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United States Air Force 611th Air Support Group 611th Civil Engineer Squadron

Elmendorf AFB, Alaska

FINAL

Site Investigation and Closure Monitoring Landfill 2 (LF03) Cape Romanzof LRRS, Alaska

August, 1999



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2

#### TABLE OF CONTENTS •

1.0	INTR	RODUCTION	1
	1 1	Project Objectives	1
	1.1	Project Scope	1
	1.4	110,000 500,000,000	1
2.0	PRO.	JECT DESCRIPTION	L
	21	Background	1
	$\frac{2.1}{2.2}$	Site History	2
	23	Environmental Setting.	5
•	2.4	Scope of Work	4
			6
3.0	ENV	IRONMENTAL SAMPLING	
	2 1	Sampling Strategies	6
	2.1	Chamical Analysis	6
	2.2	Sompling Procedures	.2
	2.2	Samping Trocoares	-
		3 3 1 Surface Water	/
		3 3 2 Water Level Survey	ð
		3.3.3 Sediment	δ
	3.4	Sample Handling and Documentation	8
		2.4.1 Sample Custody	8
		3.4.2 Chain-of-Custody	9
		3 4 3 Documentation	10
		3.4.4 Sample Handling, Packaging, and Shipping.	12
4.0	QU	ALITY ASSURANCE/QUALITY CONTROL	13
			13
	4.1	Leminology	14
	4.2	Compling Procedures	15
	4.3	Sampling Liocedules	
		4 3 1 Field Sampling	15
		432 OA/OC Samples	15
		4.3.3 Sample Analytical Procedures	10 14

Analyses

Laboratory Quality Control.

Data Quality Assessment

Laboratory Analytical Data .....

Field Quality Control .....

1

Data Quality Control ......

16

16

17

.17

17

18

. .

. ..

4.3.4

4.61

4.62

44

4.5

4.6

5.0	REPORT OF SURVEY	
	<ul> <li>5.1 Physical Survey</li> <li>5.2 Chemical Survey</li> <li>5.3 Current Data</li> <li>5.4 Comparison of Recent and Older Analytical Data</li> </ul>	.21 .21 21 .22
6.( C(	0 ONCLUSIONS	23

#### LIST OF APPENDICES

#### **APPENDIX I - TABLES**

- Summary of Investigation Samples for Cape Romanzof Landfill 2 (LF03)
- 1 Method Two Soil Cleanup Levels 2A
- Petroleum Hydrocarbon Soil Cleanup Levels 2B
- Groundwater Cleanup Levels
- Cape Romanzof Landfill 2 (LF03) Sample Collection Summary Groundwater 2C
- 3
- Cape Romanzof Landfill 2 (LF03)Sample Collection Summary Soil Cape Romanzof Landfill 2 (LF03) Sample Collection Summary Sediment 4
- Cape Romanzof Landfill 2 (LF03) Sample Collection Summary Surface Water 5

n

- 6 Summary of Analytical Data Quality Objectives
- 7 Field PCB Monitor Results 8
- Compendium of Anomalous Data 9
- Comparison of Previous Data 10

#### **APPENDIX II - FIGURES**

- Site Location and Vicinity Map 1
- Site Plan 2
- Previous Sample Sites and Cap Location 3
- Sample Locations 4

APPENDIX III - ARARS AND TBCS

APPENDIX IV - PHOTOGRAPHS

APPENDIX V - BIBLIOGRAPHY

APPENDIX VI - ANALYTICAL DATA

#### 1.0 INTRODUCTION

#### 1.1 Project Objectives

The objective of this investigation was to obtain soil and water samples at Landfill 2 (LF03) to monitor the potential leaching of contaminants from the site before the landfill closure, and to assess the extent of contaminant migration from the landfill. This portion of the project involved resampling at nine sites that are shown in Figure 3, south of the Main Access Road which runs between the airfield and the main camp.

In addition, significant effort was undertaken to perform a physical survey of the capped PCB area shown in Figure 3 as landfill. Elevations and coordinates were run and a final as-built map prepared. Contemporaneously, the physical condition of the cap was studied to locate visible rips, tears, or missing portions. Recommendations for linered cap maintenance are made herein, and 30 soil samples were taken to permit the development of a closely contoured PCB isopleth map, particularly on the west side of the landfill, where high concentrations of Arochlor have been previously found.

#### 1.2 Project Scope

The SOW for this project consists of further acquisition of data for monitoring the extent of contamination remaining at the Landfill 2 (LF03) site as a part of a long term monitoring (LTM) project. This investigation herein evaluates the presence and extent of contamination in sediment, soil, surface water, and groundwater, as a result of environmental sample analysis whose collection took place in September and October 1998.

Documentation associated with this project included a Work Plan, and a Site Safety and Health Plan (SSHP). The Work Plan included a Field Sampling Plan (FSP) (sections 2 and 3), a Quality Assurance Project Plan (QAPP) (section 4), and a health and safety plan (section 5). The FSP described the general site and SOW, and discussed project organization, field operations, environmental sampling, field measurements, and documentation. The QAPP detailed the quality assurance/quality control (QA/QC) procedures to be used so that technical data generated during the investigation would be accurate, precise, complete, and representative of actual field conditions. The health and safety plan documented good working practices.

#### 2.0 PROJECT DESCRIPTION

#### 2.1 Background

Cape Romanzof is in the Yukon Delta Wildlife Refuge, approximately 540 miles west of Anchorage on a 4,900-acre peninsula that extends into the Bering Sea (Figure 1) Operations at Cape Romanzof began in 1953. It was one of the 10 original Aircraft Control and Warning sites in the Alaska Air Defense System Emerging technologies during the subsequent 30 years allowed for several facility renovations that resulted in the station becoming a Minimally Attended

Radar Site. Six station personnel presently operate and maintain the site (U.S. Air Force [USAF] 611 CES/CEOR, 1995).

Various methods of waste management have been used at Cape Romanzof Industrial wastes were applied to roads until 1978. Since then, these wastes have been accumulated and barged to off-base disposal locations. Other wastes have been disposed of in landfills, dumps, hardfills, and incinerators. Many of the potential contamination source areas at Cape Romanzof are from spills and leaks of diesel fuel and motor gasoline, either from drums in landfills or from petroleum, oil and lubricant tanks or pipelines (Woodward-Clyde Consultants [WCC], 1992)

#### 2.2 Site History

The Landfill 2 (LF03) investigation site is south of the access road between Cape Romonzof's Lower (main)Camp and the runway (Figure 2). The landfill covers approximately 43,800 square feet (about 1 acre) and is on a slope that descends to a lower plateau. The landfill received garbage, rubbish, wood, metal, plastic, construction and demolition debris, shop wastes, and incinerator ash, and was operated until the mid-1970s (WCC, 1992). The location of this landfill and previous sample collection points are shown in Figure 3.

During site investigations conducted in 1989 and 1990 by WCC, a large amount of exposed metal, wood, and plastic debris was visible at the landfill. Areas of sheen-covered landfill effluent and stained soil were observed. An engineered drainage pathway with flowing surface water was observed along the north side of the access road and two drainage pathways containing active surface-water flow were observed adjacent to the east toe of the landfill. Several active seeps were observed on the landfill surface. Surface flow from these seeps extended for up to 100 feet across the surface of the landfill before reentering the landfill material The water table was encountered at 2 to 3 feet below the bottom of the landfill (WCC, 1992). During the 1989 WCC site investigation, four 4-inch groundwater monitoring wells (MW-1, MW-2, MW-3, and MW-4) were installed and sampled by WCC. Groundwater, surface water, sediment, and soil were sampled and analyzed for total petroleum hydrocarbons (TPH); metals, organochlorine pesticides and polychlorinated biphenyl's (PCBs); benzene, toluene, ethylbenzene, and xylenes (BTEX); and semivolatile organic compounds (SVOCs). Contamination consisted principally of TPH in soil and sediments, and PCBs and TPH in surface water at the perimeter of the landfill TPH in the sediment samples ranged from nondetect to 3,000 milligrams per kilogram (mg/kg) TPH was detected in one soil sample at 100,000 mg/kg. PCBs were detected in one surface-water sample collected west of the southwest corner of the landfill at a concentration of 2.7 micrograms per liter (µg/L) During the 1990 WCC site investigation, MW-1, MW-2, and MW-4 were resampled and TPH was detected in Wells MW-1 and MW-2.

Based on the results of the Landfill 2 (LF03) investigation, WCC concluded the following.

Surface water downgradient of Landfill 2 (LF03) was contaminated with petroleum products as measured by TPH (EPA 418 1) and also PCBs.

The volume of fill (soil and debris) was approximately 11,530 cubic yards

Contaminated soil contained within an area of approximately 49,900 square feet required remedial action

# 7

During June through September 1993, 11 Civil Engineering Operations Squadron (now known as 611 CES) collected the debris from 200 feet around the perimeter of the landfill and placed it in the landfill. Approximately 500 cubic yards of fill was placed on the south section of the landfill to cover the debris. The stream parallel to the eastern toe of the landfill was diverted 20 feet away from its original drainage (USAF 611 CES/CEOR, 1995).

Based on the WCC investigation recommendations, the landfill surface debris was compacted, and the landfill was capped in June through September 1994, with an impermeable hypalon liner overlain by geotextile fabric, sandwiched between layers of sand and pit-run material (USAF 611 CES/CEOR, 1995)

Also, additional analyses performed by Harding and Lawson in 1997 determined surface water concentrations of 0.1 - 0.2 PPB Arochlor 1260 offsite of the eastern edge of the landfill, as well as sediment Arochlor values of several hundreds of ppm offsite of the western edge of the capped landfill, with concomitant high surface water Arochlor 1260 values (55 ppb) here.

# 2.3 Environmental Setting

Cape Romanzof is in the physiographic region known as the Yukon-Kuskokwim Coastal Lowland, a marshy, lake-dotted deltaic plain that consists of coastal deposits of interlayered alluvial and marine sediments.

Ground-surface elevations at Cape Romanzof range from zero feet mean sea level (MSL) at the shoreline of the Bering Sea to approximately 2,300 feet MSL at the Upper Camp

The geology of the Cape Romanzof Upper Camp consists of sand, gravel, and boulders overlying granitic bedrock of the Towak Mountain. At the site of the Lower Camp, thin to moderately thick talus (coarse-grained materials) and alluvial sequences have been transported downslope into the steeply sloping stream valley of Fowler (Nilumat) Creek and its tributaries. The mixed talus and alluvial materials consist of large granitic boulders, rock fragments (probably cobble-sized), sand, and minor amounts of silt and clay. The talus layer is between 57 and 74 feet thick in local water wells, and is underlain by weathered bedrock. Granitic bedrock underlies the unconsolidated deposits (WCC, 1992).

Cape Romanzof is in a section of western coastal Alaska where thin to moderately thick (to 600 feet thick) permafrost zones may occur in predominately fine-grained sediments (Ferrians, 1965) Permafrost has not been observed in the Cape Romanzof area (USAF 611 CES/CEOR, 1995)

The major surface-water feature at Cape Romanzof is Fowler (Nilumat) Creek, which drains into Kokechik Bay. Nilumat Creek has a watershed area of approximately 8.5 square miles. Active springs exist northeast of Landfill 2 (LF03), indicating a shallow water table with a hydrostatic head (WCC, 1992).

#### 8

Cape Romanzof lies in the maritime climatic zone Average summer temperatures range from 39 to 53 degrees Fahrenheit (°F), and winter temperatures range from 5 to 20°F The average annual precipitation is 25 inches (Arctic Environmental Information and Data Center [AEIDC], 1989)

Undisturbed vegetation consists of alpine/barren ground communities including mountain avens, lichens, low-growing herbs, and grasses

#### 2.4 Scope of Work

Activities specific to the planned fieldwork are identified in the SOW They consist of the following tasks:

- Sampling monitoring wells
- PCB capped area monitoring
- Sampling surface water and sediment

Handling investigation-derived waste

# Sample Monitoring Wells

The 611 CES/CEVO tested existing groundwater monitoring wells to provide data for site characterization and to aid in determining future sampling requirements. All anomalous, extraordinary, or unusual analytical data, including that taken from past studies, are presented in Tables 9 and 10 in the Appendix for the specific purpose of showing if any significant changes have occurred over time.

Included in the work plan is an evaluation and Long Term Monitoring (LTM) of the capped area over Landfill 2 (LF 03) specifically planned to:

Create a baseline (as-built) physical survey of the landfill cap to determine the stability of the structure in terms of erosion and aging, which will enable future monitoring to be meaningful The existing cap was scrutinized on site for stability and weathering, as well as to aid in determination as to requirements for additional cap placement Field screening of soils and sediments was directed toward this effort

Delineate the extent of PCB contamination in surface and subsurface (1-2' depth), soil, sediment, and surface water for mapping and sampling purposes and to determine the extent of contamination and/or required sediment or soil removal. Upgradient samples were collected to establish a background to also help delineate areal extent of contamination plumes This data will

4

be used for the execution of the FY 99 PCB soil/sediment IRA as a part of Operation Clean Sweep.

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Determine if the off-site PCBs are either migrating due to weathering or are stable In Situ, and if there is any likelihood of continued PCB movement by erosion or leaching. Past and current data will be used to study PCB migration.

Physical survey requires the services of a transitman and a rodman, and was able to be completed in less than two days. In addition, a soil/sediment sampling grid was prepared by using the procedure developed for the EPA by Kelso and Cox (1986), and these sampling sites were surveyed in.

Delineation of limits of PCB contamination was undertaken by the collection and analysis of some 50 soil samples at grid – derived surveyed locations. Field methodology using a field chloride detector was undertaken to ensure that the soil sampling is sufficiently complete to locate any PCB plume that are to be found at or near the landfill; this data is included as a part of the LTM plan to determine stability or migration of PCBs found on the west side of this area

PCB mapping was further accomplished after field work was completed using physical survey and laboratory analytical data.

Sample Surface Water and Sediment

611 CES/CEVO collected three surface-water and three sediment samples from streams, seeps, and drainage pathways, where surface water drains offsite. Three duplicate samples were also collected as a means of determining sample precision. These duplicates are identified in Table 9 as consisting of one duplicate each of soil, sediment, and surface water. Surface-water and sediment sample locations are shown on Figure 3.

Specifically, the sample locations designated in Figure 3 were analyzed as follows

ANALYTE	METHOD
Diesel Range Organics	AK 102
Gasoline Range Organics	AK 101
ICP Metals Screen	EPA 3050/6010
Organochloride Pests & PCB	EPA 8081/8082
Volatile Organic Compounds	EPA 8260
Semivolatile Organic Compounds	EPA 8270

# 3.0 ENVIRONMENTAL SAMPLING

The Landfill 2 (LF03) investigation focused on existing and potential contamination of soil, groundwater, surface water, and sediment resulting from past practices of waste disposal Previous investigations indicated the presence of petroleum hydrocarbons in soil, groundwater, surface water, and sediments; and of PCBs in surface water and in soil/sediment

The sampling program conducted at the Landfill 2 (LF03) area is detailed in the following sections. Sampling rationale, chemical analyses, and quantities of investigation samples collected from subsurface soil, groundwater, sediment, and surface water are summarized on Table 1

The goals for soil sampling are to

•Collect samples representative of field conditions.

•Properly identify, preserve, handle, store, and transport samples to maintain their integrity

#### 3.1 Sampling Strategies

The media that was sampled included (shallow) subsurface soil, groundwater, surface water, and sediment During the time period that soil and sediment samples were being collected, field screening was completed on soil samples derived from the Kelso and Cox net, to ensure that the PCB plume was captured on the sampling map which was finalized after return from the field

The sampling strategy for the investigation at Landfill 2 (LF03) included:

- Collection of subsurface-soil samples in areas of known and suspected contamination;
- Evaluation of physical and chemical properties of subsurface soil;
- Collection of groundwater samples to assess areas of contaminant migration;
- Collection of groundwater samples to decorrect
  Collection of sediment and surface-water samples from the streams, seeps, and drainage pathways adjacent to the landfill in areas of known and suspected contamination;

#### 3.2 Chemical Analysis

Potential chemicals of concern at Landfill 2 (LF03) are diesel-range organics (DRO), gasolinerange organics (GRO), VOCs, SVOCs, PCBs, and target analyte list (TAL) metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, thallium, vanadium, zinc). Table 2 presents a comparison of risk-based concentrations, maximum contaminant levels, and method reporting limits for soil and water

Six well samples were to be drawn, but one well (CMW2) was found to be dry, even after allowing the purged well to stand overnight. Three surface water samples, and two sediment samples were also collected from the locations shown on Figure 3. Additional soil samples were taken to ensure that adequate site control and plume delineation would be taken for PCB migration monitoring. These were surveyed in using the Kelso and Cox procedure for laying out

a sampling grid. A total of 50 soil samples were taken to ensure that the site had adequate analytical coverage (Figure 4)

All information gathered is herein compiled for a study of site aging phenomena over time, and to ascertain if any weathering trends are present, as well as to delineate affected soil that may have to be removed or otherwise treated.

In addition to investigation samples, sampling of treated IDW water (Investigation Derived Water) was necessary to comply with regulatory treatment and disposal requirements. IDW water was analyzed for the same parameters as investigation water samples (Table 3). Following the assumption that the drum of mixed IDW water was no more contaminated than the dirtiest well water analysis, and was indeed found to be within legal limits for discharge, the IDW was disposed in the camp sewage lagoon.

Required samples, chemical analyses, analytical methods, and collection requirements for soil, sediment, surface water, and groundwater are presented in Tables 3 through 6 Sampling and sample handling procedures are described in the following sections.

#### Sampling Procedures 3.3

Surface Water 3.3.1

Collected water samples may be classified as either surface water or ground (subsurface) water derived from monitor wells.

Surface-water samples are collected as grab samples, by fully immersing sample containers in the water, taking care to avoid or minimize aeration of the sample and to not dilute out any preserving materials within the bottles Surface-water samples were collected with the associated sediment samples.

Surface water samples were collected into bottles furnished by the laboratory by gently tipping or immersing the bottle in the water and slowly allowing to fill to a depth of 1/2 below the rim of the bottle in order to minimize likelihood of breakage. The lids were then tightly screwed on, the bottle labeled, and placed in a refrigerator as quickly as possible.

Ground water samples were taken by collection from a freshly purged monitor well. Well purging allows fresh formation water that is representative of the surrounding groundwater to be collected.

All wells capable of being sampled were sampled within two hours of purging. Downgradient wells were sampled first to minimize cross contamination between potentially contaminated wells Nothing entering the well was allowed to contact the ground or any potentially contaminated surface. If contact were to occur, the contaminated item was not placed in the well or used for sampling until it had been decontaminated.

All personnel wore disposable latex gloves while handling sampling equipment and containers.

Gloves were always changed at each well Sampling gloves were not allowed to touch any unclean surfaces prior to sampling.

Caution was taken to not allow sample waters to potentially lose volatile constituents by either warming up or become aerated during the bottle filling process, and water agitation was minimized. Containers designated for volatile analysis were filled last to prevent warming or having the bottles stand around.

Sample containers are always clearly and properly labeled.

Adequate steps were always immediately undertaken for sample preservation. These samples were immediately taken out of sunlight, placed in a cooler, and properly chilled as quickly as possible.

#### Water-Level Surveys 3.3.2

Water levels in each well were measured using a clean down - the - hole tape only after water sampling has been completed, and the well has been given sufficient time to become recharged

#### Sediment 3.3.3

Sediment samples were collected from stream bottoms at the Landfill 2 (LF03) site.

Sediment located above water (i.e., sandbar sediment) was collected as grab samples from about 3 to 6 inches below the sediment surface using a clean, noncontaminating hand trowel or similar implement.

Samples were placed in an appropriate sample containers in a manner that minimizes aeration and warming of all the samples. Pertinent observations made during sampling, such as odor or sheen, are recorded in the field logbook.

Sediment sample collection always began at the farthest downstream location and proceeded upstream to prevent potential adverse disturbances or cross-contamination at sample locations caused by upstream sampling activities Similarly, at each location, collocated surface-water samples were collected before collecting sediment samples to avoid potential cross-contamination of the water samples.

- Sample Handling and Documentation 3.4
- Sample Custody 3.4.1

The primary objective of sample custody is to create an accurate, verified written record that may be used to trace the possession and handling of the samples from the moment of collection until

receipt by the laboratory. Adequate sample custody was achieved by means of appropriate field and analytical documentation. A chain-of-custody form always accompanies samples

A sample is in someone's custody if:

- It is in one's actual physical possession; •
- It is in one's view, after being in one's physical possession; •
- It is in one's physical possession and then locked or otherwise sealed so that tampering will be • evident; or
- It is kept in a secure area, restricted to authorized personnel only.

#### Chain-of-Custody 3.42

A chain-of-custody form is completed and accompanies every sample and shipment of samples to the laboratory, to establish the documentation necessary to trace sample possession from time of collection. The form contains the following information:

- Sample number
- Signature of collector, sampler, or recorder
- Date and time of collection
- Place of collection
- Sample type
- Analyses requested
- Signatures of persons involved in chain of possession
- Inclusive dates of possession

The field team sent the original chain-of-custody forms with the samples and retained copies for the project files. The last chain-of-custody form sent to each laboratory stated in 2 5 centimeterhigh Helvetica letters "END OF PROJECT."

The laboratory portion of each form was completed by personnel at the analytical laboratory and contained the following information:

- Name of person receiving the sample
- Laboratory sample number
- Date of sample receipt
- Sample condition and temperature

# Transfer of Custody and Shipment

When transferring the samples, the individuals relinquishing and receiving the samples signs, dates, and notes the time on the chain-of-custody form. Samples were properly packaged for shipment, as described in section 5.3.4. Samples were shipped by an airplane directly to Anchorage. The analytical laboratory coordinators were notified of when and how samples were sent. Notification included the following:

Date of shipment

- Name of shipping company •
- Airbill number .
- Number of coolers
- Name, phone number, and facsimile number of point of contact
- Estimated date of shipment arrival
- Type of samples (water, sediment, or soil) •

On receipt of each sample cooler and after verification of the chain-of-custody records, the project laboratories will fill out a Cooler Receipt Form documenting the condition of the samples.

#### Documentation 3.4.3

Field personnel will maintain documentation of both administrative and technical activities The following types of documentation are required:

- Field logs .
- **Boring** logs ٠
- Well completion forms
- Well development documentation ٠
- Groundwater sampling data form
- Sample record logs
- Equipment calibration logs ٠
- Photographs

# Sample Labels

Sample labels are required for all samples. Site- and time-dependent information was added to the labels using indelible ink. The labels were protected from water and solvents with clear label protection tape. Each label will contain the following information:

- Project name ٠
- Name of collector •
- Date and time of collection
- Place of collection •
- Sample number
- Preservation method
- Depth of sample (soil samples only)
- Method of analysis

The samples are numbered as follows: 480309898XXX, where 98 are the last two digits of the year and 48030 is the work order for Cape Romanzof; 8 indicates that the sample was collected by 611 CES/CEVO, where 8 is the code for the CEVO environmental section, and XXX is the sample number at the site. The first sample collected was numbered 48030988001. Field QA and QC samples were labeled and numbered in such a way that the laboratory could not identify the as duplicates unless they were so told.

Sample type designations	аге	as	foliows:	
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Sample Designation	Sample Type	
SL SD SW WA IW	Subsurface soil Sediment Surface water Groundwater IDW water	

#### Field Logs

The project field supervisor maintained a field logbook of daily activities. Activities should always be recorded contemporaneously. Field logs were written to include the following information:

- Name of author, and date and time of entry .
- Location of activity .
- Names and affiliations of personnel onsite
- Field observations and comments
- Health and safety comments •
- Conversations with USACE

# Sample Record Log

The field supervisor maintained a sample record log spreadsheet that contained the following information:

- Sample number •
- Sampling location •
- Date and time of sample collection ٠

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- Sample depth •
- Analyses requested ٠
- Number of containers
- Type of sample if it is a QA/QC sample •
- Date shipped •
- Airbill number

#### Photographs

Photographs were taken in the field to document sampling locations and conditions. Photographs of all samples were taken with the sample number and depth clearly visible. A photographic log was kept in which the date, location, and direction faced (if appropriate) are noted Photographs and negatives were labeled and placed in the LTM Closure Monitoring Report as an appendix.

# Documentation Control

The project manager maintains project files. Documents are kept in project files. Project personnel may keep their own files; however, all official and original documents are placed in the official project file.

Field logs of boring, sampling and well installation are maintained by the field supervisor and submitted to the project manager after the field effort.

# 3.4.4 Sample Handling, Packaging, and Shipping

The specific methods for sample container size and type sample preservation and holding times, and any special handling requirements for samples collected at the Landfill 2 (LF03) site are presented in Tables 3 through 6. All sample containers were obtained from the project laboratory. The containers were verified as precleaned and were obtained in sealed boxes.

Samples were packaged for shipment according to Department of Transportation IATA regulations. The method of shipment, courier name(s), and other pertinent information were entered on the chain-of-custody form

To minimize the potential for degradation and to maintain a temperature of 4 °C, samples were placed with an ice substitute in a cooler. The chain-of-custody form was filled out in ink, placed in a plastic bag, and taped to the inside lid of the shipping cooler. Each cooler was sealed with a custody seal to readily show evidence of tampering. Marking and labeling procedures were consistent with DOT regulations. Airbills were properly completed, and copies were retained and placed in the project file.

The following checklist details the procedures for sample packaging and shipment:

- For water samples other than those for VOC analyses, mark the sample volume with a grease pencil. Fill all water bottles to within ¼ inch of the rim to give just a smidgen of ullage to prevent breakage, except for those containers specifically designed to be filled to the brim, such as purge (VOA) vials.
- Place a layer of ice substitute and cushioning material in the bottom of the cooler Then place a layer of cushioning material over the ice substitute.
- Wrap each bottle with a layer of bubble wrap With the exception of 40-ml and 2-ounce containers, enclose each bottle in a separate, clear plastic bag and seal each bag. Single samples consisting of two or three 40-ml or 2-ounce containers may be placed together in a single plastic bag after they are individually wrapped to prevent glass-to-glass contact Place the bottles upright in the cooler so that they will not touch during shipment.
- Place additional cushioning material to cover sample bottles and fill voids between bottles Then place the ice substitute into the cooler.
- Fill the cooler with cushioning material
- Tape the cooler drain shut.

- Place completed chain-of-custody form and a note indicating destination for return of cooler in a plastic bag, and tape the bag to the inside lid of the cooler.
- Secure the lid by wrapping the cooler with strapping tape at two locations Tape the cooler • latch closed with strapping tape.
- Seal the cooler with custody seals in three places other than the areas with strapping tape and the hinged side. Sign and date custody seals. The signature on the custody seals should match the signature on the chain of custody.
- Attach the completed shipping label to the top of the cooler; affix "This side up" labels on all four sides, and "Fragile" and "Chill, Do Not Freeze" labels on at least two sides.

#### QUALITY ASSURANCE/QUALITY CONTROL 4.0

This Quality Assurance Project Plan (QAPP) has been prepared for site investigation activities at Cape Romanzof, Alaska. This QAPP addresses requirements set forth in the EPA's Interim Guidelines for the Preparation of Quality Assurance Project Plans (1980) The formal guidance will be used to produce valid data for the project.

QA is an integrated program designed to achieve reliable monitoring and measurement data. QC is the routine application of procedures for obtaining prescribed standards of performance in the monitoring and measurement processes The QA/QC requirements for the project are described in the following sections.

#### Terminology 4.1

QA/QC terms used throughout this QAPP are defined as follows.

- Accuracy The degree of agreement of a measurement with an accepted reference of true value. Usually expressed in terms of percent recovery.
- Comparability Expresses the confidence with which one data set can be compared to • another.
- Completeness The amount of valid data obtained from a measurement system compared to the amount of valid data that was expected.
- Duplicate Two samples collected independently at a sampling location during a single act of sampling. Field duplicates will be numbered separately so that laboratory personnel performing the analyses may not ascertain which samples are duplicates.
- Laboratory Sample Duplicate For every inorganic method, for every 20 samples, a ٠ duplicate aliquot is analyzed for the analytes of interest.
- Method Blank Method blanks consist of analyte-free water or soil, processed in the exact •
- manner as the samples within a batch, using identical reagents and solvents Precision - A measure of agreement among individual measurements under similar •
- conditions Usually expressed in terms of the relative percent difference (RPD)

- Representativeness The degree to which a sample or group of samples reflects the characteristics of the media at the sampling point. Includes how well the sampling point represents variations in the parameters under study.
- Rinsate Blank After the equipment has been decontaminated, organic-free water is poured into the sampling device or pumped through it (in the case of sampling pumps), transferred to • the sample bottle, and then transported to the laboratory for analysis.
- Sample Matrix Spike For every 20 samples, a sample is selected that represents the matrix and is spiked with analytes specified for each method.
- Sample Matrix Spike Duplicate For every organic method, for every 20 samples, a sample is selected that represents the matrix, and a duplicate spike is performed with the
- analytes specified for each method. Standard Matrix Spike/QC Check Sample - A QC check sample consists of either an EPA reference, a National Bureau of Standards (NBS) traceable reference, or a laboratoryprepared spike into a standard matrix (typically deionized water) using stocks made independently of the calibration standards (i.e., same as a standard matrix spike). The QC check sample or standard matrix spike serves one of two purposes, depending on the method-
  - To verify the standard calibration using an independent standard Verification occurs when the method involves direct analysis of the sample. 1.
  - To differentiate between sample matrix interference and analytical procedural error Sample matrix spikes that fall outside of precision and/or accuracy acceptance criteria 2. indicate either matrix interference or a problem with the standard analytical procedure. An acceptable QC check sample provides strong evidence that a matrix interference is
  - Surrogate Spikes Surrogate spikes are specific compounds that are added to every sample analyzed and that are not expected to occur in field samples. The spikes are added to ٠ standards, blanks, matrix spikes, and QC check samples, to assess the recovery of all organic methods.
  - Trip Blank A sample bottle that is filled with organic-free water in the laboratory, transported to the site, handled like a sample, and returned to the laboratory for analysis (trip blanks are not to be opened in the field). The sample is analyzed for VOCs.

#### Data Quality Assurance 4.2

The overall QA objectives for the project are to develop and implement procedures for obtaining and evaluating data in an accurate, precise, and complete manner so that measurement data, sampling procedures, and field measurements provide information that is comparable and representative of actual field conditions.

Analytical methods have been selected on the basis of documented reliability and acceptability, and because they meet the general project objectives.

Data quality assessments will evaluate whether laboratory data generated are accurate and consistent with analytical data quality objectives. The laboratories will be initially responsible for performing a review of laboratory data. The 611 CES/CEVO will be responsible for ensuring that EPA quality assurance programs are complied with. The DQA will evaluate the usability of data based on a review of precision, accuracy, and compliance with analytical procedure control limits. A summary of the analytical data quality objectives is presented in Table 7.

- Sampling Procedures 4.3
- Field Sampling 4.3.1

The investigation activities completed at the Landfill 2 (LF03) site included a subsurface-soilsampling program, a sediment-sampling program, monitoring well installation, and a water (groundwater and surface water) sampling program. A sample analysis was performed at USACE-validated and ADEC-approved laboratories. Required sampling techniques and sample locations are included in the Field Sampling Plan The goals for soil, sediment, surface-water, and groundwater sampling are 1) to collect samples that are representative of field conditions, and 2) to properly identify, preserve, and transport samples to retain their integrity.

#### QA/QC Samples 4.3.2

Three types of QA/QC samples were used for the project: trip blanks, rinsate blanks, and duplicates. Each type of sample is defined in section 6.1. QA/QC samples are summarized for each site on Tables 3 through 6. In general, QA and QC samples each represent approximately 10 percent of the total number of field samples. Sampling and handling procedures are discussed below.

Trip blanks are used for VOC analyses of water samples, and are prepared by filling sample bottles with organic-free water. Trip blanks are sent to a sampling location with sampling jars, and are returned unopened from the sampling location with the samples and analyzed One trip blank will be shipped with each cooler of water samples for VOC analysis. Trip blanks were numbered like water samples, so that they could not be distinguished from other water samples by the associated sample numbers alone.

Rinsate blanks are obtained immediately before the samples to which they are related, and are processed by rinsing decontaminated sampling equipment with organic-free water The rinse water is collected in sample bottles, preserved, and handled in the same manner as the water samples. Rinsate blank samples will be collected at a minimum frequency of 1 for every 20 investigation water samples (or 5 percent) for both QA and QC. Rinsate blanks will be numbered like other water samples so that the laboratories will not be able to distinguish them.

Sample duplicates are collected for soil and water to evaluate the precision of the sampling and analytical processes. Each duplicate will be a blind sample, meaning the sample will be labeled with a sample number different than the sample being duplicated Therefore, it is critical that the field teams leader records the sample number and site identification in the field notes Every effort should be made to collect QA and QC duplicates at the same time and location

Duplicates for soil and water VOC and GRO analyses are always collected before other sample fractions to minimize loss of volatiles. Duplicate fractions for soil and sediment, other than the VOC and GRO fractions, were not collected as splits, but instead were collected as true duplicates, being comprised of a side-by-side double set of samples placed into appropriate sample containers. Duplicate samples will be collected at a minimum frequency of 1 for every 10 investigation samples (or 10 percent) for both QA and QC.

# 4.3.3 Sample Analytical Procedures

Laboratory analyses were conducted at an USACE-validated laboratory using familiar USACE analytical protocols. Data deliverables and analytical methods selected for use during the program were tailored to meet program objectives and to support field activities while providing results of sufficient quality to meet the intended data use.

#### 4.3.4 Analyses

The laboratory chosen was equipped to analyze soil and water samples for all required analytes listed below. Analyses were performed under the supervision of an experienced chemist

The media to be sampled included subsurface soil, groundwater, surface water, and sediment The analytical methods to be used are as follows:

- DRO were analyzed by gas chromatography (GC) using the ADEC Method AK102.
- DRO were analyzed by gas chiomatography (CC) analyzed
   GRO were analyzed by GC using the ADEC Method AK101.
- VOCs were analyzed by GC/mass spectrometry (GC/MS) using EPA Method SW-8260.
- □ SVOCs were analyzed by GC/MS using EPA Method SW-8270.
- SVOCs were analyzed by GC/WS using Er reason
   PCBs/organochlorine pesticides were analyzed by GC using EPA Method SW-8081 and 8082.
- Metals were extracted (acid digestion) by EPA Method SW-3050 Analyses are as follows:
- Metals were extracted (acid digestion) by 2000 and 100 an
  - <u>Selenium</u> GFAA using EPA Method SW-7740
  - Thallium GFAA using EPA Method SW7841.
  - Lead GFAA using EPA Method SW-7421.
  - <u>Antimony, barium, beryllium, cadmium, chromium, cobalt, copper, nickel, vanadium,</u> zinc, and silver - inductively coupled plasma (ICP) using EPA Method SW-6010

# 4.4 Data Quality Assessment

The 611 CES personnel will validate data obtained from field measurements by checking procedures used in the field and comparing the data to previous measurements Data that cannot be validated will be so documented.

The following reporting requirements will be followed for field data:

- Water levels: Measurements will be repeated until at least two are within 0 01 foot
- Soil sample depths. Tape measurements will be made to the nearest 0.1 foot, measurements made by known lengths of drill string will be made to the nearest 0.5 foot.
- Locations of sampling sites: Sampling locations will be surveyed in and a map made for a final report.

# 4.5 Laboratory Analytical Data

The following minimum QA/QC information should be included in any reported data batch.

- Narrative cover letter explaining corrective actions taken on reported data and/or data falling outside the method or QA specifications;
- Sample data (matrix, date sampled, date received, date of extraction, and date of analysis);
- Parameters, results, and test method identification;
- Results that are uncorrected for any method blank contamination;
- Sample-specific detection limits for each parameter,
- Results of laboratory control data, method blanks, spikes, and replicates,
- Copies of chain-of-custody forms.

The contract laboratories will submit a data report in accordance with USACE requirements.

The 611 CES reviewed the analytical data and the QA sample data, and prepared a DQA The DQA summarized results of the QA laboratory's data review This information will be used in the DQA when preparing investigation reports. The DQA report may include the results of

- The independent analytical data review
- Field operations audits
- Office operations audits

#### 4.6 Data Quality Control

Data quality will be assessed by analyzing laboratory QC and QA samples. Laboratory QA samples and laboratory QC samples will be analyzed by different laboratories.

#### 4.6.1 Field Quality Control

Procedures for the preparation, collection, frequency of use, and identification of QC samples are presented in section 6.3.2 and in Tables 3 through 6

# 4.6.2 Laboratory Quality Control

Laboratory QC procedures are those steps taken by the laboratories in day-to-day activities to achieve desired precision, accuracy, completeness, representativeness, and comparability Each analytical chemistry department manager and analyst will be responsible for performing the analysis in accordance with the defined QC practices outlined in ER 1110-1-263 (USACE, 1990)

Precision is a measure of agreement among analyses performed using the same test procedure, and is estimated by the RPD between duplicate samples. Precision will be assessed by analyzing field duplicates and/or matrix spike duplicates, calculating the RPD, and comparing the RPD to acceptance criteria. The analyses of field duplicates and laboratory duplicates will provide information on the precision of sample collection and analysis methodologies. Substandard precision in laboratory samples and subsequent corrective actions will be documented by the analytical laboratory and reviewed by the 611 CES project manager. The RPD of two duplicate samples will be calculated as follows:

$$RPD = \frac{D_1 - D_2}{(D_1 + D_2)/2} \times 100$$

Where:  $D_1$  and  $D_2$  = Concentration of duplicates 1 and 2, respectively.

#### Accuracy

Accuracy is the degree of agreement between a sample's target value (known concentration) and the actual measured value. Accuracy will be assessed by means of reference samples and percent recoveries. In addition to sample matrix spikes and surrogate spikes, a QC check sample consisting of commercial reference samples or spikes into a standard matrix (typically reagent water) will be analyzed, and "found values" will be compared to true or known values to assess accuracy. Results of the comparison will be expressed in terms of percent recovery

The QC check sample will also be used to assess the effects of any sample matrix interferences. If recoveries of matrix spikes are out of expected ranges and QC check samples show acceptable recoveries, then strong evidence exists that the sample matrix is affecting method accuracy. Accuracy for this project is measured by calculating the percent recovery of known levels of spike compounds into appropriate sample matrices. Percent recovery is calculated as follows:

$$\% R = (Q_d / Q_a) \times 100$$

Where: % R = Percent recovery

- Qd = Quantity detected by analysis minus unspiked sample quantity
- Q<sub>a</sub> = True or accepted reference quantity or value

Completeness

Completeness is defined as "a measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under correct normal conditions" (EPA, 1980). Following completion of the analytical testing, percent completeness will be calculated as follows:

Completeness		number of valid y values reported
(percent)	=	A los
for parameter y		number of samples planned for analysis

Documentation

The review of analytical and QC data begins at the bench-chemist level. The chemists will be aware of the QC requirements for the project and will verify that calibration and other QC requirements are met before sample analysis continues. QC checks are part of the data programs. The following will be achieved before the final data report is published:

- Sufficient number of initial and continuing calibration standards,
- Sample responses bracketed by the calibration standards responses,
- Minimum calibration coefficient,
- Sufficient number and types of QC samples in the data batch,
- Accuracy and precision for each type of QC sample,
- Verification that holding times for extraction and analysis have been met

If any of these checks are not met, the data will be further reviewed and will be signed by the laboratory project manager.

#### Representativeness

Representativeness expresses the degree to which data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition. Standardized, uniform field procedures will be implemented to achieve adequate representativeness of data.

#### Comparability

Comparability expresses the confidence with which one data set may be compared to another. Procedures to attain comparability will include

- Using the EPA SW-846 method of analysis, or
- Using ASTM methods, and
- Reporting data in conventional and standard units.

#### 5.0 REPORT OF SURVEY

For the purposes of site work at Cape Romanzof, work in general can be divided into two aspects of data collection, physical and chemical. Chemical parameters consist of laboratory or mineralogical or compositional data. Physical information in contrast consists of all other types of information derived from the study, including, but not limited to, visual observation, measurements and palpation, so that physical data, such as surface slopes, material density and other phenomena can be measured.

Physical observations in contrast consist of physical or observational measurements, such as surface slopes, material density, etc.

As previously described, the Kelso and Cox site-sampling plan consists of a minimum of 37 sample locations surveyed in on a hexagonal grid system (Figure 4). Kelso and Cox have shown that statistically, this plan of 37 gridded samples ensures that there is a 98 per cent chance of intercepting a contaminant plume. Since 611 CES/CEVO collected fifty soil samples, more than adequate coverage of the site was accomplished, and adequate information was thus derived.

On site work for this project commenced on 21 Sep 98 with the layout of the sample grid system as derived from the Kelso and Cox procedure. Commencing at the northwest corner of the landfill at the toe of the angle created with the road to the airfield, test pits were staked out 116 feet apart along a line parallel to the road. A baseline for survey control was laid out from this initial point, heading at a perpendicular to this row of samples (i.e., to the south). The baseline was staked out with points 98' apart. These points then served in turn as beginning points for new rows of sample points parallel to both the road and the initial row described above.

The westernmost side of the landfill, in an area located between SW2 and the main access road (Figure 3) is exceptionally rocky, being covered with felsenmeer so that there was literally no surface outcrop of soil in this area. The Glossary of Geology defines felsenmeer as "A flat or gently sloping area covered with a continuous veneer of large angular and subangular blocks of rock derived from well-jointed underlying bedrock by intensive frost action and usually occurring is situ on high, flat-topped mountains or plateaus above timberline in middle and high latitudes" This felsenmeer area exempted the area from the Kelso and Cox grid, and samples were taken here where they could be found.

A total of eight rows of sample points was laid out and staked. Alternate rows were staked with sample points 49 feet apart, twice as near as calculated from Kelso and Cox to provide adequate sample points to permit generation of an isograd contour map of PCB concentrations

Soil samples were taken at a depth of 6", two feet if possible and even deeper if possible, at sampling points as close as possible to the Kelso and Cox staked point. Excavation proceeded with a small rubber – tired backhoe which had some difficulty digging through this rocky area, particularly the felsenmeer field located in the northwest angle created by the intersection of the cap and the roadway, where sampling tended to be either spotty or not on a gridline because of the difficulty of sampling through and around the boulders

A total of 50 soil samples were collected for PCB analysis, taken at the locations and in the order shown on Figure 4. Soil samples were taken with a clean sample spoon from the middle of the backhoe bucket.

As excavation for soil sampling proceeded, materials from the old landfill site were either uncovered or brought to the surface. These materials included old pipes, electrical cables, and fuel tanks that indicate there is an uncapped portion of the landfill that extends southward for some tens of feet from the capped portion of the landfill, along the southwestern edge.

The physical survey was undertaken by professional surveyors from 611 CES/CEVO to establish baseline survey points for potential future studies. At the same time, the Kelso - Cox soil sampling points were surveyed in. Physical layout, contour lines, and soil sample points are located on Figure 4.

The top of the capped liner is a gently sloping flat surface that is contiguous with the main access road running between lower camp and the airfield, and serves as a local parking apron. Because of ready access by wheeled vehicles, this surface has been continuously wheel rolled over time, and is well compacted.

In contrast, the edges of this flat surface feather downhill onto natural ground. These tapering edges are rather steep, with slopes of unconsolidated backfill of just under 30 per cent. These steep slopes were found to have a minimum of compaction, so that these low density surfaces readily accepted footprints and were also found to be undergoing erosion, particularly along the southwestern edge, where tongues of eroded gravel extended over natural ground. From recollection and photogrammetry, a narrow tongue of alluvial outwash from the area of the exposed liner shown on Figure 4 extends to the west or southwest of this area for a distance of about thirty feet. Since these side slopes are so steep, it may well be that little or no compaction was done during cap construction, or indeed that appropriate compaction equipment was not on site. At any rate, this is a situation that should be repaired to prevent further erosion Other methods of slope stabilization include regrading and planting appropriate grasses, and creating a weak backfill/cement dry mix for slope packing.

#### Chemical Survey 5.2

Chemical survey contrasts with the physical survey in that the chemical survey defines the chemical or mineralogical composition of materials found on site, or the partial analysis for certain harmful analytes. This may be performed by soil and water sampling for laboratory analysis, field instrumental testing, or visual observations in the field as to mineralogy, weathering phenomena, or any other compositional clues.

#### Current Data 5.3

The data show that except for one sediment sample of unusually high PCB content, the landfill area is quite clean of hazardous contaminants.

Fifty soil samples were collected specifically for PCB analysis by the laboratory. During this laboratory sample collection a duplicate sample bottle was also filled so that field screening for PCBs could be performed on site. The results of this field screening are shown in Table 8. With the minimum detection limit at 0.1 PPM chloride ion, this translates into considerable less than that amount of PCB, since each PCB molecule contains many more than one chloride ion. There were no field detectable amounts of PCB in these soil samples. This was borne out by subsequent laboratory chromatographic analysis, which determined 620 PPB Arochlor as a maximum,

roughly half of the Dexsil Chloride Detector lower analytical range. Three surface water samples along with a duplicate were collected from locations SW1, SW2, and SW3 on Figure 4. Soil and sediment samples were also collected here, except at SD2, where seemingly a portion of the felsenmeer had been removed to expose the subcolluvial running water and accompanying sediment. This one lone sediment sample proved to be exceptionally high in PCB (Arochlor 1260) at 180 ppm, approximately three orders of magnitude higher than surrounding soil samples. There is no adequate rationale developed for this. This one particular site has shown high values of PCB in the past.

In addition, seven monitor well samples were collected, along with a duplicate. An attempt was made to sample MW2, but this monitor well proved to be dry after allowing the purged well to

Results of laboratory analysis are posted in Table 9. All units are in PPB, except where otherwise noted (180 ppm Arochlor 1260 for sample 57). Nearly all of these soil, sediment, and water samples show traces of methylene chloride (MeCl), phthalates, and either acetone or toluene. Methylene chloride is a highly volatile and fugitive laboratory solvent, capable of being transmitted through the air from an extraction bench to samples either through plastics or by means of an unopened bottle cap. Because methylene chloride would not be expected to be found in a landfill, and is commonly found in laboratory atmospheres, it is felt that this is a case of cross contamination. As further evidence, MeCl is also found in only one sample out of a duplicate pair (in other words, the duplicate analysis did not match, and it is more likely that MeCl came in as a laboratory derived airborne contaminant).

Phthalates are a class of organic compounds that are used as plasticizers, modifying hardness, strength, and toughness of polyethylene based plastics. It is common for phthalates to exist in leaching dump waters, and it is quite likely that indeed the phthalate contribution to the samples came from buried materials in the dump, as opposed to being a laboratory artifact.

Aromatics (toluene and Xylene) are found in nearly all water samples at low ppb ranges. Unfortunately, they are also found in the trip blank, and may represent the water soluble aromatic portion of the previously reported low levels of diesel range organics. At any rate, the low values are negligible.

# Comparison of Recent and Older Analytical Data

When comparing recent and old analytical data in Tables 9 and 10, it should be noted that at least three data points are needed to perform any sort of statistical analysis, and these three points must be derived in the same manner. That is, the samples must be collected by the same person in the same way at the same time of year, sent to the same lab, etc. However, there are some glimmers of possible trends, or at least concepts of indications that certain of the environmental chemicals might be behaving in a certain way, perhaps in part a result of the nature of the contaminant in itself. Items to be noted are:

- 1. There may be a trend developing for an increase of phthalate in monitor well samples. Since phthalate leaching is a normal part of landfill weathering of soil incorporated plastics, it may be that the seeming increase in phthalate leaching may be more a matter of a thermal lag, rather than a time lag. That is, the original samples were collected in mid June. There may have been dilution from melting snow waters in the ground, or even lack of solubility is early summer ground water.
- 2. Diesel Range Organic compounds may have suffered the same fate. It is somewhat suspicious that fuel constituents would increase over time, particularly when there is no evidence of addition or increase of soil fuel content. Changes in concentration may be a result of weather differences or flow rate differentials.
- Toluene and xylene are petroleum fuel constituents, found in both gasoline and diesel
   Toluene and xylene are petroleum fuel constituents, found in both gasoline and diesel fuels. It is interesting to note that they increased along with DRO values, as should be expected
- 4. There is some slight indication of decrease in PCB content, particularly of water. This may be due to leaching out and removal of Arochlor, or other unknown factors.

#### 6.0 CONCLUSIONS

6.1 A small portion of the landfill cap liner has been damaged. Probably no repair is necessary on the liner, since the damaged area is near the perimeter along the downhill side of the edge of the toe. However, the sloping sides of the landfill liner cap are loose, fluffy, and eroding. This does need repair before erosion proceeds much further.

6.2 Very little chemical contamination was found in the area of the capped landfill, and except for a lone sediment sample, trace chemicals found in the low part – per – billion ranges are of no great significance.

- 6.3 The one exceptionally high anomaly is at SD2, located in the middle of the felsenmeer. If considered of significant importance, this area should be resampled for sediment deposited by water heard running below the felsenmeer, although a piece of heavy equipment would have to be taken to the site to remove the felsenmeer blocks, which are about one foot wide and two feet long, running in weight over 300 pounds.
- 6.4 Now that baseline data has been established, to acquire statistical data water and sediment samples should be recollected annually during the same month.

# Tables

Table 1. Summary of Investigation Samples for Cape Romanzof Landfill 2 (LF03)

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Rationale	Evaluate contaminant concentration levels in areas of known and suspected contamination Evaluate physical properties of subsurface soil.	Evaluate contaminant concentration levels and assess contaminant migration downgradient of the landfill. Assess future sampling requirements.	Evaluate contaminant concentration levels in areas of known and suspected contamination Assess the potential migration of contaminants downgradient of the landfill.	Evaluate contaminant concentration levels in areas of known and suspected contamination Assess the potential migration of contaminants downgradient of the landfill
Analyses	DRO, GRO, VOCs, SVOCs, PCBs, TAL Metals, PSA	DRO, GRO, VOCs, SVOCs, PCBs, TAL Metals	DRO, GRO, VOCS, SVOCS, PCBs, TAL Metals	DRO, GRO, VOCs, SVOCs, PCBs, TAL, Metals
Turnaround Time	Normal	Normal	Normal	Normal
Number of Samules	2	٢	en e	£
Type of	sample Subsurface Soil	Groundwater	Sediment	Sur ace Water

DR() Diesel-range organics GR() Gasoline-range organics PSA Particle-size analysis PCBs Polychlorinated biphenyls SV()CsSemivolatile organic compounds TAL Target Analyte List VO(Cs Volatile organic compounds

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Arctic Zone         Under 40 inch Zone         Over 40 inch Zone         Over 40 inch Zone $\Lambda$ figration         Migration         Migration         Migration         Migration $n^2$ Indelation of Cround-vater         Indelation         Indelation         Migration $n^2$ Indelation         Nigration         Migration         Migration $n^2$ Indelation         North         Indelation         Indelation         Migration $n^2$ Indelation         North         Ingestion         Indelation         Indelation $n^2$ Indelation         North         Ingestion         Indelation         Indelation $n^2$ Indelation         Ingestion         Indelation         Indelation         Ingestion $n^2$ Ingestion         Indelation         Indelation         Indelation         Ingestion $n^2$ Ingestion         Indelation         Indelation         Indelation         Ingestion $n^2$ Ingestion         Indelation         Ingestion         Indelation         Ingestion $n^2$ Ingestion         Ingestion         Ingestion         Ingestion         Ingestion <th>ċ</th> <th>- SOIL</th> <th>, CLEANL</th> <th>JP LEVI</th> <th>ELS TAF</th> <th>3LE</th> <th></th> <th></th> <th></th> <th></th>	ċ	- SOIL	, CLEANL	JP LEVI	ELS TAF	3LE				
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$10^{11}$ (mg/kg)         (N/A)         (mg/kg)         <			Intralation <sup>6</sup>	Ground-	Ingestion	Inhalation	to Groundwater	Ingestion	Inhalation (mg/kg)	ter (mg/kg)
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410000     390     332000     2.4       1     1     3     0.9     2.4       5     8     3     0.002     6     2.4     0002       5     8     3     0.002     6     2.4     0003       5     130     130     0.35     1100     1100     0.34 $590^{12}$ 1050     500     0.38     860     370     0.34 $590^{12}$ 1050     500     0.38     860     370     0.34 $590^{12}$ 10000     500     0.38     860     370     0.34 $590^{12}$ 10000     453^{12}     17     8300     9 $420$ 20000     2     340     453^{12}     16 $453^{12}$ 10000     453^{12}     17     8300     453^{12}     16 $5$ 64     3.4     0.03     52     2.6     003 $5$ 64     3.4     3.4     5     100     3					110		200	00000		150
1       3 $0.7$ $2.4$ $0.002$ 5       8       3 $0.002$ $6$ $2.4$ $0.003$ 5       8       3 $1200$ $490$ $1100$ $0.34$ $130$ $0.03$ $1100$ $0.35$ $110$ $0.34$ $590^{12}$ $1050$ $500$ $0.38$ $860$ $370$ $0.34$ $590^{12}$ $1050$ $500$ $0.38$ $860$ $370$ $0.34$ $590^{12}$ $10000$ $500$ $0.38$ $860$ $370$ $0.34$ $590^{12}$ $10000$ $500$ $0.38$ $860$ $370$ $0.34$ $10000$ $420$ $500$ $0.3300$ $1000$ $8300$ $453^{12}$ $16$ $453^{12}$ $17$ $8300$ $453^{12}$ $16$ $0.03$ $52$ $26$ $0.03$ $5$ $500$ $5$ $5$ $100$ $370$ $5$ $100$ $5$ $5$ $5$ $1003$ $52$ $26$ $0.03$					410000		390	132000		24
5     8     3 $0.002$ $0.02$ $0.2$ $2.7$ $1100$ 590     590     130     0.35     110     0.3       590 <sup>12</sup> 1050     500     0.38     860     370     0.34       590 <sup>12</sup> 10000     0.38     860     370     0.34       591     10000     500     0.38     860     370     0.34       6     10000     453 <sup>12</sup> 17     8300     453 <sup>12</sup> 16       700     453 <sup>12</sup> 17     8300     453 <sup>12</sup> 16       5     64     3.4     0.03     52     2     0.03       5     64     3.40     3     52     2     0.03		2			1		3	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	4 6	0 002
$2$ $590$ $1200$ $490$ $1100$ $590^{12}$ $130$ $0.35$ $110$ $0.34$ $590^{12}$ $1050$ $500$ $0.38$ $860$ $370$ $0.34$ $590^{12}$ $1050$ $500$ $0.38$ $860$ $370$ $0.34$ $590^{12}$ $10000$ $500$ $10$ $8300$ $9$ $420$ $20000$ $5600$ $16600$ $2000$ $453^{12}$ $17$ $8300$ $453^{12}$ $16$ $453^{12}$ $17$ $8300$ $453^{12}$ $16$ $5$ $64$ $3.4$ $0.03$ $52$ $26$ $003$ $5$ $64$ $3.4$ $0.03$ $52$ $26$ $003$ $5$ $64$ $3.4$ $3$ $5$ $100$ $3$					<u>.</u>	3	0.002			
$130$ $130$ $0.35$ $110$ $0.34$ $590^{12}$ $1050$ $500$ $0.38$ $860$ $370$ $0.34$ $590^{12}$ $10000$ $500$ $0.38$ $860$ $370$ $0.34$ $10000$ $10$ $8300$ $10$ $8300$ $9$ $10000$ $20000$ $5600$ $16600$ $5000$ $420$ $22$ $340$ $453^{12}$ $17$ $8300$ $453^{12}$ $16$ $453^{12}$ $17$ $8300$ $453^{12}$ $17$ $8300$ $453^{12}$ $16$ $5$ $64$ $3.4$ $0.03$ $52$ $26$ $003$ $5$ $64$ $3.4$ $3$ $52$ $26$ $003$ $5$ $64$ $3.4$ $3$ $52$ $26$ $003$	<u>al 8</u>				590		1200	-1 <u>0</u>		~ ~
$590^{12}$ $1050$ $500$ $500$ $38$ $860$ $570$ $590^{12}$ $10000$ $100$ $8300$ $9$ $10000$ $20000$ $5600$ $16600$ $9$ $420$ $20000$ $2$ $340$ $2$ $453^{12}$ $17$ $8300$ $453^{12}$ $16$ $5$ $64$ $3.4$ $0.03$ $52$ $26$ $0.03$ $5$ $64$ $3.4$ $0.03$ $52$ $26$ $0.03$ $5$ $64$ $3.4$ $3.5$ $26$ $0.03$ $5$ $100$ $3$ $52$ $26$ $0.03$					130		0 35		01.6	5-0 74
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	140		590 <sup>12</sup>		1050	500	0 38	860		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$							01	8300		6
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	<u>₹</u>	000			10000		2600	16600		5000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1ã	000			20000	-+-	2000	140	 	2
453 <sup>12</sup> 10000         453 <sup>12</sup> 1/         0.03         52         2.6         0.03         5         0.03         5         1000         3         5         1000         3         5         100	12	Ŀ			420			0028	453 <sup>12</sup>	16
5         64         3.4         0.03         7*         100         3           500         6         140         3         5         100         3	12	000	453 <sup>12</sup>		10000	453"		5)	26	0 03
<u>500</u>   6   140   3   2   2   2   2   2   2   2   2   2			l s		64	3.4	<u>cn.u</u>	     		<u> </u>
	3		0.05	 	9	140	13			

