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Styrene	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Toluene	SW8260B	µg/kg	ND	[380]	ND	[250]	24	[430]	ND	[390]
Trichloroethene	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
Xylenes	SW8260B	µg/kg	ND	[1100]	ND	[750]	ND	[1300]	ND	[1200]
is-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	ND	[430]	ND	[390]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A501901	AM-A502001	AM-A502501	AM-A502502
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03165	00E03166	00E03292	00E03293
	Collection Date	9/16/00	9/16/00	9/19/00	9/19/00
	Matrix	SO	SO	SO	SO

Analyte	Method	Units							
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	ND	[2.5]
Acenaphthene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	25	[2.5]
Acenaphthylene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	26	[2.5]
Anthracene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	ND	[2.5]
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	ND	[2.5]
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	ND	[2.5]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	ND	[2.5]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	ND	[2.5]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	ND	[2.5]
Chrysene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	9.3	[2.5]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	ND	[2.5]
Fluoranthene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	11	[2.5]
Fluorene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	15	[2.5]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	ND	[2.5]
Naphthalene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	ND	[2.5]
Phenanthrene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	ND	[2.5]
Pyrene	SW8270C SIM	µg/kg	ND	[2.4]	ND	[9.7]	ND	[5.2]	11	[2.5]
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	15.8	[5.76]	219	[22.7]	52	[12.2]	1810	[5.79]
Residual Range Organics	AK103	µg/g	142	[144]	1230	[568]	78.6	[306]	80.5	[145]
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	29	[2.9]	41	[11]	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	3.4	[1.4]	77	[5.7]	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	ND	[1.4]	ND	[5.7]	-	-	-	-
Arsenic	SW6010B	µg/g	1.8	[0.72]	10	[2.8]	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	ND	[0.29]	ND	[1.1]	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	12	[0.43]	220	[1.7]	-	-	-	-
Selenium	SW6010B	µg/g	1.5	[0.72]	9.8	[2.8]	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	0.039	[0.0288]	0.243	[0.114]	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.0479]	ND	[0.189]	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.096]	ND	[0.379]	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.0479]	ND	[0.189]	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.0479]	ND	[0.189]	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.0479]	ND	[0.189]	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.0479]	ND	[0.189]	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.0479]	ND	[0.189]	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A501901		AM-A502001		AM-A502501		AM-A502502	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03165		00E03166		00E03292		00E03293	
	Collection Date	9/16/00		9/16/00		9/19/00		9/19/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
2-Butanone	SW8260B	µg/kg	880	[360]	3200	[1400]	-	-	-	-
2-Hexanone	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Acetone	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[360]	ND	[1400]	ND	[470]	ND	[210]
Bromodichloromethane	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Bromoform	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Bromomethane	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Chloroethane	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Chloroform	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Chloromethane	SW8260B	µg/kg	ND	[360]	200	[1400]	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[360]	ND	[1400]	ND	[470]	ND	[210]
Methylene chloride	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Styrene	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Toluene	SW8260B	µg/kg	ND	[360]	ND	[1400]	ND	[470]	ND	[210]
Trichloroethene	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
Xylenes	SW8260B	µg/kg	ND	[1100]	ND	[4300]	ND	[1400]	ND	[640]
is-1,2-Dichloroethene	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[360]	ND	[1400]	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A502503		AM-A502504		AM-A502505		AM-A502506	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E03294		00E03295		00E03296		00E03297	
		Collection Date	9/19/00		9/19/00		9/19/00		9/19/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Acenaphthene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Acenaphthylene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Anthracene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Chrysene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Fluoranthene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Fluorene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Naphthalene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Phenanthrene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Pyrene	SW8270C SIM	µg/kg	ND	[2.9]	ND	[2.2]	ND	[6.1]	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	ND	[6.86]	7.24	[5.14]	111	[7.14]	-	-
Residual Range Organics	AK103	µg/g	31	[172]	53.3	[129]	58	[179]	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A502503	AM-A502504	AM-A502505	AM-A502506
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03294	00E03295	00E03296	00E03297
	Collection Date	9/19/00	9/19/00	9/19/00	9/19/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**								
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[370]	ND	[200]	ND	[320]	ND	[250]
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[370]	ND	[200]	ND	[320]	ND	[250]
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	ND	[370]	ND	[200]	ND	[320]	ND	[250]
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	ND	[1100]	ND	[610]	ND	[970]	ND	[740]
is-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A502601		AM-A502602		AM-A502703		AM-A502703	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03298		00E03299		00E03372		00E03372MS	
	Collection Date	9/19/00		9/19/00		9/20/00		9/20/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	ND	[3.2]	ND	[3.4]	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	153	[7.48]	10.3	[8.05]	-	-	-	-
Residual Range Organics	AK103	µg/g	62.8	[187]	37.2	[201]	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	48000	[2000]	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	0.48	[0.5]	200	[0.5]
Barium	SW6010B	µg/g	-	-	-	-	9.7	[4.2]	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	9.1	[0.2]	8.9	[0.2]
Chromium	SW6010B	µg/g	-	-	-	-	32	[2.1]	-	-
Lead	SW6010B	µg/g	-	-	-	-	50	[0.3]	100	[0.3]
Selenium	SW6010B	µg/g	-	-	-	-	3.1	[0.5]	210	[0.5]
Silver	SW6010B	µg/g	-	-	-	-	ND	[2.1]	-	-
Mercury	SW7471A	µg/g	-	-	-	-	0.0528	[0.0421]	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	ND	[0.0701]	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	ND	[0.14]	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	ND	[0.0701]	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	ND	[0.0701]	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	ND	[0.0701]	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	ND	[0.0701]	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	ND	[0.0701]	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A502601		AM-A502602		AM-A502703		AM-A502703	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03298		00E03299		00E03372		00E03372MS	
	Collection Date	9/19/00		9/19/00		9/20/00		9/20/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[350]	ND	[480]	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[350]	ND	[480]	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	ND	[350]	ND	[480]	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	ND	[1100]	ND	[1400]	-	-	-	-
is-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A502704	AM-A502705	AM-A502706	AM-A502801
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03373	00E03374	00E03375	00E03376
	Collection Date	9/20/00	9/20/00	9/20/00	9/21/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	ND [61]	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	310 [61]	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	490 [61]	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	ND [61]	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	ND [61]	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	ND [61]	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	ND [61]	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	ND [61]	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	ND [61]	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	180 [61]	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	ND [61]	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	ND [61]	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	230 [61]	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	ND [61]	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	ND [61]	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	ND [61]	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	390 [61]	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	- -	66700 [7.23]	- -	28.2 [4.77]
Residual Range Organics	AK103	µg/g	- -	9330 [181]	- -	52 [119]
(TOC)	KAHNTOC	mg/kg	- -	76000 [1800]	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	ND [250]	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND [250]	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	ND [250]	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	ND [250]	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	ND [250]	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A502704	AM-A502705	AM-A502706	AM-A502801
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03373	00E03374	00E03375	00E03376
	Collection Date	9/20/00	9/20/00	9/20/00	9/21/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
1,2-Dichloroethane	SW8260B	µg/kg	ND [250]	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/kg	ND [250]	- -	- -	- -
2-Butanone	SW8260B	µg/kg	ND [250]	- -	- -	- -
2-Hexanone	SW8260B	µg/kg	ND [250]	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	ND [250]	- -	- -	- -
Acetone	SW8260B	µg/kg	ND [250]	- -	- -	- -
Benzene	SW8260B	µg/kg	ND [250]	ND [440]	ND [250]	ND [200]
Bromodichloromethane	SW8260B	µg/kg	ND [250]	- -	- -	- -
Bromoform	SW8260B	µg/kg	ND [250]	- -	- -	- -
Bromomethane	SW8260B	µg/kg	ND [250]	- -	- -	- -
Carbon disulfide	SW8260B	µg/kg	ND [250]	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/kg	ND [250]	- -	- -	- -
Chlorobenzene	SW8260B	µg/kg	ND [250]	- -	- -	- -
Chloroethane	SW8260B	µg/kg	ND [250]	- -	- -	- -
Chloroform	SW8260B	µg/kg	ND [250]	- -	- -	- -
Chloromethane	SW8260B	µg/kg	ND [250]	- -	- -	- -
Dibromochloromethane	SW8260B	µg/kg	ND [250]	- -	- -	- -
Ethylbenzene	SW8260B	µg/kg	ND [250]	ND [440]	ND [250]	ND [200]
Methylene chloride	SW8260B	µg/kg	ND [250]	- -	- -	- -
Styrene	SW8260B	µg/kg	ND [250]	- -	- -	- -
Tetrachloroethene	SW8260B	µg/kg	ND [250]	- -	- -	- -
Toluene	SW8260B	µg/kg	ND [250]	ND [440]	ND [250]	ND [200]
Trichloroethene	SW8260B	µg/kg	ND [250]	- -	- -	- -
Vinyl chloride	SW8260B	µg/kg	ND [250]	- -	- -	- -
Xylenes	SW8260B	µg/kg	ND [740]	ND [1300]	ND [750]	ND [610]
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND [250]	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND [250]	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND [250]	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND [250]	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A502802	AM-A502803	AM-A502804	AM-A502805
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03377	00E03378	00E03379	00E03380
	Collection Date	9/21/00	9/21/00	9/21/00	9/21/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	1300 [4.6]	- -	ND [2.3]
Acenaphthene	SW8270C SIM	µg/kg	- -	89 [4.6]	- -	ND [2.3]
Acenaphthylene	SW8270C SIM	µg/kg	- -	22 [4.6]	- -	ND [2.3]
Anthracene	SW8270C SIM	µg/kg	- -	57 [4.6]	- -	ND [2.3]
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	18 [4.6]	- -	ND [2.3]
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	15 [4.6]	- -	ND [2.3]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	13 [4.6]	- -	ND [2.3]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	12 [4.6]	- -	ND [2.3]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	ND [4.6]	- -	ND [2.3]
Chrysene	SW8270C SIM	µg/kg	- -	43 [4.6]	- -	ND [2.3]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	ND [4.6]	- -	ND [2.3]
Fluoranthene	SW8270C SIM	µg/kg	- -	20 [4.6]	- -	ND [2.3]
Fluorene	SW8270C SIM	µg/kg	- -	160 [4.6]	- -	ND [2.3]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	5.6 [4.6]	- -	ND [2.3]
Naphthalene	SW8270C SIM	µg/kg	- -	110 [4.6]	- -	ND [2.3]
Phenanthrene	SW8270C SIM	µg/kg	- -	280 [4.6]	- -	2.8 [2.3]
Pyrene	SW8270C SIM	µg/kg	- -	50 [4.6]	- -	ND [2.3]
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	- -	654 [5.41]	- -	7.43 [5.33]
Residual Range Organics	AK103	µg/g	- -	1740 [135]	- -	39.6 [133]
(TOC)	KAHNTOC	mg/kg	- -	- -	14000 [1100]	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A502802		AM-A502803		AM-A502804		AM-A502805	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E03377		00E03378		00E03379		00E03380	
		Collection Date	9/21/00		9/21/00		9/21/00		9/21/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[250]	ND	[280]	-	-	ND	[120]
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[250]	2800	[280]	-	-	ND	[120]
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	ND	[250]	ND	[280]	-	-	ND	[120]
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	ND	[750]	10000	[820]	-	-	ND	[360]
s-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A502806		AM-A502807		AM-A502808		AM-A502809	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E03381		00E03382		00E03383		00E03384	
		Collection Date	9/21/00		9/21/00		9/21/00		9/21/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	10	[2.3]	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	2.6	[2.3]	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	ND	[2.3]	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	20.3	[4.62]	-	-	60	[5.42]	65.3	[6.2]
Residual Range Organics	AK103	µg/g	62.2	[116]	-	-	271	[136]	302	[155]
(TOC)	KAHNTOC	mg/kg	-	-	9100	[1200]	12000	[1400]	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A502806		AM-A502807		AM-A502808		AM-A502809	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03381		00E03382		00E03383		00E03384	
	Collection Date	9/21/00		9/21/00		9/21/00		9/21/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[210]	-	-	ND	[220]	ND	[370]
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[210]	-	-	ND	[220]	ND	[370]
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	ND	[210]	-	-	ND	[220]	ND	[370]
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	ND	[630]	-	-	ND	[660]	ND	[1100]
is-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A502810		AM-A502811		AM-A502812		AM-A503001	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03385		00E03386		00E03387		00E03649	
	Collection Date	9/21/00		9/21/00		9/21/00		10/3/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	ND	[4.27]	22.1	[5.49]	-	-	2320	[6.37]
Residual Range Organics	AK103	µg/g	10.1	[107]	92.6	[137]	-	-	5890	[159]
(TOC)	KAHNTOC	mg/kg	-	-	-	-	25000	[1100]	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	ND	[5.3]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	ND	[10.6]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	ND	[5.3]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	ND	[5.3]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	ND	[5.3]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	ND	[5.3]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	ND	[5.3]
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A502810		AM-A502811		AM-A502812		AM-A503001	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03385		00E03386		00E03387		00E03649	
	Collection Date	9/21/00		9/21/00		9/21/00		10/3/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[200]	ND	[300]	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[200]	ND	[300]	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	ND	[200]	ND	[300]	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	ND	[590]	ND	[900]	-	-	-	-
s-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A503101	AM-A503201	AM-A503301	AM-A503401
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03650	00E03651	00E03652	00E03653
	Collection Date	10/3/00	10/3/00	10/3/00	10/3/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	380 [7.72]	66300 [9.9]	95.5 [8.57]	- -
Residual Range Organics	AK103	µg/g	3860 [193]	89400 [248]	2330 [214]	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	9.4 [6.43]	ND [0.824]	ND [0.713]	ND [0.0369]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND [12.9]	ND [1.65]	ND [1.43]	ND [0.0739]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND [6.43]	ND [0.824]	ND [0.713]	ND [0.0369]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND [6.43]	ND [0.824]	ND [0.713]	ND [0.0369]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND [6.43]	ND [0.824]	ND [0.713]	ND [0.0369]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND [6.43]	ND [0.824]	11.9 [0.713]	ND [0.0369]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND [6.43]	3.37 [0.824]	ND [0.713]	ND [0.0369]
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A503101	AM-A503201	AM-A503301	AM-A503401
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03650	00E03651	00E03652	00E03653
	Collection Date	10/3/00	10/3/00	10/3/00	10/3/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
1,2-Dichloroethane	SW8260B	µg/kg	- - - - - - - -		
1,2-Dichloropropane	SW8260B	µg/kg	- - - - - - - -		
2-Butanone	SW8260B	µg/kg	- - - - - - - -		
2-Hexanone	SW8260B	µg/kg	- - - - - - - -		
4-Methyl-2-pentanone	SW8260B	µg/kg	- - - - - - - -		
Acetone	SW8260B	µg/kg	- - - - - - - -		
Benzene	SW8260B	µg/kg	- - - - - - - -		
Bromodichloromethane	SW8260B	µg/kg	- - - - - - - -		
Bromoform	SW8260B	µg/kg	- - - - - - - -		
Bromomethane	SW8260B	µg/kg	- - - - - - - -		
Carbon disulfide	SW8260B	µg/kg	- - - - - - - -		
Carbon tetrachloride	SW8260B	µg/kg	- - - - - - - -		
Chlorobenzene	SW8260B	µg/kg	- - - - - - - -		
Chloroethane	SW8260B	µg/kg	- - - - - - - -		
Chloroform	SW8260B	µg/kg	- - - - - - - -		
Chloromethane	SW8260B	µg/kg	- - - - - - - -		
Dibromochloromethane	SW8260B	µg/kg	- - - - - - - -		
Ethylbenzene	SW8260B	µg/kg	- - - - - - - -		
Methylene chloride	SW8260B	µg/kg	- - - - - - - -		
Styrene	SW8260B	µg/kg	- - - - - - - -		
Tetrachloroethene	SW8260B	µg/kg	- - - - - - - -		
Toluene	SW8260B	µg/kg	- - - - - - - -		
Trichloroethene	SW8260B	µg/kg	- - - - - - - -		
Vinyl chloride	SW8260B	µg/kg	- - - - - - - -		
Xylenes	SW8260B	µg/kg	- - - - - - - -		
is-1,2-Dichloroethene	SW8260B	µg/kg	- - - - - - - -		
cis-1,3-Dichloropropene	SW8260B	µg/kg	- - - - - - - -		
trans-1,2-Dichloroethene	SW8260B	µg/kg	- - - - - - - -		
trans-1,3-Dichloropropene	SW8260B	µg/kg	- - - - - - - -		

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A503501		AM-A503601		AM-A503701		AM-A503801	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E03654		00E03655		00E03656		00E03657	
		Collection Date	10/4/00		10/4/00		10/4/00		10/4/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	0.961	[5.5]	-	-	0.799	[5.26]	1.09	[5.03]
Diesel Range Organics	AK102	µg/g	10.3	[5.82]	-	-	292	[6.14]	213	[6.23]
Residual Range Organics	AK103	µg/g	89.5	[100]	-	-	125	[100]	106	[100]
(TOC)	KAHNTOC	mg/kg	-	-	33000	[1600]	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A503501		AM-A503601		AM-A503701		AM-A503801	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03654		00E03655		00E03656		00E03657	
	Collection Date	10/4/00		10/4/00		10/4/00		10/4/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
is-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A503802		AM-A504002		AM-A504004		AM-A504101	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E03658		00E03659		00E03661		00E03662	
		Collection Date	10/4/00		10/6/00		10/6/00		10/6/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	8.6	[6.5]	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	ND	[6.5]	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	ND	[6.5]	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	12	[6.5]	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	29	[6.5]	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	31	[6.5]	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	47	[6.5]	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	16	[6.5]	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	14	[6.5]	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	31	[6.5]	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	ND	[6.5]	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	79	[6.5]	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	15	[6.5]	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	17	[6.5]	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	7.5	[6.5]	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	73	[6.5]	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	72	[6.5]	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	1.6	[12.5]	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	-	-	172	[15.2]	-	-	1250	[12.3]
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A503802		AM-A504002		AM-A504004		AM-A504101	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03658		00E03659		00E03661		00E03662	
	Collection Date	10/4/00		10/6/00		10/6/00		10/6/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	ND	[160]	ND	[50]	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	ND	[160]	ND	[50]	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	ND	[160]	ND	[50]	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	ND	[160]	ND	[50]	-	-
is-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504102	AM-A504103	AM-A504104	AM-A504105
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03663	00E03664	00E03665	00E03666
	Collection Date	10/6/00	10/6/00	10/6/00	10/6/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	17 [3.8]	ND [2.2]
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	ND [2.2]
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	ND [2.2]
Anthracene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	ND [2.2]
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	ND [2.2]
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	ND [2.2]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	ND [2.2]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	ND [2.2]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	ND [2.2]
Chrysene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	2.6 [2.2]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	ND [2.2]
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	ND [2.2]
Fluorene	SW8270C SIM	µg/kg	- -	- -	4.6 [3.8]	5.2 [2.2]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	ND [2.2]
Naphthalene	SW8270C SIM	µg/kg	- -	- -	7.6 [3.8]	ND [2.2]
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	ND [3.8]	ND [2.2]
Pyrene	SW8270C SIM	µg/kg	- -	- -	5.6 [3.8]	4.5 [2.2]
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	314 [6.66]	315 [7.5]	852 [8.99]	1390 [5.1]
Residual Range Organics	AK103	µg/g	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504102	AM-A504103	AM-A504104	AM-A504105
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03663	00E03664	00E03665	00E03666
	Collection Date	10/6/00	10/6/00	10/6/00	10/6/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
1,2-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/kg	- -	- -	- -	- -
2-Butanone	SW8260B	µg/kg	- -	- -	- -	- -
2-Hexanone	SW8260B	µg/kg	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	- -	- -	- -
Acetone	SW8260B	µg/kg	- -	- -	- -	- -
Benzene	SW8260B	µg/kg	- -	- -	- -	- -
Bromodichloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Bromoform	SW8260B	µg/kg	- -	- -	- -	- -
Bromomethane	SW8260B	µg/kg	- -	- -	- -	- -
Carbon disulfide	SW8260B	µg/kg	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/kg	- -	- -	- -	- -
Chlorobenzene	SW8260B	µg/kg	- -	- -	- -	- -
Chloroethane	SW8260B	µg/kg	- -	- -	- -	- -
Chloroform	SW8260B	µg/kg	- -	- -	- -	- -
Chloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Dibromochloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Ethylbenzene	SW8260B	µg/kg	- -	- -	- -	- -
Methylene chloride	SW8260B	µg/kg	- -	- -	- -	- -
Styrene	SW8260B	µg/kg	- -	- -	- -	- -
Tetrachloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Toluene	SW8260B	µg/kg	- -	- -	- -	- -
Trichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Vinyl chloride	SW8260B	µg/kg	- -	- -	- -	- -
Xylenes	SW8260B	µg/kg	- -	- -	- -	- -
.s-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504106		AM-A504107		AM-A504108		AM-A504109	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03667		00E03668		00E03669		00E03670	
	Collection Date	10/6/00		10/7/00		10/7/00		10/7/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	-	-	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	1870 [11.2]		-	-	-	-	-	-
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	95000 [1900]		36000 [1800]		16000 [1700]	
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504106		AM-A504107		AM-A504108		AM-A504109	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03667		00E03668		00E03669		00E03670	
	Collection Date	10/6/00		10/7/00		10/7/00		10/7/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
is-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504110	AM-A504201	AM-A504202	AM-A504303
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03671	00E03672	00E03673	00E03676
	Collection Date	10/6/00	10/7/00	10/6/00	10/6/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	ND [6.2]
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	359 [10.3]	- -	69.1 [7.97]	147 [14.5]
Residual Range Organics	AK103	µg/g	- -	- -	- -	788 [100]
(TOC)	KAHNTOC	mg/kg	- -	310000 [3300]	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504110	AM-A504201	AM-A504202	AM-A504303
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03671	00E03672	00E03673	00E03676
	Collection Date	10/6/00	10/7/00	10/6/00	10/6/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
1,2-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/kg	- -	- -	- -	- -
2-Butanone	SW8260B	µg/kg	- -	- -	- -	- -
2-Hexanone	SW8260B	µg/kg	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	- -	- -	- -
Acetone	SW8260B	µg/kg	- -	- -	- -	- -
Benzene	SW8260B	µg/kg	- -	- -	- -	- -
Bromodichloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Bromoform	SW8260B	µg/kg	- -	- -	- -	- -
Bromomethane	SW8260B	µg/kg	- -	- -	- -	- -
Carbon disulfide	SW8260B	µg/kg	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/kg	- -	- -	- -	- -
Chlorobenzene	SW8260B	µg/kg	- -	- -	- -	- -
Chloroethane	SW8260B	µg/kg	- -	- -	- -	- -
Chloroform	SW8260B	µg/kg	- -	- -	- -	- -
Chloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Dibromochloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Ethylbenzene	SW8260B	µg/kg	- -	- -	- -	- -
Methylene chloride	SW8260B	µg/kg	- -	- -	- -	- -
Styrene	SW8260B	µg/kg	- -	- -	- -	- -
Tetrachloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Toluene	SW8260B	µg/kg	- -	- -	- -	- -
Trichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Vinyl chloride	SW8260B	µg/kg	- -	- -	- -	- -
Xylenes	SW8260B	µg/kg	- -	- -	- -	- -
is-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504303	AM-A504304	AM-A504401	AM-A504402
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03676	00E03677	00E03678	00E03679
	Collection Date	10/7/00	10/7/00	10/7/00	10/7/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	- -	191 [5.55]	991 [12.5]
Residual Range Organics	AK103	µg/g	- -	1930 [139]	4980 [313]
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	ND [51]	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	ND [51]	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	ND [51]	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	ND [51]	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	ND [51]	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504303		AM-A504304		AM-A504401		AM-A504402	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03676		00E03677		00E03678		00E03679	
	Collection Date	10/7/00		10/7/00		10/7/00		10/7/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
1,2-Dichloropropane	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
2-Butanone	SW8260B	µg/kg	- -	ND	[260]	- -		- -	
2-Hexanone	SW8260B	µg/kg	- -	ND	[260]	- -		- -	
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	ND	[260]	- -		- -	
Acetone	SW8260B	µg/kg	- -	ND	[260]	- -		- -	
Benzene	SW8260B	µg/kg	ND [90]	ND	[51]	- -		- -	
Bromodichloromethane	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Bromoform	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Bromomethane	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Carbon disulfide	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Carbon tetrachloride	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Chlorobenzene	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Chloroethane	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Chloroform	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Chloromethane	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Dibromochloromethane	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Ethylbenzene	SW8260B	µg/kg	ND [90]	ND	[51]	- -		- -	
Methylene chloride	SW8260B	µg/kg	- -	24	[51]	- -		- -	
Styrene	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Tetrachloroethene	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Toluene	SW8260B	µg/kg	ND [90]	ND	[51]	- -		- -	
Trichloroethene	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Vinyl chloride	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
Xylenes	SW8260B	µg/kg	ND [90]	ND	[51]	- -		- -	
s-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
trans-1,2-Dichloroethene	SW8260B	µg/kg	- -	ND	[51]	- -		- -	
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	ND	[51]	- -		- -	

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504403	AM-A504404	AM-A504405	AM-A504406
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03680	00E03681	00E03682	00E03683
	Collection Date	10/7/00	10/7/00	10/7/00	10/7/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	447 [9.83]	993 [9.69]	1380 [8.57]	- -
Residual Range Organics	AK103	µg/g	3050 [246]	2950 [242]	2830 [214]	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	170000 [3300]
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504403		AM-A504404		AM-A504405		AM-A504406	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03680		00E03681		00E03682		00E03683	
	Collection Date	10/7/00		10/7/00		10/7/00		10/7/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
is-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504501	AM-A504502	AM-A504503	AM-A504601
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03684	00E03685	00E03686	00E03687
	Collection Date	10/7/00	10/7/00	10/7/00	10/7/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	442 [8.03]	1560 [7.38]	255 [8.23]	2810 [9.13]
Residual Range Organics	AK103	µg/g	1630 [201]	1280 [185]	1340 [206]	1580 [228]
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
1,1,2-Trichloroethane	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
1,1-Dichloroethane	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
1,1-Dichloroethene	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A504501	AM-A504502	AM-A504503	AM-A504601
		Laboratory	DCHM	DCHM	DCHM	DCHM
		Lab Sample ID	00E03684	00E03685	00E03686	00E03687
		Collection Date	10/7/00	10/7/00	10/7/00	10/7/00
		Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**				
1,2-Dichloroethane	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
1,2-Dichloropropane	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
2-Butanone	SW8260B	µg/kg	720 [690]	570 [580]	1500 [400]	ND [430]
2-Hexanone	SW8260B	µg/kg	ND [690]	ND [580]	ND [400]	ND [430]
4-Methyl-2-pentanone	SW8260B	µg/kg	ND [690]	ND [580]	ND [400]	ND [430]
Acetone	SW8260B	µg/kg	ND [690]	ND [580]	ND [400]	ND [430]
Benzene	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Bromodichloromethane	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Bromoform	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Bromomethane	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Carbon disulfide	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Carbon tetrachloride	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Chlorobenzene	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Chloroethane	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Chloroform	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Chloromethane	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Dibromochloromethane	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Ethylbenzene	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Methylene chloride	SW8260B	µg/kg	130 [140]	100 [110]	ND [84]	56 [90]
Styrene	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Tetrachloroethene	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Toluene	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Trichloroethene	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Vinyl chloride	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
Xylenes	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
is-1,2-Dichloroethene	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND [140]	ND [110]	ND [84]	ND [90]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504602		AM-A504603		AM-A504604		AM-A504701	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03688		00E03689		00E03690		00E03738	
	Collection Date	10/7/00		10/7/00		10/7/00		10/10/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Acenaphthene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Acenaphthylene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Anthracene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Chrysene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Fluoranthene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Fluorene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Naphthalene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Phenanthrene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Pyrene	SW8270C SIM	µg/kg	- -	- -	- -	ND	[2]
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	-	-
Diesel Range Organics	AK102	µg/g	314 [6.51]	4230 [8.55]	- -	4.85	[4.63]
Residual Range Organics	AK103	µg/g	681 [163]	684 [214]	- -	-	-
(TOC)	KAHNTOC	mg/kg	- -	- -	31000 [1700]	-	-
Arsenic	SW6010B	µg/g	- -	- -	- -	-	-
Barium	SW6010B	µg/g	- -	- -	- -	-	-
Cadmium	SW6010B	µg/g	- -	- -	- -	-	-
Chromium	SW6010B	µg/g	- -	- -	- -	-	-
Lead	SW6010B	µg/g	- -	- -	- -	-	-
Selenium	SW6010B	µg/g	- -	- -	- -	-	-
Silver	SW6010B	µg/g	- -	- -	- -	-	-
Arsenic	SW6010B	µg/g	- -	- -	- -	-	-
Barium	SW6010B	µg/g	- -	- -	- -	-	-
Cadmium	SW6010B	µg/g	- -	- -	- -	-	-
Chromium	SW6010B	µg/g	- -	- -	- -	-	-
Lead	SW6010B	µg/g	- -	- -	- -	-	-
Selenium	SW6010B	µg/g	- -	- -	- -	-	-
Silver	SW6010B	µg/g	- -	- -	- -	-	-
Mercury	SW7471A	µg/g	- -	- -	- -	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	ND [67]	ND [110]	- -	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND [67]	ND [110]	- -	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	ND [67]	ND [110]	- -	-	-
1,1-Dichloroethane	SW8260B	µg/kg	ND [67]	ND [110]	- -	-	-
1,1-Dichloroethene	SW8260B	µg/kg	ND [67]	ND [110]	- -	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504602		AM-A504603		AM-A504604		AM-A504701	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03688		00E03689		00E03690		00E03738	
	Collection Date	10/7/00		10/7/00		10/7/00		10/10/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
2-Butanone	SW8260B	µg/kg	1500	[340]	2300 [580]	-	-	-	-
2-Hexanone	SW8260B	µg/kg	ND	[340]	ND [580]	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[340]	ND [580]	-	-	-	-
Acetone	SW8260B	µg/kg	ND	[340]	ND [580]	-	-	-	-
Benzene	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Bromoform	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Bromomethane	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Chloroethane	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Chloroform	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Chloromethane	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Methylene chloride	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Styrene	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Toluene	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Trichloroethene	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
Xylenes	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
is-1,2-Dichloroethene	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[67]	ND [110]	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504702	AM-A504703	AM-A504704	AM-A504705
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03739	00E03740	00E03741	00E03742
	Collection Date	10/10/00	10/10/00	10/10/00	10/10/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Acenaphthene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Anthracene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Chrysene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Fluoranthene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Fluorene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Naphthalene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Phenanthrene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Pyrene	SW8270C SIM	µg/kg	- -	ND [2.3]	- -	- -
Gasoline Range Organics	AK101	mg/kg	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g	36 [4.7]	34.2 [5.49]	93.2 [9.07]	177 [6.6]
Residual Range Organics	AK103	µg/g	- -	- -	- -	- -
(TOC)	KAHNTOC	mg/kg	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -
Barium	SW6010B	µg/g	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -
Chromium	SW6010B	µg/g	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -
Selenium	SW6010B	µg/g	- -	- -	- -	- -
Silver	SW6010B	µg/g	- -	- -	- -	- -
Mercury	SW7471A	µg/g	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	- -	- -	- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	- -	- -	- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	- -	- -	- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	- -	- -	- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	- -	- -	- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	- -	- -	- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	- -	- -	- -
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,1-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504702		AM-A504703		AM-A504704		AM-A504705	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03739		00E03740		00E03741		00E03742	
	Collection Date	10/10/00		10/10/00		10/10/00		10/10/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,2-Dichloropropane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Butanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
2-Hexanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Acetone	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Benzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromodichloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromoform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Bromomethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon disulfide	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Carbon tetrachloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chlorobenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloroform	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Chloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Dibromochloromethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Ethylbenzene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Methylene chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Styrene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Toluene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Trichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Vinyl chloride	SW8260B	µg/kg	-	-	-	-	-	-	-	-
Xylenes	SW8260B	µg/kg	-	-	-	-	-	-	-	-
is-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A504706		AM-A504707		AM-A504708		AM-A504709	
		Laboratory	DCHM		DCHM		DCHM		DCHM	
		Lab Sample ID	00E03743		00E03744		00E03745		00E03746	
		Collection Date	10/10/00		10/10/00		10/10/00		10/10/00	
		Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Anthracene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Chrysene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Fluorene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Pyrene	SW8270C SIM	µg/kg	-	-	ND	[2.2]	-	-	-	-
Gasoline Range Organics	AK101	mg/kg	-	-	-	-	-	-	-	-
Diesel Range Organics	AK102	µg/g	22	[6.25]	21.3	[5.16]	-	-	-	-
Residual Range Organics	AK103	µg/g	-	-	-	-	-	-	-	-
(TOC)	KAHNTOC	mg/kg	-	-	-	-	39000	[1900]	63000	[1700]
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	-	-
Barium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Chromium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Lead	SW6010B	µg/g	-	-	-	-	-	-	-	-
Selenium	SW6010B	µg/g	-	-	-	-	-	-	-	-
Silver	SW6010B	µg/g	-	-	-	-	-	-	-	-
Mercury	SW7471A	µg/g	-	-	-	-	-	-	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethane	SW8260B	µg/kg	-	-	-	-	-	-	-	-
1,1-Dichloroethene	SW8260B	µg/kg	-	-	-	-	-	-	-	-

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504706	AM-A504707	AM-A504708	AM-A504709
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E03743	00E03744	00E03745	00E03746
	Collection Date	10/10/00	10/10/00	10/10/00	10/10/00
	Matrix	SO	SO	SO	SO
Analyte	**Method**	**Units**			
1,2-Dichloroethane	SW8260B	µg/kg	- -	- -	- -	- -
1,2-Dichloropropane	SW8260B	µg/kg	- -	- -	- -	- -
2-Butanone	SW8260B	µg/kg	- -	- -	- -	- -
2-Hexanone	SW8260B	µg/kg	- -	- -	- -	- -
4-Methyl-2-pentanone	SW8260B	µg/kg	- -	- -	- -	- -
Acetone	SW8260B	µg/kg	- -	- -	- -	- -
Benzene	SW8260B	µg/kg	- -	- -	- -	- -
Bromodichloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Bromoform	SW8260B	µg/kg	- -	- -	- -	- -
Bromomethane	SW8260B	µg/kg	- -	- -	- -	- -
Carbon disulfide	SW8260B	µg/kg	- -	- -	- -	- -
Carbon tetrachloride	SW8260B	µg/kg	- -	- -	- -	- -
Chlorobenzene	SW8260B	µg/kg	- -	- -	- -	- -
Chloroethane	SW8260B	µg/kg	- -	- -	- -	- -
Chloroform	SW8260B	µg/kg	- -	- -	- -	- -
Chloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Dibromochloromethane	SW8260B	µg/kg	- -	- -	- -	- -
Ethylbenzene	SW8260B	µg/kg	- -	- -	- -	- -
Methylene chloride	SW8260B	µg/kg	- -	- -	- -	- -
Styrene	SW8260B	µg/kg	- -	- -	- -	- -
Tetrachloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Toluene	SW8260B	µg/kg	- -	- -	- -	- -
Trichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
Vinyl chloride	SW8260B	µg/kg	- -	- -	- -	- -
Xylenes	SW8260B	µg/kg	- -	- -	- -	- -
cis-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
cis-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -
trans-1,2-Dichloroethene	SW8260B	µg/kg	- -	- -	- -	- -
trans-1,3-Dichloropropene	SW8260B	µg/kg	- -	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504710		AM-A504801		AM-A504802		AM-A505301	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03747		00E03736		00E03737		00E03785	
	Collection Date	10/10/00		10/10/00		10/10/00		10/12/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
2-Methylnaphthalene	SW8270C SIM	µg/kg	- -	780	[140]	- -		10	[4.1]
Acenaphthene	SW8270C SIM	µg/kg	- -	1300	[140]	- -		ND	[4.1]
Acenaphthylene	SW8270C SIM	µg/kg	- -	350	[140]	- -		ND	[4.1]
Anthracene	SW8270C SIM	µg/kg	- -	1000	[140]	- -		8.8	[4.1]
Benzo(a)anthracene	SW8270C SIM	µg/kg	- -	700	[140]	- -		26	[4.1]
Benzo(a)pyrene	SW8270C SIM	µg/kg	- -	460	[140]	- -		33	[4.1]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	- -	350	[140]	- -		45	[4.1]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	- -	360	[140]	- -		58	[4.1]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	- -	ND	[140]	- -		15	[4.1]
Chrysene	SW8270C SIM	µg/kg	- -	1600	[140]	- -		32	[4.1]
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	- -	ND	[140]	- -		10	[4.1]
Fluoranthene	SW8270C SIM	µg/kg	- -	1000	[140]	- -		46	[4.1]
Fluorene	SW8270C SIM	µg/kg	- -	2100	[140]	- -		4.6	[4.1]
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	- -	170	[140]	- -		32	[4.1]
Naphthalene	SW8270C SIM	µg/kg	- -	500	[140]	- -		9.8	[4.1]
Phenanthrene	SW8270C SIM	µg/kg	- -	4100	[140]	- -		39	[4.1]
Pyrene	SW8270C SIM	µg/kg	- -	4400	[140]	- -		64	[4.1]
Gasoline Range Organics	AK101	mg/kg	- -	15.8	[4.34]	0.586	[4.99]	-	-
Diesel Range Organics	AK102	µg/g	- -	15800	[5.48]	- -		219	[4.8]
Residual Range Organics	AK103	µg/g	- -	35100	[137]	- -		3300	[120]
(TOC)	KAHNTOC	mg/kg	6500 [1300]	-	-	- -		-	-
Arsenic	SW6010B	µg/g	- -	8.1	[0.68]	- -		-	-
Barium	SW6010B	µg/g	- -	-	-	- -		-	-
Cadmium	SW6010B	µg/g	- -	0.14	[0.27]	- -		-	-
Chromium	SW6010B	µg/g	- -	-	-	- -		-	-
Lead	SW6010B	µg/g	- -	6.3	[0.41]	- -		-	-
Selenium	SW6010B	µg/g	- -	ND	[0.68]	- -		-	-
Silver	SW6010B	µg/g	- -	-	-	- -		-	-
Arsenic	SW6010B	µg/g	- -	8.1	[0.68]	- -		15	[0.6]
Barium	SW6010B	µg/g	- -	23	[2.7]	- -		33	[2.4]
Cadmium	SW6010B	µg/g	- -	0.14	[0.27]	- -		0.19	[0.24]
Chromium	SW6010B	µg/g	- -	88	[1.4]	- -		15	[1.2]
Lead	SW6010B	µg/g	- -	6.3	[0.41]	- -		180	[0.36]
Selenium	SW6010B	µg/g	- -	ND	[0.68]	- -		ND	[0.6]
Silver	SW6010B	µg/g	- -	ND	[1.4]	- -		ND	[1.2]
Mercury	SW7471A	µg/g	- -	0.7188	[0.0274]	- -		0.146	[0.024]
PCB-1016 (Aroclor 1016)	SW8082	µg/g	- -	ND	[0.456]	- -		-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	- -	ND	[0.0914]	- -		-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	- -	ND	[0.0456]	- -		-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	- -	ND	[0.0456]	- -		-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	- -	ND	[0.0456]	- -		-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	- -	ND	[0.0456]	- -		-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	- -	ND	[0.456]	- -		-	-
1,1,1-Trichloroethane	SW8260B	µg/kg	- -	ND	[42]	ND	[50]	ND	[8.9]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	- -	ND	[42]	ND	[50]	ND	[8.9]
1,1,2-Trichloroethane	SW8260B	µg/kg	- -	ND	[42]	ND	[50]	ND	[8.9]
1,1-Dichloroethane	SW8260B	µg/kg	- -	ND	[42]	ND	[50]	ND	[8.9]
1,1-Dichloroethene	SW8260B	µg/kg	- -	ND	[42]	ND	[50]	ND	[8.9]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A504710		AM-A504801		AM-A504802		AM-A505301	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E03747		00E03736		00E03737		00E03785	
	Collection Date	10/10/00		10/10/00		10/10/00		10/12/00	
	Matrix	SO		SO		SO		SO	
Analyte	**Method**	**Units**							
1,2-Dichloroethane	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
1,2-Dichloropropane	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
2-Butanone	SW8260B	µg/kg	-	-	900	[200]	ND	[250]	340	[44]
2-Hexanone	SW8260B	µg/kg	-	-	ND	[200]	ND	[250]	ND	[44]
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-	ND	[200]	ND	[250]	ND	[44]
Acetone	SW8260B	µg/kg	-	-	ND	[200]	ND	[250]	ND	[44]
Benzene	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Bromodichloromethane	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Bromoform	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Bromomethane	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Carbon disulfide	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Carbon tetrachloride	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Chlorobenzene	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Chloroethane	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Chloroform	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Chloromethane	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Dibromochloromethane	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Ethylbenzene	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Methylene chloride	SW8260B	µg/kg	-	-	ND	[42]	27	[50]	ND	[8.9]
Styrene	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	24	[8.9]
Tetrachloroethene	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Toluene	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Trichloroethene	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Vinyl chloride	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
Xylenes	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
s-1,2-Dichloroethene	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-	ND	[42]	ND	[50]	ND	[8.9]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

Sample ID	AM-A506505
Laboratory	DCHM
Lab Sample ID	00E04058
Collection Date	10/19/00
Matrix	SH

Analyte	Method	Units		
Diesel Range Organics	AK102	µg/g	2560	[5.63]
Organics	AK103	µg/g	465000	[141]

Notes.
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A507703	AM-A507903
	Laboratory	DCHM	DCHM
	Lab Sample ID	00E04283	00E04294
	Collection Date	10/27/00	10/28/00
	Matrix	SE	SE
Analyte	**Method**	**Units**	
2-Methylnaphthalene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
Acenaphthene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
Acenaphthylene	SW8270C SIM	µg/kg	ND [2.9] 2.6 [1.7]
Anthracene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
Benzo(a)anthracene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	3.7 [2.9] ND [1.7]
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
Chrysene	SW8270C SIM	µg/kg	4.4 [2.9] ND [1.7]
e	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
Fluoranthene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
Fluorene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
cd)pyrene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
Naphthalene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
Phenanthrene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]
Pyrene	SW8270C SIM	µg/kg	ND [2.9] ND [1.7]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

		Sample ID	AM-A510501	
		Laboratory	CTE	
		Lab Sample ID	1007218001	
		Collection Date	11/8/00	
		Matrix	LO	
Analyte	**Method**	**Units**		
Barium	SW6010B	mg/kg	0.551	[1]J
Cadmium	SW6010B	mg/kg	0.142	[0.5]J
Chromium	SW6010B	mg/kg	0.438	[1]J
Lead	SW6010B	mg/kg	1.67	[2.5]J ,B
Silver	SW6010B	mg/kg	1.31	[1]
Arsenic	SW7060A	mg/kg	0.226	[0.1]
Mercury	SW7471A	mg/kg	ND	[0.0357]
Selenium	SW7740	mg/kg	ND	[0.1]
1016)	SW8082	mg/kg	ND	[0.983]
1221)	SW8082	mg/kg	ND	[0.983]
1232)	SW8082	mg/kg	ND	[0.983]
1242)	SW8082	mg/kg	ND	[0.983]
1248)	SW8082	mg/kg	ND	[0.983]
1254)	SW8082	mg/kg	ND	[0.983]
1260)	SW8082	mg/kg	ND	[0.983]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506503		AM-A506504		AM-A506703		AM-A506704	
	Laboratory	DCHM		DCHM		DCHM		DCHM	
	Lab Sample ID	00E04056		00E04057		00E04175		00E04176	
	Collection Date	10/19/00		10/19/00		10/23/00		10/23/00	
	Matrix	LH		LH		LH		LH	
Analyte	**Method**	**Units**							
Flash Point	SW1010	DEG C	19	[2]	65	> [2]	0 NR	[2]	65 > [2]
Arsenic	SW6010B	µg/g	-	-	-	-	-	-	- -
Cadmium	SW6010B	µg/g	-	-	-	-	-	-	- -
Lead	SW6010B	µg/g	-	-	-	-	-	-	- -
Arsenic	SW6010B	µg/g	2.8	[5]	3	[5]	3.6	[5]	3.3 [5]
Cadmium	SW6010B	µg/g	0.028	[2]	0.039	[2]	ND	[2]	ND [2]
Chromium	SW6010B	µg/g	4.2	[5]	0.61	[5]	1.2	[5]	ND [5]
Lead	SW6010B	µg/g	550	[10]	1.3	[10]	1	[10]	0.81 [10]
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.1]	ND	[0.1]	ND	[0.1]	ND [0.1]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.2]	ND	[0.2]	ND	[0.2]	ND [0.2]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.1]	ND	[0.1]	ND	[0.1]	ND [0.1]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.1]	ND	[0.1]	ND	[0.1]	ND [0.1]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.1]	ND	[0.1]	ND	[0.1]	ND [0.1]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.1]	ND	[0.1]	ND	[0.1]	ND [0.1]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.1]	ND	[0.1]	ND	[0.1]	3.23 [0.1]
Total Organic Halides (TOX)	SW9020	mg/kg	77.3	[50]	0	NA[50]	-	-	- -
Total Organic Halides (TOX)	SW9020	µg/L	-	-	-	-	ND	[50]	ND [50]

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506705	AM-A506707	AM-A506708	AM-A506709
	Laboratory	DCHM	DCHM	DCHM	DCHM
	Lab Sample ID	00E04177	00E04179	00E04180	00E04181
	Collection Date	10/23/00	10/23/00	10/23/00	10/23/00
	Matrix	LH	LH	LH	LH
Analyte	**Method**	**Units**			
Flash Point	SW1010	DEG C	65 > [2]	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	- -	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	- -	- -	- -	- -	- -
Lead	SW6010B	µg/g	- -	- -	- -	- -	- -
Arsenic	SW6010B	µg/g	3 [5]	- -	- -	- -	- -
Cadmium	SW6010B	µg/g	ND [2]	- -	- -	- -	- -
Chromium	SW6010B	µg/g	1.8 [5]	- -	- -	- -	- -
Lead	SW6010B	µg/g	0.75 [10]	- -	- -	- -	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND [0.1]	ND [0.0471]	ND [0.0557]	ND [0.0649]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND [0.2]	ND [0.0943]	ND [0.112]	ND [0.13]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND [0.1]	ND [0.0471]	ND [0.0557]	ND [0.0649]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND [0.1]	ND [0.0471]	ND [0.0557]	ND [0.0649]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND [0.1]	ND [0.0471]	ND [0.0557]	ND [0.0649]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND [0.1]	ND [0.0471]	ND [0.0557]	ND [0.0649]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	3.15 [0.1]	ND [0.0471]	ND [0.0557]	ND [0.0649]
Total Organic Halides (TOX)	SW9020	mg/kg	- -	- -	- -	- -
Total Organic Halides (TOX)	SW9020	µg/L	ND [50]	- -	- -	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

	Sample ID	AM-A506710		AM-A509401		AM-A521201	
	Laboratory	DCHM		DCHM		DCHM	
	Lab Sample ID	00E04182		00E04447		00E04725	
	Collection Date	10/23/00		11/6/00		11/16/00	
	Matrix	LH		LH		LH	
Analyte	**Method**	**Units**					
Flash Point	SW1010	DEG C	-	-	65	> [2]	65 > [2]
Arsenic	SW6010B	µg/g	-	-	-	-	4.6 [5]
Cadmium	SW6010B	µg/g	-	-	-	-	ND [2]
Lead	SW6010B	µg/g	-	-	-	-	2.2 [10]
Arsenic	SW6010B	µg/g	-	-	4.8	[2.5]	- -
Cadmium	SW6010B	µg/g	-	-	ND	[1]	- -
Chromium	SW6010B	µg/g	-	-	ND	[5]	ND [5]
Lead	SW6010B	µg/g	-	-	1.7	[5]	- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.0369]	ND	[1]	ND [0.1]
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.0739]	ND	[2]	ND [0.2]
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.0369]	ND	[1]	ND [0.1]
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.0369]	ND	[1]	ND [0.1]
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.0369]	ND	[1]	ND [0.1]
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.0369]	ND	[1]	ND [0.1]
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.0369]	ND	[1]	27 [0.1]
Total Organic Halides (TOX)	SW9020	mg/kg	-	-	32	[50]	- -
Total Organic Halides (TOX)	SW9020	µg/L	-	-	-	-	- -

Notes:
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

APPENDIX D-4

Waste Characterization Sample Results

No. Samples	JESS ID/Sample Control Number	USACE Sample Location I.D.
33	AM-A502703	00-AMA-LSALATRINE1-001-SL
34	AM-A502704	00-AMA-LSALATRINE1-TRIPBLANK-SL
18	AM-A501601	00-AMA-LSA-ASTSOIL-001-SO
19	AM-A501602	00-AMA-LSA-AST-TRIPBLANK-SO
164	AM-A506501	00-AMA-HCL1-USTSLUDGE-001-SL
165	AM-A506502	00-AMA-LSA1154-USTSLUDGE-001-SL
166	AM-A506505	00-AMA-BHOO-DRUM WITH SOLID-001-SH
252	AM-A508309	00-AMA-PLD-DRUM-001-SL
260	AM-A509501	00-AMA-RPP-VLTB-001-SL
261	AM-A509502	00-AMA-RPP-VLTB-001-SL
262	AM-A509503	00-AMA-RPP-VLTC-001-SL
263	AM-A509504	00-AMA-RPP-VLTC-001-SL
268	AM-A510501	00-AMA-RPP-VLTG-001-SL
269	AM-A510502	00-AMA-RPP-VLTG-001-SL
339	AM-A520632	00-AMA-DECONPAD-001-SL
340	AM-A520633	00-AMA-DECONPAD-001-SL
341	AM-A520634	00-AMA-DECONPAD-001-SL
18	AM-A501401	00-AMA-LSA-AST-001-WX
37	AM-A505501	00-AMA-UST3860-001-WW
40	AM-A506001	00-AMA-UST3760-001-WW
41	AM-A506002	00-AMA-UST3760-001-WW
42	AM-A506407	00-AMA-HCL1-USTWATER-001-WW

	Sample ID	AM-A501501			AM-A501601			AM-A501602		AM-A501701		AM-A501801			AM-A501901			AM-A502001			AM-A502501			AM-A502502			AM-A502503		
	Laboratory	DCHM		JEG	DCHM		JEG	DCHM		DCHM	JEG	DCHM		JEG	DCHM		JEG	DCHM		JEG	DCHM		JEG	DCHM		JEG	DCHM		JEG
	Lab Sample ID	00E03158		VAL	00E03160		VAL	00E03161		00E03162	VAL	0E03164		VAL	0E03165		VAL	00E03166		VAL	00E03292		VAL	00E03293		VAL	00E03294		VAL
	Collection Date	9/16/00		QAL	9/16/00		QAL	9/16/00		9/16/00	QAL	9/16/00		QAL	9/16/00		QAL	9/16/00		QAL	9/19/00		QAL	9/19/00		QAL	9/19/00		QAL
	Matrix	SO			SO			SO		SO		SO			SO			SO			SO			SO			SO		
Analyte	**Method**	**Units**																											
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		ND	[2.5]		ND	[2.9]	
Acenaphthene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		25	[2.5]		ND	[2.9]	
Acenaphthylene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		26	[2.5]		ND	[2.9]	
Anthracene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		ND	[2.5]		ND	[2.9]	
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		ND	[2.5]		ND	[2.9]	
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		ND	[2.5]		ND	[2.9]	
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		ND	[2.5]		ND	[2.9]	
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		ND	[2.5]		ND	[2.9]	
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		ND	[2.5]		ND	[2.9]	
Chrysene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		9.3	[2.5]		ND	[2.9]	
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		ND	[2.5]		ND	[2.9]	
Fluoranthene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		11	[2.5]		ND	[2.9]	
Fluorene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		15	[2.5]		ND	[2.9]	
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		ND	[2.5]		ND	[2.9]	
Naphthalene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		ND	[2.5]		ND	[2.9]	
Phenanthrene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		ND	[2.5]		ND	[2.9]	
Pyrene	SW8270C SIM	µg/kg	-	-		ND	[2.5]		-	-	ND	[2.9]		ND	[2.7]		ND	[2.4]		ND	[9.7]		ND	[5.2]		11	[2.5]		ND	[2.9]	
Gasoline Range Organics	AK101	mg/kg	-	-		-	-		-	-	ND	[9.11]	J-D	0.983	[9.53]	J-D,UB/RL	0.896	[4.41]	J-D,UB/RL	5.88	[23.4]	J-D,UB/RL	-	-		-	-		-	-	
Diesel Range Organics	AK102	µg/g	-	-		22.7	[5.97]	J-L,J-M	-	-	20.4	[6.91]	J-L	23.9	[6.28]	J-L	15.8	[5.76]	J-L	219	[22.7]	J-L	52	[12.2]	J-L,J-M	1810	[5.79]	J-H,J-S,J-L	ND	[6.86]	
Residual Range Organics	AK103	µg/g	-	-		107	[149]	J-M	-	-	214	[173]		163	[157]		142	[144]		1230	[568]		78.6	[306]	UB/RL,J-M	80.5	[145]	UB/RL,J-S	31	[172]	
(TOC)	KAHNTOC	mg/kg	-	-		-	-		-	-	-	-		-	-		-	-		-	-		-	-		-	-		-	-	
Arsenic	SW6010B	µg/g	9.9	[1.3]		-	-		-	-	5	[0.86]		3.8	[0.78]		1.8	[0.72]		10	[2.8]		-	-		-	-		-	-	
Barium	SW6010B	µg/g	7.2	[5.2]		-	-		-	-	40	[3.5]		46	[3.1]		29	[2.9]		41	[11]		-	-		-	-		-	-	
Cadmium	SW6010B	µg/g	5.2	[0.52]	J-M	-	-		-	-	0.098	[0.35]	UB/RL,J-M	ND	[0.31]	UJ-M	ND	[0.29]	UJ-M	ND	[1.13]	UJ-M	-	-		-	-		-	-	
Chromium	SW6010B	µg/g	220	[2.6]		-	-		-	-	6.6	[1.7]		7.9	[1.6]		3.4	[1.4]		77	[5.7]		-	-		-	-		-	-	
Lead	SW6010B	µg/g	1300	[0.77]		-	-		-	-	13	[0.52]		3.6	[0.47]		12	[0.43]		220	[1.7]		-	-		-	-		-	-	
Selenium	SW6010B	µg/g	ND	[1.3]		-	-		-	-	ND	[0.86]		1.8	[0.78]		1.5	[0.72]		9.8	[2.8]		-	-		-	-		-	-	
Silver	SW6010B	µg/g	ND	[2.6]		-	-		-	-	ND	[1.7]		ND	[1.6]		ND	[1.4]		ND	[5.7]		-	-		-	-		-	-	
Mercury	SW7471A	µg/g	0.059	[0.0515]		-	-		-	-	0.0489	[0.0345]		0.0716	[0.0314]		0.039	[0.0288]		0.243	[0.114]		-	-		-	-		-	-	
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.0858]		-	-		-	-	ND	[0.0575]		ND	[0.0523]		ND	[0.0479]		ND	[0.189]		-	-		-	-		-	-	
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.172]		-	-		-	-	ND	[0.115]		ND	[0.105]		ND	[0.096]		ND	[0.379]		-	-		-	-		-	-	
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.0858]		-	-		-	-	ND	[0.0575]		ND	[0.0523]		ND	[0.0479]		ND	[0.189]		-	-		-	-		-	-	
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.0858]		-	-		-	-	ND	[0.0575]		ND	[0.0523]		ND	[0.0479]		ND	[0.189]		-	-		-	-		-	-	
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.0858]		-	-		-	-	ND	[0.0575]		ND	[0.0523]		ND	[0.0479]		ND	[0.189]		-	-		-	-		-	-	
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.0858]		-	-		-	-	ND	[0.0575]		ND	[0.0523]		ND	[0.0479]		ND	[0.189]		-	-		-	-		-	-	
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.0858]		-	-		-	-	ND	[0.0575]		ND	[0.0523]		ND	[0.0479]		ND	[0.189]		-	-		-	-		-	-	
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
1,1-Dichloroethane	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
1,1-Dichloroethene	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
1,2-Dichloroethane	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
1,2-Dichloropropane	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
2-Butanone	SW8260B	µg/kg	770	[650]	R	-	-		-	-	1100	[430]	R	910	[390]	R	880	[360]	R	3200	[1400]	R	-	-		-	-		-	-	
2-Hexanone	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Acetone	SW8260B	µg/kg	670	[650]	R	-	-		-	-	ND	[430]	UR	470	[390]	R	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Benzene	SW8260B	µg/kg	ND	[650]	UR	ND	[380]	UR	ND	[250]	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	ND	[470]		ND	[210]		ND	[370]	
Bromodichloromethane	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Bromoform	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Bromomethane	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Carbon disulfide	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Carbon tetrachloride	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Chlorobenzene	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Chloroethane	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Chloroform	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Chloromethane	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	200	[1400]	R	-	-		-	-		-	-	
Dibromochloromethane	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Ethylbenzene	SW8260B	µg/kg	ND	[650]	UR	ND	[380]	UR	ND	[250]	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	ND	[470]		ND	[210]		ND	[370]	
Methylene chloride	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Styrene	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Tetrachloroethene	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Toluene	SW8260B	µg/kg	ND	[650]	UR	ND	[380]	R	ND	[250]	24	[430]	R	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	ND	[470]		ND	[210]		ND	[370]	
Trichloroethene	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Vinyl chloride	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
Xylenes	SW8260B	µg/kg	ND	[2000]	UR	ND	[1100]	UR	ND	[750]	ND	[1300]	UR	ND	[1200]	UR	ND	[1100]	UR	ND	[4300]	UR	ND	[1400]		ND	[640]		ND	[1100]	
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[650]	UR	-	-		-	-	ND	[430]	UR	ND	[390]	UR	ND	[360]	UR	ND	[1400]	UR	-	-		-	-		-	-	

	Sample ID	AM-A502504		AM-A502505		AM-A502506	AM-A502601	AM-A502602	AM-A502703	AM-A502704
	Laboratory	JEG DCHM		JEG DCHM		JEG DCHM	DCHM	JEG DCHM	JEG DCHM	JEG DCHM
	Lab Sample ID	VAL 00E03295		VAL 00E03296		VAL 00E03297	00E03298	VAL 00E03299	VAL 00E03372	VAL 00E03373
	Collection Date	QAL 9/19/00		QAL 9/19/00		QAL 9/19/00	9/19/00	QAL 9/19/00	QAL 9/20/00	QAL 9/20/00
	Matrix	SO		SO		SO	SO	SO	SO	SO
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Acenaphthene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Acenaphthylene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Anthracene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Benzo(a)anthracene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Benzo(a)pyrene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Benzo(b)fluoranthene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Benzo(k)fluoranthene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Chrysene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Fluoranthene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Fluorene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Naphthalene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Phenanthrene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Pyrene	SW8270C SIM	µg/kg		ND [2.2]		ND [6.1]	- -	ND [3.2]	ND [3.4]	- -	- -	- -
Gasoline Range Organics	AK101	mg/kg		- -		- -	- -	- -	- -	- -	- -	- -
Diesel Range Organics	AK102	µg/g		7.24 [5.14]	J-L	111 [7.14]	J-L	153 [7.48]	J-L	10.3 [8.05]	J-L	- -	- -	- -
Residual Range Organics	AK103	µg/g	UB/RL	53.3 [129]	UB/RL	58 [179]	UB/RL,J-S	62.8 [187]	UB/RL	37.2 [201]	UB/RL	- -	- -	- -
(TOC)	KAHNTOC	mg/kg		- -		- -	- -	- -	48000 [2000]		- -	- -	- -
Arsenic	SW6010B	µg/g		- -		- -	- -	- -	- -	- -	0.48 [0.5]&		- -
Barium	SW6010B	µg/g		- -		- -	- -	- -	- -	- -	9.7 [4.2]		- -
Cadmium	SW6010B	µg/g		- -		- -	- -	- -	- -	- -	0.1 [0.2]		- -
Chromium	SW6010B	µg/g		- -		- -	- -	- -	- -	- -	32 [2.1]		- -
Lead	SW6010B	µg/g		- -		- -	- -	- -	- -	- -	5.0 [0.3]		- -
Selenium	SW6010B	µg/g		- -		- -	- -	- -	- -	- -	3.1 [0.5]		- -
Silver	SW6010B	µg/g		- -		- -	- -	- -	- -	- -	ND [2.1]	UJ-M	- -
Mercury	SW7471A	µg/g		- -		- -	- -	- -	- -	- -	0.0528 [0.0421]		- -
PCB-1016 (Aroclor 1016)	SW8082	µg/g		- -		- -	- -	- -	- -	- -	ND [0.0701]		- -
PCB-1221 (Aroclor 1221)	SW8082	µg/g		- -		- -	- -	- -	- -	- -	ND [0.14]		- -
PCB-1232 (Aroclor 1232)	SW8082	µg/g		- -		- -	- -	- -	- -	- -	ND [0.0701]		- -
PCB-1242 (Aroclor 1242)	SW8082	µg/g		- -		- -	- -	- -	- -	- -	ND [0.0701]		- -
PCB-1248 (Aroclor 1248)	SW8082	µg/g		- -		- -	- -	- -	- -	- -	ND [0.0701]		- -
PCB-1254 (Aroclor 1254)	SW8082	µg/g		- -		- -	- -	- -	- -	- -	ND [0.0701]		- -
PCB-1260 (Aroclor 1260)	SW8082	µg/g		- -		- -	- -	- -	- -	- -	ND [0.0701]		- -
1,1,1-Trichloroethane	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
1,1,2-Trichloroethane	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
1,1-Dichloroethane	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
1,1-Dichloroethene	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
1,2-Dichloroethane	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
1,2-Dichloropropane	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
2-Butanone	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
2-Hexanone	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
4-Methyl-2-pentanone	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Acetone	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Benzene	SW8260B	µg/kg		ND [200]		ND [320]	ND [250]	ND [350]	ND [480]		- -	- -	ND [250]
Bromodichloromethane	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Bromoform	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Bromomethane	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Carbon disulfide	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Carbon tetrachloride	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Chlorobenzene	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Chloroethane	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Chloroform	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Chloromethane	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Dibromochloromethane	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Ethylbenzene	SW8260B	µg/kg		ND [200]		ND [320]	ND [250]	ND [350]	ND [480]		- -	- -	ND [250]
Methylene chloride	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Styrene	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Tetrachloroethene	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Toluene	SW8260B	µg/kg		ND [200]		ND [320]	ND [250]	ND [350]	ND [480]		- -	- -	ND [250]
Trichloroethene	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Vinyl chloride	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
Xylenes	SW8260B	µg/kg		ND [610]		ND [970]	ND [740]	ND [1100]	ND [1400]		- -	- -	ND [740]
cis-1,2-Dichloroethene	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
cis-1,3-Dichloropropene	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
trans-1,2-Dichloroethene	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]
trans-1,3-Dichloropropene	SW8260B	µg/kg		- -		- -	- -	- -	- -	- -	- -	- -	ND [250]

	Sample ID	AM-A506501			AM-A506502			AM-A506505		
	Laboratory	DCHM		JEG	DCHM		JEG	DCHM		JEG
	Lab Sample ID	00E04054		VAL	00E04055		VAL	00E04058		VAL
	Collection Date	10/19/00		QAL	10/19/00		QAL	10/19/00		QAL
	Matrix	SO			SO			SO		
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-		-	-	380000	[12000]	
Acenaphthene	SW8270C SIM	µg/kg	-	-		-	-	630000	[12000]	
Acenaphthylene	SW8270C SIM	µg/kg	-	-		-	-	ND	[12000]	
Anthracene	SW8270C SIM	µg/kg	-	-		-	-	660000	[12000]	
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-		-	-	470000	[12000]	
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-		-	-	420000	[12000]	
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-		-	-	450000	[12000]	
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-		-	-	150000	[12000]	
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-		-	-	180000	[12000]	
Chrysene	SW8270C SIM	µg/kg	-	-		-	-	460000	[12000]	J-L
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-		-	-	52000	[12000]	
Fluoranthene	SW8270C SIM	µg/kg	-	-		-	-	1400000	[12000]	
Fluorene	SW8270C SIM	µg/kg	-	-		-	-	520000	[12000]	
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-		-	-	190000	[12000]	
Naphthalene	SW8270C SIM	µg/kg	-	-		-	-	1200000	[12000]	
Phenanthrene	SW8270C SIM	µg/kg	-	-		-	-	2100000	[12000]	
Pyrene	SW8270C SIM	µg/kg	-	-		-	-	440000	[12000]	
Gasoline Range Organics	AK101	mg/kg	-	-		-	-	1540	[757]	
Diesel Range Organics	AK102	µg/g	-	-		-	-	-	-	
Residual Range Organics	AK103	µg/g	-	-		-	-	-	-	
(TOC)	KAHNTOC	mg/kg	-	-		-	-	-	-	
Arsenic	SW6010B	µg/g	ND	[1.1]		9.6	[0.93]	1	[0.7]	
Cadmium	SW6010B	µg/g	0.073	**[0.44]&**		32	[0.37]	ND	[0.28]	
Lead	SW6010B	µg/g	33	[0.66]	J-M	440	[0.56]	29	[0.42]	
Selenium	SW6010B	µg/g	ND	[1.1]		0.48	**[0.93]&**	3.5	[0.7]	
Barium	SW6010B	µg/g	18	[4.4]		24	[3.7]	4	[2.8]	
Chromium	SW6010B	µg/g	6.3	[2.2]		35	[1.9]	1.9	[1.4]	
Silver	SW6010B	µg/g	ND	[2.2]		ND	[1.9]	0.84	**[1.4]&**	
Zinc	SW6010B	µg/g	-	-		-	-	-	-	
Mercury	SW7471A	µg/g	0.0383	**.0442]&**		0.0555	[0.0371]	ND	[0.0282]	
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.0737]		ND	[0.0618]	ND	[4.69]	
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.148]		ND	[0.124]	ND	[9.39]	
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.0737]		ND	[0.0618]	ND	[4.69]	
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.0737]		ND	[0.0618]	ND	[4.69]	
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.0737]		ND	[0.0618]	ND	[4.69]	
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.0737]		ND	[0.0618]	ND	[4.69]	
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.0737]		ND	[0.0618]	ND	[4.69]	
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[24]		ND	[18]	ND	[480]	
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[24]		ND	[18]	ND	[480]	

	Sample ID	AM-A506501			AM-A506502			AM-A506505		
	Laboratory	DCHM		JEG	DCHM		JEG	DCHM		JEG
	Lab Sample ID	00E04054		VAL	00E04055		VAL	00E04058		VAL
	Collection Date	10/19/00		QAL	10/19/00		QAL	10/19/00		QAL
	Matrix	SO			SO			SO		
Analyte	**Method**	**Units**								
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
1,1-Dichloroethane	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
1,1-Dichloroethene	SW8260B	µg/kg	ND	[24] UJ-L	ND	[18] UJ-L		ND	[480]	UJ-L
1,2-Dichloroethane	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
1,2-Dichloropropane	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
2-Butanone	SW8260B	µg/kg	1200	[120]	1000	[89]		ND	[2400]	
2-Hexanone	SW8260B	µg/kg	ND	[120]	ND	[89]		ND	[2400]	
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[120]	ND	[89]		ND	[2400]	
Acetone	SW8260B	µg/kg	ND	[120]	ND	[89]		ND	[2400]	
Benzene	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Bromodichloromethane	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Bromoform	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Bromomethane	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Carbon disulfide	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Carbon tetrachloride	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Chlorobenzene	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Chloroethane	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Chloroform	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Chloromethane	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Dibromochloromethane	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Ethylbenzene	SW8260B	µg/kg	ND	[24]	ND	[18]		7900	[480]	
Methylene chloride	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Styrene	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Tetrachloroethene	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Toluene	SW8260B	µg/kg	ND	[24]	11	[18]&		1600	[480]	
Trichloroethene	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Vinyl chloride	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
Xylenes	SW8260B	µg/kg	ND	[24]	62	[18]		78000	[480]	
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[24]	ND	[18]		ND	[480]	

	Sample ID	AM-A508309			AM-A509501			AM-A509502			AM-A509503			AM-A509504		
	Laboratory	DCHM		JEG	DCHM		JEG	DCHM		JEG	DCHM		JEG	DCHM		JEG
	Lab Sample ID	00E04437		VAL	00E04448		VAL	00E04449		VAL	00E04450		VAL	00E04451		VAL
	Collection Date	11/1/00		QAL	11/6/00		QAL	11/6/00		QAL	11/6/00		QAL	11/6/00		QAL
	Matrix	SO			SO			SO			SO			SO		
Analyte	**Method**	**Units**														
2-Methylnaphthalene	SW8270C SIM	µg/kg	300	[58]		-	-		-	-		-	-		-	-
Acenaphthene	SW8270C SIM	µg/kg	98	[58]		-	-		-	-		-	-		-	-
Acenaphthylene	SW8270C SIM	µg/kg	ND	[58]		-	-		-	-		-	-		-	-
Anthracene	SW8270C SIM	µg/kg	110	[58]		-	-		-	-		-	-		-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	110	[58]		-	-		-	-		-	-		-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	ND	[58]		-	-		-	-		-	-		-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	ND	[58]		-	-		-	-		-	-		-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	ND	[58]		-	-		-	-		-	-		-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	ND	[58]		-	-		-	-		-	-		-	-
Chrysene	SW8270C SIM	µg/kg	480	[58]		-	-		-	-		-	-		-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	ND	[58]		-	-		-	-		-	-		-	-
Fluoranthene	SW8270C SIM	µg/kg	ND	[58]		-	-		-	-		-	-		-	-
Fluorene	SW8270C SIM	µg/kg	480	[58]		-	-		-	-		-	-		-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	ND	[58]		-	-		-	-		-	-		-	-
Naphthalene	SW8270C SIM	µg/kg	77	[58]		-	-		-	-		-	-		-	-
Phenanthrene	SW8270C SIM	µg/kg	4200	[58]		-	-		-	-		-	-		-	-
Pyrene	SW8270C SIM	µg/kg	ND	[58]		-	-		-	-		-	-		-	-
Total Solids	A2540G	%	-	-		-	-		-	-		-	-		-	-
Gasoline Range Organics	AK101	mg/kg	18.9	[22.2]	J-S	-	-		-	-		-	-		-	-
Diesel Range Organics	AK102	µg/g	2470	[5.46]	J-S,J-L	-	-		-	-		-	-		-	-
Residual Range Organics	AK103	µg/g	1190000	[137]	J-S,J-L	-	-		-	-		-	-		-	-
(TOC)	E415.2	mg/kg	-	-		-	-		-	-		-	-		-	-
(TOC)	KAHNTOC	mg/kg	-	-		-	-		-	-		-	-		-	-
Arsenic	SW6010B	µg/g	6.6	[0.68]		12	[0.5]		-	-		5.2	[0.5]		-	-
Cadmium	SW6010B	µg/g	0.02	[0.27]	UB/RL	0.28	[0.2]	UB/RL	-	-		0.3	[0.2]	UB/RL	-	-
Lead	SW6010B	µg/g	77000	[0.41]		23	[0.3]		-	-		20	[0.3]		-	-
Selenium	SW6010B	µg/g	3.2	[0.68]		2.5	[0.5]		-	-		5.2	[0.5]		-	-
Barium	SW6010B	µg/g	14	[2.7]		33	[10]		-	-		13	[10]		-	-
Chromium	SW6010B	µg/g	4.3	[1.4]		12	[5]		-	-		ND	[5]		-	-
Silver	SW6010B	µg/g	2.1	[1.4]		ND	[5]		-	-		ND	[5]		-	-
Mercury	SW7471A	µg/g	0.31	[0.0273]		0.0865	[0.0391]		-	-		ND	[0.0367]		-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.455]		ND	[0.652]		-	-		ND	[0.611]		-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.911]		ND	[1.31]		-	-		ND	[1.22]		-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.455]		ND	[0.652]		-	-		ND	[0.611]		-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.455]		ND	[0.652]		-	-		ND	[0.611]		-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.455]		ND	[0.652]		-	-		ND	[0.611]		-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.455]		ND	[0.652]		-	-		ND	[0.611]		-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.455]		ND	[0.652]		-	-		ND	[0.611]		-	-

		Sample ID	AM-A508309			AM-A509501			AM-A509502			AM-A509503			AM-A509504		
		Laboratory	DCHM		JEG	DCHM		JEG	DCHM		JEG	DCHM		JEG	DCHM		JEG
		Lab Sample ID	00E04437		VAL	00E04448		VAL	00E04449		VAL	00E04450		VAL	00E04451		VAL
		Collection Date	11/1/00		QAL	11/6/00		QAL	11/6/00		QAL	11/6/00		QAL	11/6/00		QAL
		Matrix	SO			SO			SO			SO			SO		
Analyte	**Method**	**Units**															
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
1,1-Dichloroethane	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
1,1-Dichloroethene	SW8260B	µg/kg	ND	[91]	UJ-L	-	-		ND	[44]	UJ-L	-	-		ND	[36]	UJ-L
1,2-Dichloroethane	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
1,2-Dichloropropane	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
2-Butanone	SW8260B	µg/kg	ND	[440]		-	-		ND	[220]		-	-		ND	[180]	
2-Hexanone	SW8260B	µg/kg	ND	[440]		-	-		ND	[220]		-	-		ND	[180]	
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[440]		-	-		ND	[220]		-	-		ND	[180]	
Acetone	SW8260B	µg/kg	ND	[440]		-	-		ND	[220]		-	-		ND	[180]	
Benzene	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Bromodichloromethane	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Bromoform	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Bromomethane	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Carbon disulfide	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Carbon tetrachloride	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Chlorobenzene	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Chloroethane	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Chloroform	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Chloromethane	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Dibromochloromethane	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Ethylbenzene	SW8260B	µg/kg	ND	[91]		-	-		110	[44]		-	-		21	[36]	&
Methylene chloride	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Styrene	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Tetrachloroethene	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Toluene	SW8260B	µg/kg	430	[91]		-	-		ND	[44]		-	-		110	[36]	UB/RL
Trichloroethene	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Vinyl chloride	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
Xylenes	SW8260B	µg/kg	ND	[91]		-	-		360	[44]		-	-		200	[36]	
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[91]		-	-		ND	[44]		-	-		ND	[36]	
pH	SW9045B	PH UNITS	-	-		-	-		-	-		-	-		-	-	

		Sample ID	AM-A510502	
		Laboratory	DCHM	JEG
		Lab Sample ID	00E04643	VAL
		Collection Date	11/8/00	QAL
		Matrix	SO	
Analyte	**Method**	**Units**		
2-Methylnaphthalene	SW8270C SIM	µg/kg	-	-
Acenaphthene	SW8270C SIM	µg/kg	-	-
Acenaphthylene	SW8270C SIM	µg/kg	-	-
Anthracene	SW8270C SIM	µg/kg	-	-
Benzo(a)anthracene	SW8270C SIM	µg/kg	-	-
Benzo(a)pyrene	SW8270C SIM	µg/kg	-	-
Benzo(b)fluoranthene	SW8270C SIM	µg/kg	-	-
Benzo(g,h,i)perylene	SW8270C SIM	µg/kg	-	-
Benzo(k)fluoranthene	SW8270C SIM	µg/kg	-	-
Chrysene	SW8270C SIM	µg/kg	-	-
Dibenzo(a,h)anthracene	SW8270C SIM	µg/kg	-	-
Fluoranthene	SW8270C SIM	µg/kg	-	-
Fluorene	SW8270C SIM	µg/kg	-	-
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/kg	-	-
Naphthalene	SW8270C SIM	µg/kg	-	-
Phenanthrene	SW8270C SIM	µg/kg	-	-
Pyrene	SW8270C SIM	µg/kg	-	-
Total Solids	A2540G	%	-	-
Gasoline Range Organics	AK101	mg/kg	-	-
Diesel Range Organics	AK102	µg/g	-	-
Residual Range Organics	AK103	µg/g	-	-
(TOC)	E415.2	mg/kg	-	-
(TOC)	KAHNTOC	mg/kg	-	-
Arsenic	SW6010B	µg/g	-	-
Cadmium	SW6010B	µg/g	-	-
Lead	SW6010B	µg/g	-	-
Selenium	SW6010B	µg/g	-	-
Barium	SW6010B	µg/g	-	-
Chromium	SW6010B	µg/g	-	-
Silver	SW6010B	µg/g	-	-
Mercury	SW7471A	µg/g	-	-
PCB-1016 (Aroclor 1016)	SW8082	µg/g	-	-
PCB-1221 (Aroclor 1221)	SW8082	µg/g	-	-
PCB-1232 (Aroclor 1232)	SW8082	µg/g	-	-
PCB-1242 (Aroclor 1242)	SW8082	µg/g	-	-
PCB-1248 (Aroclor 1248)	SW8082	µg/g	-	-
PCB-1254 (Aroclor 1254)	SW8082	µg/g	-	-
PCB-1260 (Aroclor 1260)	SW8082	µg/g	-	-

		Sample ID	AM-A510502		
		Laboratory	DCHM		JEG
		Lab Sample ID	00E04643		VAL
		Collection Date	11/8/00		QAL
		Matrix	SO		
Analyte	**Method**	**Units**			
1,1,1-Trichloroethane	SW8260B	µg/kg	ND	[20]	
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	ND	[20]	
1,1,2-Trichloroethane	SW8260B	µg/kg	ND	[20]	
1,1-Dichloroethane	SW8260B	µg/kg	ND	[20]	
1,1-Dichloroethene	SW8260B	µg/kg	ND	[20]	UJ-L
1,2-Dichloroethane	SW8260B	µg/kg	ND	[20]	
1,2-Dichloropropane	SW8260B	µg/kg	ND	[20]	
2-Butanone	SW8260B	µg/kg	ND	[100]	
2-Hexanone	SW8260B	µg/kg	ND	[100]	
4-Methyl-2-pentanone	SW8260B	µg/kg	ND	[100]	
Acetone	SW8260B	µg/kg	ND	[100]	
Benzene	SW8260B	µg/kg	ND	[20]	
Bromodichloromethane	SW8260B	µg/kg	ND	[20]	
Bromoform	SW8260B	µg/kg	ND	[20]	
Bromomethane	SW8260B	µg/kg	ND	[20]	
Carbon disulfide	SW8260B	µg/kg	ND	[20]	
Carbon tetrachloride	SW8260B	µg/kg	ND	[20]	
Chlorobenzene	SW8260B	µg/kg	ND	[20]	
Chloroethane	SW8260B	µg/kg	ND	[20]	
Chloroform	SW8260B	µg/kg	ND	[20]	
Chloromethane	SW8260B	µg/kg	ND	[20]	
Dibromochloromethane	SW8260B	µg/kg	ND	[20]	
Ethylbenzene	SW8260B	µg/kg	43	[20]	
Methylene chloride	SW8260B	µg/kg	ND	[20]	
Styrene	SW8260B	µg/kg	ND	[20]	
Tetrachloroethene	SW8260B	µg/kg	ND	[20]	
Toluene	SW8260B	µg/kg	7.2	[20]	UB/RL
Trichloroethene	SW8260B	µg/kg	ND	[20]	
Vinyl chloride	SW8260B	µg/kg	ND	[20]	
Xylenes	SW8260B	µg/kg	260	[20]	
cis-1,2-Dichloroethene	SW8260B	µg/kg	ND	[20]	
cis-1,3-Dichloropropene	SW8260B	µg/kg	ND	[20]	
trans-1,2-Dichloroethene	SW8260B	µg/kg	ND	[20]	
trans-1,3-Dichloropropene	SW8260B	µg/kg	ND	[20]	
pH	SW9045B	PH UNITS	-	-	

		Sample ID	AM-A520632			AM-A520633		AM-A520634		
		Laboratory	DCHM		JEG	DCHM		DCHM		JEG
		Lab Sample ID	00E04684		VAL	00E04685		00E04686		VAL
		Collection Date	11/18/00		QAL	11/18/00		11/18/00		QAL
		Matrix	SO			SO		SO		
Analyte	**Method**	**Units**								
2-Methylnaphthalene	SIM	µg/kg	-	-		-	-	-	-	
Acenaphthene	SIM	µg/kg	-	-		-	-	-	-	
Acenaphthylene	SIM	µg/kg	-	-		-	-	-	-	
Anthracene	SIM	µg/kg	-	-		-	-	-	-	
Benzo(a)anthracene	SIM	µg/kg	-	-		-	-	-	-	
Benzo(a)pyrene	SIM	µg/kg	-	-		-	-	-	-	
Benzo(b)fluoranthene	SIM	µg/kg	-	-		-	-	-	-	
Benzo(g,h,i)perylene	SIM	µg/kg	-	-		-	-	-	-	
Benzo(k)fluoranthene	SIM	µg/kg	-	-		-	-	-	-	
Chrysene	SIM	µg/kg	-	-		-	-	-	-	
Dibenzo(a,h)anthracene	SIM	µg/kg	-	-		-	-	-	-	
Fluoranthene	SIM	µg/kg	-	-		-	-	-	-	
Fluorene	SIM	µg/kg	-	-		-	-	-	-	
Indeno(1,2,3-cd)pyrene	SIM	µg/kg	-	-		-	-	-	-	
Naphthalene	SIM	µg/kg	-	-		-	-	-	-	
Phenanthrene	SIM	µg/kg	-	-		-	-	-	-	
Pyrene	SIM	µg/kg	-	-		-	-	-	-	
Diesel Range Organics	AK102	µg/g	-	-		-	-	-	-	
Solids, %	D2216	%	-	-		-	-	-	-	
(TOC)	KAHNTOC	mg/kg	-	-		-	-	-	-	
Arsenic	SW6010B	µg/g	-	-		9.6	[0.85]	-	-	
Cadmium	SW6010B	µg/g	-	-		ND	[0.34]	-	-	
Lead	SW6010B	µg/g	-	-		18	[0.51]	-	-	
Selenium	SW6010B	µg/g	-	-		1.1	[0.85]	-	-	
Barium	SW6010B	µg/g	-	-		36	[3.4]	-	-	
Chromium	SW6010B	µg/g	-	-		33	[1.7]	-	-	
Silver	SW6010B	µg/g	-	-		ND	[1.7]	-	-	
Mercury	SW7471A	µg/g	-	-		0.0792	[0.0339]	-	-	
PCB-1016 (Aroclor 1016)	SW8082	µg/g	ND	[0.0535]	UJ-M	-	-	-	-	
PCB-1221 (Aroclor 1221)	SW8082	µg/g	ND	[0.107]		-	-	-	-	
PCB-1232 (Aroclor 1232)	SW8082	µg/g	ND	[0.0535]		-	-	-	-	
PCB-1242 (Aroclor 1242)	SW8082	µg/g	ND	[0.0535]		-	-	-	-	
PCB-1248 (Aroclor 1248)	SW8082	µg/g	ND	[0.0535]		-	-	-	-	
PCB-1254 (Aroclor 1254)	SW8082	µg/g	ND	[0.0535]		-	-	-	-	
PCB-1260 (Aroclor 1260)	SW8082	µg/g	ND	[0.0535]	UJ-M	-	-	-	-	
1,1,1-Trichloroethane	SW8260B	µg/kg	-	-		-	-	ND	[15]	
1,1,2,2-Tetrachloroethane	SW8260B	µg/kg	-	-		-	-	ND	[15]	
1,1,2-Trichloroethane	SW8260B	µg/kg	-	-		-	-	ND	[15]	

		Sample ID	AM-A520632			AM-A520633		AM-A520634		
		Laboratory	DCHM		JEG	DCHM		DCHM		JEG
		Lab Sample ID	00E04684		VAL	00E04685		00E04686		VAL
		Collection Date	11/18/00		QAL	11/18/00		11/18/00		QAL
		Matrix	SO			SO		SO		
Analyte	**Method**	**Units**								
1,1-Dichloroethane	SW8260B	µg/kg	-	-		-	-	ND	[15]	
1,1-Dichloroethene	SW8260B	µg/kg	-	-		-	-	ND	[15]	UJ-L
1,2-Dichloroethane	SW8260B	µg/kg	-	-		-	-	ND	[15]	
1,2-Dichloropropane	SW8260B	µg/kg	-	-		-	-	ND	[15]	
2-Butanone	SW8260B	µg/kg	-	-		-	-	58	[75]	J-S
2-Hexanone	SW8260B	µg/kg	-	-		-	-	ND	[75]	
4-Methyl-2-pentanone	SW8260B	µg/kg	-	-		-	-	ND	[75]	
Acetone	SW8260B	µg/kg	-	-		-	-	ND	[75]	
Benzene	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Bromodichloromethane	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Bromoform	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Bromomethane	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Carbon disulfide	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Carbon tetrachloride	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Chlorobenzene	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Chloroethane	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Chloroform	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Chloromethane	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Dibromochloromethane	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Ethylbenzene	SW8260B	µg/kg	-	-		-	-	48	[15]	J-S
Methylene chloride	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Styrene	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Tetrachloroethene	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Toluene	SW8260B	µg/kg	-	-		-	-	8.8	[15]	J-S
Trichloroethene	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Vinyl chloride	SW8260B	µg/kg	-	-		-	-	ND	[15]	
Xylenes	SW8260B	µg/kg	-	-		-	-	210	[15]	J-S
cis-1,2-Dichloroethene	SW8260B	µg/kg	-	-		-	-	ND	[15]	
cis-1,3-Dichloropropene	SW8260B	µg/kg	-	-		-	-	ND	[15]	
trans-1,2-Dichloroethene	SW8260B	µg/kg	-	-		-	-	ND	[15]	
trans-1,3-Dichloropropene	SW8260B	µg/kg	-	-		-	-	ND	[15]	

	Sample ID	AM-A501401			AM-A505501			AM-A506001			AM-A506002		AM-A506407		
	Laboratory	DCHM		JEG	DCHM		JEG	DCHM		JEG	DCHM		DCHM		JEG
	Lab Sample ID	00E03107		VAL	00E03783		VAL	00E03883		VAL	00E03884		00E04050		VAL
	Collection Date	9/16/00		QAL	10/13/00		QAL	10/15/00		QAL	10/15/00		10/18/00		QAL
	Matrix	W			W			W			W		W		
Analyte	**Method**	**Units**													
2-Methylnaphthalene	SW8270C SIM	µg/L	ND	[0.05]		0.19	[0.05]		53	[0.15]		- -	1700	[6.3]	J-H
Acenaphthene	SW8270C SIM	µg/L	ND	[0.05]		ND	[0.05]		1.2	[0.15]		- -	220	[6.3]	J-H,J-L
Acenaphthylene	SW8270C SIM	µg/L	ND	[0.05]		0.066	[0.05]		0.6	[0.15]		- -	76	[6.3]	J-H
Anthracene	SW8270C SIM	µg/L	ND	[0.05]		ND	[0.05]		0.18	[0.15]		- -	45	[6.3]	J-H
Benzo(a)anthracene	SW8270C SIM	µg/L	ND	[0.05]		ND	[0.05]		ND	[0.15]		- -	9.3	[6.3]	J-H
Benzo(a)pyrene	SW8270C SIM	µg/L	ND	[0.05]		ND	[0.05]		ND	[0.15]		- -	ND	[6.3]	J-H
Benzo(b)fluoranthene	SW8270C SIM	µg/L	ND	[0.05]		ND	[0.05]		ND	[0.15]		- -	ND	[6.3]	J-H
Benzo(g,h,i)perylene	SW8270C SIM	µg/L	ND	[0.05]		ND	[0.05]		ND	[0.15]		- -	ND	[6.3]	J-H
Benzo(k)fluoranthene	SW8270C SIM	µg/L	ND	[0.05]		ND	[0.05]		ND	[0.15]		- -	ND	[6.3]	J-H
Chrysene	SW8270C SIM	µg/L	ND	[0.05]		0.062	[0.05]		ND	[0.15]		- -	41	[6.3]	J-H
Dibenzo(a,h)anthracene	SW8270C SIM	µg/L	ND	[0.05]		ND	[0.05]		ND	[0.15]		- -	ND	[6.3]	J-H
Fluoranthene	SW8270C SIM	µg/L	ND	[0.05]		ND	[0.05]		ND	[0.15]		- -	34	[6.3]	J-H
Fluorene	SW8270C SIM	µg/L	ND	[0.05]		0.079	[0.05]		4.2	[0.15]		- -	390	[6.3]	J-H
Indeno(1,2,3-cd)pyrene	SW8270C SIM	µg/L	ND	[0.05]		ND	[0.05]		ND	[0.15]		- -	ND	[6.3]	J-H
Naphthalene	SW8270C SIM	µg/L	ND	[0.05]		0.19	[0.05]		7.1	[0.15]		- -	120	[6.3]	J-H,J-L
Phenanthrene	SW8270C SIM	µg/L	ND	[0.05]		0.13	[0.05]		4.4	[0.15]		- -	830	[6.3]	J-H
Pyrene	SW8270C SIM	µg/L	ND	[0.05]		ND	[0.05]		ND	[0.15]		- -	34	[6.3]	J-H
Gasoline Range Organics	AK101	µg/L	-	-		-	-		-	-		- -	-	-	
Diesel Range Organics	AK102	µg/L	47.2	[100]	J-L	18500	[100]	J-S, J-L	4840	[100]	J-S, J-L	- -	-	-	
Residual Range Organics	AK103	µg/L	ND	[100]		957	[100]	UB/RL,J-S,J-L	225	[100]	UB/RL,J-S,J-L	- -	-	-	
Arsenic	SW6010B	µg/L	3.4	[5]&		-	-		-	-		- -	-	-	
Barium	SW6010B	µg/L	13	[20]&		-	-		-	-		- -	-	-	
Cadmium	SW6010B	µg/L	1.3	[2]	UB/RL	-	-		-	-		- -	-	-	
Chromium	SW6010B	µg/L	35	[10]		-	-		-	-		- -	-	-	
Lead	SW6010B	µg/L	260	[3]		-	-		-	-		- -	-	-	
Selenium	SW6010B	µg/L	ND	[5]		-	-		-	-		- -	-	-	
Silver	SW6010B	µg/L	ND	[10]		-	-		-	-		- -	-	-	
Cadmium	SW6020	µg/L	-	-		-	-		-	-		- -	-	-	
Chromium	SW6020	µg/L	-	-		-	-		-	-		- -	-	-	
Silver	SW6020	µg/L	-	-		-	-		-	-		- -	-	-	
Arsenic	SW7060A	µg/L	-	-		-	-		-	-		- -	-	-	
Lead	SW7421	µg/L	-	-		-	-		-	-		- -	-	-	
Mercury	SW7470A	µg/L	0.0517	[0.1]		-	-		-	-		- -	-	-	
Selenium	SW7740	µg/L	-	-		-	-		-	-		- -	-	-	
PCB-1016 (Aroclor 1016)	SW8082	µg/L	-	-		-	-		-	-		- -	-	-	
PCB-1221 (Aroclor 1221)	SW8082	µg/L	-	-		-	-		-	-		- -	-	-	
PCB-1232 (Aroclor 1232)	SW8082	µg/L	-	-		-	-		-	-		- -	-	-	
PCB-1242 (Aroclor 1242)	SW8082	µg/L	-	-		-	-		-	-		- -	-	-	
PCB-1248 (Aroclor 1248)	SW8082	µg/L	-	-		-	-		-	-		- -	-	-	
PCB-1254 (Aroclor 1254)	SW8082	µg/L	-	-		-	-		-	-		- -	-	-	
PCB-1260 (Aroclor 1260)	SW8082	µg/L	-	-		-	-		-	-		- -	-	-	

	Sample ID	AM-A501401			AM-A505501			AM-A506001			AM-A506002			AM-A506407		
	Laboratory	DCHM		JEG	DCHM		JEG	DCHM		JEG	DCHM		JEG	DCHM		JEG
	Lab Sample ID	00E03107		VAL	00E03783		VAL	00E03883		VAL	00E03884		VAL	00E04050		VAL
	Collection Date	9/16/00		QAL	10/13/00		QAL	10/15/00		QAL	10/15/00		QAL	10/18/00		QAL
	Matrix	W			W			W			W			W		
Analyte	**Method**	**Units**														
1,1,1-Trichloroethane	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
1,1,2,2-Tetrachloroethane	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
1,1,2-Trichloroethane	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
1,1-Dichloroethane	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
1,1-Dichloroethene	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
1,2-Dichloroethane	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
1,2-Dichloropropane	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
2-Butanone	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[50]	
2-Hexanone	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[50]	
4-Methyl-2-pentanone	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[50]	
Acetone	SW8260B	µg/L	-	-	4.5	[5]	UB/RL	ND	[5]		7.1	[5]		ND	[50]	
Benzene	SW8260B	µg/L	ND	[5]	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Bromodichloromethane	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Bromoform	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Bromomethane	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Carbon disulfide	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Carbon tetrachloride	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Chlorobenzene	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Chloroethane	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Chloroform	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Chloromethane	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Dibromochloromethane	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Ethylbenzene	SW8260B	µg/L	ND	[5]	0.99	[5]&		ND	[5]		ND	[5]		ND	[10]	
Methylene chloride	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		0.93	[5]&		ND	[10]	
Styrene	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Tetrachloroethene	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Toluene	SW8260B	µg/L	ND	[5]	ND	[5]		0.22	[5]&		ND	[5]		ND	[10]	
Trichloroethene	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Vinyl chloride	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Xylenes	SW8260B	µg/L	ND	[15]	5.7	[5]		ND	[5]		ND	[5]		ND	[10]	
cis-1,2-Dichloroethene	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
cis-1,3-Dichloropropene	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
Isomers)	SW8260B	µg/L	-	-	-	-		-	-		-	-		-	-	
o-Xylene	SW8260B	µg/L	-	-	-	-		-	-		-	-		-	-	
trans-1,2-Dichloroethene	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	
trans-1,3-Dichloropropene	SW8260B	µg/L	-	-	ND	[5]		ND	[5]		ND	[5]		ND	[10]	

Sample ID	AM-A510501
Laboratory	CTE
Lab Sample ID	1007218001
Collection Date	11/8/00
Matrix	LO

Analyte	Method	Units		
Barium	SW6010B	mg/kg	0.551	[1]J
Cadmium	SW6010B	mg/kg	0.142	[0.5]J
Chromium	SW6010B	mg/kg	0.438	[1]J
Lead	SW6010B	mg/kg	1.67	[2.5]J ,B
Silver	SW6010B	mg/kg	1.31	[1]
Arsenic	SW7060A	mg/kg	0.226	[0.1]
Mercury	SW7471A	mg/kg	ND	[0.0357]
Selenium	SW7740	mg/kg	ND	[0.1]
1016)	SW8082	mg/kg	ND	[0.983]
1221)	SW8082	mg/kg	ND	[0.983]
1232)	SW8082	mg/kg	ND	[0.983]
1242)	SW8082	mg/kg	ND	[0.983]
1248)	SW8082	mg/kg	ND	[0.983]
1254)	SW8082	mg/kg	ND	[0.983]
1260)	SW8082	mg/kg	ND	[0.983]

Notes:
See Data Quality Assessment section of report for validation qualification information
[ ] - laboratory reporting limit
ND - not detected
"-" - sample not analyzed by this method

APPENDIX D-5

Chain of Custodies

Chain-of-Custody Report

Collection Organization: JEG **Chain-of-Custody:** AM-A4335 **Cooler ID:** _ **Admin Number:** 00-054

Project Number: AMAKNAK **Laboratory:** DCHM **Bill To:** JEG **Report To:** JEG

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A433501	08/30/2000	1245	EDETMER	1	POLY	500ML	4C_HNO3_PH<2	WG	RCRA METALS		48HRS		DISP	Undefined
AM-A433501	08/30/2000	1245	EDETMER	2	AMBER	1L	4C	WG	8270CSIM		48HRS		DISP	Undefined
AM-A433501	08/30/2000	1245	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		48HRS		DISP	Undefined
AM-A433501	08/30/2000	1245	EDETMER	3	VOA	40ML	4C_HCL_PH<2	WG	SW8260B(~~BTEX~~) 8/31/00		48HRS		DISP	Undefined
AM-A433502	08/30/2000	1245	EDETMER	3	VOA	40ML	4C_HCL_PH<2	WG	SW8260B(~~BTEX~~) 8/31/00		48HRS		DISP	Undefined

Comments: AM-A433502 (8260B) all 3 VOA vials have bubbles, PLEASE FAX RESULTS TO Bo YORK (907)563-3320 AND ERIC DETMER (907)581-5797.

Special Instructions: RCRA Metals: SW7060A, SW7131A, SW7191, SW7421, SW6010B,

Relinquish By [illegible] 8/31/00 1130

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5000 **Cooler ID:** PRIMA **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A500001	09/06/2000	1045	EDETMER	1	AMBER	8OZ	4C	SO	SW9060		30DAYS			Undef ed
AM-A500002	09/06/2000	1510	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A500002	09/06/2000	1510	EDETMER	1	AMBER	8OZ	4C	SO	SW8270CSIM		30DAYS			Undef ed
AM-A500002	09/06/2000	1510	EDETMER	1	AMBER	8OZ	4C	SO	SW9060		30DAYS			Undef ed

Comments:

Special Instructions:

Relinquish By: ERIC DETMER 9/7/00 0945

Received By: / /

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5001 **Cooler ID:** DONKEY **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A500101	09/08/2000	1111	EDETMER	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undefined
AM-A500101	09/08/2000	1111	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		30DAYS			Undefined
AM-A500102	09/08/2000	1330	EDETMER	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undefined
AM-A500102	09/08/2000	1330	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		30DAYS			Undefined

Comments:

Special Instructions:

Relinquished By [illegible]

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5002 **Cooler ID:** 3/6 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A500201	09/09/2000	1120	EDETMER	2	AMBER	1L	4C	WS	SW8082A		30DAYS			Undef ed
AM-A500201	09/09/2000	1120	EDETMER	2	AMBER	1L	4C	WS	SW8270CSIM		30DAYS			Undef ed
AM-A500201	09/09/2000	1120	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WS	AK102/103		30DAYS			Undef ed
AM-A500202	09/09/2000	1138	EDETMER	1	AMBER	8OZ	4C	SE	AK102/103		30DAYS			Undef ed
AM-A500202	09/09/2000	1138	EDETMER	1	AMBER	8OZ	4C	SE	SW8270CSIM/SW8082A		30DAYS			Undef ed

Comments:

Special Instructions:

Relinquished By: [illegible] **Date:** 9/11/00 **Time:** 0900

Received By: [illegible]

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5003 **Cooler ID:** 312 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A500301	09/09/2000	1230	EDETMER	2	AMBER	1L	4C	WS	SW8082A		30DAYS			Undefed
AM-A500301	09/09/2000	1230	EDETMER	2	AMBER	1L	4C	WS	SW8270CSIM		30DAYS			Undefed
AM-A500301	09/09/2000	1230	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WS	AK102/103		30DAYS			Undefed
AM-A500302	09/09/2000	1330	EDETMER	1	AMBER	8OZ	4C	SE	AK102/103		30DAYS			Undefed
AM-A500302	09/09/2000	1330	EDETMER	1	AMBER	8OZ	4C	SE	SW8270CSIM/SW8082A		30DAYS			Undefed

Comments:

Special Instructions:

Relinquished by: Eric Dorrell 9/11/00 0900

Received by:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5004 **Cooler ID:** MAROONED **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A500401	09/09/2000	1540	EDETMER	2	AMBER	1L	4C	WS	SW8270CSIM		30DAYS			Undefed
AM-A500401	09/09/2000	1540	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WS	AK102/103		30DAYS			Undefed
AM-A500402	09/09/2000	1545	EDETMER	2	AMBER	1L	4C	WS	SW8270CSIM		30DAYS			Undefed
AM-A500402	09/09/2000	1545	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WS	AK102/103		30DAYS			Undefed

Comments:

Special Instructions:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5005 **Cooler ID:** Harry Galvin **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** LTL **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A500501	09/09/2000	1540	EDETMER	2	AMBER	1L	4C	WS	SW8270CSIM		30DAYS			Undef ed
AM-A500501	09/09/2000	1540	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WS	AK102/103		30DAYS			Undef ed
AM-A500502	09/09/2000	1600	EDETMER	1	AMBER	8OZ	4C	SE	AK102/103		30DAYS			Undef ed
AM-A500502	09/09/2000	1600	EDETMER	1	AMBER	8OZ	4C	SE	SW8270CSIM		30DAYS			Undef ed

Comments:

Special Instructions:

Relinquished By Ernie Peters 9/11/00 0900

Received By

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5006 **Cooler ID:** CUBMED6EN **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A500601	09/09/2000	1600	EDETMER	1	AMBER	8OZ	4C	SE	AK102/103		30DAYS			Undef ed
AM-A500601	09/09/2000	1600	EDETMER	1	AMBER	8OZ	4C	SE	SW8270CSIM		30DAYS			Undef ed
AM-A500602	09/09/2000	1605	EDETMER	1	AMBER	8OZ	4C	SE	AK102/103		30DAYS			Undef ed
AM-A500602	09/09/2000	1605	EDETMER	1	AMBER	8OZ	4C	SE	SW8270CSIM		30DAYS			Undef ed
AM-A500603	09/09/2000	1645	EDETMER	2	AMBER	1L	4C	WS	SW8270CSIM		30DAYS			Undef ed
AM-A500603	09/09/2000	1645	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WS	AK102/103		30DAYS			Undef ed
AM-A500604	09/09/2000	1700	EDETMER	1	AMBER	8OZ	4C	SE	AK102/103		30DAYS			Undef ed
AM-A500604	09/09/2000	1700	EDETMER	1	AMBER	8OZ	4C	SE	SW8270CSIM		30DAYS			Undef ed

Comments:

Special Instructions:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5007 **Cooler ID:** 201 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A500701	09/08/2000	1515	EDETMER	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undef ed
AM-A500701	09/08/2000	1515	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		30DAYS			Undef ed

Comments:

Special Instructions:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5008 **Cooler ID:** CAS ALASKA **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A500801	09/11/2000	1155	EDETMER	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undef ed
AM-A500801	09/11/2000	1155	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		30DAYS			Undef ed
AM-A500802	09/11/2000	1338	EDETMER	1	GSEPT	4OZ	4C	SO	SW9060		30DAYS			Undef ed

Comments:

Special Instructions:

Relinquish By: Eric Detmer 9/13/00 1100

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5009 **Cooler ID:** DONNA **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A500901	09/11/2000	1635	EDETMER	4	AMBER	1L	4C	WG	SW8082A	MS/D	30DAYS			Undefed
AM-A500901	09/11/2000	1635	EDETMER	4	AMBER	1L	4C	WG	SW8270CSIM	MS/D	30DAYS			Undefed

Comments:

Special Instructions:

Relinquish By: Eric Detar 9/13/00 1108

Received By: / /

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5010 **Cooler ID:** KIWI **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A501001	09/11/2000	1635	EDETMER	2	POLY	1L	4C_HNO3_PH<2	WG	RCRA METALS	MS/D	30DAYS			Undefined
AM-A501001	09/11/2000	1635	EDETMER	4	AMBER	1L	4C_HCL_PH<2	WG	AK102/103	MS/D	30DAYS			Undefined
AM-A501001	09/11/2000	1635	EDETMER	5	VOA	40ML	4C_HCL_PH<2	WG	8260B (VOC & BTEX)	MS/D	30DAYS			Undefined
AM-A501002	09/11/2000	1635	EDETMER	3	VOA	40ML	4C_HCL_PH<2	WG	8260B (VOC & BTEX)		30DAYS			Undefined

Comments: Sample AM-A501002 bottles 1/3, 2/3, & 3/3 all have air bubbles.

Special Instructions: RCRA Metals: SW7060A, SW7131A, SW7191, SW7421, SW6010B,

Relinquish By: Eric Detue 9/13/00 1100

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5011 **Cooler ID:** PIGGY **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A501101	09/12/2000	1355	EDETMER	1	POLY	500ML	4C_HNO3_PH<2	WG	RCRA METALS		30DAYS			Undefined
AM-A501101	09/12/2000	1355	EDETMER	2	AMBER	1L	4C	WG	SW8082A		30DAYS			Undefined
AM-A501101	09/12/2000	1355	EDETMER	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undefined
AM-A501101	09/12/2000	1355	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		30DAYS			Undefined
AM-A501101	09/12/2000	1355	EDETMER	3	VOA	40ML	4C_HCL_PH<2	WG	SW8260B(VOC & BTEX)		30DAYS			Undefined
AM-A501102	09/12/2000	1355	EDETMER	3	VOA	40ML	4C_HCL_PH<2	WG	SW8260B(VOC & BTEX)		30DAYS			Undefined

Comments: Sample AM-A501102 bottles 1/3, 2/3, & 3/3 all have air bubbles.

Special Instructions: RCRA Metals: SW7060A, SW7131A, SW7191, SW7421, SW6010B,

Relinquish By: ERIC DETMER 9/13/00 1100

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5012 **Cooler ID:** RECRA **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A501201	09/14/2000	0855	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed
AM-A501201	09/14/2000	0855	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A501202	09/14/2000	0900	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed
AM-A501202	09/14/2000	0900	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A501203	09/14/2000	0905	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed
AM-A501203	09/14/2000	0905	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A501204	09/14/2000	0910	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed
AM-A501204	09/14/2000	0910	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A501205	09/14/2000	0915	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed
AM-A501205	09/14/2000	0915	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A501206	09/14/2000	0855	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed

Comments: Sample AM-A501206 assume 25 grams and 0 % moisture. 5 Grams

Special Instructions: Collect moisture for SW 8021B (BTEX)) from 8 oz jar with same

Relinquish By: Eric Detmer 9/17/00 1030

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5014 **Cooler ID:** RCRA **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A501401	09/16/2000	1455	EDETMER	1	POLY	500ML	4C_HNO3_PH<2	WX	RCRA METALS		30DAYS			Undef ed
AM-A501401	09/16/2000	1455	EDETMER	2	AMBER	1L	4C	WX	SW8270CSIM		30DAYS			Undef ed
AM-A501401	09/16/2000	1455	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WX	AK102/103		30DAYS			Undef ed
AM-A501401	09/16/2000	1455	EDETMER	3	VOA	40ML	4C_HCL_PH<2	WX	SW8021B(BTEX)		30DAYS			Undef ed
AM-A501402	09/16/2000	1455	EDETMER	3	VOA	40ML	4C_HCL_PH<2	WX	SW8021B(BTEX)		30DAYS			Undef ed

AND SW8260B (VOCs)

AND SW8260B (VOCs)

Comments: Sample AM-A501402 bottles 1/3, 2/3, & 3/3 all have air bubbles.

Special Instructions: RCRA Metals: SW7060A, SW7131A, SW7191, SW7421, SW6010B,

Relinquish By: Eric Detmer 9/17/00 1030

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5015 **Cooler ID:** 384 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A501501	09/16/2000	1500	EDETMER	1	AMBER	4OZ	4C_METHANOL	SL	SW8260B		30DAYS			Undef ed
AM-A501501	09/16/2000	1500	EDETMER	1	AMBER	8OZ	4C	SL	RCRA METALS		30DAYS			Undef ed
AM-A501501	09/16/2000	1500	EDETMER	1	AMBER	8OZ	4C	SL	SW8082A		30DAYS			Undef ed
AM-A501502	09/16/2000	1500	EDETMER	1	AMBER	4OZ	4C_METHANOL	SL	SW8260B		30DAYS			Undef ed

Comments: RCRA Metals: SW7060A, SW7131A, SW7191, SW7421, SW6010B,

Special Instructions: Collect moisture for SW 8021B (BTEX)) from 8 oz jar with same SAMPLE NUMBER

Relinquish By: Eric Daniel 9/19/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5016 **Cooler ID:** 384 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A501601	09/16/2000	1555	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed
AM-A501601	09/16/2000	1555	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A501601	09/16/2000	1555	EDETMER	1	AMBER	8OZ	4C	SO	SW8270CSIM		30DAYS			Undef ed
AM-A501602	09/16/2000	1555	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed

Comments:

Special Instructions: Collect moisture for SW 8021B (BTEX)) from 8 oz jar with same SAMPLE NUMBER

Relinquish By: ERIC DETMER 9/19/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5017 **Cooler ID:** 384 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A501701	09/16/2000	1635	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undef ed
AM-A501701	09/16/2000	1635	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed
AM-A501701	09/16/2000	1635	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undef ed
AM-A501701	09/16/2000	1635	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A501701	09/16/2000	1635	EDETMER	1	AMBER	8OZ	4C	SO	RCRA METALS		30DAYS			Undef ed
AM-A501701	09/16/2000	1635	EDETMER	1	AMBER	8OZ	4C	SO	SW8082A		30DAYS			Undef ed
AM-A501701	09/16/2000	1635	EDETMER	1	AMBER	8OZ	4C	SO	SW8270CSIM		30DAYS			Undef ed
AM-A501702	09/16/2000	1635	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undef ed

Comments: RCRA Metals: SW7060A, SW7131A, SW7191, SW7421, SW6010B,

Special Instructions: Collect moisture for SW 8021B (BTEX)) from 8 oz jar with same SAMPLE NUMBER

Relinquish By: Eric Detsel 9/19/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5018 **Cooler ID:** 384 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A501801	09/16/2000	1640	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101 •		30DAYS			Undef ed
AM-A501801	09/16/2000	1640	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed
AM-A501801	09/16/2000	1640	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8260B •		30DAYS			Undef ed
AM-A501801	09/16/2000	1640	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103 •		30DAYS			Undef ed
AM-A501801	09/16/2000	1640	EDETMER	1	AMBER	8OZ	4C	SO	RCRA METALS •		30DAYS			Undef ed
AM-A501801	09/16/2000	1640	EDETMER	1	AMBER	8OZ	4C	SO	SW8082A •		30DAYS			Undef ed
AM-A501801	09/16/2000	1640	EDETMER	1	AMBER	8OZ	4C	SO	SW8270CSIM •		30DAYS			Undef ed

Comments: RCRA Metals: SW7060A, SW7131A, SW7191, SW7421, SW6010B,

Special Instructions: Collect moisture for SW 8021B (BTEX)) from 8 oz jar with same SAMPLE NUMBER

Relinquish By: Eric Detmer 9/19/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5019 **Cooler ID:** 384 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A501901	09/16/2000	1650	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undef ed
AM-A501901	09/16/2000	1650	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed
AM-A501901	09/16/2000	1650	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undef ed
AM-A501901	09/16/2000	1650	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A501901	09/16/2000	1650	EDETMER	1	AMBER	8OZ	4C	SO	RCRA METALS		30DAYS			Undef ed
AM-A501901	09/16/2000	1650	EDETMER	1	AMBER	8OZ	4C	SO	SW8082A		30DAYS			Undef ed
AM-A501901	09/16/2000	1650	EDETMER	1	AMBER	8OZ	4C	SO	SW8270CSIM		30DAYS			Undef ed

Comments: RCRA Metals: SW7060A, SW7131A, SW7191, SW7421, SW6010B,

Special Instructions: Collect moisture for SW 8021B (BTEX)) from 8 oz jar with same SAMPLE NUMBER

Relinquish By: Eric Detmer 9/19/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5020 **Cooler ID:** 384 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A502001	09/16/2000	1700	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undef ed
AM-A502001	09/16/2000	1700	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed
AM-A502001	09/16/2000	1700	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undef ed
AM-A502001	09/16/2000	1700	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A502001	09/16/2000	1700	EDETMER	1	AMBER	8OZ	4C	SO	RCRA METALS		30DAYS			Undef ed
AM-A502001	09/16/2000	1700	EDETMER	1	AMBER	8OZ	4C	SO	SW8082A		30DAYS			Undef ed
AM-A502001	09/16/2000	1700	EDETMER	1	AMBER	8OZ	4C	SO	SW8270CSIM		30DAYS			Undef ed

Comments: RCRA Metals: SW7060A, SW7131A, SW7191, SW7421, SW6010B,

Special Instructions: Collect moisture for SW 8021B (BTEX)) from 8 oz jar with same SAMPLE NUMBER

Relinquish By: ERIC DETMER 9/19/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5022 **Cooler ID:** 35 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A502201	09/18/2000	1435	EDETMER	2	AMBER	1L	4C	W	SW8270CSIM		14DAYS			Undef ed
AM-A502201	09/18/2000	1435	EDETMER	2	AMBER	1L	4C_HCL_PH<2	W	AK102/103		14DAYS			Undef ed
AM-A502201	09/18/2000	1435	EDETMER	3	VOA	40ml	4C_HCL_PH<2	W	SW8021B(BTEX)		14DAYS			Undef ed
AM-A502201	09/18/2000	1435	EDETMER	3	VOA	40ml	4C_HCL_PH<2	W	SW8260B		14DAYS			Undef ed
AM-A502202	09/18/2000	1435	EDETEMR	3	VOA	40ml	4C_HCL_PH<2	W	SW8021B(BTEX)		14DAYS			Undef ed
AM-A502202	09/18/2000	1435	EDETMER	3	VOA	40ml	4C_HCL_PH<2	W	SW8260B		14DAYS			Undef ed

Comments: ~~UNABLE TO RECOVER ENOUGH PRODUCT FOR THREE 40 ML~~ 9/19/00 SAMPLE NUMBER 9/19/00 AM-A502202 (BOTH SW8021B AND SW8260B) HAVE AIR BUBBLES IN ALL SIX CONTAINERS.

Special Instructions:

Relinquish By: Eric Dettle 9/19/00 0900

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5023 **Cooler ID:** IZZY **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A502301	09/19/2000	1100	EDETMER	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undefined
AM-A502301	09/19/2000	1100	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		30DAYS			Undefined
AM-A502302	09/19/2000	1100	EDETMER	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undefined
AM-A502302	09/19/2000	1100	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: Eric Dotur 9/20/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5024 **Cooler ID:** DIZZY **Admin Number:** 00053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A502401	09/19/2000	1320	EDETMER	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undefined
AM-A502401	09/19/2000	1320	EDETMER	2	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: Eric Dehl 9/20/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5025 **Cooler ID:** DIZZY **Admin Number:** 000353

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A502501	09/19/2000	1255	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undefined
AM-A502501	09/19/2000	1255	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103/SW8270CSIM		30DAYS			Undefined
AM-A502502	09/19/2000	1300	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undefined
AM-A502502	09/19/2000	1300	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103/SW8270CSIM		30DAYS			Undefined
AM-A502503	09/19/2000	1302	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undefined
AM-A502503	09/19/2000	1302	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103/SW8270CSIM		30DAYS			Undefined
AM-A502504	09/19/2000	1306	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undefined
AM-A502504	09/19/2000	1306	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undefined
AM-A502505	09/19/2000	1309	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undefined
AM-A502505	09/19/2000	1309	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undefined
AM-A502506	09/19/2000	1255	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undefined

Comments: Assume 25g & 0% moisture for AM-A502506.

Special Instructions: take moisture for BTEX from 8 oz. same number.

Relinquish By: Eric Dotzel 9/20/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5026 **Cooler ID:** DIZZY **Admin N**

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report T** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Comments	Dispose or Return Samples	Leve
AM-A502601	09/19/2000	1310	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed
AM-A502601	09/19/2000	1310	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A502602	09/19/2000	1315	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS			Undef ed
AM-A502602	09/19/2000	1315	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A502602	09/19/2000	1315	EDETMER	1	AMBER	8OZ	4C	SO	SW9060		30DAYS			Undef ed

Comments: Assume 25g & 0% moisture for AM-A502603.

Special Instructions: take moisture for BTEX from 8 oz. same number.

Relinquish By: Eric Dehn 9/20/00 0900

Received

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5027 **Cooler ID:** GOING HOME **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A502701	09/20/2000	1035	EDETMER	2	AMBER	1L	4C	W	SW8270CSIM		48HRS			Undefined
AM-A502701	09/20/2000	1035	EDETMER	2	AMBER	1L	4C_HCL_PH<2	W	AK102/103		48HRS			Undefined
AM-A502701	09/20/2000	1035	EDETMER	3	VOA	40ML	4C_HCL_PH<2	W	SW8021B(BTEX)		48HRS			Undefined
AM-A502701	09/20/2000	1035	EDETMER	3	VOA	40ML	4C_HCL_PH<2	W	SW8260B		48HRS			Undefined
AM-A502702	09/20/2000	1035	EDETMER	3	VOA	40ML	4C_HCL_PH<2	W	SW8021B(BTEX)		30DAYS			Undefined
AM-A502702	09/20/2000	1035	EDETMER	3	VOA	40ML	4C_HCL_PH<2	W	SW8260B		30DAYS			Undefined
AM-A502703	09/20/2000	1115	EDETMER	1	AMBER	4OZ	4C_METHANOL	SL	SW8260B		48HRS	AM 571883		Undefined
AM-A502703	09/20/2000	1115	EDETMER	1	AMBER	8OZ	4C	SL	RCRA METALS		48HRS			Undefined
AM-A502703	09/20/2000	1115	EDETMER	1	AMBER	8OZ	4C	SL	SW8082A		48HRS			Undefined
AM-A502704	09/20/2000	1115	EDETMER	1	AMBER	4OZ	4C_METHANOL	SL	SW8260B		30DAYS	AM571791		Undefined
AM-A502705	09/20/2000	1150	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS	AM571784		Undefined

Comments: RCRA Metals: SW7060A, SW7131A, SW7191, SW7421, SW6010B, ALL BOTTLES FOR AM-A502702 HAVE AIR BUBBLES

Special Instructions: take moisture for BTEX from 8 oz. same number. Assume 0% moisture +25g FOR AM-A502704 & AM-A502706

Relinquish By: ERIC DETMER 9/22/2000 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5027 **Cooler ID:** GOING HOME **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A502705	09/20/2000	1150	EDETMER	1	AMBER	8OZ	4C_METHANOL	SO	AK102/103/SW8270CSIM		30DAYS			Undefined
AM-A502705	09/20/2000	1150	EDETMER	1	AMBER	8OZ	4C_METHANOL	SO	SW9060		30DAYS			Undefined
AM-A502706	09/20/2000	1035	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS	00757782		Undefined

Comments: RCRA Metals: SW7060A, SW7131A, SW7191, SW7421, SW6010B,

Special Instructions: take moisture for BTEX from 8 oz. same number. Assume 0% moisture

Relinquished By: Peter Darrell 9/21/00 0900

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5028 **Cooler ID:** HOWE1T **Admin N[illegible]:** 00053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report T[illegible]:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	[illegible]	Dispose or Return Samples	Leve
AM-A502801	09/21/2000	1045	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101		30DAYS	[illegible]97		Undef ed
AM-A502801	09/21/2000	1045	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS	[illegible]44		Undef ed
AM-A502801	09/21/2000	1045	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undef ed
AM-A502802	09/21/2000	1045	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101		30DAYS	[illegible] 9/22/00		Undef ed
AM-A502802	09/21/2000	1045	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS	[illegible] 9/22/00		Undef ed
AM-A502803	09/21/2000	1100	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101		30DAYS	[illegible]99		Undef ed
AM-A502803	09/21/2000	1100	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS	[illegible]98		Undef ed
AM-A502803	09/21/2000	1100	EDETMER	1	AMBER	8OZ	4C	SO	SW8270CSIM/AK102/103		30DAYS			Undef ed
AM-A502804	09/21/2000	1030	EDETMER	1	AMBER	8OZ	4C	SO	SW9060		30DAYS			Undef ed
AM-A502805	09/21/2000	1230	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101		30DAYS	[illegible]34		Undef ed
AM-A502805	09/21/2000	1230	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS	[illegible]28		Undef ed

Comments: Assume 0% moisture &25g on AM-A502802

Special Instructions: take moisture for BTEX from 8 oz. same number.

Relinquish By: Eric Detmer 9/22/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5028 **Cooler ID:** HOWE IT **Admin N** 53

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report T** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Dispose or Return Samples	Leve
AM-A502805	09/21/2000	1230	EDETMER	1	AMBER	8OZ	4C	SO	SW8270CSIM/AK102/103		30DAYS		Undef ed
AM-A502806	09/21/2000	1240	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101		30DAYS		Undef ed
AM-A502806	09/21/2000	1240	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS		Undef ed
AM-A502806	09/21/2000	1240	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS		Undef ed
AM-A502807	09/21/2000	1250	EDETMER	1	AMBER	8OZ	4C	SO	SW9060		30DAYS		Undef ed
AM-A502808	09/21/2000	1455	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101		30DAYS		Undef ed
AM-A502808	09/21/2000	1455	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS		Undef ed
AM-A502808	09/21/2000	1455	EDETMER	1	AMBER	8OZ	4C	SO	SW8270CSIM/AK102/103		30DAYS		Undef ed
AM-A502808	09/21/2000	1455	EDETMER	1	AMBER	8OZ	4C	SO	SW9060		30DAYS		Undef ed
AM-A502809	09/21/2000	1505	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101		30DAYS		Undef ed
AM-A502809	09/21/2000	1505	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX)		30DAYS		Undef ed

Comments: Assume 0% moisture &25g on AM-A502802

Special Instructions: take moisture for BTEX from 8 oz. same number.

Relinquish By: Eric Detmer 9/22/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5028 **Cooler ID:** HOWZIT **Admin N** 53

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report T** A

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Dispose or Return Samples	Leve
AM-A502809	09/21/2000	1505	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103 •		30DAYS		Undef ed
AM-A502810	09/21/2000	1600	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101 •		30DAYS	06	Undef ed
AM-A502810	09/21/2000	1600	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX) •		30DAYS	12	Undef ed
AM-A502810	09/21/2000	1600	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103 •		30DAYS		Undef ed
AM-A502811	09/21/2000	1607	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	AK101 •		30DAYS	5	Undef ed
AM-A502811	09/21/2000	1607	EDETMER	1	AMBER	4OZ	4C_METHANOL	SO	SW8021B(BTEX) •		30DAYS		Undef ed
AM-A502811	09/21/2000	1607	EDETMER	1	AMBER	8OZ	4C	SO	AK102/103 •		30DAYS		Undef ed
AM-A502812	09/21/2000	1620	EDETMER	1	AMBER	8OZ	4C	SO	SW9060		30DAYS		Undef ed

Comments: Assume 0% moisture &25g on AM-A502802

Special Instructions: take moisture for BTEX from 8 oz same number.

Relinquish By: Eric DeTmer 9/22/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5029 **Cooler ID:** _ **Admin Numb**

Project Number: AMAKNAK ISLANDWIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:**

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Con Cu	or m ies	Level
AM-A502901	9/26/00	1717	K.THOMPSON	2	AMBER	1L	4C	W	SW8270CSIM		48HRS			Undefined
AM-A502901	9/26/00	1717	K.THOMPSON	2	AMBER	1L	4C_HCL_PH<2	W	AK102		48HRS			Undefined
AM-A502901	9/26/00	1717	K.THOMPSON	3	VOA	40ML	4C_HCL_PH<2	W	SW8021B		48HRS			Undefined
AM-A502902	9/26/00	1717	K.THOMPSON	3	VOA	40ML	4C_HCL_PH<2	W	SW8021B		30DAYS			Undefined

Comments: Sample # AM-A502902 have air bubbles.

Special Instructions: PLEASE FAX RESULTS TO BO YORK AT (907) 563-3320 AND TO RANDY GIBSON AT (907)581-5777

Relinquish By: B Thompson @10:10 9/27/00

Received By: //

09/26/2000

08/27/2000 16:32 9075815797 JACOBS IN UNALASKA PAGE 02

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5030 **Cooler ID:** 1005A **Admin** 0-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report** EGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Dispose or Return Samples	Level
AM-A503001	10/03/2000	1100	SAB	1	AMBER	8OZ	4C	SO	AK102/103		7DAY		Undefined
AM-A503001	10/03/2000	1100	SAB	1	AMBER	8OZ	4C	SO	SW8082		7DAY		Undefined

Comments:

Special Instructions:

Relinquish By: Sarah Bundenfeld 10/3/00 1100

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5031 **Cooler ID:** 1005A **Admin** 053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Repor** GA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Dispose or Return Samples	Level
AM-A503101	10/03/2000	1100	SAB	1	AMBER	8OZ	4C	SO	AK102/103		7DAY		Undefined
AM-A503101	10/03/2000	1100	SAB	1	AMBER	8OZ	4C	SO	SW8082		7DAY		Undefined

Comments:

Special Instructions:

Relinquish By: Sarah Sandenfield 10/5/00 1100

Received By: / /

/2000

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5032 **Cooler ID:** 1005A **Admin** -053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT		Dispose or Return Samples	Level
AM-A503201	10/03/2000	1430	SAB	1	AMBER	8OZ	4C	SO	AK102/103*		7DAY			Undefined
AM-A503201	10/03/2000	1430	SAB	1	AMBER	8OZ	4C	SO	SW8082-		7DAY			Undefined

Comments:

Special Instructions:

Relinquish By: 10/5/00 1100

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5033 **Cooler ID:** 1005A **Admin** 053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report** A

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Dispose or Return Samples	Level
AM-A503301	10/03/2000	1730	SAB	1	AMBER	8OZ	4C	SO	AK102/103		7DAY		Undefined
AM-A503301	10/03/2000	1730	SAB	1	AMBER	8OZ	4C	SO	SW8082		7DAY		Undefined

Comments:

Special Instructions:

Relinquish By: Sarah Benderwald 10/5/00 1100

Received By: / /

2000

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5034 **Cooler ID:** 1005A **Admin** [illegible]053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report** [illegible]EGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	[illegible]	Dispose or Return Samples	Level
AM-A503401	10/03/2000	1041	SAB	1	AMBER	8OZ	4C	SO	SW8082 •		7DAY			Undefined

Comments:

Special Instructions:

Relinquish By: Sarah Bendenhild 10/5/00 1100

Received By: //

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5035 **Cooler ID:** 1005A **Admin** -053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report** GA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT		Dispose or Return Samples	Level
AM-A503501	10/04/2000	1707	SAB	1	AMBER	8OZ	4C	SO	AK102/103 •		30DAY			Undefined
AM-A503501	10/04/2000	1707	SAB	1	GLASS	4OZ	4C_METHANOL	SO	AK101 •		30DAY		985	Undefined

Comments: • for AK101

Special Instructions: Collect % moisture from 8 oz jar

Relinquish By: Sarah Bendewald 10/5/00 1100

Received By: / /

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5036 **Cooler ID:** 1005A **Admin** 053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report** GA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Dispose or Return Samples	Level
AM-A503601	10/04/2000	1706	SAB	1	GLASS	4OZ	4C	SO	415.2M		30 DAY		Undefined

Comments:

Special Instructions:

Relinquish By: [signature] 10/5/00 1100

Received By: //

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5037 **Cooler ID:** 1005A **Admin** 053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report** A

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT		Dispose or Return Samples	Level
AM-A503701	10/04/2000	1710	SAB	1	GLASS	4OZ	4C_METHANOL	SO	AK101		30 DAY		43	Undefined
AM-A503701	10/04/2000	1710	SAB	1	GLASS	8OZ	4C	SO	AK102/103		30 DAY			Undefined

Comments:

Special Instructions: Collect %o moisture for AK101 from 8 oz jar with the same sample

Relinquish By: Sarah Bendenwalk 10/5/00 1100

Received By:

1 /2000

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5038 **Cooler ID:** 1005A **Admin** -053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Comments	Dispose or Return Samples	Level
AM-A503801	10/04/2000	1717	SAB	1	AMBER	8OZ	4C	SO	AK102/103 •		30 DAY			Undefined
AM-A503801	10/04/2000	1717	SAB	1	GLASS	4OZ	4C_METHANOL	SO	AK101 •		30 DAY	65		Undefined
AM-A503802	10/04/2000	1717	SAB	1	GLASS	4OZ	4C_METHANOL	SO	AK101 •		30 DAY			Undefined

Comments: Assume 25g ± 0% moisture for AM-A503802

Special Instructions: Collect % moisture for AK101 from 8 oz jar with the same sample ID

Relinquish By: Sarah Bendenbald 10/5/00 1100

Received By: / /

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5039 **Cooler ID:** 1006A **Admin N** **ber:** 00054

Project Number: GW PreWWII - Aug 00 **Laboratory:** STLA **Bill To:** JEGA **Report T** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	tents tion	Dispose or Return Samples	Leve
AM-A503901	10/05/2000	1640	SAB	3	VOA	40ML	4C_HCL_PH<2	WG	SW8260B		24 hour			Undef ed
AM-A503902	10/05/2000	0800	SAB	3	VOA	40ML	4C_HCL_PH<2	WG	SW8260B		30 DAYS ~~24 hour~~			Undef ed

Comments: SAMPLE NUMBER AM-A503902 - ALL 3 BOTTLES HAVE AIR BUBBLES.

Special Instructions:

Relinquish By: [signature] 10/6/00 1130

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5040 **Cooler ID:** 1009A **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A504001	10/06/2000	1030	SAB	2	AMBER	1L	4C	WS	SW8270C SIM		30 DA			Undefined
AM-A504001	10/06/2000	1030	SAB	2	AMBER	1L	4C_HCL	WS	AK102		30 DA			Undefined
AM-A504001	10/06/2000	1030	SAB	3	VOA	40ML	4C_HCL	WS	SW8021B		30 DA			Undefined
AM-A504002	10/06/2000	1035	SAB	1	AMBER	4OZ	4C_METHANOL	SE	SW8021B		30 DA			Undefined
AM-A504002	10/06/2000	1035	SAB	1	AMBER	8OZ	4C	SE	AK102, SW8270C SIM		30 DA			Undefined
AM-A504003	10/06/2000	0800	SAB	3	VOA	40ML	4C_HCL	WS	SW8021B		30 DA			Undefined
AM-A504004	10/06/2000	0805	SAB	1	AMBER	4OZ	4C_METHANOL	SE	SW8021B		30 DA			Undefined

Comments: ALL 3 BOTTLES OF SAMPLE NUMBER AM-A504003 HAVE AIR BUBBLES. TAKE % MOISTURE FOR AM-A504002 FROM 8OZ. WITH SAME NUMBER.

Special Instructions: SAMPLE NUMBER AM-A504004; ASSUME 8% MOISTURE AND 25g.

Relinquish By: [signature] 10/8/00 1130

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5041 **Cooler ID:** 1009A **Adm[illegible]umber:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Repo[illegible]To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A504101	10/06/2000	1400	SAB	1	AMBER	8OZ	4C	SO	~~A102~~ AK102		30 DA			Undefined
AM-A504102	10/06/2000	1402	SAB	1	AMBER	8OZ	4C	SO	~~A102~~ AK102		30 DA			Undefined
AM-A504103	10/06/2000	1404	SAB	1	AMBER	8OZ	4C	SO	~~A102~~ AK102		30 DA			Undefined
AM-A504104	10/06/2000	1406	SAB	1	AMBER	8OZ	4C	SO	~~A102~~, SW8270C SIM AK102		30 DA			Undefined
AM-A504105	10/06/2000	1408	SAB	1	AMBER	8OZ	4C	SO	~~A102~~, SW8270C SIM AK102		30 DA			Undefined
AM-A504106	10/06/2000	1430	SAB	1	AMBER	8OZ	4C	SO	~~A102~~ AK102		30 DA			Undefined
AM-A504107	10/06/2000	1450	SAB	1	AMBER	4OZ	4C	SO	415.2M		30 DA			Undefined
AM-A504108	10/06/2000	1452	SAB	1	AMBER	4OZ	4C	SO	415.2M		30 DA			Undefined
AM-A504109	10/06/2000	1500	SAB	1	AMBER	4OZ	4C	SO	415.2M		30 DA			Undefined
AM-A504110	10/06/2000	1515	SAB	1	AMBER	8OZ	4C	SO	AK102		30 DA			Undefined

Comments:

Special Instructions:

Relinquish By: [signature] 10/8/00 1130

Received By: [illegible]

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5042 **Cooler ID:** 1009A **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A504201	10/06/2000	1640	SAB	1	AMBER	4OZ	4C	SO	415.2		30 DA			Undefined
AM-A504202	10/06/2000	1645	SAB	1	AMBER	8OZ	4C	SO	AK102		30 DA			Undefined

Comments:

Special Instructions:

Relinquish By: 10/8/00 1130

Received By:

Chain-of-Custody Report

Collection Organization: JEGA AMAKNAK **Chain-of-Custody:** AM-A5043 **Cooler ID:** 1009B **Admin Number:** 00-053

Project Number: ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A504301	10/07/2000	1010	ED	2	AMBER	1L	4C	WS	SW8270C SIM		30 DAY			Undefined
AM-A504301	10/07/2000	1010	ED	2	AMBER	1L	4C_HCL	WS	AK102/103		30 DAY			Undefined
AM-A504301	10/07/2000	1010	ED	3	VOA	40ML	4C_HCL	WS	SW8021B		30 DAY			Undefined
AM-A504302	10/07/2000	0800	ED	3	VOA	40ML	4C_HCL	WS	SW8021B		30 DAY			Undefined
AM-A504303	10/07/2000	1015	ED	1	GLASS	8OZ	4C	SO	AK102/103, SW8270C SIM		30 DAY			Undefined
AM-A504303	10/07/2000	1015	ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8021B		30 DAY	23489.59		Undefined
AM-A504304	10/07/2000	0810	ED	1	GSEPT	4OZ	4C_METHANOL	SO	~~SW8021B~~ @ 10/9/00 SW8260B/SW8021B		30 DAY	24.506		Undefined

Comments: SAMPLE ID AM-A504304: ASSUME 25g AND 0% MOISTURE

Special Instructions: TAKE MOISTURE FOR SW8021B ANALYSIS FROM 8oz. WITH SAME SAMPLE ID.

Relinquish By: ERIC DETRE 10/8/00 1130

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5044 **Cooler ID:** 1009B **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A504401	10/07/2000	1215	ED	1	GLASS	8OZ	4C	SO	AK102/103		30 DAY			Undefined
AM-A504402	10/07/2000	1218	ED	1	GLASS	8OZ	4C	SO	AK102/103		30 DAY			Undefined
AM-A504403	10/07/2000	1220	ED	1	GLASS	8OZ	4C	SO	AK102/103		30 DAY			Undefined
AM-A504404	10/07/2000	1222	ED	1	GLASS	8OZ	4C	SO	AK102/103		30 DAY			Undefined
AM-A504405	10/07/2000	1225	ED	1	GLASS	8OZ	4C	SO	AK102/103, SW8270C SIM		30 DAY			Undefined
AM-A504406	10/07/2000	1300	ED	1	GLASS	4OZ	4C	SO	415.2M		30 DAY			Undefined

Comments:

Special Instructions:

Relinquish By: Eric Detweiler 10/8/00 1130

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5045 **Cooler ID:** 1009B **Admin Number:** 00053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A504501	10/07/2000	1625	ED	1	GLASS	8OZ	4C	SO	AK102/103 •		30 DAY			Undefined
AM-A504501	10/07/2000	1625	ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8021B		30 DAY			Undefined
AM-A504501	10/07/2000	1625	ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B •		30 DAY			Undefined
AM-A504502	10/07/2000	1630	ED	1	GLASS	8OZ	4C	SO	AK102/103 •		30 DAY			Undefined
AM-A504502	10/07/2000	1630	ED	1	GSEPTA	4OZ	4C_METHANOL	SO	SW8021B		30 DAY			Undefined
AM-A504502	10/07/2000	1630	ED	1	GSEPTA	4OZ	4C_METHANOL	SO	SW8260B •		30 DAY			Undefined
AM-A504503	10/07/2000	1635	ED	1	GLASS	8OZ	4C	SO	AK102/103*		30 DAY			Undefined
AM-A504503	10/07/2000	1635	ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8021B		30 DAY			Undefined
AM-A504503	10/07/2000	1635	ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B *		30 DAY			Undefined

Comments: TAKE %MOISTURE FOR SW8021B AND/OR SW8260B FROM 8oz. WITH SAME SAMPLE ID.

Special Instructions:

Relinquish By: ERIC DETRICK 10/8/00 1136

Received By:

Chain-of-Custody Report

Collection Organization: JEGA AMARUK **Chain-of-Custody:** AM-A5046 **Cooler ID:** 1009B **Admin N[illegible]ber:** 00053

Project Number: ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report T[illegible]** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	[illegible]ments [illegible]ution	Dispose or Return Samples	Leve
AM-A504601	10/07/2000	1640	ED	1	GLASS	8OZ	4C	SO	AK102/103		30 DAY			Undef ed
AM-A504601	10/07/2000	1640	ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8021B		30 DAY			Undef ed
AM-A504601	10/07/2000	1640	ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30 DAY			Undef ed
AM-A504602	10/07/2000	1645	ED	1	GLASS	8OZ	4C	SO	AK102/103		30 DAY			Undef ed
AM-A504602	10/07/2000	1645	ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8021B		30 DAY			Undef ed
AM-A504602	10/07/2000	1645	ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30 DAY			Undef ed
AM-A504603	10/07/2000	1650	ED	1	GLASS	8OZ	4C	SO	AK102/103		30 DAY			Undef ed
AM-A504603	10/07/2000	1650	ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8021B		30 DAY			Undef ed
AM-A504603	10/07/2000	1650	ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30 DAY			Undef ed
AM-A504604	10/07/2000	1700	ED	1	GLASS	4OZ	4C	SO	415.2M		30 DAY			Undef ed

Comments: TAKE %MOISTURE FOR SW8021B AND/OR SW8260B SAMPLES FROM 8oz. WITH SAME SAMPLE ID.

Special Instructions:

Relinquish By: ERIC DETTLE 10/8/00 1130

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5047 **Cooler ID:** WADSWORTH **Admin Number:** 00-053

Project Number: Amatnat ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A504701	10/10/2000	1400	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30D			Undefined
AM-A504702	10/10/2000	1410	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30D			Undefined
AM-A504703	10/10/2000	1420	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30D			Undefined
AM-A504704	10/10/2000	1425	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30D			Undefined
AM-A504705	10/10/2000	1430	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30D			Undefined
AM-A504706	10/10/2000	1437	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30D			Undefined
AM-A504707	10/10/2000	1442	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30D			Undefined
AM-A504708	10/10/2000	1505	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30D			Undefined
AM-A504709	10/10/2000	1505	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30D			Undefined
AM-A504710	10/10/2000	1505	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30D			Undefined

Comments:

Special Instructions:

Relinquish By: Keafler McLoone 10/12/00 1015

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5048 **Cooler ID:** WADSWORTH **Admin Number:** 00-053

Project Number: ISLAND WIDE Anaktuvuk **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A504801	10/10/2000	1550	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103/SW8082		7DAY			Undefined
AM-A504801	10/10/2000	1550	KAM/ED	1	AMBER	8OZ	4C	SO	SW8270CSIM/Metals		7DAY			Undefined
AM-A504801	10/10/2000	1550	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		7DAY			Undefined
AM-A504801	10/10/2000	1550	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		7DAY			Undefined
~~AM-A504802~~	~~10/10/2000~~	~~1550~~	~~KAM/ED~~	~~1~~	~~GSEPT~~	~~4OZ~~	~~4C_METHANOL~~	~~SO~~	~~AK101~~		~~7DAY~~			~~Undefined~~
AM-A504802	10/10/2000	1550	KAM/ED	2 KAM	GSEPT	4OZ	4C_METHANOL	SO	SW8260B/AK101		7DAY			Undefined

KAM

Comments: AM-A504802 Assume 25 grams and 0% moisture.

Special Instructions: RCRA Metals SW6010B SW7060A SW7131A SW7191 SW7421

Relinquish By: Heather McLoone 10/12/00 1015

Received By:

Chain-of-Custody Report

Collection Organization: JEGA Anaktuvuk **Chain-of-Custody:** AM-A5049 **Cooler ID:** ~~WADSWORTH-CHM~~ Pete! **Admin Number:** 00-053

Project Number: ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TA	Contents Caution	Dispose or Return Samples	Level
AM-A504901	10/11/2000	1450	KAM/ED	4	AMBER	1L	4C	WG	SW8270CSIM		30D			Undefined
AM-A504901	10/11/2000	1450	KAM/ED	4	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		30D			Undefined

Comments:

Special Instructions:

Relinquish By: Heather Melcone 10/12/00 1015

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5050 **Cooler ID:** HAPPY **Admin Number:** 00-053

Project Number: Anaktuvuk ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A505001	10/11/2000	1700	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		30DAYS			Undefined
AM-A505001	10/11/2000	1700	KAM/ED	4	AMBER	1L	4C	WG	SW8082/8270CSIM		30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: Heather Meloon 10/17/00 1015

Received By:

Chain-of-Custody Report

Collection Organization: JEGA Anaktuvuk **Chain-of-Custody:** AM-A5051 **Cooler ID:** WADSWORTH **Admin N ber:** 00-053

Project Number: ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report T** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	ntents aution	Dispose or Return Samples	Leve
AM-A505101	10/11/2000	1705	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		30DAYS			Undef ed
AM-A505101	10/11/2000	1705	KAM/ED	4	AMBER	1L	4C	WG	SW8270CSIM/8082		30DAYS			Undef ed

Comments:

Special Instructions:

Relinquish By: Heather McJoone 10/12/00 1015

Received By:

Chain-of-Custody Report

Collection Organization: JEGA ANAKNNK **Chain-of-Custody:** AM-A5052 **Cooler ID:** BEANIE **Admin Number:** 00-053

Project Number: ISLAND WIDE **Laboratory:** LTL **Bill To:** .NULL. **Report To:** .NULL.

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A505201	10/11/2000	1710	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WG	AK102/103		30DAYS			Undefined
AM-A505201	10/11/2000	1710	KAM/ED	4	AMBER	1L	4C	WG	SW8082/8270CSIM		30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: Heather Melcone 10/12/00 1015

Received By:

30day soil →

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5053 **Cooler ID:** WINDY **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A505301	10/12/2000	1630	KAM/ED	1	AMBER	4OZ	4C	SO	Metals ✓	MS/MSD	30DAYS			Undefined
AM-A505301	10/12/2000	1630	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM ✓ ✓	MS/MSD	30DAYS			Undefined
AM-A505301	10/12/2000	1630	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B ✓	MS/MSD	30DAYS			Undefined
AM-A505302	10/12/2000	1630	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B ✓		30DAYS			Undefined
AM-A505303	10/12/2000	1635	KAM/ED	1	AMBER	4OZ	4C	SO	Metals ✓		30DAYS			Undefined
AM-A505303	10/12/2000	1635	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM ✓ ✓		30DAYS			Undefined
AM-A505303	10/12/2000	1635	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B ✓		30DAYS			Undefined
AM-A505304	10/13/2000	1550	KAM/ED	1	AMBER	4OZ	4C	SO	Metals ✓		30DAYS			Undefined
AM-A505304	10/13/2000	1550	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM ✓ ✓		30DAYS			Undefined
AM-A505304	10/13/2000	1550	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B ✓		30DAYS			Undefined
AM-A505305	10/13/2000	1555	KAM/ED	1	AMBER	4OZ	4C	SO	Metals ✓		30DAYS			Undefined

Comments:

Special Instructions: 8 RCRA Metals = SW6010B/7060A/7131/7191/7421 + 7470A Water 7471A Soil

Relinquish By: Kathleen McFarlane 10/15/2000 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5053 **Cooler ID:** WINDY **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A505305	10/13/2000	1555	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM	MS/MSD	30DAYS			Undefined
AM-A505305	10/13/2000	1555	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B	MS/MSD	30DAYS			Undefined
AM-A505306	10/13/2000	1645	KAM/ED	1	AMBER	4OZ	4C	SO	Metals	MS/MSD	30DAYS			Undefined
AM-A505306	10/13/2000	1645	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM		30DAYS			Undefined
AM-A505306	10/13/2000	1645	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A505307	10/13/2000	1655	KAM/ED	1	AMBER	4OZ	4C	SO	Metals		30DAYS			Undefined
AM-A505307	10/13/2000	1655	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM		30DAYS			Undefined
AM-A505307	10/13/2000	1655	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined

Comments:

Special Instructions: 8 RCRA Metals = SW6010B/7060A/7131/7191/7421

Relinquish By: Heather McGhone 10/15/2000 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5054 **Cooler ID:** WINDY **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents	Dispose or Return Samples	Level
AM-A505401	10/13/2000	0945	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM	MS/D	30DAYS			Undefined
AM-A505402	10/13/2000	0950	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
AM-A505403	10/13/2000	0955	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
AM-A505404	10/13/2000	1000	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M	MS/D	30DAYS			Undefined
AM-A505405	10/13/2000	1005	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A505406	10/13/2000	1010	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A505407	10/13/2000	1010	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined

Comments:

Special Instructions: 8 RCRA Metals = SW6010B/7060A/7131/7191/7421

Relinquish By: Heather McJoone 10/15/2000 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5055 **Cooler ID:** WINDY **Admin Number:** 00353

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A505501	10/13/2000	1315	KAM/ED	2	AMBER	1L	4C	WW	SW8270CSIM ✓		48HRS			Undefined
AM-A505501	10/13/2000	1315	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WW	AK102/103 ✓		48HRS			Undefined
AM-A505501	10/13/2000	1315	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WW	SW8260B ✓		48HRS			Undefined
AM-A505502	10/13/2000	1315	KAM/ED	3	AMBER	40ML	4C_HCL_PH<2	WW	SW8260B ✓		48HRS			Undefined

Comments:

Special Instructions: 8 RCRA Metals = SW6010B/7060A/7131/7191/7421

Relinquish By: Heather McLoone 10/17/2000 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5056 **Cooler ID:** OPENER **Admin Number:** 00-853

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
~~AM-A505601~~	~~10/13/2000~~	~~1530~~	~~KAM/ED~~	~~1~~	~~AMBER~~	~~8OZ~~	~~4C~~	~~SL~~	~~SW8082/metals~~		~~48HRS~~			~~Undefined~~
~~AM-A505601~~	10/13/2000	1530	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SL	SW8260B		48HRS			Undefined
AM-A505602	10/13/2000	1530	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SL	SW8260B		48HRS			Undefined
AM-A505603	10/15/2000	1230	KAM/ED	1	AMBER	8OZ	4C	SL	SW8082/metals		48HRS			Undefined
AM-A505603	10/15/2000	1230	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SL	SW8260B		48HRS			Undefined

Comments:

Special Instructions: 8 RCRA Metals = SW6010B/7060A/7131/7191/7421

Relinquish By: Kathleen McFarren 10/16/00 1030

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5057 **Cooler ID:** BLOWIN **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** LTL **Bill To:** .NULL. **Report To:** .NULL.

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A505701	10/13/2000	1010	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A505702	10/15/2000	1400	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undefined
AM-A505703	10/15/2000	1410	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undefined
AM-A505704	10/16/2000	1530	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: Kathleen McLaren 10/17/00 1000

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5058 **Cooler ID:** OPENER **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A505801	10/15/2000	1420	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
AM-A505802	10/15/2000	1400	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undefined
AM-A505803	10/15/2000	1400	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undefined
AM-A505804	10/15/2000	1410	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undefined
AM-A505805	10/15/2000	1410	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undefined
AM-A505806	10/15/2000	1415	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
AM-A505807	10/15/2000	1425	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
AM-A505808	10/15/2000	1430	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A505809	10/15/2000	1435	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A505810	10/15/2000	1440	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: Heather McFarlane 10/16/00 1630

Received:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5059 **Cooler ID:** OPENER **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A505901	10/15/2000	1630	KAM/ED	2	AMBER	1L	4C	WS	SW8270CSIM		30DAYS			Undefined
AM-A505901	10/15/2000	1630	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WS	AK102		30DAYS			Undefined
AM-A505902	10/15/2000	1635	KAM/ED	1	AMBER	8OZ	4C	SE	AK102/SW8270CSIM		30DAYS			Undefined
AM-A505903	10/15/2000	1640	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: Kristin McGrath 10/16 for 0820

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5060 **Cooler ID:** OPENER **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A506001	10/15/2000	1130	KAM/ED	2	AMBER	1L	4C	WW	SW8270CSIM		48HRS			Undefined
AM-A506001	10/15/2000	1130	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WW	AK102/103		48HRS			Undefined
AM-A506001	10/15/2000	1130	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WW	SW8260B		48HRS			Undefined
AM-A506002	10/15/2000	1130	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WW	SW8260B		48HRS			Undefined

Comments:

Special Instructions:

Relinquish By: [illegible] 10/16/00 1030

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5061 **Cooler ID:** BOSS **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A506101	10/16/2000	1120	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undefined
AM-A506102	10/16/2000	1230	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
AM-A506103	10/16/2000	1400	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A506104	10/16/2000	1405	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A506105	10/16/2000	1530	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undefined
AM-A506106	10/16/2000	1530	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undefined
AM-A506107	10/16/2000	1535	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A506108	10/16/2000	1715	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: Heather Moore 10/18/00 1030

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5062 **Cooler ID:** BOSS **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A506201	10/17/2000	1200	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103	MS/MSD	3DAYS			Undefined
AM-A506202	10/17/2000	1415	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
AM-A506202	10/17/2000	1415	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A506203	10/17/2000	1425	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM	MS/MSD EDMH	30DAYS			Undefined
AM-A506203	10/17/2000	1425	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A506204	10/17/2000	1430	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A506204	10/17/2000	1430	KAM/ED	2	AMBER	8OZ	4C	SO	AK102	MS/D	30DAYS			Undefined
AM-A506205	10/17/2000	1430	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A506206	10/17/2000	1600	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undefined
AM-A506206	10/17/2000	1600	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A506207	10/17/2000	1605	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined

Comments:

Special Instructions: For AM-A506212 assume 25 grams and 0% moisture, for AM-A506205 use AM-A506204 for % moisture

Relinquish By: Katherine Jeane 10/18/00 1030

Received:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5062 **Cooler ID:** BOSS **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A506207	10/17/2000	1605	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A506208	10/17/2000	1600	KAM/ED	1	AMBER	8OZ	4C	SO	415.2M	MS/D	30DAYS			Undefined
AM-A506209	10/17/2000	1602	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A506210	10/17/2000	1605	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A506211	10/17/2000	1700	KAM/ED	1	AMBER	8OZ	4C	SO	Lead(SW6010B)		24HRS			Undefined
AM-A506212	10/17/2000	1415	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined

Comments:

Special Instructions: For AM-A506212 assume 25 grams and 0% moisture, for AM-A506205

Relinquish By: Karlene McGhee 10/19/00 1500

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5063 **Cooler ID:** GRUBBIN **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** LTL **Bill To:** .NULL. **Report To:** .NULL.

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A506301	10/17/2000	1430	KAM/ED	1	AMBER	4OZ	4C	SO	E160.3		30DAYS			Undefined
AM-A506301	10/17/2000	1430	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A506302	10/17/2000	1430	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101 / SW8260B		30DAYS			Undefined
AM-A506303	10/20/2000	1500	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM		30DAYS			Undefined
AM-A506303	10/20/2000	1500	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082,Metals		30DAYS			Undefined
AM-A506303	10/20/2000	1500	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101/SW8260B		30DAYS			Undefined

Comments: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Special Instructions: For sample AM-A506302 assume 25 grams and 0% moisture

Relinquished By: Kendra Mc Farlane 10/20/00 1130

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5064 **Cooler ID:** _ **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A506401	10/18/2000	1545	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undef ed
AM-A506402	10/18/2000	1548	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undef ed
AM-A506403	10/18/2000	1550	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undef ed
AM-A506404	10/18/2000	1600	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undef ed
AM-A506405	10/18/2000	1610	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undef ed
AM-A506406	10/18/2000	1620	KAM/ED	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undef ed
AM-A506407	10/18/2000	1640	KAM/ED	2	AMBER	1L	4C	WW	SW8270CSIM		48HRS			Undef ed
AM-A506407	10/18/2000	1640	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WW	AK102/103		48HRS			Undef ed
AM-A506407	10/18/2000	1640	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WW	SW8260B		48HRS			Undef ed
AM-A506408	10/18/2000	1640	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WW	SW8260B		30DAYS			Undef ed
AM-A506409	10/18/2000	1100	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/SW8270CSIM		30DAYS			Undef ed

Comments:

Special Instructions: PLEASE FAX AM-A506407 RESULTS TO (907) 581-5797

Relinquish By: Heather McLoone 10/22/00 1100

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5064 **Cooler ID:** _ **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Leve
AM-A506409	10/18/2000	1100	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undef ed
AM-A506410	10/18/2000	1100	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undef ed

Comments: Assume 25 grams and 0% moisture for AM-A506410

Special Instructions: PLEASE FAX AM-A506407 RESULTS TO (907) 581-5797

Relinquish By: Heather McJoone 10/20/00 1100

Received By: / /

10/../2000

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5065 **Cooler ID:** JILLIAN **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A506501	10/19/2000	1055	KAM/ED	1	AMBER	8OZ	4C	SL	SW8082/METALS		48HRS			Undefined
AM-A506501	10/19/2000	1055	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SL	SW8260B		48HRS			Undefined
AM-A506502	10/19/2000	1100	KAM/ED	1	AMBER	8OZ	4C	SL	SW8082/METALS		48HRS			Undefined
AM-A506502	10/19/2000	1100	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SL	SW8260B		48HRS			Undefined
AM-A506503	10/19/2000	1105	KAM/ED	1	GLASS	4OZ	4C	LT	OBS/SW8260B		48HRS			Undefined
AM-A506504	10/19/2000	1130	KAM/ED	1	GLASS	4OZ	4C	LT	OBS/SW8260B		48HRS			Undefined
AM-A506505	10/19/2000	1145	KAM/ED	1	AMBER	8OZ	4C	SH	AK102/AK103/SW8270 CSIM		48HRS			Undefined
AM-A506505	10/19/2000	1145	KAM/ED	1	AMBER	8OZ	4C	SH	METALS/SW8082		48HRS			Undefined
AM-A506505	10/19/2000	1145	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SH	AK101/SW8260B		48HRS			Undefined
AM-A506506	10/19/2000	1500	KAM/ED	1	AMBER	8OZ	4C	SO	Lead(SW6010B)/SW8082		48HRS			Undefined

Comments: obs= 40CFR279.11

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Relinquished by: [illegible]

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5066 **Cooler ID:** _Cora 5 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Solution	Dispose or Return Samples	Level
AM-A506608	10/20/2000	1500	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B/AK101		30DAYS			Undefined
AM-A506609	10/20/2000	1500	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103/SW8270CSIM		30DAYS			Undefined
AM-A506609	10/20/2000	1500	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA Metals		30DAYS			Undefined
AM-A506609	10/20/2000	1500	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B/AK101		30DAYS			Undefined
AM-A506610	10/20/2000	1520	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103/SW8270CSIM		30DAYS			Undefined
AM-A506610	10/20/2000	1520	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA Metals		30DAYS			Undefined
AM-A506610	10/20/2000	1520	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B/AK101		30DAYS			Undefined
AM-A506611	10/20/2000	1449	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B/AK101		30DAYS			Undefined
AM-A506612	10/20/2000	1400	KAM/ED	2	AMBER	1L	4C	WW	SW8270CSIM		48HRS			Undefined
AM-A506612	10/20/2000	1400	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WW	AK102		48HRS			Undefined
AM-A506612	10/20/2000	1400	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WW	BTEX(SW8260B)		48HRS			Undefined

Comments: surrogated methanol used

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Relinquish By: Kathy McLean Date/Time

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5066 **Cooler ID:** _Crab **Admin Number:** 0

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** J

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Content: Caution
AM-A506613	10/20/2000	1400	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WW	BTEX(SW8260B)		30DAYS	

Comments: surrogated methanol used

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Relinquished By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5066 **Cooler ID:** _ Cra-b **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A506601	10/20/2000	1200	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/Lead(SW6010B)		48HRS			Undefed
AM-A506602	10/20/2000	1245	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/Lead(SW6010B)		48HRS			Undefed
AM-A506603	10/20/2000	1345	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/Lead(SW6010B)		48HRS			Undefed
AM-A506604	10/20/2000	1535	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/Lead(SW6010B)		48HRS			Undefed
AM-A506605	10/20/2000	1640	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/Lead(SW6010B)		48HRS			Undefed
AM-A506606	10/21/2000		KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/Lead(SW8082)		48HRS			Undefed
AM-A506607	10/20/2000	1449	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103/SW8270CSIM		30DAYS			Undefed
AM-A506607	10/20/2000	1449	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA Metals		30DAYS			Undefed
AM-A506607	10/20/2000	1449	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B/AK101		30DAYS			Undefed
AM-A506608	10/20/2000	1500	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103/SW8270CSIM		30DAYS			Undefed
AM-A506608	10/20/2000	1500	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA Metals		30DAYS			Undefed

Comments: surrogated methanol used

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Relinquished By: Heather Pr[illegible]

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5067 **Cooler ID:** BLISS **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Comments Caution	Dispose or Return Samples	Level
AM-A506701	10/23/2000	1230	KAM/ED	2	AMBER	1L	4C	W	SW8270CSIM		48HOURS			Undefined
AM-A506701	10/23/2000	1230	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	W	AK102		48HOURS			Undefined
AM-A506701	10/23/2000	1230	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	W	SW8021B		48HOURS			Undefined
AM-A506702	10/23/2000	1230	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	W	SW8021B		30DAYS			Undefined
AM-A506703	10/23/2000	1400	KAM/ED	1	GSEPT	4OZ	4C	LH	SW8082/40CFR279.11		48HOURS			Undefined
AM-A506704	10/23/2000	1430	KAM/ED	1	GSEPT	4OZ	4C	LH	SW8082/40CFR279.11		48HOURS			Undefined
AM-A506705	10/23/2000	1515	KAM/ED	1	GSEPT	4OZ	4C	LH	SW8082/40CFR279.11		48HOURS			Undefined
AM-A506706	10/23/2000	1545	KAM/ED	1	AMBER	8OZ	4C	SL	SW8082		48HOURS			Undefined
AM-A506707	10/23/2000	1325	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/LEAD(SW6010)		48HOURS			Undefined
AM-A506708	10/23/2000	1415	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/LEAD(SW6010)		48HOURS			Undefined
AM-A506709	10/23/2000	1510	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/LEAD(SW6010)		48HOURS			Undefined

Comments: surrogated methanol used; FOR AM-A506719 ASSUME 25GRAMS ; 0% MOISTURE

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421 ; NOTE: AM-A506702 ALL 3 BOTTLES HAVE AIR BUBBLES

Relinquish By: Eric Dorn 10/25/00 1400

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5067 **Cooler ID:** BUSS **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Comments Condition	Dispose or Return Samples	Level
AM-A506710	10/23/2000	1620	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/LEAD(SW6010)		48HOURS			Undefined
AM-A506711	10/23/2000	1525	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103/SW8270 CSIM		30DAYS			Undefined
AM-A506711	10/23/2000	1525	KAM/ED	1	AMBER	8OZ	4C	SO	RCRA METALS/SW8082		30DAYS			Undefined
AM-A506711	10/23/2000	1525	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101/SW8260B	MS/D	30DAYS			Undefined
AM-A506712	10/23/2000	1525	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103		30DAYS			Undefined
AM-A506712	10/23/2000	1525	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101/SW8260B		30DAYS			Undefined
AM-A506713	10/23/2000	1625	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103/SW8270 CSIM		30DAYS			Undefined
AM-A506713	10/23/2000	1625	KAM/ED	1	AMBER	8OZ	4C	SO	RCRA METALS/SW8082		30DAYS			Undefined
AM-A506713	10/23/2000	1625	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101/SW8260B		30DAYS			Undefined
AM-A506714	10/23/2000	1625	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103		30DAYS			Undefined
AM-A506714	10/23/2000	1625	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined

Comments: surrogated methanol used; FOR AM-A506719 ASSUME 25GRAMS NO % MOISTURE

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Relinquish By: Eric Dersh 10/25/00 1000

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5067 **Cooler ID:** BUSS **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Condition	Dispose or Return Samples	Level
AM-A506715	10/23/2000	1635	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103/SW8270 CSIM		30DAYS			Undefined
AM-A506715	10/23/2000	1635	KAM/ED	1	AMBER	8OZ	4C	SO	RCRA METALS/SW8082		30DAYS			Undefined
AM-A506715	10/23/2000	1635	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101/SW8260B		30DAYS			Undefined
AM-A506716	10/23/2000	1645	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103/SW8270 CSIM		30DAYS			Undefined
AM-A506716	10/23/2000	1645	KAM/ED	1	AMBER	8OZ	4C	SO	RCRA METALS/SW8082		30DAYS			Undefined
AM-A506716	10/23/2000	1645	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101/SW8260B		30DAYS			Undefined
AM-A506717	10/23/2000	1645	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103	MS/D	30DAYS			Undefined
AM-A506717	10/23/2000	1645	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A506718	10/23/2000	1655	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103/SW8270 CSIM		30DAYS			Undefined
AM-A506718	10/23/2000	1655	KAM/ED	1	AMBER	8OZ	4C	SO	RCRA METALS/SW8082		30DAYS			Undefined
AM-A506718	10/23/2000	1655	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101/SW8260B		30DAYS			Undefined

Comments: surrogated methanol used; FOR AM-A506719 ASSUME 25GRAMS AND 0% MOISTURE

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Relinquish By: Eric Dehler 10/25/00 1000

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5067 **Cooler ID:** BUSS **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Comments Condition	Dispose or Return Samples	Level
AM-A506719	10/23/2000	1525	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101/SW8260B		30DAYS			Undefined

Comments: surrogated methanol used; FOR AM-A506719 ASSUME 25GRAMS %D&M MOISTURE

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Relinquish By: [illegible] 10/25/00 1050

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5068 **Cooler ID:** AHAB **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** LTL **Bill To:** USAED **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A506801	10/23/2000	1525	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undefined
AM-A506801	10/23/2000	1525	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101/SW8260B		30DAYS			Undefined
AM-A506802	10/23/2000	1625	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103		30DAYS			Undefined
AM-A506802	10/23/2000	1625	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A506803	10/23/2000	1525	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101/SW8260B		30DAYS			Undefined
AM-A506804	10/23/2000	1645	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103		30DAYS			Undefined

Comments: surrogated methanol used; FOR AM-A506803, ASSUME 25 GRAMS 30% MOISTURE

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Relinquished By: Eric Denge Johnston 1000

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5074 **Cooler ID:** LEROY **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Comments	Dispose or Return Samples	Level
AM-A507401	10/25/2000	1420	KAM/ED	2	AMBER	8OZ	4C	SO	AK102/103,SW8082	MS/D	30DAYS			Undefined
AM-A507402	10/25/2000	1425	KAM/ED	1	AMBER	8OZ	4C	SO	Metals		30DAYS			Undefined
AM-A507403	10/25/2000	1500	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8082		30DAYS			Undefined
AM-A507403	10/25/2000	1500	KAM/ED	1	AMBER	8OZ	4C	SO	Metals+Zn/SW8270CSIM		30DAYS			Undefined
AM-A507403	10/25/2000	1500	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A507403	10/25/2000	1500	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A507404	10/25/2000	1500	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A507405	10/25/2000	1500	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A507406	10/25/2000	1500	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8082,Zn		30DAYS			Undefined
AM-A507407	10/25/2000	1510	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8082		30DAYS			Undefined
AM-A507407	10/25/2000	1510	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined

Comments: AM-A507407 MS/MSD on PAH only, FOR AM-A507404 AND AM-A507405, ASSUME 25g AND 0% MOISTURE

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Relinquish By: ERIC DETMER 10/29/00 1230

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5074 **Cooler ID:** LEROY **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A507407	10/25/2000	1510	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A507407	10/25/2000	1510	KAM/ED	2	AMBER	8OZ	4C	SO	Metals+Zn/SW8270CSIM	MS/D	30DAYS			Undefined
AM-A507408	10/25/2000	1515	KAM/ED	1	AMBER	8OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507409	10/25/2000	1520	KAM/ED	1	AMBER	8OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507410	10/25/2000	1550	KAM/ED	1	AMBER	8OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507411	10/25/2000	1555	KAM/ED	1	AMBER	8OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507412	10/25/2000	1612	KAM/ED	1	AMBER	8OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507413	10/25/2000	1612	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507414	10/25/2000	1620	KAM/ED	1	AMBER	8OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507415	10/25/2000	1625	KAM/ED	1	AMBER	8OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507416	10/25/2000	1635	KAM/ED	1	AMBER	8OZ	4C	SO	415.2M		30DAYS			Undefined

Comments: AM-A507407 MS/MSD on PAH only

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Relinquish By: [signature] 10/29/00 1230

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5075 **Cooler ID:** N.E.S. **Admin Number:** 00-054

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** LTL **Bill To:** NULL **Report To:** NULL

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Comments Caution	Dispose or Return Samples	Level
AM-A507501	10/25/2000	1500	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8082,Zn		30DAYS			Undefined
AM-A507502	10/25/2000	1612	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507503	10/26/2000	1100	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507504	10/26/2000	1445	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8082		30DAYS			Undefined
AM-A507505	10/26/2000	1355	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: Kenneth McBane 10/27/00 1000

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5076 **Cooler ID:** LEROY **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Comments Caution	Dispose or Return Samples	Level
AM-A507601	10/26/2000	1100	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507602	10/26/2000	1100	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507603	10/26/2000	1130	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM	MS/D	30DAYS			Undefined
AM-A507603	10/26/2000	1130	KAM/ED	1	AMBER	8OZ	4C	SO	Lead		30DAYS			Undefined
AM-A507603	10/26/2000	1130	KAM/ED	2	GSEPT	4OZ	4C_METHANOL	SO	AK101/SW8260B	MS/D	30DAYS			Undefined
AM-A507604	10/26/2000	1445	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM		30DAYS			Undefined
AM-A507604	10/26/2000	1445	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A507605	10/26/2000	1445	KAM/ED	2	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM	MS/D	30DAYS			Undefined
AM-A507606	10/26/2000	1515	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A507606	10/26/2000	1515	KAM/ED	2	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM		30DAYS			Undefined
AM-A507607	10/26/2000	1345	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined

Comments: AM-A507603 MS/MSD on PAH only

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Relinquish By: Eric DeWitt 10/29/00 1230

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5076 **Cooler ID:** LEROY **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Condition	Dispose or Return Samples	Level
AM-A507608	10/26/2000	1355	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507609	10/26/2000	1355	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined

Comments: AM-A507603 MS/MSD on PAH only

Special Instructions: RCRA metals to include SW6010B/7060A/7131A/7191/7421

Relinquish By: Eric Dewr 10/29/00 1236

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5077 **Cooler ID:** BUBBLES **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A507701	10/27/2000	1210	KAM/ED	2	AMBER	1L	4C	WS	SW8270CSIM		30DAYS			Undefined
AM-A507701	10/27/2000	1210	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WS	AK102/103		30DAYS			Undefined
AM-A507701	10/27/2000	1210	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WS	SW8260B		30DAYS			Undefined
~~AM-A507702~~	~~10/27/2000~~	~~1210~~	~~KAM/ED~~	~~3~~	~~VOA~~	~~40ML~~	~~4C_HCL_PH<2~~	~~W~~	~~SW8260B~~		~~30DAYS~~	@ 10/29/00		~~Undefined~~
AM-A507703	10/27/2000	1220	KAM/ED	1	AMBER	8OZ	4C	SE	AK102/103,SW8270CSIM		30DAYS			Undefined
AM-A507704	10/27/2000	1250	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507705	10/27/2000	1253	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A507706	10/27/2000	1255	KAM/ED	1	AMBER	8OZ	4C	S0	AK102/103,SW8270CSIM		30DAYS			Undefined
AM-A507706	10/27/2000	1255	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	S0	SW8260B		30DAYS			Undefined
AM-A507707	10/27/2000	1315	KAM/ED	1	AMBER	8OZ	4C	S0	AK102/103,SW8270CSIM		30DAYS			Undefined
AM-A507707	10/27/2000	1315	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	S0	SW8260B		30DAYS			Undefined
AM-A507703	10/27/2000	1220	KAM/ED	1	GSEPT	4oz	4°C, METH	SE	SW8260B		30 DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: ERIC DETAR 10/29/00 1230

Received By: / /

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5078 **Cooler ID:** BLIGH **Admin Num** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Co ents Ca tion	Dispose or Return Samples	Level
AM-A507801	10/28/2000	1050	KAM/ED	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undefined
AM-A507801	10/28/2000	1050	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WG	AK102		30DAYS			Undefined
AM-A507802	10/28/2000	1200	KAM/ED	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undefined
AM-A507802	10/28/2000	1200	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WG	AK102		30DAYS			Undefined
AM-A507802	10/28/2000	1200	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WG	BTEX(SW8260B)		30DAYS			Undefined
AM-A507803	10/28/2000	1200	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WG	BTEX(SW8260B)		30DAYS			Undefined

Comments: AM-A507803: ALL 3 BOTTLES HAVE AIR BUBBLES

Special Instructions:

Relinquish By: ERIC DETMER 10/29/00 1230

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5079 **Cooler ID:** BUBBLES **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A507901	10/28/2000	1220	KAM/ED	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undefined
AM-A507901	10/28/2000	1220	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WG	AK102		30DAYS			Undefined
AM-A507901	10/28/2000	1220	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WG	BTEX(SW8260B)		30DAYS			Undefined
AM-A507902	10/28/2000	1220	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WG	~~BTEX~~(SW8260B)		30DAYS			Undefined
AM-A507903	10/28/2000	1225	KAM/ED	1	AMBER	8OZ	4C	SE	AK102/SW8270CSIM		30DAYS			Undefined
AM-A507903	10/28/2000	1225	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SE	BTEX(SW8260B)		30DAYS			Undefined
AM-A507904	10/28/2000	1225	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SE	BTEX(SW8260B)		30DAYS			Undefined

10/28/00 KAM

Comments: AM-A507902 : ALL 3 BOTTLES HAVE BUBBLES. ALSO, RUN FULL SW8260B (VOCs) on AM-A507902.

Special Instructions:

Relinquish By: Eric Dotzl 10/29/00 1230

Received By: / /

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5080 **Cooler ID:** BAMBI **Admin Num:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Comments Caution	Dispose or Return Samples	Level
AM-A508001	10/28/2000	1445	KAM/ED	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undefined
AM-A508001	10/28/2000	1445	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WG	AK102		30DAYS			Undefined
AM-A508001	10/28/2000	1445	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WG	BTEX(SW8260B)		30DAYS			Undefined
AM-A508002	10/28/2000	1445	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WG	BTEX(SW8260B)		30DAYS			Undefined
AM-A508003	10/28/2000	1610	KAM/ED	2	AMBER	1L	4C	WG	SW8270CSIM		30DAYS			Undefined
AM-A508003	10/28/2000	1610	KAM/ED	2	AMBER	1L	4C_HCL_PH<2	WG	AK102		30DAYS			Undefined
AM-A508003	10/28/2000	1610	KAM/ED	3	VOA	40ML	4C_HCL_PH<2	WG	BTEX(SW8260B)		30DAYS			Undefined

Comments: AM-A508002: ALL 3 BOTTLES HAVE AIR BUBBLES

Special Instructions: AM-A508003 use 1 of 2 if possible for AK102

Relinquish By: Eric Dehnel 10/30/00 1230

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5081 **Cooler ID:** _ **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A508101	10/30/2000	1305	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508101	10/30/2000	1305	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103/SW8270 CSIM		30DAYS			Undefined
AM-A508101	10/30/2000	1305	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA METALS		30DAYS			Undefined
AM-A508101	10/30/2000	1305	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508102	10/30/2000	1305	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B / AK101		30DAYS			Undefined
AM-A508103	10/30/2000	1305	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103/SW8270 CSIM		30DAYS			Undefined
AM-A508103	10/30/2000	1305	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA METALS		30DAYS			Undefined
AM-A508103	10/30/2000	1305	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508104	10/30/2000	1315	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508104	10/30/2000	1315	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103		30DAYS			Undefined
AM-A508104	10/30/2000	1315	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA METALS		30DAYS			Undefined

Comments: RCRA METALS TO INCLUDE SW6010B/7060A/7131A/7191/7421

Special Instructions: FOR AM-A508102, ASSUME 25 GRAMS AND 0% MOISTURE

Relinquish By: Heather McGoone 11/2/00 1000

Received By: / /

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5081 **Cooler ID:** _ **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A508104	10/30/2000	1315	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508105	10/30/2000	1520	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508105	10/30/2000	1520	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103/SW8270 CSIM		30DAYS			Undefined
AM-A508105	10/30/2000	1520	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA METALS		30DAYS			Undefined
AM-A508105	10/30/2000	1520	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508106	10/30/2000	1520	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508107	10/30/2000	1530	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508107	10/30/2000	1530	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103		30DAYS			Undefined
AM-A508107	10/30/2000	1530	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA METALS		30DAYS			Undefined
AM-A508107	10/30/2000	1530	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined

Comments: RCRA METALS TO INCLUDE SW6010B/7060A/7131A/7191/7421

Special Instructions: FOR AM-A508102, ASSUME 25 GRAMS AND 0% MOISTURE

Relinquish By: Keathi McJoone 11/2/00 1000

Received By: / /

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5082 **Cooler ID:** _ NES. **Admin Number:** 00-033

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** LTL **Bill To:** USAED **Report To:** USAED

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Comments	Dispose or Return Samples	Level
AM-A508201	10/30/2000	1305	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103/SW8270 CSIM		30DAYS			Undefined
AM-A508201	10/30/2000	1305	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA METALS		30DAYS			Undefined
AM-A508201	10/30/2000	1305	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508202	10/30/2000	1520	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508203	10/30/2000	1305	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined

Comments: RCRA Metals to include SW6010B, 7060A, 7131A, 7191, AND 7421

Special Instructions: FOR AM-A508203, ASSUME 25 GRAMS AND 0% MOISTURE

Relinquish By: Heather McLoone 10/31/00 1000

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5083 **Cooler ID:** _ **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A508301	10/31/2000	1400	KAM	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508302	10/31/2000	1415	KAM	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508303	10/31/2000	1505	KAM	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508304	10/31/2000	1515	KAM	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508305	11/01/2000	0900	KAM	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM,*		30DAYS			Undefined
AM-A508305	11/01/2000	0900	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508306	11/01/2000	0915	KAM	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM,*		30DAYS			Undefined
AM-A508306	11/01/2000	0915	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508307	11/01/2000	0940	KAM	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM,*		30DAYS			Undefined
AM-A508307	11/01/2000	0940	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508308	11/01/2000	0950	KAM	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM,*		30DAYS			Undefined

Comments:

Special Instructions: *=RCRA Metals to include SW6010B/7060A/7131A/7191/7421

Relinquish By: Heather McGoore 1000 11/2/00

Received By: //

11h 00

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5083 **Cooler ID:** _ **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A508308	11/01/2000	0950	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508309	11/01/2000	1200	KAM	1	AMBER	4OZ	4C	SO	AK102/103,SW8270CSIM,*		30DAYS			Undefined
AM-A508309	11/01/2000	1200	KAM	1	AMBER	4OZ	4C	SO	SW8082		30DAYS			Undefined
AM-A508309	11/01/2000	1200	KAM	1	GSEPT	4OZ	4C_METHANOL	SL	SW8260B		30DAYS			Undefined
AM-A508309	11/01/2000	1330	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A508310	11/01/2000	1330	KAM	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM,*		30DAYS			Undefined
AM-A508310	11/01/2000	1330	KAM	1	AMBER	8OZ	4C	SO	SW8082		30DAYS			Undefined
AM-A508310	11/01/2000	1330	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A508310	11/01/2000	1330	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508311	11/02/2000	0930	KAM	1	AMBER	8OZ	4C	S~~O~~ KAM	~~SW8082~~ KAM SW6010B/9040B		30DAYS			Undefined
AM-A508312	11/2/00	0945	KAM	1	AMBER	8OZ	4C	S	SW6010B/9040B		30 Days			

Comments:

Special Instructions: *=RCRA Metals to include SW6010B/7060A/7131A/7191/7421

Relinquish By: Heather McJoone 1000 11/2/00

Received By: / /

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5081 **Cooler ID:** _ **Admin Nu**

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To**

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	C	pose or Return amples	Level
AM-A508101	10/30/2000	1305	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508101	10/30/2000	1305	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103/SW8270 CSIM		30DAYS			Undefined
AM-A508101	10/30/2000	1305	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA METALS		30DAYS			Undefined
AM-A508101	10/30/2000	1305	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508102	10/30/2000	1305	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B / AK101		30DAYS			Undefined
AM-A508103	10/30/2000	1305	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103/SW8270 CSIM		30DAYS			Undefined
AM-A508103	10/30/2000	1305	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA METALS		30DAYS			Undefined
AM-A508103	10/30/2000	1305	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508104	10/30/2000	1315	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508104	10/30/2000	1315	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103		30DAYS			Undefined
AM-A508104	10/30/2000	1315	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA METALS		30DAYS			Undefined

Comments: RCRA METALS TO INCLUDE SW6010B/7060A/7131A/7191/7421

Special Instructions: FOR AM-A508102, ASSUME 25 GRAMS AND 0% MOISTURE Re-Packed and new ice o[illegible]20

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5081 **Cooler ID:** _ **Admin N** **Group:** 53

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report T** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Dispose or Return Samples	Level
AM-A508104	10/30/2000	1315	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS		Undefined
AM-A508105	10/30/2000	1520	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS		Undefined
AM-A508105	10/30/2000	1520	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103/SW8270 CSM		30DAYS		Undefined
AM-A508105	10/30/2000	1520	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA METALS		30DAYS		Undefined
AM-A508105	10/30/2000	1520	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS		Undefined
AM-A508106	10/30/2000	1520	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS		Undefined
AM-A508107	10/30/2000	1530	KAM/ED	1	AMBER	4OZ	4C	SO	415.2M		30DAYS		Undefined
AM-A508107	10/30/2000	1530	KAM/ED	1	AMBER	8OZ	4C	SO	AK102/AK103		30DAYS		Undefined
AM-A508107	10/30/2000	1530	KAM/ED	1	AMBER	8OZ	4C	SO	SW8082/RCRA METALS		30DAYS		Undefined
AM-A508107	10/30/2000	1530	KAM/ED	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS		Undefined

Comments: RCRA METALS TO INCLUDE SW6010B/7060A/7131A/7191/7421

Special Instructions: FOR AM-A508102, ASSUME 25 GRAMS AND 0% MOISTURE Re-Relinq and new fee on 11/6

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5083 **Cooler ID:** STUCK **Admin N[illegible]ber:** [illegible]053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report T[illegible]** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	[illegible]tent[illegible]ution	Dispose or Return Samples	Level
AM-A508301	10/31/2000	1400	KAM	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508302	10/31/2000	1415	KAM	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508303	10/31/2000	1505	KAM	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508304	10/31/2000	1515	KAM	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A508305	11/01/2000	0900	KAM	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM,*		30DAYS			Undefined
AM-A508305	11/01/2000	0900	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508306	11/01/2000	0915	KAM	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM,*		30DAYS			Undefined
AM-A508306	11/01/2000	0915	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508307	11/01/2000	0940	KAM	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM,*		30DAYS			Undefined
AM-A508307	11/01/2000	0940	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508308	11/01/2000	0950	KAM	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM,*		30DAYS			Undefined

Comments:

Special Instructions: *=RCRA Metals to include SW6010B/7060A/7131A/7191/7421 Re packed and new ice on [illegible]

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5083 **Cooler ID:** _ **Admin Number:** 05053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Content Caution	Dispose or Return Samples	Level
AM-A508308	11/01/2000	0950	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508309	11/01/2000	1200	KAM	1	AMBER	4OZ	4C	SO	AK102/103,SW8270CSIM,*		30DAYS			Undefined
AM-A508309	11/01/2000	1200	KAM	1	AMBER	4OZ	4C	SO	SW8082		30DAYS			Undefined
AM-A508309	11/01/2000	1200	KAM	1	GSEPT	4OZ	4C_METHANOL	SL	SW8260B		30DAYS			Undefined
AM-A508309	11/01/2000	1330	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A508310	11/01/2000	1330	KAM	1	AMBER	8OZ	4C	SO	AK102/103,SW8270CSIM,*		30DAYS			Undefined
AM-A508310	11/01/2000	1330	KAM	1	AMBER	8OZ	4C	SO	SW8082		30DAYS			Undefined
AM-A508310	11/01/2000	1330	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	AK101		30DAYS			Undefined
AM-A508310	11/01/2000	1330	KAM	1	GSEPT	4OZ	4C_METHANOL	SO	SW8260B		30DAYS			Undefined
AM-A508311	11/02/2000	0930	KAM	1	AMBER	8OZ	4C	SO	~~SW8082~~ KAM SO 6010B/7060A		30DAYS			Undefined
AM-A508312	11/2/00	0945	KAM	1	AMBER	8OZ	4C	S	SW6010B/7060A		30 Days			

Changed to 48 hours

Changed to 48hours

Comments:

Special Instructions: *=RCRA Metals to include SW6010B/7060A/7131A/7191/7421

Re-Packed and new ice on 11/6/00

Relinquished By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5092 **Cooler ID:** 1107A **Admin N[illegible]er:** [illegible]53

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report T[illegible]:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	[illegible]	Dispose or Return Samples	Level
AM-A509201	11/06/2000	1628	JR	2	AMBER	1L	4C_HCL_PH<2	WS	AK102		30DAYS			Undefined
AM-A509202	11/06/2000	1630	JR	2	AMBER	1L	4C	WS	SW8270CSIM		30DAYS			Undefined
AM-A509203	11/06/2000	1625	JR	3	VOA	40ML	4C_HCL_PH<2	WS	SW8021B		30DAYS			Undefined

Comments:

Special Instructions:

[illegible] Pergrib 11/10 11:50

PAGE 2/2 JACOBS ENGINEERING ALASKA 12/13/2006 12:21 9072770711

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5093 **Cooler ID:** 1107A **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A509303	11/06/2000	1637	JR	1	GSEPT	4OZ	4C_MEOH	SE	SW8021B		30DAYS			Undefined
AM-A509301	11/6/00	1635	JR	1	AMBER	8oz	4C	SE	AK102/SW8270C SIM		30DAYS			
AM-A509302	11/6/00	1633		1	GSEPT	4oz	4C-MeOH	SE	SW8021B		30DAYS			

Comments:

Special Instructions:

Relinquished By

JACOBS IN UNALASKA 9075815797 11/07/2000 13:27

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5094 **Cooler ID:** 1107A **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A509401	11/06/2000	1800	JR	1	AMBER	8OZ	4C	LH	40CFR279.11		30DAYS			Undefined

q
TAT
Changed
to 48 hours

Comments:

Special Instructions:

[redacted]

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5095 **Cooler ID:** 1107A **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A509501	11/06/2000	1705	JR	1	AMBER	8OZ	4C	SL	SW8082/TCLP MET		30DAYS			Undefined
AM-A509502	11/06/2000	1705	JR	1	AMBER	4OZ	4C	SL	SW8260B		30DAYS			Undefined
AM-A509503	11/06/2000	1815	JR	1	AMBER	8OZ	4C	SL	SW8082/TCLP MET		30DAYS			Undefined
AM-A509504	11/06/2000	1815	JR	1	AMBER	4OZ	4C	SL	SW8260B		30DAYS			Undefined

TAT changed to 30days + Lab 48hrs

Comments: TCLP MET = SW6010B except HG (SW 7470A)

Special Instructions:

Relinquish By:

Chain-of-Custody Report

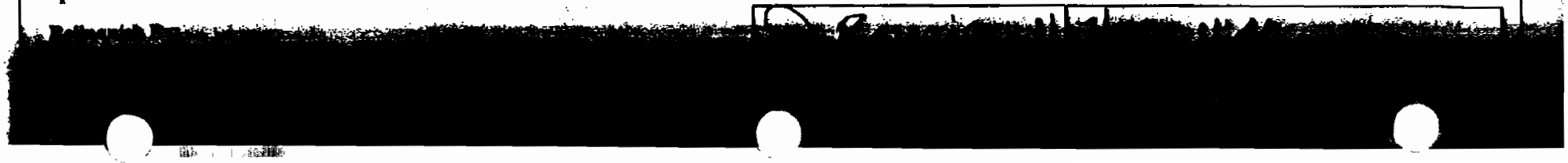
Collection Organization: JEGA **Chain-of-Custody:** AM-A5096 **Cooler ID:** 1107A **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A509601	11/06/2000	1215	JR	1	AMBER	8OZ	4C	SO	SW8082		30DAYS			Undefined
AM-A509602	11/06/2000	1225	JR	1	AMBER	8OZ	4C	SO	SW8082		30DAYS			Undefined
AM-A509603	11/06/2000	1300	JR	1	AMBER	8OZ	4C	SO	SW8082		30DAYS			Undefined

Comments:

Special Instructions:



Chain-of-Custody Report

Collection Organization: JEGA | **Chain-of-Custody:** AM-A5101 | **Cooler ID:** 1109A | **Admin Number:** 00-053

Project Number: ANIAKNAK ISLAND WELL | **Laboratory:** ~~DCHM~~ FHM STL | **Bill To:** JEGA | **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A510101	11/09/2000	~~1600~~ 1500 (12)	JR	2	AMBER	1L	4C_HCL	GW	AK102		30DAYS			Undefined
AM-A510102	11/09/2000	~~1600~~ 1500 (12)	JR	2	AMBER	1L	4C	GW	SW8270C SIM		30DAYS			Undefined

UST 2664-WP1

Comments:

Special Instructions:

Relinquish By: Jeannette Ronning 11/14/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEG | **Chain-of-Custody:** AM-A5104 | **Cooler ID:** ~~1109A~~ 2115 | **Admin Number:** 00-053

Project Number: AM-[illegible]NAK ISLAND | **Laboratory:** DCHM | **Bill To:** JEGA | **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A510401	11/08/00	1630	JR	1	AMBER	4OZ	4C	LH	SW8082		~~30DAYS~~ 45 DAYS			Undefined

Comments: See Fax For Airbill #

Special Instructions:

Relinquish By: [signature] 11/14/00 1030

Received By:

Chain-of-Custody Report

Collection Organization: [illegible] **Chain-of-Custody:** AM-A5105 **Cooler ID:** [illegible] **Admin Number:** 00-053

Project Number: [illegible] NAK ISLAND **Laboratory:** DSHM ~~[illegible]~~ DSHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A510502	[illegible]	1405	JR	1	AMBER	4OZ	4C	SL	SW8260B		48HRS			Undefined

Comments: [illegible] For Airbill #

Special Instructions:

Relinquish By: Kenneth Romig 11/14/00 1030

Received By:

Chain-of-Custody Report

Collection Organization: JEGA
Project Number: AKNAK ISLAND DE
Chain-of-Custody: AM-A5106
Laboratory: ~~DCHM~~ KUKUI CTS
Cooler ID: 1109A
Bill To: JEGA
Admin Number: 00-053
Report To: JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A510601	11/[illegible]/2000	1525	JR	1	AMBER	8OZ	4C	SO	AK102/103, SW8270C SI		30DAYS			Undefined
AM-A510604	11/[illegible]/2000	1504	JR	1	AMBER	8OZ	4C	SO	AK102/103, SW8270C SI		30DAYS			Undefined
AM-A510607	11/[illegible]/2000	1438	JR	1	AMBER	8OZ	4C	SO	AK102/103, SW8270C SI		30DAYS			Undefined
AM-A510610	11/[illegible]/2000	1448	JR	1	AMBER	8OZ	4C	SO	AK102/103, SW8270C SI		30DAYS			Undefined
AM-A510612	11/[illegible]/2000	1458	JR	1	AMBER	8OZ	4C	SO	AK102/103, SW8270C SI		30DAYS			Undefined
AM-A510614	11/[illegible]/2000	1508	JR	1	AMBER	8OZ	4C	SO	AK102/103, SW8270C SI		30DAYS			Undefined
AM-A510616	11/[illegible]/2000	1150	JR	1	AMBER	8OZ	4C	SO	AK102/103, SW8270C SI		30DAYS			Undefined
AM-A510618	11/[illegible]/2000	1210	JR	1	AMBER	8OZ	4C	SO	AK102/103, SW8270C SI		30DAYS			Undefined
AM-A510621	11/[illegible]/2000	1040	JR	1	AMBER	8OZ	4C	SO	AK102/103, SW8270C SI		30DAYS			Undefined
AM-A510623	11/[illegible]/2000	1047	JR	1	AMBER	8OZ	4C	SO	AK102/103, SW8270C SI		30DAYS			Undefined

Comments:
Special Instructions:
Relinquish By: Jeannette Romig 11/14/00 0900
Received By:

11/13/2000

Chain-of-Custody Report

Collection Organization: [illegible] **Chain-of-Custody:** AM-A5106 **Cooler ID:** 3415 (32) **Admin Number:** 00-053

Project Number: [illegible]GNAK ISLAND **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A510602	[illegible]	1525	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		30DAYS			Undefined
AM-A510603	[illegible]	1525	JR	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A510605	[illegible]	1504	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		48HRS			Undefined
AM-A510606	[illegible]	1525	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		30DAYS			Undefined
AM-A510608	[illegible]	1438	JR	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A510609	[illegible]	1438	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		30DAYS			Undefined
AM-A510611	[illegible]	1448	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		30DAYS			Undefined
AM-A510613	[illegible]	1458	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		30DAYS			Undefined
AM-A510615	[illegible]	1508	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		48HRS			Undefined
AM-A510617	[illegible]	1150	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		48HRS			Undefined
AM-A510619	[illegible]	1210	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		30DAYS			Undefined

Comments: [illegible] will it on Pax

Special Instructions:

Relinquish By: Jeannette Konnig 11/14/00 1030

Received By:

11/16/2000 13:45 5072010753

Chain-of-Custody Report

Collection Organiz[illegible] | Chain-of-Custody: AM-A5106 | Cooler ID: ~~H09B~~ SOILS | Admin Number: 00-053

Project Number: [illegible]AK ISLAND | Laboratory: DCHM | Bill To: JEGA | Report To: JEGA

COC Sample ID	[illegible]ction Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A510620	1210	JR	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A510622	1040	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		48HRS			Undefined
AM-A510624	1047	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		30DAYS			Undefined
AM-A510625	1047	JR	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined

Comments: See [illegible] for Airbill #

Special Instructions:

Relinquish By: Jeannette Konig 11/14/00 1030

Received By:

11/[illegible]2000

Chain-of-Custody Report

Collection Organization: [redacted] **Chain-of-Custody:** AM-A5106 **Cooler ID:** LAUCHS **Admin Number:** 00-053

Project Number: [redacted]KNAK ISLAND **Laboratory:** LTL **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A510626	[redacted]/2000	1458	JR	1	AMBER	8OZ	4C	SO	AK102/103, SW8270CSIM		30DAYS			Undefined
AM-A510627	[redacted]/2000	1458	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		30DAYS			Undefined
AM-A510628	[redacted]/2000	1458	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		30DAYS			Undefined

Comments: No 4oz GSEPT available for AM-A510628, used Datachem lab pre-tared bottle

Special Instructions: Lead.

Relinquish By: Jeannette Ronig 11/14/00 0945

Received By:

Chain-of-Custody Report

Collection Organization: [illegible]
Chain-of-Custody: AM-A5107
Cooler ID: 1109A
Admin Number: 00-053
Project Number: [illegible]KNAK ISLAND
Laboratory: DCHM (Gilfilen Knox)
Bill To: JEGA
Report To: JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A510701	[illegible]000	1635	JR	2	AMBER	IL	4C	W	SW8082		30DAYS			Undefined

MH 310

Comments:
Special Instructions:
Relinquish By: [illegible]nette Ronig 11/14/00 0900
Received By:

[illegible]/2000

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5116 **Cooler ID:** ~~1100~~ 3 coolers **Admin Number:** 00-053

Project Number: [illegible]AKNAK ISLAND **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A511601	[illegible]000	1440	JR	1	GSEPT	4OZ	4C_MEOH	SO	SW8260B		30DAYS			Undefined
AM-A511602	[illegible]000	1440	JR	1	GSEPT	4OZ	4C_MEOH	SO	AK101, SW8021B		30DAYS			Undefined
AM-A511603	[illegible]000	1440	JR	1	AMBER	8OZ	4C	SO	AK102, AK103, SW8270C SIM		30DAYS			Undefined
AM-A511604	[illegible]000	1440	JR	1	AMBER	8OZ	4C	SO	RCRA METALS		30DAYS			Undefined

Comments: RCRA METALS = SW6010B, SW7060A, SW7131A, SW7191, SW7421 (Pb) (waste characterization samples)

Special Instructions: Use Fax For Airbill #

Relinquish By: Jeannette Ronig 11/14/00 1030

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5117 **Cooler ID:** 1109B **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND [illegible] **Laboratory:** ~~DCHM~~ KPFM CTEC **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A511701	[illegible]/2000	1430	JR	3	VOA	40ML	4C_HCL	W	SW8260B		48HRS ~~30DAYS~~			Undefined
AM-A511702	[illegible]/2000	1430	JR	3	VOA	40ML	4C_HCL	W	AK101, SW8021B		48HRS ~~30DAYS~~			Undefined
AM-A511703	[illegible]/2000	1430	JR	2	AMBER	1L	4C_HCL	W	AK102, AK103		48HRS ~~30DAYS~~			Undefined
AM-A511704	[illegible]/2000	1430	JR	2	AMBER	1L	4C	W	SW8270C SIM		48HRS ~~30DAYS~~			Undefined
AM-A511705	[illegible]/2000	1430	JR	2	AMBER	1L	4C	W	SW8082		48HRS ~~30DAYS~~			Undefined
AM-A511706	[illegible]/2000	1430	JR	1	POLY	500ML	4C_HNO3	W	RCRA METALS		48HRS ~~30DAYS~~			Undefined

JR

PDL2 - Drum 2

Comments: RCRA METALS = SW6010B, SW7060A, SW7131A, SW7191,

Special Instructions:

Relinquish By: Jeannette Ronig 11/14/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5121 **Cooler ID:** 1110A **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND **Laboratory:** ~~DCHM~~ WAM CTR **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AMA-A512101	11/1/2000	1135	JR	3	VOA	40ML	4C_HCL	WG	SW8260B		30DAYS			Undefined
AMA-A512102	11/1/2000	1135	JR	2	AMBER	1L	4C_HCL	WG	AK102, AK103		30DAYS			Undefined
AMA-A512103	11/1/2000	1135	JR	2	AMBER	1L	4C	WG	SW8270C SIM		30DAYS			Undefined
AMA-A512104	11/1/2000	1135	JR	2	AMBER	1L	4C	WG	SW8082		30DAYS			Undefined
AMA-A512105	11/1/2000	1135	JR	1	POLY	500ML	4C_HNO3	WG	RCRA METALS		30DAYS			Undefined
AMA-A512106	11/1/2000	1135	JR	3	VOA	40ML	4C_HCL	WG	SW8260B		30DAYS			Undefined
AMA-A512107	11/1/2000	1525	JR	3	VOA	40ML	4C_HCL	WG	SW8260B		30DAYS			Undefined
AMA-A512108	11/1/2000	1525	JR	2	AMBER	1L	4C_HCL	WG	AK102, AK103		30DAYS			Undefined
AMA-A512109	11/1/2000	1525	JR	2	AMBER	1L	4C	WG	SW8270C SIM		30DAYS			Undefined
AMA-A512110	11/1/2000	1525	JR	2	AMBER	1L	4C	WG	SW8082		30DAYS			Undefined
AMA-A512111	11/1/2000	1525	JR	1	POLY	500ML	4C_HNO3	WG	RCRA METALS		30DAYS			Undefined

Comments: RCRA METALS = SW6010B, 7060A, 7131A, 7191, 7421

Special Instructions: Bubbles in 512106 VOAs (JR)

Relinquish By: Kenneth Romine 0900 11/14/00

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5121 **Cooler ID:** 1110A **Admin Number:** 00-053

Project Number: [redacted] AKNAK ISLAND **Laboratory:** ~~DCHM~~ FHM CTEC **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AMA-A512112	11/1[redacted]/2000	1715	JR	3	VOA	40ML	4C_HCL	WG	SW8260B		30DAYS			Undefined
AMA-A512113	11/1[redacted]/2000	1835	JR	3	VOA	40ML	4C_HCL	WG	SW8260B		30DAYS			Undefined

FMLN-MW1 (101 - 105)
106 = TB
MW5 (107 - 111)
MW 3 VOAS (112)
MW 4 VOAS (113)

Comments: JEGA METALS = SW6010B, 7060A, 7131A, 7191, 7421

Special Instructions:

Relinquish By: [redacted] 11/14/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA | **Chain-of-Custody:** AM-A5131 | **Cooler ID:** 1110B | **Admin Number:** 00-053

Project Number: AMCHITKA ISLAND WELLS | **Laboratory:** ~~DCHM~~ KAM JEE | **Bill To:** JEGA | **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A513101	11/10/2000	1715	JR	2	AMBER	1L	4C_HCL	GW	AK102, AK103		30DAYS			Undefined
AM-A513102	11/10/2000	1715	JR	2	AMBER	1L	4C	GW	SW8270C SIM		30DAYS			Undefined
AM-A513103	11/10/2000	1715	JR	2	AMBER	1L	4C	GW	SW8082		30DAYS			Undefined
AM-A513104	11/10/2000	1715	JR	1	POLY	500ML	4C_HNO3	GW	RCRA METALS		30DAYS			Undefined
AM-A513105	11/10/2000	1835	JR	2	AMBER	1L	4C_HCL	GW	AK102, AK103		30DAYS			Undefined
AM-A513106	11/10/2000	1835	JR	2	AMBER	1L	4C	GW	SW8270C SIM		30DAYS			Undefined
AM-A513107	11/10/2000	1835	JR	2	AMBER	1L	4C	GW	SW8082		30DAYS			Undefined
AM-A513108	11/10/2000	1835	JR	1	POLY	500ML	4C_HNO3	GW	RCRA METALS		30DAYS			Undefined

101 - 104 = FMLN-MW3
105 - 108 = NW4

Comments: RCRA METALS = SW6010B, 7060A, 7131A, 7191, 7421

Special Instructions:

Relinquish By: Kenneth Ronnig 0900 11/14/00

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5136 **Cooler ID:** 1110B **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** ~~DCHM~~ KAEN CTE **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A513601	11/12/2000	1035	JR	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined

FLMS-SED3

Comments:

Special Instructions:

Relinquish By: Jeannette Romig 11/14/00

Chain-of-Custody Report

Collection Organization: [redacted] **Chain-of-Custody:** AM-A5141 **Cooler ID:** UST2762A/B **Admin Number:** 00-053

Project Number: [redacted] AMCHITKA ISLAND **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A514101	[redacted]	1545	JR	3	VOA	40ML	4C_HCL	GW	AK101, SW8021B		30DAYS			Undefined
AM-A514102	[redacted]	1545	JR	2	AMBER	1L	4C_HCL	GW	AK102		30DAYS			Undefined
AM-A514103	[redacted]	1545	JR	2	AMBER	1L	4C	GW	SW8270C SIM		30DAYS			Undefined
AM-A514104	[redacted]	1705	JR	3	VOA	40ML	4C_HCL	GW	AK101, SW8021B		30DAYS			Undefined
AM-A514105	[redacted]	1705	JR	2	AMBER	1L	4C_HCL	GW	AK102		30DAYS			Undefined
AM-A514106	[redacted]	1705	JR	2	AMBER	1L	4C	GW	SW8270C SIM		30DAYS			Undefined
AM-A514107	[redacted]	1705	JR	3	VOA	40ML	4C_HCL	GW	AK101, SW8021B		30DAYS			Undefined

Comments: [redacted] HAVE BUBBLES (SR)

Special Instructions:

Relinquish By: [redacted] morning 11/14/00 0930

Received By: [redacted]

11/16/2000 13:43 9075815797 JACOBS ENGINEERING

Chain-of-Custody Report

Collection Organiz | **Chain-of-Custody:** AM-A5141 | **Cooler ID:** LAUCHS | **Admin Number:** 00-053

Project Number: NAK ISLAND | **Laboratory:** LTL | **Bill To:** JEGA | **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A514108	[illegible]	1802	JR	3	VOA	40ML	4C_HCL	GW	AK101, SW8021B		30DAYS			Undefined
AM-A514109	[illegible]	1802	JR	2	AMBER	1L	4C_HCL	GW	AK102		30DAYS			Undefined
AM-A514110	[illegible]	1802	JR	2	AMBER	1L	4C	GW	SW8270C SIM		30DAYS			Undefined
AM-A514111	[illegible]	1802	JR	3	VOA	40ML	4C_HCL	GW	AK101, SW8021B		30DAYS			Undefined

Comments: 1 sample bottle from AM-A514104 HP was damaged (broken cap & chipped lip) small amount of sample lost. Please draw from undamaged Laucks bottle. Sample was transfered to clean unpreserved non-Laucks bottle. JE 11/13

Special Instructio [illegible] AM-A514111 have bubbles

Relinquish By:

Received By: Jeannette Romig 11/14/00 0945

11/16/2000 13:43 9075815797 JACOBS IN UNALASKA PAGE 03

Chain-of-Cust( )y Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5151 **Cooler ID:** ~~1109B~~ 1109 B **Admin Number:** 00-053

Project Number: ~~AMAKNAK ISLAND WIDE~~ **Laboratory:** ~~DCHM~~ **Bill To:** JEGA **Report To:** All

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A515101	11/10/2000	1135	SH	3	VOA	40ML	4C_HCL	W	SW8021B		48HRS			Undefined
AM-A515102	11/10/2000	1135	SH	2	AMBER	1L	4C_HCL	W	AK102		48HRS			Undefined
AM-A515103	11/10/2000	1135	SH	2	AMBER	1L	4C	W	SW8270C SIM		48HRS			Undefined

15,000gal Treatment H2O

Comments:

Special Instructions:

Relinquish By: Jeannette Ronning 11/14/00 0000

Received By:

Air Way Bill # 2859 8404

Chain-of-Custody Report

Collection Org[illegible]EGA | Chain-of-Custody: AM-A5161 | Cooler ID: All (Erpu key/ UST 3465 (9)) | Admin Number: All

Project Number: All | Laboratory: All | Bill To: All | Report To: All

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A516101	[illegible]/2000	1458	JR	2	AMBER	IL	4C	GW	SW8270C SIM		30DAYS			Undefined
AM-A516102	[illegible]/2000	1458	JR	4	AMBER	IL	4C_HCL	GW	AK102, AK103	MS/D	30DAYS			Undefined
AM-A516103	[illegible]/2000	1513	JR	2	AMBER	IL	4C_HCL	GW	AK102, AK103		30DAYS			Undefined
AM-A516104	[illegible]/2000	1513	JR	2	AMBER	IL	4C	GW	SW8270C SIM		30DAYS			Undefined
AM-A516105	[illegible]/2000	1513	JR	3	VOA	40ML	4C_HCL	GW	SW8021B		30DAYS			Undefined
AM-A516106	[illegible]/2000	1513	JR	3	VOA	40ML	4C_HCL	GW	SW8021B		30DAYS			Undefined

Comments:

Special Instructions:

Relinquished By: Jeannette Ronnig 11/16/00 0900

Received By:

Pa [illegible] 11/16

11/16/2000 13:43 907 5815797 JACOBS IN ANCHORAGE PAGE 10

Air way Bill # 2097 9904

Chain-of-Custody Report

Collection Organization: JEGA | **Chain-of-Custody:** AM-A5171 | **Cooler ID:** NLF MW2 | **Admin Number:** 00-053

Project Number: [illegible] AKNAK ISLAND [illegible] | **Laboratory:** STLA | **Bill To:** JEGA | **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC TAT	Contents Caution	Dispose or Return Samples	Level
AM-A517101	[illegible]000	1805	JR	2	AMBER	1L	4C_HCL	GW	AK102, AK103	30DAYS			Undefined
AM-A517102	[illegible]000	1805	JR	3	VOA	40ML	4C_HCL	GW	SW8260B	30DAYS			Undefined
AM-A517103	[illegible]000	1805	JR	2	AMBER	1L	4C	GW	SW8270C SIM	30DAYS			Undefined
AM-A517104	[illegible]000	1822	JR	2	AMBER	1L	4C	GW	SW8270C SIM	30DAYS			Undefined
AM-A517105	[illegible]000	1822	JR	2	AMBER	1L	4C_HCL	GW	AK102, AK103	30DAYS			Undefined
AM-A517106	[illegible]000	1822	JR	3	VOA	40ML	4C_HCL	GW	SW8260B	30DAYS			Undefined
AM-A517107	[illegible]000	1805	JR	3	VOA	40ML	4C_HCL	GW	SW8260B	30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: Jeannette Romig 11/16/00 0900

Received By:

11/16/2000

Page 1

11/16/2000 13:43 9075815797 JACOBS ENGINEERING ALASKA

Airbill # 2860 3153

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5181 **Cooler ID:** LAUCHS MW2/UST3265 **Admin Number:** 00-053

Project Number: AKNAK ISLAND **Laboratory:** LTL **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A518101	[illegible]000	1835	JR	2	AMBER	1L	4C_HCL	GW	AK102, AK103		30DAYS			Undefined
AM-A518102	[illegible]000	1835	JR	2	AMBER	1L	4C	GW	SW8270C SIM		30DAYS			Undefined
AM-A518103	[illegible]000	1835	JR	3	VOA	40ML	4C_HCL	GW	SW8260B		30DAYS			Undefined
AM-A518104	[illegible]000	1835	JR	3	VOA	40ML	4C_HCL	GW	SW8260B		30DAYS			Undefined

Comments: [illegible]8104 VOAs have bubbles

Special Instructions:

Relinquished By: Jeannette Fonnoy 11/16/00 0800

Received By:

11/16/2000

11/16/2000 13:43 907 JACOBS IN ANCHORAGE PAGE 02

Airbill #

Chain-of-Custody Report

2860 8153

Collection Organization: JEGA **Chain-of-Custody:** AM-A5186 **Cooler ID:** LAUCHS MW2/UST3269 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** LTL **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A518601	11/15/2000	1315	BM	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
AM-A518602	11/15/2000	1315	BM	1	AMBER	8OZ	4C	SO	SW8270C SIM		30DAYS			Undefined
AM-A518603	11/15/2000	1315	BM	1	AMBER	4OZ	4C	SO	SW9060		30DAYS			Undefined

Comments: 4oz Jar unavailable - used datachem lab jar instead

Special Instructions:

Relinquished By: Bruce McEwen 11/16/00 0900

Received By: //

11/16/2000

Air Way Bill# 2860 3164 ~~2857 8404~~

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5191 **Cooler ID:** NLF MW2 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** STLA **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A519101	10/15/2000	1830	JR	2	AMBER	1L	4C	GW	SW8270C SIM		30DAYS			Undefined
AM-A519102	10/15/2000	1830	JR	2	AMBER	1L	4C_HCL	GW	AK102, AK103		30DAYS			Undefined
AM-A519103	10/15/2000	1830	JR	3	VOA	40ML	4C_HCL	GW	SW8260B		30DAYS			Undefined

Comments:

Special Instructions:

Relinquished By: Jennifer Romig 11/16/00 0900

Received By: "

11/16/2000 13:45 3072870731 UNOCAL ATTENTION

AIRBILL# 2860-? 5

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5196 **Cooler ID:** LAUCHS UST3260 **Admin Number:** 00-053

Project Number: [redacted] AMAKNAK ISLAND **Laboratory:** LTL **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A519601	11/17/2000	1320	JN	1	GSEPT	4OZ	4C_MEOH	SO	SW8021B		30DAYS			Undefined
AM-A519602	11/17/2000	1320	JN	1	AMBER	8OZ	4C	SO	SW8270C SIM		30DAYS			Undefined

Comments: LAUCHS GLASSWARE UNAVAILABLE, PLEASE USE INFO FROM METHANOL CONTAINER FOR SW8021B ANALYSIS.

Special Instructions:

Relinquish By: [signature] 11/20/00 0900

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5206 **Cooler ID:** UST3260/3265 **Admin Number:** 00-053

Project Number: AMUKNAK ISLAND **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A520601	11/15/2000	1135	JN	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
AM-A520602	11/15/2000	1135	JN	1	AMBER	8OZ	4C	SO	SW8270C SIM		30DAYS			Undefined
AM-A520603	11/15/2000	1135	JN	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A520604	11/15/2000	1200	JN	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
AM-A520605	11/15/2000	1200	JN	1	AMBER	8OZ	4C	SO	SW8270C SIM		30DAYS			Undefined
AM-A520606	11/15/2000	1215	JN	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
AM-A520607	11/15/2000	1215	JN	1	AMBER	8OZ	4C	SO	SW8270C SIM		30DAYS			Undefined
AM-A520608	11/15/2000	1315	JN	1	AMBER	8OZ	4C	SO	AK 102		30DAYS			Undefined
AM-A520609	11/15/2000	1315	JN	1	AMBER	8OZ	4C	SO	SW8270C SIM		30DAYS			Undefined
AM-A520610	11/15/2000	1315	JN	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
AM-A520611	11/15/2000	1335	JN	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: 11/19/00 1500

Received By:

1/18/2000

Chain-of-Custody Report

ollection Organization: JEGA **Chain-of-Custody:** AM-A5206 **Cooler ID:** UST3260/3265 **Admin Number:** 00-053

roject Number: [redacted] NAK ISLAND **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC ample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
M-A520612	[redacted]	1335	JN	1	AMBER	8OZ	4C	SO	SW8270C SIM		30DAYS			Undefined
M-A520613	[redacted]	1315	JN	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
M-A520614	[redacted]	1315	JN	1	AMBER	8OZ	4C	SO	SW8270C SIM		30DAYS			Undefined
M-A520615	[redacted]	1315	JN	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
M-A520616	[redacted]	1445	JN	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
M-A520617	[redacted]	1445	JN	1	AMBER	8OZ	4C	SO	SW8270C SIM		30DAYS			Undefined
M-A520618	[redacted]	1445	JN	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
M-A520619	[redacted]	1500	JN	1	AMBER	8OZ	4C	SO	AK102		30DAYS			Undefined
M-A520620	[redacted]	1500	JN	1	AMBER	8OZ	4C	SO	SW8270C SIM		30DAYS			Undefined
M-A520621	[redacted]	1245	JN	1	AMBER	4OZ	4C	SO	415.2M		30DAYS			Undefined
M-A520622	[redacted]	1245	JN	1	AMBER	4OZ	4C	SO	415.2M	MS/D	30DAYS			Undefined

mments:

ecial Instructions:

linquish By: [signature] 11/19/00 1500

ceived By:

AIRBILL #
2860-3116

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5206 **Cooler ID:** UST3260/3265 **Admin Number:** 00-053

Project Number: [illegible] MAKNAK ISLAND [illegible]DE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
									JN 11/18/00 ADD MS/MSD					
AM-A520623	11/17/2000	1320	JN	1	GSEPT	40Z	4C_MEOH	SO	SW8021B		30DAYS			Undefined
AM-A520624	11/17/2000	1320	JN	1	GSEPT	40Z	4C_MEOH	SO	SW8021B		30DAYS			Undefined
									JN 11/18/00					
~~AM-A520625~~	~~11/17/2000~~	~~1320~~	~~JN~~	~~1~~	~~GSEPT~~	~~40Z~~	~~4C_MEOH~~	~~SO~~	~~SW8021B~~	~~MS/D~~	~~30DAYS~~			~~Undefined~~
AM-A520626	11/17/2000	1320	JN	1	AMBER	80Z	4C	SO	AK102, SW8270C SIM		30DAYS			Undefined
AM-A520627	11/17/2000	1320	JN	2	AMBER	80Z	4C	SO	AK102, SW8270C SIM	MS/D	30DAYS			Undefined
AM-A520628	11/17/2000	1320	JN	1	AMBER	80Z	4C	SO	SW8270C SIM		30DAYS			Undefined
AM-A520629	11/17/2000	1515	JN	1	AMBER	80Z	4C	SO	AK102, SW8270C SIM		30DAYS			Undefined
AM-A520630	11/17/2000	1650	JN	1	AMBER	80Z	4C	SO	AK102, SW8270C SIM		30DAYS			Undefined
AM-A520631	11/17/2000	1650	JN	1	AMBER	40Z	4C	SO	415.2M		30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: [signature] 11/19/00 1500

Received By:

IRB11 5th 2860-3116

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5207 **Cooler ID:** PWW2-MW-14 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A520632	11/18/2000	1415	BM	1	AMBER	8OZ	4C	SO	SW8082		48HR			Undefined
AM-A520633	11/18/2000	1415	BM	1	AMBER	4OZ	4C	SO	SW6010/7000 SERIES		48HR			Undefined
AM-A520634	11/18/2000	1415	BM	1	AMBER	4OZ	4C_MEOH	SO	SW8260B		48HR			Undefined
AM-A520635	11/18/2000	1500	BM	1	AMBER	8OZ	4C	SO	SW8082		48HR			Undefined
AM-A520636	11/18/2000	1500	BM	1	AMBER	4OZ	4C	SO	SW6010/7000SERIES		48HR			Undefined
AM-A520637	11/18/2000	1500	BM	1	AMBER	4OZ	4C Mc_MEOH	SO	SW8260B		48HR			Undefined

JP GSEPT 11/19/00

GSEPT 11/19/00 JN

Comments:

Special Instructions: 11/20/00

Relinquish By: NONE NONE 1600 11/19/2000 JP 10:50

Received By:

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5209 **Cooler ID:** UST3260/3265 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A520638	11/19/2000	1400	JN	1	GSEPT	4OZ	4C _MEOH	SO	SW8021B	TB	30DAYS			Undefined

Comments:

Special Instructions:

Relinquish By: Julie Norgaard 11/19/00 1500

Received By:

11/10/20

AMRU # 9860-3116

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5211 **Cooler ID:** PWW2-MW14 **Admin Number:** 00-055

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A521101	11/16/2000	1525	JR	2	AMBER	1L	4C	GW	SW8270C SIM		30DAYS			Undefined
AM-A521102	11/16/2000	1525	JR	2	AMBER	1L	4C_HCL	GW	AK102, AK103		30DAYS			Undefined
AM-A521103	11/16/2000	1525	JR	3	VOA	40ML	4C_HCL	GW	SW8260B		30DAYS			Undefined
AM-A521104	11/16/2000	1525	JR	3	VOA	40ML	4C_HCL	GW	SW8260B		30DAYS			Undefined

Comments: NOTE: PROJECT NAME SHOULD READ "GW-PreWWII-Nov 00"

Special Instructions: AM-A521104 VOAs have bubbles JR 11/n

Relinquish By: [signature] 11/20/00 10:50

Received By: / /

HIK BILL # 286031166

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5212 **Cooler ID:** PWW2-MW14 **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
♦ AM-A521201	11/6/2000	1630	BM	1	AMBER	4OZ	4C	LH	40CFR279.11,SW8082		48HR			Undefined

Comments: UNABLE TO COLLECT FULL VOLUME OF SAMPLE, PLEASE ANALYZE SAMPLE AM-A52120 FOR OSB AND PCBS USING THE 1 4OZ CONTAINER. J.N. 11/16/00

Special Instructions:

Relinquish By: Cynthia Noggle 11/20/00 10:50

Received By:

JACOBS ENGINEERING GROUP INC.
4300 ... ET, SUITE 1500, ANCHORAGE, ALASKA 99503-5922
TELE (907) ...-3322 FAX (907) 563-3320

2820 3116

COOLER: RAIN

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: AMAKNAK ISLAND WIDE	LABORATORY NAME & ADDRESS:
PROJECT NUMBER: 60-53	DATA CHEM
WBS CODE: SUBCONTRACT / D.O. No.	

SAMPLE NUMBER	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	QC	CONDITION ON RECEIPT
AM-AS19104	11/17/00	14:35	JN	4	1-LITER AMBER	HCl 4°C	GW	AK102-DRO	MS/MSDS	
AM-AS19105	11/17/00	14:35	JN	2	1-LITER AMBER	4°C	GW	SW8270SIM PAHS		
AM-AS19106	11/17/00	14:35	JN	3	40-ML VOA	HCl 4°C	GW	SW8021B		
AM-AS19107	11/17/00	15:15	JN	1	1-LITER AMBER	HCl 4°C	GW	AK102-DRO		
AM-AS19108	11/17/00	15:15	JN	1	1-LITER AMBER	4°C	GW	SW8270CSIM PAHS		
AM-AS19109	11/17/00	15:15	JN	3	40ML VOAS	HCl 4°C	GW	SW8021B		
AM-AS20110	11/20/00	0900	JN	3	40-ML VOAS	HCl 4°C	~~W~~ GW	SW8021B		

COMMENTS: ONLY (2) 1 LITER CONTAINERS EACH AVAILABLE FOR DRO AND PAH ANALYSES FOR SAMPLES ~~AM-AS~~ AS19107/AMAS19108 DUE TO SLOW PURGE RATES IN WELL

COLLECTED & RELEASED BY	DATE	TIME	TURNAROUND TIME
[illegible] 11/20/00	/ /	11:00	30 DAYS

RECEIVED BY	DATE	TIME	RELINQUISHED BY	DATE	TIME
	/ /	:		/ /	:
RECORD RETURNED BY	DATE	TIME			
	/ /	:	SHIPPING NUMBER:		

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

INFORMATION IN THIS SECTION FOR JACOBS USE ONLY

LOCATION	SAMPLE TYPE	DEPTH (FT)	QC CODE
00-AMA-UST-3260-001-GW	GW		MS/MSDS
00-AMA-UST-3260-001-GW	GW		
00-AMA-UST-3260-001-GW	GW		
00-AMA-UST-3265-001-GW	GW		
00-AMA-UST-3265-001-GW	GW		
00-AMA-UST-3265-001-GW	GW		
00-AMA-3260-3265-TRIPBLANK	W		TRIP BLANK

SAMPLING COMMENTS:

FORM-12.CDR 07.10.92

4300 B STREET, SUITE 500, ANCHORAGE, ALASKA 99503-5922
TELEPHONE (907) 563-3222 FAX (907) 563-3320

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: AMAK NAK - ISLAND WIDE	LABORATORY NAME & ADDRESS:
PROJECT NUMBER: 66-53	DATACHEM
WBS CODE:	SUBCONTRACT / D.O. No.

SAMPLE NUMBER	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	DO	CONDITION ON RECEIPT
AM-AS20	11/20/00	1000	JN	3	4-ML VOAS	HCl 4°C	W	SW8021B/BTEX		

COMMENTS: AM-AS20 111 - VOAS HAVE BUBBLES JAN 11/20/00

COLLECTED & RELEASED BY	DATE 11/20/00	TIME 10:30	TURNAROUND TIME 30 DAY TAT	
RECEIVED BY	DATE / /	TIME :	RELINQUISHED BY	DATE / / TIME :
RECORD RETURNED BY	DATE / /	TIME :		
			SHIPPING NUMBER:	

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

INFORMATION IN THIS SECTION

FOR JACOBS USE ONLY

LOCATION	SAMPLE TYPE	DEPTH (FT.)	QC CODE
00-AMA-PWW2-MW14-FBLANK-W	W		FB TRIP BLANK

SAMPLING COMMENTS:

JACOBS ENGINEERING GROUP INC.
4300 [illegible] ANCHORAGE, ALASKA 99503-5922
TELE (907) [illegible]3322 FAX (907) 563-3320

UST 3260

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: AMCHITKA ISLAND WIDE
PROJECT NUMBER: 00-53
WBS CODE: SUBCONTRACT / D.O. No.
LABORATORY NAME & ADDRESS: LTL

SAMPLE NUMBER	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	QC	CONDITION ON RECEIPT
AM-A 520639	11/19/00	15:05	JN	1	40z GSEP	4°C MEOH	SO	SW8021B	TB	

COMMENTS: AIRBILL # 2860-3105
30 DAY TAT

COLLECTED & RELEASED BY	DATE	TIME	TURNAROUND TIME
[illegible] North CL	11/20/00	9:00	

RECEIVED BY	DATE	TIME	RELINQUISHED BY	DATE	TIME
	/ /	:		/ /	:
RECORD RETURNED BY	DATE	TIME			
	/ /	:	SHIPPING NUMBER:		

WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

INFORMATION IN THIS SECTION FOR JACOBS USE ONLY

LOCATION	SAMPLE TYPE	DEPTH (FT.)	QC CODE
TRIP BLANK			TB

SAMPLING COMMENTS:

FORM-12 CTR 07.10.92

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** AM-A5700 **Cooler ID:** HEFE **Admin Number:** 00-053

Project Number: AMAKNAK ISLAND WIDE **Laboratory:** DCHM **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Containers Number	Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Contents Caution	Dispose or Return Samples	Level
AM-A570001	12/06/2000	1145	ED/SC	2	AMBER	1L	4C	WG	SW8270C SIM		30DAYS			Undefined
AM-A570001	12/06/2000	1145	ED/SC	2	AMBER	1L	4C_HCL_PH<2	WG	AK102		30DAYS			Undefined
AM-A570002	12/06/2000	1600	ED/SC	1	AMBER	40z	4°C	SO	SW7470		30 DAYS			

KEATHER'S COPY

Comments:

Special Instructions:

Relinquish By: ERIC DETTER 12/07/00 1005

Received By:

APPENDIX E

Groundwater Sampling Forms

Double-sided

GROUNDWATER SAMPLING DATA SHEET

Site Name: AMAKNAK
Site ID: 26604
Project Number: 05M30225
9/8/00 Start Time: 1020 Finish Time: 1145
Sampled By: E. DETMER

Well Number: MW-2
Well Type: (i.e., Monitor, Extraction) MONITOR
Well Material: (i.e., PVC, St. Steel) PVC
Well Integrity GOOD
HNU Reading: 0.1

WELL PURGING

PURGE VOLUME

Casing Radius (in feet) = _____ inches/12 inches per foot = _____
Total depth of casing (in feet BTOC) = 17.10'
Borehole Radius (in feet) = _____ inches/12 inches per foot = _____
Total depth of borehole (in feet BTOC) = _____
Water Level Depth (in feet BTOC) = 8.94'
Number of well volumes to be purged (# Vols.) = 3 MINIMUM

PURGE METHOD

_____ Bailer – Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
X Other – Type: PERISTALTIC
Immiscible Phase Detection: ___ Yes X No ___ LNAPL ___ DNAPL
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.) _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 X (Borehole radius (ft.))² X (Total Depth of Borehole (ft.) – Water Level (ft.)) X 7.48 X gallons/ft.³ (_____) # Vols.
= _____ gallons

Casing Volume (gallons) = 3.14 X (Casing radius (ft.))² X (Total Depth of Casing (ft.) – Water Level (ft.)) X 7.48 X gallons/ft.³ (_____) # Vols.
= _____ gallons

Total Purge Volume = (Borehole Volume (gal.) – Casing Volume (gal.)) X 0.45 + Casing Volume (gal.) = _____ gallons (Tot. Purge Volume)

PURGE TIME

1037 Start 1111 Stop 34 Elapsed

PURGE RATE

Initial _____ gpm

ACTUAL PURGE VOLUME

_____ gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	Volume Purged	pH	Cond. ~~mS/cm~~ (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other (mg/L) DO	Other (PPT) SAL
5		6.10	192	8.5	21.2	0.83	0.0
10		6.19	196	9.0	11.2	0.77	0.0
15		6.27	200	9.1	3.75	1.01	0.0
20		6.31	201	9.2	1.06	1.24	0.0

Minutes Since Pumping Began	Volume Purged	pH	Cond. ~~mS/cm~~ (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other (mg/L) DO	Other (PPT) SAL
30		6.38	202	9.3	0.92	1.23	0.0

Meter IDs pH: Ec: Turbidity: Pump:

Observations During Purging (Well Conditions, Color, Odor): WATER IS CLEAR, ODORLESS, NO SHEEN

Discharge Water Disposal: Sanitary Sewer ___ Storm Sewer ___ Drum ___ (No. _____) Other: _____

WELL SAMPLING

SAMPLING METHOD

___ Bailer – Type: _____
___ Grab – Type: _____
___ Submersible ___ Centrifugal ___ Bladder: Pump No. _____
X Other – Type: PERISTALTIC

SAMPLING DISTRIBUTION Sample Date: 9/8/00 Start Time: 1111 Finish Time: 1145

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A500101	2x1L	DRO/RRO	HCl, 4°C		
↓	2x1L	PAHs	4°C		

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Field QC By: _____ Date: _____

JACOBS ENGINEERING GROUP INC.

wp\af\shy\tables\gwrec 21-Apr-93

Groundwater Sampling Field Data Form

Site Name: UST 2446
Site MW1
HNU Reading:
Date: 11/9/00 Start Time: 1630 Finish Time: 1805
Sampled by: JR Recorded by S.H.

Well
Well Type: (i.e. Monitor, Si)
Well Material: (i.e., PVC,
Well
Casing (ags): 2" Stickup

WELL PURGING

PURGE VOLUME

Borehole Radius (in feet) = _____ in./12 in. per foot = _____
Total depth of borehole (in feet BTOC) = 12.5'
Water Level Depth (in feet BTOC) = _____
Casing Radius (in feet) = _____ in./12 in. per foot = _____
Total depth of casing (in feet BTOC) = _____
Number of well volumes to be purged (#vols.) _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
Borehole radius (ft.) TD of Borehole (ft.) Water Level (ft.) gal./ft.³ # vols.

Casing Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
Borehole radius (ft.) TD of Borehole (ft.) Water Level (ft.) gal./ft.³ # vols.

Gallons Per Purge Volume = (_____ - _____) x 0.45 + _____ = _____ Gallons
Borehole Vol. (gal.) Casing Vol. (gal.) Casing Vol. (gal.) Total Purge Vol.

PURGE METHOD

_____ Bailer - Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
_____ Other - Type: _____
Immiscible Phase Detection: Yes____ No____ LNAPL___ DNAPL____
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.): _____

PURGE TIME
Start 1635 Stop 1755

PURGE RATE
Initial 150 ml/min gpm

ACTUAL PURGE VOLUME
6.75 liters gallons

FIELD PARAMETER MEASUREMENT

Time	Volume Purged Liter	pH	Conduct. ms (umhos/cm)	Temp. °C or °F	Turbidity (ntu)	Other ~~Sal~~ %	DO
1645	1	6.29	0.293	8.4	73		12.92
1657	2	6.59	0.260	8.2	30		13.04
1709	3	6.41	0.239	8.2	21		13.13
1720	4	6.36	0.226	8.1	8		13.20
1735	5	6.42	0.222	8.1	4		14.12

Time	Volume Purged	p.H.	Conduct. ms (umhos/cm)	Temp. °C or °F	Turbidity (ntu)	Other ~~Sal~~ %	DO
1745	5.75	~~8.1~~ 6.45	0.221	8.1	3		15.23
1755	6.75	~~8.1~~ 6.27	0.220	8.1	0		19.46

Meter Ids Horiba: U10 Pump: geo pump Other:
Observations During Purging (Well Conditions, Color, ~~Odor~~): None
Discharge Water Disposal: Sanitary Sewer: _____ Storm Sewer: _____ Drum: ____ (No. _____) Other: treatment system

WELL SAMPLING

SAMPLING METHOD

11/9 Date Type: low-flow peristaltic/teflon bailer for VOC Grab Type: _____
X Submersible _____ Centrifugal _____ Bladder Pump No. _____ _____ Other Type: _____
SAMPLING DISTRIBUTION Sample Date: 11/9/00 Start Time: _____ Finish Time: _____

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A510102	(2) 1L AMBER	AK102	4C-HCl	DQM	Sample time = 1800
AM-A510102	"	SW8270C SIM	4C	"	"

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Field QC by: _____ Date: _____

JACOBS ENGINEERING GROUP, INC.

GROUNDWATER SAMPLING DATA SHEET

Site Name: AMAKNAK
Site ID: 21664
Project Number: 05M30225
9/8/00 ~~1200~~ Start Time: 1300 Finish Time: 1420
Sampled By: E. DETMER

Well Number: WP-1
Well Type: (i.e., Monitor, Extraction) MONITOR (WELL POINT)
Well Material: (i.e., PVC, St. Steel)
Well Integrity
HNU Reading: 0.0 PPM

WELL PURGING

PURGE VOLUME

Casing Radius (in feet) = _____ inches/12 inches per foot = _____
Total depth of casing (in feet BTOC) = 12.25'
Borehole Radius (in feet) = _____ inches/12 inches per foot = _____
Total depth of borehole (in feet BTOC) = _____
Water Level Depth (in feet BTOC) = 11.77'
Number of well volumes to be purged (# Vols.) = _____

PURGE METHOD

_____ Bailer – Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
X Other – Type: PERISTALTIC
Immiscible Phase Detection: ___ Yes X No ___ LNAPL ___ DNAPL
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.) _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 X (Borehole radius (ft.))² X (Total Depth of Borehole (ft.) – Water Level (ft.)) X 7.48 X gallons/ft³ X # Vols.
= _____ gallons

Casing Volume (gallons) = 3.14 X (Casing radius (ft.))² X (Total Depth of Casing (ft.) – Water Level (ft.)) X 7.48 X gallons/ft³ X # Vols.
= _____ gallons

Total Purge Volume = (Borehole Volume (gal.) – Casing Volume (gal.)) X 0.45 + Casing Volume (gal.) = _____ gallons (Tot. Purge Volume)

PURGE TIME

1310 Start 1330 Stop 20 Elapsed

PURGE RATE

Initial _____ gpm

ACTUAL PURGE VOLUME

_____ gallons

FIELD PARAMETER MEASUREMENT ~2L PURGED BEFORE SAMPLING

Minutes Since Pumping Began	Volume Purged	pH	Cond. (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other (mg/L) DO	Other (PPT) SAL
		6.62	245	11.5	26.0	1.46	0.0

Minutes Since Pumping Began	Volume Purged	pH	Cond. (umhos/cm)	T ___ °C ___ °F	Turbidity (ntu)	Other

Meter IDs pH: Ec: Turbidity: Pump:
Observations During Purging (Well Conditions, Color, Odor): WATER IS CLEAR, ODORLESS, NO SHEEN OBSERVED
Discharge Water Disposal: Sanitary Sewer ___ Storm Sewer ___ Drum ___ (No. _____) Other: _____

WELL SAMPLING

SAMPLING METHOD

___ Bailer – Type: _____
___ Submersible ___ Centrifugal ___ Bladder: Pump No. _____
___ Grab – Type: _____
X Other – Type: PERISTALTIC

SAMPLING DISTRIBUTION Sample Date: _____ Start Time: 1330 Finish Time: 1420

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A500102	2x1L	DRO/RRO	HCl, 4°C		
↓	2x1L	PAHs	4°C		

QUALITY CONTROL SAMPLES

Duplicate Samples		Blank Samples		Other Samples	
Original Sample No.	Dup. Sample No.	Type	Sample No.	Type	Sample No.

Field QC By: _____ Date: _____

JACOBS ENGINEERING GROUP INC.

wp\af\shy\tables\gwrec 21-Apr-93

GROUNDWATER SAMPLING DATA SHEET

Site Name: AMAKNAK
Site ID: 2667
Project Number: 05m30225
9/8/00 Start Time: 1420 Finish Time: 1545
Sampled By: E. DETMER

Well Number: MW-1
Well Type: (i.e., Monitor, Extraction) MONITOR
Well Material: (i.e., PVC, St. Steel) PVC
Well Integrity GOOD
HNU Reading: 0.8 PPM

WELL PURGING

PURGE VOLUME

Casing Radius (in feet) = _____ inches/12 inches per foot= _____
Total depth of casing (in feet BTOC) = 18.32'
Borehole Radius (in feet) = _____ inches/12 inches per foot= _____
Total depth of borehole (in feet BTOC) = _____
Water Level Depth (in feet BTOC) = 10.45'
Number of well volumes to be purged (# Vols.) = 3 MINIMUM

PURGE METHOD

_____ Bailer – Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
X Other – Type: PERISTALTIC
Immiscible Phase Detection: ___Yes X No ___LNAPL ___DNAPL
Depth to top (ft.)_____ Depth to bottom (ft.)_____
Thickness (ft.) _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 X (_____)² X (_____ – _____) X 7.48 X _____
Borehole radius (ft.) Total Depth of Borehole (ft.) Water Level (ft.) gallons/ft.³ # Vols.
= _____ gallons

Casing Volume (gallons) = 3.14 X (_____)² X (_____ – _____) X 7.48 X _____
Casing radius (ft.) Total Depth of Casing (ft.) Water Level (ft.) gallons/ft.³ # Vols.
= _____ gallons

Total Purge Volume = (_____ – _____) X 0.45 + _____ = _____ gallons
Borehole Volume (gal.) Casing Volume (gal.) Casing Volume (gal.) Tot. Purge Volume

PURGE TIME

1437 Start 1515 Stop 38 Elapsed

PURGE RATE

Initial _____ gpm

ACTUAL PURGE VOLUME

_____ gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	Volume Purged	pH	Cond. µS/cm (~~umhos/cm~~)	T X °C ___ °F	Turbidity (ntu)	Other (mg/L) DO	Other (PPT) SAL
5		6.69	224	8.2	100	1.94	0.0
10		6.68	225	8.3	82	1.42	0.0
15		6.68	226	8.3	11.2	1.15	0.0
18		6.63	227	8.4	4.80	1.22	0.0

Minutes Since Pumping Began	Volume Purged	pH	Cond. µS/cm (~~umhos/cm~~)	T X °C ___ °F	Turbidity (ntu)	Other (mg/L) DO	Other (PPT) SAL
21		6.62	226	8.4	2.80	1.18	0.0
25		6.62	226	8.5	2.25	1.24	
28		6.61	226	8.4	1.32	1.28	
31		6.60	227	8.4	0.99	1.23	0.0

Meter IDs pH: Ec: Turbidity: Pump:

Observations During Purging (Well Conditions, Color, Odor): WATER IS COOL, CLEAR, NO ODOR OR SHEEN OBSERVED

Discharge Water Disposal: Sanitary Sewer ___ Storm Sewer ___ Drum ___ (No.____) Other: _____

WELL SAMPLING

SAMPLING METHOD

___Bailer – Type: _____
___Grab – Type: _____
___Submersible ___Centrifugal ___Bladder: Pump No. _____
___Other – Type: _____

SAMPLING DISTRIBUTION Sample Date: 9/8/00 Start Time: 1515 Finish Time: 1545

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A500103	2x1L	DRO/RRO	HCl, 4°C		
↓	2x1L	PAHs	4°C		

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Field QC By: _____ Date: _____

JACOBS ENGINEERING GROUP INC.

GROUNDWATER SAMPLING DATA SHEET

Site Name: AMAKNAK
Site ID: UST 3265
Project Number: 05M30227
11/17/00 Start Time: 1600 Finish Time: 1815 JR
Sampled By: JULIE NOFFKE

Well Number: WP-1 (UST 3265)
Well Type: (i.e., Monitor, Extraction) MONITORING POINT
Well Material: (i.e., PVC, St. Steel)
Well Integrity
HNU Reading:

WELL PURGING

PURGE VOLUME

Casing Radius (in feet) = _____ inches/12 inches per foot= _____
Total depth of casing (in feet BTOC)= _____
Borehole Radius (in feet)= _____ inches/12 inches per foot= _____
Total depth of borehole (in feet BTOC)= 7.5'
Water Level Depth (in feet BTOC)= 1.05'
Number of well volumes to be purged (# Vols.)= _____

PURGE METHOD

_____ Bailer – Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
X Other – Type: PERISTALTIC PUMP
Immiscible Phase Detection: ___Yes ___No ___LNAPL ___DNAPL
Depth to top (ft.)_____ Depth to bottom (ft.)_____
Thickness (ft.) _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 X (_____)² X (_____ – _____) X 7.48 X _____
(Borehole radius (ft.); Total Depth of Borehole (ft.); Water Level (ft.); gallons/ft.³; # Vols.)
= _____ gallons

Casing Volume (gallons) = 3.14 X (_____)² X (_____ – _____) X 7.48 X _____
(Casing radius (ft.); Total Depth of Casing (ft.); Water Level (ft.); gallons/ft.³; # Vols.)
= _____ gallons

Total Purge Volume = (_____ – _____) X 0.45 + _____ = _____ gallons
(Borehole Volume (gal.); Casing Volume (gal.); Casing Volume (gal.); Tot. Purge Volume)

PURGE TIME

1715 Start _____ Stop _____ Elapsed

PURGE RATE

Initial _____ → _____ gpm (1QT/5MIN; 20MIN/GAL; 1L/5MIN)

ACTUAL PURGE VOLUME

_____ gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	Volume Purged	pH	Cond. µS/cm (umhos/cm)	T X °C / °F	Turbidity (ntu)	*Other mg/L DO	*Other % SAL
1730		5.89	0.164	2.3	91	Ø	0.0
1740		5.71	0.157	2.10	80	Ø	0.0
1745		5.97	0.157	—	73	Ø	0.0
1755		5.79	0.158	2.3	94	Ø	0.0
1810		5.76	0.156	2.4	122	Ø	0.0
1815		5.76	0.155	2.3	85	Ø	0.0

Meter IDs pH: MULTIMETER Ec: Turbidity: HACH Pump: PERISTALTIC
Observations During Purging (Well Conditions, Color, Odor): LIGHT BROWN COLOR, HYDROCARBON ODOR (?) DARK BROWN ORGANICS
Discharge Water Disposal: Sanitary Sewer ___ Storm Sewer ___ Drum X (No.____) Other: TREATED ON SITE

WELL SAMPLING

SAMPLING METHOD

___Bailer – Type: _____
___Submersible ___Centrifugal ___Bladder: Pump No. _____
___Grab – Type: _____
X Other – Type: PERISTALTIC PUMP

SAMPLING DISTRIBUTION Sample Date: 11/17/00 Start Time: 1815 Finish Time: _____

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A519107	1X1L AMBER	DRO	HCL, 4°C		
AM-A519108	1X1L AMBER	PAHs	4°C		
AM-A519109	3X40ML VOAs	BTEX	HCL, 4°C		

QUALITY CONTROL SAMPLES

Duplicate Samples		Blank Samples		Other Samples	
Original Sample No.	Dup. Sample No.	Type	Sample No.	Type	Sample No.

Field QC By: _____ Date: _____

JACOBS ENGINEERING GROUP INC.

* D.O. READOUT NOT WORKING

wp\af\shy\tables\gwrec 21-Apr-93

Groundwater Sampling Field Data Form

Site: UST 3465 WP-1
Well Grading:
Date: 4/15/00 Start Time: 1100 Finish Time: 1630
Sampled by: JR
Well Type: point (i.e. Monitor, Soil Boring)
Well Material: (i.e., PVC, Steel)
Well Casing Dia. (ags): 2" Dia.
Stickup

WELL PURGING

WELL VOLUME

Radius (in feet) = _____ in./12 in. per foot = _____ 6.43' H2O Col.
Depth of borehole (in feet BTOC) = 10.39'
Water Level Depth (in feet BTOC) = 3.96' 1.02 Well Vol
Radius (in feet) = _____ in./12 in. per foot = _____ x3 3.06 gal
Depth of casing (in feet BTOC) = _____
Number well volumes to be purged (#vols.) _____ min purge vol.

WELL VOLUME CALCULATION

Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
Borehole radius (ft.) TD of Borehole (ft.) Water Level (ft.) gal./ft.³ # vols.

Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
Borehole radius (ft.) TD of Borehole (ft.) Water Level (ft.) gal./ft.³ # vols.

Actual Purge Volume = (_____ - _____) x 0.45 + _____ = _____ Gallons
Borehole Vol. (gal.) Casing Vol. (gal.) Casing Vol. (gal.) Total Purge Vol.

PURGE METHOD

_____ Bailer - Type:
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
_____ Other - Type:
Immiscible Phase Detection: Yes____ No____ LNAPL____ DNAPL____
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.): _____

TIME

Start 1355 Stop 1513

PURGE RATE

Initial 100 ml/min

ACTUAL PURGE VOLUME

3.55 gallons

FIELD PARAMETER MEASUREMENT

Volume Purged	pH	Conduct. (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other %	Other DO
1.07	5.91	0.274	4.7	74	0.01	9.99
2.09	5.99	0.238	4.1	4	0	"
2.76	6.35	0.229	4.8	1	0	"
3.30	6.39	0.225	4.9	1	0	"
3.55	6.37	0.228	4.9	1	0	"

Time	Volume Purged	p.H.	Conduct. (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other
1355						
1510						
1513						

Horiba: U10 Pump: new PVC pump Other:
Observations During Purging (Well Conditions, Color, Odor): None H2O recharge extremely slow
Purge Water Disposal: Sanitary Sewer: ____ Storm Sewer: ____ Drum: ____ (No. ____) Other: treatment system

WELL SAMPLING

SAMPLING METHOD

Bladder Type: low-flow paristaltic pump / teflon bailer for VOAs
_____ Submersible _____ Centrifugal _____ Bladder: Pump No. _____
_____ Grab Type: _____
_____ Other Type: _____

SAMPLE DISTRIBUTION Sample Date: 4/15/00 Start Time: 1513 Finish Time: 1620

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
116103	(2) 1 L AMBERS	AK102/103	HCl-4C	DCHM	Sample time = 1513
116104	"	SW 8270 CSIM	4C	"	"
116105	(3) 40 ml VOAs	SW 8021B	HCl-4C	"	"
				"	"

QUALITY CONTROL SAMPLES

Duplicate Samples

Sample No.	Dup. Sample No.

Blank Samples

Type	Sample No.
SW 8021B	AM-A-116106

Other Samples

Type	Sample No.

Sampled by: _____ Date: _____

JACOBS ENGINEERING GROUP, INC.

1355 - Began taking samples, well wea
will allow time to recharge
1510 - Well recharged to original H2O

Groundwater Sampling Field Data Form

Site Name: NOT 2762 A|B
MW-1
Reading:
11/11/00 Start Time: 1400 Finish Time: 1905
Sampled by: JK

Well
Well Type: (i.e. Monitor
Well Material: (i.e., PVC St.
Well
Casing (ags): 2" well Dia Stickup

WELL PURGING

PURGE VOLUME 2" well
Borehole Radius (in feet) = _____ in./12 in. per foot = _____
Depth of borehole (in feet BTOC) = 8.51'
Water Level Depth (in feet BTOC) = 6.61'
Casing Radius (in feet) = _____ in./12 in. per foot = _____
Depth of casing (in feet BTOC) = _____
Number of well volumes to be purged (#vols.) _____

well vol = 1.2L
x3 = 3.6L min purge

PURGE VOLUME CALCULATION
Borehole Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
Borehole radius (ft) | TD of Borehole (ft.) | Water Level (ft.) | gal./ft.³ | # vols.
Casing Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
Borehole radius (ft) | TD of Borehole (ft.) | Water Level (ft.) | gal./ft.³ | # vols.
Gallons Per Purge Volume = (_____ - _____) x 0.45 + _____ = _____ Gallons
Borehole Vol. (gal.) | Casing Vol. (gal.) | Casing Vol. (gal.) | Total Purge Vol.

PURGE METHOD
_____ Bailer - Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
_____ Other - Type: _____
Immiscible Phase Detection: Yes____ No____ LNAPL____ DNAPL____
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.): _____

PURGE TIME Start 1409 Stop 1535

PURGE RATE Initial 100 ml/min

ACTUAL PURGE VOLUME ~~1.85~~ liters ~~gallons~~ 1.0 gal

FIELD PARAMETER MEASUREMENT

Volume Purged ~~liters~~	pH	Conduct. (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other % Sal	Other DO
1.2	6.06	0.249	6.2	11	0	14.82
2.4	5.82	0.236	5.5	6	0	15.24
3.6	5.75	0.239	5.0	4	0	16.02
4.4	6.38	0.241	4.5	2	0	16.58
5.2	6.40	0.244	4.5	1	0	16.49

Time	Volume Purged	p.H.	Conduct. (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other Sal	Other DO
1505	6.0	6.39	0.245	4.4	1	0	16.55

Horiba: U10 Pump: geo pump Other: well recharge extremely slow
Observations During Purging (Well Conditions, Color, Odor): None
Purge Water Disposal: Sanitary Sewer: ____ Storm Sewer: ____ Drum: ____ (No. ____) Other: treatment system

WELL SAMPLING

SAMPLING METHOD
Grab Sample Type: low-flow paristaltic pump / teflon bailer for VOA
_____ Submersible _____ Centrifugal _____ Bladder: Pump No. _____ _____ Grab Type: _____
_____ Other Type: _____

SAMPLE DISTRIBUTION Sample Date: 11/11/00 Start Time: 1545 Finish Time: 1805

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A514101	(3) 40ml VOA	AK 101, SW8021B	4C-HCl	DCHM	time 1545
AM-A514102	(2) 1L Amber	AK 102	"	"	"
AM-A514103	"	SW 8270 CSIM	4C	"	"
AM-A514104				"	"

QUALITY CONTROL SAMPLES

Duplicate Samples — Dup Sample time = 1705

Sample No.	Dup. Sample No.
AM-A514101	AM-A514104
AM-A514102	AM-A514105
AM-A514103	AM-A514106

Blank Samples

Type	Sample No.
AK101, SW8021B time = 1545	AM-A514107

Other Samples — trip LTL

Type	Sample No.
AM-A514108	AK101, SW8021B
AM-A514109	AK102
AM-A514110	SW 8270 CSIM
AM-A514111	AK101, SW8021B

Field QC by: _____ Date: _____

Trip blank

Triplicate samples time = 1802

JACOBS ENGINEERING GROUP, INC.

AMAKNAK

GROUNDWATER SAMPLING DATA SHEET

Site Name: FORT MEARS LANDFILL NORTH — Well Number: WP1
Site ID: WP1 — Well Type: (I.e., Monitor, Extraction) MONITORING POINT
Project Number: — Well Material: (I.e., PVC, St. Steel)
11/10/00 Start Time: 1050 Finish Time: 1345 — Well Integrity
Sampled By: J. ROMIG — HNU Reading:

WELL PURGING

PURGE VOLUME

Casing Radius (in feet) = 2" inches/12 inches per foot=
Total depth of casing (in feet BTOC) =
Borehole Radius (in feet) = inches/12 inches per foot=
Total depth of borehole (in feet BTOC) = 16.31 H_2O_{COL} = 1.21
Water Level Depth (in feet BTOC) = 15.10
Number of well volumes to be purged (# Vols.) = 3 (MIN)

PURGE METHOD

___ Bailer – Type: LOW-FLOW PERISTALTIC PUMP
Pump Type:
X Submersible ___ Centrifugal ___ Bladder
___ Other – Type:
Immiscible Phase Detection: ___Yes ___No ___LNAPL ___DNAPL
Depth to top (ft.) ___ Depth to bottom (ft.) ___
Thickness (ft.) ___

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 X (Borehole radius (ft.))² X (Total Depth of Borehole (ft.) – Water Level (ft.)) X 7.48 X gallons/ft.³ X # Vols.
= ___ gallons

Casing Volume (gallons) = 3.14 X (Casing radius (ft.))² X (Total Depth of Casing (ft.) – Water Level (ft.)) X 7.48 X gallons/ft.³ X # Vols.
= ___ gallons

Total Purge Volume = (Borehole Volume (gal.) – Casing Volume (gal.)) X 0.45 + Casing Volume (gal.) = ___ gallons (Tot. Purge Volume)

WELL VOL = 0.75 L x 3 = 1.5 L MIN PURGE VOL

PURGE TIME

___ Start ___ Stop ___ Elapsed

PURGE RATE

Initial 300 mL/min gpm

ACTUAL PURGE VOLUME

5.75 L gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	Volume (L) Purged	pH	Cond. mS (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other – % SAL	Other – DO
1050	0.75	6.26	5.23	4.0	70	0.25	13.81
1100	1.50	6.78	4.62	3.8	0	0.22	14.06
1110	2.350	7.02	4.57	3.8	0	0.22	14.20
1115	3.200	7.25	4.101	3.7	3	0.22	14.35
1123	4.05	7.48	4.48	4.1	3	0.21	14.25
1130	4.900	7.58	4.54	4.1	5	0.22	14.38
1136	5.750	7.50	4.47	4.2	5	0.21	

Meter IDs pH: Ec: Turbidity: Pump: GEOPUMP
Observations During Purging (Well Conditions, Color, Odor): NONE
Discharge Water Disposal: Sanitary Sewer ___ Storm Sewer ___ Drum ___ (No.___) Other: TREATMENT SYSTEM

WELL SAMPLING

SAMPLING METHOD

X Bailer – Type: TEFLON BAILER FOR VOCs
X LOW-FLOW Submersible ___Centrifugal ___Bladder: Pump No. ___
___Grab – Type: ___
___Other – Type: ___

SAMPLING DISTRIBUTION Sample Date: 11/10/2001 Start Time: 1155 Finish Time: 1345

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A512101	(3) 40mL VOA	SW8260B	4°C HCl	DCHM	SAMPLE TIME 1155
AM-A512102	(2) 1L AMBER	AK102/103	4°C HCl	DCHM	"
AM-A512103	(2) 1L AMBER	SW8270CSIM	4°C	DCHM	"
AM-A512104	(2) 1L AMBER	SW8082	4°C	DCHM	"
AM-A512105	(1) 500mL POLY	RCRA METALS	4°C HNO_3	DCHM	"

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.

Blank Samples

Type	Sample No.
AM-A512106	SW8260B

Other Samples

Type	Sample No.

Field QC By: ___ Date: ___

JACOBS ENGINEERING GROUP INC.

ADDITIONAL NOTES:
- WELL CAP AND LOCK IN PLACE
- NO ODOR OR SHEEN NOTED ON PROBE
- SOFT BOTTOM

wp\af\shy\tables\gwrec 21-Apr-93

GROUNDWATER SAMPLING DATA SHEET

Site Name: FORT MEARS LANDFILL
Site ID: WP-3
Project Number:
11/10/00 Start Time: 1515 Finish Time:
Sampled By: J. ROMIG / J. NOFFKE

Well Number:
Well Type: (i.e., Monitor, Extraction) MONITORING POINT
Well Material: (i.e., PVC, St. Steel) 1" STEEL
Well Integrity
HNU Reading:

WELL PURGING

PURGE VOLUME

Casing Radius (in feet) = _____ inches/12 inches per foot= _____
Total depth of casing (in feet BTOC) = _____
Borehole Radius (in feet) = _____ inches/12 inches per foot= _____
Total depth of borehole (in feet BTOC) = 16.23'
Water Level Depth (in feet BTOC) = 15.60'
Number of well volumes to be purged (# Vols.) = _____

PURGE METHOD

_____ Bailer – Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
X Other – Type: PERISTALTIC GEOPUMP
Immiscible Phase Detection: ___Yes ___No ___LNAPL ___DNAPL
Depth to top (ft.)_____ Depth to bottom (ft.)_____
Thickness (ft.) _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 X (_____)² X (_____ – _____) X 7.48 X _____
(Borehole radius (ft.); Total Depth of Borehole (ft.); Water Level (ft.); gallons/ft.³; # Vols.)
= _____ gallons

Casing Volume (gallons) = 3.14 X (_____)² X (_____ – _____) X 7.48 X _____
(Casing radius (ft.); Total Depth of Casing (ft.); Water Level (ft.); gallons/ft.³; # Vols.)
= _____ gallons

Total Purge Volume = (_____ – _____) X 0.45 + _____ = _____ gallons
(Borehole Volume (gal.); Casing Volume (gal.); Casing Volume (gal.); Tot. Purge Volume)

PURGE TIME

_____ Start _____ Stop _____ Elapsed

PURGE RATE

Initial 250mL/min ppm

ACTUAL PURGE VOLUME

_____ gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	Volume Purged	pH	Cond. mS (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other DO	Other SAL
1630	1.3L	7.12	9.1	5.8	24	15.5	0.48
1637	2.1L	6.84	9.1	5.7	45	16.35	0.48
1643	3.0L	6.83	9.1	5.6	0	17.26	0.48
1650	4.0L	6.68	9.1	5.5	2	17.95	0.48

Minutes Since Pumping Began	Volume Purged	pH	Cond. mS (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other DO	Other SAL
1657	4.8L	6.67	9.1	5.4	45	18.16	0.49
1703	5.6L	6.68	9.21	5.5	5	14.77	0.48

Meter IDs pH: Ec: Turbidity: Pump:

Observations During Purging (Well Conditions, Color, Odor): NONE

Discharge Water Disposal: Sanitary Sewer ___ Storm Sewer ___ Drum ___ (No.____) Other: TREATMENT SYSTEM

WELL SAMPLING

SAMPLING METHOD

___ Bailer – Type: TEFLON BAILER FOR VOAS
X Submersible ___ Centrifugal ___ Bladder: Pump No. _____
___ Grab – Type: _____
___ Other – Type: _____

SAMPLING DISTRIBUTION Sample Date: 11/10/00 Start Time: 1715 Finish Time: 1730

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A512112	(3) 40mL VOA	SW8260B	4°C/HCl	DCHM	SAMPLE TIME 1715
AM-A513101	(2) 1L AMBER	AK102/103	4°C/HCl	DCHM	
AM-A513102	(2) 1L AMBER	SW8270C SIM	4°C	DCHM	
AM-A513103	(2) 1L AMBER	SW8082	4°C	DCHM	
AM-A51310	500mL POLY	RCRA METALS	4°C/HNO_3	DCHM	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Field QC By: _____ Date: _____

JACOBS ENGINEERING GROUP INC.

ADDITIONAL NOTES:
NO ODOR OR SHEEN ON PROBE
SOFT BOTTOM

Groundwater Sampling Field Data Form

Site: Fort Mears Land fill North
Well: WP- 4
Bldg:
Date: 11/10/05 Start Time: 1800 Finish Time: 1935
Sampled by: JRonig

Well Type: (i.e. Monitor,
Well Material: (i.e., PVC, SS)
Well Casing (ags): 1" well
Stickup

WELL PURGING

WELL VOLUME

Borehole Radius (in feet) = _____ in./12 in. per foot = _____
Total Depth of borehole (in feet BTOC) = 16.23'
Water Level Depth (in feet BTOC) = 15.60'
Casing Radius (in feet) = _____ in./12 in. per foot = _____
Total Depth of casing (in feet BTOC) = _____
Number of well volumes to be purged (#vols.) _____

H_2O col = 0.63'
0.1L = Wellvol.
x3 = 0.3L min purge

WELL VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
(Borehole radius (ft.) | TD of Borehole (ft.) | Water Level (ft.) | gal./ft.³ | # vols.)

Casing Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
(Borehole radius (ft.) | TD of Borehole (ft.) | Water Level (ft.) | gal./ft.³ | # vols.)

Total Purge Volume = (_____ - _____) x 0.45 + _____ = _____ Gallons
(Borehole Vol. (gal.) | Casing Vol. (gal.) | Casing Vol. (gal.) | Total Purge Vol.)

PURGE METHOD

_____ Bailer - Type: low-flow paristaltic pump
Pump Type:
X Submersible _____ Centrifugal _____ Bladder
_____ Other - Type:
Immiscible Phase Detection: Yes ___ No ___ LNAPL ___ DNAPL ___
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.): _____

PURGE TIME

Start 1805 Stop 1826

PURGE RATE

Initial 250 ml/min

ACTUAL PURGE VOLUME

4.8L gallons

FIELD PARAMETER MEASUREMENT

Volume Purged Liters	pH	Conduct (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other Sal %	Other DO
1.6	7.22	10.5	5.3	57	0.56	16.40
2.6	7.24	10.2	5.1	2	.54	16.95
3.6	7.27	10.2	5.2	5	.54	16.90
4.8	7.23	10.1	5.2	5	.53	17.23

Time	Volume Purged	p.H.	Conduct. (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other

Meter Info: Horiba: U10 Pump: Other:
Observations During Purging (Well Conditions, Color, Odor): None
Purge Water Disposal: Sanitary Sewer: _____ Storm Sewer: _____ Drum: ___ (No. _____) Other: treatment System

WELL SAMPLING

SAMPLING METHOD

Sample Collected Type: Sub. low-flow pump / teflon bailer for VOC. Grab Type: _____
Submersible _____ Centrifugal _____ Bladder Pump No. _____ _____ Other Type: _____

SAMPLING DISTRIBUTION Sample Date: 11/10/05 Start Time: 1835 Finish Time: 1900

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
WP4-513105	(2) 1L AMBER	AK102/103	4C HCl	DCHM	Sample Time 1835
WP4-513106	"	SW8270 SIM	4C	"	"
WP4-513107	"	SW8082	"	"	"
WP4-513108	500ml Poly	RCRA Metals	4C- HNO_3	"	"
				"	"

QA/QC CONTROL SAMPLES

WP4-513113 (3) 40ml VOA SW8260B 4C-HCl

Duplicate Samples		Blank Samples		Other Samples	
Sample No.	Dup. Sample No.	Type	Sample No.	Type	Sample No.

Sampled by: _____ Date: _____

JACOBS ENGINEERING GROUP, INC.

Groundwater Sampling Field Data Form

Site: Fort Mears Landfill North
Well: WP-5
Sampling: _____
Date: 11/10/00 Start Time: 1430 Finish Time: 1550
Sampled by: J Romig

Well Type: point (i.e. Monitor, St.)
Well Material: (i.e., PVC,
Well Casing (ags): 2" Diameter
Stickup

WELL PURGING

PURGE VOLUME

Borehole Radius (in feet) = _____ in./12 in. per foot = _____
Depth of borehole (in feet BTOC) = 17.42'
Water Level Depth (in feet BTOC) = 13.92'
Casing Radius (in feet) = _____ in./12 in. per foot = _____
Depth of casing (in feet BTOC) = _____
Number of well volumes to be purged (#vols.) _____

H_2O col = 3.50'
Well Vol = 2.16L
X3 = 6.5L
min. purge

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
(Borehole radius (ft.) | TD of Borehole (ft.) | Water Level (ft.) | gal./ft.³ | # vols.)

Casing Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
(Borehole radius (ft.) | TD of Borehole (ft.) | Water Level (ft.) | gal./ft.³ | # vols.)

Other Purge Volume = (_____ - _____) x 0.45 + _____ = _____ Gallons
(Borehole Vol. (gal.) | Casing Vol. (gal.) | Casing Vol. (gal.) | Total Purge Vol.)

PURGE METHOD

_____ Bailer - Type: _____
Pump Type:
X Submersible _____ Centrifugal _____ Bladder
_____ Other - Type: Geopump - paristaltic
Immiscible Phase Detection: Yes ___ No ___ LNAPL ___ DNAPL ___
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.): _____

PURGE TIME

Start H2O Stop 1517

PURGE RATE

Initial 300 ml/min

ACTUAL PURGE VOLUME

8.2L. gallons

FIELD PARAMETER MEASUREMENT

Time	Volume Purged (Liters)	pH	Conduct. (mS/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other % Sal.	Other D.O.
	2.2	8.13	16.9	5.5	36	0.95	14.34
	4.4	7.90	17.8	5.1	9	1.00	15.03
	6.2	7.81	18.0	4.9	1	1.01	16.00
	7.2	7.83	18.1	5.0	0	1.02	15.93
	8.2	7.79	18.2	5.1	1	1.03	15.85

Time	Volume Purged	p.H.	Conduct. (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other

Horiba: U10 Pump: geopump Other:

Observations During Purging (Well Conditions, Color, Odor): None

Purge Water Disposal: Sanitary Sewer: ___ Storm Sewer: ___ Drum: ___ (No. ___ X Other: treatment System

WELL SAMPLING

SAMPLING METHOD

Grab Date Type: low-flow paristaltic/ teflon bailer for VOC Grab Type: _____
X Submersible _____ Centrifugal _____ Bladder: Pump No. _____ _____ Other Type: _____

SAMPLING DISTRIBUTION Sample Date: 11/10/00 Start Time: 1525 Finish Time: 1545

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
WP5A512107	(3) 40ml VOA	SW8260B	4C-HCl	D CAM	Sample time 1525
WP5A512108	(2) 1L AMBER	AK102/103	"	"	"
WP5A512109	"	SW 8270 CSIM	4C		"
WP5A512110	"	SW 8082	"	"	"
WP5A512111	(1) 500 ml Poly	RCRA Metals	4C-HNO3	"	"

QUALITY CONTROL SAMPLES

Duplicate Samples		Blank Samples		Other Samples	
Sample No.	Dup. Sample No.	Type	Sample No.	Type	Sample No.

Logged by: _____ Date: _____

JACOBS ENGINEERING GROUP, INC.

GROUNDWATER SAMPLING DATA SHEET

Site Name: AMAKNAK
Site ID: FORT MEARS GAS STATION (FMGS)
Project Number: 05M30225
8/30/00 Start Time: 1200 Finish Time: 1310
Sampled By: E. DETMER

Well Number: MW-2
Well Type: (i.e., Monitor, Extraction) MONITOR
Well Material: (i.e., PVC, St. Steel) PVC
Well Integrity GOOD
HNU Reading: 1.8 PPM

WELL PURGING

PURGE VOLUME

Casing Radius (in feet) = _____ inches/12 inches per foot= _____
Total depth of casing (in feet BTOC) = 18.70'
Borehole Radius (in feet) = _____ inches/12 inches per foot= _____
Total depth of borehole (in feet BTOC) = _____
Water Level Depth (in feet BTOC) = 13.89'
Number of well volumes to be purged (# Vols.) = 3 MINIMUM

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 X (_____ Borehole radius (ft.))² X (_____ Total Depth of Borehole (ft.) – _____ Water Level (ft.)) X 7.48 X _____ gallons/ft.³ X _____ # Vols.
= _____ gallons

Casing Volume (gallons) = 3.14 X (_____ Casing radius (ft.))² X (_____ Total Depth of Casing (ft.) – _____ Water Level (ft.)) X 7.48 X _____ gallons/ft.³ X _____ # Vols.
= _____ gallons

Total Purge Volume = (_____ Borehole Volume (gal.) – _____ Casing Volume (gal.)) X 0.45 + _____ Casing Volume (gal.) = _____ gallons Tot. Purge Volume

PURGE METHOD

_____ Bailer – Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
X Other – Type: PERISTALTIC
Immiscible Phase Detection: ___ Yes X No ___ LNAPL ___ DNAPL
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.) _____

PURGE TIME

1215 Start 1245 Stop 30 Elapsed

PURGE RATE

Initial _____ gpm

ACTUAL PURGE VOLUME

2.2 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	Volume Purged	pH	Cond. mS/cm (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other (mg/L) DO	Other (PPT) SAL
7		6.15	4.40	5.1	8.13	5.10	0.0
12		6.19	4.26	5.0	6.81	4.70	2.1
17		6.19	4.28	5.0	6.38	4.51	2.1
20		6.18	4.32	5.0	6.05	4.30	2.1

Minutes Since Pumping Began	Volume Purged	pH	Cond. (umhos/cm)	T ___ °C ___ °F	Turbidity (ntu)	Other

Meter IDs pH: MULTIMETER Ec: Turbidity: HACH Pump: PERISTALTIC

Observations During Purging (Well Conditions, Color, Odor): SAMPLE WATER IS CLEAR, NO ODOR OR SHEEN OBSERVED.

Discharge Water Disposal: Sanitary Sewer ___ Storm Sewer ___ Drum X (No. ___) Other: TREATED ONSITE

WELL SAMPLING

SAMPLING METHOD

___ Bailer – Type: _____
___ Submersible ___ Centrifugal ___ Bladder: Pump No. _____
___ Grab – Type: _____
X Other – Type: PERISTALTIC

SAMPLING DISTRIBUTION Sample Date: 8/30/00 Start Time: 1245 Finish Time: 1310

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A433501	2x1L	DRO/RRO	HCl, 4°C		
↓	2x1L	PAHs	4°C		
	3x40mL	VOCs			
	1x500mL	RCRA METALS	HNO_3, 4°C		
↓					

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.

Blank Samples

Type	Sample No.
TRIP BLANK	AM-A433502

Other Samples

Type	Sample No.

Field QC By: _____ Date: _____

JACOBS ENGINEERING GROUP INC.

GROUNDWATER SAMPLING DATA SHEET

Site Name: AMAKNAK
Site ID: HUMPY COVE (HCPP)
Project Number: 05M30225
9/11/00 Start Time: 1035 Finish Time: 1230
Sampled By: E. DETMER

Well Number: MW-1
Well Type: (i.e., Monitor, Extraction) MONITOR
Well Material: (i.e., PVC, St. Steel) PVC
Well Integrity GOOD
HNU Reading: 0.0

WELL PURGING

PURGE VOLUME

Casing Radius (in feet) = 1 inches/12 inches per foot = 0.083
Total depth of casing (in feet BTOC) = 32.33'
Borehole Radius (in feet) = _____ inches/12 inches per foot = _____
Total depth of borehole (in feet BTOC) = _____
Water Level Depth (in feet BTOC) = 23.70'
Number of well volumes to be purged (# Vols.) = 3 MINIMUM

PURGE METHOD

_____ Bailer – Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
X Other – Type: PERISTALTIC
Immiscible Phase Detection: ___Yes X No ___LNAPL ___DNAPL
Depth to top (ft.)_____ Depth to bottom (ft.)_____
Thickness (ft.) _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 X (_____)² X (_____ – _____) X 7.48 X _____
Borehole radius (ft.) Total Depth of Borehole (ft.) Water Level (ft.) gallons/ft.³ # Vols.
= _____ gallons

Casing Volume (gallons) = 3.14 X (_____)² X (_____ – _____) X 7.48 X _____
Casing radius (ft.) Total Depth of Casing (ft.) Water Level (ft.) gallons/ft.³ # Vols.
= _____ gallons

Total Purge Volume = (_____ – _____) X 0.45 + _____ = _____ gallons
Borehole Volume (gal.) Casing Volume (gal.) Casing Volume (gal.) Tot. Purge Volume

PURGE TIME

1100 Start 1155 Stop 55 Elapsed

PURGE RATE

Initial _____ gpm

ACTUAL PURGE VOLUME

_____ gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	Volume Purged	pH	Cond. µS/cm ~~(umhos/cm)~~	T X °C ___ °F	Turbidity (ntu)	Other (mg/L) DO	Other (PPT) SAL
16		6.74	219	7.3	65.5	5.94	0.0
22		6.38	218	7.0	57.5	5.82	0.0
28		6.95	216	6.9	30.9	5.80	0.0
35		6.97	211	6.9	15.0	5.89	0.0

Minutes Since Pumping Began	Volume Purged	pH	Cond. µS/cm ~~(umhos/cm)~~	T X °C ___ °F	Turbidity (ntu)	Other (mg/L) DO	Other (PPT) SAL
38		7.02	203	6.9	6.85	5.79	0.0
42		7.02	192	7.0	5.59	5.82	0.0
47		7.00	180	6.8	5.53	5.76	0.0
50		7.05	176	6.8	5.49	5.80	0.0

Meter IDs pH: Ec: Turbidity: Pump:

Observations During Purging (Well Conditions, Color, Odor): WATER IS CLEAR, NO ODOR OR SHEEN OBSERVED

Discharge Water Disposal: Sanitary Sewer ___ Storm Sewer ___ Drum ___ (No._____) Other: _____

WELL SAMPLING

SAMPLING METHOD

___Bailer – Type: _____
___Submersible ___Centrifugal ___Bladder: Pump No. _____
___Grab – Type: _____
X Other – Type: PERISTALTIC

SAMPLING DISTRIBUTION Sample Date: 9/11/00 Start Time: 1155 Finish Time: 1230

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A500801	2x1L	DRO/RRO	HCl, 4°C		
↓	2x1L	PAHs	4°C		

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Field QC By: _____ Date: _____

JACOBS ENGINEERING GROUP INC.

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GROUNDWATER SAMPLING DATA SHEET

Site Name: AMAKNAK
Site ID: HUMPY COVE POWER PLANT (HCPP)
Project Number: 05M30227
10/11/00 Start Time: 1345 Finish Time: _____
Sampled By: ERIC DETMER

Well Number: HCPP-MW1
Well Type: (i.e., Monitor, Extraction) MONITORING WELL
Well Material: (i.e., PVC, St. Steel) _____
Well Integrity _____
HNU Reading: 0.0 PPM

WELL PURGING

PURGE VOLUME

Casing Radius (in feet) = _____ inches/12 inches per foot = _____
Total depth of casing (in feet BTOC) = _____
Borehole Radius (in feet) = _____ inches/12 inches per foot = _____
Total depth of borehole (in feet BTOC) = 32.80'
Water Level Depth (in feet BTOC) = 24.54'
Number of well volumes to be purged (# Vols.) = _____

PURGE METHOD

_____ Bailer – Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
X Other – Type: PERISTALTIC PUMP
Immiscible Phase Detection: ___Yes ___No ___LNAPL ___DNAPL
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.) _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 X (_____ Borehole radius (ft.))² X (_____ Total Depth of Borehole (ft.) – _____ Water Level (ft.)) X 7.48 X _____ gallons/ft.³ # Vols.
= _____ gallons

Casing Volume (gallons) = 3.14 X (_____ Casing radius (ft.))² X (_____ Total Depth of Casing (ft.) – _____ Water Level (ft.)) X 7.48 X _____ gallons/ft.³ # Vols.
= _____ gallons

Total Purge Volume = (_____ Borehole Volume (gal.) – _____ Casing Volume (gal.)) X 0.45 + _____ Casing Volume (gal.) = _____ gallons Tot. Purge Volume

PURGE TIME

1352 Start _____ Stop _____ Elapsed

PURGE RATE

Initial 0.125 gpm

ACTUAL PURGE VOLUME

_____ gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	Volume Purged	pH	Cond. (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other mg/L DO	Other PPT SAL
10		6.86	157	6.2	52.1	7.11	0.0
20		6.90	155	6.9	13.0	5.21	0.0
30		6.88	153	6.8	4.91	5.68	0.0
40		6.88	154	6.2	10.4	5.43	0.0

Minutes Since Pumping Began	Volume Purged	pH	Cond. (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other mg/L DO	Other PPT SAL
43		6.87	154	6.1	3.56	5.35	0.0
46		6.88	155	6.0	2.52	5.63	0.0
49		6.86	156	5.9	3.08	5.64	0

Meter IDs pH: MULTIMETER Ec: Turbidity: HACH Pump: PERISTALTIC
Observations During Purging (Well Conditions, Color, Odor): WATER IS CLEAR-NO ODOR OR SHEEN OBSERVED
Discharge Water Disposal: Sanitary Sewer ___ Storm Sewer ___ Drum X (No. ____) Other: TREATED ONSITE

WELL SAMPLING

SAMPLING METHOD

___Bailer – Type: _____
___Submersible ___Centrifugal ___Bladder: Pump No. _____
___Grab – Type: _____
X Other – Type: PERISTALTIC PUMP

SAMPLING DISTRIBUTION Sample Date: 10/11/00 Start Time: 1450 Finish Time: _____

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A504901	4x1L	DRO	HCl, 4°C		
↓	4x1L	PAHs	4°C		

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Field QC By: _____ Date: _____

JACOBS ENGINEERING GROUP INC.

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GROUNDWATER SAMPLING DATA SHEET

Site Name: AMAKNAK | Well Number: PLD2 - MW1
Site ID: PORT LEVASHEF | Well Type: (I.e., Monitor, Extraction) MONITORING WELL
Project Number: 05M30227 | Well Material: (I.e., PVC, St. Steel)
9/11/00 Start Time: 1535 Finish Time: | Well Integrity
Sampled By: ERIC DETMER | HNU Reading: 0.0 PPM

WELL PURGING

PURGE VOLUME

Casing Radius (in feet) = _____ inches/12 inches per foot = _____
Total depth of casing (in feet BTOC) = _____
Borehole Radius (in feet) = _____ inches/12 inches per foot = _____
Total depth of borehole (in feet BTOC) = 22.55'
Water Level Depth (in feet BTOC) = 16.79'
Number of well volumes to be purged (# Vols.) = _____

PURGE METHOD

_____ Bailer – Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
X Other – Type: PERISTALTIC PUMP
Immiscible Phase Detection: ___Yes ___No ___LNAPL ___DNAPL
Depth to top (ft.)_____ Depth to bottom (ft.)_____
Thickness (ft.) _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 X (_____)² X (_____ – _____) X 7.48 X _____
(Borehole radius (ft.); Total Depth of Borehole (ft.); Water Level (ft.); gallons/ft.³; # Vols.)
= _____ gallons

Casing Volume (gallons) = 3.14 X (_____)² X (_____ – _____) X 7.48 X _____
(Casing radius (ft.); Total Depth of Casing (ft.); Water Level (ft.); gallons/ft.³; # Vols.)
= _____ gallons

Total Purge Volume = (_____ – _____) X 0.45 + _____ = _____ gallons
(Borehole Volume (gal.); Casing Volume (gal.); Casing Volume (gal.); Tot. Purge Volume)

PURGE TIME 1551 Start _____ Stop _____ Elapsed

PURGE RATE Initial 1GAL/8MIN gpm

ACTUAL PURGE VOLUME _____ gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	Volume Purged	pH	Cond. µS/cm (mmhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other mg/L DO	Other PPT SAL
5		6.96	83	6.7	88.0	7.97	0.0
26		6.41	81	6.0	2.56	7.68	0.0
29		6.38	81	5.7	1.36	7.68	0.0
32		6.33	81	5.9	1.26	7.74	0.0

Minutes Since Pumping Began	Volume Purged	pH	Cond. µS/cm (mmhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other mg/L DO	Other PPT SAL
35		6.36	81	5.8	1.31	7.85	0.0

Meter IDs pH: MULTIMETER Ec: Turbidity: HACH Pump: PERISTALTIC
Observations During Purging (Well Conditions, Color, Odor):
Discharge Water Disposal: Sanitary Sewer ___ Storm Sewer ___ Drum X (No.____) Other: TREAT ONSITE

WELL SAMPLING

SAMPLING METHOD

___Bailer – Type: _____ ___Grab – Type: _____
___Submersible ___Centrifugal ___Bladder: Pump No. _____ X Other – Type: PERISTALTIC PUMP
SAMPLING DISTRIBUTION Sample Date: 9/11/00 Start Time: 1635 Finish Time: _____

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A500901	5x40mL VOA	SW8260B			
	4x1L	AK102/103	HCl, 4°C		
	4x1L	PAHs	4°C		
	4x1L	PCBs	4°C		
	2x500mL	RCRA METALS	HNO_3, 4°C		

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.
MS/MSD	AM-A500901

Field QC By: _____ Date: _____

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GROUNDWATER SAMPLING DATA SHEET

Site Name: AMAKNAK
Site ID: PORT LEVESHEF
Project Number: 05M30227
10/11/00 Start Time: 1625 Finish Time: _____
Sampled By: ERIC DETMER

Well Number: PLD2-MW1
Well Type: (i.e., Monitor, Extraction) MONITORING WELL
Well Material: (i.e., PVC, St. Steel) _____
Well Integrity _____
HNU Reading: 0.0 PPM

WELL PURGING

PURGE VOLUME

Casing Radius (in feet) = _____ inches/12 inches per foot = _____
Total depth of casing (in feet BTOC) = _____
Borehole Radius (in feet) = _____ inches/12 inches per foot = _____
Total depth of borehole (in feet BTOC) = 22.35'
Water Level Depth (in feet BTOC) = 16.20'
Number of well volumes to be purged (# Vols.) = _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 X (_____ Borehole radius (ft.))² X (_____ Total Depth of Borehole (ft.) – _____ Water Level (ft.)) X 7.48 X _____ gallons/ft.³ # Vols.
= _____ gallons

Casing Volume (gallons) = 3.14 X (_____ Casing radius (ft.))² X (_____ Total Depth of Casing (ft.) – _____ Water Level (ft.)) X 7.48 X _____ gallons/ft.³ # Vols.
= _____ gallons

Total Purge Volume = (_____ Borehole Volume (gal.) – _____ Casing Volume (gal.)) X 0.45 + _____ Casing Volume (gal.) = _____ gallons Tot. Purge Volume

PURGE METHOD

_____ Bailer – Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
X Other – Type: PERISTALTIC PUMP
Immiscible Phase Detection: ___Yes ___No ___LNAPL ___DNAPL
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.) _____

PURGE TIME

1630 Start _____ Stop _____ Elapsed

PURGE RATE

Initial _____ gpm

ACTUAL PURGE VOLUME

_____ gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	Volume Purged	pH	Cond. µS/cm (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other mg/L DO	Other PPT SAL
10		6.97	83	5.3	35.0	7.98	0.0
18		6.73	83	4.7	5.02	8.06	0.0
21		6.68	83	4.7	3.50	8.67	0.0
24		6.60	83	4.7	3.58	8.63	0.0

Minutes Since Pumping Began	Volume Purged	pH	Cond. µS/cm (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other mg/L DO	Other PPT SAL
27		6.58	84	4.7	3.29	8.31	0.0

Meter IDs pH: MULTIMETER Ec: Turbidity: HACH Pump: PERISTALTIC

Observations During Purging (Well Conditions, Color, Odor): _____

Discharge Water Disposal: Sanitary Sewer ___ Storm Sewer ___ Drum X (No. ___) Other: TREATED ONSITE

WELL SAMPLING

SAMPLING METHOD

___ Bailer – Type: _____
___ Submersible ___ Centrifugal ___ Bladder: Pump No. _____
___ Grab – Type: _____
X Other – Type: PERISTALTIC PUMP

SAMPLING DISTRIBUTION Sample Date: 10/11/00 Start Time: 1700 Finish Time: _____

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A505001	2x1L	DRO/RRO	HCl, 4°C		
↓	2x1L	PAHs	4°C		
	2x1L	PCBs	4°C		

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.
AM-A505001	AM-A505101
AM-A505001	AM-A505201

DUPLICATE (2x1L DRO/RRO, 2x1L PAHs, 2x1L PCBs)

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Field QC By: _____ Date: _____

TRIPLICATE (2x1L DRO/RRO, 2x1L PAHs, 2x1L PCBs)

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GROUNDWATER SAMPLING DATA SHEET

Site Name: AMAKNAK
Site ID: PORT LEVASHEF (PLD3)
Project Number: 05M30225
9/12/00 Start Time: 1200 Finish Time: 1410
Sampled By: E. DETMER

Well Number: PLD3-MW1
Well Type: (i.e., Monitor, Extraction) MONITOR
Well Material: (i.e., PVC, St. Steel) PVC
Well Integrity GOOD
HNU Reading: 0.0

WELL PURGING

PURGE VOLUME

Casing Radius (in feet) = 2 inches/12 inches per foot = 0.167 ~~0.083~~ (1 casing)

Total depth of casing (in feet BTOC) = 11.09'

Borehole Radius (in feet) = _____ inches/12 inches per foot = _____

Total depth of borehole (in feet BTOC) = _____

Water Level Depth (in feet BTOC) = 6.29'

Number of well volumes to be purged (# Vols.) = 3 MINIMUM

PURGE METHOD

____ Bailer – Type: _____

Pump Type:

____ Submersible ____ Centrifugal ____ Bladder

X Other – Type: PERISTALTIC

Immiscible Phase Detection: ___ Yes X No ___ LNAPL ___ DNAPL

Depth to top (ft.) _____ Depth to bottom (ft.) _____

Thickness (ft.) _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 X (_____ Borehole radius (ft.))² X (_____ Total Depth of Borehole (ft.) – _____ Water Level (ft.)) X 7.48 X _____ gallons/ft³ # Vols.

= _____ gallons

Casing Volume (gallons) = 3.14 X (0.083 Casing radius (ft.))² X (11.09 Total Depth of Casing (ft.) – 6.29 Water Level (ft.)) X 7.48 X 3 (MINIMUM) gallons/ft³ # Vols.

= 2.3 gallons

Total Purge Volume = (_____ Borehole Volume (gal.) – _____ Casing Volume (gal.)) X 0.45 + _____ Casing Volume (gal.) = _____ gallons Tot. Purge Volume

PURGE TIME

1300 Start 1355 Stop ~~55~~ 49 (1 casing) Elapsed

PURGE RATE

Initial 0.125 gpm

ACTUAL PURGE VOLUME

6.1 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	Volume Purged	pH	Cond. µS/cm (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other (mg/L) DO	Other (PPT) SAL
25	3.1	6.34	47.0	5.5	55.1	9.90	0.0
31	3.9	6.46	47.0	5.8	5.45	9.91	0.0
34	4.3	6.45	47.0	5.9	4.27	9.81	0.0
37	4.6	6.42	48.0	5.8	4.09	9.51	0.0

Minutes Since Pumping Began	Volume Purged	pH	Cond. µS/cm (umhos/cm)	T X °C ___ °F	Turbidity (ntu)	Other (mg/L) DO	Other (PPT) SAL
40	5.0	6.47	47.0	5.8	3.31	9.84	0.0
43	5.4	6.48	47.0	5.8	2.28	9.91	0.0
46	5.8	6.50	47.0	5.7	2.10	9.87	0.0
49	6.1	6.47	47.0	5.7	2.03	9.88	0.0

Meter IDs pH: Ec: Turbidity: Pump:

Observations During Purging (Well Conditions, Color, Odor): WATER IS CLEAR, NO ODOR OR SHEEN.

Discharge Water Disposal: Sanitary Sewer ___ Storm Sewer ___ Drum ___ (No.____) Other: TREATED AT PRE-WWII TANK FARM

WELL SAMPLING

SAMPLING METHOD

X Bailer – Type: FOR VOCs ONLY

___ Submersible ___ Centrifugal ___ Bladder: Pump No. _____

___ Grab – Type: _____

X Other – Type: PERISTALTIC

SAMPLING DISTRIBUTION Sample Date: 9/12/00 Start Time: 1355 Finish Time: 1410

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A501101	3x40 mL	VOC/BTEX	HCl, 4°C		
↓	2x1L	DRO/RRO	HCl, 4°C		
↓	2x1L	PAHs	4°C		
↓	2x1L	PCB	4°C		
↓	1x500mL	RCRA METALS	HNO_3, 4°C		

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Field QC By: _____ Date: _____

JACOBS ENGINEERING GROUP INC.

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Groundwater Sampling Field Data Form

Site Name: Crowley Dock MW-1
Site MW1
HNU Reading:
Date: 11/14/00 Start Time: 1415 Finish Time: 1525
Sampled by: JR

Well
Well Type: (i.e. Monitor
Well Material: (i.e., PVC, S
Well
Casing Stickup (ags):

WELL PURGING

PURGE VOLUME

Borehole Radius (in feet) = _____ in./12 in. per foot = _____
Total depth of borehole (in feet BTOC) = _____
Water Level Depth (in feet BTOC) = _____
Casing Radius (in feet) = _____ in./12 in. per foot = _____
Total depth of casing (in feet BTOC) = _____
Number of well volumes to be purged (#vols.) _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
(Borehole radius (ft.) | TD of Borehole (ft.) | Water Level (ft.) | gal./ft.³ | # vols.)

Casing Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
(Borehole radius (ft.) | TD of Borehole (ft.) | Water Level (ft.) | gal./ft.³ | # vols.)

Gallons Per Purge Volume = (_____ - _____) x 0.45 + _____ = _____ Gallons
(Borehole Vol. (gal.) | Casing Vol. (gal.) | Casing Vol. (gal.) | Total Purge Vol.)

PURGE METHOD

_____ Bailer - Type: _____
Pump Type:
X Submersible _____ Centrifugal _____ Bladder
_____ Other - Type: Geo pump - peristaltic
Immiscible Phase Detection: Yes____ No____ LNAPL___ DNAPL____
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.): _____

2 inch well
Total Depth = 12.26'
Depth to H_2O = 9.34'
H_2O column = 2.92'
well vol = 0.47 gal
x3 = 1.4 gal

PURGE TIME
Start 1425 Stop 1455

PURGE RATE
Initial 350 ml/min

ACTUAL PURGE VOLUME
3 gal. gallons

FIELD PARAMETER MEASUREMENT

Time	Volume Purged gal.	pH	Conduct. (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other Sal %	Other D.O.
1425	1.5	5.5	0.175	5.3	421	0.0	1400
1435	2.0	5.49	0.173	5.2	99	0.0	14.43
1445	2.5	5.53	0.174	5.1	10	0.0	14.43
1450	2.75	5.52	0.172	5.1	10	0.0	14.52
1455	3.0	5.51	0.172	5.1	10	0.0	1448

Time	Volume Purged	p.H.	Conduct. (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other

Meter Ids Horiba: U10 Pump: Geo pump - peristaltic Other:
Observations During Purging (Well Conditions, Color, Odor): No Odor or Sheen
Discharge Water Disposal: Sanitary Sewer: _____ Storm Sewer: _____ Drum: ___ (No. _____) Other: H_2O treatment

WELL SAMPLING

SAMPLING METHOD

11/14 Date Type: Sub. pump/teflon bailer for VOC's
X Submersible _____ Centrifugal _____ Bladder: Pump No. _____
_____ Grab Type: _____
_____ Other Type: _____

SAMPLING DISTRIBUTION Sample Date: 11/14 Start Time: 1458 Finish Time: 1525

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A516101	(2) 1 L AMBER	SW8270 CSIM	4°C	DCHM	1458
AM-A516102	(4) 1 L AMBER	AK102/103	4°C-HCl	DCHM	2 bottles for MS/MSD 1458

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.
MS/MSD	AM-A516102

Field QC by: _____ Date: _____

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Groundwater Sampling Field Data Form

PWW2
MW14
Grading:
11/16/00 Start Time: 1310 Finish Time: 1600
By: JR

Well
Well Type: (i.e. Monitor, St.
Well Material: (i.e., PVC,
Well
Casing (ags): 4" well Stickup

WELL PURGING

VOLUME 4" radius
Radius (in feet) = ____ in./12 in. per foot = ____
of borehole (in feet BTOC) = 15.15'
Depth (in feet BTOC) = 7.81'
dius (in feet) = ____ in./12 in. per foot = ____
of casing (in feet BTOC) = ____
well volumes to be purged (#vols.) 3 min.

VOLUME CALCULATION
Volume (gallons) = 3.14 x (____)² x (____ - ____) x 7.48 x ____ = ____ gallons
Borehole radius (ft.) TD of Borehole (ft.) Water Level (ft.) gal./ft.³ # vols.
Volume (gallons) = 3.14 x (____)² x (____ - ____) x 7.48 x ____ = ____ gallons
Borehole radius (ft.) TD of Borehole (ft.) Water Level (ft.) gal./ft.³ # vols.
r Purge Volume = (____ - ____) x 0.45 + ____ = ____ Gallons
Borehole Vol. (gal.) Casing Vol. (gal.) Casing Vol. (gal.) Total Purge Vol.

PURGE METHOD
____ Bailer - Type: Low-Flow paristaltic pump
Pump Type:
____ Submersible ____ Centrifugal ____ Bladder
____ Other - Type: ____
Immiscible Phase Detection: Yes ____ No ____ LNAPL ____ DNAPL ____
Depth to top (ft.) ____ Depth to bottom (ft.) ____
Thickness (ft.): ____

well vol = 4.7 gal
x 3 = 14.1 gal min purge

E
____ Stop ____

PURGE RATE
Initial 350 ml/min

ACTUAL PURGE VOLUME
14.160 gallons

FIELD PARAMETER MEASUREMENT

Volume Purged (Gallon)	pH	Conduct. (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other % Sal.	Other D.O
4.7	5.88	0.290	6.1	0	0.01	10.11
9.4	5.89	0.287	5.9	0	0.01	10.42
9.1	5.92	0.281	5.4	1	0.01	10.73
13.35	5.94	0.288	5.5	0	0.01	10.89
14.160	5.90	0.288	5.5	1	0.01	10.85

Time	Volume Purged	p.H.	Conduct. (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other

Horiba: U10 Pump: geo pump Other:
ns During Purging (Well Conditions, Color, Odor): No odor or color observed
Water Disposal: Sanitary Sewer: ____ Storm Sewer: ____ Drum: ____ (No. ____) Other: treatment system @ HAV site

WELL SAMPLING

G METHOD
Date Type: paristaltic pump/teflon bailer for VOC ____ Grab Type: ____
Submersible ____ Centrifugal ____ Bladder Pump No. ____ ____ Other Type: ____
G DISTRIBUTION Sample Date: 11/16/00 Start Time: 1525 Finish Time: 1600

le No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
52 1101	(2) 1L AMBER	SW8270 SIM	4C	DCHM	Sample time 1525
52 1102	(2) 1L AMBER	AK102/103	4C/HCl	"	"
52 1103	(3) 40ml VOAs	VOC	4C-HCl	"	"
					"

CONTROL SAMPLES

Duplicate Samples		Blank Samples		Other Samples	
Sample No.	Dup. Sample No.	Type	Sample No.	Type	Sample No.

y: ____ Date: ____

JACOBS ENGINEERING GROUP, INC.

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No Odor No Sheen

Groundwater Sampling Field Data Form

Site Name: Navy Laundry Facility
Site MW2
HNU Reading:
Date: 11/14 Start Time: 1700 Finish Time: 1900
Sampled by: JR

Well
Well Type: (i.e. Monitor, S'
Well Material: (i.e., PVC
Well
Casing 2" Diameter Stickup
(ags):

WELL PURGING

PURGE VOLUME

Borehole Radius (in feet) = _____ in./12 in. per foot = _____
Total depth of borehole (in feet BTOC) = _____
Water Level Depth (in feet BTOC) = _____
Casing Radius (in feet) = _____ in./12 in. per foot = _____
Total depth of casing (in feet BTOC) = _____
Number of well volumes to be purged (#vols.) _____

PURGE VOLUME CALCULATION

Borehole Volume (gallons) = 3.14 x (_____)^2 x (_____ - _____) x 7.48 x _____ = _____ gallons
(Borehole radius (ft.) | TD of Borehole (ft.) | Water Level (ft.) | gal./ft.^{3} | # vols.)

Casing Volume (gallons) = 3.14 x (_____)^2 x (_____ - _____) x 7.48 x _____ = _____ gallons
(Borehole radius (ft.) | TD of Borehole (ft.) | Water Level (ft.) | gal./ft.^{3} | # vols.)

Gallons Per Purge Volume = (_____ - _____) x 0.45 + _____ = _____ Gallons
(Borehole Vol. (gal.) | Casing Vol. (gal.) | Casing Vol. (gal.) | Total Purge Vol.)

PURGE METHOD

_____ Bailer - Type: _____
Pump Type:
_____ Submersible _____ Centrifugal _____ Bladder
_____ Other - Type: _____
Immiscible Phase Detection: Yes____ No____ LNAPL___ DNAPL____
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.): _____

2 inch well
Total well Depth = 11.
Depth to H_2O = 5
Water column = 6.
well vol = 0.9
x 3 = 2.9 gal

PURGE TIME
Start 1725 Stop 1802

PURGE RATE
Initial 350 ml/min gpm

ACTUAL PURGE VOLUME
3.5 gallons

FIELD PARAMETER MEASUREMENT

Time	Volume Purged (gal)	pH	Conduct. (mS (umhos)/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other Sal	Other D.O
1725	1.0	6.41	0.246	5.7	534	0	14.14
1740	2.0	6.44	0.247	5.7	10	0	14.20
1755	3.0	6.48	0.247	5.7	10	0	14.35
1802	3.5	6.70	0.247	5.6	10	0	14.38

Time	Volume Purged	p.H.	Conduct. (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other

Meter Ids Horiba: U10 Pump: Geopump · peristaltic Other:
Observations During Purging (Well Conditions, Color, Odor): petroleum product odor & sheen present
Discharge Water Disposal: Sanitary Sewer: ____ Storm Sewer: ____ Drum: ____ (No. ____) Other: H_2O treatment

WELL SAMPLING

SAMPLING METHOD

11/14 Date Type: Sub. pump / teflon bailer for VOCs
X Submersible _____ Centrifugal _____ Bladder: Pump No. _____
_____ Grab Type: _____
_____ Other Type: _____

SAMPLING DISTRIBUTION Sample Date: 11/14/00 Start Time: 1805 Finish Time: 1835

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
AM-A517101	(2) 1L AMBER	AK102/103	4°C-HCl	DCHM	1805
102	(3) 40ml VOAs	SW8260B	4°C-HCl	DCHM	1805
103	(2) 1L AMBERS	SW8270CSIM	4°C	DCHM	1805
10					

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Dup. Sample No.
AM-A517103	AM-A517104 (1822)
AM-A517101	AM-A517105
AM-A517102	AM-A517106

Trip Blank Samples

Type	Sample No.
(3) 40 ml VOA VOCs	AM-A517107

Other Samples

Type	Sample No.

Field QC by: _____ Date: _____

Triplicates
AM-A518101 - AK102/103
AM-A518102 - SW82
AM-A518103 - SW8260B
104 - SW8260B
Trip blank

JACOBS ENGINEERING GROUP, INC.

Groundwater Sampling Field Data Form

Site: Navy Laundry Facility (NLF) | Well
Well: W3 | Well Type: (i.e. Monitor, St.
Sampling: | Well Material: (i.e., PVC,
Date: 11/15/00 Start Time: 1755 Finish Time: 1900 | Well
Weather: | Casing (ags): 2" Diameter | Stickup

WELL PURGING

VOLUME

Radius (in feet) = _____ in./12 in. per foot = _____
Total borehole (in feet BTOC) = 10.21'
Depth (in feet BTOC) = 7.25' 2.96' = 1 Vol
Radius (in feet) = _____ in./12 in. per foot = _____
Total casing (in feet BTOC) = _____
Well volumes to be purged (#vols.) _____ x3 = 1.5 gal
Well Vol = .5 gal
min purge

VOLUME CALCULATION

Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
Borehole radius (ft.) TD of Borehole (ft.) Water Level (ft.) gal./ft.³ # vols.

Volume (gallons) = 3.14 x (_____)² x (_____ - _____) x 7.48 x _____ = _____ gallons
Borehole radius (ft.) TD of Borehole (ft.) Water Level (ft.) gal./ft.³ # vols.

Total Purge Volume = (_____ - _____) x 0.45 + _____ = _____ Gallons
Borehole Vol. (gal.) Casing Vol. (gal.) Casing Vol. (gal.) Total Purge Vol.

PURGE METHOD

_____ Bailer - Type: _____
Pump Type:
X Submersible _____ Centrifugal _____ Bladder
_____ Other - Type: geo pump - peristaltic
Immiscible Phase Detection: Yes ___ No ___ LNAPL ___ DNAPL ___
Depth to top (ft.) _____ Depth to bottom (ft.) _____
Thickness (ft.): _____

TIME

Start _____ Stop 1827

PURGE RATE

Initial 350 ml/min gpm

ACTUAL PURGE VOLUME

3.0 gallons

FIELD PARAMETER MEASUREMENT

Volume Purged	pH	Conduct. (umhos/cm) MS	Temp. (°C or °F)	Turbidity (ntu)	Other % Sat	Other DO
.75	6.51	0.450	6.3	38	0.01	19.99
1.5	6.49	0.413	5.6	13	"	19.99
2.0	6.47	0.399	5.4	8	"	19.99
2.5	6.44	0.393	5.3	8	"	19.99
3.0	6.44	0.390	5.2	4	"	19.99

Time	Volume Purged	p.H.	Conduct. (umhos/cm)	Temp. (°C or °F)	Turbidity (ntu)	Other

Horiba: U10 Pump: geo pump? Other:

Observations During Purging (Well Conditions, Color, Odor): None

Purge Water Disposal: Sanitary Sewer: ____ Storm Sewer: ____ Drum: ____ (No. ____) Other: treatment System

WELL SAMPLING

SAMPLE METHOD

Grab Type: low-flow peristaltic/teflon bailer for VOC
Submersible _____ Centrifugal _____ Bladder: Pump No. 3 _____ Other Type: _____

SAMPLE DISTRIBUTION Sample Date: 11/15/00 Start Time: 1830 Finish Time: 1855

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab ID	Comments
19101	(2) 1L AMBER	SW8270C SIM	4C	STLA	Sample time 1830
19102	"	AK102/103	4C-HCl	"	"
19103	(3) 40ml VOA	SW8260B	"	"	"
					"

QUALITY CONTROL SAMPLES

Duplicate Samples		Blank Samples		Other Samples	
Sample No.	Dup. Sample No.	Type	Sample No.	Type	Sample No.

Signature: _____ Date: _____

JACOBS ENGINEERING GROUP, INC.

APPENDIX F

Log Books

Double-sided

(92)

1230 - [illegible]

- [illegible] OFFICE

+ - OBJECTIVES

- [illegible] WELLS (EXCEPT [illegible] WILL BE REDRILLED NEXT WEEK) AND WELLS AT ROCKY POINT

- SURFACE WATER SAMPLES TO BE DETERMINED

1300 - LUNCH

1330 - WORKING ON ORGANIZING COOLERS, INSTALLING NEW SHELVES AND DRIVER (SLAMBOOK COOLERS AND BOTTLES TO COOLER. TOOK SOME SHELVES TO SAM'S CLUB ALONG WITH MISC. EXTRA GEAR

+ WEATHER - PARTLY CLOUDY, TEMPS 55-60°F, LIGHT SW BREEZES +

1800 - DONE FOR DAY, ORGANIZING APARTMENTS

8/24/00

(93)

8/25/00 EMS

0700 - SIGN ON LOG

- HEALTH AND SAFETY TAILGATE MEETING (GW CREW SEPARATE FROM HAVE MEETING)
- CALIBRATING INSTRUMENTS (PID + pH/SC/D.O.)

pH CAL

mV/pH = 54.7

E_0 = 13 mV

DO 8⁰

SLOPE: 0.87

S.C.

SLOPE = 0.453/mV

- PREPARING AND LOADING FIELD SAMPLING GEAR
- WILL MEASURE WATER LEVELS IN WELLS THIS MORNING

0900 - ARRIVE AT ROCKY POINT, LOOKING FOR WELLS MW-1, MW-2, AND MW-6 — FOUND OTHER 4 WELLS

1030 - CALLED SKIP KOCH — REQUESTED SWING TIE OR GPS COORDS FOR MISSING WELLS

- WILL MEASURE WATER LEVELS @ PWN TF AREA ONLY, AS WE CANNOT LOCATE ALL ROCKY POINT WELLS.