	A METHOD TW	'0 – SOIL	CLEAN	JP LEVI	ELS TAE	)LE				
					linder 4	10 inch Zone <sup>1</sup>		Over	r 40 inch Zo	le'
		Arc	tic Zone	Mioration						Migration
-				to			Migration			Groundwa-
	NAME	- s and so the second	Inhalation <sup>6</sup>	Ground- water	Ingestion	Inhalation	Groundwater	Ingestion	Inhalation (me/kg)	ter (mg/kg)
CAS	(Carcinogenics in Bold Tune)	(mg/kg)	(mg/kg)	(N/A)	(mg/kg)	(mg/kg)	n s	330		).46
NUMBER	Chloroaniline	550			410	01	0.6	1700	81	05
0-4-00 200	Chlorobenzene	2700	160		2000	110	<u> </u>	80		0.2
1-06-201	Clautocate and the second share	130			100		7.0	0.0		6
124-48-1		1400	5		1000	3.4	0.34	830	<b></b>	1.3
67-66-3	Chlorotorm	680			510		1.4			550
95-57-8	2-Chlorophenol	000			0011		620	056		
218-01-9	Chrysene <sup>15</sup>	1500			3.5		47	28		42
72-54-8	DDD	47					150	20		130
77.65.0	DR	33			+7	2300	88	20	3900	80
200.02	DUT	33	7800		- 4	- Andre	9	0.9		5
C-67-00	Distantation h) anthracene	1.5					0021	8300		1500
53-70-5	Diversion april anthalate	14000			10000		0000	1200		720000
84-74-2	Di-II-Outyl puttered	2700			2000	12	1000010	7500	110 <sup>12</sup>	9
11:-84-0		12000	110 <sup>12</sup>		9100	- 011		USC 1	6000	0.7
95-50-1		470	12000		350	8000	0.8	207		0.02
106-46-7	1,4-DICRIOCODCULATION	25			18	12	0.02	8300	890 <sup>12</sup>	11
91-94-1	3,3-DICING OUCHAINS	14000	890 <sup>12</sup>		10000	890	112	2020	35	0 01
75-34-3	1, 1-DICIII010CIUMIC	120	2		91	~	c10.0	2	2 2 2	0 03
107-06-2	1,2-Dichloroethane	01	13		14	0.9	0.03		C0.0	200
75-35-4	1,1-Dichloroethylene	17			0001		0.2	830		4.0
15()-59-2	cis-1,2-Dichloroethylene	1400			0006		0.4	1700		9.34
156-60-5	Trans-1,2-Dichloroethylene	2700			100		0.45	250		0 45
120-83-2	2 4-Dichlorophenol	410				17	0 017	100	12	0 015
79.97	1.2-Dichloropropane	160	25		071	1 5	0.02	25	-	0 02
9-51-615	1.3-Dichloropropene	41	2.3							

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	A METHOD TW(	0 – SOIL	CLEAN	JP LEVI	ELS TAB	ILE				.
ABLE 21					Iladar 4	to inch Zone <sup>2</sup>		Ovel	r 40 inch Zo	le,
		Arc	tic Zone '	Minution						Migration
				to to			Migration	Ņ		Groundwa-
	CHEMICAL NAME	Investion <sup>5</sup>	Inhalation <sup>6</sup>	Ground- water	Ingestion	Inhalation	Groundwater	Ingestion (mg/kg)	Inhalation (mg/kg)	ter (mg/kg)
CAS MIMBER 4	(Carcinogenics in Bold Type)	(mg/kg)	(mg/kg)	(V/V)	(mg/kg) 8	(mg/kg)	0.015	04	9	0.014
60-57-1	Dieldrin	0.7	12		100000		1400	830000		1200
1-12-00	Dimethyl phthalate	>1000000					061	66000		170
C-11-1CI	Diethvl nhthalate	110000			81000		4	1700		3.6
2-00-40	2 4-Dimethylohenol	2700			2000		0.2	170		0 17
2 00 13	2, 1, Dinitronhenol	270			700			830000		1200
C-07-1C		>1000000			>1000000		1400	10		0 0044
131-11-3	Dimethyl phulalate	21			12		500.0			0.004
121-14-2	2,4-Dinitrotoluene				12		0.0044	⊇ _		
606-20-2	2,6-Dinitrotoluene									
174-60-16	Dioxin <sup>8</sup>				10		7	500		
115-29-7	Endosulfan	820			010		0.3	25		0.3
77_06	Endrin	41	!		00001	g012	5.5	8300	89 <sup>12</sup>	2
100.414	Ethylbenzene <sup>15</sup>	13700	8912			2	2100	3300		1900
20K 44-0	Fluoranthene	5500			100		270	3300		240
727.20	Fluorene <sup>15</sup>	5500				80	<u> 00</u>	15	0.6	
76.44-8	Hentachlor	2.5	1.2			33	0.2	0.75	25	02
1074-57-3	Hentachlor eporide		50		4.7		0 73	-1	~	07
1-12 311	Hexachlorobenzene	7	10			22	×	17	41	
110-11-1	Herachloro-1,3-butadiene	27	82		07	27 2 2	0 0026		4	0 002
C-00-10	Linha-Herachlorococlohexane	e 2	8		1.3		000		32	0 008
319-46-2	hata-Hevachlorocyclohexane	9	65		46		0.003	<u> </u> ~	   	0 003
1-0-615	ora ma-Herachlorocyclohex-	6			6 4					
58-89-9	ane (Lindane)				012	2	130	580	<u>~</u>	120
77-47-4	Hexachlorocyclopentadiene	960			101	390	1.6	83	290	14
67-72-1	Herachloroethane	1139								

A METHOULTWO CHEMICAL NAME		CLEAN	JP LEVI	ELS TAF	3LE				
CHEMICAL NAME					Ant Tone		Over	r 40 inch Zo	ne
CHEMICAL NAME	Arci	lic Zone '		Under	40 INCD 2011C				Migration
CHEMICAL NAME			Migration			Migration			to Groundwa-
	Ingestion <sup>5</sup>	Inhalation <sup>6</sup>	Ground- water	Ingestion	Inhalation (me/kg)	to Groundwater (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	ter (mg/kg)
Buld Type)	(mg/kg)	(mg/kg)			10-10-	54	6		50
	2						7200		2.6
leno(1,2,3-C,u)pyreuc	1800			8700		53	420		47
phorone 6	80			510		0.16	120	11	0.14
ethoxycnuor	190	21		140	14	0.015	006	135	0.01
etnyi oronnue	1500	270		1100	180		4200		9
ethylene curor we	6800			5100		/ 17	3300		38
McInyIplicitud (V Viver-)	5500			4100		900	42	67	0.06
	68	130		51	06	3.4	1400		
Itrobenzene	2300			1700		2.000	01		0.0003
-Nitrosodiphenyiamue	16			112			2 J 3		0.009
-Nitrosodi-n-propyiaum	46 713			35 <sup>13</sup>					60
entachlorophenol	40.7		   	60800		67		9	10
henol	010	10	 	10	10	10	10	2	
PCBs)				1000		1500	2500		1400
ovrene <sup>15</sup>	4100	1			280 <sup>12</sup>	13	17000	280'	1 2
Ityrene	27400	280'*	 	20202	5.4	0.017	34		10.0
1.1.2.2-Tetrachloroethane	56	8		160	80 <sup>12</sup>	0.03	130	64	C70 0
Tetrachloroethylene	220	80'-		00200	180 <sup>12</sup>	5.4	17000	180	4.0
Toluene <sup>15</sup>	27400	180.2		20277	620	10	و.	460	
Toxanhene	0	920			570 <sup>12</sup>	2	830	570'	
1 2.4-Trichlorobenzene	1400	570'4	-+-		460 <sup>12</sup>	10		1091	0 9
1, 1, 1-Trichloroethane		460''		150	10	0 017	120	<u>∞</u>	c100

			CLEAN	JP LEVI	<b>ELS TAE</b>	3LE				
<b>ABLE 2</b> .	A MEIHODIW							Ove	r 40 inch Zo	ne
		Arc	tic Zone <sup>1</sup>		Under	40 inch Zone				Migration
				Migration			Migration			to Groundwa-
	CHEMICAL NAME	Ingestion 5	Inhalation <sup>6</sup>	Ground- water	Ingestion	Inhalation (mo/ke)	to Groundwater (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	ter (mg/kg)
CAS	(Carcinogenics in Bold Type)	(mg/kg)	(mg/kg)	(V/V)	(mg/kg) 750	43	0.027	620	32	0 02
79-01-6	Trichloroethylene	000	45		10000		06	8300		
05-95-4	2.4.5-Trichtorophenol	13700				1 500	0.6	620	1100	05
C-90-88	2.4.6-Trichlorophenol	1000	2300		000101	0001	100	83000	1100	06
4 50 001	Vinvl acetate	137900	2200 <sup>12</sup>		000101	00C1	600.0		0.3	0 008
		9	0.7		4	2110	18	166000	81 <sup>12</sup>	69
75-01-4		274000	81 <sup>12</sup>		203000	10				
1330-20-7	Xylenes (lotal)							     		5
	INORGANICS				41		3.6			81
7440-36-0	Antimony	<u>s</u>			5.5		12	C.4		982
7440-38-2	Arsenic	×			7100		1100	nnec		38
7440-39-3	Barium	9600			6.1		42	1.6		
7440-41-7	Beryllium	2.6			01		5	83		2 6
7440-43-9	) Cadmium	140			510		26	420		1000001
7440-47-3	Chromium (Total)	680			10000		0000001<	83000		
16065-83-	.1 Chromium +3	137,000			510		26	420	     -+-	
10540-79-	.9 Chromium +6	680			2000		27	1200		•
10-10-2	Cvanide <sup>10</sup>	2700								
74'19-92-	1 Lead <sup>11</sup>					18	14			+7 1
-79-91-6	6 Mercury		20	 	0000		87	1700	-	0, 5
-20-01 12	0 Nickel	2700			015		3.5	420		
7707-49-49-	o Selenium	680		\   - <del> </del> -	\$10 \$		21	420		19
7410-22-	4 Silver	680			10		3400	580		ncnc
CY-01 V-	-2 Vanadium	960								
していたます										

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	AFTHOD TW	VO – SOIL	, CLEANI	JP LEVI	ELS TAB	LE				
LABLE 2								Over	- 40 inch Zo	ne
		Arc	tic Zone		Under 4	n Incn Zung				Migration
				Migration			Migration	·		to Groundwa-
	CHEMICAL		``	Ground-		Inhatation	to Groundwater	Ingestion	Inhalation	ter
SA C	(Carcinogenics in	Ingestion <sup>5</sup>	Inhalation °	water N/A)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg/
NUMBER <sup>4</sup>	Bold Type)	(mg/kg)	(Ing/Kg)		30000		9100	25000		
7440-66-6	Zinc	41000		NCL						
			しょうろうましょう							

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NOTES TO TABLE B1 FOLLOW TABLE B2 IN (d) OF THIS SECT

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F		Maximum Allowable	Concentrations' mg/kg		1400	12500	22000		1000	1000		10000	5000	20000	10000		
		one	Migration to Groundwater (mg/kg)		260	230	9700	and 103AA	240	130		6400	8	20000	2900		
	S	er 40 Inch Z	Inhalation (mg/kg)		1400	12500	22000	AA, 102AA,	1000	0001		10000	5000	20000	10000		
	LEVEL	Ŏ	ingestion (mg/kg)	02, and 10.	1400	8250	8300	thods 101	1000	0001	000T	8300	3300	20000	2500		
	LEANUP	Cone	Migration to groundwater (mo/kg)	lethods 101, 1	300	250	11000	c Fraction Me	020		120	7200	100	2000	0055		
	יין כ רייך כ	er 40 Inch 2	Inhalation (modeo)	using AK N	1400	12500	22000	nd Aromati			1000	10000	5000	00006	10000	Innon	
	ARBON	Und	Ingestion	y Analysis	1400	10250	10000	Alinhatir g		0001	1000	10000	4100	00000	0000	at amilicahl	ion apprinting
			Migration to Groundwater	(mg/kg)  - For Laborator	N/A	N/A	N/A			N/A	N/A	N/A	N/N		N/N	N/A N/A	
		Arctic Zone	Inhalation	(m <u>g/kg)</u>	1400	12500	22000		ratory Anal	1000	1000	10000	0005		20000	10000	lurements.
			Ingestion	(mg/kg)	1400	12500	13700		For Labor	1000	1000	10000	0003	0000	20000	4100	ir further req
		Petroleum	Hydrocarbon Range		C <sub>6</sub> -C <sub>10</sub> GRO using AK 101	C <sub>10</sub> -C <sub>25</sub> DRO using AK 102	C <sub>25</sub> -C <sub>36</sub> RRO using AK 103		C <sub>c</sub> -C <sub>to</sub> Aliphatics	Accuration		C10-C25 Aliphatics	C10-C25 Aromatics	C <sub>3</sub> ,-C <sub>46</sub> Aliphatics	C.4-C.46 Aromatics		See notes to table fo

### **Fables 2A and 2B**

For PCB-free mineral oils, the department will approve alternate levels or exposure pathways, if the department determines that the alternative levels or exposure pathways are protective of human health, safety, and welfare, and of the environment. Although migration to groundwater is not applicable to the Arctic zone, site-specific levels must be protective of migration to surface water Concentrations of hazardous substances in soil must be calculated and presented on a per dry weight basis For volatile organic hazardous substances for which toxicity data is not currently available, the cleanup level that applies at a site is the calculated saturation concentration determined using the equations set out in Guidance on Cleanup Standards Equations and Input Parameters, adopted by reference in 18 AAC 75 325 The cleanup level from Table B1 or B2 that applies at a site is the most stringent of the applicable exposure pathway-specific cleanup levels based on ingestion, inhalation, or migration to groundwater. In Table B1, a blank space means not available or not applicable

1 "Arctic zone" is defined at 18 AAC 75.990.

2. "under 40 inch zone" means a site that receives mean annual precipitation of less than 40 inches each year.

3. "over 40 inch zone" means a site that receives mean annual precipitation of 40 or more inches each year 4 "CAS Number" means the Chemical Abstract Service (CAS) registry number uniquely assigned to chemicals by the American

Chemical Society and recorded in the CAS Registry System

5. "ingestion" means a potential pathway of exposure to hazardous substances in soil through direct consumption of the soil. 6. "Inhalation" means a potential pathway of exposure to volatile organic hazardous substances in the soil through volatilization.

7. "Migration to groundwater" means a potential exposure to hazardous substances in soil through direct ingestion of groundwater contaminated with concentrations of hazardous substances at levels listed in Table C at 18 AAC 75.345(b)(1) as a result of movement of hazardous substances through soil to the groundwater; this exposure pathway is not applicable to the Arctic zone, where soil cleanup levels protective of migration to surface water must be determined on a site-specific basis.

8. Dioxin cleanup levels must be determined on a site-specific basis.

9. For residential land use, the cleanup level for PCBs in surface soil is 1 mg/kg; for commercial or industrial land use, the cleanup level for PCBs in surface soils is 10 mg/kg and for PCBs in subsurface soil is 25 mg/kg; a responsible person may also propose an alternative cleanup level through an approved site-specific risk assessment, conducted according to the Risk Assessment Procedures Manual,

d by reference at 18 AAC 75.340.

yanide expressed as free, or physiologically available cyanide. 11 Lead cleanup levels must be determined on a site-specific basis, based on land use; for residential land use, the soil cleanup level is 400 mg/kg, and for commercial or industrial land use, that level is 1,000 mg/kg; through an approved site-specific risk assessment, conducted according to the Risk Assessment Procedures Manual, adopted by reference at 18 AAC 75.340, approved exposure models may be used to evaluate exposure to a child resident or an adult worker, a responsible person may also propose an alternative cleanup level, through a site-specific risk assessment conducted according to the Manual, and based on a chemical speciation of the lead present

12 These levels are based on soil saturation level (Csat) using the equations set out in Guidance on Cleanup Standards Equations and Input Parameters, adopted by reference in 18 AAC 75.325.

13. Ingestion value is adjusted by a factor of 0.5 to account for dermal exposure.

14. This level is the concentration of  $C_6 - C_{10}$ ,  $C_{10} - C_{25}$ , or  $C_{25} - C_{36}$  petroleum hydrocarbon range in surface and subsurface soil that, if exceeded, indicates an increased potential for hazardous substance migration or for risk to human health, safety, or welfare, or to the environment; the level of a petroleum hydrocarbon may not remain at a concentration above the maximum allowable concentration unless a responsible person demonstrates that the petroleum hydrocarbon will not migrate and will not pose a significant risk to human health, safety, or welfare, or to the environment. Free product must be recovered as required by 18 AAC 75.325(f)

15. If using method two or method three, the applicable petroleum hydrocarbon cleanup levels must be met in addition to the applicable chemical-specific cleanup levels for benzene, toluene, ethylbenzene, and total xylenes; the chemical-specific cleanup levels for the polynuclear aromatic hydrocarbons acenaphthene, anthracene, benzo (a) anthracene, benzo (b) fluoranthene, benzo (k) fluoranthene, benzo (a) pyrene, chrysene, dibenzo (a, h) anthracene, fluorene, indeno (1,2,3-c, d) pyrene, naphthalene, and pyrene must also be met unless the department determines that those cleanup levels need not be met to protect human health, safety, and welfare, and the environment. (Eff. 1/22/99, Register 149)

Authority:	AS 46.03.020 AS 46.03.050 AS 46.03.710	AS 46.03.740 AS 46.03.745 AS 46.04.020	AS 46.04.070 AS 46.09 020
	AS 46.03.710	AS 46.04.020	

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18 AAC 75.345. GROUNDWATER AND SURFACE WATER CLEANUP LEVELS. (a) Except as otherwise provided in this section, cleanup of a discharge or release of a hazardous substance to groundwater or surface water must meet the requirements of this section

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(b) Contaminated groundwater must meet

(1) the cleanup levels in Table C if the current use or the reasonably expected potential future use of the groundwater, determined under 18 AAC 75.350, is a drinking water source;

Hazardous Substance	CAS Registry Number	Groundwater Cleanug Level (mg/L)	
	83-32-9	2.2	
enaphthene	67-64-1	3.00	
etone	309-00-2	0.00005	
drin	120-12-7	0.006	
nthracene	7440-36-0	0.000	
ntimony	2440.38-2	0 05	
	7440-38-2	2.0	
	71_43-2	0 005	
	56-55-3	0.001	
enzo(a)anthracene	205-99-2	0.001	
enzo(b)fluoranthene		0.01	
	207-08-9	146.0	
Senzo(k)fluoranthene	65-85-0	0 0002	
Benzoic acid	50-32-8	0.004	
Benzo(a)pyrene	7440-4-17	0 00077	
Beryllium p://aplanosthyl)cther	111-44-4		
Bis(2-chior bethy)/ctaet	117-81-7	0.006	
P <sup>:</sup> -(?-ethylhexyl)phthalate	75-27-4	0.1	
odichloromethane	75-25-2	0.1	
Joform (Tribromomethane)	71-36-3	3 65	
Butanol	85-68-7	1.5	
Butyl benzyl phthalate		0 005	
	7440-04-39	0.04	
Cadmium	80-74-0 75-15-0	3.65	
Carbon disulfide	56-23-5	0.005	
Carbon tetrachloride	57-74-9	0.002	
Chlordane		0.15	
	106-47-8	0.13	
p-Chloroaniline	108-90-7	0.06	
Chlorobenzene	124-48-1	0.1	
Chlorodibromomethane	67-66-3	0.2	
Chloroform	95-57-8		
2-Chiorophenon	7440-47-3	01	
Chromium (Total)	16065-83-1	36.5	
Chromium +3	18540-29-9	0.1	
Chromium +6	218-01-9	0.1	
Chrysene	7440-05-08	1.3	
Copper	57-12-5	0.2	
Cyanide	70.54.9	0.0036	
	12-34-8	0 0025	
עטע	12-53-5		

Hazardous Substance	CAS Registry Number	Groundwater Cleanup Level (mg/L)		
	50-29-3	0.0025		
 DT	53-70-3	0 0001		
benzo(a,h)anthracene	84-74-2	3.65		
-n-butyl phthalate				
	95-50-1	0.0		
2-Dichlorobenzene	106-46-7			
-Dichlorobenzene	91-94-1	0.002		
3-Dichlorobenzidine	75-34-3	3.05		
1-Dichloroethane	107-06-2	0.005		
2-Dichloroethane		0.007		
	75-35-4	0,007		
1-Dichloroethylene	156-59-2			
s-1,2-Dichloroethylene	156-60-5	0.1		
ans-1,2-Dichloroethylene	120-83-2	0.1		
4-Dichlorophenol	78-87-5	0.003		
2-Dichloropropane		0.005		
	542-75-6	0 00005		
3-Dichloropropene	60-57-1	29.0		
Dieldrin	84-66-2	07		
Diethyl phthalate	105-67-9	0.1		
4-Dimethylphenol		0.07		
at the second	51-28-5	0 00125		
Jinitrophenor	121-14-2	0 00125		
2,4-Dinitroloucuc	606-20-2	07		
2,6-Dinitrolouene	117-84-0	0 0000003		
Di-n-octyl philialaic	174-60-16			
Dioxin	115 29-7	0.2		
	113-23-7	0.002		
Endon	12-20-0	0.7		
Ellum Edudhanzene	100-41-4	1.46		
Elliyioutizan	200-44-0			
Fluorantiche	96-73-7	1.46		
Fluorene	76_44-8	0.0004		
Tantachlor	1034-57-3	0.0002		
Heptachlor en0xide	110 74_1	0.001		
Herechiorobenzene	07 49-2	0.01		
Herochloro-1.3-butadiene	87-08-3			
Hexaculoro-1,0-0 data tar	310-84-6	0 0001		
Alpha-Hexachlorocyclohexane	210_85_7	0.00047		
Bote-Heyachlorocyclohexane	517-05-7	0.0002		
Comme-Heyachlorocyclohexane (Lindane)	J0-07-7 77_A7_A	0.05		
Havachlorocyclopentadiene	67_72_1	0.06		
The achieve than e	0/-/2-1			
netachiorocchane	103-39-5	0 001		
Indeno(1,2,3-c.d)pyrene	78-59-1	09		
Teonborone	7439-92-1	0 015		
	1457.70			

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Hazardous Substance	CAS Registry Number	Groundwater Cleanup Level (mg/L)
	7439-97-6	0.002
lercury	72-43-5	0 04
fethoxychlor	74-83-9	0.05
Aethyl bromide		0.005
Aethylene chloride	75-09-2	18
-Methylphenol (o-cresol)	yo-48-7	1 46
Janbthalene	91-20-3	0.1
Jickel	/440-02-0	
	98-95-3	0.018
Nitrobenzene	86-30-6	0.17
n-Nitrosodiphenylamine	621-64-7	0 0001
n-Nitrosodi-n-propylamine	87-86-5	0 001
Pentachlorophenol		22.0
	108-95-2	0.0005
Phenoi Delightering to d binhenvis (PCBs)	133-63-63	1 1
Polychiorinated orphenyis (1 C20)	129-00-0	1.1
Pyrene	7782-49-2	0.19
Silver	7440-22-4	V.10
Silver	100.42.5	0.1
- •ne	70.24.5	0.004
2-Tetrachloroethane	107 18-4	0.005
etrachloroethylene	7440280	0.002
Thallum	109 98-3	10
Toluene	8001-35-7	0.003
Toxaphene	8001-50 2	
	120-82-1	0.07
1,2,4-Trichlorobenzene	71-55-6	0.2
1,1,1-Trichloroethane	79-00-5	0.005
1,1,2-Trichloroethane	79-01-6	0,005
Trichloroethylene	95-95-4	3.65
2,4,5-1 richlorophenor		0.077
2.4.6-Trichloronhen0	88-06-2	0.26
Vanadum	7440-00-22	36.5
Vinvl acetate		0.002
Vinyl chloride (Chloroethene)	/5-01-4	10 0
Xvienes (total)	1530-20-7	11.0
Zinc	/440-00-0	
Petroleum Hydrocarbons		
· · · · · · · · · · · · · · · · · · ·		1.3*
$GRO - C_6 - C_{10} (AK 101)$		1.5
DRO - C10 - C25 (AK 102)		1.1
$RRO - C_{25} - C_{36}$		
		1.3*
C <sub>6</sub> - C <sub>10</sub> - Aliphatics		

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(Carc	inogenics in Bold Type)	
Hazardous Substance	CAS Registry Number	Groundwater Cleanup Level (mg/L)
		7.3
6 - C <sub>10</sub> - Aromatics		0.1*
-10 - C <sub>25</sub> - Aliphatics		1.5
- C <sub>25</sub> - Aromatics		N/A (insoluble)
Cas - Cas - Aliphatics		1.1
Cos - Cos - Aromatics		

(2) a concentration equal to 10 times the cleanup levels in Table C, based on a determination of groundwater use made under 18 AAC 75.350 in consultation with each site landowner, the public, and appropriate government officials if

(A) the department determines that the groundwater is not a current source of drinking water or that the reasonably expected potential future use of the groundwater is not a drinking water source; and

(B) the cleanup levels in Table C are met at the property boundary in an area where the current use or reasonably expected potential future use of groundwater in the neighboring property is determined to be a source of drinking water; or

(3) an approved cleanup level based on an approved site-specific risk assessment conducted under the Risk Assessment edures Manual adopted by reference in 18 AAC 75.340.

(c) The department will require a more stringent cleanup level than the applicable level under (b) of this section, if the department determines that a more stringent cleanup level is necessary to ensure protection of human health, safety, or welfare, or of the environment, and based on actual onsite and actual or likely offsite uses of the groundwater that are likely to be affected by the hazardous substance, and

(1) the groundwater use classifications other than for drinking water, as set out under 18 AAC 70.020(a)(1)(A) and 18 AAC 70.050(a)(2);

(2) groundwater hazardous substance concentrations complying with the secondary maximum contaminant levels in 18 AAC 80.070 for actual or likely drinking water supplies; and

(3) the standards in this section for groundwater contaminated with petroleum, the contamination may not exceed, for each petroleum hydrocarbon range applicable, including the gasoline range, the diesel range, and the residual range,

(A) a Threshold Odor Number (TON) of 1 for odor, as measured by Method 2150B, Standard Methods for the Examination of Water and Wastewater, 18th edition, American Public Health Association (1992), adopted by reference, or

(B) a Flavor Threshold Number (FTN) of 1 for flavor, as measured by Method 2160B, Standard Methods for the Examination of Water and Wastewater, adopted by reference in (A) of this paragraph.

(d) Toxic substances in sediment may not cause, and may not be reasonably be expected to cause, a toxic or other deleterious effect on aquatic life, except as authorized under 18 AAC 70. For purposes of this subsection, "toxic substances" has the meaning given in 18 AAC 70.990.

(e) The point of compliance where groundwater cleanup levels must be attained is throughout the site from each point extending vertically from the uppermost level of the saturated zone to the lowest possible depth that could potentially be affected by the discharge or release of a hazardous substance, unless the department approves an alternative point of compliance as part of the cleanup action under or release of a hazardous substance, unless the department approves an alternative point of compliance as part of the cleanup action under

18 AAC 75.360 To be approved under this subsection, an alternative point of compliance 1) must be within the existing groundwater contamination plume, and

(2) may not exceed the property boundary, unless a responsible person

(A) demonstrates that attainment of the applicable groundwater cleanup levels is not practicable, and

(B) provides an alternative source of water for affected persons.

(f) Groundwater that is closely connected hydrologically to nearby surface water may not cause a violation of the water quality standards in 18 AAC 70 for surface water or sediment. The department will, in consultation with local, state, and federal officials and the public, establish points of compliance with this subsection, taking into account the following factors:

(1) groundwater travel time and distance from sources of hazardous substances to surface water,

(2) the contribution of the groundwater to the chemical and physical quantity and quality of the surface water,

(3) organisms living in or dependent upon the groundwater to surface water ecosystems;

(4) climatic, tidal, or seasonal variations;

(5) feasibility of attaining applicable water quality standards to support the designated uses of the surface water,

(6) presence of sediment contamination;

(7) if conducted for the site, the conclusions of a site-specific risk assessment conducted under the Risk Assessment Procedures Manual, adopted by reference in 18 AAC 75.340.

(g) If the groundwater point of compliance is established at or near a property boundary or if groundwater is closely connected hydrologically to a surface waterbody, the department will, if the department determines that sentunel monitoring is necessary to ensure protection of human health, safety, or welfare, or the environment, require a responsible person to develop sentunel monitoring wells that monitor for any hazardous substances likely to migrate to the applicable point of compliance at concentrations that exceed the cleanup levels.

(h) The department will require long-term monitoring if the department determines that monitoring is necessary to ensure protection of human health, safety, or welfare, or of the environment and if groundwater, surface water, soil, or sediment contains residual concentrations of a hazardous substance that exceed the applicable cleanup levels. If long-term monitoring is required under this subsection, a responsible person shall submit a plan and schedule for monitoring as part of the requirements for cleanup operations under 18 AAC 75.360. Unless otherwise approved by the department, a responsible person shall conduct monitoring quarterly for at least one year to establish the concentration trend. The department will evaluate the monitoring program yearly. If the monitoring indicates that the concentration trend

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(1) is increasing, the department will require additional followup monitoring and assess the need for additional cleanup;

(2) is stable or decreasing, and that hazardous substance mugration is not occurring, the department will decrease or discontinue the monitoring frequency and locations, if the responsible person demonstrates that continued monitoring is not necessary to ensure protection of human health, safety, and welfare, and of the environment.

(i) The department will require groundwater, surface water, soil, or sedument monitoring to estimate contaminant flux rates and (1) The department will require groundwater, surface water, soil, or securities intervines to estimate communicate intervines and to audress potential bioaccumulation of each hazardous substance at the site, if the department determines that monitoring is necessary to ensure protection of human health, safety, or welfare, or of the environment. If monitoring is required under this subsection, a responsible person shall submit a plan and schedule for monitoring as part of the cleanup operation requirements under 18 AAC 75 360.

(j) Groundwater monitoring wells must be installed, developed, and decommissioned in accordance with the department's

Installation, and Decommissioning, April 1992, adopted by reference, or another approved method that is protective of human health, safety, and welfare, and of the environment.

(k) For a cleanup conducted under (b)(1) of this section, a chemical that is detected at one-tenth or more of the Table C value must be included when calculating cumulative risk under 18 AAC 75.325(g). (Eff 1/22/99, Register 149)

Authority:	AS 46.03.020 AS 46.03.050 AS 46.03.710 AS 46.03 740	AS 46.03.745 AS 46.03.755 AS 46.04.020	AS 46.04.070 AS 46.09.010 AS 46.09.020
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Editor's note: Standard Methods for the Examination of Water and Wastewater, adopted by reference in this section, may be purchased from the American Water Works Association Bookstore, 6666 West Quincy Avenue, Denver, Colorado 80235, or may be viewed at the department's Anchorage, Fairbanks, Juneau, and Soldotna offices. Recommended Practices for Monitoring Well Design, Installation, and Decommissioning, adopted by reference in this section, may be viewed at, or requested from, the department's Anchorage, Fairbanks, Juneau, and Soldotna offices.

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			Ouality	Quality			Maximum 
i Parameter	Analytica 1	Number of Samples <sup>b</sup>	Assurance Samples*	Control Sampies*	Container <sup>c</sup>	Preservative	Holding 1 mics
	Method <sup>a</sup>				40 ml alocs	No headspace	14 days to analysis
Gasoline-Range Organics	AK101d	٢	1 duplicate		I nice 40-in gaza septa-lidded	HCI to pH<2 4°C	
-		۴	1 duplicate		One 1-liter amber glass <sup>f</sup>	HCI to pH<2 4°C	7 days to extraction 40 days to analysis
Dicsel-Range Organics	AK102		I duplicate	1 trip	Three 40-ml glass	No headspace HCI to pH<2	14 days to analysis
Volatile Organic Compounds	0078				Soperation of the second se	4°C	14 days to analy sis
	8270	7	I duplicate				6 months
Semivolattic Organic Compounds		r	1 duplicate		One 1-liter HDPE	HNO3 to pH<2 4°C	
TAL Metals <sup>g</sup>	6010/700	-			One 1-liter amber glass <sup>f</sup>	4°C	14 days to
n. tt.l.edunted	8080	7	I duplicate				40 days to analysis
Polycinol marce Biphenyls/ Ores nochlorine							
Pesticides							
<ul> <li>C Degrees Celsiu: HCl Hydrochloric at HDPE High-density Pt HNO3 Nitric Acid</li> </ul>	s cid olyethylene					- C 41 - 6-460	unles At least one trip
TAL Target Analyte	List	The second second	at least one samp	le, whichever is	greater. Duplicates are 10 per	rcent of the lotation	
* Finsates are 5 perc blank must be prov	ent of the tol rided for eac	h cooler contai	from the U.S. En	anic compounds wironmental Pro	tection Agency (EPA), 1986, Nv 1992.	Test method for eva	luation of solia wasie.
a. Unless otherwise physical/chemical h. One sample of trea	methods, SM tted investig	v-846, 3rd edit	ion, amended tur vaste water will t sclined lids	be collected and	analyzed for all the parameter	video cinti no dəfsil s	
<ul> <li>c. Glass containers h</li> <li>c. Glass containers h</li> <li>d. State of Alaska m</li> <li>e State of Alaska m</li> <li>f For 10 percent of 1</li> <li>For 10 percent of 1</li> <li>g. TAL metals includ</li> <li>g. zinc Samples will</li> </ul>	ave polytetra sthod for det sthod for det the water sau de antimony. Il be analyze	afluoroctnyten ermining gaso ermining diese mples, include , arsenic, bariu d for total met	line-range organi el-range organics two extra 1-liter m, beryllium, cao als. Samples wil	cs. bottles per labor Imium, chromiu I not be analyzec	atory for matrıx spike/matrix m, cobalt, copper, lead, nıckel I for dissolved or suspended n	spike duplicate. 1, selenium, silver, ti netals	allium, vanadıum, and

pe Romanzof Landfill 2 (LF03) Sample Collection Summary - Groundwater ζ e 

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	Table 4. Caj	pe Romanzof I	andfill 2 (LFU)	is) sample vu			
-			Ouslity	Quality			Maximum
	Analytical	Number of Samples	Assurance Samples*	Control Samples*	Container	Preservative	Holding 1 mcs
Parameter	Menton					-	14 days to analysis
	ak lutb	2		1	One 4-02. amber glass	Methanol, <25°C	
Gasoline-Range Organics				•	One 8-07 amber	40c	14 days to extraction
Diesel-Range Organics	AK102 <sup>c</sup>	2		-	glass or one 4-oz. amber glass		
	0360	7		<b>1</b>	One 4-oz. glass or one 2-oz. glass	No headspace 4°C	14 days to analysis
Volatile Organic Compounds	0079	ſ	1 Trip	1	One 4-oz. glass	4°C	14 days to analysis
Semivolatile Organic	8270	2	din r		One 8-07. Elass	4°C	6 months
TAL Metalsd	6010/7000	2			One 8-of place	4°C	14 days to extraction
I AL Muuu	8080	2		-	Olic o Ar Bran		the days of an area of the second sec
Polychlorinateu pupucuyus Organochlorine Pesticides				0	Plastic geobag	NA	AN
Grain-Size Analysis	ASTM C117 and C136	7					
ASTIM Degrees ( SC Not applicable	merican Society Celsius	/ for Testing an	d Materials				

F03) Sample Collection Summary - Soil

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Duplicate samples will be 10 percent of the total samples. Environmental Protection Agency (EPA), 1986, *Test method for evaluation of* Unless otherwise stated, analytical method is from the US. Environmental Protection Agency (EPA), 1986, *Test method for evaluation of* solid waste, solid waste, SW-846, 3rd edition, amended through update I, July 1992. State of Alaska method for determining gasoline-range organics state of Alaska method for determining gasoline-range organics range organics and under the soletion, arenic, barium, beryllium, cobalt, copper, lead, nickel, selenium, silver, thallium, state of Alaska method for determining gasoline-range organics range organics and under antimony, arsenic, barium, beryllium, cadmium, cobalt, copper, lead, nickel, selenium, silver, thallium, vanadium, and zinc فانح

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Ĩ	able 5. Cape	Romanzof La	(coard) z (light	Sampre vignites			
			And the second se	Ouality			Maximum Holding
	A malutical	Maximum Number of	Assurance	Control Samples*	Container	Preservative	Times
Parameter	Methoda	Samples	Samples <sup>-</sup>			Methanol.	14 days to analysis
	ak101 <sup>b</sup>	v	I	I	One 4-02. amber glass	25°C	
Gasoline-Range Organics			-	I	One 8-oz amber	40C	40 days to analysis
Diesel-Range Organics	AK102 <sup>c</sup>	ń	•		glass or one +-v2. amber glass	-	14 days to analysis
		v	-	I	One 4-oz glass	No headspace	
Volatile Organic Compounds	8260	n		_	One 8-oz. glass	4°C	14 days to extraction 40 days to analysis
Polychlorinated Biphenyls/	8080	۶.			One 4-oz. glass	4°C	7 days to extraction 40 days to analysis
Semivolatile Organic	8270	Ŷ	-	•	One 8-oz. glass	4°C	6 months
Compounds TAL Metals <sup>d</sup>	6010/7000	vî.	1	-			
<ul> <li>C Degrees Celsius</li> <li>* Duplicates are 10 per</li> </ul>	cent of the tota	l samples.	the U.S. Envir	onmental Protec	tion Agency (EPA),	1986, Test met	hod for evaluation of
a Unless otherwise stat solid waste, physical b State of Alaska metho C Tate of Alaska metho d TAL metals include a vanadium, and zinc.	ed, analytical f chemical meth od for determit od for determit antimony, arse	netros W-846, lods, SW-846, ang gasoline-i ang desel-rar nic, barium, b	3rd edition, am range organics. ige organics eryllium, cadmi	ended turousu - um, chromium, (	cobalt, copper, lead,	nickel, seleniu	n, silver, thallium,

Composition Summary - Sediment

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	Maximum Holding	Times	1.4 dave to analysis		7 days to extraction 40 days to analysis	14 days to analysis		14 days to extraction 40 days to analysis		7 days to extraction 40 days to analysis	28 days for mercury in	glass, 6 months for an others		ie total samples At least iod for evaluation of n, silver, thallium, nded metal
- Surface Water		Preservative		No headspace HCI to pH<2	HCI to PH<2	•	No headspace HCI to pH<2	4°C		4°C	UNIOs to nH<2	40C		are 10 percent of th A), 1986, <i>Test meth</i> ke/matrix spike dup ad, nickel, seleniur dissolved or susper
ollection Summary		Container <sup>b</sup>		Three 40-ml glass septa-lidded	One 1-liter amber	glasse	Three 40-ml glass septa-lidded	One 1-liter amber elasse		One 1-liter amber	glass	One 1-liter HDPE		is greater. Duplicates Protection Agency (EP boratory for matrix spil nium, cobalt, copper, le
3) Sample C		Control	Samples				1 trip							ole, whichever ounds nvironmental I nvironmental I ics. ics. ics. ics. is. Samples w is. Samples w
		Quality Assurance	Samples*	-	auplicate	1 duplicate	1 Aunlicate	1	duplicate	-	duplicate	 	duplicate	least one samp organic comp om the U.S. E on the U.S. Lult h update 1, Jult ne-lined lids. te-range organics o extra 1-liter for total meta
re l'înne	IMANZUI LAN	Number of	Samples			۳	ę	•	n		m	£		samples or at aining volatile 1 method is fr ended throug afluoroethyler anining diesel- include tw senic, barium senic, barium
<b>1</b>	56. Cape Ki		Analytical Method <sup>a</sup>	AK101C		AK102 <sup>d</sup>	8260		8080		8270	0007/0102	0010100	s cid olyethylene be ch cooler conta be ated, analytica ated, analytica shave polytet thod for deterr thod for deterr thod for deterr e antimony, al
	Tabl			Parameter	Gasoline-Range Organucs	The same Arganics	Diesei-Fainge of grant	Volatile Organic Compounds	<b>Polychlorinated</b>	Biphenyls/ Organochlorine Pesticides	Semivolatile Organic	Compounds	Metals <sup>f</sup>	<ul> <li>CC Degrees Celsiv HCPE Hydrochloric a HDO3 Nitric acid</li> <li>Rinsates are 5 perce one trip blank must provided for car provided fo</li></ul>

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88 88	
0 5 3 ation of Solid Waste,	
60-14 70-13 80-20 80-20	
25 15 20 20 20	DOIL ABOILDI, 17 24 -
8260 8260 6010	Fuvironmental Protect
Soil Liquid Soil	S I of angles in the second se
Veilatile Organic Compounds Zinc	

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Unless otherwise specified, method numbers refer to U.S. Environmental Protectio Physical/Chemical Methods, SW-846, 3rd edition, with additions through November 1992. State of Alaska method for determining diesel-range organics. State of Alaska method for determining gasoline-range organics. ė ł

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	Table i Alag	•			
		Mathodd	Precision (percent)	Accuracy (percent)	Completeness (percent)
Parameter	Matrix	Michion			5
	Co.1	601 <u>0</u>	40	75-125 80-120	80
Antimony	Limid	6010	50		06
	Soil	7060	40 00	80-120	<u>8</u>
Arsenic	Liquid	/090/	9 4	75-125	88
Barin	Soil	6010	20	071-02	5
Datum	Soil	6010	40 00	75-125 80-120	<u>90</u>
Beryllium	Liquid	6010 6010	07	75-125	88
Cadmium	Soil Liquid	6010	50 19	75-125	06
	Soil	1612	40 20	80-120	. 06
Chromium	Liquid sail	0109	96	75-125 80-120	88
Cobalt	Liquid	6010 6010	40 7	75-125	06 06
Copper	5011 Liquid	6010 •••••••	20 40	50-150	060
Discel-Range Organics	Soil	AK102 AK102	20	60-140 20 150	2 <b>9</b>
	Snil	AK101 <sup>c</sup>	40	60-140	<u>90</u>
Gasoline-Range Organics	Liquid	AK101 7421	40	75-125 80-120	96 90
Lead	sou Liquid	7421	20 40	75-125	06
Nickel	Soil Liquid	6010	20	80-120 50-150	6 06
	Soil	8080	40 30	60-140	90
Polychlorinated Bipmenyis Organochlorine Pesticides	Liquid Sail	8270	40	12-127 12-127	98
Semivolatile Organic Compounds	Liquid	8270 7740	66 66	75-125 80-120	88
Selenium	Liquid	7740 6010	40 40	75-125 80-120	88
Silver	Liquid	6010 7841	20	85-115 85-115	06 06 06
Thallium	Soil Liquid	7841	20 40	75-125	88
Vanadium	Soil Liquid	6010	20	071-02	

Table 7. Summary of Analytical Data Quality Objectives

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Table 8	Ì.
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Field PCB Monitor Data

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Field PCB Determinations by Dexsil Chloride Detector  $Y = 1 \ 10 \ X + 2 \ 9$ 

	Field Chloride Value (Units are ppm)	EPA Method 8082 (Units are PPB)
Sample No 1 2 3 4	3.6 1 8 9.3 BDL 0.2	92 68 120 76 170
5 6 7 8 9 10 11 12 13	23.6 2.7 BDL BDL BDL BDL BDL BDL BDL 0.3	86 30 38
14 15 16 17 18	0 2 0.4 BDL 1.2 BDL	87
19 20 21 22 23 24 25 26	BDL 0.6 4 7.6 12 BDL 3.1 5 4	87 120 110 620
27 28 29 30 31	0.8 0.1 0.8 1.2 BDI	140
32 33 34 35 36 37 38	2.8 0 7 0.6 0.5 BDL 2.9 BDL	55
39 40 41 42 43	BDL 11 4 3.4 BDL BDL	430
44 . 45 46 47 48 49	BDL 0.2 BDL BDL 0 3 BDL	26 72
50 '	The love	v chloride standard, 0 1 ppm

BDL - Below Detection Limits This is represented by the low chloride standard, 0.1 ppm

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	ı		13.1 94	<b>1</b> 8	01SD 52 sed	SD3 SD3 (sed)
<b>69.1</b> pi 180 pi			<b>181</b> 1000	180	03SD 57 sed	SD2
	DDD 00115, DDT 000813		<b>34.7</b> 44	8 8	02SD 55 sed	SD1 .
0.0002			,		01SW 51 water	SW3
0.04;			0.205		03SW 58 water	SW2 SW2
0.000					02SW 54 water	SW1 SW1
				0.23	04WA 66 water	CMW-7 CMW7
					03WA 64 water	CMW-6 CMW6
			0.41	0.22	06WA 68 water	CMW-5 CWM5
			<b>2.13</b> 3.2	0 29	02WA 67 water	CMW-4 CMW4
					eviously sampled	CMW-3
					Well Dry	CMW-2
			0.179		01WA 70 water	CMW-1 CMW1
80	8270	8260	RRO	DRO	sampie	Site
	ıs Data (1998 data ıs emboldened)	parison of Previous	ible 10. Com	Ţ		

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te	ORO	RRO	8260	8270	RUBO
	ppm	ppm	ppb	ddd	ppm
CA EA					
V1					
V1					
3					
3					
G					
2					180 (10)
/3					
4					
3		~	AeCl 5 5 (5)		
2					
t Collected					
W3					
W6					
7				Bis(2-ethvihexxvI)nhthalate 17 5 (6) D	
W7					
W4	ω	2 (1 1)			
M5					
W5dupe					
<b>V</b> 1					
- そそミアンマララクトトレビ ホスチャープラブ ク	2 2 5 4 7 7 8 3 0 0 1 1 2 2 3 0 0 1 1 2 2 3 0 0 1 1 2 2 3 0 0 1 1 2 2 3 0 0 1 1 2 2 3 0 0 1 1 2 2 3 0 0 1 1 2 2 3 0 0 1 1 2 3 0 0 0 1 1 2 3 0 0 0 1 1 2 3 0 0 0 1 1 2 3 0 0 0 1 1 2 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	DRO RRO ppm ppm 2111 2111 200 2111 2111 200 2111 200 200	e DRO RRO 8260 ppm ppm ppm ppb 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	e DRO RRO 8260 8270 ppm ppm ppb ppb ppb ppb ppb ppb 111 111 111 111 111 111 111 111

• area and compound was lound in the laboratory interriod plank

No GRO anomaties were found, since volatiles would have evaporated or weathered out from an old inactive site

8260 - Traces of toluene and xylene were found in the water samples below regulated levels Since these compounds were also found in the trip

blank, they may be attributed to lab contamination, and certainly do not reflect on the samples themselves Soil samples - Methylene chloride is ubiquitous along with acetone at levels below reporting requirements These are unlikely to actually exist on

They are, however, common laboratory extraction and cleaning fluids

far the hottest sample on site This white sandy sediment samples appeared pristine during sampling Sample 57 yielded 180 ppm arochlor 1260, confirmed by another laboratory Since all other site samples yielded PCB in the ppb range, this is by

53

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# TAB

Figures









84 59

## TAB

RARS and TBCS

### APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

Applicable or relevant and appropriate requirements (ARARs) can be in the form of regulations enforceable by law (federal, state and/or local) or regulatory "guidance" Many regulators issue guidance documents, advisories, and verbal ("understood") direction (e.g., 20x Dilution Rule) to assist the environmental community and potentially responsible parties in complying with environmental laws and regulations. These guidelines are commonly used to determine cleanup requirements at contaminated sites where specific laws or regulations are absent Ecological and human health risk assessments are also commonly employed to help determine appropriate remedial actions.

Exceedance of a potential ARAR or items "to be considered" (TBC) will force consideration of some type of remedial action on the part of the responsible party in a reasonable time frame, with consideration of the protection of human health and the environment as threshold criteria Cleanup alternatives shall be assessed to determine if they will be effective in protecting critical guidelines (protection of life and environment) with short and long term goals held in assessment. Assessments are to be made on hazardous substances, pollutants, or contaminants by eliminating, reducing, or minimizing exposure of these chemicals to goals established in accordance with ARAR forced study as listed in 18 AAC 75,

The ARARs and TBCs listed for this study are intended only as a guide since some, particularly the very conservative residential risk - based concentrations (RBCs) discussed below, are included for completeness only. Ultimately, long term monitoring or final cleanup requirements are determined by the appropriate regulating agency or agencies, such as United States Environmental Protection Agency (USEPA), Alaska Department of Environmental Conservation (ADEC), etc. TBC information is available for many chemicals that do not have federal or state promulgated standards. These may be from various information sources such as the EPA Integrated Risk Information System TBCs are integrated into the contents of Table 3.

Section 121 of SARA established four standards that govern selection of remedial action

- 1. Protection of human health and the environment
- 2. Cost effectiveness
- 3 Usage of permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum practicable extent
- 4. The achievement of federal ARARs and more stringent state ARARs promulgated under state environmental or facility siting laws for any material remaining onsite at the conclusion of the remedial action

A requirement may be either applicable or relevant and appropriate to eventual remedial Applicable requirements are those cleanup activities at a site, but not necessarily both. standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstances at a site.

If a regulation is not applicable, it may still be relevant and appropriate. The basic considerations are whether the requirement (1) regulates or addresses problems or situations sufficiently similar to those encountered at the site (i e., relevance), and (2) is appropriate to the circumstances of the release or threatened release, such that its use is well suited to the particular site. Determining whether a requirement is relevant and appropriate is site-specific and must be based on best professional judgment. This judgment is based on a number of factors, including the characteristics of the site and of the release, as compared to the statutory or regulatory requirement. Compliance with all requirements found to be applicable or relevant and appropriate is mandatory under Comprehensive Environmental Response Compensation and Liability Act (CERCLA) program unless a waiver is obtained from the USEPA.

In some situations, a promulgated regulation does not address a particular issue or compound. In the case when there is no promulgated regulation, a state or federal advisory, proposed rules, criteria, or guidance documents may be TBC to establish remediation cleanup levels or procedures. TBCs are not enforceable and their use may not be economically feasible Based on site evaluation data, the ARARs listed below were selected for review and are discussed or referenced in the sections that follow.

USEPA Toxic Substance Control Act (TSCA) - PCB Spill Cleanup Policy (40 CFR 761.121)

USEPA Toxic Substance Control Act (TSCA) - PCB Spill Cleanup Policy (40 CFR 761.125)

ADEC Oil and Hazardous Substances Pollution Control (I 8 AAC 75), Parts 3 and 9.

ADEC Underground Storage Tanks (I 8 AAC 78)

ADEC Interim Guidance for Non-UST Contaminated Soil Cleanup Levels (July 17,1991)

USEPA Region III Risk-Based Concentration Table, Third quarter 1994

There are three types of ARARS: (1) chemical-specific ARARS, (2) location-specific ARARS, and (3) action-specific ARARS. Generally, potential chemical-specific ARARs and location specific ARARs are identified during the site characterization phase of a project, and the potential action-specific ARARs are identified during the development of remedial alternatives in a Feasibility Study (FS). Action-specific ARARs are not discussed in this report Should remedial actions be required at Cape Romanzof, action specific ARARs would be identified during the remedial design.

84 62

### CHEMICAL -SPECIFIC ARARs

Chemical-specific requirements are based on health or risk-based concentration (RBC) limitations in environmental media (i.e., water, air, soil) for specific hazardous chemicals. These requirements may be used to set cleanup levels for the COCs in the designated media, or to set a safe level of discharge where discharge occurs as part of a remedial activity. Alternative cleanup levels may be adopted for a site if regulated levels are technically unfeasible and/or risk assessment is performed and approved by ADEC

The first step in identifying chemical-specific ARARs is identifying the chemicals of concern. These potential chemical-based ARARs are based upon the following sources

- Safe Drinking Water Act and the National Primary Drinking Water Regulations (40 CFR 141). These regulations establish enforceable MCLs for organic and inorganic compounds in public drinking water systems. In addition, nonenforceable MCL goals have been set at the level at which no known or anticipated adverse health effects are expected, assuming adequate margins of safety. There are no drinking water sources downgradient from Landfill 2 (LF03) at Cape Romanzof.
- Alaska Water Quality Standards (18 AAC 70). These regulations establish maximum contaminant concentrations (MCCs) for organic and inorganic contaminants in marine, estuarine, and fluvial environments. The MCL listed in Table 2 in the Appendix are compatible with the requirements of this act.
- Alaska Oil and Hazardous Substances Pollution Control Regulations (18 AAC 75, Articles 3 • and 9).

Sources for potential target cleanup levels include selected standards, criteria, and guidelines that are typically considered as ARARs for remedial actions In addition, EPA Region III risk based concentrations (RBCs), developed as guidance for determining soil action levels are presented and should be regarded as TBCs.

### Soil Cleanup Standards

Potential soil cleanup levels for contaminants found at the LRRS are discussed in the following sections.

### **PCBs**

Soil The USEPA promulgated a PCB spill cleanup policy in the April 2, 1987, Federal Register. The policy is intended for spills occurring after the Federal Register notice, but may be applied to previous spill sites at the discretion of the USEPA regional office having jurisdiction USEPA Region X, which has jurisdiction in Alaska, adopted the policy for spills occurring before and after the Federal Register notice.

The PCB spill regulations in TSCA (40 CFR 761.125) require that for high-concentration PCB spills (above 500 mg/kg) in nonrestricted access areas, soil containing more than 10 mg/kg PCB must be removed and excavated to a depth of at least 10 inches. The regulations also state that

the excavation must be filled in with clean soil, containing less than 1 mg/kg PCB. However, these are the most stringent clean-up criteria. Cape Romanzof LRRS can be defined as a restricted access area as defined by TSCA. PCB clean-up requirements for restricted access areas are less stringent.

PCB concentrations in soil at Cape Romanzof Landfill 2 (LF03) exceed several hundred mg/kg along the western edge, as determined in only one sediment sample out of 50 soil and 3 sediment samples. The location of PCB contaminated soil is discussed in Sections 2.0 and 3.0.

### Petroleum Hydrocarbons

The ADEC promulgated regulations (18 AAC 75, Articles 3 and 9, "Oil and Hazardous Substances Pollution Control Regulations, Discharge Reporting, Cleanup, and Disposal of Oil and Other Hazardous Substances and Other Hazardous Substances, and General Provisions" delineates cleanup and standards for releases of petroleum hydrocarbons, organic, and inorganic contaminants discharged on land or waters of the State of Alaska Soil contaminated by petroleum products must be cleaned up to levels identified by the ADEC Regional Supervisor or his designee.

The ADEC guidance documents include a method to determine cleanup levels using a matrix scoring system. The matrix accounts for variations in conditions, such as depth to groundwater, soil and geology types, precipitation, potential receptors, and volume of contaminated soil.

### **Risk-Based Concentrations for Soil**

Under the provisions of 18 AAC 75, Articles 3 and 9, ADEC has developed risk-based concentrations (RBCs) for both arctic and non-arctic regions for soil borne contaminants, where arctic regions are based on the presence of nondiscontinuous permafrost. Table B1 of Method Two takes into consideration carcinogenicity, as well as possible ingestion or inhalation factors, as well as groundwater migration.

These levels were developed based on long-term residential exposure assumptions for soil ingestion that may not reflect actual site conditions. For instance, a factor which may be considered as a TBC is that Landfill 2 (LF03) is neither an area of permanent nor temporary residence, nor is it a continuous workplace. Rather, an assumption TBC may be made that no individual will work at Landfill 2 (LF03) for more than 2 weeks out of any given year. RBCs are not cleanup standards but rather a means of assessing potential health or environmental risk under conservative exposure. assumptions. Cleanup goals are based on site-specific risk management decisions.

Chemical concentrations that exceed screening-level RBCs do not necessarily indicate an actual health threat because the RBCs are based on assumptions that overestimate current and probable future exposure conditions, and RBCs are based on very protective target risk levels that can be exceeded without necessarily posing unacceptable risk Therefore, the RBCs are used only for screening purposes to identify potential COCs. If the concentrations at the site do not exceed the screening-level RBCs, exposure to the chemicals at a site will not be of concern, and no

further action is recommended. Additionally, levels of target constituents above the RBCs do not necessarily indicate a potential health risk. For example, concentrations of metals in soils may be elevated above the RBCs but within area background levels, thus eliminating the chemical from the target COCs. Additionally, an item TBC is that the local watersources for Cape Romanzof LRRS is located considerably uphill from Landfill 2 (LF03), and that there are no water sources downhill.

A general RBC for lead has not been developed. In the absence of actual clean-up requirements or toxicity factors for lead, the EPA suggests an interim screening level for lead in residential soil of 400 mg/kg (USEPA 1994. Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities).

### Location - Specific ARARs

Location – specific requirements are special requirements or standards that apply because of the location of the site. These ARARs may restrict or preclude certain remedial actions, or they may apply only to certain portions of the installation Location –specific factors that may add ARARs include sensitive habitats, floodplains, wetlands, endangered species habitat, and historic or archeological resources.

Performance, design, or other action - specific requirements

These ARARs constitute limitations or requirements that apply to specific technologies or activities, particularly with respect to hazardous waste or to the conduct of activities at specific locations. These ARARs do not in themselves determine any remedial alternatives; they indicate how a selected alternative must be achieved. These are included in the parameters of Tables 2 and 3.

### Waiver of ARARs

Section 121 of CERCLA/SARA provides that under certain circumstances ARARs may be waived. These waivers apply only to meeting ARARs with respect to remedial actions at the contaminated area; Other statutes requiring remedies that protect human health and the environment cannot be waived. A waiver must be invoked for each ARAR that will not be attained or achieved. Waivers of ARARs may include the following.

- Interim Measures the remedial action selected is only part of a total remedial action that will meet the ARAR when completed; it may apply to sites where a final remedy is divided into several smaller actions.
- Greater Risk Compliance with the ARAR will result in greater risk to human health or environment. Magnitude, duration, and reversibility of adverse impacts are considered.
- Technically:Impracticable Compliance is technically impracticable from and engineering perspective. Engineering feasibility and reliability are considered.
- Equivalence to other Standards The selected action would attain a standard of performance equivalent to the standard required by the ARAR. It may be used where the

ARAR specifies design or where operating standards by equivalent or better results are available from an alternative design or method of operation.

• Inconsistent Application – The standard may not be applied consistently in similar circumstances. Similarity of sites or response circumstances may be considered.

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 Funding – This waiver is primarily applicable to sites undergoing action under CERCLA Section 104, and does not affect Landfill 2 (LF03) at Cape Romanzof. TAB

Photos

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View from CMW3 showing CMW4 and the Felsenmeer area in background, and the eroding corner of the Landfill Cap.



Seep area at SD1



View from the SW eroding corner of the Landfill Cap NNW into the Felsenmeer area and SD2



View from the SW corner of the Landfill Cap showing Erosion, and the Edge of the Cap Liner



View from Landfill Cap looking Southwest to CMW4 and beyond toward CMW7



Sediment collection area at SD1



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Well Monitoring at MW1



Buried Off-Landfill Junk near the Southwest corner of the Landfill

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### TAB

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Analytical Data

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325 Interlocken Parkway Suite 200 Broomfield, CO 80021 (303) 469-8868 (800) 873-8707 FAX (303) 469-5254



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Department of the Air Force 611 Civil Eng./CEVO 21885 2nd St. Elmendorf AFB, AK 99506-0875 Attn: Carl A. Hornig

48030988 023 6"

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Order #: 98-09-228 Date: 10/26/98 12:15 Work ID: CAPE ROMANZOF - CALL #B002 Date Received: 09/25/98 Date Completed: 10/25/98

## SAMPLE IDENTIFICATION

		_	
Sample		Sample	alter Description
Number	Client Description	Number	Chient Description
Number	48030988 001 6"	24	48030988 024 21
01		25	48030988 025 6"
02		26	48030988 026 2'
03	48030988 003 8	27	48030988 027 3'
04	48030988 004 2	28	48030988 028 6"
05	48030988 005 4	29	48030988 029 2'
06	48030988 006 6"	30	48030988 030 6"
07	48030988 007 2'	21	48030988 031 2'
08	48030988 008 4'	22	48030988 032 6"
09	48030988 009 6"	22	49030988 033 2'
10	48030988 010 2'	33	
11	48030988 011 6"	34	
12	48030988 012 2'	35	48030988 035 0
13	48030988 013 6"	36	48030988 036 2
14	48030988 014 2'	37	48030988 037 3.5
15	48030988 015 6"	38	48030988 038 6"
15	48030988 016 6"	39	48030988 039 2'
10	40030988 017 6"	40	48030988 040 6"
1/		41	48030988 041 6"
18		42	48030988 042 2'
19	48030988 019 6	43	48030988 043 6"
20	48030988 020 2	44	480309 <sup>8</sup> 8 044 6"
21	48030988 021 6"	45	48030988 045 6"
22	48030988 022 2'	45	48030988 046 6"
			70000000

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. A listing of data qualifiers and analytical codes is located on the TEST METHODOLOGIES page at the end of the report.

If you have any questions regarding the analyses, please feel free to call.

Sincerely,

Claire K. Toon

Claire K. Toon Project Manager

Samples were prepared and analyzed according to methods outlined in the following references:

 Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 4, January 1996.

All analyses meet quality assurance objectives.

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 01A 48030988 001 6"	Coll	Lected: 09/22/	'98 Mat	rix: SOIL	
Test Description	Method	<u>Result 0</u>	Limit	Units	Analyzed
Percent Moisture	ASTM D2216	39.8	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	55	ug/Kg-DRY	10/20/98
PCB-1232		ND	28	ug/Kg-DRY	10/20/98
PCB-1242		ND	28	ug/Kg-DRY	10/20/98
PCB-1248		ND	28	ug/Kg-DRY	10/20/98
PCB-1254		92 .	28	ug/Kg-DRY	10/20/98
PCB-1260		ND	28	ug/Kg-DRY	10/20/98
PCB-1016		ND	28	ug/Kg-DRY	10/20/98
SURROGATES, % Recovery				2.2	
Tetrachlorometaxylene		56.4	Min:	11 Max:	102
Decachlorobiphenyl		53.6	Min:	35 Max:	141
Sample: 02A 48030988 002 2'	Coll	lected: 09/22/	'98 Mat	rix: SOIL	
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>

	MCCHOU	<u>Result</u> <u>V</u>		UNITCE	Analyzeu
Percent Moisture	ASTM D2216	19.9	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				• •
PCB-1221		ND	42	ug/Kg-DRY	10/20/98
PCB-1232		ND	21	ug/Kg-DRY	10/20/98
PCB-1242		ND	21	ug/Kg-DRY	10/20/98
PCB-1248		ND	21	ug/Kg-DRY	10/20/98
PCB-1254		68	21	ug/Kg-DRY	10/20/98
PCB-1260		ND	21	ug/Kg-DRY	10/20/98
PCB-1016		ND	21	ug/Kg-DRY	10/20/98
SURROGATES, % Recovery				<b>.</b>	. ,
Tetrachlorometaxylene		50.6	Min:	11 Max	: 102
Decachlorobiphenyl		49.4	Min:	35 Max	: 141

Sample: 03A 48030988 003 6" Collected: 09/22/98 Matrix: SOIL

Test Description	Method	<u>Result O</u>	Limit	Units	Analyzed
Percent Moisture	ASTM D2216	14.5	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	39	ug/Kg-DRY	10/20/98
PCB-1232		ND	19	ug/Kg-DRY	10/20/98
PCB-1242		ND	19	ug/Kg-DRY	10/20/98
PCB-1248		ND	19	ug/Kg-DRY	10/20/98
PCB-1254		120	19	ug/Kg-DRY	10/20/98
PCB-1260		ND	19	ug/Kg-DRY	10/20/98
PCB-1016		ND	19	ug/Kg-DRY	10/20/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		89.7	Min:	11 Max:	102
Decachlorobiphenyl		74.4	Min:	.35 Max:	141

Page 5

Order # 98-09-228 ANALYTICA, INC.

Sample: 04A 48030988 004 2	Col	lected: 09/22/	98 Mat	rix: SC	)IL	
Test Description	Method ASTM D2216	<u>Result</u> <u>Q</u> 25.8	<u>Limit</u> 0.1	<u>Units</u> WT%		<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 PCB-1016	SW 8082	ND ND ND 76 ND ND	45 22 22 22 22 22 22 22	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	-DRY -DRY -DRY -DRY -DRY -DRY -DRY -DRY	10/20/98 10/20/98 10/20/98 10/20/98 10/20/98 10/20/98 10/20/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		46.7 111	Min: Min:	11 35	Max: Max:	102 141

Sample: 05A 48030988 005 4' Collected: 09/22/98 Matrix: SOIL

					_	
Test Description	Method	<u>Result Q</u>	Limit 01	<u>Units</u> WT%	<u>7</u>	<u>Analyzed</u> 09/29/98
Percent Moisture	ASTM D2216	11.0	0.1	112 0		
Polychlorinated Biphenyls	SW 8082	ND	37	ug/Kg-DR	ey :	10/20/98
PCB-1221		ND	19	ug/Kg-DR	Y I	10/20/98
PCB-1232		ND	19	ug/Kg-DR	RX :	10/20/98
PCB-1242		NTD	19	ug/Kg-DR	RX .	10/20/98
PCB-1248		170	19	ug/Kg-DF	۲Y	10/20/98
PCB-1254		ND	19	ug/Kg-DF	RY	10/20/98
PCB-1260 PCB-1016		ND	19	ug/Kg-DF	RY	10/20/98
SURROGATES, & Recovery		72.0	Min:	11 1	Max:	102
Tetrachlorometaxylene Decachlorobiphenyl		60.0	Min:	35 N	Max:	141

Sample: 06A 48030988 006 6" Collected: 09/22/98 Matrix: SOIL

Test Description	Method ASTM D2216	<u>Result</u> <u>0</u> 23.2	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 PCB-1016	SW 8082	ND ND ND ND ND ND	43 22 22 22 22 22 22 22	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		48.3 52.9	Min: Min:	11 Max: 35 Max	102 141

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ANALYTICA, INC.

Sample: 07A 48030988 007 2	. Col	Collected: 09/22/98 Matrix: SOIL				
Test Description	Method	<u>Result Q</u>	<u>Limit</u>	Units	Analyzed	
Percent Moisture	ASTM D2216	12.3	0.1	WT*	09/29/98	
Polychlorinated Biphenyls PCB-1221	SW 8082	ND	38	ug/Kg-DRY	10/20/98	
PCB-1232		ND	19	ug/Kg-DRY	10/20/98	
PCB-1242		ND	19	ug/Kg-DRY	10/20/98	
PCB-1248		ND	19 19	ug/Kg-DRY	10/20/98	
PCB-1254		88 ND	19	ug/Kg-DRY	10/20/98	
PCB-1200 PCB-1016		ND	19	ug/Kg-DRY	10/20/98	
SURROGATES, % Recovery Tetrachlorometaxylene		94.7	Min:	11 Max	102	
Decachlorobiphenyl		93.4	Min:	35 Max	: 141	

Sample: 08A 48030988 008 4' Collected: 09/22/98 Matrix: SOIL

Test Description Percent Moisture	Method ASTM D2216	<u>Result</u> <u>Q</u> 10.6	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1254 PCB-1260 PCB-1016	SW 8082	ND ND ND 30 ND ND	37 19 19 19 19 19 19	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/19/98 10/19/98 10/19/98 10/19/98 10/19/98 10/19/98 10/19/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		93.3 98.7	Min: Min:	11 Max 35 Max	:: 102 :: 141

Sample: 09A 48030988 009 6" Collected: 09/22/98 Matrix: SOIL

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Test Description Percent Moisture	Method ASTM D2216	<u>Result 0</u> 21.5	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 PCB-1260	SW 8082	ND ND ND 38 ND ND	42 21 21 21 21 21 21	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/19/98 10/19/98 10/19/98 10/19/98 10/19/98 10/19/98 10/19/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		78.8 82.4	Min: Min:	11 Max: 35 Max:	102 141

Sample: 10A 48030988 010 2'	Collected: 09/22/98 Matrix: SOIL					
Test Description	Method ASTM D2216	<u>Result Q</u> 31.3	<u>Limit</u> 0.1	<u>Units</u> WT%		<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 PCB-1016	SW 8082	nd ND ND ND ND ND	48 24 24 24 24 24 24	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	- DRY - DRY - DRY - DRY - DRY - DRY - DRY - DRY	10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		42.3 42.3	Min: Min:	11 35	Max: Max:	102 141

Sample: 11A 48030988 011 6" Collected: 09/22/98 Matrix: SOIL

Test Description	Method ASTM D2216	<u>Result 0</u> 34.5	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 PCB-1016	SW 8082	ND ND ND ND ND ND	51 25 25 25 25 25 25	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		63.0 49.0	Min: Min:	11 Max: 35 Max:	102 141

Sample: 12A 48030988 012 2' Collected: 09/22/98 Matrix: SOIL

Test Description	Method ASTM D2216	<u>Result Q</u> 36.0	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Percent Moisture Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 PCB-1016	SW 8082	ND ND ND ND ND ND	52 26 26 26 26 26 26	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		55.0 48.0	Min: Min:	11 Max 35 Max	x: 102 x: 141

Page 7

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Sample: 13A 48030988 013 6" Collected: 09/22/98 Matrix: SOIL

Test Description	Method ASTM D2216	<u>Result 0</u> 44.0	<u>Limit</u> 0.1	<u>Units</u> WT%		<u>Analyzed</u> 09/29/98
Percent Moisture Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1254 PCB-1260 PCB-1016	SW 8082	ND ND ND ND ND ND	59 30 30 30 30 30 30	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	-DRY -DRY -DRY -DRY -DRY -DRY -DRY -DRY	10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		50.0 44.2	Min: Min:	11 35	Max: Max:	102 141

Sample: 14A 48030988 014 2' Collected: 09/22/98 Matrix: SOIL

Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>		<u>Analyzed</u>
Percent Moisture	ASTM D2216	18.7	0.1	WT%		09/29/98
Polychlorinated Biphenyls	SW 8082	ND	41	ug/Kg-	DRY	10/16/98
PCB-1221		ND	20	ug/Kg-	DRY	10/16/98
PCB-1232		ND	20	ug/Kg-	DRY	10/16/98
PCB-1242		ND	20	ug/Kg-	DRY	10/16/98
PCB-1248		ND	20	ug/Kg-	DRY	10/16/98
PCB-1254		ND	20	ug/Kg-	DRY	10/16/98
PCB-1260		ND	20	ug/Kg-	DRY	10/16/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		51.2 56.1	Min: Min:	11 35	Max: Max:	102 141

Sample: 15A 48030988 015 6" Collected: 09/22/98 Matrix: SOIL

Test Description	Method ASTM D2216	<u>Result</u> <u>0</u> 44.3	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 PCB-1016	SW 8082	nd Nd Nd Nd Nd Nd Nd	60 30 30 30 30 30 30	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		56.7 45.8	Min: Min:	11 Ma 35 Ma	x: 102 x: 141

Sample: 16A 48030988 016 6" Collected: 09/22/98 Matrix: SOIL

Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>		Analyzed
Percent Moisture	ASTM D2216	50.2	0.1	WT%		09/29/98
Polychlorinated Biphenyls	SW 8082	ND	67	ug/Kg	-DRY	10/16/98
PCB-1221		ND	33	ug/Kg	-DRY	10/16/98
PCB-1232		ND	33	ug/Kg	-DRY	10/16/98
PCB-1242 DCB-1248		ND	33	ug/Kg	-DRY	10/16/98
PCB-1254		ND	33	ug/Kg	-DRY	10/16/98
PCB-1260		ND	33	ug/Kg	-DRY	10/16/98
PCB-1016		ND	33	ug/Kg	-DRY	10/10/90
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		53.8 49.2	Min: Min:	11 35	Max: Max:	102 141

Sample: 17A 48030988 017 6" Collected: 09/22/98 Matrix: SOIL

Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Percent Moisture	ASTM D2216	36.9	0.1	WT*	09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1254 PCB-1260	SW 8082	ND ND ND 87 ND	53 26 26 26 26 26	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/19/98 10/19/98 10/19/98 10/19/98 10/19/98 10/19/98
PCB-1016		ND	26	ug/Kg-DRY	10/19/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		60.9 69.1	Min: Min:	11 Max: 35 Max:	: 102 : 141

Sample: 18A 48030988 018 2' Collected: 09/22/98 Matrix: SOIL

Test Description Percent Moisture	Method ASTM D2216	<u>Result 0</u> 9.80	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1254 PCB-1260 PCB-1016	SW 8082	ND ND ND ND ND ND	37 18 18 18 18 18 18	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		58.1 54.1	Min: Min:	11 Max: 35 Max:	102 141

Department of the Air Force TEST RESULTS by SAMPLE

Collected: 09/22/98 Matrix: SOIL Sample: 19A 48030988 019 6" Analyzed <u>Units</u> <u>Limit</u> <u>Result 0</u> Method Test Description 09/29/98 WT% 0.1 ASTM D2216 40.1 Percent Moisture SW 8082 Polychlorinated Biphenyls 10/15/98 56 ug/Kg-DRY ND PCB-1221 10/15/98 ug/Kg-DRY 28 ND PCB-1232 10/15/98 ug/Kg-DRY 28 ND PCB-1242 10/15/98 28 ug/Kg-DRY ND PCB-1248 28 ug/Kg-DRY 10/15/98 ND PCB-1254 10/15/98 28 ug/Kg-DRY ND PCB-1260 10/15/98 ug/Kg-DRY 28 ND PCB-1016 SURROGATES, % Recovery 11 Max: 102 Min: 50.0 Tetrachlorometaxylene 141 35 Max: Min: 52.7

Sample: 20A 48030988 020 2'

Decachlorobiphenyl

Collected: 09/22/98 Matrix: SOIL

Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Percent Moisture	ASTM D2216	23.7	0.1	WT%	09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260	SW 8082	ND ND ND ND ND ND	44 22 22 22 22 22	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98
PCB-1280 PCB-1016		ND	22	ug/Kg-DRY	10/15/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		64.4 51.7	Min: Min:	11 Max: 35 Max	: 102 : 141

Sample: 21A 48030988 021 6"

Collected: 09/22/98 Matrix: SOIL

Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Percent Moisture	ASTM D2216	24.6	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082	ND	44	ug/Kg-DRY	10/23/98
PCB-1221 PCB-1232		ND	22	ug/Kg-DRY	10/23/98
PCB-1242		ND	22	ug/Kg-DRY	10/23/98
PCB-1248		ND 87	22	ug/Kg-DRI ug/Kg-DRY	10/23/98
PCB-1254 PCB-1260		ND	22	ug/Kg-DRY	10/23/98
PCB-1016		ND	22	ug/Kg-DRY	10/23/98
SURROGATES, % Recovery Tetrachlorometaxvlene		58.0	Min:	11 Max:	102
Decachlorobiphenyl		79.5	Min:	35 Max:	141

Sample:	22A	48030988	022	2'	

Collected: 09/22/98 Matrix: SOIL

Test Description	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Percent Moisture	ASTM D2216	37.4	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082	ND	53	ug/Kg-DRY	10/23/98
PCB-1221		ND	27	ug/Kg-DRY	10/23/98
PCB-1232		ND	27	ug/Kg-DRY	10/23/98
PCB-1242		ND	27	ug/Kg-DRY	10/23/98
PCB-1240		120	27	ug/Kg-DRY	10/23/98
PCB-1254		ND	27	ug/Kg-DRY	10/23/98
PCB-1280 PCB-1016		ND	27	ug/Kg-DRY	10/23/98
SURROGATES, % Recovery		60.0	Min:	11 Max	c: 102
Decachlorobiphenyl		109	Min:	35 Max	c: 141

Sample: 23A 48030988 023 6" Collected: 09/22/98 Matrix: SOIL

Test Description Percent Moisture	Method ASTM D2216	<u>Result 0</u> 22.4	<u>Limit</u> 0.1	<u>Units</u> WT%		<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1254	SW 8082	ND ND ND 110 ND	43 21 21 21 21 21	ug/Kg-I ug/Kg-I ug/Kg-I ug/Kg-I ug/Kg-I ug/Kg-I	DRY DRY DRY DRY DRY DRY	10/23/98 10/23/98 10/23/98 10/23/98 10/23/98 10/23/98
PCB-1250 PCB-1016 SURROGATES, % Recovery Tetrachlorometaxylene		ND 53.5	21 Min:	ug/Kg-I 11	DRY Max:	10/23/98
Decachlorobiphenyl		59.3	Min:	35	Max:	141

Sample: 24A 48030988 024 2' Collected: 09/22/98 Matrix: SOIL

<u>Test Description</u> Percent Moisture	Method ASTM D2216	<u>Result Q</u> 22.5	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 PCB-1016	SW 8082	ND ND ND 620 D ND ND	130 64 64 64 64 64 64	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/19/98 10/19/98 10/19/98 10/19/98 10/19/98 10/19/98 10/19/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		77.9 77.9	Min: Mın:	11 Max: 35 Max:	102 141

Sample: 25A 48030988 025 6"	Colle	ected: 09/22/9	8 Mat	rix: SOIL	
Test Description	Method	<u>Result 0</u>	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Percent Moisture Polychlorinated Biphenyls	SW 8082	13.0			
PCB-1221		ND	38	ug/Kg-DRY	10/17/98
PCB-1232		ND	19	ug/Kg-DRY	10/17/98
PCB-1242		ND	19	ug/Kg-DRY	10/17/98
PCB-1248		ND	19	ug/Kg-DRY	10/17/98
PCB-1254		ND	19	ug/Kg-DRY	10/17/98
PCB-1260		ND	19	ug/Kg-DRY	10/17/98
PCB-1016		ND	19	ug/Kg-DRY	10/17/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		49.4	Min:	11 Max:	102
Decachlorobiphenyl		57.1	Min:	35 Max:	141

Sample: 26A 48030988 026 2' Collected: 09/22/98 Matrix: SOIL

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Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Percent Moisture	ASTM D2216	9.60	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082		27	va/¥a-DPV	10/17/98
PCB-1221		ND	37	ug/kg-Dki	10/17/98
PCB-1232		ND	18	ug/kg-DRI	10/1//90
PCB-1242		ND	18	ug/Kg-DRY	10/1//98
PCB-1248		ND	18	ug/Kg-DRY	10/17/98
PCB-1254		ND	18	ug/Kg-DRY	10/17/98
PCB-1260		ND	18	ug/Kg-DRY	10/17/98
PCB-1016		ND	18	ug/Kg-DRY	10/17/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		48.6	Min:	11 Max	: 102
Decachlorobiphenyl		45.9	Min:	35 Max	: 141

Sample: 27A 48030988 027 3' Collected: 09/22/98 Matrix: SOIL

Test Description	Method	<u>Result Q</u>	Limit b 1	<u>Units</u> WT2	<u>Analyzed</u> 09/29/98
Percent Moisture	ASTM DZZ16	16.9	0.1	44 T D	05,25,50
Polychlorinated Biphenyls	SW 8082			/	10/17/00
PCB-1221		ND	40	ug/Kg-DRY	10/1//98
PCB-1232		ND	20	ug/Kg-DRY	10/17/98
DCB-1242		ND	20	ug/Kg-DRY	10/17/98
PCB-1248		ND	20	ug/Kg-DRY	10/17/98
PCB-1254		ND	20	ug/Kg-DRY	10/17/98
PCB-1260		ND	20	ug/Kg-DRY	10/17/98
PCB-1016		ND	20	ug/Kg-DRY	10/17/98
SURROGATES, % Recovery				n n Maari	107
Tetrachlorometaxylene		38.8	Min:	11 Max:	102
Decachlorobiphenyl		42.5	Min:	35 Max:	141

Sample: 28A 48030988 028 6"	Collected: 09/22/98 Matrix: SOIL					
<u>Test Description</u> Percent Moisture	Method ASTM D2216	<u>Result 0</u> 9.70	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98	
Polychlorinated Biphenyls	SW 8082	ND	37	ug/Kg-DR	r 10/17/98	
PCB-1221		ND	18	ug/Kg-DR	<i>ː</i> 10/17/98	
PCB-1232		ND	18	ug/Kg-DR	r 10/17/98	
PCB-1242		ND	18	ug/Kg-DR	Y 10/17/98	
PCB-1248		ND	18	ug/Kg-DR	Y 10/17/98	
PCB-1254		ND	18	ug/Kg-DR	Y 10/17/98	
PCB-1260 PCB-1016		ND	18	ug/Kg-DR	Y 10/17/98	
SURROGATES, % Recovery		51.4	Min:	11 M	ax: 102	
Decachlorobiphenyl		52.7	Min:	35 M	ax: 141	

Sample: 29A 48030988 029 2' Collected: 09/22/98 Matrix: SOIL

Test Description Percent Moisture	Method ASTM D2216	<u>Result 0</u> 17.6	<u>Limit</u> 0.1.	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242	SW 8082	ND ND ND	40 20 20 20	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/17/98 10/17/98 10/17/98 10/17/98
PCB-1248 PCB-1254 PCB-1260 PCB-1016		ND ND ND	20 20 20	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/17/98 10/17/98 10/17/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		53.1 50.6	Min: Min:	11 Max: 35 Max:	102 141

Sample: 30A 48030988 030 6" Collected: 09/23/98 Matrix: SOIL

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Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>		Analyzed
Percent Moisture	ASTM D2216	26.6	0.1	M.T.42		09/29/90
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1254 PCB-1260	SW 8082	ND ND ND ND ND	45 23 23 23 23 23 23	ug/Kg-D ug/Kg-D ug/Kg-D ug/Kg-D ug/Kg-D ug/Kg-D ug/Kg-E	RY RY RY RY DRY DRY DRY	10/17/98 10/17/98 10/17/98 10/17/98 10/17/98 10/17/98 10/17/98
PCB-1016		ND	23	ug/ng r		20, 20, 20
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		44.0 40.7	Min: Min:	11 35	Max: Max:	102 141

Sample: 31A 48030988 031 2' Collected: 09/23/98 Matrix: SOIL

Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Percent Moisture	ASTM D2216	11.7	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	38	ug/Kg-DRY	10/17/98
PCB-1232		ND	19	ug/Kg-DRY	10/17/98
PCB-1242		ND	19	ug/Kg-DRY	10/17/98
PCB-1248		ND	19	ug/Kg-DRY	10/17/98
PCB-1254		ND	19	ug/Kg-DRY	10/17/98
PCB-1260		140	19	ug/Kg-DRY	10/17/98
PCB-1016		ND	19	ug/Kg-DRY	10/17/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		54.7	Min:	11 Max	: 102
Decachlorobiphenyl		56.0	Min:	35 Max	: 141

Sample: 32A 48030988 032 6" Collected: 09/23/98 Matrix: SOIL

Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Percent Moisture	ASTM D2216	11.3	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	38	ug/Kg-DRY	10/17/98
PCB-1232		ND	19	ug/Kg-DRY	10/17/98
PCB-1242		ND	19	ug/Kg-DRY	10/17/98
PCB-1248		ND	19	ug/Kg-DRY	10/17/98
PCB-1254		ND	19	ug/Kg-DRY	10/17/98
PCB-1260		ND	19	ug/Kg-DRY	10/17/98
PCB-1016		ND	19	ug/Kg-DRY	10/17/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		50.7	Min:	11 Max:	102
Decachlorobiphenyl		52.0	Min:	35 Max:	141

Sample: 33A 48030988 033 2' Collected: 09/23/98 Matrix: SOIL

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Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Percent Moisture	ASTM D2216	8.90	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	37	ug/Kg-DRY	10/17/98
PCB-1232		ND	18	ug/Kg-DRY	10/17/98
PCB-1242		ND	18	ug/Kg-DRY	10/17/98
PCB-1248		ND	18	ug/Kg-DRY	10/17/98
PCB-1254		ND	18	ug/Kg-DRY	10/17/98
PCB-1260		ND	18	ug/Kg-DRY	10/17/98
PCB-1016		ND	18	ug/Kg-DRY	10/17/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		52.1	Min:	11 Max	: 102
Decachlorobiphenyl		56.2	Min:	35 Max	: 141

Sample: 34A 48030988 034 3.5' Collected: 09/23/98 Matrix: SOIL

Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Percent Moisture	ASTM D2216	27.1	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	46	ug/Kg-DRY	10/23/98
PCB-1232		ND	23	ug/Kg-DRY	10/23/98
PCB-1242		ND	23	ug/Kg-DRY	10/23/98
PCB-1248		ND	23	ug/Kg-DRY	10/23/98
PCB-1254		55	23	ug/Kg-DRY	10/23/98
PCB-1260		ND	23	ug/Kg-DRY	10/23/98
PCB-1016		ND	23	ug/Kg-DRY	10/23/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		54.9	Min:	11 Max	c: 102
Decachlorobiphenyl		86.8	Min:	35 Mar	<: 141

Sample: 35A 48030988 035 6" Collected: 09/23/98 Matrix: SOIL

Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Percent Moisture	ASTM D2216	11.4	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	38	ug/Kg-DRY	10/17/98
PCB-1232		ND	19	ug/Kg-DRY	10/17/98
PCB-1242		ND	19	ug/Kg-DRY	10/17/98
PCB-1248		ND	19	ug/Kg-DRY	10/17/98
PCB-1254		ND	19	ug/Kg-DRY	10/17/98
PCB-1260		ND	19	ug/Kg-DRY	10/17/98
PCB-1016		ND	19	ug/Kg-DRY	10/17/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		57.3	Min:	11 Max:	102
Decachlorobiphenyl		69.3	Min:	35 Max:	141

Sample: 36A 48030988 036 2' Collected: 09/23/98 Matrix: SOIL

Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
ASTM D2216	13.0	<b>0.1</b>	WT&	09/29/98
SW 8082				
	ND	38	ug/Kg-DRY	10/17/98
	ND	19	ug/Kg-DRY	10/17/98
	ND	19	ug/Kg-DRY	10/17/98
	ND	19	ug/Kg-DRY	10/17/98
	ND	19	ug/Kg-DRY	10/17/98
	ND	19	ug/Kg-DRY	10/17/98
	ND	19	ug/Kg-DRY	10/17/98
	48.1	Min:	11 Max:	102
	55.8	Min:	35 Max:	141
	Method ASTM D2216 SW 8082	Method Result Q   ASTM D2216 13.0 13.0   SW 8082 ND ND   ND ND SS   48.1 55.8 55.8	Method Result O Limit   ASTM D2216 13.0 0.1   SW 8082 ND 38   ND 19   ND 10	Method Result Q Limit Units   ASTM D2216 13.0 0.1 WT%   SW 8082 ND 38 ug/Kg-DRY   ND 19 ug/Kg-DRY   S5.8 Min: 35

Order # 98-09-228Department of the Air ForceANALYTICA, INC.TEST RESULTS by SAMPLE

Sample: 37A 48030988 037 3.5' Collected: 09/23/98 Matrix: SOIL

Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Percent Moisture	ASTM D2216	22.8	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	43	ug/Kg-DRY	10/17/98
PCB-1232		ND	22	ug/Kg-DRY	10/17/98
PCB-1242		ND	22	ug/Kg-DRY	10/17/98
PCB-1248		ND	22	ug/Kg-DRY	10/17/98
PCB-1254		ND	22	ug/Kg-DRY	10/17/98
PCB-1260		ND	22	ug/Kg-DRY	10/17/98
PCB-1016		ND	22	ug/Kg-DRY	10/17/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		40.7	Min:	11 Max:	102
Decachlorobiphenyl		53.5	Min:	35 Max:	141

Sample: 38A 48030988 038 6" Collected: 09/23/98 Matrix: SOIL

Test Description	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Percent Moisture	ASTM D2216	12.4	0.1	WT*	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	38	ug/Kg-DRY	10/16/98
PCB-1232		ND	19	ug/Kg-DRY	10/16/98
PCB-1242		ND	19	ug/Kg-DRY	10/16/98
PCB-1248		ND	19	ug/Kg-DRY	10/16/98
PCB-1254		ND	19	ug/Kg-DRY	10/16/98
PCB-1260		ND	19	ug/Kg-DRY	10/16/98
PCB-1016		ND	19	ug/Kg-DRY	10/16/98
SURROGATES, % Recovery					
Tetrachlorometaxylene	`	56.6	Min:	11 Max:	102
Decachlorobiphenyl		57.9	Min:	35 Max:	141

Sample: 39A 48030988 039 2' Collected: 09/23/98 Matrix: SOIL

Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Percent Moisture	ASTM D2216	16.1	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	40	ug/Kg-DRY	10/16/98
PCB-1232		ND	20	ug/Kg-DRY	10/16/98
PCB-1242		ND	20	ug/Kg-DRY	10/16/98
PCB-1248		ND	20	ug/Kg-DRY	10/16/98
PCB-1254		ND	20	ug/Kg-DRY	10/16/98
PCB-1260		ND	20	ug/Kg-DRY	10/16/98
PCB-1016		ND	20	ug/Kg-DRY	10/16/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		51.9	Min:	ll Max:	102
Decachlorobiphenyl		63.3	Min:	35 Max:	141

Sample: 40A 48030988 040 6" Collected: 09/23/98 Matrix: SOIL

Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Percent Moisture	ASTM D2216	12.4	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	38	ug/Kg-DRY	10/16/98
PCB-1232		ND	19	ug/Kg-DRY	10/16/98
PCB-1242 ·		ND	19	ug/Kg-DRY	10/16/98
PCB-1248		ND	19	ug/Kg-DRY	10/16/98
PCB-1254		ND	19	ug/Kg-DRY	10/16/98
PCB-1260		ND	19	ug/Kg-DRY	10/16/98
PCB-1016		ND	19	ug/Kg-DRY	10/16/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		60.5	Min:	11 Max:	102
Decachlorobiphenyl		36.8	Min:	35 Max:	141

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Sample: 41A 48030988 041 6" Collected: 09/23/98 Matrix: SOIL

Test Description	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Percent Moisture	ASTM D2216	28.4	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	47	ug/Kg-DRY	10/23/98
PCB-1232		ND	23	ug/Kg-DRY	10/23/98
PCB-1242		ND	23	ug/Kg-DRY	10/23/98
PCB-1248		ND	23	ug/Kg-DRY	10/23/98
PCB-1254		430	23	ug/Kg-DRY	10/23/98
PCB-1260		ND	23	ug/Kg-DRY	10/23/98
PCB-1016		ND	23	ug/Kg-DRY	10/23/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		52.7	Min:	11 Max:	102
Decachlorobiphenyl		89.2	Min:	35 Max:	141

Sample: 42A 48030988 042 2' Collected: 09/23/98 Matrix: SOIL

Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Percent Moisture	ASTM D2216	22.3	0.1	WT%	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	43	ug/Kg-DRY	10/16/98
PCB-1232		ND	21	ug/Kg-DRY	10/16/98
PCB-1242		ND	21	ug/Kg-DRY	10/16/98
PCB-1248		ND	21	ug/Kg-DRY	10/16/98
PCB-1254		ND	21	ug/Kg-DRY	10/16/98
PCB-1260		ND	21	ug/Kg-DRY	10/16/98
PCB-1016		ND	21	ug/Kg-DRY	10/16/98
SURROGATES, % Recovery					
Tetrachlorometaxylene		36.0	Min:	11 Max:	102
Decachlorobiphenyl		66.3	Min:	35 Max:	141

88

### Department of the Air Force TEST RESULTS by SAMPLE

Sample: 43A 48030988 043 6"	Colle	ected: 09/23/9	8 Mat	rix: SOIL	
Test Description Percent Moisture	Method ASTM D2216	<u>Result 0</u> 36.7	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 PCB-1016	SW 8082	ND ND ND ND ND ND	53 26 26 26 26 26 26	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		49.1 62.7	Min: Min:	11 Max: 35 Max:	102 141

Sample: 44A 48030988 044 6" Collected: 09/23/98 Matrix: SOIL

Test Description	Method ASTM D2216	<u>Result 0</u> 14.6	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 PCB-1016	SW 8082	ND ND ND ND ND ND ND	39 20 20 20 20 20 20	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98 10/16/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl	-	55.1 78.2	Min: Min:	11 Max 35 Max	: 102 : 141

Sample: 45A 48030988 045 6" Collected: 09/23/98 Matrix: SOIL

Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Percent Moisture	ASTM D2216	10.0	0.1	MT-2	09/29/50
Polychlorinated Biphenyls	SW 8082			/ <b></b>	
PCB-1221		ND	37	ug/Kg-DRY	10/16/98
DCB_1232		ND	19	ug/Kg-DRY	10/16/98
PCD-1232		ND	19	ug/Kg-DRY	10/16/98
		ND	19	ug/Kg-DRY	10/16/98
PCB-1248		NT	19	ug/Kg-DRY	10/16/98
PCB-1254			10	wa/Ka-DRY	10/16/98
PCB-1260		ND		ug/ng Dhi	10/16/09
PCB-1016		ND	19	ug/kg-DR1	10/10/90
SURROGATES, % Recovery					
Tetrachlorometaxvlene		56.8	Min:	11 Max	: 102
Decachlorobiphenyl		56.8	Min:	.35 Max	: 141

Max:

141

Order # 98-09-228 ANALYTICA, INC.

Sample: 46A 48030988 046 6"

Page 19

### Collected: 09/23/98 Matrix: SOIL Test Description Method <u>Result 0</u> <u>Limit</u> Units Analyzed Percent Moisture ASTM D2216 28.8 0.1 WT% 09/29/98 Polychlorinated Biphenyls SW 8082 PCB-1221 ND47 ug/Kg-DRY 10/23/98 PCB-1232 ND 23 ug/Kg-DRY 10/23/98 PCB-1242 ND 23 ug/Kg-DRY 10/23/98 PCB-1248 ND 23 ug/Kg-DRY 10/23/98 PCB-1254 26 23 ug/Kg-DRY 10/23/98 PCB-1260 ND 23 ug/Kg-DRY 10/23/98 PCB-1016 ND 23 ug/Kg-DRY 10/23/98 SURROGATES, % Recovery Tetrachlorometaxylene 49.5 Min: 11 Max: 102 Decachlorobiphenyl 90.3 Min:

Page 20

THE FOLLOWING CODES APPLY TO THE ANALYTICAL REPORT

RESULT field... ND = not detected at the reported limit NA = analyte not applicable (see case narrative/methods for discussion) Q (qualifier) field... GENERAL: \* = Recovery or %RPD outside method specifications H = value is estimated due to analysis run outside EPA holding times E = reported concentration is above the instrument calibration range D = analyte was diluted to bring within instrument calibration range or to remove matrix interferences ORGANIC ANALYSIS DATA QUALIFIERS: B = analyte was detected in the laboratory method blank J = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL) INORGANIC ANALYSIS DATA QUALIFIERS: B = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL) W = post digestion spike did not meet criteria (85-115%) S = reported value determined by the Method of Standard Additions

Order	#	98.	-09-228
ANALY	CIC	CA,	INC.

PCB_8S:	POLYCHLORINATED BIPHENYLS	METHOD :	8082
PCBPRS:	Ultrasonic Extraction - PCBs	METHOD:	3550A
PMOIST:	PERCENT MOISTURE	METHOD :	ASTM D2216

Order # 98-09-228 ANALYTICA, INC. Department of the Air Force DATES REPORT

Sample: 01A 48030988	3 001 6 <b>"</b>	Mat	rix: SOIL			
Analysis	Method	Collected	Received	TCLP date	<u>Extracted</u>	Analyzed
Dercept Melsture	ACTM D2216	09/22/98	09/25/98	NA		09/29/98
Percent Moiscure	EN 2022	09/22/98	09/25/98	NA	09/29/98	10/20/98
Polychiorinated Biphenyis	31 0002	03722750	00,20,00	•		
Sample: 02A 48030988	8 002 2'	Mat	rix: SOIL			
Analysis	Method	Collected	Received	TCLP date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/20/98
Sample: 03A 4803098	8 003 6ª	Mat	rix: SOIL			
Analysis	Method	Collected	Received	TCLP date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/20/98
Sample: 04A 4803098	8 004 2'	Mat	rix: SOIL			
Analysis	Method	Collected	Received	TCLP date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA	-	09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/20/9B
Sample: 05A 4803098	8 005 4'	Mat	rix: SOIL			
Analysis	Method	Collected	Received	TCLP date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/20/98
Sample: 06A 4803098	8 006 6"	Mat	rix: SOIL			
Analysis	Method	Collected	Received	TCLP_date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/16/98
Sample: 07A 4803098	8 007 2'	Mat	trix: SOIL			
Analysis	Method	<u>Collected</u>	Received	TCLP_date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/22/98	09/25/9B	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/20/98
Sample: 08A 4803098	8 008 4'	Mat	trix: SOIL			
Analysis	Method	<u>Collected</u>	Received	TCLP_date	Extracted	<u>Analyzed</u>
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/19/98

84 94 Page 23

Order # 98-09-228 ANALYTICA, INC. Department of the Air Force DATES REPORT

Sample: 09A 48030988	3 009 6"	Mat	rix: SOIL			
Analysis	Method	<u>Collected</u>	Received	<u>TCLP date</u>	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/19/98
Sample: <b>10A 4803098</b> 8	B 010 2'	Mat	rix: SOIL			
Analysis	Method	<u>Collected</u>	Received	TCLP date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/16/98
Sample: <b>11A 4803098</b>	8 011 6"	Mat	rix: SOIL			
Analysis	Method	Collected	Received	TCLP date	Extracted	<u>Analyzed</u>
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/16/98
Sample: <b>12A 4803098</b>	8 012 2'	Mat	rix: SOIL			
Analysis	Method	<u>Collected</u>	Received	TCLP date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/16/98
Sample: 13A 4803098	8 013 6"	Mat	rix: SOIL			
Analysis	Method	<u>Collected</u>	Received	<u>TCLP date</u>	Extracted	<u>Analyzed</u>
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/16/98
Sample: <b>14A 4803098</b>	38 014 2'	Mat	rix: SOIL			
<u>Analysis</u>	Method	Collected	Received	TCLP date	Extracted	<u>Analyzed</u>
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/16/98
Sample: 15A 4803098	38 015 6"	Mat	trix: SOIL			
Analysis	Method	Collected	Received	TCLP date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/16/98
Sample: 16A 480309	88 016 <b>6</b> "	Ma	trix: SOIL			
Analysis	Method	Collected	Received	TCLP date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/16/98
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Order # 98-09-228 ANALYTICA, INC.

Department of the Air Force DATES REPORT

AnalysisMethodCollectedReceivedTCLP dateExtractedPercent MoistureASTM D221609/22/9809/25/98NAPolychlorinated BiphenylsSW 808209/22/9809/25/98NA09/29/98Sample:18A480309880182'Matrix:SOIL	<u>Analyzec</u> 09/29/98 10/19/98 <u>Analyzed</u> 09/29/98 10/16/98
Percent Moisture ASTM D2216 09/22/98 09/25/98 NA   Polychlorinated Biphenyls SW 8082 09/22/98 09/25/98 NA 09/29/98   Sample: 18A 48030988 018 2' Matrix: SOIL	09/29/98 10/19/98 <u>Analyzed</u> 09/29/98 10/16/98
Polychlorinated Biphenyls SW 8082 09/22/98 09/25/98 NA 09/29/98   Sample: 18A 48030988 018 2' Matrix: SOIL	10/19/98 <u>Analyzed</u> 09/29/98 10/16/98
Sample: 18A 48030988 018 2' Matrix: SOIL	<u>Analyzed</u> 09/29/98 10/16/98
	<u>Analyzed</u> 09/29/98 10/16/98
Analysis Method Collected Received TCLP date Extracted	09/29/98 10/16/98
Percent Moisture ASTM D2216 09/22/98 09/25/98 NA	10/16/98
Polychlorinated Biphenyls SW 8082 09/22/98 09/25/98 NA 09/29/98	
Sample: 19A 48030988 019 6" Matrix: SOIL	
Analysis Method <u>Collected Received TCLP date Extracted</u>	Analyzed
Percent Molsture ASTM D2216 09/22/98 09/25/98 NA	09/29/98
Polychlorinated Biphenyls SW 8082 09/22/98 09/25/98 NA 09/29/98	10/15/98
Sample: 20A 48030988 020 2' Matrix: SOIL	
Analysis Method Collected Received <u>TCLP date Extracted</u>	Analyzed
Percent Moisture ASTM D2216 09/22/98 09/25/98 NA	09/29/98
Polychlorinated Biphenyls SW 8082 09/22/98 09/25/98 NA 09/29/98	10/15/98
Sample: 21A 48030988 021 6" Matrix: SOIL	
Analysis Method Collected Received TCLP date Extracted	<u>Analyzed</u>
Percent Molsture ASTM D2216 09/22/98 09/25/98 NA	09/29/98
Polychlorinated Biphenyls SW 8082 09/22/98 09/25/98 NA 09/29/98	10/23/98
Sample: 22A 48030988 022 2' Matrix: SOIL	
Analysis Method Collected Received TCLP_date Extracted	Analyzed
Percent Moisture ASTM D2216 09/22/98 09/25/98 NA	09/29/98
Polychlorinated Biphenyls SW 8082 09/22/98 09/25/98 NA 09/29/98	10/23/98
Sample: 23A 48030988 023 6" Matrix: SOIL	
Analysis Method Collected ReceivedCLP_dateExtracted	Analyzed
Percent Molsture ASTM D2216 09/22/98 09/25/98 NA	09/29/98
Polychlorinated Biphenyls SW 8082 09/22/98 09/25/98 NA 09/29/98	10/23/98
Sample: 24A 48030988 024 2' Matrix: SOIL	
Analysis Method Collected Received TCLP date Extracted	Analyzed
Percent Molsture ASTM D2216 09/22/98 09/25/98 NA	09/29/98
Polychlorinated Biphenyls SW 8082 09/22/98 09/25/98 NA 09/29/98	10/19/98

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Order # 98-09-228 ANALYTICA, INC. Department of the Air Force DATES REPORT

Sample: 25A 48030988	3 025 6"	Mati	cix: SOIL			
	Method	Collected	Received	TCLP date	Extracted	Analyzed
Analysis Dereest Moleture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
reluchlorizated Riphenvis	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/17/98
polychiorinaced prphenyrs						
Sample: 26A 4803098	8 026 2'	Mat	rix: SOIL			
Analysis	Method	<u>Collected</u>	Received	<u>TCLP date</u>	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/17/98
Sample: <b>27A 4803098</b>	8 027 3'	Mat	rix: SOIL			
	Method	Collected	Received	TCLP date	Extracted	Analyzed
Analysis Parcent Molsture	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/17/98
porychiorinated prphanyro						
Sample: 28A 4803098	8 028 6"	Mat	rix: SOIL			
Analysis s	Method	Collected	Received	TCLP date	Extracted	Analyzed
Analysis	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Polychlorynated Biphenyls	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/17/98
Sample: 29A 4803098	38 029 2'	Mat	rix: SOIL			
	Method	Collected	Received	TCLP date	Extracted	Analyzed
Analysis	ASTM D2216	09/22/98	09/25/98	NA		09/29/98
Percent Moisture	SW 8082	09/22/98	09/25/98	NA	09/29/98	10/17/98
Sample: 30A 480309	88 030 6"	Mat	rix: SOIL			
		0-13 actor	Deceived	TCLP date	Extracted	Analyzed
Analysis	Method	00/22/08	09/25/98	NA		09/29/98
Percent Moisture	ASTM 02216	09/23/98	09/25/98	NA	09/29/98	10/17/98
Polychlorinated Biphenyls	SM 8082	09/23/90	03/23/00			
Sample: 31A 480309	88 031 2'	Ma	trix: SOIL			
	Method	Collected	Received	TCLP date	Extracted	Analyzed
Analysis	ASTM D2216	09/23/98	09/25/98	NA		09/29/98
Percent Moisture	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/17/98
Polychiofinated signeryis						
Sample: 32A 480309	88 032 6"	Ма	trix: SOIL			
700 11010	Method	Collected	Received	TCLP date	Extracted	Analyzed
Andiysis	ASTM D2216	09/23/9B	09/25/98	NA		09/29/98
Percent Mulsture	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/17/98
Potycutorinated piphenyis	0	- •				

Order # 98-09-228 ANALYTICA, INC. Department of the Air Force DATES REPORT

Sample: 33A 48030988 033 2' Matrix: SOIL

bealweine	Method	Collected	Received	TCLP date	Extracted	Analyzed
Analysis Percent Molsture	ASTM 02216	09/23/98	09/25/98	NA	<u></u>	09/29/98
Percent Moisture	CW 0092	09/23/98	09/25/98	NA	09/29/98	10/17/98
Polychiorinated Biphenyis	5. 0002	0,00,00				
Sample: 34A 4803098	3 034 3.5'	Mat	rix: SOIL			
Analysis	Method	<u>Collected</u>	Received	TCLP_date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/23/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/23/98
Sample: <b>35A 4803098</b>	8 035 6ª	Mat	rix: SOIL			
Analysis	Method	<u>Collected</u>	Received	TCLP date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/23/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/17/98
Sample: 36A 4803098	8 036 2'	Mat	rix: SOIL			
					<b>-</b>	8 <b>1</b>
Analysis	Method	Collected	Received	<u>TCLP date</u>	Extracted	<u>Analyzeu</u>
Percent Moisture	ASTM D2216	09/23/98	09/25/98	NA	00/00/00	09/29/98
Polychlorinated Biphenyls	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/1//98
Sample: <b>37A 4803098</b>	8 037 3.5'	Mat	rix: SOIL			
Analysis	Method	Collected	Received	TCLP date	Extracted	<u>Analyzed</u>
Percent Moisture	ASTM D2216	09/23/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/17/98
Sample: 38A 4803098	8 038 6"	Mat	rix: SOIL			
Analysis	Method	Collected	Received	TCLP date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/23/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/16/98
Sample: <b>39A 4803098</b>	8 039 2'	Mat	rix: SOIL			
	11-5 h - 4	College of	Pacouved	TCLP date	Extracted	Analyzed
Analysis	MeLHOU	COTTecced	N0/25/02	NA		09/29/98
Percent Moisture	ASIM D2210	09/23/98	09/25/98	NA	09/29/98	10/16/98
rolychiorinated Biphenyls	SW BUGZ	V3/23/30	V3/23/30	476°1	,,	, _,, ,,
Sample: <b>40A 4803098</b>	8 040 6"	Mat	rix: SOIL			
Analysis	Method	Collected	<u>Received</u>	TCLP date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/23/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/16/98

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Department of the Air Force DATES REPORT

Sample: <b>41A 4803098</b> 8	8 041 6"	Mat:	rix: SOIL			
Analysis	Method	<u>Collected</u>	Received	<u>TCLP date</u>	Extracted	<u>Analyzed</u>
Percent Moisture	ASTM D2216	09/23/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/23/98
Sample: <b>42A 4803098</b>	8 042 2'	Mat	rix: SOIL			
Analysis	Method	<u>Collected</u>	<u>Received</u>	<u>TCLP date</u>	Extracted	<u>Analyzed</u>
Percent Moisture	ASTM D2216	09/23/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/16/98
Sample: <b>43A 4803098</b>	8 043 6¤	Mat	rix: SOIL			
Analysis	Method	Collected	Received	TCLP date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/23/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/23/98	09/25/9B	NA	09/29/98	10/16/98
Sample: <b>44A 4803098</b>	8 044 6"	Mat	rix: SOIL			
Analysis	Method	Collected	Received	TCLP_date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/23/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/16/9B
Sample: <b>45A 4803098</b>	8 045 6°	Mat	rix: SOIL			
Analysis	Method	Collected	<u>Received</u>	TCLP_date	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/23/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/16/98
Sample: <b>46A 4803098</b>	8 046 6"	Mat	rix: SOIL			
Analysis	Method	<u>Collected</u>	Received	<u>TCLP date</u>	Extracted	Analyzed
Percent Moisture	ASTM D2216	09/23/98	09/25/98	NA		09/29/98
Polychlorinated Biphenyls	SW 8082	09/23/98	09/25/98	NA	09/29/98	10/23/98

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### COOLER RECEIPT FORM

CLIENT LIMEn ATBCSN#\_

PROJECT - Roman ORD# 780922 USE OTHER SIDE OF THIS FORM TO NOTE DETAILS CONCERNING CHECK-IN PROBLEMS/DISCREPANCIES A. PRELIMINARY EXAMINATION PHASE: Date cooler opened: 5-25-56 Chain of Custody #\_\_\_\_\_ BUENES by print / / នាំខ្លា\_\_\_\_ 1. Did cooler come with a shipping slip air bill, etc. ?\_\_\_\_ NO If YES, enter carrier name & air bill number here Fales 3/28864820 2. Were custody seals on outside of cooler? NO How many & where: 2 - Sedlar seal date: 5-28-98 seal name: 3. Were custody seals unbroken and intact on the date and time of arrival?\_\_\_\_\_ NO 4. Did you screen samples for radioactivity using the Geiger Counter?\_\_\_\_\_ YES 60 5. Were custody papers sealed in a plastic bag & taped inside to the lid?\_\_\_\_\_ YES NO 6. Were custody papers filled out properly ink, signed, etc ?\_\_\_\_\_ NO 7. Did you sign custody papers in the appropriate place?\_\_\_\_\_ NO 8. Was project identifiable from custody paper?, If yes, enter project name at the top of this form NO 9. If required, was enough ice used? YES NO Type of ice: WET BLUE Jemp 6 °C 10. Have designate person initial here to acknowledge receipt of cooler: date: 7.28-29 B. LOG-IN PHASE: Date samples were logged-in: 5-24-70 by print <u>PLSINEC</u>

11. Describe type of packing in co	olen	Balle	her
12. Were all bottles sealed in separ	ate plastic bags?		TES NO
13. Did all bottles arrive unbroken	& were labels in good condition? $\underline{C} 2 / - \underline{C}$	roched	·YES SIO
14. Were all bottle labels complete	D, date, time, signature, preservative, etc. ?		YES NO
15. Did all bottle labels agree with	custody papers?		YES NO
16. Number of samples received	16 Number of bottles received6		$\bigcirc$
17. Were correct containers used f	or the tests indicated?		TES, NO
13. Were correct preservatives add	ied to samples?	······································	(YES) NO
19. Was a sufficient amount of sar	nple sent for tests indicated?		YES NO
20. Were bubbles absent in volatil	e samples? If NO, list by Sample = ID		YES NO
21. Was the project manager calles	d and status discussed? It yes, give details on the b	ack of this form	YES NO
22. Who was called?	By whom?	date	

325 Interlocken Parkway Suite 200 Broomfield, CO 80021 (303) 469-8868 (800) 873-8707 FAX. (303) 469-5254



Department of the Air Force 611 Civil Eng./CEVO 21885 2nd St. Elmendorf AFB, AK 99506-0875 Attn: Carl A. Hornig Order #: 98-09-243 Date: 10/26/98 12:26 Work ID: CAPE ROMANZOF - CALL #B002 Date Received: 09/25/98 Date Completed: 10/25/98

### SAMPLE IDENTIFICATION

Sample		Sample	
Number	Client Descrip <u>tion</u>	Number <u>Client Description</u>	<u>1</u>
01	48030988 047 6"	03 48030988 049 4'	
02	48030988 048 21	04 48030988 050 6"	

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. A listing of data qualifiers and analytical codes is located on the TEST METHODOLOGIES page at the end of the report.

If you have any questions regarding the analyses, please feel free to call.

Sincerely,

Claire K. Toon Project Manager

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Samples were prepared and analyzed according to methods outlined in the following references:

 Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 4, January 1996.

All analyses meet quality assurance objectives.

Sample: 01A 48030988 047 6"	Coll	ected: 09/23/9	8 Mat	rix: SOIL	
Test Description Percent Moisture	Method ASTM D2216	<u>Result 0</u> 27.4	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 PCB-1016 SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl	SW 8082	ND ND ND 72 ND ND 48.9 69.6	46 23 23 23 23 23 23 Min: Min:	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY 11 Max: 35 Max:	10/23/98 10/23/98 10/23/98 10/23/98 10/23/98 10/23/98 10/23/98 10/23/98
Sample: 02A 48030988 048 2'	Coll	lected: 09/23/9	98 Mai	trix: SOIL	•
Test Description Percent Moisture Polychlorinated Biphenyls	Method ASTM D2216 SW 8082	<u>Result 0</u> 24.9	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
PCB-1221		ND ND	44 22	ug/Kg-DRY ug/Kg-DRY	10/18/98 10/18/98

DC=_1232	ND	22	ug/ng		10, 20, 20
	ND	22	ug/Kg	-DRY	10/18/98
PCB-1242		22		-DRY	10/18/98
PCB-1248	ци Ци	44	ug/19		
DCP = 1.25A	ND	22	ug/Kg	-DRY	10/18/98
PCD-1434	NT	22	ua/Ka	-DRY	10/18/98
PCB-1260	ND		ug,g		10/10/00
PCB-1016	ND	22	ug/Kg	-DRY	10/18/98
SURROGATES. & Recovery					
mature ablement over long	40.4	Min:	11	Max:	102
Tetrachiorometaxylene		M-1	35	Max·	141
Decachlorobiphenyl	51.7	1-1717:	رر	TIGAN -	

Sample: 03A 48030988 049 4' Collected: 09/23/98 Matrix: SOIL

<u>Test Description</u>	Method ASTM D2216	<u>Result 0</u> 12.9	<u>Limit</u> 0.1	<u>Units</u> WT%	<u>Analyzed</u> 09/29/98
Polychlorinated Biphenyls PCB-1221 PCB-1232	SW 8082	ND ND	38 19	ug/Kg-DRY ug/Kg-DRY	10/18/98 10/18/98
PCB-1242 PCB-1248		ND ND	19 19 19	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/18/98 10/18/98 10/18/98
PCB-1254 PCB-1260 PCB-1016		ND ND ND	19 19	ug/Kg-DRY ug/Kg-DRY	10/18/98 10/18/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		44.2 51.9	Min: Min:	11 Max 35 Max	:: 102 :: 141

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 04A 48030988 050 6" Collected: 09/23/98 Matrix: SOIL					
Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Percent Moisture	ASTM D2216	22.0	0.1	WI\$	09/29/98
Polychlorinated Biphenyls	SW 8082				
PCB-1221		ND	43	ug/Kg-DRY	10/18/98
PCB-1232		ND	21	ug/Kg-DRY	10/18/98
DCB-1242		ND	21	ug/Kg-DRY	10/18/98
PCD 1242		ND	21	ug/Kg-DRY	10/18/98
PCB-1240		ND	21	ug/Kg-DRY	10/18/98
PCB-1260		ND	21	ug/Kg-DRY	10/18/98
PCB-1016		ND	21	ug/Kg-DRY	10/18/98
SURROGATES, & Recovery					
Tetrachlorometaxylene		41.2	Min:	11 Max.	102
Decachlorobiphenyl		50.6	Min:	35 Max:	141
Page 5

THE FOLLOWING CODES APPLY TO THE ANALYTICAL REPORT

RESULT field ... ND = not detected at the reported limit NA = analyte not applicable (see case narrative/methods for discussion) Q (qualifier) field... GENERAL: \* = Recovery or %RPD outside method specifications H = value is estimated due to analysis run outside EPA holding times E = reported concentration is above the instrument calibration range D = analyte was diluted to bring within instrument calibration range or to remove matrix interferences ORGANIC ANALYSIS DATA QUALIFIERS: B = analyte was detected in the laboratory method blank J = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL) INORGANIC ANALYSIS DATA QUALIFIERS: B = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL) W = post digestion spike did not meet criteria (85-115%) S = reported value determined by the Method of Standard Additions

Page 6

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PCB_8S:	POLYCHLORINATED BIPHENYLS	METHOD :	8082
PCBPRS :	Ultrasonic Extraction - PCBs	METHOD :	3550A
PMOIST:	PERCENT MOISTURE	METHOD :	ASTM D2216

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325 Interlocken Parkway Suite 200 Broomfield, CO 90021 (303) 469-8868 (800) 873-8707 FAX (303) 469-5254



Department of the Air Force 611 CES/CEVO 21-885 2nd St. Elmendorf AFB, AK 99506-0875 Attn: Carl A. Hornig Order #: 98-09-259 Date: 10/30/98 15:19 Work ID: CAPE ROMANZOF - CALL #B002 Date Received: 09/30/98 Date Completed: 10/30/98

#### SAMPLE IDENTIFICATION

Sample		Sample	
Number	Client Description	<u>Number Client Description</u>	m
03	48020988051 SW3	·07 48030988057 SD2	
01	48030988051 503	08 48030988058 SW2	
02	48030988052 505	09 48030988059 SW1	
03	48030988053 SW3	10 48030988060 SW1	
04	48030988054 SW1		
05	48030988055 SD1	11 48030388081 551	
06	48030988056 SW1		

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. A listing of data qualifiers and analytical codes is located on the TEST METHODOLOGIES page at the end of the report.

If you have any questions regarding the analyses, please feel free to call.

Sincerely,

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Claire K. Toon Project Manager

Samples were prepared and analyzed according to methods outlined in the following references:

 Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 4, January 1996.

Problems encountered with the analyses are discussed in the following narrative.

The 8260 analysis of sample 48030988057 SD2, resulted in the fourth internal standard being recovered low. This result was verified by re-analysis, and is attributed to sample matrix effect.

The pesticide results for samples 48030988052 SD3, 48030988053 SW3, 48030988055 SD1, and 48030988057 SD2 are reported with surrogate recoveries below quality control guidelines. These recoveries were verified by secondary analysis and are attributed to sample matrix effects. The method blank, which is analyzed in the absence of sample matrix, shows all surrogates within QC limits.