1115 - ARRIVE AT MW-1 (KEY #2001)

PID = 3.1 ppm

WL = 13.42' BTOC

TD = 16.35' BTOC

8/25/00 EMW

1120 - ARRIVE AT MW-14
PID = 1.8 ppm
WL BTOC = 12.62'
TD BTOC = 15.15'

1130 - ARRIVE AT MW-10
PID = 1.2 ppm
WL BTOC = 12.13'
TD BTOC = 15.80'

1136 - ARRIVE AT MW-11
PID = 0.7 ppm
WL BTOC = 12.44'
TD BTOC = 17.20'

1143 - ARRIVE AT MW-12
PID = 0.2 ppm
WL BTOC = 12.59'
TD BTOC = 14.42'

1149 - ARRIVE AT MW-15
PID = 0.7 ppm
WL BTOC = 13.09'
TD BTOC = 15.31'

1209 - ARRIVE AT MW-2 (KEY # 2001)
PID = 18.0 ppm
WL BTOC = 12.94'
TD BTOC = 18.50'

8/25/00 EMW

1231 ARRIVE AT MW-4
PID = 0.4 ppm
WL BTOC = NO WATER
TD BTOC = 11.25'
- ONE BOLT MISSING ON CHRISTY BOX, DIRT HAS BEGUN TO FILL SPACE BETWEEN CHRISTY BOX AND RISER. REMOVED DIRT IN CHRISTY BOX.

1240 - ARRIVE AT MW-5 (KEY # 2001)
PID = 0.4 ppm
WL BTOC = 14.15'
TD BTOC = 14.32'

1258 - ARRIVE AT MW-7 (KEY # 2001)
PID = 1.8 ppm
WL BTOC = 12.62'
TD BTOC = 15.57'

1306 - ARRIVE AT MW-6 (KEY # 2265)
PID = 2.3 ppm
WL BTOC = 12.99'
TD BTOC = 13.53'

1325 - ARRIVE AT MW-8
PID = 21.8 ppm
WL BTOC = 12.92' - SOME PRODUCT IN WELL
TD BTOC = DIDN'T MEASURE TO PREVENT PRODUCT FROM COATING ORS

1408 - ARRIVE AT MW-13 ~ COVERED BY FORKLIFT WAITING TO MOVE IT. CALLED DELTA WESTERN

8/25/00 EMS

1410 - MW-13 (CONTINUED)

PID = 9.4 ppm

TOP OF PRODUCT = 12.43 FT BTOC

BOTTOM OF PRODUCT = 13.82 FT BTOC

TD = 17.94 FT BTOC

- PRODUCT APPEARS TO BE LESS VISCOUS AT THESE WARMER TEMPS

* WEATHER TODAY

OVERCAST, LIGHT SW WIND 0-5 KNOTS

TEMPS 50-55°F, OCCAISIONAL LIGHT RAIN *

1430 - HEADING BACK TO OFFICE TO PICKUP SAMPLING GEAR.

- DROP TOM OFF - LUNCH

- WENT WITH KIWI TO LOOK AT REFRIG. AT CROWLEY

- CONNEX BLOCKED, WILL LOOK TOMMORON

1530 - PICKED UP TOM, HE HAD PHONE FIXED AT MY APT.

- WENT TO DPW - BEGIN UTILITY LOCATE PROCESS FOR DRILLING LOCATIONS NEXT WEEK

- CALLED RICHARD CHAGIN ~ ALSO LET HIM KNOW ABOUT DRILLING LOCALES & SCHEDULE.

1625 - BACK AT OFFICE

- UNLOADING TRUCK, MAKING CUBIES OF ICE

- PREPARING EDDS FOR TOMORRON'S SAMPLING

- HAVING PROBLEMS CHANGING SAMPLE TIMES TO MAKE BLANK LABELS, WILL HAVE TO REDO ALL COCs.

1800 - SIGN OFF LOG

8/26/00 EMS

0700 - SIGN ON LOG

- HEALTH AND SAFETY TAILGATE MEETING

- CALIBRATING INSTRUMENTS, PID

pH

SLOPE = -55.8 mV/pH

E_0 = -12 mV

SC

SLOPE = 0.452/mV

D.O.

SLOPE = 0.83

0725 - LOADING SAMPLING GEAR AND BOTTLES IN TRUCK

0800 ARRIVE AT MW-14

PID = 3.3 ppm

WL BTOC = 12.48'

TD = 15.15 BTOC

CASING VOLUME = 1.74 GAL x 3 = 5.2 GAL MINIMUM

0815 PURGE RATE = 8 min/GAL ≈ 14 min/PV

	1st	2nd	3rd
pH (S.U.)	7.08	6.80	6.70
SC (µS/cm)	322	322	322
DO (mg/l)	0.72	0.25	0.08
TEMP (°C)	6.8	6.8	6.8
SAL (PPT)	0.0	0.0	0.0
TURB (NTU)	2.13	2.05	1.16

8/26/00 EMW

0909 - COLLECT SAMPLE AT MW-14 (AM-A432801)

2x1L DRO/RRO w/HCl — WATER IS CLEAR AND NON TURBID NO ODOR

2x1L SW8270C SIM

3x40ml SW8021B w/HCl

0945 - ARRIVE AT MW-10

PID = 1.0 ppm

WL BTOC = 12.13'

TD BTOC = 15.80'

CASING VOLUME = 2.4 GALLONS x 3 = 7.2 gal / MINIMUM

0955 - BEGIN PURGE

	1st	2nd	3rd	
pH (S.U.)	6.81	6.79	6.75	
SC (mS/cm)	3.05	3.30	4.06	→ TIDE COMING IN
DO (mg/l)	0.33	0.26	0.25	
TEMP (°C)	8.1°	7.9	8.0	
SAL (PPT)	1.4	1.6	2.0	→ TIDE COMING IN
TURB (NTU)	60.0	15.4	11.5	

1101 - COLLECT SAMPLE AT MW-10 (AM-A432802)

2x1L DRO/RRO w/HCl

2x1L SW8270C SIM

3x40ml SW8021B w/HCl

- WATER IS V. SLIGHTLY TURBID, SLIGHT FUEL ODOR - DEGRADED DIESEL

- LOADING GREEN

8/26/00 EMW

1130 - LUNCH

1200 - ARRIVE AT MW-2, HIGH TIDE NOT UNTIL 1708 HRS SHOULD BE OK TO SAMPLE

PID = 57.0 ppm

WL-BTOC = 12.86'

TD BTOC = 18.11'

- BUNKER C NOTED ON SOLINST TAPE, THOUGH NOT DETECTED ON TOP OF WATER COLUMN.

- CASING VOLUME = 0.85 x 3 = 2.56 gal MINIMUM PURGE

1225 - BEGIN PURGE

	1st	2nd	3rd
pH (S.U.)	6.59	6.44	6.38
SC (µS/cm)	702	696	699
D.O. (mg/l)	0.95	1.10	1.18
TEMP (°C)	9.6	10.0	9.3
SAL (PPT)	0.1	0.1	0.1
TURB (NTU)	273	115	91.4

WATER IS MODERATELY TURBID, GRAYISH COLOR, HYDROCARBON SHEEN ON PURGE WATER

1255 - SAMPLE MW-2 (AM-A432803)

2x1L DRO/RRO

2x1L PAHs

3x40ml BTEX

8/26/00 (EM)

1310 - HEAD TO AIRPORT; PICKUP SAMPLE BOTTLES/COOLER FROM STLA, DROP OFF AT SAMPLE TRAILER.

1345 - UNLOADING COOLERS.

* WEATHER TODAY - PARTLY CLOUDY, MORNING RAIN, TEMPS 55-60°F, WEST WIND 5-10 KNOTS.

1410 - ARRIVE AT MW-8

PID = 8.0 ppm

WL BTOC = 12.68' } 2.77'

TD BTOC = 15.45' }

CASING VOLUME = 0.45 GAL x 3 x 1.5 gal MINIMUM PURGE

1420 - BEGIN PURGE

	1st	2nd	3rd
pH (S.U.)	6.66	6.58	6.59
SC (µS/cm)	540	540	539
D.O. (mg/l)	0.29	0.22	0.22
TEMP (°C)	7.5	6.9	6.7
SAL (PPT)	0.0	0.0	0.0
TURB (NTU)	3.47	1.89	1.57

1445 - COLLECT SAMPLE FROM MW-8 (AM-A432804)

2x1L DRO/RRO — WATER IS CLEAR, NON ~~TURBID~~ TURBID

2x1L PAHs — WITH PETROLEUM HYDROCARBON ODOR

3x40ml BTEX — AND SHEEN.

1605 - LOAD TRUCK AND RETURN TO OFFICE TO UNLOAD SAMPLES, EDMS AND PREP FOR TOMORROW.

8/26/00 (EM)

- 1600 - LABELING SAMPLE BOTTLES, MAKING CoCs

- TREATING WELL PURGE WATER (≈ 25 GALLONS). DUMPED TREATED PURGE WATER AT PRE-WWII TANK FARM.

- PACKAGING UP SAMPLES.

- 1730 - DINNER

1900 - WENT TO HUMPY COVE TO STAKE WELL DRILLING LOCATIONS FOR ISLANDWIDE PROGRAM

2100 - SIGN OFF LOG

EM 8/26/00

102

8/27/00 (GMP)

0700 - SIGN ON LOG
- CALIBRATING PID AND SAMPLING INSTRUMENTS
- HEALTH AND SAFETY TAILGATE MEETING
- LOADING GEAR AND SAMPLE BOTTLES

pH
SLOPE = -57.2 mV/pH
E_o = -10 mV

S.C.
SLOPE = 0.84

D.O.
SLOPE = 0.449/cm

TURBIDITY	CAL	PREVIOUSLY ESTABLISHED STANDARD
0-10 GELEX	6.73	6.57
0-100 ↓	52.7	52.3
0-1000	527	525

ALL WITHIN 5% → CALIBRATION NOT NECESSARY

0815 - DEPART TO PRE-WWII TANK FARM
- TALK WITH KIWI ABOUT MOVING WATER TREATMENT SYSTEM

0908 - ARRIVE AT MW-12
PID = 0.0 ppm
WL BTOC = 11.61' > 2.81'
TD BTOC = 14.42'

0915 - BEGIN PURGE
CASING VOLUME = 1.83 GAL x3 = 5.5 GALLON MINIMUM PURGE
8min/GAL x1.83 = 15min/PURGE VOLUME

103

8/27/00 (GMP)

0920

	1st	2nd	3rd
pH (S.U.)	6.61	6.83	6.89
S.C. (mS/cm) (milli)	41.7	42.8	43.1
D.O. (mg/l)	7.20	7.28	6.54
TEMP (°C)	8.4	8.4	8.4
SAL (PPT)	25.8	26.5	26.8
TURB (NTU)	68.7	32.4	21.5

- WATER IS SLIGHTLY TURBID, NO ODOR.

1005 - COLLECT SAMPLE AT MW-12
2x1L DRO/RRO
2x1L PAHs
3x40ml BTEX
} PRIMARY AM-A432901

2x1L DRO/RRO
2x1L PAHs
3x40ml BTEX
} QC FIELD DUP AM-A432902

2x1L DRO/RRO
2x1L PAHs
3x40ml BTEX
} QA TRIPLICATE - LAUCKS A-433101 AM-A433001 (R)

1045 - ARRIVE AT MW-15
PID = 0.8 ppm
WL BTOC = 12.52' > 2.74
TD BTOC = 15.31

8/27/00 EMM

1045 - MW-15 (CONT.)

CASING VOLUME = 1.82 GAL x 3 = 5.5 gal MINIMUM PURGE VOLUME

8 min/GAL x 1.82 ≅ 15 min/CASING VOLUME

	1st	2nd	3rd
pH (S.U.)	6.33	6.00	5.96
SC. (µS/cm)	1,057	811	785
D.O. (mg/l)	0.50	0.43	0.43
TEMP (°C)	6.5	6.5	6.5
SAL (PPT)	0.3	0.1	0.1
TURB (NTU)	7.62	2.93	1.75

1052 - BEGIN PURGE

1140 - COLLECT SAMPLE AT MW-15 (AM-A432903)

2x1L DRO/RRO

2x1L PAHs

3x40ml BTEX

1205 - HEAD TO STORE TO BY SOLVENT TO CLEAN SOLINST

1215 - LUNCH

1245 - HEAD TO ROCKY POINT WELLS

1255 - ARRIVE AT MW-7

WELL HAS CAP, BUT NO LOCK ON IT

PID = 8.0 ppm

WL BTOC = 15.31 → 4.6'

TD BTOC = 19.81 / AND SOFT BOTTOM

8/27/00 EMM

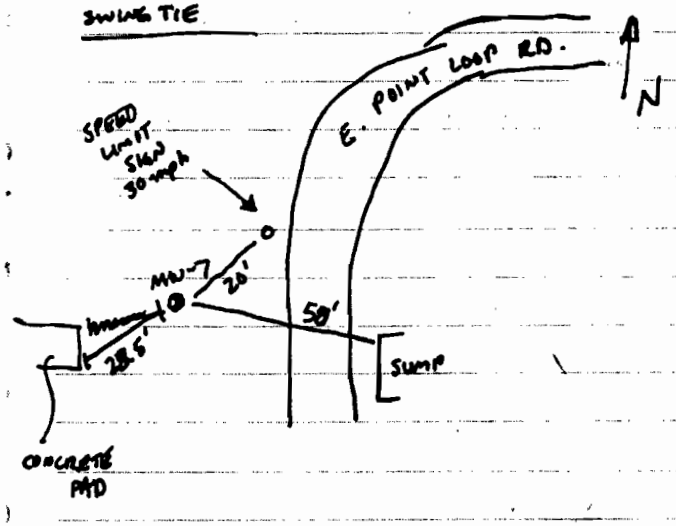
1255 - MW-7 (CONT.)

CASING VOLUME = 0.73 GALLONS x 3 = 2.2 GAL MINIMUM PURGE VOL.

≈ 6 min / CASING VOLUME

	1st	2nd	3rd
pH (S.U.)	6.72	6.73	6.73
SC (mS/cm)	1590	1385	1355
DO (mg/L)	0.15 ~~0.48~~	0.07	0.06
TEMP (°C)	7.3	7.2	7.0
SAL (PPT)	0.6	0.5	0.4
TURB (NTU)	320	51.3	89.9

- WATER IS TURBID, GREY, AND HAS DEGRADED PETROLEUM HYDROCARBON ODOR



8/27/00 EMD

1355 - COLLECT SAMPLE AT ROCKY POINT WELL MW-7

2x1L DRO/RRO
2x1L PAHs (AM-A433001)
3x40ml BTEX
3x40ml GRO
1x1L Pb

1430 - ARRIVE AT ROCKY POINT WELL MW-5

PID = 0.0 ppm
WL BTOC = 5.22' > 6.5' H_2O
TD BTOC = 11.72' SOFT BOTTOM

NO LOCK ON WELL, SOLINST CAME UP COATED WITH MUD

CASING VOLUME = 1.06 gal x 3 = 3.18 gal MINIMUM PURGE VOL.
8 min/gal ≈ 9 min/CASING VOLUME

1440 - BEGIN PURGE

- NOT USING FLOW-THRU CELL YET; WATER IS VERY MUDDY TRYING TO CLEAR UP; HAD TO PULL TEFLON TUBING TO NEAR TOP OF WATER COLUMN TO CLEAR UP. PURGED ≈10 gal.

1520 - BEGIN OFFICIAL PURGE

	1st	2nd	3rd
pH (S.U.)	6.77	6.62	6.58
SC (µS/cm)	536	507	483
D.O. (mg/L)	5.67	4.72	3.89
TEMP (°C)	9.8	9.5	9.7
SAL (PPT)	0.0	0.0	0.0
TURB (NTU)	TOO TURBID FOR 1ST. →		

8/27/00 EMD

1540 - COLLECT SAMPLE AT ROCKY POINT WELL MW-5

2x1L DRO/RRO
2x1L PAHs (AM-A433002)
3x40ml BTEX
3x40ml GRO
1x1L Pb

WATER IS STILL VERY TURBID, GRAY, SLIGHT SHEEN & HYDROCARBON ODOR.

1600 - HEADING BACK TO OFFICE TO LABEL, PACKAGE, AND PREP SAMPLES FOR SHIPMENT TOMORROW.

- WILL HAVE 4 COOLERS TO SHIP TOMORROW
  - 3 TO STLA
  - 1 TO LAUCKS

1830 - WEATHER TODAY WAS OVERCAST, TEMPS 50-55°F, WEST WINDS 10-15 KNOTS.

- SIGN OFF LOG

8/27/00

8/28/00 EMO

0700 - SIGN ON LOG

- HEALTH AND SAFETY TAILGATE MEETING
- PACKING UP COOLERS, ADDING FRESH ICE, ETC.

0900 - SHIPPED 4 COOLERS

3 TO STLA AIRBILL# 2859 8975 → GOLDSTREAK

1 TO LTL " " 2859 8964 → "

- NOTIFIED BOTH LABORATORIES OF SHIPMENT

0930 - TREATING YESTERDAY'S PURGE WATER ≈ 30 GALLONS

DUMPED TREATED WATER AT PWWTF; NO SHEEN NOTED ON WATER

- CALIBRATING PID & WATER SAMPLE INSTRUMENTS

O_2

SLOPE = 0.80

S.C.

SLOPE = 0.475/cm

pH

SLOPE = -58.0 mV/pH

E_o = -12 mV

- FILLING OUT EXCAVATION PERMITS

1000 - AT DPW - LOCATES FOR DRILLING SCHEDULED FOR TOMORROW AT 0830 ~ UST 2664

- MEET MIKE AGUIRE (SURVEYOR) AT ROCKY POINT, FOUND WELL MW-6; STILL CANNOT FIND MW-1

1145 - LUNCH

1215 - TO AIRPORT TO MEET DISCOVERY DRILLING CREW

8/28/00 EMO

1245 - MET DISCOVERY CREW - DROVE THEM TO DRILL RIG

- THEY WILL UNLOAD THEIR GEAR AND GET THEIR RIG SET UP.

1330 - ARRIVE AT MW-6; WELL HAS NO LOCK ON IT OR CHRISTY BOX ~ JUST PVC, EXPANSION CAP HAS GOT UPON FINDING & WELL APPEARS TO HAVE BEEN HIT BY SNOW PLOW

PID = 0.0 ppm

WL BTOC = 5.99' > 27'

TD BTOC = 13.69'

1335 - BEGIN PURGE

CASING VOLUME = 1.3 GAL x 3 = 3.9 GAL MIN. VOLUME

8 min/gal x 1.3 ≈ 10 min/CASING VOLUME

	1st	2nd	3rd
pH (S.U.)	6.14	6.28	6.36
S.C. (µS/cm)	222	228	219
D.O. (mg/l)	0.24	0.19	0.16
TEMP (°C)	8.9	9.0	9.1
SAL (PPT)	0.0	0.0	0.0
TURB (NTU)	6.97	4.89	8.10

* WEATHER - VERY WINDY, PARTLY CLOUDY, WEST WINDS 20-30 KTS, TEMPS 50-55°F *

1410 - COLLECT SAMPLE AT MW-6 (ROCKY POINT WELL)

AM-A433201

MS/MSD

5 x 40ml BTEX
5 x 40ml GRO
4 x 1L DRO/KERO
4 x 1L PAHs
1 x 1L Pb

AM-A433202
TRIP BLANK
SHIPPED BLANK OUT

(110)

8/28/00 (ERW)

1410 - MW-6 (CONT.)

- WATER IS CLEAR, NO ODOR OR SHEEN OBSERVED.

1445 - HEADING OVER TO ANDERSON YARD TO LOOK AT WATER TREATMENT SYSTEM. OWS APPEARS TO HAVE WATER (PROB. PRECIP) IN IT. LLOYD MOTHERSHEAD DOESN'T WANT US TO TAKE ANYTHING OUT OF THE YARD UNTIL HE TALKS WITH THE PAINE BROTHERS.

1530 - MEET WITH DRILLERS, HEAD OUT TO HUMPY COVE TO MEET RICHARD CHASIN (OC) AND TO LOOK AT RIG ACCESS. MAY BE ABLE TO ACCESS ALL BORINGS WITH DRILL RIG ~ MAY NOT NEED MUDWELL.

1700 - RETURN TO OFFICE

TOM IS LABELING SAMPLES, PACKING, AND ICEING SAMPLES.

1730 - SIGN OFF LOG

(8) 8/28/00

(111)

8/28/00 (ERW)

0645 - SIGN ON LOG

- HEALTH AND SAFETY TAILGATE MEETING W/ DISCOVERY SAFE PLAN OF ACTION FOR DECON & DRILLING
- CALIBRATING INSTRUMENTS & PID
- LOADING GEAR.

O_2

SLOPE = 0.82

SC

SLOPE = 0.473/cm

pH

SLOPE = -57.3 mv/pH

E_0 = -9 mv

0815 - HEADING TO UST 2664 FOR UTILITY LOCATES (FROM DPW)

* WEATHER - WINDY, SW WINDS 20 KNOTS, TEMPS 50-55°F PARTLY CLOUDY SKIES *

0845 - UTILITIES AT UST 2664 + MW-11 ALL CLEAR

0900 - ARRIVE AT MW-3 (ROCKY POINT WELL)

PID = 0.0 ppm NO LOCK ON WELL

WL BTOC = 8.77' → 6.53

TO BTOC = 15.30' ~ VERY SOFT BOTTOM

CASING VOLUME = 6.06 GAL x 3 = 3.18 MINIMUM PURGE VOLUME

8 min/gal ≅ 9 min/CASING VOLUME

0910 - BEGIN PURGE

SEE NEXT PAGE FOR FIELD PARAMETERS →

08/29/00

0910 - MW-3 (CONT.)

	1st	2nd	3rd
pH (S.U.)	6.38	6.47	6.51
S.C. (µS/cm)	1589	1316	1248
D.O. (mg/l)	0.52	0.76	0.69
TEMP (°C)	8.3	8.0	7.8
SAL (PPT)	0.6	0.4	0.3
TURB (NTU)	125	273	111

0945 - COLLECT SAMPLE AT ROCKY POINT WELL MW-3

2 x 1L DRO/RRO
2 x 1L PAHs
1 x 1L Pb
3 x 40ml GRO
3 x 40ml BTEX

AM-A433301

- WATER IS TURBID, GREY, NO ODOR OR SHEEN OBSERVED

1010 - ARRIVE AT MW-4 (ROCKY POINT WELL)

NO LOCK ON WELL, SAND + GROUT HAVE HEAVED UP AND OVER EXPANSION CAP, CLEANING OUT

PID = 0.0 ppm

WL BTOC = 9.08' } 1.29

TD BTOC = 10.37'

1025 - PURGE START AM

CASING VOLUME = 0.21 GALLONS x 3 = 0.63 GAL MIN. PURGE VOL.

8 min/GAL x 0.21 = 2 min

8/29/00

1035 - MW-4 (CONT.)

	1st	2nd	3rd
pH (S.U.)	7.26	7.39	7.44
S.C. (µS/cm)	624	603	603
D.O (mg/l)	1.85	1.35	1.67
TEMP (°C)	8.7	8.7	8.6
SAL (PPT)	0.0	0.0	0.0
TURB (NTU)	28.7	12.4	4.53

1035 - COLLECT SAMPLE AT ROCKY POINT WELL MW-4

PRIMARY:
2 x 1L DRO/RRO
2 x 1L PAHs
3 x 40ml GRO
3 x 40ml BTEX
1 x 1L Pb

AM-A433302

1040 QC DUPLICATE:
2 x 1L DRO/RRO
2 x 1L PAHs
3 x 40ml GRO
3 x 40ml BTEX
1 x 1L Pb

AM-A433303

- WATER IS CLEAR WITH STRONG ODOR OF DEGRADED PETROLEUM HYDROCARBONS

1115 - CHECK ON DRILLERS ~ STILL DECONTAMINATING EQUIPMENT, NOT COLLECTING DECON WATER, LETTING IT RUN THROUGH COFFER DAM & BOOM. ROAD DUST ONLY.

8/29/00 EMD

1120 - RETURN TO OFFICE TO DROP OFF SAMPLES. TOM TO DO EDMS, LABEL, AND PACKAGE SAMPLES

1130 - LUNCH

1200 - TO AIRPORT TO PICKUP BRUCE McDONALD (HART CROWSER)

1315 - MET W/ SUZANNE BEAUCHAMP (USACE) ~ DIRECTED US TO SAMPLE THE SEVEN SEEPS AT ROCKY POINT.

- GOT BRUCE CHECKED INTO APT #507 AT PTS

1430 - CONDUCTED PREPARATORY PHASE MEETING FOR DRILLING AND INSTALLING WELLS, SAFETY ORIENTATION FOR BRUCE M. (NOTIFIED MARY JEMIN THIS MORNING OF INTENT TO DO PREP. PHASE MEETING TODAY ~ SHE WAS OK WITH IT)

- DRILLERS WRAPPING UP SITE SETUP/GEAR PREP.

1530 - HEADING OUT TO HUMPY COVE

1610 ARRIVE AT HUMPY COVE POWERHOUSE U&T

WELL ID ⇒ HCPP-MW1

- SETTING UP DRILL RIG AND EQUIPMENT/MATERIALS

1630 - BEGIN DRILLING

- SAFETY BRIEF, RIG SHUTOFF PROCEDURES REVIEWED

- BRUCE IS LOGGING CORE AND SCREENING SAMPLED SOIL

- DRILLED 5 ft (7.5' OF SPLIT SPOON)

1710 - DONE FOR DAY

WILL FINISH WELL/BORING TOMORROW

- RETURN TO OFFICE; PARK RIG

1800 - SIGN OFF LOG

8/30/00 EMD

0820 - SIGN ON LOG

- HEALTH AND SAFETY TAILGATE MEETING W/ DRILLERS

0900 - ARRIVE AT HUMPY COVE

(TOM IS PREPPING GEAR FOR GW SAMPLING TODAY)

- BEGIN SITE SETUP

0845 - DRILLERS REPORT 'SHIFTER' IS BROKEN

RUNNING TO TOWN TO TACK WELD

- BRUCE M. WILL RUN SHOW AT DRILLING OPERATIONS TOD

- RETURN TO OFFICE/ LOAD GW SAMP. GEAR.

1030 - HEAD TO ROCKY POINT

1045 - ARRIVE AT ROCKY POINT WELL MW-2

PID = 0.0 ppm NO LOCK ON WELL

WLBTOC = 10.26' > 5.86'

TD BTOC = 16.12'

CASING VOLUME ≈ 1.0 GAL x 3 = 3 GAL MIN PURGE VOL

8 min/GAL x 1 = 8 min/CASING VOLUME

1055 - BEGIN PURGE

	1st	2nd	3rd
pH (S.U.)	6.26	6.43	6.51
S.C. (MS/cm)	136	136	132
D.O. (mg/l)	0.75	0.46	0.32
TEMP (°C)	8.8	8.8	8.8
SAL (PPT)	0.0	0.0	0.0
TURB (NTU)	1.77	1.13	1.44

(116)

8/30/00 EMD

MW-2 (CONT.)

INSTRUMENT CALIBRATION INFO,

pH S=-57.0 mV/pH

E_o = -9/mV

SC SLOPE= 6.452 /cm

DO SLOPE = 0.81

* WEATHER TODAY

- OVERCAST, RAIN, SW WINDS 10-20 KNOTS

TEMPS 45-55°F *

1130 - COLLECT SAMPLE AT ROCKY POINT WELL MW-2

2x1L DRO/RRO
2x1L PAHs
1x1L Pb
3x40ml BTEX
3x 40ml GRO

} AM-A433402

- SAMPLE IS VERY CLEAR WITH NOTICEABLE FUEL ODOR
NO SHEEN OBSERVED

1200 - ARRIVE AT FMGS - MW2

PID = 1.8 ppm

WL BTOC = 13.89' → 4.51'

TD BTOC = 18.70

CASING VOLUME = 0.23 gal x 3 = 2.2 gal MIN PURGE VOL

(117)

8/30/00 (2nd)

1200 - FMGS-MW2 (CONT.)

1215 - BEGIN PURGE

NOT PURGE VOLUME READING →	1st	2nd	3rd	4th
pH (s.u.)	6.15	6.19	6.19	6.18
milli S.C. (mS/cm)	4.40	~~4.40~~ 4.26	4.28	4.32
D.O. (mg/l)	5.1	4.70	4.50	4.30
TURB (NTU)	8.13	8.81	6.38	6.05
TEMP (°C)	5.1	5.0	5.0	5.0
SAL (PPT)	0.0	2.1	2.1	2.1
TIME (min AFTER BEGINNING PURGE)	7min	12	17	20

- READING FIELD PARAMETERS AT 3-5 MINUTE INTERVALS

1245 - COLLECT SAMPLE AT FMGS-MW2

2x1L DRO/RRO
2x1L PAHs
3x40ml VOCs
1x 500ml RCRA METALS

} AM-A433501

TO DATACHEM
~~AM-A433~~ A433502 TRIP BLANK

- WATER IS CLEAR, NO ODOR OR SHEEN OBSERVED

1310 - HEADING TO PHOTODOCUMENT TUNNEL AND TRANSFORMER CANS NEAR NIRVANA HILL

- COULD NOT LOCATE, RETURN

~~1410 SAMPLE COLLECTED~~

~~AM-A433202~~

- CALLED SKIP, HE GUIDED US TO TUNNEL - TRANSFORMER CANS ARE NO LONGER PRESENT; APPEARED TO HAVE BEEN MOVED BY HUD HOME CONSTRUCTORS.

8/30/00 EMD

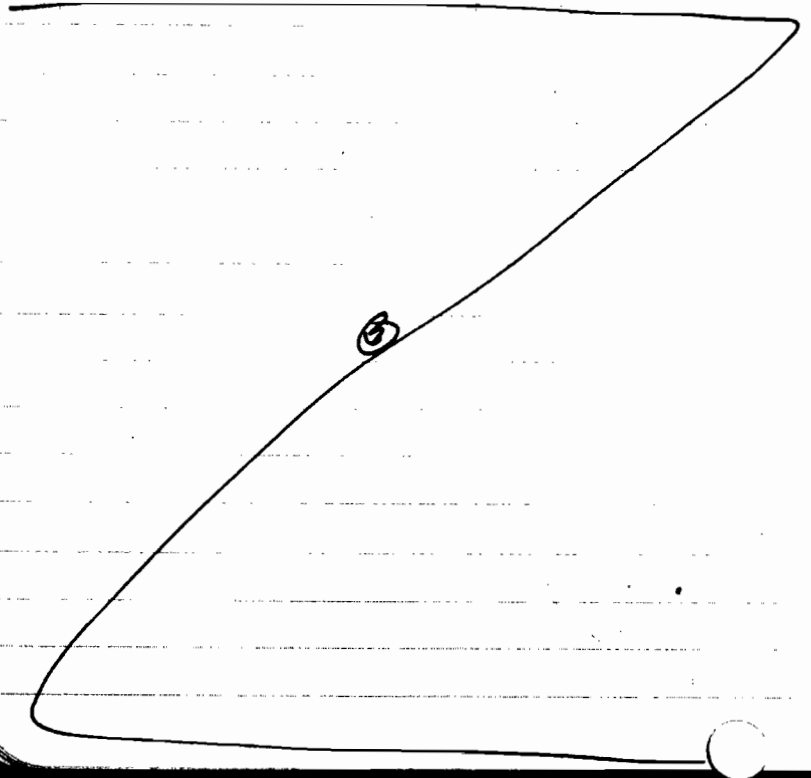
1500 - TUNNEL (CONT.)

PHOTOGRAPHED TUNNEL AND PRESUMED FORMER LOCATION OF TRANSFORMER CANS. RETURN TO OFFICE

1600 - ASSIST TOM WITH UNLOADING GEAR, SAMPLE CONTROL

- SUZANNE BEAUCHAMP (USAED) STOPPED BY OFFICE. ASKED US TO RUN SW8260B ON ALL ROCKY POINT GW WELL SAMPLES INSTEAD OF SW8021B. CALLED KEATHER, GAVE HER SAMPLE #'S OF SAMPLES ALREADY SUBMITTED FOR CHANGE ~ WILL CHANGE REST OF SAMPLES IN REGTER.

1800 - SIGN OFF LOG



8/31/00 EMD

0700 - SIGN ON LOG

- HEALTH AND SAFETY TAILGATE MEETING - DRIVING SAFETY
- CALIBRATED PID
- BEGIN PREPPING SAMPLES FOR SHIPMENT

0845 - MEET TEL-ALASKA UTILITY FOLKS AT UST 2664/2667 GW WELL SITE FOR CLEARANCE

TODD JOOSSE 581-1399 w/ ITC

- UST 2664/2667 SITE IS CLEAR
- MW-11 REDRILL AT PEF-WEST T.F. IS CLEAR
- TODD SAID THEIR UTILITY ENDS AT OSI TOWARDS PORT LEVISHEF ~ THEREFORE NO CLEARANCE NECESSARY

0930 - SENT BO TUNNEL PHOTOS

- E-MAILED DAILY REPORTS
- WORKING ON PACKING UP COOLERS FOR SHIPMENT.

1115 - DROPPED OFF 4 COOLERS AT PENAIR

1 - TO DATACHEM AIR WAYBILL # 2859 8850

3 - TO STLA AIR WAYBILL # 2859 8883

- NOTIFIED LABS; LEFT MESSAGE AT DATA CHEM

1200 - LUNCH

1230 - PREP BOTTLES FOR FIELD WORK THIS AFTERNOON

- HEAD OUT TO HUMPY COVE TO CHECK ON DRILLERS

1300 - DRILLING AT DISPENSARY

- COMPLETED HOLE AT POWERHOUSE ALREADY NO WATER WHEN BEDROCK HIT @ 24.5'

INSTRUCTED DDI TO LEAVE OVERNIGHT.

8/31/00

1330 - DRILLING AT DISPENSARY (HCD-MW1)
DOWN TO APPROX 10' ~ APPEAR TO BE HITTING BEDROCK.
1400 - RETURN TO OFFICE
- LOADING GEAR TO SAMPLE SEEPS
1430 - LOOKING FOR ROCKY POINT WELL MW-1
- USING MAGNETOMETER AND PICK AND GPS COORDS.
- NO LUCK; THOUGH DID FIND SOME SHARDS OF PVC WELL SCREEN IN DIRT ~ LEADING US TO BELIEVE THE WELL AND NEARBY PIEZOMETERS HAVE BEEN DESTROYED BY GRADING AND FILLING OPERATIONS IN THE AREA.
1530 - GOING TO SEEPS
- LOCATED ALL SEVEN SEEP LOCATIONS, THOUGH NONE OF THE SEVEN ARE CURRENTLY FLOWING
1730 - RECEIVED INSTRUCTION FROM SKIP TO HAVE DELTA WESTERN ESCORT SEC ONTO ANDERSON SITE TO GET 1,500 & 2,000 GAL POLY TANKS TOMORROW.
1800 - SIGN OFF LOG

8/31/00

9/1/00

0700 - SIGN ON LOG
- HEALTH AND SAFETY TAILGATE MEETING ~ EASY DRILLING AROUND COBBLY ROCK
- CALIBRATING INSTRUMENTS
- WILL HEAD OUT TO HUMPY COVE TO CHECK HOLES DRILLED YESTERDAY FOR WATER
0730 - HEADING OUT TO HUMPY COVE
0800 - CHECKING WATER AT LATRINE NO. 3 HOLE (HCL3-MW1)
NO WATER (8') ~ AUGER STILL IN GROUND
- CHECKING WATER AT DISPENSARY HOLES. BOTH HOLES (10.5' + 11.0') ARE DRY
- CHECKING WATER AT POWER HOUSE (HCPP-MW1) (24.5') ~ NO WATER
- DRILLERS ON STANDBY
- DRIVING UP TO POINT TO GET PHONE COVERAGE ON ROAD TO MORRIS COVE; CALL SKIP KOCH FOR DETERMINATION
0930 - PER SKIP, WE WILL LEAVE THE AUGERS IN HOLES, COVER THE HOLES AND DRILL ELSEWHERE; MADE SURE THAT I TOLD SKIP, WE ARE AT BEDROCK AND THAT AT THE POWER HOUSE, WE ARE BELOW THE WATER ELEVATION IN THE SURROUNDING WELL POINTS.
1000 - HEADING TO DRILL 2667-MW1
- WENT TO DPW ~ SPOKE WITH CLINT HULLUM, GOT WELL LOG FOR CITY WELL 1A (NEAR 2667-MW1). WATER IS SHALLOW @ 9 ft
- TOM IS SWING-TIEING R/P WELLS TODAY
- HELPING SEC MOVE H2O TANKS TO PWTP

122

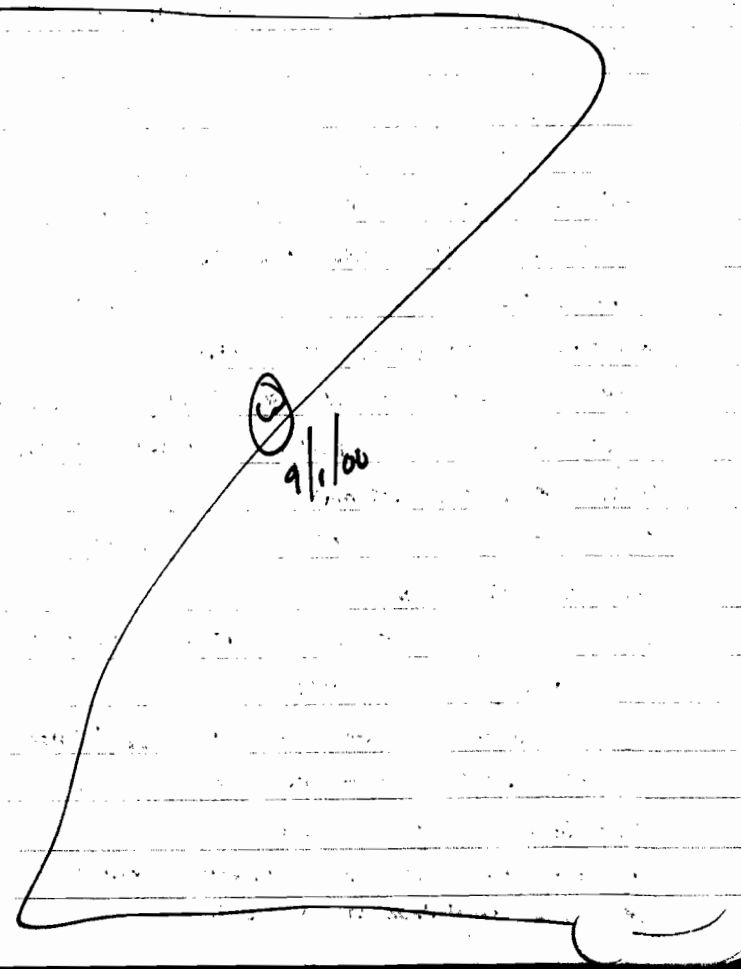
09/1/00 BMO

1045- DRILLERS ARRIVE AND BEGIN DRILLING
- WATER ENCOUNTERED AT 7 ft BGS
- DRILLED WELL TO 15 ft (10ft SCREEN, 5ft SOLID, 3 ft STICKUP
+ WEATHER - PARTLY CLOUDY (HIGH CLOUDS), TEMPS 60-70°F, SW WINDS 0-5 KNOTS. NICE!
- APPEAR TO BE USING SPECIFIED MATERIALS
- 20/40 SILICA SAND (OK)
- PURE GOLD BENTONITE CHIPS (MED.)
- CONCRETE FOR SURFACE SEAL
1400 - DONE FOR NOW AT 2667-MW1
WILL DEVELOP TOMORROW
MOVING TO MW-11
1430 - WILL ABANDON EXISTING MW-11; DRILL NEW ONE TOMORROW
- NOTIFIED MARY JEMIN OF INTENT TO PERFORM PREPARATORY PHASE MEETING FOR WELL/WELL POINT DECOMMISSIONING
1500 - PERFORMED PREP/INITIAL PHASE MEETING FOR WELL/WELL POINT DECOMMISSIONING
- DDI PROCEEDING WITH DECOMMISSIONING MW-11
- WENT WITH TOM TO STAKE WELL LOCATIONS AT PORT LEVASHEF, ALSO LOCATED WELLS & WELL POINTS TO DECOMMISSION
- MET WITH RICHARD CHAGIN (OC) & SHOWED HIM LOCATIONS TOLD HIM WE WILL DRILL THIS WEEKEND DOWN A

123

9/1/00 BMO

1630 - AT PYRAMID VALLEY; LOOKING FOR WP-3075
- FOUND IT!
1700 - RETURN TO OFFICE
- START QC DAILY
- DDI IS DONE WITH DECOMMISSIONING MW-11
1830 - SIGN OFF LOG



9/2/00

0700 - SIGN ON LOG
- HEALTH AND SAFETY TAILGATE MEETING
- CALIBRATING PID
- DISCUSS PLAN FOR DAY - WILL DRILL NEW MW-11 AND DECON + MOVE TO PORT LEVASHEF, POSSIBLY DEVELOP 2667-MW1

0840 - FINISH E-MAILING DAILY REPORT, HEAD TO MW-11
- DDI JUST BEGINNING DRILLING MW11
- DRILLED TO 20 FT BGS
- BUNKER C PRESENT FROM 10 TO 20 FT BGS WATER AT 11 FT ~ NEAR HIGH TIDE
- SPOKE WITH ZAK COLLINS (SEC) ~ WILL FINISH CONSTRUCTING CONTAINMENT FOR WATER TANKS AND READYING DECON PAD FOR DRILLERS. KIWI & J ASSISTED

1130 - DRILLERS PUTTING IN 3 BOLLARDS AROUND MW-11 & STICKUP ABOUT 3 FEET HIGH
- TOM IS TAGGING WATER LEVELS AT ROCKY POINT WELLS
- NEED MORE TEFLON TUBING.

WEATHER - OVERCAST, CEILING APPROX 1,200 ft, SOUTH WIND 0-5 KNOTS, TEMPS 50-55°F
- STAKED LOCATION OF FORMER MW-11 (NOW ABANDONED)

1300 - DRILLERS DECONNING AUGERS (NOT THE AUGERS WITH BUNKER C); BRUCE AND I ARE CLEANING UP DECON PAD (DIRT FROM DRILLERS CLEANING DRILL RIG UPON ARRIVAL ON ISLAND)

9/2/00

1330 - # WEATHER - OVERCAST, SOUTH WINDS 0-5 KNOTS, TEMPS 50-55°F #

1345 - LUNCH

1415 - DRILLERS MOVING TO PORT LEVASHEF; STOPPED TO FUEL UP

1500 - ARRIVE AT PORT LEVASHEF
BEGIN PULLING 3 WELL POINTS (WP-1, WP-2, WP-3)
- PHOTOGRAPHED ALL 3 WELL POINTS + 2 GW WELLS PRIOR TO DECOMMISSIONING WELLS. STAKED LOCATIONS AFTER DECOMMISSIONING
- ATTEMPTED TO CALL COE WHITTEN; RE: DECOMMISSIONING 2 GW WELLS AT PAINT DRUM SITE ON HIS PROPERTY.
- LEFT MESSAGE
- COMPLETED WELL POINT DECOMMISSIONING
- BEGIN DECOMMISSIONING PLD-MW1

1700 - DONE AT PLD-MW1
- DRILLERS HEADING BACK TO DECON PAD TO LOAD UP MORE MATERIALS AND TO DECON.
- HEAD BACK TO OFFICE
- DAILY REPORTS; CALL IN SITREP

1830 - SIGN OFF LOG

9/2/00

126

9/3/00 EMW

0700 - SIGN ON LOG
- HEALTH & SAFETY TAILGATE MEETING
- CALIBRATE PID
- DRILLERS TO DECOMMISSION PLD-MW2 AND DRILL PLD3-MW1 TODAY
- BRUCE WILL TRY DEVELOPING 2667-MW1 WHILE DRILLERS DECON THIS MORNING.

0800 - SENT DAILY REPORTS IN VIA E-MAIL
- TAKING DAY OFF TODAY

1400 - RECEIVED CALL FROM COE WHITTERN; HE IS OK WITH US DECOMMISSIONING WELLS AT PAINT DRUM SITE TOMORROW.
- CHECKED BOREHOLES AT HUMPY COVE → NO WATER IN ANY OF 4 BORINGS.
- SIGN O

WEATHER - OVERCAST, VAR WINDS 10-15 KNOTS, TEMPS 45-55°F
- SIGN OFF LOG

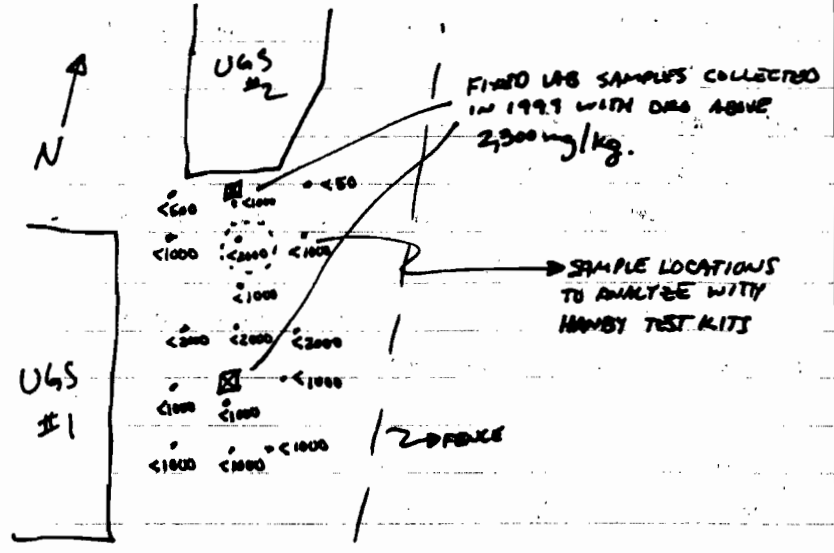
9/3/00

127

9/4/00 EMW

0700 - SIGN ON LOG
- HEALTH AND SAFETY TAILGATE MEETING ~ WATCH DUST WHEN POURING SILICA SAND; SILICOSIS
- CALIBRATING PID
- DRILLERS WILL DECON AUGER 1st; THEN HEAD TO PLD2-MW1 TO SET WELL, PULL 3075-MW1, THEN DEVELOP 2667-MW1

0800 - DOING YESTERDAY'S DAILY, SITREP, ETC.
- DROP TOM OFF TO SAMPLE 'HOT-SPOTS' AT PRE-WWII TANK FARM AREA WHERE WE ARE ON PUTTING CONT. SOIL STOCKPILE. WILL USE HANBY SOIL TEST KITS AND SAMPLE ON A 10' GRID AROUND FIXED LAB SAMPLE LOCATIONS (COLLECTED IN 1999) SEE MAP BELOW.



9/4/00 End

0900 - SOIL SAMPLING IS BEING DONE TO DETERMINE VERTICAL AND HORIZONTAL EXTENT OF CONT. WITH DRO > 2,300 mg/kg.

- TAKE VISIT TO PORT LEWISNOFF AND OBSERVE DRILLING
- DRILLING AT PLD2-MW1; HIT WATER AT 14 ft, WILL DRILL TO 20' AND INSTALL WELL.
- HEAD OVER TO PAINT DRUM SITE TO SCOUT OUT ACCESS TO ULPD SITE WELL DECOMMISSIONING
- ACCESS LOOKS MARGINAL; WILL LET DISCOVERY KNOW

1030 - RETURN TO PWWTF SITE; ASSIST TOM WITH REMAINING SOIL SAMPLES (COLLECTED FROM 0-6" BGS)

* WEATHER - PARTLY CLOUDY, S WINDS 10-20 KNOTS, TEMPS 45-53°F *

1130 - RETURN TO SAMPLE TRAILER TO ANALYZE SAMPLES

1145 - LUNCH

1215 - START ANALYZING SOIL SAMPLES

HANBY TEST KITS ONLY GO UP TO 1000 mg/kg DRO WILL HAVE TO DILUTE ~ CALLING BA FOR PROCEDURE NOT HOME -- LEFT MESSAGE.

- SPENDING SOME TIME CLEANING OUT SAMPLE TRAILER

1440 - GOING TO CHECK ON DRILLERS

- DDI IS DECONNING AUGERS; DROPPED OFF 2 DRUMS SOIL

1530 - HEADING TO PAINT DRUM SITE

1600 - SETTING UP ON ULPD-MW1 (DECOMMISS MW)

- ACCESS IS SOMEWHAT DIFFICULT

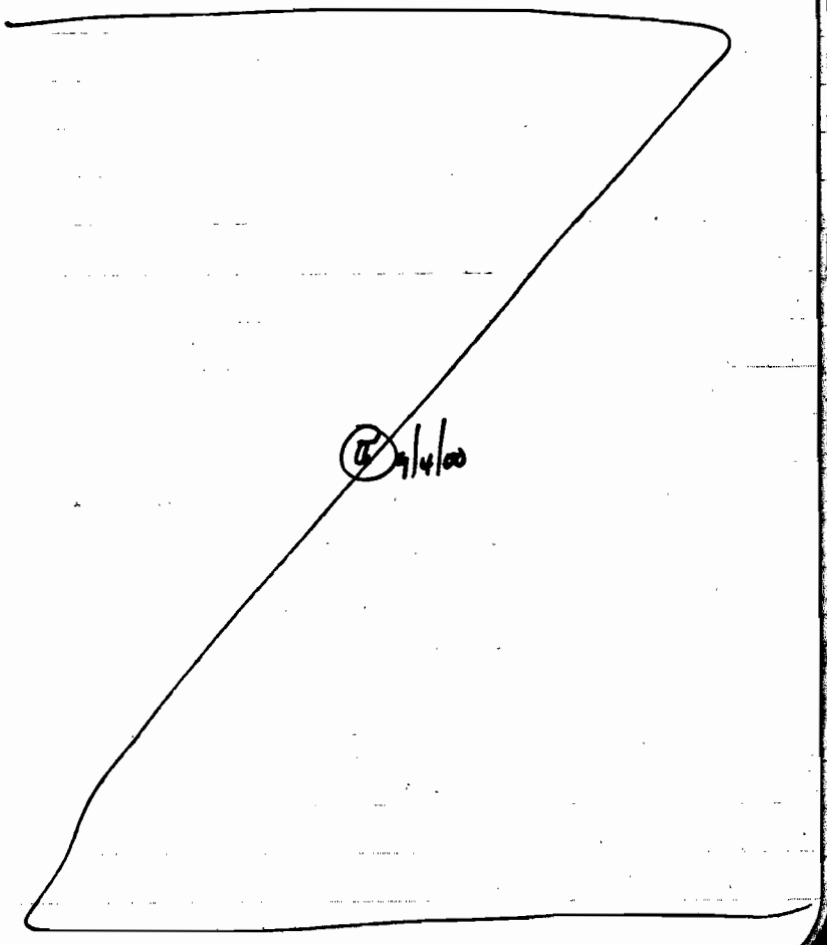
9/4/00 End

1630 - ACCESS TO ULPD-MW2 MAY REQUIRE MODWELL

- REQUESTED DDI TO REMOVE ALL CONCRETE FROM SURFACE SEALS TOO; INCLUDING DISPOSAL.
- RETURN TO OFFICE

1730 - WORKING ON DAILY REPORTS

1800 - SIGN OFF LOG

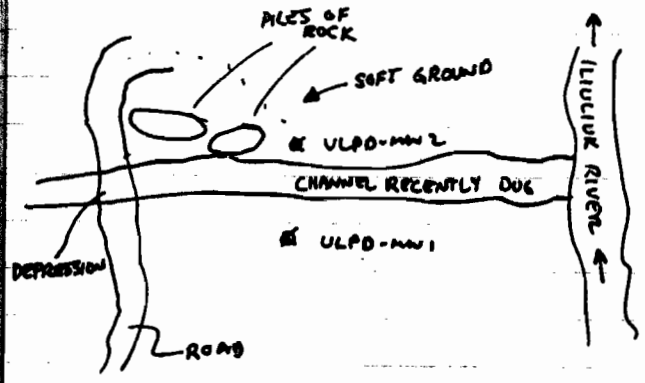


130

9/5/00 ETMS

0700 - SIGN ON LOG

- HEALTH AND SAFETY TAILGATE MEETING ~ WALKING IN TALL GRASS, WATCH HOLES IN GROUND
- CALIBRATING PID
- TOM TO WORK ON ANALYZING SOIL SAMPLES COLLECTED YESTERDAY.
- DRILLERS WILL TRY TO SET UP ON ULPD-MW2, HOWEVER ACCESS LOOKS DIFFICULT ~SEE BELOW MAP



- DDI WILL ASK SEC IF THEY CAN BORROW THEIR LOADER IN CASE THEY NEED PULLING OUT
- WORKING ON SUMMARIZING HUMPY COVE DRILLING DATA
- CALLED TELALASKA (TODD JOOSSE) RE: UTILITIES ON STRAWBERRY HILL. HE SAID THEIR UTILITIES STOP AT THE TRAILERS ON THE NORTH SIDE OF STRAWBERRY HILL OK TO DRILL/DECOMMISSION. WILL SCHEDULE LOCATE FOR FMGS LATER THIS WEEK
- CALLED DPW, SPOKE WITH RALPH

131

9/5/00 ETMS

0830 - DPW (CONT.)

- RALPH SAID WE ARE OK TO DECOMMISSION WELLS ON STRAWBERRY HILL (NO UTILITIES), BUT WE'LL NEED A LOCATE AT FMGS SITE

0930 - CONFERENCE CALL WITH SKIP, SUSANNE, JOHN HALVERSON RE: HUMPY COVE DRY WELLS

1000 - PROBLEMS W/ PHONE - WILL RECONVENE AT 1100

- WORKING ON WEEKLY REPORT FOR ISLANDWIDE
- EXPENSE REPORT

1100 - CONF. CALL (SAME PEOPLE AS ABOVE)

WILL ABANDON ALL 4 DRY HOLES AND DRILL NEW ONE AT POWER HOUSE, HCL 3 & HCL 1

1300 - LUNCH

1330 - MEET BRUCE AT STRAWBERRY HILL ~ SHOW HIM MW-1, 2, & 3 SITES

* WEATHER TODAY - OVERCAST, NW WIND 10-15 KNOTS, TEMPS 45-55°F *

- DRILLERS GOING TO HUMPY COVE TO ABANDON DRY HOLES AND PULL AUGERS FOR DECON.
- FINISH WEEKLY AND MAIL OFF
- RECEIVED CALL FROM STLA (RYAN) ~NEED TO RESAMPLE AM-A433201 (AK102/103 & SW8270C SIM) BECAUSE THE LAB BLEW HOLD TIMES. (MW-6 @ ROCKY POINT)
- TOM HAS FINISHED ANALYZING PWMTP SOIL SAMPLES.

1600 - HEAD TO MW-6 (ROCKY POINT)

9/6/00 (5)

1600 - MW-6 (ROCKY POINT) ⑧ CONT. RESAMPLE

PID = 0.0 ppm

WL BTOC = 6.05' > 7.64'

TD = 13.69'

1605 - BEGIN PURGE

CASING VOL 1.3 GAL x 3 = 3.9 GAL MIN. PURGE

8 min/GAL x 1.3 gal = 10 min / PURGE VOL

	1st	2nd	3rd
pH (S.U.)	6.39	6.43	6.48
SC (µS/cm)	215	216	215
D.O. (mg/L)	0.38	0.21	0.14
TEMP (°C)	9.0	9.0	9.0
TURB (NTU)	18.3	4.94	2.63
SAL (PPT)	0.0	0.0	0.0

1640 - COLLECT RESAMPLE AT MW-6

4x 1L AK102/AK103

4x 1L SW8270C SIM

(MS/MSD)

AM-A433601

1710 - RETURN TO OFFICE

- WORK ON DAILY REPORTS

1815 - SIGN OFF LOG

② 9/6/00

9/6/00 (END)

0700 - SIGN ON LOG

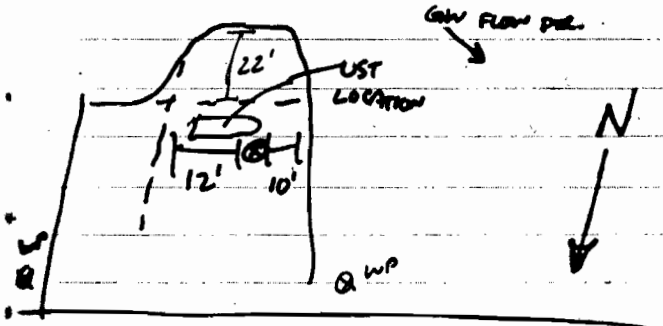
- HEALTH AND SAFETY TAILGATE ~ WINDY TODAY

- CALIBRATING PID

- WILL DRILL AT HUMPY TODAY

0800 - HEADING OUT TO SITE

- DRILLERS SETTING UP ON HCPP-MW4 ~ LOCATED INSIDE EXCAVATION CLOSER TO FORMER UST LOCATION



0830 - TOM IS MEETING UTILITY CLEARANCE (DPW AND ITC) FOLKS AT FORT MEYER GASOLINE STATION FOR WELL DECOMMISSIONING ~ ALL WELLS OK TO DRILL/DECOMMISSION.

0900 - RETURN TO OFFICE - GETTING SPOON DECON BUCKETS (DRILLERS FORGOT)

- RETURN TO HUMPY COVE POWER PLANT

0945 - DRILLERS AT 17.6', NO WATER YET

9/6/00 EMD

1000 - ASSISTING DRILLERS DECON SPLIT SPOONS

- AT 27.5 FEET ~ MOIST, BUT NO WATER

1045 - COLLECTED TOC SAMPLE (25.0-27.5') AM-A500001

- AT 30 FEET, A MOIST SAND AND GRAVEL WAS ENCOUNTERED AND SUDDENLY WATER WAS PRESENT UP TO 21.5 FEET; APPEARS THE AQUIFER IS CONFINED HERE. WILL FINISH WELL FROM 20-30 FEET, BLANK REMAINDER

1145 - RETURN TO OFFICE (NOTIFIED SKIP OF ABOVE INFO)

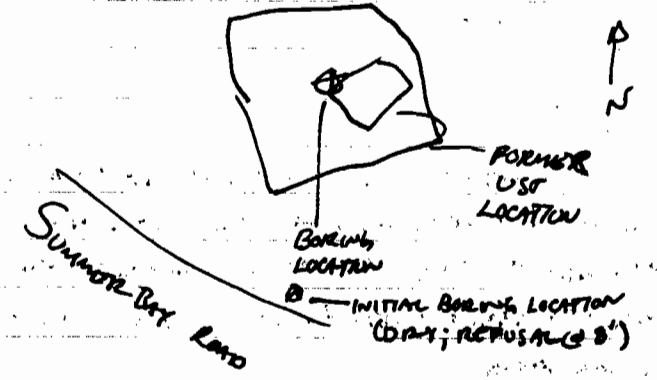
1200 - LUNCH

1230 - RETURN TO OFFICE

- HEAD BACK TO HUMPY COVE
- DRILLERS HAVE BENT. CHIPPED TO 4 FEET; RAN OUT OF CHIPS BRUCE WENT TO GET MORE

* WEATHER - MOSTLY CLOUDY, TEMPS 45-55°F, SW WINDS 20-30 KNOTS *

1330 - DRILLERS SET UP ON BOREHOLE AT LATRINE No. 3



- DRILLERS MOVING SUPPLIES TO LATRINE No. 3 SITE

1400 - BEGIN DRILLING

9/6/00 EMD

1500 - CONTINUING DRILLING AT HCL3-MW1

1530 - HITTING BEDROCK AT 8 FEET BGS; NO WATER

- COLLECTED SAMPLE FROM 6-7.5' BGS

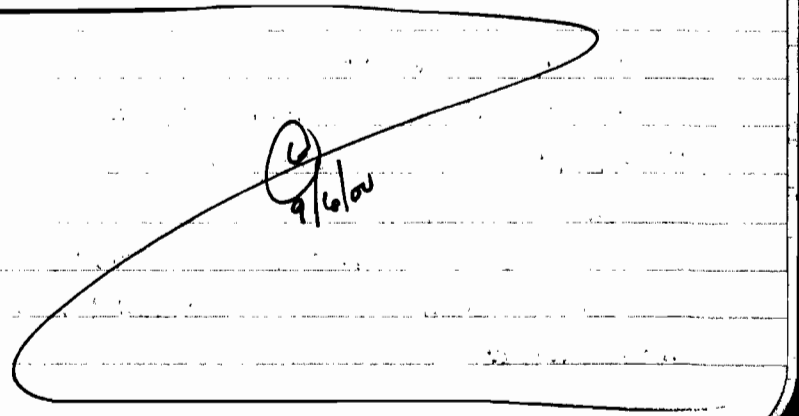
ANALYZE FOR TOC 1x 8oz A.G.
DRO/RRO 1x 8oz A.G.
PAHs 1x 8oz A.G.
} AM-A500002

- WILL PLUG HOLE WITH BENTONITE
- LOADING GEAR ~ HEADING (DRILLERS) BACK TO TOWN

1630 - BEGIN DECOMMISSIONING AT STRAWBERRY HILL WELL SHL-MW1

- RETURN TO OFFICE
- TOM HAS COMPLETED PHASE II OF SOIL SAMPLES AND SCREEN AT CONTAMINATED AREA AT PRE-WWII TANK FARM (SE CORNER OF SITE). WILL FIELD MARK SITE TOMORROW.
- WORKING ON DAILYS, AND FCTS INFO FOR JENNY

2200 - SIGN OFF LOG



136

9/7/00 EMD

0700 - SIGN ON LOG
- HEALTH AND SAFETY TAILGATE MEETING (DECON PAD OPERATIONS)
- CALIBRATING INSTRUMENTS
- DRILLERS TO FINISH UP SHL-MW1 & SHL-MW2 DECOMMISSIONING TODAY (STILL HAVE 5 FEET TO DO AT SHL-MW1). ALSO, THEIR 'SHIFTER' HAS BROKE AGAIN - WILL REPAIR IT WHILE THEY DECON AUGERS.
- DRILLERS WILL ALSO START ON WELL DEVELOPMENTS AT MW-11, PLD3MW1, PLD2-MW1, AND HCPP-MW1.

0800 - SCHEDULED UTILITY LOCATES FOR TOMORROW @ 9.am AT FORT MEARS PUBLIC WORKS AREA FOR WELL DECOMMISSIONING; CALLED DPW AND ITC.
- TOM & I ARE EDMSing AND SHIPPING SAMPLES THIS MORNING.
  1 COOLER TO STLA (AA-A41336)
  1 COOLER TO DCHM (AA-A5000)
- NOTIFIED LABS OF INCOMING COOLERS
- SENDING OUT DAILY REPORTS
- SPOKE WITH SKIP, WILL DECOMMISSION WELLS AT FMGS NO MATTER WHAT RESULTS OF FMGS-MW2 ARE (WILL DO LAST).

1030 - TOM & I ARE SCOUTING AROUND TOWN LOOKING FOR BOAT TO SAMPLE FROM AT UNALASKA AND ILIULIUK LAKES.

137

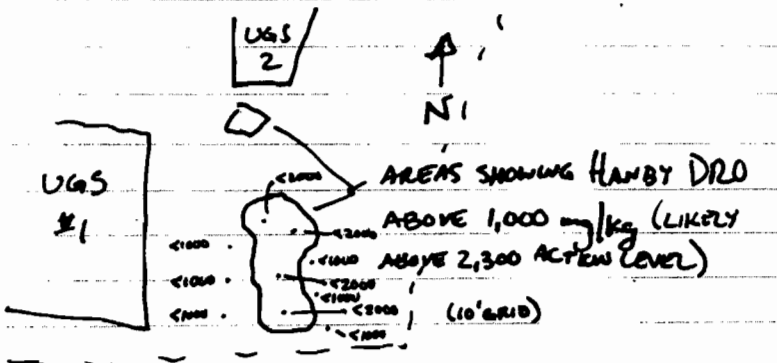
9/7/00 EMD

- FOUND BOAT AT UNALASKA SENIOR CENTER. AL IN UNIT #13 WILL LET US USE HIS 2-MAN DINGHY ~ NO CHARGE
- ALSO GOT OK TO USE KIWI'S ACQUAINTANCES ALUMINUM SKIFF AT LAKE ILIULIUK. $100/DAY.

1130 - LUNCH

1200 - TO AIRPORT TO PICKUP RANDY G. ~ NO SIGN OF HIM ON PLANE

1230 - TO OFFICE WILL COLLECT LAST FEW SAMPLES AT PWWTF SOIL STOCKPILE AREA - ANALYZED AND DELINEATED CONT. AREA AT SITE



1400 - WEATHER - CLEAR, (MORNING FOG) CALM, TEMPS 45-60°F

1500 - TO 2667-MW1 - WILL TRY TO CLEAN LAST BIT OF SEDIMENT OFF BOTTOM WELL USING PERISTALTIC PUMP
- PUMPED ABOUT 15 GALLONS OUT OF WELL, STILL SLIGHTLY TURBID BUT APPEARS SAMPLEABLE

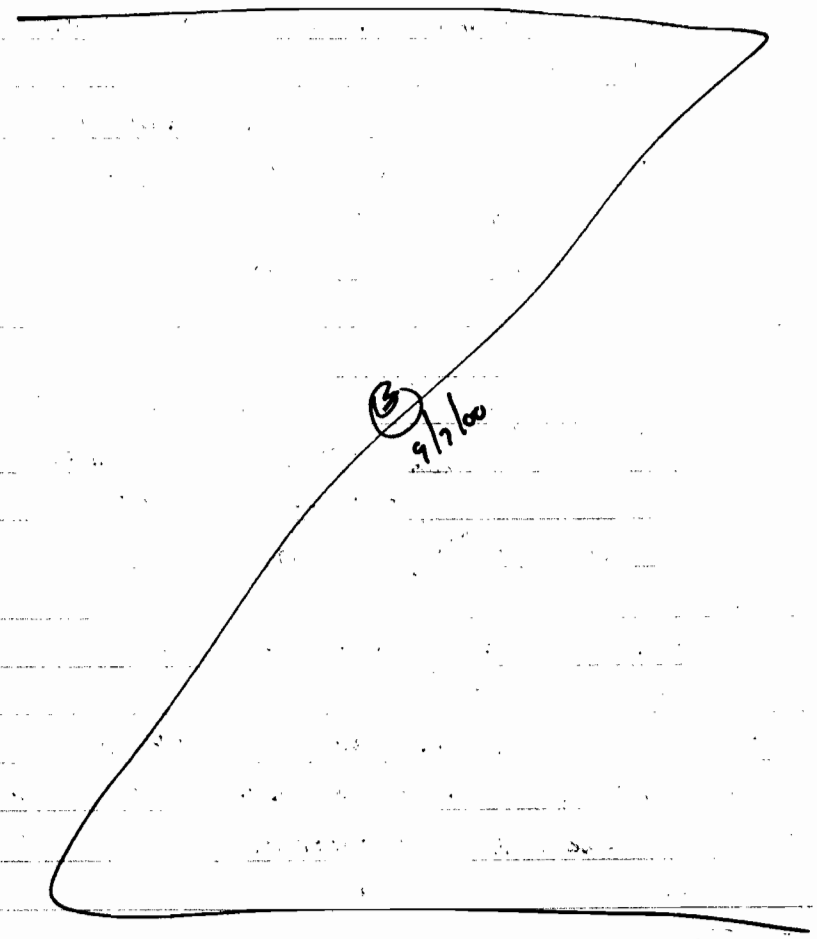
9/7/00 ETM

1630 - TO AIRPORT; PICKED UP RANDY G. (SITE MANAGER) AND BUSTER G. (SSHO). TOOK THEM TO OFFICE FOR QUICK TOUR/KEYS AND THEN TO APTS AT FTS

1715 - RETURN TO OFFICE

- DAILY REPORTS, SITREP

1830 - SIGN OFF LOG



9/8/00 EDWD

0700 - SIGN ON LOG

- HEALTH AND SAFETY TAILGATE MEETING
- CALIBRATING PIDs
- SENDING IN DAILY REPORTS
- TOM GETTING GEAR READY FOR SAMPLING WELLS AT UST 2664/2667 SITES TODAY

0830 - TO FORT MEADE PUBLIC WORKS

- LOCATED 3 WELLS
- UTILITY CLEARANCE, WATER/SEWER OK - ELECTRICAL LINES ARE SOMEWHAT CLOSE ~ BEING PAINTED IN BY ELECTRICAL DPW GUY
- GIVING RANDY AND BUSTER SITE ORIENTATION

1020 - ARRIVE AT 2664-MW2

PID = 0.1

WL BTOC = 8.94'

TD BTOC = 17.10'

PUTTING TEFLON TUBING DOWN WELL

1037 - BEGIN PURGE, PUMPING 1 GAL/8 min

STABILITY CRITERIA						
±1	pH (s.u.)	6.10	6.19	6.27	6.31	6.38
±3	S.C. (mS/cm)	192	196	200	201	202
±10	D.O. (mg/L)	0.83	0.77	1.01	1.24	1.23
±2	TEMP (°C)	8.5	9.0	9.1	9.2	9.3
<10	TURB (NTU)	21.2	11.2	3.75	1.06	0.92
	SAL (PPT)	0.0	0.0	0.0	0.0	0.0
	MINUTES INTO PURGE	5	10	15	20	30

(140)

9/8/00 (EW)

1111 - COLLECT SAMPLE AT 2664-MW2

2x1L DRO/RRO AM-A500101

2x1L PAH - WATER IS CLEAR, ODORLESS, NO SHEEN

- GPSing UST 2664 SITE TO INCLUDE BUILDING CORNERS AND WELLS.

1145 - HEAD TO FORT MEARS PUBLIC WORKS

DECOMMISSIONING WELL FMPW-MW3

1200 - LUNCH

1230 - BACK TO OFFICE

- NEW KEY FOR NEW DOOR KNOB

*WEATHER TODAY - OVERCAST, OCCAISSIONAL RAIN, SE WINDS 10-15 KNOTS, TEMPS 45-53°F

TO DO: - SEND FACT SHEETS BACK TO SKIP

- FOLLOWUP ON VIALS REPORT ON SITREP

- GET MODEL* OFF WT SYSTEM TO BQ

- KEEP RICHARD INFORMED ON WORK!

1300 - ARRIVE AT 2664-WP1

PID = 8.0 ppm

WL BTOC = 11.77'

TD BTOC = 12.25'

1310 - BEGIN PURGE

- WATER DRIED UP ALMOST IMMEDIATELY, WILL TRY TO TAKE ONE SET OF FIELD PARAMETERS AND THEN SAMPLE

- USING SUPER LOW PUMP RATE ≈ 1 GAL/HR

50ml/50ml

(141)

9/8/00 (EW)

1310 - 2664-WP1 (CONT.)

- PURGED APPROX 2 LITERS BEFORE SAMPLE

pH (S.U.)	6.62
S.C. (µS/cm)	245
D.O. (mg/l)	1.46
TEMP (°C)	11.5
TURB (NTU)	26.0
SAL (PPT)	0.0

WATER IS CLEAR, ODORLESS, NO SHEEN OBSERVED

1330 - SAMPLE 2664-WP1

2x1L DRO/RRO > AM-A500102

2x1L PAHs

TAKING OVER 15 MINUTES TO FILL EACH 1L AMBER

1420 - SET UP ON 2667-MW1

PID = 0.8 ppm

WL BTOC = 10.45'

TD = 18.32' BTOC

1437 - BEGIN PURGE

MINUTES INTO PURGE	5	10	15	18	21	25	28	31
pH (S.U.)	6.69	6.68	6.68	6.63	6.62	6.62	6.61	6.60
S.C. (µS/cm)	224	225	226	227	226	226	226	227
DO (mg/l)	1.94	1.42	1.15	1.22	1.18	1.24	1.28	1.23
TEMP (°C)	8.2	8.3	8.3	8.4	8.4	8.5	8.4	8.4
SAL (PPT)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TURB (NTU)	100	82	44	4.86	2.80	2.25	1.32	0.99

142

9/8/00 EMD

1515 - COLLECT SAMPLE AT 2667-MW1
2x1L DRO/RRO > AM-A500103
2x1L PAH
WATER IS COOL, CLEAR, NO ODOR OR SHEEN OBSERVED

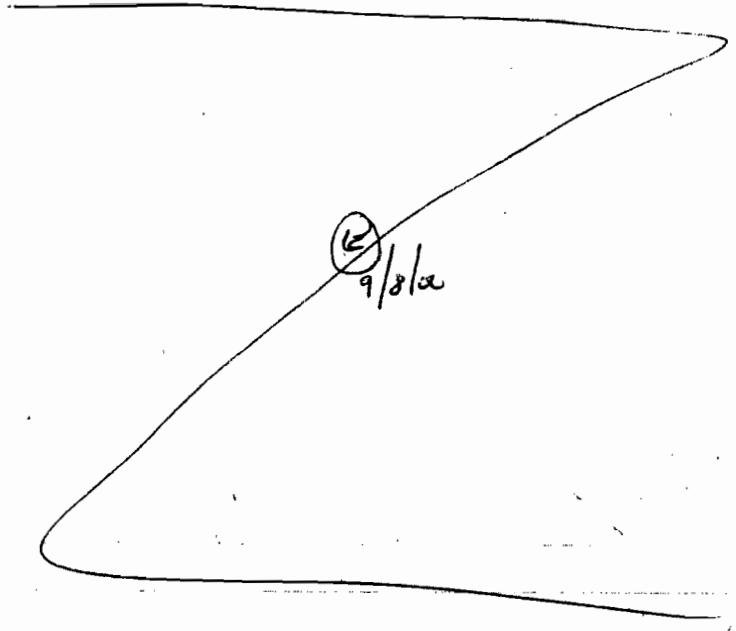
1545 - TO ANDERSON YARD - LEFT MESSAGE WITH BO
NO APPARENT MODEL NUMBER ON UNIT

1600 - DROPPING OFF SAMPLES AND GEAR → EDMS

1630 - TO AIRPORT TO PICKUP KEITH RUPP (USARD QAR)
- WAITING FOR BAGS — LONG TIME!

1700 - RETURN TO OFFICE, KEITH STAYING AT GRAND ALEUTIAN, SITE ORIENTATION TOMORROW

1800 - SIGN OFF LOG



143

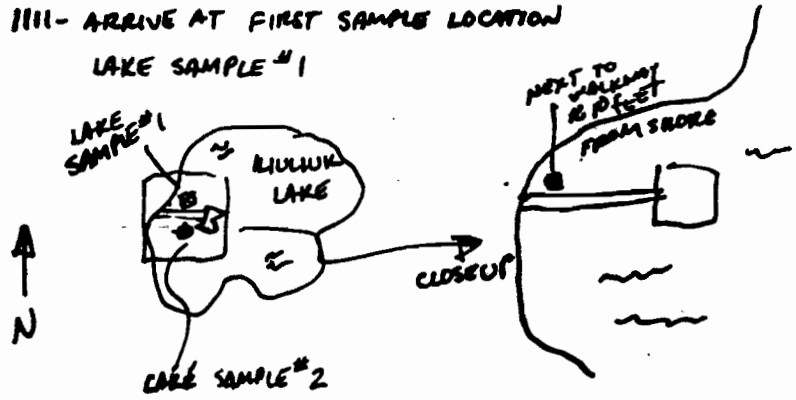
9/9/00 BTW

0700 - SIGN ON LOG
- HEALTH AND SAFETY TAILGATE MEETING
- SAFE PLAN OF ACTION FOR BOAT OPERATIONS

0830 - PICKED UP BOAT ~ 8' ZODIAC W/ MOTOR
- INSPECTED IT ~ LOOKS IN GOOD CONDITION
- DRILLERS DECOMMISSIONING FMGS WELLS TODAY (MW4, 3, 5, 6, AND 4) NOT MW-2.
- PREPARING GEAR FOR SEDIMENT AND SURFACE WATER SAMPLING ON LAKE ILIULIUK AND UNNAMED LAKE

1030 - ARRIVE AT CSX YARD AT LAKE ILIULIUK
- WILL SAMPLE AT 2 LOCATIONS AROUND OLD PUMPHOUSE.

1111 - ARRIVE AT FIRST SAMPLE LOCATION
LAKE SAMPLE #1



- SAMPLING FROM BOAT
- LAKE BOTTOM = 8.0 FEET BTOB (BELOW TOP OF BOAT) - LOTS OF WOOD DEBRIS IN LAKE BOTTOM

144

9/9/00 BMD

1115 - ILIULIUK LAKE (CONT.)

- FIELD PARAMETERS COLLECTED WITH CALIBRATED HORIBA U-10

pH (S.U.)	- 6.61
S.C. (µS/cm)	- 0.132,
D.O. (mg/l)	- 9.76
TEMP (°C)	- 12.8°
TURB (NTU)	- 8.0
SAL (PPT)	- 0.0

1120 BEGIN COLLECTING SURFACE WATER SAMPLE

- 2x1L DRO/RRO
- 2x1L PAHs
- 2x1L PCBs

→ AM-A500201

WATER IS CLEAR, NO ODOR OR SHEEN

1130 - BEGIN COLLECTING SEDIMENTS AT LAKE #1 SITE

2x8oz AMBER GLASS JAR

DRO/RRO, PAHs, PCBs → AM-A500202

1215 - AT LAKE #2 SITE (ILIULIUK); DEPTH = 20.0' BTOB

1230 - COLLECTING WATER SAMPLE

pH (S.U.)	6.65
S.C. (mS/cm)	0.131
D.O. (mg/l)	9.88
TEMP (°C)	12.9
TURB (NTU)	0
SAL (PPT)	0.0

→ 2x1L DRO/RRO
2x1L PAHs
2x1L PCBs

→ AM-A500203 A500301

WATER IS CLEAR, NO ODOR OR SHEEN.

145

9/9/00 BMD

1230 - COLLECTING SEDIMENTS FROM LAKE #2 SAMPLE (ILIULIUK LAKE)

2x 8oz AMBER GLASS JAR → AM-A500204 A500302

1245 - BREAKING BOAT INTO TRUCK

LUNCH

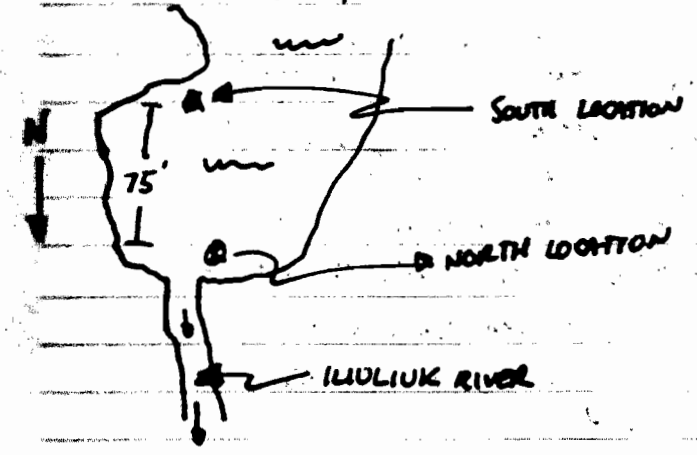
1445 - BACK TO OFFICE

DROP OFF SAMPLES; PICK UP MORE BOTTLES

1515 - HEAD TO UNALASKA LAKE

BOAT PUT IN AT CHURCH (METHODIST)

1535 - ARRIVE AT UNALASKA LAKE NORTH SITE (SEE MAP BELOW)



DEPTH = 6 FT BTOB

FIELD PARAMETERS

pH (S.U.)	= 6.98	TURB (NTU)	= 1
S.C. (mS/cm)	= 0.084	TEMP (C)	= 11.9
D.O. (mg/l)	= 11.27	SAL (PPT)	= 0.0

9/9/00

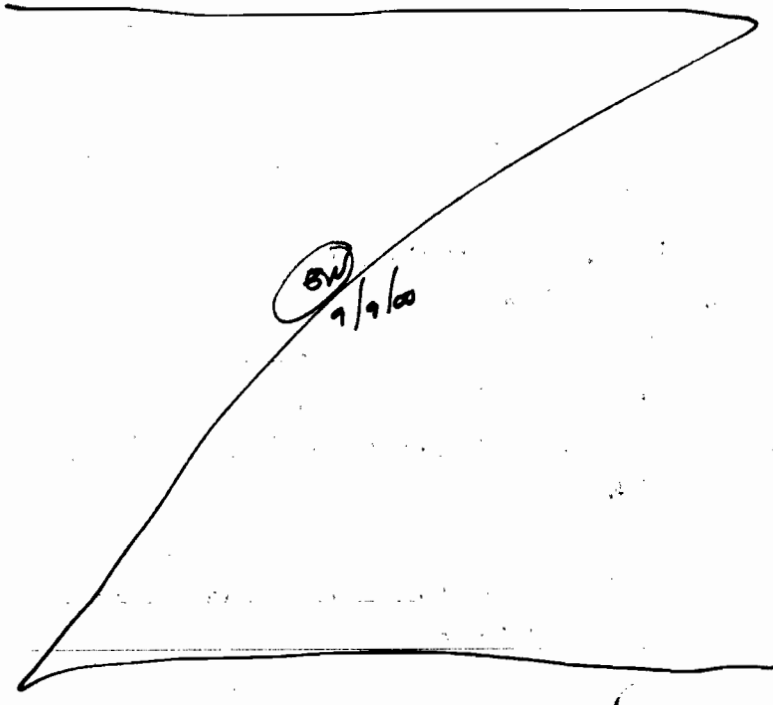
1540 - COLLECT SAMPLE AT UNALASKA LAKE NORTH LOC.
WATER IS CLEAR, ODORLESS, NO SHEEN
2x 1L DRO/RRO > PRIMARY AM-~~A500205~~ A500401
2x 1L PAH
1545 - 2x 1L DRO/RRO > DUP ~~AM-A500210~~ A500402
2x 1L PAH
2x 1L DRO/RRO > FIELD REP. ~~AM-A500101~~ AM-A500501
2x 1L PAH
1600 - BEGIN SEDIMENT SAMPLE AT SAME LOCATION
1 x 8oz DRO/RRO > AM-~~A500302~~ A500601
1 x 8oz PAH
1605 - 1x 8oz DRO/RRO > AM-~~A500303~~ A500602
1x 8oz PAH
1x 8oz DRO/RRO > AM-~~A500402~~ A500501
1x 8oz PAH
SEDIMENT IS DARK FINE GRAINED SAND
1630 - ARRIVE AT UNALASKA LAKE SOUTH LOCATION
1645 - COLLECT UNALASKA LAKE SOUTH LOCATION
2x 1L DRO/RRO > AM-A500603
2x 1L PAH

pH (S.U.)	= 7.28
S.C. (mS/cm)	= 0.083
TEMP (°C)	= 12.6
TURB (NTU)	= 1
D.O. (mg/l)	= 10.97
SAL (PPT)	= 0.0

WATER IS CLEAR
NO ODOR OR SHEEN OBSERVED
DEPTH = 7 FT BTOB

9/9/00 BLND

1700 - COLLECT SEDIMENT SAMPLE
1x 8oz DRO/RRO > AM-~~A500304~~ -A500604
1x 8oz PAH
- SEDIMENT IS A BLACK FINE-GRAINED SAND
1710 - RETURN TO SHORE - LOAD UP, TRUCK WITH BOAT AND GEAR, RETURN TO OFFICE
- UNLOAD GEAR AT OFFICE
- CLEAN BOAT AND RETURN TO TROY AT AIRPORT
1830 - WEATHER TODAY - OVERCAST, SW WIND 10-15 KNOTS, * TEMPS 45-55°F *
- SIGN OFF LOG



148

9/6/00 BW

0700 - SIGN ON LOG
- HEALTH AND SAFETY TAILGATE MEETING
- CALIBRATE PID
- YESTERDAYS REPORT, E-MAIL IT OFF
- BRUCE HAS TODAY OFF, I WILL SIT RIG ~ DRILLERS TO DECOMMISSION MW-3 AT FORT MEARS GASOLINE STATION AND SWITCH DRILL TO NODWELL FOR WELL AT HUMPY COVE LATRINE No. 1.
- TOM IS WORKING ON EDMS FOR YESTERDAY'S LAKE SAMPLES, ALSO PACKING BOTTLES FOR SHIPMENT TOMORROW.

0900 - DRILLERS ARRIVE AT FORT MEARS GASOLINE STATION MW-3
- BEGIN DECOMMISSIONING
- PULLED CASING FIRST ~ SAND-PAK SCREEN SECTION
- 22 FT. TD; WATER AT ABOUT 15 FEET BGS
- USED 7 BAGS OF BENTONITE CHIPS

1100 - RETURN TO DECON PAD
- DRILLERS SWITCHING DRILL TO NODWELL
- OFFLOADING 2 DRUMS OF CUTTINGS

* WEATHER - MOSTLY CLOUDY, TEMPS 45-50°F, NW WINDS 15-20 KNOTS *

1130 - TALK WITH ZAK @ SEC
- NEED TO EXCAVATE CONT. SOIL AT SE CORNER OF HAVE SITE

149

9/10/00 BW

- NEED TO MOVE TP3 SOIL (SKIP-MONDAY)

1300 - TO OFFICE
- WORKING ON SAMPLE SUMMARY SPREADSHEET.
- TOM IS PACKING UP SAMPLES FOR SHIPMENT TOMORROW

1530 - DONE WITH SPREADSHEET

1600 - SIGN OFF LOG

9/10/00

150

9/11/00 BMW

0700 - SIGN ON LOG
- HEALTH AND SAFETY TAILGATE MEETING
- CALIBRATE PID AND WATER SAMPLING INSTRUMENTS
- PACKAGING COOLERS FOR SHIPMENT

0900 - SENT 6 COOLERS TO DATACHEM
1 " " LAUCKS
- FAXED CoCs AND AIR WAYBILL #'s TO EACH LAB
- DID CQC DAILYS ~CAN'T PRINT DUE TO NEW PRINTER MALFUNCTION

1000 - HEAD TO HUMPY COVE

1035 - DRILLERS JUST BEGINNING TO DRILL AT LATRINE No. 1 - MW1 ~LOCATED ABOUT 15-20 FT DOWNGRADIENT OF UST (STILL IN GROUND)
- BEGIN SAMPLING HCPP-MW1
PID = 0.0
WL BTOC = 23.70'
TD BTOC = 32.33'

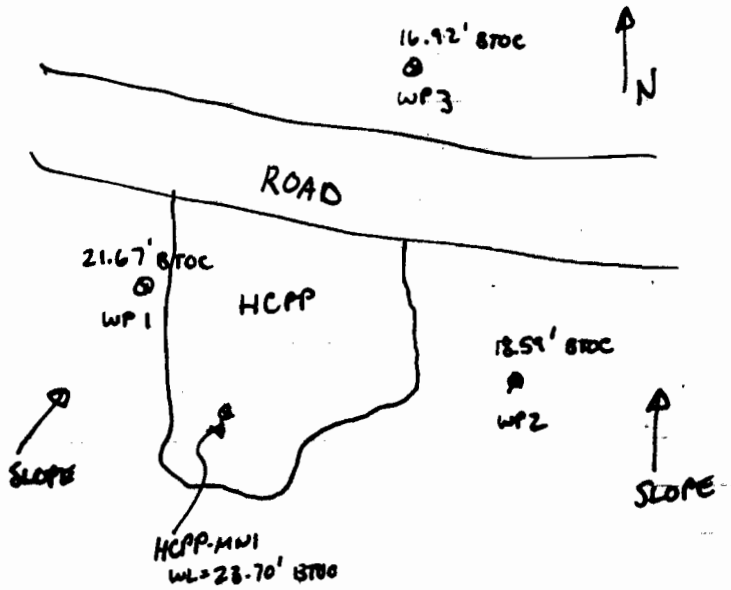
1100 - BEGIN PURGE; PURGE RATE = 1 GAL/8min

TIME SINCE START	16	22	28	35	38	42	47	50
pH (S.U.)	6.74	6.83	6.95	6.97	7.02	7.02	7.06	7.05
S.C. (µS/cm)	219	218	216	211	203	192	180	176
D.O. (mg/L)	5.94	5.82	5.80	5.80	5.79	5.82	5.76	5.80
TURB (NTU)	65.5	57.5	~~29.30~~ 30.9		15.0	6.88	5.89	5.53	5.49
TEMP (°C)	7.3	7.6	6.9	6.9	6.9	7.0	6.8	6.8
SAL (PPT)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

151

9/11/00 BMW

1130 - WATER LEVELS AT ALL WELLS/WELL POINTS AT HC POWER PLANT



1155 - COLLECT SAMPLE AT HCPP-MW1
2x1L DRO/RRO > AM-A500801
2x1L PAHs
WATER IS CLEAR, NO ODOR, NO SHEEN OBSERVED
- CHECK ON DRILLERS; HIT REFUSAL AT 30'. INSTRUCTED THEM TO OFFSET 5' AND TRY AGAIN

1230 - AT 20' ~ STILL NO WATER
- HEADING BACK TO TOWN

* WEATHER - MOSTLY CLOUDY, WEST WINDS 10-15 KNOTS TEMPS 46-55°F *

152

9/11/00 EMO

1320 - ARRIVE AT MW-11, PRE-WWII TANK FARM

CHECKING PRODUCT THICKNESS/PRESENCE

PRODUCT LEVEL = ~~15.6' BTOC~~ 15.62' BTOC

WATER LEVEL = ~~15.75' BTOC~~ 15.67' BTOC

- BACK TO OFFICE TO DROP OFF SAMPLES AND RELOAD

1535 - ARRIVE AT PORT LEWISMET, PLD2-MW1

PID = 0.0 ppm

WL BTOC = 16.79'

TD BTOC = 22.65

1551 - BEGIN PURGE; PURGE RATE = 1GAL/8 min

TIME SINCE START (min)	5	26	29	32	35
pH (S.U.)	6.96	6.41	6.38	6.33	6.36
SC (μS/cm)	83	81	81	81	81
D.O. (mg/l)	7.97	7.68	7.68	7.74	7.86
TEMP (C)	6.7	6.0	5.7	5.9	5.8
SAL (PPT)	0.0	0.0	0.0	0.0	0.0
TURB (NTU)	88.6	2.56	1.36	1.26	1.31

~~1630~~ 1635 - BEGIN COLLECTING SAMPLE FROM PLD2-MW1

5x 40ml VOA SW8260B

4x 1L AK102/103

4x 1L PAH

4x 1L PCBs

2x 500ml RCRA METALS

} AM-A500901

MS/MSD AT THIS LOCATION

153

9/11/00 EMO

-1635 - PLD2MW1 (CONT.)

- WATER IS CLEAR, NO ODOR OR SHEEN OBSERVED

1700 - RETURN TO TOWN

- DRILLERS DONE AT HUMPY LATRINE No. 1

- HIT 28 FEET, REFUSAL AND NO WATER

- INSTALLED WELL DESPITE NO WATER (PER ADEC/USAFD AGREEMENT)

- SETTING UP RIG ON STRAWBERRY HILL WELL SHL-MW3 TO DECOMMISSION TOMORROW

1800 - DUMPED 40 GALLONS OF WELL PURGE WATER AT DECON PAD

1830 - SIGN OFF LOG

EMO 9/11/00

- REWARD IF FOUND -

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CONTENTS

PAGE	REFERENCE	DATE

9/12/00

~~C/S — Sec Nick Grundy's Field Log~~ 9/12/00

~~For well bottoms samples~~ 9/12/00

0700 - SIGN ON LOG

- HEALTH AND SAFETY TAILGATE MEETING WITH DRILLERS
- SPA - WEED BURNER ON AUGERS
- SENDING DAILY REPORTS TO USAED
- CHANGE ORDER FOR ADDING FMGS-MW2 TO DDI DECOMMISSIONING WORK - JENNY COORDINATING WITH DDI AND OFFICE

0800 - TAILGATE AT SEC

- TOM WORKING ON COCs FOR YESTERDAY'S SAMPLING
- 1.5 HOUR TAILGATE MEETING

0945 - BEGIN EQUIPMENT INSPECTIONS

EQUIPMENT ON SITE

- JOHN DEERE 750 B [illegible] TRUCK
- KENWORTH 10CY DUMP TRUCK (TWO)
- SAMSUNG SL 250 3CY LOADER
- KOBELCO SK 220 EXCAVATOR
- WESTERN STAR TRACTOR TRAILER
- LOWBOY TRAILER
- S1700 FLATBED SERVICE TRUCK
- FORD F350 FLATBED TRUCK
- FORD F350 CREW CAB PICKUP
- BRIGGS AND STRATTON 8HP AIR COMPRESSOR
- MULTIQUIP 5KW GENSET
- MILLER 8000W GENERATOR/WELDER

9/12/00 (DNA)

1015 - * WEATHER TODAY - RAIN, OVERCAST, WIND: WINDS 5-10 KNOTS, TEMPS 46-50°F *
- DRILLERS AT STRAWBERRY HILL DECOMMISSIONING SHL-MW3
- WILL TRY TO DO FMGS MW2 TODAY AS WELL
- CALLED RICHARD NOTIFIED HIM OF OUR PRESENCE ON HILL 400 AND DRILLERS WORK, MAY NEED TO IMPROVE ROAD ON HILL 400.
- ~~SHERRY~~ SCHEDULED PREP/INITIAL PHASE MEETING FOR STOCKPILE CONSTRUCTION FOR 1600 HRS TODAY
- NOTIFIED ~~ZAK~~ OF SHPO MEETING TOMORROW, ALL PERSONEL MUST ATTEND.

1100 - RAINY TARPING INSPECTIONS OVER FOR NOW
- HEAD BACK TO OFFICE TO PREP GEAR FOR GW SAMPLING

1130 - LUNCH

1400 - HEAD TO PLD3-MW1
PID - 0.0 ppm
WL BTOC = 6.29'
TD BTOC = 11.09'

1300 - BEGIN PURGE
PURGE RATE = 1 GAL/8 min
SEE NEXT PAGE FOR FIELD PARAMETERS
- WEATHER IS DETERIORATING
HEAVY WINDS AND RAIN NOW

9/12/00 (DNA)

PLD3-MW1 (CONT.)

TIME SINCE START	25	31	34	37	40	43	46	49
pH (S.U.)	6.34	6.46	6.45	6.42	6.47	6.48	6.50	6.47
EC (mS/cm)	47.0	47	47	48	47	47	47	47
DO (mg/L)	9.90	9.91	9.81	9.81	9.84	9.91	9.87	9.85
TEMP (°C)	5.5	5.8	5.9	5.8	5.8	5.8	5.7	5.7
TURB (NTU)	55.1	5.45	4.27	4.09	3.31	2.28	2.10	2.03
SAL (PPT)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1355 - COLLECT SAMPLE AT PLD3-MW1

3x40 ml	VOC/BTEX	AM-A501101
2x1L	DRO/GRO	
2xHL	PAH	
2HL	PCB	
1x500 ml	RCRA METALS	

WATER IS CLEAR, NO ODOR OR SHEEN
1400 - ~~TRIP~~ FIELD BLANK - AM-A501201
3x40ml VOC/BTEX
1410 - TO HILL 400, SCOUTING OUT USTs
1500 - RETURN TO OFFICE
- PREPARING FOR PREP/INITIAL PHASE MEETING FOR CONTAMINATED SOIL STOCKPILE
- NOTIFIED KEVIN GRIFFITHS (DATACHEM) TO SCRATCH SAMPLES COLLECTED FROM 2664/2667 THE OTHER DAY

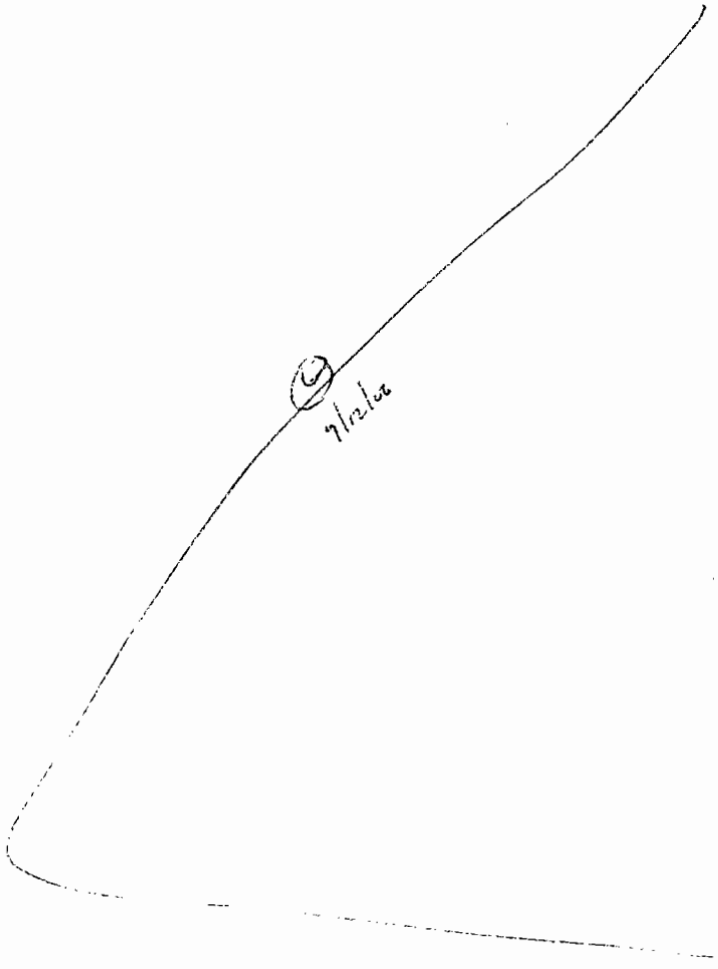
9/12/00 (EMW)

1600 - PREP / INITIAL PHASE MEETING AT SEC

1700 - RETURN TO SITE

DAILY REPORTS

1900 - SIGN OFF LOG



9/13/00 EMW

1.5 - SIGN ON LOG

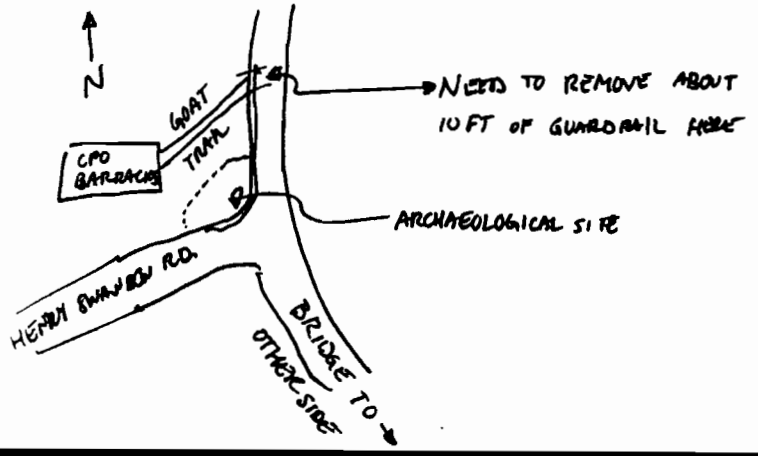
- FAXED KEVIN GRIFFITHS SAMPLES TO CANCEL DUE TO DPW'S AVAILABILITY TO PUMP CITY WELL (AM-A500701, AM-A500101, AM-A500102) (ALL SAMPLES FROM UST 2664/2667 SITE)
- PREPARING DAILY REPORT FOR SEC TO USE

800 - TAILGATE AT SEC

- DRILLERS ARE DECONTAMINATING AUGERS THIS MORNING, LOADING UP GEAR FOR DEMOBILIZATION WILL DEVELOP MW-11 AS WELL.

0830 - TO HILL 400 WITH RANDY AND SEC CREW

- WILL NEED ABOUT 20 LOADS (≈200 CY) OF ROCK TO MAKE ROAD PASSABLE FOR TRUCKS.
- LOCATED 3 OF THE 6 TANKS
- WILL NEED TO GET DPW TO OK REMOVAL (TEMP) OF GUARDRAILS TO ACCESS CPO BARRACKS TANK. (SEE MAP)



9/13/00 5TH D

1000 - BACK TO OFFICE, HELPING TOM WITH SAMPLES FOR SHIPMENT

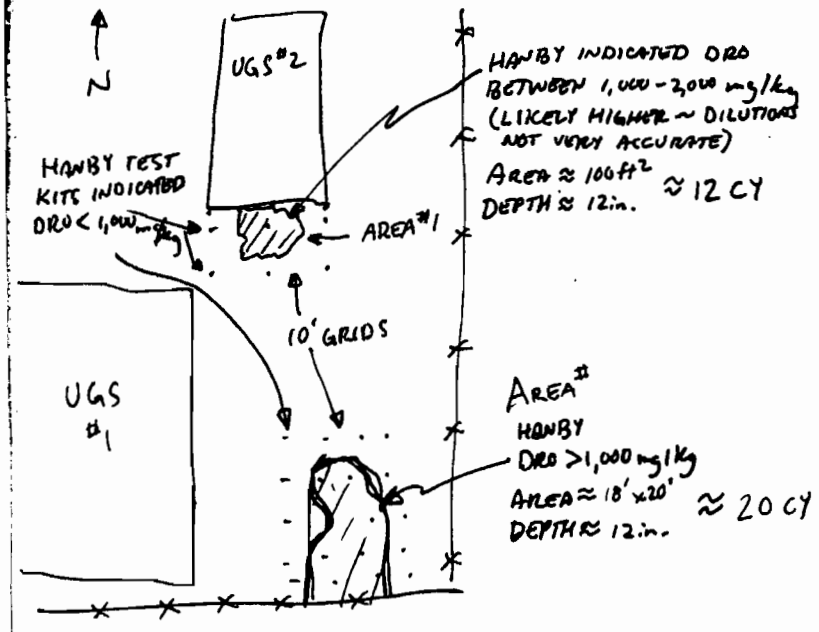
1100 - SHIPPED 4 COOLERS TO DATACHEM; SENT K. GRIFFITHS AIR WAYBILL AND CoCs (cc: K. McLOONE)

1210 - STILL NO DAILY FROM SBC; ZAK WORKING ON IT

1220 - LUNCH

1250 - TO PRE-WWII TANK FARM

1320 - EXCAVATING CONTAMINATED SOIL FROM BENEATH FUTURE LOCATION OF CONTAMINATED SOIL STOCKPILE. SEE MAP BELOW.



1350 - DRILLERS DONE WITH DECON

- TOM WILL COLLECT CONFIRMATION HANBY SAMPLES TO CONFIRM COMPLETE SOIL REMOVAL OF CONTAMINATED

9/13/00 2ND D

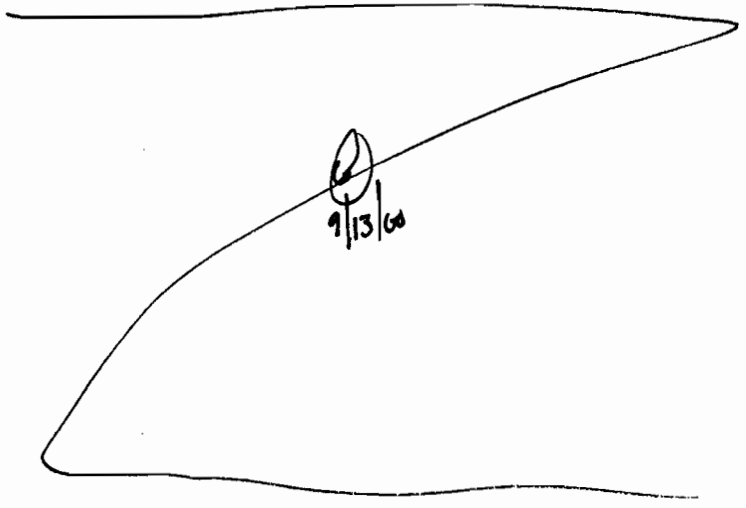
1400 - WEATHER - PARTLY CLOUDY, SW WINDS 5-10 KNOTS, TEMPS 45°-55°F

- CONFIRMATION SAMPLE FROM AREA #1; DRO = 1,000 mg/kg BACKFILLED EXCAVATION WITH CLEAN ANDERSON/WILDER MAT'L.
- CONFIRMATION SAMPLE FROM AREA #2; DRO = 500 - 1,000 mg/kg BACKFILLED EXCAVATION WITH CLEAN MAT'L.
- WILL LAYOUT STOCKPILE LOCATION TOMORROW AND COLLECT BASELINE SAMPLES
- GOT DAILY'S FROM ZAK, BACK TO OFFICE TO SEND THEM OFF VIA E-MAIL

1630 - PICKED UP MIKE YARBOROUGH AT AIRPORT; WILL DO CULTURAL RESOURCE TRAINING TOMORROW MORNING

- BACK TO OFFICE
- WORK ON DAILY

1800 - SIGN OFF LOG

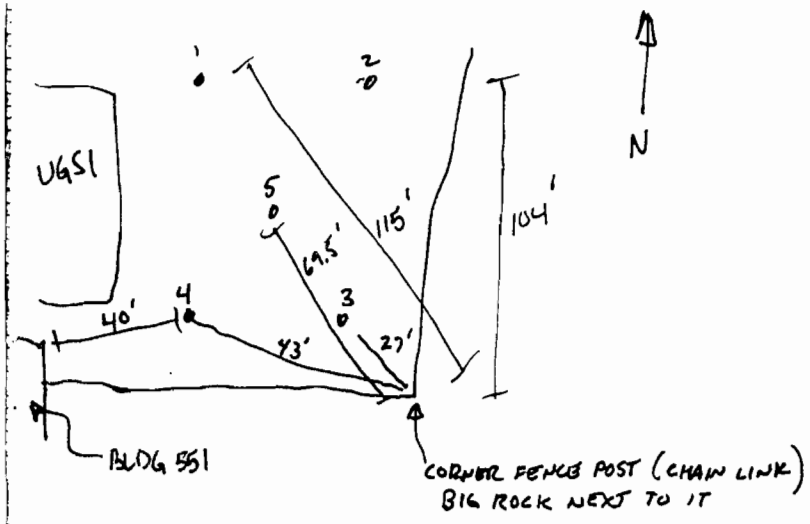


9/14/00 EMD

0745 - SIGN ON LOG

0800 - TAILGATE AT SEC
- WILL FINISH ROAD WORK TODAY ON HILL 400
- BEGIN STOCKPILE CONSTRUCTION
- MIKEY. GAVE SPIEL ON CULTURAL RESOURCES

0830 - BEGIN STOCKPILE BASELINE SAMPLING



FROM BLDG. 551 NW CORNER	TO:
124'	1
133'	2
69'	3
40'	4
89'	5

9/14/00 (EMA)

0855 - COLLECT SAMPLE (SOIL) 0-6" AT LOCATION 1
1x 40z BTEX
1x 80z DRO/RRO
> AM-A501201

0900 - LOCATION 2; SAA AM-A501202

0905 - LOCATION 3; SAA AM-A501203

0910 - LOCATION 4; SAA AM-A501204

0915 - LOCATION 5; SAA AM-A501205 (AM-A501206 IS TRIP BLANK COLLECTED AT 0855)

0930 - RETURN TO OFFICE
- MENTIONED TO MIKE YARBOROUGH THAT WE WOULD LIKE HIM TO COMPLETE DETERMINATION OF ELIGIBILITY FOR BALLYHOO SPIT AND SUMMER BAY (SECOND PRIEST ROCK) SITES. HE SAID THE D.O.E. FOR SUMMER BAY IS ESSENTIALLY COMPLETE (WITH DIANE HANSON) ~ HE WILL WORK ON BALLYHOO D.O.E.

1000 - UP TO HILL 400 WITH MIKE Y., CONDUCTING MAGNETIC SURVEYS LOOKING FOR USTS
- FOUND MARINE NO. 1 UST; DIFFICULT ACCESS AT BEST MIKEY. TALKING ADVERSE EFFECTS

1300 - RETURN TO OFFICE
- SEE IS DONE WITH ROAD WORK ON HILL 400
- LAYING OUT STOCKPILE LOCATION

*WEATHER TODAY - PARTLY CLOUDY, TEMPS 35-48°F, SW WINDS 0-5 KNOTS *

1400 - LUNCH

1430 ~ PREP FOR PREP/KICKOFF PHASE MEETING

9/14/00 EMM

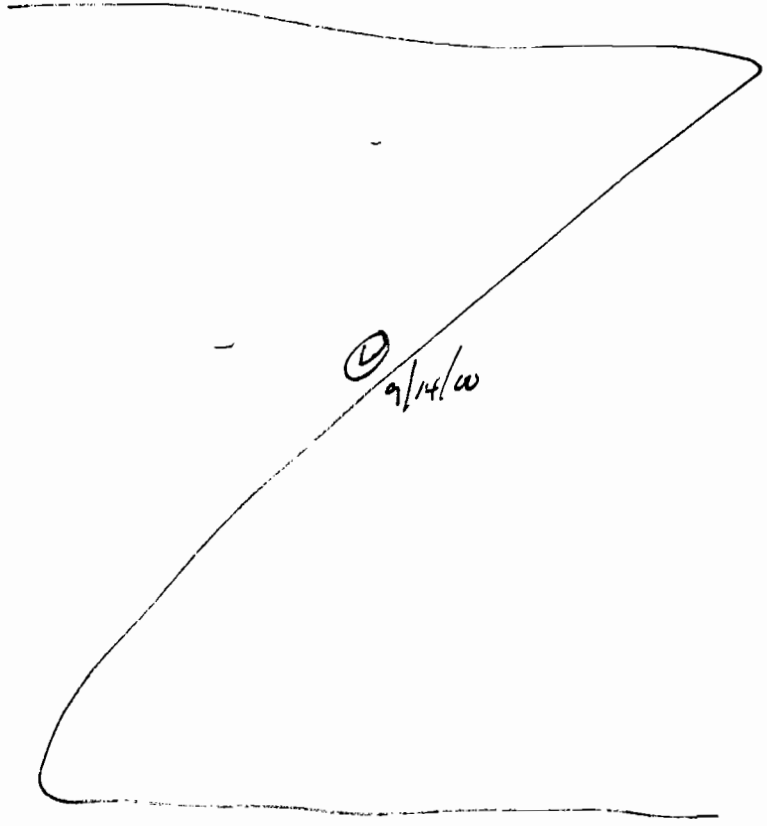
1500 - PREP PHASE MEETING FOR UST EXCAVATIONS

1600 - TO OFFICE

- ZAK IS REQUESTING VARIANCE ON GEOTEXTILE FOR CONTAMINATED SOIL STOCKPILE
- HE WAS INSTRUCTED TO USE 60-MIL HDPE (SURPLUS) LOCATED ONSITE.

1700 - WORKING ON DAILY REPORTS

1845 - SIGN OFF LOG



9/15/00 EMM

0800 - SIGN ON LOG

- TAILGATE AT SEE SITE
- SEE TO BEGIN STOCKPILE CONSTRUCTION TODAY

0900 - RETURN TO OFFICE

WORKING ON DAILYS, SENT OFF VIA E-MAIL

- UPDATE SAMPLE SUMMARY SPREADSHEET

1100 - ARRIVE AT MW-11 (NEW WELL)

PID = 47.6 ppm

WL BTOC = 14.93'

TD = 22.82' BTOC

NO MEASURABLE AMOUNT OF PRODUCT IN WELL; THOUGH ORS PROBE CAME UP COVERED IN BUNKER C.

- SETTING UP TO PURGE

1117 - BEGIN PURGE

PURGE RATE = 1 GAL / 8 min

TIME SINCE START	11	23	30	36	50	53	56
pH (SU.)	6.49	6.62	6.66	6.67	6.70	6.71	6.71
C ($\frac{\mu S}{cm}$)	621	605	602	594	584	588	587
DO ($\frac{mg}{l}$)	1.11	0.27	0.29	0.29	0.17	0.19	0.20
Temp (°C)	6.5	6.5	6.3	6.4	6.7	6.5	6.5
Turb (NTU)	21.9	11.0	7.79	6.00	~~4.24~~ 4.39	4.07	4.24
ORP (MV)	0.0	0.0	0.0	0.0	0.0	0.0	0.0

* WEATHER TODAY - SUNNY, SW WINDS 0-5 KNOTS, TEMPS 35-47°F *

- SHEEN OBSERVED ON PURGE WATER

9/15/00 END

1205 - TSUNAMI WARNING SIREN (TEST) SOUNDED

1215 - COLLECT SAMPLE AT MW-11

4 x 1L DRO/RRO
4 x 1L PAH
5 x 40ml BTEX
} AM-A501301

MS/MSD

1215 - TRIP BLANK

3 x 40ml BTEX AM-A501302

SAMPLE WATER IS CLEAR WITH A NOTICEABLE FUEL ODOR AND PETROLEUM HYDROCARBON SHEEN.

1300 - LUNCH

1330 - TO OFFICE; DROP OFF SAMPLES & GEAR

1400 - MEET RICHARD CHAGIN ON HILL 400; GO OVER WORK TO BE DONE

- TOOK KEITH RUPP TO LATRINE NO. 1 TANK SHOWED HIM ACCESS ISSUE.

1500 - TO PWNTF SITE

- STOCKPILE PROGRESS: ADDING SAND (½" MINUS) INTERNAL DIMENSIONS ≈ 85' x 55', NOT MUCH ROOM TO EXPAND IN ANY DIRECTION BEYOND EXISTING EDGES ESPECIALLY IF WE INTEND ON USING A GATE AT EAST POINT LOOP ROAD ENTRANCE.

1600 - DEPLOYING 60-mil HDPE w/ 2-FOOT OVERLAP AS BOTTOM PROTECTION OVER SAND LAYER

9/15/00 END

1605 - TO DO LIST

- CALL CLINT HULING (DPW) AND SCHEDULE PUMPING OF CITY WATER WELL AT UST 2067 SITE
- SHIP SAMPLES SUNDAY
- PREP FOR TANK WORK

1730 - RETURN TO OFFICE

- DOWNLOAD PHOTOS; WORK ON DAILY REPORTS

1830 - SIGN OFF LOG

(6) 9/15/00

9/16/00 ERM

0800 - SIGN ON LOG
- TAILGATE AT SOUTHEAST TRAILER.
- WILL FINISH STOCKPILE TODAY AND POSSIBLY BEGIN WORK ON HILL 400

0900 - FINISH UP DAILY'S

1030 - TO HILL 400
- STOP AND FILL UP PROPANE TANK
- STOP BY AND LOOK AT STOCKPILE CONST.
- ADDING SAND ABOVE TOP 60-mil

1100 - AT HILL 400, LSA TANK
- TRYING TO GET WATER SAMPLE OUT OF LSA TANK USING DRUM THIEF
- ABLE TO GET VOAs BUT NOTHING ELSE, HARD TO GET DRUM THIEF THROUGH BULLET HOLES IN SIDE OF TANK
- PID ON TANK = 0.0 ppm

1200 LUNCH

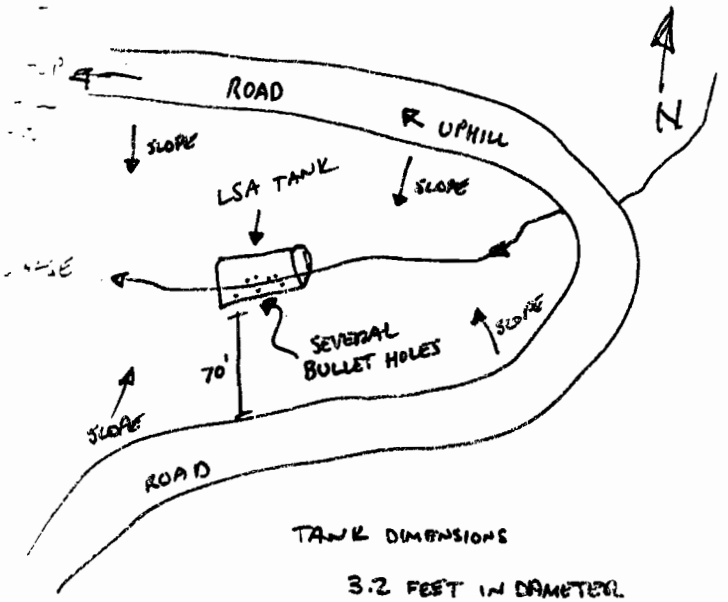
1230 - BACK TO LSA TANK

* WEATHER - SUNSHINE, BLUE SKY, CALM WINDS, TEMPS 35-50°F. *

1300 - MAY HAVE LOCATED UST BY DRUM SITE, WILL CHECK LATER WITH SHOVEL/PICK.
- GOING TO CUT HOLES IN TANK TO ALLOW SAMPLE ACCESS AND FOR RIGGING PURPOSES
- LEL = 0.0
- FLUID INSIDE APPEARS TO BE WATER

9/16/00 ERM

- LSA TANK MAP



TANK DIMENSIONS
3.2 FEET IN DIAMETER
5.0 FEET LONG
CAPACITY = 300gal

- CUTTING OPEN TANK WITH SAWZALL
- COLLECTED WATER SAMPLE FROM LSA TANK

2x 1L DRO/RRO
2x 1L PAH
3x40ml VOCs/BTEX
1x500ml METALS
} AM-A501401

WATER IS CLEAR, APPEARS TO HAVE A SHEEN, UNKNOWN IF PETROLEUM, NO ODOR

- 3x40ml VOCs/BTEX (TRIP BLANK) → AM-A501403

9/16/00

1500 ~~1600~~ - COLLECT SLUDGE SAMPLE FROM LSA TANK

1 x 8oz	RCRA METALS	AM-A501402
1 x 8oz	PCBs	
1 x 4oz	VOCs	
1 x 40z	VOCs (TRIP BLANK)	AM-A501404

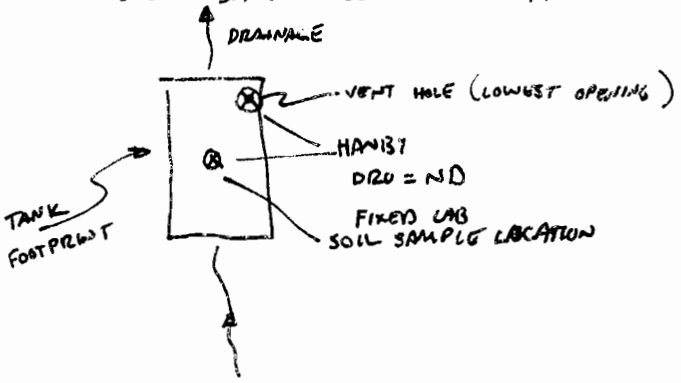
1520
1620 - PUMPING WATER FROM TANK

- ABOUT 30 GALLONS RECOVERED AND PUMPED INTO DRUM
- COLLECTED 2 HANBY SOIL SAMPLES

BOTH INDICATED DRO < DETECTION

~~1520~~
1654

1555 - COLLECTED SOIL SAMPLE BENEATH LSA TANK



1 x 8oz	DRO/RRO
1 x 8oz	PAH
1 x 4oz	BTEX

- SOIL IS A SILTY LOAM, DARK BROWN, LOTS OF ORGANICS

9/16/00

- TO LSA-1 DRUMS LOCATION (NEAR DRY LAKE)

1557 - LOCATION #1 (LSA-DR1) (TWO DRUMS HERE)

BEGIN SAMPLE COLLECTION

1 x 8oz	DRO/RRO
1 x 8oz	METALS
1 x 8oz	PAHs
1 x 8oz	PCBs
1 x 4oz	VOCs/BTEX. 1 x 4oz GRO

1610 - LOCATION #2 (LSA-DR3) (ONE DRUM HERE)

SAME AS ABOVE

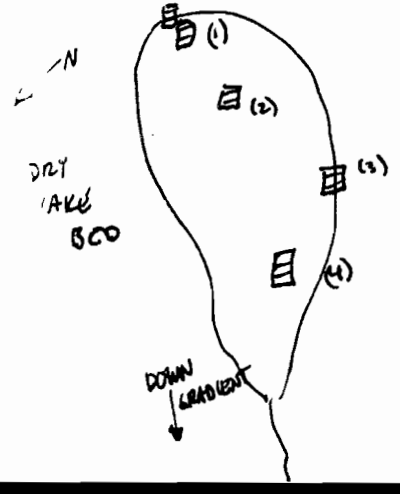
1625 - LOCATION #3 (LSA-DR4) (ONE DRUM HERE)

SAME AS ABOVE

1640 - LOCATION #4 (LSA-DR5) (ONE DRUM HERE)

SAME AS ABOVE

MAP OF LITTLE SOUTH AMERICA DRUM SITE



9/16/00 (CMW)

1700 - DRUMS (CONT.)

- SOUTHEAST HAS PICKED THE DRUMS UP AND PLACED THEM ON THEIR TRUCK.
- RETURN TO OFFICE

1730 - WORKING ON DAILY, ~~EFR~~ SAMPLE MGMT.

1845 - SIGN OFF LOG

(17) 9/16/00

17
9/16/00 (CMW)

: 00 - SIGN ON LOG

- PREPARING TWO COOLERS FOR SHIPMENT
  - 1 COOLER TO DATA CHEM
  - 1 COOLER TO STLA
- FAXED IN AIR WAYBILL TO BOTH

: 0 - SIGN OFF LOG

(17) 9/17/00

9/18/00 (BTW)

0740 - SIGN ON LOG

0800 - TAILGATE AT SOUTHEAST'S TRAILER

0830 - RETURN TO OFFICE

- SET UP ~~BEER~~ FOR UST PULL TODAY
- TRYING TO DO DAILY REPORT - ALL COMPUTERS IN USE AND PRINTER DOES NOT WORK
- E-MAILED OFF DAILY FOR SATURDAY; NO E-MAIL FOR SUNDAY DUE TO LACK OF ACTIVITY

0930 - USACE IS QUESTIONING OUR INTENTION TO USE A TRACKED EXCAVATOR ~ MORE DISTURBANCE?

1100 - HEAD TO UST 2664/2667 SITE

1107 - LARRY COGWELL WITH DPW ~~DOD~~ TURNING ON CITY WELL 1A

- PUMP RATE ≈ 1,250 gpm
- TOM WILL BE MEASURING WATER LEVELS IN THE FOLLOWING WELLS: 2667-MW1 (RECENTLY DRILLED)
  2664-WP1
  2664-MW1
  2664-MW2
  ~~HOSE~~ - CONTINUOUSLY FOR 1st HOUR THEN HOURLY THEREAFTER
- ASKED LARRY TO RUN PUMP AT FULL BLAST UNTIL TOMORROW AT 1100 HRS. WILL COLLECT SAMPLE FROM CITY WELL TOMORROW RIGHT BEFORE SHUT DOWN.

* WEATHER - OVERCAST, LOW CLOUDS, NE WINDS 10 KNOTS TEMPS 40-45°F

1140 - LUNCH

9/18/00 (BTW)

1210 - BACK TO OFFICE

- PRINTING DAILY REPORTS; REVISED
- TOOK TO TANK FOR SIGNATURE
- SEC IS NEARING COMPLETION OF TRANSFERRING 23 DRUMS OF DRILLING CUTTINGS FROM DECON PAD TO CONTAMINATED SOIL STOCK PILE

1400 - HEAD TO LSA

- LOOKING AT GARAGE AREA ~ NO INDICATION OF STAKES OR USTs READILY PRESENT
- HEAD TO MESS HALL UST 1154
- PUT BAILER IN UST 1154 FILL PORT ~ABOUT 1.5' OF RUSTY/TURBID WATER IN TANK, NO SIGN OF FUEL IN TANK ~ READY TO COLLECT SAMPLE OF WATER

1435 - COLLECT WATER SAMPLE FROM UST 1154

- 3 x 40ml BTEX
- 3 x 40ml VOCs
- 2 x 1L DRO/RRO
- 2 x 1L PAHs

- NOTICEABLE FUEL (DEGRADED DIESEL) ODOR OBSERVED DURING SAMPLING

1500 - SOUTHEAST ARRIVING ON SITE

- BRAD WITH OASIS HERE ON SITE TO ASSIST WITH UST DECOMMISSIONING.

1515 - SOUTHEAST IS BEGINNING TO PUMP WATER OUT OF THE UST

9/18/00 ENVO

1520 - SPOKE WITH JULIE NOFFKE. LOOK FOR MILITARY WELL AND #1 NEAR 1A AT UST 2664/2667 SITE. TAKE WATER LEVEL READINGS AT MONITOR WELLS SURROUNDING WELL 1A EVERY HOUR; CAN DO EVERY 4 HOURS TONIGHT.

- SOUTHEAST IS HAVING DIFFICULTY PUMPING WATER OUT OF UST; PUMP PROBLEMS

1530 - PUMPING WATER

- PUMP FAILED AGAIN; WILL BEGIN EXCAVATING SOIL AND TRY TO GET BETTER ACCESS TO TANK TO AVAIL USE OF DRUM PUMP. PUMPED ABOUT 80 GALS.
- PUTTING CLEAN SOIL ON VISQUEEN NEXT TO EXCAVATION
- SCREENING WITH PID;
- DEFINITE ODOR OF FUEL COMING FROM UST, NONE NOTED IN SOILS BEING EXCAVATED

1600 - FILL PORT INADVERTANTLY CLIPPED BY BUCKET

- PID READINGS = 0.0 ppm OF SOIL ON TOP AND SIDES OF TANK
- COLLECTED HANBY ON NW END OF TANK, AT BOTTOM.

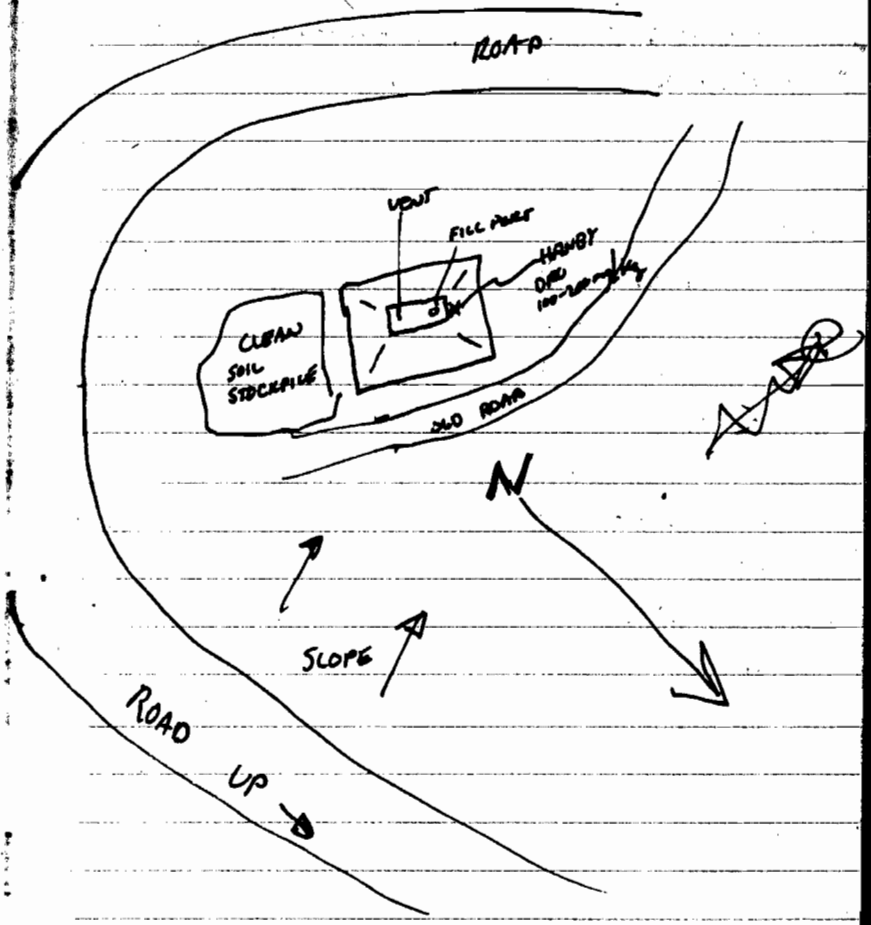
  DRO = 100 - 200 mg/kg
- SOIL ON TOP & SIDES OF TANK IS VERY ORGANIC WITH SILT.
- SILTY/CLAYEY LAYER AT BOTTOM OF TANK

  PID = 3.9 ppm - DIRECT SCREEN
- SEE MAP NEXT PAGE

9/18/00

9/18/00 (ENV)

1700 - SETTING UP BARRICADES AROUND EXCAVATION



1730 - DEPART TO CHECK ON TOM

- WILL DO WATER LEVELS EVERY 4 HOURS TONIGHT
- BACK TO OFFICE

1800 - SAMPLE CONTROL

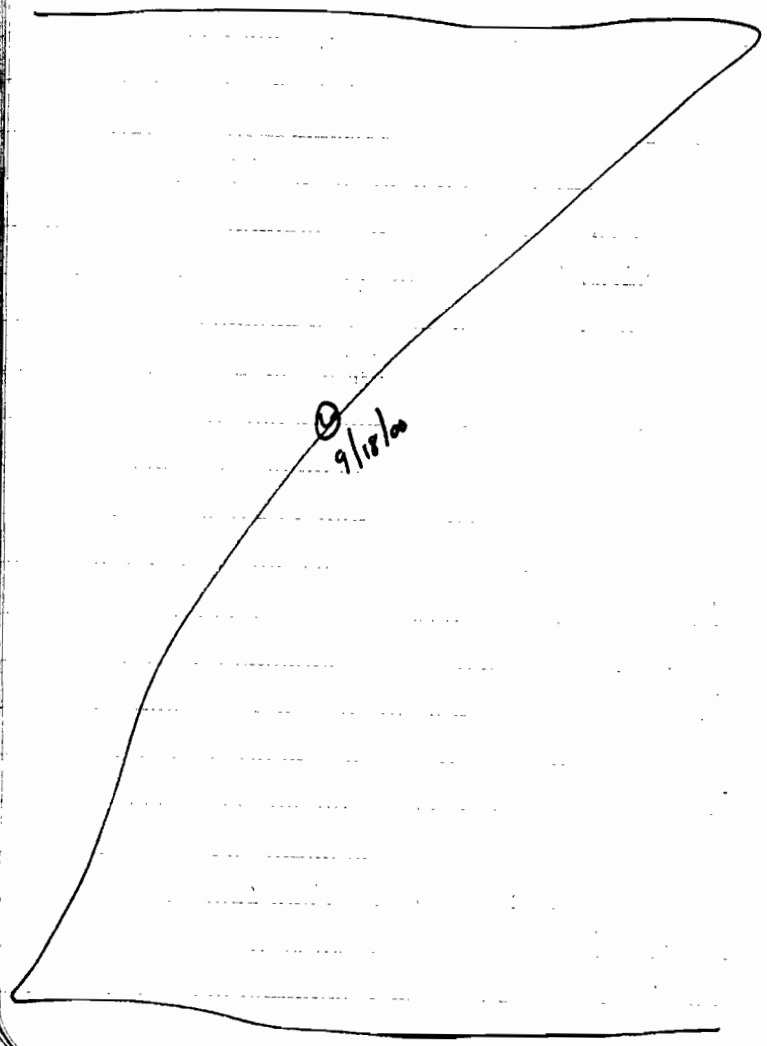
9/18/00 EMO

1830 - DAILY REPORT

- CLEANING UP SAMPLE TRAILER

- UPDATING SAMPLE SUMMARY SPREADSHEET

2130 - SIGN OFF LOG



9/19/00 EMO

0200 - WAKE UP AND HEAD TO UST 2664/2667; SIGN ON LOG

- TAKING WATER LEVEL MEASUREMENTS AT WELLS SURROUNDING CITY WELL #1A. (SEE TOM BOND'S LOGBOOK FOR DETAILS)

0245 - BACK TO BED

0630 - TO SAMPLE TRAILER

- PREPARING 2 COOLERS FOR SHIPMENT TO DATACHEM

0730 - SENT DAILY'S VIA E-MAIL; COSTS TO JENNY

0800 - TAILGATE AT SOUTHEAST'S TRAILER

0900 - SHIPPING TWO COOLERS TO DATA CHEM

- FAXED DATACHEM COCs AND AIRWAY BILL

0930 - RETURN TO OFFICE

- LOADING SAMPLING GEAR

1000 - ARRIVE AT UST 1154 (MESS HALL - LSA)

- SOUTHEAST IS PUMPING REMAINING FLUID FROM UST

- PUMPED 30 GALLONS (80 PUMPED YESTERDAY); TOTAL IS 110 GALLONS.

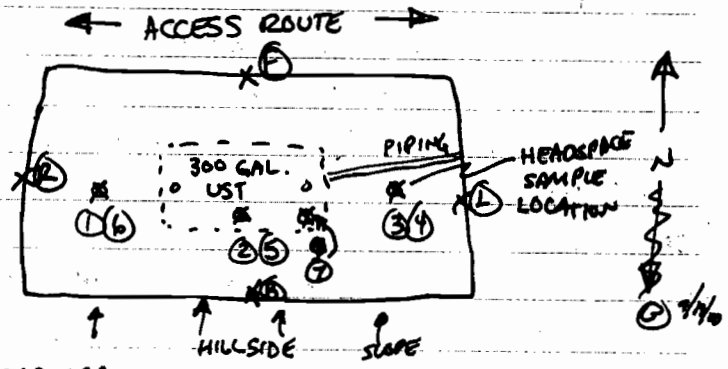
1045 - PREPARING TO PULL UST

- COLLECTING HEADSPACE SAMPLES FROM SURROUND SOILS BENEATH TANK (SEE MAP NEXT PAGE)

- ALSO COLLECTING HANBY SAMPLES. TWO HANBYS INDICATED DRO = 100 mg/kg ~ WILL CONSIDER SOIL CONTAMINATED PER WORKPLAN.

9/19/00 EMD

MAP OF MESS HALL UST 1164 (LSA)



PID READINGS

LOCATION	DEPTH	PID HEADSPACE	HANBY RESULT (mg/kg^{DRO})
①	4-6'	78	≈100 ppm
②	4'-6'	14	<50
③	4-6'	51	100
④	5'	8	-
⑤	5'	34	-
⑥	5'	37	-
⑦	6'	42	50
SIDEWALLS			
B	4'	-	<1
F	4'	-	<1
R	4'	-	<1
L	4'	-	1
UNCONTAMINATED SOIL (0-6")		-	<10

9/19/00 EMD

1200 - TANK HAS BEEN WRAPPED IN VISQUEEN AND REMOVED FROM AREA.

- REMOVED APPROXIMATELY 10 CY OF CONTAMINATED SOIL FROM EXCAVATION BEFORE BEDROCK WAS ENCOUNTERED

HANBY FROM SOIL WITHIN BEDROCK CREVICES & SAMPLE ⑦ ON PREVIOUS PAGE) → DRO = 50 mg/kg

1250 - BEGAN WORK FOR FIXED LAB SAMPLING (SEE MAP NEXT PAGE)

1255 - COLLECTED FLOOR SAMPLE (EAST - CENTER OF FLOOR)

1x 4oz BTEX } AM-A502501
1x 8oz DRO/RRO/PAH } 5.5' BGS

1300 - COLLECTED FLOOR SAMPLE (WEST - CENTER OF FLOOR)

1x 4oz BTEX } AM-A502502
1x 8oz DRO/RRO/PAH } 5.5' BGS

1302 - COLLECTED SOUTH SIDEWALL SAMPLE

1x 4oz BTEX } AM-A502503
1x 8oz DRO/RRO/PAH } 4.0' BGS

1306 - COLLECTED NORTH SIDEWALL SAMPLE

1x 4oz BTEX } AM-A502504
1x 8oz DRO/RRO/PAH } 4.5' BGS

1309 - COLLECTED WEST SIDEWALL SAMPLE

1x 4oz BTEX } AM-A502505
1x 8oz DRO/RRO/PAH } 4.5' BGS

1310 - COLLECTED EAST SIDEWALL SAMPLE

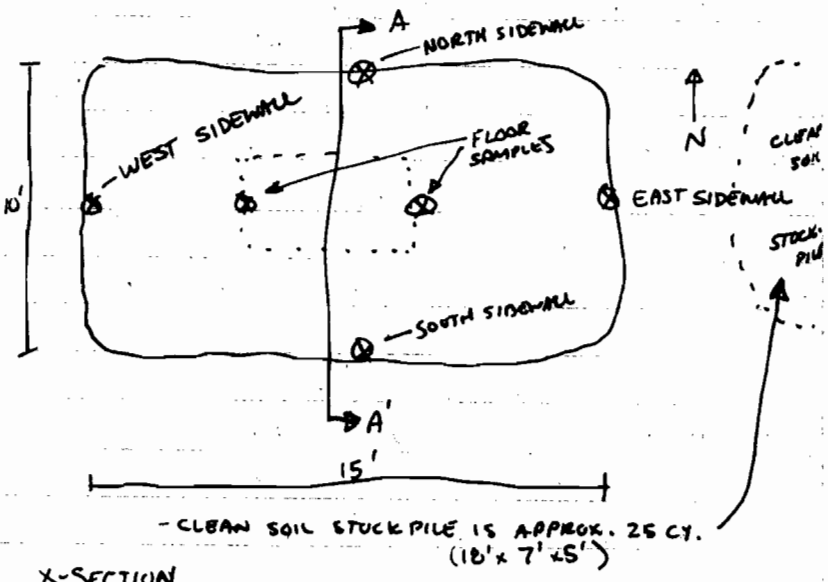
1x 4oz BTEX } AM-A502601
1x 8oz DRO/RRO/PAH } 4.6' BGS

9/19/00 (EZ)

1315 - COLLECTED UNCONTAMINATED SOIL SAMPLE

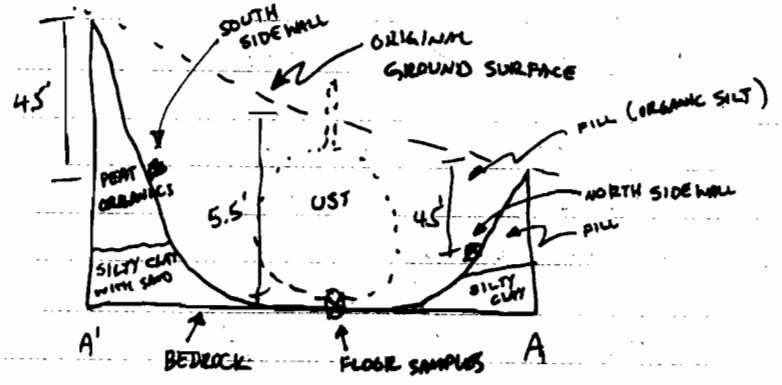
1 x 4oz BTEX
1 x 8oz DRO/RRO } AM-A502602
1 x 8oz TOC

0-6" IN STOCKPILE



- CLEAN SOIL STOCKPILE IS APPROX. 25 CY. (18' x 7' x 5')

X-SECTION



9/19/00 (EZ)

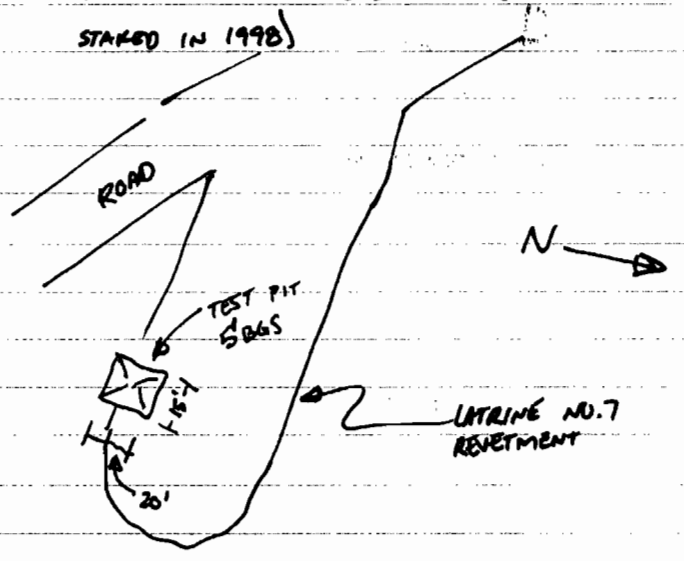
- 1330 - USING 10 CY OF WILDER/ANDERSON MATERIAL TO SUPPLEMENT BACKFILL
- COMPACTING SOIL IN 18-INCH LIFTS
- BACKFILLING OVERBURDEN
- EXCAVATED ABOUT 3 'STRANDS' OF 30' LONG ½" DIAMETER FUEL PIPING TO EAST OF UST AND DEAD-ENDS AT OLD MESS HALL FOUNDATION

* WEATHER - OVERCAST, OCCASIONAL RAIN, SE WINDS 5-10 KNOTS, 40-50°F

- RAN EXCAVATOR OVER BACKFILL TO FURTHER COMPACT SOIL AND HELP HOLD SEED
- SEE SEEDED AREA

1400 - HEAD TO LATRINE NO. 7 (LSA)

- TEST PIT AT STAKED LOCATION (MAGNETIC ANOMALY STAKED IN 1998)



9/19/00 (BKS)

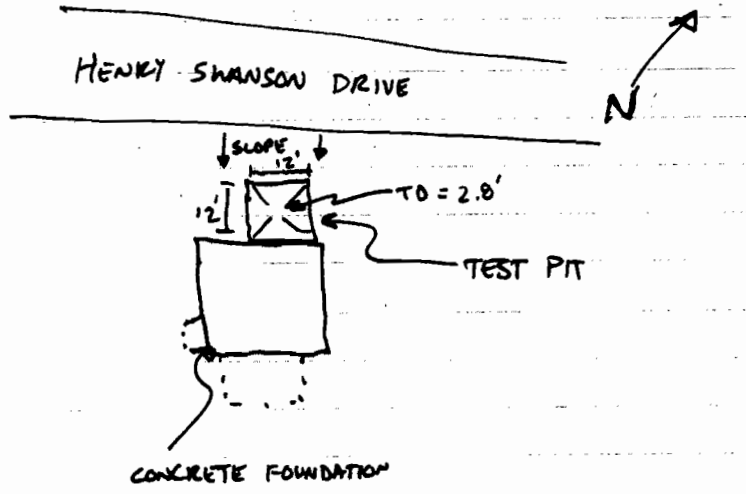
1420 - LATRINE NO. 7 TEST PIT

- NO SIGN OF UST, PIPING, OR EVIDENCE OF CONTAMINATION. PID = 0.0 ppm
- BACKFILLED AND SEEDED TEST PIT

- HEADING TO BARRACKS 1205

1600 - TEST PIT AT BARRACKS 1205

- MAGNETIC ANOMALY AT NW EDGE OF FOUNDATION



CAPTAINS BAY

9/19/00 (EN)

1630 - TEST PIT AT 1205 BARRACKS

- NOTED SEVERAL 5' SECTIONS OF 1½" DIAMETER FUEL PIPE, BUT IT DEAD-ENDED. NO SIGN OF UST OR CONTAMINATION. PID = 0.0 ppm

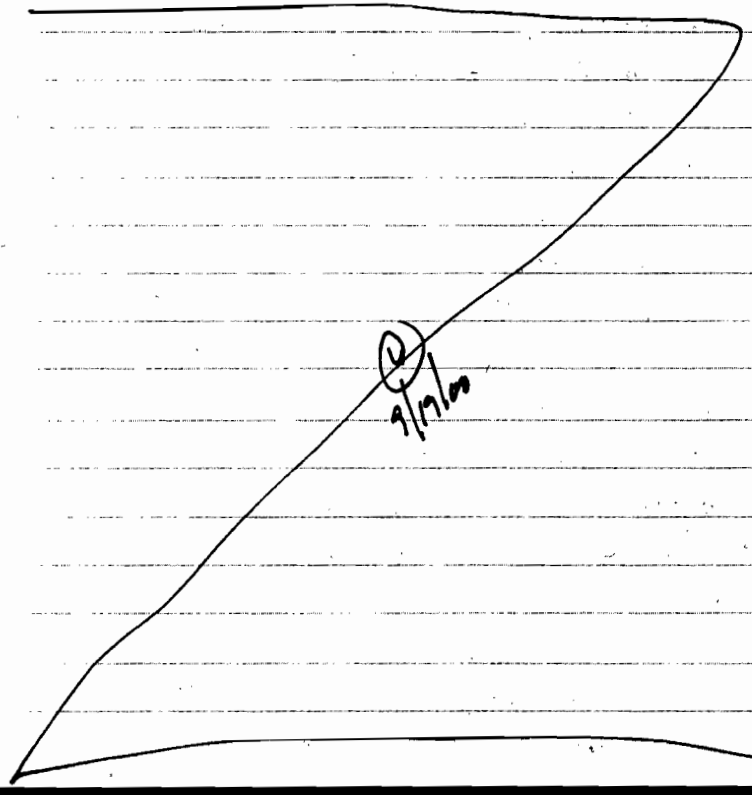
1700 - BACKFILLED TEST PIT AND SEEDED AREA

- HEADING TO BALLYHOO TO LOOK AT UST AND TRANSFORMERS

1830 - BACK TO OFFICE

- SAMPLE CONTROL, DAILY REPORT

2130 - SIGN OFF LOG



9/20/00 (GL)

0700 - SIGN ON LOG
- DAILY REPORT

0800 - TAILGATE SAFETY MEETING
- NOTIFIED THAT WE NEED TO RE-SAMPLE PORT LEVASHEF / HUMPY COVE NEW WELLS (3)
- PREPPING SAMPLES FOR SHIPMENT

0900 - SHIPPED 2 COOLERS TO DATACHEM VIA GOLDSTREAK
- LOADING GEAR FOR SAMPLING TODAY

1000 - HEADING TO LATRINE No. 1 UST
- DIRECTIVE IS TO CLOSE UST IN PLACE, REMOVE WATER/SLUDGE, CLEAN INSIDES, AND COLLECT SOIL SAMPLE FROM BENEATH UST.

1015 - ARRIVE AT LATRINE No. 1 UST

1035 - COLLECT WATER SAMPLE FROM UST

2 x 1L	DRO/RRO	AM-A502701
2 x 1L	PAHs	AM-A502701
3 x 40ml	VOCs	AM-A502701
3 x 40ml	BTEX	AM-A502702 BTEX & VOC TRIP BLANKS

- REMOVING WATER FROM UST VIA BUCKETS TOO FAR UPHILL TO PUMP.
- REMOVED 55 GALLONS OF WATER

1115 - WATER HAS FUEL ODOR AND SHEEN ON IT.

1115 - COLLECT SLUDGE SAMPLE

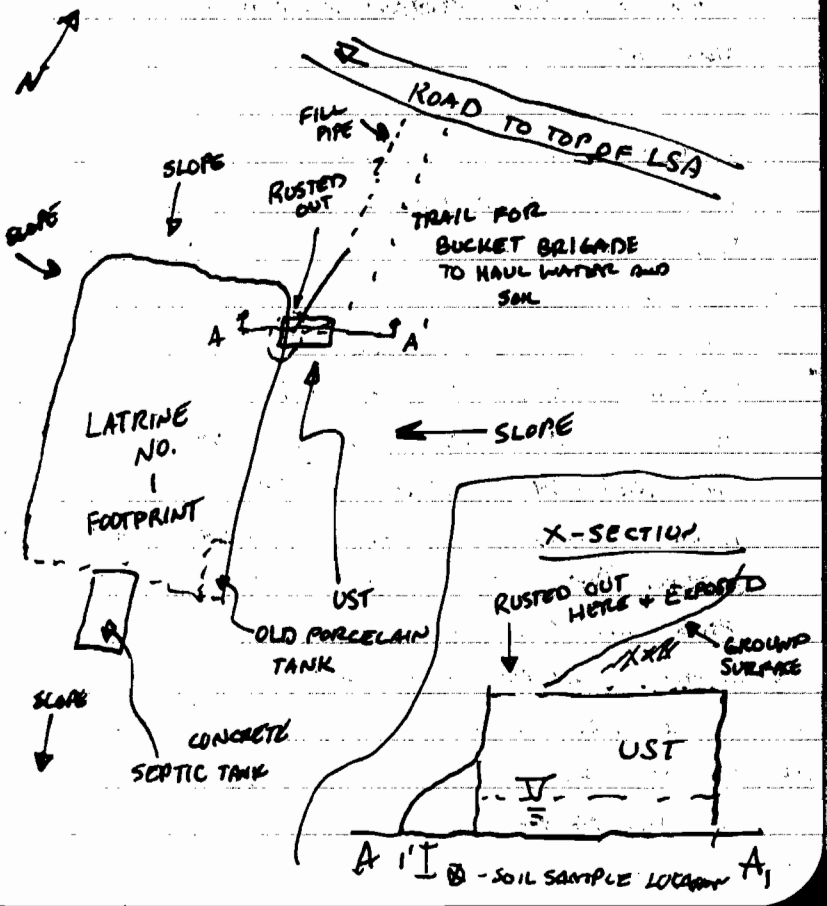
1 x 4oz	VOCs	AM-A502703
1 x 8oz	PCBs	AM-A502703
1 x 8oz	RCRA METALS	AM-A502703
		AM-A502704 VOC TRIP BLANK

9/20/00 (BW)

1115 - SLUDGE (CONT.)
- SLUDGE HAS NOTICEABLE FUEL ODOR TO IT, LOTS OF ORGANICS FROM RUSTED OUT OPENING OF UST.

1135 - WIPING OUT UST WITH SORBS; NO WAY TO WASH/RINSE TANK IN A PRACTICAL MANNER
- TANK IS 300 GALLON UST

MAP OF LATRINE No. 1 UST (LSA)



9/20/00 (EMW)

1150 - COLLECTING SOIL SAMPLE FROM BELOW UST BELOW WHERE UST IS EXPOSED.