The PCB analysis for sample 48030988057 SD2 is reported with the surrogates diluted out. Analytical dilution was required in order to quantitate the detected aroclor within linear range.

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 01A 48030988051 SW3	Colle	cted: 09/26/	<b>98</b> Mat	rix: WATER	
Test Description	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
ICP Metals, TCLP Extracted	SW 1311/6010			/-	10/15/08
Arsenic		ND	0.050	mg/L	10/15/98
Barium		0.34	0.020	mg/L	10/15/90
Cadmium		ND	0.0050	mg/L	10/15/98
Chromium		ND	0.010	mg/L	10/15/98
Lead		ND	0.050	mg/L	10/15/98
Selenium		ND	0.10	mg/L	10/15/98
Silver		ND	0.010	mg/L	10/15/98
Mercury, TCLP Extracted	SW 1311/7470	ND	0.0020	mg/L	10/20/98
Sample: 01B 48030988051 SW3	Colle	ected: 09/26/	'98 Mai	crix: WATER	ł
Test Description	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Organochlorine Pesticides	SW 8081A				/ /
Aldrin		ND	0.025	ug/L	10/21/98
alpha-BHC		ND	0.025	ug/L	10/21/98
beta-BHC		ND	0.025	ug/L	10/21/98
delta-BHC		ND	0.025	ug/L	10/21/98
gamma-BHC (Lindane)		ND	0.025	ug/L	10/21/98
alpha-Chlordape		ND	0.025	ug/L	10/21/98
gamma-Chlordane		ND	0.025	ug/L	10/21/98
		ND	0.050	ug/L	10/21/98
		ND	0.050	ug/L	10/21/98
		ND	0.050	ug/L	10/21/98
Dieldrin		ND	0.025	ug/L	10/21/98
Endosulfan I		ND	0.050	ug/L	10/21/98
Endosulfan II		ND	0.050	ug/L	10/21/98
Endosulfan Sulfate		ND	0.050	ug/L	10/21/98
Endrin Endrin		ND	0.050	ug/L	10/21/98
Endrin Aldehyde		ND	0.050	ug/L	10/21/98
Hentachlor		ND	0.025	ug/L	10/21/98
Heptachior Enovide		ND	0.025	ug/L	10/21/98
Methomichlor		ND	0.25	ug/L	10/21/98
Toyaphene		ND	0.75	ug/L	10/21/98
TOYADHEHE				-	
SURROGAIDS, & RECOVELY		75.0	Min:	45 M	lax: 124
Tetrachionecasylene		75.0	Min:	45 M	lax: 124
Decacutotopthmentt					

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 01B 48030988051 SW3	Col	R			
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1254 PCB-1260 PCB-1016	SW 8082	nd Nd Nd Nd Nd Nd Nd	1.0 0.50 0.50 0.50 0.50 0.50	ug/L ug/L ug/L ug/L ug/L ug/L ug/L	10/21/98 10/21/98 10/21/98 10/21/98 10/21/98 10/21/98 10/21/98
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		75.0 75.0	Min: Min:	29 M 26 M	Max: 133 Max: 137

Sample: 01C 48030988051 SW3

Collected: 09/26/98 Matrix: WATER

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Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Volatiles by GC/MS	SW 8260B			. 17	10/08/98
Dichlorodifluoromethane		ND	5.0	ug/L	10/08/98
Chloromethane		ND	5.0	ug/L	10/08/98
Vinvl Chloride		ND	2.0	ug/L	10/08/98
Bromomethane		ND	5.0	ug/L	10/08/98
Chloroethane		ND	5.0	ug/L	10/08/98
Trichlorofluoromethane		ND	2.0	ug/հ	10/08/98
1 1-Dichloroethene		ND	2.0	ug/L	10/08/98
Trichlorotrifluoroethane		ND	2.0	ug/L	10/08/98
Methylene Chloride		ND	10	ug/L	10/08/98
trans-1.2-Dichloroethene		ND	2.0	ug/L	10/08/98
1 1-Dichloroethane		ND	2.0	ug/L	10/08/98
2 2-Dichloropropane		ND	2.0	ug/L	10/00/98
cis-1.2-Dichloroethene		ND	2.0	ug/L	10/08/98
Bromochloromethane		ND	2.0	ug/L	10/08/98
Chloroform		ND	2.0	ug/L	10/00/98
1 1 1-Trichloroethane		ND	2.0	ug/L	10/08/98
Carbon Tetrachloride		ND	2.0	ug/L	10/08/98
1 1-Dichloropropene		ND	2.0	ug/L	10/00/98
Enzene		ND	2.0	ug/L	10/08/98
1 2-Dichloroethane		ND	2.0	ug/L	10/08/98
Trichloroethene		ND	2.0	ug/L	10/08/90
1.2-Dichloropropane		ND	2.0	ug/L	10/08/98
Dibromomethane		ND	2.0	ug/L	10/08/98
Bromodichloromethane		ND	2.0	ug/L	10/08/98
cis-1 3-Dichloropropene		ND	2.0	ug/L	10/08/98
		ND	2.0	ug/L	10/08/98
trancel 3-Dichloropropene		ND	2.0	ug/L	10/08/98
1 1 2-Trichloroethane		ND	2.0	ug/L	10/08/98
Tetrachloroethene		ND	2.0	ug/L	10/00/90
1.2-Dichloropropane		ND	2.0	ug/L	10/00/90 TU/08/90
Dibromochloromethane		ND	2.0	ug/L	10/00/90
1.2-Dibromoethane		ND	2.0	ug/ь	10/00/90
<b>1</b> , <b>2</b> , <b>2</b> , <b>2</b> , <b>2</b> , <b>3</b> , <b>4</b> , <b>4</b> , <b>4</b> , <b>4</b> , <b>4</b> , <b>4</b> , <b>4</b> , <b>4</b>					

Department of the Air Force TEST RESULTS by SAMPLE

Page 5

Sample:	01C	48030988051	SW3

Collected: 09/26/98 Matrix: WATER

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Tost Description	Method	<u>Result</u>	0	<u>Limit</u>	<u>Units</u>	A	nalyzed
Volatiles by GC/MS	SW 8260B	(continued	from	previou	is page)	_	- (
Chlorobenzene		ND		2.0	ug/L	1	0/08/98
Ethulbergere		ND		2.0	ug/L	1	0/08/98
1 1 1 2 Tetrachloroethaue		ND		2.0	ug/L	1	0/08/98
		ND		2.0	ug/L	1	0/08/98
m, p-xytenes		ND		2.0	ug/L	1	0/08/98
o-xylene		ND		2.0	ug/L	1	0/08/98
Styrene		ND		2.0	ug/L	1	0/08/98
Bromotorm		ND		2.0	ug/L	1	0/08/98
Isopropylbenzene		ND		2.0	ug/L	l	0/08/98
Bromobenzene		ND		2.0	ug/L	1	.0/08/98
n-Propylbenzene		ND		2.0	ug/L	1	.0/08/98
1,1,2,2-Tetrachloroethane		NTD		2.0	ug/L	1	.0/08/98
1,2,3-Trichloropropane				2.0	uq/L	1	.0/08/98
2-Chlorotoluene		ND		2.0	ug/L	1	.0/08/98
1,3,5-Trimethylbenzene		ND		2.0	ug/L	1	0/08/98
4-Chlorotoluene				2.0	ug/L	1	0/08/98
tert-Butylbenzene		ND		2.0	ug/L	1	10/08/98
1,2,4-Trimethylbenzene				2.0	,_ ug/L	1	LO/08/98
sec-Butylbenzene				2.0	-9,= υσ/L	1	10/08/98
4-Isopropyltoluene				2.0	ug/L	1	10/08/98
1,3-Dichlorobenzene				2.0	ug/L	1	10/08/98
1,4-Dichlorobenzene				2.0	ug, 2 να/Ι.		10/08/98
n-Butylbenzene		ND		2.0	ug/1		10/08/98
1,2-Dichlorobenzene		ND		2.0	ug/L		10/08/98
1,2-Dibromo-3-chloropropane	2	ND		2 0	1971 1077		10/08/98
1,2,4-Trichlorobenzene		ND		2.0	ug/L		10/08/98
Hexachlorobutadiene		ND		2.0			10/08/98
Napthalene		ND		2.0	ug/D		10/08/98
1,2,3-Trichlorobenzene		ND		2.0	ug/D		10/08/98
Acetone		ND		50	ug/1		10/08/98
Acrylonitrile		ND		10	ug/L		10/08/98
2-Butanone		ND		50	ug/1		10/08/98
Carbon Disulfide		ND		2.0	ug/11		10/08/98
trans-1,4-Dichloro-2-buten		ND		10	ug/u		10/08/98
2-Chloroethyl Vinyl Ether		ND	Ļ	10	ug/1		10/08/98
2-Hexanone		ND	1	20	ug/n		10/08/98
Iodomethane		ND	)	2.0			10/08/98
4-Methyl-2-pentanone		NĽ	)	20	ug/L		10/08/98
Vinyl Acetate		NĽ	}	5.0	ug/1 /7		10/08/98
tert-Butyl methyl ether		NI	)	2.0	ng/ P		20,00,00
SURROGATES, & Recovery						Move	120
Dibromofluoromethane		100	)	Min:	80	Max:	110
Toluene d-8		102	2	Min:	88	Mox-	115
p-Bromofluorobenzene		104	ł	Min:	86	max:	
<b>r</b>							

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Department of the Air Force TEST RESULTS by SAMPLE

Page 6

# Sample: 01D 48030988051 SW3

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Collected: 09/26/98 Matrix: WATER

Test Description	Method	<u>Result</u> O	<u>Limit</u>	<u>Units</u>	Analyzed
Semivolatile Organics	SW 8270C				10/07/98
Phenol		ND	5.6	ug/D	10/07/98
bis(2-Chloroethyl) ether		ND	5.0 F 6	ug/D	10/07/98
2-Chlorophenol		ND	5.0	ug/L vg/L	10/07/98
1,3-Dichlorobenzene		ND	5.0	ug/10 11/17.	10/07/98
1,4-Dichlorobenzene		NU	2.0 11	ug/L	10/07/98
Benzyl alcohol		1.6 J	E C	ug/D	10/07/98
1,2-Dichlorobenzene		ND	5.0	ug/15 1107/I	10/07/98
2-Methylphenol		UN ND	5.0 E 6	ug/D	10/07/98
bis(2-Chloroisopropyl) et	ther	ND ND	5.0 E C		10/07/98
4-Methylphenol			5.0	ug/1	10/07/98
n-Nitroso-di-n-propylami	ne	ND	5.0	ug/t	10/07/98
Hexachloroethane		ND	5.0	ug/1 ug/1	10/07/98
Nitrobenzene		ND	5.0		10/07/98
Isophorone			5.0		10/07/98
2-Nitrophenol		ND	5.0		10/07/98
2,4-Dimethylphenol		DM ND	5.0	ug/5	10/07/98
Benzoic acid		ND	56	ug/1	10/07/98
bis(2-Chloroethoxy)metha	ne	ND	5.0		10/07/98
2,4-Dichlorophenol			5.0		10/07/98
1,2,4-Trichlorobenzene		ND	5.0	ug/1	10/07/98
Naphthalene		NU	5.0	ug/1 ug/L	10/07/98
4-Chloroaniline		ND	5.0	ug/2	10/07/98
Hexachlorobutadiene		ND	5.0	ug/1	10/07/98
4-Chloro-3-methylphenol		ND	5.0	ug/5	10/07/98
2-Methylnaphthalene		ND	5.0		10/07/98
Hexachlorocyclopentadier	ne	DM ND	5.0	ug/5	10/07/98
2,4,6-Trichlorophenol		DM ND	5.0	ug/⊥ ug/L	10/07/98
2,4,5-Trichlorophenol			11	ug/L	10/07/98
2-Chloronaphthalene			56	ug/L	10/07/98
2-Nitroaniline		ND	56	ug/L	10/07/98
Dimethylphthalate		ND	5.6	vg/L	10/07/98
Acenaphthylene		ND	56	ug/L	10/07/98
3-Nitroaniline		ND	5.6	ug/L	10/07/98
Acenaphthene		ND	56	ug/L	10/07/98
2,4-Dinitrophenol			56	ua/L	10/07/98
4-Nitrophenol		NTO	5.6	ug/L	10/07/98
Dibenzofuran		ND	5.6	ug/L	10/07/98
2,6-Dinitrotoluene		ND	5.6	ug/L	10/07/98
2,4-Dinitrotoluene		ND	5.6	ug/L	10/07/98
Diethylphthalate	_		5.6	ug/L	10/07/98
4-Chlorophenyl-phenylet	her	ND	5.6	ug/L	10/07/98
Fluorene			5.6	ua/L	10/07/98
4-Nitroaniline	-		56	ua/L	10/07/98
4,6-Dinitro-2-methylphe	nol		5.6	, υα/L	10/07/98
n-Nitrosodiphenylamine	er.	ND	5.6	ug/L	10/07/98
4-Bromopheny1-pheny1etr	1CT			-	

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 01D 48030988051 SW3		Collected: 09/	26/98 Mat	rix: WATE	R	
	Method	Result	0 <u>Limit</u>	<u>Units</u>	1	Analyzed
Test Description	CW 8270C	(continued	from previou	us page)		
Semivolatile Organics	5W 0270C	ND	5.6	ug/L		10/07/98
Hexachlorobenzene		ND	5.6	ug/L		10/07/98
Pentachlorophenol		ND	5.6	ug/L		10/07/98
Phenanthrene		ND	5.6	ug/L	-	10/07/98
Anthracene			5.6	ug/L		10/07/98
Di-n-butylphthalate		NT)	5.6	ug/L		10/07/98
Fluoranthene		ND	5.6	uq/L		10/07/98
Pyrene		23.5	т 5.6	ug/L		10/07/98
Butylbenzylphthalate		3.5 C	, 2.2	ug/L		10/07/98
3,3'-Dichlorobenzidine			5 6	ug/L		10/07/98
Benzo (a) Anthracene			5.6	ug/L		10/07/98
Chrysene			TD 56	-9,- υσ/L		10/07/98
Bis(2-Ethylhexyl)phthalate		2.0 0	5.6	ug/L		10/07/98
Di-n-octylphthalate		ND	5.0			10/07/98
Benzo(b)fluoranthene		ND	5.0	ug/L		10/07/98
Benzo(k) fluoranthene		DM	5.0	ug/L		10/07/98
Benzo(a)pyrene			5.6	ug/L		10/07/98
Indeno (1,2,3-cd) pyrene		ND	5.0	ug/1		10/07/98
Dibenz (a, h) anthracene		ND	5.0	ug/1		10/07/98
Benzo(g,h,i)perylene		ND	5.0	ug/ n		10/0//20
SURROGATES, & Recovery				~1	M	100
2-Fluorophenol		70.6	Min:	21	Max	94
d5-Phenol		70.6	Min:	10	Max	114
d5-Nitrobenzene		89.1	Min:	35	Max	116
2-Fluorobiphenvl		88.2	Min:	43	Max:	122
2 4 6-Tribromophenol		82.4	Min:	10	max:	147
d14-Terphenyl		100	Min:	33	max:	TAT

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Order # 98-09-259 ANALYTICA, INC. Department of the Air Force TEST RESULTS by SAMPLE

Sample: 02A 48030988052 SD3	Colle	cted: 09/26/	<b>98</b> Mat	rix: SEDIMEN	Т
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	Units	<u>Analyzed</u>
ICP Metals, TCLP Extracted Arsenic Barium Cadmium Chromium Lead Selenium Silver Mercury, TCLP Extracted	SW 1311/6010 SW 1311/7470	ND 0.99 ND ND ND ND ND ND	0.050 0.020 0.010 0.050 0.10 0.10 0.010 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	10/09/98 10/09/98 10/09/98 10/09/98 10/09/98 10/09/98 10/09/98 10/20/98
Sample: 02B 48030988052 SD3	Colle	ected: 09/26/	/98 Ma	trix: SEDIMEN	T
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Organochlorine Pesticides Aldrin alpha-BHC beta-BHC	SW 8081A	ND ND ND	1.5 1.5 1.5	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/15/98 10/15/98 10/15/98 10/15/98

		ND	0.010	mg/ь	10/09/90
Silver Mercury TCLP Extracted	SW 1311/7470	ND	0.0020	mg/L	10/20/98
Sample: 02B 48030988052 SD3	Colle	ected: 09/26/	98 Mat	rix: SEDIMEN	T
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Aldrin alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) alpha-Chlordane gamma-Chlordane 4,4'-DDD 4,4'-DDE 4,4'-DDT Dieldrin Endosulfan I		ND ND ND ND ND ND ND ND ND ND ND	1.5 1.5 1.5 1.5 1.5 2.9 2.9 2.9 1.5 2.9	ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY	10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98
Endosulfan II Endosulfan Sulfate Endrin Endrin Aldehyde Heptachlor Heptachlor Epoxide Methoxychlor Toxaphene SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		ND ND ND ND ND ND 40.8 * 58.3	2.9 2.9 2.9 1.5 1.5 15 44 Min: Min:	ug/Kg-DRI ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY ug/Kg-DRY 45 Max	10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98
Percent Moisture	ASTM D2216	43.0	0.1	WI\$	10/05/98

Department of the Air Force TEST RESULTS by SAMPLE

48030988052 SD3		Collected:	09/26/	98 Matr	ix: SEDIM	ENT
Sample: 02B 48050500002 220	_	-	1- 0	Timit	Units	Analyzed
Test Description	Method	<u>Resu</u>	<u>.1t U</u>		0111 00	
Polychlorinated Biphenyls	SW 8082		1.777	58	11g/Kg-DRY	10/15/98
PCB-1221				29	ug/Kg-DRY	10/15/98
PCB-1232			ND	29	ug/Kg-DRY	10/15/98
PCB-1242				29	ug/Kg-DRY	10/15/98
PCB-1248				22	ug/Kg-DRY	10/15/98
PCB-1254			ND	22	ug/Kg-DRY	10/15/98
PCB-1260			ND	29	ug/Kg-DRY	10/15/98
PCB-1016			ND	29	ug/ng bits	
SURROGATES, % Recovery			_	36.00	าว Ma	x: 102
Tetrachlorometaxylene		41	1.7	MIII:	25 M=	141
Decachlorobiphenyl		58	3.3	Min:	35 Me	
Semivolatile Organics	SW 82700	2				z 10/21/98
Phenol			ND	290	$ug/Kg^{-}DK$	z 10/21/98
his (2-Chloroethyl) ether			ND	290	ug/kg-Dk	r = 10/21/98
2-Chlorophenol			ND	290	ug/kg-DR	z 10/21/98
1 3-Dichlorobenzene			ND	290	ug/Kg-DR	10/21/98
1, 4-Dichlorobenzene			ND	290	ug/Kg-DR	$\frac{10}{21}$
Pongyl alcohol			ND	580	ug/Kg-DR	Y = 10/21/90
			ND	290	ug/Kg-DR	Y 10/21/98
2 Mathylphenol			ND	290	ug/Kg-DR	Y 10/21/98
2-Methylphenor			ND	290	ug/Kg-DR	Y 10/21/98
bis (2-Chibroisopiopyi) com			ND	290	ug/Kg-DR	Y 10/21/98
4-Metnyiphenoi			ND	290	ug/Kg-DR	Y 10/21/98
n-Nitroso-ai-n-propyramine			ND	290	ug/Kg-DR	Y 10/21/98
Hexachioroethane			ND	290	ug/Kg-DR	Y 10/21/98
Nitrobenzene	•		ND	290	ug/Kg-DR	Y 10/21/98
Isophorone			ND	290	ug/Kg-DR	Y 10/21/98
2-Nitrophenol			ND	290	ug/Kg-DR	Y 10/21/98
2,4-Dimethyiphenoi			ND	2900	ug/Kg-DF	Y 10/21/98
Benzoic acid			ND	290	ug/Kg-DF	Y 10/21/98
bis (2-Chloroethoxy) mechane			ND	290	ug/Kg-DF	Y 10/21/98
2,4-Dichlorophenol			ND	290	ug/Kg-DF	X 10/21/98
1,2,4-Trichiorobenzene			ND	290	ug/Kg-DH	RY 10/21/98
Naphthalene			ND	290	ug/Kg-DI	RY 10/21/98
4-Chloroaniline			ND	290	ug/Kg-DI	RY 10/21/98
Hexachlorobutadiene			ND	290	ug/Kg-D	RY 10/21/98
4-Chloro-3-methylphenol			NTD	290	ug/Kg-D	RY 10/21/98
2-Methylnaphthalene			ND	290	ug/Kg-D	RY 10/21/98
Hexachlorocyclopentadiene			ND	290	ug/Kg-D	RY 10/21/98
2,4,6-Trichlorophenol			ND	2900	ug/Kg-D	RY 10/21/98
2,4,5-Trichlorophenol			NTD	290	ug/Kg-D	RY 10/21/98
2-Chloronaphthalene			NTD	2900	uq/Kq-D	RY 10/21/98
2-Nitroaniline				290	ug/Kg-D	RY 10/21/98
Dimethylphthalate				290	ug/Kg-D	RY 10/21/98
Acenaphthylene			ALD ALD	220	ug/Ka-D	RY 10/21/98
3-Nitroaniline			IND	2500		

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 02B 48030988052 SD3

Collected: 09/26/98 Matrix: SEDIMENT

Sampie. Vis		2	Result	0	Limit	<u>Units</u>	A	nalyzed
Test Description	Method		continued	from	previous	; page)		
Semivolatile Organics	SW 82		ND		290	ug/Kg-DR	Y 1	0/21/98
Acenaphthene			ND		2900	ug/Kg-DR	Y 1	.0/21/98
2,4-Dinitrophenol			ND		2900	ug/Kg-DR	ίΥ 1	.0/21/98
4-Nitrophenol			ND		290	ug/Kg-DF	1 Y	0/21/98
Dibenzofuran			ND		290	ug/Kg-DF	SX 1	10/21/98
2,6-Dinitrotoluene			NTO		290	ug/Kg-DF	<u>.</u> 2Y ]	L0/21/98
2,4-Dinitrotoluene			ND		290	ug/Kg-DF	RX 1	10/21/98
Diethylphthalate			ND		290	ug/Kg-DI	RY I	10/21/98
4-Chlorophenyl-phenylether			ND		290	ug/Kg-DI	RY :	10/21/98
Fluorene			ND		2900	ug/Kg-D	RY	10/21/98
4-Nitroaniline			ND		2900	ug/Kg-D	RY	10/21/98
4,6-Dinitro-2-methylphenol			ND		290	ug/Kg-D	RY	10/21/98
n-Nitrosodiphenylamine					290	ug/Kg-D	RY	10/21/98
4-Bromophenyl-phenylether			ND		290	ug/Kg-D	RY	10/21/98
Hexachlorobenzene			NTD		290	ug/Kg-D	RY	10/21/98
Pentachlorophenol			ND		290	ug/Kg-D	RY	10/21/98
Phenanthrene			ND		290	ug/Kg-D	RY	10/21/98
Anthracene			ND		290	ug/Kg-I	RY	10/21/98
Di-n-butylphthalate			ND		290	ug/Kg-I	DRY	10/21/98
Fluoranthene					290	ug/Kg-I	JRY	10/21/98
Pyrene			ND		290	ug/Kg-I	ORY	10/21/98
Butylbenzylphthalate			ND	1	1200	ug/Kg-I	ORY	10/21/98
3,3'-Dichlorobenzidine			ND		290	ug/Kg-I	ORY	10/21/98
Benzo (a) Anthracene			ND	)	290	ug/Kg-I	DRY	10/21/98
Chrysene			NT	)	290	ug/Kg-l	DRY	10/21/98
Bis(2-Ethylhexyl)phthalate			NE	)	290	ug/Kg-!	DRY	10/21/98
Di-n-octylphthalate			NT		290	ug/Kg-	DRY	10/21/98
Benzo(b)fluoranthene			NI	5	290	ug/Kg-	DRY	10/21/98
Benzo(k)fluoranthene			NI	5	290	ug/Kg-	DRY	10/21/98
Benzo(a)pyrene			NI	5	290	ug/Kg-	DRY	10/21/98
Indeno (1,2,3-cd) pyrene			NI	D	290	ug/Kg-	DRY	10/21/98
Dibenz (a, h) anthracene			N	D	290	ug/Kg-	DRY	10/21/98
Benzo(g,h,i)perylene								
SURROGATES, % Recovery			43.	7	Min:	30	Max:	122
2-Fluorophenol			51.	7	Min:	30	Max:	117
d5-Phenol			44.	8	Min:	30	Max	: 122
d5-Nitrobenzene			62.	1	Min:	36	Max	: 121
2-Fluorobiphenyl			58.	6	Min:	30	Max	: 113
2,4,6-Tribromophenol			10	2	Min:	30	Max	: 134
d14-Terphenyl			20					

Department of the Air Force TEST RESULTS by SAMPLE

Page 11

Sample:	02B	48030988052	SD3
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Collected: 09/26/98 Matrix: SEDIMENT

	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Test Description	SW 8260B				10/00/09
Volatiles by GC/MS		ND	8.8	ug/Kg-DRY	10/09/98
Dicatoroalituoromeenane		ND	8.8	ug/Kg-DRY	10/09/98
Chloromethane		ND	8.8	ug/Kg-DRY	10/09/98
Vinyl Chloride		ND	8.8	ug/Kg-DRY	10/09/98
Bromomethane		ND	8.8	ug/Kg-DRY	10/09/98
Chloroetnane		ND	8.8	ug/Kg-DRY	10/09/98
Trichlorofluoromethane		ND	3.5	ug/Kg-DRY	10/09/98
1,1-Dichloroethene		ND	3.5	ug/Kg-DRY	10/09/98
Trichlorotrifluoroethane		13 B	3.5	ug/Kg-DRY	10/09/98
Methylene Chloride		ND	3.5	ug/Kg-DRY	10/09/98
trans-1,2-Dichloroethene		ND	3.5	ug/Kg-DRY	10/09/98
1,1-Dichloroethane		ND	3.5	ug/Kg-DRY	10/09/98
2,2-Dichloropropane		ND	3.5	ug/Kg-DRY	10/09/98
cis-1,2-Dichloroethene		ND	3.5	ug/Kg-DRY	10/09/98
Bromochloromethane		ND	3.5	ug/Kg-DRY	10/09/98
Chloroform		ND	3.5	ug/Kg-DRY	10/09/98
1,1,1-Trichloroethane		ND	3.5	ug/Kg-DRY	10/09/98
Carbon Tetrachloride		ND	3.5	ug/Kg-DRY	10/09/98
1,1-Dichloropropene		ND	3.5	ug/Kg-DRY	10/09/98
Benzene		NT	3.5	ug/Kg-DRY	10/09/98
1,2-Dichloroethane		ND	3.5	ug/Kg-DRY	10/09/98
Trichloroethene			3.5	ug/Kg-DRY	10/09/98
1,2-Dichloropropane			3.5	ug/Kg-DRY	10/09/98
Dibromomethane			3.5	ug/Kg-DRY	10/09/98
Bromodichloromethane			3.5	ug/Kg-DRY	10/09/98
cis-1,3-Dichloropropene		ND ND	3.5	ug/Kg-DRY	10/09/98
Toluene		ND	3.5	ug/Kg-DRY	10/09/98
trans-1,3-Dichloropropene		ND	3.5	ug/Kg-DRY	10/09/98
1,1,2-Trichloroethane		ND	3 5	ug/Kg-DRY	10/09/98
Tetrachloroethene		ND	35	ug/Kg-DRY	10/09/98
1,3-Dichloropropane		ND	35	ug/Kg-DRY	10/09/98
Dibromochloromethane			3.5	ug/Kg-DRY	10/09/98
1,2-Dibromoethane		ND	35	ug/Kg-DRY	10/09/98
Chlorobenzene			3.5	ug/Kg-DRY	10/09/98
Ethylbenzene		ND	3.5	ug/Kg-DRY	10/09/98
1,1,1,2-Tetrachloroethane	2		3.5	ug/Kg-DRY	10/09/98
m,p-Xylenes		ND	35	ug/Kg-DRY	10/09/98
o-Xylene		UM ID	3.5	ug/Kg-DRY	10/09/98
Styrene		ND	3.5	ug/Kg-DRY	10/09/98
Bromoform		ND ND	3.5	ug/Kg-DRY	10/09/98
Isopropylbenzene		ND	3.5	ug/Kg-DRY	10/09/98
Bromobenzene		ND	3.5	ug/Kg-DRY	10/09/98
n-Propylbenzene		ND	3.5	ug/Kg-DRY	10/09/98
1,1,2,2-Tetrachlorethane		ND	3.5	ug/Kg-DRY	10/09/98
1,2,3-Trichloropropane		ND	).) ) =	ug/Kg-DRY	10/09/98
2-Chlorotoluene		ND	J.J 7 E	ug/Kg-DRY	10/09/98
1,3,5-Trimethylbenzene		ND	3.5	ug/Kg-DRY	10/09/98
4-Chlorotoluene		DN	3.5	,	

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 02B 48030988052 SD3

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Collected: 09/26/98 Matrix: SEDIMENT

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Test Description	Met	hod	<u>Result</u>	<u> </u>	<u>Limit</u>		-	<u></u>
Volatiles by GC/MS	SW	8260B	(continued	from	previou	s page)	ov 7	0/09/98
tort-Putylbenzene			ND		3.5	ug/kg-D	ni - nv 1	0/09/98
1.2.4.Trimethylbenzene			ND		3.5	ug/Kg-D	RI - DV -	10/09/98
1, 2, 4-111meeny iscussing			ND		3.5	ug/kg-D	RI . DV	10/09/98
sec-ButyIDenzene			ND		3.5	ug/Kg-D	RY .	
4-Isopropylloluene			ND		3.5	ug/Kg-D	RY	10/09/98
1,3-Dichlorobenzene			ND		3.5	ug/Kg-D	RY	10/09/98
1,4-Dichlorobenzene			ND		3.5	ug/Kg-D	RY	10/09/98
n-Butylbenzene			ND		3.5	ug/Kg-I	RY	10/09/98
1,2-Dichlorobenzene			ND		18	ug/Kg-I	RY	10/09/98
1,2-Dibromo-3-chloropropane			ND		3.5	ug/Kg-I	ORY	10/09/98
1,2,4-Trichlorobenzene			ND		3.5	ug/Kg-I	DRY	10/09/98
Hexachlorobutadiene			NT)		3.5	ug/Kg-I	DRY	10/09/98
Napthalene					3.5	ug/Kg-I	DRY	10/09/98
1,2,3-Trichlorobenzene			41	л	88	ug/Kg-I	ORY	10/09/98
Acetone .				0	88	uq/Kg-l	DRY	10/09/98
Acrylonitrile			ND		88	ug/Kg-l	DRY	10/09/98
2-Butanone					35	11a/Ka-1	DRY	10/09/98
Carbon Disulfide					88	ug/Kg-3	DRY	10/09/98
trans-1,4-Dichloro-2-butene			UN T		99	ug/Kg-	DRY	10/09/98
2-Chloroethyl Vinyl Ether					10	ug/kg	עאט	10/09/98
2-Hexanone			ND		~		אינב אפת	10/09/98
Todomethane			ND		3.5			10/09/98
A-Methyl-2-pentanone			ND		18	$ug/kg^{-}$	DRI	10/09/98
Vinvl Acetate			ND	•	88	ug/kg-	DRI	10/09/98
tert-Butyl methyl ether			ND	•	3.5	ug/kg-	DRI	10/05/50
CURPOGATES & Recovery							14	120
Sorrogales, a Recorded			100	)	Min:	80	Max:	120
			108	3	Min:	81	Max:	11/
Toruene u-o			114	Ł	Min:	74	Max:	121
p-promotifuoropenzene								

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 03A 48030988053 SW3	Colle	cted: 09/26/	98 Mati	cix: SOIL	
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
ICP Metals, TCLP Extracted	SW 1311/6010		0 050	mc/1.	10/09/98
Arsenic		ND	0.030	mg/L	10/09/98
Barium		0.95	0.020	mg/L	10/09/98
Cadmium		D	0.0050	mg/L	10/09/98
Chromium		ND	0.010		10/09/98
Lead		ND	0.030	mg/I.	10/09/98
Selenium		ND	0.10		10/09/98
Silver		ND	0.010	mg/L	10/20/98
Mercury, TCLP Extracted	SW 1311/7470	ND	0.0020	шду п	20/20/20
Sample: 03B 48030988053 SW3	Colle	ected: 09/26/	<b>'98</b> Mat	rix: SOIL	
Test Description	Method	<u>Result Q</u>	Limit	<u>Units</u>	Analyzed
Organochlorine Pesticides	SW 8081A			ug/Kg-DRY	10/15/98
Aldrin		ND	1.1	ug/Kg-DRY	10/15/98
alpha-BHC		ND ND	1 · 4	ug/Kg-DRY	10/15/98
beta-BHC		ND	1.1	ug/Kg-DRY	10/15/98
delta-BHC		ND	1.1	ug/Kg-DRY	10/15/98
gamma-BHC (Lindane)		ND	1.1	ug/Kg-DRY	10/15/98
alpha-Chlordane		ND	1.1	ug/Kg DRY	10/15/98
gamma-Chlordane		ND	1.1	ug/kg-DRI	10/15/98
4.4'-DDD		ND	2.2	ug/ kg-DRI	10/15/98
$4, 4^{\dagger} - DDE$		ND	2.2	ug/kg-DRI	10/15/98
4' - DDT		ND	2.2	ug/kg-DRI	10/15/98
Dieldrin		ND	1.1	ug/kg-DRI	10/15/98
Endosulfan I		ND	2.2	ug/kg-DRI	10/15/98
Endosulfan II		ND	2.2	ug/kg-DRI	10/15/98
Endosulfan Sulfate		ND	2.2	ug/kg-DRI	10/15/98
Endrin		ND	2.2	ug/kg-DRI	10/15/98
Endrin Aldehvde		ND	2.2	ug/kg-DRI	10/15/98
Hentachlor		ND	1.1	ug/kg-DRI	10/15/98
Heptachlor Epoxide		ND	1.1	ug/kg-DRI	10/15/98
Methorychlor		ND	11	ug/kg-DRI	10/15/98
Toxaphene		ND	32	ug/kg-DRI	10/15/50
SURROGATES, % Recovery		24 G ±	Min	45 Max	c: 124
Tetrachlorometaxylene		54.7 "	Mine	45 Max	k: 124
Decachlorobiphenyl		52.3	5.7 <b>~</b> * *		
Percent Moisture	ASTM D2216	22.6	0.1	WI\$	10/05/98

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 03B 48030988053 SW3		Collected:	09/26/	98 Matr	ix: SO1	Ľ	
	Method	Resu	<u>1t_0</u>	<u>Limit</u>	<u>Units</u>		<u>Analyzed</u>
Test Description	SW 8082						/1 - /00
Polychiorinated Biphenyis			ND	43	ug/Kg-I	DRY	10/15/98
PCB-1221			ND	22	ug/Kg-I	DRY	10/15/98
PCB-1232			ND	22	ug/Kg-I	DRY	10/15/98
PCB-1242			ND	22	ug/Kg-l	DRY	10/15/98
PCB-1248			ND	22	ug/Kg-l	DRY	10/15/98
PCB-1254			ND	22	ug/Kg-	DRY	10/15/98
PCB-1260			ND	22	ug/Kg-	DRY	10/15/98
PCB-1016							
SURROGATES, & Recovery		34	. 9	Min:	11	Max:	102
Tetrachlorometaxylene		52	2.3	Min:	35	Max:	141
Decachlorobiphenyl		22					
Semivolatile Organics	SW 82700			220	ua/Ka-	DRY	10/15/98
Phenol			ND	220	ug/Kg	TRY	10/15/98
bis(2-Chloroethyl) ether			NÐ	220	ug/Kg		10/15/98
2-Chlorophenol			ND	220			10/15/98
1.3-Dichlorobenzene			ND	220	ug/kg		10/15/98
1 4-Dichlorobenzene			ND	220			10/15/98
Benzyl alcohol			ND	430	ug/kg-	עסת	10/15/98
1 2-Dichlorobenzene			ND	220	ug/kg·		10/15/98
2-Methylphenol			ND	220	ug/kg·	-DRI DDV	10/15/98
bis (2-Chloroisopropyl) eth			ND	220	ug/Kg	-DRI	10/15/90
A_Methylphenol			ND	220	ug/Kg	-DRI	10/15/98
n Nitroso-di-n-propylamine			ND	220	ug/Kg	-DRY	10/15/98
Heweshloroethane			ND	220	ug/Kg	-DRY	10/15/90
Nitrobongene			ND	220	ug/Kg	-DRY	10/15/98
NICIODENZENE			ND	220	ug/Kg	-DRY	10/15/98
			ND	220	ug/Kg	-DRY	10/15/90
			ND	220	ug/Kg	-DRY	10/15/90
2,4-Dimechyiphenoi			ND	2200	ug/Kg	-DRY	10/15/98
Benzoic aciu			ND	220	ug/Kg	-DRY	10/15/98
bis (2-Chloroethoxy) mechane			ND	220	ug/Kg	-DRY	10/15/98
2,4-Dichlorophenol			ND	220	ug/Kg	J-DRY	10/15/98
1,2,4-Trichlorobenzene			ND	220	ug/Kg	J-DRY	10/15/98
Naphthalene			ND	220	ug/Kg	g-DRY	10/15/98
4-Chloroaniline			ND	220	ug/Kg	3-DRY	10/15/98
Hexachlorobutadiene			ND	220	ug/Kg	J-DRY	10/15/98
4-Chloro-3-methylphenol			ND	220	ug/Kg	g-DRY	10/15/98
2-Methylnaphthalene			ND	220	ug/Kg	g-DRY	10/15/98
Hexachlorocyclopentadiene			ND	220	ug/Kg	g-DRY	10/15/98
2,4,6-Trichlorophenol			NTO	2200	ug/K	g-DRY	10/15/98
2,4,5-Trichlorophenol			NT	220	ug/K	g-DRY	10/15/98
2-Chloronaphthalene			NT	2200	ug/K	g-DRY	10/15/98
2-Nitroaniline			NT	220	uq/K	g-DRY	10/15/98
Dimethylphthalate			ND	220	uq/K	g-DRY	10/15/98
Acenaphthylene				2200	ua/K	- g-DRY	10/15/98
3-Nitroaniline			MD.	2290	- ,	-	

Page 15

Order # 98-09-259 ANALYTICA, INC.

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 03B 48030988053 SW3

Collected: 09/26/98 Matrix: SOIL

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		Pecult 0	Limit	<u>Units</u>	<u>Analyzed</u>
Test Description	Method	<u></u>	previous	s page)	
Semivolatile Organics	SW 8270C	ND	220	ug/Kg-DRY	10/15/98
Acenaphthene		ND	2200	ug/Kg-DRY	10/15/98
2,4-Dinitrophenol		ND	2200	ug/Kg-DRY	10/15/98
4-Nitrophenol		ND	220	ug/Kg-DRY	10/15/98
Dibenzofuran		ND	220	ug/Kg-DRY	10/15/98
2,6-Dinitrotoluene		ND	220	ug/Kg-DRY	10/15/98
2,4-Dinitrotoluene		ŃD	220	ug/Kg-DRY	10/15/98
Diethylphthalate		ND	220	ug/Kg-DRY	10/15/98
4-Chlorophenyl-phenylether		ND	220	ug/Kg-DRY	10/15/98
Fluorene			2200	ug/Kg-DRY	10/15/98
4-Nitroaniline		ND	2200	ug/Kg-DRY	10/15/98
4,6-Dinitro-2-methylphenol			2200	ug/Kg-DRY	10/15/98
n-Nitrosodiphenylamine			220	ug/Kg-DRY	10/15/98
4-Bromophenyl-phenylether		ND	220	ug/Kg-DRY	10/15/98
Hexachlorobenzene		ND	220	ug/Kg-DRY	10/15/98
Pentachlorophenol		ND	220	ug/Kg-DRY	10/15/98
Phenanthrene		ND	220	ug/Kg-DRY	10/15/98
Anthracene		UN	220	ug/Kg-DRY	10/15/98
Di-n-butylphthalate		ND	220	ug/Kg-DRY	10/15/98
Fluoranthene		ND	220	ug/Kg-DRY	10/15/98
Pyrene		ND	220	ug/Kg-DRY	10/15/98
Butylbenzylphthalate		ND	220	ug/Kg-DRY	10/15/98
3,3'-Dichlorobenzidine		ND	200	ug/Kg-DRY	10/15/98
Benzo(a)Anthracene		ND	220	ug/Kg_DRY	10/15/98
Chrysene		ND	220	ug/Kg-DRY	10/15/98
Bis (2-Ethylhexyl) phthalate		ND	220	ug/Kg DRY	10/15/98
Di-n-octylphthalate		ND	220	ug/Kg DRI	10/15/98
Benzo(b)fluoranthene		ND	220	ug/Kg-DRY	10/15/98
Benzo(k)fluoranthene		ND	220	ug/Kg-DRY	10/15/98
Benzo (a) pyrene		ND	220	ug/Kg DRI	10/15/98
Indeno (1,2,3-cd) pyrene		ND	220	ug/Kg-DRI	10/15/98
Dibenz (a, h) anthracene		ND	220	ug/Kg-DRY	10/15/98
Benzo(q,h,i)perylene		ND	220	ug/ng-bni	
SURROGATES, & Recovery			<b>N</b> <sup>2</sup>	20 Ma	<b>v</b> · 122
2-Fluorophenol		55.4	Min:	30 Ma	x: 117
d5-Phenol		58.5	Mill:	30 Ma	ax: 122
d5-Nitrobenzene		55.8	Min:	30 Ma	ax. 121
2-Fluorobiphenyl		65.1	Min:	•M 0C Ma	ax: 113
2.4.6-Tribromophenol		61.5	Min:	20 Mi	 
dl4-Terphenyl		88.4	Min:	20 Ma	an

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 03B 48030988053 SW3

Collected: 09/26/98 Matrix: SOIL

There Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Volatiles by GC/MS	SW 8260B		6 E	ng/Kg-DRY	10/09/98
Dichlorodifluoromethane		ND	6.5	ug/Kg-DRY	10/09/98
Chloromethane		ND	6.5	ug/Kg-DRY	10/09/98
Vinvl Chloride		ND	6.5 6 F	ug/Kg-DRY	10/09/98
Bromomethane		ND	6.5	ug/Kg-DRY	10/09/98
Chloroethane		ND	6.5	ug/Kg-DRY	10/09/98
Trichlorofluoromethane		ND	0.5	ug/Kg-DRY	10/09/98
1 1-Dichloroethene		ND	2.0	ug/Kg-DRY	10/09/98
Trichlorotrifluoroethane		ND	2.8	ug/Kg-DRY	10/09/98
Methylene Chloride		12 B	2.0	ug/Kg-DRY	10/09/98
trans-1 2-Dichloroethene		ND	2.0	ug/Kg-DRY	10/09/98
1 1-Dichloroethane		ND	2.0	ug/Kg-DRY	10/09/98
2.2-Dichloropropane		ND	2.0	ug/Kg-DRY	10/09/98
cis-1 2-Dichloroethene		ND	2.0	ug/Kg-DRY	10/09/98
Bromochloromethane		ND	2.0	ug/Kg-DRY	10/09/98
chloroform		ND	2.6	ug/Kg-DRY	10/09/98
1 1 1-Trichloroethane		ND	2.6	ug/Kg-DRY	10/09/98
Carbon Tetrachloride		ND	2.0	ug/Kg-DRY	10/09/98
1 1-Dichloropropene		ND	2.0	ug/Kg-DRY	10/09/98
T, T DICALOLOF-T Benzene		ND	2.0	ug/Kg-DRY	10/09/98
1 2-Dichloroethane		ND	2.6	ug/Kg-DRY	10/09/98
Trichloroethene		ND	2.6	ug/Kg-DRY	10/09/98
1 2-Dichloropropane		ND	2.6	ug/Kg-DRY	10/09/98
Dibromomethane		ND	2.0	ug/Kg-DRY	10/09/98
Bromodichloromethane		ND	2.0	ug/Kg-DRY	10/09/98
cis-1 3-Dichloropropene		ND	2.0	ug/Kg-DRY	10/09/98
		ND	2.6	ug/Kg-DRY	10/09/98
trans-1.3-Dichloropropene	È	ND	2.0	ug/Kg-DRY	10/09/98
1 1.2-Trichloroethane		ND	2.0	ug/Kg-DRY	10/09/98
Tetrachloroethene		ND	2.0	ug/Kg-DRY	10/09/98
1.3-Dichloropropane		ND	2.0	ug/Kg-DRY	10/09/98
Dibromochloromethane		ND	2.0	ug/Kg-DRY	10/09/98
1.2-Dibromoethane		ND	2.0	ug/Kg-DRY	10/09/98
Chlorobenzene		ND	2.0	ug/Kg-DRY	10/09/98
Ethylbenzene			2.0	ug/Kg-DRY	10/09/98
1,1,1,2-Tetrachloroethan	e		2.0	ug/Kg-DRY	10/09/98
m.p-Xvlenes		ND	2.0	ug/Kg-DRY	10/09/98
o-Xvlene			2.6	ug/Kg-DRY	10/09/98
Styrene			2.6	ug/Kg-DRY	10/09/98
Bromoform			2.6	ug/Kg-DRY	10/09/98
Isopropylbenzene		עא	2.6	ug/Kg-DRY	10/09/98
Bromobenzene		ND	2.6	ug/Kg-DRY	10/09/98
n-Propylbenzene			2.6	ug/Kg-DRY	10/09/98
1,1,2,2-Tetrachlorethane	8		2.6	uq/Kg-DRY	10/09/98
1.2.3-Trichloropropane			2.6	ug/Kg-DRY	10/09/98
2-Chlorotoluene		עא רידא	2.6	ug/Kg-DRY	10/09/98
1,3,5-Trimethylbenzene		ND	2.0	5 ug/Kg-DRY	10/09/98
4-Chlorotoluene					

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 03B 48030988053 SW3		Collected: 09/26/98	8 Matr	ix: SOIL	
	Nothod	Result 0	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Test Description	<u>Method</u>	(continued from	previous	; page)	
Volatiles by GC/MS	SW 8200B	ND	2.6	ug/Kg-DRY	10/09/98
tert-Butylbenzene		ND	2.6	ug/Kg-DRY	10/09/98
1,2,4-Trimethylbenzene		ND	2.6	ug/Kg-DRY	10/09/98
sec-Butylbenzene		ND	2.6	ug/Kg-DRY	10/09/98
4-Isopropyltoluene		ND	2.6	ug/Kg-DRY	10/09/98
1,3-Dichlorobenzene		NTD	2.6	ug/Kg-DRY	10/09/98
1,4-Dichlorobenzene		NTO	2.6	ug/Kg-DRY	10/09/98
n-Butylbenzene		ND	2.6	ug/Kg-DRY	10/09/98
1,2-Dichlorobenzene		ND	13	ug/Kg-DRY	10/09/98
1,2-Dibromo-3-chloropropane		ND	2.6	ug/Kg-DRY	10/09/98
1,2,4-Trichlorobenzene		ND	2.6	ug/Kg-DRY	10/09/98
Hexachlorobutadiene		NTD	2.6	ug/Kg-DRY	10/09/98
Napthalene		ND	2.6	ug/Kg-DRY	10/09/98
1,2,3-Trichlorobenzene		48 J	65	ug/Kg-DRY	10/09/98
Acetone		-10 C	65	ug/Kg-DRY	10/09/98
Acrylonitrile		ND	65	ug/Kg-DRY	10/09/98
2-Butanone		ND	2.6	ug/Kg-DRY	10/09/98
Carbon Disulfide			65	ug/Kg-DRY	10/09/98
trans-1,4-Dichloro-2-butene		ND	65	ug/Kg-DRY	10/09/98
2-Chloroethyl Vinyl Ether		ND	13	ug/Kg-DRY	10/09/98
2-Hexanone		ND	2.6	ug/Kg-DRY	10/09/98
Todomethane		ND	13	ug/Kg-DRY	10/09/98
4-Methyl-2-pentanone		ND	65	ug/Kg-DR)	10/09/98
Vinvl Acetate		ND	2.6	ug/Kg-DR	z 10/09/98
tert-Butyl methyl ether		MD.	2.0	-9, 9	
SURROGATES, & Recovery		102	Min:	80 Mi	ax: 120
Dibromofluoromethane		102	Min:	81 M	ax: 117
Toluene d-8		100	Min:	74 M	ax: 121
p-Bromofluorobenzene		112	· · · · · ·		
Sample: 03C 48030988053 SW	3	Collected: 09/26	/98 Ma	atrix: SOIL	<b>1 1 1 1</b>
			Limit	<u>Units</u>	<u>Analyzed</u>

<u>Test Description Method Result</u> Organic Carbon, Total LECO/D513G 0.66	0.05	WT%	10/08/98
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Department of the Air Force TEST RESULTS by SAMPLE

Matrix: WATER Collected: 09/26/98 48030988054 SW1 Sample: 04A <u>Analyzed</u> <u>Units</u> <u>Limit</u> <u>Result Q</u> Method Test Description SW 1311/6010 ICP Metals, TCLP Extracted 10/15/98 mg/L 0.050 ND Arsenic 10/15/98 0.020 mq/L 0.35 10/15/98 Barium mg/L 0.0050 ND 10/15/98 Cadmium mg/L 0.010 ND Chromium 10/15/98 mg/L 0.050 ND 10/15/98 Lead 0.10 mq/L ND 10/15/98 Selenium mg/L 0.010 ND 10/20/98 Silver mg/L 0.0020 NDSW 1311/7470 Mercury, TCLP Extracted Matrix: WATER Collected: 09/26/98 48030988054 SW1 Sample: 04B Analyzed <u>Limit</u> <u>Units</u> <u>Result Q</u> Method Test Description SW 8081A Organochlorine Pesticides 10/21/98 0.025 ug/L ND Aldrin 10/21/98 ug/L 0.025 ND 10/21/98 alpha-BHC 0.025 uq/L ND beta-BHC 10/21/98 ug/L 0.025 ND delta-BHC 10/21/98 ug/L 0.025 ND gamma-BHC (Lindane) 10/21/98 uq/L 0.025 ND alpha-Chlordane 10/21/98 ug/L 0.025 ND gamma-Chlordane 10/21/98 ug/L 0.050 ND 4,4'-DDD 10/21/98 0.050 ug/L ND 4,4'-DDE 10/21/98 ug/L 0.050 ND 4,4'-DDT 10/21/98 ug/L 0.025 ND Dieldrin 10/21/98 uq/L 0.050 ND Endosulfan I 10/21/98 ug/L 0.050 ND Endosulfan II 10/21/98 ug/L 0.050 ND Endosulfan Sulfate 10/21/98 ug/L 0.050 ND Endrin 10/21/98 ug/L 0.050 NDEndrin Aldehyde 10/21/98 ug/L 0.025 ND Heptachlor 10/21/98 0.025 ug/L ND Heptachlor Epoxide 10/21/98 0.25 ug/L ND Methoxychlor 10/21/98 ug/L 0.75 ND Toxaphene SURROGATES, % Recovery 124 45 Max: Min: 70.0 Tetrachlorometaxylene 124 Max: 45 Min: 75.0 Decachlorobiphenyl

Sample: 04B 48030988054 SW1		Collected: 09/26/9	8 Mat	rix: WATER	
Test Description	Method	Result Q	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260	SW 8082	ND ND ND ND ND ND	1.0 0.50 0.50 0.50 0.50 0.50 0.50	ug/L ug/L ug/L ug/L ug/L ug/L ug/L	10/21/98 10/21/98 10/21/98 10/21/98 10/21/98 10/21/98 10/21/98
Sample: 04C 48030988054 SW1		70.0 75.0 Collected: <b>09/26/</b>	Min: Min: 98 Ma	29 Max 26 Max trix: WATER	c: 133 c: 137
Sampic. College		Recult 0	Limit	Units	<u>Analyzed</u>

Test Description	Method	<u>Result</u> <u>V</u>	<u> <u> </u></u>		
Volatiles by GC/MS	SW 8260B		5 0	ng/t	10/08/98
Dichlorodifluoromethane			5.0	ug/L	10/08/98
Chloromethane		ND	2.0	ug/Σ υσ/Ι	10/08/98
Vinvl Chloride			5.0	ug/2	10/08/98
Bromomethane		ND	5.0	ug/L	10/08/98
Chloroethane		UN ND	3.0	ug/#	10/08/98
Trichlorofluoromethane		ND NTD	2.0	ug/1	10/08/98
1,1-Dichloroethene		ND	2.0	ug/1	10/08/98
Trichlorotrifluoroethane		ND	2.0	ug/1	10/08/98
Methylene Chloride		UM NTD	2 0	ug/L	10/08/98
trans-1,2-Dichloroethene		ND	2.0	ug/2	10/08/98
1,1-Dichloroethane		ND	2.0	ug/L	10/08/98
2,2-Dichloropropane		DM ND	2.0	ug/L	10/08/98
cis-1,2-Dichloroethene		ND	2.0	ug/I	10/08/98
Bromochloromethane			2.0	ug/L	10/08/98
Chloroform		ND	2.0	ug/L	10/08/98
1,1,1-Trichloroethane	,	ND	2.0	υg/L	10/08/98
Carbon Tetrachloride		ND	2.0	ug/L	10/08/98
1,1-Dichloropropene			2.0	ug/L	10/08/98
Benzene			2.0	ug/L	10/08/98
1,2-Dichloroethane		ND	2.0	uq/L	10/08/98
Trichloroethene		ND ND	2.0	ug/L	10/08/98
1,2-Dichloropropane		ND	2.0	uq/L	10/08/98
Dibromomethane			2.0	uq/L	10/08/98
Bromodichloromethane		ND	2.0	uq/L	10/08/98
cis-1,3-Dichloropropene			2.0	uq/L	10/08/98
Toluene			2.0	ug/L	10/08/98
trans-1,3-Dichloropropene		ND	2.0	uq/L	10/08/98
1,1,2-Trichloroethane		ND	2.0	ug/L	10/08/98
Tetrachloroethene		ND	2.0	ug/L	10/08/98
1,3-Dichloropropane			2.0	ua/L	10/08/98
Dibromochloromethane			2.0	uq/L	10/08/98
1,2-Dibromoethane		7474		<u> </u>	

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 04C 48030988054 SW1 Collected: 09/26/98 Matrix: WATER

lected: 09/26/98	
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Test Description Method Volatiles by GC/MS SW 8260B (c Chlorobenzene Ethylbenzene 1,1,1,2-Tetrachloroethane m,p-Xylenes a Yulene	continued from ND ND ND ND ND ND ND ND ND ND ND ND	previous 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	s page) ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	10, 10, 10, 10, 10, 10, 10, 10, 10,	/08/98 /08/98 /08/98 /08/98 /08/98 /08/98 /08/98 /08/98
Volatiles by GC/MS Sw 02002 Chlorobenzene Ethylbenzene 1,1,1,2-Tetrachloroethane m,p-Xylenes	ND ND ND ND ND ND ND ND ND ND	2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	/08/98 /08/98 /08/98 /08/98 /08/98 /08/98 /08/98 /08/98
Chlorobenzene Ethylbenzene 1,1,1,2-Tetrachloroethane m,p-Xylenes	ND ND ND ND ND ND ND ND	2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L	10, 10, 10, 10, 10, 10, 10, 10,	/08/98 /08/98 /08/98 /08/98 /08/98 /08/98 /08/98
Ethylbenzene 1,1,1,2-Tetrachloroethane m,p-Xylenes	ND ND ND ND ND ND ND ND	2.0 2.0 2.0 2.0 2.0 2.0 2.0	ug/L ug/L ug/L ug/L ug/L ug/L	10, 10, 10 10 10 10	/08/98 /08/98 /08/98 /08/98 /08/98 /08/98
1,1,1,2-Tetrachioroethane m,p-Xylenes	ND ND ND ND ND ND ND	2.0 2.0 2.0 2.0 2.0 2.0	ug/L ug/L ug/L ug/L ug/L	10, 10, 10 10	/08/98 /08/98 /08/98 /08/98 /08/98
m,p-Xylenes	ND ND ND ND ND ND	2.0 2.0 2.0 2.0 2.0	ug/L ug/L ug/L ug/L	10 10 10 10	/08/98 /08/98 /08/98 /08/98
	nd Nd Nd Nd Nd	2.0 2.0 2.0 2.0	ug/L ug/L ug/L	10 10 10	/08/98 /08/98 /08/98
0-vitene	ND ND ND ND	2.0 2.0 2.0	ug/L ug/L ug/L	10 10	/08/98 /08/98
Styrene	ND ND ND	2.0	ug/L	10	/08/98
Bromoform	ND ND	2.0	$\frac{1}{1}$		
Isopropylbenzene	ND		ug/ 11	10	/08/98
Bromobenzene		2.0	ug/L	10	/08/98
n-Propylbenzene	ND	2.0	ug/L	10	/08/98
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	10	/08/98
1,2,3-Trichloropropane	ND	2.0	ug/L	10	/08/98
2-Chlorotoluene	ND	2.0	ug/L	10	/08/98
1,3,5-Trimethylbenzene	ND	2.0	ug/L	10	/08/98
4-Chlorotoluene	ND	2.0	ug/L	10	)/08/98
tert-Butylbenzene	NT	2.0	ug/L	10	0/08/98
1,2,4-Trimethylbenzene	NTD	2.0	ug/L	l	0/08/98
sec-Butylbenzene	NT	2.0	uq/L	10	0/08/98
4-Isopropyltoluene	ND	2.0	ug/L	10	0/08/98
1,3-Dichlorobenzene		2.0	ug/L	1	0/08/98
1,4-Dichlorobenzene		2.0	ug/L	1	0/08/98
n-Butylbenzene		2 0	ug/L	1	0/08/98
1,2-Dichlorobenzene	ND	10	ug/L	l	0/08/98
1,2-Dibromo-3-chloropropane		2 0	ug/L	1	0/08/98
1,2,4-Trichlorobenzene		2.0	ug/L	1	0/08/98
Hexachlorobutadiene		2.0	ug/L	1	0/08/98
Napthalene		2.0	ug/L	1	0/08/98
1,2,3-Trichlorobenzene		50	, ug/L	1	0/08/98
Acetone	ND	10	ug/L	1	.0/08/98
Acrylonitrile	ND	50	ug/L	1	0/08/98
2-Butanone	ND	2 0	ug/L	1	0/08/98
Carbon Disulfide	ND	10	ug/L	3	0/08/98
trans-1,4-Dichloro-2-buten	ND ND	10	ug/L	3	LO/08/98
2-Chloroethyl Vinyl Ether	ND	20	ug/L		L0/08/98
2-Hexanone		20	ug/L		10/08/98
Iodomethane	ND	2.0	ug/L		10/08/98
4-Methyl-2-pentanone	UM ND	5 0	ug/L		10/08/98
Vinvl Acetate	ND	2.0	ug/L		10/08/98
tert-Butyl methyl ether	ND	2.0	ug/ =		
SURROGATES, % Recovery	00.0	Mine	80	Max:	120
Dibromofluoromethane	98.0	Min.	88	Max:	110
Toluene d-8	104	Miro.	86	Max:	115
p-Bromofluorobenzene	T00	1.1771.			