1 x 8oz. DRO/RRO + PAH } AM-A502705
1 x 8oz. TOC
1 x 4oz. BTEX } AM-A502706

SOIL IS A SANDY, ORGANIC SILT, BLACK. BTEX TRIP BLANK

1200 - SOUTHEAST IS PREPARING TO FILL TANK UP WITH CLEAN SOIL. (FROM ANDERSON STOCKPILE AT PRE-WWII TANK FARM)

- FILLING TANK
- TOM AND I WENT DOWN THE HILL TO INVESTIGATE POTENTIAL DRUM OBSERVED BY SOUTHEAST EMPLOYEES, BUT IT TURNED OUT TO BE A 1960's-ERA HOT WATER HEATER.
- BACK TO OFFICE; DISCUSS POSSIBLE UST WORK WITH MIKE Y. CAN'T DO ANY WORK ON BOMB SHELTER (BALLYHOO) TANK ~ NEED TO DO SHPO CONSULTATION. SAME WITH BOTH UGADAGA ROAD TANKS. WILL TRY TO DO CPO BARRACKS TEST PIT TOMORROW WITH SMALLER BACKHOE. MAY TRY TO DO TEST PITS AT BALLYHOO SPIT WHILE MIKE Y. IS HERE.

* WEATHER - OVERCAST, SE/SW WIND 10 KNOTS, TEMPS 35-50°F, OFF & ON RAIN

1230 - TOM WORKING ON SAMPLE CONTROL FROM THIS MORNINGS SAMPLES

9/20/00 (EMW)

1450 - TO BALLYHOO SPIT TANK FARM
- STAKING TEST PIT LOCATIONS
- MAY NEED TO MOVE OLD CRAB POTS TO GET TEST PIT (TP8) AT FORMER AST #1

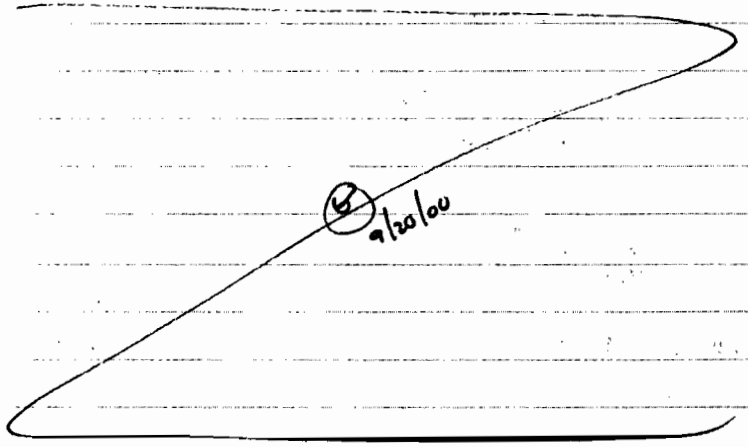
1600 - SPOKE WITH ROSIE (MARTEKA); SHE WILL MOVE OLD/REJECT CRAB POT PILE TO ALLOW EXCAVATOR ACCESS TO TP8
- OK TO MOVE REMAINING CRAB POTS FOR ACCESS
- HEADING TO UNALASKA VALLEY; CHECKING OUT BLDG. 2965 AND 3165

1725 - GOOD UST PROSPECT AND BLDG. 3165 - FOUND OLD STAKE (LIKELY A HESSONG ARTIFACT)
- SHOULD INSTALL A TEST PIT HERE.

1830 - DINNER

2030 - WORK ON DAILY REPORT

2130 - SIGN OFF LOG



9/21/00 EMD

0700 - SIGN ON LOG

- PREPARING COOLER FOR SHIPMENT TO DATACHEM
- SKIP NOT COMING OUT TIL SUNDAY; WILL SPEND DAY OVERLAPPING WITH KWI SO I CAN FLY TOMORROW

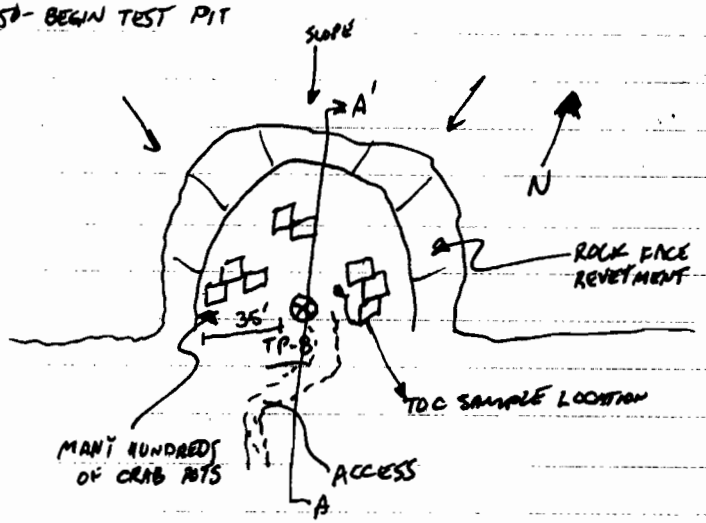
0800 - TAILGATE MEETING AT SOUTHEAST

- PREPARING GEAR FOR TEST PITS AT BALLYHOO SPIT TANK FARM

0900 - ARRIVE AT BALLYHOO SPIT TANKFARM

- SOUTHEAST IS UNLOADING BACK HOE
- MOVING LOTS OF OLD DERELICT CRAB POTS TO ACCESS TEST PIT 8 LOCATION

0950 - BEGIN TEST PIT



- THIS IS THE FARTHEST WEST OF THE 4 REVETMENTS HERE

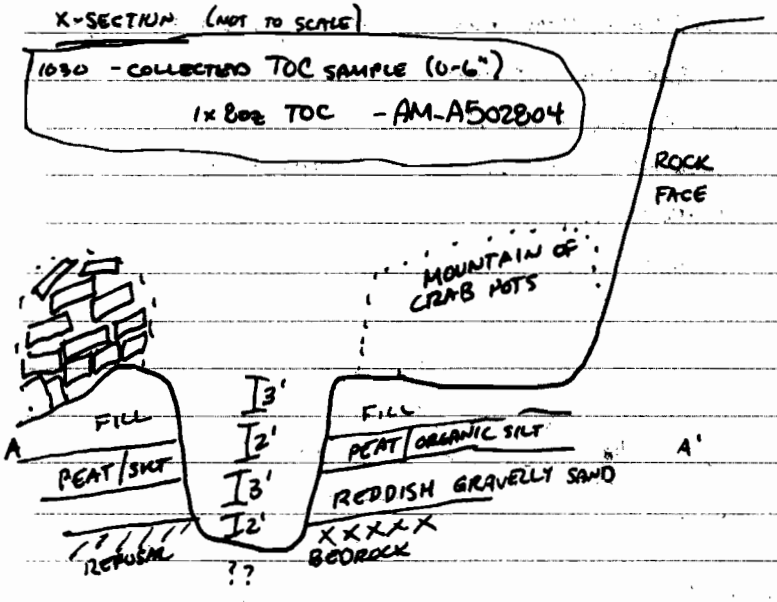
9/21/00

1030 - TP8 (CONT.)

- AT 3' BGS; STRONG ODOR OF GASOLINE. PID READINGS OF SOIL AT 3' ARE 108 ppm
- COLLECTED HANDY AT 3'
  - HARD TO TELL COLOR; LOOKS LIKE DIESEL 200-500 mg/kg
  - DOES NOT RESEMBLE GASOLINE COLOR

X-SECTION (NOT TO SCALE)

1030 - COLLECTED TOC SAMPLE (0-6")
1x 8oz TOC - AM-A502804



1045 - COLLECT FLOOR CONFIRMATION SAMPLE; 7' BGS

1x 4oz GRO
1x 4oz BTEX
1x 8oz DRO/RRO ~~+PAH~~ 9/21/00

} AM-A502801 & AM-A502802 GRO/BTEX TRIPBLANK

- SOIL IS A BROWN GRAVELLY SAND

PID DIRECT SCREEN = 15.0 ppm; HEADSPACE = 242 ppm (VERY MOIST SOIL)
STRONG ODOR OF GASOLINE

9/21/00

TP8 (CONT.)

1100 - COLLECTING EAST SIDEWALL SAMPLE ; 3.5' BGS

- DIRECT SCREEN PID = 184 ppm ; HANBY = 200-500 mg/kg

1 x 4oz GRO
1 x 4oz BTEX
1 x 8oz DRO/RRO & PAHs
} AM-A502803

- SOIL IS A SANDY SILT WITH LOTS OF ORGANICS, GRAY

VERY STRONG FUEL ODOR OBSERVED ; HEADSPACE = 742 ppm

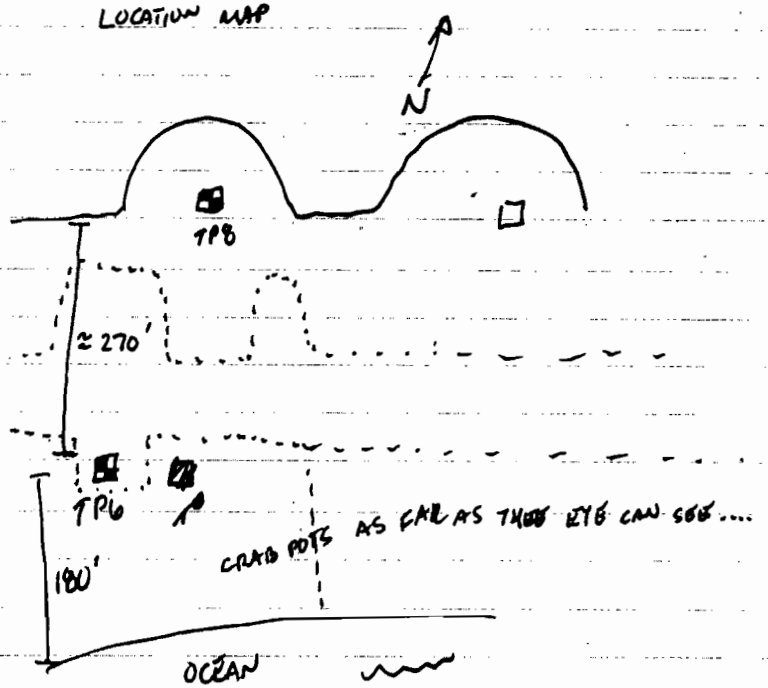
1105 - NO SIGN OF GROUNDWATER

- BACKFILLING TEST PIT

- CLEANING BACKHOE BUCKET WITH SORBS/SHOVELS

1140 - MOVING TO TP6

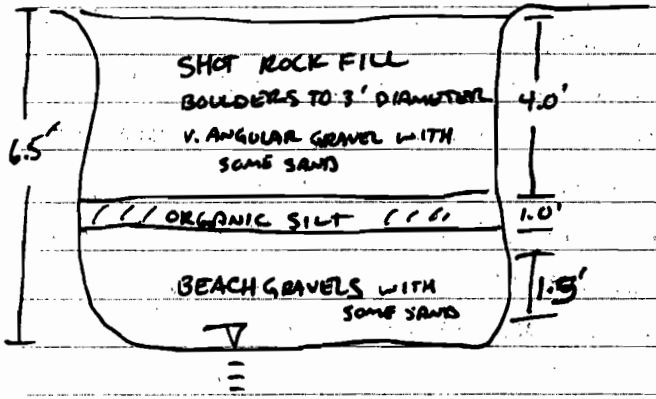
LOCATION MAP



9/21/00

1200 - TP6 (CONT.)

X-SECTION



1210 - HITTING LARGE ROCK AT ABOUT 4 FT BGS (3' DIAMETER)

1230 - HIT WATER AT 6.5' ; SHEEN OBSERVED ON WATER, UNABLE TO TELL IF ORGANIC OR PETROLEUM HYDROCARBON. NO ODOR OBSERVED

- COLLECTED SAMPLE DIRECTLY ABOVE GROUNDWATER AT 6.5' BGS

1 x 4oz GRO
1 x 4oz BTEX
1 x 8oz DRO/RRO/PAH
} AM-A502805

- SOIL IS A SANDY GRAVEL, MOIST (BEACH GRAVEL), NO ODOR OBSERVED

- DIRECT SCREEN PID = 0.0 ppm

- HANBY = <1 mg/kg

9/21/00 (RM)

- 1240 - COLLECTED SIDEWALL SAMPLE FROM TP6 ; 4.0' BGS
  - 1x 40z GRO
  - 1x 40z BTEX
  - 1x 80z DRO/RRO/PAH
  - } AM-A502806
- SOIL IS A SANDY GRAVEL, SLIGHTLY MOIST, NO ODOR
- COLLECTED FROM NORTH SIDEWALL ; PID DIRECT SCREEN = 0.0 ppm

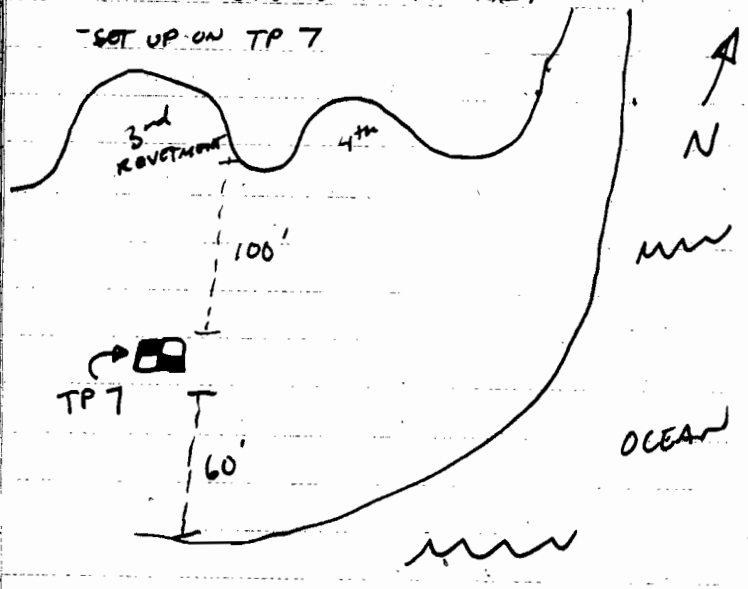
1250 - COLLECTED TOC SAMPLE FROM CLEAN SOIL STOCKPILE (REPRESENTING 2.0' BGS) - AM-A502807 1x80z JAR

- WILL SET WELL POINT WHEN DISCOVERY MOBILIZES THUMPER RIG LATER IN FIELD SEASON.
- BACKFILLING AND COMPACTING SOIL IN TEST PIT

1305 - LUNCH BREAK

1405 - RETURN TO BALLYHOU SPIT TANK FARM

- SET UP ON TP 7



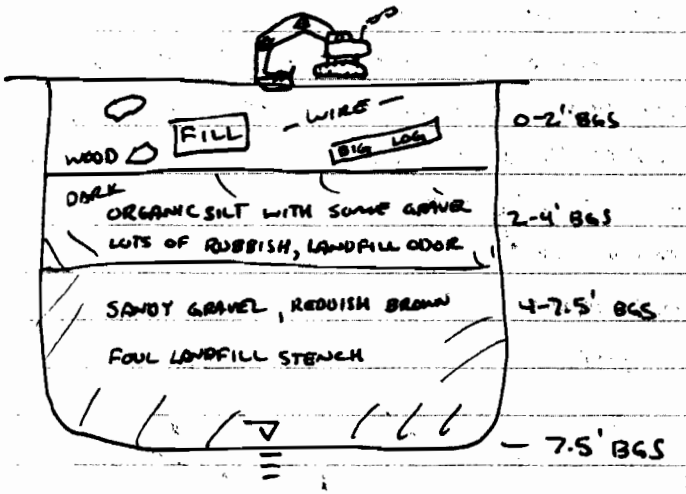
9/21/00 END

1430 - DIGGING TEST PIT - TP7

- DIRECT SCREENING SOIL W EXCAVATOR BUCKET

1445 - AT 7.5' BGS HIT GROUND WATER

X-SECTION OF TP 7



1455 - COLLECT SOIL SAMPLE AT TP7 AT 7.5' BGS IMMEDIATELY ABOVE GROUND WATER

DIRECT SCREEN PID = 0.0 ppm

- 1x 40z BTEX
- 1x 40z GRO
- 1x 80z DRO/RRO/PAHs
- } AM-A502808

SOIL IS MOIST, DARK REDDISH BROWN, SANDY GRAVEL WITH A LANDFILL ODOR

HANBY = 200-500 mg/kg DIESEL

1505 - COLLECT NORTHERN SIDEWALL SAMPLE AT TP7 ; 4.5' BGS

9/21/00 EMD

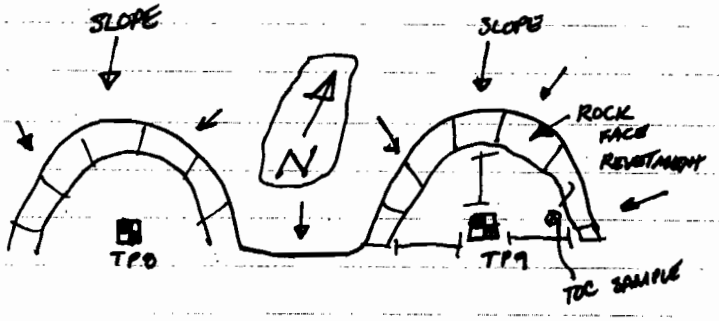
1505 - TP 7 SIDEWALL SAMPLE (CONT.)

1 x 4oz. BTEX
1 x 4oz GRO
1 x 8oz DRO/RRO/PAHs @ 9/21/00 } AM-A502809
1 x 8oz TOC

- SOIL IS A DARK BROWN ORGANIC SILT WITH SOME GRAVEL. NO ODOR OTHER THAN OCCASIONAL LANDFILL STENCH.
- PID DIRECT SCREEN = 0.0 ppm
- HANBY = 100 mg/kg DIESEL

1585 - MOVING TO TP 9

1530 - BEGIN DIGGING



1545 - AT 2.0' BGS ; IN ORGANIC LAYER, PID = 300 ppm DIRECT SCREEN

1600 - REFUSAL AT 5.0' (LARGE GREY ROCKS)

- COLLECT BOTTOM OF TEST PIT SAMPLE ; 5.0' BGS

1 x 4oz BTEX
1 x 4oz GRO
1 x 8oz DRO/RRO/PAHs @ 9/21/00 } AM-A502810 @ 9/21/00

9/21/00 EMD

1600 - TP 9 (CONT.) FLOOR SAMPLE

- SOIL IS A BROKEN/WEATHERED ROCK WITH SOME SAND
- NO ODOR
- DIRECT SCREEN PID = 0.6 ppm
- HANBY = < 1 mg/kg DIESEL

1607 - COLLECT SIDEWALL SAMPLE FROM TP9 ; 4.0' BGS FROM SOUTH SIDEWALL

1 x 4oz BTEX
1 x 4oz GRO
1 x 8oz DRO/RRO/PAH @ 9/21/00 } AM-A502811 @ 9/21/00

1610 SOIL IS AN ORGANIC SILT, DARK BROWN, STRONG FUEL ODOR

1630 - HANBY on SIDEWALL SAMPLE = 1 mg/kg DIESEL
DIRECT SCREEN PID = SPOTTY, SOME 0.0 ppm SOME AS HIGH AS 100 ppm

1620 - COLLECT TOC SAMPLE FROM UNCONTAMINATED SOIL (AS DETERMINED BY FIELD SCREENING)

AM-A502812 1 x 8oz JAR

0-6" BGS

1630 - BACKFILLING TEST PIT

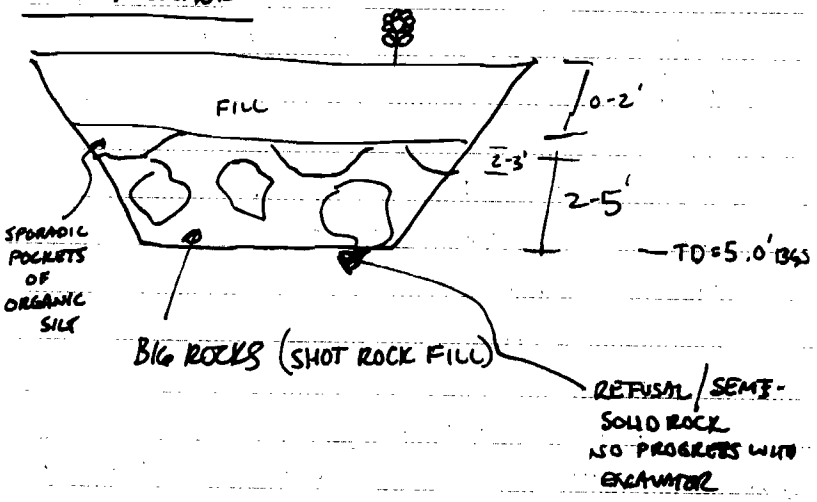
- APPROACHED BY ZAK (SEC) THAT AFTER BACKFILLING THIS TEST PIT, THEY ARE SHUTTING DOWN, MEETING AT JACOBS DIDN'T GO VERY WELL. NO WORK TOMORROW IS THE CURRENT PLAN.
- SEE NEXT PAGE FOR TP9 X-SECTION

1645 - HEAD BACK TO OFFICE

- WORK ON DAILY REPORTS

9/21/00

TP9 X-SECTION

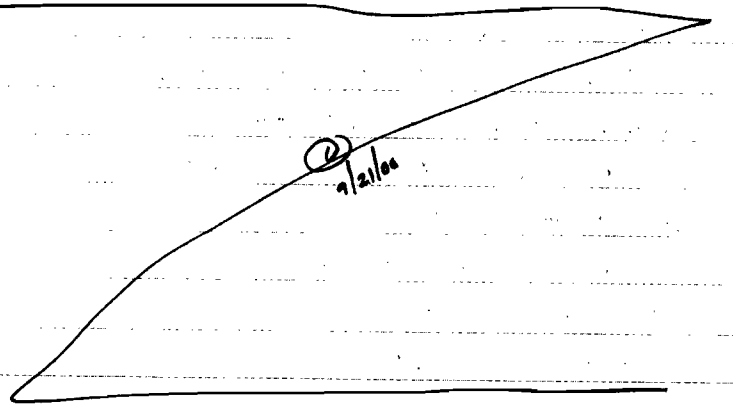


1700 - BACK TO OFFICE

- WORK ON DAILY REPORTS, DOWNLOAD PHOTOS, SAMPLE CONTROL

* WEATHER TODAY - PARTLY CLOUDY, SW WIND 10-16 KNOTS TEMPS 35°-45°F. *

1830 - SIGN OFF LOG



9/29/00 TG

1230 ARRIVE DUTCH HARBOR PROCEED TO TRAILER KEITH RUPP (USACE CoE) ALSO ARRIVES

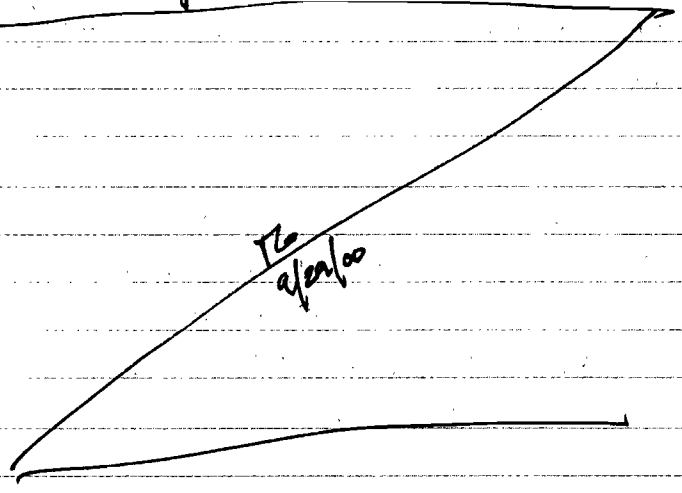
1230 - 1445 UNLOAD EQUIP @ TRAILER - GET SETTLED AT APARTMENTS

1445 - 1700 SITE RECONNAISSANCE @ MOUNT BALLYHOO WITH RANDY GROGAN

1705 SARAH BUNDEWALD (OASIS) FIELD SAMPLER ARRIVES ON AFTERNOON FLIGHT PROCEED BACK TO TRAILER

1730-1830 SAFETY ORIENTATION - IN BRIEFING W/ BUSTER GODWIN, FOR SARAH B, TIM G, KEITH R.

1830 OFF FOR DAY.



9/30/00 TJG

0730 - ARRIVE @ SITE TRAILER
- PREPARE QC DAILY # 026 FOR DATES 9/22 - 9/28/2000 TO HA w/ CONCURRENCE OF KEITH KEITH RUPP QAR.
- PREPARED QC DAILY # 027 FOR 9/29/2006
- BOTH REPORTS #026, #027 SIGNED BY KEITH R.

0845 DAILY H&S TAILGATE.

0855 SARAH B. BEGINS BOTTLE PREP FOR BALLYHOO WORK.

* WORK TO BE PERFORMED TODAY
GOLDIN - COMPLETE EQUIP INSPECTIONS/SI WORK
GROGAN - MOVE SEC EQUIP OUT OF WAY @ FILE WALL TANK FARM / SI WORK
GRACE/THOMPSON/BUNDENAUD - SI WORK.

0930 BALLYHO SI.

1056 WPT BH016 @ SUSPECTED UST. PHOTO 18
1111 WPT BH017 @ SUSPECTED UST @ BOMB #17 SHELTER.
1130 WPT BH018 @ BUILDING C USTS # 16
1138 WPT BHCT01 @ XFMR VAULT BLDG C #15
1149 WPT BHCT02 @ XMR VAULT BLDG C #14
1300 WPT BHS001 @ STAND-ALONE XFMR # 13
1302 PHOTO OF BATTERIES NEXT TO XFMR # 12 AT STAND ALONE SITE.

1316 WPT BHT01 @ VAULT W/ SWITCH GEAR PHOTO # 12, 13.

1319 WPT BDRM2 DRUM IN GULLY DOWN FROM OLD RADIO STATION

1323 WPT BDRM3-2 DRUMS IN GULLY - 1 gal H_2O and 5 gal sludge. NORTH OF PREVIOUS DRUM.

1328 BDRM04 @ DRUM IN GULLY FROM ROAD NEXT TO WOOD FRAME BUILDING. PHOTO # 14

1335 BOST0 POSSIBLE AST @ MAIN COMPLEX.

1400-1445 LUNCH

1500 OFFICE. LOOK FOR HILL 400 MAPS.

1530 PROCEED TO HILL 400. NO EVIDENCE OF DRUM DUMP ALONG BEACH ROAD.

1620 WPT 400T01 N53°52' 16.1" W166°33' 35.5' TWO SUSPECTED USTs IN THIS AREA (OLD MESS HALL) ONE DRUM IN THIS AREA 400D01 WAYPOINT SAME COORDINATES.

1635 ARRIVE "AGNES BEACH" AREA FOR SI.

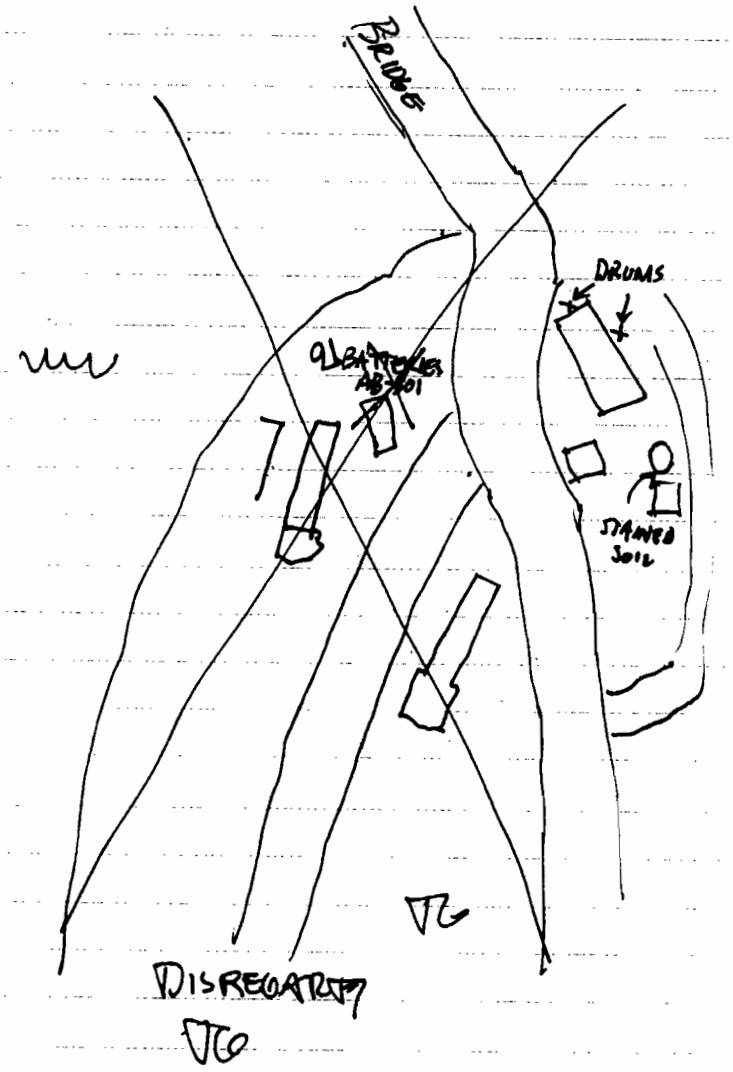
1638 PHOTO OF CONTAMINATED SOIL # 9

1652 WPT AB-B01 - GLASS BATTERIES. IN BUILDING - PHOTO #8.

1655 WPT AB-S01 STAINED SOIL NEXT TO ENGINE SHIPPING CONTAINER. PHOTO # 9.

9/30/00 TG

1659 WPT AB-B02 @ AGNES BEACH. MILITARY BATTERIES PHOTO # 6.



9/30/00 TJG

1704 IN BUILDING ADJACENT TO AB-B02, XMMR PRESENT IN GOOD SHAPE. WILL TRY TO TALK TO LANDOWNER TO GET ACCESS FOR REMOVAL.

1728 UST? @ LAUNDRY - UNALASKA VALLEY. WPT. ~~UNL-TP1~~ UG-TP1 TG PHOTO # 7.

1755 UST @ FIRE STATION PHOTO # 6 WPT ~~UNLTP2~~ UG-TP2 TG STEWARD ROAD UNALASKA GARRISON.

1805 ~~TG~~ PROCEED BACK TO FIELD OFFICE. WORK ON DAILY REPORTS.

1845 SIGN OFF LOG.

TG.

10/1/00 TTG

0730 ARRIVE AT TRAILER FINISH DAILY QC REPORT.

0830 SOUTHCOAST CREWS ARRIVE. BEGIN SAFETY ORIENTATION - IN BRIEFING BY BUSTER GODWIN.

0945 END SAFETY BRIEFING.

1000 PROCEED TO "AGNES BEACH" W/ KEITH R TO LOOK AT BATTERIES AND XFORMERS IN BUILDING. WILL TRY TO DETERMINE IF PCBs ELIGIBLE.

1145 PROCEED TO AIRPORT - PICK UP JENNY REIGLE AND MIKE YARBOROUGH (CRC) DROP MIKE OFF AT GRAND ALEUTIAN AND PROCEED TO OFFICE.

12:30-1330 LUNCH.

1345 CULTURAL RESOURCE TRAINING W/ MIKEY. W/ JEG/SOUTH COAST AT SOUTHCOAST TRAILER

1500 BEGIN PREPATORY PHASE MEETING. GO OVER:

- MOB/SITE SETUP
- XFMR REMOVAL
- PCB SAMPLING.
- UST/AST REMOVAL.

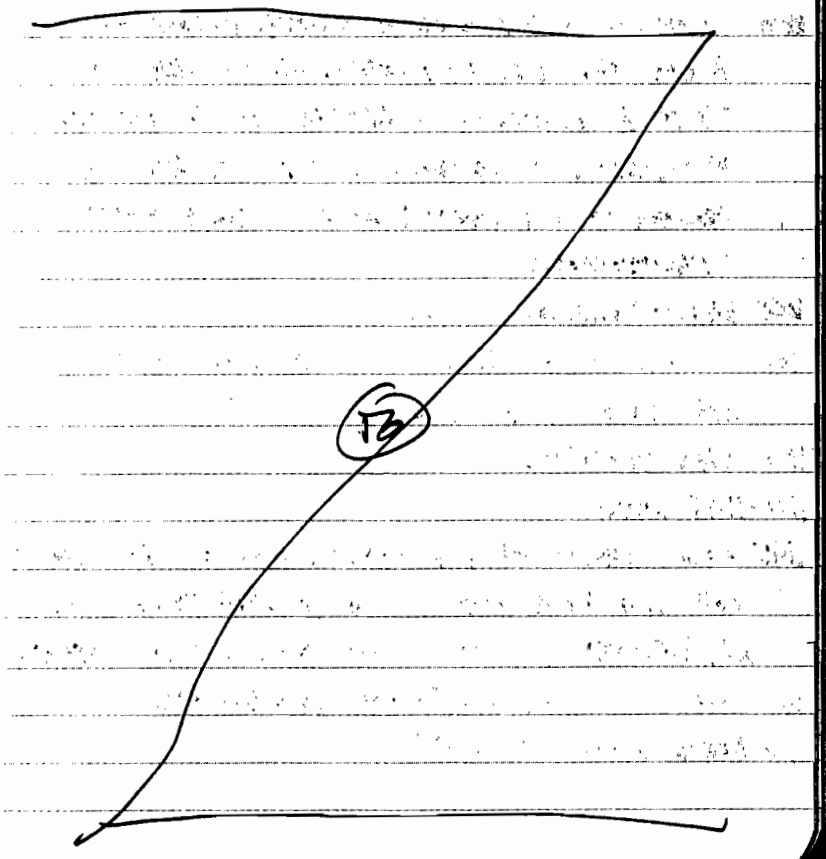
ATTENDEES:

T. GRACE JEG
K. KRUPP USAEN
M. YARBOROUGH CRC
R. GROGAN JEG
B. GODWIN "
K. THOMPSON "
S. BUNDEWALD OASIS
J. REIGLE. JEG.
DAN BATES SOUTHCOAST

10/1/00 TG

1630 PROCEED TO MOUNT BALLYHOO W/ MIKEY. KEITH R. TO LOOK AT XFMR SITES/USTS. MUST STAY ON ROADS W/ EQUIPMENT, ACCORDING TO MIKE Y. NO OFF ROAD TRAVEL ON THE NHL. R. GROGAN AND D. BATES (SC) ARRIVED TO PLAN XFMR - UST WORK.

1830 ARRIVE BACK AT OFFICE. SIGN OUT LOG.



10/2/00 TJG.

0700 ARRIVE AT TRAILER. COC REPORT PREP. / MINUTES FOR PREP PHASE MEETING.

0805 TAILGATE SAFETY MEETING.

0930 REPORTS COMPLETE. EMAIL PHOTOGRAPH OF BALLYHOO STAND ALONE XFMR TO DIANE HANSON. WILL ASK FOR PERMISSION TO REMOVE SOME SOIL IN AREA. SARAH BONDEWALD PUTTING TOGETHER SAMPLING SUPPLIES.

1000 PROCEED TO CPO BARRACKS W/ MIKEY. TO LOOK AT ACCESS FOR UST REMOVAL. WE WILL HAVE TO MOVE A SECTION OF GUARDRAIL TO ACCESS SITE W/O DISTURBING ARCHAEOLOGICAL EXCAVATIONS. PROCEED TO OLD STEAM PLANT TO TAKE PHOTOS, MEASUREMENTS.

1045 BACK @ TRAILER

1100 PROCEED TO ROBINSON ESTATE TO TAKE PHOTO OF THE XFMR IN BUILDING.

1120 BACK AT OFFICE.

1120-1145 LUNCH

1145 EMAIL PHOTOS OF ROBINSON ESTATE TO DIANE HANSON AND SKIP KOCH. FAXED MAP TO SKIP KOCH THAT WAS PREPARED BY KIWI T. LOAD TRUCK FOR XFMR REMOVAL

1300 PROCEED TO MOUNT BALLYHOO FOR XFMR REMOVAL.

1320 ARRIVE @ SITE. VAULT #1.

10/2/00 TJG.

1405 MEASURE AIR/VAPORS IN VAULT #1. PHOTO #1. OF R. GROGAN / B. GODOIN MEASURING AIR/VAPORS. 0% LEL, 20.8% O_2, H_2O & CO_2 = 0 CLEAR TO ENTER.

1429 XFMRS DISCONNECTED FROM WIRES. VAPORS STILL OK. SAFE TO WORK. CREWS ASSEMBLING TRIPOD TO PULL OUT XFMRS.

1453 RIGGED AND PULLED 1ST XFMR FROM VAULT #1. PHOTO #S 2 AND 3.

1502 XFMR #1 OUT. PHOTO #4. NAMEPLATE ON XFMR NOT PRESENT. IT HAS CORRODED OFF!

1515 TG XFMR #2 OUT OF VAULT "280" ON TOP FACEPLATE CORRODED. NO INFORMATION. PREPARING TO SECURE XFMR #1 TO SKID TO PULL UP THE HILL WILL WRAP IN PLASTIC, W/ ABSORBENT AROUND LID.

1532 PHOTO #5 PREPARING TO REMOVE XFMR UP HILL.

1600 XFMR 1 READY TO BE PULLED UP SLOPE.

1607 XFMR 1 AT TOP. PHOTOS 6, 7, 8, 9, 10, 11 TG

1651 XFMR 2 AT TOP. PHOTOS 12, 13, 14. TG TG TG

1730 BOTH XFMRS IN SALVAGE DRUMS.

1740 BEGIN TO PACK UP SITE FOR DAY.

1745 VERY SMALL AMOUNT OIL FROM XFMR ON GROUND. SHOVELED ALL SOIL INTO OVERPACK W/ XFMR. IN ORDER TO GET TG XFMR CONTAMINATION.

10/2/00 TJB

1100 RETRIEVE OVERPACK. SHOVELED SOIL FROM HOLE TO SPREAD INTO OVERPACK.

1130 SPILL IN OVERPACK. PACK UP EQUIP. RETURN TO TRAILER.

1300 AT TRAILER. UNLOAD EQUIP. LABEL OVERPACKS.

[illegible]

10/2/00

1330 ARRIVE AT TRAILER. WORK ON COC REPORTS.

0745 Call Skip Koch. Inform him to inform John Halvorson (ADEC) re: regarding small oil spill on ground at XFMR#1 when putting into overpack. Skip will inform John.

0800-0820 Safety Meeting.

0840 Randy S. heads over to Decon Pad to unload equip from last Decon.

0845 Traveled to Rocky Point w/ Mike Y. to look at UST. Partially uncovered. Photo #14.

1000 Proceed to Mount Ballyhoo.

1041 Collect PCB Sample in road next to spill.

1-8oz PCB SW8082] AM-A503401

1100 Collect 2 Soil Samples in XFMR Vault #1

XFMR#1	1-8oz PCB	AM-A503001
Vault#1	1-8oz DRO/RRO	
XFMR#2	1-8oz PCB	AM-A503101
Vault#1	1-8oz. DRO/RRO	

1105 Southcoast rigged up to pull XFMR#3 out of Vault #2. Randy G. heads over to MTS. To line up progression of work.

1205 XFMR#3, Vault #2 rigged to pull.

10/3/00 TJG.

1213 XFMR #3 OUT. PHOTOS 15, 16, 17. WILL HAVE TO BE CAREFUL AS TOP IS LOOSE WHEN WE BRING IT UP THE HILL. "281" STENCILED ON TOP OF XFMR #3. APPROXIMATELY 2-3.5 GAL H_2O IN XFMR #3. DRAINED INTO 5 gal BUCKET PRIOR TO BRINGING XFMR UP THE HILL. PHOTO #18.

1241 XFMR #3 RIGGED ON HOOD TO SKID UP TO THE ROAD. PHOTO #19.

1329 XFMR #3 IN OVERPACK. PHOTO #20. LABELED DRUM.

1430 COLLECT 1 PCB SAMPLE FROM VAULT #2.
1-8oz PCB
1-8oz DRO/RRO
} AM-A503201

1500 MOVE TO VAULT #3. TO PUMP OUT XFMR #4. CREWS ALSO BEGIN TO UNEARTH UST NEAR THE XFMR VAULT. XFMR OPEN, FILLED W/ OIL.

1528 MEASURE APPROX. 6" LIQUID IN UST NEXT TO XFMR VAULT #3. DEPTH FROM TOP OF STANDPIPE = 10.8', DEPTH TO PRODUCT = 10.2', SUSPECT GASOLINE IN TANK.

1530 BEGIN PUMPING XFMR #3. PUMP OUT W/ AIR POWERED PUMP PRIOR TO REMOVAL. PUMPING INTO TIGHTHEAD, BUNG-TOP DRUM. CEASED PUMPING BECAUSE 4-GAS METER FAILED. WAIT FOR B. GOODWIN TO REPAIR 4-GAS METER. CANNOT HAVE PERSONNEL IN VAULT W/O MONITORING.

10/3/00 TJG.

1540 TO 1546 PHOTO #16 TO 17 ON NIKON DIGITAL OF CREWS UNEARTHING UST. THE XFMR VAULT AND UST ARE ADJACENT TO "BUILDING C". MONITORED BREATHING AIR ZONE W/ MINIRAE PID. LESS THAN 2.5 ppm IN BREATHING ZONE.

1550 BEGIN PUMPING XFMR #4. MONITORING EQUIPMENT IS REPAIRED.

1602 CEASE PUMPING. 4-GAS METER FAILED. CO SENSOR INDICATES FAILURE. MUST BE RE CALIBRATED.

1620 BEGIN PUMPING AGAIN. FINISH AT 1625.

1636 COMPLETE PUMP/HOSE DECON. PUMPED H_2O + LIQUINOX > 5 gal THROUGH PUMP AND HOSE.
PHOTOGRAPH #8 - R. GROGAN
PHOTOGRAPH #9 - PUMPING DECON H_2O THROUGH HOSE.
AM-A503301 ← 1730 PCB SAMBLE

1723 XFMR #3 TO 4 OUT AND DOWN HILL. XFMR 4 VAULT 3
PHOTOGRAPHS # 10 AND # 11. 1-8oz PCB
1-8oz DRO/RRO

1742 XFMR #3 TO 4 OUT IN OVERPACK. DRUM LABELED. DRUM W/ XFMR #4 OIL/WATER ALSO LABELED.

1800 BEGIN TO DEMOB/PACK UP EQUIPMENT FROM SITE.

1830 BACK AT TRAILER.

1845 SIGN OFF LOG

TJG.

6/4/00 TJE

0700 ARRIVE @ TRAILER. WORK ON DAILY REPORTS.

0800 SAFETY TAILGATE MTG.

0830 SCI CREWS HEAD TO DECON PAD TO REMOVE DRUMS FROM TRUCK AND DECON PUMPS.

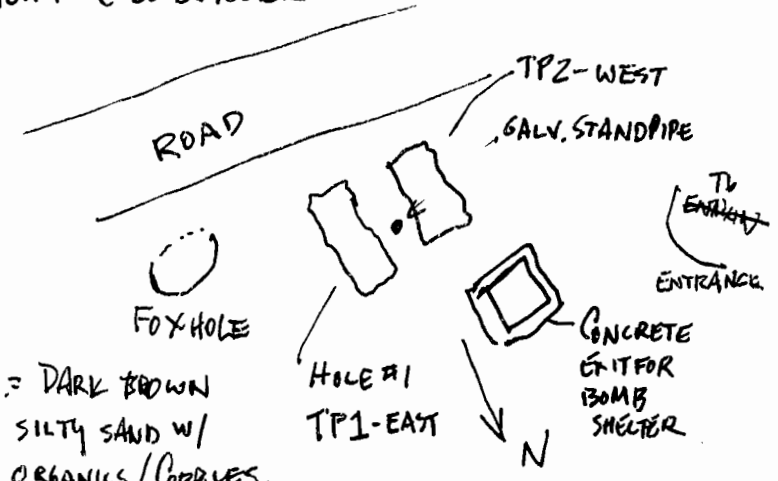
1000 COMPLETE REPORTS / PREPING SQUIPE COOLERS PROCEED TO MOUNT BALLYHOO.

1035 ARRIVE MOUNT BALLYHOO. CREW (SCI) HAND DIGGING UST @ BUILDING "C".

1100 PREPARE TO DIG TEST PIT @ BOMB SHELTER, MOUNT BALLYHOO. SUSPECTED UST IN THIS AREA.

1110 BEGIN TEST PIT AT BOMB SHELTER.

1116 TEST PIT @ BOMB SHELTER



SOIL = DARK BROWN SILTY SAND W/ ORGANICS / COBBLES.

HOLE #1 - 10'-12' BGS NO EVIDENCE OF TANK

(TP2-EAST) - LOOKS LIKE OVERBURDEN. LOTS OF COBBLES PIECES OF WOOD. NO EVIDENCE OF CONTAMINATION OR DISCOLORED SOIL

10/4/00 TJE.

1153 HAVE UNEARTHED SOME OF TANK AT THE BUILDING "C" SITE. SOME CONTAMINATED SOIL LENS ~~FRO~~ TO ABOUT 6" THICK AT TOP OF TANK. SOIL SILTY SAND W/ LOAM HEADSPACE READING = 28 ppm. INSTRUCTED SCI TO CLEAN OF ~~TOO~~ TO TOP OF TANK, ~~CALL~~ TO WILL DO A HANDY FIELD ~~PROBE~~ TO TEST KIT.

1221 TP2-WEST COMPLETE @ BOMB SHELTER. 10' BGS. NO EVIDENCE OF TANK OR CONTAMINATION / DISCOLORED SOIL. ORGANIC SILTY SAND W/ COBBLES, CONCRETE CHUNKS, AND WOOD. WILL ABANDON / BACKFILL BOTH HOLES. ONCE BACKFILL COMPLETE, WILL RE-SEED.

PHOTOS 12-13 TP2-WEST - NIKON D16.

" 14 ~~TP3~~ TO TP1-EAST - NIKON D16.

1320 TEST PITS AT BOMB SHELTER BACKFILLED. DOING HAND WORK TO CLEAN UP TO PREPARE FOR SEEDING.

- PREPARING TO PUMP OUT USTs AT BUILDING "C". THERE ARE TWO USTS AT THAT LOCATION. SEE SKETCH, OPPOSITE PAGE.

1330-1400 LUNCH.

1409 STICK BUILDING "C" UST #1 - WEST FROM TOP OF PIPE WHICH HAS BEEN CUT: 6.34 PRODUCT. 7.15 H_2O 7.17 BOT.

10/4/00 TJG

1411 STICK BUILDING "C" UST #2 - EAST @ 8.83' TO PRODUCT, 8.85 TO BOTTOM WHERE IT READ WATER. CREWS PREPARING TO PUMP TANKS.

1500 TRIED TO STICK TANK @ FORT LEARNARD OBSERVATION POST. COULD NOT GET PROBE TO TANK, PIPE OBSTRUCTED. DECIDE TO LEAVE IN PLACE. MIKEY. CONSULTED W/LINDA COOK AT NPS, DOES NOT WANT ANY INTRUSIVE WORK AT THAT SITE.

1511 BEGIN PUMPING UST #1 - WEST, BUILDING C.

PHOTO #15 BEGINNING PUMPING UST #1 - WEST.

1515 ERIC DETMER CALLED AFTER CHECKING UST RECS. CAN CLOSE IN PLACE W/O FILLING W/ INERT MTL, IF PIPES CONCRETED SHUT. WILL GO THIS ROUTE ON/ MOUNT TRAILY/HOO SINCE THE AREA CANNOT BE ACCESSED BY EQUIPMENT, AND THE TANKS ~~CAN~~ TO ARE EXPOSED AT THE END ONLY. VERY HARD TO FILL W/ RAVEL W/O BRIDGING OFF.

1558 LABELED DRUMS FROM UST #1 - WEST 3 DRUMS. APPROX 125 gal WASTE DIESEL. LABELED AS SUCH. ARE PUMPING UST #2-EAST AT BUILDING C.

1409 LABELED WASTE GASOLINE DRUMS. DRUM. APPROX 18 GALLONS. UST #2 - EAST. LABELED AS SUCH.

10/4/00 TJG.

1624 MIKEY. FOUND 6" .45 ACP UNEXPLODED CARTRIDGE IN ROAD. TOOK PHOTOGRAPH #16 NIKON DIG.

1707 COLLECT SAMPLE NEAR FILLPORT ENTRY TO UST #2-EAST. APPROX DEPTH 7.5'

AM-A503501 { 1-4oz MEOH PRESERVED GRO/BTEX
1-8oz DRO/RRO

AM-A503601 { 1-4oz TOC AT 4.5' DEPTH

1710 COLLECT SAMPLE NEAR FILLPORT ENTRY TO TANK UST #1 - WEST. APPROX DEPTH 7.5'

AM-A503701 { 1-4oz MEOH PRESERVED GRO/BTEX
1-8oz DRO/RRO

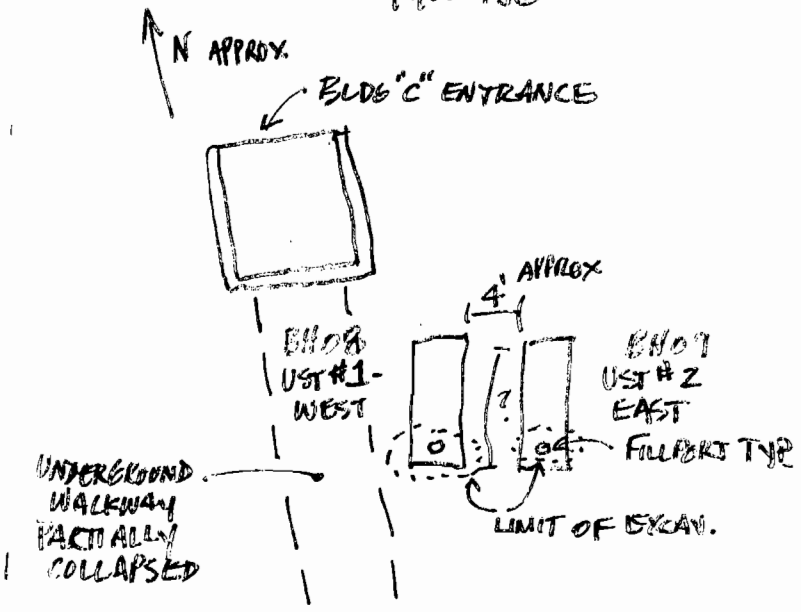
1717 COLLECT SAMPLE OFF END OF UST #1-WEST AT APPROX DEPTH 11 FEET.

AM-A503801 { 1-4oz MEOH PRESERVED GRO/BTEX
1-8oz DRO/RRO.

NOTE: COULD NOT AUGER FOR DEEP SAMPLE AT UST #2-EAST ROCKS IN SOIL CAUSED REFUSAL IN ALL HOLES AT APPROX 8.5'

NOTE: ALL USTs NEAR BUILDING "C" ABANDONED IN PLACE. HISTORICAL SIGNIFICANCE MANDATED HAND EXCAV. ONLY. PLUGGED FILL PORTS WITH GROUT AND BACKFILLED. NOTIFY ADEC ASAP. FILLED PIPE AT EIDER POINT OBSERVATION POINT W/ GROUT ALSO.

10/4/00 TJG



1130 BACKFILL SEEDING COMPLETED AT USTs. CREWS PACKING UP EQUIP FOR TRIP DOWN MOUNTAIN.

[illegible] AT TRAILER. UNLOAD EQUIPMENT

1900 SIGN OFF LOG.

10/5/00 TJG/EMD

[illegible] ARRIVE @ TRAILER. WORK ON DAILY REPORTS.

0800 SAFETY TAILGATE MTG.

[illegible] RECEIVE SOIL DAILY REPORT. COMPLETE DAILY SOIL REPORT.

[illegible] PROCEED TO MT BALDY RD TO RETRIEVE STAND ALONE XFMR. (XFMR #5)

[illegible] ARRIVE @ STAND-ALONE XFMR.

0940 RECORD FACEPLATE OF STAND-ALONE XFMR (XFMR #5) M&T
MALONEY ELECTRIC CO. ST. LOUIS MO
SER 707067. 12½ GAL OIL. 416 534-9226 X241 FOR THOMPSON

* AREA CODE: 314 - CALLED INFO - NO LISTING.

[illegible] DECIDE NOT TO TAKE XFMR #5 (STAND-ALONE) OUT. DOES NOT APPEAR TO BE PCB ELIGIBLE. WILL DO SOME MORE RESEARCH, ON THE XFMR MANUFACTURER.. WILL PULL DRUMS IN DRAINAGE AT CLOSE TO ROAD INTERSECTION. OK'D BY MIKE Y.

1130 REMOVE TWO DRUMS IN DRAINAGE.

1200 RETURN TO TRAILER.

1230 PICK UP ERIC DETMER AT AIRPORT.
DROP GEAR OFF AT APARTMENT

1330 - CONDUCT PRE-FINAL MEETING FOR CONTAMINATED SOIL REMOVAL

- WITH FINAL CONT. SOIL REMOVAL AT SEA-LAND SITE

[illegible] HEADING TO SEA-LAND SITE

10/5/00 DMB

1430 - TO SHOWCO - SITE RECON WITH SARAH

1500 - BACK TO OFFICE; WILL COLLECT SAMPLE AT MW-14 PRE-WWII TANK FARM.

1530 - ARRIVE AT MW-14

- SETT - UP GEAR

PID = 0.0 ppm

WATER LEVEL = 13.91'

TOTAL DEPTH = 15.13

1545 - BEGIN PURGE

1.0 gal/PURGE VOL x 3 = 5.4 gal. purge.

	1st	2nd	3rd
pH (s.u.)	6.60	6.51	6.44
S.C. (µS/cm)	350	348	347
D.O. (mg/L)	0.91	0.39	0.41
TEMP (°C)	7.1	7.1	7.1
SAL. (PPT)	0.0	0.0	0.0
TURB (NTU)	24.6	14.4	9.51

* WEATHER TODAY IS POOR, RAIN, NORTH WIND 15-20 KNOTS TEMPS 40 - 47°F *

- CALIBRATION OF ORION METERS

pH: S = -53.2 mV/pH

E_0 = 11

SC = S = 0.446 I/mV

DO: S = 0.75

10/5/00 DMB

1540 - COLLECT SAMPLE AT MW-14, PRE-WWII TANK FARM

3 x 40 ml VOA (SW8260B) (AM-A50390 1)

WATER IS CLEAR, NO ODOR OR SHEEN OBSERVED

3 x 40 ml VOA SW8260B (AM-A50390 2)

1700 - RETURN TO OFFICE

- UNLOAD GEAR; PREP SAMPLES FOR SHIPMENT TOMORROW

1730 - SIGN OFF LOG

10/5/00

10/6/00 EMD

0700 - SIGN ON LOG

- BEGIN DAILY, TRACKING DOWN # TRANSFORMER INFORMATION ON STAND-ALONE TRANSFORMER

DAN MARLOW (314) 679-4570

MALONEY ELECTRIC Co. ROCKWELL SEARCH

0800 - TAILGATE WITH SCI

- PLAN FOR DAY = BEGIN WORK AT SKI BOWL SITE UST 3475

- PREPARING GEAR FOR SURF. SOIL SAMPLING/REMOVAL

0945 - ARRIVE AT UST ~~2465~~ 3465 SITE

WILL SAMPLE SURFACE WATER AND SEDIMENT DOWN GRADIENT OF UST ~~3475~~ 3465 SITE

FIELD PARAMETERS

pH (S.U.)	~~7.4~~ 6.19
S.C. (MS/cm)	0.087
D.O. (mg/l)	10.09
SAL (PPT)	. .
TEMP (°C)	3.1
TURB (NTU)	290

1030 - COLLECT SURFACE WATER SAMPLE AT LOCATION ~~#2~~ 1 X UST ~~3475~~ 3465

- CREEK FLOW IS ABOUT 20 gpm

3 x 40ml	SW8260B	ANALYSIS REQUIRED
2 x 1L	SW8270C SIM	
2 x 1L	ARCHIVE	

10/6/00 (PM)

1X UST ~~3475~~ 3465

WATER IS CLEAR, NO ODOR, SHEEN OBSERVED

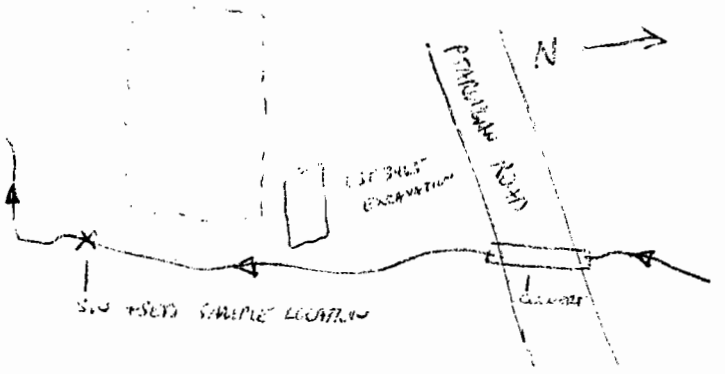
1X - COLLECTING SEDIMENT AT CREEK BELOW UST ~~3475~~ 3465

(SAME SPOT AS SURFACE WATER)

1 x 8oz	AMBER/JAR	ANALYSIS REQUIRED
1 x 8oz	SW8270C SIM	
1 x 4oz	SW8082	

TRIP BLANK

3 x 40ml	SW8260B	ANALYSIS REQUIRED
1 x 4oz	SW8082	



1100 - CREW ARRIVES ONSITE TO BEGIN DIGGING AT UST ~~3475~~ 3465 SITE

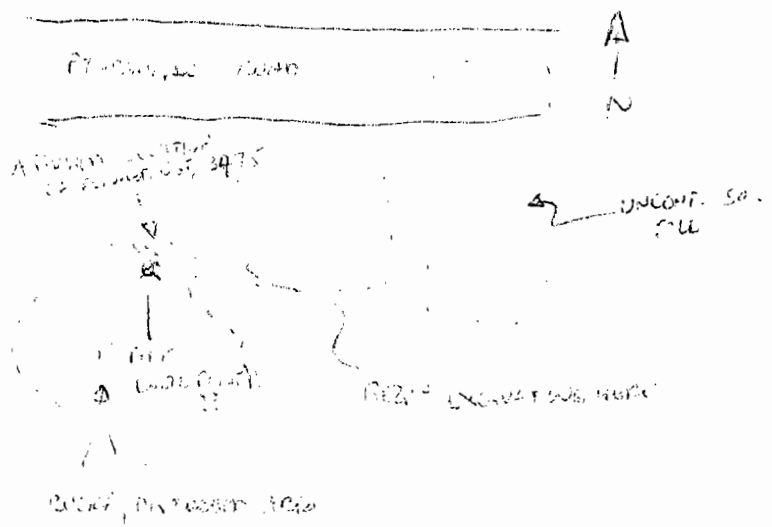
1115 - BEGIN DIGGING AT UST 3475

SEE MAP NEXT PAGE

- COLLECTING DIRECT SCREEN PID READINGS DIRECTLY FROM BACKHOE BUCKET

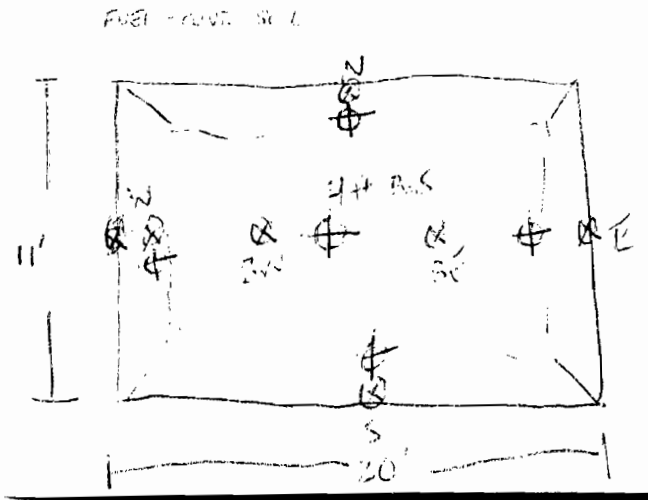
10/6/00

1130 - GST BASE [illegible]



*WEATHER TODAY - PARTLY, OCCASIONAL RAIN, WIND GUSTS 10 - 25 KNOTS, TEMPS 35 - 45° F * OVERCAST

1230 - CONTINUE EXCAVATION, VERY SPOTTY PRESENCE OF FUEL - FLOOR SLOPES



10/6/00

DAVE TOOK ABOUT 4 BUCKETS OF CONTAMINATED SOIL (BYSED ON OLFACTORY AND PID HEADSPACE READINGS) (ABOUT ½ CY)

HEADSPACE RESULTS

	DEPTH (ft BGS)	HEADSPACE (ppm)	BENZENE (mg/kg)
N	3	12.0	<1
S	3	14.0	<10
E	3	15.0	<10
W	3	16.5	<10
BTM	4	16.5	<100
BTM	4	10.3	<50
UNSAT	2.5	14.0	<1

1400 - COLLECT NORTH WALL SAMPLE AT 3' BGS

1 x 8oz AMBER & 1 x 4oz GLASS JAR

(AM-A504101)

SANDY GRAVEL WITH LOTS OF COBBLES, BROWN

1402 COLLECT WEST WALL SAMPLE AT 3' BGS

SAA (AM-A504102)

1404 - COLLECT SOUTH WALL SAMPLE AT 3' BGS

SAA (AM-A504103)

1406 COLLECT EAST FLOOR SAMPLE AT 4' BGS

SAA (AM-A504104)

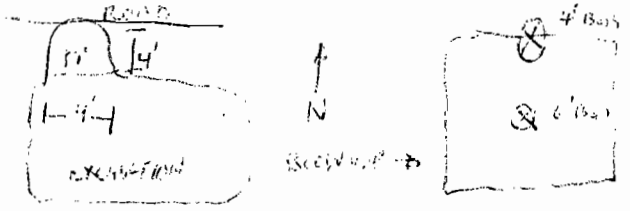
1408 - COLLECT WEST FLOOR SAMPLE AT 4' BGS

SAA (AM-A504105)

1415 - BUTTON UP TEST PIT BETWEEN EXCAVATION AND SUMP

10/5/00 (SUN)

1420 - TEST PIT #1 IS MAXIMUM EXTENSION OF EXCAVATION; DO NOT WANT TO GET TOO CLOSE TO ROAD.



- TEST PIT #1 AT LEAST 6' BGS
- COLLECT ONE FROM 4 ONE IN THE HANDS

1430 - COLLECT FIELD SAMPLE IN TEST PIT 6' BGS
1 x 8oz DRO/RRO/1144 (AM-450410)

- SOIL IS AN ORGANIC SILT WITH LOTS OF ROOTS — APPEARS TO BE ORIGINAL GROUND SURFACE

- HANDS — HEADSPACE
  - WASH WATER OF TEST PIT = < 1 — 4.1 ppm
  - FLOOR " " " = < 1 — 4.2 ppm

1445 - INSTALLING WELL POINT IN TEST PIT; WATER LOOKS UNDERNEATH INTERFACE IN AT ABOUT 6' BGS
WELL POINT IS 5 FEET LONG, WITH BOTTOM THREE FEET AS SCREENED INTERVAL

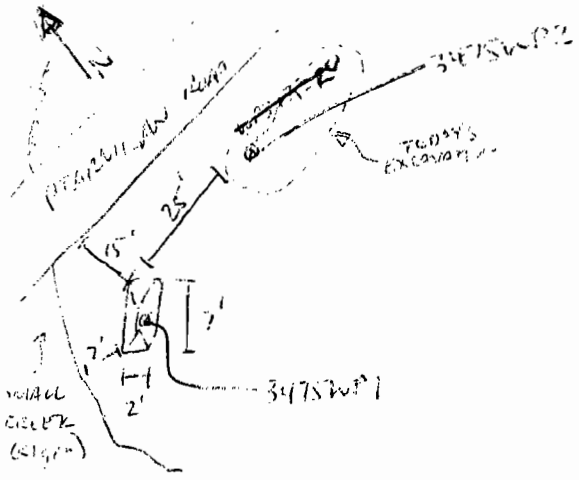
- DRIVING WELL POINT TO 6' BGS (WP 3475-1)

1450 - COLLECT TOC SAMPLE FROM 1ST TEST PIT (2' BGS)
1 x 4oz TOC (AM-450410) → 3475WP6 TEST PIT #2

1453 - COLLECT TOC SAMPLE FROM MAIN DRY 3475 LOCATION WITH SHOVEL
1 x 4oz TOC (AM-450410)

10/6/00 (FRI)

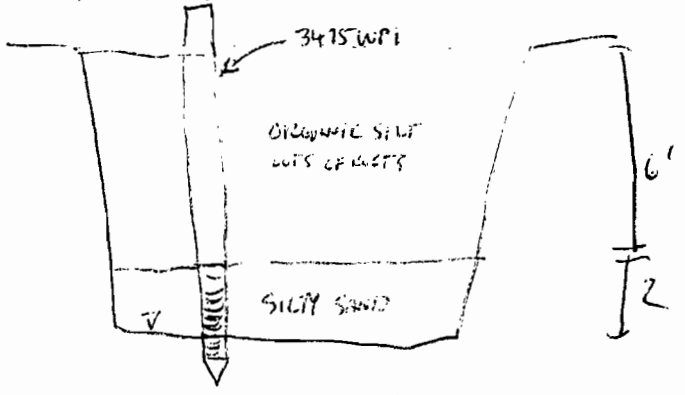
1455 - SET UP DIGGING SECOND TEST PIT



1500 - COLLECT TOC SAMPLE FROM SECOND TEST PIT; 4' BGS
1 x 4oz TOC (AM-450410)

- SOIL IS A SILTY SAND WITH SOME ORGANICS

TEST PIT #2 X-SECTION



- WATER ENCOUNTERED AT 6' BGS

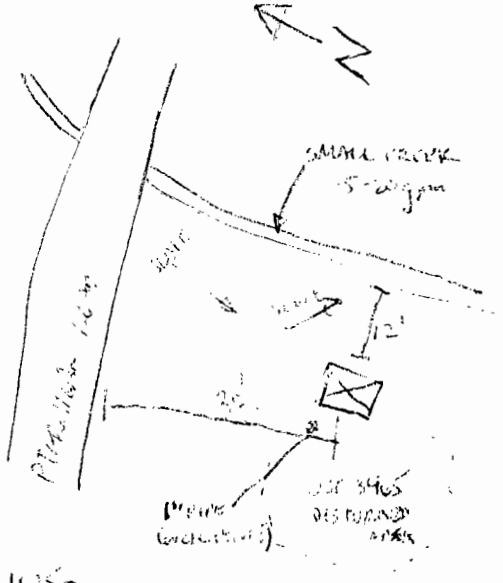
10/6/00

1510 - COLLECT HEADSPACE FROM TEST PIT #1 (HEADSPACE SCREEN)
N SIDEWALL (3' BGS) - <1 mg/kg — 3.6 ppm
FLOOR (8' BGS) - <1 mg/kg — 2.4 ppm

1515 - COLLECT SAMPLE FROM BOTTOM OF TEST PIT #1
1 x 8oz - DRO/RRO/PAH (AM-14504110)
SOIL IS A SILTY SAND W/ ORGANIC STRINGERS

1520 - BACKFILLING BOTH TEST PITS/EXCAVATION
ATTEMPTING TO COMPACT AROUND UST PITS

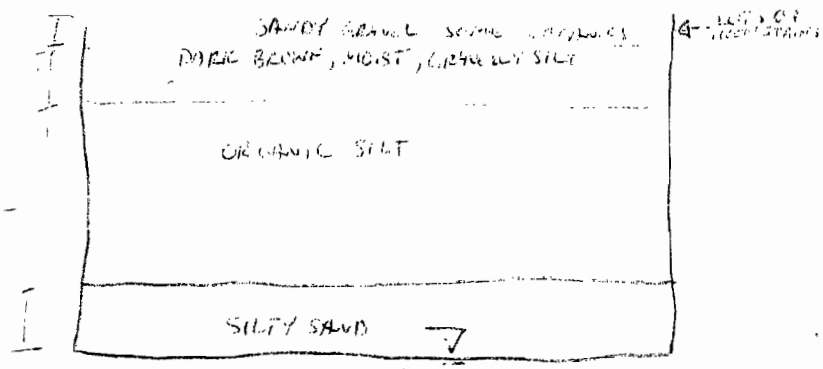
1600 - SETTING SAMPLE STAKES UP ON UST PITS
TEST PIT BETWEEN UST EXCAVATION AND SHED



1625 - SCRATCHING SOIL IN TEST PIT
~~1630~~ LOCATE ON NEXT PAGE

10/6/00 (cont.)

1630 - UST AREA TEST PIT X-SECTION



- WATER ENCOUNTERED AT 7' BGS
WILL BACKFILL TEST PIT
- COLLECTING HANDBT/HEADSPACE FROM TEST PIT FLOOR AND WALL

WALL	HANDBT	HEADSPACE
N WALL	<1 mg/kg	5.4 ppm
FLOOR	<1 mg/kg	8.6 ppm

1640 - COLLECT TCL SAMPLE FROM 4' BGS (CONCRETE)
1 x 4oz TCL (AM-14504201)

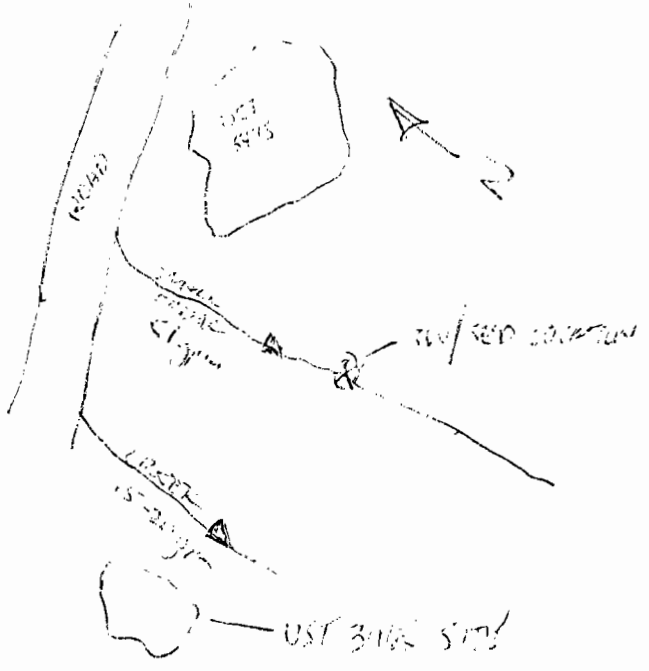
1645 - COLLECT FLOOR SAMPLE FROM TEST PIT @ 7' BGS
1 x 8 = DRO/RRO/PAH (AM-14504202)
SOIL IS A SILTY SAND
- HEADING BACK TO OFFICE

1715 - UNLOAD GOAL
- LABEL SAMPLES
- DOWNLOAD PICTURES

1815 - SIGN OFF LOG ——— P) 10/6/00

10/7/00 (2W)

0730 - SHAW ON JOB
- WORK ON DAILY REPORT
0800 - TAILGATE SAFETY MEETING
- PICK UP EQUIPMENT / ARCHIVES
0845 - OFF-LOAD & LOAD UP EXPLORER
0930 - DRIVING FOR OFF AT BC RANGE - NO ONE ON TRUCK TO SHAW TO
0945 - ARRIVE AT UST 3465 SITE ; SET WAITING
- SETTING UP PUMP FOR UNION - SHAW
1005 - SHAW IS COLLECTING SURFACE WATER SAMPLE AT CREEK JUST BELOW UST 3475



10/7/00 (3W)

1010 - COLLECTING SURFACE WATER SAMPLE AT CREEK BELOW UST 3475

3 x 40mL	BTEX	AM-4504301
2 x 1L	PAH	
2 x 1L	DRO/RRO	
3 x 40mL	BTEX	AM-4504302 (TB)

1015 - COLLECT SEDIMENT AT SAME LOCATION

1 x 40z	BTEX	AM-4504303
1 x 8oz	PAH/DRO/RRO	
1 x 4oz	BTEX	AM-4504304 (TB)

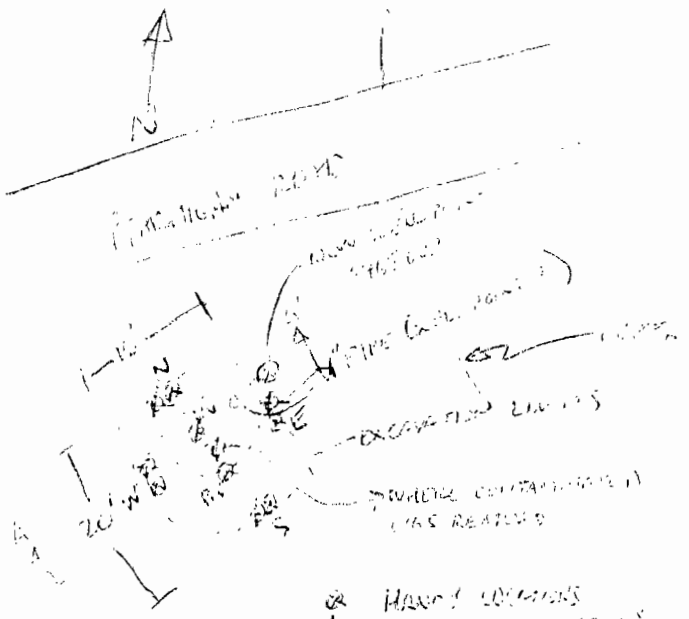
pH	COND	TURB	TEMP C	DO	SAL
5.87	0.085	98	11.3	9.72	0‰

1020 - BEGIN EXCAVATING UST 3465 SITE
- FIRST BUCKET 10.5 ppm DIRECT SCREEN
SMELLS STRONGLY OF DIESEL
- LOADED 10 CY OF CONTAMINATED SOIL
- DIRECT SCREENING EVERY BUCKET / HEADSPACE RESULTS INDICATE ANYTHING 5-4 ppm DIRECT YIELDED 11 ABOUT 50 ppm ON HEADSPACE.

LOCATION	HANDS	HEADSPACE (W)
N	<1	
S	<1	
E	<1	
W	<1	
BOTTOM	<1	
BS	<1	
UNKNOWN	<1	

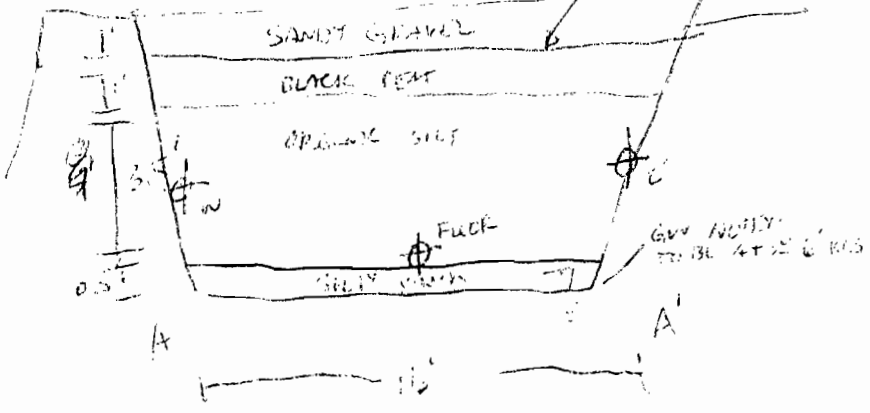
10/7/00 (Ex)

UST 3165, 3166



@ HIGHEST READINGS
- FIRST GAS READINGS

X-SECTION



10/7/00 (Ex)

1215 - COLLECT NORTH WALL SAMPLE; 4' BGS
1 x 8oz DRO/PAH AM-A5C-4401

1218 - COLLECT SOUTH WALL SAMPLE; 4' BGS
1 x 8oz DRO/PAH AM-A5C-4402

1220 - COLLECT EAST WALL SAMPLE; 4' BGS
1 x 8oz DRO/PAH AM-A5C-4403

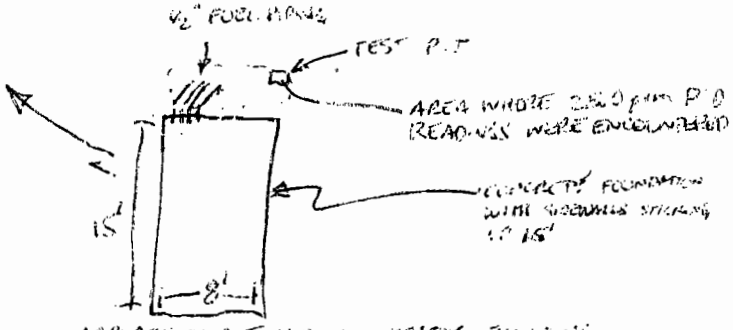
1222 - COLLECT WEST WALL SAMPLE, 4' BGS
1 x 8oz DRO/PAH AM-A5C-4404

1225 - COLLECT FLOOR SAMPLE; 6' BGS
1 x 8oz DRO/PAH AM-A5C-4405

- ALL SOILS ARE AN ORGANIC SILT, SLIGHTLY MOIST LOTS OF ORGANICS.

1300 - COLLECT TCL FROM UNKNOWN MATERIAL SOIL STOCKPILE (0-6" BGS)
1 x 4oz TCL AM-A5C-4406

* WEATHER TODAY IS MISERABLE, OCCASIONAL SNOW NW WINDS 20-30 KNOTS, OVERCAST, TEMPS 35-40°F
- INSTALLING TEST PIT AT BLDG 3165 USING GEO BACKHOE
- DIRECT SCREEN PID OF 25.6 ppm AT ABOUT 3' BGS



- APPEARS TO BE OLD DEMOLISHED BUILDING

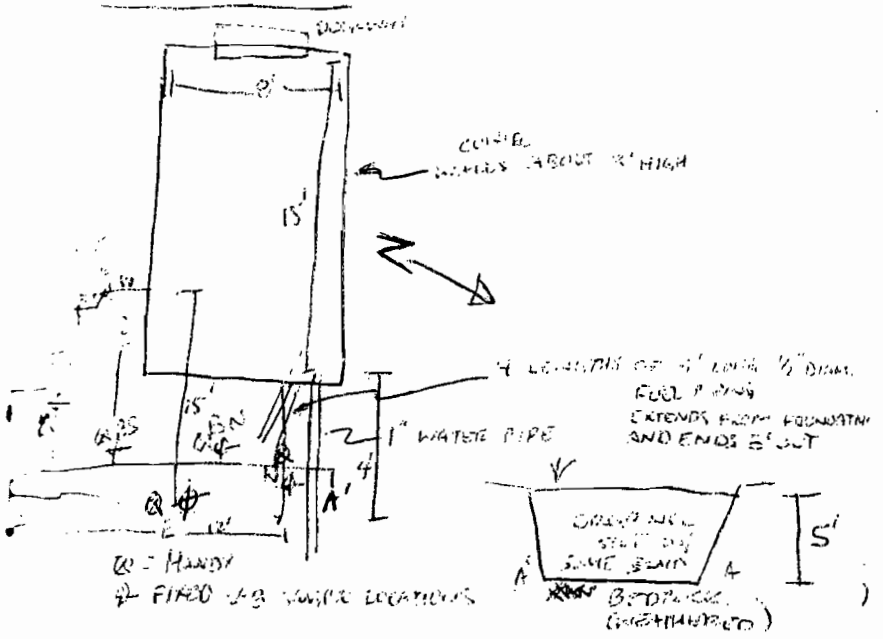
10/7/00 (END)

1300 - BEGIN DIGGING AT NORTH WALL OF BLDG. 3165 (SAME AS YESTERDAY)
- SEE MAP FROM PAGE
- SOME HEAVY CONTAMINATION

1325 - COLLECT NORTH WALL SAMPLE @ 3' BGS
1 x 802 BTEX/PAH/PCB } ANALYSIS
2 x 402 VOC/BTEX

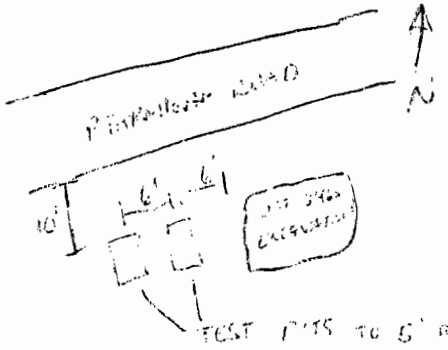
10/7/00 (END)

BLDG. 3165 MAP



- SEVERAL BUCKETS MOVED IN EXCAVATION

LOCATION	HAND HELD
N	< 1
E	< 1
S	< 1
W	< 50
FIX	< 1
FIX	< 10
FLOOR	< 1



- PID READINGS FROM BOTH TEST PITS (SAMPLES) NO SIGN OF CONTAMINATION IN EITHER. BACKFILLED BOTH TEST PITS.
- MOVING TO BLDG. 3165 TO EXPLORE MORE ON THE TEST PIT

1430 - BEGIN DIGGING AT PREVIOUS TEST PIT, BLDG. 3165
- PID READINGS 0.0 - 2.0 ppm, SLIGHT FUEL ODOR.
- SEE MAP FROM PAGE
- SOME HEAVY CONTAMINATION

- INSTALL WATER AND BEGIN BIG EXCAVATION W/ TRENCH TO REMOVE CONTAMINATED SOIL
- BACKFILLING, CAT 345 EXCAVATION
- NOT SURE EXACTLY WHAT BUILDING TEST PIT WAS JUST AT. MAP SHOWS BLDG. 3160 (MESS HALL) AND BLDG. 3165 (LAUNDRY) IN AREA, THOUGH THIS BUILDING APPEARS TO BE A GENERATOR BLDG. (SMALL).
- PUTTING IN A COUPLE OF TEST PITS JUST WEST OF MAIN EXCAVATION TO CONFIRM NO MORE CONTAMINATION PER MAP BELOW

10/7/00

1630 - COLLECT SOUTH WALL SEDIMENT ; 3 BAGS
1 x 8oz DRC/FRAC/FAH } AM-A50480Z
2 x 4oz BOX/VOCs

1635 - COLLECT EAST WALL SEDIMENT ; 3 BAGS
1 x 8oz DRC/FRAC/FAH } AM-A50480Y
2 x 4oz BOX/VOCs

1640 - COLLECT WEST WALL SEDIMENT ; 3 BAGS
1 x 8oz DRC/FRAC/FAH } AM-A50480Y
2 x 4oz BOX/VOCs

1645 - COLLECT BOTTOM (FLOOR) SAMPLE FROM NORTH END OF EXC. 5 BAGS
1 x 8oz DRC/FRAC/FAH } AM-A50480S
2 x 4oz BOX/VOCs

1650 - COLLECT BOTTOM (FLOOR) SAMPLE FROM SOUTH END OF EXC. 5 BAGS
1 x 8oz DRC/FRAC/FAH } AM-A50480W
2 x 4oz BOX/VOCs

ALL SOILS ARE ORGANIC SILTS WITH SOME SAND.

- RETURN TO OFFICE ; UNLOAD GEAR

1730 - SIGN OFF LOG.

10/8/00

1730 - SIGN ON LOG
- PACKAGING UP SAMPLES FOR SHIPMENT
- EDMS

1200 - SARAH B. DEPARTS ISLAND
- SHIPPED 1 COOLER TO STLA
- SHIPPED 2 COOLERS TO DATACHEM
- FAXED AIRBILL AND COCs TO LABS

1330 - LUNCH

1400 - PLANNING MEETING ; PICK UP KEATHER McLOUNE.

1600 - SIGN OFF LOG

10/8/00

10/9/00 (SW)

0700 - SIGN ON LOG
- WORKING ON DAILY REPORTS
- PREP GEAR W/ KEARNEY

0800 - TAILGATE SAFETY MEETING;
- WENT OVER DAILY REPORT WITH SCI FOREMAN DAN BART; MUST TRY TO IMPROVE SPELLING AND OVERALL QUALITY.

0920 - DEPART FOR UST 3665' SITE

0945 - BEGIN DIGGING AT 3665'; LARGE DEPRESSION IS APPARENT LOCATION TO DIG.
- IMMEDIATELY LOCATED BOUNDARY OF OLD EXCAVATION (NATIVE SOIL / FILL CONTACT)
- AT ABOUT 6' BGS, ENCOUNTERED SOIL WITH STRONG FUEL ODOR; PID READINGS 0.0 TO 16.0 ppm

1100 - ONE TRUCK (10CY) LOADED OUT

1245 - SECOND TRUCK (10 CY) LOADED OUT

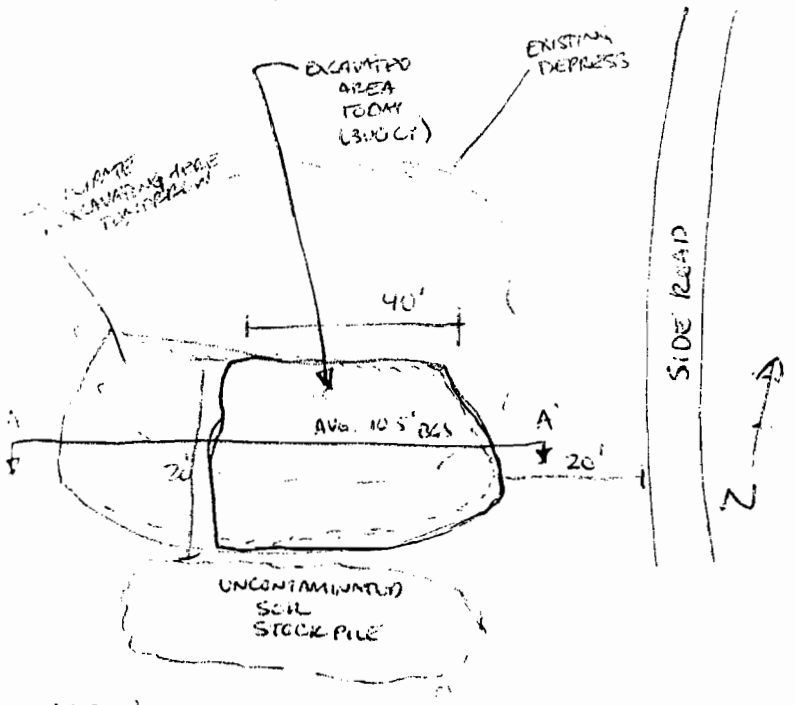
* WEATHER TODAY - HEAVY RAIN, TEMPS 40-45°F, SE WIND 20-30 KNOTS, NASTY! *

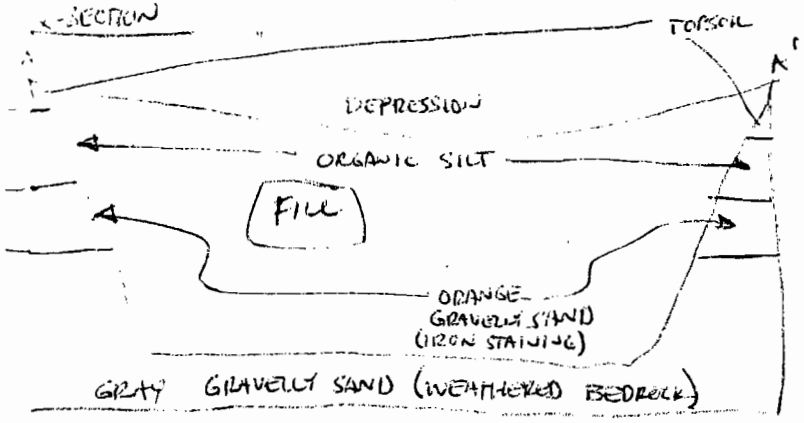
1300 - COLLECTED HANBI SAMPLE OF APPARENT CONT. SOIL THOUGH IT WAS <1 mg/kg DIESEL. SMELLS OF FUEL THOUGH.
- PID NOT FUNCTIONING WELL DUE TO RAIN.
- BOSTON BROUGHT OUT 2nd PID, TRADED NON-FUNCTIONING ONE; USING OLFACTORY OBSERVATIONS TO SEGREGATE SOIL
- 2nd PID WORKING OK.

10/9/00 (SW)

1400 - SCREENING EXCAVATED BUCKET WITH PID

1500 - COLLECTED HANBY SAMPLE; = 100 TO 200 mg/kg IN CONTAMINATED SOILS

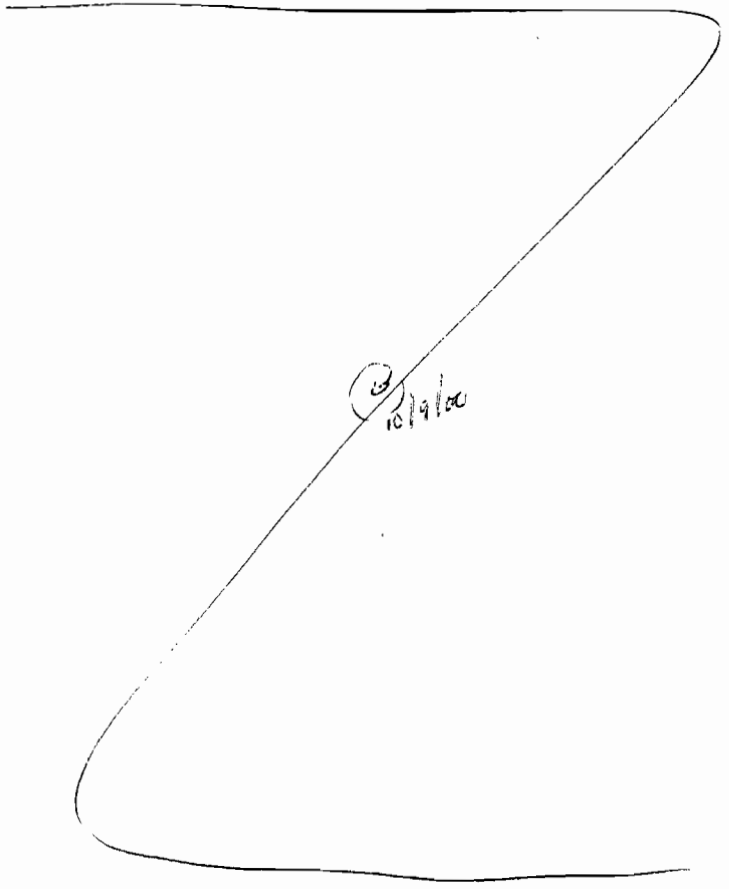




10/9/00 (EW)

1730 - DONE FOR DAY
- ERECTING 4' HIGH CONSTRUCTION FENCE AROUND HOLE
- LOADED OUT 90 CY OF CONT SOIL
- RETURN TO OFFICE
- UNLOAD GEAR

1830 - SIGN OFF LOG



10/10/00 (EW)

0700 - SIGN ON LOG:
- DAILY REPORTS

0900 - TAILGATE SAFETY MEETING
- E-MAIL DAILY REPORT OFF

0930 - HEAD TO PRE-WWII TANK FARM
- ENTIRE JEG AND SCI CREW FILLING UP SAND BAGS AND PULLING LINER BACK; SCI ALSO BUCKING UP CONTAMINATED SOIL AND PILING IT ALL AT THE SOUTH END OF STOCKPILE.
- INSPECTED ENTIRE STOCKPILE; IS IN GOOD SHAPE, WILL TRY TO COVER AT A LATER DATE WHEN WIND DIES DOWN.

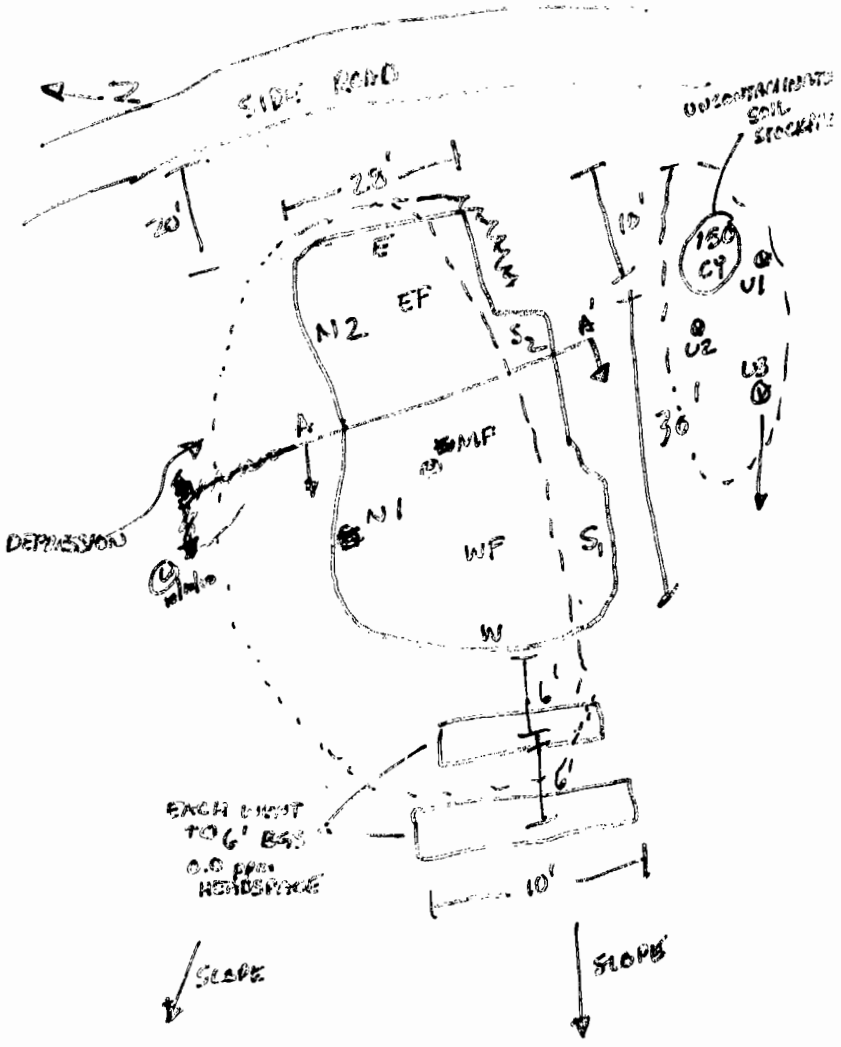
1030 - HEAD TO 365 EXCAVATION.
- CONTINUE DIGGING ON SOUTH EDGE OF EXCAVATION WHERE WE LEFT OFF YESTERDAY.
- SCREENING EVERY BUCKET WITH PID
- COLLECTED HANBY SAMPLE FROM SOUTH WALL ~9' BGS <1 mg/kg.

1200 - EXCAVATING WEST WALL NOW
- SOILS NOT APPEARING CONTAMINATED; 0.0 ppm on PID
- WEST WALL APPEARS CLEAN
- PUTTING IN TEST PITS TO WEST OF WEST WALL TO CONFIRM COMPLETE REMOVAL; 6' BGS
- BOTH TEST PITS 0.0 on PID. EXCAVATED TO 6' BGS AND NO EVIDENCE OF CONTAMINATION

* WEATHER TODAY - NW WIND 20-30 mph, OVERCAST, OCCASIONAL RAIN AND SNOW, TEMPS 35-40°F *

10/10/00 (6)

UST 3665 EXCAVATION MAP

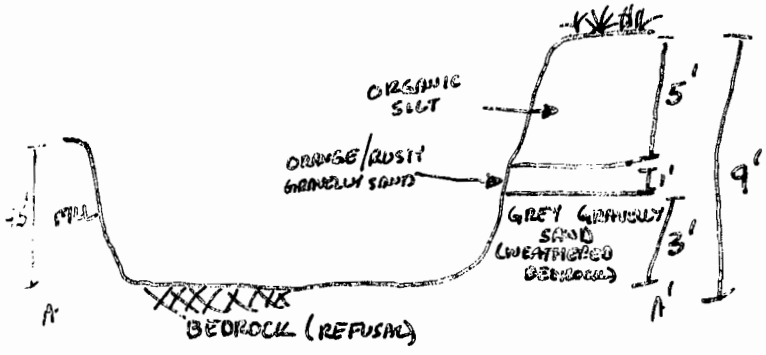


10/10/00 (7)

1330 - COLLECT HANBY SOIL SAMPLES FROM SIDEWALL AND FLOOR; AND UNCONTAMINATED SOIL STOCKPILE

LOCATION (SEE MAP)	HANBY (mg/kg)	DEPTH (ft BGS)
N1 (SIDEWALL)	<1	4'
N2 (SIDEWALL)	<1	4'
E (SIDEWALL)	<1	5'
S_2 (SIDEWALL)	<1	7'
S_1 (SIDEWALL)	<1	7'
EF (FLOOR)	<1	6'
MF ↓	<1	9'
WF ↓	<1	8'
U1 (UNCONT.)	<1	0.5'
U2 ↓	<10	0.5'
U3 ↓	<1	0.5'
W (SIDEWALL)	<1	5'

X-SECTION A-A'



10/10/00 (6)

1400 - COLLECT SOUTH SIDEWALL SAMPLE AT S_2 (7'BGS)
1 x 8oz DRO/PAH (AM-A504701)

1410 - COLLECT WEST SIDEWALL SAMPLE AT W (5'BGS)
1 x 8oz DRO (AM-A504702)

1420 - COLLECT FLOOR SAMPLE AT WF (8'BGS)
1 x 8oz DRO/PAH (AM-A504703)

1425 - COLLECT NORTH SIDEWALL SAMPLE AT N1 (4.0'BGS)
1 x 8oz DRO (AM-A504704)

1430 - COLLECT FLOOR SAMPLE AT MF (9'BGS)
1 x 8oz DRO (AM-A504705)

1437 - COLLECT EAST SIDEWALL SAMPLE AT E (5'BGS)
1 x 8oz DRO (AM-A504706)

1442 - COLLECT FLOOR SAMPLE AT EF (6'BGS)
1 x 8oz DRO/PAH (AM-A504707)

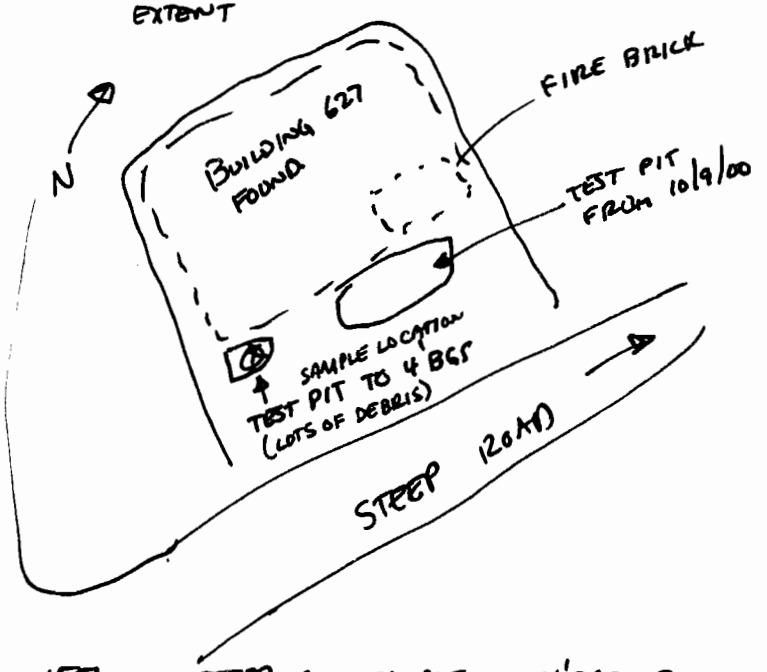
NOTE - FLOOR SAMPLES COLLECTED OF SOIL IN CRACKS OF BEDROCK AND CONSISTS OF A GREY GRAVELLY SAND. SIDEWALL SAMPLES ALSO COLLECTED IN SAME LAYER 1-2 FEET ABOVE BOTTOM OF EXC.

1500 - SOME WATER IS PRESENT IN EXCAVATION BOTTOM, THOUGH THIS IS NOT GROUNDWATER, NOT© BUT PRECIPITATION WE'VE RECEIVED OVER THE LAST DAY. WILL NOT INSTALL A WELL POINT.

1505 - COLLECTED THREE TOC SAMPLES FROM UNCONT. SOIL
3 x 4oz. (AM-A504708, 09, 10)
- SCI BEGINNING TO BACKFILL EXCAVATION WITH ANDERSON/WILDER SOIL

10/10/00 (7)

- 1520 - HEADING BACK TO OFFICE
- NOW TO BUILDING 627. PUTTING IN TEST PITS IN FRONT OF FORMER BUILDING LOCATION TO DELINEATE APPARENT BUNKER C-CONTAMINATED SOIL EXTENT



- 1550 - COLLECTED SOIL SAMPLE AT 4'BGS OF BUNKER C CONT. SOIL; SANDY GRAVEL WITH VISUAL EVIDENCE OF CONTAMINATION.

1 x 4oz	GRO/BTEX	AM-A504801
1 x 4oz	VOCs	
1 x 8oz	DRO/RRO/PAHs	
1 x 8oz	PCBs/METALS	
1 x 4oz	GRO/BTEX	AM-A504802
1 x 4oz	VOCs	

10/10/00 (E)

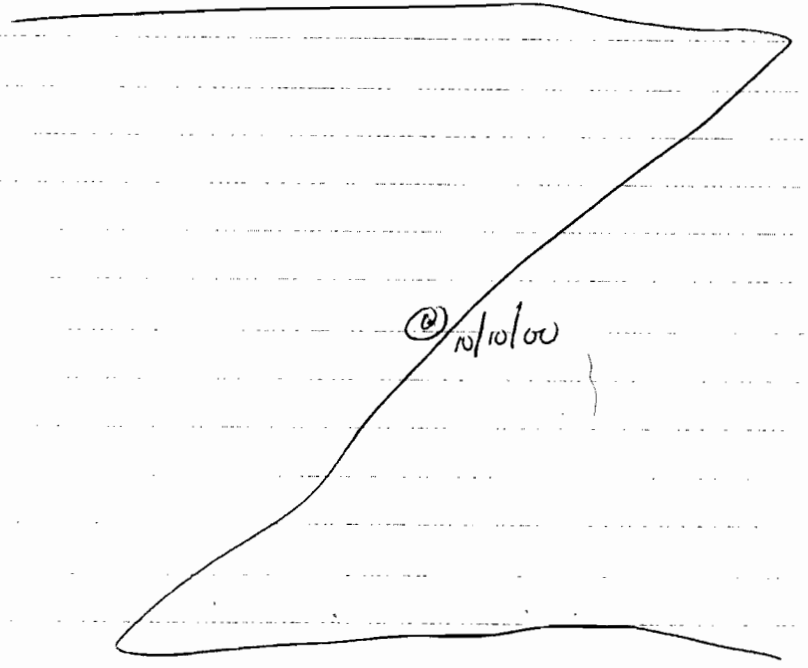
1600 - KIWI WILL CONTINUE WITH SCI TO DELINEATE APPARENT CONTAMINATION; NOT SHOWING UPON PID.

- HEADING BACK TO OFFICE
- SAMPLE CONTROL / UNLOAD TRUCK
- SWAPPED TRUCK OUT FOR VAN

1650 - WORK ON DAILY REPORT

- RECEIVED RESULTS ON INITIAL WATER TREATMENT SAMPLE, BELOW DISCHARGE CRITERIA, KIWI TO DISCHARGE WATER TO GROUND SURFACE OUTSIDE OF PRE-WWII TANK FARM.
- SCI HAULING EXTRA FILL (100 CY) TO UST 3665 EXC. TO FILL IN DEPRESSION.

1800 - SIGN OFF LOG



10/11/00 (E)

0700 - SIGN ON LOG

- WORK ON DAILY REPORT

0800 - TAILGATE SAFETY MEETING

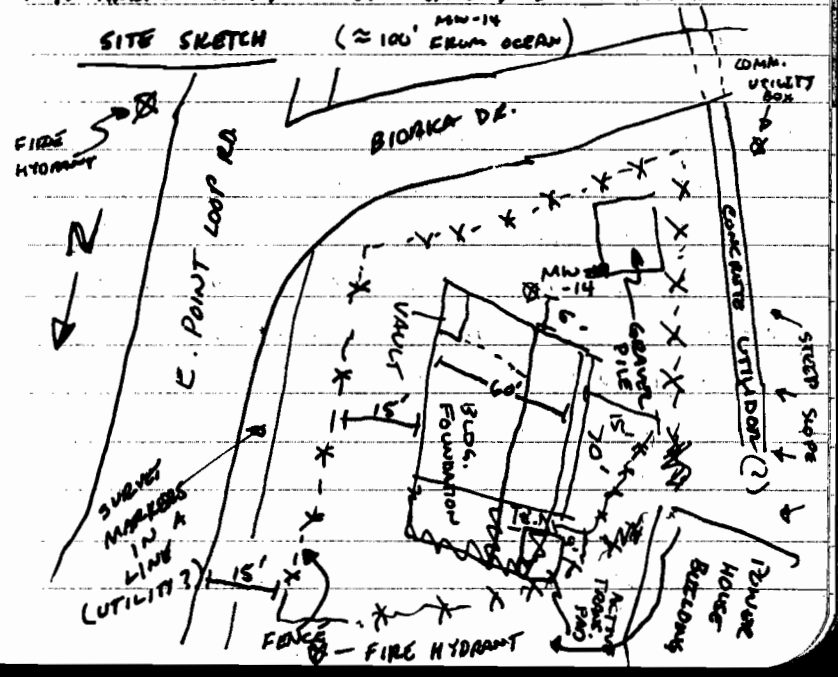
- WILL HEAD TO UST 2674 SITE TODAY AND BEGIN CONTAMINATED SOIL REMOVAL; AFTER FILLING IN 3665 AREA.
- ORGANIZING GEAR IN NEW 'SAMPLE' VAN

0930 - HEAD TO 3665 SITE

- SCI BACKFILLING EXCAVATION, USING DOZER TO COMPACT BACKFILL. USING ANDERSON / WILDER / HAVE SOIL MIXTURE.
- EXCAVATOR AT 2674 SITE

1040 - ARRIVE AT MW-14 SITE (PRE-WWII TANK FARM)

SITE SKETCH



10/11/00 EMD

1600 - RETURN TO OFFICE TO FAX JULIE A MAP OF MW-14 AREA

1140 - LUNCH

1210 - TO OFFICE; LOAD GW SAMPLING GEAR

1250 - ARRIVE AT 2664-WP1

165 - SETTING UP GEAR

- CALIBRATING pH/S.C./D.O. METER

pH: S = -55.4 mV/pH

E_0 = -10 mV

SC: S = 0.478/cm

DO: S = 0.80

1300 2664-WP1

PID = 14.1 ppm

WL BTOC = 12.09

TD BTOC = 12.11

1305 - ATTEMPT TO PUMP WITH PERISTALTIC PUMP

- PUMPED ABOUT 0.1 GALLON BEFORE IT DRIED UP COMPLETELY.

- LOADING UP GEAR. HEAD TO HUMPY COVE TO RESAMPLE WELL HCPP-MW1 FOR DRO AND PAHs (MISSED HOLD TIME).

* WEATHER TODAY - CLEAR SKIES, SOME VARIABLE HIGH CLOUDS, TEMPS 45-50°F, CALM WINDS *

1345 - ARRIVE AT HCPP-MW1

- SET UP GEAR

- PID = 0.0 ppm

- WL BTOC = 24.54
  TD BTOC = 32.80

10/11/00 EMD

HCPP-MW1 (CONT.)

1352 - BEGIN PURGE; PURGE RATE = 0.125 gal/min

MINUTES SINCE START	10	20	30	40	43	46	49
pH (S.U.)	6.86	6.90	6.88	6.88	6.87	6.88	6.86
S.C. (mS/cm)	157	155	153	154	154	155	156
D.O. (mg/l)	7.11	5.21	5.60	5.43	5.35	5.63	5.61
TEMP (°C)	6.2	6.9	6.8	6.2	6.1	6.0	5.9
SAL (PPT)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TURB (NTU)	52.1	13.0	4.91	10.4	3.56	2.52	3.08

1410 - CHECKED WATER LEVEL IN HCPP-MW1; NO WATER IN WELL.

1450 - SAMPLE COLLECTED FROM ~~AMC~~ HCPP-MW1

4x 1L DRO ~~/ DRO~~ / PAHs } AM-A504901

4x1L PAHs

WATER IS CLEAR, NO ODOR OR SHEEN OBSERVED.

- CHECK WATER LEVELS IN NEARBY WELL POINTS

HCPP WP1 = 22.53 FT BTOC

HCPP WP2 = 19.40 FT BTOC

HCPP WP3 = 17.70 FT BTOC - ALSO AT TD ~(END CAP FULL OF WATER?)

1530 → CHECK ON BACKFILL AT 3665; LOOKS LIKE ABOUT 10 MORE LOADS NEEDED TO COMPLETE BACKFILL. USING DOZER TO MOVE AND COMPACT MATERIAL IN 3' LIFTS.

1600 - DUMP 5 GAL PURGE WATER AT DECON PAD.

10/11/00 (BW)

1625 - ARRIVE AT PLD2-MW1

RESAMPLE DRO/RRO, PAHs, AND PCBs DUE TO MISSED HOLD TIMES ON ORIGINAL SAMPLE IN EARLY SEPT.

- SETTING UP GEAR

PID = 0.0 ppm

WLBTOC = 16.20'

TD BTOC = 22.35'

1630 - BEGIN PURGE

MINUTES SINCE START	10	18	21	24	27
pH (S.U.)	6.97	6.73	6.68	6.60	6.58
C. (mS/cm)	83	83	83	83	84
[illegible] (°C)	5.3	4.7	4.7	4.7	4.7
D.O. (mg/L)	7.78	8.66	8.67	8.63	8.81
[illegible] (NTU)	35.0	5.82	3.50	3.58	3.29
SAL (ppt)	0.0	0.0	0.0	0.0	0.0

1700 - COLLECT SAMPLE AT PLD2MW1

2x1L DRO/RRO
2x1L PAH
2x1L PCBs
} AM-A505001

1705 - DUPLICATE

2x1L DRO/RRO
2x1L PAH
2x1L PCBs
} AM-A505101

10/11/00 (BW)

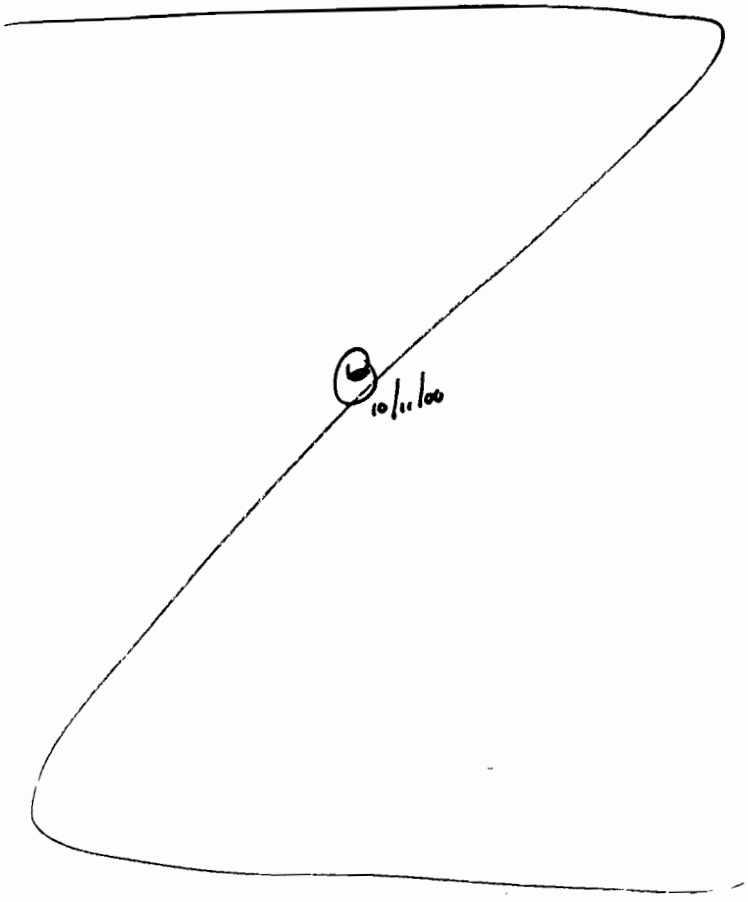
1710 - COLLECT TRIPLICATE (LTL)

2x1L DRO/RRO
2x1L PAHs
2x1L PCBs
} AM-A505201

1730 - RETURN TO OFFICE

UNLOAD GEAR

1800 - SIGN OFF LOG



10/12/00 (BW)

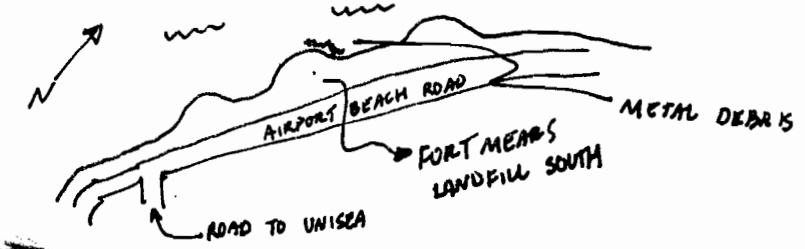
0700 - SIGN ON LOG,
- DAILY REPORT

0800 - TAILGATE SAFETY MEETING

0830 - WEATHER PACKING UP SAMPLES FOR SHIPMENT
- MEETING WITH CLAIRE JAEGER, CHRIS LESTOCHI (USAED)
- PACKAGING SAMPLES FOR SHIPMENT TODAY
- E-MAIL DAILY OFF.

1100 - SHIPPED 1 COOLER TO LAUCKS AND 3 TO DATA CHEM.
- JENNY FAXING AIRWAY BILLS AND CoCs TO EACH LAB.
- DEPART TO 2674 (WAREHOUSE)
NO SIGN OF ACTIVITY
- SCI IS CONTINUING TO HAUL ANDERSON/WILDER/HAVE SOIL TO FILL IN 3665 EXCAVATION; COMPACTING WITH DOZER, GRADING SO SITE WILL DRAIN AND NOT POND.

1200 - TO FORT MEARS LANDFILL SOUTH
- TEST PIT LOCATIONS KIWI STAKED ARE IN WRONG LOCATION (METAL DEBRIS AT CORRECT LOCATION HAS BEEN BURIED IN BEACH GRAVEL BY STORM SURGE). WE RESTAKED TEST PITS AT CORRECT LOCATION FOR UTILITY LOCATES THIS AFTERNOON (BEST CASE). THE CORRECT LOCATION IS ~~1st~~ 2nd 'STICKOUT' EAST OF SUB BASE TURNOUT.



10/12/00 (BW)

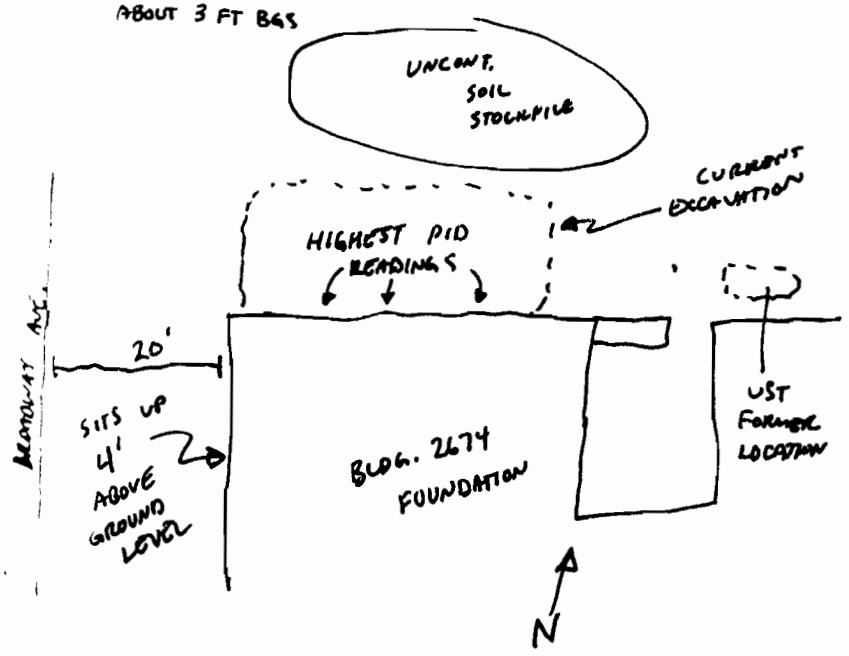
230 - LUNCH

1300 - TO 3665 EXCAVATION; BACKFILL/GRADING NEARING COMPLETION, INSTALLING SITE DRAINAGE. SEEDING AREA IS ABOUT 0.10 ACRES.
- WILL BEGIN 2674 WORK AT 1430

1345 - TO HILL 400; TAKE PICTURES OF ROCKY POINT FOR TIM G. FOR MASTER BUILDER AWARD PRESENTATION.

+ WEATHER TODAY - NICE! MOSTLY SUNNY, SW WINDS 0-5mph, TEMPS 40-50°F *

1420 - ARRIVE AT 2674
- BEGIN REMOVING OVERBURDEN
- HITTING CONT. SOIL (BASED ON PID READINGS) AT ABOUT 3 FT BGS

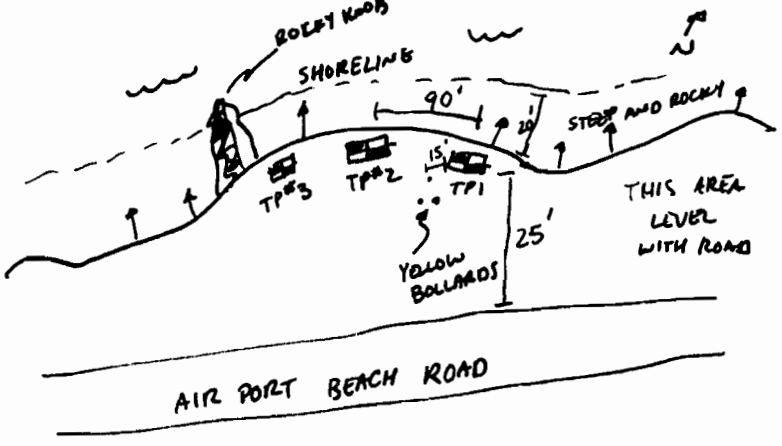


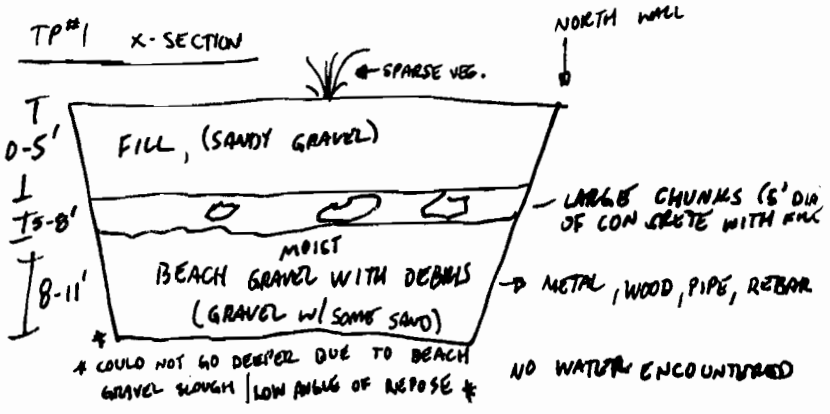
10/12/00 (AM)

1506 - HITTING HARD ROCK AT 4' BGS

- KIWI STOPPED BY; STATED WE ARE ALL CLEAR ON BLDG 2766 WORK TO PROCEED (NOTIFIED LAND OWNERS)
- CONTAMINATED MATERIAL EXHIBITING PID READINGS BETWEEN 3.0 AND 20.0 ppm ~ NOTICEABLE FUEL ODOR.
- WEATHER REMAINING TO SCREEN SOILS; HEADING TO FORT MEADE LANDFILL SOUTH TO TEST PIT. UTILITIES CLEARED.

1520 - BEGINNING TEST PIT 1 (TP#1)





10/12/00 (PM)

- 25 - COLLECT HANBY FROM BOTTOM; 11 FT BGS = 500-1,000 mg/kg diesel
- 30 - COLLECT LAB SAMPLE FROM TP1 BOTTOM; 11 FT BGS

FROM BEACH GRAVEL LAYER

- 1x 40z VOCs
- 1x 40z RCRA METALS
- 1x 80z DRO/RRO/PAHs

} AM-A505301

- 1x 40z VOCs - TRIP BLANK - AM-A505302

PID = 0.0 ON SAMPLED SOIL, NO ODOR OBSERVED

1635 - COLLECT SIDEWALL SAMPLE FROM E. SIDEWALL; 7' BGS (HANBY AND FIXED LAB); COLLECTED FROM GRAVELLY SAND IN BLOCKY CONCRETE LAYER. HANBY = <1 mg/kg DIESEL

PID = 0.0 PPM, NO ODOR

- 1x 40z VOCs
- 1x 40z RCRA METALS
- 1x 80z DRO/RRO/PAHs

} AM-A505303

1640 - BACKFILLING TEST PIT #1; ATTEMPTING TO COMPACT, DIFFICULT WITH CONCRETE IN WAY.

GPS CODE (WAYPOINT) ~~FMCS-1~~ FMLFS 1

1705 - RETURN TO 2674 SITE

- SCI CREW DONE FOR DAY; PUTTING UP CONST. FENCE AROUND EXCAVATION
- STILL SOME CONTAMINATION BENEATH CONCRETE SLAB NEED TO JACKHAMMER IT OUT
- NEED TO CALL COE WHITTERN AND SEE ABOUT APPROVAL TO DEMO CONCRETE

10/12/00 (BM)

1730 - CALL FROM SKIP

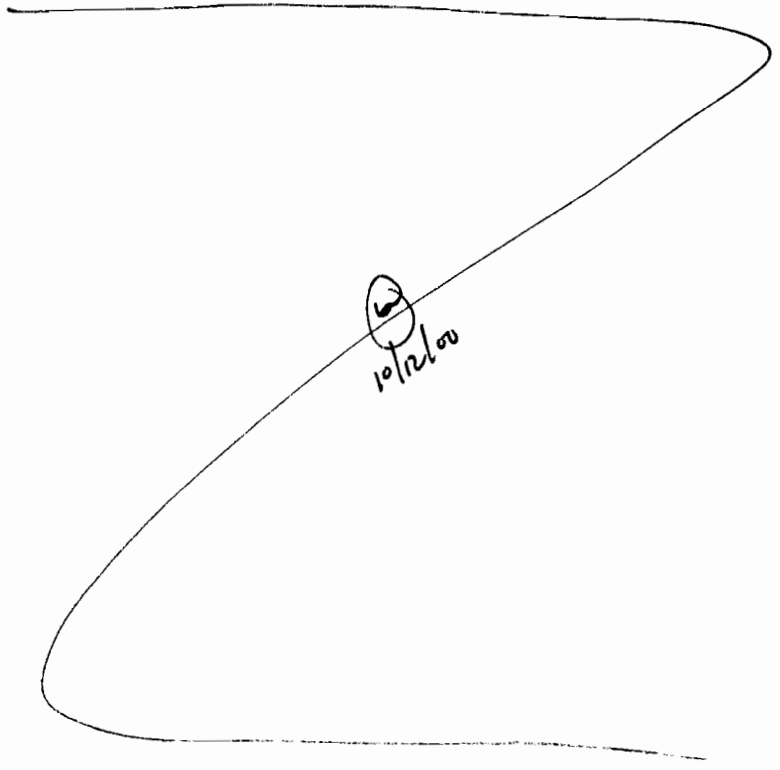
- RESAMPLE ANDERSON/WILDER MATERIAL WITH HANBY

1745 - HANBY OF ANDERSON/WILDER MATERIAL IS INCONCLUSIVE DUE TO DARK FINES FROM EXTRACTION SOLUTION ALREADY BEING DARK; THEREBY SKEWING RESULT (1000mg/kg) WILL RESAMPLE IN MORNING WITH LESS-FINE MATERIAL.

1800 - DINNER.

2000 - TO OFFICE

- DOWNLOAD AND NAME PHOTOS
- EMAIL DOWNLOAD



10/13/00 (BM)

0700 - SIGN ON LOG

- DAILY REPORT; CALIBRATE PIDs

0800 - TAILGATE SAFETY MEETING

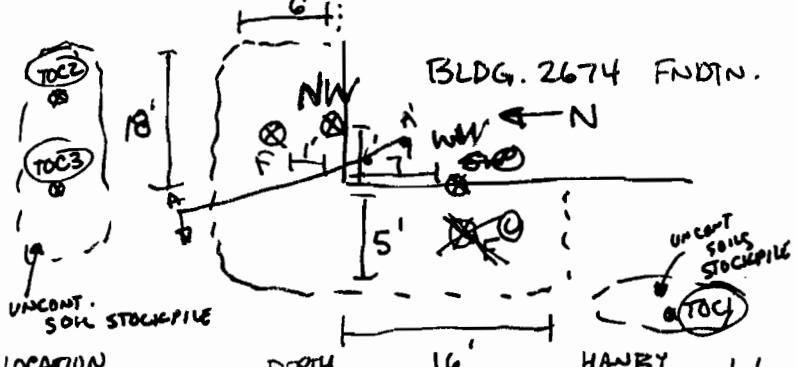
- LOAD GEAR FOR 2674 SAMPLING, FMLFS TEST PIT SAMPLING, AND 3860/3760 UST CLOSURE.

0845 - COLLECT ADDITIONAL HANBY SAMPLE FROM ANDERSON/WILDER SOIL STOCKPILE AT PRE-WWII TANK FARM

RESULT = 1,000 mg/kg

0915 - TO BUILDING 2674

- RANDY CALLED; SAID COE WHITTERN DOES NOT WANT CONCRETE REMOVED. ALSO WANTS CLEAN SOIL BROUGHT IN (NOT DARK ANDERSON/WILDER SOIL)
- COLLECTING CONFIRMATION SOIL SAMPLES, BASED ON 35 YD^3 EXCAVATION, TWO WALL AND ONE FLOOR AND 3 TOC SAMPLES. COLLECTING HANBY'S FIRST



LOCATION	DEPTH
NW (SIDEWALL)	3'
WW (SIDEWALL)	3'
F (FLOOR)	4'

HANBY 10/13/00

50 mg/kg ~~1 mg/kg~~

<1 mg/kg

200 mg/kg

10/13/00 (2)

0930 - SCI COULD NOT EXCAVATE FURTHER ON FLOOR WHERE CONT. SOIL WAS ENCOUNTERED DUE TO PRESENCE OF BEDROCK. NO GROUNDWATER ENCOUNTERED

0945 - COLLECT FLOOR SOIL SAMPLE AT LOCATION F; 4' BGS
1x8oz DRO/PAH (AM-A505401)
- SOIL IS A GRAVELLY SAND; COLLECTED FROM RESIDUAL SOIL AT BEDROCK LEVEL, GRAY IN COLOR

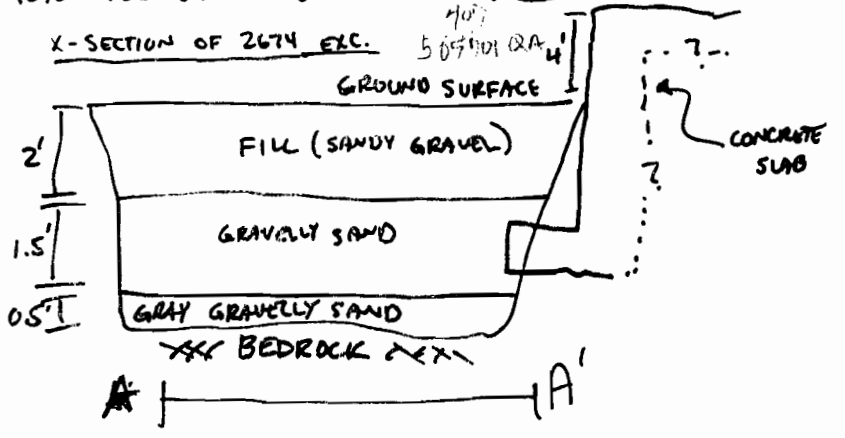
0950 - COLLECT SIDEWALL SOIL SAMPLE AT LOCATION NW; 3' BGS
1x8oz DRO (AM-A505402)
- SOIL IS A SANDY GRAVEL, BROWN

0955 - COLLECT SIDEWALL SAMPLE AT LOCATION WW; 3' BGS
1x8oz DRO (AM-A505403)
- SOIL IS A SANDY GRAVEL, BROWN

1000 - COLLECT TOC FROM UNCONTAMINATED SOIL STOCKPILE (AM-A505404) TOC1

1005 - TOC SAMPLE (AM-A505405) TOC2 SANDY GRAVELS IN UNCONT. SOIL STOCKPILE

1010 - TOC SAMPLE (AM-A505406) TOC3



10/13/00 EMD

1030 - TO UGADAGA RD. AND 165th INTERSECTION
- SCI IS ADDING FILL TO WASHOUT AT CREEK TO ALLOW ACCESS TO 3860 AND 3760 USTs (IN-PLACE CLOSURES)

1045 - DROP SAMPLING GEAR OFF WITH KIWI (FMLFS TEST PITS)

1100 - OFFICE

1105 - LUNCH

1135 - BACK TO OFFICE
- HEAD TO UGADAGA/165th ROAD SITES
- CALLED JOE @ O.C.; LEFT MESSAGE AT MAINT. SHOP ABOUT OUR ACTIVITIES AT 165th ROAD SITES.

1230 - ARRIVE AT 3860 SITE; FOUND OLD STAKE FROM 1998 SITE ACTIVITIES, ALONG WITH TANK.
- SCI CREW REMOVING TOP 6" OF SOIL OVER TANK TO EXPOSE PIPING ENTRANCES

1315 - COLLECT WATER SAMPLE FROM UST 3860
- TANK IS FULL OF WATER; SOME FUEL NOTED ON OUTSIDE OF BAILER
  2 x 1L DRO/RRO
  2 x 1L PAHs
  3 x 40ml VOCs/BTEX
  } AM-A505501
NO OBS ~ (NO FUEL PRESENT IN LARGE ENOUGH QUANTITIES)
3 x 40ml VOCs/BTEX - AM-A505502 TRIP BLANK
WATER SMELLS OF FUEL, IS SLIGHTLY TURBID

1335 - LOCATED UST AT 3760

1345 - STUCK TRYING TO GET BACK TO 3860

10/13/00 (BW)

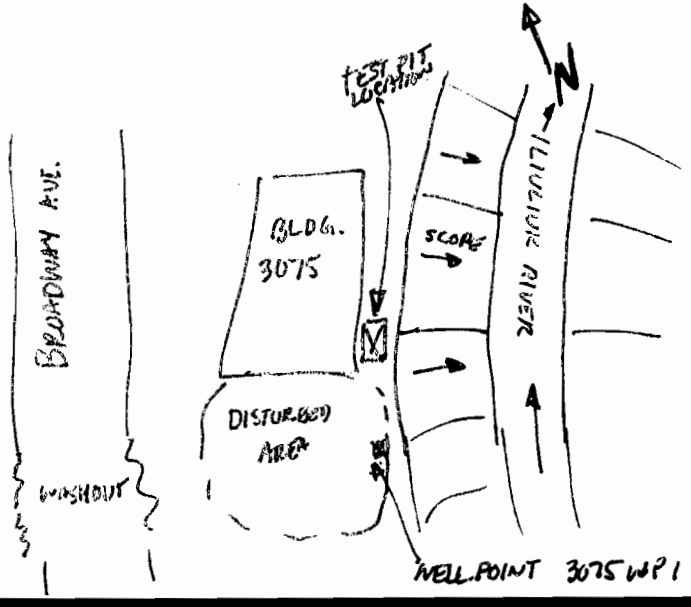
1415 - SCI CUTTING OPEN 'HATCH' ON TANK WITH CHOPSAW
- PUMPING WATER FROM TANK

1500 - WATER PUMPED OUT

1530 - COLLECT SLUDGE SAMPLE

1 x 4oz VOCs
1 x 8oz RCRA METALS, PCBs } AM-A505601 ~~AM-A505503~~ 10/17a

- VERY LITTLE SLUDGE IN TANK TO CONTAINERIZE
USED MOST IN SAMPLES, WIPED REST UP WITH DIAPERS.
- MM NOT NEED TO ANALYSE (?) IF NO CONTAINERIZED SLUDGE.
- WIPING DOWN TANK WITH SORBS; WATER ENTERING TANK (TANK APPARENTLY HAS PERFORATIONS), WIPED TANK AS BEST THEY COULD AND FILLED TANK WITH CLEAN GRAVEL/SAND.
- HEAD TO BLDG. 3075, UPPER UNNAMED VALLEY
- DIGGING TEST PIT ~~@~~ 1545 AT LOCATION SHOWN IN MAP BELOW



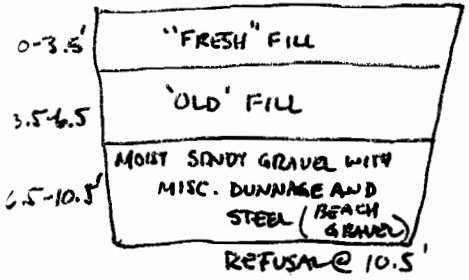
10/13/00 (BW)

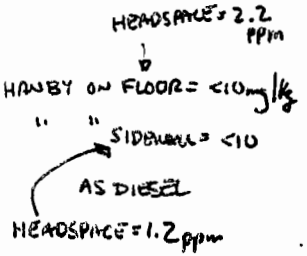
1545 - HIT CONT. SOIL AT 4' BGS; DIFFICULT TO ATTEMPT TO REMOVE CONT. SOIL DUE TO BUILDING & CUT BANK IN WAY; HANBY ON CONT. SOIL = 200 mg/kg

TEST PITS AT FORT MEARS LANDFILL SOUTH

DIGGING TP#2 AND TP#3 TODAY (SEE MAP ON PG. 98 OF THIS LOGBOOK)

TP#2 X-SECTION





1550 - COLLECT FLOOR SAMPLE FROM TP#2; 10.5' BGS

1 x 8oz DRO/RRO/PAHs
1 x 4oz RCRA METALS } AM-A505701 505304
1 x 4oz VOCs

SOIL IS A SANDY GRAVEL WITH NO NOTICEABLE ODOR

1555 - COLLECT SIDEWALL SAMPLE FROM TP#2; 7.5' BGS

SAA → AM-A505702 505305

SOIL IS A SANDY/LOAM MATERIAL WITH SOME FINES
NO NOTICEABLE ODOR.

- BACKFILLING TP#2; GPS CODE FMLFS 2

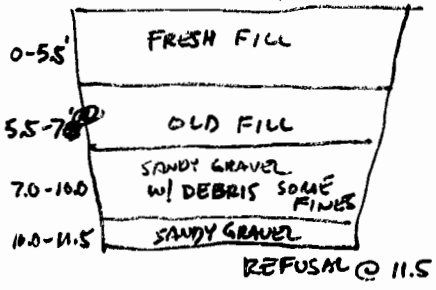
1610 - BEGIN EXCAVATING TP#3; GPS CODE FMLFS 3

NEXT PAGE FOR X-SECTION

10/13/00 EMO

1615 - EXCAVATED SMALL QTY OF SOIL IMPACTED BY BACKHOE HYDRAULIC HOSE LEAK (1/8 CY) AND TOOK TO SOIL STOCKPILE AT PRE-WWII TANIC FARM.

X-SECTION OF TP#3; FORT MEARS LANDFILL SOUTH



HEADSPACE ≤ 4.4ppm
HANDY ON FLOOR = <10 mg/kg
" " SIDEWALL = <10 mg/kg
HEADSPACE = 2.4 ppm

1645 - COLLECT FLOOR SOIL SAMPLE FROM TP#3; 11.5' BGS

1 x 8oz DRO/RRO/PAHs
1 x 4oz METALS
1 x 4oz VOCs
} AM-A505763 505306

SOIL IS A ~~GRAVELLY SAND WITH SOME FINES~~ SANDY GRAVEL @ 10 ft bgs; NO ODOR OBSERVED.

1655 - COLLECT SIDEWALL SAMPLE FROM TP#3; 8.5' BGS

SAA -- AM-A505704 505301

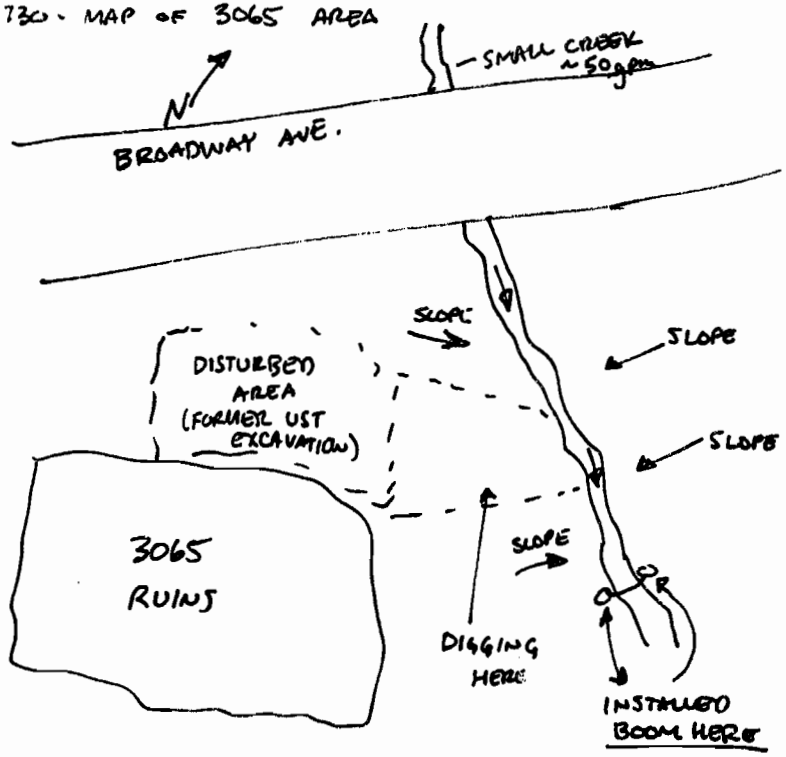
SOIL IS A GRAVELLY SAND WITH SOME FINES; NO ODOR OBSERVED

1730 - BACKFILLED AND GRADED TP#3

- BEGAN EXCAVATING SOIL AT BUILDING 3065 AT LOCATION BETWEEN CREEK AND UST REMOVAL EXCAVATION LIMITS FROM 1997.

10/13/00 EMO

1730 - MAP OF 3065 AREA



- HITTING CONTAMINATED SOIL RIGHT AWAY (98.8ppm DIRECT SCREEN WITH PID)
- EXCAVATED 20 CY OF SOIL; ALL OF WHICH WAS CONT., VERY NOTICEABLE ODOR OF DIESEL

1740 - SHUTTING DOWN FOR DAY

* WEATHER - OVERCAST, WEST WINDS 20-30 mph WITH GUSTS TO 50 mph, TEMPS 40-48°F *

- BACK TO OFFICE; UNLOAD GEAR

1800 - SIGN OFF LOG

10/13/00

10/14/00 (BD)

16 0700 - SIGN ON LOG
- DAILY REPORT
- WILL NOT WORK TODAY DUE TO WEATHER WHICH IS OVERCAST, WEST WINDS 50 mph, GUSTING TO 60-70 mph, WITH RAIN, TEMPS 40-47°F.

0-1 1300 - HEAD TO MORRIS COVE WITH KIWI
- PERFORM LIMITED SITE RECON DUE TO WEATHER.

5.5 - KEATHIC PACKAGING OF SAMPLES.

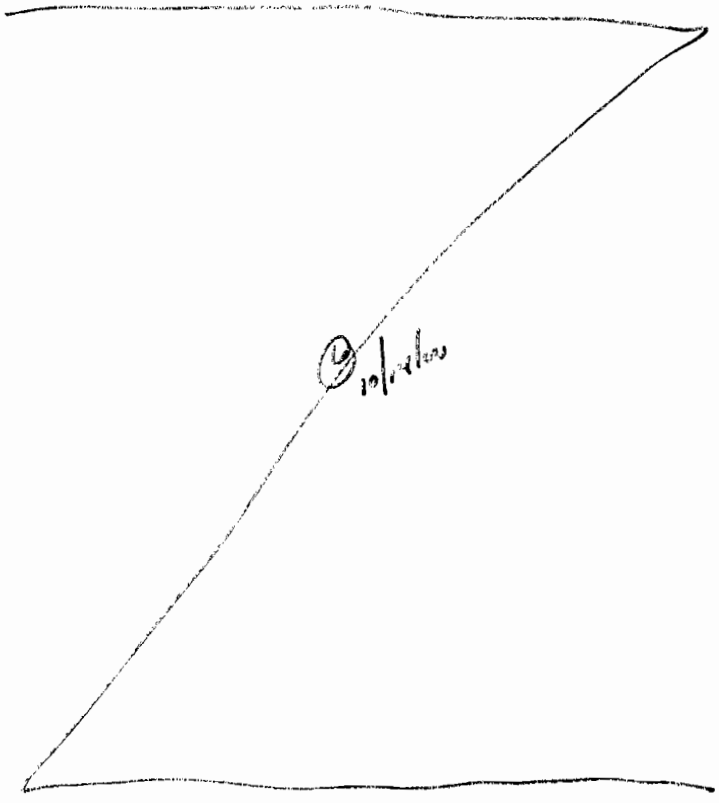
7.0 1600 - SIGN OFF LOG

10.0

16

16.5

17.3



10/15/00 (END)

0700 - SIGN ON LOG
- DAILY REPORT; KEATHER PACKAGING UP COOLERS

0800 - TAILGATE SAFETY MEETING
PLAN FOR DAY - IN-PLACE CLOSURE OF UST 3760 @ 165th AND CONTINUE DIGGING AT 3065.
- SHIPPED ONE COOLER TO DATACHEM; FAXED CoC AND AIRWAY BILL TO DATACHEM

0930 - HEAD TO 3065 EXCAVATION

1000 - BEGIN EXCAVATING CONT. SOIL BETWEEN OLD UST EXCAVATION AND SMALL CREEK.
- SCREENING EVERY BUCKET WITH PID (DIRECT SCREEN) READINGS VARY BETWEEN 2.0 AND 20 PPM, NOTICEABLE FUEL ODOR
- SCI INSTALLED SILT FENCE BETWEEN EXC. AND CREEK.
- PUT BOOM IN CREEK AND ON SMALL AMOUNT OF WATER IN CREEK.

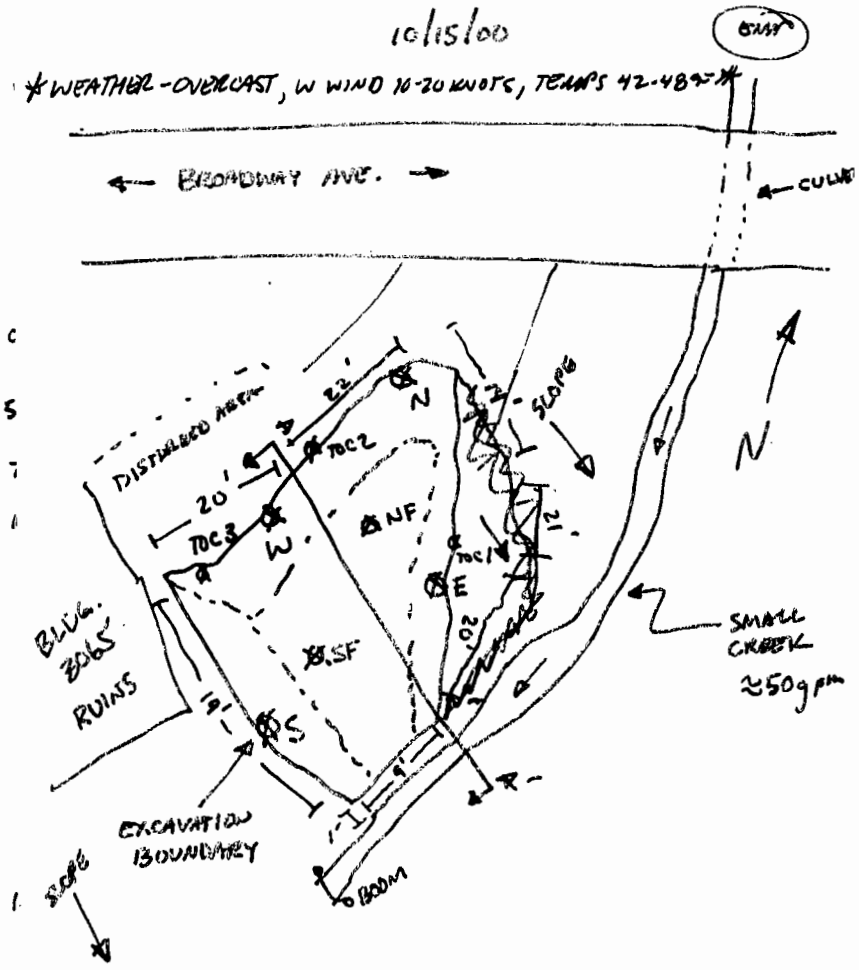
1330 - LOADED OUT 35 CY OF CONT. SOIL; NO UNCONT. SOIL EXCAVATED/STOCKPILED ~ VERY SHALLOW PRESENCE OF CONT. SOIL. WATER ENCOUNTERED AT 4' BGS, DID NOT EXCAVATE PAST GW. WILL INSTALL WELL POINT.
- COLLECTING HANBY/HEADSPACE SAMPLES.
- 4 SIDEWALL, 2 FLOOR LOCATIONS (SEE MAP AND TABLE NEXT PAGE)

1400 - COLLECT SOUTH FLOOR SOIL SAMPLE (LOC. SF); 4.0' BGS

1 x 8oz	DRO/PAH - AM-A505802
1 x 8oz	DRO/PAH - AM-A505803 (DUP)
1 x 8oz	DRO/PAH - AM-A505702 (TRIPLICATE)

10/15/00 EMW

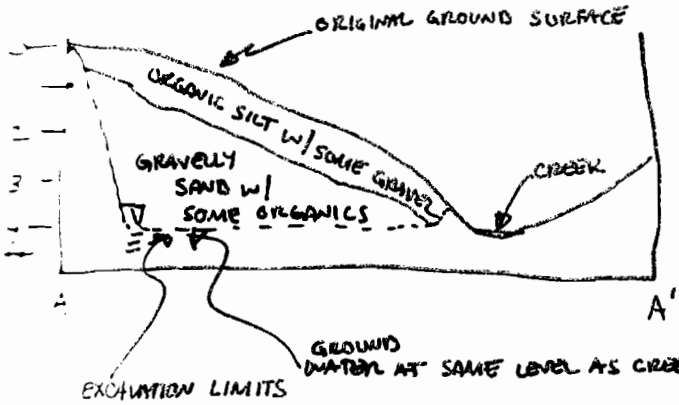
WEATHER - OVERCAST, W WIND 10-20 KNOTS, TEMPS 42-48°F



LOCATION	DEPTH (FT.)	HANBY (mg/kg diesel)	HEADSPACE (PPM)
N	3.0	<1	13.3
W	3.0	<1	0.0
S	3.0	>1000	41.1
E	2.0	<10	5.2
SF	4.0	<50	7.0
NF	4.0	<10	0.0

10/15/00 EMW

X-SECTION, 3065 EXCAVATION



~~1415 - COLLECT~~ 1015hrs

1410 - COLLECT NORTH FLOOR SAMPLE AT LOCATION NF; ~~3.0'~~ 4.0' BGS

1 x 8oz DRO/PAHs (AM-A505804)

1 x 8oz DRO/PAHs (AM-A505805) DUP

1 x 8oz DRO/PAHs (AM-A505703) TRIPLICATE QA

1415 - COLLECT SOUTH WALL SIDEWALL SAMPLE AT LOC. S; 3.0' BGS

1 x 8oz DRO (AM-A505806)

* NOTE: COULD NOT REMOVE ALL CONTAMINATION FROM SOUTH END OF EXCAVATION DUE TO PRESENCE OF BUILDING 3065. NOT APPROVED/SHPO CLEARANCE TO MOVE BUILDING. *

1420 - COLLECT WEST WALL SIDEWALL SAMPLE AT LOC. W; 3.0' BGS

1 x 8oz DRO (AM-A505801)

1425 - COLLECT NORTH SIDEWALL SAMPLE AT LOC. N; 3.0' BGS

1 x 8oz DRO (AM-505807)

10/15/00 (BW)

1430 - COLLECT TOC SAMPLE AT TOC1 LOC. ; 2.0'BGS
1x4oz TOC. (AM-A505808)

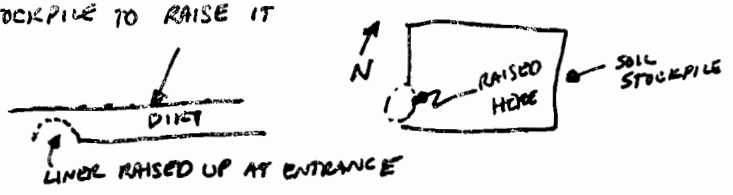
1435 - COLLECT TOC SAMPLE AT TOC2 LOC. ; 2.0'BGS
1x4oz TOC (AM-A505809)

1440 - COLLECT TOC SAMPLE AT TOC3 LOC.; 2.0'BGS
1x4oz TOC (AM-A505810)

- SCI NOW BACKFILLING EXCAVATION WITH CLEAN ANDERSON/WILDER MATERIAL. COMPACTING WITH BACKHOE.