n-Nitrosodiphenylamine

4-Bromophenyl-phenylether

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 04D 48030988054 SW1		Collected:	09/26/	98 Mati	cix: WATER	
	Method	Resu	<u>lt_0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Test Description	SW 8270C		_			
Semivolatile Organics	2	-	ND.	5.0	ug/L	10/07/98
Phenol bis() Chloroothul) ether		1	ND.	5.0	ug/L	10/07/98
bis(2-Chioroechyr) echer		1	ND	5.0	ug/L	10/07/98
2-Cniorophenor		:	ND	5.0	ug/L	10/07/98
1,3-Dichioropenzene		:	ND	5.0	ug/L	10/07/98
1,4-Dichlorobenzene			ND	10	ug/L	10/07/98
Benzyl alconol			ND	5.0	ug/L	10/07/98
1,2-Dichiorobenzene			ND	5.0	ug/L	10/07/98
2-Methylphenol	r		ND	5.0	ug/L	10/07/98
bis (2-Chibibisopiopy+/ come			ND	5.0	ug/L	10/07/98
4-Methylphenol			ND	5.0	ug/L	10/07/98
n-Nitroso-di-m-propyramine			ND	5.0	ug/L	10/07/98
Hexachioroechane			ND	5.0	ug/L	10/07/98
Nitrobenzene			ND	5.0	ug/L	10/07/98
Isophorone			ND	5.0	ug/L	10/07/98
2-Nitrophenoi			ND	5.0	ug/L	10/07/98
2,4-Dimethyiphenoi			ND	50	ug/L	10/07/98
Benzoic aciu			ND	5.0	ug/L	10/07/98
Dis(2-Chiorophenol			ND	5.0	ug/L	10/07/98
2,4-Dichiorophenor			ND	5.0	ug/L	10/07/98
1,2,4-IIICHIOIODEHZene			ND	5.0	ug/L	10/07/98
A Chlercopiline			ND	5.0	ug/L	10/07/98
4-(moroamiiime			ND	5.0	ug/L	10/07/98
A Chlore 2-methylphenol			ND	5.0	ug/L	10/07/98
4-CHIOID-3-methylphemor			ND	5.0	ug/L	10/07/98
Z-Methy inaphenatene Newschlorogyclopentadiene			ND	5.0	ug/L	10/07/98
a c C Trichlorophenol			ND	5.0	ug/L	10/07/98
2,4,5-Trichlorophenol			ND	5.0	ug/L	10/07/98
2, 4, 5-irichiorophenor			ND	10	ug/L	10/07/98
2 Nitroaniline			ND	50	ug/L	10/07/98
Dimethylphthalate			ND	5.0	ug/L	10/07/98
Acepandthylene			ND	5.0	ug/L	10/07/98
2-Nitroaniline			ND	50	ug/L	10/07/98
Acepaphthene			ND	5.0	ug/L	10/07/98
2 A-Dinitrophenol			ND	50	ug/L	10/07/98
4-Nitrophenol			ND	50	ug/L	10/07/98
Dibenzofuran			ND	5.0	ug/L	10/07/98
2 6-Dipitrotoluene			ND	5.0	ug/L	10/07/98
2,8-Dimitrotoluene			ND	5.0	ug/L	10/07/98
Diethylphthalate			ND	5.0	ug/L	10/07/98
A-chlorophenyl-phenylethe:	r		ND	5.0	ug/L	10/07/98
Eluorene			ND	5.0	ug/L	T0/07/98
A-Nitroaniline			ND	5.0	ug/L	T0/07/98
4 6-Dinitro-2-methylpheno	1		ND	50	ug/L	T0/07/98
4,0-DINICIO-2-MCCHY #Promo	-		ND	5.0	ug/L	T0\01\98

ND

ND

10/07/98

ug/L

5.0

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 04D 48030988054 SW1

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Collected: 09/26/98 Matrix: WATER

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-	Method	Result (	0	<u>Limit</u>	<u>Units</u>	1	Analyzed
Test Description	EW 9270C	(continued)	from	previou	is page)		
Semivolatile Organics	SW 0270C	ND		5.0	ug/L	:	10/07/98
Hexachlorobenzene		ND		5.0	ug/L		10/07/98
Pentachlorophenol		NTD		5.0	ug/L	:	10/07/98
Phenanthrene		NTD		5.0	ug/L	•	10/07/98
Anthracene		NT		5.0	ug/L		10/07/98
Di-n-butylphthalate		ND		5.0	ug/L		10/07/98
Fluoranthene		ND		5.0	ug/L		10/07/98
Pyrene		1 8 .1	ť	5.0	ug/L		10/07/98
Butylbenzylphthalate		1.0 -	•	20	ug/L		10/07/98
3,3'-Dichlorobenzidine		NT		5.0	ug/L		10/07/98
Benzo(a)Anthracene		ND		5.0	ug/L		10/07/98
Chrysene		3.8	JB	5.0	ug/L		10/07/98
Bis(2-Ethylhexyl)phthalate		ND		5.0	ug/L		10/07/98
D1-n-octylphthalate		ND		5.0	ug/L		10/07/98
Benzo(b) fluoranthene		ND		5.0	ug/L		10/07/98
Benzo(k)fluoranthene		ND		5.0	ug/L		10/07/98
Benzo(a)pyrene		ND		5.0	ug/L		10/07/98
Indeno (1,2,3-cd) pyrene		ND		5.0	ug/L		10/07/98
Dibenz(a,h)anthracene		 NTD		5.0	ug/L		10/07/98
Benzo (g, h, i) perylene							
SURROGATES, & Recovery		44.0		Min:	21	Max:	100
2-Fluorophenol		45.3		Min:	10	Max:	94
d5-Phenol		48 0		Min:	35	Max:	114
d5-Nitrobenzene		54.0		Min:	43	Max:	116
2-Fluorobiphenyl		48 0		Min:	10	Max:	123
2,4,6-Tribromophenol d14-Terphenyl		68.0		Min:	33	Max:	141

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 05A 48030988055 SD1	Colle	cted: 09/26/	'98 Mat:	rix: SEDIMEN.	C
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
ICP Metals, TCLP Extracted	SW 1311/6010		0 050	ma /T.	10/09/98
Arsenic		ND	0.030	mg/L	10/09/98
Barium .		1.2	0.020		10/09/98
Cadmium		ND	0.0050	mg/L	10/09/98
Chromium		ЦИ T	0.010		10/09/98
Lead		DM TD	0.050		10/09/98
Selenium		DM ND	0.10		10/09/98
Silver		ND	0.010		10/20/98
Mercury, TCLP Extracted	SW 1311/7470	ND	0.0020	iligy b	
Sample: 05B 48030988055 SD1	. Colle	ected: 09/26	<b>/98 M</b> at	rix: SEDIMEN	T
Test Description	Method	<u>Result O</u>	<u>Limit</u>	Units	<u>Analyzed</u>
Organochlorine Pesticides	SW 8081A			u-/V- DPV	10/15/98
Aldrin		ND	1.1	ug/Kg-DKI	10/15/98
alpha-BHC		ND	1.1	ug/kg-DRI	10/15/98
beta-BHC		ND	1.1	ug/kg-DRI	10/15/98
delta-BHC		ND	1.1	ug/kg-DRI	10/15/98
gamma-BHC (Lindane)		ND	1.1	ug/kg-DRI	10/15/98
alpha-Chlordane		ND		ug/kg-DRI	10/15/98
gamma-Chlordane		ND	1.1	ug/kg-DRI	10/15/98
4.4'-DDD		ND	2.2	ug/Kg-DKI	10/15/98
4,4'-DDE		ND	2.2	ug/kg-DRI	10/15/98
4,4'-DDT		ND	2.2	$ug/Kg^{-}DRY$	10/15/98
Dieldrin		ND	1.1	ug/ Kg-DRI	10/15/98
Endosulfan I		ND	2.2	ug/kg-DRI	10/15/98
Endosulfan II		ND	2.2	ug/kg-DRI	10/15/98
Endosulfan Sulfate		ND	2.2	ug/kg-DRI	10/15/98
Endrin		ND	2.2	ug/kg-DRI	10/15/98
Endrin Aldehyde		ND	2.2	ug/kg-DRI	10/15/98
Heptachlor		ND	1.1	ug/kg-DRI	10/15/98
Heptachlor Epoxide		ND	1.1	ug/kg-Dki	10/15/98
Methoxychlor		ND	11	ug/kg-DRI	10/15/98
Toxaphene		ND	33	ug/kg-bki	10/15/50
SURROGATES, % Recovery		36 8 *	Min:	45 Max	: 124
Tetrachlorometaxylene Decachlorobiphenyl		44.8 *	Min:	45 Max	:: 124
Percent Moisture	ASTM D2216	23.8	0.1	WT %	10/05/98

ug/Kg-DRY

220

ND

Order # 98-09-259 ANALYTICA, INC.

Acenaphthene

Department of the Air Force TEST RESULTS by SAMPLE

Test Description     Method     Result Q     Limit     Units     Analyzed       Polychorinated Biphenyls     SW 8082     ND     44     ug/Kg-DRY 10/15/98       PCB-1232     ND     22     ug/Kg-DRY 10/15/98     10/15/98       PCB-1244     ND     22     ug/Kg-DRY 10/15/98     10/15/98       PCB-1246     ND     22     ug/Kg-DRY 10/15/98     10/15/98       PCB-1256     ND     22     ug/Kg-DRY 10/15/98     10/15/98       PCB-1266     ND     220     ug/Kg-DRY 10/21/98     10/15/98       Stronganics     SW 6270C     ND     220     ug/Kg-DRY 10/21/98       Phenol     ND     220     ug/Kg-DRY 10/21/98     10/21/98       1, 3-Dichlorobenzene     ND     220     ug/Kg-DRY 10/21/98     10/21/98       1, 2-Dichlorobenzene     ND	Sample: 05B 48030988055 SD1	c	ollected: 09/26/9	8 Mati	ix: SEDIMEN	T
Toolychlorinated Biphenyls     SW 8082     ND     44     ug/Kg-DRY     10/15/98       PCB-1221     ND     22     ug/Kg-DRY     10/15/98       PCB-1221     ND     22     ug/Kg-DRY     10/15/98       PCB-1232     ND     22     ug/Kg-DRY     10/15/98       PCB-1244     ND     22     ug/Kg-DRY     10/15/98       PCB-1254     ND     22     ug/Kg-DRY     10/15/98       PCB-1260     ND     22     ug/Kg-DRY     10/15/98       PCB-1260     ND     22     ug/Kg-DRY     10/15/98       SURROGATES, & Recovery     36.8     Min:     11     Max:     102       Tetrachlorometaxylene     36.8     Min:     35     Max:     141       Semivolatile Organics     SW 8270C     ND     220     ug/Kg-DRY     10/21/98       Phenol     ND     220     ug/Kg-DRY     10/21/98     10/21/98       1, 3-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1, 2-Dichlorobenzene     ND	Test Description	Method	<u>Result</u> O	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
PCB-1221     ND     42     Ug/Kg-DRY     10/15/98       PCB-1232     ND     22     Ug/Kg-DRY     10/15/98       PCB-1242     ND     22     Ug/Kg-DRY     10/15/98       PCB-1248     ND     22     Ug/Kg-DRY     10/15/98       PCB-1260     ND     22     Ug/Kg-DRY     10/15/98       PCB-1260     ND     22     Ug/Kg-DRY     10/15/98       SUBRQCATES, & Recovery     36.8     Min:     11     Max:     102       Sumolatile Organics     SW 8270C     ND     220     Ug/Kg-DRY     10/21/98       Semivolatile Organics     SW 8270C     ND     220     Ug/Kg-DRY     10/21/98       Semivolatile Organics     SW 8270C     ND     220     Ug/Kg-DRY     10/21/98       Semivolatile Organics     SW 8270C     ND     220     Ug/Kg-DRY     10/21/98       J.3-Dichlorobenzene     ND     220     Ug/Kg-DRY     10/21/98       J.4-Dichlorobenzene     ND     220     Ug/Kg-DRY     10/21/98       J.2-Dichlorobenzene	Polychlorinated Biphenyls	SW 8082			NG/KG-DRY	10/15/98
PCB-1232     ND     22     ug/Kg-DRY     10/15/98       PCB-1242     ND     22     ug/Kg-DRY     10/15/98       PCB-1248     ND     22     ug/Kg-DRY     10/15/98       PCB-1254     ND     22     ug/Kg-DRY     10/15/98       PCB-1260     ND     22     ug/Kg-DRY     10/15/98       PCB-1260     ND     22     ug/Kg-DRY     10/15/98       PCB-1260     ND     22     ug/Kg-DRY     10/15/98       PCB-1260     ND     22     ug/Kg-DRY     10/21/98       Semivolatile Organics     SW 8270C     Min:     11     Max:     102       Phenol     ND     220     ug/Kg-DRY     10/21/98     10/21/98       2-Chlorophenol     ND     220     ug/Kg-DRY     10/21/98       1,4 - Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1,2 - Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1,2 - Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98 <tr< td=""><td>PCB-1221</td><td></td><td>ND</td><td>44</td><td>ug/Kg-DRI</td><td>10/15/98</td></tr<>	PCB-1221		ND	44	ug/Kg-DRI	10/15/98
PCB-1242     ND     22     ug/Kg-DRY     10/15/98       PCB-1248     ND     22     ug/Kg-DRY     10/15/98       PCB-1254     ND     22     ug/Kg-DRY     10/15/98       PCB-1260     ND     22     ug/Kg-DRY     10/15/98       PCB-1260     ND     22     ug/Kg-DRY     10/15/98       SURROGATES, % Recovery     36.8     Min:     11     Max:     102       Tetrachlorometaxylene     44.8     Min:     35     Max:     141       Semivolatile Organics     SW 8270C     ND     220     ug/Kg-DRY     10/21/98       Phenol     ND     220     ug/Kg-DRY     10/21/98     10/21/98       j.3-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       j.4-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       j.4-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       j.4-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       j.2-Methylphenol     ND     220 <td>PCB-1232</td> <td></td> <td>ND</td> <td>22</td> <td>ug/kg-DRI</td> <td>10/15/98</td>	PCB-1232		ND	22	ug/kg-DRI	10/15/98
ND     22     Ug/Kg-DRY     10/15/98       PCB-1254     ND     22     ug/Kg-DRY     10/15/98       PCB-1260     ND     22     ug/Kg-DRY     10/15/98       PCB-1260     ND     22     ug/Kg-DRY     10/15/98       SURROGATES, % Recovery     36.8     Min:     11     Max:     102       Tetrachlorometaxylene     44.8     Min:     35     Max:     141       Decachlorobiphenyl     SW 8270C     ND     220     ug/Kg-DRY     10/21/98       Fhenol     ND     220     ug/Kg-DRY     10/21/98     10/21/98       1,3-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1,4-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1,2-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       1,2-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1,2-Dichlorobenzene     ND     220     ug/Kg	PCB-1242		ND	22	ug/kg-Dki	10/15/98
ND     22     ug/Kg-DR1     10/12/32       PCB-1254     ND     22     ug/Kg-DR1     10/12/32       PCB-1260     ND     22     ug/Kg-DR1     10/12/32       PCB-1260     ND     22     ug/Kg-DR1     10/12/32       PCB-1260     ND     22     ug/Kg-DR1     10/12/32       SURROGATES, % Recovery     36.8     Min:     11     Max:     102       Decachlorobetagene     44.8     Min:     35     Max:     141       Semivolatile Organics     SW 8270C     ND     220     ug/Kg-DRY     10/21/98       J., 3-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1, 4-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1, 2-Dichlorobenzene     ND     220     ug/Kg-DRY	PCB-1248		ND	22	ug/kg-Dki	10/15/98
ND     22     Ug/Kg-DR1     10/12/98       PCB-1260     ND     22     Ug/Kg-DR1     10/12/98       SURROGATES, % Recovery     36.8     Min:     11     Max:     102       Tetrachlorometaxylene     44.8     Min:     35     Max:     141       Semivolatile Organics     SW 8270C     ND     220     Ug/Kg-DR1     10/21/98       Phenol     ND     220     Ug/Kg-DR1     10/21/98     10/21/98       2-Chloroethyl) ether     ND     220     Ug/Kg-DR1     10/21/98       1,4-Dichlorobenzene     ND     220     Ug/Kg-DR1     10/21/98       1,4-Dichlorobenzene     ND     220     Ug/Kg-DR1     10/21/98       1,4-Dichlorobenzene     ND     220     Ug/Kg-DR1     10/21/98       2-Methylphenol     ND     220     Ug/Kg-DR1     10/21/98       1,2-Dichlorobenzene     ND     220     Ug/Kg-DR1     10/21/98       2-Methylphenol     ND     220     Ug/Kg-DR1     10/21/98       1.4-Bichlorobenzene     ND     220	PCB-1254		ND	22	ug/kg-DRI	10/15/98
ND     22     ug/Kg-DRT     10/13/36       PCB-1016     SURROGATES, % Recovery     36.8     Min:     11     Max:     102       Tetrachlorometaxylene     44.8     Min:     35     Max:     141       Semivolatile Organics     SW 8270C     ND     220     ug/Kg-DRY     10/21/98       Phenol     ND     220     ug/Kg-DRY     10/21/98     10/21/98       2-Chlorophenol     ND     220     ug/Kg-DRY     10/21/98       1, 4-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1, 4-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       1, 2-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       1s(2-Chloroisopropyl) eth     ND     220     ug/Kg-DRY     10/21/98       Nitrobenzene     ND     220     ug/Kg-DRY     10/21/98       1sophorone <t< td=""><td>PCB-1260</td><td></td><td>ND</td><td>22</td><td>ug/kg-DRI</td><td>10/15/90</td></t<>	PCB-1260		ND	22	ug/kg-DRI	10/15/90
SURROGATES, % Recovery     36.8     Min:     11     Max:     102       Tetrachlorometaxylene     44.8     Min:     35     Max:     141       Semivolatile Organics     SW 8270C     ND     220     ug/Kg-DRY     10/21/98       Phenol     ND     220     ug/Kg-DRY     10/21/98       Dis(2-Chloroethyl) ether     ND     220     ug/Kg-DRY     10/21/98       1,3-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1,4-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1,2-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1,2-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       1,2-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       Mitrois (2-Chlorostenzene     ND     220     ug/Kg-DRY     10/21/98       Nitrosc-di-n-propylamine </td <td>PCB-1016</td> <td></td> <td>ND</td> <td>22</td> <td>ug/Kg-DRI</td> <td>10/15/90</td>	PCB-1016		ND	22	ug/Kg-DRI	10/15/90
36.8   Min:   11   Max:   102     Decachlorobiphenyl   44.8   Min:   35   Max:   141     Semivolatile Organics   SW 8270C   ND   220   ug/Kg-DRY   10/21/98     Phenol   ND   220   ug/Kg-DRY   10/21/98     Sis (2-Chlorophenol   ND   220   ug/Kg-DRY   10/21/98     1, 3-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     1, 4-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     1, 2-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     1, 2, 4-Dichlorophenol   ND	CIDDOGATES & Recovery					100
Herzehlorobacharyland   44.8   Min: 35   Max: 141     Semivolatile Organics   SW 8270C   ND   220   ug/Kg-DRY   10/21/98     Phenol   ND   220   ug/Kg-DRY   10/21/98     bis (2-Chlorobthyl) ether   ND   220   ug/Kg-DRY   10/21/98     1, 3-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     1, 4-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     1, 4-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     1, 2-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     1, 2-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     2-Methylphenol   ND   220   ug/Kg-DRY   10/21/98     bis (2-Chloroisopropyl) eth   ND   220   ug/Kg-DRY   10/21/98     n-Nitroso-di-n-propylamine   ND   220   ug/Kg-DRY   10/21/98     Nitrobenzene   ND   220   ug/Kg-DRY   10/21/98     2.4-Dichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2.4-Dichlorophenol   ND	Sorrogales, a necestery		36.8	Min:	11 Max	: 102
Semivolatile Organics     SW 8270C     ND     220     ug/Kg-DRY     10/21/98       bis (2-Chloroethyl) ether     ND     220     ug/Kg-DRY     10/21/98       2-Chlorophenol     ND     220     ug/Kg-DRY     10/21/98       1,3-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1,4-Dichlorobenzene     ND     440     ug/Kg-DRY     10/21/98       1,2-Dichlorobenzene     ND     440     ug/Kg-DRY     10/21/98       2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       4-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       n-Nitroso-di-n-propylamine     ND     220     ug/Kg-DRY     10/21/98       Nitrobenzene     ND     220     ug/Kg-DRY     10/21/98       Nitrophenol     ND     220     ug/Kg-DRY     10/21/98       No     220     ug/Kg-DRY     10/21/98     10/21/98       2-Nitrophenol     ND     220     ug/Kg-	Decachlorobiphenyl		44.8	Min:	35 Max	: 141
ND     220     ug/Kg-DRY     10/21/98       Phenol     ND     220     ug/Kg-DRY     10/21/98       bis (2-Chloroethyl) ether     ND     220     ug/Kg-DRY     10/21/98       2Chlorophenol     ND     220     ug/Kg-DRY     10/21/98       1,3-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1,2-Dichlorobenzene     ND     420     ug/Kg-DRY     10/21/98       1,2-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       2Methylphenol     ND     220     ug/Kg-DRY     10/21/98       2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       -Methylphenol     ND     220     ug/Kg-DRY     10/21/98       n-Nitroso-di-n-propylamine     ND     220     ug/Kg-DRY     10/21/98       Nitrobenzene     ND     220     ug/Kg-DRY     10/21/98       Nitrobenzene     ND     220     ug/Kg-DRY     10/21/98       Sophorone     ND     220     ug/Kg-DRY     10/21/98       2-N	Semivolatile Organics	SW 8270C			(** *****	10/21/08
ND     220     ug/Kg-DRY     10/21/98       bis (2-Chlorophenol     ND     220     ug/Kg-DRY     10/21/98       1, 3-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1, 4-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1, 4-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       4-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       hexachloroethane     ND     220     ug/Kg-DRY     10/21/98       Nitrobenzene     ND     220     ug/Kg-DRY     10/21/98       2.4-Dimethylphenol     ND     220     ug/Kg-DRY     10/21/98       2.4-	Dheno]		ND	220	ug/Kg-DRI	10/21/98
ND     220     ug/Kg-DRY     10/21/98       2-Chlorophenol     ND     220     ug/Kg-DRY     10/21/98       1,3-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1,4-Dichlorobenzene     ND     440     ug/Kg-DRY     10/21/98       1,2-Dichlorobenzene     ND     440     ug/Kg-DRY     10/21/98       1,2-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       4-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       n-Nitroso-di-n-propylamine     ND     220     ug/Kg-DRY     10/21/98       Nitrobenzene     ND     220     ug/Kg-DRY     10/21/98       Isophorone     ND     220     ug/Kg-DRY     10/21/98       2-Nitrophenol     ND     220     ug/Kg-DRY     10/21/98       2,4-Dichlorophenol     ND     220     ug/Kg-DRY     10/21/98       2,4-Dichlorophenol     ND     220     ug/Kg-DRY     10/21/98	his (2-Chloroethyl) ether		ND	220	ug/Kg-DRY	10/21/90
1,3-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     1,3-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     1,4-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     Benzyl alcohol   ND   220   ug/Kg-DRY   10/21/98     1,2-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     2-Methylphenol   ND   220   ug/Kg-DRY   10/21/98     bis (2-Chloroisopropyl) eth   ND   220   ug/Kg-DRY   10/21/98     Hexachloroethane   ND   220   ug/Kg-DRY   10/21/98     Nitrobezene   ND   220   ug/Kg-DRY   10/21/98     Isophorone   ND   220   ug/Kg-DRY   10/21/98     2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2-A-Dichlorophenol   ND   220   ug/Kg-DRY   10/21	2-Chlorophenol		ND	220	ug/Kg-DRY	10/21/98
1,4-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     1,4-Dichlorobenzene   ND   440   ug/Kg-DRY   10/21/98     1,2-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     2-Methylphenol   ND   220   ug/Kg-DRY   10/21/98     bis (2-Chloroisopropyl) eth   ND   220   ug/Kg-DRY   10/21/98     4-Methylphenol   ND   220   ug/Kg-DRY   10/21/98     n-Nitroso-di-n-propylamine   ND   220   ug/Kg-DRY   10/21/98     Nitrobenzene   ND   220   ug/Kg-DRY   10/21/98     Nitrobenzene   ND   220   ug/Kg-DRY   10/21/98     2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2-Alphethylphenol   ND   220   ug/Kg-DRY   10/21/98     2.4-Dichlorophenol   ND   220   ug/Kg-DRY	2 - Chiorophenor		ND	220	ug/Kg-DRY	10/21/98
ND   440   ug/Kg-DRY   10/21/98     Benzyl alcohol   ND   220   ug/Kg-DRY   10/21/98     1,2-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     2-Methylphenol   ND   220   ug/Kg-DRY   10/21/98     bis (2-Chloroisopropyl) eth   ND   220   ug/Kg-DRY   10/21/98     4-Methylphenol   ND   220   ug/Kg-DRY   10/21/98     n-Nitroso-di-n-propylamine   ND   220   ug/Kg-DRY   10/21/98     Nitrobenzene   ND   220   ug/Kg-DRY   10/21/98     Nitrobenzene   ND   220   ug/Kg-DRY   10/21/98     2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2.4-Dimethylphenol   ND   220   ug/Kg-DRY   10/21/98     2.4-Dichlorophenol   ND   220   ug/Kg-DRY   10/21/98     1.2,4-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     1.2,4-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     1.2,4-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98<	1, 3-Dichlorobenzene		ND	220	ug/Kg-DRY	10/21/98
Benzyl altohol     ND     220     ug/Kg-DRY     10/21/98       1,2-Dichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       bis (2-Chloroisopropyl) eth     ND     220     ug/Kg-DRY     10/21/98       4-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       n-Nitroso-di-n-propylamine     ND     220     ug/Kg-DRY     10/21/98       Hexachloroethane     ND     220     ug/Kg-DRY     10/21/98       Nitrobenzene     ND     220     ug/Kg-DRY     10/21/98       1sophorone     ND     220     ug/Kg-DRY     10/21/98       2Nitrophenol     ND     220     ug/Kg-DRY     10/21/98       2.4-Dichlorophenol     ND     220     ug/Kg-DRY     10/21/98       bis (2-Chloroethoxy) methane     ND     220     ug/Kg-DRY     10/21/98       1.2, 4-Trichlorophenol     ND     220     ug/Kg-DRY     10/21/98       1.2, 4-Trichlorophenol     ND     220     ug/Kg	I,4-Dichiolobenzene		ND	440	ug/Kg-DRY	10/21/98
1,2-Dichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     2-Methylphenol   ND   220   ug/Kg-DRY   10/21/98     4-Methylphenol   ND   220   ug/Kg-DRY   10/21/98     4-Methylphenol   ND   220   ug/Kg-DRY   10/21/98     n-Nitroso-di-n-propylamine   ND   220   ug/Kg-DRY   10/21/98     Hexachloroethane   ND   220   ug/Kg-DRY   10/21/98     Nitrobenzene   ND   220   ug/Kg-DRY   10/21/98     Isophorone   ND   220   ug/Kg-DRY   10/21/98     2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2,4-Dimethylphenol   ND   220   ug/Kg-DRY   10/21/98     bis (2-Chloroethoxy)methane   ND   220   ug/Kg-DRY   10/21/98     2,4-Dichlorophenol   ND   220   ug/Kg-DRY   10/21/98     1,2,4-Trichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     Naphthalene   ND   220   ug/Kg-DRY   10/21/98     4-Chloroaniline   ND   220   ug/Kg-DRY	Benzyl alconol		ND	220	ug/Kg-DRY	10/21/98
2-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       bis (2-Chloroisopropyl) eth     ND     220     ug/Kg-DRY     10/21/98       A-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       n-Nitroso-di-n-propylamine     ND     220     ug/Kg-DRY     10/21/98       Hexachloroethane     ND     220     ug/Kg-DRY     10/21/98       Nitrobenzene     ND     220     ug/Kg-DRY     10/21/98       Isophorone     ND     220     ug/Kg-DRY     10/21/98       2.Nitrophenol     ND     220     ug/Kg-DRY     10/21/98       2.4-Dimethylphenol     ND     220     ug/Kg-DRY     10/21/98       bis (2-Chloroethoxy) methane     ND     220     ug/Kg-DRY     10/21/98       2.4-Dichlorophenol     ND     220     ug/Kg-DRY     10/21/98       1.2, 4-Trichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       1.2, 4-Trichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       A-Chloroariline     ND     220     ug/K	1,2-Dichiorobenzene		ND	220	ug/Kg-DRY	10/21/98
bis (2-Chlorolsopropyl) eth     ND     220     ug/Kg-DRY     10/21/98       4-Methylphenol     ND     220     ug/Kg-DRY     10/21/98       n-Nitroso-di-n-propylamine     ND     220     ug/Kg-DRY     10/21/98       Hexachloroethane     ND     220     ug/Kg-DRY     10/21/98       Nitrobenzene     ND     220     ug/Kg-DRY     10/21/98       Isophorone     ND     220     ug/Kg-DRY     10/21/98       2.Nitrobenzene     ND     220     ug/Kg-DRY     10/21/98       Jophorone     ND     220     ug/Kg-DRY     10/21/98       2.A-Dimethylphenol     ND     220     ug/Kg-DRY     10/21/98       Benzoic acid     ND     220     ug/Kg-DRY     10/21/98       bis (2-Chloroethoxy)methane     ND     220     ug/Kg-DRY     10/21/98       2.4 - Dichlorophenol     ND     220     ug/Kg-DRY     10/21/98       A-Chloroaniline     ND     220     ug/Kg-DRY     10/21/98       Maphthalene     ND     220     ug/Kg-DRY     10/	2-Methylphenol		ND	220	ug/Kg-DRY	10/21/98
4-Methylphenol   ND   220   ug/Kg-DRY   10/21/98     n-Nitroso-di-n-propylamine   ND   220   ug/Kg-DRY   10/21/98     Hexachloroethane   ND   220   ug/Kg-DRY   10/21/98     Nitrobenzene   ND   220   ug/Kg-DRY   10/21/98     Isophorone   ND   220   ug/Kg-DRY   10/21/98     2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2,4-Dimethylphenol   ND   220   ug/Kg-DRY   10/21/98     Benzoic acid   ND   220   ug/Kg-DRY   10/21/98     bis (2-Chloroethoxy)methane   ND   220   ug/Kg-DRY   10/21/98     1, 2, 4-Trichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     Naphthalene   ND   220   ug/Kg-DRY   10/21/98     4-Chloroaniline   ND   220   ug/Kg-DRY   10/21/98     Hexachlorobutadiene   ND   220   ug/Kg-DRY   10/21/98     4-Chloro-3-methylphenol   ND   220   ug/Kg-DRY   10/21/98     2.Methylnaphthalene   ND   220   ug/Kg-DRY	bis (2-Chlorolsopropy1) eth		ND	220	ug/Kg-DRY	10/21/98
n-Nitroso-di-n-Propyramine     ND     220     ug/Kg-DRY     10/21/98       Hexachloroethane     ND     220     ug/Kg-DRY     10/21/98       Nitrobenzene     ND     220     ug/Kg-DRY     10/21/98       Isophorone     ND     220     ug/Kg-DRY     10/21/98       2-Nitrophenol     ND     220     ug/Kg-DRY     10/21/98       2.A-Dimethylphenol     ND     220     ug/Kg-DRY     10/21/98       Benzoic acid     ND     220     ug/Kg-DRY     10/21/98       bis(2-Chloroethoxy)methane     ND     220     ug/Kg-DRY     10/21/98       2,4-Dichlorophenol     ND     220     ug/Kg-DRY     10/21/98       1,2,4-Trichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       Naphthalene     ND     220     ug/Kg-DRY     10/21/98       4-Chloroaniline     ND     220     ug/Kg-DRY     10/21/98       4-Chloro-3-methylphenol     ND     220     ug/Kg-DRY     10/21/98       2-Methylnaphthalene     ND     220     ug/Kg-DRY	4-Methylphenol		ND	220	ug/Kg-DRY	10/21/98
Hexachloroethane   ND   220   ug/Kg-DRY   10/21/98     Nitrobenzene   ND   220   ug/Kg-DRY   10/21/98     Isophorone   ND   220   ug/Kg-DRY   10/21/98     2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2.4-Dimethylphenol   ND   220   ug/Kg-DRY   10/21/98     Benzoic acid   ND   220   ug/Kg-DRY   10/21/98     bis (2-Chloroethoxy)methane   ND   220   ug/Kg-DRY   10/21/98     2.4-Dichlorophenol   ND   220   ug/Kg-DRY   10/21/98     1.2,4-Trichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     Naphthalene   ND   220   ug/Kg-DRY   10/21/98     4-Chloroaniline   ND   220   ug/Kg-DRY   10/21/98     4-Chloro-3-methylphenol   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY <td>n-Nitroso-di-n-propylamine</td> <td></td> <td>ND</td> <td>220</td> <td>ug/Kg-DRY</td> <td>10/21/98</td>	n-Nitroso-di-n-propylamine		ND	220	ug/Kg-DRY	10/21/98
Nitrobenzene     ND     220     ug/Kg-DRY     10/21/98       Isophorone     ND     220     ug/Kg-DRY     10/21/98       2-Nitrophenol     ND     220     ug/Kg-DRY     10/21/98       2.4-Dimethylphenol     ND     220     ug/Kg-DRY     10/21/98       Benzoic acid     ND     220     ug/Kg-DRY     10/21/98       bis (2-Chloroethoxy)methane     ND     220     ug/Kg-DRY     10/21/98       2.4-Dichlorophenol     ND     220     ug/Kg-DRY     10/21/98       1.2,4-Trichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       Naphthalene     ND     220     ug/Kg-DRY     10/21/98       4-Chloroaniline     ND     220     ug/Kg-DRY     10/21/98       4-Chloro-3-methylphenol     ND     220     ug/Kg-DRY     10/21/98       2-Methylnaphthalene     ND     220     ug/Kg-DRY     10/21/98       2-Methylnaphthalene     ND     220     ug/Kg-DRY     10/21/98       2,4,6-Trichlorophenol     ND     220     ug/Kg-DRY	Hexachloroethane		ND	220	ug/Kg-DRY	10/21/98
Isophorone     ND     220     ug/Kg-DRY     10/21/98       2-Nitrophenol     ND     220     ug/Kg-DRY     10/21/98       2,4-Dimethylphenol     ND     2200     ug/Kg-DRY     10/21/98       Benzoic acid     ND     2200     ug/Kg-DRY     10/21/98       bis(2-Chloroethoxy)methane     ND     220     ug/Kg-DRY     10/21/98       2,4-Dichlorophenol     ND     220     ug/Kg-DRY     10/21/98       1,2,4-Trichlorobenzene     ND     220     ug/Kg-DRY     10/21/98       Naphthalene     ND     220     ug/Kg-DRY     10/21/98       4-Chloroaniline     ND     220     ug/Kg-DRY     10/21/98       Hexachlorobutadiene     ND     220     ug/Kg-DRY     10/21/98       2-Methylnaphthalene     ND     220     ug/Kg-DRY     10/21/98       2,4,6-Trichlorophenol     ND     220     ug/Kg-DRY     10/21/98       2,4,6-Trichlorophenol     ND     220     ug/Kg-DRY     10/21/98       2,4,6-Trichlorophenol     ND     220     ug/Kg-DRY <td>Nitrobenzene</td> <td></td> <td>ND</td> <td>220</td> <td>ug/Kg-DRY</td> <td>10/21/98</td>	Nitrobenzene		ND	220	ug/Kg-DRY	10/21/98
2-Nitrophenol   ND   220   ug/Kg-DRY   10/21/98     2,4-Dimethylphenol   ND   2200   ug/Kg-DRY   10/21/98     Benzoic acid   ND   220   ug/Kg-DRY   10/21/98     bis(2-Chloroethoxy)methane   ND   220   ug/Kg-DRY   10/21/98     2,4-Dichlorophenol   ND   220   ug/Kg-DRY   10/21/98     1,2,4-Trichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     Naphthalene   ND   220   ug/Kg-DRY   10/21/98     4-Chloroaniline   ND   220   ug/Kg-DRY   10/21/98     Hexachlorobutadiene   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,-Chloronaphthalene   ND   2200   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   2200   <	Isophorone		ND	220	ug/Kg-DRY	10/21/98
2,4-Dimethylphenol   ND   2200   ug/Kg-DRY   10/21/98     Benzoic acid   ND   220   ug/Kg-DRY   10/21/98     bis (2-Chloroethoxy) methane   ND   220   ug/Kg-DRY   10/21/98     2,4-Dichlorophenol   ND   220   ug/Kg-DRY   10/21/98     1,2,4-Trichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     Naphthalene   ND   220   ug/Kg-DRY   10/21/98     4-Chloroaniline   ND   220   ug/Kg-DRY   10/21/98     Hexachlorobutadiene   ND   220   ug/Kg-DRY   10/21/98     4-Chloro-3-methylphenol   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     Hexachlorocyclopentadiene   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2-Chloronaphthalene   ND   220   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   2	2-Nitrophenol		ND	220	ug/Kg-DRY	10/21/98
Benzoic acid   ND   220   ug/Kg-DRY   10/21/98     bis (2-Chloroethoxy) methane   ND   220   ug/Kg-DRY   10/21/98     2,4-Dichlorophenol   ND   220   ug/Kg-DRY   10/21/98     1,2,4-Trichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     Naphthalene   ND   220   ug/Kg-DRY   10/21/98     4-Chloroaniline   ND   220   ug/Kg-DRY   10/21/98     Hexachlorobutadiene   ND   220   ug/Kg-DRY   10/21/98     4-Chloro-3-methylphenol   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     Hexachlorocyclopentadiene   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2-Chloronaphthalene   ND   220   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   220   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   220 <td>2,4-Dimethylphenol</td> <td></td> <td>NT</td> <td>2200</td> <td>ug/Kg-DRY</td> <td>10/21/98</td>	2,4-Dimethylphenol		NT	2200	ug/Kg-DRY	10/21/98
bis (2-Chloroethoxy) methane   ND   220   ug/Kg-DRY   10/21/98     2,4-Dichlorophenol   ND   220   ug/Kg-DRY   10/21/98     1,2,4-Trichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     Naphthalene   ND   220   ug/Kg-DRY   10/21/98     4-Chloroaniline   ND   220   ug/Kg-DRY   10/21/98     Hexachlorobutadiene   ND   220   ug/Kg-DRY   10/21/98     4-Chloro-3-methylphenol   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     Hexachlorocyclopentadiene   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   220   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   220   ug/Kg-DRY   10/21/98     Dimethylphthalate   ND <td< td=""><td>Benzoic acid</td><td></td><td>ND</td><td>220</td><td>ug/Kg-DRY</td><td>10/21/98</td></td<>	Benzoic acid		ND	220	ug/Kg-DRY	10/21/98
2,4-Dichlorophenol   ND   220   ug/Kg-DRY   10/21/98     1,2,4-Trichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     Naphthalene   ND   220   ug/Kg-DRY   10/21/98     4-Chloroaniline   ND   220   ug/Kg-DRY   10/21/98     Hexachlorobutadiene   ND   220   ug/Kg-DRY   10/21/98     4-Chloro-3-methylphenol   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     Hexachlorocyclopentadiene   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2-Chloronaphthalene   ND   220   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   220   ug/Kg-DRY   10/21/98     Dimethylphthalate   ND   220   ug/Kg-DRY   10/21/98	bis (2-Chloroethoxy) methane		ND	220	ug/Kg-DRY	10/21/98
1,2,4-Trichlorobenzene   ND   220   ug/Kg-DRY   10/21/98     Naphthalene   ND   220   ug/Kg-DRY   10/21/98     4-Chloroaniline   ND   220   ug/Kg-DRY   10/21/98     Hexachlorobutadiene   ND   220   ug/Kg-DRY   10/21/98     4-Chloro-3-methylphenol   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     Hexachlorocyclopentadiene   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2-Chloronaphthalene   ND   220   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   220   ug/Kg-DRY   10/21/98     Dimethylphthalate   ND   220   ug/Kg-DRY   10/21/98	2,4-Dichlorophenol		ND	220	ug/Kg-DRY	10/21/98
Naphthalene   ND   220   ug/Kg-DRY   10/21/98     4-Chloroaniline   ND   220   ug/Kg-DRY   10/21/98     Hexachlorobutadiene   ND   220   ug/Kg-DRY   10/21/98     4-Chloro-3-methylphenol   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     Hexachlorocyclopentadiene   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2-Chloronaphthalene   ND   220   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   220   ug/Kg-DRY   10/21/98     Dimethylphthalate   ND   220   ug/Kg-DRY   10/21/98	1,2,4-Trichlorobenzene		ND	220	ug/Kg-DRY	10/21/98
4-Chloroaniline   ND   220   ug/Kg-DRY   10/21/98     Hexachlorobutadiene   ND   220   ug/Kg-DRY   10/21/98     4-Chloro-3-methylphenol   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     Hexachlorocyclopentadiene   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2-Chloronaphthalene   ND   220   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   220   ug/Kg-DRY   10/21/98     Dimethylphthalate   ND   220   ug/Kg-DRY   10/21/98	Naphthalene		NT	220	ug/Kg-DRY	10/21/98
Hexachlorobutadiene   ND   220   ug/Kg-DRY   10/21/98     4-Chloro-3-methylphenol   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     Hexachlorocyclopentadiene   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2-Chloronaphthalene   ND   220   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   220   ug/Kg-DRY   10/21/98     Dimethylphthalate   ND   220   ug/Kg-DRY   10/21/98	4-Chloroaniline		ND	220	ug/Kg-DRY	10/21/98
4-Chloro-3-methylphenol   ND   220   ug/Kg-DRY   10/21/98     2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     Hexachlorocyclopentadiene   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2-Chloronaphthalene   ND   220   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   220   ug/Kg-DRY   10/21/98     Dimethylphthalate   ND   220   ug/Kg-DRY   10/21/98	Hexachlorobutadiene		ND	220	ug/Kg-DRY	10/21/98
2-Methylnaphthalene   ND   220   ug/Kg-DRY   10/21/98     Hexachlorocyclopentadiene   ND   220   ug/Kg-DRY   10/21/98     2,4,6-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2-Chloronaphthalene   ND   220   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   220   ug/Kg-DRY   10/21/98     Dimethylphthalate   ND   220   ug/Kg-DRY   10/21/98	4-Chloro-3-methylphenol		ND	220	ug/Kg-DRY	10/21/98
Hexachlorocyclopentadiene     ND     220     ug/Kg-DRY     10/21/98       2,4,6-Trichlorophenol     ND     2200     ug/Kg-DRY     10/21/98       2,4,5-Trichlorophenol     ND     2200     ug/Kg-DRY     10/21/98       2-Chloronaphthalene     ND     2200     ug/Kg-DRY     10/21/98       2-Nitroaniline     ND     2200     ug/Kg-DRY     10/21/98       Dimethylphthalate     ND     220     ug/Kg-DRY     10/21/98	2-Methylnaphthalene			220	ug/Kg-DRY	10/21/98
2,4,6-Trichlorophenol   ND   2200   ug/Kg-DRY   10/21/98     2,4,5-Trichlorophenol   ND   220   ug/Kg-DRY   10/21/98     2-Chloronaphthalene   ND   2200   ug/Kg-DRY   10/21/98     2-Nitroaniline   ND   2200   ug/Kg-DRY   10/21/98     Dimethylphthalate   ND   220   ug/Kg-DRY   10/21/98	Hexachlorocyclopentadiene			220	ug/Kg-DRY	10/21/98
2,4,5-Trichlorophenol ND 2200 ug/Kg-DRY 10/21/98   2-Chloronaphthalene ND 2200 ug/Kg-DRY 10/21/98   2-Nitroaniline ND 2200 ug/Kg-DRY 10/21/98   Dimethylphthalate ND 220 ug/Kg-DRY 10/21/98	2,4,6-Trichlorophenol		עא	2200	ug/Kg-DRY	10/21/98
2-Chloronaphthalene     ND     2200     ug/Kg-DRY     10/21/98       2-Nitroaniline     ND     2200     ug/Kg-DRY     10/21/98       Dimethylphthalate     ND     2200     ug/Kg-DRY     10/21/98	2,4,5-Trichlorophenol			2200	ug/Kg-DRy	10/21/98
2-Nitroaniline     ND     2200     ug/ Ng     Dimethylphthalate       Dimethylphthalate     ND     220     ug/Kg-DRY     10/21/98	2-Chloronaphthalene		UN	220	ug/Kg-DR	10/21/98
Dimethylphthalate ND 220 ug/Kg-DRY 10/21/98	2-Nitroaniline		ND	2200		10/21/98
	Dimethylphthalate		UN VT	220		10/21/98
Acenaphthylene 2200 ug/kg-DRY 10/21/98	Acenaphthylene		UN T	220	ug/Kg-DR	10/21/98
3-Nitroaniline 2200 ug/Kg-DRY 10/21/98	3-Nitroaniline		NU	2200	ug/Kg-DR	Y 10/21/98

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 05B 48030988055 SD1 Collected: 09/26/98 Matrix: SEDIMENT

				~	*	Units	I	nalvzed
Test Description	Meth	od	<u>Result</u>	<u>0</u>			-	
Semivolatile Organics	SW 8	270C	(continued	irom	previous	ug/Kg-D	RY 1	10/21/98
2,4-Dinitrophenol			ND		2200	ug/Kg-D	RY ]	L0/21/98
4-Nitrophenol			ND		2200	110/Kg-D	RY :	10/21/98
Dibenzofuran			ND		220	110/Ka-D	RY	10/21/98
2,6-Dinitrotoluene			ND		220	110/Ka-D	RY	10/21/98
2,4-Dinitrotoluene					220	11g/Kg-Ľ	RY	10/21/98
Diethylphthalate					220	ug/Kg-D	RY	10/21/98
4-Chlorophenyl-phenylether					220	ua/Ka-E	DRY	10/21/98
Fluorene					2200	ua/Ka-I	DRY	10/21/98
4-Nitroaniline					2200	ua/Ka-I	DRY	10/21/98
4,6-Dinitro-2-methylphenol					2200	ug/Kg-I	ORY	10/21/98
n-Nitrosodiphenylamine					220	ug/Kg-I	ORY	10/21/98
4-Bromophenyl-phenylether			ND		220	ug/Kg-I	DRY	10/21/98
Hexachlorobenzene			ND ND		220	ug/Kg-I	DRY	10/21/98
Pentachlorophenol					220	uq/Kg-l	DRY	10/21/98
Phenanthrene					220	ug/Kg-l	DRY	10/21/98
Anthracene			ND		220	ug/Kg-	DRY	10/21/98
Di-n-butylphthalate			ND		220	ug/Kg-	DRY	10/21/98
Fluoranthene	_		ND		220	ug/Kg-	DRY	10/21/98
Pyrene	-		NT)		220	ug/Kg-	DRY	10/21/98
Butylbenzylphthalate			ND		870	ug/Kg-	DRY	10/21/98
3,3'-Dichlorobenzidine			NT)		220	ug/Kg-	DRY	10/21/98
Benzo (a) Anthracene			ND		220	ug/Kg-	DRY	10/21/98
Chrysene			49	з	220	ug/Kg-	DRY	10/21/98
Bis(2-Ethylhexyl)phthalate			ND	•	220	ug/Kg-	DRY	10/21/98
Di-n-octylphthalate			ND		220	ug/Kg-	DRY	10/21/98
Benzo(b)fluoranthene			ND		220	ug/Kg-	DRY	10/21/98
Benzo(k)fluoranthene			ND		220	ug/Kg-	DRY	10/21/98
Benzo (a) pyrene			ND		220	ug/Kg-	DRY	10/21/98
Indeno (1,2,3-cd) pyrene			ND	•	220	ug/Kg·	-DRY	10/21/98
Dibenz(a,h)anthracene			ND	1	220	ug/Kg·	-DRY	10/21/98
Benzo (g, h, i) perylene								
SURROGATES, & Recovery			37.9	)	Min:	30	Max:	122
2-Fluorophenol			43.9	)	Min:	30	Max:	117
d5-Phenol			40.9	•	Min:	30	Max:	122
d5-Nitrobenzene			56.8	3	Min:	36	Max:	121
2-Fluorobipheny1			47.0	)	Min:	30	Max	: 113
2,4,6-Tribromopheno⊥ d14-Terphenyl			86.4	1	Min:	30	Max	: 134

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 05B 48030988055 SD1

Collected: 09/26/98 Matrix: SEDIMENT

n	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Test Description	SW 8260B				10/00/00
pichlorodifluoromethane		ND	6.6	ug/Kg-DRY	10/08/98
Chloromethane		ND	6.6	ug/Kg-DRY	10/08/98
Vinul Chloride		ND	6.6	ug/Kg-DRY	10/08/98
Promomethane		ND	6.6	ug/Kg-DRI	10/08/98
Chloroethane		ND	6.6	ug/Kg-DRY	10/08/98
Trichlorofluoromethane		ND	6.6	ug/Kg-DRY	10/08/98
1 1-Dichloroethene		ND	2.6	ug/kg-DRI	10/08/98
Trichlorotrifluoroethane		ND	2.6	ug/kg-DRY	10/08/98
Mathylene Chloride		44 B	2.6	ug/Kg-DRY	10/08/98
methyrene chiorida		ND	2.6	ug/Kg-DRY	10/08/98
Lians-1,2-Dichiolocomon-		ND	2.6	ug/Kg-DRY	10/08/98
2, 2 Dichloropropane		ND	2.6	ug/Kg-DRY	10/08/98
2,2-Dichloroethene		ND	2.6	ug/Kg-DRY	10/08/98
Cig-1, 2-Dichioloccheme		ND	2.6	ug/Kg-DRY	10/08/98
Chloroform		ND	2.6	ug/Kg-DRY	10/08/98
Cniciolorum		ND	2.6	ug/Kg-DRY	10/08/98
1,1,1,1,1,1,1,1,1,0,0,0,0,0,0,0,0,0,0,0		ND	2.6	ug/Kg-DRY	10/08/98
1 ] Dichloropropene		ND	2.6	ug/Kg-DRY	10/08/98
I, I-DIGHIOIOPIOPene		ND	2.6	ug/Kg-DRY	10/08/98
Benzene		ND	2.6	ug/Kg-DRY	10/08/98
1,2-Dichioroethane		ND	2.6	ug/Kg-DRY	10/08/98
Trichloroethene		ND	2.6	ug/Kg-DRY	10/08/98
1,2-Dichioropropane		ND	2.6	ug/Kg-DRY	10/08/98
Dibromomethane		ND	2.6	ug/Kg-DRY	10/08/98
Bromodichioromethane		ND	2.6	ug/Kg-DRY	10/08/98
Cis-1, 3-Dichiolopiopene		ND	2.6	ug/Kg-DRY	10/08/98
Toluene		ND	2.6	ug/Kg-DRY	10/08/98
trans-1, 3-Dichloroptopene		ND	2.6	ug/Kg-DRY	10/08/98
1,1,2-Trichtoroethane		ND	2.6	ug/Kg-DRY	10/08/98
Tetrachioroethene		NĎ	2.6	ug/Kg-DRY	10/08/98
1,3-Dichioropropane		ND	2.6	ug/Kg-DRY	10/08/98
Dibromochioromethane		ND	2.6	ug/Kg-DRY	10/08/98
1,2-Dibromoethane		ND	2.6	ug/Kg-DRY	10/08/98
Chlorobenzene		ND	2.6	ug/Kg-DRY	10/08/98
Etnylbenzene		ND	2.6	ug/Kg-DRY	10/08/98
1,1,1,2-Tetrachioroethane		ND	2.6	ug/Kg-DRY	10/08/98
m,p-Xylenes		ND	2.6	ug/Kg-DRY	10/08/98
o-xyiene		ND	2.6	ug/Kg-DRY	10/08/98
Styrene		ND	2.6	ug/Kg-DRY	10/08/98
Bromolorm		ND	2.6	ug/Kg-DRY	10/08/98
IsopropyIbenzene		ND	2.6	ug/Kg-DRY	10/08/98
Bromobenzene		ND	2.6	ug/Kg-DRY	10/08/98
n-Propylbenzene		ND	2.6	ug/Kg-DRY	10/08/98
1,1,2,2-Tetrachiorethane		ND	2.6	ug/Kg-DRY	10/08/98
1,2,3-Trichloropropane		ND	2.6	ug/Kg-DRY	10/08/98
2-Chlorotoluene		ND	2.6	ug/Kg-DRY	10/08/98
1,3,5-Trimethylbenzene		ND	2.6	ug/Kg-DRY	10/08/98
4-Chlorotoluene					



Page 26

1

p-Bromofluorobenzene

Department of the Air Force TEST RESULTS by SAMPLE

Collected: 09/26/98 Matrix: SEDIMENT

Sample: 05B 48030988055 SD1		Collected: C	9/26/9	s Maci	IX. 0222		
Sampre	Method	<u>Result</u>	<u> </u>	<u>Limit</u>	Units	A	malyzed
Test Description	GW 8260B	(continue	ed from	previous	s page)		
Volatiles by GC/MS	54 02002	NI	5	2.6	ug/Kg-DR	Y 1	0/08/98
tert-Butylbenzene		N	C	2.6	ug/Kg-DR	Y I	0/08/98
1,2,4-Trimethylbenzene		N	D	2.6	ug/Kg-DR	נצ	10/08/98
sec-Butylbenzene		N	D	2.6	ug/Kg-DR	Y ]	10/08/98
4-Isopropyltoluene		N	D	2.6	ug/Kg-DR	Y I	10/08/98
1,3-Dichlorobenzene		N	D	2.6	ug/Kg-DR	Y :	10/08/98
1,4-Dichlorobenzene		N	Ð	2.6	ug/Kg-DR	Y :	10/08/98
n-Butylbenzene		N	D	2.6	ug/Kg-DR	Y :	10/08/98
1,2-Dichlorobenzene		N	D	13	ug/Kg-DR	Y	10/08/98
1,2-Dibromo-3-chloropropane		N	D	2.6	ug/Kg-DR	IY .	10/08/98
1,2,4-Trichlorobenzene		Ň	D	2.6	ug/Kg-DR	Υ	10/08/98
Hexachlorobutadiene		N	Ð	2.6	ug/Kg-DF	RY	10/08/98
Napthalene		I	Ð	2.6	ug/Kg-DF	RΥ	10/08/98
1,2,3-Trichlorobenzene		ç	96	66	ug/Kg-DH	RΥ	10/08/98
Acetone		1	ND.	66	ug/Kg-DI	RY	10/08/98
Acrylonitrile		1	D	66	ug/Kg-DI	RY	10/08/98
2-Butanone		]	ND.	2.6	ug/Kg-Dl	RY	10/08/98
Carbon Disulfide		J	ND	66	ug/Kg-D	RY	10/08/98
trans-1,4-Dichloro-2-Dutene		1	ND	66	ug/Kg-D	RY	10/08/98
2-Chloroethyl Vinyl Ether			ND	13	ug/Kg-D	RY	10/08/98
2-Hexanone			ND	2.6	ug/Kg-D	RY	10/08/98
Iodomethane			ND	13	ug/Kg-D	RY	10/08/98
4-Methyl-2-pentanone			ND	66	ug/Kg-D	RY	10/08/98
Vinyl Acetate			ND	2.6	ug/Kg-D	RY	10/08/98
tert-Butyl methyl ether	٠						
SURROGATES, & Recovery		1	.03	Min:	80	Max:	120
Dibromofluoromethane		1	.05	Min:	81	Max:	117
Toluene d-8			14	Min:	74	Max:	121

Page 28

Order # 98-09-259 ANALYTICA, INC. Department of the Air Force TEST RESULTS by SAMPLE

Sample: 06A 48030988056 SW1	Colle	cted: 09/26/9	8 Mat:	rix: SOIL	
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
ICP Metals, TCLP Extracted	SW 1311/6010				10/09/98
Arsenic		ND	0.050	mg/J	10/09/98
Barium		1.0	0.020	mg/L	10/09/98
Cadmium		ND	0.0050	mg/L	10/09/98
Chromium		ND	0.010	mg/⊥ ⊸∞/t	10/09/98
Lead		0.20	0.050	mg/L	10/09/98
Selenium		ND	0.10	mg/ц	10/09/98
Silver		ND	0.010	mg/L	10/09/90
Mercury, TCLP Extracted	SW 1311/7470	ND	0.0020	mg/L	10/20/98
Sample: 06B 48030988056 SW1	Colle	ected: 09/26/	98 Mat	rix: SOIL	
Test Description	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Organochlorine Pesticides	SW 8081A		0 95	ua/Ka-DRY	10/15/98
Aldrin		ND	0.95	ug/Kg-DRY	10/15/98
alpha-BHC		ND	0.95	ug/Kg-DRY	10/15/98
beta-BHC		ND	0.95	ug/Kg-DRY	10/15/98
delta-BHC		ND	0.95	ug/Kg-DRY	10/15/98
gamma-BHC (Lindane)		ND	0.95	ug/Kg-DRY	10/15/98
alpha-Chlordane		ND	0.95	ug/Kg-DRI	10/15/98
gamma-Chlordane		ND	0.95	$\frac{1}{1}$	10/15/98
4.4'-DDD		ND	1.9	ug/kg-DRI	10/15/98
4,4'-DDE		ND	1.9	ug/kg-DRI	10/15/98
4, 4' - DDT		ND	1.9		10/15/98
Dieldrin		ND	0.95	ug/kg-DRI	10/15/98
Endosulfan I		ND	1.9	ug/kg-DRI	10/15/98
Endosulfan II		ND	1.9	ug/kg-DRI	10/15/98
Endosulfan Sulfate		ND	1.9	ug/kg-DKI	10/15/98
Endrin		ND	1.9	ug/kg-DRI	10/15/98
Endrin Aldehvde		ND	1.9	ug/kg-DRI	10/15/98
Hentachlor		ND	0.95	ug/Kg-DRY	10/15/90
Hentachlor Epoxide		ND	0.95	ug/Kg-DRY	10/15/90
Methorychlor		ND	9.5	ug/Kg-DRY	10/15/98
Toxaphene		ND	29	ug/Kg-DRY	10/15/90
SURROGATES, % Recovery		F0 0	Min	45 Max	: 124
Tetrachlorometaxylene Decachlorobiphenyl		59.2	Min:	45 Max	: 124
Percent Moisture	ASTM D2216	13.0	0.1	WT%	10/05/98

Page 29

Order # 98-09-259 ANALYTICA, INC.

# Sample: 06B 48030988056 SW1 Collected: 09/26/98 Matrix: SOIL

	Method	Result 0	<u>Limit</u>	<u>Units</u>	Analyzed
Test Description	SW 8082		20	na/Ka-DRY	10/15/98
polychiorinated Dipnenger		ND	38	ug/Kg-DRY	10/15/98
PCB-1221		ND	19	ug/Kg-DRY	10/15/98
PCB-1232		ND	19	ug/Kg-DRY	10/15/98
PCB-1242		ND	19	ug/Kg-DRY	10/15/98
PCB-1240		ND	19	ug/Kg-DRY	10/15/98
PCB-1254		ND	19	ug/Kg-DRI	10/15/98
PCB-1260		ND	19	ug/kg-bki	10,, -
PCB-1016			4	11 Max.	102
SURROGATES, & RECOVELY		50.0	Min:	II Max.	141
Tetrachiologielaxylenc		59.2	Min:	35 Mar.	
Decachlorobiphenyi					
Semivolatile Organics	SW 8270C	NT	190	uq/Kg-DRY	10/21/98
Phenol		ND	190	ug/Kg-DRY	10/21/98
his(2-Chloroethyl) ether			190	ug/Kg-DRY	10/21/98
2-Chlorophenol		ND	190	ug/Kg-DRY	10/21/98
1 3-Dichlorobenzene		ND	190	ug/Kg-DRY	10/21/98
1 4-Dichlorobenzene		ND	290	ug/Kg-DRY	10/21/98
Renzyl alcohol		ND	100	ug/Kg-DRY	10/21/98
1 2-Dichlorobenzene		ND	190	ug/Kg-DRY	10/21/98
2. Methylphenol		ND	190		10/21/98
big (2-Chloroisopropyl) eth		ND	190	ug/Kg-DRY	10/21/98
A Methylphenol		ND	190	ug/Kg-DRY	10/21/98
- Nitroso-di-n-propylamine		ND	190	ug/Kg DRY	10/21/98
Hewachloroethane		ND	190	ug/kg-DRY	10/21/98
Hexaciiioioechano		ND	190	ug/kg-DRY	10/21/98
Niciobenzene		ND	190	ug/kg-DRY	10/21/98
		ND	190	ug/kg-DRI	10/21/98
2-Niliophenoi		ND	190		10/21/98
2,4-Dimetry phenor		ND	1900	ug/kg-DRI	10/21/98
Benzoic acid		ND	190	ug/kg-DRI	10/21/98
bis(2-chioropheno)		ND	190	ug/kg-DRI	10/21/98
2,4-Dichiorophenor		ND	190	ug/kg-DRI	10/21/98
1,2,4-1fichiofodenzene		ND	190	$ug/Kg^{-}DRT$	10/21/98
Naphthalelle		ND	190	ug/kg-DRI	10/21/98
4-Chioroaniiine		ND	190	ug/kg-DRI	10/21/98
Hexachiorobucautene		ND	190	ug/kg-Dki	10/21/98
4-Chioro-3-meeny phone		ND	190	ug/kg-DRI	10/21/98
2-Metnyinaphtnaiene		ND	190	ug/kg-DRI	10/21/98
Hexachiorocyclopencautene		ND	190	ug/Kg-DRI	10/21/98
2,4,6-Trichlorophenol		ND	1900	ug/kg-DRI	10/21/98
2,4,5-Trichtorophenor		ND	190	ug/Kg-DRI	10/21/98
2-Chloronaphthalene		ND	1900	) ug/kg-DRI	10/21/98
2-Nitroaniline		ND	190	) ug/Kg-DRY	10/21/08
Dimethylphthalate		ND	190	) $ug/Kg-DRX$	, 10/21/08
Acenaphthylene		ND	1900	) ug/Kg-DR	· 10/21/00
3-Nitroaniline		ND	190	0 ug/Kg-DR	1 10/21/90
Acenaphthene					

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 06B 48030988056 SW1

Collected: 09/26/98 Matrix: SOIL

Sampre. 002 00110					Analyzed
	Method	<u>Result O</u>	<u>Limit</u>	Units	<u>Anary 200</u>
Test Description	SW 8270C	(continued fro	m previous	; page)	10/21/98
Semivolatile Organics		ND	1900	ug/kg-DRI	10/21/98
2,4-Dinicrophenor		ND	1900	ug/kg-DRI	10/21/98
4-Nitrophenoi		ND	190	ug/kg-DRI	10/21/98
Dibenzoluran		ND	190	ug/kg-DRI	10/21/98
2,6-Dimitrotoluene		ND	190	ug/kg-DRI	10/21/98
2,4-Dinitrotoidene		ND	190	ug/kg-DRI	10/21/98
Dietnyiphthalace		ND	190	ug/kg-DRI	10/21/98
4-Chloropneny1-pheny1cener		ND	190	ug/kg-DRI	10/21/98
Fluorene		ND	1900	ug/Kg-DRI	10/21/98
4-Nitroaniline		ND	1900	ug/Kg-DRY	10/21/90
4,6-Dinitro-2-methylphenol		ND	190	ug/Kg-DRY	10/21/98
n-Nitrosodiphenylamine		ND	190	ug/Kg-DRY	10/21/98
4-Bromophenyl-phenylether		ND	190	ug/Kg-DRY	10/21/98
Hexachlorobenzene		ND	190	ug/Kg-DRY	10/21/98
Pentachlorophenol		ND	190	ug/Kg-DRY	10/21/98
Phenanthrene		ND	190	ug/Kg-DRY	10/21/98
Anthracene		41 J	190	ug/Kg-DRY	10/21/98
Di-n-butylphthalate		ND	190	ug/Kg-DRY	10/21/98
Fluoranthene		ND	190	ug/Kg-DRY	10/21/98
Pyrene		ND	190	ug/Kg-DRY	10/21/98
Butylbenzylphthalate			760	ug/Kg-DRY	10/21/98
3,3'-Dichlorobenzidine		ND	190	ug/Kg-DRY	10/21/98
Benzo (a) Anthracene		ND	190	ug/Kg-DRY	10/21/98
Chrysene		130 J	190	ug/Kg-DRY	10/21/98
Bis(2-Ethylhexyl)phthalate		ND	190	ug/Kg-DRY	10/21/98
Di-n-octylphthalate		ND	190	ug/Kg-DRY	10/21/98
Benzo(b)fluoranthene		ND	190	ug/Kg-DRY	10/21/98
Benzo(k)fluoranthene		NTD	190	ug/Kg-DRY	10/21/98
Benzo(a)pyrene		ND	190	ug/Kg-DRY	10/21/98
Indeno(1,2,3-cd)pyrene		NTO	190	ug/Kg-DRY	10/21/98
Dibenz (a, h) anthracene		ND	190	ug/Kg-DRY	10/21/98
Benzo(g,h,i)perylene		12			
SURROGATES, % Recovery		57 6	Min:	30 Ma	x: 122
2-Fluorophenol		52.0	Min:	30 Ma	x: 117
d5-Phenol		50.1	Min:	30 Ma	ix: 122
d5-Nitrobenzene		01 K	Min:	36 Ma	ix: 121
2-Fluorobiphenyl		101.0	Min:	30 Ma	ax: 113
2,4,6-Tribromophenol		42++ Q/ 7	Min:	30 Ma	ax: 134
d14-Terphenyl		72./	• • • • • •		

Page 31

Order # 98-09-259 ANALYTICA, INC.

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 06B 48030988056 SW1

Collected: 09/26/98 Matrix: SOIL

	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Test Description	SW 8260B	-			10/08/98
Dichlorodifluoromethane		ND	5.7	ug/Kg-DRY	10/08/98
Chloromethane		ND	5.7	ug/Kg-DRY	10/08/98
Unity Chloride		ND	5.7	ug/Kg-DRY	10/08/98
Proponethane		ND	5.7	ug/Kg-DRY	10/08/98
Bromomernanc		ND	5.7	ug/Kg-DRY	10/08/98
This chlorofluoromethane		ND	5.7	ug/Kg-DRY	10/08/98
1 1-Dichloroethene		ND	2.3	ug/Kg-DRY	10/08/98
Trichlorotrifluoroethane		ND	2.3	ug/Kg-DRY	10/08/98
Mothylene Chloride		41 B	2.3	ug/Kg-DRY	10/08/98
methylene chicilite		ND	2.3	ug/Kg-DRY	10/08/98
1 1 Dichloroethane		ND	2.3	ug/Kg-DRY	10/08/98
2.2-Dichloropropane		ND	2.3	ug/kg-DR1	10/08/98
aic-1 2-Dichloroethene		ND	2.3	ug/Kg-DRI	10/08/98
Bromochloromethane		NĎ	2.3	ug/Kg-DRI	10/08/98
Chloroform		ND	2.3	ug/Kg-DRI	10/08/98
1 1 1-Trichloroethane		ND	2.3	ug/Kg-DRI	10/08/98
Carbon Tetrachloride		ND	2.3	ug/kg-DRI	10/08/98
1 1-Dichloropropene		ND	2.3	ug/Kg-DRY	10/08/98
Ponzene		ND	2.3	ug/Kg-DRY	10/08/98
1 2-Dichloroethane		ND	2.3	ug/Kg-DRI	10/08/90
Trichloroethene		ND	2.3	ug/Kg-DRY	10/08/98
1 2-Dichloropropane		ND	2.3	ug/Kg-DRY	10/08/98
T, Z-Dichicicprop		ND	2.3	ug/Kg-DRY	10/08/98
Bromodichloromethane		ND	2.3	ug/Kg-DRI	10/08/98
cis-1 3-Dichloropropene		ND	2.3	ug/kg-DRI	10/08/98
		ND	2.3	ug/kg-DRI	10/08/98
trans-1.3-Dichloropropene		ND	2.3	ug/kg-DRI	10/08/98
1 2-Trichloroethane		ND	2.3	ug/kg-DRI	10/08/98
Tetrachloroethene		ND	2.3	ug/Kg-DRI	10/08/98
1 3-Dichloropropane		ND	2.3	ug/kg-DRI	10/08/98
Dibromochloromethane		ND	2.3	ug/kg-Dki	10/08/98
1 2-Dibromoethane		ND	2.3	ug/kg-DRI	10/08/98
Chlorobenzene		ND	2.3	ug/kg-DRI	10/08/98
Ethylbenzene		ND	2.3	ug/Kg-DRI	10/08/98
1.1.1.2-Tetrachloroethane	:	ND	2.3	ug/Kg-DRI	10/08/98
m.p-Xvlenes		ND	2.3	ug/Kg-DRY	10/08/98
o-Xvlene		ND	2.3	ug/Kg-DRY	10/08/98
Styrene		ND	2.2	ug/Kg-DRY	10/08/98
Bromoform		ND	2.3	ug/Kg-DRY	10/08/98
Isopropylbenzene		ND	2.3	ug/Kg-DRY	10/08/98
Bromobenzene		ND	2.2	ug/Kg-DRY	10/08/98
n-Propylbenzene		ND	2.2	ug/Kg-DRY	10/08/98
1,1,2,2-Tetrachlorethane		ND	2.3	ug/Kg-DRY	10/08/98
1,2,3-Trichloropropane		ND	2.3	ug/Kg-DRY	10/08/98
2-Chlorotoluene		ND	∠.⊥ ? ?	ug/Kg-DRY	10/08/98
1,3,5-Trimethylbenzene			<u>د</u>	ug/Kg-DRY	10/08/98
4-Chlorotoluene		ли Л			

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Order # 98-09-259 ANALYTICA, INC. Department of the Air Force TEST RESULTS by SAMPLE

Sample: 06B 48030988056 SW1		Collected:	09/26/98	3 Matı	ix: SOIL		
- 	athod	Resul	lt Q	<u>Limit</u>	<u>Units</u>	₽	<u>malyzed</u>
Test Description	W 9260B	(continu	ied from	previous	; page)		- /
Volatiles by GC/MS	5W 0200D	1	ND CI	2.3	ug/Kg-DF	I YS	_0/08/98
tert-Butylbenzene			CTV CTV	2.3	ug/Kg-DF	<u>57</u> ]	10/08/98
1,2,4-Trimethylbenzene		-	NTD	2.3	ug/Kg-DH	<u> XY</u> ]	10/08/98
sec-Butylbenzene		-	NTD	2.3	ug/Kg-DI	XX I	10/08/98
4-Isopropyltoluene		-	ND	2.3	ug/Kg-DI	RY I	10/08/98
1,3-Dichlorobenzene				2.3	ug/Kg-D	RY I	10/08/98
1,4-Dichlorobenzene				2.3	ug/Kg-D	RY .	10/08/98
n-Butylbenzene			ND	2.3	ug/Kg-D	RY	10/08/98
1,2-Dichlorobenzene			ND	11	ug/Kg-D	RY	10/08/98
1,2-Dibromo-3-chloropropane			NTD	2.3	ug/Kg-D	RY	10/08/98
1,2,4-Trichlorobenzene			NID	2.3	ug/Kg-D	RY	10/08/98
Hexachlorobutadiene			ND	2.3	ug/Kg-D	RY	10/08/98
Napthalene			ND	2.3	ug/Kg-D	RY	10/08/98
1,2,3-Trichlorobenzene		-	20	57	uq/Kg-L	RY	10/08/98
Acetone		-	ND	57	ug/Kg-L	RY	10/08/98
Acrylonitrile			ND	57	ug/Kg-I	DRY	10/08/98
2-Butanone			ND	2.3	ug/Kg-I	DRY	10/08/98
Carbon Disulfide				57	ug/Kg-I	JRY	10/08/98
trans-1,4-Dichloro-2-butene				57	ua/Ka-I	ORY	10/08/98
2-Chloroethyl Vinyl Ether				11	ug/Kg-I	ORY	10/08/98
2-Hexanone				23	ug/Kg-l	DRY	10/08/98
Iodomethane				11	ug/Kg-1	DRY	10/08/98
4-Methyl-2-pentanone				57	ug/Kg-1	DRY	10/08/98
Vinvl Acetate			ND	2,	ug/Kg-)	DRY	10/08/98
tert-Butyl methyl ether			ND	2.3	49,9		
SURROGATES, & Recovery				Mini	80	Max:	120
Dibromofluoromethane			109	Min:	81	Max:	117
Toluene d-8			100	Min	74	Max:	121
p-Bromofluorobenzene			110	1-1211-			
Sample: 06C 48030988056 SW1		Collected	1: 09/26/	<b>/98</b> Ma	trix: SC	IL	
m turdam	Method	Res	<u>sult O</u>	<u>Limit</u>	<u>Units</u>		Analyzed
Test Description	LECO/D	513G	0.23	0.05	WT%		T0\08\38
Organic Carbon, Total							

Percent Moisture

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 07A 48030988057 SD2	Colle	cted: 09/27	/98 Mati	rix: SEDIMEN.	C
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
ICP Metals, TCLP Extracted	SW 1311/6010		0.050	ma/T	10/09/98
Arsenic		ND	0.050	mg/1	10/09/98
Barium		1.0	0.020		10/09/98
Cadmium		ND	0.0050	mg/L mm/T	10/09/98
Chromium		ND	0.010	mg/1 m=/I	10/09/98
Lead		ND	0.050	mg/L	10/09/98
Selenium		ND	0.10	mg/L	10/09/98
Silver		ND	0.010	mg/L	10/09/98
Mercury, TCLP Extracted	SW 1311/7470	ND	0.0020	mg/ц	10/20/98
Sample: 07B 48030988057 SD2	Colle	ected: 09/27	7 <b>/98</b> Mat	rix: SEDIMEN	т
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Organochlorine Pesticides	SW 8081A			/	10/15/09
Aldrin		ND	1.1	ug/Kg-DRY	10/15/90
alpha-BHC		ND	1.1	ug/Kg-DRY	10/15/98
beta-BHC		ND	1.1	ug/Kg-DRY	10/15/90
delta-BHC		ND	1.1	ug/Kg-DRY	10/15/98
gamma-BHC (Lindane)		ND	1.1	ug/Kg-DRY	10/15/98
alpha-Chlordane		ND	1.1	ug/Kg-DRY	10/15/98
gamma-Chlordane		ND	1.1	ug/Kg-DRY	10/15/98
$4 \cdot 4' - DDD$		ND	2.2	ug/Kg-DRY	10/15/98
$4 \cdot 4' - DDE$		ND	2.2	ug/Kg-DRY	10/15/98
$4 \cdot 4' - DDT$		ND	2.2	ug/Kg-DRY	10/15/98
Dieldrin		ND	1.1	ug/Kg-DRY	10/15/98
Endosulfan I		ND	2.2	ug/Kg-DRY	10/15/98
Endosulfan II		ND	2.2	ug/Kg-DRY	10/15/98
Endosulfan Sulfate		ND	2.2	ug/Kg-DRY	10/15/98
Endrin		ND	2.2	ug/Kg-DRY	10/15/98
Endrin Aldehyde		ND	2.2	ug/Kg-DRY	10/15/98
Hentachlor		ND	1.1	ug/Kg-DRY	10/15/98
Hentachlor Enoxide		ND	1.1	ug/Kg-DRY	10/15/98
Methowschlor		ND	11	ug/Kg-DRY	10/15/98
Toxaphene		ND	33	ug/Kg-DRY	10/15/98
SURROGATES, % Recovery			<b>N (</b> )	AS May	- 124
Tetrachlorometaxylene		33.7 *	Min:	40 Max	. 104
Decachlorobiphenyl		66.3	Min:	40 MAX	. 107
Percent Moisture	ASTM D2216	25.0	0.1	WT%	10/05/98

Department of the Air Force TEST RESULTS by SAMPLE Page 34

Sample: 07B 48030988057 SD2		Collected:	09/27/	98 Mat:	rix: SE	DIMENT	ſ
Test Description	Method	Resu	<u>lt 0</u>	<u>Limit</u>	<u>Units</u>		<u>Analyzed</u>
Polychlorinated Biphenyls	SW 8082	·					
PCB-1221			ND	22000	ug/Kg-l	DRY	10/16/98
PCB-1232			ND	11000	ug/Kg-	DRY	10/16/98
PCB-1242			ND	11000	ug/Kg-	DRY	10/16/98
PCB-1248			ND	11000	ug/Kg-	DRY	10/16/98
DCB-1254			ND	11000	ug/Kg-	DRY	10/16/98
PCB-1254		1800	00 D	11000	ug/Kg-	DRY	10/16/98
PCB-1016			ND	11000	ug/Kg-	DRY	10/16/98
CIERCATES & Recovery							
Tetrachlorometaxylene			0 *	Min:	11	Max:	102
Decachlorobiphenyl			0 *	Min:	35	Max:	141
	014 00300						
Semivolatile Organics	SW 8270C		NT	440	ua/Ka-	DRY	10/21/98
Phenol			NED ,	440	ua/Ka-	DRY	10/21/98
bis(2-Chloroethyl) ether			NTD	440	ug/Kg-	DRY	10/21/98
2-Chlorophenol				440	ug/Kg-	DRY	10/21/98
1,3-Dichlorobenzene				440	ug/Kg-	DRY	10/21/98
1,4-Dichlorobenzene			ND	440	ug/Kg	VQU	10/21/98
Benzyl alcohol			ND	890			10/21/98
1,2-Dichlorobenzene			ND	440	$ug/Ng^{-}$	עסת	10/21/98
2-Methylphenol			ND	440	ug/ng-	DRI	10/21/98
bis(2-Chloroisopropyl) eth			ND	440	ug/kg-	DRI	10/21/98
4-Methylphenol			ND	440	ug/kg·	DRI	10/21/98
n-Nitroso-di-n-propylamine			ND	440	ug/kg·	-DRI VBV	10/21/98
Hexachloroethane			ND	440	ug/kg·	DRI	10/21/98
Nitrobenzene			ND	440	ug/kg	DRI	10/21/98
Isophorone			ND	440			10/21/98
2-Nitrophenol			ND	440			10/21/98
2,4-Dimethylphenol			ND	440	ug/kg	DRI	10/21/98
Benzoic acid			ND	4400	ug/kg		10/21/98
bis(2-Chloroethoxy)methane			ND	440	ug/kg	DRI	10/21/98
2,4-Dichlorophenol			ND	440	ug/kg	-DRI DDV	10/21/98
1,2,4-Trichlorobenzene			ND	440	ug/kg		10/21/98
Naphthalene			ND	440	ug/kg	-DRI DDV	10/21/98
4-Chloroaniline			ND	440	ug/kg	-DRI DDV	10/21/90
Hexachlorobutadiene			ND	440	ug/kg	-DRI	10/21/90
4-Chloro-3-methylphenol			ND	440	ug/kg	-DRI	10/21/98
2-Methylnaphthalene			ND	440	ug/kg	-DRI	10/21/98
Hexachlorocyclopentadiene			ND	440	ug/Kg	-DRY	10/21/90
2,4,6-Trichlorophenol			ND	440	ug/Kg	-DRY	10/21/90
2,4,5-Trichlorophenol			ND	4400	ug/Kg	-DRY	10/21/90
2-Chloronaphthalene			ND	440	ug/Kg	-DRY	TO\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
2-Nitroaniline			ND	4400	ug/Kg	-DRY	TO\ST\20
Dimethylphthalate			ND	440	ug/Kg	I-DKX	TO/21/38
Acenaphthylene			ND	440	ug/Ko	J-DRY	10/21/98
3-Nitroaniline			ND	4400	ug/Kg	J-DRY	10/21/98
Acenaphthene			ND	440	ug/Kg	J-DRY	10/21/38

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 07B 48030988057 SD2

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Collected: 09/27/98 Matrix: SEDIMENT

met Description	Method	Result	0	<u>Limit</u>	<u>Units</u>	2	Analyzed
Test Description	SW 8270C	(continued	from	previou	s page)		
Semivolatile Olyanics		ND		4400	ug/Kg-D	RY :	10/21/98
2,4-Dimicrophenoi		ND		4400	ug/Kg-D	RY :	10/21/98
4-NICIOPHENOI		ND		440	ug/Kg-D	RY :	10/21/98
Dibenzoidian D.C.Dimitrotoluene		ND		440	ug/Kg-D	RY :	10/21/98
2,6-Dimitrotoluene		ND		440	ug/Kg-D	RY	10/21/98
2,4-Dinitrotoiuene		ND		440	ug/Kg-D	RY	10/21/98
Dietnyiphthalate		ND		440	ug/Kg-D	RY	10/21/98
4-Chiorophenyi-phenyiethei		ND		440	ug/Kg-D	RY	10/21/98
Fluorene		ND		4400	ug/Kg-D	RY	10/21/98
4-Nitroaniline		ND		4400	ug/Kg-I	RY	10/21/98
4,6-Dinitro-2-methylphenor		ND		440	ug/Kg-I	RY	10/21/98
n-Nitrosodiphenylamine		ND		440	ug/Kg-I	DRY	10/21/98
4-Bromopneny1-pheny1ether		220	DJ	440	ug/Kg-I	DRY	10/21/98
Hexachlorobenzene				440	ug/Kg-I	DRY	10/21/98
Pentachiorophenol		ND		440	ug/Kg-I	DRY	10/21/98
Phenanthrene				440	ug/Kg-I	DRY	10/21/98
Anthracene		 ND		440	ug/Kg-I	DRY	10/21/98
Di-n-butylphthalate		ND		440	ug/Kg-I	DRY	10/21/98
Fluoranthene		ND		440	ug/Kg-I	ORY	10/21/98
Pyrene		ND		440	ug/Kg-J	ORY	10/21/98
Butylbenzylphthalate		ND		1800	ug/Kg-J	DRY	10/21/98
3,3'-Dichlorobenzidine		ND		440	uq/Kq-J	DRY	10/21/98
Benzo(a)Anthracene				440	ug/Kg-J	DRY	10/21/98
Chrysene		ND		440	ua/Ka-	DRY	10/21/98
Bis(2-Ethylhexyl)phtnalate				440	ua/Ka-	DRY	10/21/98
Di-n-octylphthalate		ND		440	ua/Ka-	DRY	10/21/98
Benzo(b)fluoranthene		ND		440	ug/Kg-	DRY	10/21/98
Benzo(k)fluoranthene				440	ug/Kg-	DRY	10/21/98
Benzo(a)pyrene				440	ug/Kg-	DRY	10/21/98
Indeno (1,2,3-cd) pyrene				440	ug/Kg-	DRY	10/21/98
Dibenz (a, h) anthracene				440	ug/Kg-	DRY	10/21/98
Benzo(g,h,i)perylene		ND		170	~ <u>9</u> ,9		
SURROGATES, % Recovery		11 C		Min·	30	Max:	122
2-Fluorophenol		44.0		Min.	30	Max:	117
d5-Phenol		50.0	•	Min.	30	Max:	122
d5-Nitrobenzene		48.9	т •	Min.	36	Max:	121
2-Fluorobiphenyl		73.3	•	Min.	30	Max:	113
2,4,6-Tribromophenol		49.2	5 1	Min-	30	Max:	134
d14-Terphenyl		84.4	t i	PILII:	50		

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 07B 48030988057 SD2 Collected: 09/27/98 Matrix: SEDIMENT

Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Volatiles by GC/MS	SW 8260B				
Dichlorodifluoromethane		ND	6.7	ug/Kg-DRY	10/09/98
Chloromethane		ND	6.7	ug/Kg-DRY	10/09/98
Vinyl Chloride		ND	6.7	ug/Kg-DRY	10/09/98
Bromomethane		ND	6.7	ug/Kg-DRY	10/09/98
Chloroethane		ND	6.7	ug/Kg-DRY	10/09/98
Trichlorofluoromethane		ND	6.7	ug/Kg-DRY	10/09/98
1,1-Dichloroethene		ND	2.7	ug/Kg-DRY	10/09/98
Trichlorotrifluoroethane		ND	2.7	ug/Kg-DRY	10/09/98
Methylene Chloride		11 B	2.7	ug/Kg-DRY	10/09/98
trans-1,2-Dichloroethene		ND	2.7	ug/Kg-DRY	10/09/98
1.1-Dichloroethane		ND	2.7	ug/Kg-DRY	10/09/98
2,2-Dichloropropane		ND	2.7	ug/Kg-DRY	10/09/98
cis-1,2-Dichloroethene		ND	2.7	ug/Kg-DRY	10/09/98
Bromochloromethane		ND	2.7	ug/Kg-DRY	10/09/98
Chloroform		ND	2.7	ug/Kg-DRY	10/09/98
1,1,1-Trichloroethane		ND	2.7	ug/Kg-DRY	10/09/98
Carbon Tetrachloride		ND	2.7	ug/Kg-DRY	10/09/98
1,1-Dichloropropene		ND	2.7	ug/Kg-DRY	10/09/98
Benzene		ND	2.7	ug/Kg-DRY	10/09/98
1,2-Dichloroethane		ND	2.7	ug/Kg-DRY	10/09/98
Trichloroethene		ND	2.7	ug/Kg-DRY	10/09/98
1,2-Dichloropropane		ND	2.7	ug/Kg-DRY	10/09/98
Dibromomethane		ND	2.7	ug/Kg-DRY	10/09/98
Bromodichloromethane		ND	2.7	ug/Kg-DRY	10/09/98
cis-1,3-Dichloropropene		ND	2.7	ug/Kg-DRY	10/09/98
Toluene		ND	2.7	ug/Kg-DRY	10/09/98
trans-1,3-Dichloropropene		ND	2.7	ug/Kg-DRY	10/09/98
1,1,2-Trichloroethane		ND	2.7	ug/Kg-DRY	10/09/98
Tetrachloroethene		ND	2.7	ug/Kg-DRY	10/09/98
1,3-Dichloropropane		ND	2.7	ug/Kg-DRY	10/09/98
Dibromochloromethane		ND	2.7	ug/Kg-DRY	10/09/98
1,2-Dibromoethane		ND	2.7	ug/Kg-DRY	10/09/98
Chlorobenzene		ND	2.7	ug/Kg-DRY	10/09/98
Ethylbenzene		ND	2.7	ug/Kg-DRY	10/09/98
1,1,1,2-Tetrachloroethane		ND	2.7	ug/Kg-DRY	10/09/98
m,p-Xylenes		ND	2.7	ug/Kg-DRY	10/09/98
o-Xylene		ND	2.7	ug/kg-DRY	10/09/90
Styrene		ND	2.7	ug/Kg-DRY	10/09/98
Bromoform		ND	2.7	ug/kg-DRY	10/09/98
Isopropylbenzene		ND	2.7	ug/Kg-DRY	10/09/98
Bromobenzene		ND	2.7	ug/Kg-DRI	10/09/98
n-Propylbenzene		ND	2.7	ug/Kg-DRI	10/09/98
1,1,2,2-Tetrachlorethane		ND	2.7	ug/kg-DRY	10/02/30
1,2,3-Trichloropropane		ND	2.7		10/00/00
2-Chlorotoluene		ND	2.7	ug/kg-DKY	10/09/90
1,3,5-Trimethylbenzene		ND	2.7	ug/kg-DRI	10/09/98
4-Chlorotoluene		ND	2.7	ug/ kg-bki	10,00,00

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Order # 98-09-259 ANALYTICA, INC.

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 07B 48030988057 SD2

Collected: 09/27/98 Matrix: SEDIMENT

Test Description	Me	thod	Result	<u>0</u>	<u>Limit</u>	<u>Units</u>		<u>Analyzed</u>
Volatiles by GC/MS	SW	8260B	(continued	from	previou	s page)		( (
tert-Butylbenzene			ND		2.7	ug/Kg-I	DRY	10/09/98
1.2.4-Trimethylbenzene			ND		2.7	ug/Kg-I	DRY	10/09/98
sec-Butvlbenzene			ND		2.7	ug/Kg-l	ORY	10/09/98
4-Isopropyltoluene			ND		2.7	ug/Kg-l	DRY	10/09/98
1.3-Dichlorobenzene			ND		2.7	ug/Kg-l	DRY	10/09/98
1 4-Dichlorobenzene			ND		2.7	ug/Kg-l	DRY	10/09/98
n-Butylbenzene			ND		2.7	ug/Kg-l	DRY	10/09/98
1 2-Dichlorobenzene			ND		2.7	ug/Kg-l	DRY	10/09/98
1 2-Dibromo-3-chloropropane			ND		13	ug/Kg-1	DRY	10/09/98
1,2 4-Trichlorobenzene			ND		2.7	ug/Kg-	DRY	10/09/98
Herschlorobutadiene			ND		2.7	ug/Kg-	DRY	10/09/98
Nanthalene			ND		2.7	ug/Kg-	DRY	10/09/98
1 2 3-Trichlorobenzene			ND		2.7	ug/Kg-	DRY	10/09/98
Acetone			30	J	67	ug/Kg-	DRY	10/09/98
Acrylonitrile			ND		67	ug/Kg-	DRY	10/09/98
2-Butanone			ND		67	ug/Kg-	DRY	10/09/98
Carbon Digulfide			ND		2.7	ug/Kg-	DRY	10/09/98
trans_1_4-Dichloro-2-butene			ND		67	ug/Kg-	DRY	10/09/98
2-Chloroethyl Vinyl Ether			ND		67	ug/Kg-	DRY	10/09/98
2 Hoxanone			ND		13	ug/Kg-	DRY	10/09/98
Zonexanone			ND		2.7	ug/Kg-	DRY	10/09/98
4 Mothy)-2-pentanone			ND		13	ug/Kg-	DRY	10/09/98
4-Methy1-z-pencanone			ND		67	ug/Kg-	DRY	10/09/98
tort-Dutyl methyl ether			ND		2.7	ug/Kg-	DRY	10/09/98
CIERCONTES & Recovery								
Surrogails, & Recovery			104		Min:	80	Max:	120
Dibiomoriuoromeenane			109		Min:	81	Max:	117
p-Bromofluorobenzene			121		Min:	74	Max:	121

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 08A 48030988058 SW2	Colle	cted: 09/27/	98 Mat	rix: WATE	IR
Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	Analyzed
ICP Metals, TCLP Extracted	SW 1311/6010				
Arsenic		ND	0.050	mg/L	10/15/98
Barium		0.40	0.020	mg/L	10/15/98
Cadmium		ND	0.0050	mg/L	10/15/98
Chromium		ND	0.010	mg/L	10/15/98
Lead		ND	0.050	mg/L	10/15/98
Selenium		ND	0.10	mg/L	10/15/98
Silver		ND	0.010	mg/L	10/15/98
Mercury, TCLP Extracted	SW 1311/7470	ND	0.0020	mg/L	10/20/98
Sample: 08B 48030988058 SW2	Colle	ected: 09/27/	98 Mat	trix: WATE	R
Test Description	Method	Result 0	<u>Limit</u>	<u>Units</u>	Analyzed
Organochlorine Pesticides	SW 8081A				
Aldrin		ND	0.025	ug/L	10/21/98
alpha-BHC		ND	0.025	ug/L	10/21/98
beta-BHC		ND	0.025	ug/L	10/21/98
delta-BHC		ND	0.025	ug/L	10/21/98
gamma-BHC (Lindane)		ND	0.025	ug/L	10/21/98
alpha-Chlordane		ND	0.025	ug/L	10/21/98
gamma-Chlordane		ND	0.025	ug/L	10/21/98
4,4'-DDD		ND	0.050	ug/L	10/21/98
4,4'-DDE		ND	0.050	ug/L	10/21/98
4,4'-DDT		ND	0.050	ug/L	10/21/98
Dieldrin		ND	0.025	ug/L	10/21/98
Endosulfan I		ND	0.050	ug/L	10/21/98
Endosulfan II		ND	0.050	ug/L	10/21/98
Endosulfan Sulfate		ND	0.050	ug/L	10/21/98
Endrin		ND	0.050	ug/L	10/21/98
Endrin Aldehyde		ND	0.050	ug/L	10/21/98
Heptachlor		ND	0.025	ug/L	10/21/98
Heptachlor Epoxide		ND	0.025	ug/L	10/21/98
Methoxychlor		ND	0.25	ug/L	10/21/98
Toxaphene		ND	0.75	ug/L	10/21/98
SURROGATES, & Recovery			•		
Tetrachlorometaxylene		75.0	Min:	45 !	Max: 124
Decachlorobiphenyl		65.0	Min:	45	Max: 124

Order # 98-09-259

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#### Department of the Air Force TEST RESULTS by SAMPLE

Page 39

Sample: 08B 48030988058 SW2		Collected: 09/27/98 Matrix: WATER					
Test Description	Method	Result 0	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>		
Polychlorinated Biphenyls PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 PCB-1016	SW 8082	ND ND ND ND ND ND ND	1.0 0.50 0.50 0.50 0.50 0.50 0.50	ug/L ug/L ug/L ug/L ug/L ug/L ug/L	10/21/98 10/21/98 10/21/98 10/21/98 10/21/98 10/21/98 10/21/98		
SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		75.0 65.0	Min: Min:	29 M 26 M	Max: 133 Max: 137		

Sample: 08C 48030988058 SW2 Collected: 09/27/98 Matrix: WATER

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	Method	Result 0	<u>Limit</u>	<u>Units</u>	Analyzed
Test Description	SW 8260B				20/00/08
volatiles by GC/MS		ND	5.0	ug/L	10/09/98
Dichiorodiliaoromethane		ND	5.0	ug/L	10/09/98
Chioride		ND	2.0	ug/L	10/09/98
Vinyi Chioritae	•	ND	5.0	ug/L	10/09/90
Bromomethane		ND	5.0	ug/L	10/09/90
Chioroechane maishlerofluoromethane		ND	2.0	ug/L	10/09/98
1 1 Dichloroethene		ND	2.0	ug/L	10/09/98
1, I-Dichioroethane		ND	2.0	ug/L	10/09/98
Trichiorocritituorocomme		4.8 JB	10	ug/L	10/09/98
Methylene Chiolide		ND	2.0	ug/L	10/09/98
trans-1,2-bichloroethane		ND	2.0	ug/L	10/09/98
1,1-Dichioropropape		ND	2.0	ug/L	10/09/98
2,2-Dichioropropane		ND	2.0	ug/L	10/09/98
C15-1,2-DICHIOIOECHCHC		ND	2.0	ug/L	10/09/98
Bromochioromechane		ND	,2.0	ug/L	10/09/98
Chlorolorm		ND	2.0	ug/L	10/09/98
1,1,1-Trichiordechanc		ND	2.0	ug/L	10/09/98
Carbon Tetrachioride		ND	2.0	ug/L	10/09/98
1,1-Dichtoropropene		ND	2.0	ug/L	10/09/98
Benzene		ND	2.0	ug/L	10/09/98
1,2-Dichloroethane		ND	2.0	ug/L	10/09/98
Trichloroetnene		ND	2.0	ug/L	10/09/98
1,2-Dichloropropane		ND	2.0	ug/L	10/09/98
Dibromomethane		ND	2.0	ug/L	10/09/98
Bromodichlorometnane		ND	2.0	ug/L	10/09/98
cis-1,3-Dichloropropene		ND	2.0	ug/L	10/09/98
Toluene		ND	2.0	ug/L	10/09/98
trans-1,3-Dichloropropene		ND	2.0	ug/L	10/09/98
1,1,2-Trichloroethane		ND	2.0	ug/L	10/09/98
Tetrachloroethene		ND	2.0	ug/L	10/09/98
1,3-Dichloropropane		ND	2.0	ug/L	10/09/98
Dibromochloromethane		ND	2.0	ug/L	10/09/98
1,2-Dibromoethane					

#### Department of the Air Force TEST RESULTS by SAMPLE

Page 40

Sample: 08C 48030988058 SW2 Collected: 09/27/98 Matrix: WATER

Test Description	Met	thod	<u>Result</u>	0	<u>Limit</u>	<u>Units</u>		<u>Analyzed</u>
Volatiles by GC/MS	SW	8260B	(continued	from	previo	us page)		
Chlorobenzene			ND		2.0	ug/L		10/09/98
Ethylbenzene			ND		2.0	ug/L		10/09/98
1,1,1,2-Tetrachloroethane			ND		2.0	ug/L		10/09/98
m,p-Xylenes			ND		2.0	ug/L		10/09/98
o-Xylene			ND		2.0	ug/L		10/09/98
Styrene			ND		2.0	ug/L		10/09/98
Bromoform			ND		2.0	ug/L		10/09/98
Isopropylbenzene			ND		2.0	ug/L		10/09/98
Bromobenzene			ND		2.0	ug/L		10/09/98
n-Propylbenzene			ND		2.0	ug/L		10/09/98
1,1,2,2-Tetrachloroethane			ND		2.0	ug/L		10/09/98
1,2,3-Trichloropropane			ND		2.0	ug/L		10/09/98
2-Chlorotoluene			ND		2.0	ug/L		10/09/98
1,3,5-Trimethylbenzene			ND		2.0	ug/L		10/09/98
4-Chlorotoluene			ND		2.0	ug/L		10/09/98
tert-Butylbenzene			ND		2.0	ug/L		10/09/98
1,2,4-Trimethylbenzene			ND		2.0	ug/L		10/09/98
sec-Butylbenzene			ND		2.0	ug/L		10/09/98
4-Isopropyltoluene			ND		2.0	ug/L		10/09/98
1,3-Dichlorobenzene			ND		2.0	ug/L		10/09/98
1,4-Dichlorobenzene			ND		2.0	ug/L		10/09/98
n-Butylbenzene			ND		2.0	ug/L		10/09/98
1,2-Dichlorobenzene			ND		2.0	ug/L		10/09/98
1,2-Dibromo-3-chloropropane			ND		10	ug/L		10/09/98
1,2,4-Trichlorobenzene			ND		2.0	ug/L		10/09/98
. Hexachlorobutadiene			ND		2.0	ug/L		10/09/98
Napthalene			ND		2.0	ug/L		10/09/98
1,2,3-Trichlorobenzene			ND		2.0	ug/L		10/09/98
Acetone			ND		50	ug/L		10/09/98
Acrylonitrile			ND		10	ug/L		10/09/98
2-Butanone			ND		50	ug/L		10/09/98
Carbon Disulfide			ND		2.0	ug/L		10/09/98
trans-1,4-Dichloro-2-buten			ND		10	ug/L		10/09/98
2-Chloroethyl Vinyl Ether			ND		10	ug/L		10/09/98
2-Hexanone			ND		20	ug/L		10/09/98
Iodomethane			ND		2.0	ug/L		10/09/98
4-Methyl-2-pentanone			ND		20	ug/L		10/09/98
Vinyl Acetate			ND		5.0	ug/L		10/09/98
tert-Butyl methyl ether			ND		2.0	ug/L		10/09/98
SURROGATES, % Recovery					w?	~~	Mass	100
Dibromofluoromethane			98.0		Min:	80	Max:	120
Toluene d-8			104		Min:	88	Max:	110
p-Bromofluorobenzene			108		Min:	86	max:	TT2