1500 - GPS CODE WAYPOINT — 3065WP1

1530 - HEADING BACK TO OFFICE TO CHECK ON STATUS OF 580 EXCAVATOR; SCI PILING UP HAVE CLEAN SOIL, ABATING DUST WITH FIREHOSE
- SCI CLOSED UST 3760 IN-PLACE; PUMPED 190 GALLONS OF WATER AND CONTAINERIZED 20 GALLONS OF SLUDGE. TAKEN TO DECON PAD, PUT IN DRUMS AND LABELED.
- TREATING 1,800 GALLONS OF WATER TODAY; TREATED AND RELEASED 1,500 GALLONS ALREADY SINCE 1ST SAMPLE.
- SCI IS FIXING LINER ON TRUCK ENTRANCE TO LONG TERM SOIL STOCKPILE TO RAISE IT



1600 - BACK TO 3065/3075 SITE
- SCI STILL BACKFILLING 3065 EXCAVATION

10/15/00 (BW)

1615 - GOING TO SAMPLE ILIULIUK RIVER NEAR 3075 SITE

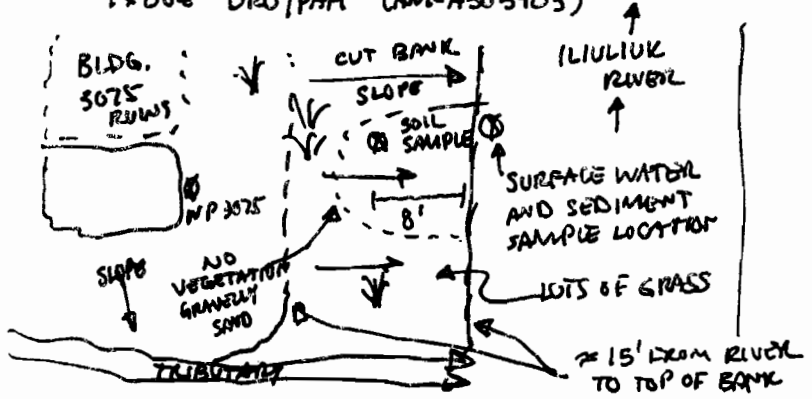
1630 - COLLECT SURFACE WATER SAMPLE FROM ILIULIUK RIVER
- 2x1L PAHs } AM-A505901
- 2x1L DRO }

1635 10/15/00 FIELD PARAMETERS

pH (S.U.)	= 6.22	WATER IS CLEAR, NO ODOR OR SHEEN OBSERVED
S.C. (mS/cm)	= 0.054	
D.O. (mg/l)	= 14.94	
TEMP (°C)	= 4.1	
TURB (NTU)	= 6	
SAL (%)	= 0.0	

1635 - COLLECT SEDIMENT SAMPLE AT SAME LOCATION
1x8oz DRO/PAH (AM-A505902)

1640 - COLLECT SOIL SAMPLE FROM CUT BANK BELOW FORMER UST LOCATION/EXCAVATION AND ABOVE RIVER
1x8oz DRO/PAH (AM-A505903)

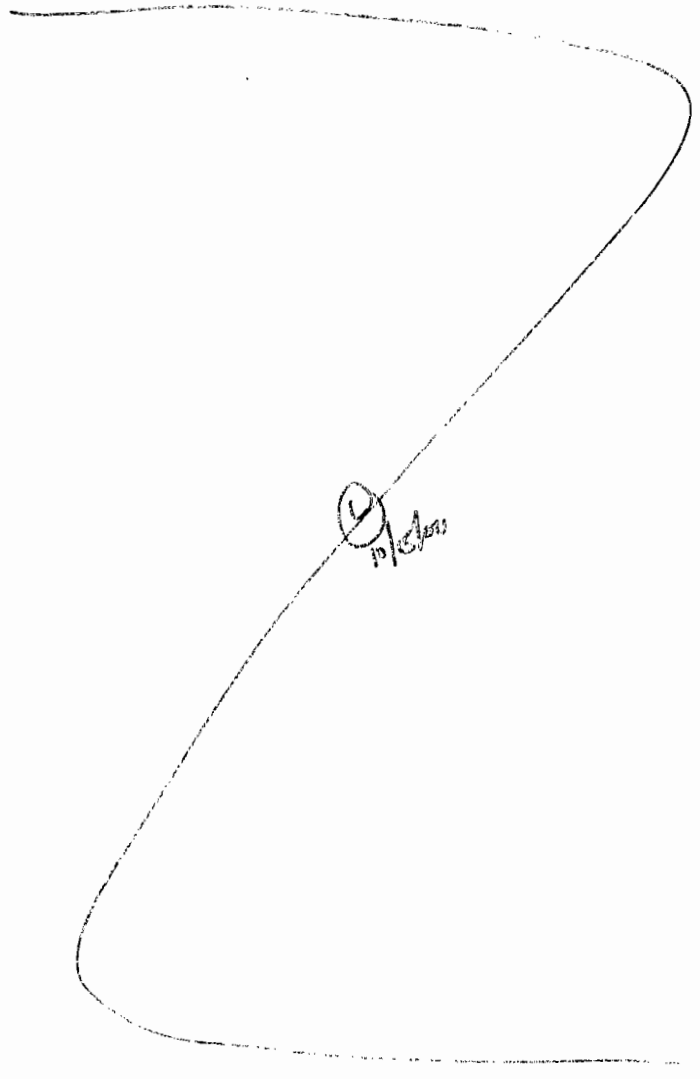


10/15/00 (BW)

1700 - RETURN TO OFFICE; UNLOAD GEAR

- VAN DOORS GOING OUT, TOOK TO DC RENTAL SHOP

1800 - SIGN OFF LOG



10/16/00 (C)

0700 - SIGN ON LOG

- DAILY REPORT

0900 - TAILGATE SAFETY MEETING

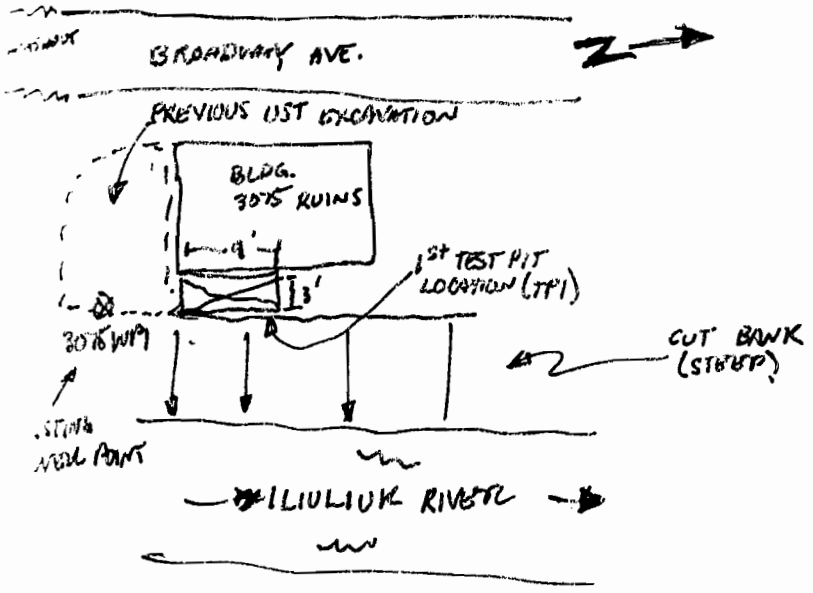
- LOADING GEAR - USING RANDY'S TRUCK

- TOOK SCI ONE BOX SARANEX

0930 - SCI IS PUTTING 20mil LINER ON LONG TERM SOIL STOCKPILE; FILLING SANDBAGS.

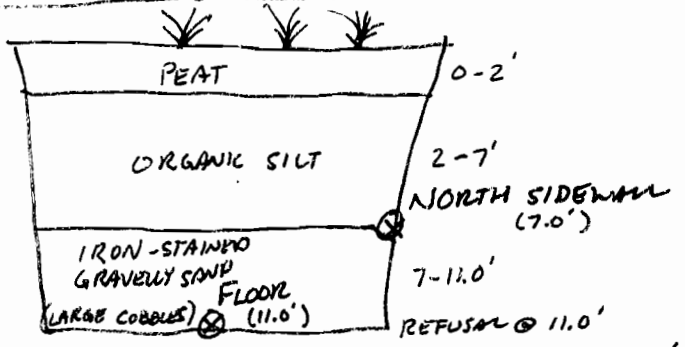
- CLEANING SLUDGE FROM DECON PAD; ONE 55-GAL DRUM DESIGNATED AS SLUDGE COLLECTION.

1000 - ARRIVE AT BLDG 3075; CONTINUATION OF TEST PIT FROM FRIDAY. OBJECTIVE IS TO DETERMINE NORTHERN EXTENT OF POL SOIL CONT.



10/16/00 EW

TP1 X-SECTION (BLDG. 3075)



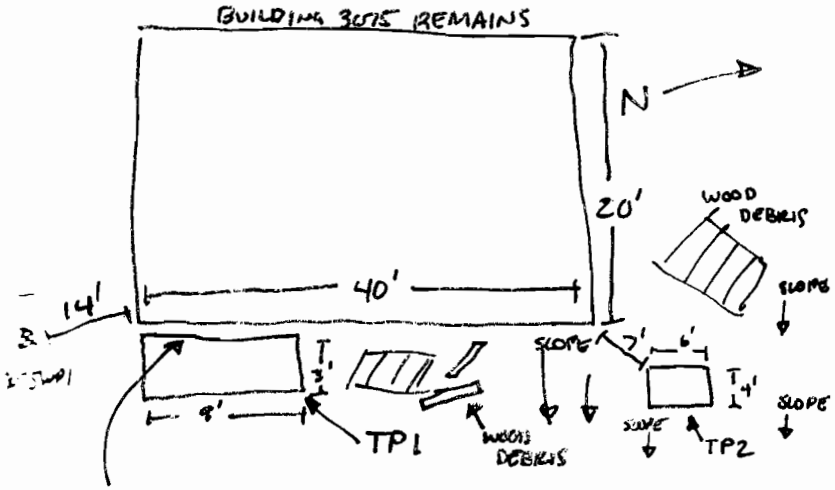
- DIRECT SCREENED 10 CY OF CONT. SOIL FROM TP1 (2.0-15.0 ppm)
REFUSAL AT 11.0' BGS; NO WATER ENCOUNTERED.
- COLLECTED FLOOR SAMPLE AND SIDEWALL HANBY/HEADSPACE SAMPLES AT LOCATIONS ABOVE

LOCATION	DEPTH	HANBY	HEADSPACE (ppm)
FLOOR	11.0'	<1 mg/kg	4.0
NORTH SIDEWALL	7.0'	<1 mg/kg	2.7

1120 - COLLECT FLOOR SAMPLE FROM TP1 : 11.0' BGS
1x 8oz DRO/PAHs (AM-A50600101)
SOIL IS AN IRON-STAINED GRAVELLY SAND, NO ODOR OBSERVED
1130 - SOIL CONTAMINATION APPEARS TO BE MAINLY IN THE ORGANIC SILT LAYER, THOUGH SOME HIGHER PID LEVELS WERE ALSO NOTED IN SAND LAYER AT BOTTOM
- SCI HAULED CONT. SOIL TO PWMTF; WILL DECON AND BRING BACK LOAD OF CLEAN SOIL TO BACKFILL TP1
* WEATHER: RAIN, OVERCAST, NW WIND 10-20 mph, TEMPS 40-45°F *

10/16/00 EW

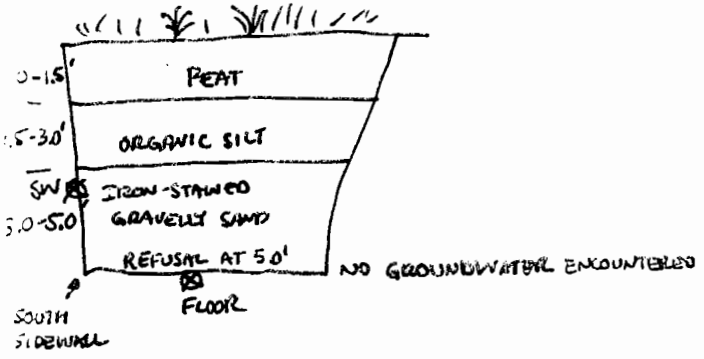
BLDG 3075 MAP



- SOIL ON THIS SIDEWALL WAS EXHIBITING HIGH PID LEVELS AND HAD A NOTICEABLE DIESEL ODOR

1200 - DIGGING AT TP2
- AT 5.0' BGS, ENCOUNTERED BEDROCK
- PID SCREENING ON ALL REMOVED SOILS =0.0 ppm

TP2 X-SECTION



10/11/00 BMD

1315 - COLLECTED HNU/HEADSPACE SAMPLE FROM TP2

LOCATION	DEPTH	HNU	HEADSPACE
SOUTH SIDEWALL	3.0'	<1	0.0 ppm
FLOOR	5.0'	<1	0.0 ppm

1330 - COLLECT FLOOR SOIL SAMPLE AT TP2; @ 5.0' BGS
1x8oz DRO (AM-A50610002)

SOIL IS AN IRON-STAINED GRAVELLY SAND, NO ODOR OBSERVED

- NO APPARENT SOIL CONTAMINATION EXTENDING TWO FWL NORTH.
- BACKFILLING EXCAVATIONS

1345 - HEAD TO OFFICE

1300 - LUNCH

1330 - HEAD TO BLDG. 2762

- SCI HAVING TO MOVE LOTS OF WOOD AND DEBRIS OUT OF WAY TO ALLOW ACCESS TO AREA WHERE EXCAVATION WIL. occur

1400 - COLLECT TOC. AT TP1 AT BLDG. 2675; 2.5' BGS
1x40z TOC (AM-A50610003)

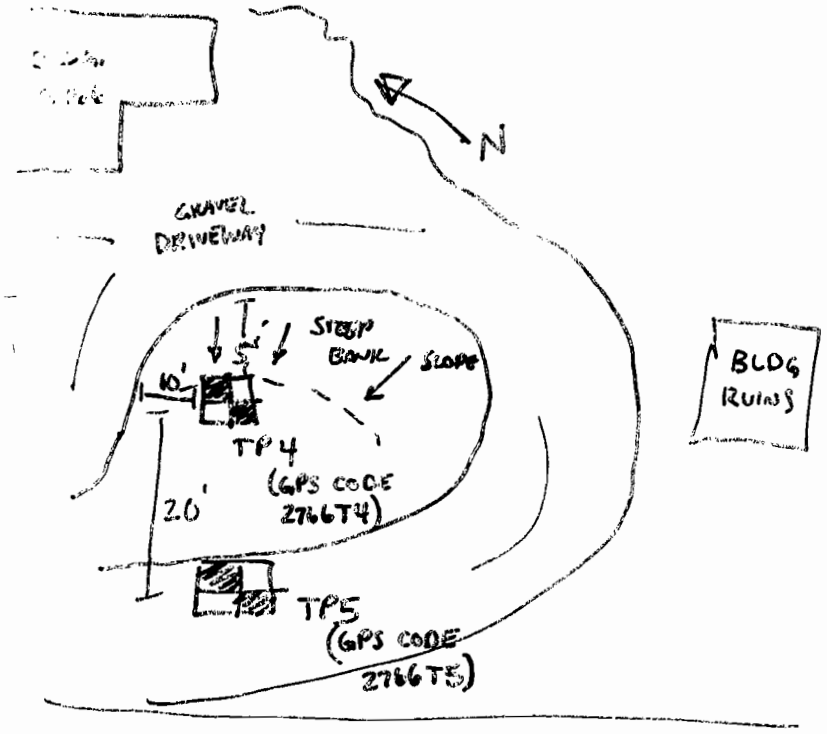
1415 - COLLECT TOC. AT TP2 AT BLDG. 2675; 2 FT BGS
1x40z TOC (AM-A50610004)

1520 - MOVING COMMER NOW AWAY FROM BLDG. 2762

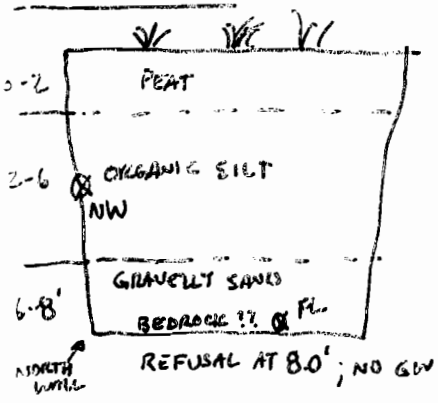
- SCI ALSO DIGGING BOTH TEST PITS AT BUILDING 2766
- LOTS OF WATER ENTERING INITIAL EXCAVATION AT 2762. SCI TRYING TO PUMP OUT FROM ABOVE EXCAVATION
- TEST PIT TP1 AT 2766 READY TO SAMPLE; REACHED REFUSAL AT 8.0' BGS

10/16/00 BMD

LOCATION MAP OF 2766 AREA



TP4 X-SECTION



LOCATION	DEPTH	HNU	HEADSP.
NW	4.0'	<1	0.0
FL	8.0'	<1	0.0

REFUSAL AT 8.0'; NO GW ENCOUNTERED

10/16/00

1530 - COLLECT FLOOR SAMPLE FROM TP4 ; 8.0'BGS

1x8oz DRO/PAHs (AM-A506105) PRIMARY

1x8oz DRO/PAHs (AM-A506106) DUP

1x8oz DRO/PAHs (~~AM-A506201~~ AM-A505704) QA TRIPLICATE

SOIL IS A GRAVELLY SAND ; NO ODOR OBSERVED

1535 - COLLECTED TOC SOIL SAMPLE FROM TP4 ; 4.0'BGS

UNCONT. SOIL

1x4oz TOC (AM-A506107)

- BACKFILLING TEST PIT, REGRADING SITE

1630 - SETTING UP ON TP5 ; BUILDING 2766

- IMMEDIATELY HIT FUEL-CONTAMINATED SOIL AT 0.5'BGS
- CALLED RANDY, GOT KEITH RUPP TO COME LOOK
- WILL COMPLETE TEST PIT AND TAKE EXCAVATED SOIL TO PWNTF STOCKPILE.
- EXCAVATED 5 CY (ALL CONTAMINATED ; DIRECT SCREEN PID READINGS >100 ppm.

1715 - COLLECTED FLOOR SAMPLE FROM TP5 ; 11.0'BGS

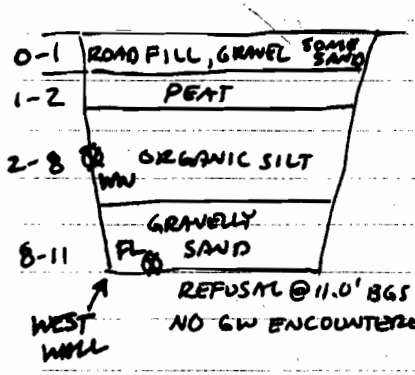
1x 8oz DRO (AM-A506108)

SOIL IS A GRAVELLY SAND ; NOTICEABLE FUEL ODOR

- BACKFILLED EXCAVATION WITH CLEAN FILL FROM PWNTF
- HEAD BACK TO OFFICE
- SCI IS PREPARING 2762 EXCAVATION FOR PUMPING H_2O TOMORROW, FIRST THING
- UNLOADING GEAR
- DOWN LOAD PHOTOS

10/16/00

TP5 x-SECTION ; BLDG 2766



LOCATION	DEPTH	HANBY	H.SPACE
WW	5.5'	<50	50.0
FL	11.0'	<1	40.0

1830 - SIGN OFF LOG

10/16/00

10/11/00 (SAM)

0900 - SIGN OUT VAN

- DRIVE TO SITE; MEET WITH MR. BROWN

0930 - TAILGATE SAFETY MEETING

0935 - START WORK; MARK OUT AREA FOR SOIL REMOVAL

- CONTACT ONE CALL AT 1-800-344-7233 FOR UTILITY CLEARANCE

- MOVE THE MATERIALS AND EQUIPMENT TO SITE

1000 - COMPLETE FOR MOBILIZATION

1005 - BEGIN EXCAVATING SOIL AT TP-1 AREA; LOADING SOIL ONTO PAD; SCREENING EVERY SHOVELFUL

- DIRECT READ FOR BENZENE 30-100.0 ppm

1200 - COMPLETED EXCAVATING CONTAMINATED SOIL. SOIL IS FROM TP-1 AREA AT 2 1/2 FEET; 3' BGS

1 x 8oz Brown (AIR-ASOL202)

FOR THE NEW SOIL PILE, BE USED; SAMPLE WAS ALSO FOR BENZENE (SCREENING).

- HEAD TO 16th AVE

1415 - HEAD TO BUILDING, PHOTOGRAPH SOIL PILE, MEASUREMENTS AND BARRELS FOR SOIL.

1430 - HEAD BACK TO ZAGI.

- MEASURE COMPLETION OF TP-1 AREA (SOUTH SIDE OF POWERLINE)

- COLLECTING WALL AND FLOOR SAMPLES FROM 11".

1435 - COLLECT SIDEWALL SAMPLE AT LOCATION SW1; 6.0' BGS

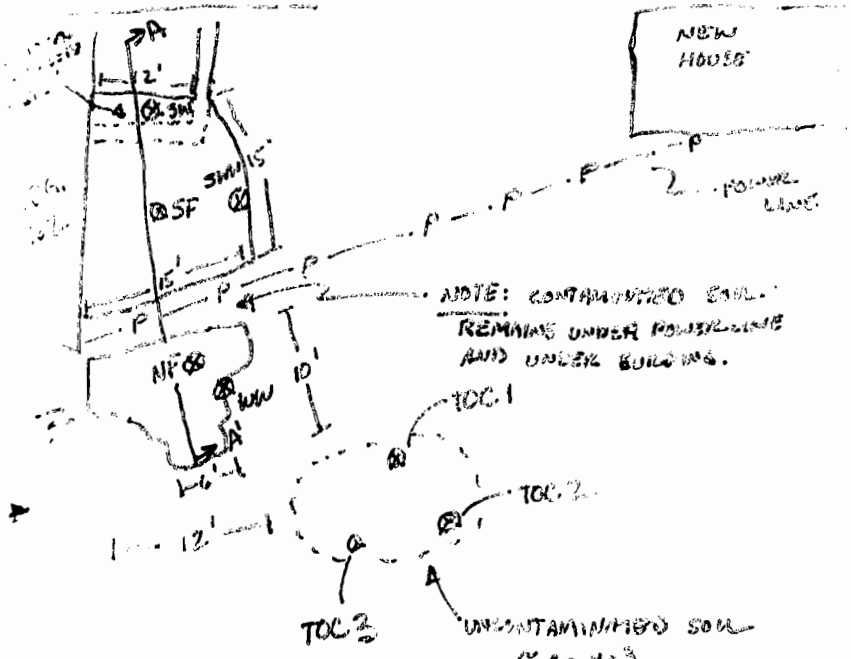
1 x 4oz AMBER } AIR-ASOL202

1 x 8oz CLEAR }

SOIL IS A SILTY/CLAY NOT WITH SOME SAND, NO ODOR OBSERVED

10/17/00 (SAM)

MAP OF ZAGI SITE



LOCATION	DEPTH	HNU'S	HEADSPACE (ppm)
SW1 (SIDEWALL)	6.0'	<1	0.0
SW2 (SIDEWALL)	6.0'	<1	0.0
SF (FLOOR)	8.0'	<1	0.0
WW (SIDEWALL)	3.0'	<1	8.0
NF (FLOOR)	6.0'	<1	0.0

1435 - COLLECT SIDEWALL SAMPLE AT LOCATION SW1; 6.0' BGS

1 x 4oz AMBER } AIR-ASOL203

1 x 8oz CLEAR }

SOIL IS AN ORGANIC/SILT WITH SOME SAND; NO ODOR OBSERVED

10/17/00 EMD

1430 - COLLECT FLOOR SOIL SAMPLE AT LOCATION SF; 8.0' BGS

1x 40z GRO } PRIMARY AM-A506204
2 x 80z DRO (MS/MSD)

1x 40z GRO } DUPLICATE AM-A506205
~~1 x 80z DRO~~ (collected)

1x 40z GRO } QA TRIPLICATE AM-A506301

SOIL IS A SANDY GRAVELLY SILT; SLIGHT FUEL ODOR OBSERVED

- SOUTH EXCAVATION (TP4) COLLECTED ENCOUNTERED GROUNDWATER AT 8.0' BGS. CANNOT INSTALL WELL POINT; LANDOWNER INTENDS TO PUT CONNEX IN SAME LOCATION.

1500 - DIGGING NORTH OF POWERLINE NOW.

- CONTAMINATION IS SHALLOW, ≈ 3 FT, VERY SPORADIC. OVER-EXCAVATED ENTIRE AREA TO ENSURE CLEAN CLOSURE.
- COLLECT FLOOR AND SIDEWALL SAMPLES (HANDY/HEADSPACE)

1600 - COLLECT FLOOR SOIL SAMPLE AT LOCATION NF; 6.0' BGS

1x 40z GRO
1x 80z DRO/PAHS } AM-A506206

SOIL IS AN ORGANIC SANDY SILT; NO ODOR OBSERVED

1605 - COLLECT SIDEWALL SOIL SAMPLE AT LOCATION WW; 3.0' BGS

1x 40z GRO
1x 80z DRO } AM-A506207

SOIL IS A SANDY GRAVEL WITH SOME SILT; NO ODOR OBSERVED.

- DAVE A. (SCI) IS SURVEYING IN EXCAVATIONS/BUILDINGS
- SCI BACKFILLING EXCAVATIONS WITH CLEAN SOIL FROM PWWTF.

10/17/00 EMD

1630 - HEAD TO PWWTF

- SCI KEEPING CONT. SOIL FROM 2762 SEPARATE FROM OTHER SOILS IN CONT. SOIL STOCKPILE DUE TO Pb POSSIBILITY.

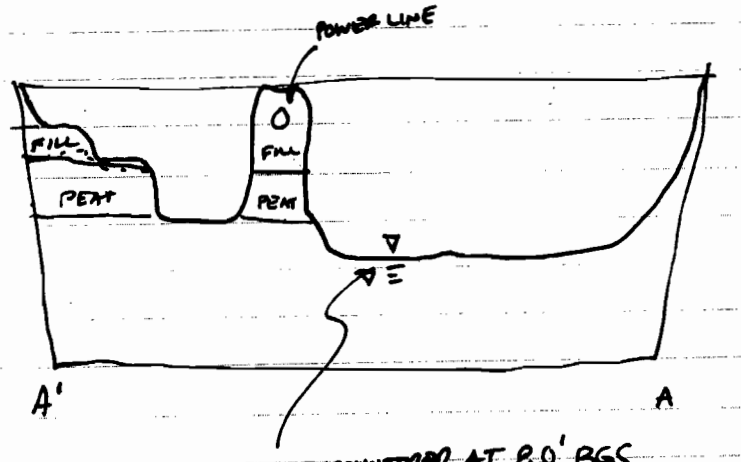
1700 - COLLECT LEAD SAMPLE FROM 50 CY OF CONT. SOIL REMOVED FROM 2762 EXCAVATION.

1x 80z Pb (AM-A506206) KAM
KAM

1715 - RETURN TO OFFICE

- UNLOAD GEAR

X-SECTION OF 2762 EXCAVATION



0-4' - FILL, GRAVELLY SANDY SILTY MATERIAL, IRON STAINED
4-6' - PEAT, LOTS OF ROOTS (ORIGINAL GROUND SURFACE)
6-8' - SANDY GRAVELLY SILT, LOTS OF IRON STAINING
8' - GROUNDWATER

10/17/00 EMO

1730 - UNLOADING GEAR, SAMPLE CONTROL

* WEATHER - PARTLY CLOUDY, NW WIND 5-10 KNOTS, TEMPS 40-45°F *

- SIGN OFF LOG

10/17/00

10/18/00 EMO

0700 - SIGN ON LOG

- DAILY REPORT WORK

- E-MAILED SKIP PHOTOS OF STAND-ALONE TRANSFORMER (FACE PLATE) AND BATTERIES

0800 - TAILGATE SAFETY MEETING

- LOADING GEAR

- SHIPPING ONE COOLER OF SAMPLES TO DATACHEM

0930 - ARRIVE AT 2762

- NEED 1-2 LOADS TO COMPLETE BACKFILL OF YESTERDAY'S EXCAVATION

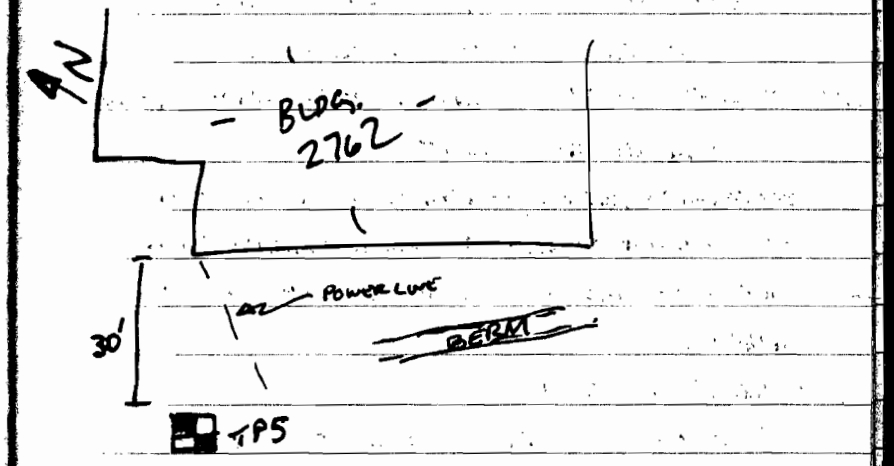
0945 - PUT J-PLUG + LOCK ON 306 SWP1

1000 - COMPACTING FILL AT 2762

* WEATHER TODAY IS OVERCAST, CALM, TEMPS 40-45°F *

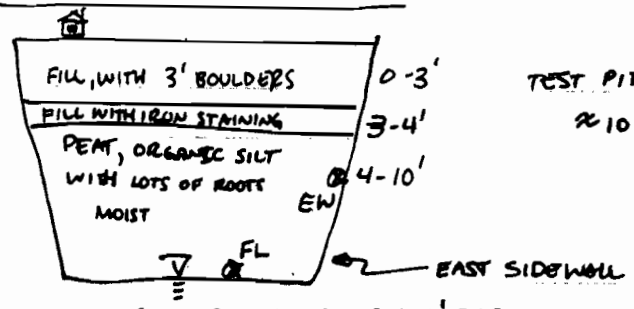
- GPS AT 2762 WAYPOINT CODE ~~2762WP~~ 2762EX

- BEGIN DIGGING TP5 AT 2762



10/18/00 EMD

TP5 x-SECTION; BUILDING 2762



TEST PIT VOLUME ≈ 10 CY

GW ENCOUNTERED AT 10.0' BGS

- COLLECT HANBY/HEADSPACE SAMPLES

LOCATION	DEPTH	HANBY	HEADSPACE
FL	10.0	<1	0.0
EW	5.5'	<1	0.0

- COLLECT FLOOR SOIL SAMPLE FROM TP5

1x4oz GRO } AM-A506409 9 KHM
1x8oz DRO/PAH }

1x4oz GRO AM-A506402 10 KHM TRIP BLANK

SOIL IS AN ORGANIC SILT; NO ODOR OBSERVED.

1145- INSTALLING WELL POINT; DRIVING IT USING EXCAVATOR BUCKET

WELL POINT GPS CODE 2762WP

- BACKFILLING TEST PIT; COMPACTING AROUND WELL POINT
- PUTTING GRAVEL IN DRIVEWAY WHERE EXCAVATOR 'MUDDIED' THINGS UP; ADDING 2 LOADS OF SOUTH COAST QUARRY GRAVEL.

1330- RETURN TO OFFICE

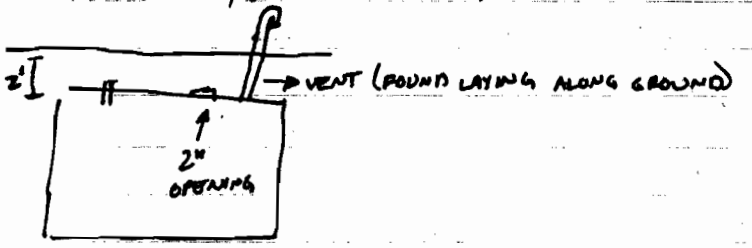
- WEATHER TO STAY; WORK AT 2766 EXCAVATION

10/18/00 EMD

1345- GETTING GEAR READY FOR CLOSING UST AT HUMPY COVE IN PLACE (HUMPY COVE LATRINE NO. 1)

1435- HEAD TO HUMPY COVE W/ RANDY

- LOCATED UST, BEGAN HAND DIGGING TO EXPOSE TOP OF UST



- TANK IS A 300-GALLON UST
- HAS ABOUT 4-5 INCHES OF WATER INSIDE; NOTICEABLE FUEL ODOR

1530- COLLECTED VOC SAMPLE FROM UST WITH ½" BAILER VERY SLOW PROGRESS; WILL COLLECT DRO & PAH SAMPLE AFTER CUTTING OPEN TOP OF TANK

1540- CUTTING OPEN TANK

LEL = 0%
PID = 0.2ppm

- BEGIN COLLECTING REST OF ANALYSES

3x40ml BTEX/VOCs } AM-A506403 7 KHM
2x1L DRO/RRO
2x1L PAHs

3x40ml BTEX/VOCs - AM-A506404 8 KHM TRIP BLANK

- WATER IS DARK, GRAY, TURBID AND VERY STINKY OF DIESEL; FLOATING SCUM PREVALENT

10/18/00 EMD

1610 - DRAINING WATER FROM UST VIA 5-GALLON BUCKETS

- DRAINED 35 GAL H_2O FROM UST
- REMOVED 2 GAL SLUDGE FROM UST

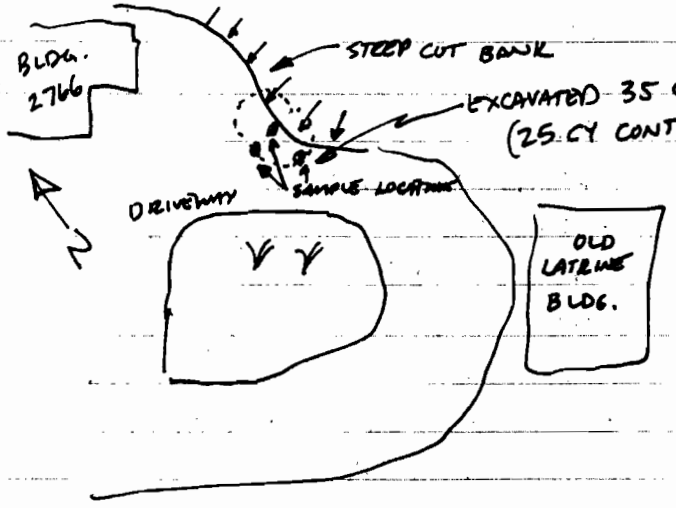
1630 - WIPING DOWN INSIDE OF UST WITH SORBS

1645 - BEGINNING TO BACKFILL WITH GRAVEL

- 5 GAL BUCKET FULL OF USED SORBS
- TANK IS SLIGHTLY RUSTED; SOME PERFORATIONS NOTED ON REMOVED 'HATCH'.

1700 - TANK FILLED TO TOP; BACKFILLED COVER SOIL AND SEEDED

- SEEDED BARE PATCH OF TRAIL UP TO UST
- HEAD BACK TO TOWN
- TO 2766 EXCAVATION; DONE EXCAVATING. KEATHER HAS COLLECTED 1 FLOOR AND 2 SIDEWALL LAB AND HANBY SAMPLES (SEE HER LOGBOOK)



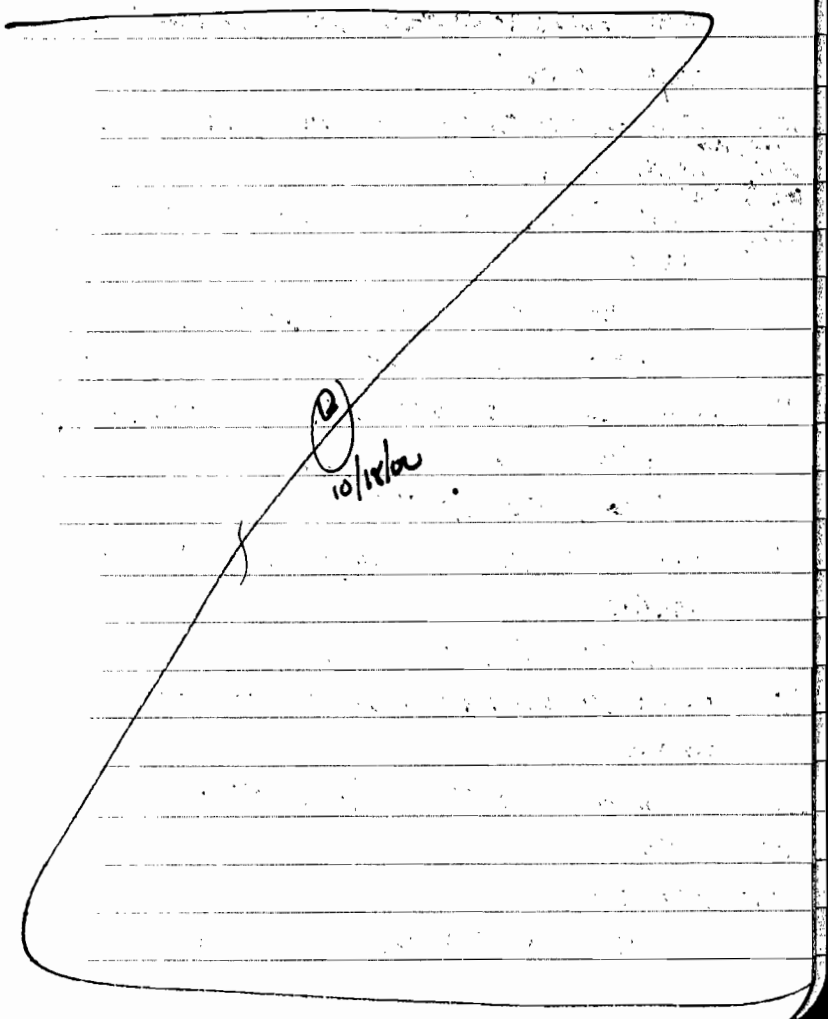
10/18/00 BW

- SCI PUTTING UP 4' CONSTRUCTION FENCE AROUND OPEN EXCAVATION.

1800 - BACK TO OFFICE

- UNLOAD GEAR

1830 - SIGN OFF LOG



10/19/00 EMD

0700 - SIGN ON LOG
- DAILY REPORT

0800 - TAILGATE SAFETY MEETING

0830 - PREPARATORY/INITIAL PHASE MEETING FOR ROCKY POINT PIPELINE DFW
- DAVE AUSMUS DOWNLOADED INFO. ON WHAT HE HAS LOCATED SO FAR.

1030 - TO 2766, SCI BACKFILLING AND COMPACTING EXCAVATION
1040 10 min
1100 20 min
ARRIVE AT DECON PAD
1105 5 min
1055 - COLLECT HUMPY COVE LATRINE No. 1 UST SLUDGE SAMPLE

1x 4oz VOCs
1x 8oz PCBs/METALS
} AM-A506501

1100 - COLLECT LSA MESS HALL 1154 UST SLUDGE SAMPLE

1x 4oz VOCs
1x 8oz PCBs/METALS
} AM-A506502

1105 - COLLECT MT. BALLYHOO, BLDG. C EAST UST GASOLINE SAMPLE

1x 4oz VOCs/OBS (AM-A506503)

1130 - COLLECT MT. BALLYHOO, BLDG. C WEST UST DIESEL SAMPLE

1x 4oz VOCs/OBS (AM-A506504)

1200 - LUNCH

1230 - BACK TO OFFICE
SCI SETTING UP ON BLDG. 627 EXCAVATION

10/19/00 EMD

1300 - DIGGING UP BLDG. 627 SOILS
- CHECKING ON DATA FROM SAMPLE OF CONT. SOIL COLLECTED ON 10/10/00 - TO ALLOW FOR MIXING SOIL WITH SOIL ALREADY ON CONT. SOIL STOCKPILE. (AM-A504801)
- RESULTS TO BE AVAILABLE TOMORROW, POSSIBLY
- PUT 1 LOAD OF SCI QUARRY ROCK AT BLDG 627 ENTRANCE TO STABILIZE AREA.

1500 - HEAD TO ROCKY POINT PIPELINE; BLDG 575
- DAVE AUSMUS HAS MOST PIPELINES MARKED WITH PAINT; ALONG WITH VALVE HOUSES

1530 - MET WITH ANDY FROM APL
- DISCUSSED PLAN TO DRAIN PIPELINES 194 AND 206
- ANDY SAID IT SHOULDN'T BE A PROBLEM, JUST NEED TO COORDINATE SCHEDULES
- NEED TO GET GENE'S FILE ON DOCK CONSTRUCTION AND PIPE CAPPING
- NEED TO OPEN WOODEN/CONCRETE BOX IN NE CORNER OF POWER HOUSE.

1600 - BACK TO 627
- EXCAVATION CONTINUING TO EAST

1680 - TO PWWTF
- HAVING TO PUMP H_2O FROM SOIL STOCKPILE; TRUCKS COMING OUT OF CELL VERY MUDDY AND WET.
- SPOKE WITH DAN B., WILL COVER STOCKPILE TONIGHT TO KEEP POTENTIAL RAIN OFF CONT. SOIL. FORCAST IS RAIN.

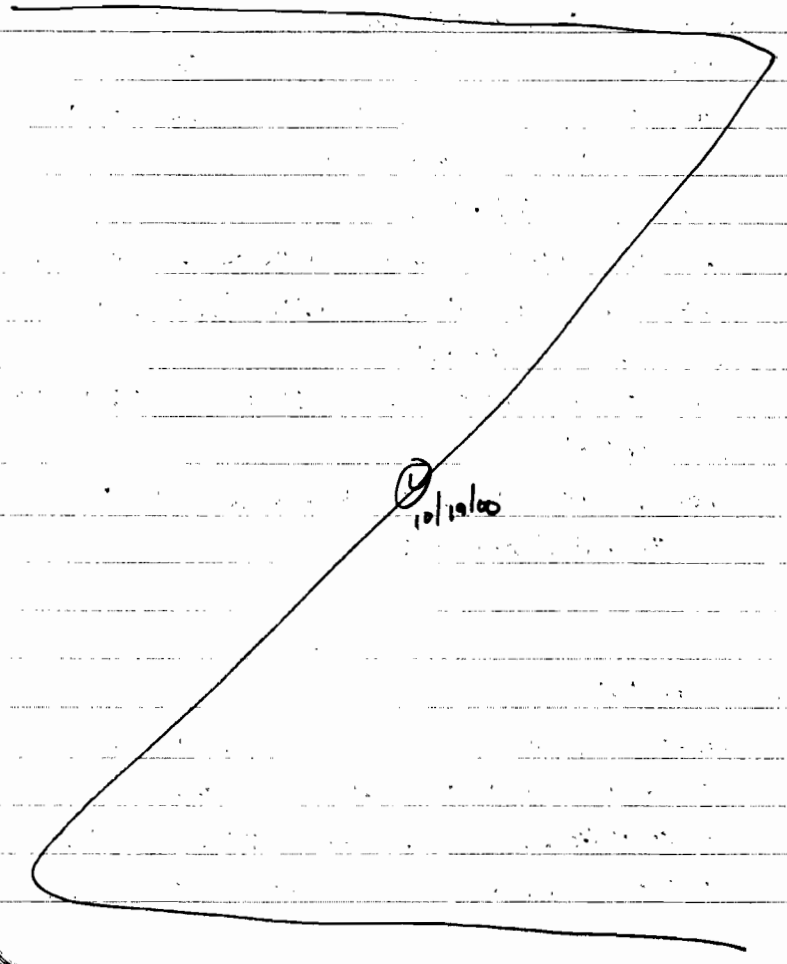
10/19/00 EMD

1700 - RETURN TO 627

- DONE EXCAVATING; CREW TO PWWTF TO COVER STOCKPILE.

1800 - SIGN OFF LOG.

* WEATHER - PARTLY CLOUDY, N. WINDS 0-5 KNOTS, TEMPS 40-47°F *



10/20/00 EMD

0400 - SIGN ON LOG

- UPDATE SAMPLE SUMMARY TABLE, DO EDMS FOR SAMPLES COLLECTED OVER LAST 2 DAYS
- COMPILED LIST OF SAMPLE NUMBERS WE NEED DATA FOR (i.e., WASTE MGMT DECISIONS) TO HELP WITH MANIFEST PREPARATION.

0700 - SITREP AND DAILY REPORT WORK

0800 - TAILGATE SAFETY MEETING

- PLAN FOR DAY: UNCOVER STOCKPILE, POMP WATER FROM STOCKPILE, CONTINUE DIGGING AT 627, MEET WITH MAGONE AND POSSIBLY BEGIN CLEANING BUILDING I; MAY TRY CLOSING NIRVANA HILL TUNNEL
- MINUTES FROM YESTERDAY'S PREP PHASE
- E-MAIL DAILY REPORT

0930 - TO DECON PAD. SCI IS PUMPING WATER FROM CELL INTO POLY TANK, THEN TRANSFERRING TO WT SYSTEM. SLOW PROCESS

- DUMPED BOTH TRUCKS (FULL FROM YESTERDAY) INTO CELL AND WIPED DOWN TIRES WITH SORBS. PUT RAMP ON ENTRANCE TO CELL TO KEEP TRUCKS FROM ENTERING, WILL USE LOADER TO MOVE AND BUCK UP CONT. SOIL FROM 627
- NEED 2" SUBMERSIBLE
- CITY WANTS US TO TAKE OUR PIPE FROM FIRE HYDRANT EXT. TO DECON PAD OUT; NO FLOW IN CULVERT UNDER E. POINT LOOP ROAD. SCI BLOWING CULVERT OUT WITH AIR COMPRESSOR.

10/20/00 EMM

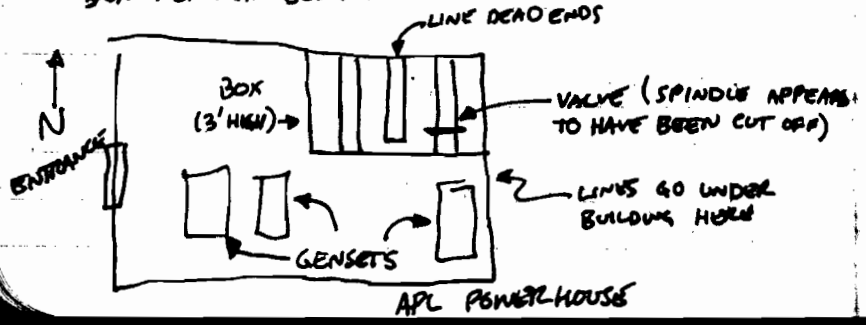
1030 - SCI CONTINUING TO PUMP WATER OUT OF CELL
- DUMPING SOIL AT CELL ENTRANCE WORKING WELL, NO TRACKING OF SOIL OCCURING

1130 - SCI CONTINUING TO EXCAVATE SOILS FROM 627
- TREATING WATER
- WILL COLLECT TREATED WATER SAMPLE TODAY @ 5,000 GAL TOTAL
- DEFINATELY SOME DISDAIN FOR PAUL WILSON FROM REST OF SCI CREW - LOTS OF BICKERING.

* WEATHER - OVERCAST, RAIN, SW WIND 0-10 mph, TEMPS 40-46°F *

1250 - LUNCH

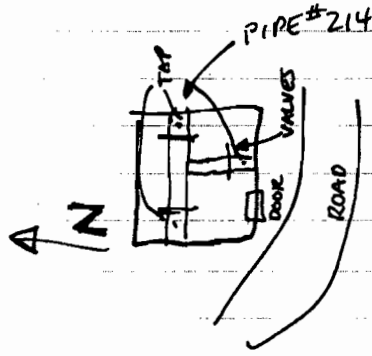
1320 - MEET WITH DELTA WESTERN AND APL FOLKS AT LOCATION OF RUSTY SINNOT'S HOT TAPS IN APL YARD
- NEED TO FIND MAPS OF CURRENT ELECTRICAL LAYOUT IN APL YARD; CITY WILL NOT DO LOCATE IN YARD AND SCI CANNOT EITHER - KIWI CHECKING ON ~MAY NEED TO SEE GENE MAKAMIN (APL).
- STAN (APL MECHANIC) OPENED 'BOX' INSIDE NORTHEAST CORNER OF APL POWERHOUSE. THREE 6" PIPELINES INSIDE BOX PER MAP BELOW.



10/20/00 EMM

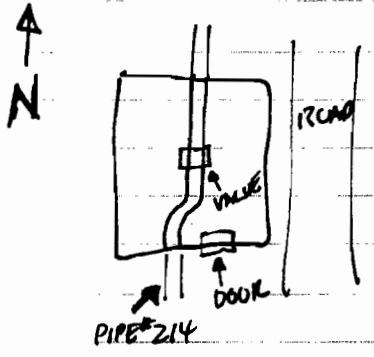
1430 - HAULED 200 CY FROM 627 SO FAR; APPEAR TO BE ABOUT 1/2 - 1/3 COMPLETE.
- RECEIVED RESULTS ON 627 CONT. SOILS (AM-AE04801)
  Pb = 8 ppm
  PCBs = ND
- WILL START COMBINING SOILS ON PAD TO MAKE ROOM FOR MORE 627 SOILS.

1700 - ARRIVE AT BLDG. I, ROCKY POINT



- WILL TRY TO USE EXISTING TAP ON 214 THAT IS INSIDE BLDG.
- THEN INSTALL HOT TAP ON PIPE OUTSIDE OF BUILDING.

1707 - BLDG H, ROCKY POINT



10/20/00 EMD

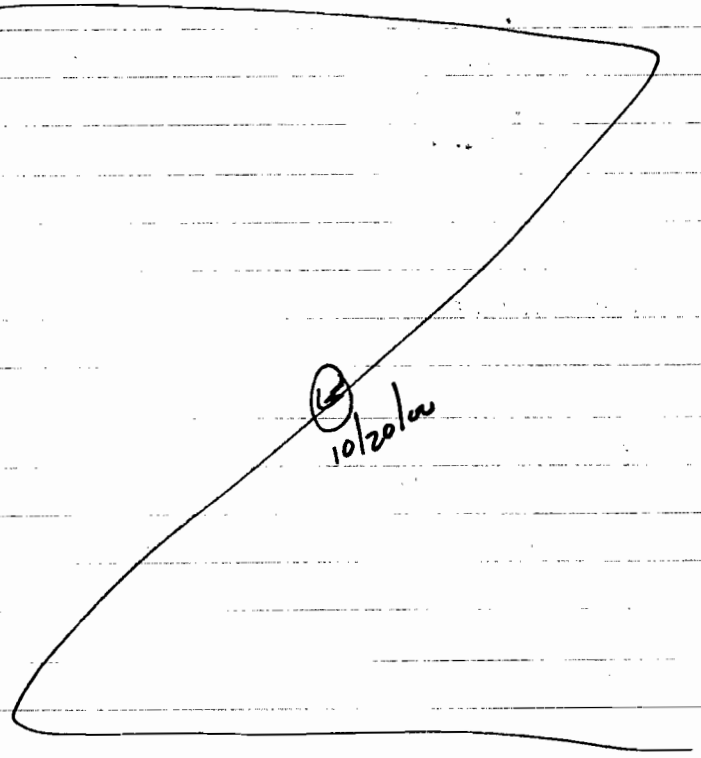
NOTE: AT 1400, I COLLECTED A TREATED WATER SAMPLE BETWEEN 1st AND 2nd DRUM OF CARBON.

2x1L DRO
2x1L PAH
3x40ml BTEX
} AM-A506612

3x40ml BTEX (AM-A506613)

1730 - RETURN TO PWWTF
- HELP SCI PULL STOCKPILE COVER BACK OVER PILE.

1830 - SIGN OFF LOG



10/21/00 EMD

0700 - SIGN ON LOG
- DAILY REPORT AND SITREP

0800 - TAILGATE SAFETY MEETING
- SPA - VALVE HOUSE CLEANING

0900 - CONTINUE DAILY REPORT WORK
- WILL NOT MOVE STOCKPILE LINER TODAY - VERY WINDY; PLAN TO CLEAN EITHER BLDG. H OR I TODAY.

*WEATHER - HEAVY RAIN, NORTH WINDS 15-40 mph, 50 mph GUSTS, TEMPS 40-45°F *

1030 - HEAD TO VALVE HOUSES AND DECON PAD.
- LINER ON STOCKPILE IS RIPPED IN SEVERAL LOCATIONS
ASKED JENNY TO TRY AND ROUND UP SOME PRICES ON 100'x100' SHEETS OF 20-mil LINER + SHIPPING.
- KIWI ROUNDING UP FAN AND LIGHTS FOR VALVE HOUSE CLEANING TODAY.

1130 - AT VALVE HOUSE H
SCI CLEANING UP DEBRIS
- VERY WINDY NOW ON THIS HILL; DOUG C. AND JP AGREED CONDITIONS ARE DANGEROUS - CALLED DAN BARTZ TO SHUT WORK DOWN FOR DAY. SCI WILL FINISH UP PICKING UP DEBRIS IN BUILDING H AND PUMPING WATER FROM BLDG. I, TREAT REST OF WATER, AND PUT SANDBAGS ON SOIL STOCKPILE.

1200 - KIWI AND I WENT TO UPPER UNALASKA VALLEY TO STAKE SITES FOR SURVEYOR ON MONDAY

10/21/00 EMO

1400 - SPOKE WITH DAN BATES; LINER AT STOCKPILE IS IN BAD SHAPE THOUGH WATER IS NOT VERY HIGH INSIDE CELL ~ SHOULD BE OK THROUGH WEEKEND.

NOTE: Bi

1515 - HELPING KEATHER WITH SAMPLE PACKAGING

1630 - SIGN OFF LOG

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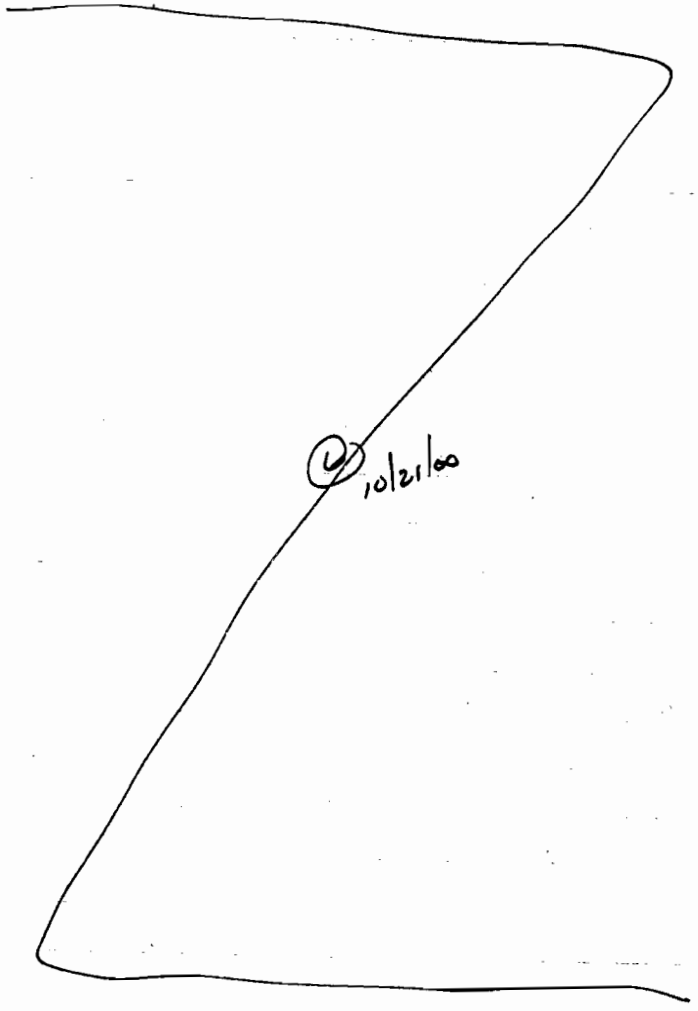


10/23/00 EMO

0700 - SIGN ON LOG

- DAILY REPORT; E-MAILED OFF

0800 - TAILGATE SAFETY MEETING

- SKIP KOCH HAS ARRIVED (YESTERDAY) AND IS FULFILLING SITE MGMT. DUTIES

0900 - PLAN FOR DAY - FINISH 627, TRY TO BUTTON-UP SOIL STOCKPILE, BACKFILL 627 ~ MAY FINISH CLEANING VALVE HOUSES H+I

- TO 627 EXCAVATION, LOTS OF H_2O IN EXCAVATION. WILL NEED TO EXCAVATE BEHIND DAM TO KEEP WATER OUT OF TRUCKS.

- TO PWWTF, LINER ON CONT. SOIL STOCKPILE IS GONE. PUMPING WATER OFF LINER THAT REMAINS (CLEAN, NO SHEEN) ON TOP OF LINER.

- SEI GETTING PIPING TO PUMP CONT. WATER TO DECON PAD.

- TO BLDG. H+I, BLDG H IS LOOKING GOOD -- DEBRIS HAS BEEN REMOVED. STILL NEED TO CLEAN FLOOR AND VALVES/PIPING.

* WEATHER TODAY - OVERCAST, RAIN, TEMPS 35-45°F, SOUTH WINDS 10-25 mph *

- BACK TO OFFICE, WORKING ON LABELING DATA FOR QUICK TAT (WASTE MGMT. DECISIONS).

1200 - TO DECON PAD. WATER FROM SOIL STOCKPILE IS PLUGGING UP FILTERS, SLOWING WATER TREATMENT DOWN.

10/23/00 EMD

1230 - COLLECT TREATED WATER SAMPLE AT 10,000 GALLON MILESTONE.

2 x 1L DRO
2 x 1L PAH
3 x 40ml BTEX
} AM-A506701

3 x 40ml BTEX (TRIP BLANK) - AM-A506702

- WATER IS TURBID, BROWN - NO SHEEN OR ODOR OBSERVED
- WILL SHUT TREATMENT SYSTEM DOWN AND LET WATER/SED SETTLE FOR A DAY.
- GATHERING GEAR TO SAMPLE CONTENTS OF 4 TRANSFORMERS FROM BALLYHOO
  - TRANSFORMER 1, VAULT 1
  - TRANSFORMER 2, VAULT 1
  - TRANSFORMER 3, VAULT 2
  - TRANSFORMER 4, VAULT 3

1400 - COLLECT TRANSFORMER OIL SAMPLE FROM TRANSFORMER 1, VAULT 1

1 x 4oz OBS/PCBs (AM-A506703)

- VERY LITTLE OIL IN TRANSFORMER (APPEARS ALMOST EMPTY)
- ONLY ABLE TO GET 1/2 JAR FULL.
- TRANSFORMER IS UPSIDE-DOWN IN OVERPACK (85-GALLON)

1430 - COLLECT TRANSFORMER OIL SAMPLE FROM TRANSFORMER 2, VAULT 1

1 x 4oz OBS/PCBs (AM-A506704)

10/23/00 EMD

[illegible] - (CONT.) TRANSFORMER 2, VAULT 1

[illegible] - TRANSFORMER IS FULL OF OIL INSIDE AN 85-GALLON OVERPACK

[illegible] - COLLECT TRANSFORMER OIL SAMPLE FROM TRANSFORMER 4, VAULT 3

1 x 4oz OBS/PCBs (AM-A506705)

- SAMPLE COLLECTED FROM 55-GALLON DRUM (OIL/WATER WAS TRANSFERRED FROM TRANSFORMER TO DRUM PREVIOUSLY)
- APPEARS TO BE SOME WATER WITH OIL.

[illegible] - OPENED TRANSFORMER 3, VAULT 2 (OVERPACK). NO OIL PRESENT IN TRANSFORMER CAN, BUT SOME RESIDUE/SLUDGE.

- COLLECT SLUDGE/RESIDUE SAMPLE

1 x 8oz PCBs (AM-A506706)

- ONLY ABLE TO GET ABOUT 10% OF JAR FULL ~ MAY NOT BE SUFFICIENT VOLUME.

1600 - TO BLDG. 627 EXCAVATION

- EXCAVATED 14 TRUCKLOADS SO FAR; PER SKIP, WILL STOP AT 500 CY TOTAL.
- [illegible] CLOSED DOORS TO VALVE HOUSES H & I. BRIAN TRACED LINE 215 TO BRICK NAVY HOUSE, LINE [illegible]S/DISAPPEARS THERE. SHOULD NOT IMPACT DRAINING LINE 214.
- [illegible]EATHER COLLECTING CONF. SAMPLES FROM 627 EXCAVATION.

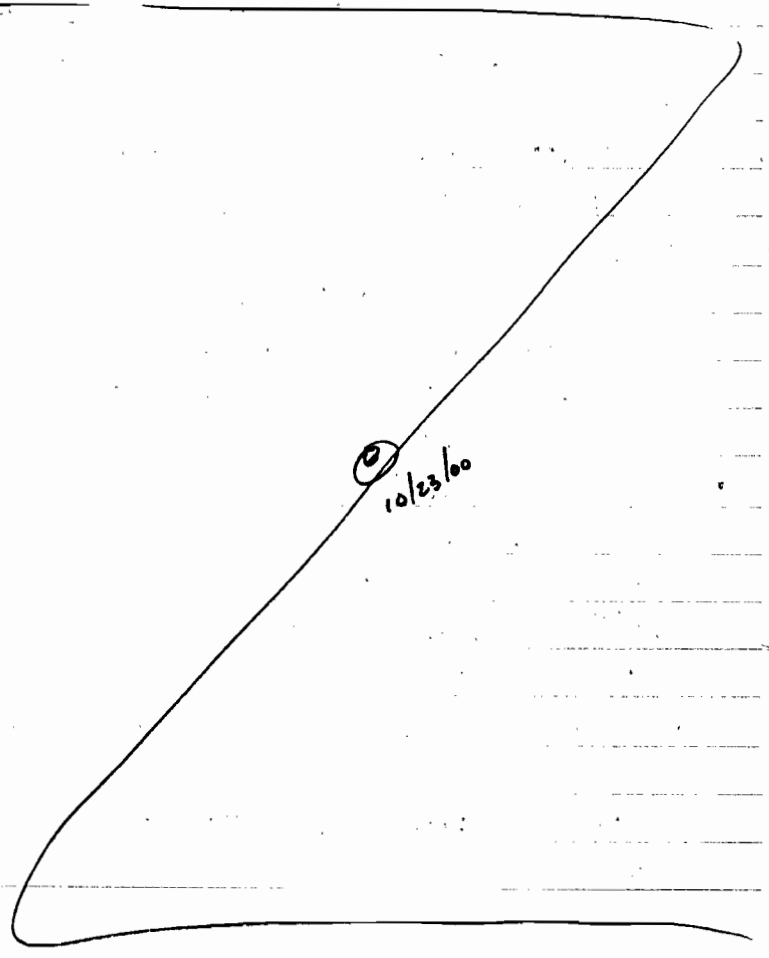
10/23/00 EMO

1700 - RETURN TO OFFICE

- WEATHER IS VERY POOR NOW; SOUTH WINDS 20-30 KNOTS, HEAVY RAIN. WILL BE UNABLE TO COVER STOCKPILE TONIGHT.

1730 - SAMPLE CONTROL

1800 - SIGN OFF LOG



10/24/00 EMO

0700 - SIGN ON LOG

- DAILY REPORT; SKIP DOING SITREP

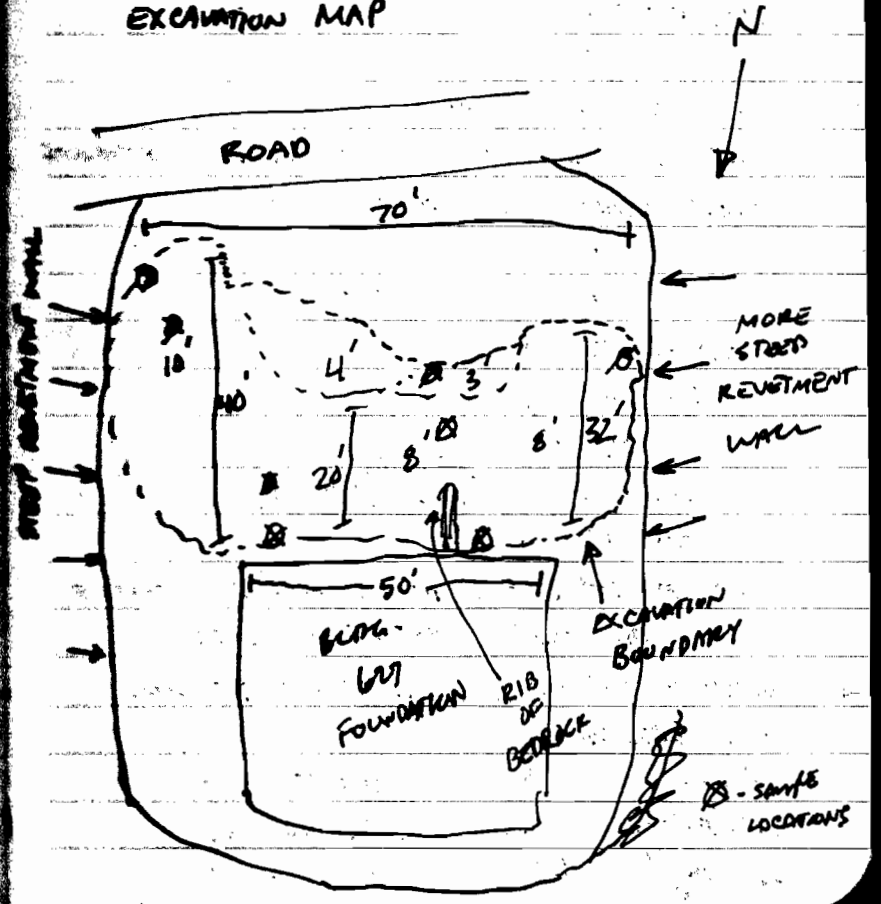
0800 - TAILGATE SAFETY MEETING

- PLAN FOR DAY: COVER STOCKPILE 6, UNCOVER P214, SAMPLE ROCKY POINT SEEPS

- LOAD SW SAMPLING GEAR.

0930 - ARRIVE AT BUILDING 627

EXCAVATION MAP



10/24/00 EMM

0955 - ARRIVE AT SEEP-3-SW (ROCKY POINT)

- SET UP SAMPLING GEAR, CALIBRATE (AUTO) HORIBA U-10

1015 - FIELD PARAMETERS AT SEEP-3-SW

pH (s.u.) = 5.50
S.C. ($\frac{mS}{cm}$) = 0.154
D.O. ($\frac{mg}{l}$) = 17.70
TEMP (°C) = 5.3
TURB (NTU) = 82
SAL (‰) = 0.0

1020 - COLLECT SAMPLE AT SEEP-3-SW

- WATER IS CLEAR, STRONG ODOR OF DEGRADED HYDROCARBONS

NO SHEEN OBSERVED; SEEP FLOWING 10-15 gpm

2 x 1L DRO/RRO
2 x 1L PAH
3 x 40ml VOCs
3 x 40ml GRO
1 x 1L Pb
} AM-A506901

3 x 40ml VOCs
3 x 40ml GRO
} AM-~~A506901~~ A507201

- LOOKING FOR SEEP BY PZ1; NEED TO WAIT FOR NEGATIVE TIDE, NOT READILY VISIBLE (2 HOURS AFTER 0.8' LOW TIDE).

1130 - ARRIVE AT NW SEEP; RIGHT BY ANDERSON FACILITIES.

FIELD PARAMETERS

pH (s.u.) = 6.38
S.C. (mS/cm) = 0.212
D.O. (mg/l) = 18.33
TEMP (°C) = 4.9
TURB (NTU) = 61
SAL (‰) = 0.0

10/24/00 EMM

1200 - COLLECT SAMPLE FROM NW SEEP

- WATER IS CLEAR, NO ODOR OR SHEEN

2 x 1L DRO/RRO
2 x 1L PAH
3 x 40ml VOCs
3 x 40ml GRO
1 x 1L Pb
} AM-A506902

1205 SAA A507001 (AM-A506403 FIELD DUPLICATE)

SAA @ 1200 A507201 (AM-A506805 QA)

SEEP IS FLOWING @ 10 GPM

1225 - LUNCH

1235 - BACK TO ROCKY POINT

- LOOKING FOR SPRING B (GPS WAYPOINT CODE RPSPRB); LOCATED SEEP FINALLY!

1255 - SEEP/SPRING IS RIGHT NEAR WATERS EDGE

FIELD PARAMETERS

pH (s.u.) = 8.05
S.C. (mS/cm) = 0.255
D.O. (mg/l) = NOT WORKING
TEMP (°C) = 5.1
TURB (NTU) = 0.0
SAL (‰) = 0.0

1420 - COLLECT WATER SAMPLE

- WATER IS CLEAR, NO ODOR OR SHEEN OBSERVED

10/24/00 EMN

1420 - SPRING B (CONT.)

~~2 x 2~~ 10/24/00

2 x 1L DRO/RRO
2 x 1L PAH
3 x 40ml GRO
3 x 40ml VOCs
1 x 1L Pb
} A507002 AM-~~A506904~~ 10/24/00

1435 - BACK TO VAN

1505 - ARRIVE AT SEEP 4-SW (ROCKY POINT) BY ANDERSON SOIL STOCKPILE CELL (NEAR NORTH END).

- FIELD PARAMETERS

pH (S.U.) = 6.58
S.C. ($\frac{mS}{cm}$) = 0.255
D.O. ($\frac{mg}{L}$) = NOT WORKING
TEMP (°C) = 6.7
TURB (NTU) = 0.0
SAL (‰) = 0.0

SEEP IS FLOWING ABOUT 2 GPM

1515 - COLLECT SW SAMPLE AT SEEP-4-SW

2 x 1L DRO/RRO
2 x 1L PAH
3 x 40ml VOCs
3 x 40ml GRO
1 x 1L Pb
} AM-~~A506905~~ 507101 10/24/00

WATER IS CLEAR, SLIGHT FUEL ODOR, NO PBT. HYDROCARBON SHEEN OBSERVED

10/24/00 EMN

1600 - LOCATED SEEP AT APL YARD, JUST WEST OF TANK 10. WATER IS SEEPING OUT OF BEDROCK IN THE TANK 10 REVETMENT. SEEP LOCATED ~30' FROM TANK.

GPS WAYPOINT CODE RPST10

- WATER FLOWING ABOUT 2 gpm.
- FIELD PARAMETERS

pH (S.U.) = 5.05
S.C. ($\frac{mS}{cm}$) = 0.210
D.O. ($\frac{mg}{l}$) = 11.87 (RECALIBRATED INSTRUMENT WORKING OK NOW)
TEMP (°C) = 8.0
TURB (NTU) = 9
SAL (‰) = 0.0

1615 - COLLECT SW SAMPLE AT TANK 10 SEEP (ROCKY POINT)

2 x 1L DRO/RRO
2 x 1L PAH
3 x 40ml VOCs
3 x 40ml GRO
1 x 1L Pb
} AM-A507102

- ROCKS ARE IRON STAINED THOUGH WATER IS CLEAR, NON-TURBID, NO ODOR OR SHEEN.

1630 - HEAD BACK TO OFFICE.

* WEATHER - PARTLY CLOUDY, SW WINDS 5-15 mph, TEMPS 40-45°F, OCC. RAIN SHOWERS *

- SAMPLE CONTROL

2100 - SIGN OFF LOG

10/24/00

10/25/00 EMD

0700 - SIGN ON LOG

- DAILY REPORT

0800 - TAILGATE SAFETY MEETING, SPA FOR TRANSFORMER REMOVAL

0900 - PACKING COOLERS FOR SHIPMENT

- SHIPPED 3 COOLERS TO STLA
- " 1 COOLER TO DCHM
- " 1 COOLER TO LTL

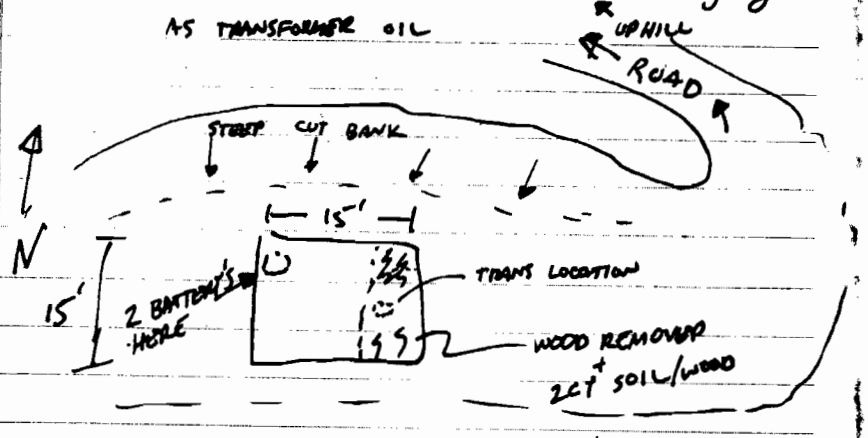
- JENNY FAXED AIR WAYBILLS AND CoCs TO LABS

1200 - READYING GEAR FOR SOIL SAMPLING

1245 - ARRIVE AT STAND ALONE TRANSFORMER SITE

- SCI HAS PUT TRANSFORMER AND OIL-SOAKED WOOD INTO CONTAINERS (OVERPACK AND SUPERSACKS) BATTERY ALSO INTO SUPERSACK. EXCAVATED 2CY OF VISIBLY STAINED SOIL AND WOOD. UNABLE TO EXCAVATE MORE SOILS UNTIL BLDG IS REMOVED.

HANDY AT BOTTOM OF EXCAVATION = 1,000 mg/kg AS TRANSFORMER OIL



10/25/00 EMD

1420 - COLLECTED SOIL SAMPLE DIRECTLY BENEATH WHERE TRANSFORMER WAS. SOIL IS A SANDY GRAVEL, VERY FEW FINES. 1.0' BGS

1x 8oz PCBs
1x 8oz DRO/RRO
} AM-A507301 (4 @ lab)

1425 - COLLECTED SOIL SAMPLE DIRECTLY BENEATH WHERE BATTERIES WERE LOCATED

1x 8oz METALS (AM-A507302) (4 @ lab)

- HEADING TO DRUM LOCATIONS

1455 - ARRIVE AT LOCATION WHERE 2 DRUMS WERE REMOVED. GPS WAYPOINT CODE BHODR1

1500 - COLLECT SOIL SAMPLE WHERE 2 DRUMS REMOVED

1x 8oz DRO/RRO/PAHs
1x 8oz PCBs/RCRA METALS + Zn
1x 4oz GRO
1x 4oz VOCs/BTEX
} AM-A507403

1x 4oz GRO (TRIP BLANK) (AM-A507404)
1x 4oz VOCs/BTEX (TRIP BLANK) (AM-A507405)
1x 8oz DRO/RRO PCB + Zn (DUPLICATE) (AM-A507406)
1x 8oz DRO/RRO PCB + Zn (QA FR) (AM-A507501) (AM-A507407)

- SOIL IS A SAND WITH SOME FINES, SOME RUST FLAKES, NO APPARENT ODOR. 0-6" BGS

1510 - COLLECT SOIL SAMPLE NEAR OLD PAINT SHOP WHERE ONE DRUM WAS REMOVED

GPS WAY POINT CODE BHODR2

10/25/00 EMO

1510 - DRUM LOCATION AT PAINT SHOP (CONT.)

1x8oz DRO/RRO/PAHs
1x8oz PCBs/RCRA METALS
1x4oz VOCs/BTEX
1x4oz GRO
} AM-A507407

-SOIL IS A SAND WITH SOME FINES AND RUSTY FLAKES NO ODOR OBSERVED. 0-6" BGS

1515 - COLLECT TOC FROM WITHIN 10' OF DRUM LOCATION 2
1x4oz AM-A507408 0-6" BGS

1520 - COLLECT TOC FROM WITHIN 10' OF DRUM LOCATION 1
1x4oz AM-A507409 0-6" BGS

1525 - HEAD TO BLDG. H ; STAKED STANDPIPE

1550 - COLLECT TOC FROM SOIL NEAR BLDG. A TRANSFORMER VAULT (0-6" BGS)
1x8oz (AM-A507410)
GPS WAYPOINT CODE BHOATV

1555 - COLLECT TOC FROM SOIL NEAR BLDG. B TRANSFORMER VAULT (0-6" BGS)
1x8oz (AM-A507411)
GPS WAY POINT BHOBTV

1605 - STAKE AND GPS TEST PIT AT POTENTIAL BOMB SHELTER UST BHOBSH

1610 - STAKE AND GPS BLDG C T.V. BHOCTV

1612 - COLLECT TOC AT SAME (0-6" BGS)
1x8oz (AM-A507412) PRIMARY 1x8oz (AM-A507
1x8oz (AM-A507413) DUPLICATE

10/25/00 EMO

1615 - STAKE AND GPS BLDG. C USTs BHOCUS

1620 - COLLECT TOC TO NORTH OF USTs (TOC1)
1x8oz (AM-A507414) 0-6"

1625 - COLLECT TOC TO SOUTH OF USTs (TOC2)
1x8oz (AM-A507415) 0-6"

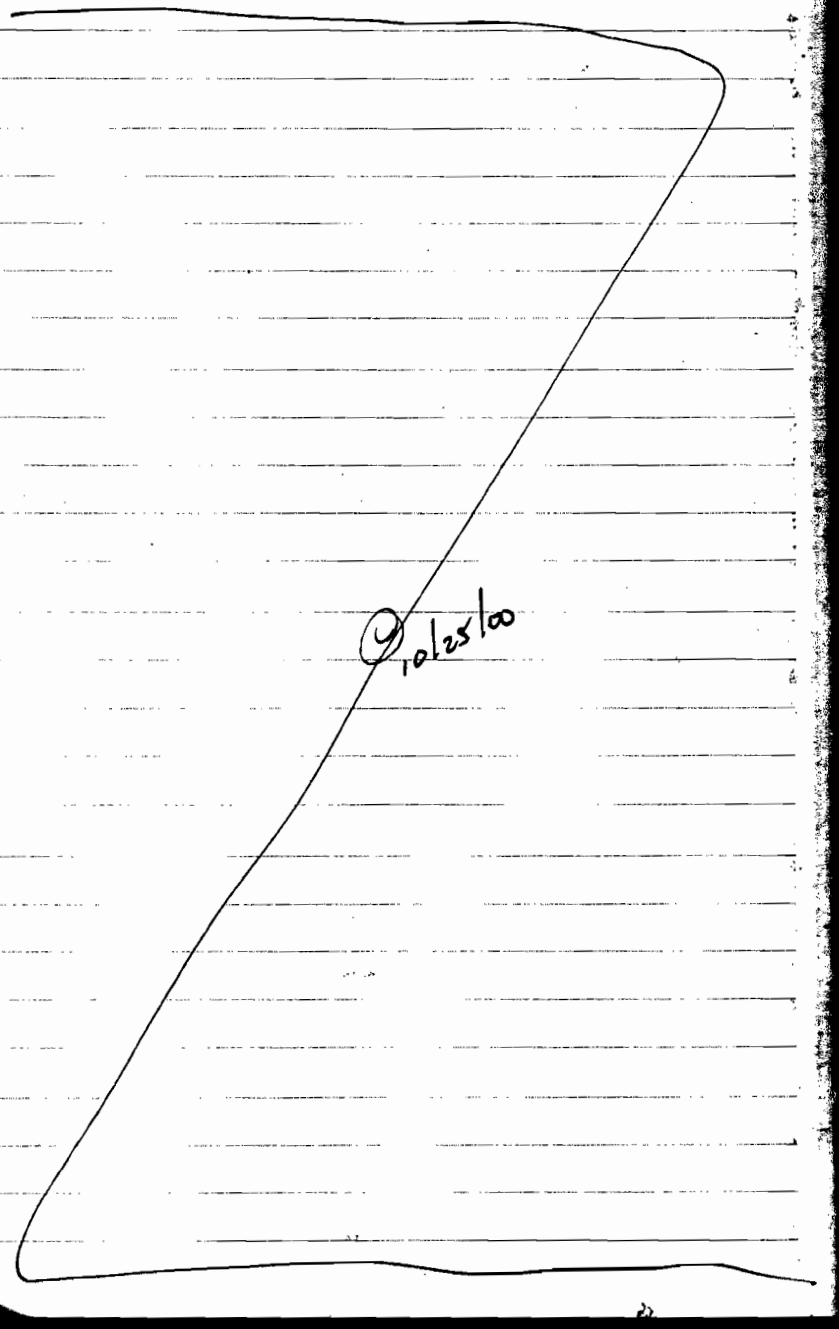
1635 - COLLECT TOC AT STAND ALONE TRANSFORMER AND BATTERY SITE (0-6")
1x8oz (AM-A507416)

-HEAD BACK TO OFFICE

1705 - UNLOAD GEAR *WEATHER-PARTLY CLOUDY, WARM WINDS UP TO 20 mph, TEMPS 40's-50's F

1745 - SIGN OFF LOG

10/25/00


Q 10.25/00

MEASUREMENT CONVERSIONS

"Rite in the Rain®"
ALL-WEATHER WRITING PAPER

Name Tom Bond
Heather McCune

Address

Phone 581-5777

Project Amaknak Island Wide
05M3022T (T22721 FD1)

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

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CONTENTS

REFERENCE	DATE
Eric's Cell 391-8903	
Kiwi's Cell 391-6817	
Buster's Cell 391-8910	
Rudy's Cell 391-8904	
OFFICE 581 5777	
" FAX 581 5797	
Address Margaret Bay Man Camp	
Dutch Harbor AK 99692	
P.O. Box # 92323	
#408 - FTS Apt Phone 581-5799	
Gloria's cell - 223-7870	

Purge rate ~ 1200 gpm 09/18/00

Well #	Time	WL
1A	1107	31.4
2667-MW1	1110	10.79
2664-WP1	1113	12.18
2664-MW2	1116	9.37
[illegible]	1119	9.48
[illegible]	1124	29.4
[illegible]	1128	10.82
2664 WP1	1131	12.19
2664 MW-2	1135	9.43
2664 MW-1	1137	9.49
1A	1141	29.4
2667 MW1	1143	10.86
2664 WP1	1146	12.2
UV2664 MW2	1148	9.42
UV2664 MW1	1151	9.49
1A	1153	29.4
2667 MW1	1156	10.88
2664 WP1	1158	12.2
2664 MW2	1200	9.42
2664 MW1	1202	9.49
1A	1206	29.4
2667 MW1	1208	10.89
2664 WP1	1210	12.2
2667 MW2	1213	9.42
2667 MW1	1216	9.50

Well #	Date	Time	WL	Time	WL	Time	WL	Time	WL	Time	WL	Time	WL	Time	WL	Time	WL
1A	9/18	1307	29.4	1407	29.4	1507	29.4	1607	29.4	1707	29.4	1807	29.4	2145	29.4	[illegible]	29.4
2667 MW1		1310	10.93	1410	10.97	1510	11.0	1610	11.02	1710	11.04	1810	11.06	2148	11.14	1405	11.22
2664WP01		1313	12.23	1413	12.24	1513	12.25	1613	1226	1713	12.27	1813	12.27	2151	DRY	—	—
2664 MW 2		1316	9.42	1416	9.43	1516	9.46	1616	9.47	1716	9.48	1816	9.50	2154	9.56	1407	9.70
2664 MW1		1319	9.35	1419	9.61	1519	9.62	1619	9.66	1719	9.70	1819	9.74	2157	9.8	1409	10.07

Well #	Date	Time	WL
1A	9/19	1100	29.4
2667 MW1		1103	10.99
2664 WP1		1106	12.2
2664 MW2		1109	9.42
2664 MW1		1112	9.49
1A		1115	29.4
2667 MW1		1118	10.89
2664 WP1		1121	12.2
2664 MW2		1124	9.42
2664 MW1		1127	9.49
1A		1130	29.4
2667 MW1		1133	10.89
2664 WP1		1136	12.2
2664 MW2		1139	9.42
2664 MW1		1142	9.49
1A		1145	29.4
2667 MW1		1148	10.89
2664 WP1		1151	12.2
2664 MW2		1154	9.42
2664 MW1		1157	9.49
1A		1200	29.4
2667 MW1		1203	10.89
2664 WP1		1206	12.2
2664 MW2		1209	9.42
2664 MW1		1212	9.49
1A		1215	29.4
2667 MW1		1218	10.89
2664 WP1		1221	12.2
2664 MW2		1224	9.42
2664 MW1		1227	9.49
1A		1230	29.4
2667 MW1		1233	10.89
2664 WP1		1236	12.2
2664 MW2		1239	9.42
2664 MW1		1242	9.49
1A		1245	29.4
2667 MW1		1248	10.89
2664 WP1		1251	12.2
2664 MW2		1254	9.42
2664 MW1		1257	9.49
1A		1300	29.4
2667 MW1		1303	10.89
2664 WP1		1306	12.2
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2664 MW1		1312	9.49
1A		1315	29.4
2667 MW1		1318	10.89
2664 WP1		1321	12.2
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2664 MW1		1327	9.49
1A		1330	29.4
2667 MW1		1333	10.89
2664 WP1		1336	12.2
2664 MW2		1339	9.42
2664 MW1		1342	9.49
1A		1345	29.4
2667 MW1		1348	10.89
2664 WP1		1351	12.2
2664 MW2		1354	9.42
2664 MW1		1357	9.49
1A		1400	29.4
2667 MW1		1403	10.89
2664 WP1		1406	12.2
2664 MW2		1409	9.42
2664 MW1		1412	9.49
1A		1415	29.4
2667 MW1		1418	10.89
2664 WP1		1421	12.2
2664 MW2		1424	9.42
2664 MW1		1427	9.49
1A		1430	29.4
2667 MW1		1433	10.89
2664 WP1		1436	12.2
2664 MW2		1439	9.42
2664 MW1		1442	9.49
1A		1445	29.4
2667 MW1		1448	10.89
2664 WP1		1451	12.2
2664 MW2		1454	9.42
2664 MW1		1457	9.49
1A		1500	29.4
2667 MW1		1503	10.89
2664 WP1		1506	12.2
2664 MW2		1509	9.42
2664 MW1		1512	9.49
1A		1515	29.4
2667 MW1		1518	10.89
2664 WP1		1521	12.2
2664 MW2		1524	9.42
2664 MW1		1527	9.49
1A		1530	29.4
2667 MW1		1533	10.89
2664 WP1		1536	12.2
2664 MW2		1539	9.42
2664 MW1		1542	9.49
1A		1545	29.4
2667 MW1		1548	10.89
2664 WP1		1551	12.2
2664 MW2		1554	9.42
2664 MW1		1557	9.49
1A		1600	29.4
2667 MW1		1603	10.89
2664 WP1		1606	12.2
2664 MW2		1609	9.42
2664 MW1		1612	9.49
1A		1615	29.4
2667 MW1		1618	10.89
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1A		1630	29.4
2667 MW1		1633	10.89
2664 WP1		1636	12.2
2664 MW2		1639	9.42
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1A		1800	29.4
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2664 MW1		1812	9.49
1A		1815	29.4
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2664 MW1		1827	9.49
1A		1830	29.4
2667 MW1		1833	10.89
2664 WP1		1836	12.2
2664 MW2		1839	9.42
2664 MW1		1842	9.49
1A		1845	29.4
2667 MW1		1848	10.89
2664 WP1		1851	12.2
2664 MW2		1854	9.42
2664 MW1		1857	9.49
1A		1900	29.4
2667 MW1		1903	10.89
2664 WP1		1906	12.2
2664 MW2		1909	9.42
2664 MW1		1912	9.49
1A		1915	29.4
2667 MW1		1918	10.89
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2664 MW2		1924	9.42
2664 MW1		1927	9.49
1A		1930	29.4
2667 MW1		1933	10.89
2664 WP1		1936	12.2
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2664 MW1		1942	9.49
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1A		2000	29.4
2667 MW1		2003	10.89
2664 WP1		2006	12.2
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1A		2015	29.4
2667 MW1		2018	10.89
2664 WP1		2021	12.2
2664 MW2		2024	9.42
2664 MW1		2027	9.49
1A		2030	29.4
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2664 MW1		2042	9.49
1A		2045	29.4
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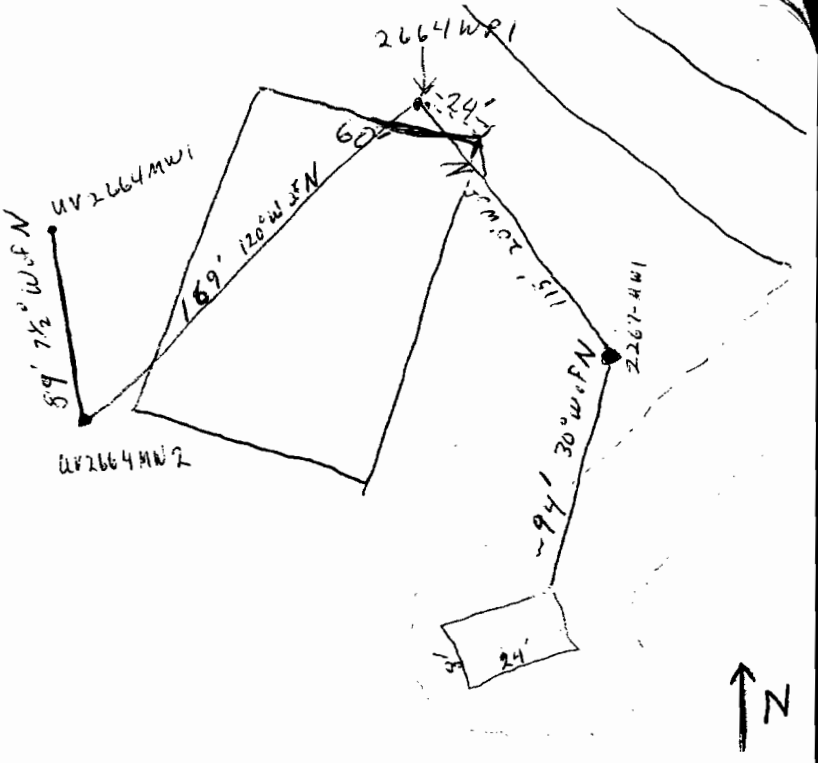
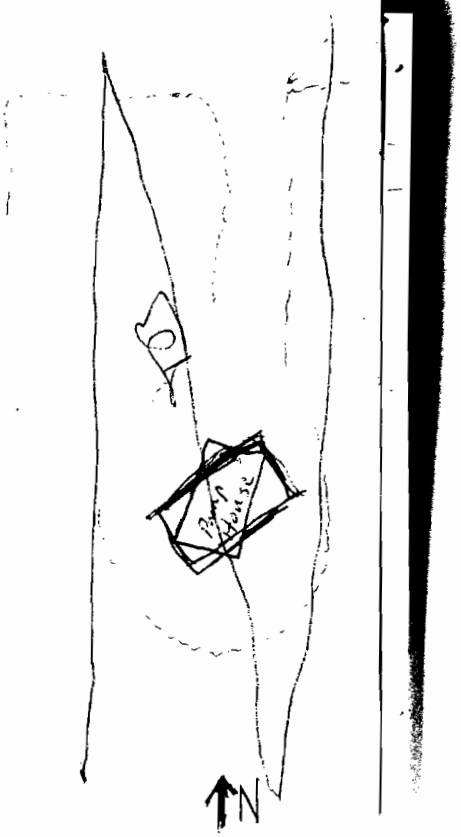
2664 MW2		2309	9.42
2664 MW1		2312	9.49
1A		2315	29.4
2667 MW1		2318	10.89
2664 WP1		2321	12.2
2664 MW2		2324	9.42
2664 MW1		2327	9.49
1A		2330	29.4
2667 MW1		2333	10.89
2664 WP1		2336	12.2
2664 MW2		2339	9.42
2664 MW1		2342	9.49
1A		2345	29.4
2667 MW1		2348	10.89
2664 WP1		2351	12.2
2664 MW2		2354	9.42
2664 MW1		2357	9.49


2664MW1
24'
60°
UV2664MW1
N 59° 7½' W of N
169' 120° W of N
UV2664MW2
115' 30° W of N
2267-4W1
~94' 30° W of N
24'
N


Pump House
N

09/19/00 Overcast, drizzle and 50°F

09/19/2000
0600 Leave for ~~Office~~ 1A to take H_2O levels
0635 Back at trailer prepping to ship samples
0800 H&S at HAVE Unit
0845 Back prepping to Sample 1A, 2667MW1, 2664MW2 & 2664WP1.

1015 Start purge with peristaltic at 2667MW1

1045 Parameters		1050	1055
pH	6.38	6.37	6.38
Cond	204 µs/cm	205	204
Turb	~~B 76.2~~ 0.71	~~B 00~~ 0.65	0.49
Temp	5.8°C NTU	8.8	8.7
D.O	1.90 mg/L	1.90	1.89
Sal	0.0	0.0	0.0

1100 Parameters in Sample 2667MW1
Sample # AM-A502301 for DRO & BAH TD-17.33 Purge Volume 4 gallons
1110 Sample 1A- #AMA502302 For DRO & PAH
1120 Pump shut down
Larry said well was drawing air & that the sensor in 1A was not working still read 29.4 when removed from well. They are going to replace sensor & pump again.
1200 Started pumping WL 31.8'
1228 W.L reads 29.5 & has been there for quite awhile. When Larry raised cable no difference was noted. They are going to get lunch & the recalibrate to see

if we can get a more accurate reading. Starting to note some small air bubbles in gage. Going to sample MW2 (2664)

1244 2664 MW2 WL 9.93

TD 171

1254 Start purge

Parameter	Reading 1300	Time 1305	Reading 1310		1315
pH	6.43		6.47	6.50	6.50
Conductivity	199		201 uS/cm	201	201
D.O.	0.59		0.79	0.81	0.84
Turbidity	24.5		2.32	1.25	0.50
Temperature	9.3°C		9.4°C	9.4	9.4
Salinity	0.0		0.0	0.0	0.0

1320 Sample AM-A502400 PAH & DRO Well # 2664 MW2

1340 Finished packing up Have 3 gal of purge water from this well

1350 At pump house 1A reads 29.5 but is drawing lots of air. Larry asked if I'd seen Jim & said he'd check on calibration. When they're done I'll start taking water levels

1452 Jim back w/ calibrated drawdown instrument reading went From 29.5 to 11.2 when they switched them out

14:59:30 11.2 Kicked pumps off

15:00 30 13.0

1501 30 13.2

1502 - 13.2

1503 - 13.3

10/15/2000 KKen

0700 arrive at office
prepare 10/13/00 samples for shipment and sample kits for Eric, Kiwi & myself

0800 tailgate

0820 continue

0920 samples to Coldstreak (windy)

1000 mob to Upper Unalaska Valley 165th Road & Ugadaga Road
UST 3760

1130 collect WW samples
DRO/RRO/PAH/VOC
2xL 2xL 3x 40ml
AM-A-506001
AM-A506002 trip Blank

1230 collect sludge samples
VOC/PCB/metals - 1 oz
AM-A505602 (3 jars)
trip Blank AM-505602
from 10/13/00

1330 leave valley for field office to shuffle vehicles, samples, email, buy gas

1430 leave for UST 3065

1520 check on Kiwi at HVE site

1600 mob box UST 3075 collect SW, SE, so samples w/ Erica

1800 leave office

1820 begin work at home - sample mgmt 2200 finish

	Time	WL	Time	WL	Time	WL	Time	WL	Time	WL	Time	WL	Time	WL
A	1503	13.3	1519	13.5	1530	13.5	1541	13.5	1553	13.5	1604	13.6	1800	13.6
22L2MW1	1506	11.41	1522	11.48	1533	11.38	1544	11.37	1556	11.35	1607	11.31	1803	11.29
22L4MW2	1509	9.99	1525	9.99	1536	9.99	1547	10.0	1559	9.99	1710	10.01	1806	10.02
22L4MW1	1512	10.41	1528	10.47	1539	10.45	1550	10.44	1602	10.44	1713	10.41	1809	10.39
22L4MW01	-	Dry				Dry		Dry		Dry		Dry		Dry

10/10/00 Tuesday

[illegible] Geophysics [illegible] visit
[illegible] with [illegible] for small
[illegible] team

[illegible]
[illegible] meeting to review schedule
0930 put samples to go to Anchorage,
label numbers
0945 [illegible] to deliver
samples
1030 Alaska Ship Supply to buy hat
pin thank note. Office to try to call
Tina. Phone out from Gus w/ Js
1130 [illegible] to Upper Matsca Valley
to look for tin stone. can't
reach him on phone
1350 thank staff in culvert detail
1415 Jules back. Note Details to final
Evie
1445 ship board & try to call Anchorage
can't use phone at store
1500 field office going to hand back
off to valley & when won't start
1515 Kevin gives me a ride to Chuitna
Rd
1530 Leave Chuitna Road
1830 Home.
2100 work on logs & AGT Exc 0.5 hours

10/11/00 Wednesday

0800 [illegible] office, print off stone
labels, [illegible] lab data sorted
for small batches
[illegible]
0830 pack samples to go to Lab
1000 at airport to deliver
1045 Motel to store field with
Tina & Brady Hess
1115 Tina & Brady leave for
Ridge. Excavate until
Screening shows soils stream
along South and southwest
walls & electric utility line
borders north wall. Old
foundation borders northeast
wall. Most excavating
takes place on south side of
electric utility line & N-S
trending [illegible] range from 10 cm
to bottom during stream.
1500 collect South west wall sample
0-20 cm
1510 collect Floor Sample
20-30 cm
1520 collect South wall sample
10-20 cm

10/17/00 kram cont.

all Handy's (PID shows no contamination (0.0 ppm), except at sta wall Handby shows < 10 ppm Gasoline or Diesel.

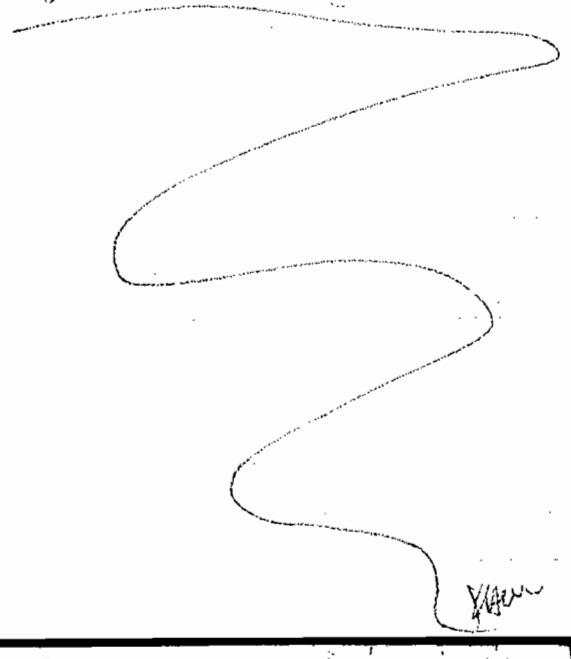
1530 Finish grading excavation work of electric utility line.

1600 collecting final confirm samples (after backfill complete) material

Line w/ hand auger at 2 ft bgs

2 more samples @ corners of excavation

backfill electric utility trench



10/18/00 kram

0600 begin work - AST & EDMS

0630 office to print COCs & labels

0700 rest of staff (except Randy who is already here) arrives

0800 tailgate

0820 calibrate PID, label and pack coolers for shipment

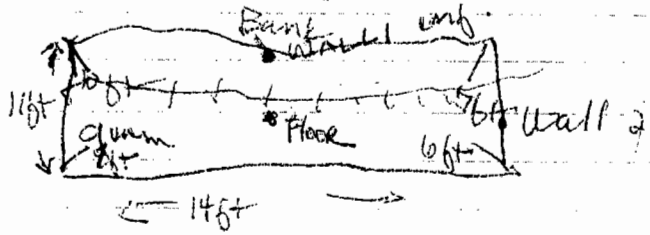
1030 coolers packed, email

1100 Goldstreak

1130 mob TRC w/ Randy to site Billy 2566

under driveway, soil excavate is gravelly w/ huge boulders in it - material in back native soil sandy

collect 3 confirmation samples Handby 0, 0 < 10 ppm



PID response 0-50 ppm.

pulled out piece of creosoted wood

25 truckloads contam. soil

5 cuyds clean

13 hrs

0700 arrive at office, email & communicate w/ Eric regarding sample management

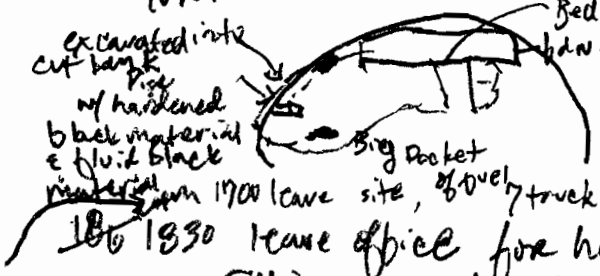
0800 tailgate

0815 begin to get ready for field work - calibrating PID, restocking Handbag kit

0930 Eric & I drive to Bldg 2766 ~~Bldg to~~ from to check on backfill

1000 Eric & I back to office to prepare for sampling at decon pad

1230 Arrive at Bldg 2666 ~~from~~ 637 to begin excavation - everything visibly stained or smells like fuel. PID readings low.



photos taken of these items

1700 leave site, 6 fuel, 7 truck loads, collected one ESTCP sample PCB/lead

1830 leave office for home

Filling temp blanks & cobitainers, organizing COCs, disposing of expired glassware

2100 finished working

1745 return to site to verify closed ~~fbwl~~ fencing properly

0645

0700 arrive at office, print COCs & labels, email, begin to transfer photos from c:/drive to ftp. site, talk to Kevin G. & Gloria, look for HVE AST

0800 TAilgate

0815 - more of above

1000 - arrive at Bldg 637, Southcoast crew still working at HVE site (stockpile).
- return to office

1145 return to Bldg 637 site

1150 starting w/ Truck #8 (W) one

1155 #9 (J) party

1200 #10 (W) collected estckpl sample (PCB/lead)

1205 #11 (J)

1210 #12 (W)

1210 8260 maybe PCB 8RCRA } talking w/ Gloria about what to submit drum sample who is waste suspected to be paint. going to? what do they want?

1226 #13 (J)

1236 #14 (W)

1235 collected sample from 0-2' bgs halfway along fdn ft RVR HandBag (leftaway)

PID reading ~ 2.0 ppm Handbag => 200 ppm

1237 recalibrating PID 103533

1245 #15 (J) - collected PCB (lead) DRO sample

10/20/00 kam cont

1303 #16 (W)
1310 #17 (J)
1323 #18 (W)
1329 #19 (J)
1345 #20 (W)
Backside of excavation along fdw wall is ~40ft in length, 10ft depth
Assuming ~ 40x10ft = 400 ft² = 2 samples

1405 #21 (J)
1445 (#22) J
1455 24 (W)
1535 25 (J) ~ PCB/lead sample
1555 26 (W)

Along fdw:
1449 Sidewall just above leftside of bedrock rib ~ 5ft bgs
2x 8oz
1x 4oz
1500 2nd sidewall sample 5ft bgs
2x 8oz x 3 (1°, QC, QA)
1x 4oz
1520 Floor Sample - just below 2nd sidewall sample
2x 8oz
1x 4oz kam 3-4 ft from sidewall

4 samples
1605 #27 (J)
1615 #28 (W)
1630 #29 (J)
1642 #30 (W)
1655 1 (J)
1705 2 (W)
~~1930 3 (J) kam~~
~~1930 4 (W) kam~~
~~1240 5 (J) kam~~

kam

10/23/00

[illegible] available email, fax, AST

[illegible] sample package for AST

[illegible] sample package for AST

[illegible] to the SE east still at 5'/6' backplate

1300 627 Truck #33 (J)

#34 (W)

1325 35 J sample

36 W

37 J

[illegible]

[illegible]

1415 40 (W)

tried to collect wall sample from middle - closer East wall. Excavator top 3-2 foot layers of soil before type of material being to collect wall sample from SE corner of excavation

1525 SE corner looks to be source of the [illegible] contaminated soil from the excavation. Extremely strong diesel odor coming from this area

[illegible] sampling [illegible] sample collected from 20 ft by

collected QA/QC for DRO/RRO

approximate depth of excavation is 12 ft

bgs

=36 Shop gives verbal approval for out [illegible] excavating "old" and starting the dirtiest part out & backfilling once water at bottom

41 J

[illegible]

43 J

44 W

1570 45 J

46 W

47 J

48 W

49 J

1620 50 W

1625 floor SE collected QA/QC for DRO/RRO

1635 West Wall

1645 S center floor (10 ft floor) (12 floor)

1645/5 South wall

10/30/00 KAm

calibrating pH/s.c/DOmeter

pH s = -54.1 mV/pH
E_0 = -10mV
SC s = 0.473/cm
DO s = 0.80 mg/L

4.0 → 4.01
7.0 → 6.98
10.0 → 10.01
1413 µs/cm → 1454 at 11.4°C

calibrating Hach 2100P turbidimeter

0-10 → 6.79 (6.57)
0-100 → 53.2 (52.3)
0-1000 → 525 (525)

KAm

10/31/00 KAm

0700 office, email, cleanup sample trailer & conex
0800 tailgate
0830 peak samples to go to QA lab
1000 ship samples to QA lab
1010 review samples collected for TOC, go over list of what needs to be collected yet that Eric & I made over a week ago
1030 talk w/ Kiwi & Dong about sampling white powder drums at decon pad
Now Eric suggests that today I should collect TOCs at 627 and Ft Mears Landfill South. Also offshore sediment samples at Ft Mears Landfill North & south if possible. consulting tide book shows that tides are not conducive but will check beach later when closer to a low tide
1130 give Eric ride to shop & to home to pick up gear & to airport
1145-1215 personal time
1215 pick Jenny up at airport

10/30/06 [illegible] cont

1230 trying to print ASTM for Oct sheet

1245 Neal Little arrives on site

1300 inventory handling waste.
3 x 5 gal buckets of carbon
[illegible] waste - talk w/ Gloria
about what to do with it. She
suggests - pass. Then soon to Skip
Neal will w/ backlog of old
sample containers + some of them
are from 1996-97
Path back to collect samples
arrive at bank to collect TOC
AM-A508301 TOC collected
1x4oz
1ft bgs
5 ft up from exc. surface

1445 AM-A508302 TOC collected 1x4oz
1ft bgs
Left up from excavation
surface

1430 arrive at Ft. Mears Landfill North
to check on possibility of collecting
offshore sediment samples. Tide
high - digging under big rocks and
not finding sediment will try again
during early morning hours.

10/31/06 [illegible] cont

1450 arrive at Ft. Mears Landfill
South - shore looks equally
problematic for collecting
sediment samples

1505 AM-A508303
1x4oz TOC collected
along underhang of bank -
below big rocks - fine root,
gravel - some brown materials
3 ft below grade 1ft into
Bank

1515
AM-A508304
1x4oz TOC collected as
above - 15 ft to the North
directly below test pit site.

1600 filling containers, deliver
to sample trailer - 3 coolers
full of coolers
loading more container backlog

1630 talk w/ Kevin about missing jar

1800 home

[illegible]

11/1/00 kam

0800 arrive at office - calibrate grids, cleaning out van - sorting thru faxes, e-mail

0830 tailgate meeting

0852 arrive at FH Myers Landfill to attempt to collect sediment samples. Lot title at 3/4 this pt.

0900 collect sediment sample from storm water ditch 3' (est) south of north end of WP1

1 x 4 oz AM-A5C8305
1 x 8 oz

0915 collect sediment sample - 75 ft south of WP1 soil sample
1 x 4 oz
1 x 8 oz AM-A5C8316

0925 arrive at FH Myers Landfill north

0940 collect sediment sample AM-A5C8317 north of well pt area 1x4oz 1x8oz

0950 collect sediment sample south of well pt area - AM-A5C8318

1000 helping Kiwi look for SL well pt - no luck

1100 met Joe Fort Leveroni to pick up

11/1/00 cont kam

drum and remove soil underneath.. will overpack drum and excavate visibly contaminated soil.
Run handby & collect laboratory confirmation samples to confirm contamination removed.
Randy, QHP, and (Southcoast Waypre/Paul) at site

drum has goopy, thick substance inside (small amt), on outside of drum, and on ground around it. Excavate area around drum (after collecting 1 x 4oz

1300 collect drum sample AM-A5C8309 --> jars of goo).

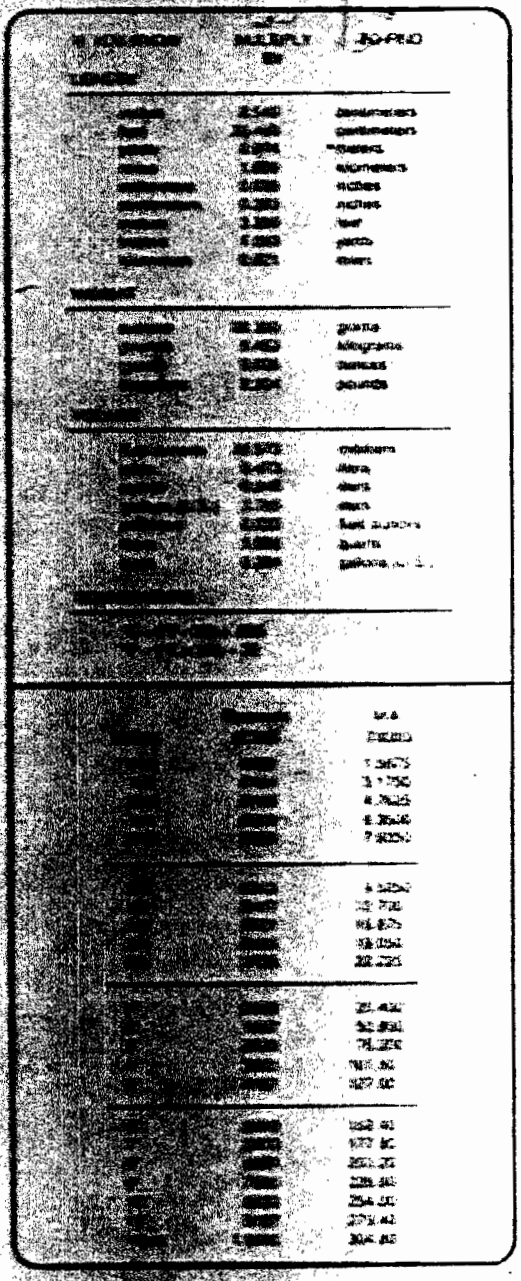
Find boards (rotten) and Handby > 1000 ppm after 6-12" excavation of area 1½ area of drum as it was found on its side (bullet holes 4oz). Run handby on soil from grid area to confirm positive readings are not from organic material - results

1330 collected 2 samples from under drum excavation - 5 drums of soil - Both

cont.
11/1/00 KAM
handbags <10 ppm. will submit only one to lab as per Eric Detmer (conversation 1400).
both samples 2 x 8oz
2 x 4oz

4m - ASL6316

MEASUREMENT CONVERSIONS



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CONTENTS

PAGE	REFERENCE	DATE

10/26/00 BMS

0700 - SIGN ON LOG

- DAILY REPORT

0800 - TAILGATE SAFETY MEETING

- SPA - PIPELINE DRAINING

0850 - PREP GEAR FOR SOIL SAMPLING / UST PROSPECTING

1010 - ARRIVE BLDG. B, MT. BALLYHOO

- WIND IS REALLY BLOWING ~40mph NW

- WILL USE PICK AXE AND SHOVEL TO EXPOSE UST

1055 - WEST END OF UST IS NOW FULLY EXPOSED ~~AND~~ VERY ROCKY MATERIAL, TOO ROCKY TO HAND AUGER VERY FAR

1100 - COLLECTED TOC SAMPLE FROM UNCONTAMINATED SOILS AT BUILDING B (2.0' BGS)

1x4oz TOC (AM-A507601) 1x4oz TOC (AM-A507602) ← DUPLICATE
1x4oz TOC (AM-A507503) ← QA FR

1130 - COLLECT SOIL SAMPLE 0.5-1.0' BELOW BOTTOM OF TANK ON WEST END (3.5-4.0' BGS)

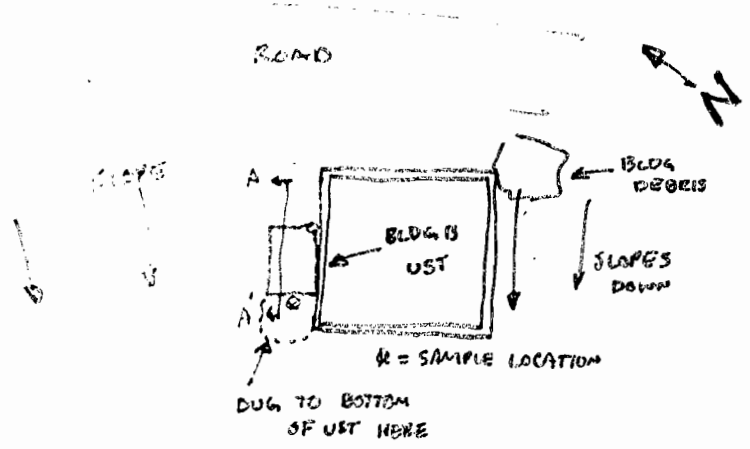
1x 8oz DRO/RRO
1x 8oz PAH/METALS ~~(+ SVOC)~~ Lead only ~~HIGH~~ AM-A507603
1x 4oz GRO
1x 4oz VOCs

- SOIL IS A SANDY GRAVEL, GRAVEL IS AN ANGULAR BROKEN ROCK 2-3" DIAMETER, SHALE
- SLIGHT FUEL ODOR
- SEE MAP NEXT PAGE

1145 - HEAD BACK DOWN HILL

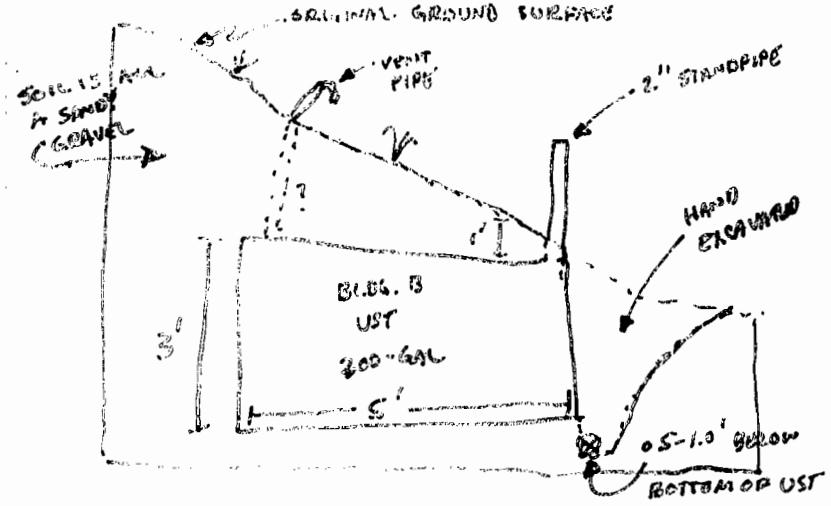
(2)

10/26/00 EMD



- TANK APPEARS TO BE A 300-GALLON UST
- NO FREE PRODUCT OBSERVED INSIDE

A-A' X-SECTION

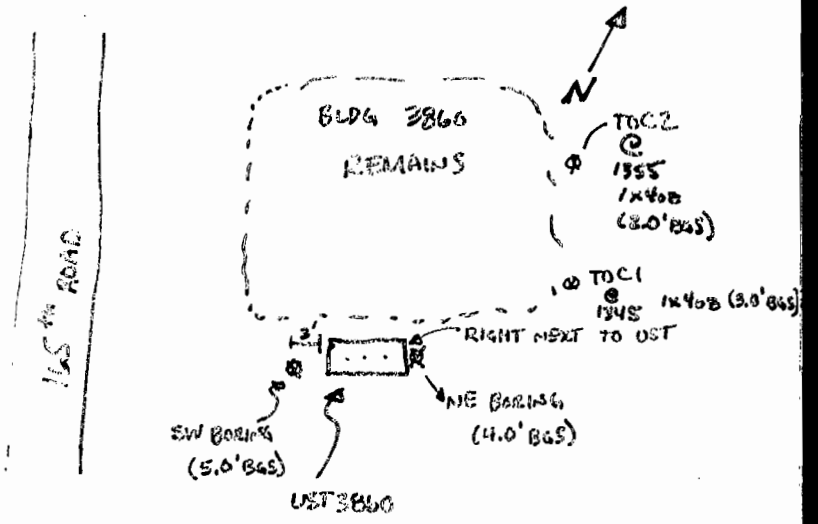


(3)

10/26/00 EMD

1320 - ARRIVE AT 165th ROAD; UST 3860 SITE

- WILL COLLECT SOIL SAMPLES BENEATH USTs W/ HAND AUGER.



1400 - BEGIN HAND AUGERING AT NE BORING

1430 - REACHED 4.0'BGS; REFUSAL

- SOIL IS AN ORGANIC SILT (ALL 4.0')
- STRONG FUEL ODOR THRUGHOUT
- TANK IS 6" BGS AND IS 3.0' IN DIAMETER
- SOIL IS FROM 0.5' BELOW THE BOTTOM OF THE TANK (RIGHT NEXT TO TANK)

1445 - COLLECT SOIL SAMPLE FROM NE BORING (4.0'BGS)

1 x 80z DRO/RRO/PAHs
1 x 40z VOCs
1 x 8oz PAHs
1 x 8oz DRO/RRO (AM-A507505)
1 x 8oz DRO/RRO (AM-A507504)

AM-A507604

(4)

Malibu

0900 - [illegible] on the beach

- [illegible] to [illegible] Road; restroom.

- [illegible] is measuring site; [illegible] is a [illegible] with [illegible] sand grains.

- [illegible], Env. Mgmt. Thousand Oaks

0915 - to meet [illegible] from Sun Bowl; 5.0 lbs

[illegible] Mo/[illegible]
[illegible] PAH
[illegible] VOCs
} AM - Agenda

- Weather unfit to van (had to walk, road washed out at creek)

- Lesson Beach.

0935 - Head back to office

Unload Gear, Access control.

- Discussion list of points for surveying.

- Weather today - overcast, wind winds to 20mph, [illegible] 59-62°F.

1130 - Meet with supervisor, go over list of sites to [illegible]

[illegible]

Malibu

(5)

Malibu

1200 - Start on lab

- Draft Report & Chain

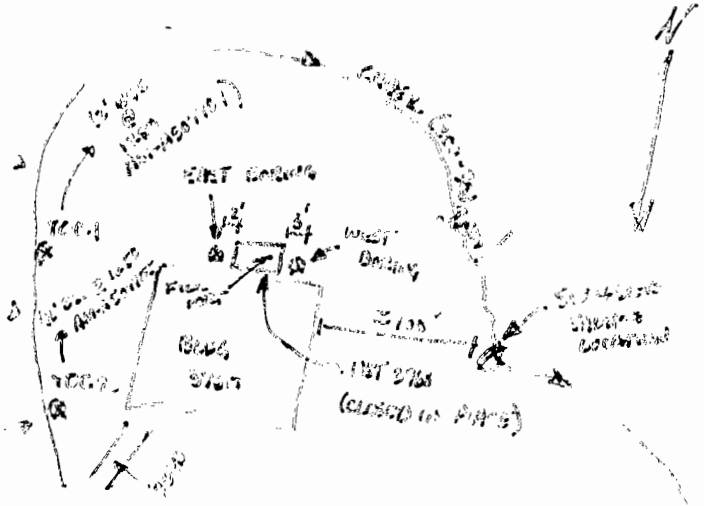
1400 - Telephone Expert Mention

- Sample Preparing on Testimonies Sampling

1430 - Pack Suitcases for Tour of a Fellowship

1500 - Depart to 45th Road; Gas up

1600 - Arrive at Last Sites


N
Creek
Sand Dune
Beach
Ocean
FIRST CORNER
WEST
Ocean
Sand Dune
Creek
Beach
Ocean
1000'
1000'
1000'

(6)

10/27/00

FIELD WORK [illegible]

[illegible]

[illegible]

[

10/27/00 EMD

1555 - PLD3-MW1 (CONT.)

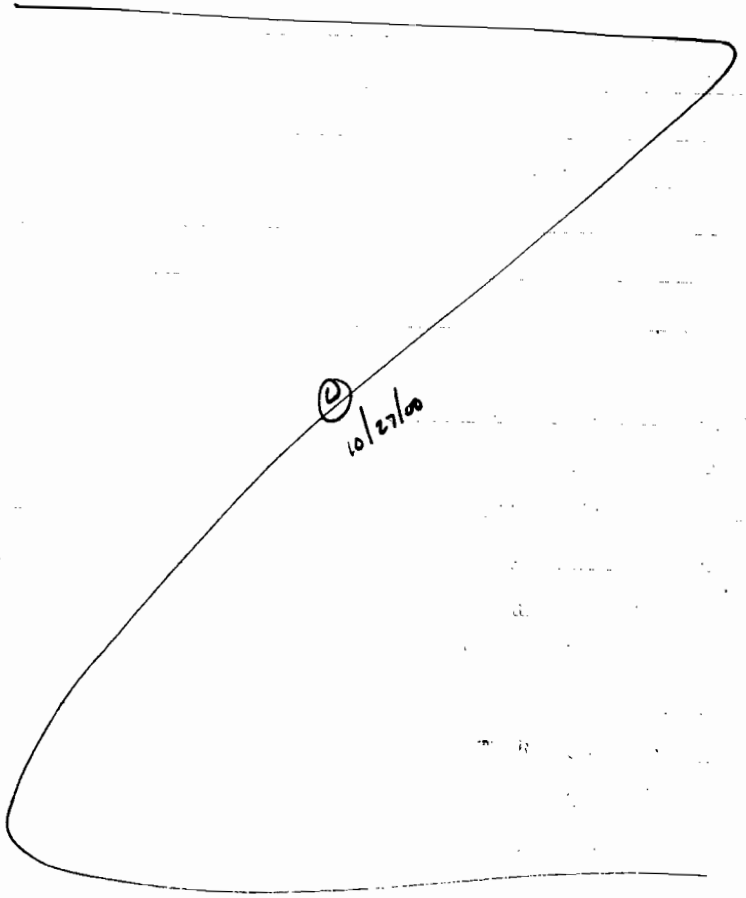
- WATER IS CLEAR AND NON TURBID. NO ODOR OR SHEEN OBSERVED.

- HEADING BACK TO OFFICE; DUMP 10 GAL H_2O AT DECON PAD

1700 - UNLOAD GEAR

- SAMPLE CONTROL; GO OVER EDMS WITH SKIP

1800 - SIGN OFF LOG



10/28/00 EMD

0700 - SIGN ON LOG

- DAILY REPORT

0800 - TAILGATE SAFETY MEETING

- SURVEYORS CANNOT FWD CONTROL POINTS, CONTINUE TODAY.

0910 - CALIBRATE ORION

SC: S = 0.476 µS/cm PER mV

D.O.: S = 0.76

pH: S = -57.2 mV/pH

E_D = -16

- LOAD UP VAN

0930 - DUMP 5 GALLONS DECON WATER AT DECON PAD

1005 - ARRIVE AT 3075-WP1

PID = 4.0 ppm

WL BTOC = 10.35'

TD BTOC = 12.45'

1022 - BEGIN PURGE; PURGE RATE ≈ 8 min/gal

MINUTES	15	19	23
pH (S.U.)	6.27	6.31	6.33
SC (µS/cm)	709	705	693
D.O. (mg/L)	0.67	0.59	0.52
TEMP (°C)	6.8	6.8	6.8
TURB (NTU)	12.7	1.02	0.96
SAL (PPT)	0.1	0.1	0.1

- BAILER FOUND AND REMOVED FROM WELL

(10)

10/28/00 EMO

1050 - COLLECT SAMPLE FROM 3075-WP1
- WATER IS CLEAR BUT HAS STRONG FUEL ODOR
- 2 x 1L DRO } AM-A507801
2 x 1L PAH }
1100 - ARRIVE AT 3065-WP1
PID = 15.0 ppm
~~WL BTOC = 5.15'~~
TD BTOC = 7.20'
1125 - BEGIN PURGE; 8 min/gal PURGE RATE
- LOTS OF SEDIMENT IN WELL POINT

MINUTES	10	17	20	23	26
pH(S.U.)	6.81	6.87	6.86	6.88	6.87
SC(µS/cm)	296	297	297	297	297
D.O.(mg/l)	1.99	1.96	2.02	2.01	2.04
TEMP(°C)	5.8	6.0	5.9	5.9	5.8
TURB(NTU)	15.3	14.5	~~15.0~~ 6.88	6.83	6.80
SAL(PPT)	0.0	0.0	0.0	0.0	0.0

1200 - COLLECT GW SAMPLE FROM 3065-WP1
- WATER IS CLEAR; SLIGHT FUEL ODOR, NO SHEEN
2x1L DRO/~~BRO~~ NAPHTHALENES } AM-A507802
2x1L PAH
3x40ml ~~VOCs~~ BTEX
3x40ml ~~VOCs~~ BTEX (AM-A507803) TRIP BLANK

(11) GW

10/28/00

1220 - COLLECT SW SAMPLE FROM CREEK BY UST 3065
2x1L DRO/~~RRO~~ NAPHTHALENES } AM-A507901
2x1L PAH
3x40ml ~~VOCs~~ BTEX
3x40ml ~~VOCs~~ BTEX (AM-A507902)
WATER IS CLEAR, NO ODOR OR SHEEN
FIELD PARAMETERS
pH(S.U.) = 7.16
SC(µS/cm) = ~~2970~~ 66
D.O.(mg/l) = ~~11.90~~ 16.08
TEMP(°C) = 5.8
TURB(NTU) = 1.85
SAL(PPT) = 0.0
1225 - COLLECT SEDIMENT SAMPLE FROM CREEK BY UST 3065 (SAME LOCATION AS SW)
1x8oz DRO/~~BRO~~/NAPHTHALENES/PAHs } AM-A507903
1x4oz ~~VOCs~~ BTEX
1x4oz ~~VOCs~~ BTEX AM-A507904 TRIP BLANK
1300 - DUMP 10 GAL PURGE WATER AT DECON PAD
1305 - LUNCH
1335 - RE-STOCK; HEAD TO SKI BOWL
1410 - ARRIVE AT 3475-WP2
PID = 50.0 ppm
WL BTOC = 2.26'
TD BTOC = 7.40'

10/28/00

1410 - 3475-WP2 (CONT.)

1417 - BEGIN PURGE

MINUTES	18	28	
pH(S.U.)	6.38 ~~6.70~~	6.19	WELL WENT DRY WILL SAMPLE
S.C.(µS/cm)	110	119	
D.O.(mg/l)	7.17	3.20	
TEMP(C)	5.7 ~~6.9~~	5.4	
TURB(NTU)	82.9	84.3	
SAL(PPT)	0.0	0.0	

1445 - COLLECT SAMPLE AT 3475-WP2

2x1L DRO
2x1L PAH
3x1L BTEX
} AM-A508001

3x1L BTEX (TB) (AM-A508002)

- WATER IS CLEAR BUT HAS SLIGHT FUEL ODOR, NO SHEEN

1500 - SET UP AT 3475-WP1

PID = 0.0

WLBTOC = 3.96'

TD BTOC = 11.40'

1520 - BEGIN PURGE

- SEE NEXT PAGE FOR FIELD PARAMETERS

- PURGE RATE: 8 min/gal

10/28/00

1520 - 3475-WP1

MW.	20	25	30	35	38	41
pH(S.U.)	6.45	6.07	6.29	5.79	5.81	5.90
S.C.(µS/cm)	145	147	100	126	132	138
D.O.(mg/l)	6.11	5.86	4.86	4.68	4.62	4.52
TEMP(C)	6.0	6.1	6.1	6.0	6.1	6.1
TURB(NTU)	13.3	8.81	6.68	6.47	6.72	6.78
SAL(PPT)	0.0	0.0	0.0	0.0	0.0	0.0

1610 - COLLECT GW SAMPLE AT ~~3700~~ 3475-WP1

2x1L DRO

2x1L PAH

3x40ml BTEX

AM-A508003 KAM

- WATER IS CLEAR, NO ODOR OR SHEEN OBSERVED

1640 - RETURN TO OFFICE, UNLOAD GEAR

* WEATHER - OVERCAST, RAIN, TEMPS 35-45°F, N WINDS 0-15 mph *

1730 - SIGN OFF LOG

10/28/00

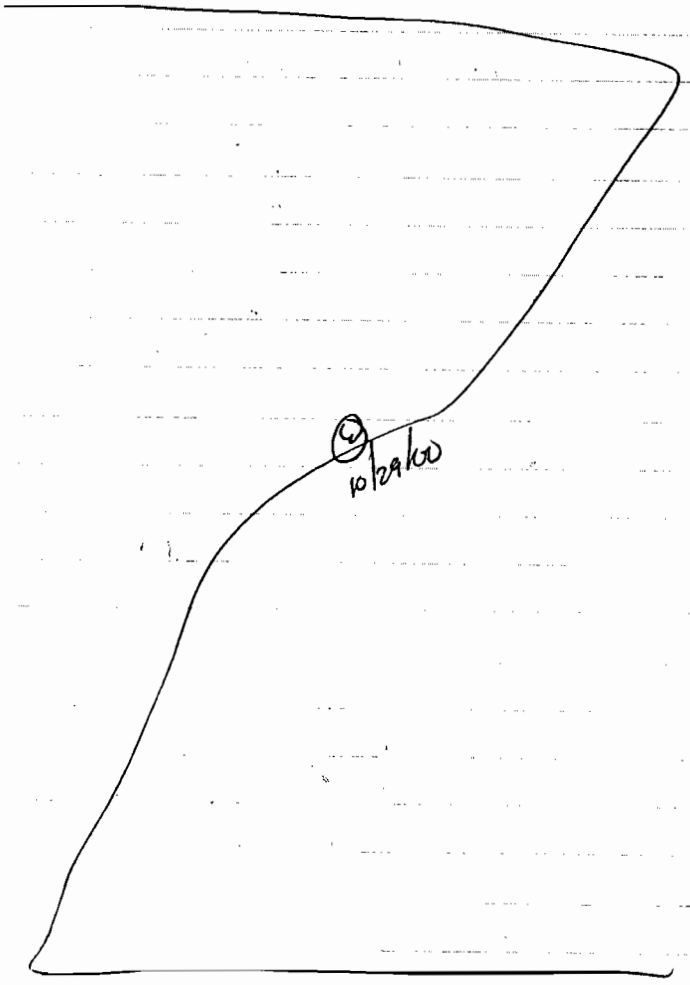
10/29/00 EMO

1000 - SIGN ON LOG

- PACKING SAMPLES FOR SHIPMENT

1430 - TOOK 4 COOLERS TO PEN AIR; SHIP TO DATA CHEM IN SLC, UTAH; FAXED COCs & AIRWAY BILL TO LAB

1500 - SIGN OFF LOG



10/30/00 EMO

0700 - SIGN ON LOG

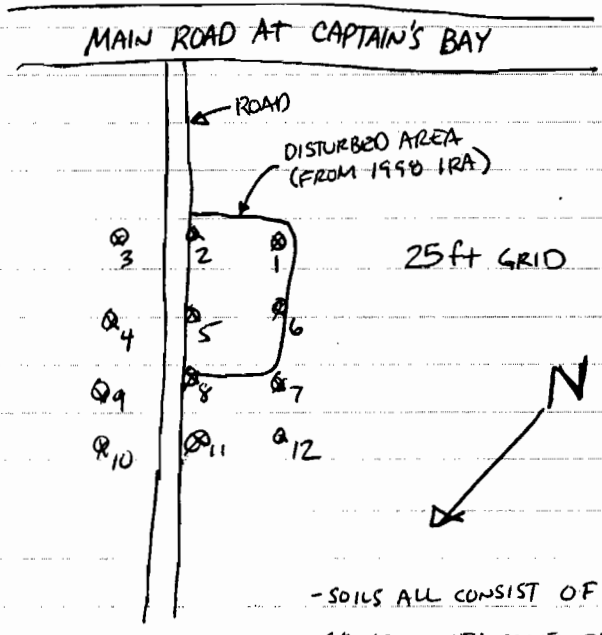
- DAILY REPORTS

0800 - TAILGATE SAFETY MEETING

- PLAN FOR DAY: SOIL SAMPLING AT PORT LEVASHEF, PIPELINE DRAINING AT APL YARD, SURVEYING AT MT. BALLYHOO.

0945 - ARRIVE AT PORT LEVASHEF, PLD3

- SETTING UP SAMPLING GRID



- SOILS ALL CONSIST OF A SANDY GRAVEL WITH SOME ORGANICS

- SAMPLED 0-6"

(16)

10/30/00 EMM

LOCATION	HANBY RESULT (mg/kg AS DIESEL)
1	<1
2	<50
3	<1
4	<1
5	<1
6	<1
7	<1
8	<1
9	<1
10	<1
11	<1
12	<1

- WILL COLLECT FIXED LAB SAMPLES AT LOCATION 2 (HIGHEST SCREENING RESULT) AND LOCATION 11 (DOWN GRADIENT - UNCONTAMINATED)

1305 - COLLECT SOIL SAMPLE AT LOCATION 2 ; 0.5' BGS

- 1x8oz DRO/RRO/PAHs
- 1x 8oz PCBs/METALS } AM-A508101
- 1x4oz VOCs
- 1x4oz TOC
- 1x40z VOCs (TB) (AM-A508102) 1 @ 10/31/00
- 1x8oz DRO/RRO/PAHs
- 1x8oz PCBs/METALS } AM-A508103 DUP
- ~~1x4oz VOCs~~ @ 10/31/00 STET

(17)

10/30/00 EMM

1305 - SAMPLING LOCATION 2 (CONT.)

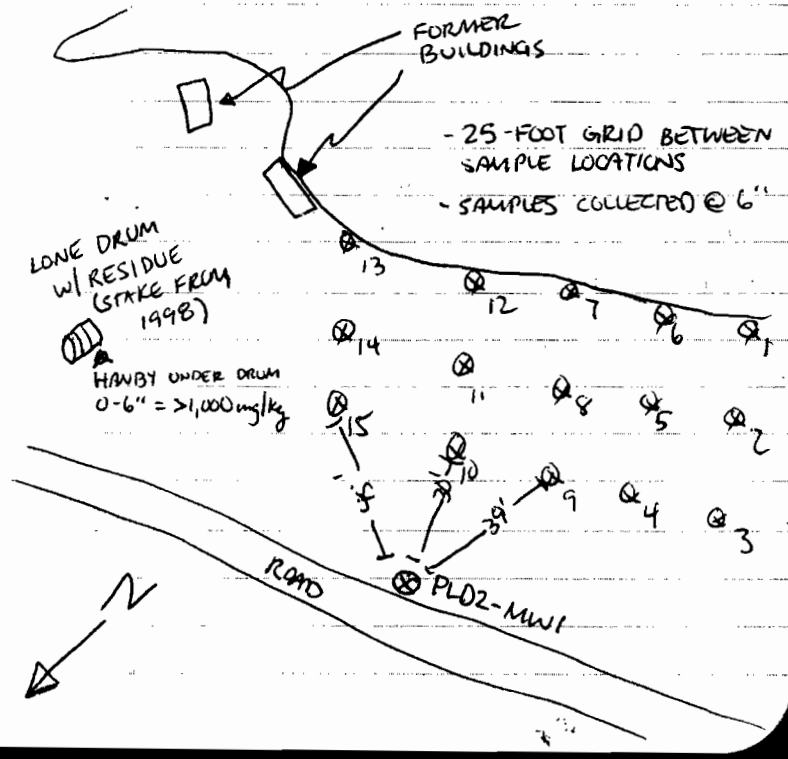
- 1x8oz DRO/RRO/PAHs
- 1x8oz PCBs/METALS } AM-A508201
- ~~1x4oz VOCs~~ @ 10/31/00 STET

FIELD REPLICATE

1315 - COLLECT SOIL SAMPLE FROM LOCATION 11 ; 0.5' BGS

- 1x 8oz DRO/RRO
- 1x 8oz PCBs/METALS } AM-A508104
- 1x4oz VOCs, ~~TOC~~ @ 4 min.
- 1x4oz TOC

1320 - HEAD TO PL02



10/30/00 EMD

LOCATION	HANBY RESULT (mg/kg AS PLUSER)
1	<1
2	<1
3	<1
4	<1
5	<1
6	<1
7	<1
8	<1
9	<1
10	<1
11	<1
12	<1
13	<1
14	<1
15	<1
UNDER DRUM	>1000

1520 - COLLECT SOIL SAMPLE AT LOCATION 8 ; 0.5' BGS

1x8oz	AM-A508105	DRO/RRO/PAH
1x8oz		PCBs/METALS
1x4oz		VOCs
1x4oz		TOC
1x4oz	TOC (DUP)	(AM-A508106)
1x4oz	TOC (FR)	(AM-A508202)

10/30/00 EMD

1535 - COLLECT SOIL SAMPLE AT LOCATION 14 ; 0.5' BGS

1x8oz	AM-A508107	DRO/RRO
1x8oz		PCBs/METALS
1x4oz		VOCs
1x4oz		TOC

1545 - SPOKE TO SKIP CONCERNING DRUM AND CONTAMINATED SOIL. HE SAID REMOVE IT AND SAMPLE (CONFIRMATION). TRY TO PUT SOIL IN DRUMS AND NOT IN STOCKPILE.

1600 - HEAD BACK TO TOWN.

1630 - SAMPLE CONTROL

1730 - SIGN OFF LOG

10/30/00

(20)

11/6/00 SPH

0800 - Safety Tailgate
- Atmospheric Monitoring
- SPAs

0830 - Preparatory Inspection
- Island Wide Sampling
- Chemical Quality Control

1000 - Gather Equipment and Materials

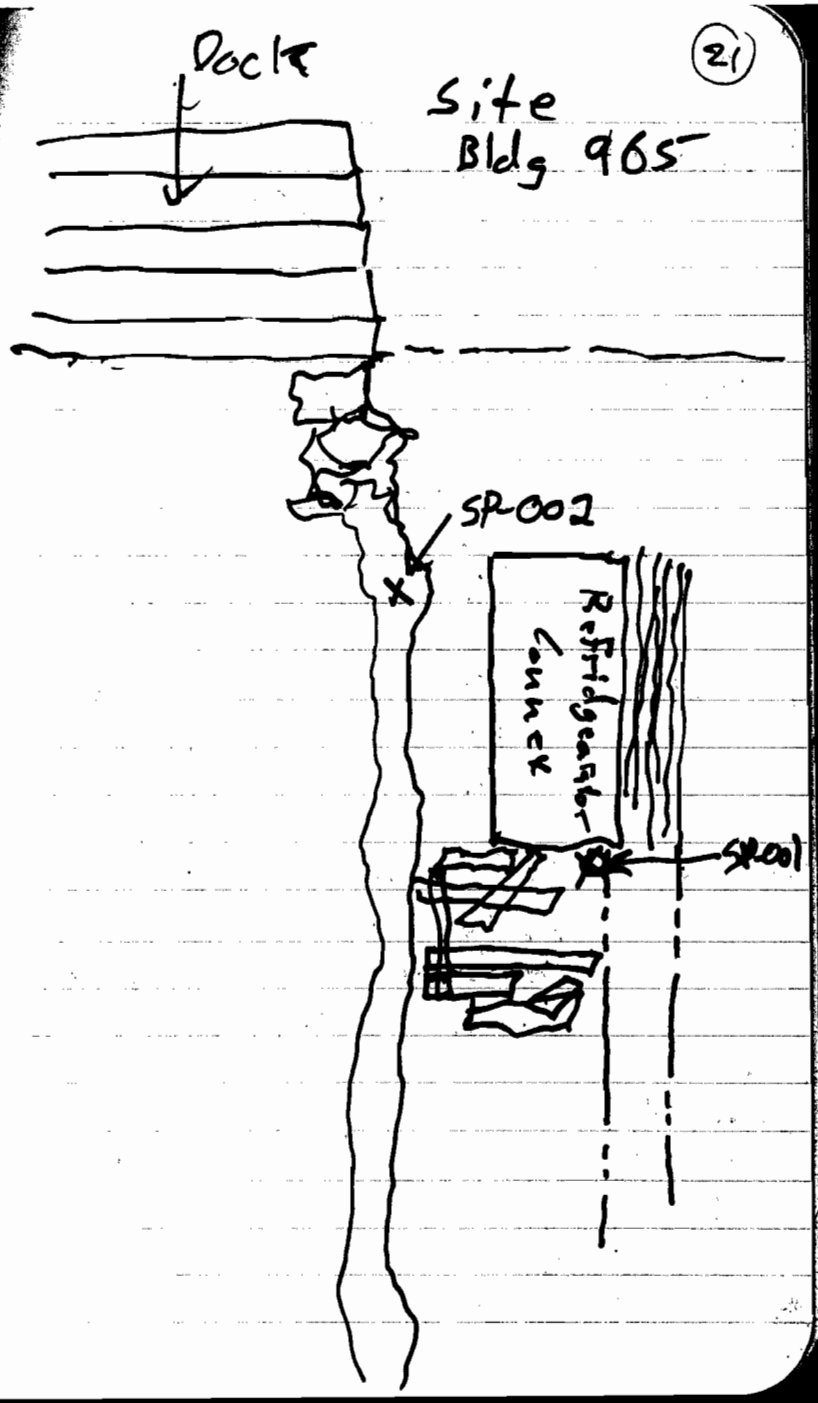
1100 - Talk to E. Detmer concerning sampling program.

1130 - On-site at bldg 965 locating sample points Moving timbers and hand digging utilidor locate.

Sampling @ 1215 - 1230
Sample Pt. 001 @ 1215
002 @ 1225

1245 - Arrive site 40 Floating Pump Power Ale to Sample

(21)



(22)

1300 - Sample PCB FP-PP-001 @ 1300

1315 - Break for Lunch

1400 - Caught up on Documentation dropped Samples at Lab

1430 - Pick up cooler at airport to re-pack and send out again

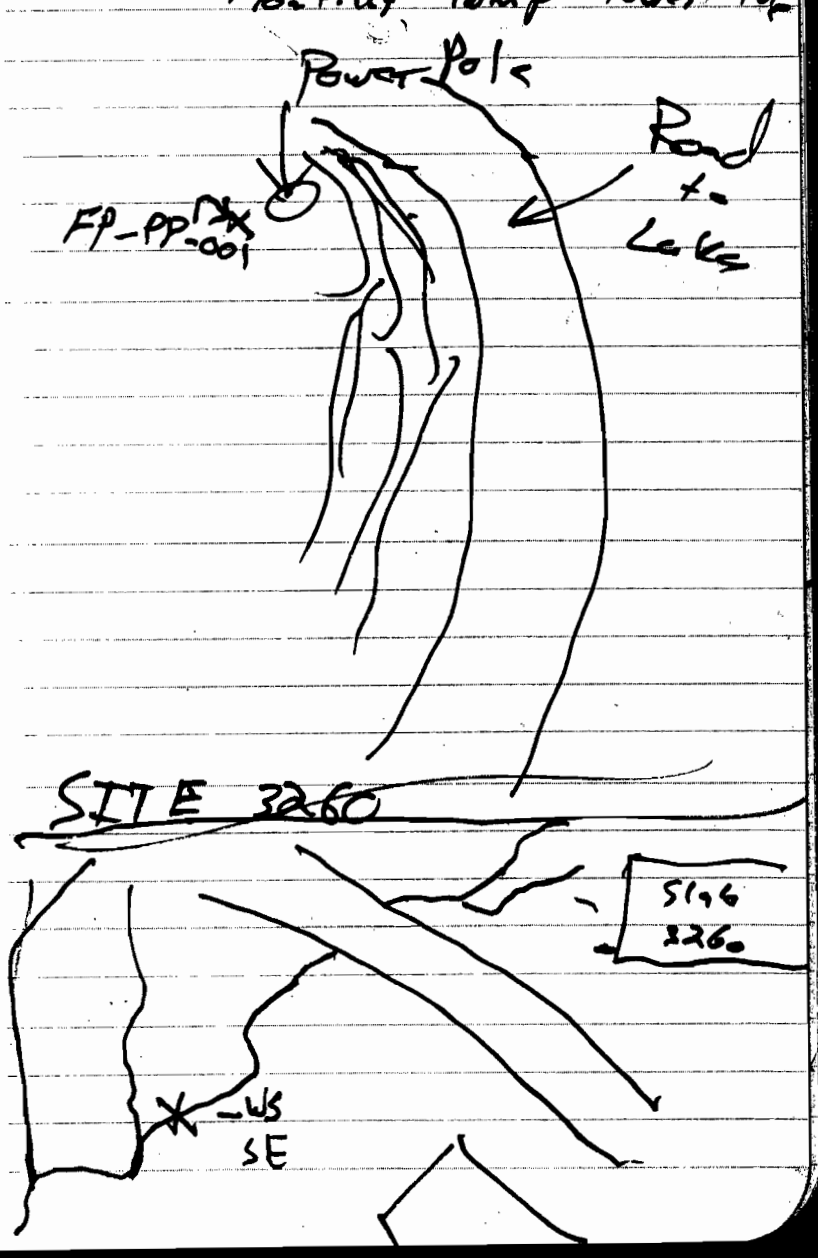
1600 - At 3260 to evaluate site and Take sediment and surface water samples

Sampling
SP-003 @ 1625
SP-001 @ 1628
SP-002 @ 1630
SP-005 @ 1633
SP-004 @ 1635

TRIPBLANK AM-A509303 @1637 11/6 SR 11/7

(23)

Site
Floating Pump Power Pole



1700 - ON Site Vault B Sample sludge in Drums From Cleaning operation Labled Drum

1705 - Took Sample for Vault ~~#~~ B

1715 - Back to office to gather tools for opening ISO 3 Drums

1800 - Sample ISO Tank liquids - Mostly Bunker C.

1815 - Sample Drums From cleaning of Vault C. Sample collected at D-con pad where drums are staged.

1830 - Call it a day. after repacking coolers with Ice.

11/7/00 SPH

0800 - Safety Tailgate
- Covered SOPs
- End of Job awareness

1000 ~~0100~~ - Drilling of Navy Laundry Facility and Crowley Dock (Prep)

1200 - Drop off 2 coolers at Alaska Airlines
- Bill (Repackaged 11/3/00 coolers
- 11/6/00 Sampling cooler 1107A

1330 - Attempt to locate seeps at Rocky Pt.

1430 - Initial Inspection at Navy Laundry Facility Setup to bore at MW-03
- Bruce McDonald - Geo
- Jeannette Romig - Helper Tech

1700 – Travel to Vault #3 I and inspect Vault for Final clean.

1730 – Inspect Vault B for clean. Looks good to close up. Commented that Asphalt layer on floor made it difficult to final clean.
- Inspected G in progress.

SPH

252 253 SPH 11/8/00

0800 Tailgate
- Good SOR on Worker practices and Use of PPE

0815 – 1215
- Conference Call for Ft. Greely
- Jeannette worked on Hanby Sampling MW3-001 and packaging Samples for storage in coolers

0900 Floating Pump House Survey and Fluid drain sampling

1430 Parts Inventory
2 – Medium Size Pump motors / Pump
1 – Large size Pump motor / Pump

1450 - Drained Bearing oil housing containing water with little oil ~~into~~ mostly water into Sample 8oz and 4oz jars.

- All other pumps / bearings / motors contain no oils. No sign of gas tanks or fuel tanks.

- Did observe asbestos gaskets and valve packings on Values and other pipeworks

1550 - Inspect Value Pit G on progress of work and to collect sample

1605 - Sample Sludge from 1 - Barrel at Value pit G.

1620 Manhole 310
Observe
24" Total / 18" H_2O
6" Sludge
7' Vault - Height
12' Length
8' Width

1630 - Take Oil Sample off floting product in vault

1635 - Sample Water Phase of Vault

1640 - Close Vault Lid

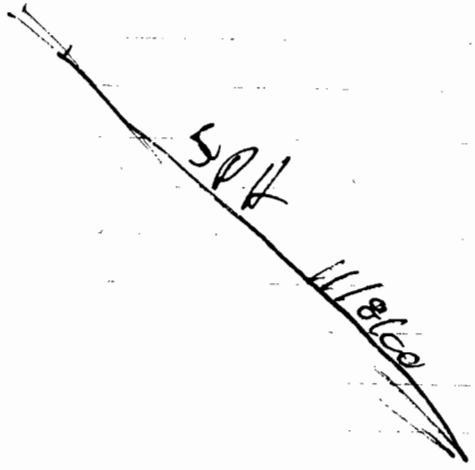
1715 - On Location at Building 503 to inspect waste and location of crack in pipe and Bunker C release

- Drawing of line notified ~~of~~ in pipe and Bunker C

release. Took Photo Documentation of pipe patch provided by SCI to plug crack. The bottom of the Valve House is filled with sediment.

1720 - ISO tank full to 12" of top
STBU 255018
OSA 2070

1st ISO STBU 255023
USA 2070
this one was sampled



11/9/00 SPH

0800 - Safety Meeting
- Boards for footing on bldg 503 joists is not nailed down.
- Proactive on PPE

0800 - 1100
- Prepare sampling equipment and complete QQC dailies.

1100 - 1200 - Lunch

1215 - Inspect & Detail Drilling soil boring and well installation.

1230 - Inspect Valve House Building 503
- Asbestos in Building
- Topping of ISO Tank STBU 255023

1300 - Inspect Valve house 6 and determine it was clean.

(52)

1435 – Sampled Port Levasheff Drum liquids and Soil

1605 – Onsite at 2664 WP-1 ~~MW-18~~ to perform groundwater sample.

1630 – Setup and starting Purge of aprox 6 Liters.

1700 – Drawing water to obtain stable parameters

– S. Hammond at Tank B House to locate well.

1745 – Found well and set Christy Box. Did not cement in need Plug & lock

1830 – Sampled and off ~~64~~ 2664 MW1

(53)

11/10/00 SPH

0800 – Safety Meeting
– Proactive on Pumping of pipes and good job people has done to date.
– End of Job and Task awarness. Be aware of Hazards with different activities

0930 – On Site Ft Mears to setup and sample wells. Keys not working on locks will pull plug top and work on locks seperately.

1000 – Sampling FM1-1 using low flow method. Host J. Romig to continue purge and start sampling

1115 – On Site to sample Water Treatment 15000 gallon Sample

(34)

1135 – Sample Water treatment For DRO, PAH-SIM, BTEX This sample was collected from discharge of 2nd Carbon Filter prior to putting into tank.

1220 – On-site at Crowley Dock MW Install. Well Drilled / Installed and installation of Bollards in progress. Jolie and I spoke with Rig 600 about 4½ Hole at NLF and, development of NLF3 Crowley wells.

1245 – Back ON. site at Fort Meyers. Dead Battery on Pump Had to put on Truck Batteries to collect Samples.

(35)

11/10/00 J.NOFFKE
PROJECT # 05M30027

1510 ARRIVE AT FORMER UST 3260, NORTHERN SKI BOWL J. NOFFKE, S. HAMMOND
OBJECTIVES: DEFINE LATERAL AND VERTICAL EXTENT OF PETROLEUM CONTAMINATION BY ~~EXCAVATING~~ IN HAND AUGERING SOIL SAMPLES
SAMPLE GRID STARTED FROM NW CORNER OF BLD FOOTPRINT SAMPLE ON 10' CENTERS IN TO ACROSS (WEST) NORTHERN SKI BOWL RD

SITE	SAMPLE #	DEPTH	TIME	SAMPLE DESCRIPTION
3260	HB-1 No. 1	6"-1'	15:25	SILTY SANDY GRAVEL GRAY, F-C SAND NO ODOR OR SHEEN,
	IN ROAD, MOIST (00+30)			
3260	HB-2-1 WET	0-6"	15:35	DK BROWN ORGANIC NO ODOR SILT, ROOTS, VEGETATION
	HB-2-2 WET (00+20)	6"-1'	15:40	GRAY MED SAND LENSE, ODOR DETECTED AT 1' - ORGANIC SILT BROWN ROOTS
	HB-2-3 WET	1.5'-2'	15:45	1.5'- DK BROWN SILTY SAND (2" LENSE) THEN BROWN ORGANIC SILT / PEAT, ROOTS, NO ODOR SHEEN

Julie Noffke 11/10/00

(36)

05M30227

11/10/00 J NOFFKE
UST 3260 SITE, N SKI BOWL
HAND AUGER SOIL SAMPLING RD

SAMPLE #	DEPTH	TIME	DESCRIPTION
HB ~~HA~~ JN 2-4	2.0-2.5'	16:00 WET	DK BROWN ORGANIC SILT PEAT ROOTS NO ODOR SHEEN JN
HB ~~HA~~ 2 (LOCATION LOCATED 5' EAST OF ROAD)			
HB ~~HA~~ 3-1	6"-1'	16:25 WET	40' WEST OF (STAKE, CORNER OF EXCAVATION) (00+40) DK BROWN ORGANIC SILT, ROOTS FINE SAND NO ODOR, NO SHEEN
HB ~~HA~~ JN 3-2	1-1.5'	16:30	AT 1.5', REFUSAL ROCK ANDESITE WET DK BROWN ORGANIC SILT, ROOTS FINE SAND NO ODOR NO SHEEN
HB ~~HA~~ JN 4-1	0-6"	16:35	(00+10) VEGETATION ROOTS WET ORGANIC DK SILT BROWN NO ODOR SHEEN

LOCATED 10' N OF FOOTPRINT 11/10/00

(37)

05M30227

11/10/00 J NOFFKE
UST 3260 SITE, N SKI BOWL

SAMPLE #	DEPTH	TIME	DESCRIPTION
HB ~~HA~~ JN 4-2	6"-1'	WET 16:45	ORGANIC DARK SILT BROWN, (OK) ROOTS NO ODOR OR SHEEN, AT 1' PEAT
HB ~~HA~~ JN 4-3	1-1.5'	WET 16:50	SAME AS ABOVE, AT 1.5' DK BROWN SILTY SAND SLIGHT ODOR
HB ~~HA~~ JN 4-4	~1.5-2.0'	WET 17:00	SAME AS ABOVE ~1.6' PEAT DARK BROWN (OK) NO ODOR SHEEN

JN HB ~~HA~~ (00) - CENTERLINE IS IN LOW SPOT, ADJACENT TO SURFACE WATER LOCATION

11/10/00

00 LS SURVEYOR

~~FOOT PRINT~~ STAKE

11/10/00 JNOFFKE
UST 3260
N SKI BOWL
SITE

SAMPLE ID	DEPTH	TIME	DESCRIPTION
HB-5-1	0-6"	1705	ORGANIC SILT DK BROWN WET NO ODOR
HB-5-2	6"-1'	1710	SAME AS ABOVE
(10' N OF STAKE 10' W)			
HB5-3	1-1.5'	1800	ROOTS ORGANICS SILT DK BROWN MINOR GRAVEL NO ODOR OR SHEEN
HB5-4	1.5-2'	1810	ORGANIC SILT DK BROWN/GRAY SOME ODOR

DEMOB FROM SITE
1830 LEAVE FOR JE TRAILER
STOP BY FM L NORTH-
GW SAMPLING AT TH IS SITE BEING COMPLETED BY

Julie Norris
K THOMPSON
J. ROMIG

11/10/00 JNOFFKE
1900 BACK AT JE OFFICE

MORNING CALIBRATION FOR HORRIBA WAS BY J. ROMIG

~0830 AM
PH = 3.98
TURBIDITY = 0
(CONDUCTIVITY) S.C. = 4.52 MS/CM
DO = 11.21 (DISSOLVED OXYGEN)
TEMP = 10.8 °C
SALINITY = 0.22%

19:15
EVENING CALIBRATION
PH = 4.27
TURBIDITY = 1
(CONDUCTIVITY) SC = 4.54 MS/CM
DO = 19.13
TEMP = 5.9 °C
SALINITY = 0.22%

19:40 OFFLINE

Julie Norris 11/10/00

11/11/00 SPH JN

0800 - Safety Tailgate
Discussed High Winds and Weather
Discussed Drilling / Utility Clearance
Discussed good communications

0830 - 1230 Sample Management and prep for sampling activities.
- Prepared samples for Sunday Shipment.
- Field Screen samples for selection for analytical

~ 13:34 LEAVE JR TRAILER FOR N. SKI BOWL, UST 3260 SITE
WEATHER: OVERCAST 35°F, WINDS VARIABLE, RAIN/SNOW

Jan 11/11/00

11/11/00 SPH JN

14:10 AT UST 3260, N SKI BOWL

SAMPLE ID	DEPTH	TIME	DESCRIPTION
HB-6-1 (10'N-00)	0-6"	14:25	DK BROWN ORGANICS PEAT, NO ODOR, MOIST SHEEN
HB-6-2	6"-1'	14:30	DK BROWN ORGANICS PEAT NO ODOR OR SHEEN, FEW GRAVELS WET
HB-6-3 (3FT)	1-1.5'	14:35	DK BROWN ORGANICS PEAT NO ODOR MOIST
HB-6-4 (6-4SN)	3-3.5'	14:40	ORGANICS PEAT DK BROWN MOIST NO ODOR
~~HB-6-4~~		~~14:45~~	JN

Jan 11/11/00

11/00 OSM30027 JNOFFICE
N SKI BOWL SPH (42)
UST 3260

SAMPLE ID	TIME	DEPTH	DESCRIPTION
HB-7-1 (20' N 10' W)	14:48	6" - 1'	ORGANICS PEAT DK BROWN, NO ODOR WET
HB-7-2	14:50	1 - 1.5'	ORGANICS PEAT, DK BROWN, NO WET ODOR
HB-7-3	14:55	1.5 - 2'	ORGANICS PEAT SAME AS ABOVE
HB-7-4	15:00	2.5 - 3'	SAME AS ABOVE
HB-8-1 (10' N 30' W)	13:05	6" - 1'	ORGANICS + SILTY VERY SAND) WET DK BROWN NO ODOR OR SHEEN
HB-8-2	15:15	1 - 1.5'	SAME AS ABOVE AT 1.5' DK BROWN SAND - F-C WET SAND
HB-8-3	15:20	2 - 2.5'	SAME AS ABOVE

JN
~~15:25 STEVE HAMMOND~~
11/11/00

SKI BOWL, SITE 3260 (43)
11/11/00 JNOFFICE, SPH OSM30027

15:25 STEVE HAMMOND
HAND AUGERING
AT 3260 SITE, WINDS
RAIN - SLEET
(10 SOUTH, 10 WEST)
OF 00 STAKE

HB-9-1

SAMPLE ID	DEPTH TIME	DESCRIPTION
	IN + 1.0	
HB-9-1 (10 S, 10 W)	1.5' 15:30	SILTY SAND GRAVEL W/ ORGANICS PEAT, SLIGHT ODOR, WET DK BROWN
HB9-2	1.5-2 15:35	GRAY SAND COBBLE SLIGHT ODOR ORGANICS AT 1.5', SHEEN NOTED
HB10-1	15:45	
PHOTO OF SPH, (20' SOUTH 10' WEST)	HAND AUGERING 0-6"	SILTY, SANDY GRAVEL BROWN NO ODOR OR WET SHEEN
HB 10-2	15:55 6"-1'	SILTY WET GRAVEL BROWN GRAY ODOR NOTED
JN set		
~~HB 10-3~~	~~16:00~~	PEAT NOTED AT 1'3"
APPEAR CONTAMINATED ABOVE	NO SAMPLE COLLECTED	

N SKI BOWL, UST 3260 (44)

11/11/00 JN/SPH OSM30227

SAMPLE ID	~~JF~~ TIME ~~DES~~ DEPTH	DESCRIPTION
HB-11-1 (30' SOUTH 10' WEST TRANSECT/STAKE 00)	16:10 0-6"	WET SILTY SANDY GRAVEL NO ODOR BROWN
HB-11-2	16:20 ~6"-1'2.5"	SAME AS ABOVE NO ODOR ONLY LIGHT BROWN WET
~~HB12-1~~ HB12-3 (40' SOUTH 20' WEST) OFFSET TO SOUTH 5' TO AVOID SURFACE WATER PONDED DRAINAGE	16:30 0-5"	NO ODOR WET DK BROWN PEAT
~~HB12-2~~		
HB13-1 (10' SOUTH 30' WEST)	16:45 0-6"	LIGHT BROWN SILTY WET SANDY GRAVEL +ORGANICS NO ODOR

11/11/00

OSM30227 JN SPH 11/11/00 (45)

NORTH SKI BOWL, UST 3260

SAMPLE ID	TIME DEPTH	DESCRIPTION
HB13-2	16:50 ~6"-1'3"	SILTY SAND GRAVEL W/ ORGANICS/PEAT JF NO ODOR W/ PEAT, WET DK BROWN

17:00-17:30 CHECK ON J. ROMIG. GROUNDWATER SAMPLING AT 2762 A+B UST SITE

17:35 RESUME SOIL SCREENING SAMPLING AT N. SKI BOWL, UST 3260

HB-14-1 (10'S 40'W)	17:45 0-6"	SILTY, SANDY GRAVEL, LIGHT BROWN NO ODOR MOIST TO DRY JF
HB-14-2	17:55 1.5'-2'	SAME AS ABOVE NO ODOR MOIST DK BROWN ORGANICS ← PEAT AT 1.5'
HB-15-1 (20'N 20'W)	18:05 0-6"	NO ODOR ORGANICS DK BROWN PEAT, WET
HB-15-2	18:10 1.5'-2'	MOIST NO ODOR PEAT BROWN ~~SAND~~ JN AT 2' ORGANIC SILT/

11/11/00

11/11/00 05M30227 (46)

N SKI BOWL UST 3260

SAMPLE ID	TIME DEPTH	DESCRIPTION
HB-16-1	18:15	MOIST
20 N'	0-6"	NO ODOR.
00 STAKE	DK BROWN	PEAT
HB-16-2		MOIST
	18.20	NO
	1.5'-2.0'	ODOR
		PEAT
		DK BROWN
		SILT ~~SAND~~
11/12/00 HB-17-1	18:25	MOST TO WET
(20'S	0-6"	NO ODOR
(20'W)	LIGHT BROWN	ORGANIC PEAT NICS
		SILT ORGANIC ~~SAND~~
		W SOME SAND
HB-17-2	18.27	
	6"-1'	VERY MOIST
		FAINT ODOR
		GRAY SILTY GRAVEL SANDS
		AT 1'

Julie Romig 11/11/00

05M30227 N SKI BOWL (47)

11/11/00 UST 3260

HB 17-3	18:35	GRAY
	1'-1.2"	SILTY
	DIFFICULT	SAND GRAVEL
	TO AUGER	NO ODOR
		WET

18:40 LEAVE UST 3260
P/U J. ROMIG AT 2762 SITE

19:30 AT OFFICE JET CHECK
CALIBRATION ON HORIBA
PH = 3.96
CONDUCTIVITY = 4.70 MS/CM
TURB = 0
DISSOLVED OXYGEN = 13.09 mg/L
SAL = 0.22%
TEMP = 3.5 °C

19:30 LOG OFF

Julie Romig 11/11/00

OSM3027 (48)

11/12/00 SPH, JAN

730 AT JE TRAILER OFFICE
SPH, JAN, J. ROMICK

WEATHER: HEAVY WINDS,
N, 40-50MPH, GUSTING UP TO
60? HEAVY RAIN OVERCAST,
UNABLE TO SAMPLE UNTIL
WEATHER IMPROVES
TEMP 30-38°F

PAPERWORK, DAILY REPORT,
SAMPLE MANAGEMENT

830 SET UP TO SCREEN
SOIL SAMPLES WITH PID
HANDBY, H+S MEETING

0930 SPH SCREENS JN
FLOATING PUMP HOUSE
SAMPLE USING (LLOR-D-TEST)
RESULT < 50 PPM

0830 BRUCE MCDONALD (HART CROWSER)
CALIBRATED PID OK TOO 100 PPM
ISOBUTYLENE, READ 99
MINIRAE

11/12/00

OSM30227 (49)

11/12/00 SPH, JAN

USING MINIRAE MODEL # PGM-7615 / SERIAL # 103533
USAED # 010476
FOR HEALTH + SAFETY
MONITORING / SOIL SCREENING

Julie Nosek
11/12/00

11/12/00 JN 05M30227 (50)

PID READINGS FOR SOIL SAMPLES AT UST 3260 SITE

SAMPLE ID	DEPTH	TIME	PID READINGS
HB1-1	6"-1'	10:30	0.0
HB2-1	0-6"	10:31	0.0
HB2-2	6"-1'	10:32	0.0
~~HB-3 JN~~			
HB2-3	1.5'-20'	10:33	0.0
HB2-4	2.0-2.5'	10:34	0.0
HB3-1	6"-1'	10:35	0.0
HB3-2	1-1.5'	10:36	0.0
HB4-1	0-6"	10:40	0.0
HB4-2	6"-1'	10:39	0.0
HB4-3	1-1.5'	10:37	0.0
HB4-4	1.5-2'	10:38	0.0
HB5-1	0-6"	10:41	0.0
HB5-2	6"-1'	10:42	0.0
HB5-3	1-1.5'	10:43	0.0
HB5-4	1.5-2.0'	11:15	0.0
HB6-1	0-6"	10:44	0.0
HB6-2	6"-1'	10:45	0.0
HB6-3	1-1.5'	10:46	0.0
HB6-4	3-3.5'	10:48	0.0

11/12/00

05M30227 (51)

11/12/00 JN

SOIL SCREENING CONTINUE

SAMPLE ID	DEPTH	TIME	PID READINGS
HB7-1	6"-1'	10:50	0.0
HB7-2	1-1.5'	10:51	0.0
HB7-3	1.5-2.0'	10:52	0.0
HB7-4	2.5-3.0'	10:53	0.0
HB8-1	6"-1.0'	10:54	0.0
HB8-2	1-1.5'	10:55	0.0
HB8-3	2-2.5'	10:56	0.0
HB9-1	1-1.5'	10:57	0.0
HB9-2	1.5-2'	10:58	0.0
HB10-1	0-6"	11:00	0.0
HB10-2	6"-1'	11:01	0.0
HB11-1	0-6"	11:02	0.0
HB11-2 JN	~~0-5"~~ 6"-1.5"	11:03	0.0
HB12-1	0-5"	11:04	0.0
~~HB12-2 JN~~			
HB13-1	0-6"	11:05	0.0
HB13-2	6"-1.30"	11:06	0.0
HB14-1	0-6"	11:07	0.0
HB14-2	1.5-2.0'	11:08	0.0
HB15-1	0-6"	11:09	0.0
HB15-2	1.5-2.0'	11:10	0.0
HB16-1	0-6"	11:11	0.0

11/12/00

05M3022 7 JN (52)

11/12/00

SOIL SCREENING UST 3260

CONTINUE

SAMPLE ID	TIME	DEPTH	PID READING
HB16-2	1[illegible]	2.0'	11:12 0.0
HB17-1		0-6"	11:14 0.0
HB17-2		6"-1'	11:15 0.0
HB17-3		1-1.2"	11:16 0.0

SAMPLES W/ODOR INFIELD ARE:
HB9-2, HB4-3, HB5-4, HB9-2, HB10-2, HB17-2

*HB2-2 - (0-6") - TRANSECT LOCATION (00+30)

HB4-3 (1-1.5') (00+10)

*HB5-4 (1.5-2') (10N+10W)

*HB9-2 (1.5-2') (10S+10W)

HB10-2 (6"-1') (20S+10W)

*HB17-2 (6"-1') (30S+20W)

* SAMPLES PICKED FOR HANDBY TESTING

11/12/00

05M30227 (53)

11/12/00

~~11:3~~ ~~12:4~~ JN 11:45 - 12:50

~~12:45 - 13:50~~ LUNCH

13:10 SET UP FOR HANDBY

~~RES~~ TESTING / RESULTS

HB2-2 = 0

HB5-4 = ~~0~~ JN 0

HB9-2 = 0

HB17-2 = 10-20

HB4-3 0

FINISH TESTS AROUND 14:30

~~GPS INFO MARK~~ JN

~~AVERAGE ENTER~~ JN

14:45 - 15:20 REVIEW ROCKY POINT SEEP LOCATIONS WITH KIWI THOMPSON

15:30 - 19:00 REVIEW UST 3260 SAMPLE MGMT CONTINUES

BOTTLE INVENTORY

SET UP TO SAMPLE PRE WW II WELLS

16:00 - 17:00 VIEW 3260 SITE FOR WELL POINT LOCATIONS

19:00 OFF WORK

11/12/00

OSM30227 (54)

11/13/00 J. NOFFKE

0715 - AT JACOBS SITE TRAILER LOG ON

0730 CALL ERIC DETMER TO DISCUSS SCOPE ISSUES ERIC'S QUESTIONS: CHECK WATER SAMPLES ~~2004-MW-1 WP-1 WR-1~~ JN JN SAMPLED ~~EAST WELL NEXT TO JN FOUNDATION~~ FOR 2004 SITE/ SHOULD BE WP-1 WILL CHANGE FIELD NOTES/ COC

(2) TCLP METALS ROCKY POINT SLUDGE - CALL SAMPLES LAB - CHANGE ANALYSES TO TOTAL METALS, B, C, G - (IS STILL HERE) ✓ CHAIN OF CUSTODY VARIANCE SENT TO LAB (DATA CHEM) ✓

~35°F

WEATHER:- RAIN, MIXED W/ SNOW, HEAVY WINDS, GUSTING TO 120 MPH, SAMPLING ACTIVITIES ON HOLD

0830 PACKAGE SAMPLES FOR SHIPMENT TO LABORATORY 11/13/00

0900 WORK ON SCHEDULE FOR COMPLETION OF PROJECT

OSM30227 (55)

11/13/00 J. NOFFKE

1300 FINISH PACKAGING SAMPLES

1320 - 1340 LUNCH

1345 BACK AT OFFICE PAPERWORK, WAITING ON WEATHER UPDATE

J. ROMIG RELEASED FOR DAY - SAMPLE TRAILER HAS BEEN CLEANED UP ORGANIZED.

EMAIL HEATHER MCLOONE SAMPLE SUMMARY SHEET TOMORROW

WORK W/ ANCHORAGE OFFICE TO SHIP SAMPLES TO LAB - SINCE A FEW SAMPLES ARE CLOSE TO HAVING HOLDING TIMES EXPIRED

11/13/00

17:15 LOG OFF, LEAVE JE OFFICE

05M30227 (56)

11/14/00 J. NOFFKE
0700 LOG IN AT JE OFFICE
WEATHER: RAIN, 35°F, LIGHT WINDS
OBJECTIVES: ISLAND-WIDE SAMPLING W/ B. MCDONALD, J. ROMIG

0730 PACKAGE SAMPLES FOR SHIPMENT TO LAB, REPACK W/ FRESH ICE
0800 HEALTH + SAFETY MEETING
0830 DAILY REPORT

1000 MOB GEAR FOR ISLAND WIDE SAMPLING

SAMPLE SHIPMENT!

SAMPLE COOLERS	AIRBILL #'s
LAUCKS (3)(1)	~~2860-3190~~ ~~2859-8343~~ JN
JP (6)	2860-3186
DATACHEM (8) - STEVE TOOK ON TO ANCHORAGE	

12:00-13:00 LUNCH, CHECKOUT OF HOTEL ~~FOR~~ ARTS 11/14/00

05M30227 (57)

STATUS: 11/14/00 J NOFFKE

SAMPLE SUMMARY FOR QA/QC

SOILS

① TOC - 1 DUP
1 MS/MSD
1 TRIP

② BTEX - 2 DUP
- 2 TRIP
- 1 MS/MSD

③ VOCS - 1 DUP
1 TRIP
1 MS/MSD

④ METALS TALK TO KEATHER

(<1) QA, 1 WHAT ABOUT PCB?

⑤ PAHS 3 DUP
23 TRIP
2 MS/MSD

⑥ GRO - 1 EACH

⑦ DRO/RRO - 1 EACH

⑧ DRO - 1 EACH

WATERS

① DRO OK ~~TM~~ JP

② DRO/RRO 1 MS/MSD

③ PCB 1 MS/MSD

④ RCRA METALS 1 DUP/TRIP

11/14/00

JNOFFKE
OSM30227 (58)
11/14/00 SAMPLE SUMMARY
(5) (6) 1 DUP / 1 TRIP VOCs

13:10 MOB TO N SKI BOWL, UST 32.60, WINDS TO HIGH ON TOP OF HILLS, ROAD HAS CULVERT, DITCHLINE FILLING W/WATER, TOO MUCH RUNOFF DRIVE TO CROWLEY SITE

HORIBA CALC.	PH	3.97	11:50
	COND	4.55	MS/CM
	TURB	1	
	DO	12.07	
	TEMP	9.6	°C
	SAL	0.22	

SET UP
J. ROMIG TO GW SAMPLE CD-1

14:20 DRIVE TO PREMW II SITE SURVEY WELLS FOR SAMPLING

MW-1 14:40 - WELL IN GOOD CONDITION, LOCKING CAP, INTACT

Joel Noffke 11/14/00

OSM30227/25 (59)
11/14/00 J. NOFFKE
14:50 KEY 2001
MW-10 WELL IN FAIR CONDITION, LOCKING WELL CAP, LOCK IS STICKING, BAILED WATER OUT OF CHRISTY BOX AROUND WELL
MW-11 (14:55) KEY JN 2001 IS 16022 (MASTER) WELL NEWLY INSTALLED SEPTEMBER 2000

15:00 MW-12, FAIR CONDITION, SURFACE SEAL CRACKED, LOCK IS STICKY, BAILED EXCESS WATER OUT OF CHRISTY BOX

15:30 MW-13, FOUND JN UNDER MUD AND GRAVEL, NEEDS LOCK, CASING TOP NEEDS REPAIR

15:45 MW-4, ONE BOLT MISSING, OTHER CAP BOLT DAMAGED, NEEDS LOCK JN FOUND UNDER MUD, GRAVEL, BAILED WATER OUT OF PROTECTOR CASING
RAINING HEAVY, WINDS FROM SE, GUSTING 30 MPH
WELL CASING FAIR, COULD USE NEW MONUMENT

Joel Noffke 11/14/00

05M3022S

11/14/00 J.NOFFKE

(60)

15:50 MW-2, FOUND UNDERNEATH GRAVEL, MUD, WELL IN FAIR/GOOD CONDITION, LOCKING CAP

16:00 MW-15, SURFACE SEAL CRACKED, WELL CAP / WELL INTACT LOCK OK JN

16:05 MW-7, BAILED WATER OUT OF PROTECTOR CASING, NEEDS NEW LOCK, CONDITION OF WELL GOOD, ~~WHERE WELLS~~ JN

WATER INSIDE PROTECTOR CASINGS HAS BEEN JUST BELOW OR AT WELL CASINGS

16:20 AT MW-14 LOCATION, COORDINATE WITH SUANNON REGARDING SAMPLING WELLS OVER NEXT FEW DAYS, WELL IN GOOD CONDITION, HAS MARINE LOCK

11/14/00

05M3022S

11/14/00 J.NOFFKE

(61)

~~16:25~~ 16:30 SET J. ROMIG UP TO SAMPLE MW-2 AT FORMER LAUNDRY SITE

17:00 CALL D. CARPENTER/ LET R. GROGAN KNOW DECON SUMP/ PAD FILLING UP W/ SURFACE H_2O DUE TO HEAVY RAINS, NEEDS TO BE ADDRESSED

17:10 MW-5, (WELL 200L KEY) GOOD CONDITION, WELL IS ADJACENT TO DRUM STORAGE AREA, SHEEN NOTED IN AREA IN ~~BN~~ MW PONDED WATER SOME DRUMS HAVE LIDS OFF CONTAINED OILED BOOM/ ADSORBENT PADS, LOCK IS ~~OK~~ JN OK (WORKING OK)

17:30 MW-8, IS IN GOOD CONDITION, WATER NOTED INSIDE PROTECTOR CASING, WILL BAIL IT OUT, LOCK STICKING

17:35 MW-6, WATER BAILED OUT OF IT, WELL IS IN GOOD CONDITION, LOCK ONIT

11/14/00

OSM30225 (62)

11/14/00 J. NOFFKE

NLF-2 WELL NEEDS 9/16" WRENCH TO OPEN

SAME FOR WELL POINT AT 2762 SITE

TASK 15: SET CONCRETE/GROUT FOR WELL POINT (WP-1/2762) H_2O INFILTRATING BOTTOM OF SKIRT OF PROTECTOR CASING / 2762

J. ROMIG COMPLETING SAMPLING AT NLF-MW-2 WELL

NEED TO EXTEND WELL POINT RISER PIPE FIRST TO SET CONCRETE SEAL FOR WP-1 / 2762

1911 - Post Horiba Calibration

pH	Cond	Turb	DO	Temp	Sal.
3.97	4.41 ms/cm	0	7.09	18.8	0.22

~~1.4 = DEFICIENCY~~

SECURE SAMPLES IN SAMPLE CONNEX FRIG

2000 LOGOFF

11/14/00

OSM30225 (63)

11/15/00 JJ J. NOFFKE

0700 - LOG IN

WEATHER: OVERCAST, LIGHT RAIN, LESS THAN 10 MPH, 30-38°F

0800 - HEALTH AND SAFETY MEETING, LEVEL D

0830 - DAILY REPORT

0750 TIM GRACE - PROJECT STATUS / ~~JIM HYDE~~

TAKE PHOTO OF LOOSE SEAL (MAGONE) R. HYDE FOR AKUTAN PROJECT

OBJECTIVES: CONTINUE GW SAMPLING + ISLAND-WIDE SOIL SAMPLING

HORIBA CALC, TODAY ~~1600~~ 1557

PH=4.00, COND=4.48 ms/cm, TURB=0, DO=9.37

TEMP=20.1, SAL=0.23

TIM GRACE - PROJECT STATUS

PRIORITY SITES:

1. SKI BOWL - HIGHER ELEVATIONS SITE FIRST

11/15/00

05M30227 (64)

11/15/00 J NOFFKE

✓ ② FORMER LAUNDRY SITE (BLD. 400)
③ SEEP SAMPLING
✓ ④ TRANSFORMER SAMPLING

581-1589 – VAN REPAIR #

0930 CALL (ANNE) AT LAUCKS LAB – ADVISE OF COOLER SHIPMENT SCHEDULE

1000 DRIVE TO N SKI BOWL SITES 3465 - J. ROMIG WILL SAMPLE WP1 FOR BTEX, ~~J~~ DRO, PAHS

1010 AT 3260 (FORMER RUST'S 3265) SITE, N SKI BOWL, SET UP COLLECT SOIL SAMPLES, INSTALL WELL POINTS, B. MACDONALD, J. NOFFKE, COMPLETE SPA FOR WELL POINTS

WILL COLLECT SOIL SAMPLES FROM GRID LOCATIONS 4, 17, ETC. FOR DRO, PAHS, (1/BTEX) TOC

11/15/00

05M30227 (65)

11/15/00 J NOFFKE
SITE 3260

NEED TO COLLECT
TOC DUP, TRIP, MS/MSD
BTEX DUP, TRIP, MS/MSD
DRO DUP, TRIP, MS/MSD

COLLECTED THE FOLLOWING SOIL SAMPLES.

	SAMPLE ID	TIME	DEPTH
	LOCATION IS 3.5' SOUTH OF (00+10) STAKE AND 2' EAST OF STAKE		
(1) (3260 SITE)	HB-4	11:35	1' BGS

1 x 8 oz FOR DRO (AM-AS20601)
1 x 8 oz FOR PAHs (— 602)
1 x 4oz TOC (— 603)

SAMPLE IS ORGANIC SILT AT 1'
0-6" SILTY SANDY GRAVEL, WOOD PIECES IN BOREHOLE, SHEEN, SLIGHT ODOR NOTED ON GRAVELS

(3260)
(2) WP-1 12:00 4.5-5' BGS (AM-AS20604 – 605)
(3) WP-1 12:15 6.5-7' BGS (AM-AS20606 – 607)

SEE B. McDONALD LOG FOR DESCRIPTION
1 x 8 oz FOR DRO
1 x 8 oz FOR PAHs
~~1 x 4oz FOR~~

11/15/00

11/15/00 J. NOFFKE

13:00 (UST)
SITE 3265
B. MCDONALD/J NOFFKE
COLLECTING SOIL SAMPLES
INSTALLING WELL POINT DOWN-
GRADIENT FROM FORMER UST SITE

(4) (3265)
TIME 13:15 SOIL SAMPLE
COLLECTED /WP-1 1.5-2.5' BGS
ORGANICS/SILT BROWN, NO ODOR, SHEEN
COLLECT (1) 8OZ FOR DRO (AM-AS20608)
(1) X 8OZ FOR PAHS (AM-AS20609)
(1) X 4OZ TOC (AM-AS20610)

(5) (3265)
TIME 13:35 SUBSURFACE
COLLECT SOIL SAMPLE AT 6-7'
BLUE/GRAY CLAY. CLAY CONTAINS
GRAVEL, WET 1X 8OZ (AM-AS20611)
DRO
1X 8OZ (AM-AS20612)
13:45 INSTALLING PAH WELL-POINT
WP-1 AT 3265

15:15 FINISH INSTALLING
WP-1 AT 3265

11/15/00

AMAS20-613
614
615
DUPLICATE OF THESE

11/15/00 J NOFFKE

UST
SITE 3260

(7)

SAMPLE ID	TIME	DEPTH
HB1B-1	14:45	1-1.5' BGS

SOIL SAMPLING
EQUIPMENT IS DECONTAMINATED ~~BETWEEN~~ BETWEEN SAMPLES USING
ALCONOX, DI WATER, DI SPRAY
15:30 GO GET WELL SUPPLY
MATERIALS (SAND, BENTONITE FOR
WELL POINTS) TO SEAL WELLSCREEN
FROM SURFACE WATER RUNOFF
HELP J ROMIG W/ SAMPLING
AT SITE 3265
17:00 COLLECT SOIL SAMPLES
AGAIN AT 3260, WORK ON
INSTALLING WELL RISERS

1800 - COLLECT SAMPLE
AT 1-1.5' (AM-AS20619)
HB 17 - SAMPLE FOR 1X 8OZ DRO
1X 8OZ PAHS
DESCRIPTION. (AM-AS20620)
SAMPLE HB18-1 IS 30' SOUTH OF
HB 17 LOCATION
18:30 DEMOB SITE, DRIVE BACK TO
JE OFFICE TRAILER

11/15/00

(68)

11/15/00 J. NOFFKE 05M30227

1915 HRS, (HORIBA)
DO 8.35 SAL 0.22 PH 3.99 COND 4.48 MS/C
TURB 1

1930 ~~JE~~ LOG OFF

DOUG CARPENTER, STEVE HAMMOND LEFT DUTCH HARBOR/ JOB SITE FOR ANCHORAGE TODAY

HB 18-1-1.5 / UST 3260 SAMPLES ARE
AM-AS20616 D20
AM-AS20617 PAHS
AM-AS20618 415.2 TOC

11/15/00

(69)

05M30227

PHOTOLOG ROLL #1
11/5/00 27 EXPOSURES
800 SPEED

① N SKI BOWL UST 3260, SJN
TIME: 13:05, J. NOFFKE HAND AUGERING TO COLLECT SOIL SAMPLES, INSTALL WELL POINT WP-1, WEATHER, OVERCAST, RAIN, DRIZZLE, 35°F, PHOTO TAKEN FACING NORTH
② SAME AS ABOVE TIME: 13:08
③ N SKI BOWL, UST 3260, PHOTO OF SAMPLE GRID, WEATHER AS STATED ABOVE, FACING EAST

11/15/00

(70)

11/15/00.

OSM30227

(71)

11/16/00 J. NOFFKE

0700 LOG ON

WEATHER: RAIN TO SNOW, OVER CAST, WINDS 20 MPH, 30°F

0800 HEALTH AND SAFETY MEETING

0830 DAILY REPORTS (INCLUDING H+S REPORT)

0915 CALIBRATE PID TO 100 PPM ISOBUTYLENE READS 99.9 - WORKING GOOD

0900 CALIBRATE HORRIBA SEE BRUCE McDONALD'S NOTES

PH =

CONDUCTIVITY =

TEMP =

D.O. =

SALINITY

1000 MOB EQUIPMENT TO FINISH SAMPLING ACTIVITIES AT UST 3260 / 3265 SITES

0800-1030 SAMPLE MANAGEMENT / PACKAGE SAMPLES FOR SHIPMENT TO LABS

11/16/00

11/16/00 J. NOFFKE

10:30 LEAVE FOR ~~JV~~ UST 3260 SITE, SNOWING

11:00 SET TO SAMPLE WELL POINTS AT 3260 & 3265 SITES, HAND AUGER SOIL SAMPLES

SET UP DECON AREA / B MCDONALD, J. NOFFKE, J. ROMIG

WATER LEVEL

WP-1 AT 3265 IS 1.0 BGS TIME: 12:05
STICKUP 2.8'
7.5' BOTTOM OF WELL
6.5' IS WATER COLUMN - 1¼" CASING

WP-1 AT 3260 TIME 12:10 STABILIZE
WATER LEVEL 0.8' ABOVE GROUND SURFACE, HEAD PRESSURE / TOTAL DEPTH WELL IS 7' N OF HB-15 AND ~~4'~~ EAST OF HB15 LOCATION

11/16/00

WP-1 AT 3265 LOCATION IS 59' W OF HB-3 LOCATION AND 58' FT NORTH ~~OF~~ THEN 52' N TO SEDIMENT / SAMPLE - STAKE AT CREEK

11/16/00 JNOFFKE

SAMPLE ID	TIME	DEPTH	ROCKS
05M 3260 HB19	12:45 (11/17/00)	10	/ ORGANIC SILT BROWN SOME SAND NO ODOR, OR SHEEN

COC# AM-AS20621

1 x 4oz TOC ONLY ~~BV~~

~~1x 4oz TOC MS JN~~

1x 4oz TOC MS/MSD S (AMA STOCK)

12:25 HAD TO STOP SAMPLING FOR HB-19 DUE TO HIGH WINDS, GUSTING UP TO 50+MPH, STARTED TO SNOW, MIXED W/ HEAVY RAIN LEAVE SITE - WHITE CAPS VISIBLE ON UNALASKA LAKE

INSTALLED CAPS ON BOTH WELL POINTS AT 12:00

12:50 BACK AT JE TRAILER ASSIST J. ROMIG IN MOBILIZATION OF EQUIPMENT TO SAMPLE MW-14 AT PREVUE SITE.

13:30-14:30 SET UP FOR SAMPLING BALLYHOO STANDALONE TRANSFORMER AT DECON PAD COMPLETE SPA W/ CALL TO H. GODDWIN

11/16/00

(74)

11/16/00 J. NOFFKE 05M30227

B. McDONALD / K. THOMPSON WILL COLLECT OIL SAMPLE FROM BALLYHOO TRANSFORMER

1580 AT OFFICE

SAMPLES TAKEN TO AIRPORT/
AA GOLDSTREAK TODAY AIRBILL#
1-COOLER TO STL 2860-3164
1-COOLER TO DATACHEM AIRBILL# 2859-8404
1 COOLER TO LAUCKS AIRBILL# 2860-3153
#'S TO CONTACT LABS DURING WEEKEND
(206) 550-4981 cell
LAUCKS
DATACHEM - K. GRIFFITHS (HM) 801-254-3727
801-835-9597 (801)254-3511
cell

STL EMANUAL HIGNUTT
(407) 278-2513
TORRI RYAN HALL
332-3142

Jan 11/16/00

05M30227 (75)

11/16/00 J. NOFFKE

1530 K. McLOONE - DISCUSS SAMPLE SHIPMENT ISSUES
3 COOLERS AT AA TODAY
2 COOLERS FROM YESTERDAY
FLIGHT CANCELLED FOR TODAY

1600 J. ROMIG RETURNS FROM SAMPLING PRE WW II MW-14
DEMOB EQUIPMENT
CHECK CALIBRATION ON THE HORIBA
PH = 4.10
CONDUCTIVITY = 4.47 MS/CM
TURBIDITY = 0
DO = 7.63 mg/L
TEMP = 12.4°C
SALINITY = 0.22
DRY EQUIPMENT FROM RAIN

Jan 11/16/00

1630 SAMPLE TIME FOR BALLYHOO STAND ALONE TRANSFORMER (POST WWII TRANSFORMER) NOT DRILLED TO SAMPLE, PULLED PLUG + THREADED IT BACK IN,

11/16/00

16:30 BALLYHOO TRANSFORMER COLLECTED 1 X 40Z FOR EQC OSB/PCB ANALYSIS - FOLLOW UP ON SAMPLING (AM=AS21201)

17:00 DEMOB EQUIPMENT, SAMPLE MANAGEMENT, REPORTING. OFFICE CLEAN UP CONNEX, TRAILER READY FOR DEMOB/PUNCH LIST FIELD SEASON

19:00 LOG OFF

17:00 - B. MCDONALD WORKS ON INSTALLING CHRISTY BOX AT 2762-WP-1

11/16/00

11/17/00

0645 LOG IN
DAILY REPORTS
0800 HEALTH + SAFETY MEETING
0830 SAMPLE MANAGEMENT, UPDATE SAMPLE SUMMARY SHEET, PACKAGE SAMPLES
0930 COORDINATE W/ ANCHORAGE OFFICE, K. MCLOONE REGARDING SHIPPING SAMPLES OUT OF OUTH ON NEXT AVAILABLE FLIGHTS, ON WEEKEND IF NEEDED
1030 MOB GEAR FOR SOIL + WATER SAMPLING
1120 MOB TONSKI BOWL SITES 3260/3265
12:05 J. ROMICK TO SAMPLE WP-1 AT 3260, J. NOFFKE, B. MCDONALD CONTINUE SOIL SAMPLING
WEATHER 38-40° F, OVERCAST, WINDS VARIABLE, 10-15 MPH, GUSTING IN AM 40-50 MPH RAIN, SLEETING SNOW

11/17/00

05M30227 (78)

11/17/00 J. NOFFKE

SAMPLE ID	TIME	DEPTH	DESCRIPTION
3260 UST HB20	1320	1.0'	OL ORGANIC SILT DK BROWN ROOTS, FIBROUS ZONES

(A) 1-40Z BTEX METH PRES PRIMARY SAMPLE
(B) 1-40Z BTEX METH PRES FIELD DUPLICATE
(C) 1-40Z BTEX METH PRES (AM-AS19601) QA SAMPLE
ALSO WILL ANALYZE FOR MS/MSDS

~~COC #5~~ JN

(D) 1-8 OZ DRO/PAHS PRIMARY
(E) 2-8 OZ DRO/PAHS MS/MSDS
(F) 1-8 OZ PAHS FIELD DUPLICATE
(G) 1-8OZ PAHS QA SAMPLE (AM-AS19602)

COC #3

(A) (AM-AS20625) 3JN
(B) (AM-AS20624)
(C) (AM-AS19601)
(D) (AM-S20626)
(E) (AM-S20627)
(H) (AM-S20628)

HB20 LOCATION IS 11' 3" N OF HB-16, 145' EAST OF WP-1 UST3260

(G) (AM-AS19602) 11/17/00

05M30227 (79)

11/17/00 J. NOFFKE

14:35 - SAMPLE WP-1/SITE 3260 H_2O IS CLEAR, NO ODOR OR SHEEN, SEE GW SAMPLING SHEET WELL POINT NOT DEVELOPED DUE TO POOR WEATHER CONDITIONS/ + REMAINING TIME FOR FIELD SCHEDULE, ALSO ~~NO JN 11/17/00~~ 1" DIA BAILERS NOT AVAILABLE - INSTEAD PURGED 4 GALLONS FROM WELL POINT, USING LOW FLOW METHOD, NO SEDS DETECTED WHILE PURGING, WELL ALSO UNDER HYDRASTATIC PRESSURE/ TEFLON USED TUBING TO SAMPLE BTEX, NO 1" DIA BAILER

15:00 FINISH SAMPLING WELL

4 1-LITER AMBERS FOR DRO (AM-AS19604) HCl PRES, PRIMARY, DUPE MS/MSDS COLLECTED

2- 1 LITER AMBERS FOR (AM-AS19605) PAHS

3 - 40 ML VOAS FOR BTEX COC #5 (AM-AS19606)

11/17/00

PUT MASTER LOCK ON 3260/WP-1) KEY # IS 16022

05M30227 (80)

11/17/00 J. NOFFKE

COLLECTED SOIL SAMPLE

SAMPLE ID	DEPTH	TIME	DESCRIPTION
3260			
HB-21	1-1.5' BGS	15:15	SILTY GRAVEL, ORANGE 0-1' BGS; 1-1.5 ORGANIC SILT (OL) DK BROWN-GRAY SILTY SAND LENSE AT 1.5' PEAT NO SHEEN OR ORGANICS ODOR

1 - 8OZ AMBER CONTAINER FOR DRO/PAHS

COC #5
(AM-A520629)

HB-21
SAMPLE IS LOCATED 10' NORTH OF HB-3 WHICH IS 40' WEST OF STAKE 00, CORNER OF FOOTPRINT

WEATHER CONTINUES TO SNOW, SLEET, WINDS VARIABLE

J. Noffke 11/17/00

JNOFFKE 05M30227 (81)

11/17/00

15:45 SET UP TO SAMPLE WELL POINT MW AT 3265

16:00 START PURGING WP-1/3265 LIGHT BROWN WATER, HYDROCARBON ODOR? SOFT BOTTOM ~.5 GALLON, DARK BROWN WATER ORGANICS, - PERISTALTIC PUMP IS REVELOPING THE WELL ~.75 GALLON WATER CLEARS, NOT CLOUDY ANYMORE PUMPING RATE IS SLOW OR WELL WILL GO DRY

17:15 PURGED 1.4 GALLONS, BEGIN TO TAKE PARAMETERS

WL BGS: 1.05'

TD BGS: 7.5'

STICKUP 3.0'

PARAMETERS:

TIME	1730/	1740	1745	1755
PH (S.U)	5.89	5.71	~~6.01~~ 5.97	~~5.79~~
SC (MS/CM)	.164	.157	.157	.158
TEMP (°C)	2.3	2.6	—	2.3
TURBIDITY (NTU)	91	80	73	94
D.O (MG/L)	NOT WORKING			
SALINITY (%)	0.00	0.00	0.00	0.00
PURGE VOLUME	1 LITER +1.4G	2ND LITER +1.4G	1 LITER +	

11/17/00 J. NOFFKE 05M30227 (82)

PURGE RATE FOR WP-1/3265 IS 1 QUART IN 5 MINUTES
20 MINUTES PER GALLON
1-LITER / 5 MINUTES

CONTINUE PARAMETERS:

TIME =	~~1810~~	1815
PH =	~~5.76~~	5.76
SC =	0.156	0.155
TEMP =	2.4	2.3
TURBIDITY =	122	85
DO.	NOT WORKING	
SALINITY =	0	0.00
PURGE VOLUME	~~+200~~	+ 1 LITER

HORRIBA - TURBIDITY / DO READINGS MAYBE FLUCTUATING DUE TO COLD TEMPS, SNOW / RAIN

SAMPLE TIME ~~18~~:15
NO ODOR, SHEEN
CLEAR
jm 11/17/00

WP-1 3265
1 X 1-LITER AMBER PRES (AM-A 519107) FOR ORO
1 X 1-LITER AMBER FOR PAHS (AM-A 519108)

05M30227 J. NOFFKE 11/17/00 (83)

UST 3265

SAMPLE DEPTH	TIME	DEPTH	DESCRIPTION
HB-1-1	16:50 JN 45	1-1.5' BGS	ORGANIC SILT DK BROWN NO ODOR OR SHEEN
HB-1-2	16:50	1.5-2.5'	

LOCATION IS

HB-2	17:30	1-2'	ORGANICS SILT NO ODOR OR SHEEN
HB-3	17:45	1.5-1'	BROWN ORGANIC SILTS W/ FINE SAND LENSES / SAND NO OR SHEEN
HB-1-2	18:00	1.5-2.5	

HB1-2
DARK BROWN ORGANIC SILT
NO ODOR OR SHEEN
COC # (AM-A520630) 1 X 8 OZ DRO/PAHS
~~AMA-A520631~~ 1 X 4 OZ TOC
jm 11/17/00

UST 3265 WP-1
→ 3 X 40 ML VOAS BTEX (AMA519109)

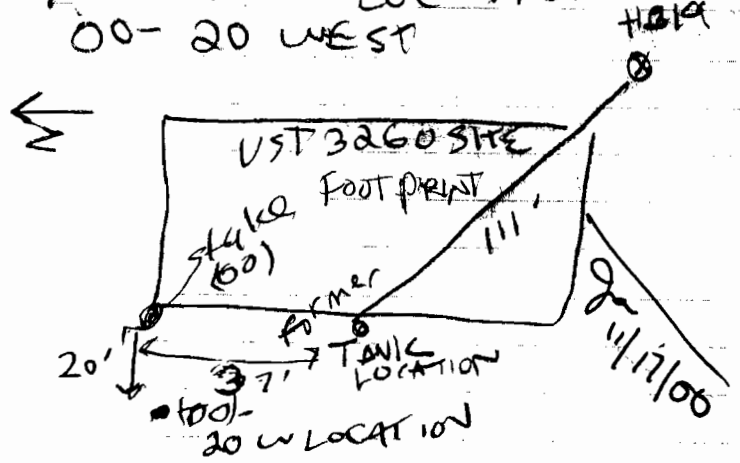
J.NGFFICE 11/17/00 05M30227 (84)

1840 TOO MUCH SNOW / WET LOGBOOK.

HB19 - 111' FROM TANK LOCATION (METAL ~~PIPE) TO APPROX NE~~ ~~CORNER OF FOUNDATION~~ ~~PIPE TO SURVEY STAKE~~ AT NW JT

LOCATION

HB19 IS 111' FROM METAL PIPE (TANK LOCATION) AND 37' TO NW CORNER OF FOOTPRINT ALSO LINES UP W/ TRANSECT LOCATION 00-20 WEST



J.NOFFICE 05M30227 (85)

UST 3265 11/17/00

HB-1 IS 32' SOUTH OF WP-1 (UST 3265) & 62' W OF HB21

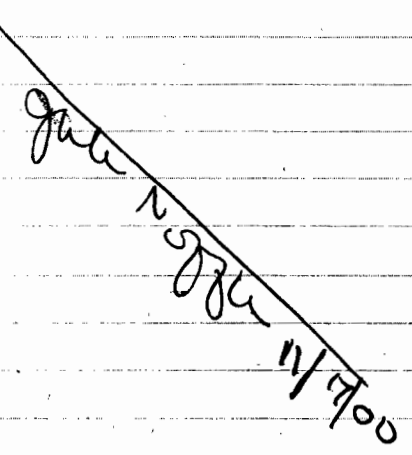
HB-2 IS 31' SOUTH OF HB-1

HB-3 IS 48' SOUTH OF HB-1, ALSO 5' EAST OF HB-2 LOCATIONS

HORIBA

PH = 3.90 COND. 457 TURB 1 DO 17.6% TEMP 8.7 SAL 0.82

2000 LOG OFF



05M3022 (86)

11/18/00 J. NOFFKE

0800 LOG IN. COOLERS TO NEED SAMPLES BE REPACKED W/ FRESH ICE, COOLERS HAVE BEEN PACKED SINCE 11/14/00 - IN IGLOO/SHIPPING CRATE OUTSIDE, WAITING FOR FLIGHT MAY HAVE BEEN IN FRIG PART TIME

0815 HEALTH + SAFETY MEETING, CONTINUE TO PAY ATTENTION TO WEATHER, DEMOB ACTIVITIES

SEE R. GROGAN NOTES

0900 DAILY REPORT

1000 REPACK SAMPLE COOLERS WITH ICE

1200 FINISH CHANGING OUT ICE IN COOLERS

1220 SET UP TO SAMPLE SLUDGES AND CARBON AT DECON PAD. B. MCDONALD, R. GROGAN ~~GROGTSON~~

11/18/00

1300 SAMPLE MANAGEMENT

1050 - COORDINATE W/ K. MCLOONE REGARDING SAMPLE SHIPMENT

COOLER SUMMARY AT ALASKA AIRLINES FREIGHT OFFICE 05M3022 (87)

11/7-9/00

DATA CHEM (2) SOILS - METHANOL

COOLER UST 2762 A/B 11/11/00

2680-3186 AIRWAY BILL#

		AIRWAY BILL#
(3)	STL 11/14 - 11/15	2860 3164
(4)	LAUCKS	2860 - 3290 / SOIL METHANOL
(5)	DATA CHEM 11/14-15	2859-8404
(6)	AIRBILL# LAUCKS	2860-3153 11/14-15/00

SHOULD GO TO ANCHORAGE TODAY AT 5PM

J. ROMIG / J. RIGGLE LEAVE SITE FOR ANCHORAGE IN MORNING

11/18/00

J. NOFFKE

J. NOFFKE 05M30227 (88)

Mini RAE PID (11-18-00 1730 HRS.)

			Reading
HB 1-2		1.5-2.5	0.0
HB 1	3265	1.0-1.5	0.0
HB 18	3260	1.0-1.5	0.0
HB 21		1.0-1.5	0.0
HB 2	3265		0.0
WP-1	3265	1.5-2.5	0.0
HB 3	3265		0.0
HB 19	1245 HRS		0.0
HB 20	3260	1.0'	0.0
	3265	6-7'	0.0 (BM)

1800 SET TO COLLECT WATER LEVELS AT THE PREWWII SITE

SEE ~~IN~~ GW MONITORING NOTEBOOK - PREWWII FOR DETAILS

2100 FINISH COLLECTING WATER LEVEL MEASUREMENT AT PREWWII SITE, DEMOB EQUIPMENT, LOG OFF

11/18/00

(89)

05M30227 JNOFFICE

11/18/00

SLUDGE SAMPLE COLLECTED FROM DECON PAD SUMP + (~~5~~ 3 55-GALLON DRUMS - CONTAINING SLUDGE), SAMPLES COLLECTED 1' DEPTH ~~COLLECTED~~ IN FROM EACH DRUM + SUMP AND COMPOSITED. SUMP SAMPLE COLLECTED NEAR OUT ~~IN~~ FLOW AND BOTTOM AT PREWWII

SAMPLE TIME 11/18/00 14:15

1 x 40Z FOR VOCs (AMA520634)

1 x 40Z FOR 8 RCRA (AMA-520633) METALS ~~IN~~ CA

1 x 80Z FOR PCBs (AMA-A520632)

FOR 48 TAT CALLED DPS (DECON PAD SLUDGE) SAMPLE

ONE COMPOSITE SAMPLE (CARBON) COLLECTED FROM 5 CARBON CANISTERS/ FILTERS FOR TREATMENT SYSTEM

SAMPLE TIME 15:00

11/18/00

11/18/00

11/18/00

COMPOSITE SAMPLE FOR CARBON - NAMED TS-C

COLLECTED THE FOLLOWING

1x 802 SW8082 PCBS (AM-AS20635)

1x 402 8 RCRA METALS SW6010/7000 SERIES (AM-AS20636)

1x 402 VOCS SW8260B (AM-AS20637)

FOR 48 HR TAT

TRIP BLANK FOR UST SITES

3260/3265 8021B

WELL POINTS

AM-AS20110

SERIAL # 199311

1800 SCC GW NOTEBOOK PREVIOUS

Joe Noffke 11/18/00

LOG OFF 2100

11/19/00

0730 LOG IN, WEATHER OVERCAST, RAIN, WINDS 15 MPH, 35-38°F

BEGIN DEMOBILIZATION ACTIVITIES, COMPLETE PREPARATORY PHASE CHECK LIST, INITIAL INSPECTIONS, W/JE STAFF, SOUTH COAST PUNCH LIST FOR DEMOB TO FOLLOW

0800 HEALTH + SAFETY MEETING

0830 DAILY REPORTS

0930 SAMPLE MANAGEMENT FOLLOW UP ON DRUM INVENTORY AT DECON PAD

1000 SOUTH COAST CONTINUES TO INSTALL FENCE AROUND PERIMETER OF LAVE YARD, CLEAN UP ACTIVITIES

WORK QUALITY IS GOOD

Joe Noffke 11/19/00

J. NOFFKE 11/19/00 (92)
05M30227

1100 CONTINUE DEMOB OF OFFICE EQUIPMENT, SAMPLE CONNEX + TRAILER ORGANIZED

1400 AA FLIGHT CANCELED FOR TODAY, SECURE SAMPLES W/ ICE

1730-1830 DINNER

1830-2130 - CONTINUE DEMOB, CLEAN EQUIPMENT, METERS

2130 OFFWORK

OTHER NOTES:

1 HOUR REVIEW AKUTAN EQUIPMENT + LIST FOR ALSO, KIWI THOMPSON./ B. MC DONALD MEASURE PRODUCT IN MW-13 AT PRESENT (SEE B McDONALD NOTES)

Jan 11/19/00

05M30227 (93)
J. NOFFKE 11/20/00

0745 LOG IN
CALL E. DETMER. PROJECT STATUS
NEED TO FIND PUMP WHICH WAS SHIPPED OUT LAST WEEK AT AA CARGO
CALL K. TJADEN/ STATUS FOR AKUTAN EQUIPMENT
0800 H + S MEETING, LAST DAY, CONTINUE TO BE SAFE, DONT RUSH TO DEMOB
0830 DAILY REPORTS
0910 SAMPLE MANAGEMENT

CONTINUE DEMOB ACTIVITIES

1200 TAKE SAMPLES TO AA CARGO OFFICE, GOLD STREAK COOLERS AS FOLLOWED: AIRBILL#
(1) LAUCKS 2860-3105
(3) DATA CHEM 2860-3116

Jan 11/20/00

05M30227 11/20/00

JNOFFICE (94)

12:30 FOLLOW-UP INSPECTION W/ SOUTH COAST AT HAVE YARD W/ DAN., CONTAMINATED STOCKPILES COVERED, SECURED W/ TIRES, FISH NETS, HAVE UNIT IN TACT, DECON PAD - IN GOOD CONDITION, DRUMS STORED APPROPRIATELY, WATER TREATMENT SYSTEM SECURED

SUMP - GOOD CONDITION, BOOM ADJACENT TO IT, PAD IS OIL WELL DRAINED FENCE IN GOOD CONDITION AROUND HAVE YARD W/ LOCKING GATE

13:30 FINAL DEMOB AT OFFICE, SAMPLE TRAILER DEC, (STERLING SERVICES) PICKS UP ~~JT~~ 20 ITEMS TO STORE FOR AKUTAN PROJECT

11/20/00

05M30227 11/20/00 (95)

JNOFFICE

14:00 DEMOB APARTMENTS, STORE HOUSEWARES IN APT #510, CLEAN UP AREAS

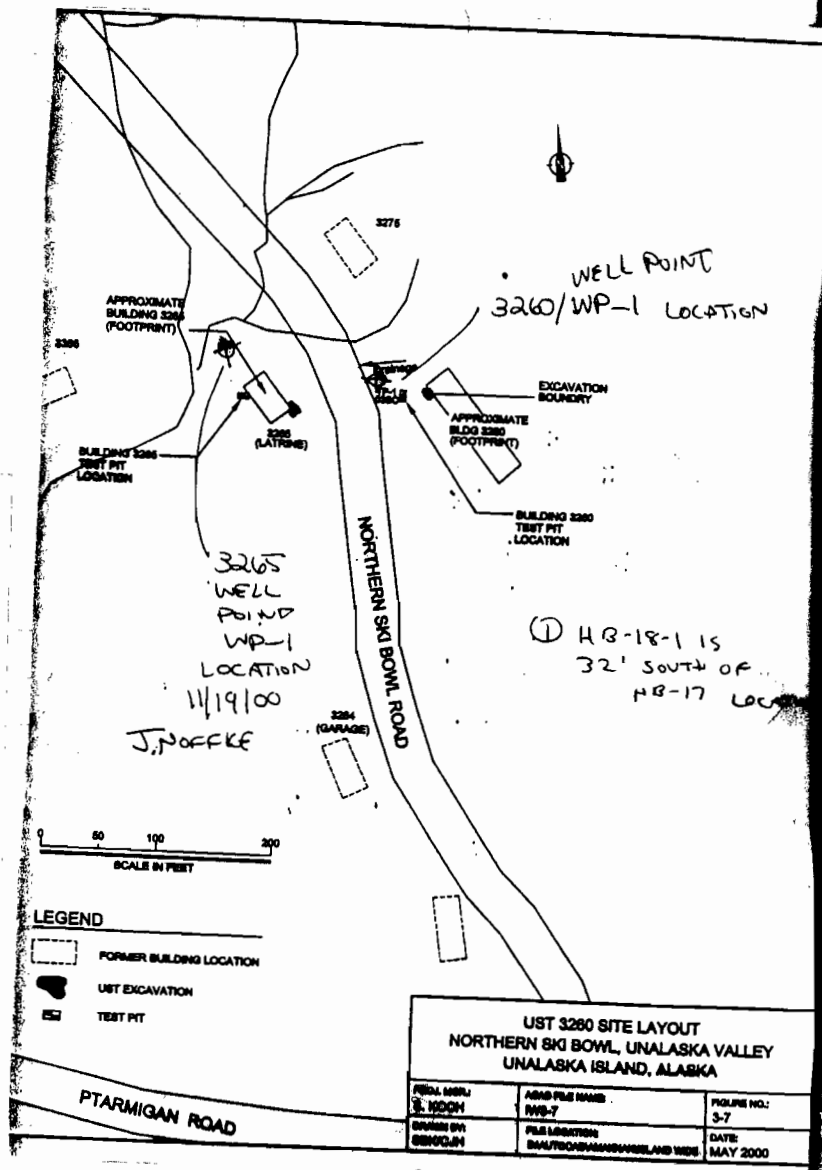
16:00 AT AIRPORT, NO PUMP AT CARGO OFFICE

17:15 DEPART DUTCH HARBOR FOR ANCHORAGE

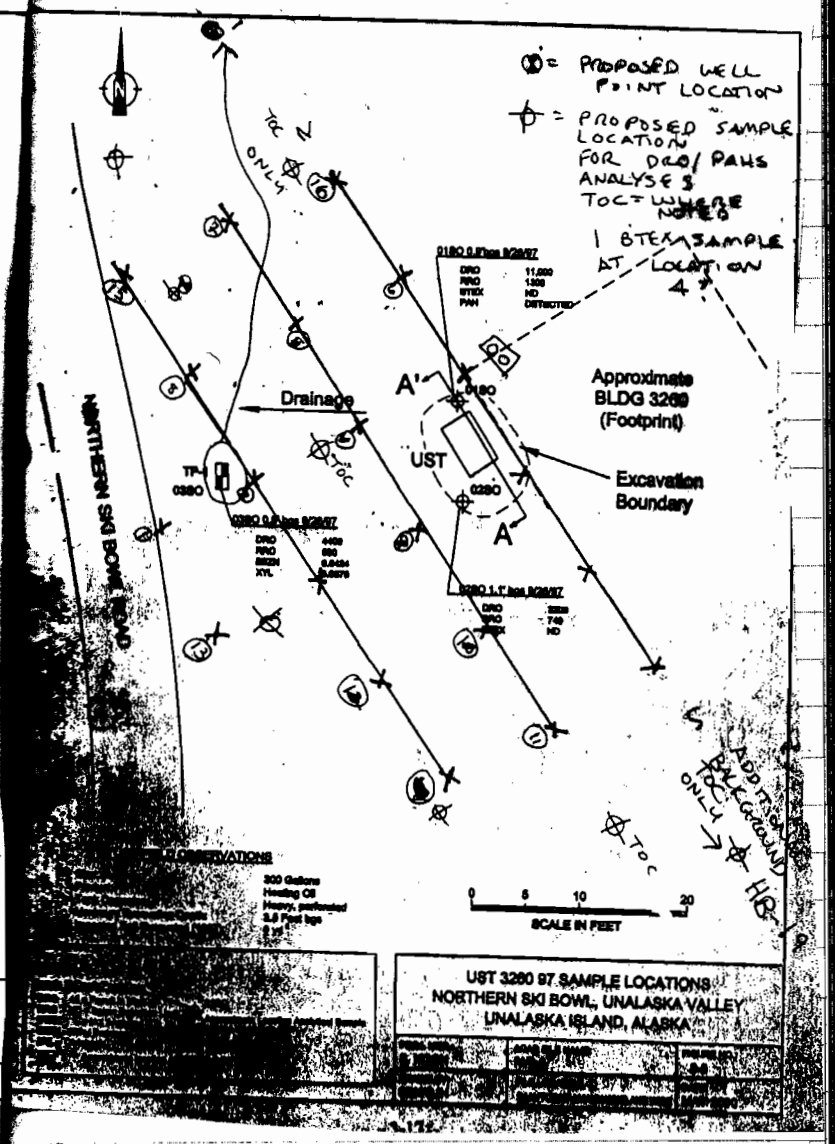
19:30 ARRIVE IN ANCHORAGE GET BAGGAGE

11/20/00

N. SKI BOWL SAMPLING INFO (96)



N. SKI BOWL SAMPLING INFO (97)



APPENDIX G

GPS Coordinates

GPS Waypoints
2000 Islandwide Activities
Unalaska and Amaknak Islands, Alaska

Waypoint Code	Location	Latitude in Decimal Degrees	Longitude in Decimal Degrees	UTM Easting (meters)	UTM Northing (meters)	UTM Zone
2664B1	Building 2664 foundation corner	53.8630378	-166.5132953	400482.38	5969344.85	03U
2664B2	Building 2664 foundation corner	53.8632309	-166.5133757	400477.54	5969366.45	03U
2664B3	Building 2664 foundation corner	53.8631129	-166.5140731	400431.41	5969354.3	03U
2664B4	Building 2664 foundation corner	53.8629198	-166.5139873	400436.59	5969332.69	03U
2664M1	Groundwater well 2664-MW1	53.8633865	-166.5141214	400428.88	5969384.8	03U
2664M2	Groundwater well 2664-MW2	53.8631398	-166.5141053	400429.35	5969357.32	03U
2664W1	Well point 2664-WP1	53.8631398	-166.5133435	400479.44	5969356.26	03U
2667M1	Groundwater well 2667-MW1	53.8628233	-166.5132202	400486.81	5969320.87	03U
3760-1	UST at Building 3765	53.8544923	-166.4908237	401940.07	5968362.9	03U
3765-1	Septic tank at Building 3765	53.8542026	-166.4901532	401983.5	5968329.75	03U
3765-2	Septic tank at Building 3765	53.8541865	-166.4900352	401991.22	5968327.79	03U
400D01	Building 400	53.8711435	-166.5598531	397440.69	5970312.89	03U
400T01	Building 400	53.8711488	-166.5598477	397441.06	5970313.48	03U
727-01	Building 727	53.8851178	-166.5467156	398338.31	5971848.56	03U
AB-B01	Agnes Beach Batteries (Glass)	53.8720286	-166.5434433	398521.69	5970387.75	03U
AB-B02	Agnes Beach Batteries (Non FUDS)	53.8722003	-166.5434808	398519.63	5970406.9	03U
AB-S01	Agnes Beach Soil Stain (Non FUDS)	53.8721359	-166.5435559	398514.54	5970399.85	03U
APT-HG	Suspect mercury contamination at airport sample location	53.8946986	-166.5395702	398831.07	5972904.17	03U
BDRM01	Ballyhoo Lone Drum #01	53.9218801	-166.5137673	400591.09	5975891.52	03U
BDRM02	Ballyhoo 3 Drum Group Drum #02	53.914445	-166.5180213	400294.04	5975070.36	03U
BDRM03	Ballyhoo 3 Drum Group Drum #03	53.9147455	-166.5170986	400355.35	5975102.49	03U
BDRM04	Ballyhoo 3 Drum Group Drum #04	53.9146435	-166.5161867	400415	5975089.87	03U
BH-016	Ballyhoo UST #016 (1997 Numbering)	53.9193267	-166.5122975	400681.55	5975605.39	03U
BH-017	Ballyhoo UST #017(1997 Numbering)	53.9196378	-166.5097065	400852.44	5975636.38	03U
BH-08	Ballyhoo UST #08 (1997 Numbering)	53.920244	-166.5100391	400832.03	5975704.28	03U
BH-09	Ballyhoo UST #09 (1997 Numbering)	53.9202333	-166.510023	400833.06	5975703.06	03U
BHCT01	Ballyhoo Transformer #1 Vault C	53.9201421	-166.5100444	400831.44	5975692.95	03U
BHCT02	Ballyhoo Transformer #2 Vault C	53.9204907	-166.5103824	400810.07	5975732.21	03U
BHSOT1	Ballyho Stand -alone Transformer	53.9144236	-166.5217013	400052.3	5975073.16	03U
BH-T01	Ballyhoo UST # Fill Pipe	53.9141607	-166.5192659	400211.62	5975040.49	03U
BHT-01	Ballyhoo UST #01 (1997 Numbering)	53.9141929	-166.5192981	400209.59	5975044.11	03U
BTFMR1	Ballyhoo Transformer #1	53.9224273	-166.5143306	400555.41	5975953.18	03U
BTFMR2	Ballyhoo Transformer #2	53.9219552	-166.5144701	400545.13	5975900.86	03U
BTFMR3	Ballyhoo Transformer #3	53.9219016	-166.5135045	400608.4	5975893.54	03U
CMD1	Crowley Maritime Debris Pile South End	53.8486129	-166.5745945	396415.89	5967827.89	03U
CMD2	Crowley Maritime Center of Debris Pile 100metres South of Dock	53.8490582	-166.5744282	396427.92	5967877.18	03U
CMD3	Crowley Maritime Debris Pile North End	53.8510859	-166.5679211	396860.94	5968093.28	03U
FMGSM1	Fort Mears Gasoline Station groundwater well MW-1	53.8835996	-166.5534157	397894.26	5971689.3	03U

GPS Waypoints
2000 Islandwide Activities
Unalaska and Amaknak Islands, Alaska

Waypoint Code	Location	Latitude (Decimal Deg)	Longitude (Decimal Deg)	Easting (Meters)	Northing (Meters)	Zone
FMGSM2	Fort Mears Gasoline Station groundwater well MW-2	53.8837391	-166.5538932	397863.22	5971705.5	03U
FMGSM3	Fort Mears Gasoline Station groundwater well MW-3	53.8842863	-166.5543921	397831.77	5971767.09	03U
FMGSM4	Fort Mears Gasoline Station groundwater well MW-4	53.8835567	-166.5538664	397864.54	5971685.17	03U
FMGSM5	Fort Mears Gasoline Station groundwater well MW-5	53.8843346	-166.5530295	397921.44	5971770.5	03U
FMGSM6	Fort Mears Gasoline Station groundwater well MW-6	53.883884	-166.5541399	397847.36	5971721.97	03U
FMLFS1	Fort Mears Landfill South test pit TP1	53.8829988	-166.5585495	397555.38	5971629.86	03U
FMLFS2	Fort Mears Landfill South test pit TP2	53.8828111	-166.5587694	397540.46	5971609.29	03U
FMLFS3	Fort Mears Landfill South test pit TP3	53.8826448	-166.5588982	397531.6	5971590.98	03U
FMPWM1	Fort Mears Public Works groundwater well MW-1	53.8869309	-166.5444357	398492.55	5972047	03U
FMPWM2	Fort Mears Public Works groundwater well MW-2	53.8873386	-166.5447361	398473.79	5972092.78	03U
FMPWM3	Fort Mears Public Works groundwater well MW-3	53.887462	-166.5452457	398440.6	5972107.24	03U
HCPPM1	Humpy Cove Power Plant groundwater well MW-1	53.8996822	-166.4321209	405902.56	5973310.62	03U
HOOTP6	Ballyhoo Spit Tank Farm Test pit TP6	53.9138389	-166.5045244	401179.04	5974984.03	03U
HOOTP7	Ballyhoo Spit Tank Farm Test pit TP7	53.9149869	-166.5032906	401262.78	5975110.02	03U
HOOTP8	Ballyhoo Spit Tank Farm Test pit TP8	53.9145309	-166.5051628	401138.75	5975061.9	03U
HOOTP9	Ballyhoo Spit Tank Farm Test pit TP9	53.9146596	-166.5044386	401186.62	5975075.22	03U
IW034A	Naval Laundry Facility	53.8925314	-166.5379179	398934.41	5972660.72	03U
IW034B	Naval Laundry Facility	53.8924563	-166.5377999	398941.98	5972652.19	03U
IW035A	Former Oil and Lube Storage	53.8918072	-166.5418608	398673.57	5972585.78	03U
IW035B	Former Oil and Lube Storage	53.8919467	-166.5417481	398681.31	5972601.14	03U
IW035C	Former Oil and Lube Storage	53.8911206	-166.5425474	398626.78	5972510.37	03U
IW036	Former USTs along Power House Road	53.8926548	-166.5383203	398908.27	5972675.02	03U
IW042	Drum Dump and WWII Debris Pile along Captains Bay Road	53.8354164	-166.5852482	395682.29	5966375.46	03U
IW042A	Drum Dump and WWII Debris Pile along Captains Bay Road	53.8353413	-166.5853018	395678.57	5966367.19	03U
IW042B	Drum Dump and WWII Debris Pile along Captains Bay Road	53.8353092	-166.585275	395680.25	5966363.57	03U
IW2193	Island Wide Bldg # 2193	53.8660204	-166.5155912	400338.49	5969679.88	03U
IW2605	Island Wide Bldg # 2605	53.8610476	-166.5102966	400674.85	5969119.24	03U
IW2673	Island Wide Bldg # 2673	53.859846	-166.5080703	400818.41	5968982.45	03U
IW2674	Island Wide Bldg # 2674	53.859567	-166.5070135	400887.24	5968949.94	03U
IW2682	Island Wide Bldg # 2682	53.8605005	-166.5095885	400720.12	5969057.38	03U
IW2762	Island Wide Bldg # 2762	53.8536072	-166.504562	401034.4	5968283.51	03U

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Waypoint Code	Location	Latitude in Decimal Degrees	Longitude in Decimal Degrees	UTM Easting (NAD83 meters)	UTM Northing (NAD83 meters)	UTM Zone
IW2766	Island Wide Bldg # 2766	53.8517833	-166.502663	401155.01	5968077.96	03U
IW3065	Island Wide Bldg # 3065	53.8444608	-166.5035749	401077.76	5967264.64	03U
IW3075	Island Wide Bldg # 3075	53.8435543	-166.5036339	401071.74	5967163.87	03U
IW3260	Island Wide Bldg # 3260	53.8672704	-166.5003187	401345.64	5969797.57	03U
IW3465	Island Wide Bldg # 3465	53.8651943	-166.4989454	401431.06	5969564.71	03U
IW3475	Island Wide Bldg # 3475	53.8651943	-166.4989454	401431.06	5969564.71	03U
IW3665	Island Wide Bldg # 3665	53.8525718	-166.4992512	401381.27	5968160.94	03U
IW3760	Island Wide Bldg # 3760	53.8544816	-166.4909042	401934.75	5968361.82	03U
IW3765	Island Wide Bldg # 3765	53.8542295	-166.4902444	401977.56	5968332.86	03U
IW3860	Island Wide Bldg # 3860	53.8528186	-166.4837159	402403.67	5968166.9	03U
IW-415	Island Wide Bldg # 415	53.8946128	-166.5401281	398794.21	5972895.42	03U
IW-627	Island Wide Bldg # 627	53.8836318	-166.5355791	399066.66	5971667.34	03U
IW-727	Island Wide Bldg # 727	53.8848442	-166.5468497	398328.84	5971818.31	03U
IW-871	Island Wide Bldg # 871	53.8852894	-166.5521337	397982.64	5971875.43	03U
JW2674	Island Wide Bldg #2674	53.8554901	-166.4919181	401870.43	5968475.41	03U
LSADR1	Little South America drum location 1 and 2	53.8738525	-166.5568114	397647.28	5970609.86	03U
LSADR3	Little South America drum location 3	53.8738257	-166.5571011	397628.17	5970607.3	03U
LSADR4	Little South America drum location 4	53.8737881	-166.5576322	397593.16	5970603.89	03U
LSADR5	Little South America drum location 5	53.8739437	-166.5577287	397587.2	5970621.33	03U
LSATNK	Little South America AST	53.8721842	-166.5584422	397535.99	5970426.62	03U
PLD2M1	Port Levashef Drum Group 2 groundwater monitoring well MW1	53.8264149	-166.6064162	394266.76	5965405.43	03U
PLD3M1	Port Levashef Drum Group 3 groundwater monitoring well MW1	53.8282013	-166.6035087	394462.61	5965599.82	03U
PLDMW1	Port Levashef Drum Groups 1 and 4 groundwater monitoring well MW-1	53.8280672	-166.5978492	394834.73	5965576.5	03U
PLDMW2	Port Levashef Drum Groups 1 and 4 groundwater monitoring well MW-2	53.8281316	-166.5975113	394857.13	5965583.16	03U
PLDWP1	Port Levashef Drum Groups 1 and 4 well point WP-1	53.827858	-166.5979511	394827.49	5965553.38	03U
PLDWP2	Port Levashef Drum Groups 1 and 4 well point WP-2	53.8280135	-166.5976186	394849.77	5965570.19	03U
PLDWP3	Port Levashef Drum Groups 1 and 4 well point WP-3	53.8280565	-166.5979404	394828.7	5965575.44	03U
ROMEL1	Rommel Stakes North of Bldg 627	53.8844097	-166.5363462	399018.11	5971754.97	03U
ROMEL2	Rommel Stakes Immediately South of Bldg 627	53.8835996	-166.5355201	399070.46	5971663.68	03U
RP-MW3	Rocky Point groundwater monitoring well MW-3	53.8851929	-166.5299142	399442.72	5971832.95	03U
RPS5SW	Rocky Point seep 5 SW	53.8828808	-166.5335084	399200.94	5971580.85	03U
SBBLG3	Summer Bay Building 3	53.898443	-166.4508534	404669	5973197.78	03U
SB-T00		53.8973486	-166.4478118	404866.36	5973071.96	03U
UG2193	Unalaska Valley Building 2193	53.8656771	-166.5151299	400368.01	5969641.04	03U

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UG3949	Unalaska Valley Building 3949	53.8511986	-166.4934255	401761.24	5968000.08	03U
UGA	Trailhead to Ugadaga Bay (Beaver Inlet)	53.8470894	-166.4652623	403604.27	5967504.32	03U
UGABAY	Ugadaga Bay (Beaver Inlet)	53.8282764	-166.4320619	405746.06	5965366.83	03U
UGTP01		53.8490689	-166.4913655	401891.75	5967760.31	03U
ULAKEN	Unalaska Lake North sediment/surface water sample location	53.8710469	-166.5296514	399426.06	5970258.9	03U
ULAKES	Unalaska Lake South sediment/surface water sample location	53.870725	-166.529131	399459.49	5970222.35	03U
UNL-T1	Building 2563	53.8595027	-166.5125282	400524.43	5968950.5	03U
UNL-T2	Building 2569	53.8569385	-166.509111	400743.09	5968660.46	03U
UT1154	Little South America UST 1154	53.8733536	-166.5543653	397806.87	5970550.84	03U
2762EX	Building 2762 excavation	53.8536286	-166.5044708	401040.45	5968285.77	03U
2762WP	Building 2762 groundwater monitoring well point 2762-WP1	53.8535804	-166.5046049	401031.52	5968280.58	03U
2766T4	Building 2766 test pit TP-4	53.8518155	-166.5028186	401144.85	5968081.76	03U
2766T5	Building 2766 test pit TP-5	53.8516814	-166.5029741	401134.3	5968067.05	03U
3065WP	Building 3065 groundwater monitoring well point 3065-WP1	53.8444287	-166.5036608	401072.03	5967261.18	03U
3075T1	Building 3075 test pit TP-1	53.8435221	-166.5036983	401067.43	5967160.38	03U
3075WP	Building 3075 groundwater monitoring well point 3075-WP1	53.8434631	-166.5036715	401069.05	5967153.77	03U
3465WP	Building 3465 groundwater monitoring well point 3475-WP1	53.8651675	-166.4989454	401430.99	5969561.73	03U
3475W1	Building 3475 groundwater monitoring well point 3475-WP1	53.8652211	-166.498527	401458.63	5969567.12	03U
3475W2	Building 3475 groundwater monitoring well point 3475-WP2	53.8652533	-166.4983071	401473.17	5969570.39	03U
BHOATV	Mt. Ballyhoo Transformer Vault A	53.9224219	-166.5143091	400556.8	5975952.55	03U
BHOBHS	Mt. Ballyhoo bomb shelter building	53.9196378	-166.5097387	400850.32	5975636.42	03U
BHOBTV	Mt. Ballyhoo Transformer Vault B	53.9217943	-166.5134562	400611.32	5975881.54	03U
BHOCTV	Mt. Ballyhoo Transformer Vault C	53.9201796	-166.5100659	400830.12	5975697.16	03U
BHOCUS	Mt. Ballyhoo Building C UST	53.9202386	-166.510082	400829.2	5975703.74	03U
BHODR1	Mt. Ballyhoo drum location 1	53.914783	-166.5170772	400356.85	5975106.63	03U
BHODR2	Mt. Ballyhoo drum location 2	53.9146596	-166.516176	400415.75	5975091.64	03U
CD-TP1	Crowley Dock proposed test pit location (never installed)	53.8510001	-166.5722717	396574.56	5968090.06	03U
CD-TR1	Crowley Dock proposed trench location (never installed)	53.8504958	-166.5725935	396552.15	5968034.44	03U
PLDR-1	Port Levashef drum location 1	53.8267475	-166.606148	394285.25	5965442.03	03U
PLDR-2	Port Levashef drum location 2	53.8272786	-166.601953	394562.67	5965494.87	03U

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Waypoint Code	Location	Latitude in Decimal Degrees	Longitude in Decimal Degrees	UTM Eastings (NAD83) (Meters)	UTM Northings (NAD83) (Meters)	UTM Zone
RPMW02	Rocky Point groundwater monitoring well MW-2	53.883723	-166.5338356	399181.46	5971675.01	03U
RPMW03	Rocky Point groundwater monitoring well MW-3	53.8851929	-166.5318615	399314.74	5971835.72	03U
RPMW04	Rocky Point groundwater monitoring well MW-4	53.8841683	-166.5318615	399312.28	5971721.73	03U
RPMW05	Rocky Point groundwater monitoring well MW-5	53.887167	-166.5366412	399005.37	5972062.13	03U
RPMW06	Rocky Point groundwater monitoring well MW-6	53.886888	-166.5352196	399098.12	5972029.07	03U
RPS3SW	Rocky Point seep 3-SW	53.8870329	-166.5339483	399182.03	5972043.38	03U
RPS4SW	Rocky Point seep 4-SW	53.8877302	-166.5361852	399036.69	5972124.14	03U
RPS5SW	Rocky Point seep 5-SW	53.8829452	-166.5335352	399199.34	5971588.05	03U
RPSNW	Rocky Point seep NW	53.8871455	-166.5350587	399109.32	5972057.49	03U
RPSPRB	Rocky Point seep Spring B	53.8888997	-166.5314002	399353.97	5972247.43	03U
RPST10	Rocky Point seep Tank 10	53.8870329	-166.5339483	399182.03	5972043.38	03U
SBAST1	Summer Bay AST 1	53.9012432	-166.4675851	403576.14	5973531.93	03U
SBAST2	Summer Bay AST 2	53.9015436	-166.468084	403544.05	5973566.03	03U
SBDRUM	Summer Bay drum	53.9014041	-166.4679928	403549.72	5973550.39	03U
SBQNST	Summer Bay Quonset hut	53.9015758	-166.468953	403487.04	5973570.79	03U
SBTWAY	Summer Bay tramway	53.9011145	-166.4674188	403586.77	5973517.38	03U

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2000 ISLANDWIDE SURVEY POINTS

Point Count	Site Locale	Point Location I.D.	Point No.	Northing	Easting	Elev.	Desc.
1	**UST 2674**	3001/2674 CL ROAD	1053	1178843.60	5324172.99	36.94	Reference Pt.
2	UST 2674	3001/2674 CL ROAD	1054	1178918.32	5324071.66	35.29	Reference Pt.
3	UST 2674	3001/2674 NW COR	1051	1178962.44	5324104.80	43.26	Reference Pt.
4	UST 2674	3001/2674 SW COR	1052	1178873.81	5324229.68	43.25	Reference Pt.
5	**UST 2664/2667**	2664/2667/CL ROAD	1049	1180161.08	5322694.23	26.28	Reference Pt.
6	UST 2664/2667	2664/2667/TOP LAKE	1050	1181237.10	5321135.80	3.99	Reference Pt.
7	UST 2664/2667	2664/MW-1	1047	1180187.60	5322431.97	23.87	Sample Pt.
8	UST 2664/2667	2664/MW-2	1048	1180099.08	5322442.93	23.68	Sample Pt.
9	UST 2664/2667	2664/NE	1037	1180153.04	5322591.92	27.81	Reference Pt.
10	UST 2664/2667	2664/NW	1040	1180094.86	5322450.89	27.43	Reference Pt.
11	UST 2664/2667	2664/SE	1038	1180097.70	5322615.06	27.77	Reference Pt.
12	UST 2664/2667	2664/SW	1039	1180039.19	5322474.17	27.57	Reference Pt.
13	UST 2664/2667	2664/WP-1	1046	1180121.04	5322608.17	27.21	Sample Pt.
14	UST 2664/2668	2667/MW-1	1045	1180012.32	5322649.37	27.14	Sample Pt.
15	UST 2664/2669	2667/NE	1041	1179930.24	5322600.99	21.67	Reference Pt.
16	UST 2664/2670	2667/NW	1044	1179916.48	5323268.65	21.53	Reference Pt.
17	UST 2664/2671	2667/SE	1042	1179923.37	5322606.09	21.46	Reference Pt.
18	UST 2664/2672	2667/SW	1043	1179909.73	5322588.47	21.39	Reference Pt.
19	**UST 3475**	3475 UST 3260	1242	1181952.18	5325198.98	562.33	Sample Pt.
20	UST 3475	3475 PIPE	1266	1181272.28	5325578.71	558.24	Sample Pt.
21	UST 3475	3475 PIPE	1267	1181276.61	5325578.34	557.16	Sample Pt.
22	UST 3475	3475 TOP 6" PIPE	1256	1181325.63	5325620.61	560.66	Sample Pt.
23	UST 3475	3475 TOP 6" PIPE	1257	1181310.31	5325610.25	560.07	Sample Pt.
24	UST 3475	3475 TOP WELL	1252	1181315.30	5325726.53	570.35	Sample Pt.
25	UST 3475	3475 TOP WELL	1253	1181298.25	5325674.78	567.05	Sample Pt.
26	**UST 3260**	3260 - 3003 BLDG	1243	1181976.31	5325171.77	579.32	Reference Pt.
27	UST 3260	3260/CL ROAD	1244	1181938.19	5325156.52	579.31	Reference Pt.
28	UST 3260	3260/CL ROAD	1245	1181994.53	5325114.62	578.43	Reference Pt.
29	UST 3260	3260/CREEK	1247	1182006.93	5325136.89	575.86	Reference Pt.
30	UST 3260	3260/CREEK	1248	1181990.46	5325086.45	572.77	Reference Pt.
31	UST 3260	3260/CREEK	1249	1181985.99	5325022.35	569.37	Reference Pt.
32	UST 3260	3260/DOWL CONTROL	1250	1181355.15	5325709.19	569.90	Reference Pt.
33	UST 3260	3260/TOP PIPE	1246	1181940.75	5325110.98	580.10	Reference Pt.
34	**UST 3465**	CL ROAD	1254	1181333.04	5325725.25	569.49	Reference Pt.
35	UST 3465	CL ROAD	1255	1181323.60	5325676.76	564.70	Reference Pt.
36	UST 3465	CL ROAD	1259	1181319.61	5325613.49	560.71	Reference Pt.
37	UST 3465	CL ROAD	1265	1181298.49	5325472.95	549.81	Reference Pt.
38	UST 3465	CL ROAD 3465	1264	1181310.62	5325575.12	558.30	Reference Pt.
39	UST 3465	CREEK	1251	1181346.86	5325722.71	568.42	Reference Pt.
40	UST 3465	CREEK	1260	1181282.69	5325658.73	559.83	Reference Pt.
41	UST 3465	CREEK	1262	1181252.78	5325584.38	553.61	Reference Pt.

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Point Count	Site Locale	Point Location I.D.	Point No.	Northing	Easting	Elev.	Desc.
42	UST 3465	CREEK	1263	1181303.78	5325609.29	557.75	Reference Pt.
43	UST 3465	CREEK @ LATH	1258	1181254.56	5325649.83	555.55	Reference Pt.
44	UST 3465	CREEK LATH @ 3465	1261	1181216.06	5325573.91	548.09	Reference Pt.
45	**UST 2762**	2762/CL ROAD-CL DW	1075	1176867.98	5324860.73	72.13	Reference Pt.
46	UST 2762	2762/EAST SIDE	1070	1176972.47	5324970.08	0.00	Reference Pt.
47	UST 2762	2762/EX	1072	1176934.85	5324963.15	77.86	Reference Pt.
48	UST 2762	2762/EX-S	1071	1176938.55	5324947.88	77.22	Reference Pt.
49	UST 2762	2762/NE COR	1069	1176977.17	5324961.12	0.00	Reference Pt.
50	UST 2762	2762/NW BLDG COR	1066	1176945.69	5324957.12	0.00	Reference Pt.
51	UST 2762	2762/NW COR EXTENSION	1068	1176961.51	5324960.95	0.00	Reference Pt.
52	UST 2762	2762/PIPE	1074	1176915.89	5324937.34	75.68	Sample Pt.
53	UST 2762	2762/PT 1 MON SITE	1073	1176877.54	5324927.36	77.91	Sample Pt.
54	UST 2762	2762/SW BLDG COR	1065	1176923.44	5325002.06	0.00	Reference Pt.
55	UST 2762	2762/SW COR EXTENSION	1067	1176953.29	5324960.73	0.00	Reference Pt.
56	**UST 2766**	2766/CL DW	1064	1176299.55	5325334.69	104.39	Reference Pt.
57	UST 2766	2766/EX	1063	1176316.91	5325428.90	116.13	Reference Pt.
58	UST 2766	2766/NW COR	1055	1176421.82	5325375.63	115.17	Reference Pt.
59	UST 2766	2766/NW COR EXTENSION	1058	1176350.41	5325413.61	119.78	Reference Pt.
60	UST 2766	2766/SE COR	1057	1176349.42	5325437.28	116.99	Reference Pt.
61	UST 2766	2766/E BLDG MEETS EXT	1276	1176358.57	5325437.38	116.99	Reference Pt.
62	UST 2766	2766/SW COR	1056	1176387.23	5325327.53	119.99	Reference Pt.
63	UST 2766	2766/SW COR EXTENSION	1059	1176341.14	5325417.36	116.71	Reference Pt.
64	UST 2766	2766/BLDG 2766	1060	1176314.83	5325389.18	114.48	Reference Pt.
65	**UST 3665**	UPPER/3665 EX	1239	1176679.58	5326136.64	241.12	Reference Pt.
66	UST 3665	UPPER/CL ROAD	1240	1176736.72	5326157.60	240.50	Reference Pt.
66	UST 3665	UPPER/CL ROAD	1241	1176687.05	5326198.89	240.31	Reference Pt.
67	**Upper Valley**	UPPER/@ LATH	1233	1177566.13	5327745.33	377.43	Reference Pt.
68	Upper Valley	UPPER/3760 BLDG	1226	1177664.04	5327818.04	401.45	Reference Pt.
69	Upper Valley	UPPER/3760 BLDG	1227	1177680.21	5327821.45	401.18	Reference Pt.
70	Upper Valley	UPPER/3760 BLDG	1228	1177674.01	5327825.69	401.34	Reference Pt.
71	Upper Valley	UPPER/3760 BLDG	1229	1177665.03	5327812.98	401.25	Reference Pt.
72	Upper Valley	UPPER/3760 BLDG	1230	1177671.18	5327808.69	414.64	Reference Pt.
73	Upper Valley	UPPER/3765-1	1231	1177593.05	5327967.45	416.69	Reference Pt.
74	Upper Valley	UPPER/3765-2	1232	1177576.81	5327972.63	379.72	Reference Pt.
75	Upper Valley	UPPER/BLDG 3860 UST	1225	1177288.02	5329439.26	646.33	Sample Pt.
76	Upper Valley	UPPER/CL ROAD	1237	1177737.05	5327791.12	399.40	Reference Pt.
77	Upper Valley	UPPER/COR BLDG	1221	1177269.04	5329433.46	647.42	Reference Pt.
78	Upper Valley	UPPER/COR BLDG	1222	1177311.93	5329494.71	647.67	Reference Pt.
79	Upper Valley	UPPER/COR BLDG	1223	1177347.54	5329401.91	646.42	Reference Pt.
80	Upper Valley	UPPER/COR BLDG	1224	1177282.00	5329396.61	648.44	Reference Pt.
81	Upper Valley	UPPER/INTERSECTION CL'S	1238	1177940.99	5327745.90	406.87	Reference Pt.

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Point Count	Site Locale	Point Location I.D.	Point No.	Northing	Easting	Elev.	Desc.
82	Upper Valley	UPPER/TOP WATER	1234	1177567.32	5327747.09	377.22	Reference Pt.
83	Upper Valley	UPPER/TOP WATER	1235	1177566.68	5327762.49	382.44	Reference Pt.
84	Upper Valley	UPPER/TOP WATER	1236	1177576.04	5327769.61	382.44	Reference Pt.
85	**UST 3065**	3065/1 CREEK	1009	1173704.32	5325631.18	266.24	Reference Pt.
86	UST 3066	3065/2 CREEK	1010	1173696.63	5325689.72	259.11	Reference Pt.
87	UST 3067	3065/3 CREEK	1011	1173690.05	5325749.34	249.46	Reference Pt.
88	UST 3068	3065/CL ROAD	1013	1173675.69	5325609.02	272.91	Reference Pt.
89	UST 3069	3065/COR MAT	1007	1173665.86	5325632.67	273.47	Reference Pt.
90	UST 3070	3065/EXC	1003	1173691.28	5325658.02	269.01	Reference Pt.
91	UST 3071	3065/NE COR MAT	1005	1173701.99	5325658.91	264.24	Reference Pt.
92	UST 3072	3065/NW COR MAT	1006	1173688.61	5325615.82	272.76	Reference Pt.
93	UST 3073	3065/PIPE	1004	1173694.78	5325662.42	270.72	Sample Pt.
94	UST 3074	3065/SE COR MAT	1012	1173674.10	5325664.85	269.51	Reference Pt.
95	UST 3075	3065/SW COR MAT	1008	1173653.71	5325636.91	272.37	Reference Pt.
96	UST 3076	3065/SW/SED	1002	1173693.01	5325690.96	260.28	Sample Pt.
97	**UST 3075**	3075/CL ROAD	1036	1173399.83	5325787.93	172.93	Reference Pt.
98	UST 3075	3075/CREEK	1022	1173428.13	5325860.53	256.90	Reference Pt.
99	UST 3075	3075/CREEK	1023	1173408.36	5325865.71	257.04	Reference Pt.
100	UST 3075	3075/MAT COR 1	1024	1173404.34	5325839.98	171.15	Reference Pt.
101	UST 3075	3075/MAT COR 2	1025	1173401.14	5325845.54	170.92	Reference Pt.
102	UST 3075	3075/MAT COR 3	1026	1173393.25	5325848.70	170.40	Reference Pt.
103	UST 3075	3075/MAT COR 4	1027	1173389.80	5325848.11	170.56	Reference Pt.
104	UST 3075	3075/MAT COR 5	1028	1173378.66	5325817.32	173.62	Reference Pt.
105	UST 3075	3075/MAT COR 6	1029	1173401.22	5325806.73	172.45	Reference Pt.
106	UST 3075	3075/MAT COR 7	1030	1173404.65	5325816.15	173.10	Reference Pt.
107	UST 3075	3075/MAT COR 8	1031	1173403.31	5325823.05	173.12	Reference Pt.
108	UST 3075	3075/NE BLDG COR	1019	1173438.35	5325817.53	276.12	Reference Pt.
109	UST 3075	3075/NE COR MAT	1035	1173502.38	5325809.64	161.00	Reference Pt.
110	UST 3075	3075/NW BLDG COR	1020	1173435.67	5325812.23	276.14	Reference Pt.
111	UST 3075	3075/NW COR MAT	1034	1173506.89	5325796.48	161.86	Reference Pt.
112	UST 3075	3075/PIPE WP-1	1021	1173396.09	5325847.99	277.98	Sample Pt.
113	UST 3075	3075/SE BLDG COR	1018	1173404.45	5325834.73	276.39	Reference Pt.
114	UST 3075	3075/SE COR MAT	1032	1173455.33	5325810.69	167.93	Reference Pt.
115	UST 3075	3075/SS	1016	1173404.30	5325856.04	264.66	Reference Pt.
116	UST 3075	3075/SW COR MAT	1033	1173455.16	5325801.43	168.35	Reference Pt.
117	UST 3075	3075/SW/SED	1015	1173412.86	5325859.10	257.82	Sample Pt.
118	**Little South America**	LSA/AST	1191	1182132.99	5312453.19	55.36	Sample Pt.
119	Little South America	LSA/DRUM	1188	1182774.38	5312730.87	233.02	Sample Pt.
120	Little South America	LSA/DRUM "A"	1189	1182792.97	5312430.37	233.16	Sample Pt.
121	Little South America	LSA/DRUM "B"	1190	1182832.36	5312391.93	230.21	Sample Pt.
122	Little South America	LSA/LATREEN	1184	1183016.98	5312975.89	372.89	Sample Pt.

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2000 ISLANDWIDE SURVEY POINTS

Point Count	Site Locale	Point Location I.D.	Point No.	Northing	Easting	Elev.	Desc.
123	Little South America	LSA/LATREEN UST	1186	1183122.40	5312309.38	347.01	Sample Pt.
124	Little South America	LSA/MESS HALL UST	1187	1182644.23	5313286.93	274.84	Sample Pt.
125	**Building 627**	BLDG 627 NW COR	1123	1186941.83	5316546.78	63.40	Reference Pt.
126	Building 627	BLDG 627/N.EDGE RD	1109	1186959.93	5316955.24	63.65	Reference Pt.
127	Building 627	BLDG 627/N.EDGE RD	1110	1186901.89	5316953.37	69.70	Reference Pt.
128	Building 627	BLDG 627/NE COR	1120	1186902.79	5316858.26	65.93	Reference Pt.
129	Building 627	BLDG 627/PT 1A	1111	1186954.34	5316945.60	64.14	Sample Pt.
130	Building 627	BLDG 627/PT 2A	1112	1186914.59	5316943.73	65.76	Sample Pt.
131	Building 627	BLDG 627/PT 3A	1113	1186894.87	5316919.51	62.76	Sample Pt.
132	Building 627	BLDG 627/PT 4A	1114	1186902.55	5316898.07	61.48	Sample Pt.
133	Building 627	BLDG 627/PT 5A	1115	1186945.56	5316896.90	62.25	Sample Pt.
134	Building 627	BLDG 627/PT 6A	1116	1186958.26	5316922.00	63.93	Sample Pt.
135	Building 627	BLDG 627/PT 7A	1117	1186961.13	5316937.23	63.93	Sample Pt.
136	Building 627	BLDG 627/SE COR	1121	1186940.81	5316894.77	61.85	Reference Pt.
137	Building 627	BLDG 627/SW COR	1122	1186982.43	5316895.35	64.78	Reference Pt.
138	**Humpy Cove UST Sites**	HUMPY/@ LATH	1175	1194418.69	5334932.34	408.25	Sample Pt.
139	Humpy Cove UST Sites	HUMPY/@ LATH	1176	1194509.21	5334849.39	362.93	Sample Pt.
140	Humpy Cove UST Sites	HUMPY/@ LATH NO WRITING	1174	1194389.28	5334959.86	416.23	Sample Pt.
141	Humpy Cove UST Sites	HUMPY/HCPP-MW-1	1160	1195078.14	5338217.53	64.26	Sample Pt.
142	Humpy Cove UST Sites	HUMPY/LATH	1159	1195653.76	5338228.19	65.23	Sample Pt.
143	Humpy Cove UST Sites	HUMPY/LATH	1164	1195670.38	5338485.49	78.64	Sample Pt.
144	Humpy Cove UST Sites	HUMPY/LATH	1169	1195957.79	5338080.17	53.30	Sample Pt.
145	Humpy Cove UST Sites	HUMPY/LATH	1170	1195807.61	5337783.25	5.77	Sample Pt.
146	Humpy Cove UST Sites	HUMPY/LATH	1171	1195833.07	5337780.53	58.23	Sample Pt.
147	Humpy Cove UST Sites	HUMPY/LOOKING OUT POST	1173	1194400.91	5334948.50	417.95	Reference Pt.
148	Humpy Cove UST Sites	HUMPY/PIPE #1A	1161	1195687.18	5338176.30	61.66	Sample Pt.
149	Humpy Cove UST Sites	HUMPY/PIPE #2A	1162	1195736.11	5338255.87	59.18	Sample Pt.
150	Humpy Cove UST Sites	HUMPY/PIPE 3A	1165	1195772.18	5338198.89	57.48	Sample Pt.
151	Humpy Cove UST Sites	HUMPY/PIPE 4A	1166	1195923.16	5338125.66	51.51	Sample Pt.
152	Humpy Cove UST Sites	HUMPY/PIPE 5A	1167	1195994.70	5338138.57	53.66	Sample Pt.
153	Humpy Cove UST Sites	HUMPY/PIPE 6A	1168	1195998.07	5338062.28	56.46	Sample Pt.
154	Humpy Cove UST Sites	HUMPY/RUINS #1	1177	1194810.91	5334493.30	178.33	Reference Pt.
155	Humpy Cove UST Sites	HUMPY/RUINS #1	1178	1194819.71	5334477.95	170.98	Reference Pt.
156	Humpy Cove UST Sites	HUMPY/RUINS #2	1172	1194380.90	5334532.94	177.58	Reference Pt.
157	Humpy Cove UST Sites	HUMPY/WELL IN CASING	1163	1195672.83	5338494.73	80.24	Sample Pt.
158	**Summer Bay AST and 55 Gallon Drum**	SUMMER/SB 2 NT	1183	1195312.91	5330168.68	216.36	Sample Pt.
159	Summer Bay AST and 55 Gallon Drum	SUMMER/SB AST-1	1180	1195224.16	5330609.72	202.24	Sample Pt.
160	Summer Bay AST and 55 Gallon Drum	SUMMER/SB AST-2	1182	1195316.40	5330439.41	211.33	Sample Pt.
161	Summer Bay AST and 55 Gallon Drum	SUMMER/SB DRUM	1181	1195264.43	5330464.81	215.35	Sample Pt.
162	Summer Bay AST and 55 Gallon Drum	SUMMER/SB SOUTH OBTWAY	1179	1195129.85	5330586.01	202.25	Reference Pt.
163	**Mt. Ballyhoo/Ballyhoo Spit Tank Farm**	BAHOO/BLDG H	1081	1198694.60	5319520.28	709.12	Reference Pt.

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2000 ISLANDWIDE SURVEY POINTS

Point Count	Site Locale	Point Location I.D.	Point No.	Northing	Easting	Elev.	Desc.
164	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BAHOO/DRUM 2	1080	1198715.08	5319323.07	730.77	Reference Pt.
165	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BAHOO/DRUM LIC 1	1079	1198716.80	5318225.22	730.36	Reference Pt.
166	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BAHOO/HOOTP #6	1220	1198708.10	5322046.06	6.22	Reference Pt.
167	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BAHOO/HOOTP #7	1216	1199179.08	5322255.62	9.03	Reference Pt.
168	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BAHOO/HOOTP #8	1217	1198892.63	5321871.63	17.70	Reference Pt.
169	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BAHOO/HOUTP #9	1215	1199031.16	5322014.12	19.78	Reference Pt.
170	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BAHOO/SAT BAT	1076	1198457.07	5318349.12	984.88	Reference Pt.
171	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BAHOO/SPLTRN	1219	1198762.42	5321840.17	7.84	Reference Pt.
172	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BAHOO/SPLTRS	1218	1198756.44	5321845.69	7.73	Reference Pt.
173	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BAHOO/TIE DOWN	1077	1198221.80	5317932.62	1105.92	Reference Pt.
174	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BAHOO/TIE DOWN	1078	1198569.68	5318881.68	1110.23	Reference Pt.
175	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BHOO/2-USTS BLDG GCBH08-09	1087	1200896.65	5320556.73	894.59	Reference Pt.
176	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BHOO/BHT & VAULT	1095	1198434.10	5318877.16	824.74	Reference Pt.
177	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BHOO/BHT 01 VAULT	1094	1198438.57	5318877.55	820.61	Reference Pt.
178	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BHOO/BLDG A TV	1092	1201560.13	5319545.66	860.94	Reference Pt.
179	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BHOO/BLDG B TV	1091	1201367.57	5319758.64	860.65	Reference Pt.
180	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BHOO/BLDG C TV	1085	1200863.36	5320566.01	888.20	Reference Pt.
181	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BHOO/BLDG C UST-S	1086	1200895.43	5320555.53	894.01	Reference Pt.
182	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BHOO/BLDG H	1082	1202285.52	5318948.98	837.94	Reference Pt.
183	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BHOO/BOMB SHELTER TP	1084	1200685.27	5320661.77	887.35	Reference Pt.
184	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BHOO/COR BUNKER	1093	1201562.21	5319540.17	860.75	Reference Pt.
185	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BHOO/PIPE	1088	1200894.43	5320560.36	895.92	Sample Pt.
186	Mt. Ballyhoo/Ballyhoo Spit Tank Farm	BHOO/TOP BUNKER	1083	1202285.56	5318947.73	839.68	Reference Pt.
187	**Port Levashef**	LEVASHEF/PLD2-MW1	1206	1164210.50	5304419.80	18.86	Sample Pt.
188	Port Levashef	LEVASHEF/PLD3-MW1	1207	1164933.55	5304966.56	7.96	Sample Pt.
189	**Fort Mears Landfill South**	FMLS/CENTER ELECT PLATE	1141	1186009.88	5311984.64	17.48	Reference Pt.
190	Fort Mears Landfill South	FMLS/EDGE WATER	1145	1185926.08	5311893.08	3.16	Reference Pt.
191	Fort Mears Landfill South	FMLS/EDGE WATER	1148	1185975.02	5311922.17	2.87	Reference Pt.
192	Fort Mears Landfill South	FMLS/EDGE WATER	1151	1186040.48	5311947.73	2.83	Reference Pt.
193	Fort Mears Landfill South	FMLS/FMLFSTP #3	1143	1185904.88	5311922.85	18.36	Reference Pt.
194	Fort Mears Landfill South	FMLS/FOG LINE ROAD	1144	1185890.81	5311949.26	19.44	Reference Pt.
195	Fort Mears Landfill South	FMLS/FOG LINE ROAD	1147	1185941.99	5311973.69	19.24	Reference Pt.
196	Fort Mears Landfill South	FMLS/FOG LINE ROAD	1150	1186013.42	5312009.97	18.85	Reference Pt.
197	Fort Mears Landfill South	FMLS/LATH P-2	1146	1185955.33	5311952.19	18.29	Sample Pt.
198	Fort Mears Landfill South	FMLS/LATH TP 1	1149	1186030.36	5311980.43	17.59	Sample Pt.
199	Fort Mears Landfill South	FMLS/TOP ELEC BOX	1142	1185824.00	5311882.67	22.07	Reference Pt.
200	**FLOATING PUMPHOUSE**	BLDG 627/TOP LAKE @ PUMP HOUSE	1119	1187744.95	5315964.64	26.18	Reference Pt.
201	FLOATING PUMPHOUSE	BLDG 627/BASE PP	1118	1187765.13	5315937.39	43.53	Reference Pt.
202	**Little South America Submarine Base**	LSAMB/BLDG 965-001 UTILITIES	1197	1184304.53	5312815.85	9.36	Reference Pt.
203	Little South America Submarine Base	LSAMB/BLDG 965-002	1196	1184280.35	5312817.58	6.91	Reference Pt.

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2000 ISLANDWIDE SURVEY POINTS

Point Count	Site Locale	Point Location I.D.	Point No.	Northing	Easting	Elev.	Desc.
204	**Fort Mears Landfill North**	FMLN/NE COR #871	1139	1187060.76	5313246.58	16.62	Reference Pt.
205	Fort Mears Landfill North	FMLN/NW COR #871	1138	1187025.03	5313210.24	16.58	Reference Pt.
206	Fort Mears Landfill North	FMLN/SE COR #871	1140	1187042.68	5313264.29	16.60	Reference Pt.
207	Fort Mears Landfill North	FMLN/SW COR #871	1137	1187006.92	5313227.76	16.61	Reference Pt.
208	Fort Mears Landfill North	FMLN/TOP WELL	1136	1186868.25	5312671.13	17.27	Sample Pt.
209	Fort Mears Landfill North	FMLN/TOP WELL PT. 2	1134	1186941.91	5312732.72	17.20	Sample Pt.
210	Fort Mears Landfill North	FMLN/WATER	1129	1187047.50	5312825.22	2.16	Reference Pt.
211	Fort Mears Landfill North	FMLN/WATER	1131	1187056.41	5312800.89	2.38	Reference Pt.
212	Fort Mears Landfill North	FMLN/WATER	1133	1187027.72	5312708.77	2.38	Reference Pt.
213	Fort Mears Landfill North	FMLN/WATER	1135	1187009.11	5312639.93	2.52	Reference Pt.
214	Fort Mears Landfill North	FMLN/WELL PT	1132	1186838.48	5312876.11	16.82	Sample Pt.
215	Fort Mears Landfill North	FMLN/WELL PT TOP	1130	1186977.01	5312858.69	15.72	Sample Pt.
216	**Unalaska Valley Buildings/Rocky**	ROCKY "B"	1214	1188914.17	5317490.97	16.40	Reference Pt.
217	Unalaska Valley Buildings/Rocky	ROCKY/H&TACK	1211	1187405.95	5317504.07	15.29	Reference Pt.
218	Unalaska Valley Buildings/Rocky	ROCKY/MW-2	1213	1187024.07	5317233.82	12.22	Sample Pt.
219	Unalaska Valley Buildings/Rocky	ROCKY/MW-3	1212	1187661.20	5318003.23	12.06	Sample Pt.
220	Unalaska Valley Buildings/Rocky	ROCKY/MW4(N)	1209	1187219.79	5317644.47	11.12	Sample Pt.
221	Unalaska Valley Buildings/Rocky	ROCKY/MW4(S)	1210	1187214.22	5317638.44	11.24	Sample Pt.
222	Unalaska Valley Buildings/Rocky	ROCKY/MW-5	1199	1188119.04	5316790.98	30.70	Sample Pt.
223	Unalaska Valley Buildings/Rocky	ROCKY/MW-6	1198	1188173.91	5316466.28	30.63	Sample Pt.
224	Unalaska Valley Buildings/Rocky	ROCKY/RPS-3SW	1202	1188204.62	5317043.73	42.24	Sample Pt.
225	Unalaska Valley Buildings/Rocky	ROCKY/RPS-4SW	1201	1188399.57	5316528.28	27.85	Sample Pt.
226	Unalaska Valley Buildings/Rocky	ROCKY/RPS-5SW	1208	1186731.05	5317343.51	5.42	Sample Pt.
227	Unalaska Valley Buildings/Rocky	ROCKY/RPS-NW	1200	1188212.40	5316799.85	32.73	Sample Pt.
228	**Former Naval Laundry Facility/Bldg. 2569**	BLDG 2569/LAT #	1128	1187055.73	5314351.30	10.72	Sample Pt.
229	Former Naval Laundry Facility/Bldg. 2569	BLDG 2569/NE COR	1124	1187108.09	5314368.83	11.34	Reference Pt.
230	Former Naval Laundry Facility/Bldg. 2569	BLDG 2569/NW COR	1127	1187073.32	5314333.22	11.11	Reference Pt.
231	Former Naval Laundry Facility/Bldg. 2569	BLDG 2569/SE COR	1125	1187066.36	5314409.40	11.27	Reference Pt.
232	Former Naval Laundry Facility/Bldg. 2569	BLDG 2569/SW COR	1126	1187031.52	5314373.53	11.23	Reference Pt.
233	Former Naval Laundry Facility/Bldg. 2569	NAL/NW COR FORMER BLDG	1099	1190470.30	5316305.74	15.34	Reference Pt.
234	Former Naval Laundry Facility/Bldg. 2569	NAL/SW COR FORMER BLDG	1098	1190021.88	5315903.63	15.56	Reference Pt.
235	Former Naval Laundry Facility/Bldg. 2569	NAL/SE COR FORMER BLDG	1097	1190029.50	5315969.92	15.54	Reference Pt.
236	Former Naval Laundry Facility/Bldg. 2569	NAL/NE COR FORMER BLDG	1096	1190108.78	5315952.54	15.49	Reference Pt.
237	Former Naval Laundry Facility/Bldg. 2569	NAL/NE COR TRANSFORMER PAD	1100	1190180.33	5315951.35	13.63	Reference Pt.
238	Former Naval Laundry Facility/Bldg. 2569	NAL/NW COR TRANSFORMER PAD	1103	1190186.03	5315933.83	13.65	Reference Pt.
239	Former Naval Laundry Facility/Bldg. 2569	NAL/SE COR TRANSFORMER PAD	1101	1190135.17	5315936.54	13.65	Reference Pt.
240	Former Naval Laundry Facility/Bldg. 2569	NAL/SW COR TRANSFORMER PAD	1102	1190140.74	5315919.20	13.73	Reference Pt.
241	Former Naval Laundry Facility/Bldg. 2569	NAL/TOP FH	1104	1189936.50	5316051.50	15.59	Reference Pt.
242	**Pre-W.W.II Tank Farm**	PRE W.W.II TOP MW-11	1000	1189848.68	5316140.65	16.27	Sample Pt.
243	**Morris Cove**	MORRIS/BOARD	1154	1202611.26	5340681.74	30.77	Reference Pt.
244	Morris Cove	MORRIS/CENTER MESS HALL	1155	1202762.74	5340093.95	49.92	Reference Pt.

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2000 ISLANDWIDE SURVEY POINTS

Point Count	Site Locale	Point Location I.D.	Point No.	Northing	Easting	Elev.	Desc.
245	Morris Cove	MORRIS/LATREEN	1157	1202832.27	5339736.52	92.66	Reference Pt.
246	Morris Cove	MORRIS/MID FRONT DOOR HUT	1158	1202290.35	5339496.71	23.72	Reference Pt.
247	Morris Cove	MORRIS/PIPE	1153	1202611.39	5340681.67	31.17	Sample Pt.
248	Morris Cove	MORRIS/REC HALL	1156	1202761.07	5339815.80	71.29	Reference Pt.
249	Morris Cove	MORRIS/TOP BUNKER	1152	1203271.27	5340073.57	164.82	Reference Pt.
250	**Former Naval Laundry**	NAL/MW-1	1107	1190016.13	5315896.24	15.12	Sample Pt.
251	Former Naval Laundry	NAL/MW-2	1106	1189009.75	5315963.94	13.45	Sample Pt.
252	Former Naval Laundry	NAL/MW-3	1108	1190058.14	5315929.01	16.58	Sample Pt.
253	**Crowley Dock**	CROWLEY/BY DOCK	1203	1174122.50	5310595.60	13.50	Reference Pt.
254	Crowley Dock	CROWLEY/TRENCH	1204	1173313.07	5310263.36	9.83	Reference Pt.
255	Crowley Dock	CROWLEY/TRENCH	1205	1173296.46	5310270.34	9.04	Reference Pt.

APPENDIX H

Chromatograms

2674 Site

Sample Number: 53 **Column:** A

Sample Name: 10X792 **Dilution Factor:** 10

Am-145094

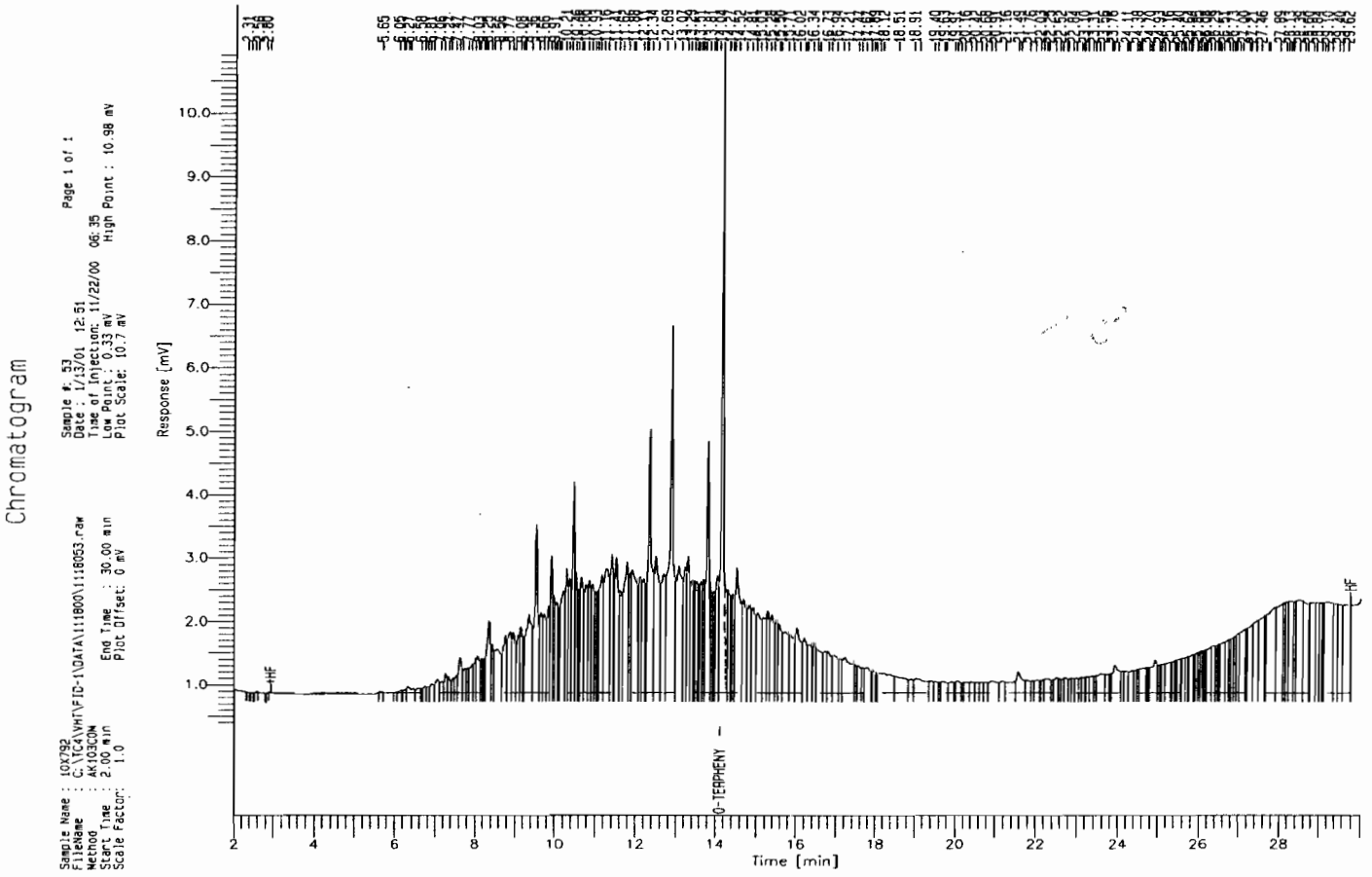
Study Name: 00E-0453/458 **Multiplier:** 0.04

Raw File: c:\tc4\vht\fid-1\data\111800\1118053.raw **Divisor:** 1

Acquisition Start Timestamp: 11/22/00 6:35:27 **Conversion Factor:** 0.39999999106

Operators Initials: VHT

2631.



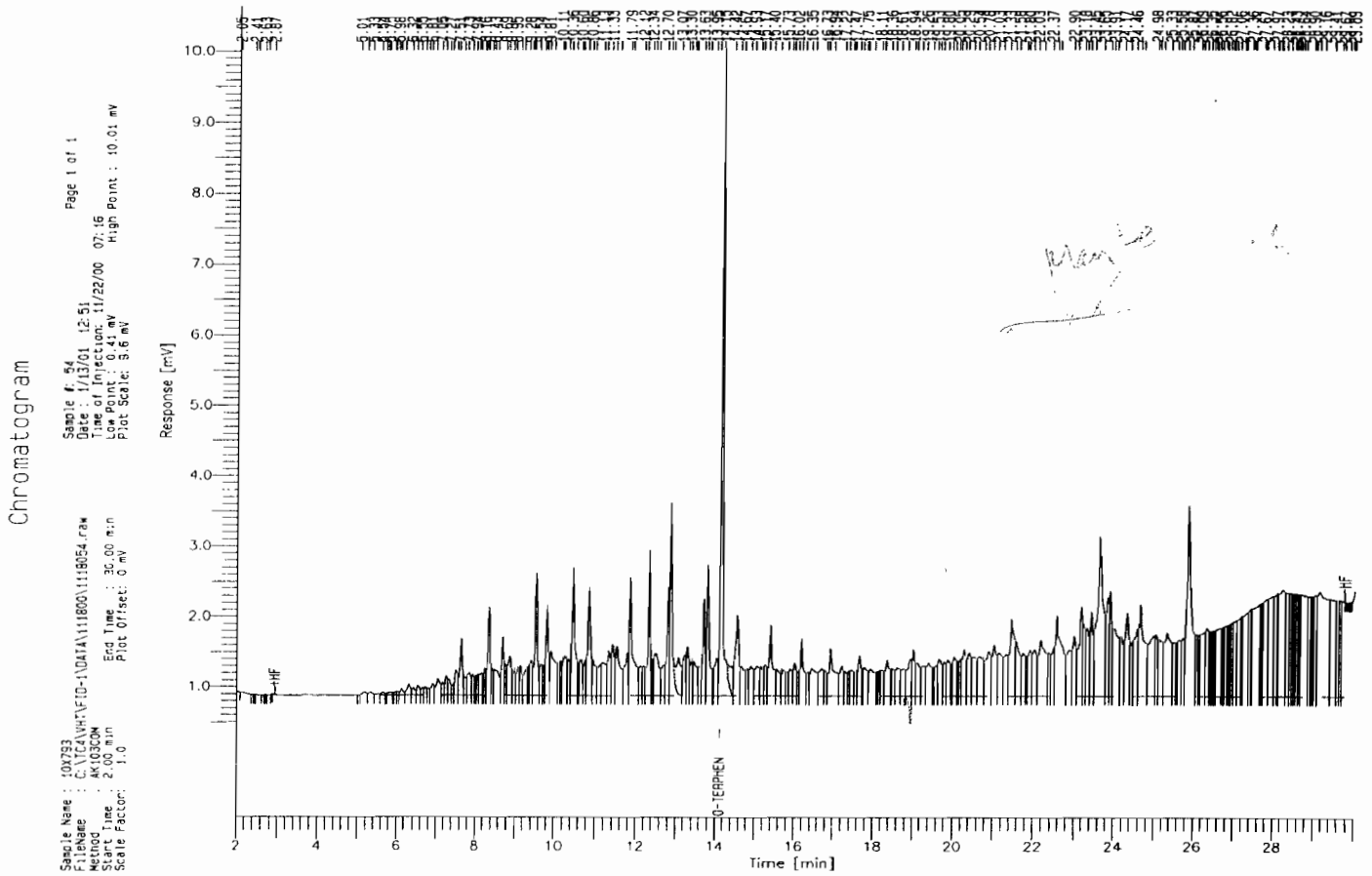
Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.145	10154	40129	52.37642	20.95057

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	155214	844970	1507.039	602.815
Residual Range Organics	23.800	50749	294734	1056.347	422.539

Sample Number:	54	**Column:**	A
Sample Name:	10X793	**Dilution Factor:**	10
Study Name:	00E-0453/458	**Multiplier:**	0.04
Raw File:	c:\tc4\vht\fid-1\data\111800\1118054.raw	**Divisor:**	1
Acquisition Start Timestamp:	11/22/00 7:16:01	**Conversion Factor:**	0.39999999106
Operators Initials:	VHT		

AW-A505Yb

224%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.145	9162	33958	44.83032	17.93213

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	71958	359823	667.866	267.147
Residual Range Organics	23.800	90088	506611	1933.573	773.429

3260 Site

3260

Sample Number: 27 Am-A509301 **Column:** A

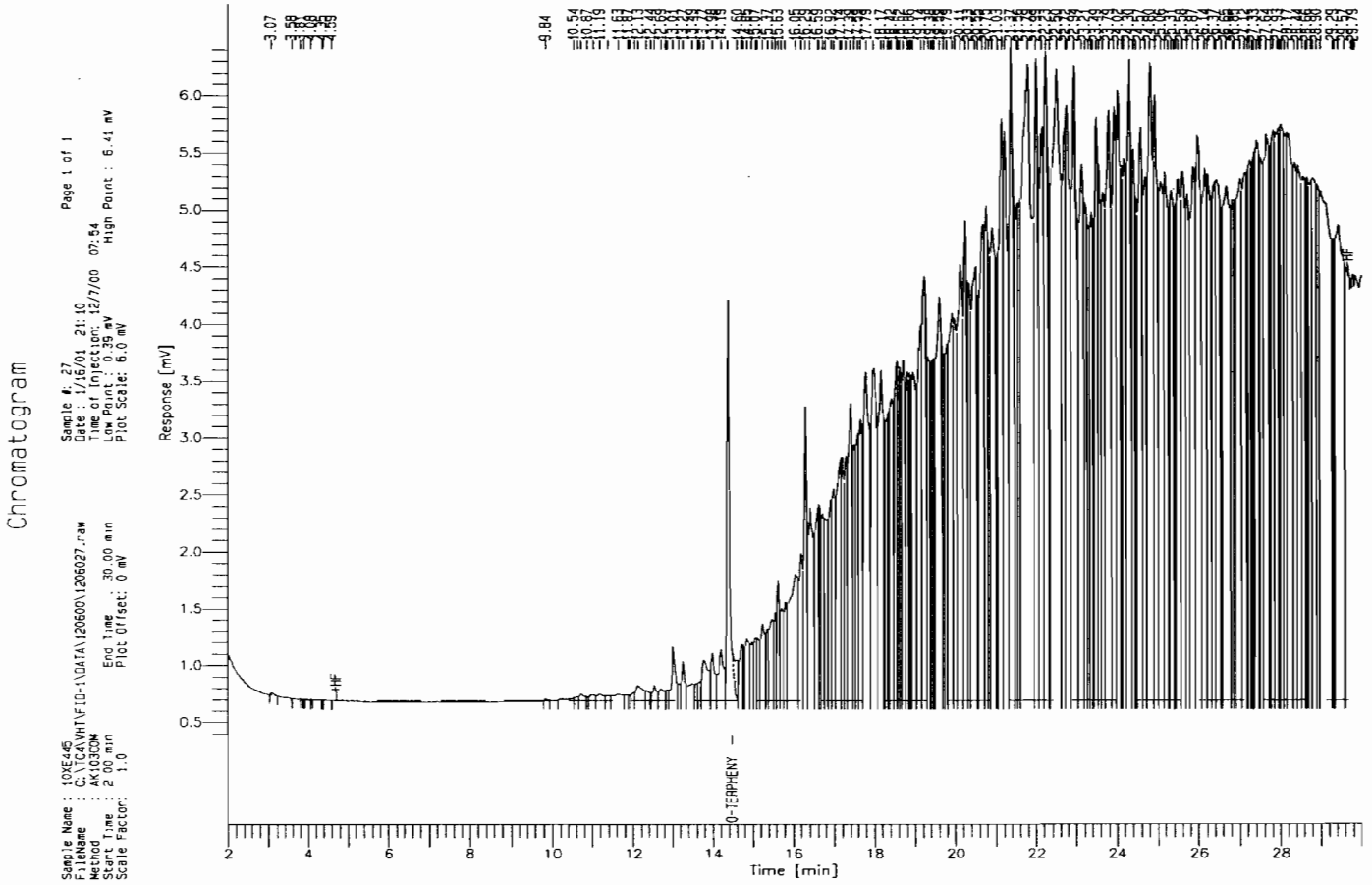
Sample Name: 10XE445 **Dilution Factor:** 10

Study Name: 00E-0510-24 **Multiplier:** 2

Raw File: c:\tc4\vht\fid-1\data\120600\1206027.raw **Divisor:** 25

Acquisition Start Timestamp: 12/7/00 7:54:37 **Conversion Factor:** 0.8

Operators Initials: VHT 136%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.365	3528	15872	16.92532	13.54026

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	99112	549066	790.611	632.489
Residual Range Organics	24.167	453096	2661252	3635.875	2908.700

Sample Number: 26 **Column:** A

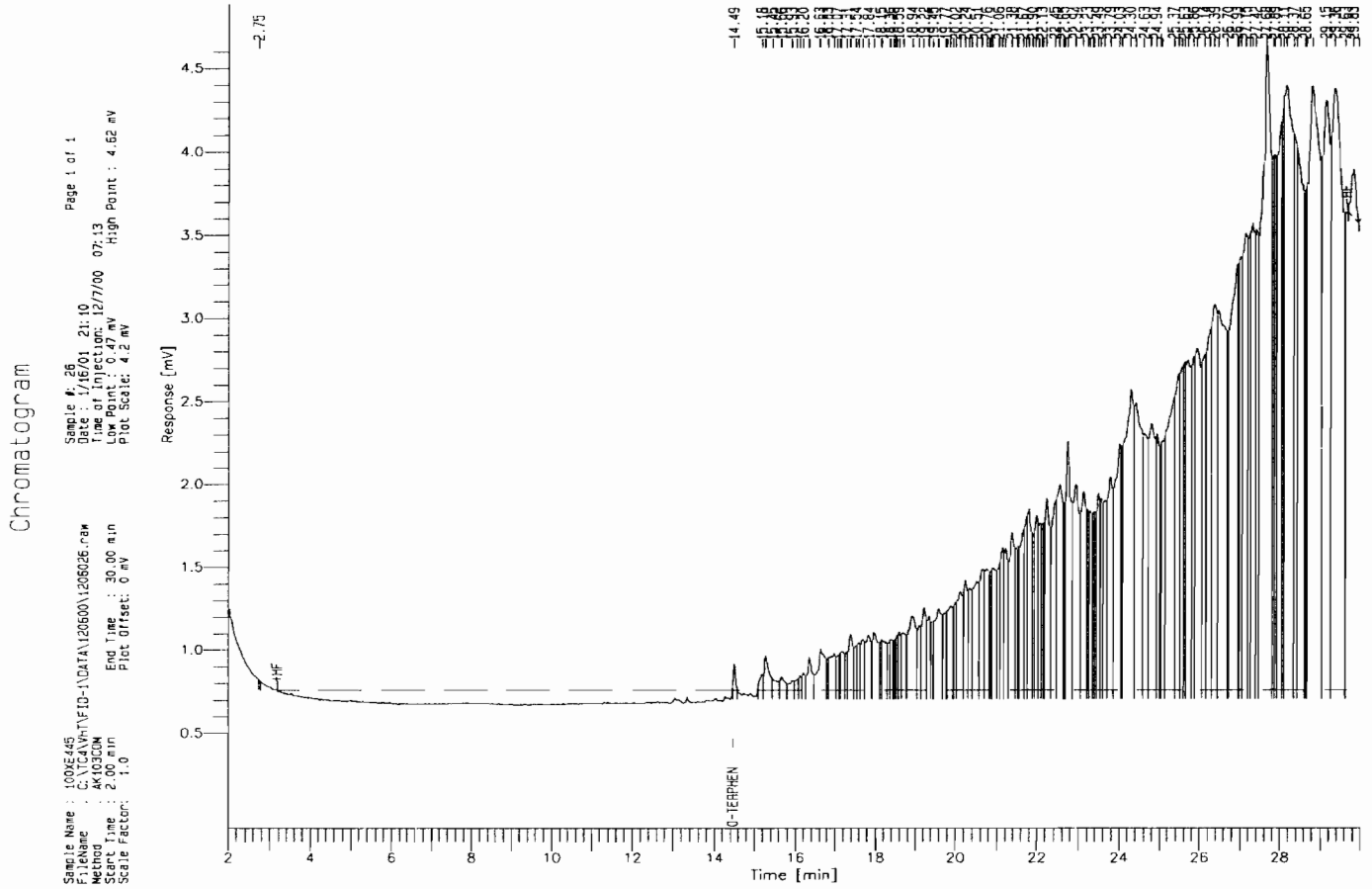
Sample Name: 100XE445 AHM-A50932 **Dilution Factor:** 100

Study Name: 00E-0510-24 **Multiplier:** 2

Raw File: c:\tc4\vht\fid-1\data\120600\1206026.raw **Divisor:** 25

Acquisition Start Timestamp: 12/7/00 7:13:42 **Conversion Factor:** 8

Operators Initials: VHT 136%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.489	160	627	2.97255	23.78039

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	8271	52140	119.336	954.691
Residual Range Organics	24.167	137791	973973	1178.978	9431.822

Sample Number: 28

Am -A509301

Sample Name: E445

Study Name: 00E-0510-24

Raw File: c:\tc4\vht\fid-1\data\120600\1206028.raw

Acquisition Start Timestamp: 12/7/00 8:35:22

Operators Initials: VHT

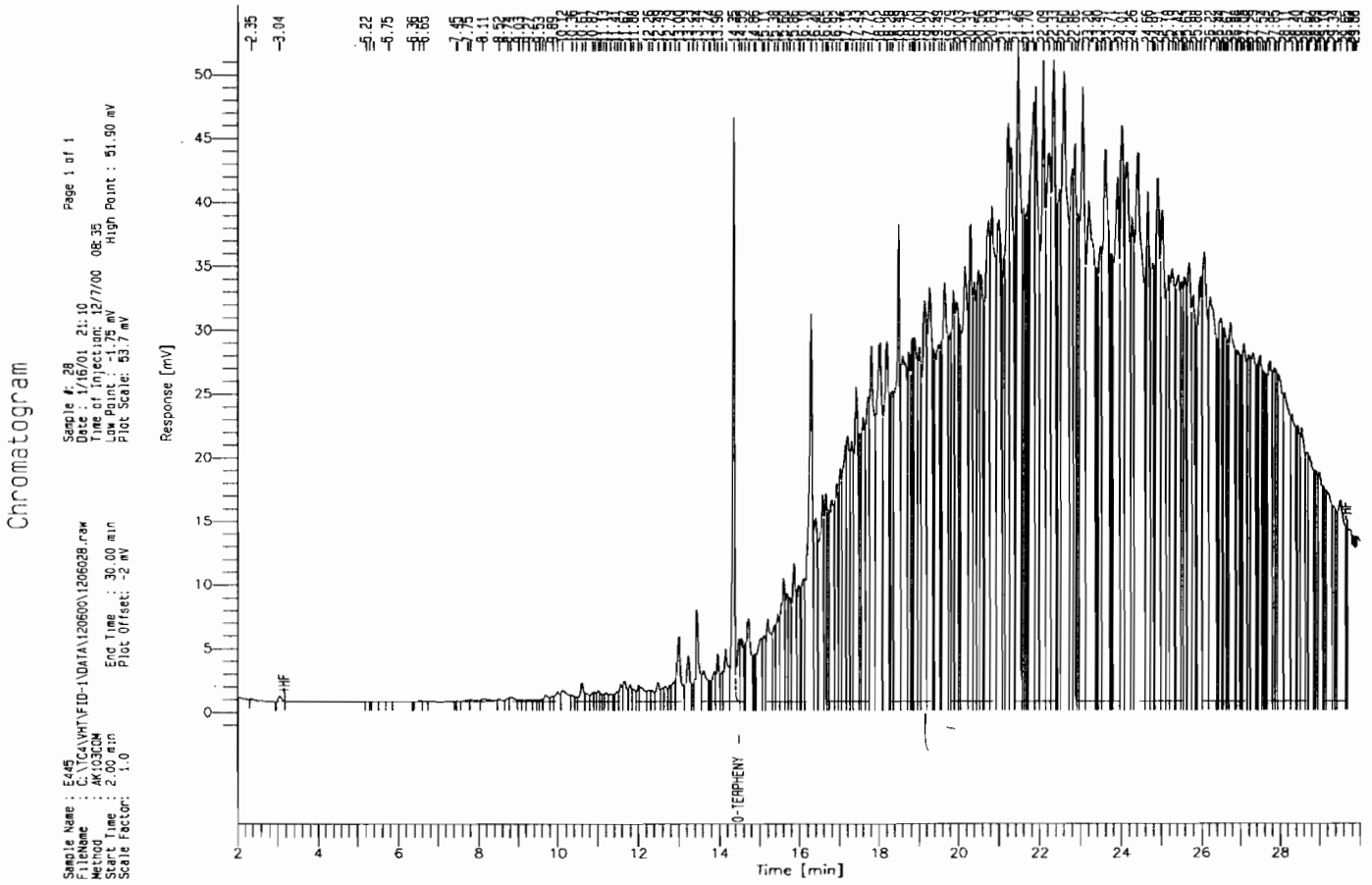
Column: A

Dilution Factor: 1

Multiplier: 2

Divisor: 25

Conversion Factor: 0.08

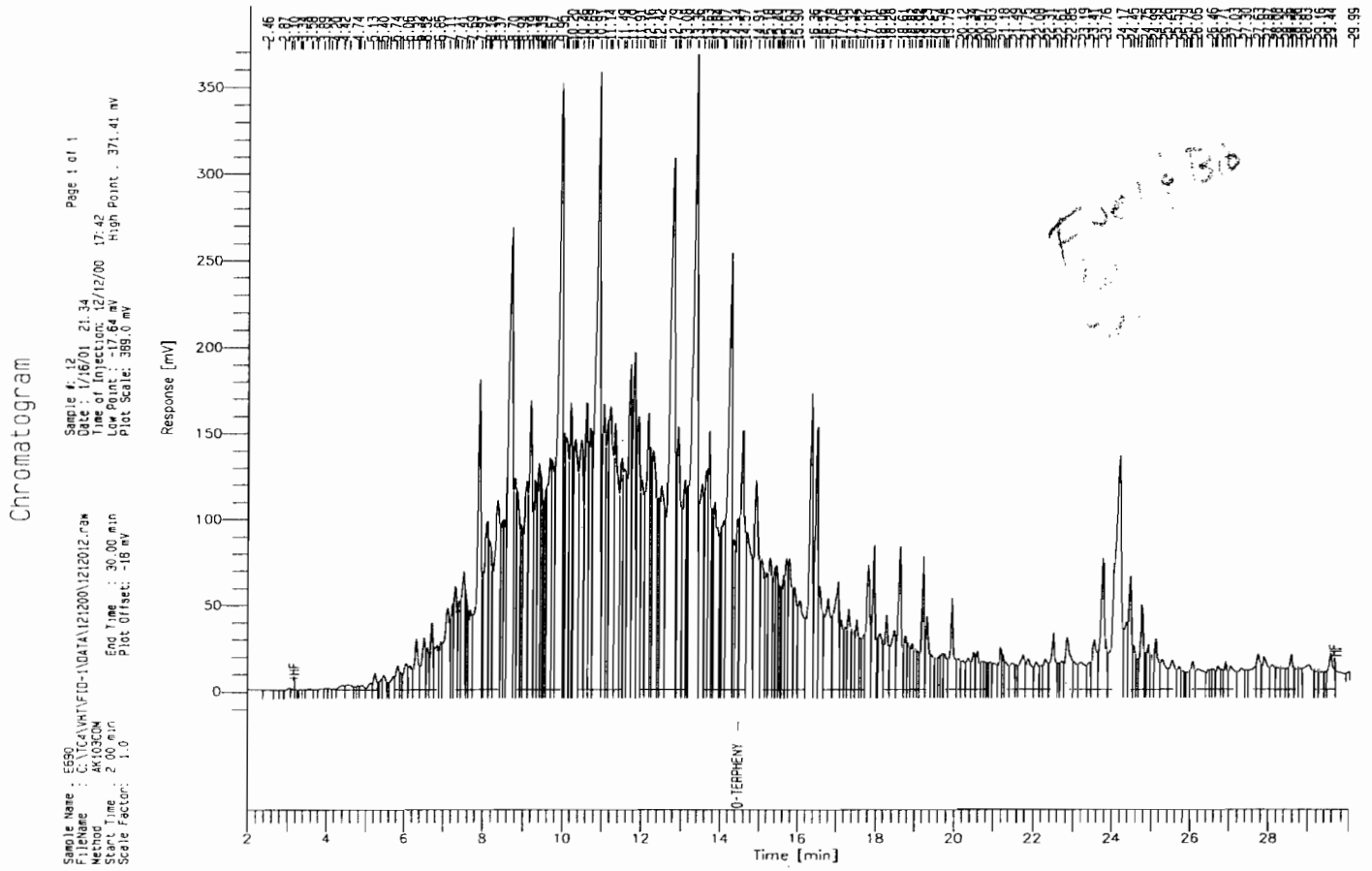


Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.346	45892	146336	136.33035	10.90643

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	903333	5165453	7026.668	562.133
Residual Range Organics	24.167	3472515	19490085	28140.834	2251.267

Sample Number:	12 AM-A5D0901	**Column:**	A
Sample Name:	E690	**Dilution Factor:**	1
Study Name:	00E-0522-19	**Multiplier:**	1
Raw File:	c:\tc4\vht\fid-1\data\121200\1212012.raw	**Divisor:**	25
Acquisition Start Timestamp:	12/12/00 17:42:18	**Conversion Factor:**	0.04
Operators Initials:	VHT		

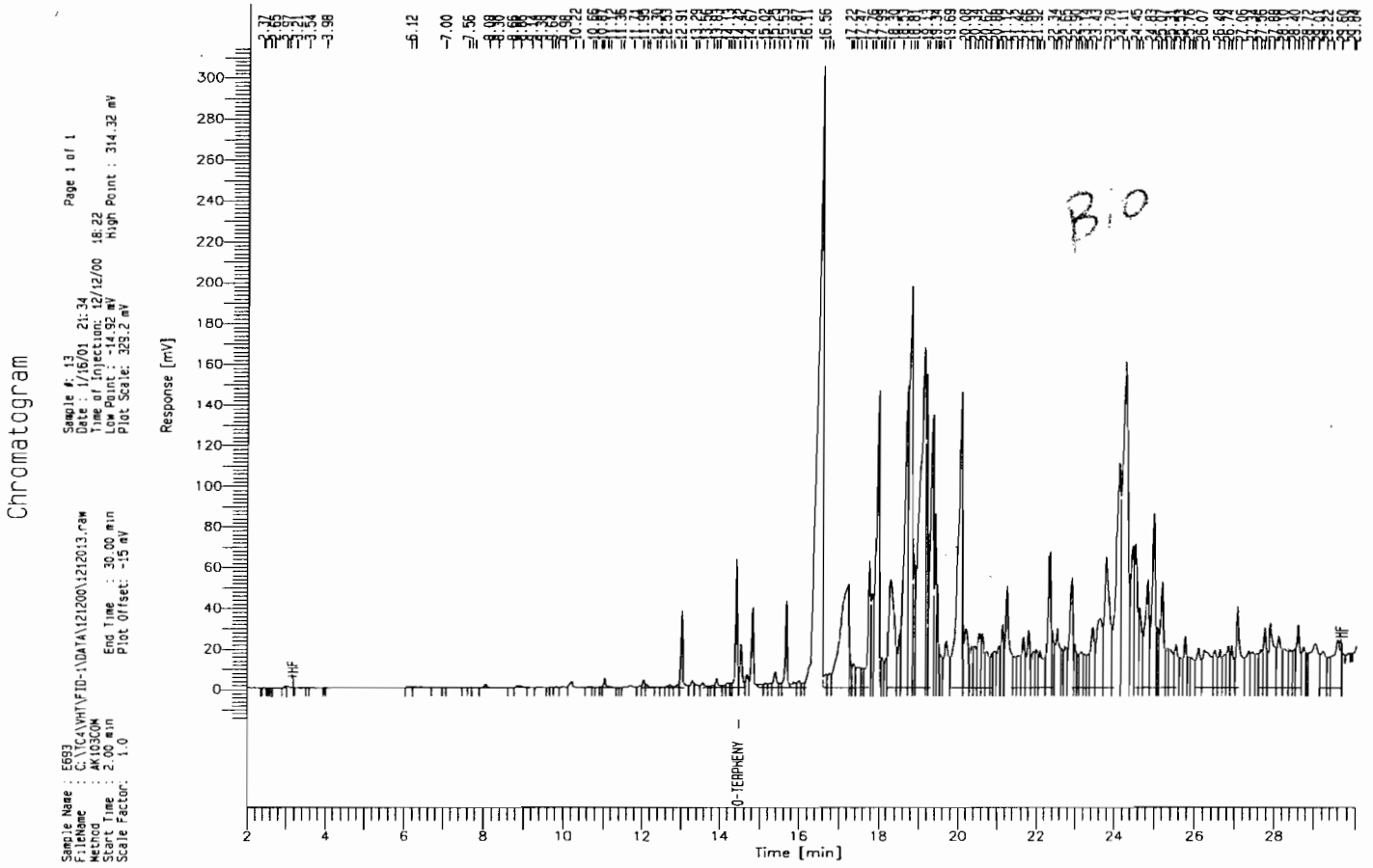
630 ?