Department of the Air Force TEST RESULTS by SAMPLE

Page 41

Sample: 08D 48030988058 SW2 Collected: 09/27/98 Matrix: WATER

Semirolatile Organics         SW 8270C         Image: Constraint of the system of the s	Test Description	Method	Result Q	Limit	Units	Analvzed
Phenol         ND         5.6         ug/L         10/07/98           Dis (2-Chlorophenol         ND         5.6         ug/L         10/07/98           1.4-Dichlorobenzene         ND         5.6         ug/L         10/07/98           1.4-Dichlorobenzene         ND         5.6         ug/L         10/07/98           1.2-Dichlorobenzene         ND         5.6         ug/L         10/07/98           1.2-Dichlorobenzene         ND         5.6         ug/L         10/07/98           2Wethylphenol         ND         5.6         ug/L         10/07/98           2Wethylphenol         ND         5.6         ug/L         10/07/98           4-Methylphenol         ND         5.6         ug/L         10/07/98           Hexachloroschane         ND         5.6         ug/L         10/07/98           Hexachloroschane         ND         5.6         ug/L         10/07/98           2-Nitrophenol         ND         5.6         ug/L         10/07/98           2-A-Dichlorophenol         ND         5.6         ug/L         10/07/98           2-A-Dichlorophenol         ND         5.6         ug/L         10/07/98           2-A-Dichlorophenol         <	Semivolatile Organics	SW 8270C		<u> </u>		
bis(2-Chloroethyl) ether         ND         5.6         ug/L         10/07/98           1,3-Dichlorobenzene         ND         5.6         ug/L         10/07/98           1,4-Dichlorobenzene         ND         5.6         ug/L         10/07/98           8enzyl alcohol         ND         11         ug/L         10/07/98           2-Michlorobenzene         ND         5.6         ug/L         10/07/98           Microbenzene         ND         5.6         ug/L         10/07/98           Nicrobenzene         ND         5.6         ug/L         10/07/98           Isophorone         ND         5.6         ug/L         10/07/98           2.4-Dimethylphenol         ND         5.6         ug/L         10/07/98           2.4-Dimethylphenol         ND         5.6         ug/L         10/07/98           2.4-Dichorophenol         ND         5.6         ug/L         10/07/98           2.4-Dichorophenol	Phenol		ND	5.6	ug/L	10/07/98
2-Chlorophenol         ND         5.6         ug/L         10/07/98           1, 3-Dichlorobenzene         ND         5.6         ug/L         10/07/98           1, 4-Dichlorobenzene         ND         5.6         ug/L         10/07/98           Benzyl alcohol         ND         11         ug/L         10/07/98           1, 2-Dichlorobenzene         ND         5.6         ug/L         10/07/98           2.Wethylphenol         ND         5.6         ug/L         10/07/98           4-Methylphenol         ND         5.6         ug/L         10/07/98           Hexachloroctname         ND         5.6         ug/L         10/07/98           Nitrobenzene         ND         5.6         ug/L         10/07/98           Sephorone         ND         5.6         ug/L         10/07/98           Sephorone         ND         5.6         ug/L         10/07/98           Senothorophenol         ND         5.6         ug/L         10/07/98           Senothorophenol         ND         5.6         ug/L         10/07/98           J.2,4-Trichlorophenol         ND         5.6         ug/L         10/07/98           Napthalene         ND <td< td=""><td>bis(2-Chloroethyl) ether</td><td></td><td>ND</td><td>5.6</td><td>uq/L</td><td>10/07/98</td></td<>	bis(2-Chloroethyl) ether		ND	5.6	uq/L	10/07/98
1.3-Dichlorobenzene       ND       5.6       ug/L       10/07/98         Benzyl alcohol       ND       11       ug/L       10/07/98         1.2-Dichlorobenzene       ND       5.6       ug/L       10/07/98         2.Methylphenol       ND       5.6       ug/L       10/07/98         4.Methylphenol       ND       5.6       ug/L       10/07/98         1.irobersene       ND       5.6       ug/L       10/07/98         2.4-Dimethylphenol       ND       5.6       ug/L       10/07/98         2.4-Dimethylphenol       ND       5.6       ug/L       10/07/98         2.4-Dichorobenzene       ND       5.6       ug/L       10/07/98         2.4-Dichlorophenol	2-Chlorophenol		ND	5.6	uq/L	10/07/98
1.4-Dichlorobenzene         ND         5.6         ug/L         10/07/98           Benzyl alcohol         ND         11         ug/L         10/07/98           1.2-Dichlorobenzene         ND         5.6         ug/L         10/07/98           2.Methylphenol         ND         5.6         ug/L         10/07/98           4.Methylphenol         ND         5.6         ug/L         10/07/98           4.Methylphenol         ND         5.6         ug/L         10/07/98           Hexachloroethane         ND         5.6         ug/L         10/07/98           Hexachloroethane         ND         5.6         ug/L         10/07/98           Isophorone         ND         5.6         ug/L         10/07/98           2-Nitrophenol         ND         5.6         ug/L         10/07/98           Benzoic acid         ND         5.6         ug/L         10/07/98           2.4-Dichlorophenol         ND         5.6         ug/L         10/07/98           1.2,4-Trichlorobenzene         ND         5.6         ug/L         10/07/98           1.2,4-Trichlorobenzene         ND         5.6         ug/L         10/07/98           2.4-Oichoroaitline         N	1,3-Dichlorobenzene		ND	5.6	uq/L	10/07/98
Benzyl alcohol         ND         11         ug/L         10/07/98           1.2-Dichlorobenzene         ND         5.6         ug/L         10/07/98           2-Methylphenol         ND         5.6         ug/L         10/07/98           bis(2-Chloroisopropyl) ether         ND         5.6         ug/L         10/07/98           Hexachloroethane         ND         5.6         ug/L         10/07/98           Nitrobenzene         ND         5.6         ug/L         10/07/98           S.4-Nitrobenzene         ND         5.6         ug/L         10/07/98           S.4-Dimethylphenol         ND         5.6         ug/L         10/07/98           Benzoic acid         ND         5.6         ug/L         10/07/98           S.4-Dimethylphenol         ND         5.6         ug/L         10/07/98           S.4-Dichlorophenol         ND         5.6         ug/L         10/07/98           S.4-Dichlorophenol         ND         5.6         ug/L         10/07/98           S.2,4-Trichlorophenol         ND         5.6         ug/L         10/07/98           A-Chloroaniline         ND         5.6         ug/L         10/07/98           A-Chloroophenol	1,4-Dichlorobenzene		ND	5.6	uq/L	10/07/98
1.2-Dichlorobenzene       ND       5.6       ug/L       10/07/98         2-Methylphenol       ND       5.6       ug/L       10/07/98         4-Methylphenol       ND       5.6       ug/L       10/07/98         4-Methylphenol       ND       5.6       ug/L       10/07/98         A-Mitroso-di-n-propylamine       ND       5.6       ug/L       10/07/98         Hexachloroethane       ND       5.6       ug/L       10/07/98         Isophorone       ND       5.6       ug/L       10/07/98         2-Nitrophenol       ND       5.6       ug/L       10/07/98         2.4-Dimethylphenol       ND       5.6       ug/L       10/07/98         2.4-Dichlorophenol       ND       5.6       ug/L       10/07/98         2.4-Dichlorophenol       ND       5.6       ug/L       10/07/98         A-Chloroaniline       ND       5.6       ug/L       10/07/98         Napthalene       ND       5.6       ug/L       10/07/98         4-Chloroaniline       ND       5.6       ug/L       10/07/98         A-Chloroaniline       ND       5.6       ug/L       10/07/98         2.4.6.71chlorophenol       ND </td <td>Benzyl alcohol</td> <td></td> <td>ND</td> <td>11</td> <td>uq/L</td> <td>10/07/98</td>	Benzyl alcohol		ND	11	uq/L	10/07/98
2-Methylphenol         ND         5.6         ug/L         10/07/98           bis(2-Chloroisopropyl) ether         ND         5.6         ug/L         10/07/98           A-Methylphenol         ND         5.6         ug/L         10/07/98           n-Nitroso-di-n-propylamine         ND         5.6         ug/L         10/07/98           Nitrobenzene         ND         5.6         ug/L         10/07/98           Isophorone         ND         5.6         ug/L         10/07/98           2-Nitrophenol         ND         5.6         ug/L         10/07/98           2-Altrophenol         ND         5.6         ug/L         10/07/98           bis(2-Chloroethoxy)methane         ND         5.6         ug/L         10/07/98           2.4-Dichlorobenzene         ND         5.6         ug/L         10/07/98           1.2.4-Trichlorobenzene         ND         5.6         ug/L         10/07/98           4-Chloroethoxylmethalene         ND         5.6         ug/L         10/07/98           4-Chloroentotadiene         ND         5.6         ug/L         10/07/98           4-Chloroentophenol         ND         5.6         ug/L         10/07/98           2	1,2-Dichlorobenzene		ND	5.6	ug/L	10/07/98
bis (2-Chloroisopropyl) ether         ND         5.6         ug/L         10/07/98           4-Methylphenol         ND         5.6         ug/L         10/07/98           n-Nitroso-di-n-propylamine         ND         5.6         ug/L         10/07/98           Nitrobenzene         ND         5.6         ug/L         10/07/98           Nitrobenzene         ND         5.6         ug/L         10/07/98           Sophorone         ND         5.6         ug/L         10/07/98           2-Nitrophenol         ND         5.6         ug/L         10/07/98           Benzoic acid         ND         5.6         ug/L         10/07/98           bis (2-Chloroethoxy)methane         ND         5.6         ug/L         10/07/98           2.4-Dichlorophenol         ND         5.6         ug/L         10/07/98           2.4-Trichlorobenzene         ND         5.6         ug/L         10/07/98           A-Chloroaniline         ND         5.6         ug/L         10/07/98           A-Chloroaniline         ND         5.6         ug/L         10/07/98           A-Chloroaniline         ND         5.6         ug/L         10/07/98           A-Ghloroaphenol	2-Methylphenol		ND	5.6	ug/L	10/07/98
4-Methylphenol         ND         5.6         ug/L         10/07/98           n-Nitroso-di-n-propylamine         ND         5.6         ug/L         10/07/98           Hexachloroethane         ND         5.6         ug/L         10/07/98           Nitrobenzene         ND         5.6         ug/L         10/07/98           Isophorone         ND         5.6         ug/L         10/07/98           2-Nitrophenol         ND         5.6         ug/L         10/07/98           Benzoic acid         ND         5.6         ug/L         10/07/98           2.4-Dimethylphenol         ND         5.6         ug/L         10/07/98           2.4-Dicoethoxylmethane         ND         5.6         ug/L         10/07/98           2.4-Dichorophenol         ND         5.6         ug/L         10/07/98           A-Chloroaniline         ND         5.6         ug/L         10/07/98           4-Chloroaniline         ND         5.6         ug/L         10/07/98           2-4chlorobutadiene         ND         5.6         ug/L         10/07/98           2-4.5-Trichlorophenol         ND         5.6         ug/L         10/07/98           2.4.6-Trichlorophenol	bis(2-Chloroisopropyl) et	ther	ND	5.6	ug/L	10/07/98
n-Nitroso-di-n-propylamine       ND       5.6       ug/L       10/07/98         Hexachloroethame       ND       5.6       ug/L       10/07/98         Nitrobenzene       ND       5.6       ug/L       10/07/98         Isophorone       ND       5.6       ug/L       10/07/98         2-Nitrophenol       ND       5.6       ug/L       10/07/98         2.4-Dimethylphenol       ND       5.6       ug/L       10/07/98         bis (2-Chloroethoxy)methane       ND       5.6       ug/L       10/07/98         2.4-Dichlorophenol       ND       5.6       ug/L       10/07/98         1.2.4-Trichlorobenzene       ND       5.6       ug/L       10/07/98         Naphthalene       ND       5.6       ug/L       10/07/98         4-Chloroaniline       ND       5.6       ug/L       10/07/98         4-Chloroanitine       ND       5.6       ug/L       10/07/98         2-Methylnaphthalene       ND       5.6       ug/L       10/07/98         2.4-5.Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4.5.Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4.5.Trich	4-Methylphenol		ND	5.6	uq/L	10/07/98
Hexachloroethane         ND         5.6         ug/L         10/07/98           Nitrobenzene         ND         5.6         ug/L         10/07/98           Isophorone         ND         5.6         ug/L         10/07/98           2-Nitrophenol         ND         5.6         ug/L         10/07/98           2-Nitrophenol         ND         5.6         ug/L         10/07/98           Benzoic acid         ND         5.6         ug/L         10/07/98           bis (2-Chloroethoxy)methane         ND         5.6         ug/L         10/07/98           1.2, 4-Trichlorobhenzene         ND         5.6         ug/L         10/07/98           Naphthalene         ND         5.6         ug/L         10/07/98           Naphthalene         ND         5.6         ug/L         10/07/98           Hexachlorobutadiene         ND         5.6         ug/L         10/07/98           4-Chloro-3-methylphenol         ND         5.6         ug/L         10/07/98           4-Chloro-3-methylphenol         ND         5.6         ug/L         10/07/98           2.4, 6-Trichlorophenol         ND         5.6         ug/L         10/07/98           2.4, 5-Trichlorophenol<	n-Nitroso-di-n-propylamin	ne	ND	5.6	ug/L	10/07/98
Nitrobenzene         ND         5.6         ug/L         10/07/98           Isophorone         ND         5.6         ug/L         10/07/98           2-Nitrophenol         ND         5.6         ug/L         10/07/98           2.4-Dimethylphenol         ND         5.6         ug/L         10/07/98           Benzoic acid         ND         5.6         ug/L         10/07/98           bis (2-Chloroethoxy)methane         ND         5.6         ug/L         10/07/98           2.4-Dichlorophenol         ND         5.6         ug/L         10/07/98           Naphthalene         ND         5.6         ug/L         10/07/98           Naphthalene         ND         5.6         ug/L         10/07/98           4-Chloroaniline         ND         5.6         ug/L         10/07/98           4-Chloroaniline         ND         5.6         ug/L         10/07/98           4-Chloroaniline         ND         5.6         ug/L         10/07/98           2-Methylnaphthalene         ND         5.6         ug/L         10/07/98           2.4.6-Trichlorophenol         ND         5.6         ug/L         10/07/98           2.4.5-Trichlorophenol         ND<	Hexachloroethane		ND	5.6	ug/L	10/07/98
Isophorone         ND         5.6         ug/L         10/07/98           2-Nitrophenol         ND         5.6         ug/L         10/07/98           2.4-Dimethylphenol         ND         5.6         ug/L         10/07/98           Benzoic acid         ND         5.6         ug/L         10/07/98           bis(2-Chloropethoxy)methane         ND         5.6         ug/L         10/07/98           2.4-Dichlorophenol         ND         5.6         ug/L         10/07/98           3.2.4-Trichlorophenol         ND         5.6         ug/L         10/07/98           Naphthalene         ND         5.6         ug/L         10/07/98           4-Chloroaniline         ND         5.6         ug/L         10/07/98           4-Chloroaniline         ND         5.6         ug/L         10/07/98           4-Chloroanethylphenol         ND         5.6         ug/L         10/07/98           2-Methylnaphthalene         ND         5.6         ug/L         10/07/98           2.4.6-Trichlorophenol         ND         5.6         ug/L         10/07/98           2.4.5-Trichlorophenol         ND         5.6         ug/L         10/07/98           2.4.5-Iniconaphth	Nitrobenzene		ND	5.6	uq/L	10/07/98
2-Nitrophenol       ND       5.6       ug/L       10/07/98         2.4-Dimethylphenol       ND       5.6       ug/L       10/07/98         Benzoic acid       ND       5.6       ug/L       10/07/98         bis (2-Chloroethoxy)methane       ND       5.6       ug/L       10/07/98         2.4-Dichlorophenol       ND       5.6       ug/L       10/07/98         3.2,4-Trichlorobenzene       ND       5.6       ug/L       10/07/98         Naphthalene       ND       5.6       ug/L       10/07/98         4-Chloroaniline       ND       5.6       ug/L       10/07/98         4-Chloro-3-methylphenol       ND       5.6       ug/L       10/07/98         2-Methylnaphthalene       ND       5.6       ug/L       10/07/98         2.4, 6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4, 6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4, 5-Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4, 5-Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4, 5-Trichlorophenol       ND       5.6       ug/L       10/07/98 <t< td=""><td>Isophorone</td><td></td><td>ND</td><td>5.6</td><td>ug/L</td><td>10/07/98</td></t<>	Isophorone		ND	5.6	ug/L	10/07/98
2,4-Dimethylphenol       ND       5.6       ug/L       10/07/98         Benzoic acid       ND       56       ug/L       10/07/98         Benzoic acid       ND       5.6       ug/L       10/07/98         2,4-Dichlorophenol       ND       5.6       ug/L       10/07/98         2,4-Trichlorobenzene       ND       5.6       ug/L       10/07/98         Naphthalene       ND       5.6       ug/L       10/07/98         4-Chloroaniline       ND       5.6       ug/L       10/07/98         4-chloroaniline       ND       5.6       ug/L       10/07/98         4-Chloro-3-methylphenol       ND       5.6       ug/L       10/07/98         2-Methylnaphthalene       ND       5.6       ug/L       10/07/98         2-A.6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4, 6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2-Ntroaniline       ND       5.6       ug/L       10/07/98         2-Ntroaniline       ND       5.6       ug/L       10/07/98         3-Nitroaniline       ND       5.6       ug/L       10/07/98         A-chaphthene       ND	2-Nitrophenol		ND	5.6	ug/L	10/07/98
Benzoic acid         ND         56         ug/L         10/07/98           bis (2-Chloroethoxy)methane         ND         5.6         ug/L         10/07/98           2,4-Dichlorophenol         ND         5.6         ug/L         10/07/98           1,2,4-Trichlorobenzene         ND         5.6         ug/L         10/07/98           Naphthalene         ND         5.6         ug/L         10/07/98           A-Chloroaniline         ND         5.6         ug/L         10/07/98           4-Chloro-3-methylphenol         ND         5.6         ug/L         10/07/98           2-Methylnaphthalene         ND         5.6         ug/L         10/07/98           2.4, 6-Trichlorophenol         ND         5.6         ug/L         10/07/98           2.4, 5-Trichlorophenol         ND         5.6         ug/L         10/07/98	2,4-Dimethylphenol		ND	5.6	ug/L	10/07/98
bis (2-Chloroethoxy)methane         ND         5.6         ug/L         10/07/98           2,4-Dichlorophenol         ND         5.6         ug/L         10/07/98           1,2,4-Trichlorobenzene         ND         5.6         ug/L         10/07/98           Naphthalene         ND         5.6         ug/L         10/07/98           4-Chloroaniline         ND         5.6         ug/L         10/07/98           4-Chloroaniline         ND         5.6         ug/L         10/07/98           4-Chloro-3-methylphenol         ND         5.6         ug/L         10/07/98           2-Methylnaphthalene         ND         5.6         ug/L         10/07/98           2-Atchorocyclopentadiene         ND         5.6         ug/L         10/07/98           2-At.6-Trichlorophenol         ND         5.6         ug/L         10/07/98           2-At.6-Trichlorophenol         ND         5.6         ug/L         10/07/98           2-Ntroaniline         ND         5.6         ug/L         10/07/98           2-Ntroaniline         ND         5.6         ug/L         10/07/98           3-Nitroaniline         ND         5.6         ug/L         10/07/98           3	Benzoic acid		ND	56	uq/L	10/07/98
2,4-Dichlorophenol       ND       5.6       ug/L       10/07/98         1,2,4-Trichlorobenzene       ND       5.6       ug/L       10/07/98         Naphthalene       ND       5.6       ug/L       10/07/98         Naphthalene       ND       5.6       ug/L       10/07/98         Hexachlorobutadiene       ND       5.6       ug/L       10/07/98         Hexachlorobutadiene       ND       5.6       ug/L       10/07/98         2-Methylnaphthalene       ND       5.6       ug/L       10/07/98         2-Methylnaphthalene       ND       5.6       ug/L       10/07/98         2.4,6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4,5-Trichlorophenol       ND       5.6       ug/L       10/07/98         2-Natroanitine       ND       5.6       ug/L       10/07/98         2-Natroanitine       ND       5.6       ug/L       10/07/98         Dimethylphthalate       ND       5.6       ug/L       10/07/98         Acenaphthene       ND       5.6       ug/L       10/07/98         2.4,5-Trichlorophenol       ND       5.6       ug/L       10/07/98         Dimethylphthalate	bis(2-Chloroethoxy)methan	ne	ND	5.6	ug/L	10/07/98
1,2,4-Trichlorobenzene       ND       5.6       ug/L       10/07/98         Naphthalene       ND       5.6       ug/L       10/07/98         4-Chloroaniline       ND       5.6       ug/L       10/07/98         4-Chloroaniline       ND       5.6       ug/L       10/07/98         4-Chloro-3-methylphenol       ND       5.6       ug/L       10/07/98         2-Methylnaphthalene       ND       5.6       ug/L       10/07/98         2.4,6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4,5-Trichlorophenol       ND       5.6       ug/L       10/07/98	2,4-Dichlorophenol		ND	5.6	ug/L	10/07/98
Naphthalene         ND         5.6         ug/L         10/07/98           4-Chloroaniline         ND         5.6         ug/L         10/07/98           Hexachlorobutadiene         ND         5.6         ug/L         10/07/98           Hexachlorobutadiene         ND         5.6         ug/L         10/07/98           2-Methylnaphthalene         ND         5.6         ug/L         10/07/98           2-Methylnaphthalene         ND         5.6         ug/L         10/07/98           2.4,6-Trichlorophenol         ND         5.6         ug/L         10/07/98           2.4,5-Trichlorophenol         ND         5.6         ug/L         10/07/98           2-Chloronaphthalene         ND         11         ug/L         10/07/98           2-Nitroaniline         ND         5.6         ug/L         10/07/98           Acenaphthylene         ND         5.6         ug/L         10/07/98           Acenaphthene         ND         5.6         ug/L         10/07/98           2.4-Dinitrophenol         ND         5.6         ug/L         10/07/98           4-Nitroaniline         ND         5.6         ug/L         10/07/98           2.4-Dinitrotoluene	1,2,4-Trichlorobenzene		ND	5.6	ug/L	10/07/98
4-Chloroaniline       ND       5.6       ug/L       10/07/98         Hexachlorobutadiene       ND       5.6       ug/L       10/07/98         4-Chloro-3-methylphenol       ND       5.6       ug/L       10/07/98         2-Methylnaphthalene       ND       5.6       ug/L       10/07/98         2-Methylnaphthalene       ND       5.6       ug/L       10/07/98         2.4.6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4.5-Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4.5-Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4.5-Trichlorophenol       ND       5.6       ug/L       10/07/98         2-Nitroaniline       ND       5.6       ug/L       10/07/98         2-Nitroaniline       ND       5.6       ug/L       10/07/98         Acenaphthylene       ND       5.6       ug/L       10/07/98         2.4-Dinitrophenol       ND       5.6       ug/L       10/07/98         4-Nitroaniline       ND       5.6       ug/L       10/07/98         2.4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2.4-D	Naphthalene		ND	5.6	ug/L	10/07/98
Hexachlorobutadiene         ND         5.6         ug/L         10/07/98           4-Chloro-3-methylphenol         ND         5.6         ug/L         10/07/98           2-Methylnaphthalene         ND         5.6         ug/L         10/07/98           Hexachlorocyclopentadiene         ND         5.6         ug/L         10/07/98           2.4, 6-Trichlorophenol         ND         5.6         ug/L         10/07/98           2.4, 5-Trichlorophenol         ND         5.6         ug/L         10/07/98           2.4, 5-Trichlorophenol         ND         5.6         ug/L         10/07/98           2-Chloronaphthalene         ND         11         ug/L         10/07/98           2-Chloronaphthalene         ND         5.6         ug/L         10/07/98           2-Ntroaniline         ND         5.6         ug/L         10/07/98           Acenaphtylene         ND         5.6         ug/L         10/07/98           3-Nitroaniline         ND         5.6         ug/L         10/07/98           4.cenaphthene         ND         5.6         ug/L         10/07/98           2.4-Dinitrophenol         ND         5.6         ug/L         10/07/98	4-Chloroaniline		ND	5.6	ug/L	10/07/98
4-Chloro-3-methylphenol       ND       5.6       ug/L       10/07/98         2-Methylnaphthalene       ND       5.6       ug/L       10/07/98         Hexachlorocyclopentadiene       ND       5.6       ug/L       10/07/98         2,4,6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2,4,6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2,4,6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2-Chloronaphthalene       ND       11       ug/L       10/07/98         2-Nitroaniline       ND       5.6       ug/L       10/07/98         Acenaphthylene       ND       5.6       ug/L       10/07/98         3-Nitroaniline       ND       5.6       ug/L       10/07/98         4.cenaphthylene       ND       5.6       ug/L       10/07/98         3-Nitroaniline       ND       5.6       ug/L       10/07/98         4.enaphthene       ND       5.6       ug/L       10/07/98         2,4-Dinitrophenol       ND       5.6       ug/L       10/07/98         2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,6-Dinit	Hexachlorobutadiene		ND	5.6	ug/L	10/07/98
2-Methylnaphthalene       ND       5.6       ug/L       10/07/98         Hexachlorocyclopentadiene       ND       5.6       ug/L       10/07/98         2.4.6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4.6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2.4.5-Trichlorophenol       ND       5.6       ug/L       10/07/98         2-Chloronaphthalene       ND       5.6       ug/L       10/07/98         2-Nitroaniline       ND       5.6       ug/L       10/07/98         Dimethylphthalate       ND       5.6       ug/L       10/07/98         Acenaphthylene       ND       5.6       ug/L       10/07/98         3-Nitroaniline       ND       5.6       ug/L       10/07/98         2.4-Dinitrophenol       ND       5.6       ug/L       10/07/98         2.4-Dinitrophenol       ND       5.6       ug/L       10/07/98         2.4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2.6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2.4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2.	4-Chloro-3-methylphenol		ND	5.6	ug/L	10/07/98
Hexachlorocyclopentadiene         ND         5.6         ug/L         10/07/98           2.4,6-Trichlorophenol         ND         5.6         ug/L         10/07/98           2.4,6-Trichlorophenol         ND         5.6         ug/L         10/07/98           2.4,5-Trichlorophenol         ND         5.6         ug/L         10/07/98           2-Chloronaphthalene         ND         5.6         ug/L         10/07/98           2-Nitroaniline         ND         5.6         ug/L         10/07/98           Dimethylphthalate         ND         5.6         ug/L         10/07/98           Acenaphthylene         ND         5.6         ug/L         10/07/98           3-Nitroaniline         ND         5.6         ug/L         10/07/98           Acenaphthene         ND         5.6         ug/L         10/07/98           2.4-Dinitrophenol         ND         5.6         ug/L         10/07/98           2.4-Dinitrophenol         ND         5.6         ug/L         10/07/98           2.6-Dinitrotoluene         ND         5.6         ug/L         10/07/98           2.4-Dinitrotoluene         ND         5.6         ug/L         10/07/98           2.4-Dinitro	2-Methylnaphthalene		ND	5.6	ug/L	10/07/98
2,4,6-Trichlorophenol       ND       5.6       ug/L       10/07/98         2,4,5-Trichlorophenol       ND       5.6       ug/L       10/07/98         2-Chloronaphthalene       ND       11       ug/L       10/07/98         2-Nitroaniline       ND       56       ug/L       10/07/98         Dimethylphthalate       ND       5.6       ug/L       10/07/98         Acenaphthylene       ND       5.6       ug/L       10/07/98         Acenaphthene       ND       5.6       ug/L       10/07/98         Acenaphthene       ND       5.6       ug/L       10/07/98         Acenaphthene       ND       5.6       ug/L       10/07/98         2,4-Dinitrophenol       ND       5.6       ug/L       10/07/98         4-Nitrophenol       ND       5.6       ug/L       10/07/98         2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         Piuorene <td< td=""><td>Hexachlorocyclopentadiene</td><td>3</td><td>ND</td><td>5.6</td><td>ug/L</td><td>10/07/98</td></td<>	Hexachlorocyclopentadiene	3	ND	5.6	ug/L	10/07/98
2,4,5-Trichlorophenol       ND       5.6       ug/L       10/07/98         2-Chloronaphthalene       ND       11       ug/L       10/07/98         2-Nitroaniline       ND       56       ug/L       10/07/98         Dimethylphthalate       ND       5.6       ug/L       10/07/98         Acenaphthylene       ND       5.6       ug/L       10/07/98         Acenaphthylene       ND       5.6       ug/L       10/07/98         Acenaphthene       ND       5.6       ug/L       10/07/98         A.cenaphthene       ND       5.6       ug/L       10/07/98         2,4-Dinitrophenol       ND       56       ug/L       10/07/98         4-Nitrophenol       ND       5.6       ug/L       10/07/98         2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         4-Chlorophenyl-phenylether	2,4,6-Trichlorophenol		ND	5.6	ug/L	10/07/98
2-Chloronaphthalene       ND       11       ug/L       10/07/98         2-Nitroaniline       ND       56       ug/L       10/07/98         Dimethylphthalate       ND       5.6       ug/L       10/07/98         Acenaphthylene       ND       5.6       ug/L       10/07/98         Acenaphthylene       ND       5.6       ug/L       10/07/98         Acenaphthene       ND       56       ug/L       10/07/98         Acenaphthene       ND       56       ug/L       10/07/98         2,4-Dinitrophenol       ND       56       ug/L       10/07/98         4-Nitrophenol       ND       56       ug/L       10/07/98         2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         4-Nitroaniline       ND<	2,4,5-Trichlorophenol		ND	5.6	uq/L	10/07/98
2-Nitroaniline       ND       56       ug/L       10/07/98         Dimethylphthalate       ND       5.6       ug/L       10/07/98         Acenaphthylene       ND       5.6       ug/L       10/07/98         3-Nitroaniline       ND       5.6       ug/L       10/07/98         Acenaphthene       ND       5.6       ug/L       10/07/98         Acenaphthene       ND       5.6       ug/L       10/07/98         2.4-Dinitrophenol       ND       5.6       ug/L       10/07/98         4-Nitrophenol       ND       5.6       ug/L       10/07/98         Dibenzofuran       ND       5.6       ug/L       10/07/98         2.6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2.4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2.4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2.4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         4-Nitroaniline       ND       5.6       ug/L       10/07/98         4.6-Dinitro-2-methylphenol <td>2-Chloronaphthalene</td> <td></td> <td>ND</td> <td>11</td> <td>ug/L</td> <td>10/07/98</td>	2-Chloronaphthalene		ND	11	ug/L	10/07/98
Dimethylphthalate         ND         5.6         ug/L         10/07/98           Acenaphthylene         ND         5.6         ug/L         10/07/98           3-Nitroaniline         ND         5.6         ug/L         10/07/98           Acenaphthene         ND         56         ug/L         10/07/98           Acenaphthene         ND         56         ug/L         10/07/98           Acenaphthene         ND         56         ug/L         10/07/98           2,4-Dinitrophenol         ND         56         ug/L         10/07/98           4-Nitrophenol         ND         56         ug/L         10/07/98           Dibenzofuran         ND         5.6         ug/L         10/07/98           2,6-Dinitrotoluene         ND         5.6         ug/L         10/07/98           2,4-Dinitrotoluene         ND         5.6         ug/L         10/07/98           Jethylphthalate         ND         5.6         ug/L         10/07/98           4-Chlorophenyl-phenylether         ND         5.6         ug/L         10/07/98           4-Nitroaniline         ND         5.6         ug/L         10/07/98           4.6-Dinitro-2-methylphenol         ND <td>2-Nitroaniline</td> <td></td> <td>ND</td> <td>56</td> <td>ug/L</td> <td>10/07/98</td>	2-Nitroaniline		ND	56	ug/L	10/07/98
Acenaphthylene       ND       5.6       ug/L       10/07/98         3-Nitroaniline       ND       56       ug/L       10/07/98         Acenaphthene       ND       5.6       ug/L       10/07/98         Acenaphthene       ND       5.6       ug/L       10/07/98         2,4-Dinitrophenol       ND       56       ug/L       10/07/98         4-Nitrophenol       ND       56       ug/L       10/07/98         Dibenzofuran       ND       5.6       ug/L       10/07/98         2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         A-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         Fluorene       ND       5.6       ug/L       10/07/98         4-Nitroaniline       ND       5.6       ug/L       10/07/98         n-Nitrosodiphenylamine	Dimethylphthalate		ND	5.6	uq/L	10/07/98
3-Nitroaniline       ND       56       ug/L       10/07/98         Acenaphthene       ND       5.6       ug/L       10/07/98         2,4-Dinitrophenol       ND       56       ug/L       10/07/98         4-Nitrophenol       ND       56       ug/L       10/07/98         Dibenzofuran       ND       56       ug/L       10/07/98         2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         Diethylphthalate       ND       5.6       ug/L       10/07/98         4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         Fluorene       ND       5.6       ug/L       10/07/98         4-Nitroaniline       ND       5.6       ug/L       10/07/98         4,6-Dinitro-2-methylphenol       ND       5.6       ug/L       10/07/98         n-Nitrosodiphenylamine       ND       5.6       ug/L       10/07/98         4-Bromophenyl-phenylether </td <td>Acenaphthylene</td> <td></td> <td>ND</td> <td>5.6</td> <td>uq/L</td> <td>10/07/98</td>	Acenaphthylene		ND	5.6	uq/L	10/07/98
Acenaphthene       ND       5.6       ug/L       10/07/98         2,4-Dinitrophenol       ND       56       ug/L       10/07/98         4-Nitrophenol       ND       56       ug/L       10/07/98         Dibenzofuran       ND       5.6       ug/L       10/07/98         2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         Diethylphthalate       ND       5.6       ug/L       10/07/98         4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         Fluorene       ND       5.6       ug/L       10/07/98         4-Nitroaniline       ND       5.6       ug/L       10/07/98         4,6-Dinitro-2-methylphenol       ND       5.6       ug/L       10/07/98         n-Nitrosodiphenylamine       ND       5.6       ug/L       10/07/98         4-Bromophenyl-phenylether       ND       5.6       ug/L       10/07/98	3-Nitroaniline		ND	56	ug/L	10/07/98
2,4-Dinitrophenol       ND       56       ug/L       10/07/98         4-Nitrophenol       ND       56       ug/L       10/07/98         Dibenzofuran       ND       5.6       ug/L       10/07/98         2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         Diethylphthalate       ND       5.6       ug/L       10/07/98         4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         Fluorene       ND       5.6       ug/L       10/07/98         4-Nitroaniline       ND       5.6       ug/L       10/07/98         4,6-Dinitro-2-methylphenol       ND       5.6       ug/L       10/07/98         n-Nitrosodiphenylamine       ND       5.6       ug/L       10/07/98         4-Bromophenyl-phenylether       ND       5.6       ug/L       10/07/98	Acenaphthene		ND	5.6	uq/L	10/07/98
4-Nitrophenol       ND       56       ug/L       10/07/98         Dibenzofuran       ND       5.6       ug/L       10/07/98         2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         Diethylphthalate       ND       5.6       ug/L       10/07/98         4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         Fluorene       ND       5.6       ug/L       10/07/98         4-Nitroaniline       ND       5.6       ug/L       10/07/98         4,6-Dinitro-2-methylphenol       ND       5.6       ug/L       10/07/98         n-Nitrosodiphenylamine       ND       5.6       ug/L       10/07/98         4-Bromophenyl-phenylether       ND       5.6       ug/L       10/07/98	2,4-Dinitrophenol		ND	56	uq/L	10/07/98
Dibenzofuran         ND         5.6         ug/L         10/07/98           2,6-Dinitrotoluene         ND         5.6         ug/L         10/07/98           2,4-Dinitrotoluene         ND         5.6         ug/L         10/07/98           Diethylphthalate         ND         5.6         ug/L         10/07/98           4-Chlorophenyl-phenylether         ND         5.6         ug/L         10/07/98           Fluorene         ND         5.6         ug/L         10/07/98           4-Nitroaniline         ND         5.6         ug/L         10/07/98           4,6-Dinitro-2-methylphenol         ND         5.6         ug/L         10/07/98           n-Nitrosodiphenylamine         ND         5.6         ug/L         10/07/98           4-Bromophenyl-phenylether         ND         5.6         ug/L         10/07/98	4-Nitrophenol		ND	56	ug/L	10/07/98
2,6-Dinitrotoluene       ND       5.6       ug/L       10/07/98         2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         Diethylphthalate       ND       5.6       ug/L       10/07/98         4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         Fluorene       ND       5.6       ug/L       10/07/98         4-Nitroaniline       ND       5.6       ug/L       10/07/98         4,6-Dinitro-2-methylphenol       ND       5.6       ug/L       10/07/98         n-Nitrosodiphenylamine       ND       5.6       ug/L       10/07/98         4-Bromophenyl-phenylether       ND       5.6       ug/L       10/07/98	Dibenzofuran		ND	5.6	ug/L	10/07/98
2,4-Dinitrotoluene       ND       5.6       ug/L       10/07/98         Diethylphthalate       ND       5.6       ug/L       10/07/98         4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         Fluorene       ND       5.6       ug/L       10/07/98         4-Nitroaniline       ND       5.6       ug/L       10/07/98         4,6-Dinitro-2-methylphenol       ND       5.6       ug/L       10/07/98         n-Nitrosodiphenylamine       ND       5.6       ug/L       10/07/98         4-Bromophenyl-phenylether       ND       5.6       ug/L       10/07/98	2,6-Dinitrotoluene		ND	5.6	ug/L	10/07/98
Diethylphthalate       ND       5.6       ug/L       10/07/98         4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         Fluorene       ND       5.6       ug/L       10/07/98         4-Nitroaniline       ND       5.6       ug/L       10/07/98         4,6-Dinitro-2-methylphenol       ND       5.6       ug/L       10/07/98         n-Nitrosodiphenylamine       ND       5.6       ug/L       10/07/98         4-Bromophenyl-phenylether       ND       5.6       ug/L       10/07/98	2,4-Dinitrotoluene		ND	5.6	ug/L	10/07/98
4-Chlorophenyl-phenylether       ND       5.6       ug/L       10/07/98         Fluorene       ND       5.6       ug/L       10/07/98         4-Nitroaniline       ND       5.6       ug/L       10/07/98         4,6-Dinitro-2-methylphenol       ND       5.6       ug/L       10/07/98         n-Nitrosodiphenylamine       ND       5.6       ug/L       10/07/98         4-Bromophenyl-phenylether       ND       5.6       ug/L       10/07/98	Diethylphthalate		ND	5.6	ug/L	10/07/98
Fluorene     ND     5.6     ug/L     10/07/98       4-Nitroaniline     ND     5.6     ug/L     10/07/98       4,6-Dinitro-2-methylphenol     ND     5.6     ug/L     10/07/98       n-Nitrosodiphenylamine     ND     5.6     ug/L     10/07/98       4-Bromophenyl-phenylether     ND     5.6     ug/L     10/07/98	4-Chlorophenyl-phenylethe	er	ND	5.6		10/07/98
4-Nitroaniline     ND     5.6 ug/L     10/07/98       4,6-Dinitro-2-methylphenol     ND     56 ug/L     10/07/98       n-Nitrosodiphenylamine     ND     5.6 ug/L     10/07/98       4-Bromophenyl-phenylether     ND     5.6 ug/L     10/07/98	Fluorene		ND	5.6	ug/L	10/07/98
4,6-Dinitro-2-methylphenol     ND     56     ug/L     10/07/98       n-Nitrosodiphenylamine     ND     5.6     ug/L     10/07/98       4-Bromophenyl-phenylether     ND     5.6     ug/L     10/07/98	4-Nitroaniline		ND	5.6	ug/L	10/07/98
n-Nitrosodiphenylamine ND 5.6 ug/L 10/07/98 4-Bromophenyl-phenylether ND 5.6 ug/L 10/07/98	4,6-Dinitro-2-methylpheno	51	ND	56		10/07/98
4-Bromophenyl-phenylether ND 5.6 ug/L 10/07/98	n-Nitrosodiphenylamine		ND	5.6	ug/L	10/07/98
	4-Bromophenyl-phenylether	c	ND	5.6	uq/L	10/07/98

84 151

Order # 98-09-259 ANALYTICA, INC.

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 08D 48030988058 SW2 Collected: 09/27/98 Matrix: WATER

Test Description	Method	Result	0	<u>Limit</u>	<u>Units</u>		Analyzed
Semivolatile Organics	SW 8270C	(continued	from	previo	us page)		
Hexachlorobenzene		ND		5.6	ug/L		10/07/98
Pentachlorophenol		ND		5.6	ug/L		10/07/98
Phenanthrene		ND		5.6	ug/L		10/07/98
Anthracene		ND		5.6	ug/L		10/07/98
Di-n-butylphthalate		ND		5.6	ug/L		10/07/98
Fluoranthene		ND		5.6	ug/L		10/07/98
Pyrene		ND		5.6	ug/L		10/07/98
Butylbenzylphthalate		ND		5.6	ug/L		10/07/98
3,3'-Dichlorobenzidine		ND		22	ug/L		10/07/98
Benzo (a) Anthracene		ND		5.6	ug/L		10/07/98
Chrysene		ND		5.6	ug/L		10/07/98
Bis(2-Ethylhexyl)phthalate	,	3.3	JB	5.6	ug/L		10/07/98
Di-n-octylphthalate		ND		5.6	ug/L		10/07/98
Benzo(b)fluoranthene		ND		5.6	ug/L		10/07/98
Benzo(k)fluoranthene		ND		5.6	ug/L		10/07/98
Benzo (a) pyrene		ND		5.6	ug/L		10/07/98
Indeno(1,2,3-cd)pyrene		ND		5.6	ug/L		10/07/98
Dibenz(a,h)anthracene		ND		5.6	ug/L		10/07/98
Benzo(g,h,i)perylene		ND		5.6	ug/L		10/07/98
SURROGATES, % Recovery							
2-Fluorophenol		64.7		Min:	21	Max:	100
d5-Phenol		64.7		Min:	10	Max:	94
d5-Nitrobenzene		86.4		Min:	35	Max:	114
2-Fluorobiphenyl		100		Min:	43	Max:	116
2,4,6-Tribromophenol		70.6		Min:	10	Max:	123
d14-Terphenyl		90.9		Min:	33	Max:	141

84 152

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Order # 98-09-259 ANALYTICA, INC. Department of the Air Force TEST RESULTS by SAMPLE

Page 43

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Sample: 09A 48030988059 SW1	Colle	ected: 09/27,	<b>/98</b> Ma	trix: WATEF	t
Test Description	Method	Result Q	Limit	Units	Analyzed
ICP Metals, TCLP Extracted	SW 1311/6010				
Arsenic		ND	0.050	mg/L	10/15/98
Barium		0.15	0.020	mg/L	10/15/98
Cadmium		ND	0.0050	mg/L	10/15/98
Chromium		ND	0.010	mg/L	10/15/98
Lead		ND	0.050	mg/L	10/15/98
Selenium		ND	0.10	mg/L	10/15/98
Silver		ND	0.010	mg/L	10/15/98
Mercury, TCLP Extracted	SW 1311/7470	ND	0.0020	mg/L	10/20/98
Sample: 09B 48030988059 SW1	Colle	ected: 09/27/	<b>98</b> Ma	trix: WATER	
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Organochlorine Pesticides	SW 8081A				
Aldrin		ND	0.050	ug/L	10/29/98
alpha-BHC		ND	0.050	ug/L	10/29/98
beta-BHC		ND	0.050	ug/L	10/29/98
delta-BHC		ND	0.050	ug/L	10/29/98
gamma-BHC (Lindane)		ND	0.050	ug/L	10/29/98
alpha-Chlordane		ND	0.050	ug/L	10/29/98
gamma-Chlordane		ND	0.050	ug/L	10/29/98
4,4'-DDD		ND	0.10	ug/L	10/29/98
4,4'-DDE		ND	0.10	ug/L	10/29/98
4,4'-DDT		ND	0.10	ug/L	10/29/98
Dieldrin		ND	0.050	ug/L	10/29/98
Endosulfan I		ND	0.10	ug/L	10/29/98
Endosulfan II		ND	0.10	ug/L	10/29/98
Endosulfan Sulfate		ND	0.10	ug/L	10/29/98
Endrin		ND	0.10	ug/L	10/29/98
Endrin Aldehyde		ND	0.10	ug/L	10/29/98
Heptachlor		ND	0.050	ug/L	10/29/98
Heptachlor Epoxide		ND	0.050	ug/L	10/29/98
Methoxychlor		ND	0.50	ug/L	10/29/98
Toxaphene		18 D	1.5	ug/L	10/29/98
SURROGATES, & Recovery					
Tetrachlorometaxylene		95.0	Min:	45 Ma	x: 124
Decachlorobiphenyl		80.0	Min:	45 Ma	<b>x:</b> 124

Department of the Air Force TEST RESULTS by SAMPLE

Page 44

Sample: 09B 48030988059 SW1	<b>/27/98</b> Mat	7/98 Matrix: WATER				
Test Description	Method	<u>Result</u>	<u>O Limit</u>	<u>Units</u>	:	Analyzed
Polychlorinated Biphenyls	SW 8082					
PCB-1221		ND	1.0	ug/L		10/21/98
PCB-1232		ND	0.50	ug/L		10/21/98
PCB-1242		ND	0.50	ug/L		10/21/98
PCB-1248		ND	0.50	ug/L		10/21/98
PCB-1254		ND	0.50	ug/L	:	10/21/98
PCB-1260		ND	0.50	ug/L		10/21/98
PCB-1016		ND	0.50	ug/L		10/21/98
SURROGATES, % Recovery				-		
Tetrachlorometaxylene		60.0	Min:	29	Max:	133
Decachlorobiphenyl		80.0	Min:	26	Max:	137

Sample: 09C 48030988059 SW1 Collected: 09/27/98 Matrix: WATER

Test Description	Method	Result Q	Limit	Units	Analvzed
Volatiles by GC/MS	SW 8260B				
Dichlorodifluoromethane		ND	5.0	ug/L	10/09/98
Chloromethane		ND	5.0	ug/L	10/09/98
Vinyl Chloride		ND	2.0	ug/L	10/09/98
Bromomethane		ND	5.0	ug/L	10/09/98
Chloroethane		ND	5.0	ug/L	10/09/98
Trichlorofluoromethane		ND	2.0	uq/L	10/09/98
1,1-Dichloroethene		ND	2.0	ug/L	10/09/98
Trichlorotrifluoroethane		ND	2.0	ug/L	10/09/98
Methylene Chloride		5.5 JB	10	uq/L	10/09/98
trans-1,2-Dichloroethene		ND	2.0	ug/L	10/09/98
1,1-Dichloroethane		ND	2.0	ug/L	10/09/98
2,2-Dichloropropane		ND	2.0	ug/L	10/09/98
cis-1,2-Dichloroethene		ND	2.0	ug/L	10/09/98
Bromochloromethane		ND	2.0	ug/L	10/09/98
Chloroform		ND	2.0	ug/L	10/09/98
1,1,1-Trichloroethane		ND	2.0	ug/L	10/09/98
Carbon Tetrachloride		ND	2.0	ug/L	10/09/98
1,1-Dichloropropene		ND	2.0	ug/L	10/09/98
Benzene		ND	2.0	ug/L	10/09/98
1,2-Dichloroethane		ND	2.0	ug/L	10/09/98
Trichloroethene		ND	2.0	ug/L	10/09/98
1,2-Dichloropropane		ND	2.0	ug/L	10/09/98
Dibromomethane		ND	2.0	ug/L	10/09/98
Bromodichloromethane		ND	2.0	ug/L	10/09/98
cis-1,3-Dichloropropene		ND	2.0	ug/L	10/09/98
Toluene		0.42 J	2.0	ug/L	10/09/98
trans-1,3-Dichloropropene		ND	2.0	ug/L	10/09/98
1,1,2-Trichloroethane		ND	2.0	ug/L	10/09/98
Tetrachloroethene		ND	2.0	ug/L	10/09/98
1,3-Dichloropropane		ND	2.0	ug/L	10/09/98
Dibromochloromethane		ND	2.0	ug/L	10/09/98
1,2-Dibromoethane		ND	2.0	ug/L	10/09/98

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Department of the Air Force TEST RESULTS by SAMPLE

Page 45

Sample: 09C 48030988059 SW1 Collected: 09/27/98 Matrix: WATER

Test Description	Method	Result	<u>O</u> <u>Limit</u>	<u>Units</u>		<u>Analyzed</u>
Volatiles by GC/MS	SW 8260B	(continued	from previo	ous page)		
Chlorobenzene		ND	2.0	ug/L		10/09/98
Ethylbenzene		ND	2.0	ug/L		10/09/98
1,1,1,2-Tetrachloroethane		ND	2.0	ug/L		10/09/98
m,p-Xylenes		ND	2.0	ug/L		10/09/98
o-Xylene		ND	2.0	ug/L		10/09/98
Styrene		ND	2.0	ug/L		10/09/98
Bromoform		ND	2.0	ug/L		10/09/98
Isopropylbenzene		ND	2.0	ug/L		10/09/98
Bromobenzene		ND	2.0	ug/L		10/09/98
n-Propylbenzene		ND	2.0	ug/L		10/09/98
1,1,2,2-Tetrachloroethane		ND	2.0	ug/L		10/09/98
1,2,3-Trichloropropane		ND	2.0	ug/L		10/09/98
2-Chlorotoluene		ND	2.0	ug/L		10/09/98
1,3,5-Trimethylbenzene		ND	2.0	ug/L		10/09/98
4-Chlorotoluene		ND	2.0	ug/L		10/09/98
tert-Butylbenzene		ŇĎ	2.0	ug/L		10/09/98
1,2,4-Trimethylbenzene		ND	2.0	ug/L		10/09/98
sec-Butylbenzene		ND	2.0	ug/L		10/09/98
4-Isopropyltoluene		ND	2.0	ug/L		10/09/98
1,3-Dichlorobenzene		ND	2.0	ug/L		10/09/98
1,4-Dichlorobenzene		ND	2.0	ug/L		10/09/98
n-Butylbenzene		ND	2.0	ug/L		10/09/98
1,2-Dichlorobenzene		ND	2.0	ug/L		10/09/98
1,2-Dibromo-3-chloropropane		ND	10	ug/L		10/09/98
1,2,4-Trichlorobenzene		ND	2.0	ug/L		10/09/98
Hexachlorobutadiene		ND	2.0	ug/L		10/09/98
Napthalene		ND	2.0	ug/L		10/09/98
1,2,3-Trichlorobenzene		ND	2.0	ug/L		10/09/98
Acetone		ND	50	ug/L		10/09/98
Acrylonitrile		ND	10	ug/L		10/09/98
2-Butanone		ND	50	ug/L		10/09/98
Carbon Disulfide		ND	2.0	ug/L		10/09/98
trans-1,4-Dichloro-2-buten		ND	10	ug/L		10/09/98
2-Chloroethyl Vinyl Ether		ND	10	ug/L		10/09/98
2-Hexanone		ND	20	ug/L		10/09/98
Iodomethane		ND	2.0	ug/L		10/09/98
4-Methyl-2-pentanone		ND	20	ug/L		10/09/98
Vinyl Acetate		ND	5.0	ug/L		10/09/98
tert-Butyl methyl ether		ND	2.0	ug/L		10/09/98
SURROGATES, % Recovery						
Dibromofluoromethane		100	Min:	80	Max:	120
Toluene d-8		104	Min:	88	Max:	110
p-Bromofluorobenzene		106	Min:	86	Max:	115

#### Department of the Air Force TEST RESULTS by SAMPLE

Page 46

Sample: 09D 48030988059 SW1 Collected: 09/27/98 Matrix: WATER

Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Semivolatile Organics	SW 8270C				
Phenol		ND	5.0	ug/L	10/07/98
bis(2-Chloroethyl) ethe	r	ND	5.0	ug/L	10/07/98
2-Chlorophenol		ND	5.0	ug/L	10/07/98
1,3-Dichlorobenzene		ND	5.0	ug/L	10/07/98
1,4-Dichlorobenzene		ND	5.0	ug/L	10/07/98
Benzyl alcohol		ND	10	ug/L	10/07/98
1,2-Dichlorobenzene		ND	5.0	ug/L	10/07/98
2-Methylphenol		ND	5.0	ug/L	10/07/98
bis(2-Chloroisopropyl)	ether	ND	5.0	ug/L	10/07/98
4-Methylphenol		ND	5.0	ug/L	10/07/98
n-Nitroso-di-n-propylam	line	ND	5.0	ug/L	10/07/98
Hexachloroethane		ND	5.0	ug/L	10/07/98
Nitrobenzene		ND	5.0	ug/L	10/07/98
Isophorone		ND	5.0	ug/L	10/07/98
2-Nitrophenol		ND	5.0	ug/L	10/07/98
2,4-Dimethylphenol		ND	5.0	ug/L	10/07/98
Benzoic acid		ND	50	ug/L	10/07/98
bis(2-Chloroethoxy)meth	ane	ND	5.0	ug/L	10/07/98
2,4-Dichlorophenol		ND	5.0	ug/L	10/07/98
1,2,4-Trichlorobenzene		ND	5.0	ug/L	10/07/98
Naphthalene		ND	5.0	ug/L	10/07/98
4-Chloroaniline		ND	5.0	ug/L	10/07/98
Hexachlorobutadiene		ND	5.0	ug/L	10/07/98
4-Chloro-3-methylphenol	L	ND	5.0	ug/L	10/07/98
2-Methylnaphthalene		ND	5.0	ug/L	10/07/98
Hexachlorocyclopentadie	ene	ND	5.0	ug/L	10/07/98
2,4,6-Trichlorophenol		ND	5.0	ug/L	10/07/98
2,4,5-Trichlorophenol		ND	5.0	ug/L	10/07/98
2-Chloronaphthalene		ND	10	ug/L	10/07/98
2-Nitroaniline		ND	50	ug/L	10/07/98
Dimethylphthalate		ND	5.0	ug/L	10/07/98
Acenaphthylene		ND	5.0	ug/L	10/07/98
3-Nitroaniline		ND	50	ug/L	10/07/98
Acenaphthene		ND	5.0	ug/L	10/07/98
2,4-Dinitrophenol		ND	50	ug/L	10/07/98
4-Nitrophenol		ND	50	ug/L	10/07/98
Dibenzofuran		ND	5.0	ug/L	10/07/98
2,6-Dinitrotoluene		ND	5.0	ug/L	10/07/98
2,4-Dinitrotoluene		ND	5.0	ug/L	10/07/98
Diethylphthalate		ND	5.0	ug/L	10/07/98
4-Chlorophenyl-phenyle	ther	ND	5.0	ug/L	10/07/98
Fluorene		ND	5.0	ug/L	10/07/98
4-Nitroaniline		ND	5.0	ug/L	10/07/98
4,6-Dinitro-2-methylph	enol	ND	50	ug/L	10/07/98
n-Nitrosodiphenylamine		ND	5.0	ug/L	10/07/98
4-Bromophenyl-phenylet	her	ND	5.0	ug/L	10/07/98

Department of the Air Force TEST RESULTS by SAMPLE

84 156 Page 47

Sample: 09D 48030988059 SW1 Collected: 09/27/98 Matrix: WATER

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Test Description	Method	Result O	Limit	Imite		7001
Semivolatile Organics	SW 8270C	(continued fr	om previo	Unice		Analyzed
Hexachlorobenzene		ND	5 0	us page, va/t.		10/07/00
Pentachlorophenol		ND	5.0	ug/L		10/07/98
Phenanthrene		NTO	5.0	$\frac{ug}{L}$		10/07/98
Anthracene		ND	5.0	ug/L		10/07/98
Di-n-butylphthalate		NTO	5.0	ug/II		10/07/98
Fluoranthene		NTO	5.0	ug/b		10/07/98
Pyrene		ND	5.0	ug/1 		10/07/98
Butylbenzylphthalate		9 5	5.0	ug/L væ/T		10/07/98
3,3'-Dichlorobenzidine		5.5 NTD	5.0	ug/L		10/07/98
Benzo (a) Anthracene		ND	∠0 E 0	ug/L		10/07/98
Chrysene			5.0	ug/L		10/07/98
Bis(2-Ethylhexyl)phthalate		17 TD	5.0	ug/L		10/07/98
Di-n-octylphthalate			5.0	ug/L		10/07/98
Benzo(b)fluoranthene		ND ND	5.0	ug/L		10/07/98
Benzo(k) fluoranthene			5.0	ug/L		10/07/98
Benzo (a) pyrene			5.0	ug/L		10/07/98
Indeno (1,2,3-cd) pyrene		ND ND	5.0	ug/L		10/07/98
Dibenz (a, h) anthracene		ND	5.0	ug/L		10/07/98
Benzo(q,h,i)pervlene		ND	5.0	ug/L		10/07/98
SURROGATES, & Recovery		ND	5.0	ug/L		10/07/98
2-Fluorophenol						
d5-Phenol		52.7	Min:	21	Max:	100
d5-Nitrobenzene		40./	Min:	10	Max:	94
2-Fluorobiphenvl		78.0	Min:	35	Max:	114
2,4,6-Tribromonbenol		90.0	Min:	43	Max:	116
dl4-Terpheny)		60.0	Min:	10	Max:	123
		91.0	Min:	33	Max:	141

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Order # 98-09-259 ANALYTICA, INC. Department of the Air Force TEST RESULTS by SAMPLE

Sample: 10A 48030988060 SW1	Coll	ected: 09/27/	<b>′98</b> Ma	trix: SOIL	•
Test Description	Method	<u>Result Q</u>	<u>Limit</u>	Units	Analyzed
ICP Metals, TCLP Extracted	SW 1311/6010				
Arsenic		ND	0.050	mg/L	10/09/98
Barium		1.0	0.020	mg/L	10/09/98
Cadmium		ND	0.0050	mg/L	10/09/98
Chromium		ND	0.010	mg/L	10/09/98
Lead		0.095	0.050	mg/L	10/09/98
Selenium		ND	0.10	mg/L	10/09/98
Silver		ND	0.010	mg/L	10/09/98
Mercury, TCLP Extracted	SW 1311/7470	ND	0.0020	mg/L	10/20/98
Sample: 10B 48030988060 SW1	Colle	ected: 09/27/	'98 Mai	rix: SOIL	
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	Units	Analvzed
Organochlorine Pesticides	SW 8081A				<u></u>
Aldrin		ND	0.96	ug/Kg-DRY	10/15/98
alpha-BHC		ND	0.96	ug/Kg-DRY	10/15/98
beta-BHC		ND	0.96	ug/Kg-DRY	10/15/98
delta-BHC		ND	0.96	ug/Kg-DRY	10/15/98
gamma-BHC (Lindane)		NT	0.00		/ /

Percent Moisture	ASTM D2216	13.6	0.1	WT%		10/05/98
Decachiorobipheny	/1	57.1	Min:	45	Max:	124
Tetrachlorometaxy	lene	48.1	Min:	45	Max:	124
SURROGATES, % Rec	covery					
Toxaphene		ND	29	ug/Kg-I	DRY	10/15/98
Methoxychlor		ND	9.6	ug/Kg-I	DRY	10/15/98
Heptachlor Epoxic	le	ND	0.96	ug/Kg-I	DRY	10/15/98
Heptachlor		ND	0.96	ug/Kg-I	DRY	10/15/98
Endrin Aldehyde		ND	1.9	ug/Kg-I	DRY	10/15/98
Endrin		ND	1.9	ug/Kg-I	DRY	10/15/98
Endosulfan Sulfat	ce	ND	1.9	ug/Kg-I	DRY	10/15/98
Endosulfan II		ND	1.9	ug/Kg-I	DRY	10/15/98
Endosulfan I		ND	1.9	ug/Kg-I	DRY	10/15/98
Dieldrin		ND	0.96	ug/Kg-I	DRY	10/15/98
4,4'-DDT		ND	1.9	ug/Kg-I	DRY	10/15/98
4,4'-DDE		ND	1.9	ug/Kg-I	DRY	10/15/98
4,4'-DDD		ND	1.9	ug/Kg-I	DRY	10/15/98
gamma-Chlordane		ND	0.96	ug/Kg-I	DRY	10/15/98
alpha-Chlordane		ND	0.96	ug/Kg-I	DRY	10/15/98
gamma-BHC (Linda)	ne)	ND	0.96	ug/Kg-I	DRY	10/15/98
delta-BHC		ND	0.96	ug/Kg-I	DRY	10/15/98
beta-BHC		ND	0.96	ug/Kg-I	DRY	10/15/98
		ND	0.90	ug/ kg-i	JRI	10/12/38

Order # 98-09-259Department of the Air ForceANALYTICA, INC.TEST RESULTS by SAMPLE