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.565	156858	1177786	1080.34673	43.21387

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	12412327	73149388	98862.924	3954.517
Residual Range Organics	24.167	1674553	11467939	16459.551	658.382

Sample Number:	13	**Column:**	A
Sample Name:	E693 Ann -#570604	**Dilution Factor:**	1
Study Name:	00E-0522-19	**Multiplier:**	1
Raw File:	c:\tc4\vht\fid-1\data\121200\1212013.raw	**Divisor:**	25
Acquisition Start Timestamp:	12/12/00 18:22:59 1/8%	**Conversion Factor:**	0.04
Operators Initials:	VHT		



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.420	67275	219068	202.89702	8.11588

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	1844720	11241619	15234.671	609.387
Residual Range Organics	24.167	2600946	16818108	24250.091	970.004

Sample Number: 18 AGM-A520608

Sample Name: E697 25%

Study Name: 00E-0522-19

Raw File: c:\tc4\vht\fid-1\data\121200\1212018.raw

Acquisition Start Timestamp: 12/12/00 21:46:56

Operators Initials: VHT

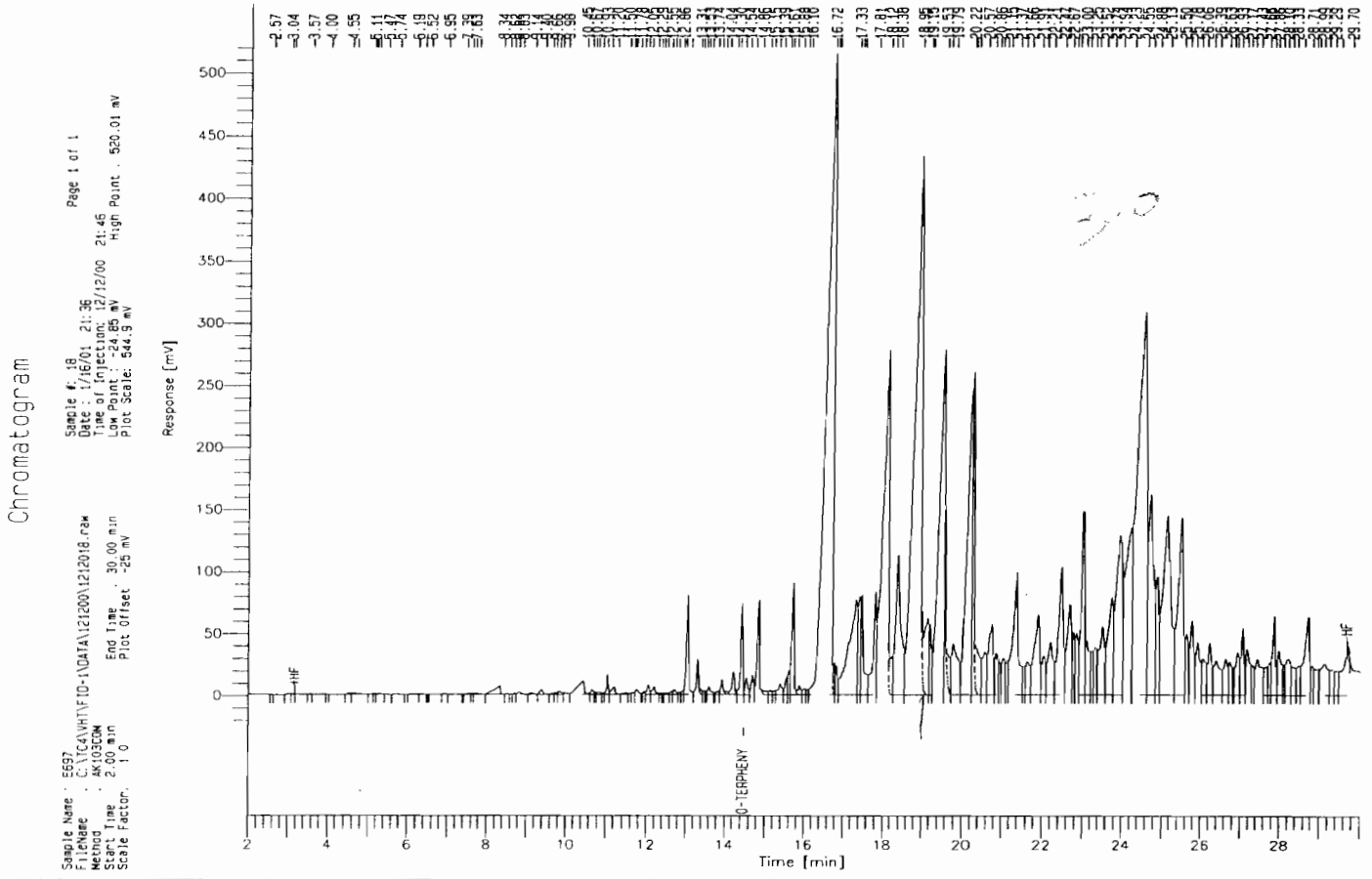
Column: A

Dilution Factor: 1

Multiplier: 1

Divisor: 25

Conversion Factor: 0.04



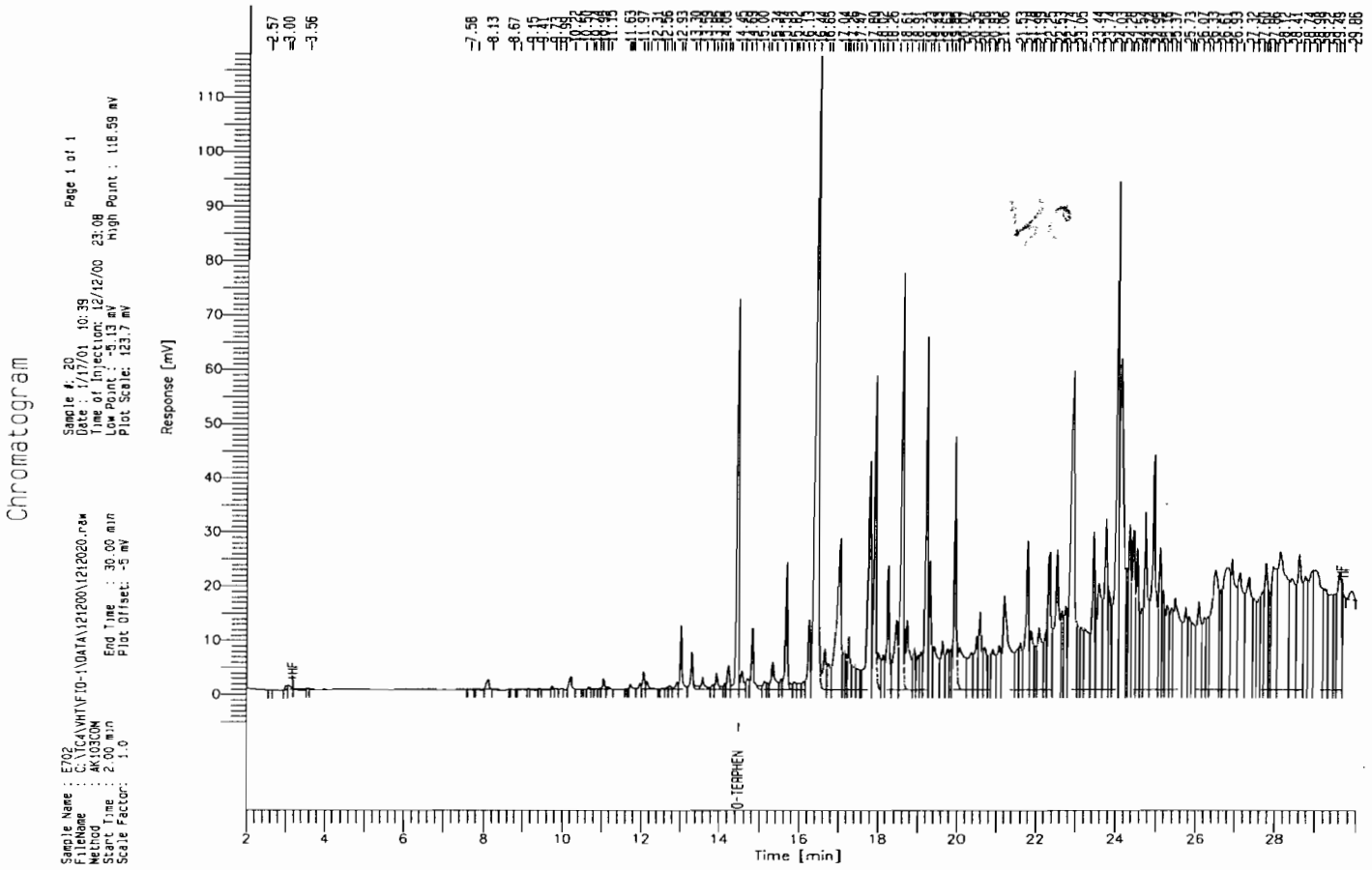
Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.436	73344	256030	236.72632	9.46905

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	2490218	22210992	30052.673	1202.107
Residual Range Organics	24.167	4221668	34477821	49964.919	1998.597

Sample Number:	20	**Column:**	A
Sample Name:	E702	**Dilution Factor:**	1
Study Name:	00E-0522-19	**Multiplier:**	1
Raw File:	c:\tc4\vht\fid-1\data\121200\1212020.raw	**Divisor:**	25
Acquisition Start Timestamp:	12/12/00 23:08:13	**Conversion Factor:**	0.04
Operators Initials:	VHT		

AM-A520613

113%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.450	72620	243837	225.56694	9.02268

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	656696	3056670	4178.014	167.121
Residual Range Organics	24.167	1536728	10086144	14447.479	577.899

Sample Number: 21 **Column:** A

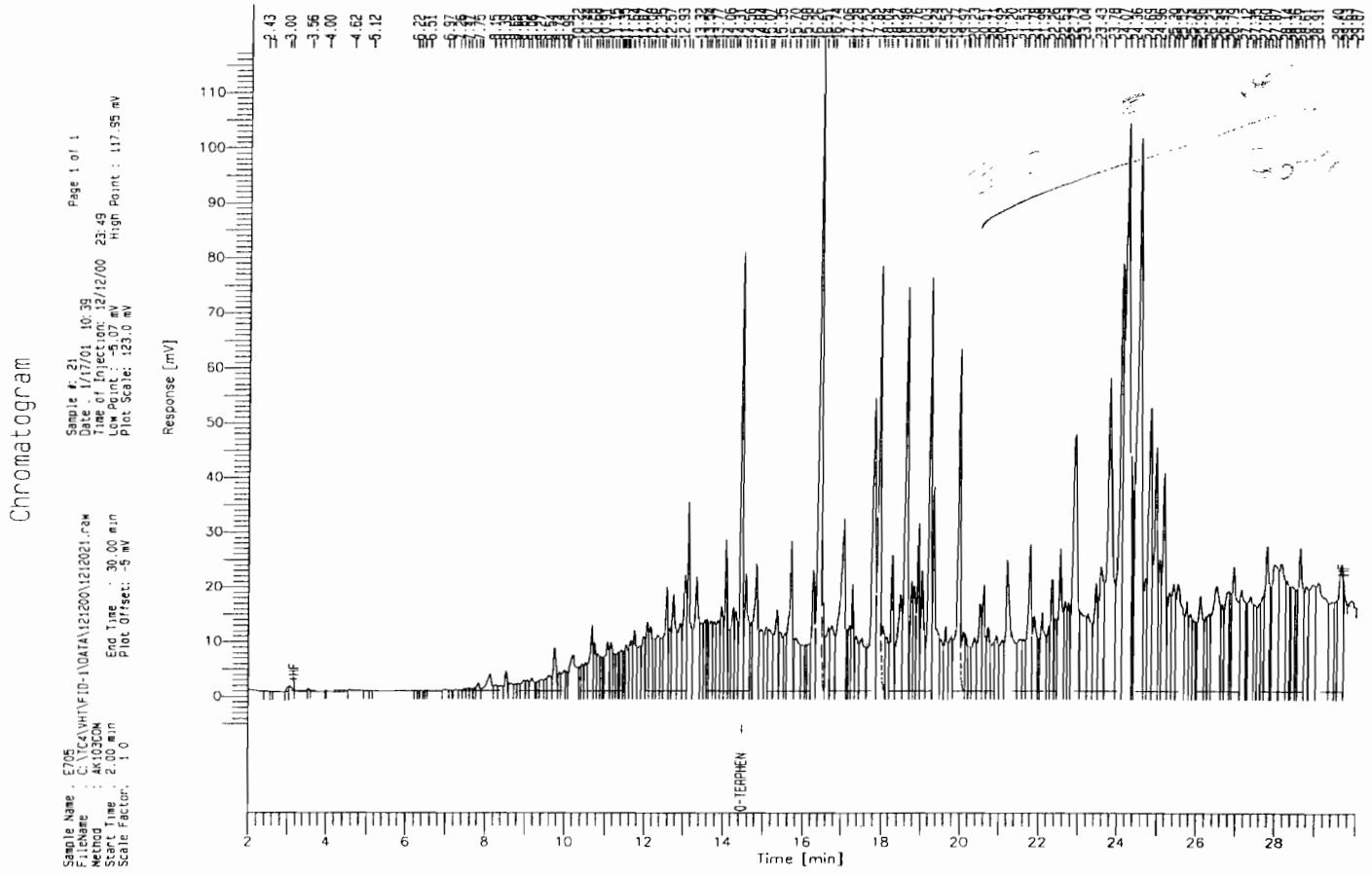
Sample Name: E705 Am-#520616 **Dilution Factor:** 1

Study Name: 00E-0522-19 **Multiplier:** 1

Raw File: c:\tc4\vht\fid-1\data\121200\1212021.raw **Divisor:** 25

Acquisition Start Timestamp: 12/12/00 23:49:01 **Conversion Factor:** 0.04

Operators Initials: VHT 185%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.461	80142	314835	290.54590	11.62184

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	1478441	7803064	10589.691	423.588
Residual Range Organics	24.167	1826868	12193361	17515.859	700.634

Sample Number: 22 **Column:** A

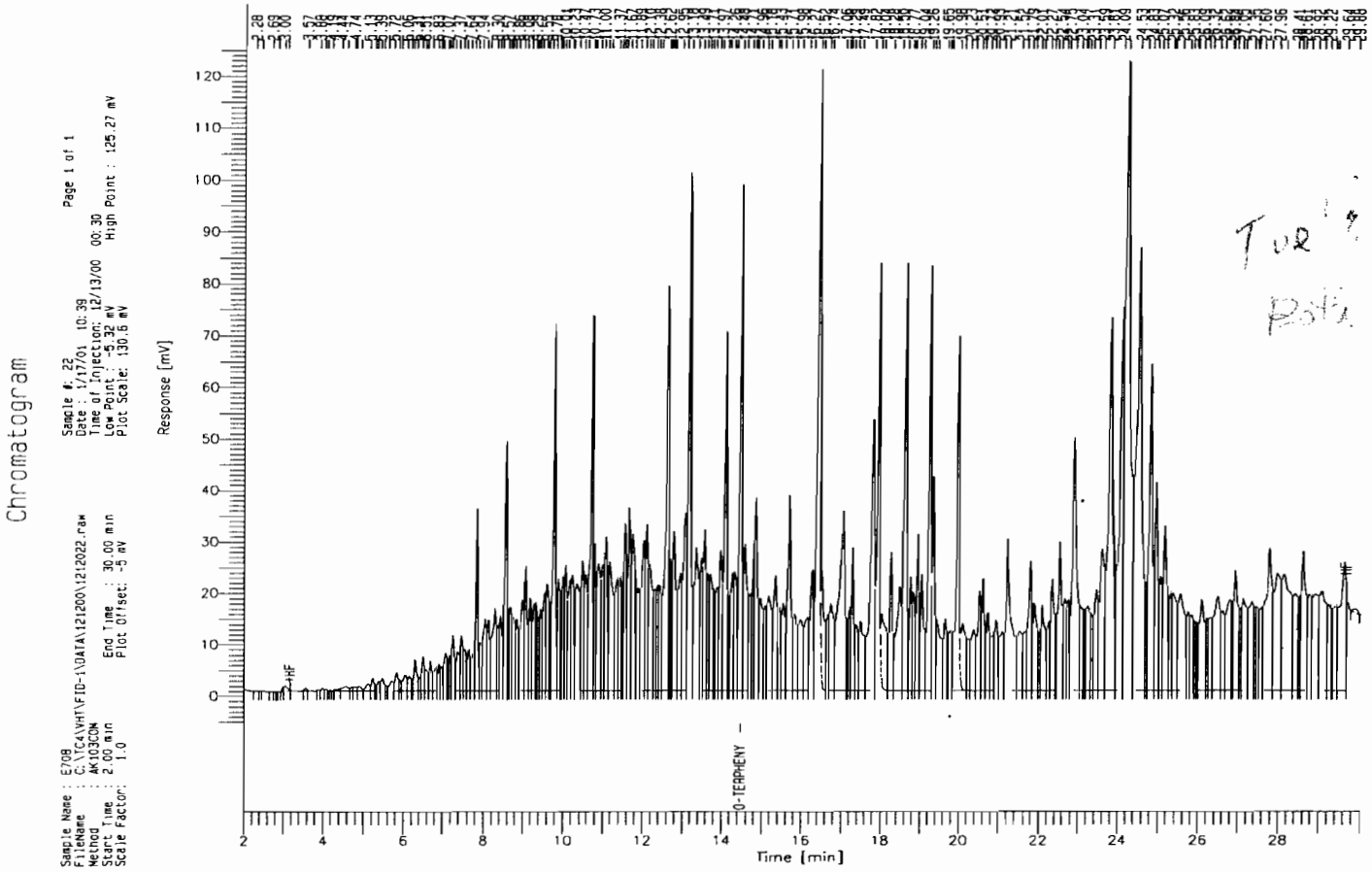
Sample Name: E708 Am-A500619 **Dilution Factor:** 1

Study Name: 00E-0522-19 **Multiplier:** 1

Raw File: c:\tc4\vht\fid-1\data\121200\1212022.raw **Divisor:** 25

Acquisition Start Timestamp: 12/13/00 0:30:15 205'. **Conversion Factor:** 0.04

Operators Initials: VHT

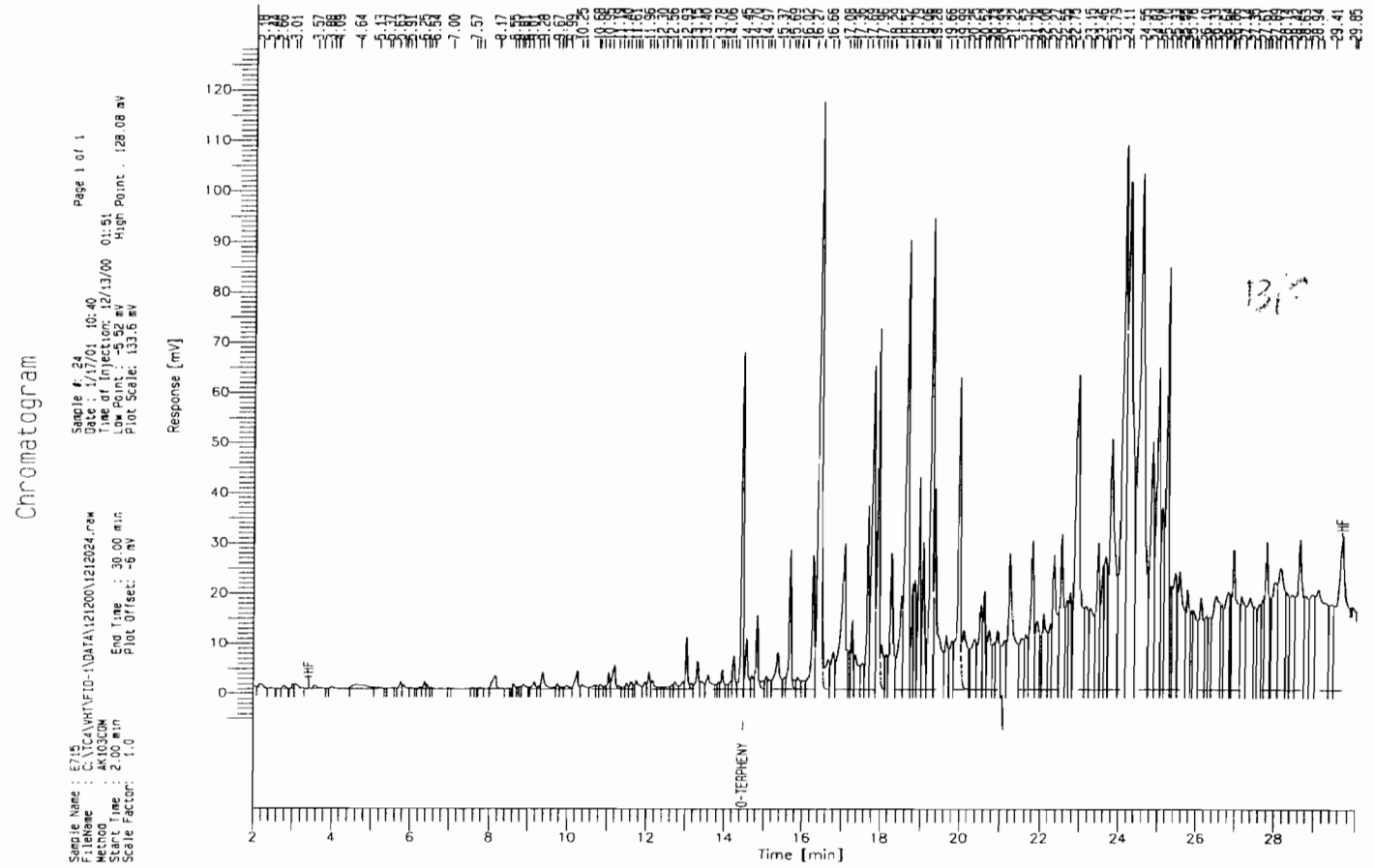


Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.482	98294	426149	392.42418	15.69697

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	3126302	15717528	21280.963	851.239
Residual Range Organics	24.167	1872310	12857699	18483.223	739.329

Sample Number:	24	**Column:**	A
Sample Name:	E715	**Dilution Factor:**	1
Study Name:	00E-0522-19	**Multiplier:**	1
Raw File:	c:\tc4\vht\fid-1\data\121200\1212024.raw	**Divisor:**	25
Acquisition Start Timestamp:	12/13/00 1:51:54	**Conversion Factor:**	0.04
Operators Initials:	VHT		

Am-A580097



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.452	70191	234312	216.84903	8.67396

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	911539	4277264	5826.856	233.074
Residual Range Organics	24.167	1903648	13580699	19536.004	781.440

Sample Number: 25

Am-A520029
318%

Sample Name: E717

Study Name: 00E-0522-19

Raw File: c:\tc4\vht\fid-1\data\121200\1212025.raw

Acquisition Start Timestamp: 12/13/00 2:32:35

Operators Initials: VHT

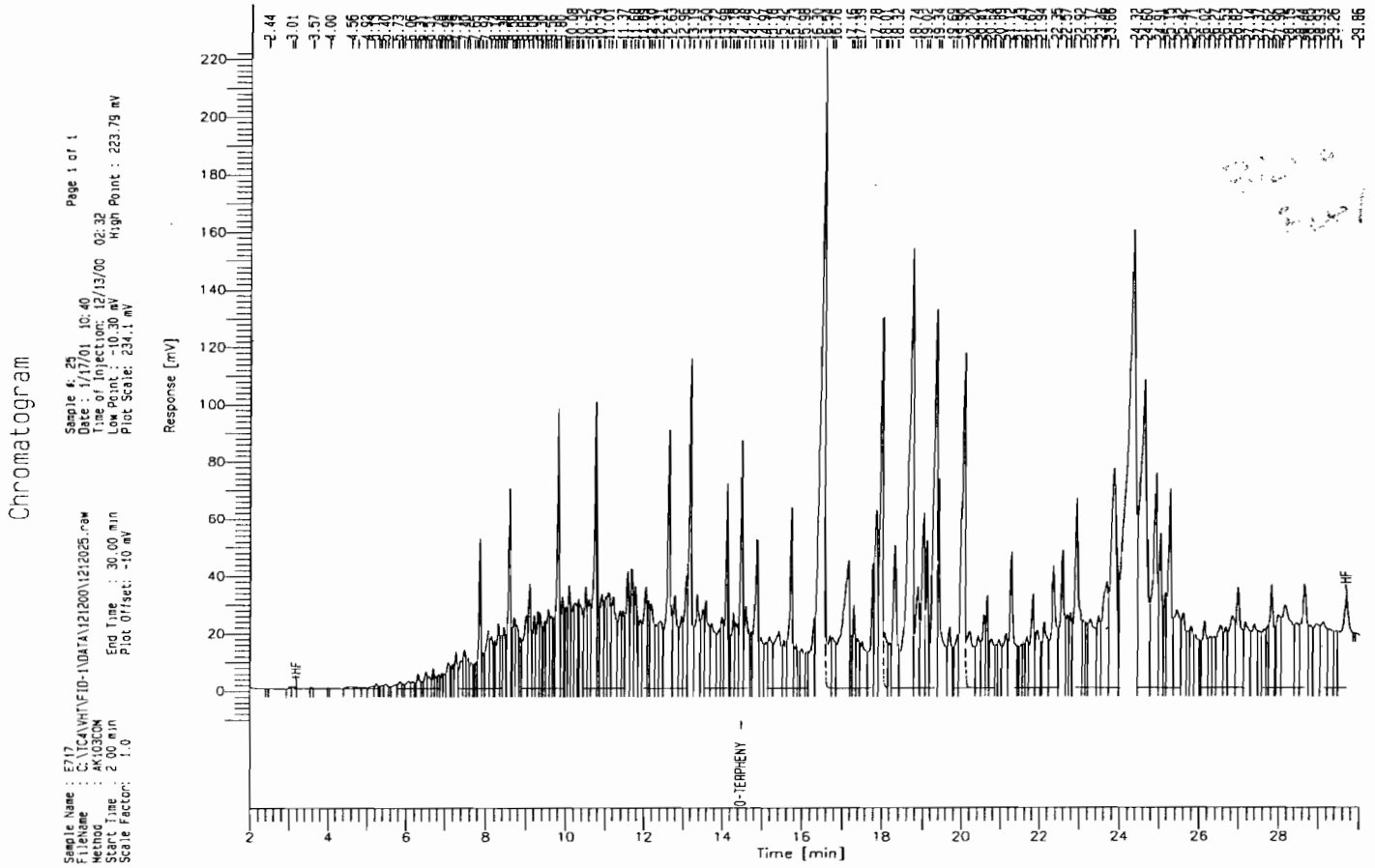
Column: A

Dilution Factor: 1

Multiplier: 1

Divisor: 25

Conversion Factor: 0.04



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.482	86614	366436	337.77302	13.51092

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	3817206	20626194	27911.845	1116.474
Residual Range Organics	24.167	2301363	17987296	25952.580	1038.103

3465 Site

Sample Number: 20 **Column:** A

Sample Name: 10XE679 AM-A50440 **Dilution Factor:** 10

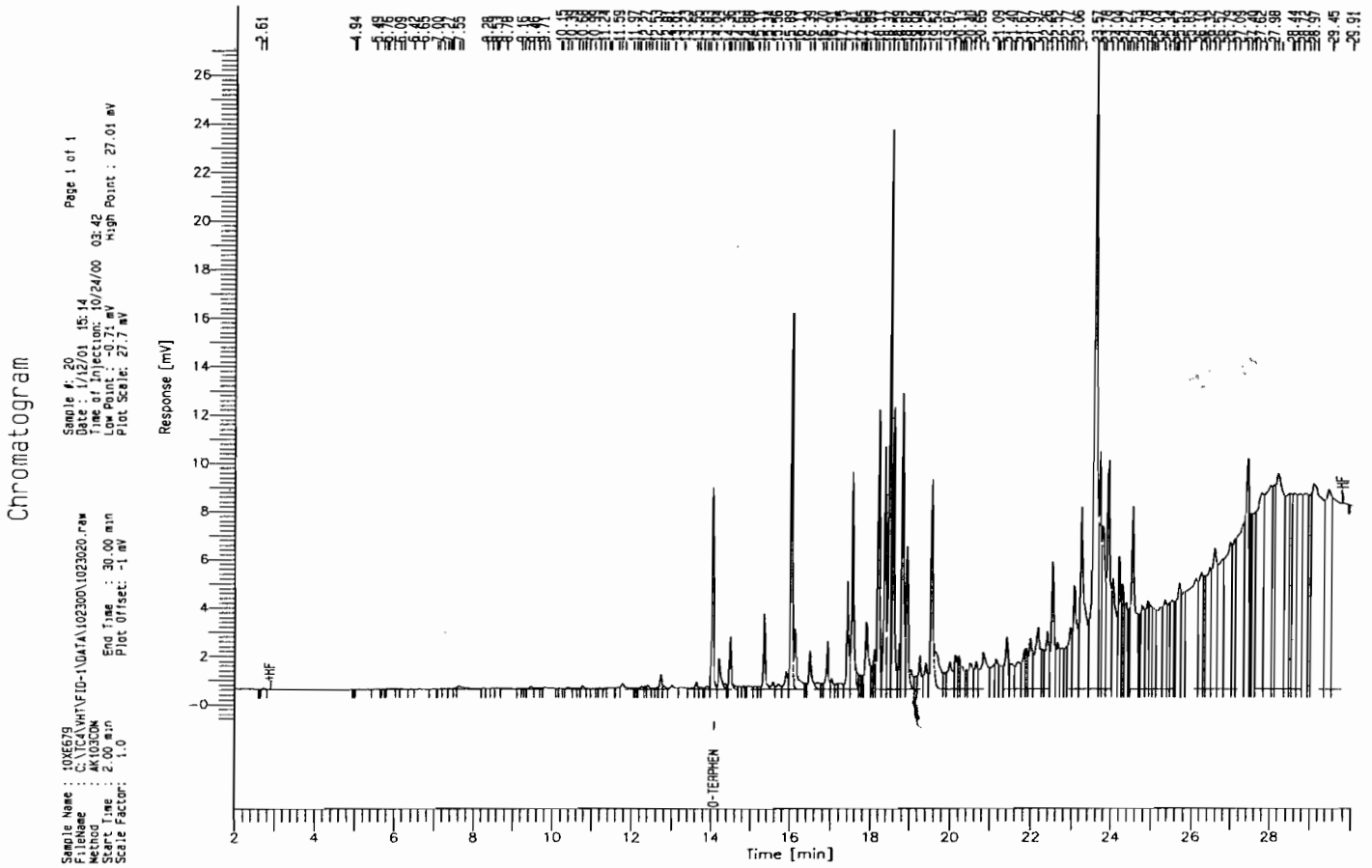
Study Name: 00E-0452-04/05 **Multiplier:** 0.04

Raw File: c:\tc4\vht\fid-1\data\102300\1023020.raw **Divisor:** 1

Acquisition Start Timestamp: 10/24/00 3:42:29 **Conversion Factor:** 0.39999999106

Operators Initials: VHT

138%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.043	8478	23849	27.56146	11.02459

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	127778	448645	700.274	280.110
Residual Range Organics	23.800	331685	2211345	3971.422	1588.569

Sample Number: 21

Sample Name: 10XE680 Am-A504403

Study Name: 00E-0452-04/05

Raw File: c:\tc4\vht\fid-1\data\102300\1023021.raw

Acquisition Start Timestamp: 10/24/00 4:22:41

Operators Initials: VHT

Column: A

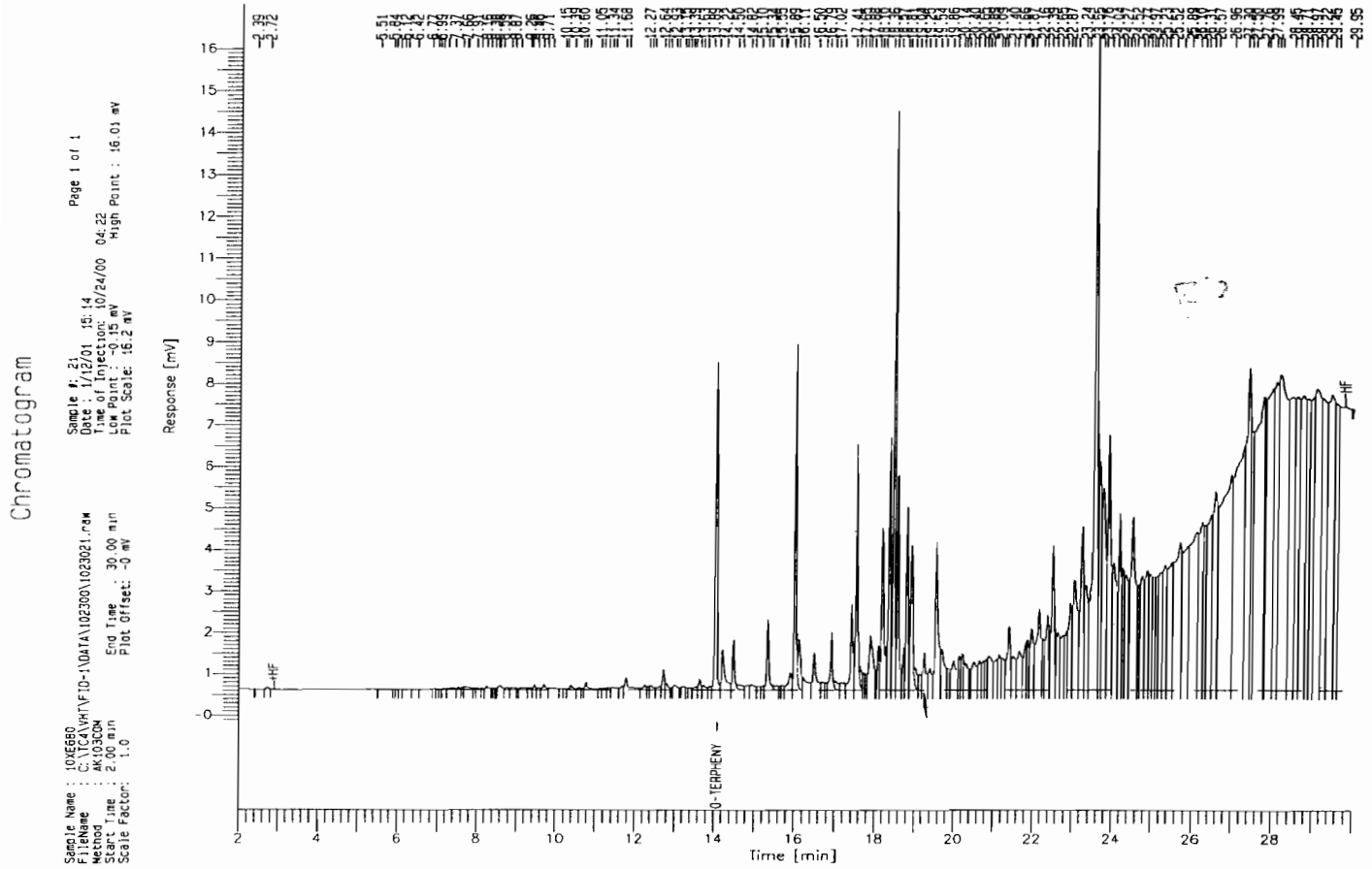
Dilution Factor: 10

Multiplier: 0.04

Divisor: 1

Conversion Factor: 0.39999999106

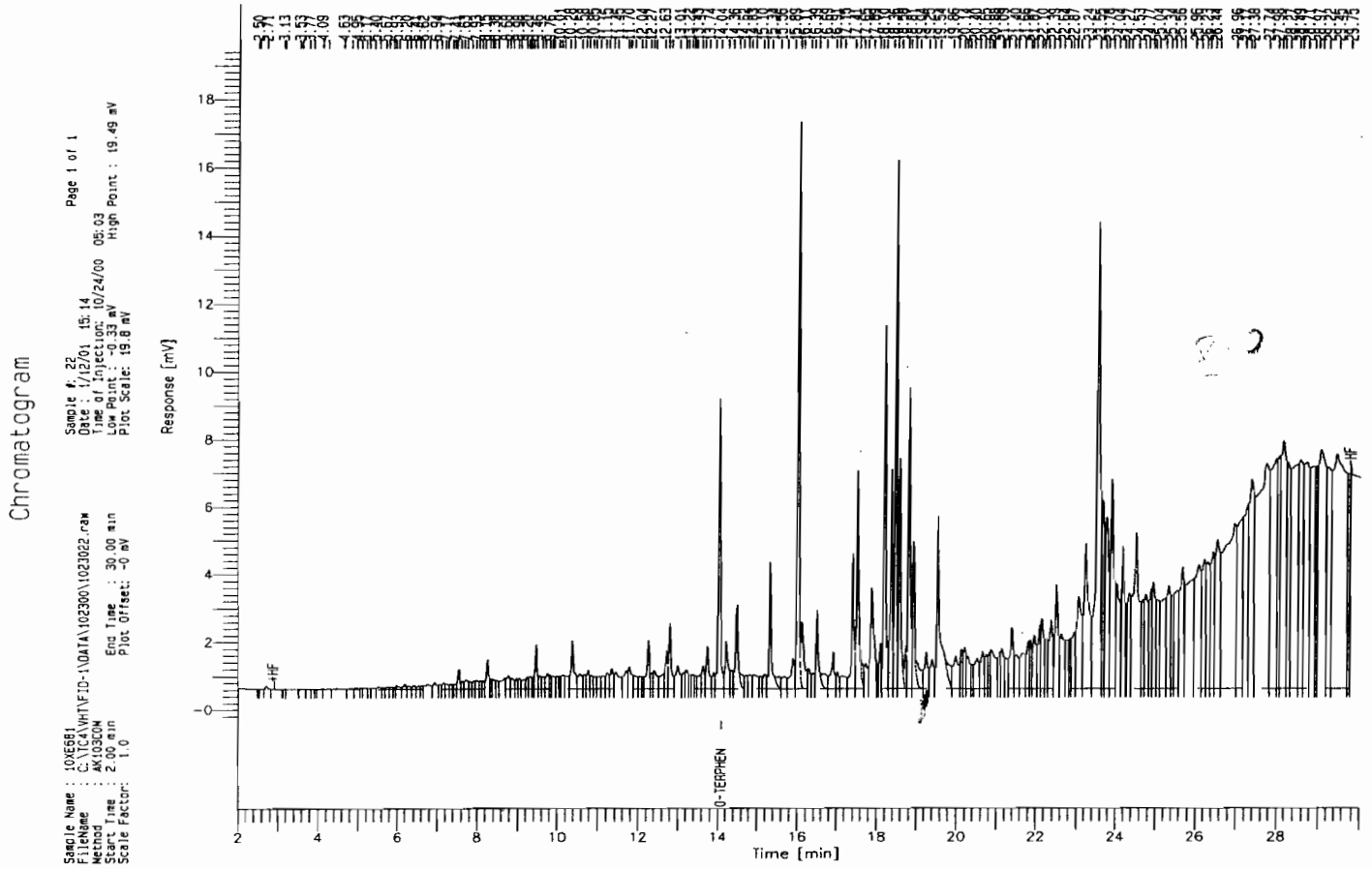
130 /.



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.042	7921	22405	25.85476	10.34190

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	72978	268063	397.722	159.089
Residual Range Organics	23.800	231741	1746995	3097.148	1238.859

Sample Number:	22	**Column:**	A
Sample Name:	10XE681 AM-11501404	**Dilution Factor:**	10
Study Name:	00E-0452-04/05	**Multiplier:**	0.04
Raw File:	c:\tc4\vht\fid-1\data\102300\1023022.raw	**Divisor:**	1
Acquisition Start Timestamp:	10/24/00 5:03:22	**Conversion Factor:**	0.39999999106
Operators Initials:	VHT 161		



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.042	8627	27760	32.18255	12.87302

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	140475	577622	916.366	366.546
Residual Range Organics	23.800	227270	1725988	3057.596	1223.038

Sample Number: 23 **Column:** A

Sample Name: 10XE682 Apr-R 50405 **Dilution Factor:** 10

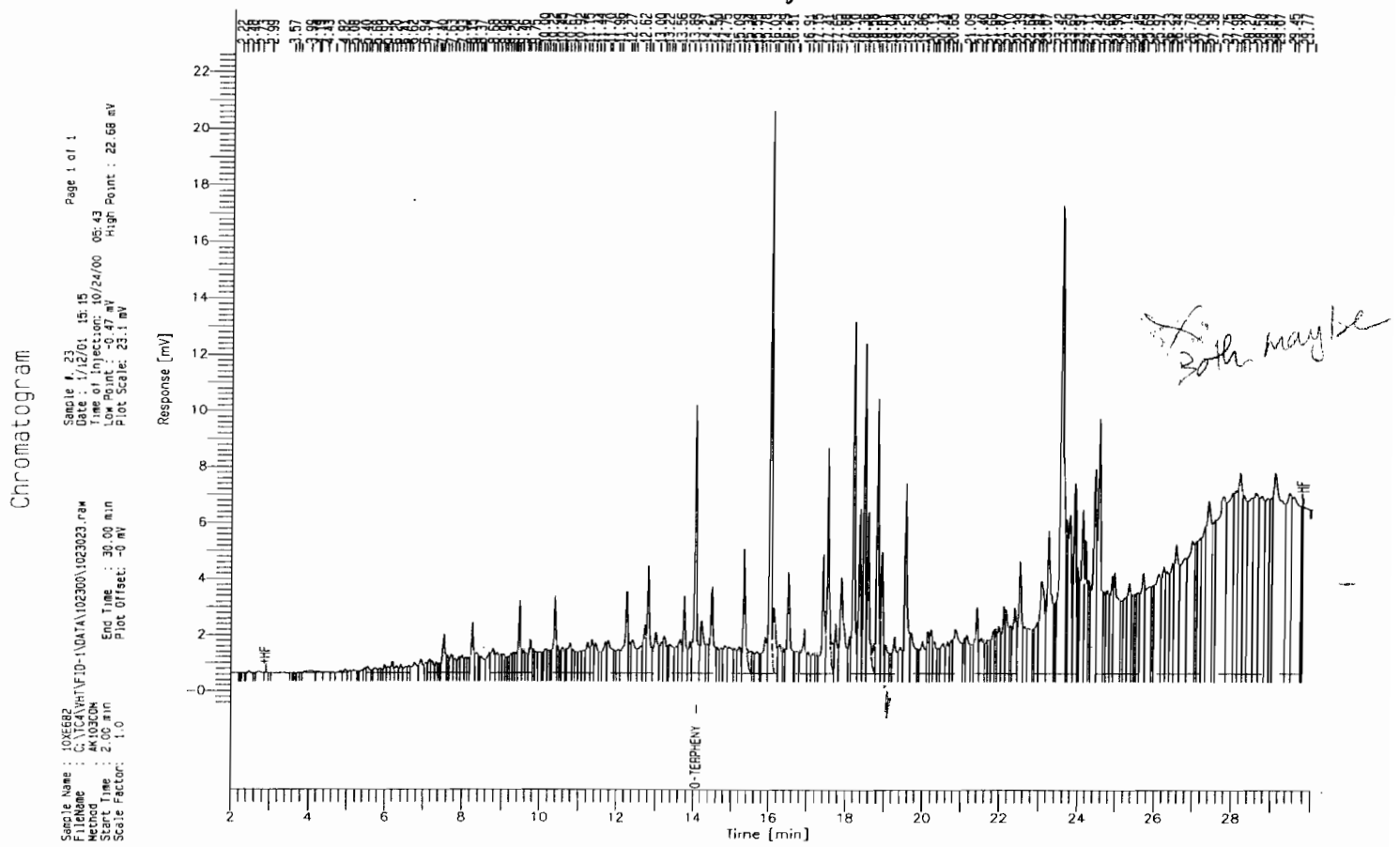
Study Name: 00E-0452-04/05 **Multiplier:** 0.04

Raw File: c:\tc4\vht\fid-1\data\102300\1023023.raw **Divisor:** 1

Acquisition Start Timestamp: 10/24/00 5:43:41 **Conversion Factor:** 0.39999999106

Operators Initials: VHT

218/.



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.043	9673	37238	43.37982	17.35193

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	200448	900109	1456.669	582.668
Residual Range Organics	23.800	283941	1853885	3298.399	1319.360

3475 Site

Sample Number: 25 **Column:** A

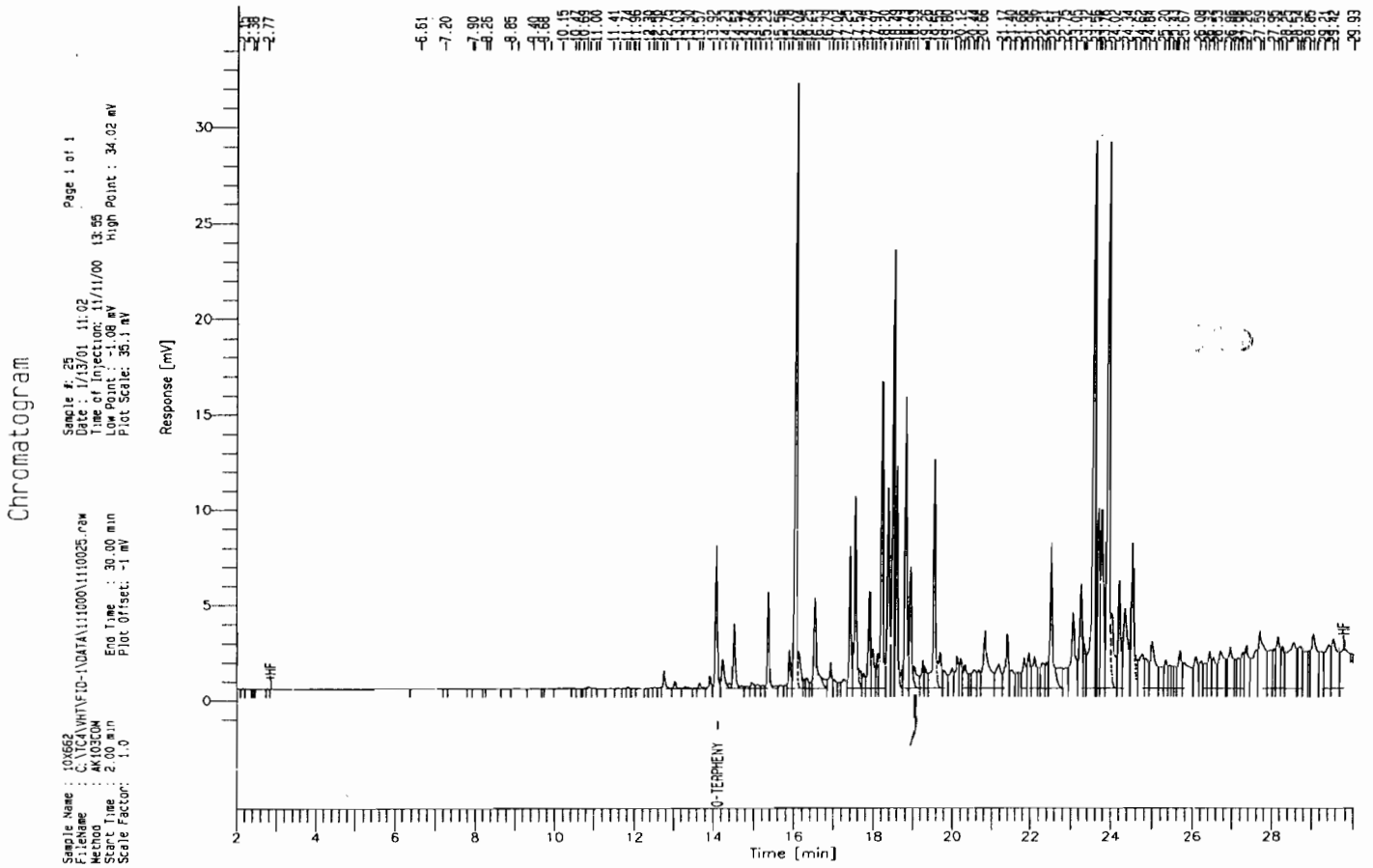
Sample Name: 10X662 AM-AS041101 **Dilution Factor:** 10

Study Name: 00E-0448 154 % **Multiplier:** 0.04

Raw File: c:\tc4\vht\fid-1\data\111000\1110025.raw **Divisor:** 1

Acquisition Start Timestamp: 11/11/00 13:55:51 **Conversion Factor:** 0.39999999106

Operators Initials: VHT

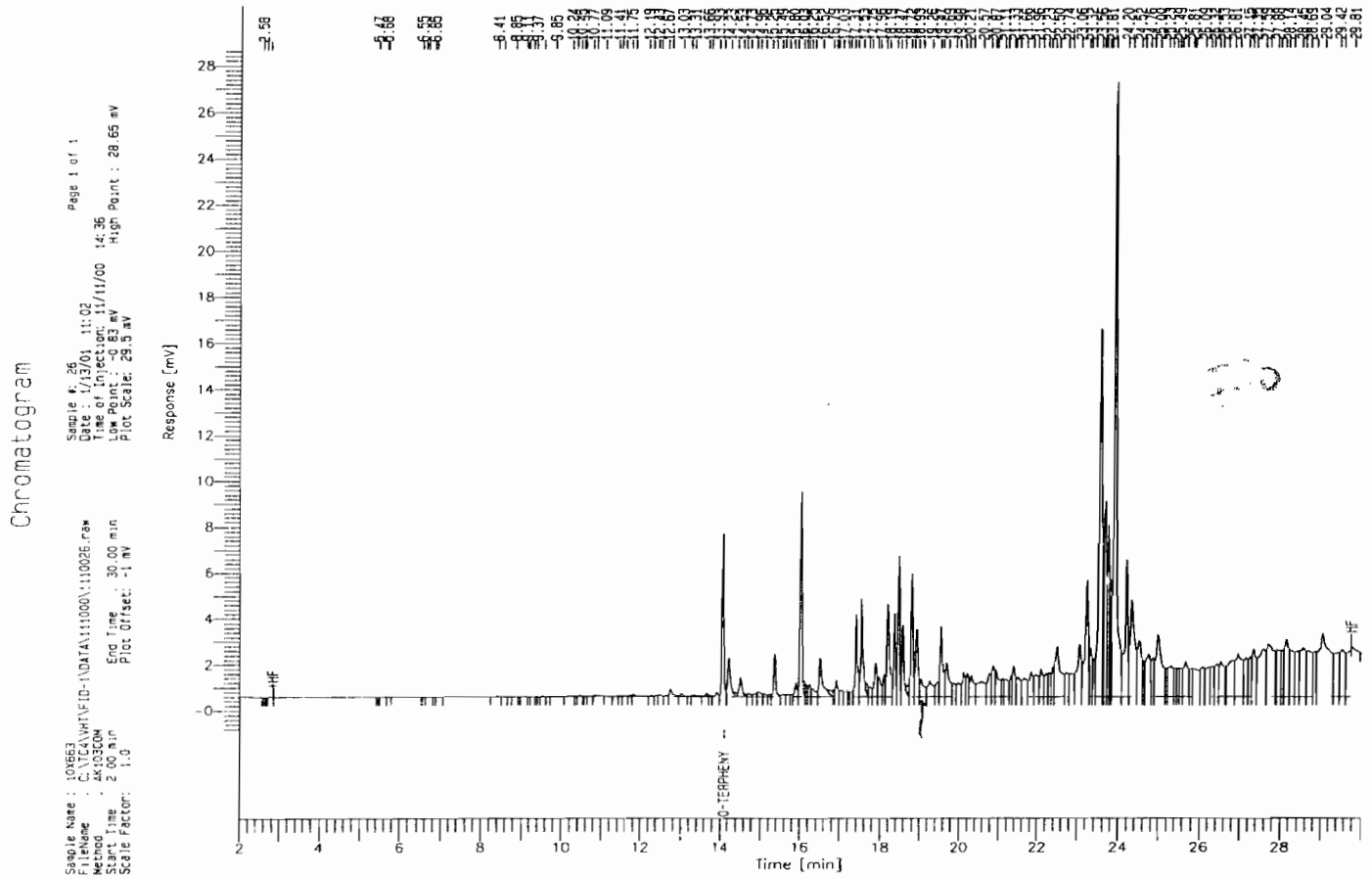


Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.067	7474	23256	31.74510	12.69804

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	163601	565742	1024.049	409.620
Residual Range Organics	23.800	238473	1261294	5058.162	2023.265

Sample Number:	26	**Column:**	A
Sample Name:	**10X663** Am-A504102	**Dilution Factor:**	10
Study Name:	00E-0448	**Multiplier:**	0.04
Raw File:	c:\tc4\vht\fid-1\data\111000\1110026.raw	**Divisor:**	1
Acquisition Start Timestamp:	11/11/00 14:36:36	**Conversion Factor:**	0.39999999106
Operators Initials:	VHT		

150%.



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.066	7082	22052	30.27268	12.10907

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	60929	231569	446.021	178.408
Residual Range Organics	23.800	186422	1055896	4207.760	1683.104

Sample Number: 27

Am-A504103

Sample Name: 10X664

Study Name: 00E-0448

Raw File: c:\tc4\vht\fid-1\data\111000\1110027.raw

Acquisition Start Timestamp: 11/11/00 15:17:17

Operators Initials: VHT

M31

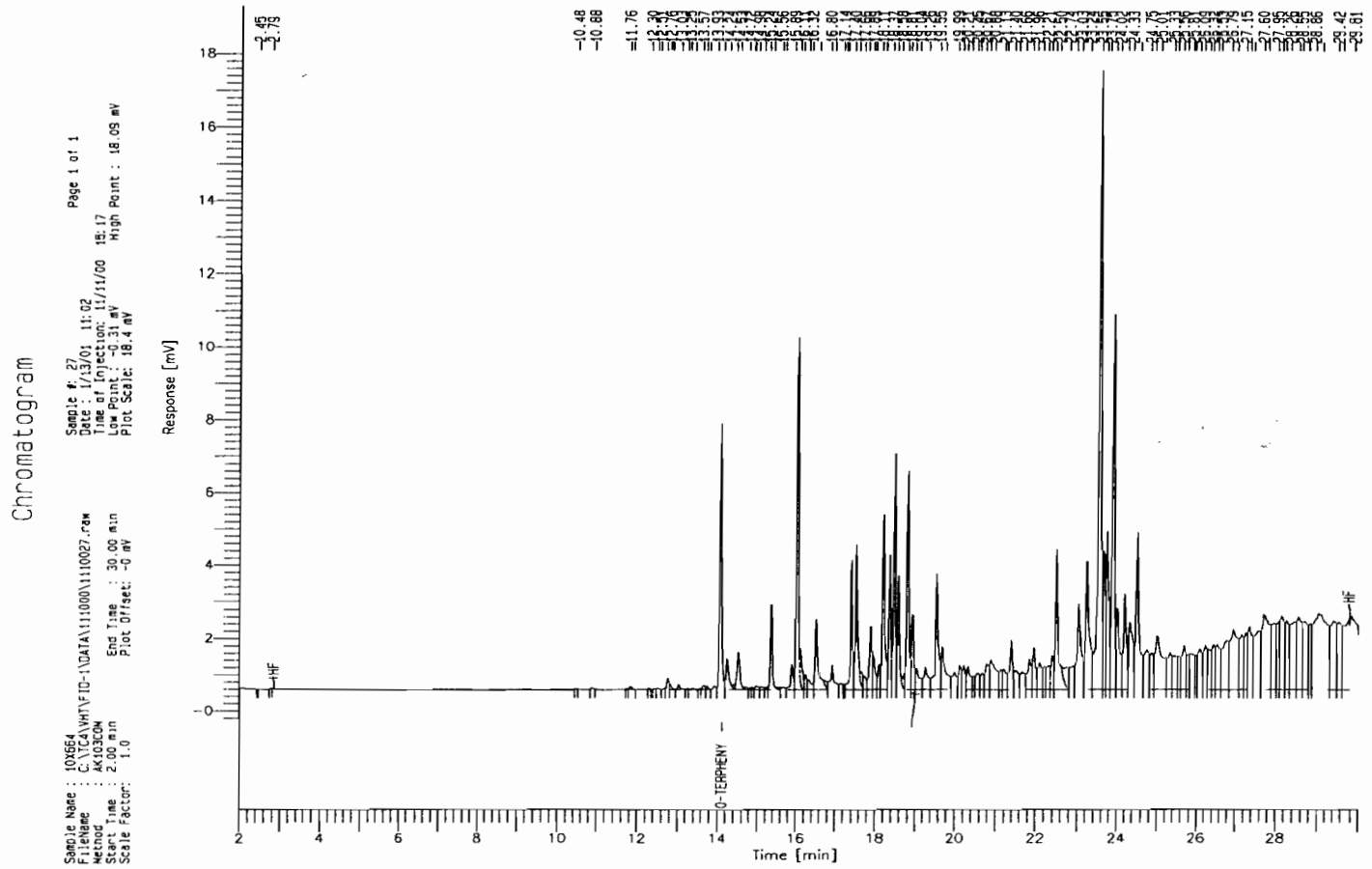
Column: A

Dilution Factor: 10

Multiplier: 0.04

Divisor: 1

Conversion Factor: 0.39999999106



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.067	7297	23646	32.22203	12.88881

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	60411	220330	426.580	170.632
Residual Range Organics	23.800	121258	752248	2950.576	1180.231

Sample Number: 28 **Column:** A

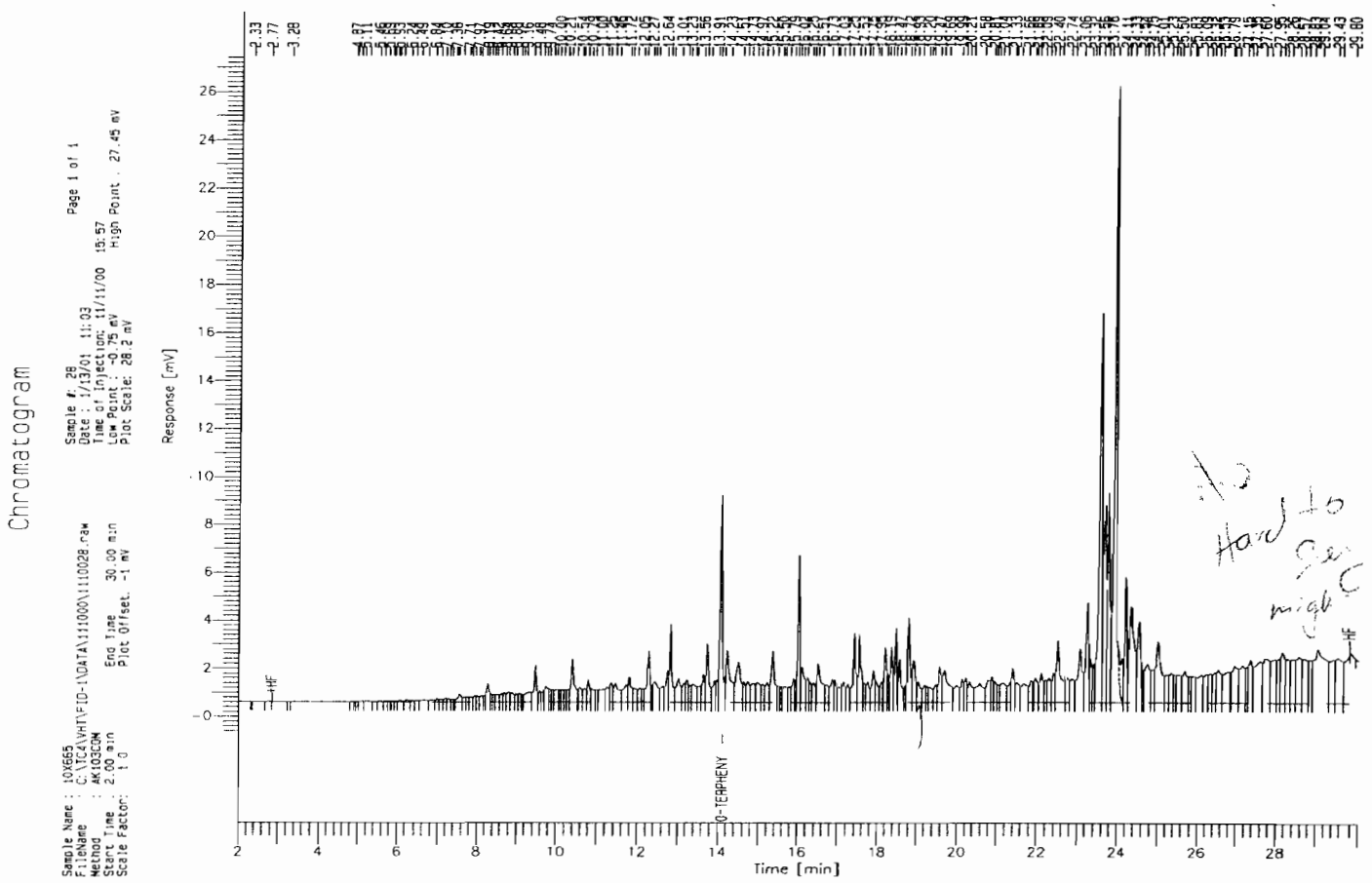
Sample Name: 10X665 Am-A 5041/04 **Dilution Factor:** 10

Study Name: 00E-0448 **Multiplier:** 0.04

Raw File: c:\tc4\vht\fid-1\data\111000\1110028.raw 205% **Divisor:** 1

Acquisition Start Timestamp: 11/11/00 15:57:56 **Conversion Factor:** 0.39999999106

Operators Initials: VHT



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.064	8695	30764	40.92500	16.37000

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	110464	538611	977.121	390.849
Residual Range Organics	23.800	164315	988963	3930.637	1572.255

Sample Number: 29 **Column:** A

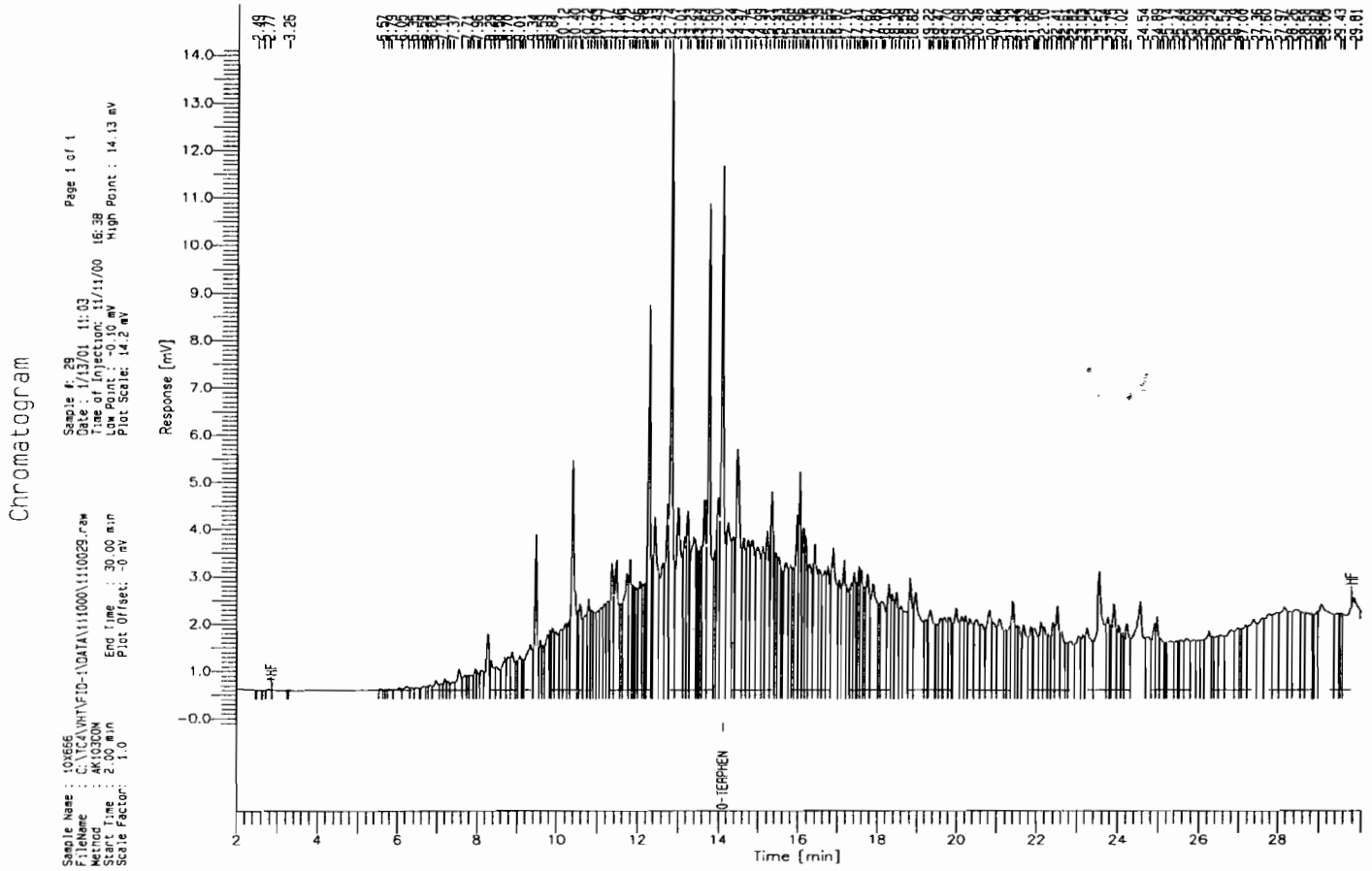
Sample Name: 10X666 AM-AS04105 **Dilution Factor:** 10

Study Name: 00E-0448 **Multiplier:** 0.04

Raw File: c:\tc4\vht\fid-1\data\111000\1110029.raw **Divisor:** 1

Acquisition Start Timestamp: 11/11/00 16:38:44 **Conversion Factor:** 0.39999999106

Operators Initials: VHT 4/10%

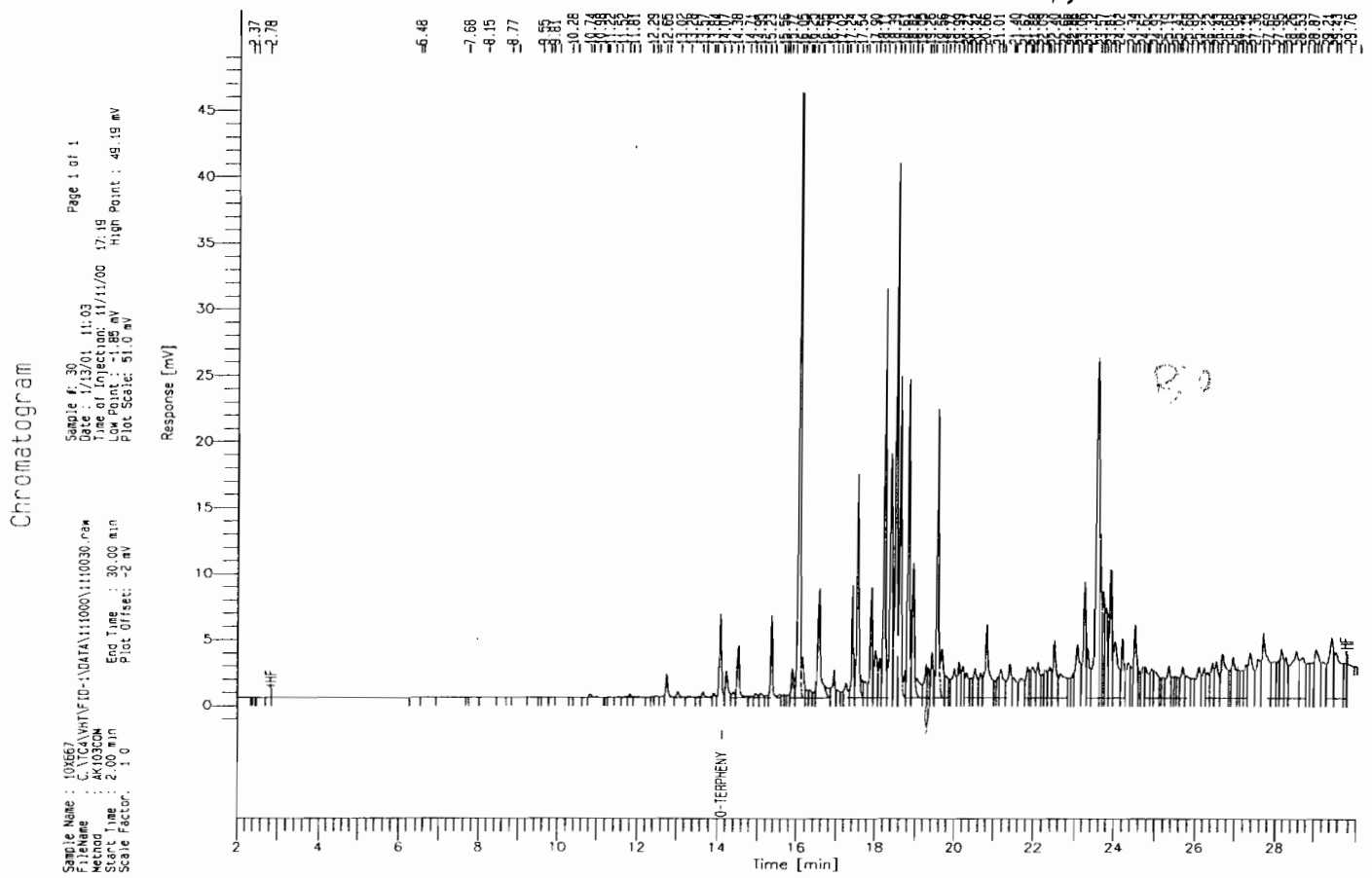


Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.066	11075	50990	65.65508	26.26203

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	288283	1510230	2657.758	1063.103
Residual Range Organics	23.800	108759	770469	3026.016	1210.406

Sample Number:	30	**Column:**	A
Sample Name:	**10X667**	**Dilution Factor:**	10
Study Name:	00E-0448	**Multiplier:**	0.04
Raw File:	c:\tc4\vht\fid-1\data\111000\1110030.raw	**Divisor:**	1
Acquisition Start Timestamp:	11/11/00 17:19:25	**Conversion Factor:**	0.39999999106
Operators Initials:	VHT		

AM-A504106 138%

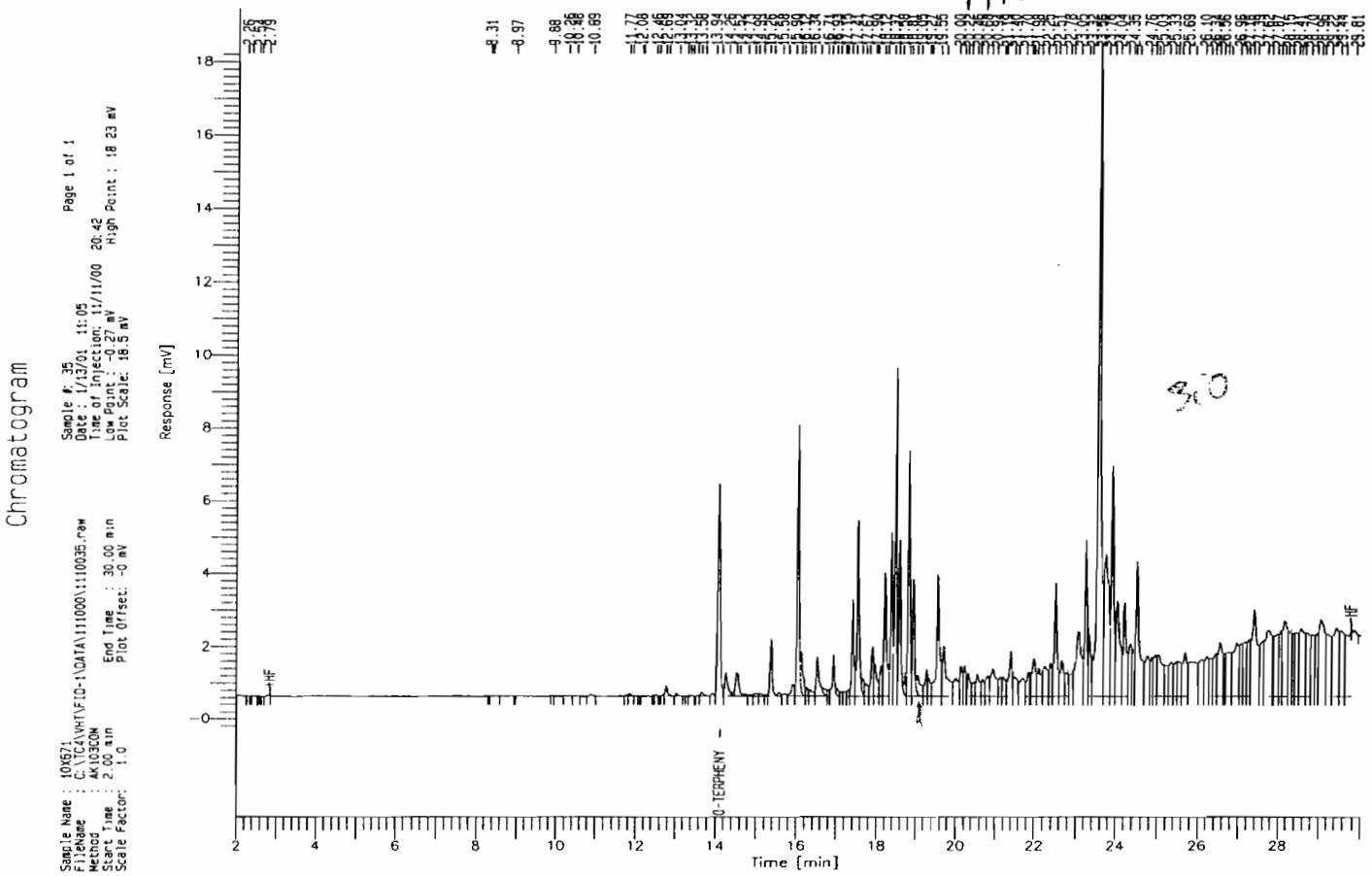


Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.066	6351	19793	27.51138	11.00455

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	256853	910447	1620.295	648.118
Residual Range Organics	23.800	290866	1588998	6414.942	2565.977

Sample Number:	35	**Column:**	A
Sample Name:	**10X671**	**Dilution Factor:**	10
Study Name:	00E-0448	**Multiplier:**	0.04
Raw File:	c:\tc4\vht\fid-1\data\111000\1110035.raw	**Divisor:**	1
Acquisition Start Timestamp:	11/11/00 20:42:17	**Conversion Factor:**	0.39999999106
Operators Initials:	VHT		

Am - A504/1/0
149%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.076	6478	21565	29.67802	11.87121

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	57572	211444	411.210	164.484
Residual Range Organics	23.800	121451	738655	2894.298	1157.719

2766 Site

2760

Sample Number: 27 | **Column:** A

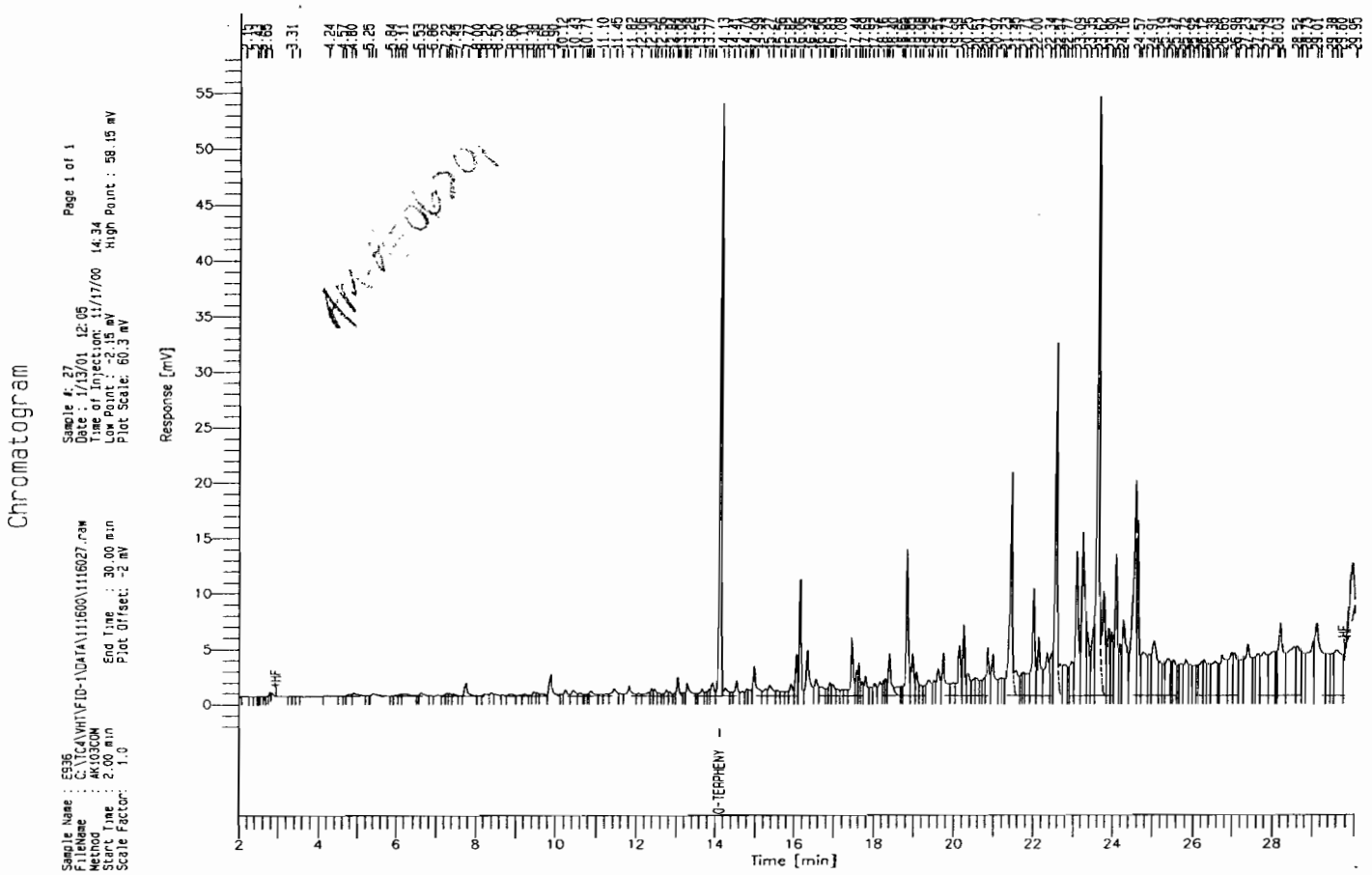
Sample Name: E936 | **Dilution Factor:** 1

Study Name: 00E-0468-01 | **Multiplier:** 0.04

Raw File: c:\tc4\vht\fid-1\data\111600\1116027.raw | **Divisor:** 1

Acquisition Start Timestamp: 11/17/00 14:34:54 | **Conversion Factor:** 0.03999999911

Operators Initials: VHT



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.134	53323	166472	206.85670	8.27427

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	139199	569806	1031.079	41.243
Residual Range Organics	23.800	438031	2373023	9661.015	386.441

3860 Site

3800

Sample Number: 63 **Column:** A

Sample Name: E276 **Dilution Factor:** 1

Study Name: 00E-0494-11/12 **Multiplier:** 1

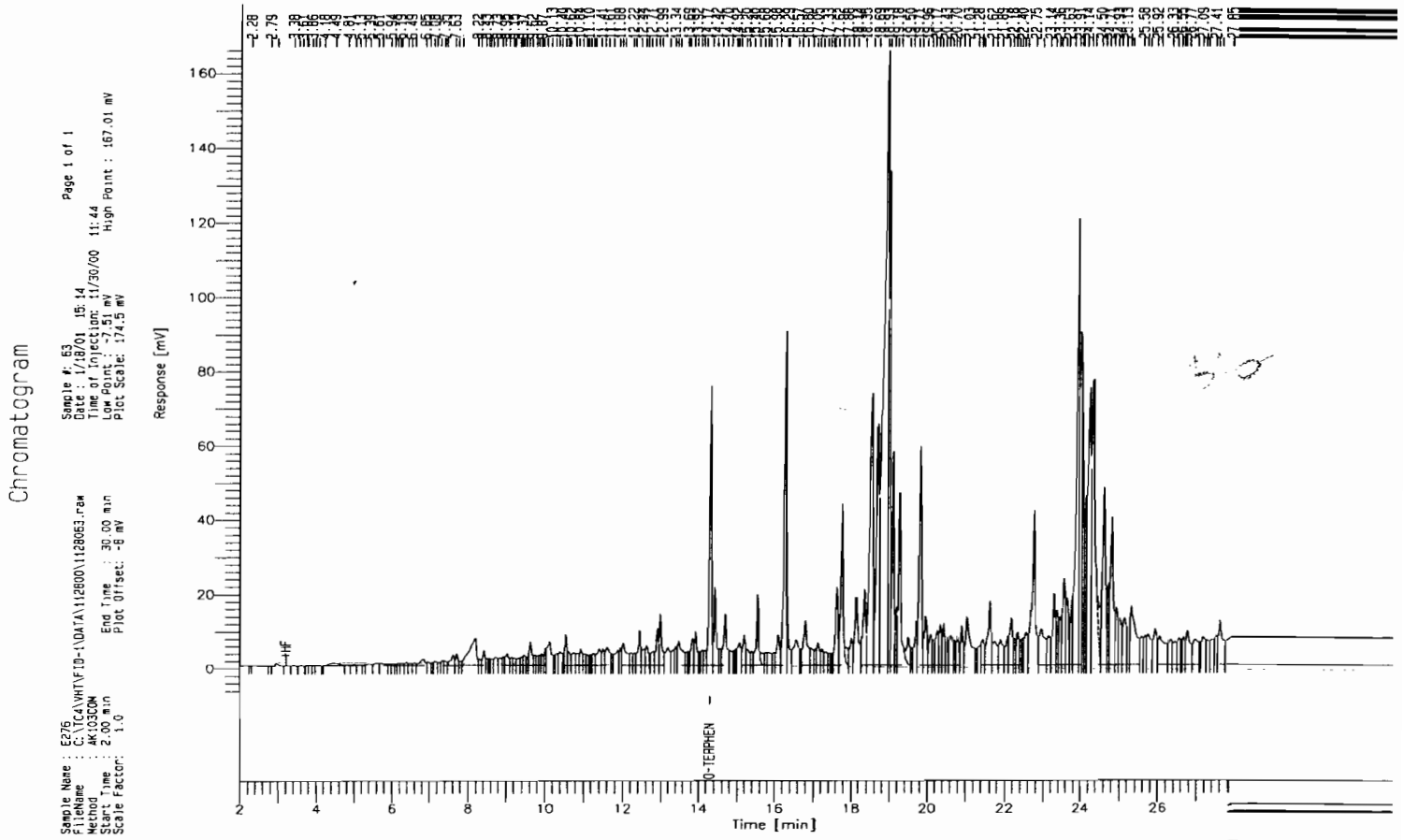
Raw File: c:\tc4\vht\fid-1\data\112800\1128063.raw **Divisor:** 25

Acquisition Start Timestamp: 11/30/00 11:44:27 **Conversion Factor:** 0.04

Operators Initials: VHT

Am-A501604

128%.



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amc
o-Terphenyl	14.315	77744	275044	254.12828	10.1

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	1291321	6501529	8831.509	35
Residual Range Organics	24.167	1418944	7453992	10614.724	42

Sample Number: 64 **Column:** A

Sample Name: E277 Am-A508605 **Dilution Factor:** 1

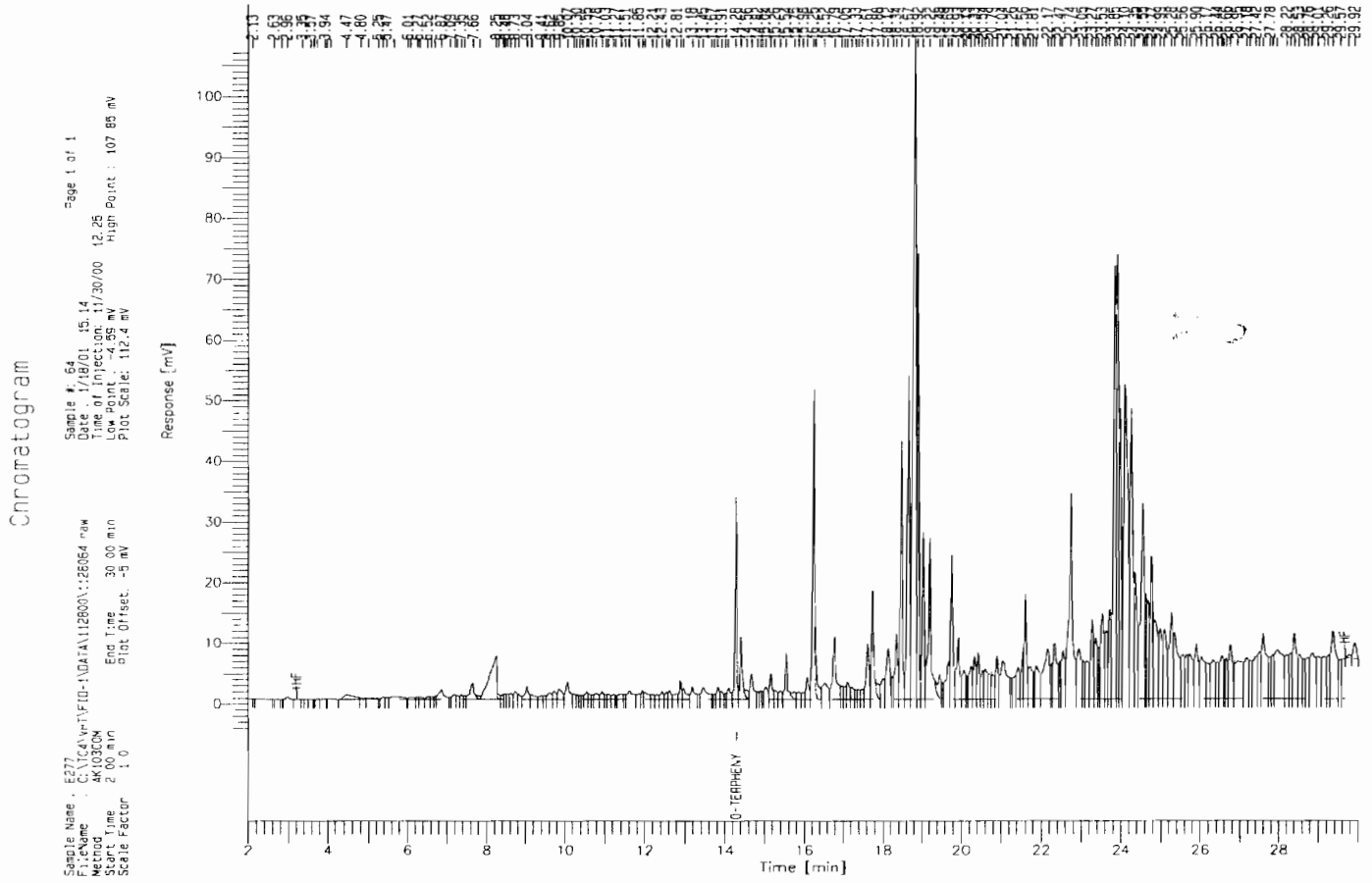
Study Name: 00E-0494-11/12 **Multiplier:** 1

Raw File: c:\tc4\vht\fid-1\data\112800\1128064.raw **Divisor:** 25

Acquisition Start Timestamp: 11/30/00 12:25:15 **Conversion Factor:** 0.04

Operators Initials: VHT

50.5%.



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.279	34952	107644	100.91794	4.03672

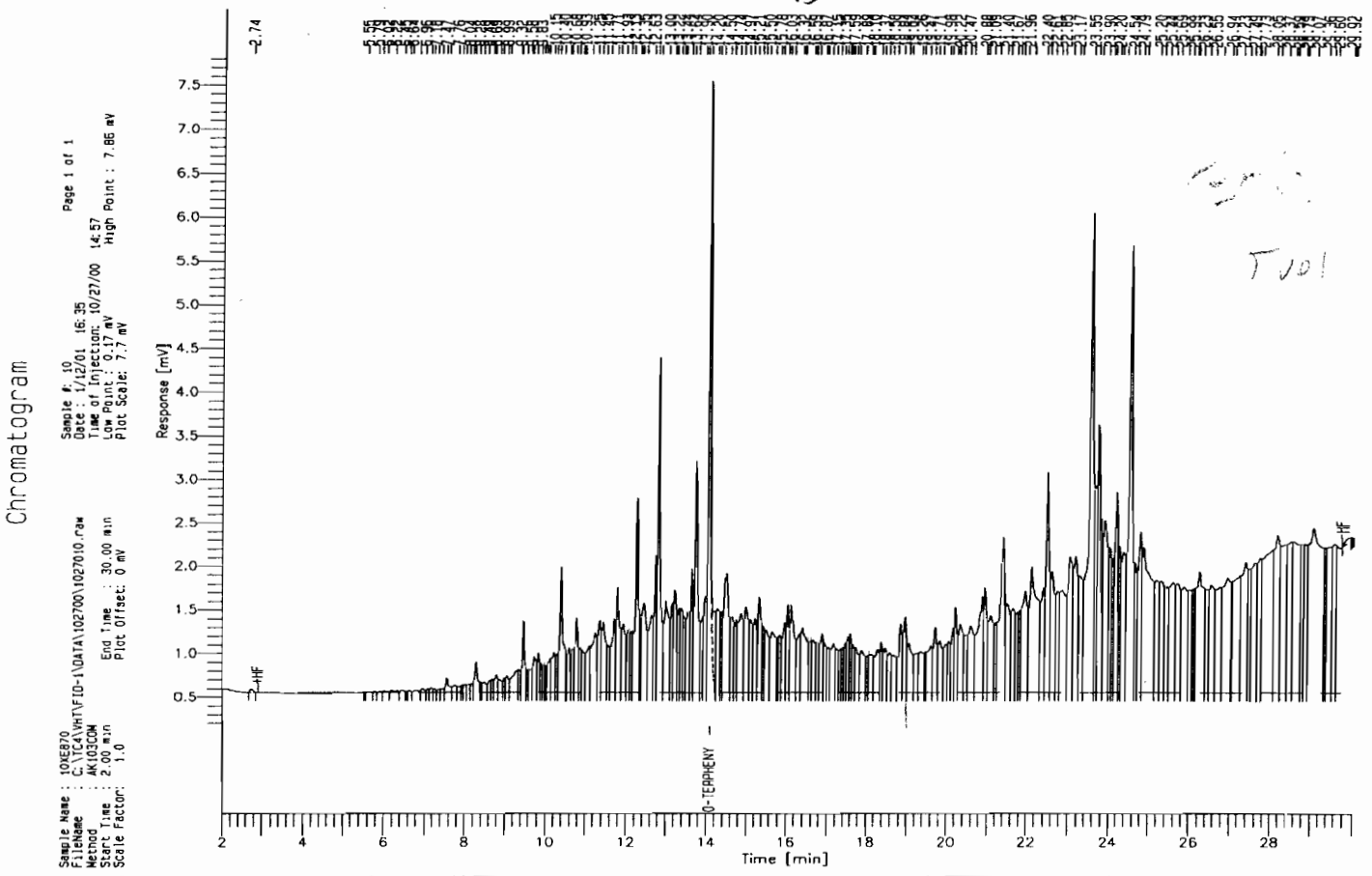
Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	604023	2771335	3792.567	151.703
Residual Range Organics	24.167	1005473	5499594	7768.869	310.755

3065 Site

3065

Sample Number:	10	**Column:**	A
Sample Name:	10XE870 Am-A505801	**Dilution Factor:**	10
Study Name:	00E-0463-11	**Multiplier:**	0.04
Raw File:	c:\tc4\vht\fid-1\data\102700\1027010.raw	**Divisor:**	1
Acquisition Start Timestamp:	10/27/00 14:57:22	**Conversion Factor:**	0.39999999106
Operators Initials:	VHT		

156 %



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.052	7310	27056	31.34991	12.53997

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	81988	432715	673.585	269.434
Residual Range Organics	23.800	102441	749759	1219.558	487.823

Sample Number: 11 **Column:** A

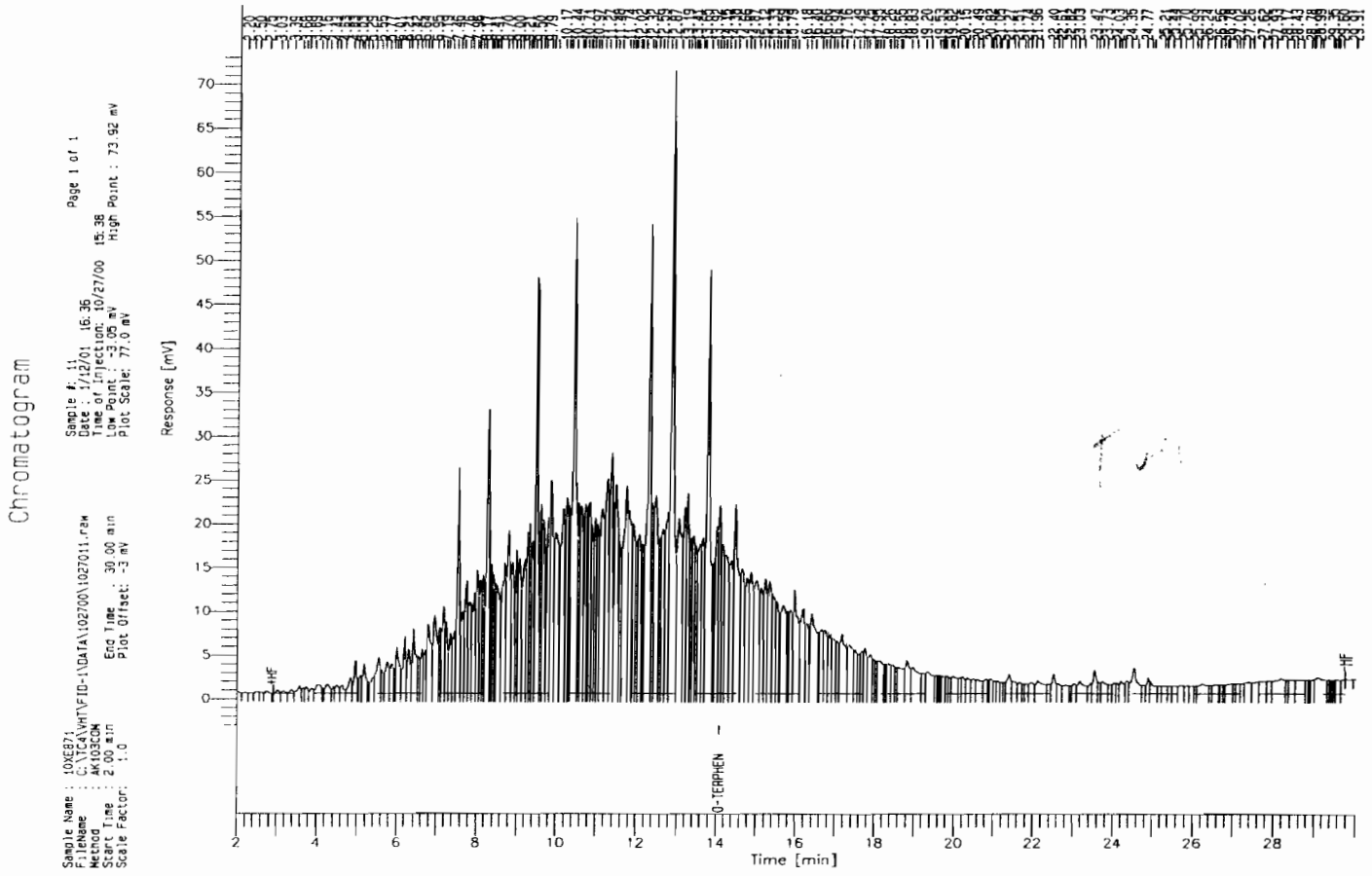
Sample Name: 10XE871 AM-A50580 **Dilution Factor:** 10

Study Name: 00E-0463-11 **Multiplier:** 0.04

Raw File: c:\tc4\vht\fid-1\data\102700\1027011.raw **Divisor:** 1

Acquisition Start Timestamp: 10/27/00 15:38:50 **Conversion Factor:** 0.39999999106

Operators Initials: VHT 63%.



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.075	21974	107784	126.72757	50.69103

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	2026820	10409547	17389.029	6955.611
Residual Range Organics	23.800	111604	792339	1299.728	519.891

Sample Number: 14 AM-A505903 **Column:** A

Sample Name: E872 **Dilution Factor:** 1

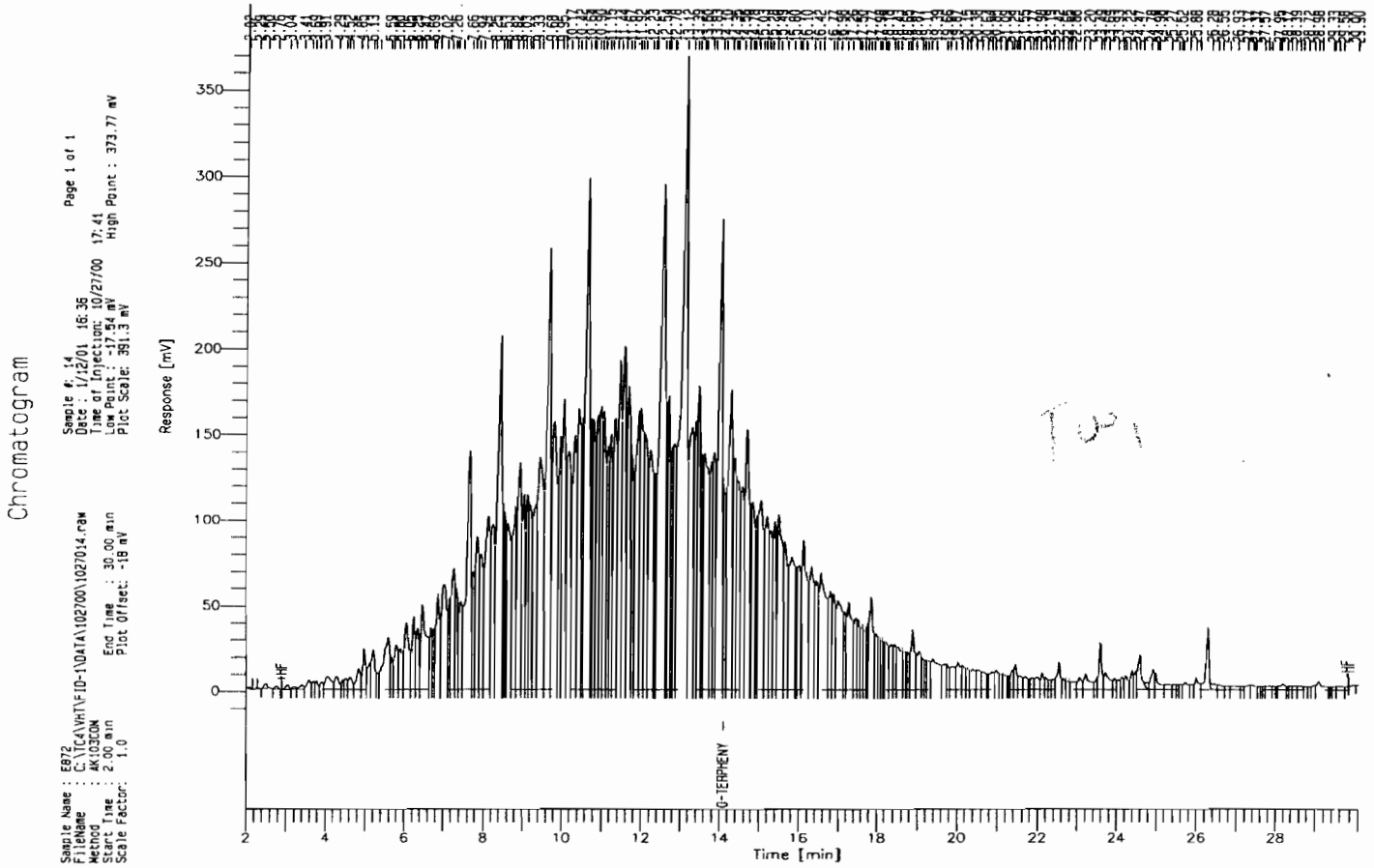
Study Name: 00E-0463-11 **Multiplier:** 0.04

Raw File: c:\tc4\vht\fid-1\data\102700\1027014.raw **Divisor:** 1

Acquisition Start Timestamp: 10/27/00 17:41:50 **Conversion Factor:** 0.03999999911

Operators Initials: VHT

0.26%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.011	275093	2199048	2597.49635	103.89985

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	12933236	79659417	133412.059	5336.482
Residual Range Organics	23.800	666488	4169504	7658.230	306.329

Sample Number: 12

Sample Name: 10XE873 Am - AG058084

Study Name: 00E-0463-11

Raw File: c:\tc4\vht\fid-1\data\102700\1027012.raw

Acquisition Start Timestamp: 10/27/00 16:19:52

Operators Initials: VHT

Column: A

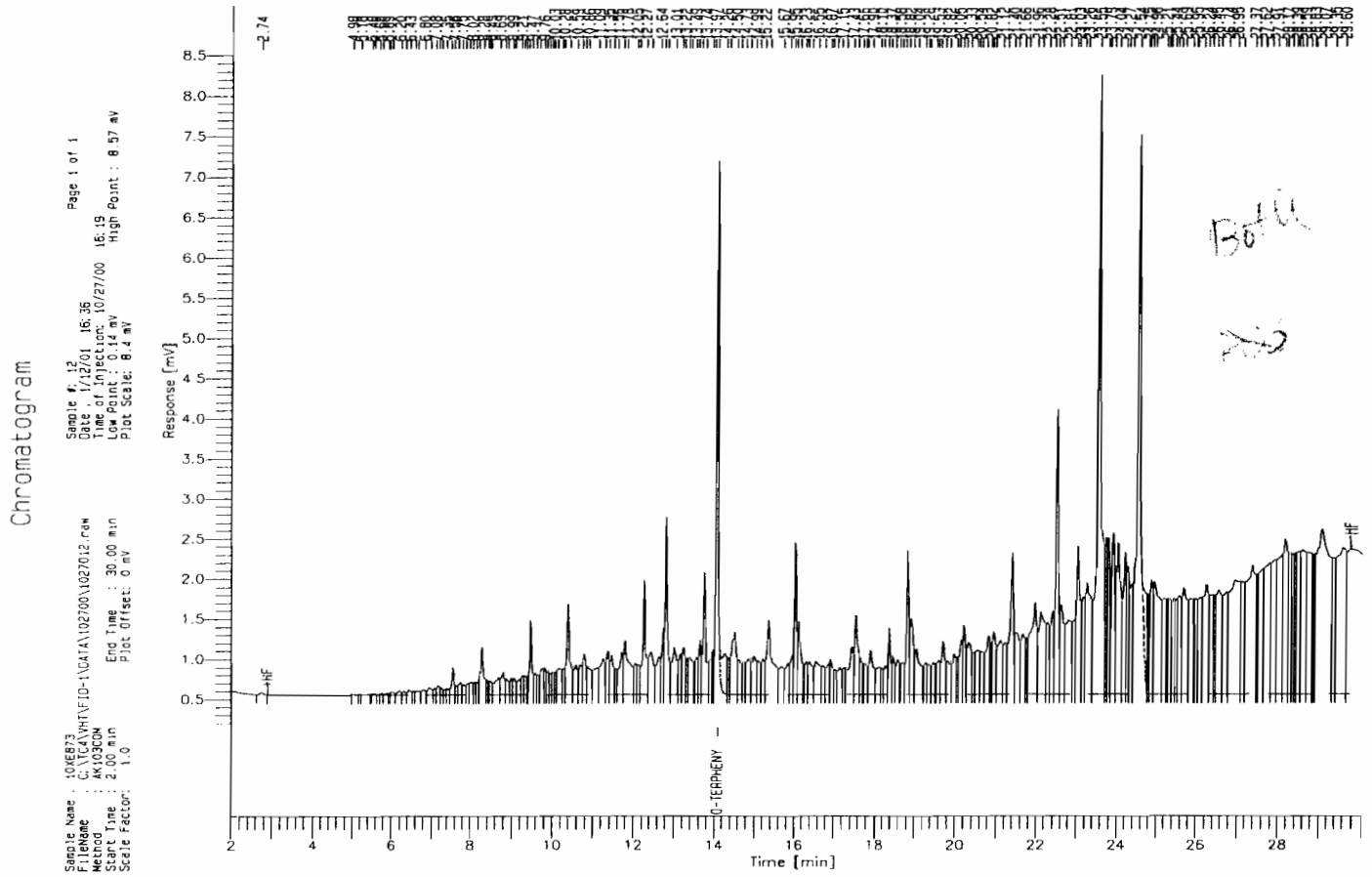
Dilution Factor: 10

Multiplier: 0.04

Divisor: 1

Conversion Factor: 0.39999999106

140%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.052	6856	23203	26.79859	10.71944

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	55184	288572	432.084	172.834
Residual Range Organics	23.800	109813	698227	1122.534	449.014

Sample Number: 16 Am-A505806

Sample Name: E875

Study Name: 00E-0463-11

Raw File: c:\tc4\vht\fid-1\data\102700\1027016.raw

Acquisition Start Timestamp: 10/27/00 19:03:26

Operators Initials: VHT

Column: A

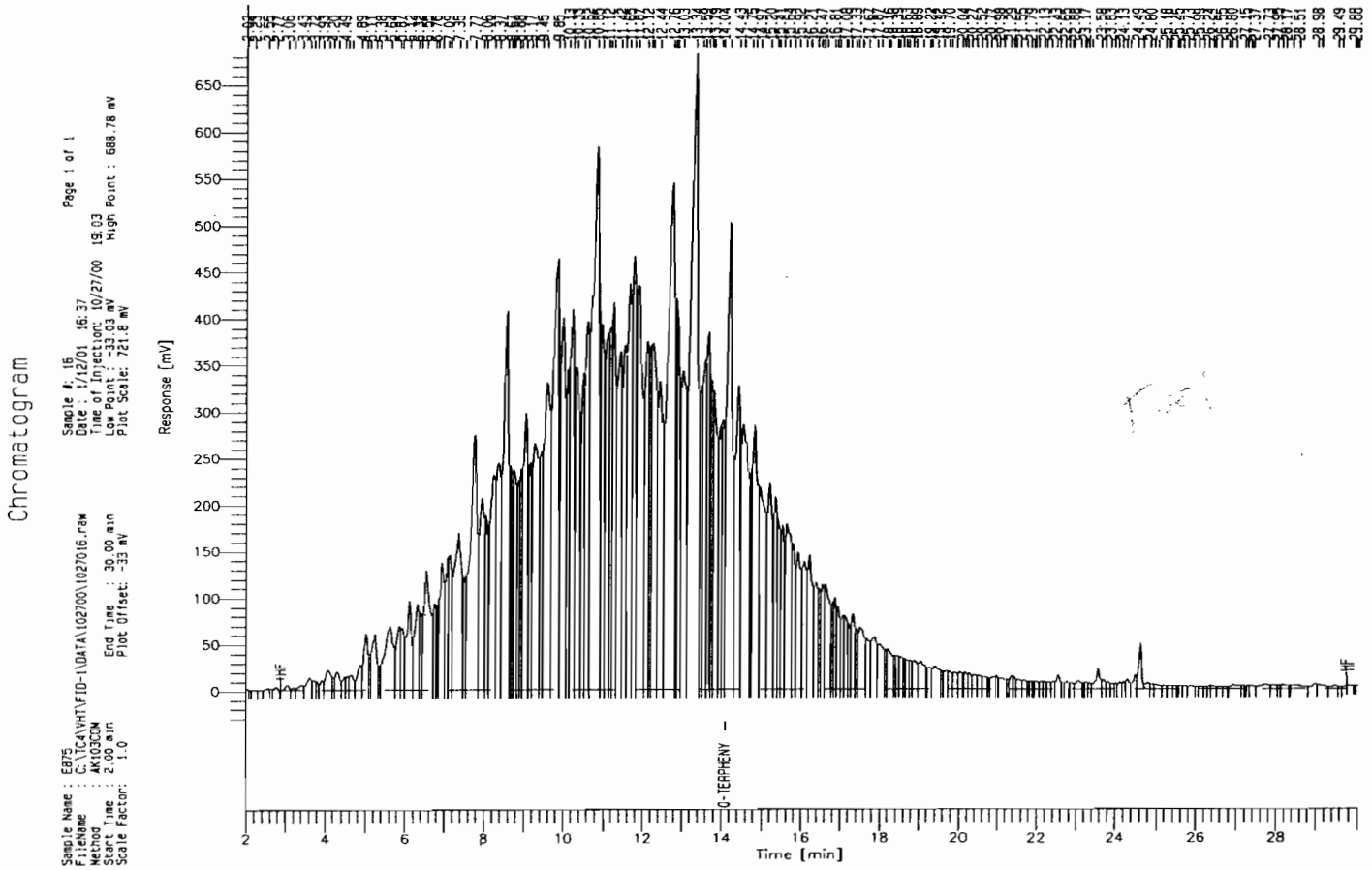
Dilution Factor: 1

Multiplier: 0.04

Divisor: 1

Conversion Factor: 0.03999999911

844'



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.204	503947	4933759	5828.47816	233.13913

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	23962609	179034462	299907.591	11996.304
Residual Range Organics	23.800	788178	4959332	9145.313	365.813

LSA 1154

LSA 1154

Sample Number: 13 **Column:** A

Sample Name: E293 AM-A502502 **Dilution Factor:** 1

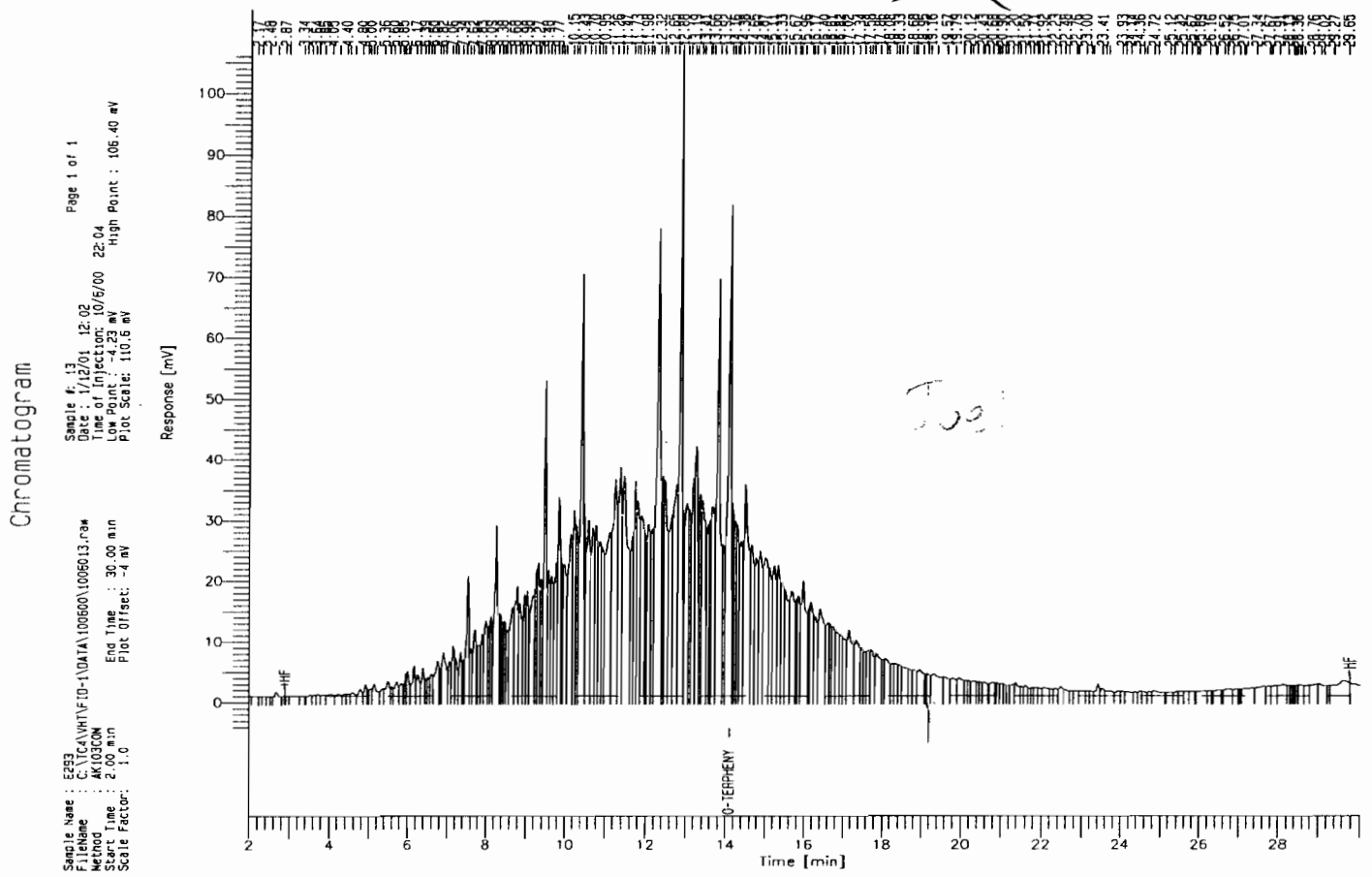
Study Name: 00E-0417-04 **Multiplier:** 0.04

Raw File: c:\tc4\vht\fid-1\data\100600\1006013.raw **Divisor:** 1

Acquisition Start Timestamp: 10/6/00 22:04:15 **Conversion Factor:** 0.03999999911

Operators Initials: VHT

DRY. 89%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.097	82099	490254	578.60498	23.14420

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	2695635	14599074	24408.270	976.331
Residual Range Organics	23.800	119633	840507	1390.418	55.617

LSA Latrine 1

LSA LAT. 1

Sample Number: 19

Sample Name: 100XE374 4M-A502705

Study Name: 00E-0421-16

Raw File: c:\tc4\vht\fid-1\data\112300\1123019.raw

Acquisition Start Timestamp: 11/23/00 14:08:37

Operators Initials: VHT

Column: A

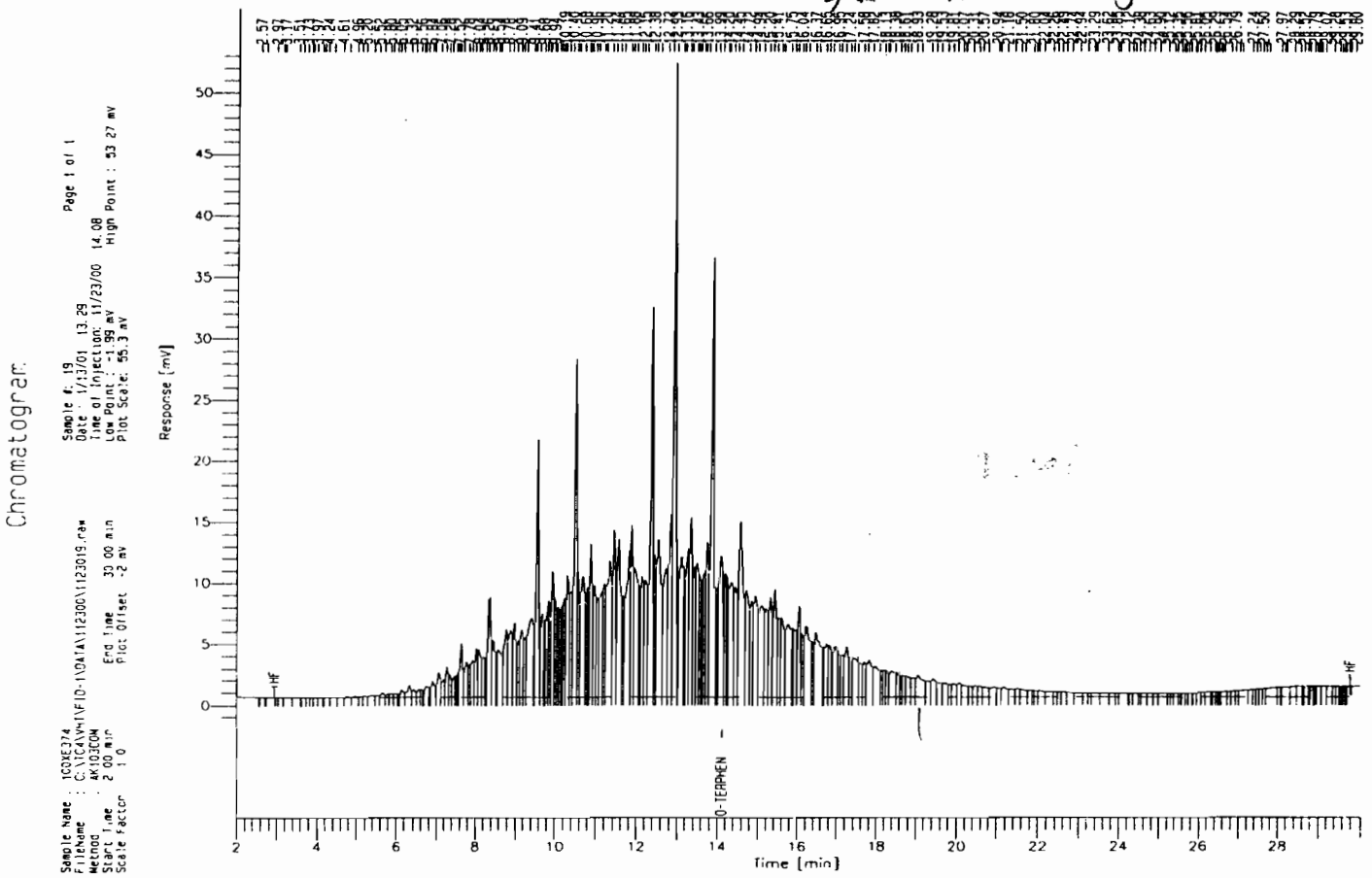
Dilution Factor: 100

Multiplier: 1

Divisor: 25

Conversion Factor: 4

~~220~~ 5410% surrogate?



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.076	11778	85750	108.15663	432.62654

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	998659	4996591	8688.216	34752.865
Residual Range Organics	23.800	48540	351056	1289.532	5158.128

Ballyhoo Transformer Vaults

Sample Number: 12 A503001

Sample Name: 10X649 Ann - A50300 (CAPS)

Study Name: 00E-0448

Raw File: c:\tc4\vht\fid-1\data\111000\1110012.raw

Acquisition Start Timestamp: 11/11/00 5:11:56

Operators Initials: VHT

Column: A

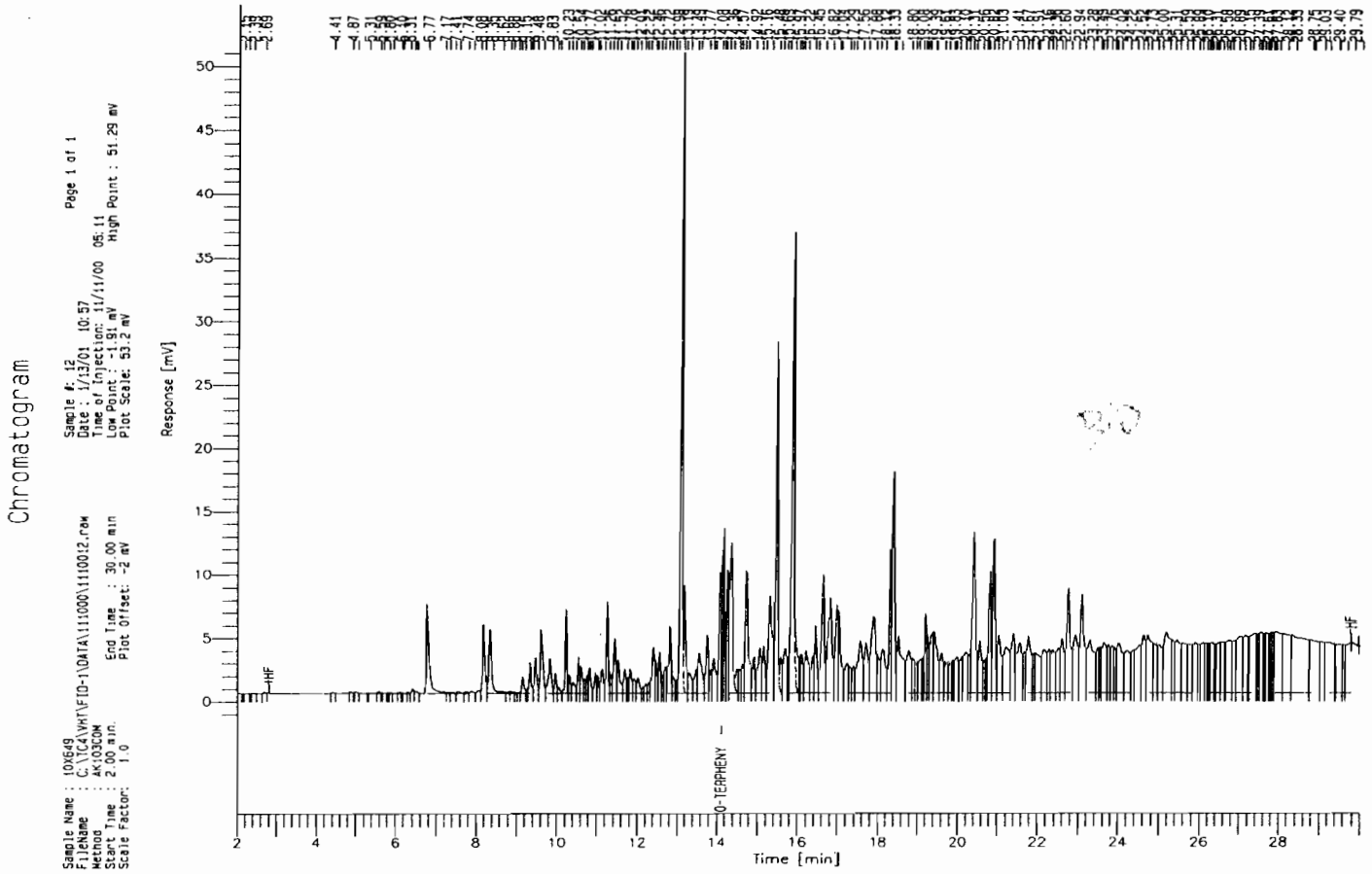
Dilution Factor: 10

Multiplier: 0.04

Divisor: 1

Conversion Factor: 0.39999999106

271.



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.177	13120	33499	44.26989	17.70796

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	463837	1975948	3463.323	1385.329
Residual Range Organics	23.800	371450	2271809	9241.961	3696.784

Sample Number: 13

Sample Name: 10X650

Study Name: 00E-0448

Raw File: c:\tc4\vht\fid-1\data\111000\1110013.raw

Acquisition Start Timestamp: 11/11/00 5:52:01

Operators Initials: VHT

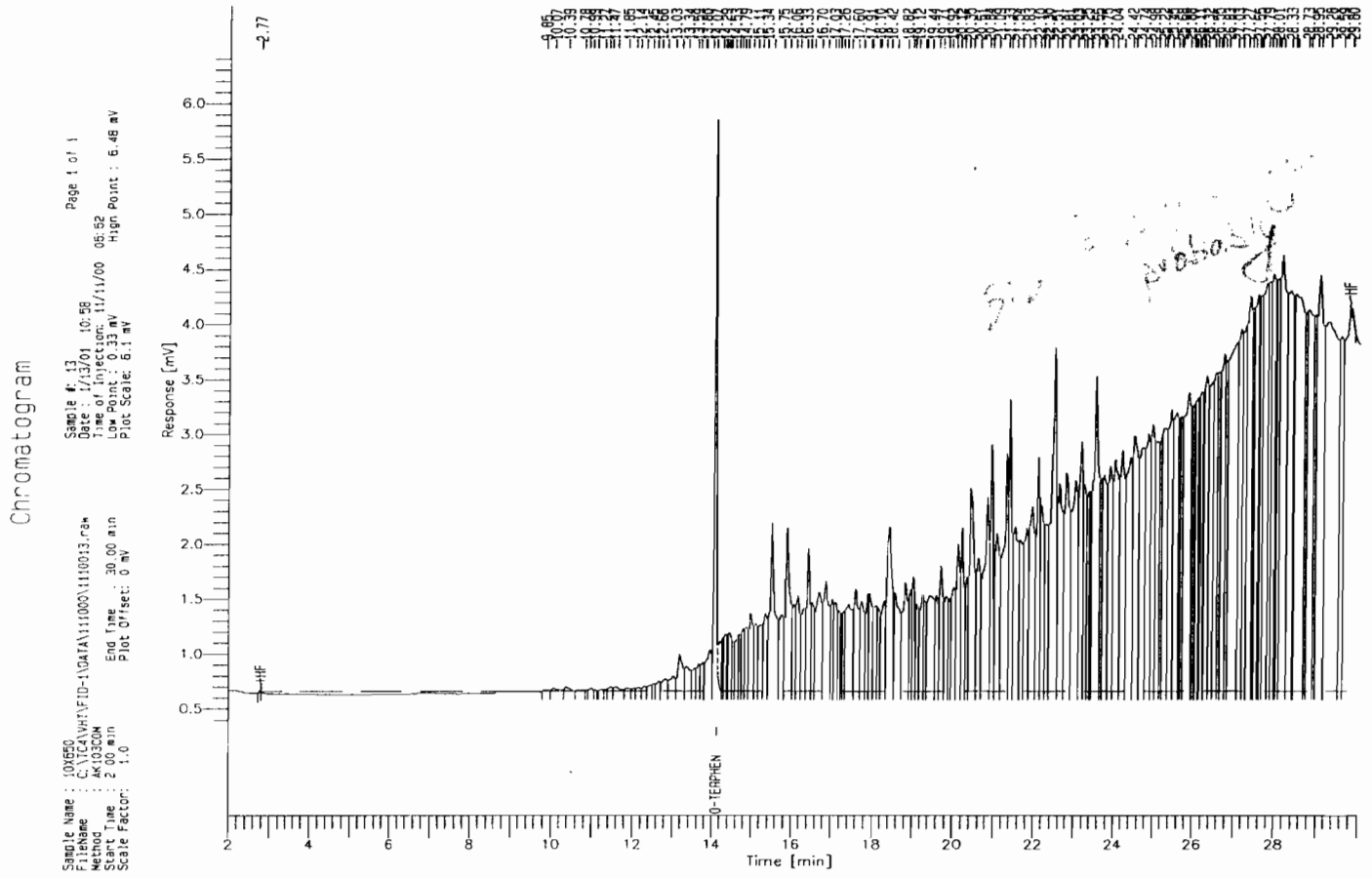
Column: A

Dilution Factor: 10

Multiplier: 0.04

Divisor: 1

Conversion Factor: 0.39999999106



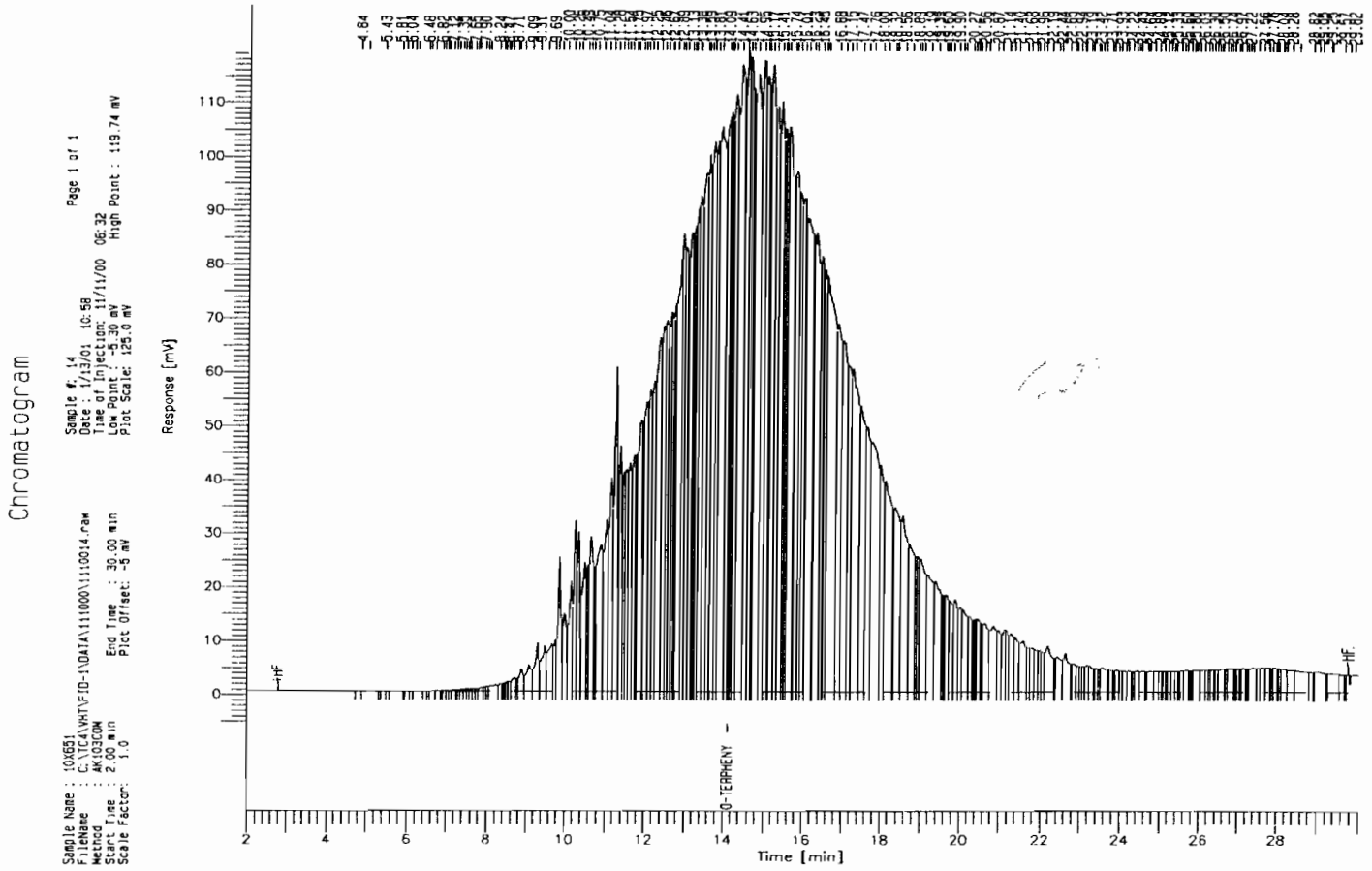
Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.070	5907	19405	27.03585	10.81434

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	39335	242074	464.193	185.677
Residual Range Organics	23.800	199919	1249669	5010.029	2004.012

Sample Number:	14	**Column:**	A
Sample Name:	10X651	**Dilution Factor:**	10
Study Name:	00E-0448	**Multiplier:**	0.2
Raw File:	c:\tc4\vht\fid-1\data\111000\1110014.raw	**Divisor:**	1
Acquisition Start Timestamp:	11/11/00 6:32:17	**Conversion Factor:**	2.00000002980
Operators Initials:	VHT		

dm-A50309

22800'.



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.261	110940	741934	910.47910	1820.95821

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	6179389	36426652	63053.697	126107.395
Residual Range Organics	23.800	771531	4403301	18066.908	36133.817

is this one out of cal range?

Ballyhoo Building C

Ballyhoo Bldg. C.

Sample Number: 22 — Am-A50801

Sample Name: 10X656 — **Column:** A

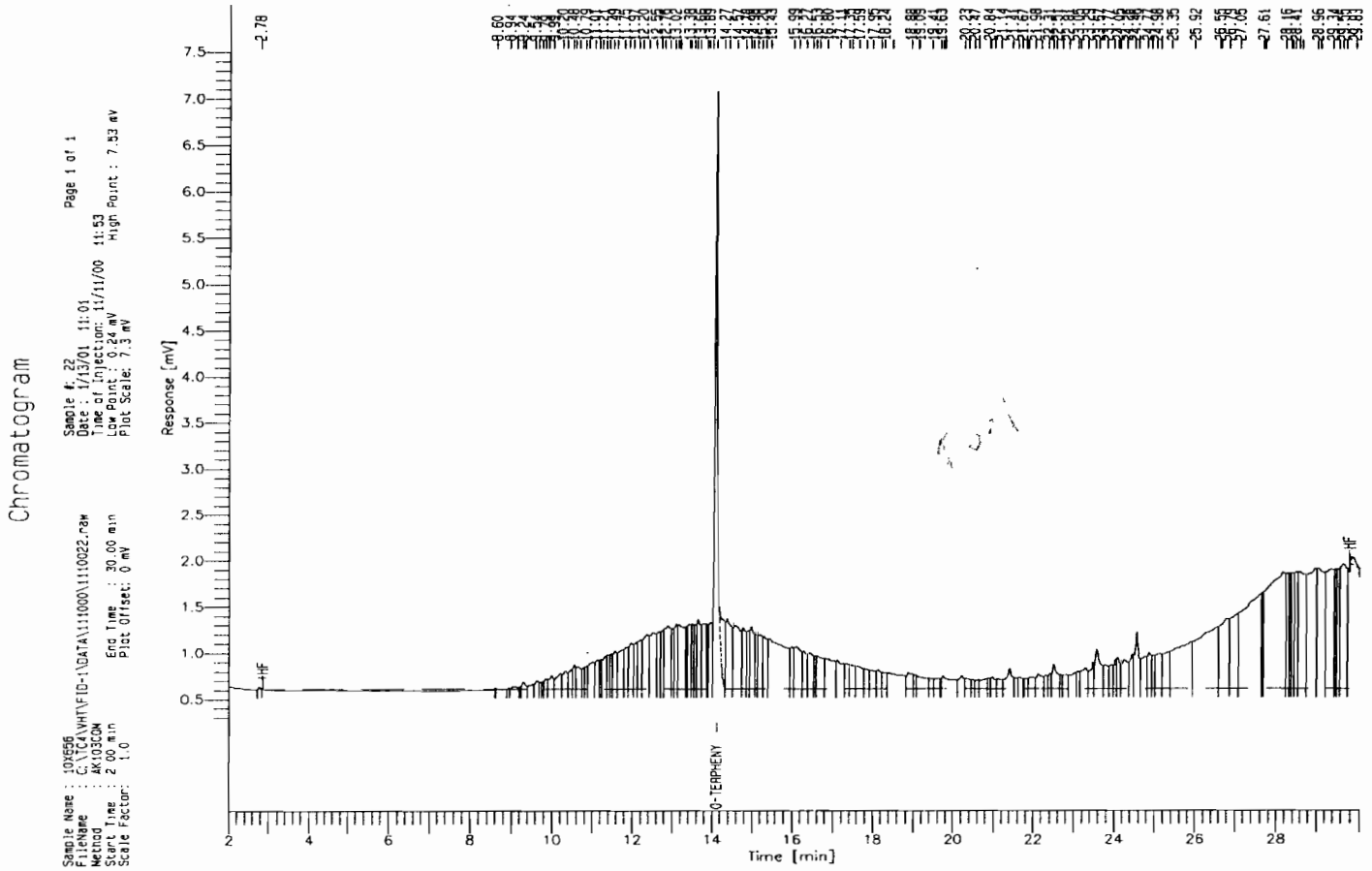
Study Name: 00E-0448 — **Dilution Factor:** 10

Raw File: c:\tc4\vht\fid-1\data\111000\1110022.raw — **Multiplier:** 0.04

Acquisition Start Timestamp: 11/11/00 11:53:49 — **Divisor:** 1

Operators Initials: VHT — **Conversion Factor:** 0.39999999106

181%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.072	6940	29753	39.68875	15.87550

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	36009	250755	479.208	191.683
Residual Range Organics	23.800	22012	241503	835.956	334.382

Ballyhoo Drums

Ballyhoo Drums

Sample Number: 50 — AM-A50703 — **Column:** A

Sample Name: E259 — **Dilution Factor:** 1

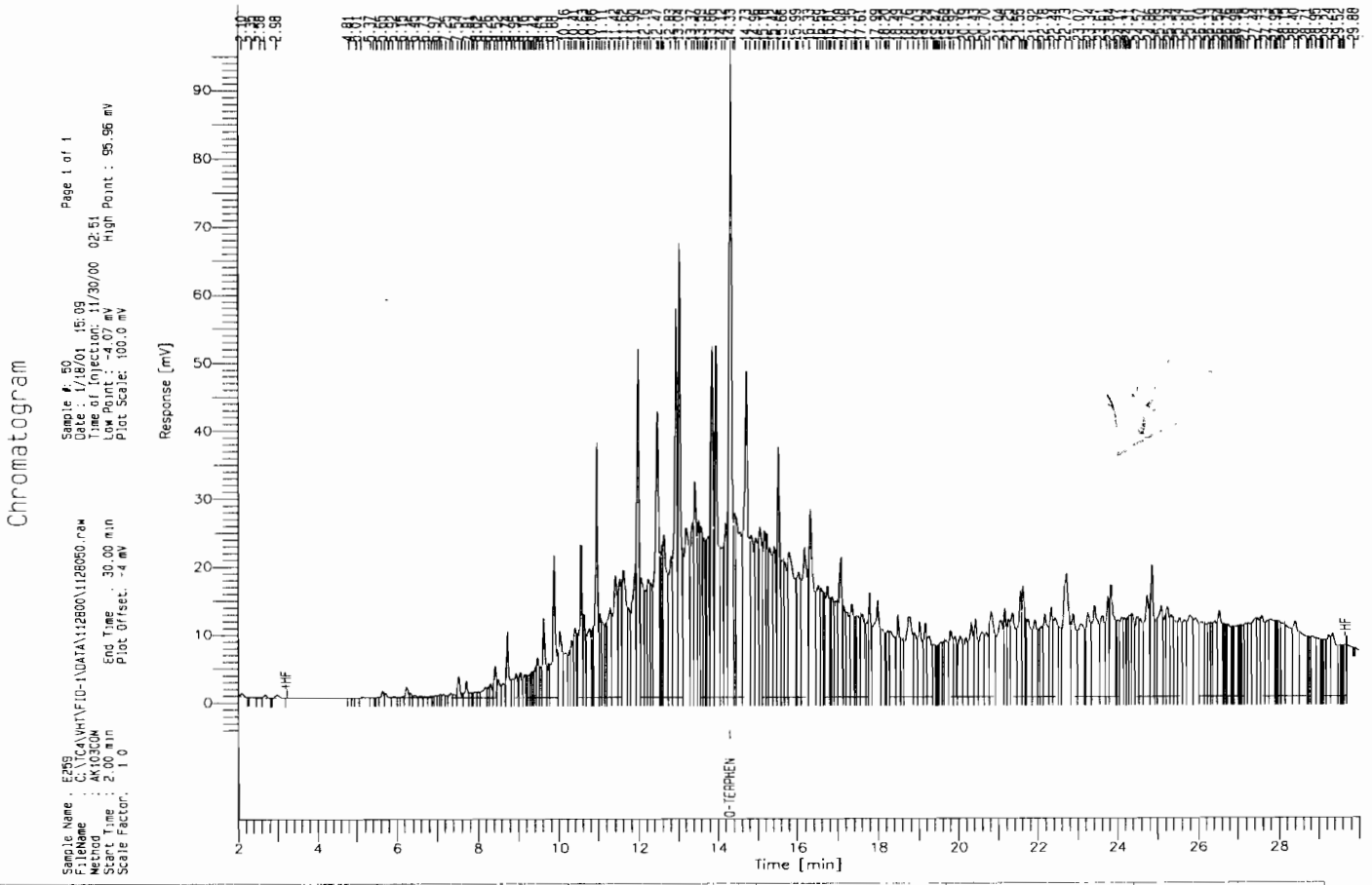
Study Name: 00E-0494-11/12 — **Multiplier:** 1

Raw File: c:\tc4\vht\fid-1\data\112800\1128050.raw — **Divisor:** 25

Acquisition Start Timestamp: 11/30/00 2:51:50 — **Conversion Factor:** 0.04

Operators Initials: VHT

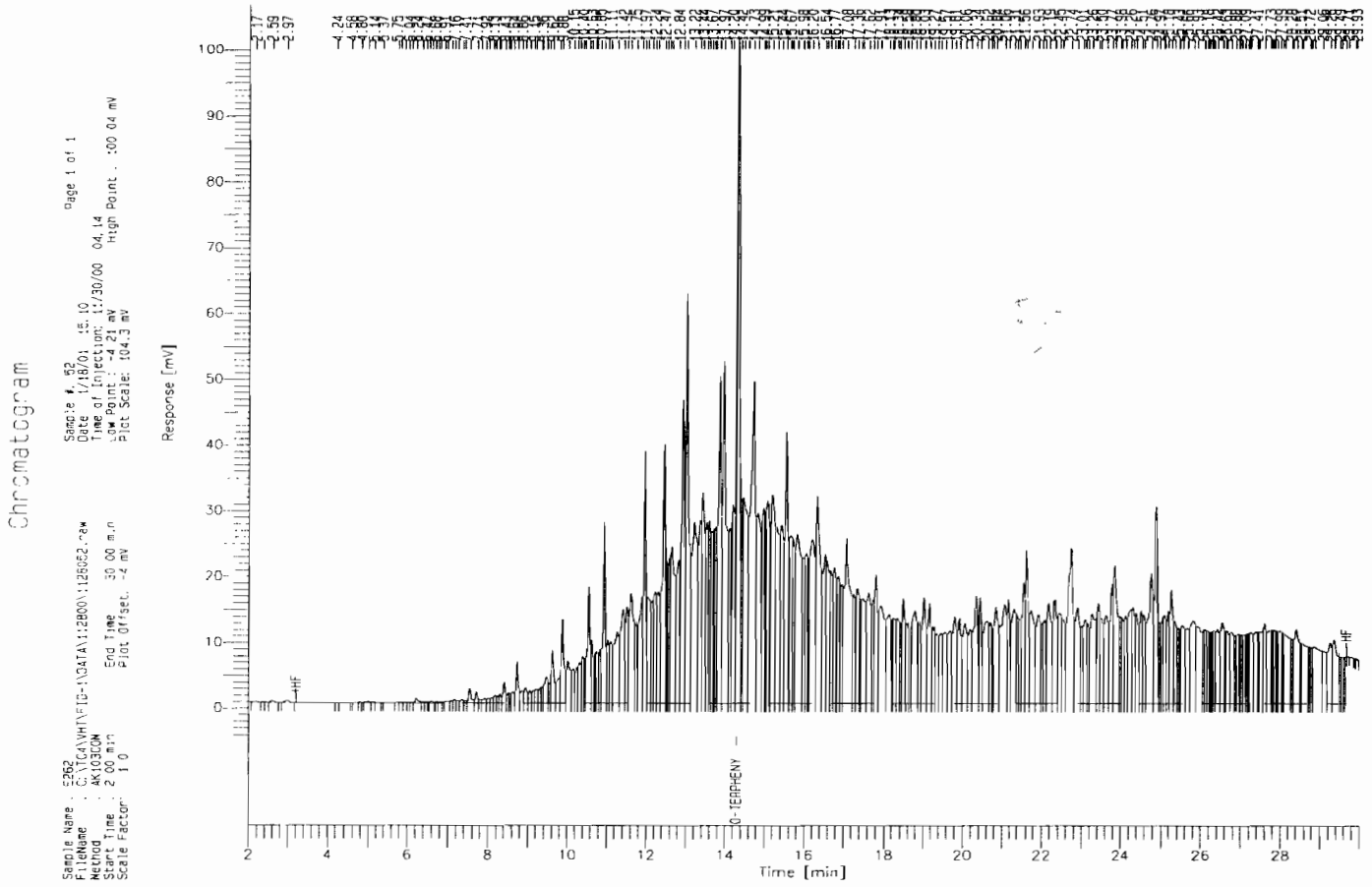
24%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.331	95801	460507	423.86996	16.95480

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	2045158	10641026	14423.358	576.934
Residual Range Organics	24.167	1119811	6347370	9003.339	360.134

Sample Number:	52	**Column:**	A
Sample Name:	E262 Am-A507406	**Dilution Factor:**	1
Study Name:	00E-0494-11/12	**Multiplier:**	1
Raw File:	c:\tc4\vht\fid-1\data\112800\1128052.raw	**Divisor:**	25
Acquisition Start Timestamp:	11/30/00 4:14:34	**Conversion Factor:**	0.04
Operators Initials:	VHT 236 1.		



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.337	100568	512431	471.39233	18.85569

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	2169371	11503909	15588.986	623.559
Residual Range Organics	24.167	1324636	7218079	10271.205	410.848

Ballyhoo Building B

Bailyhoo Bldg. B

Sample Number: 61 — **Column:** A

Sample Name: E275 — AVG-A507603 — **Dilution Factor:** 1

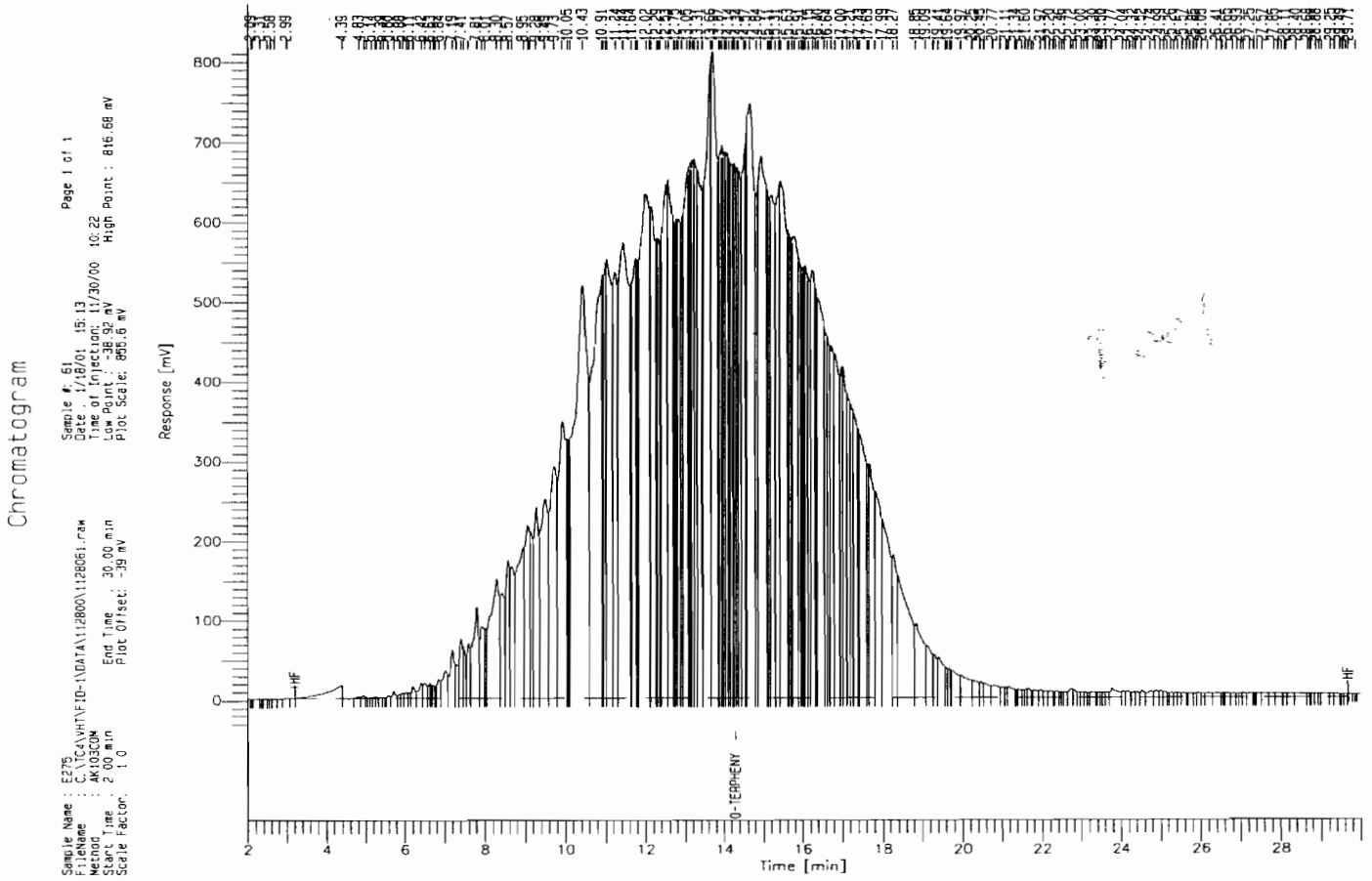
Study Name: 00E-0494-11/12 — **Multiplier:** 1

Raw File: c:\tc4\vht\fid-1\data\112800\1128061.raw — **Divisor:** 25

Acquisition Start Timestamp: 11/30/00 10:22:26 — **Conversion Factor:** 0.04

Operators Initials: VHT

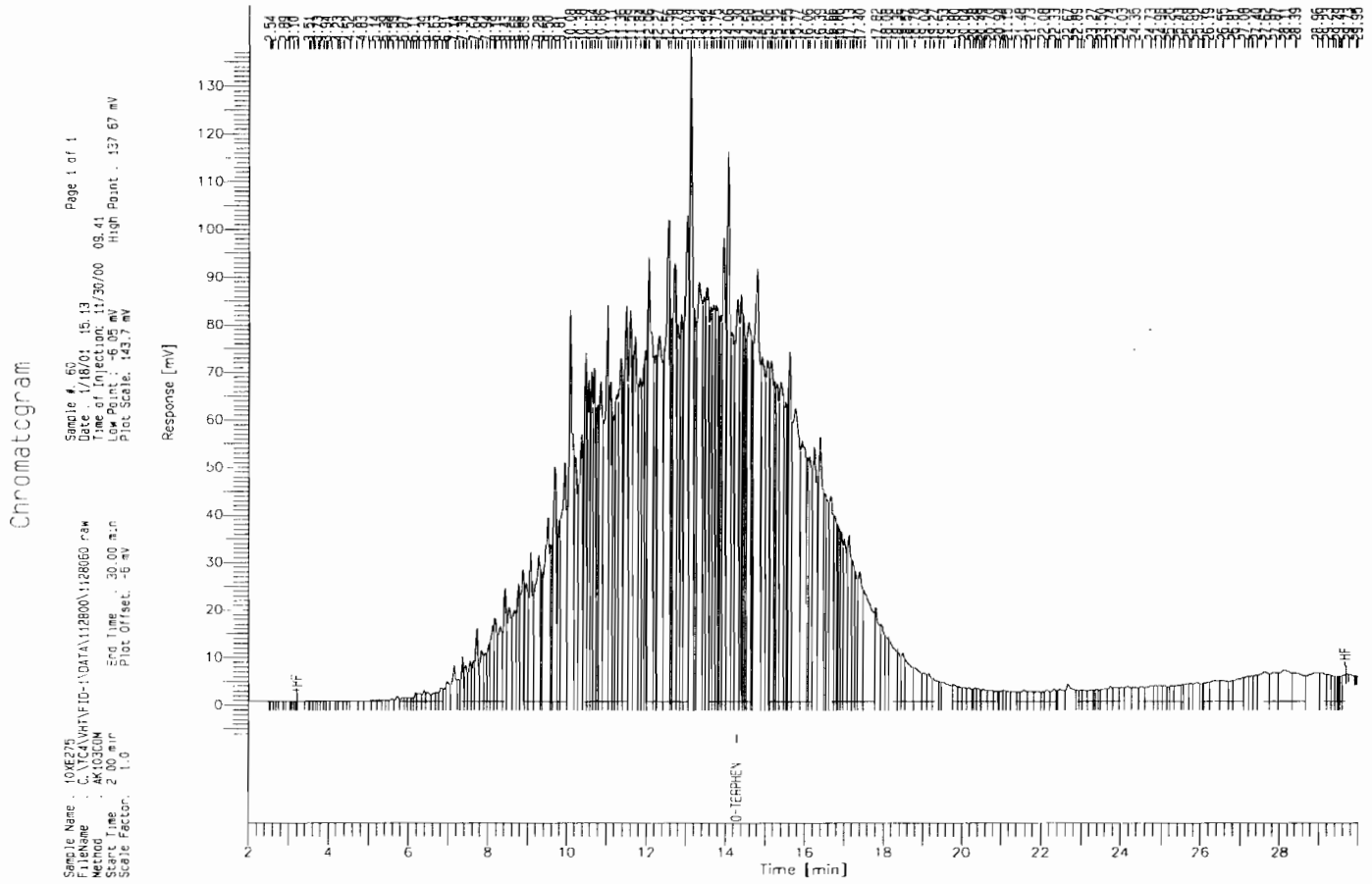
1690 ppm



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.137	678493	2423481	2220.44772	88.81791

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.981	51824607	297557854	402005.619	16080.225
Residual Range Organics	24.167	916135	5727498	8100.727	324.029

Sample Number:	60	**Column:**	A
Sample Name:	**10XE275** Am-A509603	**Dilution Factor:**	10
Study Name:	00E-0494-11/12	**Multiplier:**	1
Raw File:	c:\tc4\vht\fid-1\data\112800\1128060.raw	**Divisor:**	25
Acquisition Start Timestamp:	11/30/00 9:41:42	**Conversion Factor:**	0.4
Operators Initials:	VHT 1690 ppm		



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.386	85545	365001	336.46019	134.58407

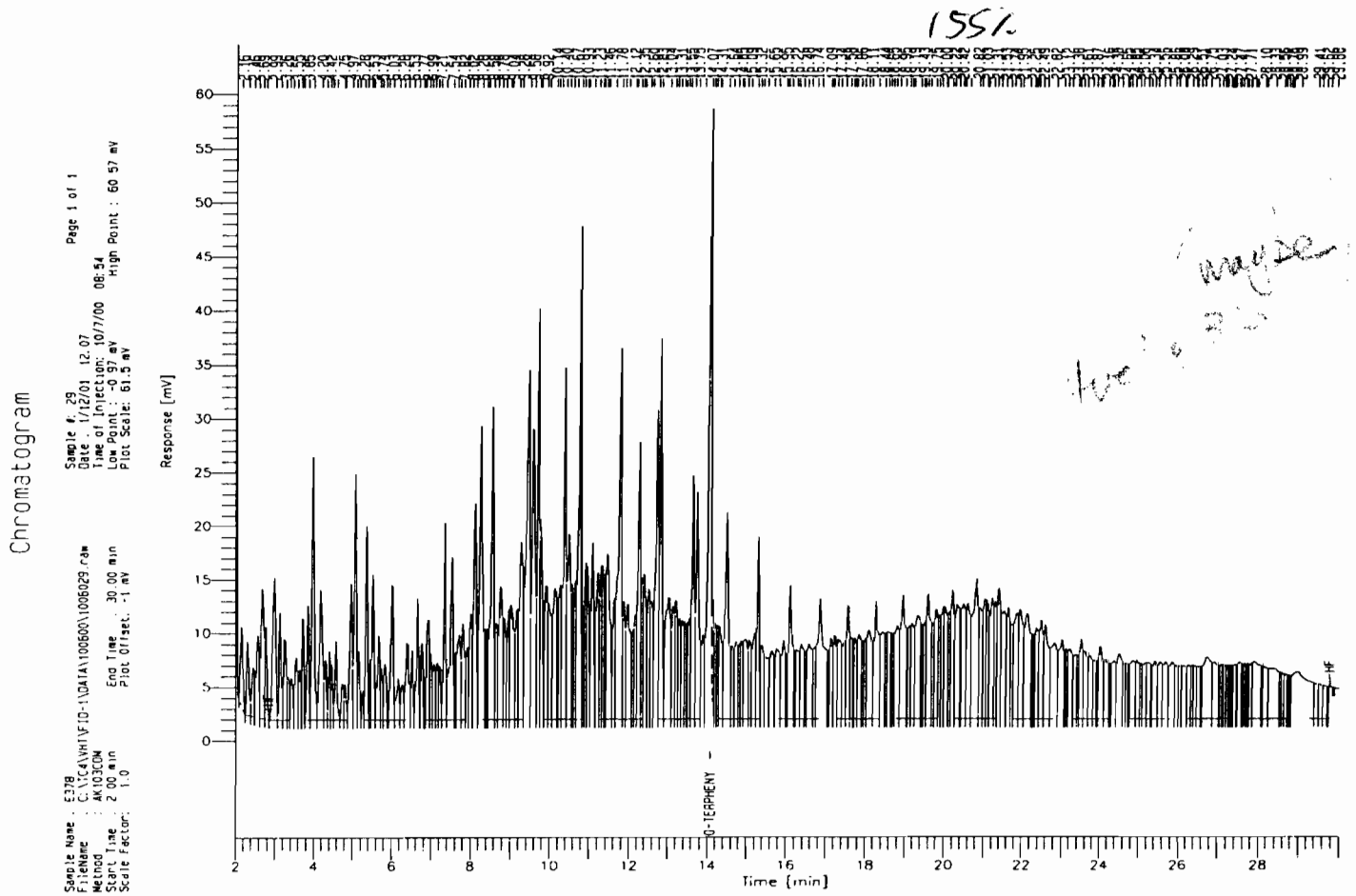
Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Residual Range Organics	24.167	236583	2132712	2866.252	1146.501
Diesel Range Organics	11.981	6242580	34534071	46699.333	18679.733

Ballyhoo Spit Tank Farm

Ballyhoo Spit Tank Farm

Sample Number:	29	**Column:**	A
Sample Name:	E378 Am-A 503803	**Dilution Factor:**	1
Study Name:	00E-0421-16	**Multiplier:**	0.04
Raw File:	c:\tc4\vht\fid-1\data\100600\1006029.raw	**Divisor:**	1
Acquisition Start Timestamp:	10/7/00 8:54:10	**Conversion Factor:**	0.03999999911
Operators Initials:	VHT		

155%



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.072	58764	262400	309.40258	12.37610

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	1680170	8048214	13432.789	537.312
Residual Range Organics	23.800	736832	4095847	7519.549	300.782

Fort Mears Landfill South

FM Landfill South

Sample Number: 44

Sample Name: 10X787 AM 505303

Study Name: 00E-0453/458

Raw File: c:\tc4\vht\fid-1\data\111800\1118044.raw

Acquisition Start Timestamp: 11/22/00 0:29:42

Operators Initials: VHT

Column: A

Dilution Factor: 10

Multiplier: 0.04

Divisor: 1

Conversion Factor: 0.39999999106

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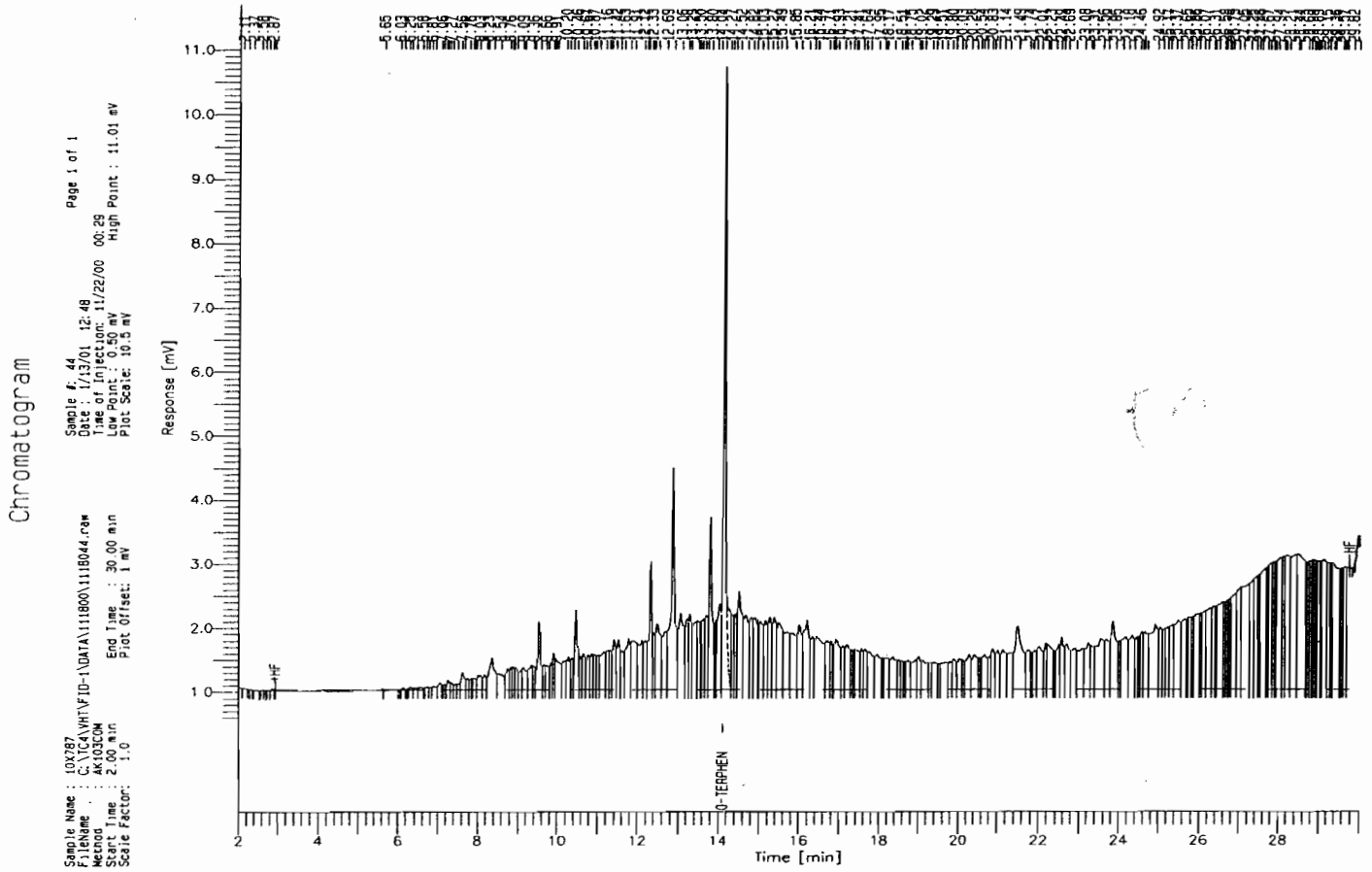
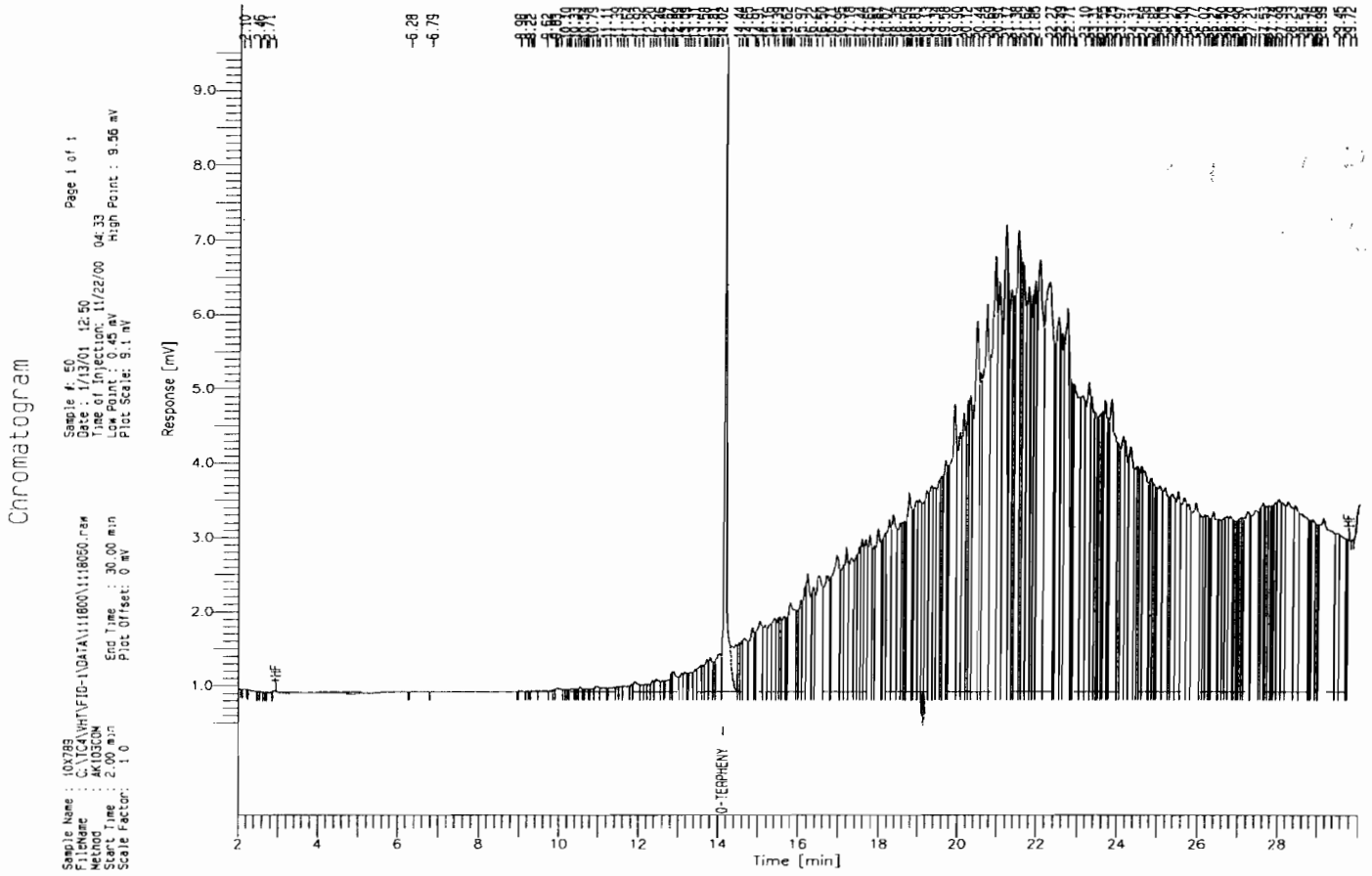


Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.138	10004	39142	51.16940	20.46776

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	87607	512180	931.402	372.561
Residual Range Organics	23.800	86704	567405	2185.276	874.110

Sample Number:	50	**Column:**	A
Sample Name:	**10X789**	**Dilution Factor:**	10
Study Name:	00E-0453/458	**Multiplier:**	0.04
Raw File:	c:\tc4\vht\fid-1\data\111800\1118050.raw	**Divisor:**	1
Acquisition Start Timestamp:	11/22/00 4:33:43	**Conversion Factor:**	0.39999999106
Operators Initials:	VHT		



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.145	8685	35685	46.94270	18.77708

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	85385	470077	858.575	343.430
Residual Range Organics	23.800	361256	2019989	8199.360	3279.744

Unalaska and Iliuliuk Lakes

Unalaska + Iliuliuk Lakes

Sample Number: 14 | **Column:** A

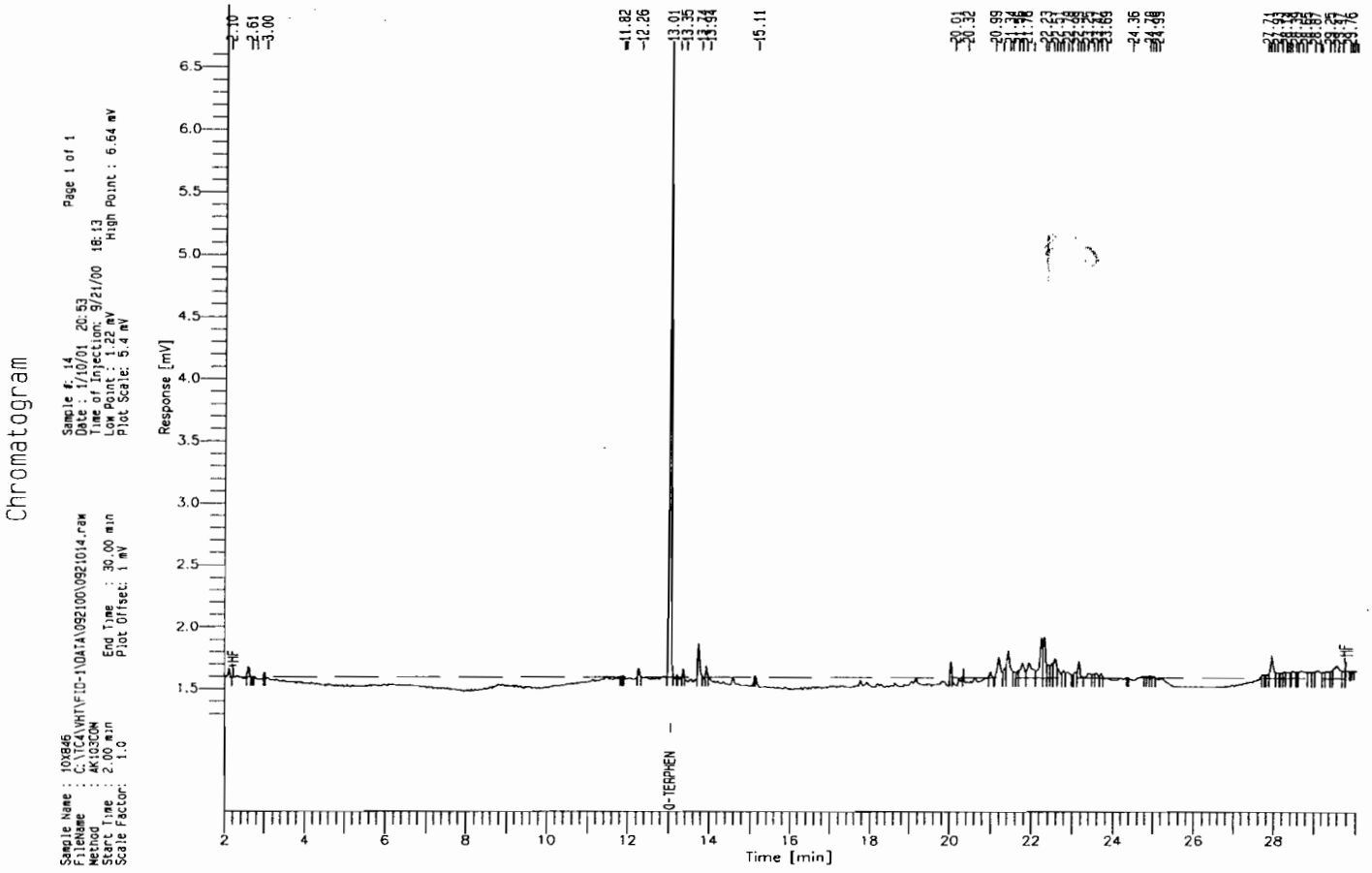
Sample Name: 10X846 Am-AS0060 | **Dilution Factor:** 10

Study Name: 00E-0388 | **Multiplier:** 0.04

Raw File: c:\tc4\vht\fid-1\data\092100\0921014.raw | **Divisor:** 1

Acquisition Start Timestamp: 9/21/00 18:13:54 | **Conversion Factor:** 0.39999999106

Operators Initials: VHT 130



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	13.011	5095	14363	26.01221	10.40489

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	10.700	5660	15856	51.234	20.494
Residual Range Organics	22.550	2723	12341	-112.836	-45.134

Sample Number: 10

AM-#500202

Sample Name: 10XE838

Study Name: 00E-0388

Raw File: c:\tc4\vht\fid-1\data\092100\0921010.raw

Acquisition Start Timestamp: 9/21/00 15:30:24

Operators Initials: VHT

Column: A

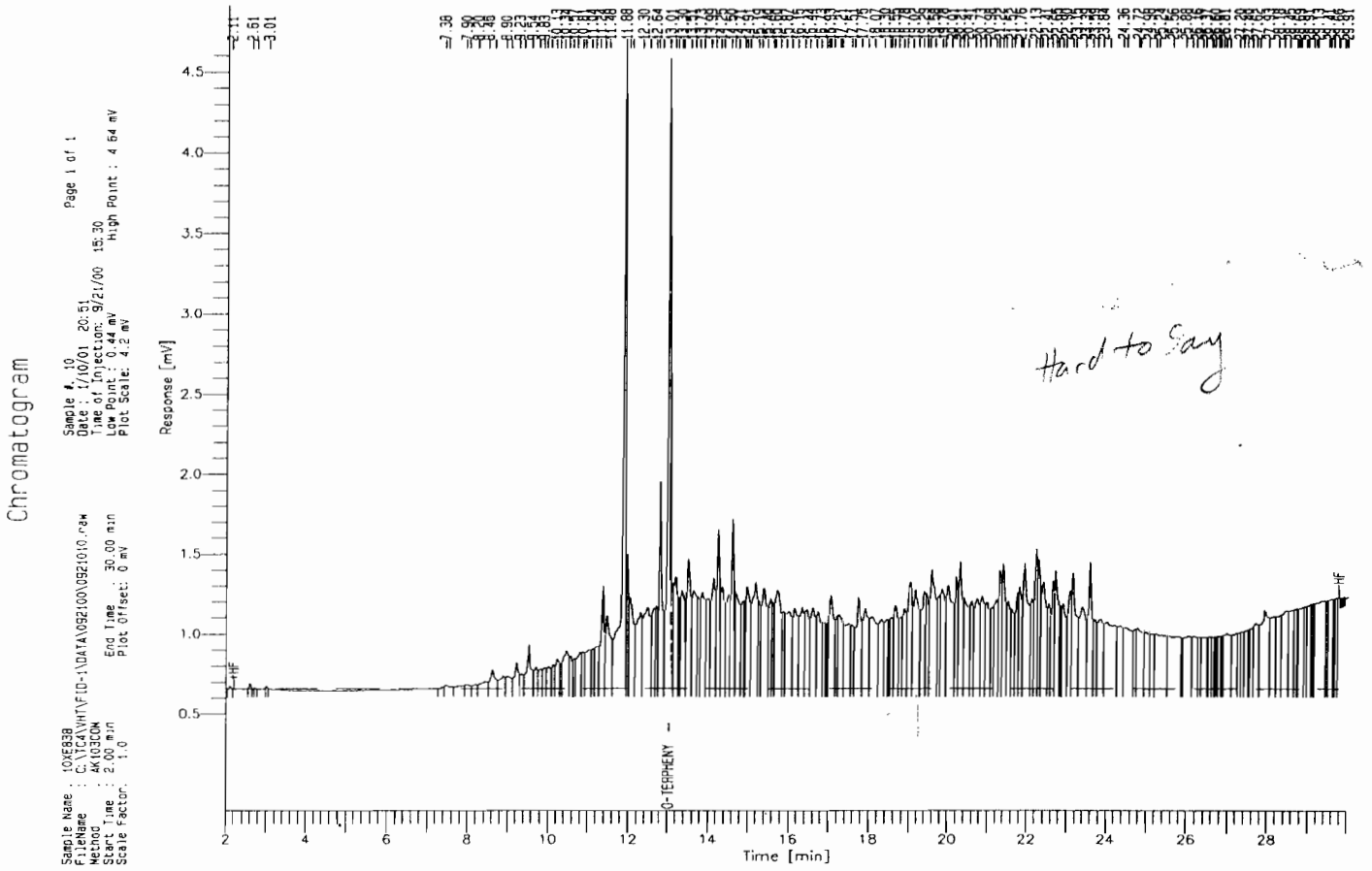
Dilution Factor: 10

Multiplier: 0.04

Divisor: 1

Conversion Factor: 0.39999999106

140%.



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	13.013	3917	15524	28.10664	11.24266

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	10.700	40020	243704	601.897	240.759
Residual Range Organics	22.550	37186	264176	929.825	371.930

Ski Bowl Generator Building

Ski Bowl Generator Bldg.

Sample Number: 5 | **Column:** A

Sample Name: 10XE689 | **Dilution Factor:** 10

Study Name: 00E-0448-14/15 | **Multiplier:** 0.04

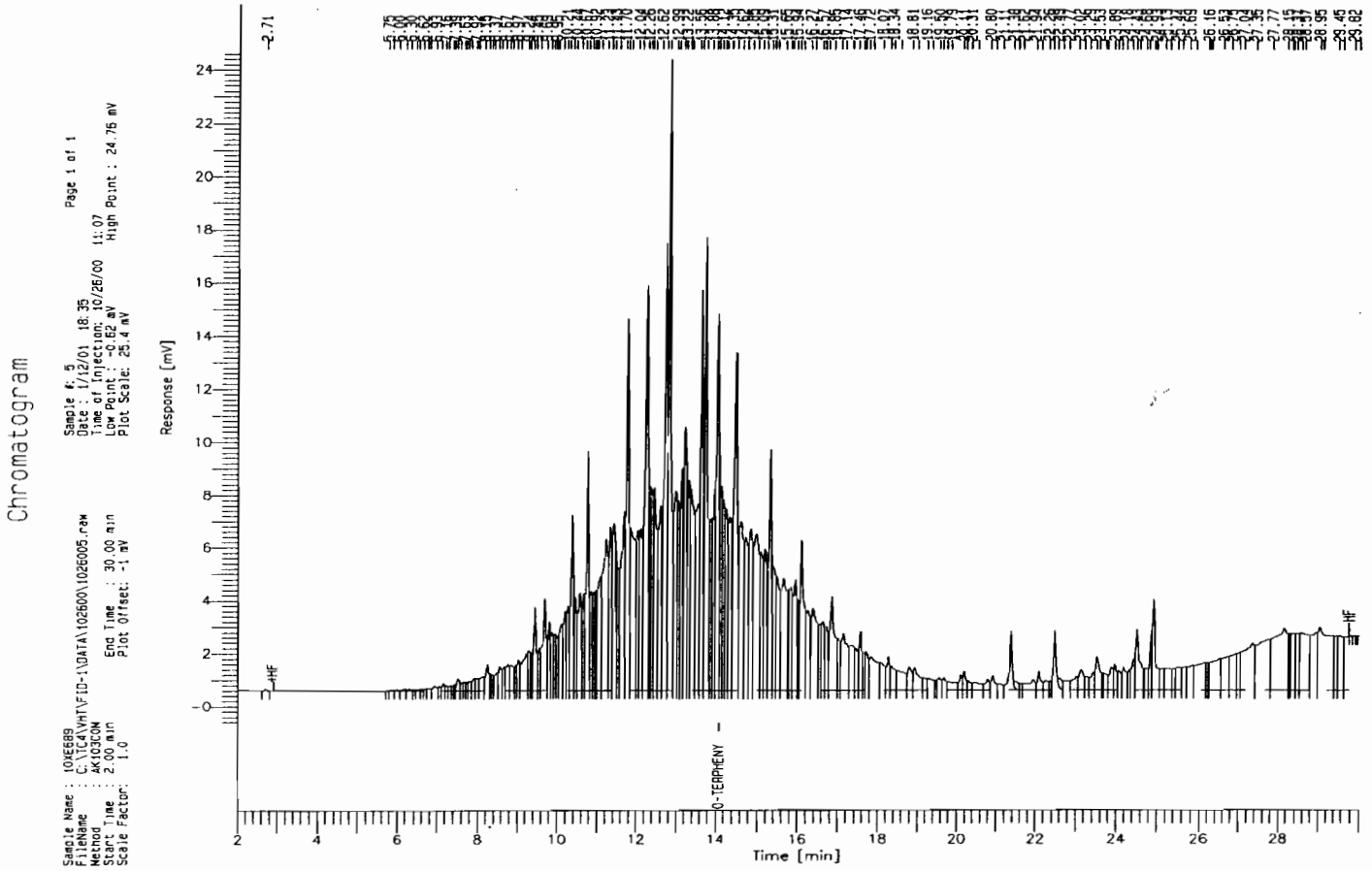
Raw File: c:\tc4\vht\fid-1\data\102600\1026005.raw | **Divisor:** 1

Acquisition Start Timestamp: 10/26/00 11:07:58 | **Conversion Factor:** 0.39999999106

Operators Initials: VHT

Kon. AS04603

4041.



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.039	14227	68828	80.70228	32.28091

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	507463	2701363	4474.537	1789.815
Residual Range Organics	23.800	63936	527281	800.678	320.271

Sample Number: 28

Sample Name: 10XE688

Study Name: 00E-0452-04/05

Raw File: c:\tc4\vht\fid-1\data\102300\1023028.raw

Acquisition Start Timestamp: 10/24/00 11:35:23

Operators Initials: VHT

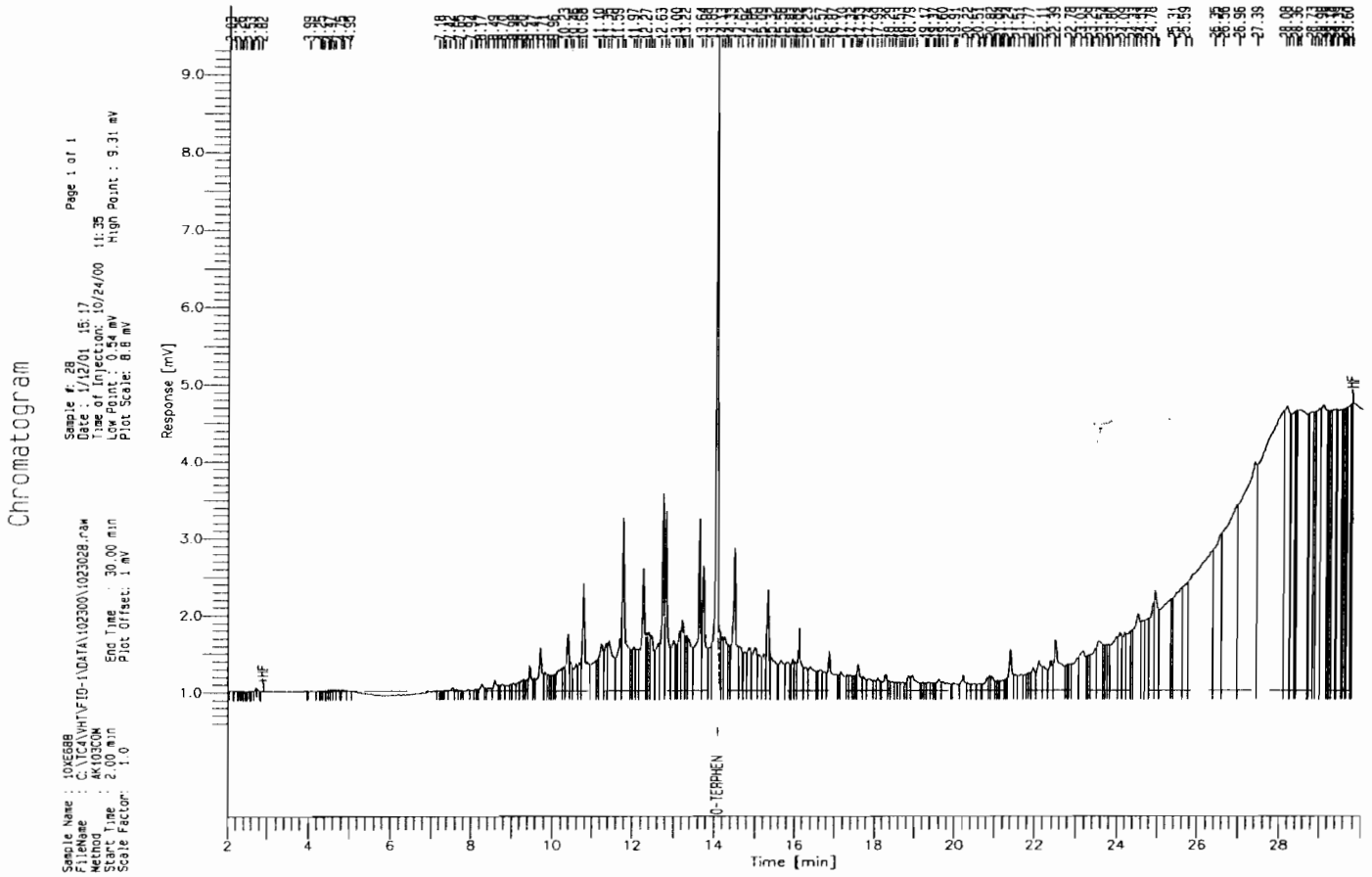
Column: A

Dilution Factor: 10

Multiplier: 0.04

Divisor: 1

Conversion Factor: 0.39999999106



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.046	8311	27935	32.38920	12.95568

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	59786	288797	432.460	172.984
Residual Range Organics	23.800	58098	656635	1044.225	417.690

Sample Number: 27

AM-A50460

Sample Name: 10XE687

Study Name: 00E-0452-04/05

Raw File: c:\tc4\vht\fid-1\data\102300\1023027.raw

Acquisition Start Timestamp: 10/24/00 10:55:04

Operators Initials: VHT

Column: A

Dilution Factor: 10

Multiplier: 0.04

Divisor: 1

Conversion Factor: 0.39999999106

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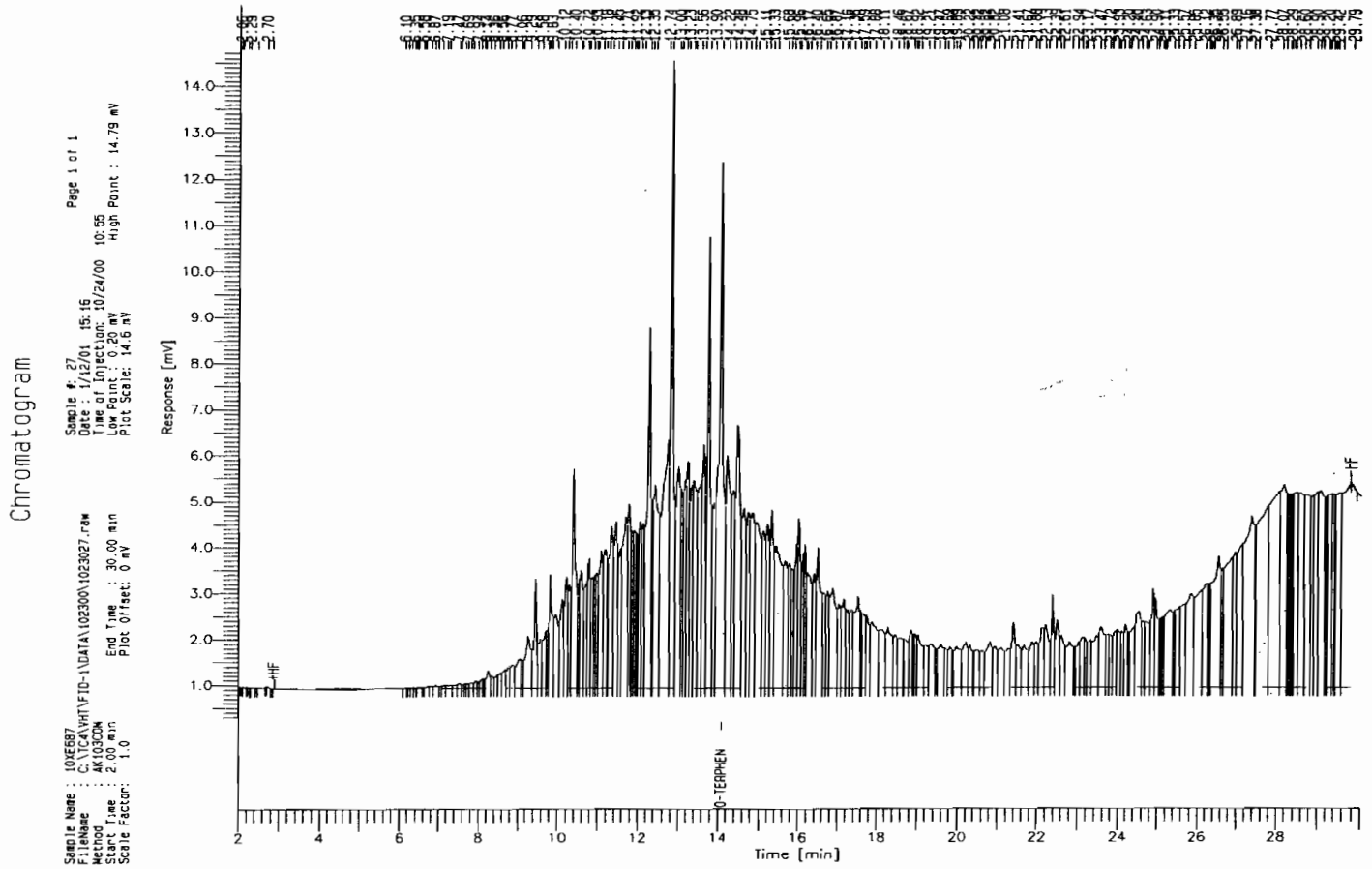

Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.053	11441	81686	95.89359	38.35744

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	291324	1717719	2826.514	1130.606
Residual Range Organics	23.800	140401	1022007	1732.145	692.858

Sample Number:	26	**Column:**	A
Sample Name:	**10XE686** Am-A504503	**Dilution Factor:**	10
Study Name:	00E-0452-04/05	**Multiplier:**	0.04
Raw File:	c:\tc4\vht\fid-1\data\102300\1023026.raw	**Divisor:**	1
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Operators Initials:	VHT		

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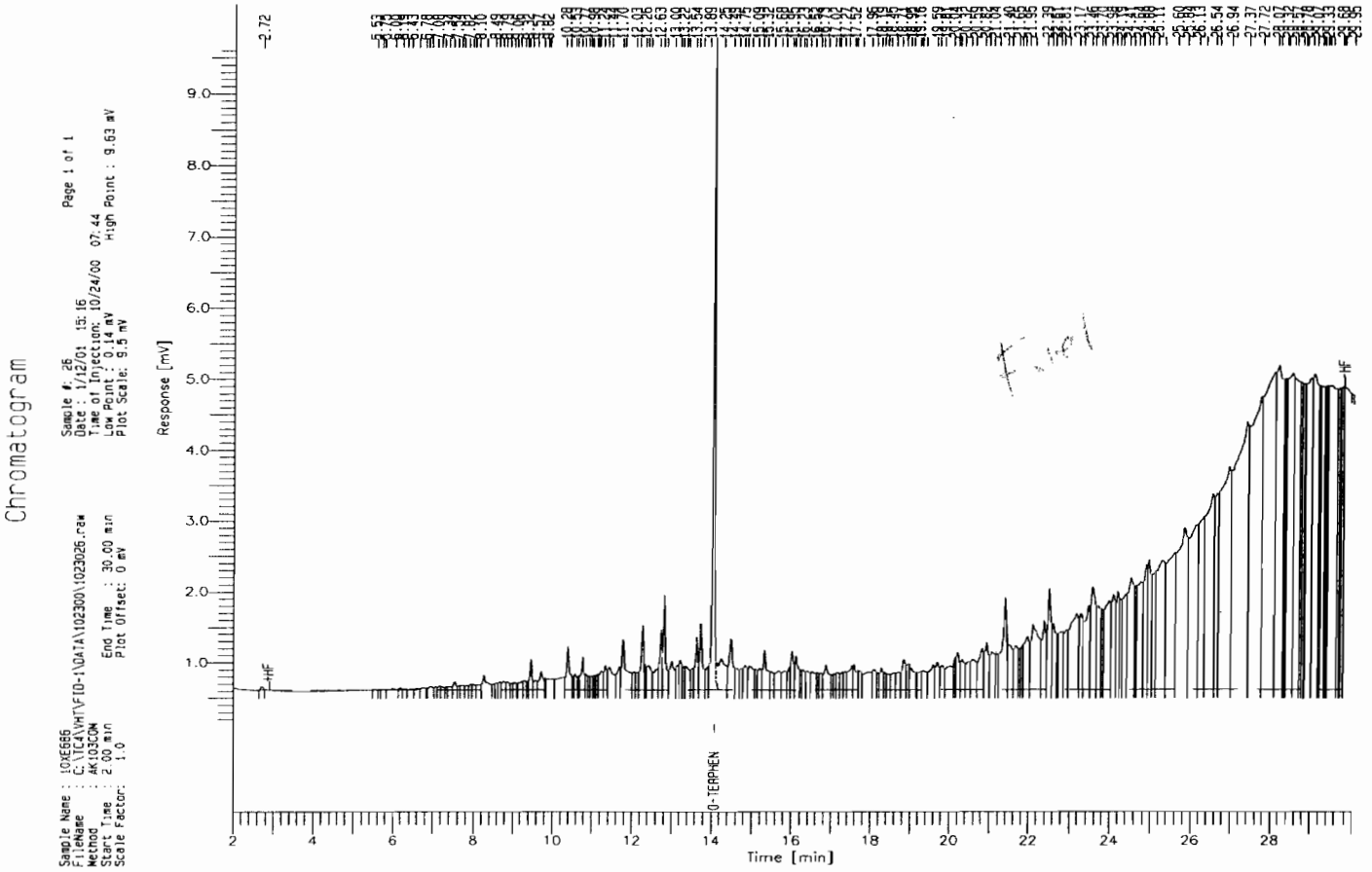

Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.041	9022	27910	32.35967	12.94387

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	38425	196788	278.306	111.322
Residual Range Organics	23.800	95773	964225	1623.354	649.342

Sample Number:	25	**Column:**	A
Sample Name:	**10XE685**	**Dilution Factor:**	10
Study Name:	00E-0452-04/05	**Multiplier:**	0.04
Raw File:	c:\tc4\vht\fid-1\data\102300\1023025.raw	**Divisor:**	1
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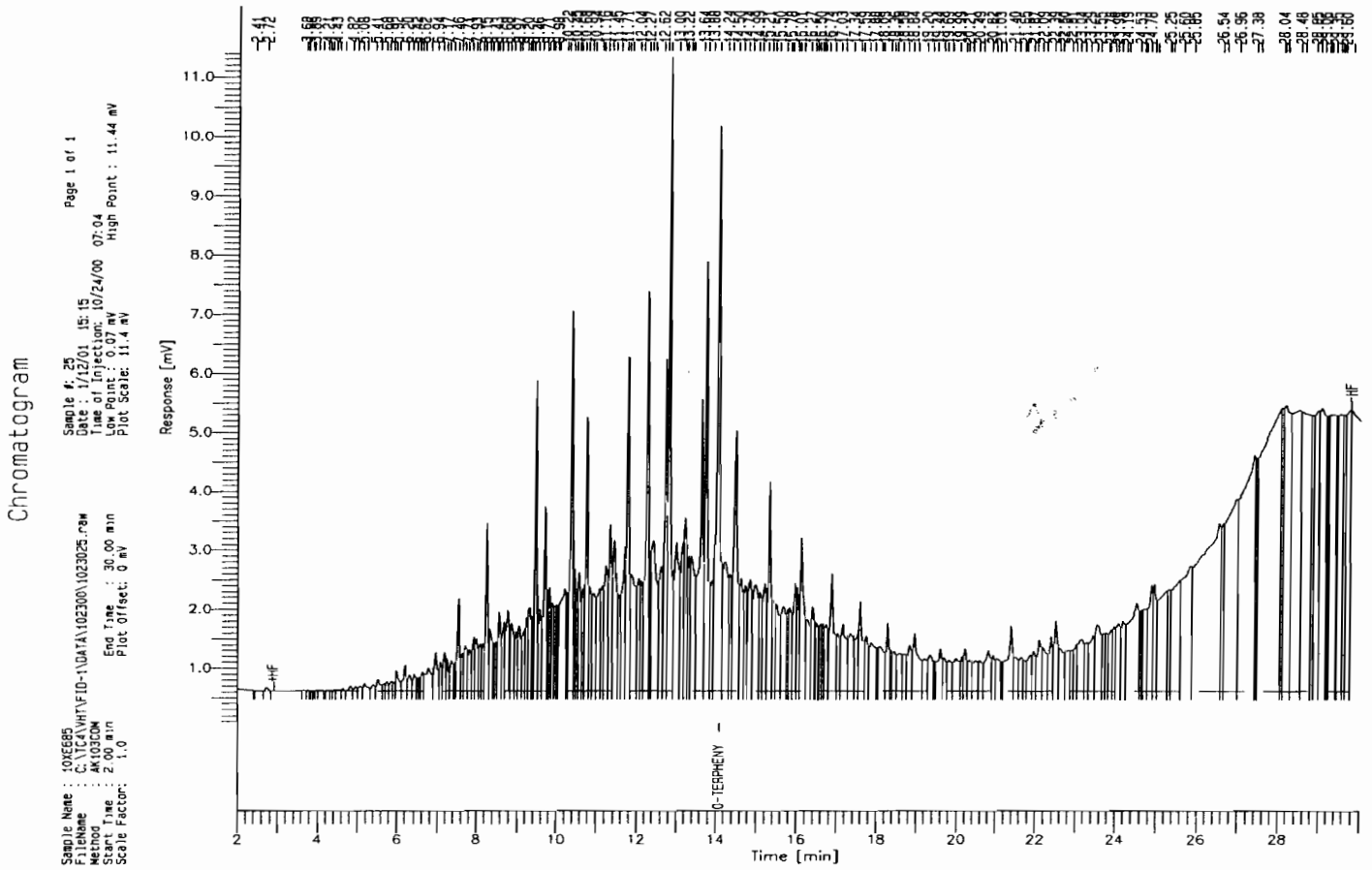
Operators Initials:	VHT		



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.045	9816	52040	60.86804	24.34721

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	230570	1179983	1925.577	770.231
Residual Range Organics	23.800	91625	1020713	1729.710	691.884

Sample Number: 24 **Column:** A

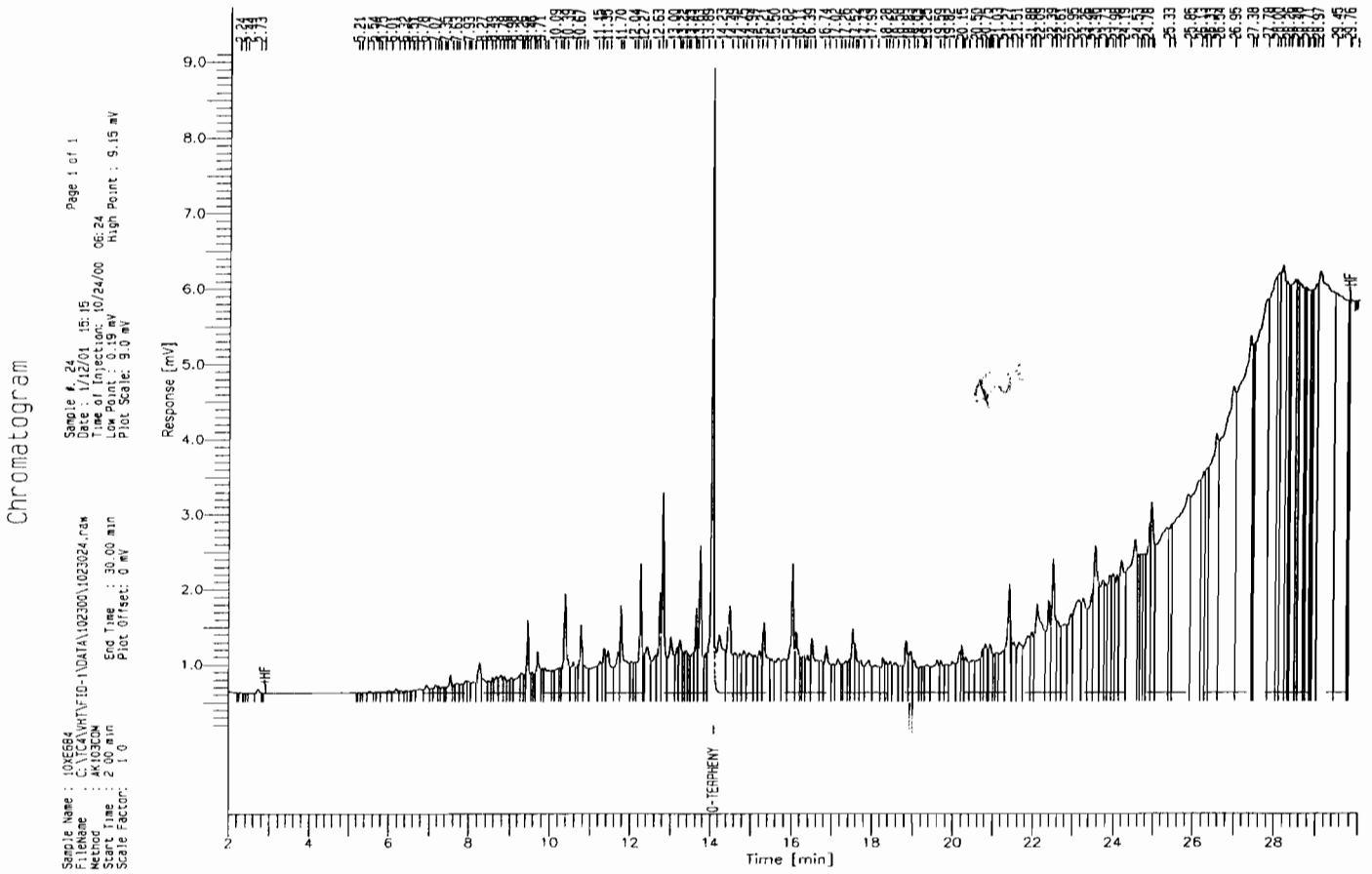
Sample Name: 10XE684 AM-AS04501 **Dilution Factor:** 10

Study Name: 00E-0452-04/05 **Multiplier:** 0.04

Raw File: c:\tc4\vht\fid-1\data\102300\1023024.raw **Divisor:** 1

Acquisition Start Timestamp: 10/24/00 6:24:11 **Conversion Factor:** 0.39999999106

Operators Initials: VHT (VB).



Component Name	Peak Retention Time (minutes)	Peak Height	Peak Area	Raw Amount	Adjusted Amount
o-Terphenyl	14.042	8560	28864	33.48590	13.39436

Group Name	Group Ret Time (min)	Group Height	Group Area	Raw Amount	Adjusted Amount
Diesel Range Organics	11.650	60025	325202	493.454	197.382
Residual Range Organics	23.800	130940	1177336	2024.597	809.839

APPENDIX I

Waste Manifests

JACOBS ENGINEERING®

Engineers and Constructors

Jacobs Engineering Group Inc.
4300 B Street, Suite 600
Anchorage, Alaska 99533-5922 U.S.A.
1.907.563.3322 Fax 1.907.563.3320

8 December 2000

Suzanne Beauchamp
U.S. Army Engineer District, Alaska
P.O. Box 898
Anchorage, Alaska 99506-0898

Attn: Mr. Ron Broyles

Subject: Amaknak Offsite Waste Transportation and Disposal Plan
Contract No. DACA85095-D-0018
Task Order No. 02 – Amaknak & Unalaska FUDS

Dear Mr. Broyles:

Several waste streams were generated during the Amaknak 2000 Island-Wide Activities. The waste streams include primarily petroleum, oil and lubricant (POL) contaminated debris, PPE and other inert material. Fuel mixtures (bunker C/diesel) were also recovered from draining a pipeline, and will be recycled for energy recovery off-site. Several non-PCB containing transformers were also removed. A complete inventory of the waste streams, number of containers and waste classification are included in Attachment 1. The Offsite Transportation and Disposal Plan for Amaknak waste streams is summarized as follows:

Samson Tug & Barge (EPA ID#WAD980981849) will provide three 20-foot connexes for loading the waste containers. Samson will also provide transportation of the empty connexes to the waste accumulation area at Amaknak.

Upon arrival at the waste accumulation area, Jacobs will load the containers of waste. It is anticipated that one connex will contain all of the hazardous waste and hazardous materials. The other two connexes will contain the remaining non-hazardous waste streams. Once the connexes have been filled and secured, Jacobs will release the containers back to Samson for transit to the TSDFs. The Jacobs CQC Manager Eric Detmer will be onsite to inspect the containers, physical state of the waste (liquid/solid classification), labels/placards and the final loading. The Jacobs Site-Safety Manager Sam Cunard will also be onsite to oversee and assist in the loading operations. The Jacobs CQC manager Eric Detmer or his designee will be responsible for completing the weights and total number of containers on each manifest. Any unused manifests will be returned directly to the USAED-Alaska District Office. Once the manifests have been released to Samson (Transporter 1), the signed generator copies will be returned to the USAED Alaska District Office.

Transportation of the loaded shipping container will continue from Amaknak by Samson Tug and Barge to Seattle. The average sailing time is fourteen (14) days, however, is subject to delays caused by weather. Upon arrival in Seattle, the barge will be offloaded and the shipping containers made available for pickup.

Pickup and delivery of the waste containers from Samson dock to the TSDF will be provided by Prime Environmental Services (US EPA ID# CAL931024038); the Jacobs Amaknak Waste Subcontractor. After unloading the container at Samson dock, the containers will be loaded onto flat beds for the remainder of the voyage to the final TSDF. Wastes listed on manifest numbers AU007 and AU006 will also have additional transporters following Prime Environmental. Wastes listed on AU007 will be transported by Philip Services (US EPA ID#CAD063547996) from Seattle to California before being transported to the final TSDF. Wastes listed on AU006 will be transported by SLT Express (US EPA ID# UTD981552425). All transportation will take place via trucking lines.

The non-regulated wastes will be transported to the Columbia Ridge Landfill and Recycling Center (US EPA ID#ORD987173457) and US Ecology (US EPA ID#NVT330010000) for final disposal. Liquid waste streams will be stabilized before being placed into the solid waste landfill. All recyclable fuels will be burned for energy recovery at Emerald Petroleum Services (US EPA ID#WAD058367152). The hazardous wastes will be transported to Chemical Waste Management's Hazardous Waste Facility in Arlington, OR (US EPA ID#ORD089452353) or Pollution Control Industries in E.Chicago, IN (US EPA ID#IND000646943) for treatment and final disposal. Please refer to Attachment 1 for the final disposition/treatment facility designated for each waste stream.

Decontamination of the containers will be provided by the disposal subcontractor if necessary.

Jacobs will provide copies of all Exception Reports as per 40 CFR 262.42 to the USAED, as necessary.

Please also see attached enclosures providing proof of facility compliance.

If you have any comments or questions, please contact Ms. Peggy Yang at (907) 563-3322.

Sincerely,

JACOBS ENGINEERING GROUP INC.

Peggy Yang
Regulatory Specialist

Cc: Tom Reed (USAED)
Mick Flaherty (USAED)
Ron Broyles (USAED)

Attachment 1
2000 Amaknak Waste Inventory

Number	Waste Description	Matrix	# Containers	Quantity/Description	Facility	Profile #	Waste Classification
1	Ballyhoo drum with solid (#3)	solid	1	10 gallons of solid in 55-gal drum inside 85-gallon overpack	PCI	PCI-1	Hazardous
2	Ballyhoo empty drum	NA	1	rusted out empty 55-gal drum inside 85-gallon overpack	Columbia Ridge	550487	Non-Hazardous
3	Ballyhoo Stand-Alone Transformer	oil in XFMR	1	transformer inside 85-gallon overpack	US Ecology	USE-2	Non-Hazardous
4	Ballyhoo Transformer #1 Vault #1	oil in XFMR	1	transformer inside 85-gallon overpack	US Ecology	USE-1	Non-Hazardous
5	Ballyhoo Transformer #2 Vault #1	oil in XFMR	1	transformer inside 85-gallon overpack	US Ecology	USE-2	Non-Hazardous
6	Ballyhoo Transformer #3 Vault #2	sludge in XFMR	1	<1 gallon oil-contaminated sludge in transformer in 85-gallon overpack	Columbia Ridge	550485	Non-Hazardous
7	Ballyhoo Transformer #4 Vault #3	XFRMR	1	empty transdormer in 85-gallon overpack;	Columbia Ridge	550485	Non-Hazardous
7A	Ballyhoo Transformer #4 Vault #3	oil	1	oil in 55-gallon drum	US Ecology	USE-3	Non-Hazardous
8	LSA empty drums	NA	1	5 rusted out crushed up drums inside 85-gallon overpack	Columbia Ridge	550487	Non-Hazardous
9	Decon water from Transformer work (decon of No. 4 - 7)	water	1	55-gallon drum	US Ecology	USE-3	Non-Hazardous
10	PCB poly	poly sheeting	1	85-gallon overpack	Columbia Ridge	550488	Non-Hazardous
11	Waste Diesel Bldg. C	diesel fuel	3	55-gallon drums	Emerald Petroleum	G02902	Non-Hazardous
12	Waste Gasoline Bldg. C	gasoline	1	55-gallon drum	Emerald Petroleum	G02901	Non-Hazardous
13	White powder	solid	1	55-gallon drum	Columbia Ridge	550484	Non-Hazardous
14	White powder	solid	1	55-gallon drum	Columbia Ridge	550484	Non-Hazardous
15	Building G oil-contaminated sludge	sludge	1	85-gallon overpack	Emerald Petroleum	G04711	Non-Hazardous
16	UST 3760 fuel-contaminated sludge	sludge	1	55-gallon drum (includes sludge from LSA Latrine No.1 UST, LSA 1154 UST, HCL1 UST, and LSA AST)	PCI	PCI-3	Hazardous

Attachment 1
2000 Amaknak Waste Inventory

17	Port Levashef tar/paint (PLD Drum)	paint/tar	1	55-gallon drum 1/5 full of dried paint/tar inside 85-gallon overpack	PCI	PCI-1	Hazardous
18	Port Levashef soil from under PLD Drum	soil	5	two 55-gallon drums and three 85-gallon overpacks full of soil	WMI - Arlington	CN7332	Hazardous
19	PLD Drum with rusty water (Port Levashef Drum #2)	water	1	water inside 55-gallon drum inside 85-gallon overpack	PCI	PCI-2	Hazardous
20	Oil-contaminated adsorbs/poly sheeting	adsorbs/poly sheeting	2	55-gallon drums	Columbia Ridge	550486	Non-Hazardous
21	Oil-contaminated PPE/adsorbs	PPE/adsorbs	7	supersacks (1 cubic yard)	Columbia Ridge	550486	Non-Hazardous
22	Oil-contaminated adsorbs/poly/PPE	adsorbs/poly sheeting/PPE	1	fish tote	Columbia Ridge	550486	Non-Hazardous
23	Oil-contaminated debris	metal/wood (mostly wood)	1 pallet	pile of debris wrapped in poly sheeting	Columbia Ridge	550486	Non-Hazardous
24	Building C oil-contaminated used adsorbs	adsorbs	1	85-gallon overpack	Columbia Ridge	550486	Non-Hazardous
25	Building C oil-contaminated sludge/ppe	sludge/ppe	1	55-gallon drum	Emerald Petroleum	G04711	Non-Hazardous
26	Building C oil-contaminated debris	wood/metal/trash	1	55-gallon drum	Columbia Ridge	550486	Non-Hazardous
27	Building C oil-contaminated adsorbs/poly/ppe	adsorbs/poly/PPE	3	three 55-gallon drums	Columbia Ridge	550486	Non-Hazardous
28	Building C oil-contaminated sludge	sludge	2	two 55-gallon drums	Emerald Petroleum	G04711	Non-Hazardous
29	Building 503 oil-contaminated adsorbs	adsorbs	2	two 55-gallon drums	Columbia Ridge	550486	Non-Hazardous
30	Valve house I oil-contaminated debris	wood/metal/trash	1	55-gallon drum	Columbia Ridge	550486	Non-Hazardous

Attachment 1
2000 Amaknak Waste Inventory

31	Valve house I oil-contaminated sludge	sludge	2	two 55-gallon drums	Emerald Petroleum	G04711	Non-Hazardous
32	Decon pad fuel-contaminated sludge	sludge	3	three 55-gallon drums	Columbia Ridge	550490	Non-Hazardous
33	Building B oil-contaminated sludge	sludge	3	three 55-gallon drums	Emerald Petroleum	G04711	Non-Hazardous
34	Building H oil-contaminated sludge/debris	sludge/debris	1	55-gallon drum	Columbia Ridge	550486	Non-Hazardous
35	Fuel-contaminated granulated activated carbon	carbon	5	Five 55-gallon drum	Columbia Ridge	550489	Non-Hazardous
36	Asbestos	asbestos material	1	double bagged--about 5 to 10 pounds	Columbia Ridge	550491	Hazardous Material
37	Bunker C/diesel mixture	oil	2	Oil/diesel in two 4,000 gallon ISO tanks	Emerald Petroleum	G02907	Non-Hazardous

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
EXEMPT	AU001	

GENERATOR

3. Generator's Name and Mailing Address
US ARMY CORPS OF ENG (DOD DERP/FUDS, USACOE AMAKNAK & UNALASKA)
PO BOX 898, CEPOA-CO-SA-DR, ATTN: RONALD BROYLES)
ANCHORAGE, AK 99506-0898

4. Generator's Phone ~~907-753-5650~~

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
SAMSON TUG & BARGE	WAD988099818	206-767-7820
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
PRIME ENVIRONMENTAL SERVICES	CAL931024038	562-495-7777
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
EMERALD PETROLEUM SERVICES, INC. 1500 AIRPORT WAY SOUTH SEATTLE, WA 98134	WAD058367152	206-622-1108

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. GASOLINE MIXTURE, 3, UN1203, II	001	DM	20	G
b.			20	G
c.				
d.				

D. Additional Descriptions for Materials Listed Above
a) PROFILE#G02901, ITEM #12

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
CERTIFICATES OF TREATMENT, RECYCLING, OR DISPOSAL REQUIRED
a) ERG #170
24 hr emergency contact (877) 217-7463
CONTAINER # STBU 700532

I hereby declare that the contents of this consignment are fully and accurately described above the by the proper shipping name, and are classified, packaged, marked, and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Ron Broyles	Ron Broyles	1 2	1 2	0 7

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Rick Daley	Rick Daley	1 2	1 4	0 7

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

MANIFEST - MANIFESTE

This Manifest conforms to all Federal and Provincial transport and environmental legislation requiring manifesting.
Ce manifeste est conforme aux législations fédérale et provinciale sur l'environnement et le transport, requérant un manifeste.

Manifest Reference No. / N° de référence du manifeste: 1811606-1

A Consignor (Generator) / Expediteur (Producteur)

Provincial ID No. / N° d'id. provincial

Company name / Nom de l'entreprise

Mailing address / Adresse postale | City / Ville | Province | Postal code / Code postal

Shipping site address / Origine de l'expédition

City / Ville | Province | Postal code / Code postal

Intended consignee / Destinataire prévu

Provincial ID No. / No d'id. provincial

Address / Adresse | City / Ville | Province | Postal code / Code postal

Receiving site address / Destination de l'expédition

City / Ville | Province | Postal code / Code postal

B Carrier / Transporteur

Provincial ID No. / N° d'id. provincial

Company name / Nom de l'entreprise

Address / Adresse

City / Ville | Prov. | Postal code / Code postal

	Registration No. / N° d'immatriculation	Prov.
Vehicle / Véhicule		
Trailer/Rail Car No. 1 / 1er remorque – wagon		
Trailer/Rail Car No. 2 / 2e remorque – wagon		

Point of entry / Point d'entrée | Point of exit / Point de sortie

Carrier Certification: I declare that I have received waste as offered by the consignor in Part A for delivery to the intended consignee and that the information contained in Part B is complete and correct. / Déclaration du transporteur : J'atteste avoir reçu les déchets offerts par l'expéditeur dans la partie A en vue de leur livraison au destinataire choisi et que les renseignements inscrits à la partie B sont exacts et complets.

Year / Année | Month / Mois | Day / Jour | Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie)

Signature | Tel. No. / N° de tél.

Reference nos. of other Manifest(s) used / N°'s de références des autres manifestes utilisés: 0001

C Consignee (Receiver) / Destinataire (Réceptionnaire)

Provincial ID No. / N° d'id. provincial

Consignee information same as Intended Consignee in Part A / L'information à fournir par le destinataire est la même qu'en A.
☐ Yes / Oui ☐ No, complete the boxed area below

Company name / Nom de l'entreprise

Address / Adresse

City / Ville | Province | Postal code / Code postal

Receiving site address / Destination de l'expédition

City / Ville | Province | Postal code / Code postal

Date received / Date de reception: Year / Année | Month / Mois | Day / Jour

Time / Heure: ☐ A.M. ☐ P.M.

Physical state / État physique	Shipping name of waste / Appellation réglementaire du déchet	Waste identification / Identification du déchet: Provincial No. / N° (Quebec-Ontario only) (Quebec-Ontario seul)	Waste identification / Identification du déchet: TDGA/PIN LTMD/NIP	Quantity shipped / Quantité expédiée	Units L or ou kg unites	Classification	Packing group / Groupe d'emballage	Packaging Contenants: No. Nbre	Packaging Contenants: Codes Int.–ext.
				75.6					

Quantity received / Quantité reçu	Units L or ou kg unites	Identify any shipment discrepancy problems. Attach addendum if necessary. / Indiquer toute différence relative à l'expédition. Annexer une feuille au besoin.	Handling code / Code de manutention	Decontamination / Décontamination: Packaging Contenants Yes / Oui	Packaging Contenants No / Non	Vehicle / Véhicule Yes / Oui	Vehicle / Véhicule No / Non

Special handling/Emergency instructions / Manutention spéciale/instructions d'urgence ☐ Attached / Ci-jointes ☐ Below / Ci-dessous

Circulation no. – Quebec only / N° de circulation – Réservée au Québec

If handling code "Other" (specify) / Si code de manutention "divers", spécifier

If waste to be transferred, specify intended company name / Si les déchets doivent être transférés, préciser le nom du destinataire

Provincial ID No. / N° d'id. provincial

Address / Adresse | City / Ville | Prov.

Date shipped / Date d'expédition: Year / Année | Month / Mois | Day / Jour

Time / Heure: ☐ A.M. ☐ P.M.

Scheduled arrival date / Date d'arrivée prévue: Year / Année | Month / Mois | Day / Jour

***Consignor Certification**: I declare that the information contained in Part A is correct and complete.*
***Déclaration de l'expéditeur**.: Je déclare que tous les renseignements à la partie A sont véridiques et complets.*

Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie) | Signature | Tel. no. / N° de tél.: (514) 563 3322

Consignee Certification: I declare that the information contained in Part C is correct and complete. Déclaration du l'expéditeur : Je déclare que tous les renseignements à la partie C sont véridiques et complets.

Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie)

Signature | Tel. / Tél.

MOE 04-1917 (06/99)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
EXEMPT	AD002	

3. Generator's Name and Mailing Address
US ARMY CORPS OF ENG (DOD DERP/FUDS, USACOE AMAKNAK & UNALASKA)
PO BOX 898, CEPOA-CO-SA-DR, ATTN: RONALD BROYLES)
ANCHORAGE, AK 99506-0898
4. Generator's Phone ( ) 907-753-5550

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
SAMSON TUG & BARGE	WAD980981849	206-767-7820
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
PRIME ENVIRONMENTAL SERVICES	CAL931024038	562-495-7777
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
EMERALD PETROLEUM SERVICES, INC. 1500 AIRPORT WAY SOUTH SEATTLE, WA 98134	WAD058367152	206-622-1108

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. MATERIAL NOT REGULATED (DIESEL WITH WATER)	003	DM	140	G
b. MATERIAL NOT REGULATED (OILY SLUDGES)	009	DM	525	G
c.				
d.				

D. Additional Descriptions for Materials Listed Above
a) PROFILE#G02902, ITEM #11 (3x55 G DM)
b) PROFILE# G04711, ITEM # S 15,25,28,31,33 (8x55 G DM, 1x85 G DM)

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
CERTIFICATES OF TREATMENT, RECYCLING, OR DISPOSAL REQUIRED
CONTAINER# TTNU 277420 FOR ITEM #S 11, 15, 28
STBU 700532 FOR ITEM #S 25, 31, 33

I hereby declare that the contents of this consignment are fully and accurately described above the by the proper shipping name, and are classified, packaged, marked, and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
R. Broyles		12	12	00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
		12	14	00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
EXEMPT	AU003	

GENERATOR

3. Generator's Name and Mailing Address
US ARMY CORPS OF ENG (DOD DERP/FUDS, USACOE AMAKNAK & UNALASKA)
PO BOX 898, CEPOA-CO-SA-DR, ATTN: RONALD BROYLES)
ANCHORAGE, AK 99506-0898
4. Generator's Phone ( ) 907-753-5550

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
SAMSON TUG & BARGE	WAD980981849	206-767-7820
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
EMERALD PETROLEUM SERVICES, INC.	WAD058367152	206-622-1108
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
EMERALD PETROLEUM SERVICES, INC. 1500 AIRPORT WAY SOUTH SEATTLE, WA 98134	WAD058367152	206-622-1108

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. MATERIAL NOT REGULATED (OIL AND DIESEL)	001	TT	4400	G
b.				
c. End				
d.				

D. Additional Descriptions for Materials Listed Above
a) PROFILE#G02907, ITEM #37-(5,000 GALLON ISO TANK)

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
CERTIFICATES OF TREATMENT, RECYCLING OR DISPOSAL REQUIRED
TANK# STBU 255023

I hereby declare that the contents of this consignment are fully and accurately described above the by the proper shipping name, and are classified, packaged, marked, and labeled/placarded and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Ron Broyles	On behalf of DOD	12	12	00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Rick Oakley		12	14	00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. EXEMPT | Manifest Document No. AC0004 | 2. Page 1 of 1

3. Generator's Name and Mailing Address
US ARMY CORPS OF ENG (DOD DERP/FUDS, USACOE AMAKNAK & UNALASKA)
PO BOX 898, CEPOA-CO-SA-DR, ATTN: RONALD BROYLES)
ANCHORAGE, AK 99506-0898
4. Generator's Phone ( ) 907-753-5550

5. Transporter 1 Company Name: SAMSON TUG & BARGE | 6. US EPA ID Number: WAD980981849 | A. Transporter's Phone: 206-767-7820

7. Transporter 2 Company Name: EMERALD PETROLEUM SERVICES, INC. | 8. US EPA ID Number: WAD058367152 | B. Transporter's Phone: 206-622-1108

9. Designated Facility Name and Site Address
EMERALD PETROLEUM SERVICES, INC.
1500 AIRPORT WAY SOUTH
SEATTLE, WA 98134
10. US EPA ID Number: WAD058367152 | C. Facility's Phone: 206-622-1108

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. MATERIAL NOT REGULATED (OIL AND DIESEL)	001	TT	4400	G
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
a) PROFILE#G02907, ITEM #37 (5,000 GALLON ISO TANK)

018
ST BD-2357095 11/10:

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
CERTIFICATES OF TREATMENT, RECYCLING, OR DISPOSAL REQUIRED

I hereby declare that the contents of this consignment are fully and accurately described above the by the proper shipping name, and are classified, packaged, marked, and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Ron Broyles	Ron Broyle On behalf of DoD	12	12	00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
RICK DALEY	R Daley	12	19	00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR — TRANSPORTER — FACILITY

ORIGINAL - RETURN TO GENERATOR

EMERALD PETROLEUM SERVICES, INC.
WASTE PRODUCT QUESTIONNAIRE

WPQ # G02907

Waste Product Name

OILS AND DIESEL (ITEM 37)

Process Generating Waste

FACILITY CLEANUP

Physical State at 70° F
- ☐ Solid ☐ Sludge
- ☒ Liquid ☐ Powder
- ☐ Compressed Gas

Free Liquids at 70° F
- ☒ Yes ☐ No
- Volume 95-100 %

Flash Point
- ☐ <70° F ☐ 140°-200° ☐ Closed Cup
- ☐ 70° - 99° F ☒ >200° F ☐ Open Cup
- ☐ 100° - 139° F ☐ No Flash Exact

pH
- ☐ ≤ 2 ☐ 10.1 - 12.4
- ☐ > 2 - 4 ☐ ≥ 12.5
- ☒ 4.1 - 10 ☐ Exact

Solids
- ☐ By Volume
- Total %
- Dissolved %
- Suspended %

Density or Specific Gravity
- ☐ Liquid lbs/gal
- ☐ Solid lbs/ft³

Odor
- ☐ None ☐ Strong
- ☒ Mild
- Describe

Layers
- ☐ Multi-Layered ☐ Bi-Layered ☐ Homogenous

Color
Varies

WASTE WATER CHARACTERISTICS

Arsenic (As)	<1 Mg/L	Mercury (Hg)	<0.1 Mg/L	Other (specify):	
Barium (Ba)	<10 Mg/L	Nickel (Ni)	<2.5 Mg/L		
Cadmium (Cd)	<0.5 Mg/L	Selenium (Se)	<1 Mg/L		
Chromium (Cr)	<2.75 Mg/L	Silver (Ag)	<1 Mg/L		
Copper (Cu)	<3 Mg/L	Zinc (Zn)	<5 Mg/L		
Lead (Pb)	<5 Mg/L	Nondetectable	Mg/L		

OIL AND WATER CONTENT

H_2O 0-20 %

HOCs < 1000 PPM

PCBs < 1 PPM

Other (specify):

OILS (BUNKER	10-90 %	WATER	0-20 %
DIESEL	10-90 %		%
	%		%

SHIPPING INFORMATION

Proper Shipping Name:

MATERIAL NOT REGULATED (OIL AND DIESEL)

DOT Hazard Class: ID#:

PG RQ

Additional Labels Required:

SOLIDS COMPOSITION

DIRT, RUST, SCALE 0-5 %

%

DOT Shipping Container:
- ☐ Drum/Volume 55 X ☐ Bulk/Volume 9000 G
- Other: Type Volume
- Projected: 9000 Gal/lbs per mo X yr

Treatment Required:

Special Handling Requirements:

HAZARDOUS PROPERTIES

I certify the above described material is not regulated as a dangerous or hazardous waste per WAC 173-303, 40 CFR 261 or 40 CFR 761, nor is it mixed with a dangerous or hazardous waste regulated under WAC 173-303, 40 CFR 261 or 40 CFR 761.

Ron Bruffe
Generator Signature

12/12/00
Date

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: AKR000000026 | Manifest Document No.: AU005 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
US ARMY CORPS OF ENG (DOD DERP/FUDS, USACOE AMAKNAK & UNALASKA)
PO BOX 896, CEPOA-CO-SA-DR, ATTN: RONALD BROYLES,
ANCHORAGE, AK 99506-0898
4. Generator's Phone (907) 753-5650

A. State Manifest Document Number:
B. State Generator's ID:

5. Transporter 1 Company Name: SAMSON TUG & BARGE
6. US EPA ID Number: WAD980981849
C. State Transporter's ID:
D. Transporter's Phone: 206-767-7820

7. Transporter 2 Company Name: PRIME ENVIRONMENTAL SERVICES
8. US EPA ID Number: CAL931024038
E. State Transporter's ID:
F. Transporter's Phone: 562-595-1000

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT – NW
17629 CEDAR SPRINGS LANE
ARLINGTON, OREGON 97812
10. US EPA ID Number: ORD089452313
G. State Facility's ID:
H. Facility's Phone: 541-682-6853

	11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	RQ HAZARDOUS WASTE SOLID, N.O.S. (LEAD), NA3077, III (RQ - LEAD)	X	005	DM	5000	P	D008
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a) PROFILE # WMI CN7332, ITEM # 18 (3x85 G DM, 2x55 G DM)

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
a) EPA # [illegible] CONTAINER STRU 7005 3[illegible]
CERTIFICATES OF TREATMENT, RECYCLING, OR DISPOSAL REQUIRED
24 HOUR EMERGENCY TELEPHONE
(877) 217-7453

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

MANIFEST - MANIFESTE

This Manifest conforms to all Federal and Provincial transport and environmental legislation requiring manifesting.
Ce manifeste est conforme aux législations fédérale et provinciale sur l'environnement et le transport, requérant un manifeste.

Manifest Reference No. / Nº de référence du manifeste: 1811608-7

A Consignor (Generator) / Expéditeur (Producteur)

Provincial ID No. / Nº d'id. provincial:

Company name / Nom de l'entreprise:

Mailing address / Adresse postale | City / Ville | Province | Postal code / Code postal

Shipping site address / Origine de l'expédition

City / Ville | Province | Postal code / Code postal

Intended consignee / Destinataire prévu | Provincial ID No. / No d'id. provincial

Address / Adresse | City / Ville | Province | Postal code / Code postal

Receiving site address / Destination de l'expédition

City / Ville | Province | Postal code / Code postal

B Carrier / Transporteur

Provincial ID No. / Nº d'id. provincial:

Company name / Nom de l'entreprise

Address / Adresse

City / Ville | Prov. | Postal code / Code postal

	Registration No. / Nº d'immatriculation	Prov.
Vehicle / Véhicule		
Trailer/Rail Car No. 1 / 1er remorque – wagon		
Trailer/Rail Car No. 2 / 2e remorque – wagon		

Point of entry / Point d'entrée | Point of exit / Point de sortie

Carrier Certification: *I declare that I have received waste as offered by the consignor in Part A for delivery to the intended consignee and that the information contained in Part B is complete and correct. / **Déclaration du transporteur** : J'atteste avoir reçu les déchets offerts par l'expéditeur dans la partie A en vue de leur livraison au destinataire choisi et que les renseignements inscrits à la partie B sont exacts et complets.*

Year / Année | Month / Mois | Day / Jour | Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimérie)

Signature | Tel. No. / Nº de tél.

Reference nos. of other Manifest(s) used / Nº's de références des autres manifestes utilisés: A0005

C Consignee (Receiver) / Destinataire (Réceptionnaire)

Provincial ID No. / Nº d'id. provincial

Consignee information same as Intended Consignee in Part A / L'information à fournir par le destinataire est la même qu'en A
☐ Yes / Oui ☐ No, complete the boxed area below

Company name / Nom de l'entreprise

Address / Adresse

City / Ville | Province | Postal code / Code postal

Receiving site address / Destination de l'expédition

City / Ville | Province | Postal code / Code postal

Date received / Date de reception: Year / Année | Month / Mois | Day / Jour | Time / Heure ☐ A.M. ☐ P.M.

Physical state / État physique	Shipping name of waste / Appellation réglementaire du déchet	Waste Identification / Identification du déchet: Provincial No. / Nº (Quebec-Ontario only) (Quebec-Ontario seul)	TDGA/PIN LTMD/NIP	Quantity shipped / Quantité expédiée	Units L or ou kg unités	Classification	Packing group / Groupe d'emballage	Packaging Contenants: No. Nbre	Codes int.-ext.	Quantity received / Quantité reçu	Units L or ou kg unités	Identify any shipment discrepancy problems. Attach addendum if necessary. / Indiquer toute différence relative à l'expédition. Annexer une feuille au besoin.	Handling code / Code de manutention	Decontamination / Décontamination: Packaging Contenants Yes / Oui	Packaging Contenants No / Non	Vehicle / Véhicule Yes / Oui	Vehicle / Véhicule No / Non
				1,360	K	9.3	III	05	01								

Special handling/Emergency instructions / Manutention spéciale/instructions d'urgence ☐ Attached / Ci-jointes ☐ Below / Ci-dessous

Circulation no. – Quebec only / Nº de circulation – Réservée au Québec

If handling code "Other" (specify) / Si code de manutention "divers", spécifier

If waste to be transferred, specify intended company name / Si les déchets doivent être transférés, préciser le nom du destinataire | Provincial ID No. / Nº d'id. provincial

Address / Adresse | City / Ville | Prov.

Date shipped / Date d'expédition: Year / Année | Month / Mois | Day / Jour | Time / Heure ☐ A.M. ☐ P.M. | Scheduled arrival date / Date d'arrivée prévue: Year / Année | Month / Mois | Day / Jour

Consignor Certification: *I declare that the information contained in Part A is correct and complete.*
Déclaration de l'expéditeur *: Je déclare que tous les renseignements à la partie A sont veridiques et complets.*

Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie) | Signature | Tel. no. / Nº de tél.: (907) 563 3322

Consignee Certification: *I declare that the information contained in Part C is correct and complete.*
Déclaration du l'expéditeur *: Je déclare que tous les renseignements à la partie C sont véridiques et complets.*

Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie)

Signature | Tel. / de tél.

MOE 04-1917 (06/99)

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

PLEASE PRINT OR TYPE (Form designed for use on elite *(12-pitch)* typewriter.) Form Approved: OMB No. 2050-0039. **Expires 9-30-99**

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID Number	Manifest Document No.	2. Page 1 of 2	Information in the shaded areas is not required by Federal Law, but Items D, F, H, I and K are required by State Law.

3. Generator's Name and Mailing Address

4. Generator's Telephone Number ( )

A. State Manifest Document Number INA1420040

B. State Generator's ID

5. Transporter 1 Company Name | **6. U.S. EPA ID Number** | **C. State Transporter's ID**

D. Transporter's Phone

7. Transporter 2 Company Name | **8. U.S. EPA ID Number** | **E. State Transporter's ID**

F. Transporter's Phone

9. Designated Facility Name and Site Address | **10. U.S. EPA ID Number** | **G. State Facility's ID**

H. Facility's Phone

11. U.S. DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a.					
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage or disposal currently available to me which minimizes the presently and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed /Typed Name	Signature	Date Month	Day	Year

17. Transporter 1 - Acknowledgement of Receipt of Materials

Printed /Typed Name	Signature	Date Month	Day	Year

18. Transporter 2 - Acknowledgement of Receipt of Materials

Printed /Typed Name	Signature	Date Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest *(except as noted in Item 19).*

Printed /Typed Name	Signature	Date Month	Day	Year

GENERATOR

TRANSPORTER

FACILITY

In case of a spill, call the Indiana Office of Environmental Response at 317/[illegible]45 *(day or night)* and the National Response Center at 800 / 424-8802 or 202 / 426-2675.

INA 1420040

EPA Form 8700-22 Previous editions are obsolete
State Form 45273 (R2/8-98)

COPY 8. GENERATOR COPY

MANIFEST - MANIFESTE

This Manifest conforms to all Federal and Provincial transport and environmental legislation requiring manifesting.
Ce manifeste est conforme aux législations fédérale et provinciale sur l'environnement et le transport, requérant un manifeste.

Manifest Reference No. / Nº de référence du manifeste: 1811610-3

A Consignor (Generator) / Expediteur (Producteur)

Provincial ID No. / Nº d'id. provincial:

Company name / Nom de l'entreprise:

Mailing address / Adresse postale | City / Ville | Province | Postal code / Code postal:

Shipping site address / Origine de l'expédition:

City / Ville | Province | Postal code / Code postal:

Intended consignee / Destinataire prévu | Provincial ID No. / No d'id. provincial:

Address / Adresse | City / Ville | Province | Postal code / Code postal:

Receiving site address / Destination de l'expédition:

City / Ville | Province | Postal code / Code postal:

B Carrier / Transporteur

Provincial ID No. / Nº d'id. provincial:

Company name / Nom de l'entreprise:

Address / Adresse:

City / Ville | Prov. | Postal code / Code postal:

	Registration No. / Nº d'immatriculation	Prov.
Vehicle / Véhicule		
Trailer/Rail Car No. 1 / 1er remorque – wagon		
Trailer/Rail Car No. 2 / 2e remorque – wagon		

Point of entry / Point d'entrée | Point of exit / Point de sortie:

Carrier Certification: *I declare that I have received waste as offered by the consignor in Part A for delivery to the intended consignee and that the information contained in Part B is complete and correct. / **Déclaration du transporteur :** J'atteste avoir reçu les déchets offerts par l'expéditeur dans la partie A en vue de leur livraison au destinataire choisi et que les renseignements inscrits à la partie B sont exacts et complets.*

Year / Année | Month / Mois | Day / Jour | Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimérie):

Signature | Tel. No. / Nº de tél.:

C Consignee (Receiver) / Destinataire (Réceptionnaire)

Provincial ID No. / Nº d'id. provincial:

Reference nos. of other Manifest(s) used / Nº's de références des autres manifestes utilisés: A0006

Consignee information same as Intended Consignee in Part A / L'information à fournir par le destinataire est la même qu'en A
☐ Yes / Oui ☐ No, complete the boxed area below

Company name / Nom de l'entreprise:

Address / Adresse:

City / Ville | Province | Postal code / Code postal:

Receiving site address / Destination de l'expédition:

City / Ville | Province | Postal code / Code postal:

Date received / Date de reception: Year / Année | Month / Mois | Day / Jour

Time / Heure: ☐ A.M. ☐ P.M.

Physical state / État physique	Shipping name of waste / Appellation réglementaire du déchet	Waste identification / Identification du déchet: Provincial No. / Nº (Quebec-Ontario only) (Quebec-Ontario seul)	Waste identification / Identification du déchet: TDGA/PIN LTMD/NIP	Quantity shipped / Quantité expédiée	Units L or kg / ou kg unites	Classification	Packing group / Groupe d'emballage	Packaging Contenants: No. Nbre	Packaging Contenants: Codes int.-ext.
				90	K		III	02	01
				113	L		III	01	01
				208	L		III	01	01

Quantity received / Quantité reçu	Units L or kg / ou kg unites	Identify any shipment discrepancy problems. Attach addendum if necessary. / Indiquer toute différance relative à l'expédition. Annexer une feuille au besoin.	Handling code / Code de manutention	Decontamination / Décontamination: Packaging Contenants Yes / Oui	Packaging Contenants No / Non	Vehicle / Véhicule Yes / Oui	Vehicle / Véhicule No / Non

Special handling/Emergency instructions / Manutention spéciale/instructions d'urgence: ☐ Attached / Ci-jointes ☐ Below / Ci-dessous

Circulation no. – Quebec only / Nº de circulation – Réservée au Québec

If handling code "Other" (specify) / Si code de manutention "divers", spécifier:

Date shipped / Date d'expédition: Year / Année | Month / Mois | Day / Jour

Time / Heure: ☐ A.M. ☐ P.M.

Scheduled arrival date / Date d'arrivée prévue: Year / Année | Month / Mois | Day / Jour

If waste to be transferred, specify intended company name / Si les déchets doivent être transférés, préciser le nom du destinataire | Provincial ID No. / Nº d'id. provincial:

Address / Adresse | City / Ville | Prov.:

Consignor Certification: *I declare that the information contained in Part A is correct and complete.*
Déclaration de l'expéditeur : *Je déclare que tous les renseignements à la partie A sont veridiques et complets.*

Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie) | Signature | Tel. no. / Nº de tél.

Consignee Certification: *I declare that the information contained in Part C is correct and complete.*
Déclaration du l'expéditeur : *Je déclare que tous les renseignements à la partie C sont véridiques et complets.*

Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie):

Signature | Tel. / de tél.

MOE 04-1917 (06/99)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 2
EXEMPT	AU007	

GENERATOR

3. Generator's Name and Mailing Address
US ARMY CORPS OF ENG (DOD DERP/FUDS, USACOE AMAKNAK & UNALASKA)
PO BOX 898, CEPOA-CO-SA-DR, ATTN: RONALD BROYLES)
ANCHORAGE, AK 99506-0898

4. Generator's Phone ( ) 907-753-5550

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
SAMSON TUG & BARGE	WAD980981849	206-767-7820
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
PRIME ENVIRONMENTAL SERVICES	CAL.931024038	562-495-7777
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
US ECOLOGY HIGHWAY 95 (18 MI N OF LATHRUP WELLS) BEATTY, NV 89003	NVT330010000	800-239-3943

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. MATERIAL NOT REGULATED	001	DM	400	P
b. MATERIAL NOT REGULATED	002	DM	1200	P
c. MATERIAL NOT REGULATED	001	DM	55	G
d. MATERIAL NOT REGULATED	001	DM	55	G

D. Additional Descriptions for Materials Listed Above
a) USE-1, ITEM #4 (1x85 G DM – NON-PCB TRANSFORMER WITH OIL)
b) USE-2, ITEMS #3,5 (2x85 G DM-TRANSFORMERS WITH OIL, PCB<50)
c) USE-3, ITEM # 7A (1x55 G DM, OIL WITH PCB<50 PPM)
d) USE-3, ITEM #9 (1X55 G DM DECON WATER & OIL WITH PCB<50 PPM)

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
CERTIFICATES OF TREATMENT, RECYCLING, OR DISPOSAL REQUIRED
CONTAINER # TTNU277420

I hereby declare that the contents of this consignment are fully and accurately described above the by the proper shipping name, and are classified, packaged, marked, and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]	1-4	1-4	00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
BILL OAKLEY	[signature]	1-3	1-4	00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

CONTINUATION SHEET

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.	Manifest Document No.	2. Page 2 of 2
	EXEMPT	AU007	

GENERATOR

3. Generator's Name and Mailing Address
US ARMY CORPS OF ENG (DOD DERP/FUDS, USACOE AMAKNAK & UNALASKA)
PO BOX 898, CEPOA-CO-SA-DR, ATTN: RONALD BROYLES)
ANCHORAGE, AK 99506-0898

4. Generator's Phone ( ) 907-753-5550

5. Transporter 3 Company Name	6. US EPA ID Number	A. Transporter's Phone
PHILIP SERVICES CORP	CAD063547996	800-321-1030
7. Transporter 4 Company Name	8. US EPA ID Number	B. Transporter's Phone
PRIME ENVIRONMENTAL SERVICES	CAL931061580	562-495-7777
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
US ECOLOGY HIGHWAY 95 (18 MI N OF LATHRUP WELLS) BEATTY, NV 89003	NVT330010000	800-239-3943

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a.			400	
b.			1200	
c.			55	
d.			55	

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

18. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: EXEMPT
Manifest Document No.: AU008
2. Page 1 of 1

3. Generator's Name and Mailing Address
US ARMY CORPS OF ENG (DOD DERP/FUDS, USACOE AMAKNAK & UNALASKA)
PO BOX 898, CEPOA-CO-SA-DR, ATTN: RONALD BROYLES)
ANCHORAGE, AK 99506-0898
4. Generator's Phone: 907-753-5550

5. Transporter 1 Company Name: SAMSON TUG & BARGE
6. US EPA ID Number: WAD988098849
A. Transporter's Phone: 206-767-7820

7. Transporter 2 Company Name: PRIME ENVIRONMENTAL SERVICES
8. US EPA ID Number: CAL933102403 8
B. Transporter's Phone: 562-495-7777

9. Designated Facility Name and Site Address
COLUMBIA RIDGE LANDFILL
18177 CEDAR SPRINGS LANE
ARLINGTON, OR 97812
10. US EPA ID Number: OR3910000000
C. Facility's Phone: 541-454-2030

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZARDOUS WASTE SOLID (NONREGULATED CLEANER)	002	DM	1,000	P
b. NON-HAZARDOUS WASTE SOLID (TRANSFORMER CARCASSES)	002	DM	1,200	P
c. NON-HAZARDOUS WASTE SOLID (EMPTY OR CRUSHED DRUMS)	002	DM	200	P
d. NON-HAZARDOUS WASTE SOLID (PLASTIC SHEETING & PPE)	001	DM	100	P

D. Additional Descriptions for Materials Listed Above
a) PROFILE# 550484, ITEM #'S 13,14 (2x55 G DM)
b) PROFILE# 550485, ITEM #'S 6,7 (2x85 G DM, PCB<50 PPM)
c) PROFILE# 550487, ITEM #'S 2,8 (2x85 G DM)
d) PROFILE# 550488, ITEM #'S 10 (1x85 G DM, PCB<50 PPM)

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
CERTIFICATES OF TREATMENT, RECYCLING, OR DISPOSAL REQUIRED
CONTAINER # TTNU277420

I hereby declare that the contents of this consignment are fully and accurately described above the by the proper shipping name, and are classified, packaged, marked, and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Ron Broyles		1	2	00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Rick Dalen		1	4	00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
EXEMPT	AU009	

GENERATOR

3. Generator's Name and Mailing Address
US ARMY CORPS OF ENG (DOD DERP/FUDS, USACOE AMAKNAK & UNALASKA)
PO BOX 898, CEPOA-CO-SA-DR, (ATTN: RONALD BROYLES)
ANCHORAGE, AK 99506-0898
4. Generator's Phone ( ) 907-753-5550

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
SAMSON TUG & BARGE	WAD980981849	206-767-7820
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
PRIME ENVIRONMENTAL SERVICES	CAL931024038	562-495-7777
9. Designated Facility Name and Site Address COLUMBIA RIDGE LANDFILL 18177 CEDAR SPRINGS LANE ARLINGTON, OR 97812	10. US EPA ID Number ORR390100000	C. Facility's Phone 541-454-2030

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZARDOUS WASTE SOLID (CARBON WITH FUELS)	005	DM	1250	P
b. NON-HAZARDOUS WASTE SOLID (DECON SOLIDS WITH FUELS)	003	DM	1500	P
c. End				
d.				

D. Additional Descriptions for Materials Listed Above
a) PROFILE# 550489, ITEM #S 35 (5x55 G DM)
b) PROFILE# 550490, ITEM #S 32 (3x55 G DM)

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
CERTIFICATES OF TREATMENT, RECYCLING, OR DISPOSAL REQUIRED
CONTAINER # TTNU 277420

I hereby declare that the contents of this consignment are fully and accurately described above the by the proper shipping name, and are classified, packaged, marked, and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Ron Broyles	Ron Broyle On Behalf of USACOE	1 2	1 2	0 0

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Rick Daley		1 2	1 4	0 0

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: EXEMPT
Manifest Document No.: AU010
2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address
US ARMY CORPS OF ENG (DOD DERP/FUDS, USACOE AMAKNAK & UNALASKA)
PO BOX 898, CEPOA-CO-SA-DR, ATTN: RONALD BROYLES)
ANCHORAGE, AK 99506-0898
4. Generator's Phone: 907-753-5550

5. Transporter 1 Company Name: SAMSON TUG & BARGE
6. US EPA ID Number: WAD980981849
A. Transporter's Phone: 206-767-7820

7. Transporter 2 Company Name: PRIME ENVIRONMENTAL SERVICES
8. US EPA ID Number: CAL931024038
B. Transporter's Phone: 562-495-7777

9. Designated Facility Name and Site Address
COLUMBIA RIDGE LANDFILL
18177 CEDAR SPRINGS LANE
ARLINGTON, OR 97812
10. US EPA ID Number: OR3910000000
C. Facility's Phone: 541-454-2030

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. RQ, ASBESTOS, 9, NA 2212, III (RQ=1, ERG# 171)	001	BA	1.0	P
b. End				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
a) PROFILE# 550491, ITEM #'S 36 (DOUBLE-BAGGED)

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
CERTIFICATES OF TREATMENT, RECYCLING, OR DISPOSAL REQUIRED
CONTAINER# STBU 706532

I hereby declare that the contents of this consignment are fully and accurately described above the by the proper shipping name, and are classified, packaged, marked, and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Ron Broyles	Ron Broyles	1.	2	00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Rick Daley		1.2	1.4	00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

GENERATOR'S COPY

MANIFEST - MANIFESTE

This Manifest conforms to all Federal and Provincial transport and environmental legislation requiring manifesting.
Ce manifeste est conforme aux législations fédérale et provinciale sur l'environnement et le transport, requérant un manifeste.

Manifest Reference No. / N° de référence du manifeste: 1811607-9

A Consignor (Generator) / Expediteur (Producteur)

Provincial ID No. / N° d'id. provincial

Company name / Nom de l'entreprise

Mailing address / Adresse postale | City / Ville | Province | Postal code / Code postal

Shipping site address / Origine de l'expédition

City / Ville | Province | Postal code / Code postal

Intended consignee / Destinataire prévu

Provincial ID No. / No d'id. provincial

Address / Adresse | City / Ville | Province | Postal code / Code postal

Receiving site address / Destination de l'expédition

City / Ville | Province | Postal code / Code postal

B Carrier / Transporteur

Provincial ID No. / N° d'id. provincial

Company name / Nom de l'entreprise

Address / Adresse

City / Ville | Prov. | Postal code / Code postal

	Registration No. / N° d'immatriculation	Prov.
Vehicle / Véhicule		
Trailer/Rail Car No. 1 / 1er remorque – wagon		
Trailer/Rail Car No. 2 / 2e remorque – wagon		

Point of entry / Point d'entrée | Point of exit / Point de sortie

Carrier Certification: *I declare that I have received waste as offered by the consignor in Part A for delivery to the intended consignee and that the information contained in Part B is complete and correct. / **Déclaration du transporteur :** J'atteste avoir reçu les déchets offerts par l'expéditeur dans la partie A en vue de leur livraison au destinataire choisi et que les renseignements inscrits à la partie B sont exacts et complets.*

Year / Année | Month / Mois | Day / Jour | Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimérie)

9 6 | 1 2 | 1 1 | Rick Olney

Signature | Tel. No. / N° de tél.

(519) 581-4077

C Consignee (Receiver) / Destinataire (Réceptionnaire)

Provincial ID No. / N° d'id. provincial

Reference nos. of other Manifest(s) used / N°'s de références des autres manifestes utilisés: A0010

Consignee information same as Intended Consignee in Part A / L'information à fournir par le destinataire est la même qu'en A

☐ Yes / Oui ☐ No, complete the boxed area below

Company name / Nom de l'entreprise

Address / Adresse

City / Ville | Province | Postal code / Code postal

Receiving site address / Destination de l'expédition

City / Ville | Province | Postal code / Code postal

Date received / Date de reception: Year / Année | Month / Mois | Day / Jour

Time / Heure: ☐ A.M. ☐ P.M.

Physical state / État physique	Shipping name of waste / Appellation réglementaire du déchet	Waste identification / Identification du déchet: Provincial No. / N° (Quebec-Ontario only) (Quebec-Ontario seul)	Waste identification: TDGA/PIN LTMD/NIP	Quantity shipped / Quantité expédiée	Units / Unités	Classification	Packaging: Packing group / Groupe d'emballage	Packaging: No. / Nbre	Packaging: Codes int.-ext.
				5.0	K	9.2	III	01	05

Quantity received / Quantité reçu	Units / Unités	Identify any shipment discrepancy problems. Attach addendum if necessary. / Indiquer toute différence relative à l'expédition. Annexer une feuille au besoin.	Handling code / Code de manutention	Decontamination / Décontamination: Packaging / Contenants Yes / Oui	Packaging / Contenants No / Non	Vehicle / Véhicule Yes / Oui	Vehicle / Véhicule No / Non

Special handling/Emergency instructions / Manutention spéciale/instructions d'urgence ☐ Attached / Ci-jointes ☐ Below / Ci-dessous

Circulation no. – Quebec only / N° de circulation – Réservée au Québec

If handling code "Other" (specify) / Si code de manutention "divers", spécifier

If waste to be transferred, specify intended company name / Si les déchets doivent être transférés, préciser le nom du destinataire

Provincial ID No. / N° d'id. provincial

Address / Adresse | City / Ville | Prov.

Date shipped / Date d'expédition: Year / Année | Month / Mois | Day / Jour

9 6 | 1 2 | 1 3

Time / Heure: ☐ A.M. ☑ P.M.

Scheduled arrival date / Date d'arrivée prévue: Year / Année | Month / Mois | Day / Jour

Consignor Certification: *I declare that the information contained in Part A is correct and complete.*
Déclaration de l'expéditeur : *Je déclare que tous les renseignements à la partie A sont véridiques et complets.*

Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie) | Signature | Tel. no. / N° de tél.

Tony Pajerka | | 807 5633322

Consignee Certification: *I declare that the information contained in Part C is correct and complete. **Déclaration du l'expéditeur :** Je déclare que tous les renseignements à la partie C sont véridiques et complets.*

Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie)

Signature | Tel. no. / N° de tél.

MOE 04-1917 (06/99)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: EXEMPT
Manifest Document No.: AU011
2. Page 1 of 1

3. Generator's Name and Mailing Address
US ARMY CORPS OF ENG (DOD DERP/FUDS, USACOE AMAKNAK & UNALASKA)
PO BOX 898, CEPOA-CO-SA-DR, ATTN: RONALD BROYLES)
ANCHORAGE, AK 99506-0898
4. Generator's Phone ( ) 907-753-5550

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
SAMSON TUG & BARGE	WAD980981849	206-767-7820
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
PRIME ENVIRONMENTAL SERVICES	CAL931024038	562-495-7777
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
COLUMBIA RIDGE LANDFILL 18177 CEDAR SPRINGS LANE ARLINGTON, OR 97812	ORR390100000	541-454-2030

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. MATERIAL NOT REGULATED (DEBRIS CONTAMINATED WITH OILY SLUDGE)	011	DM	1025	P
b. MATERIAL NOT REGULATED (DEBRIS CONTAMINATED WITH OILY SLUDGE)	007	BA	1100000	P
c. MATERIAL NOT REGULATED (DEBRIS CONTAMINATED WITH OILY SLUDGE)	001	CF	1200	P
d. MATERIAL NOT REGULATED (DEBRIS CONTAMINATED WITH OILY SLUDGE)	001	CW	45500	P

D. Additional Descriptions for Materials Listed Above
a) PROFILE# 550486, ITEM #'S 20,24,26,27,29,30,34 (10x55 G DM,1x85 G DM)
b) PROFILE# 550486, ITEM #'S 21 (7x1 CY SUPERSACKS)
c) PROFILE# 550486, ITEM #'S 22 (1 x FISH TOTE)
d) PROFILE# 550486, ITEM #'S 23 (1 x PALLET)

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
CERTIFICATES OF TREATMENT, RECYCLING, OR DISPOSAL REQUIRED
CONTAINER # TTNU 277420 FOR ITEMS #'S 20, 24, 26, 27, 29, 30,
CONTAINER # STBU 700532 FOR ITEM # 34
CONTAINER # STBU 700376 FOR ITEMS # 21, 22, 23
I hereby declare that the contents of this consignment are fully and accurately described above the by the proper shipping name, and are classified, packaged, marked, and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Ron Broyles	Ron Broyles	1.2	1.2	5.0

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Rick Daley		1.2	1.4	5.0

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

GENERATOR'S COPY

APPENDIX J

Method 3 Calculations

2674 Site

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
Chrysene	Organic	930		7590
DRO (Total)	Petroleum	8300	12500	3580
Fluorene	Organic	3320		3840
Naphthalene	Organic	3320		560
Pyrene	Organic	2490		22000

Chemical	Notes
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.016	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 6/7/01

Enter site name to view on printout: 3475

If you wish to calculate cumulative risks based on concentrations that have been entered for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

STEP 5:

The following are cumulative cancer risks and hazard quotients by chemical. Note that petroleum ranges (GRO, DRO, and RRO) are not included in cumulative risks. Also, if PCBs or dioxins are present at the site, the cumulative risks associated with these chemicals may also need to be considered; please contact the ADEC project manager for your site for information on how to address these chemicals.

Chemical Name	Concentration (mg/kg)	Cancer Risk	Hazard Quotient
Chrysene	0.0026	2.8e-11	0
Fluorene	0.0053	0	0.0000016
Naphthalene	0.0076	0	0.0000023
Pyrene	0.0056	0	0.0000023

Overall totals are as follows:

Hazard Index: 0.0000061
Cancer Risk: 0.000000000028

These cumulative risk levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cumulative risks. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

To revise concentrations and recalculate cumulative risks, click here. Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

Contaminated Sites Remediation Program

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
Chrysene	Organic	930		23200
DRO (Total)	Petroleum	8300	12500	11000
Fluorene	Organic	3320		11800
Naphthalene	Organic	3320		1710
Pyrene	Organic	2490		67400

Chemical	Notes
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.049	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 3/2/01
Enter site name to view on printout: 3475

If you wish to calculate cumulative risks based on concentrations that have been entered for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

STEP 5:

The following are cumulative cancer risks and hazard quotients by chemical. Note that petroleum ranges (GRO, DRO, and RRO) are not included in cumulative risks. Also, if PCBs or dioxins are present at the site, the cumulative risks associated with these chemicals may also need to be considered; please contact the ADEC project manager for your site for information on how to address these chemicals.

Chemical Name	Concentration (mg/kg)	Cancer Risk	Hazard Quotient
Chrysene	0.0026	2.8e-11	0
Fluorene	0.0052	0	0.0000016
Naphthalene	0.0076	0	0.0000023
Pyrene	0.0056	0	0.0000023

Overall totals are as follows:

Hazard Index: 0.0000061
Cancer Risk: 0.000000000028

These cumulative risk levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cumulative risks. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

To revise concentrations and recalculate cumulative risks, click here. Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

3465 Site

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
DRO (Total)	Petroleum	8300	12500	12500
RRO (Total)	Petroleum	8300	22000	22000

Chemical	Notes
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.
RRO (Total)	The Maximum Allowable RRO concentration is 22000 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.24	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 3/2/01
Enter site name to view on printout: 3465

If you wish to calculate cumulative risks based on concentrations that have been entered for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

STEP 5:

The following are cumulative cancer risks and hazard quotients by chemical. Note that petroleum ranges (GRO, DRO, and RRO) are not included in cumulative risks. Also, if PCBs or dioxins are present at the site, the cumulative risks associated with these chemicals may also need to be considered; please contact the ADEC project manager for your site for information on how to address these chemicals.

Overall totals are as follows:

Hazard Index:
Cancer Risk:

These cumulative risk levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cumulative risks. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

To revise concentrations and recalculate cumulative risks, click here. Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

3475 Site

2766 Site

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
DRO (Total)	Petroleum	8300	12500	6660
RRO (Total)	Petroleum	8300	22000	22000

Chemical	Notes
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.
RRO (Total)	The Maximum Allowable RRO concentration is 22000 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.02975	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 3/2/01
Enter site name to view on printout: 2766

If you wish to calculate cumulative risks based on concentrations that have been entered for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

3760 Site

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
DRO (Total)	Petroleum	8300	12500	12100
Methylene chloride	Organic	906	325	0.05
RRO (Total)	Petroleum	8300	22000	22000

Chemical	Notes
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.
RRO (Total)	The Maximum Allowable RRO concentration is 22000 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.054	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 3/2/01
Enter site name to view on printout: 3760

If you wish to calculate cumulative risks based on concentrations that have been entered for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

STEP 5:

The following are cumulative cancer risks and hazard quotients by chemical. Note that petroleum ranges (GRO, DRO, and RRO) are not included in cumulative risks. Also, if PCBs or dioxins are present at the site, the cumulative risks associated with these chemicals may also need to be considered; please contact the ADEC project manager for your site for information on how to address these chemicals.

Chemical Name	Concentration (mg/kg)	Cancer Risk	Hazard Quotient
Methylene chloride	0.022	9.2e-10	0.0000055

Overall totals are as follows:

Hazard Index: 0.0000055
Cancer Risk: 0.00000000092

These cumulative risk levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cumulative risks. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

To revise concentrations and recalculate cumulative risks, click here. Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

3860 Site

Contaminated Sites Remediation Program

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
Benzo(a) anthracene	Organic	9.3		156
Benzo(a)pyrene	Organic	0.93		80.2
Benzo(b) fluoranthene	Organic	9.3		484
Benzo(k) fluoranthene	Organic	93		4840
Chrysene	Organic	930		15600
DRO (Total)	Petroleum	8300	12500	7390
Fluoranthene	Organic	3320		61400
Fluorene	Organic	3320		7920
Indeno(1,2,3-c,d) pyrene	Organic	9.3		1360
Naphthalene	Organic	3320		1150
Pyrene	Organic	2490		45400
RRO (Total)	Petroleum	8300	22000	22000
Toluene	Organic	16600	3240	74.2
Acenaphthene	Organic	4980		6130
Acetone	Organic	8300		9.53
Anthracene	Organic	24900		128000

Chemical	Notes
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.
RRO (Total)	The Maximum Allowable RRO concentration is 22000 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the

file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.033	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 3/2/01
Enter site name to view on printout: 3860

If you wish to calculate cumulative risks based on concentrations that have been entered for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

STEP 5:

The following are cumulative cancer risks and hazard quotients by chemical. Note that petroleum ranges (GRO, DRO, and RRO) are not included in cumulative risks. Also, if PCBs or dioxins are present at the site, the cumulative risks associated with these chemicals may also need to be considered; please contact the ADEC project manager for your site for information on how to address these chemicals.

Chemical Name	Concentration (mg/kg)	Cancer Risk	Hazard Quotient
Acenaphthene	0.044	0	0.0000088
Acetone	0.97	0	0.00012
Anthracene	0.0045	0	1.8e-7
Benzo(a) anthracene	0.018	1.9e-8	0
Benzo(a)pyrene	0.017	1.8e-7	0
Benzo(b) fluoranthene	0.021	2.3e-8	0
Benzo(k) fluoranthene	0.0069	7.4e-10	0
Chrysene	0.037	4e-10	0
Fluoranthene	0.03	0	0.000009
Fluorene	0.15	0	0.000045
Indeno(1,2,3-c,d) pyrene	0.012	1.3e-8	0
Naphthalene	0.47	0	0.00014
Pyrene	0.038	0	0.000015
Toluene	0.019	0	0.0000052

Overall totals are as follows:

Hazard Index: 0.00034
Cancer Risk: 0.00000024

These cumulative risk levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cumulative risks. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

To revise concentrations and recalculate cumulative risks, click here. Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

3065 Site

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
Acenaphthene	Organic	4980		4330
Anthracene	Organic	24900		90100
Benzo(a) anthracene	Organic	9.3		110
Benzo(a)pyrene	Organic	0.93		56.6
Benzo(b) fluoranthene	Organic	9.3		341
Benzo(k) fluoranthene	Organic	93		3410
Chrysene	Organic	930		11000
Dibenzo(a,h) anthracene	Organic	0.93		105
DRO (Total)	Petroleum	8300	12500	5220
Fluoranthene	Organic	3320		43400
Fluorene	Organic	3320		5600
Indeno(1,2,3-c,d) pyrene	Organic	9.3		963
Naphthalene	Organic	3320		814
Pyrene	Organic	2490		32100

Chemical	Notes
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults

that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.0233	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 3/2/01
Enter site name to view on printout: 3065

If you wish to calculate cumulative risks based on concentrations that have been entered for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

LSA Drums

LSA Drum Location #1

Contaminated Sites Remediation Program

STEP 5: No default changes

The following are cumulative cancer risks and hazard quotients by chemical. Note that petroleum ranges (GRO, DRO, and RRO) are not included in cumulative risks. Also, if PCBs or dioxins are present at the site, the cumulative risks associated with these chemicals may also need to be considered; please contact the ADEC project manager for your site for information on how to address these chemicals.

Chemical Name	Concentration (mg/kg)	Cancer Risk	Hazard Quotient
Barium	40	0	0.0069
Cadmium	0.098	0	0.0012
Chromium (total)	6.6	0	0.016
Lead	13	0	0
Mercury	0.0489	0	0.0037
Toluene	0.024	0	0.000024

Overall totals are as follows:

Hazard Index: 0.028
Cancer Risk: 0

These cumulative risk levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cumulative risks. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

To revise concentrations and recalculate cumulative risks, click here. Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

LSA Drum Location #2

Contaminated Sites Remediation Program

STEP 5: No default changes

The following are cumulative cancer risks and hazard quotients by chemical. Note that petroleum ranges (GRO, DRO, and RRO) are not included in cumulative risks. Also, if PCBs or dioxins are present at the site, the cumulative risks associated with these chemicals may also need to be considered; please contact the ADEC project manager for your site for information on how to address these chemicals.

Chemical Name	Concentration (mg/kg)	Cancer Risk	Hazard Quotient
Acetone	0.47	0	0.000057
Barium	46	0	0.0079
Chromium (total)	7.9	0	0.019
Lead	3.6	0	0
Mercury	0.0716	0	0.0055
Selenium	1.8	0	0.0043

Overall totals are as follows:

Hazard Index: 0.037
Cancer Risk: 0

These cumulative risk levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cumulative risks. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

To revise concentrations and recalculate cumulative risks, click here. Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

LSA Drum Location #3

Contaminated Sites Remediation Program

STEP 5:

The following are cumulative cancer risks and hazard quotients by chemical. Note that petroleum ranges (GRO, DRO, and RRO) are not included in cumulative risks. Also, if PCBs or dioxins are present at the site, the cumulative risks associated with these chemicals may also need to be considered; please contact the ADEC project manager for your site for information on how to address these chemicals.

Chemical Name	Concentration (mg/kg)	Cancer Risk	Hazard Quotient
Barium	29	0	0.005
Chromium (total)	3.4	0	0.0082
Lead	12	0	0
Mercury	0.039	0	0.003
Selenium	1.5	0	0.0036

Overall totals are as follows:

Hazard Index: 0.02
Cancer Risk: 0

These cumulative risk levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cumulative risks. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

To revise concentrations and recalculate cumulative risks, click here. Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

LSA Drum Location #4

Contaminated Sites Remediation Program

STEP 5: No default changes

The following are cumulative cancer risks and hazard quotients by chemical. Note that petroleum ranges (GRO, DRO, and RRO) are not included in cumulative risks. Also, if PCBs or dioxins are present at the site, the cumulative risks associated with these chemicals may also need to be considered; please contact the ADEC project manager for your site for information on how to address these chemicals.

Chemical Name	Concentration (mg/kg)	Cancer Risk	Hazard Quotient
Acetone	0.47	0	0.000057
Arsenic	10	0.000022	0.4
Barium	46	0	0.0079
Cadmium	0.098	0	0.0012
Chromium (total)	77	0	0.19
Lead	220	0	0
Mercury	0.243	0	0.019
Selenium	9.8	0	0.024
Toluene	0.024	0	0.000024

Overall totals are as follows:

Hazard Index: 0.64
Cancer Risk: 0.000022

Total risks exceed the benchmark values of a hazard index of 1 and/or a cancer risk of 0.00001. Cleanup levels must be lowered to meet these cumulative risk benchmarks.

These cumulative risk levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cumulative risks. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

To revise concentrations and recalculate cumulative risks, click here. Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

Bldg 627

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
Methylene chloride	Organic	906	283	0.0392
Naphthalene	Organic	3320		1340
RRO (Total)	Petroleum	8300	22000	22000
Benzo(a)pyrene	Organic	0.93		93.6
DRO (Total)	Petroleum	8300	12500	8620

Chemical	Notes
RRO (Total)	The Maximum Allowable RRO concentration is 22000 mg/kg.
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.0385	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 3/3/01
Enter site name to view on printout: Bldg 627

If you wish to calculate cumulative risks based on concentrations that have been entered for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

Ballyhoo Drums

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
Fluoranthene	Organic	3320		44700
Fluorene	Organic	3320		5760
Indeno(1,2,3-c,d) pyrene	Organic	9.3		992
Lead	Inorganic			
Naphthalene	Organic	3320		838
Pyrene	Organic	2490		33000
RRO (Total)	Petroleum	8300	22000	22000
Zinc	Inorganic	24900		8150
Acenaphthene	Organic	4980		4460
Anthracene	Organic	24900		92800
Barium	Inorganic	5810		982
Benzo(a) anthracene	Organic	9.3		114
Benzo(a)pyrene	Organic	0.93		58.3
Benzo(b) fluoranthene	Organic	9.3		352
Benzo(k) fluoranthene	Organic	93		3520
Chrysene	Organic	930		11400
Dibenzo(a,h) anthracene	Organic	0.93		109
DRO (Total)	Petroleum	8300	12500	5380

Chemical	Notes
Lead	Lead cleanup levels are 400 mg/kg for residential sites and 1000 mg/kg for commercial sites.
RRO (Total)	The Maximum Allowable RRO concentration is 22000 mg/kg.
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.024	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 3/3/01
Enter site name to view on printout: BH Drng Gully Drums

If you wish to calculate cumulative risks based on concentrations that have been entered

for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

STEP 5:

The following are cumulative cancer risks and hazard quotients by chemical. Note that petroleum ranges (GRO, DRO, and RRO) are not included in cumulative risks. Also, if PCBs or dioxins are present at the site, the cumulative risks associated with these chemicals may also need to be considered; please contact the ADEC project manager for your site for information on how to address these chemicals.

Chemical Name	Concentration (mg/kg)	Cancer Risk	Hazard Quotient
Acenaphthene	0.01	0	0.000002
Anthracene	0.08	0	0.0000032
Barium	63	0	0.011
Benzo(a) anthracene	0.23	2.5e-7	0
Benzo(a)pyrene	0.34	0.0000037	0
Benzo(b) fluoranthene	0.39	4.2e-7	0
Benzo(k) fluoranthene	0.13	1.4e-8	0
Chrysene	0.28	3e-9	0
Dibenzo(a,h) anthracene	0.05	5.4e-7	0
Fluoranthene	0.45	0	0.00014
Fluorene	0.017	0	0.0000051
Indeno(1,2,3-c,d) pyrene	0.31	3.3e-7	0
Lead	39	0	0
Naphthalene	0.071	0	0.000021
Pyrene	0.54	0	0.00022
Zinc	110	0	0.0044

Overall totals are as follows:

Hazard Index: 0.016
Cancer Risk: 0.0000052

These cumulative risk levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cumulative risks. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

Ballyhoo Spit Tank Farm

Contaminated Sites Remediation Program

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
Ethylbenzene	Organic	8300	947	47.3
Fluoranthene	Organic	3320		27900
Fluorene	Organic	3320		3600
GRO (Total)	Petroleum	1400	1400	1400
Indeno(1,2,3-c,d) pyrene	Organic	9.3		620
Naphthalene	Organic	3320		525
Pyrene	Organic	2490		20600
RRO (Total)	Petroleum	8300	22000	22000
Xylenes	Organic	166000		675
Acenaphthene	Organic	4980		2790
Anthracene	Organic	24900		58000
Benzo(a) anthracene	Organic	9.3		71.1
Benzo(a)pyrene	Organic	0.93		36.5
Benzo(b) fluoranthene	Organic	9.3		220
Chrysene	Organic	930		7110
DRO (Total)	Petroleum	8300	12500	3360

Chemical	Notes
GRO (Total)	The Maximum Allowable GRO concentration is 1400 mg/kg.
RRO (Total)	The Maximum Allowable RRO concentration is 22000 mg/kg.
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the

calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.015	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 3/3/01
Enter site name to view on printout: BH Spit Tank Farm

If you wish to calculate cumulative risks based on concentrations that have been entered for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

Contaminated Sites Remediation Program

STEP 5:

The following are cumulative cancer risks and hazard quotients by chemical. Note that petroleum ranges (GRO, DRO, and RRO) are not included in cumulative risks. Also, if PCBs or dioxins are present at the site, the cumulative risks associated with these chemicals may also need to be considered; please contact the ADEC project manager for your site for information on how to address these chemicals.

Chemical Name	Concentration (mg/kg)	Cancer Risk	Hazard Quotient
Acenaphthene	0.089	0	0.000018
Anthracene	0.057	0	0.0000023
Benzo(a) anthracene	0.018	1.9e-8	0
Benzo(a)pyrene	0.015	1.6e-7	0
Benzo(b) fluoranthene	0.013	1.4e-8	0
Chrysene	0.043	4.6e-10	0
Ethylbenzene	2.8	0	0.00059
Fluoranthene	0.02	0	0.000006
Fluorene	0.16	0	0.000048
Indeno(1,2,3-c,d) pyrene	0.0056	6e-9	0
Naphthalene	0.11	0	0.000033
Pyrene	0.05	0	0.00002
Xylenes	10	0	0.00006

Overall totals are as follows:

Hazard Index: 0.00078
Cancer Risk: 0.0000002

These cumulative risk levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cumulative risks. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

To revise concentrations and recalculate cumulative risks, click here. Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

Fort Mears Landfill South

Contaminated Sites Remediation Program

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
Carbon tetrachloride	Organic	52.2	3.56	0.0567
DRO (Total)	Petroleum	8300	12500	832
RRO (Total)	Petroleum	8300	22000	22000

Chemical	Notes
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.
RRO (Total)	The Maximum Allowable RRO concentration is 22000 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.0037	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 3/4/01
Enter site name to view on printout: FM Landfill (south)

If you wish to calculate cumulative risks based on concentrations that have been entered for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

Naval Laundry Facility

Contaminated Sites Remediation Program

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
Carbon tetrachloride	Organic	52.2	2.84	0.0355
DRO (Total)	Petroleum	8300	12500	373
RRO (Total)	Petroleum	8300	22000	16100

Chemical	Notes
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.
RRO (Total)	The Maximum Allowable RRO concentration is 22000 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.00165	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 3/4/01
Enter site name to view on printout: Naval Laundry Fac.

If you wish to calculate cumulative risks based on concentrations that have been entered for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

Ski Bowl Generator Building

Contaminated Sites Remediation Program

STEP 4:

The following are the calculated cleanup levels for each chemical and pathway. Where values are provided for more than one pathway, the lowest of the values should be used as the soil cleanup level. All cleanup levels are in units of mg/kg. Any other chemical-specific requirements that must be considered follow the table of cleanup levels.

Chemical Name	Chemical Type	Ingestion	Inhalation	Migration to GW
DRO (Total)	Petroleum	8300	12500	6940
Methylene chloride	Organic	906	260	0.034
RRO (Total)	Petroleum	8300	22000	22000

Chemical	Notes
DRO (Total)	The Maximum Allowable DRO concentration is 12500 mg/kg.
RRO (Total)	The Maximum Allowable RRO concentration is 22000 mg/kg.

These cleanup levels should be printed. To print, please select the print function on your web browser. This page may also be saved and emailed for documentation of the calculated cleanup levels. For best results, save the page as a "Web Archive for email" file (.mht) if your browser supports this; in Internet Explorer 5 choose "Save as..." from the file menu and change the "Save as type" to "Web Archive for email". Other browsers should have a similar choice.

For reference, the parameters used to calculate these levels are as follows (with defaults that have been changed listed in parentheses):

Volatilization Pathway:

ρ_b: Dry soil bulk density (g/cm^3):	1.5	(Default: 1.5)
n: Total soil porosity (L_{pore}/L_{soil}):	0.434	(Default: 0.434)
Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.15	(Default: 0.15)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.284	(Default: 0.284)
w: average soil moisture content (g_{water}/g_{soil}):	0.1	(Default: 0.1)
f_{oc}: organic carbon content of soil (g/g):	0.031	(Default: 0.001)

Groundwater Pathway:

Θ_w: Water-filled soil porosity (L_{water}/L_{soil}):	0.3	(Default: 0.3)
Θ_a: Air-filled soil porosity (L_{air}/L_{soil}):	0.13	(Default: 0.13)
w: average soil moisture content (g_{water}/g_{soil}):	0.2	(Default: 0.2)
K: aquifer hydraulic conductivity (m/yr):	876	(Default: 876)
i: hydraulic gradient (m/m):	0.002	(Default: 0.002)
L: source length parallel to groundwater flow (m):	32	(Default: 32)
I: infiltration rate (m/yr):	0.6	(Default: 0.6)
d_a: aquifer thickness (m):	10	(Default: 10)

The exposure scenario and zone for this project: Over 40-inch Zone - Residential Exposures
Today's date: 3/4/01
Enter site name to view on printout: Ski Bowl Gnrtr Bldg

If you wish to calculate cumulative risks based on concentrations that have been entered for the site, select the "continue" button below. If you do not wish to complete this step, please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Guidance on Cleanup Standards Equations and Input Parameters for details.

Continue

Alternatively, to return to the first step to rerun the calculator or change parameters, click here.

APPENDIX K

Response to Comments

REVIEW COMMENTS

PROJECT: Amaknak/Unalaska Islands
DOCUMENT: Draft 2000 Islandwide SI/RI/IRA Report, dated March 2001
LOCATION: Amaknak and Unalaska Islands, Alaska

Alaska Department of Environmental Conservation (ADEC)	DATE: April 16, 2001 REVIEWER: Halverson, DEC PHONE: (907) 269-7545	Action taken on comment by: Jacobs Engineering Group, Inc.

Item No.	Drawing Sheet No., Spec. Para.	COMMENTS	REVIEW CONFERENCE A - comment accepted W - comment withdrawn (if neither, explain)	CONTRACTOR RESPONSE	USAED RESPONSE ACCEPTANCE (A-AGREE) (D-DISAGREE)
1	General – Executive Summary	I am not providing specific comments on the executive summary, however, comments on the remainder of the report need to be addressed and then appropriate changes need to be incorporated into the summary.	A	Changes made as a result of these comments have been reflected in the executive summary, where applicable.	
2	General	Several sections of the state that DRO measured in specific samples is attributed or partially attributed to "biogenic interference". Appendix H contains copies of chromatograms, some of which contain notes stating "fuel", "bio", "maybe both" or "fuel and bio". However, no further documentation or other supporting information is presented. Statements attributing the DRO to biogenic sources should be deleted or better supported. If the reported results are less than the proposed cleanup levels, the statements are not necessary.	A	References to biogenic interference will be removed from the appropriate sites.	
3	2-3, 2nd para	Either this section or the groundwater section should state that drinking water and processing water are also obtained from City water wells in lower Unalaska Valley.	A	Text has been added to Section 2.3 that states, "A secondary source of drinking and processing water is obtained from City water wells in lower Unalaska Valley."	
4	2-3, 3rd para	It states, "On rare occasions groundwater may occur in fractured bedrock." It is unclear what information this is based on. The words "on rare occasions" should be deleted.	A	The text "on rare occasions" has been deleted.	
5	3-6, guidance documents	Please note, the following changes in guidance, which should be referenced and used: - "Guidance on Cleanup Levels Equations and Input Parameters" was updated on July 28, 1999 (no substantive changes in the guidance). - The "Risk Assessment Procedures Manual" was revised and updated on June 8, 2000. - "Guidance on Calculating Cumulative Risk – Final	A	The references have been updated.	

REVIEW COMMENTS

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		Draft, December 15, 2000" These and other DEC contaminated sites program guidance documents are posted on our web page at http://www.state.ak.us/local/akpages/ENV.CONSERV/dspar/csites/ind_docs.htm			
6	3-8, 2nd para and remainder of the report related to TOC	It states that a minimum of two soil samples were collected from each site at the same depth as contamination, but from background areas, and analyzed for TOC. However, four of the sites listed in Table 3-2 have only one TOC sample result listed. The DQOs in the workplan (Table 1-1) call collecting and analyzing TOC samples at two foot depth intervals within the contaminated zone [same depth, but from an uncontaminated area]. A minimum of 2 TOC samples were to be collected from each site where method 3 migration to groundwater cleanup levels were to be proposed. It is unclear from the report that this was done. The report should clearly show how this DQO was achieved in order for method 3 cleanup levels to be approved. Several of the TOC samples described in Table 3-2 are reported to be collected from "uncontaminated stockpiles" however, no details are provided on the depths the soil samples were collected from. The sample collection depth and soil type should be included in Table 3-2. The Workplan calls for analyzing soil samples for TOC using method 415.2M/Lab SOP. The lab data reports list "KAHNTOC", which I am not familiar with, as the method used. Please clarify how the TOC samples were analyzed.	A	Text has been changed to state that, "In general, two TOC soil samples were collected from each site." Sections where TOC data is utilized have been reviewed and additional information provided, where possible. In cases where TOC DQOs were not achieved, additional sampling has been recommended and the proposed method 3 cleanup levels have been replaced with method 2 levels through the section. The method 3 levels will be re-proposed after additional TOC sampling (within the depths of the contaminated zone) has been successfully accomplished. The sample collection depths have been added to Table 3-2. Description of the soils encountered are summarized in the text for each site. TOC samples were analyzed using the Modified Lloyd Kahn Method. A copy of the procedure is available upon request.	

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7	3-8, last para	The first word should be "Criteria" rather than "Guidelines".	A	The first word has been changed to "Criteria".	
8	3-12 and 3-13, Cumulative Rsk	It appears that cumulative risks were calculated following outdated guidance. For example, pathway specific RBCs should be used in the calculations rather than using the Table B1, B2 and C values. Also, exposure via ingestion and inhalation pathways needs to be addressed (migration to groundwater is not included). The current guidance, referenced above, should be followed. Section 3.3.5 will not be necessary if the current guidance is used.	A	Cumulative risks were calculated using the ADEC Method 3 web calculator. Text in Section 3.3.4 had been changed to reflect this. Section 3.3.5 has been removed in its entirety.	
9	Fig. 5-2 and pg. 5-6, 3rd para (UST 2674)	The text states that elevated PID readings indicated possible contamination and that field screening results are shown on Fig. 5-2. However, the PID screening results are not included on the figure or reported in the text. Please add them to the figure. Also, it states that three TOC samples were collected from the uncontaminated soil stockpile. The depth this soil was removed from should be provided.	A	PID screening results were a preliminary screening tool and are not presented on the figures; only Hanby™ or analytical results are shown. The PID levels (X ppm) have been included in the text. The approximate depth that uncontaminated soil was removed has been added to Section 5.1.2.2 and the corresponding depths that TOC sample(s) were collected have been added to Table 3-2.	
10	Table 5-1 and other similar tables	Proposed method 3 cleanup levels should be included in the table rather than just the method 2 levels.	A	The proposed Method 3 cleanup levels have been added to Table 5-1 and other similar tables.	
11	Fig. 5-3, pg. 5-9	Please include the analytical results from prior sampling events, as was done with the other figures.	A	Prior analytical results at Building 2664 have been added to Figure 5-3.	
12	5-13, 3rd and 4th para	The field screening results from buildings 3260 and 3265 were all reported to be 0.0 on the PID and < 1 mg/kg using the Hanby Kit; however, DRO was measured up to 9200	A	At sites where field screening did not correlate well with analytical results, biogenic	

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		the Hanby Kit; however, DRO was measured up to 9300 mg/kg. This is one of several areas where the field screening did not correlate well with the laboratory data, which raises question on the proposed field screening and action levels as discussed during the workplan development. The text states that DRO in one sample appears to be from biogenic interference and DRO in three other samples appears to be partially due to biogenic interference. As noted above, these statement should be deleted or need to be better supported. Also, it in not clear which samples are being referred to. The text refers to appendix H for details; however, it is not clear which chromatograms correlate with specific samples in the Tables and text (this is an issue with other similar sections of the report also). The last sentence states that no contamination was found in the building 3265 sample above the method 2 levels. However, a soil sample from 3265 WP-1 contained 7710 mg/kg DRO.		interferences were shown to contribute to the high analytical result(s). Biogenic material would not have affected field screening results; therefore, field screening results were lower. See response to comment no. 2. The text in Section 5.3.2.2 has been changed to clarify that no contamination was found in the soil sample from HB-1; though soil contamination was detected in the 1.5-2.5' bgs soil sample at well point 3265 WP-1.	
13	Table 5-3, pg. 5-15 and all similar tables	The tables should list the proposed cleanup levels and explain, in footnotes, their basis. For example, for DRO if the proposed method 3 migration to gw cleanup level is higher than the method 2 ingestion level, then the ingestion level should be listed and footnotes should clarify that it is based on ingestion and should list the proposed migration to gw level. If a method 3 migration to gw cleanup level is proposed as a cleanup level, it should be listed.	A	Table 5-3 (and other similar tables throughout the text) has been changed to reflect the proposed cleanup levels and their basis.	
14	Table 5-4 and others	The third column should be titled "Screening level" rather than "DEC Cleanup Level".	A	The title of the third column in Table 5-4 (and other similar tables throughout the document)	

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	with sediment data			has been changed to "Screening Level."	
15	5-18, 2nd and 3rd para (UST 3260 and 3265)	The second paragraph refers to a method 3 ingestion level for DRO. It looks like this should refer to the method 2 ingestion level. It then states that since soil exceeding this level is a foot below ground surface, there is no completed pathway. However, the soil cleanup levels based on ingestion and inhalation apply to soil from the ground surface to a depth of fifteen feet below ground surface (see 18 AAC 75.340(j)(2)). The statement should be deleted. The third paragraph states that since contaminants have not migrated to the creek in fifty years it is unlikely that they will now. However, PAHs were found in the creek sediments at levels significantly above the screening levels. It states that a removal, even if done carefully, would result in some sediment release downstream. However, leaving the sediment in place and then subsequent development or construction taking place that is not done as cautiously as under a cleanup project could result in a larger downstream impact. Additional sampling is warranted as proposed. Subsequent actions need to be based on the overall data. Also, please note that a landfill is present in this general area from FUDS work done in 1984-85. It is unclear whether buildings were burned in this area prior to landfilling during this cleanup work. Further research on this may help in identifying the PAH source(s).	A	The text has been changed to refer to the method 2 ingestion level. The last sentence in the 2nd paragraph of Section 5.3.3 has been deleted. Comment noted. It is unlikely future use of soils in the area will occur due to its location in a wetland. The recommended future sampling will occur and future actions, if necessary, assessed at that time. Comment noted.	

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16	5-25, last bullet	Recommend amending the text to state, "The sediment sample contained one PAH at a level greater than, but within two times, the conservative Toxicological Benchmarks . . ." and deleting the word "extremely".	A	The recommended text has been added and the word "extremely" has been deleted.	
17	5-28, 5-29 and Fig. 5-6, pg 5-27 (UST 3475)	It appears that the highest levels of DRO measured in soil remaining at the site were in samples collected from 4 to 6 feet bgs. However, the TOC samples were collected from a "clean stockpile" (depth not provided) and 2 and 4 feet bgs. The reported TOC levels vary from 16,000 mg/kg to 95,000 mg/kg, which is a significant variation. It also appears that the highest TOC level was from an area with an elevated DRO level and that it should be omitted from the TOC calculation. The resulting method 3 migration to gw level would still be higher than the measured site levels.	A	In both test pits excavated at UST 3475, the soil types encountered between 2 and 6 feet were described as an organic silt. Therefore it is reasonable to assume that TOC levels at 6 feet bgs would not vary significantly from those measured at 3 and 4 feet bgs. As noted, using the most conservative TOC value (16,000 mg/kg), would still result in measured site levels below method 3 migration to gw levels. The TOC value collected at the location with the highest DRO concentration has been removed from the method 3 calculation.	
18	5-37, 5th para (UST 2762)	The conclusions state that no contaminants were detected in soil or groundwater that exceed the method 2 and Table C cleanup levels. However, the text and figures show that residual DRO contaminated soil remains beneath the building and power lines. Sample 04SO from 1997 contained 32,000 mg/kg DRO and was collected at 6.5 feet bgs. The conclusions should include information on the residual contamination and a recommendation for institutional controls addressing future management of this soil.	A	Text has been added to Section 5.6.3 to reflect that there is contamination remaining under Building 2762 and under the power line. Additional recommendations have been proposed that include institutional controls to address future management of this soil.	
19	5-55	2-Butanone, also known as methyl ethyl ketone (MEK), showed up at elevated levels in the sediment. It also showed up in several other samples collected during 2000. Unless this is shown to be a laboratory contaminant, site specific cleanup levels should be proposed as required by	A	While it is suspected that 2-butanone is a laboratory contaminant in most cases, for conservativeness, the sediment will be resampled to confirm the presence of 2-Butanone, and if required, proposed cleanup	

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		18 AAC 75.340(g).		levels will be developed.	
20	5-58, first para	This and other sections of the report refer to Appendix D for information on the waste characterization sample results. The results should be presented in tables in the main body of the report, or at a minimum should be tabbed and made easier to find in the appendix. For this particular section, it would be good to know whether 2-butanone or methylene chloride were found in the tank.	A	Results from waste characterization samples have been tabbed for quick reference in Appendix D-4. For this tank, 2-butanone was found at 1,700 ug/kg in the tank sludge. Methylene chloride was only found in the water sample at 0.93 µg/L.	
21	5-61, 2nd para	It states that the three TOC samples were collected at 2' bgs. However, all the confirmation samples were collected at 3 and 4 feet bgs. This goes back to the issue of whether the DQOs were achieved and whether the reported TOC levels are representative of the soil at the depths where contaminants remain.	A	The soil encountered at Building 3065 was described as a homogenous gravelly sand with some organics (throughout the excavation); therefore, it is expected that TOC values would not vary significantly. It should be noted, however, that even by calculating method 3 cleanup levels, two DRO samples were reported at 22,800 and 33,200 mg/kg. These exceed the maximum allowable DRO concentration of 12,500 mg/kg. This soil could not be excavated due to the shallow presence of groundwater. Therefore the importance of TOC data at this site is greatly diminished. Additional recommendations have been proposed that include institutional controls to address future management of this soil.	
22	Fig. 5-14, pg 5-66	At UST 3075, the highest field screening result shown is from 3-4' bgs in TP-1 (>100 ppm on Hanby). It is unclear why no sample was collected for laboratory analysis.	A	The soil from 3-4 feet bgs was visibly contaminated; therefore an analytical sample would have little use and would likely have revealed a similar result to that of nearby sample 01SO collected in 1997 at 8.0 feet bgs. Furthermore, this soil could not be excavated due to the building proximity and the nearby cut	

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				bank. Text has been added to Section 5.11.2.1 to reflect this information.	
23	5-68, 3rd para, and 5-69, conclusions (Bld 3075)	It states that TOC samples were collected at 2' bgs. The prior page states that peat was observed in the top 1.5 to 2.0 feet of the test pit. The highest reported DRO levels were from 8 and 11.5 feet bgs ('97 data). The text states that iron stained gravely sand was present from 7 to 11 feet bgs. No deeper TOC samples were collected. The proposed method 3 migration to groundwater cleanup levels aren't appropriate for this soil type. Also, WP-1 has been sampled twice. The '97 result was 16 mg/l and the '00 result was 0.376 mg/l. The well point should be sampled again to verify the results. The last sentence in the conclusions states that since no contaminants were detected downgradient after 50 years it is unlikely that contamination would migrate off-site at this time. Statements like this should be deleted; while the FUDS eligible tanks were installed over 50 years ago, it is unclear when the tanks corroded through or when releases actually occurred. Also, institutional controls appear to be needed to document the residual soil contamination. We will need to discuss options for institutional controls.	A	Method 3 levels were never calculated due to the inadequacy of the TOC samples. It is recognized that contaminated soil is present under the ruins of Building 3075; text has been added to Section 5.11.3 to reflect this. Another recommendation added to Section 5.11.3 includes sampling well point 3075 WP-1 one additional time to confirm recent results. The last sentence of Section 5.11.3 has been removed. Additional recommendations have been proposed that include institutional controls to address future management of this soil.	
24	Table 5-27, pg. 5-83	2-Butanone is a COPC that needs to have cleanup level proposed.	A	During the data quality assessment, the VOC results were flagged as rejected. The four locations will be resampled to obtain usable data, confirm the presence of 2-butanone, and develop proposed cleanup levels if required.	
25	5-86	NFA is proposed for UST 1154 based on a proposed method 3 migration to gw level. However, only one TOC	A	Agreed, the proposed method 3 level has been removed. However, remaining contamination	

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		sample was collected; it was collected from a stockpile (depth unknown); the residual DRO above the method 2 cleanup level was in a sample from the floor of the excavation at 5' bgs. At least one more TOC sample should have been collected.		remains only in fissures of bedrock that cannot feasibly be removed. This site will be closed similarly to other sites on Amaknak/Unalaska Islands where contamination remains within the fractured bedrock. Additional recommendations have been proposed that include institutional controls to address future management of this soil.	
26	5-98, 1st para	The conclusions for Building 627 describe petroleum contamination on bedrock at an elevation higher than the foundation of the former building in the SW corner of the site. Please note, there used to be an above ground fuel tank (~ 7,000 gal capacity) in this location. The Corps of Engineers removed it during FUDS work in 1991 in response to a spill.	A	Comment noted. The information on the AST has been added to the discussion in Section 5.13.3.	
27	Humpy Cove sites	The figures should include sampling locations and analytical results from prior years. The conclusions need to take the soil data into account.	A	Figures in Section 5.14 have been updated to include analytical results from prior years. Conclusions in Section 5.14.3 have been updated to include this information.	
28	5-110, 5th para	The conclusions for Humpy Cove Latrine Site 1 should include a statement that the groundwater sample did not contain contaminants above the applicable cleanup levels.	A	Conclusions for Humpy Cove Latrine Site 1 have been amended to include a statement that the groundwater sample did not contain contaminants above the applicable cleanup levels.	
29	5-114, 2nd para	The conclusions state that after removal of the three drums and any necessary cleanup no further action is recommended for the Summer Bay area. However, the AST and drum described in Sect. 5.15 also need to be addressed.	A	The AST and drum will be addressed prior to recommending no further action for the Summer Bay area. Text has been added to Section 5.16.3 to reflect this.	
30	5-124, 3rd	It refers to "industrial cleanup levels" for PCBs at the	A	Industrial cleanup levels have been replaced with	

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	para	transformer vaults. The site is not an industrial area and I am not aware of any land use restrictions on it. Residential (unrestricted) land use cleanup levels should be used.		unrestricted land use cleanup levels throughout this section.	
31	5-129, 2nd para	A method 3 cleanup level (mig. to gw) is proposed for Ballyhoo Building C UST. However, the TOC samples were collected from 6" bgs. The sample with DRO exceeding the method 2 level was from 7.5' bgs. The waste characterization results should be included in the main body of the report or tabbed to make them identifiable.	A	TOC samples from an uncontaminated location (at the same depth as contamination) could not be collected due to heavy equipment access restrictions (cultural resource issue). Soil was too cobbly to facilitate hand augering to depth. The proposed method 3 cleanup level has been removed from this section. Additional recommendations have been proposed that include institutional controls to address future management of this soil. Waste characterization results have been tabbed in Appendix D to make data more identifiable.	
32	5-137, 3rd para	The drawings that identify pipelines between the Ballyhoo Spit and the airport as water lines should be referenced or copied and included.	A	The 1946 as-built drawing that identified the pipelines between the Ballyhoo Spit and the airport has been referenced in Section 5.18.2.	
33	5-140 and 141	The field observations and screening results indicated POL contamination; however, the lab results did not identify contaminants. The QA/QC on these samples should be checked. Also, in TP-8 it is not clear what depth the TOC sample was collected w/ respect to the soil sample that exceeded the method 2 cleanup level. Groundwater assessment should still be done in this area.	A	A review of the QA/QC of samples collected at the Ballyhoo Spit Tank Farm indicate the following: TP-8 and TP-9 data has several qualifications associated with the results Each of these GRO results was qualified due to lab error involving an assumed tare weight; however this would likely involve a less than 1 percent bias. The GRO/DRO/RRO results that are below screening criteria that have qualifications associated with them involve a high bias. The DRO result that exceeded screening criteria (this the only result that did)	

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Item No.	Drawing Sheet No., Spec. Para.	COMMENTS	REVIEW CONFERENCE A - comment accepted W - comment withdrawn (if neither, explain)	CONTRACTOR RESPONSE	USAED RESPONSE ACCEPTANCE (A-AGREE) (D-DISAGREE)
				also involved a high bias; therefore this is the only reported result of concern. Reporting limit requirements were not met for benzene; results were reported as ND at practical quantitation limits of 0.2 to 0.3 ppm. Field notes indicate the TOC sample was collected from TP-8 at a depth of 0-6 inches bgs. A recommendation has been included for the performance of a groundwater assessment consisting of the installation and sampling of two well points where groundwater is present..	
34	5-144, 1st para	For the Ballyhoo stand alone transformer it refers to industrial cleanup levels. Again, unrestricted land use cleanup levels should be used.	A	All mention of industrial criteria has been replaced with unrestricted land use throughout Section 5.19.	
35	Table 5-44	The DRO and RRO soil cleanup levels are not applicable to sediments.	A	DRO and RRO soil cleanup levels have been removed from Table 5-44. Sediment criteria do not exist for these analytes.	
36	5-171	Was the oil sample collected from the pump in the floating pumphouse collected from the immersed line starter and/or the three phase connector that are described in Sect. 5.22.1? These were the suspected PCB containing materials.	A	A study of the photograph of the immersed line starter depicted in the 1998 SI/RI/IRA report (Appendix A) and the photos taken during the 2000 field effort indicates that the field team indeed drained the immersed line starter. No other remaining features were identified as having the potential to contain oil.	
37	5-172, 2nd para	The PAHs in Iliuliuk Lake warrant further investigation. It states that the exposure pathway would be direct contact with the water. However, organisms do have direct contact with sediment and the site cleanup rules and the water	A	Additional sediment sampling (for DRO and PAHs) in Iliuliuk Lake has been added to the recommendations in Section 5.22.3.	

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		quality standards apply to both water and sediment.			
38	5-177, 2nd para	It states that no PCBs were detected in the vicinity of Building 965. It should state that PCBs were detected up to 0.53 mg/kg, which is less than the cleanup level for unrestricted land use.	A	Text in Section 5.23.3 has been changed to state that PCBs were detected below unrestricted land use cleanup levels.	
39	5-181, 1st para	It states that the ten times rule for groundwater cleanup levels will be applied to the Ft. Mears Landfill North. However, to do this you must go through the steps in 18 AAC 75.350 first. I suggest resampling the groundwater when the proposed sediment sampling is implemented; this may alleviate the need for a gw use determination.	A	The subject text referring to the application of the ten times rule has been deleted. Recommendations have been included for the resampling of the four well points to confirm the previous results for arsenic and selenium.	
40	5-186, 5th para	We have inspected drums and other debris in one of the gullies behind Crowley Dock in the past.	A	All drum and debris areas have been identified (specifically AOC 1) and were investigated.	
41	5-197 and 198, transformer vaults and utilidors	Section 5.33.1 and .2 describe prior investigation work that documented oil-immersed switches, water and oil in Building 310. Other reports and electrical diagrams indicated subsurface transformer vaults at the airport and along the power distribution system. This report states that characterization work was not done at Bld 310 due to DOT sealing access to the building. It states that a water/oil mixture sample was collected from a manhole along utilidor and that it did not contain PCB The conclusions recommend no further action. The report does not provide sufficient documentation on efforts to locate and inspect transformer vaults and DEC does not concur with the NFA recommendation. Further documentation and/or investigation are necessary.	A	Available information, albeit very limited, points to the transformer vaults and utilidors being part of the electrical system for the airport that was for airport operations after WWII. In addition, interviews with a current employee of the airport points to the utilidors in front of the hangar containing power, phone, and water service lines that are in use. Therefore these facilities appear to have been used by the State and are not eligible under the FUDs program.	
42	5-204, former	The conclusions recommend no further action. However, PCBs, chlorinated solvent and DRO are all contaminants of	A	An additional round of monitoring for chlorinated solvents at groundwater wells NLF-	

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	naval laundry	potential concern with on-going or necessary investigation and possibly cleanup. DEC cannot concur with the recommended NFA.		MW2 and NLF-MW3 was performed as part of the 7th sampling round for the Pre-WWII Tank Farm Area. Contaminants of concern associated with the former laundy/dry cleaning facility were not detected. Therefore, for purposes of this report, NFA is appropriate. This area is included in ADEC's PRP letter regarding the presence of PCBs and this site will remain open until the PRP questions are resolved.	
43	5-205, former oil and lube storage	It refers to reports of buried drums and a magnatometer survey. More details should be included. It is unclear what was reported, who reported it and what area(s) was investigated.	A	Additional information regarding the reports of buried drums has been included in Section 5.35.	
44	5-205, Former USTs – Power-house Rd	Were these tanks removed under the earlier FUDS cleanup projects? The former tanks are shown in a photograph at OC's office. Further investigation appears appropriate.	A	Recommendations for further investigation has been added to include further research regarding the location of the former USTs and digging test pits to determine the presence of contamination.	
45	5-214, Army Garrison Power Gen. Fac.	Suggest soil sampling for PCBs be done to address concerns over the possibility of contamination from the former power facilities.	A	Recommendation for further investigation has been added to include collection of random surface samples and analysis for PCBs.	
46	5-215, Airport Beach and Capt Bay roads	I thought this was one of the sites the Corps is conducting a site history and operations review on and that further investigation/cleanup may be recommended under the FUDS program. Further discussion is necessary.	A	Available information, along with recent interviews with relatives of the now-deceased former propoert owner, confirms that the structures and materials were brought to the site by the owner after WWII. Therefore, this site is not eligible under the FUDs program.	

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47	5-219, Drum Dump and debris – Capts Bay Rd	Is this the same as AOPC #1 associated with the Crowley Dock area?	A	No. The drum dump and WWII debris pile is located adjacent to Captains Bay Road about ¾ mile south of Crowley Dock.; AOPC #1 at Crowley Dock is located near Icy Creek off the road system.	
48	5-224, Humpy Cove	It states that a field investigation and magnatometer surveys were conducted. More detail should be provided on which areas were surveyed.	A	Additional text has been added indicating that the field investigation and magnetometer surveys were conducted throughout the area shown on Figure 5-24 where site development was shown on 1946 as-built drawings and 1994 aerial photographs, excluding the locations where USTs had previously been discovered.	
49	5-226, Little South Amer. Drums	Again it states that an investigation was done, no drums or contamination was observed and NFA is recommended. Was a magnatometer survey done in this area to look for buried drums?	A	No magnetometer surveys were conducted in the area, due to the vast expanse of area where potential drums could be present. Furthermore, the community member reported that the drums were visible from the road (implying they were not buried). A thorough ground survey of the entire area was conducted, however no drums were located. A rusted hot water heater was found that is suspected to have been mistaken for a drum.	
50	5-226 and 227, Rommel Stakes	It states that NFA is recommended. DEC does not concur. Rommel stakes on Strawberry Hill, Rocky Point and any other locations were they are known to exist, should be removed.	A	NFA is appropriate for the reported Rommel stakes located at the southeast and southwest corners of the cemetery. The suspected Rommel stake was actually a severely rusted bicycle with a crank sticking out into the air. It is recognized that Rommel stakes in other areas pose a physical safety hazard. Rommel stakes are still	

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				present at Strawberry Hill, Rocky Point, and Mount Ballyhoo; these may be removed in future field efforts pending eligibility under the FUDs program, and coordination and approval from SHPO and the NPS."	
51	5-232, Broadway transformer	It states that a records review was done and that the City and a private citizen used the transformer. More details should be provided on what records document this.	A	Interviews with the owner of the adjacent property point to the transformer being disconnected by the City of Unalask about 15 years ago but was not removed because the equipment could not reach the transformer. This information will be included in the text.	
52	5-232, Pre WWII T. F. Trench	It states that the City excavated a trench in June '99 and observed oil contamination and that Jacobs field staff observed "flowing" product. Please add the trench location to Fig. 5-58.	A	The trench location has been added to Figure 5-58.	
53	Sect. 6.3	The Data QAR needs to be submitted and reviewed; the outcome has the potential of necessitating changes to the report and future plans.	A	The Data QAR was submitted to ADEC on 24 May 2001 for review	
54	Sect. 7	This section may need to be revised based on resolution of all the comments on the draft report.	A	Agreed; changes made in preceding sections have resulted in necessary changes to portions of Section 7.	