Sample: 10B 48030988060 SW1 Collected: 09/27/98 Matrix: SOIL

Polychlorinated Biphenyls         SN 8082           PCB-1221         ND         39         ug/Kg-DRY         10/18/98           PCB-1232         ND         19         ug/Kg-DRY         10/18/98           PCB-1234         ND         19         ug/Kg-DRY         10/18/98           PCB-1248         ND         19         ug/Kg-DRY         10/18/98           PCB-1256         ND         19         ug/Kg-DRY         10/18/98           PCB-1260         ND         19         ug/Kg-DRY         10/18/98           PCB-1260         ND         19         ug/Kg-DRY         10/18/98           SURROGATES, & Recovery         Tetrachlorometaxylene         40.3         Min:         11         Max:         102           Decachlorobiphenyl         53.2         Min:         35         Max:         11           Semivolatile Organics         SW 8270C         PRenol         ND         190         ug/Kg-DRY         10/21/98           2-Chlorophenol         ND         190         ug/Kg-DRY         10/21/98         10/21/98           1, 3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1, 2-Dichlorobenzene         ND         190         u	Test Description	Method	Result Q	Limit	Units	Analyzed
PCB-1221         ND         39         ug/Kg-DRY         10/18/98           PCB-1232         ND         19         ug/Kg-DRY         10/18/98           PCB-1242         ND         19         ug/Kg-DRY         10/18/98           PCB-1242         ND         19         ug/Kg-DRY         10/18/98           PCB-1254         ND         19         ug/Kg-DRY         10/18/98           PCB-1260         ND         19         ug/Kg-DRY         10/18/98           PCB-1216         ND         19         ug/Kg-DRY         10/18/98           PCB-1261         ND         19         ug/Kg-DRY         10/18/98           PCB-1261         ND         19         ug/Kg-DRY         10/18/98           SURROGATES, % Recovery         10         10         ug/Kg-DRY         10/21/98           Decachlorobtphenyl         53.2         Min:         11         Max:         141           Semivolatile Organics         SW 8270C         Phenol         ND         190         ug/Kg-DRY         10/21/98           2Chlorobenzene         ND         190         ug/Kg-DRY         10/21/98         10/21/98           1.4 -Ditchlorobenzene         ND         190         ug/Kg-DRY <td>Polychlorinated Biphenyls</td> <td>SW 8082</td> <td></td> <td></td> <td></td> <td></td>	Polychlorinated Biphenyls	SW 8082				
PCB-1232         ND         19         ug/Kg-DRY         10/18/98           PCB-1242         ND         19         ug/Kg-DRY         10/18/98           PCB-1244         ND         19         ug/Kg-DRY         10/18/98           PCB-1254         ND         19         ug/Kg-DRY         10/18/98           PCB-1260         ND         19         ug/Kg-DRY         10/18/98           PCB-1260         ND         19         ug/Kg-DRY         10/18/98           SURROGATES, & Recovery         Tetrachlorometaxylene         40.3         Min:         11         Max:         102           Decachlorobiphenyl         53.2         Min:         35         Max:         141           Semivolatile Organics         SW 8270C         Peneol         ND         190         ug/Kg-DRY         10/21/98           J.3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98         13.9.2         10/21/98           J.3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           J.2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           J.2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98 <td>PCB-1221</td> <td></td> <td>ND</td> <td>39</td> <td>ug/Kg-DRY</td> <td>10/18/98</td>	PCB-1221		ND	39	ug/Kg-DRY	10/18/98
PCB-1242         ND         19         19/Kg-DRY         10/18/98           PCB-1248         ND         19         ug/Kg-DRY         10/18/98           PCB-1250         ND         19         ug/Kg-DRY         10/18/98           PCB-1260         ND         19         ug/Kg-DRY         10/18/98           PCB-1016         ND         19         ug/Kg-DRY         10/18/98           SURROGATES, % Recovery         Tetrachlorometaxylene         40.3         Min:         11         Max:         10/11/98           Decachlorobiphenyl         53.2         Min:         35         Max:         11           Semivolatile Organics         SW 8270C         Phenol         ND         190         ug/Kg-DRY         10/21/98           S2-Chlorophenol         ND         190         ug/Kg-DRY         10/21/98         1, 3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1, 4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98         1, 2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1, 2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1, 2-Dichlorobenzene         ND	PCB-1232		ND	19	ug/Kg-DRY	10/18/98
PCB-1248         ND         19         ug/Kg-DRY         10/18/98           PCB-1254         ND         19         ug/Kg-DRY         10/18/98           PCB-1260         ND         19         ug/Kg-DRY         10/18/98           PCB-1216         ND         19         ug/Kg-DRY         10/18/98           PCB-1216         ND         19         ug/Kg-DRY         10/18/98           PCB-1216         ND         19         ug/Kg-DRY         10/18/98           SURROGATES, & Recovery         Tetrachlorometaxylene         40.3         Min:         11         Max:         102           Decachlorobiphenyl         53.2         Min:         35         Max:         11           Semivolatile Organics         SW 8270C         PHenol         ND         190         ug/Kg-DRY         10/21/98           2-Chlorophenol         ND         190         ug/Kg-DRY         10/21/98         13-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1, 2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1, 2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1/2 - Dichlorobenzene         ND	PCB-1242		ND	19	ug/Kg-DRY	10/18/98
PCB-1254         ND         19         ug/Kg-DRY         10/18/98           PCB-1260         ND         19         ug/Kg-DRY         10/18/98           SURROGATES, % Recovery         Tetrachlorometaxylene         40.3         Min:         11         Max:         102           Decachlorobiphenyl         53.2         Min:         35         Max:         141           Semivolatile Organics         SW 8270C         Phenol         ND         190         ug/Kg-DRY         10/21/98           2-Chlorophenol         ND         190         ug/Kg-DRY         10/21/98         2-Chlorophenol         ND         190         ug/Kg-DRY         10/21/98           1.4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98         1.4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1.4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98         1.4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98         10/21/98           2-M	PCB-1248		ND	19	ug/Kg-DRY	10/18/98
PCB-1260         ND         19         ug/Kg-DRY         10/18/98           PCB-1016         ND         19         ug/Kg-DRY         10/18/98           SURROGATES, % Recovery         Tetrachlorometaxylene         40.3         Min:         11         Max:         102           Decachlorobiphenyl         53.2         Min:         11         Max:         11           Semivolatile Organics         SW 8270C         Phenol         ND         190         ug/Kg-DRY         10/21/98           J. 3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           J. 3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           J. 2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           J. 2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           J. 2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           L. 2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           L. 2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           L-2-Chlorobenzene         ND         190         ug/Kg-DRY         10/21/98     <	PCB-1254		ND	19	ug/Kg-DRY	10/18/98
PCB-1016         ND         19         ug/Kg-DRY         10/16/98           SURROGATES, % Recovery         40.3         Min:         11         Max:         102           Decachlorobiphenyl         53.2         Min:         35         Max:         141           Semivolatile Organics         SW 8270C         Fhenol         ND         190         ug/Kg-DRY         10/21/98           Dis(2-Chloroethyl) ether         ND         190         ug/Kg-DRY         10/21/98           1.4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1.3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1.2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           2Methylphenol         ND         190         ug/Kg-DRY         10/21/98           2Methylphenol         ND         190         ug/Kg-DRY         10/21/98           2Methylphenol         ND         190         ug/Kg-DRY         10/21/98           4-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           1.2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           2.4-Dichlorobenze	PCB-1260		ND	19	ug/Kg-DRY	10/18/98
SURROGATES, % Recovery           Tetrachlorometaxylene         40.3         Min:         11         Max:         102           Decachlorobiphenyl         53.2         Min:         35         Max:         141           Semivolatile Organics         SW 8270C         ND         190         ug/Kg-DRY         10/21/98           Phenol         ND         190         ug/Kg-DRY         10/21/98         1,3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1,3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98         1,4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1,2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98         1,2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98         10/21/98           4-Methylphenol         ND         190         ug/Kg-DRY         10/21/98         10/21/98           2-Nitrobenzene         ND         190         ug/Kg-DRY         10/21/98           Nitrobenzene         ND         190         ug/Kg-DRY         10/21/98 <td< td=""><td>PCB-1016</td><td></td><td>ND</td><td>19</td><td>ug/Kg-DRY</td><td>10/18/98</td></td<>	PCB-1016		ND	19	ug/Kg-DRY	10/18/98
Tetrachlorometaxylene         40.3         Min:         11         Max:         102           Decachlorobiphenyl         53.2         Min:         35         Max:         141           Semivolatile Organics         SW 8270C         SW 8270C         Phenol         ND         190         ug/Kg-DRY         10/21/98           Dis(2-Chloroethyl) ether         ND         190         ug/Kg-DRY         10/21/98           1,4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1,4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1,4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           2Methylphenol         ND         190         ug/Kg-DRY         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           -Naitroso-di-n-propylamine         ND         190         ug/Kg-DRY         10/21/98           Nitrobenzene         ND         190         ug/Kg-DRY         10/21/98           Sohorone         ND         190         ug/Kg-DRY         10/21/98           2.4-Litrophenol         ND         190         ug/Kg-DRY         10/21/98	SURROGATES, % Recovery					
Decachlorobiphenyl         53.2         Min:         35         Max:         141           Semivolatile Organics         SW 8270C           Phenol         ND         190         ug/Kg-DRY         10/21/98           bis (2-Chloroethyl) ether         ND         190         ug/Kg-DRY         10/21/98           2-Chlorophenol         ND         190         ug/Kg-DRY         10/21/98           1.4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           Benzyl alcohol         ND         390         ug/Kg-DRY         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           4-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           Mintrobenzene         ND         190         ug/Kg-DRY         10/21/98           1sophorone         ND         190         ug/Kg-DRY         10/21/98           1sophorone         ND         190         ug/Kg-DRY         10/21/98           2-Nitrophenol         ND	Tetrachlorometaxylene		40.3	Min:	ll Max:	102
Semivolatile Organics         SW 8270C           Phenol         ND         190         ug/Kg-DRY         10/21/98           bis (2-Chloroethyl) ether         ND         190         ug/Kg-DRY         10/21/98           2-Chlorophenol         ND         190         ug/Kg-DRY         10/21/98           1,3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1,4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1,2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1,2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           bis (2-Chloroisopropyl) eth         ND         190         ug/Kg-DRY         10/21/98           Nitroso-di-n-propylamine         ND         190         ug/Kg-DRY         10/21/98           Nitrobenzene         ND         190         ug/Kg-DRY         10/21/98           Nitrobenzene         ND         190         ug/Kg-DRY         10/21/98           2.4-Dimethylphenol         ND         190         ug/Kg-DRY         10/21/98           2.4-Dime	Decachlorobiphenyl		53.2	Min:	35 Max:	141
Phenol         ND         190         ug/Kg-DRY         10/21/98           bis (2-Chlorophenol         ND         190         ug/Kg-DRY         10/21/98           1, 3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1, 3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1, 4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1, 2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           4-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           bis(2-Chloroisopropyl) eth         ND         190         ug/Kg-DRY         10/21/98           Nitrobenzene         ND         190         ug/Kg-DRY         10/21/98           Nitrobenzene         ND         190         ug/Kg-DRY         10/21/98           Sophorone         ND         190         ug/Kg-DRY         10/21/98           2.4-Dimethylphenol         ND         190         ug/Kg-DRY         10/21/98 </td <td>Semivolatile Organics</td> <td>SW 8270C</td> <td></td> <td></td> <td></td> <td></td>	Semivolatile Organics	SW 8270C				
bis(2-Chloroethyl) ether         ND         190         ug/Kg-DRY         10/21/98           2-Chlorophenol         ND         190         ug/Kg-DRY         10/21/98           1,3-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1,4-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           Enzyl alcohol         ND         390         ug/Kg-DRY         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           4-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           Microso-din-propylamine         ND         190         ug/Kg-DRY         10/21/98           Nitrobenzene         ND         190         ug/Kg-DRY         10/21/98           Isophorone         ND         190         ug/Kg-DRY         10/21/98           2-Nitrophenol         ND         190         ug/Kg-DRY         10/21/98           2-Altoprotenos         ND         190         ug/Kg-DRY         10/21/98           12-Chlorophenol         ND         190         ug/Kg-DRY         10/21/98	Phenol		ND	190	ug/Kg-DRY	10/21/98
2-Chlorophenol       ND       190       ug/Kg-DRY       10/21/98         1, 3-Dichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         1, 4-Dichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         Benzyl alcohol       ND       390       ug/Kg-DRY       10/21/98         1, 2-Dichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         2-Methylphenol       ND       190       ug/Kg-DRY       10/21/98         4-Methylphenol       ND       190       ug/Kg-DRY       10/21/98         4-Methylphenol       ND       190       ug/Kg-DRY       10/21/98         n-Nitroso-di-n-propylamine       ND       190       ug/Kg-DRY       10/21/98         Nitrobenzene       ND       190       ug/Kg-DRY       10/21/98         Nitrobenzene       ND       190       ug/Kg-DRY       10/21/98         Sophorone       ND       190       ug/Kg-DRY       10/21/98         2.4-Tirophenol       ND       190       ug/Kg-DRY       10/21/98         2.4-Jichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2.4-Dichlorophenol       ND       190       ug/Kg-DRY       10/2	bis(2-Chloroethyl) ether		ND	190	ug/Kg-DRY	10/21/98
1,3-Dichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         1,4-Dichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         Benzyl alcohol       ND       390       ug/Kg-DRY       10/21/98         1,2-Dichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         2-Methylphenol       ND       190       ug/Kg-DRY       10/21/98         4-Methylphenol       ND       190       ug/Kg-DRY       10/21/98         4-Methylphenol       ND       190       ug/Kg-DRY       10/21/98         n-Nitroso-di-n-propylamine       ND       190       ug/Kg-DRY       10/21/98         Nitrobenzene       ND       190       ug/Kg-DRY       10/21/98         Isophorone       ND       190       ug/Kg-DRY       10/21/98         2-Nitrophenol       ND       190       ug/Kg-DRY       10/21/98         2-Nitrophenol       ND       190       ug/Kg-DRY       10/21/98         2-A-Dichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2.4-Dirochorophenol       ND       190       ug/Kg-DRY       10/21/98         3.2.4-Trichlorophenol       ND       190       ug/Kg-DRY <t< td=""><td>2-Chlorophenol</td><td></td><td>ND</td><td>190</td><td>ug/Kg-DRY</td><td>10/21/98</td></t<>	2-Chlorophenol		ND	190	ug/Kg-DRY	10/21/98
1,4-Dichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         Eenzyl alcohol       ND       390       ug/Kg-DRY       10/21/98         1,2-Dichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         2-Methylphenol       ND       190       ug/Kg-DRY       10/21/98         bis (2-Chloroisopropyl) eth       ND       190       ug/Kg-DRY       10/21/98         4-Methylphenol       ND       190       ug/Kg-DRY       10/21/98         n-Nitroso-di-n-propylamine       ND       190       ug/Kg-DRY       10/21/98         Mitrobenzene       ND       190       ug/Kg-DRY       10/21/98         Nitrobenzene       ND       190       ug/Kg-DRY       10/21/98         Sophorone       ND       190       ug/Kg-DRY       10/21/98         2-Nitrophenol       ND       190       ug/Kg-DRY       10/21/98         2-A-Dimethylphenol       ND       190       ug/Kg-DRY       10/21/98         2-A-Dichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2,4-Dichlorophenol       ND       190       ug/Kg-DRY       10/21/98         1,2,4-Trichlorobenzene       ND       190       ug/Kg-DRY <td>1,3-Dichlorobenzene</td> <td></td> <td>ND</td> <td>190</td> <td>ug/Kg-DRY</td> <td>10/21/98</td>	1,3-Dichlorobenzene		ND	190	ug/Kg-DRY	10/21/98
Benzyl alcohol         ND         390         ug/Kg-DRY         10/21/98           1,2-Dichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           bis (2-Chloroisopropyl) eth         ND         190         ug/Kg-DRY         10/21/98           4-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           n-Nitroso-di-n-propylamine         ND         190         ug/Kg-DRY         10/21/98           Mitrobenzene         ND         190         ug/Kg-DRY         10/21/98           Nitrobenzene         ND         190         ug/Kg-DRY         10/21/98           Sophorone         ND         190         ug/Kg-DRY         10/21/98           2-Nitrophenol         ND         190         ug/Kg-DRY         10/21/98           Benzoic acid         ND         190         ug/Kg-DRY         10/21/98           bis (2-Chloroethoxy) methane         ND         190         ug/Kg-DRY         10/21/98           2, 4-Dichlorophenol         ND         190         ug/Kg-DRY         10/21/98           Naphthalene         ND         190         ug/Kg-DRY         10/2	1,4-Dichlorobenzene		ND	190	ug/Kg-DRY	10/21/98
1,2-Dichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         2-Methylphenol       ND       190       ug/Kg-DRY       10/21/98         bis (2-Chloroisopropyl) eth       ND       190       ug/Kg-DRY       10/21/98         a-Methylphenol       ND       190       ug/Kg-DRY       10/21/98         n-Nitroso-di-n-propylamine       ND       190       ug/Kg-DRY       10/21/98         Nitrobenzene       ND       190       ug/Kg-DRY       10/21/98         Isophorone       ND       190       ug/Kg-DRY       10/21/98         2-Nitrophenol       ND       190       ug/Kg-DRY       10/21/98         2-Nitrophenol       ND       190       ug/Kg-DRY       10/21/98         2-Nitrophenol       ND       190       ug/Kg-DRY       10/21/98         2-A-Damethylphenol       ND       190       ug/Kg-DRY       10/21/98         2,4-Dichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2,4-Trichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         1,2,4-Trichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         A-Chloroaniline       ND       190       ug/Kg-DRY	Benzyl alcohol		ND	390	ug/Kg-DRY	10/21/98
2-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           bis (2-Chloroisopropyl) eth         ND         190         ug/Kg-DRY         10/21/98           4-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           n-Nitroso-di-n-propylamine         ND         190         ug/Kg-DRY         10/21/98           Mexachloroethane         ND         190         ug/Kg-DRY         10/21/98           Nitrobenzene         ND         190         ug/Kg-DRY         10/21/98           Sophorone         ND         190         ug/Kg-DRY         10/21/98           2-Nitrophenol         ND         190         ug/Kg-DRY         10/21/98           2.4-Dimethylphenol         ND         190         ug/Kg-DRY         10/21/98           2.4-Dimethylphenol         ND         190         ug/Kg-DRY         10/21/98           2.4-Trichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1.2.4-Trichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           A-Chloroaniline         ND         190         ug/Kg-DRY         10/21/98           4-Chloroaniline         ND         190         ug/Kg-DRY	1,2-Dichlorobenzene		ND	190	ug/Kg-DRY	10/21/98
bis(2-Chloroisopropyl) eth         ND         190         ug/Kg-DRY         10/21/98           4-Methylphenol         ND         190         ug/Kg-DRY         10/21/98           n-Nitroso-di-n-propylamine         ND         190         ug/Kg-DRY         10/21/98           Hexachloroethane         ND         190         ug/Kg-DRY         10/21/98           Nitrobenzene         ND         190         ug/Kg-DRY         10/21/98           Sophorone         ND         190         ug/Kg-DRY         10/21/98           2.Nitrophenol         ND         190         ug/Kg-DRY         10/21/98           2.A-Dimethylphenol         ND         190         ug/Kg-DRY         10/21/98           2.A-Dimethylphenol         ND         190         ug/Kg-DRY         10/21/98           2.4-Dichlorophenol         ND         190         ug/Kg-DRY         10/21/98           2.4-Dichlorophenol         ND         190         ug/Kg-DRY         10/21/98           1.2.4-Trichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           4-Chloroaniline         ND         190         ug/Kg-DRY         10/21/98           4-Chloroa-3-methylphenol         ND         190         ug/Kg-DRY <td>2-Methylphenol</td> <td></td> <td>ND</td> <td>190</td> <td>ug/Kg-DRY</td> <td>10/21/98</td>	2-Methylphenol		ND	190	ug/Kg-DRY	10/21/98
4-Methylphenol       ND       190       ug/Kg-DRY       10/11/98         n-Nitroso-di-n-propylamine       ND       190       ug/Kg-DRY       10/21/98         Hexachloroethane       ND       190       ug/Kg-DRY       10/21/98         Nitrobenzene       ND       190       ug/Kg-DRY       10/21/98         Isophorone       ND       190       ug/Kg-DRY       10/21/98         2-Nitrophenol       ND       190       ug/Kg-DRY       10/21/98         2.4-Dimethylphenol       ND       190       ug/Kg-DRY       10/21/98         Benzoic acid       ND       190       ug/Kg-DRY       10/21/98         bis (2-Chloroethoxy)methane       ND       190       ug/Kg-DRY       10/21/98         1, 2, 4-Trichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         Naphthalene       ND       190       ug/Kg-DRY       10/21/98         4-Chloroaniline       ND       190       ug/Kg-DRY       10/21/98         Hexachlorobutadiene       ND       190       ug/Kg-DRY       10/21/98         4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY	bis(2-Chloroisopropyl) eth		ND	190	ug/Kg-DRY	10/21/98
n-Nitroso-di-n-propylamine       ND       190       ug/Kg-DRY       10/21/98         Hexachloroethane       ND       190       ug/Kg-DRY       10/21/98         Nitrobenzene       ND       190       ug/Kg-DRY       10/21/98         Isophorone       ND       190       ug/Kg-DRY       10/21/98         2-Nitrophenol       ND       190       ug/Kg-DRY       10/21/98         2.4-Dimethylphenol       ND       190       ug/Kg-DRY       10/21/98         Benzoic acid       ND       190       ug/Kg-DRY       10/21/98         bis(2-Chloroethoxy)methane       ND       190       ug/Kg-DRY       10/21/98         1.2,4-Trichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         Naphthalene       ND       190       ug/Kg-DRY       10/21/98         Naphthalene       ND       190       ug/Kg-DRY       10/21/98         A-Chloroaniline       ND       190       ug/Kg-DRY       10/21/98         Hexachlorobutadiene       ND       190       ug/Kg-DRY       10/21/98         4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY	4-Methylphenol		ND	190	ug/Kg-DRY	10/21/98
Hexachloroethane       ND       190       ug/Kg-DRY       10/21/98         Nitrobenzene       ND       190       ug/Kg-DRY       10/21/98         Isophorone       ND       190       ug/Kg-DRY       10/21/98         Isophorone       ND       190       ug/Kg-DRY       10/21/98         2-Nitrophenol       ND       190       ug/Kg-DRY       10/21/98         2.4-Dimethylphenol       ND       190       ug/Kg-DRY       10/21/98         Benzoic acid       ND       190       ug/Kg-DRY       10/21/98         bis (2-Chloroethoxy)methane       ND       190       ug/Kg-DRY       10/21/98         1.2,4-Trichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         Naphthalene       ND       190       ug/Kg-DRY       10/21/98         4-Chloroaniline       ND       190       ug/Kg-DRY       10/21/98         4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY	n-Nitroso-di-n-propylamine		ND	190	ug/Kg-DRY	10/21/98
Nitrobenzene         ND         190         ug/Kg-DRY         10/21/98           Isophorone         ND         190         ug/Kg-DRY         10/21/98           2-Nitrophenol         ND         190         ug/Kg-DRY         10/21/98           2-Nitrophenol         ND         190         ug/Kg-DRY         10/21/98           2,4-Dimethylphenol         ND         190         ug/Kg-DRY         10/21/98           bis(2-Chloroethoxy)methane         ND         190         ug/Kg-DRY         10/21/98           2,4-Dichlorophenol         ND         190         ug/Kg-DRY         10/21/98           1,2,4-Trichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           1,2,4-Trichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           Naphthalene         ND         190         ug/Kg-DRY         10/21/98           4-Chloroaniline         ND         190         ug/Kg-DRY         10/21/98           4-Chlorobutadiene         ND         190         ug/Kg-DRY         10/21/98           4-Chloro-3-methylphenol         ND         190         ug/Kg-DRY         10/21/98           2,4,6-Trichlorophenol         ND         190         ug/Kg-DRY	Hexachloroethane		ND	190	ug/Kg-DRY	10/21/98
Isophorone         ND         190         ug/Kg-DRY         10/21/98           2-Nitrophenol         ND         190         ug/Kg-DRY         10/21/98           2.4-Dimethylphenol         ND         190         ug/Kg-DRY         10/21/98           Benzoic acid         ND         190         ug/Kg-DRY         10/21/98           bis (2-Chloroethoxy)methane         ND         190         ug/Kg-DRY         10/21/98           2.4-Dichlorophenol         ND         190         ug/Kg-DRY         10/21/98           1.2.4-Trichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           Naphthalene         ND         190         ug/Kg-DRY         10/21/98           4-Chloroaniline         ND         190         ug/Kg-DRY         10/21/98           4-Chloroaniline         ND         190         ug/Kg-DRY         10/21/98           4-Chloro-3-methylphenol         ND         190         ug/Kg-DRY         10/21/98           4-Chloro-3-methylphenol         ND         190         ug/Kg-DRY         10/21/98           2-Methylnaphthalene         ND         190         ug/Kg-DRY         10/21/98           2.4.5-Trichlorophenol         ND         190         ug/Kg-DRY	Nitrobenzene		ND	190	ug/Kg-DRY	10/21/98
2-Nitrophenol       ND       190       ug/Kg-DRY       10/21/98         2,4-Dimethylphenol       ND       190       ug/Kg-DRY       10/21/98         Benzoic acid       ND       1900       ug/Kg-DRY       10/21/98         bis(2-Chloroethoxy)methane       ND       190       ug/Kg-DRY       10/21/98         2,4-Dichlorophenol       ND       190       ug/Kg-DRY       10/21/98         1,2,4-Trichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         Naphthalene       ND       190       ug/Kg-DRY       10/21/98         A-Chloroaniline       ND       190       ug/Kg-DRY       10/21/98         Hexachlorobutadiene       ND       190       ug/Kg-DRY       10/21/98         4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         2.4,6-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2,4,5-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2-Nitroaniline       ND       190	Isophorone		ND	190	ug/Kg-DRY	10/21/98
2,4-Dimethylphenol       ND       190       ug/Kg-DRY       10/21/98         Benzoic acid       ND       1900       ug/Kg-DRY       10/21/98         bis (2-Chloroethoxy)methane       ND       190       ug/Kg-DRY       10/21/98         2,4-Dichlorophenol       ND       190       ug/Kg-DRY       10/21/98         1,2,4-Trichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         Naphthalene       ND       190       ug/Kg-DRY       10/21/98         4-Chloroaniline       ND       190       ug/Kg-DRY       10/21/98         4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         2,4,6-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2,4,5-Trichlorophenol       ND       190	2-Nitrophenol		ND	190	ug/Kg-DRY	10/21/98
Benzoic acid         ND         1900         ug/Kg-DRY         10/21/98           bis(2-Chloroethoxy)methane         ND         190         ug/Kg-DRY         10/21/98           2,4-Dichlorophenol         ND         190         ug/Kg-DRY         10/21/98           1,2,4-Trichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           Naphthalene         ND         190         ug/Kg-DRY         10/21/98           4-Chloroaniline         ND         190         ug/Kg-DRY         10/21/98           Hexachlorobutadiene         ND         190         ug/Kg-DRY         10/21/98           4-Chloro-3-methylphenol         ND         190         ug/Kg-DRY         10/21/98           4-Chloro-3-methylphenol         ND         190         ug/Kg-DRY         10/21/98           2-Methylnaphthalene         ND         190         ug/Kg-DRY         10/21/98           2-Methylnaphthalene         ND         190         ug/Kg-DRY         10/21/98           2,4,6-Trichlorophenol         ND         190         ug/Kg-DRY         10/21/98           2,4,5-Trichlorophenol         ND         190         ug/Kg-DRY         10/21/98           2-Chloronaphthalene         ND         190	2,4-Dimethylphenol		ND	190	ug/Kg-DRY	10/21/98
bis (2-Chloroethoxy) methane         ND         190         ug/Kg-DRY         10/21/98           2,4-Dichlorophenol         ND         190         ug/Kg-DRY         10/21/98           1,2,4-Trichlorobenzene         ND         190         ug/Kg-DRY         10/21/98           Naphthalene         ND         190         ug/Kg-DRY         10/21/98           A-Chloroaniline         ND         190         ug/Kg-DRY         10/21/98           Hexachlorobutadiene         ND         190         ug/Kg-DRY         10/21/98           4-Chloroaniline         ND         190         ug/Kg-DRY         10/21/98           Hexachlorobutadiene         ND         190         ug/Kg-DRY         10/21/98           4-Chloro-3-methylphenol         ND         190         ug/Kg-DRY         10/21/98           2-Methylnaphthalene         ND         190         ug/Kg-DRY         10/21/98           2.4,6-Trichlorophenol         ND         190         ug/Kg-DRY         10/21/98           2,4,5-Trichlorophenol         ND         190         ug/Kg-DRY         10/21/98           2-Chloronaphthalene         ND         190         ug/Kg-DRY         10/21/98           2-Nitroaniline         ND         190         <	Benzoic acid		ND	1900	ug/Kg-DRY	10/21/98
2,4-Dichlorophenol       ND       190       ug/Kg-DRY       10/21/98         1,2,4-Trichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         Naphthalene       ND       190       ug/Kg-DRY       10/21/98         Naphthalene       ND       190       ug/Kg-DRY       10/21/98         4-Chloroaniline       ND       190       ug/Kg-DRY       10/21/98         Hexachlorobutadiene       ND       190       ug/Kg-DRY       10/21/98         4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         2,4,6-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2,4,5-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2-Chloronaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DR	bis(2-Chloroethoxy)methane		ND	190	ug/Kg-DRY	10/21/98
1,2,4-Trichlorobenzene       ND       190       ug/Kg-DRY       10/21/98         Naphthalene       ND       190       ug/Kg-DRY       10/21/98         4-Chloroaniline       ND       190       ug/Kg-DRY       10/21/98         Hexachlorobutadiene       ND       190       ug/Kg-DRY       10/21/98         4-Chloroaniline       ND       190       ug/Kg-DRY       10/21/98         4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         2,4,6-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2,4,5-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2-Chloronaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         2-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         3-Nitroaniline       ND       190       ug/Kg-DR	2,4-Dichlorophenol		ND	190	ug/Kg-DRY	10/21/98
Naphthalene       ND       190       ug/Kg-DRY       10/21/98         4-Chloroaniline       ND       190       ug/Kg-DRY       10/21/98         Hexachlorobutadiene       ND       190       ug/Kg-DRY       10/21/98         4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         Hexachlorocyclopentadiene       ND       190       ug/Kg-DRY       10/21/98         2,4,6-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2,4,5-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2-Chloronaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Dimethylphthalate       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         3-Nitroaniline       ND       1900       ug/Kg-DRY       10/21/98         Acenaphthene       ND       1900 <td< td=""><td>1,2,4-Trichlorobenzene</td><td></td><td>ND</td><td>190</td><td>ug/Kg-DRY</td><td>10/21/98</td></td<>	1,2,4-Trichlorobenzene		ND	190	ug/Kg-DRY	10/21/98
4-Chloroaniline       ND       190       ug/Kg-DRY       10/21/98         Hexachlorobutadiene       ND       190       ug/Kg-DRY       10/21/98         4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         Hexachlorocyclopentadiene       ND       190       ug/Kg-DRY       10/21/98         2,4,6-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2,4,5-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2-Chloronaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Dimethylphthalate       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         3-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Acenaphthene       ND       190       ug/Kg-DRY       10/21/98	Naphthalene		ND	190	ug/Kg-DRY	10/21/98
Hexachlorobutadiene       ND       190       ug/Kg-DRY       10/21/98         4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         Hexachlorocyclopentadiene       ND       190       ug/Kg-DRY       10/21/98         2,4,6-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2,4,5-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2-Chloronaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Dimethylphthalate       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         3-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Acenaphthene       ND       190       ug/Kg-DRY       10/21/98	4-Chloroaniline		ND	190	ug/Kg-DRY	10/21/98
4-Chloro-3-methylphenol       ND       190       ug/Kg-DRY       10/21/98         2-Methylnaphthalene       ND       190       ug/Kg-DRY       10/21/98         Hexachlorocyclopentadiene       ND       190       ug/Kg-DRY       10/21/98         2,4,6-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2,4,5-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2-Chloronaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Dimethylphthalate       ND       1900       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         3-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         Acenaphthene       ND       190       ug/Kg-DRY       10/21/98	Hexachlorobutadiene		ND	190	ug/Kg-DRY	10/21/98
2-MethylnaphthaleneND190ug/Kg-DRY10/21/98HexachlorocyclopentadieneND190ug/Kg-DRY10/21/982,4,6-TrichlorophenolND190ug/Kg-DRY10/21/982,4,5-TrichlorophenolND1900ug/Kg-DRY10/21/982-ChloronaphthaleneND1900ug/Kg-DRY10/21/982-NitroanilineND1900ug/Kg-DRY10/21/98DimethylphthalateND1900ug/Kg-DRY10/21/98AcenaphthyleneND190ug/Kg-DRY10/21/983-NitroanilineND1900ug/Kg-DRY10/21/98AcenaphtheneND1900ug/Kg-DRY10/21/98AcenaphtheneND1900ug/Kg-DRY10/21/98AcenaphtheneND1900ug/Kg-DRY10/21/98AcenaphtheneND1900ug/Kg-DRY10/21/98AcenaphtheneND1900ug/Kg-DRY10/21/98	4-Chloro-3-methylphenol		ND	190	ug/Kg-DRY	10/21/98
Hexachlorocyclopentadiene       ND       190       ug/Kg-DRY       10/21/98         2,4,6-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2,4,5-Trichlorophenol       ND       1900       ug/Kg-DRY       10/21/98         2-Chloronaphthalene       ND       1900       ug/Kg-DRY       10/21/98         2-Nitroaniline       ND       1900       ug/Kg-DRY       10/21/98         Dimethylphthalate       ND       1900       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         3-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         Acenaphthene       ND       190       ug/Kg-DRY       10/21/98	2-Methylnaphthalene		ND	190	ug/Kg-DRY	10/21/98
2,4,6-Trichlorophenol       ND       190       ug/Kg-DRY       10/21/98         2,4,5-Trichlorophenol       ND       1900       ug/Kg-DRY       10/21/98         2-Chloronaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Dimethylphthalate       ND       1900       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         3-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       1900       ug/Kg-DRY       10/21/98         Acenaphthene       ND       1900       ug/Kg-DRY       10/21/98	Hexachlorocyclopentadiene		ND	190	ug/Kg-DRY	10/21/98
2,4,5-Trichlorophenol       ND       1900       ug/Kg-DRY       10/21/98         2-Chloronaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Nitroaniline       ND       1900       ug/Kg-DRY       10/21/98         Dimethylphthalate       ND       1900       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         3-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       1900       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       1900       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       1900       ug/Kg-DRY       10/21/98         Acenaphthene       ND       1900       ug/Kg-DRY       10/21/98	2,4,6-Trichlorophenol		' ND	190	ug/Kg-DRY	10/21/98
2-Chloronaphthalene       ND       190       ug/Kg-DRY       10/21/98         2-Nitroaniline       ND       1900       ug/Kg-DRY       10/21/98         Dimethylphthalate       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         3-Nitroaniline       ND       190       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         Acenaphthene       ND       1900       ug/Kg-DRY       10/21/98	2,4,5-Trichlorophenol		ND	1900	ug/Kg-DRY	10/21/98
2-Nitroaniline       ND       1900       ug/Kg-DRY       10/21/98         Dimethylphthalate       ND       1900       ug/Kg-DRY       10/21/98         Acenaphthylene       ND       190       ug/Kg-DRY       10/21/98         3-Nitroaniline       ND       1900       ug/Kg-DRY       10/21/98         Acenaphthene       ND       1900       ug/Kg-DRY       10/21/98	2-Chloronaphthalene		ND	190	ug/Kg-DRY	10/21/98
DimethylphthalateND190ug/Kg-DRY10/21/98AcenaphthyleneND190ug/Kg-DRY10/21/983-NitroanilineND1900ug/Kg-DRY10/21/98AcenaphtheneND1900ug/Kg-DRY10/21/98	2-Nitroaniline		ND	1900	ug/Kg-DRY	10/21/98
Acenaphthylene         ND         190         ug/Kg-DRY         10/21/98           3-Nitroaniline         ND         1900         ug/Kg-DRY         10/21/98           Acenaphthene         ND         1900         ug/Kg-DRY         10/21/98	Dimethylphthalate		ND	190	ug/Kg-DRY	10/21/98
3-Nitroaniline         ND         1900         ug/Kg-DRY         10/21/98           Acenaphthene         ND         1900         ug/Kg-DRY         10/21/98	Acenaphthylene	×	ND	190	ug/Kg-DRY	10/21/98
Acenaphthene ND 190 ug/Kg-DRY 10/21/98	3-Nitroaniline		ND	1900	ug/Kg-DRY	10/21/98
	Acenaphthene		ND	190	ug/Kg-DRY	10/21/98

Department of the Air Force TEST RESULTS by SAMPLE

Page 50

Sample: 10B 48030988060 SW1 Collected: 09/27/98 Matrix: SOIL

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Test Description	Method	<u>Result</u>	2	<u>Limit</u>	<u>Units</u>		Analyzed
Semivolatile Organics	SW 8270C	(continued f	from	previo	us page)		
2,4-Dinitrophenol		ND		1900	ug/Kg-	DRY	10/21/98
4-Nitrophenol		ND		1900	ug/Kg-	DRY	10/21/98
Dibenzofuran		ND		190	ug/Kg-	DRY	10/21/98
2,6-Dinitrotoluene		ND		190	ug/Kg-	DRY	10/21/98
2,4-Dinitrotoluene		ND		190	ug/Kg-	DRY	10/21/98
Diethylphthalate		ND		190	ug/Kg-	DRY	10/21/98
4-Chlorophenyl-phenylether		ND		190	ug/Kg-	DRY	10/21/98
Fluorene		ND		190	ug/Kg-	DRY	10/21/98
4-Nitroaniline		ND		1900	ug/Kg-	DRY	10/21/98
4,6-Dinitro-2-methylphenol		ND		1900	ug/Kg-	DRY	10/21/98
n-Nitrosodiphenylamıne		ND		190	ug/Kg-	DRY	10/21/98
4-Bromophenyl-phenylether		ND		190	ug/Kg-	DRY	10/21/98
Hexachlorobenzene		ND		190	ug/Kg-	DRY	10/21/98
Pentachlorophenol		ND		190	ug/Kg-	DRY	10/21/98
Phenanthrene		ND		190	ug/Kg-	DRY	10/21/98
Anthracene		ND		190	ug/Kg-	DRY	10/21/98
Di-n-butylphthalate		ND		190	ug/Kg-	DRY	10/21/98
Fluoranthene		ND		190	ug/Kg-	DRY	10/21/98
Pyrene		ND		190	ug/Kg-	DRY	10/21/98
Butylbenzylphthalate		ND		190	ug/Kg-	DRY	10/21/98
3,3'-Dichlorobenzidine		ND		770	ug/Kg-	DRY	10/21/98
Benzo(a)Anthracene		ND		190	ug/Kg-	DRY	10/21/98
Chrysene		ND		190	ug/Kg-	DRY	10/21/98
Bis(2-Ethylhexyl)phthalate		ND		190	ug/Kg-	DRY	10/21/98
Di-n-octylphthalate		ND		190	ug/Kg-	DRY	10/21/98
Benzo(b)fluoranthene		ND		190	ug/Kg-	DRY	10/21/98
Benzo(k)fluoranthene		ND		190	ug/Kg-	DRY	10/21/98
Benzo(a)pyrene		ND		190	ug/Kg-	DRY	10/21/98
Indeno(1,2,3-cd)pyrene		ND		190	ug/Kg-	DRY	10/21/98
Dibenz(a,h)anthracene		ND		190	ug/Kg-	DRY	10/21/98
Benzo(g,h,i)perylene		ND		190	ug/Kg-	DRY	10/21/98
SURROGATES, % Recovery							
2-Fluorophenol		43.1		Min:	30	Max:	122
d5-Phenol		46.6		Min:	30	Max:	117
d5-Nitrobenzene		48.7		Min:	30	Max:	122
2-Fluorobiphenyl		61.5		Min:	36	Max:	121
2,4,6-Tribromophenol		41.4		Min:	30	Max:	113
d14-Terphenyl		76.9		Min:	30	Max:	134

Department of the Air Force TEST RESULTS by SAMPLE

Page 51

Sample: 10B 48030988060 SW1 Collected: 09/27/98 Matrix: SOIL

Test Description	Method	Result	Q	Limit	<u>Units</u>	<u>Analyzed</u>
Volatiles by GC/MS	SW 8260B					
Dichlorodifluoromethane		ND		5.8	ug/Kg~DRY	10/09/98
Chloromethane		ND		5.8	ug/Kg-DRY	10/09/98
Vinyl Chloride		ND		5.8	ug/Kg-DRY	10/09/98
Bromomethane		ND		5.8	ug/Kg-DRY	10/09/98
Chloroethane		ND		5.8	uq/Kq-DRY	10/09/98
Trichlorofluoromethane		ND		5.8	ua/Ka-DRY	10/09/98
1,1-Dichloroethene		ND		2.3	ug/Kg-DRY	10/09/98
Trichlorotrifluoroethane		ND		2.3	ug/Kg-DRY	10/09/98
Methylene Chloride		11	в	2.3	ug/Kg-DRY	10/09/98
trans-1,2-Dichloroethene		ND		2.3	ug/Kg-DRY	10/09/98
1.1-Dichloroethane		ND		2.3	ug/Kg-DRY	10/09/98
2.2-Dichloropropane		ND		2.3	ug/Kg-DRY	10/09/98
cis-1.2-Dichloroethene		ND		2.3	ug/Kg-DRY	10/09/98
Bromochloromethane				2.3	ug/Kg~DRY	10/09/98
Chloroform				2.3	ug/Kg-DRY	10/09/98
1.1.1-Trichloroethane		ND		2.3	ug/Kg-DRY	10/09/98
Carbon Tetrachloride		ND		2.2	ug/Kg-DRY	10/09/98
1.1-Dichloropropene		ND		2.2	ug/Kg-DRY	10/09/98
Renzene		ND		2.3	ug/Kg-DRV	10/09/98
1 2-Dichloroethane		ND		2.5	ug/Kg-DPV	10/09/98
Trichloroethene		ND		2.5	ug/Kg-DRY	10/09/98
1 2-Dichloropropage		ND		2.2	ug/Kg-DRY	10/09/98
Dibromomethane		ND		2.5	ug/Kg-DRI	10/09/98
Bromodichloromethane		ND		2.5	ug/Kg-DRI	10/09/98
cis-1 3-Dichloropropene		ND		2.5	ug/Kg-DRY	10/09/98
Toluene		ND		2.5	ug/Kg-DRI	10/09/98
trans-1 3-Dichloropropene		ND		2.3	ug/Kg-DRY	10/09/98
1 1 2-Trichloroethane				2.5	ug/Kg-DRI	10/09/98
Tetrachloroethene		ND		2.5	ug/Kg-DRI	10/09/98
1 3-Dichloropropage				2.3	ug/Kg-DRI	10/09/98
Dibromochloromethane		ND		2.3	ug/Kg-DRI	10/09/98
1 2-Dibromoethane				2.5	ug/Kg-DRI	10/09/98
Chlorobenzene		ND		2.3	ug/Kg-DRI	10/09/98
Ethylbenzene		ND		2.3	ug/Kg-DRI	10/09/98
1 1 2 Tetrachlereethane				2.3	ug/Kg-DRI	10/09/90
m n-Yulonog		ND		2.3	ug/Kg-DRI	10/09/98
m, p-Ayrenes				2.3	ug/kg-DRI	10/09/98
Sturono		ND		2.3	ug/kg-DRI	10/09/98
Bromoform		ND		2.3	ug/kg-DRI	10/09/98
Teennenulhennene				2.3	ug/kg-DRI	10/09/98
Brenchersene		ND		2.3	ug/kg-DRI	10/09/98
Bromobenzene		ND		2.3		10/09/98
n-Propyidenzene		ND		2.3	ug/kg-DRI	10/09/98
1,1,2,2-Tetrachiorethane		ND		د.2		10/09/98
1,2,3-Trichloropropane		ND		2.3	ug/kg-DKI	TO/02/28
		ND		2.3	ug/kg-DKI	10/09/98
1,3,5-Trimethyibenzene		ND		2.3		10/00/00
4-Chiorotoluene		ND		د.∠	ug/kg-DRY	TO\03/38

Order # 98-09-259

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Sample: 10B 48030988060 SW1 Collected: 09/27/98 Matrix: SOIL

Test Description	Method	<u>Result</u> <u>Q</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Volatiles by GC/MS	SW 8260B	(continued from	previou	ıs page)	
tert-Butylbenzene		ND	2.3	ug/Kg-DRY	10/09/98
1,2,4-Trimethylbenzene		ND	2.3	ug/Kg-DRY	10/09/98
sec-Butylbenzene		ND	2.3	ug/Kg-DRY	10/09/98
4-Isopropyltoluene		ND	2.3	ug/Kg-DRY	10/09/98
1,3-Dichlorobenzene		ND	2.3	ug/Kg-DRY	10/09/98
1,4-Dichlorobenzene		ND	2.3	ug/Kg-DRY	10/09/98
n-Butylbenzene		ND	2.3	ug/Kg-DRY	10/09/98
1,2-Dichlorobenzene		ND	2.3	ug/Kg-DRY	10/09/98
1,2-Dibromo-3-chloropropane		ND	12	ug/Kg-DRY	10/09/98
1,2,4-Trichlorobenzene		ND	2.3	ug/Kg-DRY	10/09/98
Hexachlorobutadiene		ND	2.3	ug/Kg-DRY	10/09/98
Napthalene		ND	2.3	ug/Kg-DRY	10/09/98
1,2,3-Trichlorobenzene		ND	2.3	ug/Kg-DRY	10/09/98
Acetone		24 J	58	ug/Kg-DRY	10/09/98
Acrylonitrile		ND	58	ug/Kg-DRY	10/09/98
2-Butanone		ND	58	ug/Kg-DRY	10/09/98
Carbon Disulfide		ND	2.3	ug/Kg-DRY	10/09/98
trans-1,4-Dichloro-2-butene		ND	58	ug/Kg-DRY	10/09/98
2-Chloroethyl Vinyl Ether		ND	58	ug/Kg-DRY	10/09/98
2-Hexanone		ND	12	ug/Kg-DRY	10/09/98
Iodomethane		ND	2.3	ug/Kg-DRY	10/09/98
4-Methyl-2-pentanone		ND	12	ug/Kg-DRY	10/09/98
Vinyl Acetate		ND	58	ug/Kg-DRY	10/09/98
tert-Butyl methyl ether		ND	2.3	ug/Kg-DRY	10/09/98
SURROGATES, % Recovery					
Dibromofluoromethane		102	Min:	80 Max:	120
Toluene d-8		105	Min:	81 Max:	117
p-Bromofluorobenzene		112	Min:	74 Max:	121
Sample: 10C 48030988060 SW1	Co	llected: 09/27/9	8 Mat	rix: SOIL	
		_			

Test Description	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Organic Carbon, Total	LECO/D513G	0.14	0.05	WT%	10/08/98

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 11A 48030988061 SD1	Colle	ected: 09/27,	/98 Mat	trix: SEDI	MENT
Test Description ICP Metals, TCLP Extracted	<u>Method</u> SW 1311/6010	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Arsenic		ND	0.050	mg/L	10/09/98
Cadmium		1.0	0.020	mg/L	10/09/98
Chromium		ND	0.0050	mg/L	10/09/98
		ND	0.010	mg/L	10/09/98
Selenium		1.2	0.050	mg/L	10/09/98
Silver		ND	0.10	mg/L	10/09/98
		ND	0.010	mg/L	10/09/98
Mercury, ICLP Extracted	SW 1311/7470	ND	0.0020	mg/L	10/20/98
Sample: 11B 48030988061 SD1	Colle	cted: 09/27/	98 Mat	rix: SEDIN	MENT

Test Description	Method	Result O	Limit	TTesite	-	<b>Nana 1</b>
Organochlorine Pesticides	SW 8081A		<u></u>		2	Analyzed
Aldrin		ND	1.1	$n\alpha/\kappa$	van-v	10/15/00
alpha-BHC		ND	1 1	ug/kg	J-DRI J-DRV	10/15/98
beta-BHC		ND	1 1	$\frac{ug}{K}$	J-DRI N-DRV	10/15/98
delta-BHC		NT	1 1		J-DKI - DDV	10/15/98
gamma-BHC (Lindane)		ND	1 1		J-DRI - DDV	10/15/98
alpha-Chlordane	•	ND	1 1	ug/Kg	J-DRI DDV	10/15/98
gamma-Chlordane			4.1	ug/Kg	J-DRY	10/15/98
4,4'-DDD		ND	4.1 2.2	ug/kg	J-DRY	10/15/98
4,4'-DDE		ND	2.2	ug/Kg	J-DRY	10/15/98
4,4'-DDT		ND	2.2	ug/kg	I-DRY	10/15/98
Dieldrin		NT)	2.2	ug/kg	I-DRY	10/15/98
Endosulfan I		ND	1.1	ug/Kg	-DRY	10/15/98
Endosulfan II		ND	2.2	ug/Kg	-DRY	10/15/98
Endosulfan Sulfate		ND	2.2	ug/Kg	-DRY	10/15/98
Endrin		ND	2.2	ug/Kg	-DRY	10/15/98
Endrin Aldehyde		ND	2.2	ug/Kg	-DRY	10/15/98
Heptachlor		ND	2.2	ug/Kg	-DRY	10/15/98
Heptachlor Epoxide		ND	1.1	ug/Kg	-DRY	10/15/98
Methoxychlor		ND	1.1	ug/Kg	-DRY	10/15/98
Toxaphene		ND	11	ug/Kg	-DRY	10/15/98
SURROGATES & Recovery		ND	33	ug/Kg	-DRY	10/15/98
Tetrachlorometarylene						
Decachlorohinhenyl		45.2	Min:	45	Max:	124
		78.8	Min:	45	Max:	124
Percent Moisture	ASTM D2216	25.2	0.1	WT%		10/05/98

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Department of the Air Force TEST RESULTS by SAMPLE

Page 54

# Sample: 11B 48030988061 SD1 Collected: 09/27/98 Matrix: SEDIMENT

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Test Description	Method	Result O	Limit	Unite	Analuzed
Polychlorinated Biphenyls	SW 8082	. <u></u>	<u> 22</u>	<u>QIII CB</u>	Anaryzeu
PCB-1221		ND	45	ug/Kg-DRV	10/10/00
PCB-1232		ND	22	ug/Kg-DRY	10/10/90
PCB-1242		ND	22	ug/Kg-DRY	10/18/98
PCB-1248		ND	22	ug/Kg-DRY	10/10/98
PCB-1254		ND	22	ug/Kg-DRY	10/10/00
PCB-1260		ND	22	ug/Kg-DRY	10/10/90
PCB-1016		ND	22	ug/Kg-DRY	10/10/90
SURROGATES, % Recovery					10/10/90
Tetrachlorometaxylene		41.6	Min	11 Mar.	102
Decachlorobiphenyl		62.9	Min:	35 Max:	102
Semivolatile Organics	SW 8270C				
Phenol		TD	220	ug/Kg-DPV	10/21/00
bis(2-Chloroethyl) ether			220	ug/Kg-DRI	10/21/98
2-Chlorophenol		NT)	220	ug/Kg-DRI	10/21/98
1,3-Dichlorobenzene		NTD	220	ug/Kg-DRI	10/21/98
1,4-Dichlorobenzene			220	ug/Kg-DRI	10/21/98
Benzyl alcohol		ND	440	ug/Kg-DRI	10/21/98
1,2-Dichlorobenzene		ND	220	ug/Kg~DRI	10/21/98
2-Methylphenol		ND	220	ug/Kg-DRI	10/21/98
bis(2-Chloroisopropyl) eth		ND	220	ug/Kg-DRI	10/21/98
4-Methylphenol		ND	220	ug/Kg=DRI	10/21/98
n-Nitroso-di-n-propylamine		NTD	220	ug/Kg-DRI	10/21/98
Hexachloroethane		ND	220	ug/Kg-DRI	10/21/98
Nitrobenzene		ND	220	ug/Kg-DRI	10/21/98
Isophorone		ND	220	ug/Kg-DRI	10/21/98
2-Nitrophenol		ND	220	ug/Kg-DRI	10/21/98
2,4-Dimethylphenol		ND	220	ug/Kg-DRI	10/21/98
Benzoic acid		ND	2200	ug/Kg-DRI	10/21/98
bis(2-Chloroethoxy)methane		ND	2200	ug/Kg-DRI	10/21/98
2,4-Dichlorophenol		ND	220	ug/Kg-DRI	10/21/98
1,2,4-Trichlorobenzene		NTD	220	ug/Kg-DRI	10/21/98
Naphthalene			220	ug/Kg-DRI	10/21/98
4-Chloroaniline		ND	220	ug/Kg-DRI	10/21/98
Hexachlorobutadiene		NTD	220	ug/Kg-DRI	10/21/98
4-Chloro-3-methylphenol		ND	220	ug/Kg-DRI	10/21/98
2-Methylnaphthalene		ND	220	ug/Kg-DRI	10/21/98
Hexachlorocyclopentadiene		ND	220	ug/Kg-DRI	10/21/98
2,4,6-Trichlorophenol		ND	220	ug/Kg-DRI	10/21/98
2,4,5-Trichlorophenol		ND	2200	ug/Kg-DRI	10/21/98
2-Chloronaphthalene		ND	2200	ug/Kg-DRI	10/21/98
2-Nitroaniline		NT.	220	ug/Ng-DRI	10/21/98
Dimethylphthalate		ND	2200	ug/Kg-DRI	10/21/98
Acenaphthylene		ND	220	ug/Kg-DRI	10/21/98
3-Nitroaniline		NT	2200	ug/Kg-DRI	10/21/98
Acenaphthene		ND	220		10/21/98
			220	~3\ ~2_DKT	TO/27/28

#### Department of the Air Force TEST RESULTS by SAMPLE

Page 55

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## Sample: 11B 48030988061 SD1 Collected: 09/27/98 Matrix: SEDIMENT

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Test Description	Method	Result O	Limit	Units	Analvzed
Semivolatile Organics	SW 8270C	(continued from	previou	is page)	
2,4-Dinitrophenol		ND	2200	ug/Kg-DRY	10/21/98
4-Nitrophenol		ND	2200	ug/Kg-DRY	10/21/98
Dibenzofuran		ND	220	ug/Kg-DRY	10/21/98
2,6-Dinitrotoluene		ND	220	ug/Kg-DRY	10/21/98
2,4-Dinitrotoluene		ND	220	ug/Kg-DRY	10/21/98
Diethylphthalate		ND	220	ug/Kg-DRY	10/21/98
4-Chlorophenyl-phenylether		ND	220	ug/Kg-DRY	10/21/98
Fluorene		ND	220	ug/Kg-DRY	10/21/98
4-Nitroaniline		ND	2200	ug/Kg-DRY	10/21/98
4,6-Dinitro-2-methylphenol		ND	2200	ug/Kg-DRY	10/21/98
n-Nitrosodiphenylamine		ND	220	ug/Kg-DRY	10/21/98
4-Bromophenyl-phenylether		ND	220	ug/Kg-DRY	10/21/98
Hexachlorobenzene		ND	220	ug/Kg-DRY	10/21/98
Pentachlorophenol		ND	220	ug/Kg-DRY	10/21/98
Phenanthrene		ND	220	ug/Kg-DRY	10/21/98
Anthracene		ND	220	ug/Kg-DRY	10/21/98
Di-n-butylphthalate		ND	220	ug/Kg-DRY	10/21/98
Fluoranthene		ND	220	ug/Kg-DRY	10/21/98
Pyrene		ND	220	ug/Kg-DRY	10/21/98
Butylbenzylphthalate		ND	220	ug/Kg-DPV	10/21/98
3,3'-Dichlorobenzidine		ND	890	ug/Kg-DPV	10/21/90
Benzo (a) Anthracene		ND	220	ug/Kg-DRY	10/21/98
Chrysene		ND	220	ug/Kg-DRI	10/21/98
Bis(2-Ethylhexyl)phthalate		ND	220	ug/Kg-DRY	10/21/98
Di-n-octylphthalate		ND	220	ug/Kg-DRI	10/21/98
Benzo(b)fluoranthene		ND	220	ug/Kg-DRY	10/21/90
Benzo(k)fluoranthene		ND	220	ug/Kg-DRV	10/21/98
Benzo(a)pyrene		ND	220	ug/Kg-DRY	10/21/98
Indeno(1,2,3-cd)pyrene		ND	220	ug/Kg-DRV	10/21/90
Dibenz (a, h) anthracene		ND	220	ug/Kg-DRY	10/21/98
Benzo(g,h,i)perylene		ND	220	ug/Kg-DRY	10/21/90
SURROGATES, % Recovery				ug/ng Dni	10/21/90
2-Fluorophenol		40.3	Min·	30 Max.	1 2 2
d5-Phenol		43.3	Min·	30 Max:	117
d5-Nitrobenzene		45.5	Min	30 Max:	120
2-Fluorobiphenyl		56.8	Min•	36 Marve	121
2,4,6-Tribromophenol		41.8	Min	30 Max-	112
d14-Terphenyl		65.9	Min·	30 Mar.	131
			• • • • • • •		T 7 4

Order # 98-09-259 ANALYTICA, INC. ANALYTICA, INC.

Department of the Air Force TEST RESULTS by SAMPLE

Page 56

#### Sample: 11B 48030988061 SD1 Collected: 09/27/98 Matrix: SEDIMENT

Test Description	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Volatiles by GC/MS	SW 8260B				
Dichlorodifluoromethane		ND	6.7	ug/Kg-DRY	10/09/98
Chloromethane		ND	6.7	ug/Kg-DRY	10/09/98
Vinyl Chloride		ND	6.7	ug/Kg-DRY	10/09/98
Bromomethane		ND	6.7	ug/Kg-DRY	10/09/98
Chloroethane		ND	6.7	ug/Kg-DRY	10/09/98
Trichlorofluoromethane		ND	6.7	ug/Kg-DRY	10/09/98
1,1-Dichloroethene		ND	2.7	ug/Kg-DRY	10/09/98
Trichlorotrifluoroethane		ND	2.7	ug/Kg-DRY	10/09/98
Methylene Chloride		15 B	2.7	ug/Kg-DRY	10/09/98
trans-1,2-Dichloroethene		ND	2.7	ug/Kg-DRY	10/09/98
1,1-Dichloroethane		ND	2.7	ug/Kg-DRY	10/09/98
2,2-Dichloropropane		ND	2.7	ug/Kg-DRY	10/09/98
cis-1,2-Dichloroethene		ND	2.7	ug/Kg-DRY	10/09/98
Bromochloromethane		ND	2.7	ug/Kg-DRY	10/09/98
Chloroform		ND	2.7	ug/Kg-DRY	10/09/98
1,1,1-Trichloroethane		ND	2.7	ug/Kg-DRY	10/09/98
Carbon Tetrachloride		ND	2.7	ug/Kg-DRY	10/09/98
1,1-Dichloropropene		ND	2.7	ug/Kg-DRY	10/09/98
Benzene		ND	2.7	ug/Kg-DRY	10/09/98
1,2-Dichloroethane		ND	2.7	ug/Kg-DRY	10/09/98
Trichloroethene		ND	2.7	ug/Kg-DRY	10/09/98
1,2-Dichloropropane		ND	2.7	ug/Kg-DRY	10/09/98
Dibromomethane		ND	2.7	ug/Kg-DRY	10/09/98
Bromodichloromethane		ND	2.7	ug/Kg-DRY	10/09/98
cis-1,3-Dichloropropene		ND	2.7	ug/Kg-DRY	10/09/98
Toluene		ND	2.7	ug/Kg-DRY	10/09/98
trans-1,3-Dichloropropene		ND	2.7	ug/Kg-DRY	10/09/98
1,1,2-Trichloroethane		ND	2.7	ug/Kg-DRY	10/09/98
Tetrachloroethene		ND	2.7	ug/Kg-DRY	10/09/98
1,3-Dichloropropane		ND	. 2.7	ug/Kg-DRY	10/09/98
Dibromochloromethane		ND	2.7	ug/Kg-DRY	10/09/98
1,2-Dibromoethane		ND	2.7	ug/Kg-DRY	10/09/98
Chlorobenzene		ND	2.7	ug/Kg-DRY	10/09/98
Ethylbenzene		ND	2.7	ug/Kg-DRY	10/09/98
1,1,1,2-Tetrachloroethane		ND	2.7	ug/Kg-DRY	10/09/98
m,p-Xylenes		ND	2.7	ug/Kg-DRY	10/09/98
o-Xylene		ND	2.7	ug/Kg-DRY	10/09/98
Styrene		ND	2.7	ug/Kg-DRY	10/09/98
Bromoform		ND	2.7	ug/Kg-DRY	10/09/98
Isopropylbenzene		ND	2.7	ug/Kg-DRY	10/09/98
Bromobenzene		ND	2.7	ug/Kg-DRY	10/09/98
n-Propylbenzene		ND	2.7	ug/Kg-DRY	10/09/98
1,1,2,2-Tetrachlorethane		ND	2.7	ug/Kg-DRY	10/09/98
1,2,3-Trichloropropane		ND	2.7	ug/Kg-DRY	10/09/98
2-Chlorotoluene		ND	2.7	ug/Kg-DRY	10/09/98
1,3,5-Trimethylbenzene		ND	2.7	ug/Kg-DRY	10/09/98
4-Chlorotoluene		ND	2.7	ug/Kg-DRY	10/09/98

Sample: 11B 48030988061 SD1

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Collected: 09/27/98 Matrix: SEDIMENT

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	Mot	hođ	Result	0	<u>Limit</u>	<u>Units</u>	<u>7</u>	<u>inalyzed</u>
Test Description	CW	9260B	(continued	from	previou	s page)		
Volatiles by GC/MS	511	02000	ND		2.7	ug/Kg-D	RY ]	10/09/98
tert-Butylbenzene			ND		2.7	ug/Kg-D	RY I	10/09/98
1,2,4-Trimethylbenzene			ND		2.7	ug/Kg-D	RY :	10/09/98
sec-Butylbenzene			ND		2.7	ug/Kg-D	RY :	10/09/98
4-Isopropyltoluene			ND		2.7	ug/Kg-I	IRY C	10/09/98
1,3-Dichlorobenzene					2.7	ug/Kg-I	)RY (	10/09/98
1,4-Dichlorobenzene			ND		2.7	ug/Kg-I	)RY	10/09/98
n-Butylbenzene					2.7	ug/Kg-I	)RY	10/09/98
1,2-Dichlorobenzene			ND		13	ug/Kg-I	DRY	10/09/98
1,2-Dibromo-3-chloropropane			NID		2.7	ug/Kg-I	ORY	10/09/98
1,2,4-Trichlorobenzene			ND		2.7	ug/Kg-l	DRY	10/09/98
Hexachlorobutadiene					2.7	ug/Kg-l	DRY	10/09/98
Napthalene					2.7	ug/Kg-	DRY	10/09/98
1,2,3-Trichlorobenzene			37	л	67	ug/Kg-	DRY	10/09/98
Acetone			, c	U	67	ug/Kg-	DRY	10/09/98
Acrylonitrile			ND		67	ug/Kg-	DRY	10/09/98
2-Butanone			ND		2.7	ug/Kg-	DRY	10/09/98
Carbon Disulfide			ND		67	uq/Kg-	DRY	10/09/98
trans-1,4-Dichloro-2-butene			ND		67	uq/Kg-	DRY	10/09/98
2-Chloroethyl Vinyl Ether			ND		13	ug/Kg-	DRY	10/09/98
2-Hexanone			ND		2.7	ug/Kg-	DRY	10/09/98
Iodomethane			ND		13	ug/Kg-	DRY	10/09/98
4-Methyl-2-pentanone			NT:		67	ug/Kg-	DRY	10/09/98
Vinyl Acetate			ND		2.7	ug/Kg-	DRY	10/09/98
tert-Butyl methyl ether			1412			2. 2		
SURROGATES, % Recovery			100		Min:	80	Max:	120
Dibromofluoromethane			100		Min:	81	Max:	117
Toluene d-8			101		Min	74	Max:	121
p-Bromofluorobenzene			172					

Page 57

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Department of the Air Force TEST METHODOLOGIES

Order # 98-09-259 ANALYTICA, INC.

THE FOLLOWING CODES APPLY TO THE ANALYTICAL REPORT

RESULT field... ND = not detected at the reported limit NA = analyte not applicable (see case narrative/methods for discussion) Q (qualifier) field... \* = Recovery or %RPD outside method specifications GENERAL: H = value is estimated due to analysis run outside EPA holding times E = reported concentration is above the instrument calibration range D = analyte was diluted to bring within instrument calibration range or to remove matrix interferences ORGANIC ANALYSIS DATA QUALIFIERS: B = analyte was detected in the laboratory method blank J = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL) INORGANIC ANALYSIS DATA QUALIFIERS: B = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL) W = post digestion spike did not meet criteria (85-115%) S = reported value determined by the Method of Standard Additions

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		METHOD: 8082
PCB_8S: P	OLYCHLORINATED BIPHENYLS	METHOD: 8082
PCB_8W: P	OLYCHLORINATED BIPHENYLS	METHOD: 3520B
3520_P: 0	continuous Liquid-Liquid Extraction (Pesticides)	
	Iltrasonic Extraction - Pesticides	METHOD: 3550B
3550_F	Continuous Liquid-Liquid Extraction (PCBs)	METHOD: 3520B
DCBDRS.	Ultrasonic Extraction - PCBs	METHOD: 3550A
DET 85:	ORGANOCHLORINE PESTICIDES	METHOD: 8081A
PST_00.	ORGANOCHLORINE PESTICIDES	METHOD: 8001A
1311EM:	TCLP EXTRACTION	METHOD: 1311 Metals)
	Toxicity Characteristic Ledonard	METHOD: 1311/7470
1311HG:	MERCURY, TCLP Extracted Maximum Contaminant Level (mg/L)	
ICPTWE:	Acid Digestion of TCLP Extracts for Total Metals Analysis by Inductively Coupled Placma (ICP) Spectroscopy according to SW-84	METHOD: SOLUT
	Plasma (ICL) -1	METHOD: 1311/6010
1311_M:	METALS (ICF), ICLI Level (mg/L) Maximum Contaminant Level (mg/L)	5.0
	Arsenic	1.0
	Barium	5.0
	Cadmium	5.0
	Chromium	1.0
	Leau celenium	5.0
	silver	
8760 S	VOLATILE ORGANIC COMPOUNDS (GC/MS)	METHOD: 8260B
8260_V	V: VOLATILE ORGANIC COMPOUNDS (GC/MS)	METHOD: 8280B

Order # 9 ANALYTICA	8-09-259 Depar , INC. T	tment of the Air Force EST METHODOLOGIES
3520_B:	Continuous Liquid-Liquid Extr The continuous liquid-liquid method (3520) is modified to methodology (OLMO1.0) in which werelaged with one 18 hour ext	action - BNAs METHOD: 3520B extraction used with this conform with the EPA-CLP ch dual pH extraction has been traction at a pH of <2.0.
	replaced "	METHOD: 3550B
3550_B:	Ultrasonic Extraction - BNAS	METHOD: 8270
8270_S:	SEMIVOLATILE ORGANIC COMPOUN	DS (GC/MS) METHOD: 8270
8270_W:	SEMIVOLATILE ORGANIC COMPOUN	DS (GC/MS) METHOD: LECO/D513G
TOC_S:	ORGANIC CARBON, Total This analysis was subcontrac HUFFMAN Laboratories, Inc. 4630 Indiana Street Golden, CO 80403 TEL: (303) 278-4455	method: Method: ASTM D2216

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PMOIST: PERCENT MOISTURE

84 170

Extracted

10/14/98

10/20/98

Extracted

10/01/98

10/01/98

Extracted

Extracted

10/01/98

Extracted

10/07/98

10/20/98

Order # 98-09-259 ANALYTICA, INC.

Sample: 01A 48030988051 SW3

#### Department of the Air Force DATES REPORT

Matrix: WATER

Analysis ICP Metals, TCLP Extracted Mercury, TCLP Extracted	Method SW 1311/6010 SW 1311/7470	<u>Collected</u> 09/26/98 09/26/98 Mat:	<u>Received</u> 09/30/98 09/30/98 rix: <b>WATER</b>	<u>TCLP date</u> 10/12/98 10/12/98
Sample: <b>UIB</b> 480309830 <u>Analysis</u> Organochlorine Pesticides Polychlorinated Biphenyls	Method SW 8081A SW 8082	<u>Collected</u> 09/26/98 09/26/98	<u>Received</u> 09/30/98 09/30/98	<u>TCLP date</u> NA NA
Sample: 01C 48030988	051 SW3	Mat	rix: WATER	TCLP_date
<u>Analysis</u> Volatiles by GC/MS	<u>Method</u> SW 8260B	<u>Collected</u> 09/26/98	09/30/98	NA
Sample: 01D 48030988	8051 SW3	Mat	TIX: WAIER	
<u>Analysis</u> Semivolatile Organics	Method SW 8270C	<u>Collected</u> 09/26/98	<u>Received</u> 09/30/98	<u>TCLP date</u> NA
Sample: 02A 4803098	8052 SD3	Ma	trix: SEDIM	INT
<u>Analysis</u> ICP Metals, TCLP Extracted Mercury, TCLP Extracted	<u>Method</u> SW 1311/6010 SW 1311/7470	<u>Collected</u> 09/26/98 09/26/98	<u>Received</u> 09/30/98 09/30/98	<u>TCLP_date</u> 10/06/98 10/06/98

Sample: 02B 48030988052 SD3

Sampre. V2D 1000				<b>.</b> .	Everacted	<u>Analyzed</u>
	Method	Collected	Received	TCLP date	10/05/98	10/15/98
Analysis	SW BOBIA	09/26/98	09/30/98	NA		10/05/98
Organochlorine Pesticides	ACTM D2216	09/26/98	09/30/98	NA	20/05/09	10/15/98
Percent Moisture	ASIM DELLO	09/26/98	09/30/98	NA	10/03/30	10/21/98
Polychlorinated Biphenyls	SW 8082	09/26/98	09/30/98	NA	10/05/98	10/09/98
Semivolatile Organics	SW 8270C	00/26/98	09/30/98	NA		10/05/50
Volatiles by GC/MS	SW 8260B	03/20/30				

Matrix: SOIL

Matrix: SOIL

Matrix: SEDIMENT

Sampre: Von 1000			-		Extracted	Analyzed
<u>Analysis</u> ICP Metals, TCLP Extracted Mercury, TCLP Extracted	<u>Method</u> SW 1311/6010 SW 1311/7470	<u>Collected</u> 09/26/98 09/26/98	<u>Received</u> 09/30/98 09/30/98	<u>TCLP Gate</u> 10/06/98 10/06/98	10/07/98 10/20/98	10/09/98 10/20/98

Sample: 03B 48030988053 SW3

Sample: 03A 48030988053 SW3

Sample: VID LUCE				TCLP date	Extracted	<u>Analyze</u>
- 1	Method	<u>Collected</u>	Received	NA	10/05/98	10/15/9
Analysis	SW 8081A	09/26/98	09/30/98			10/05/9
Organochlorine Pesticides	ASTM 02216	09/26/98	09/30/98		10/05/98	10/15/9
Percent Moisture	AD11. 2000	09/26/98	09/30/98	NA	20/05/98	10/15/2
Polychlorinated Biphenyls	SW 8082	09/26/98	09/30/9B	NA	10/03/90	10/09/
Semivolatile Organics	SW 8270C	00/26/98	09/30/98	NA		20,000
Volatiles by GC/MS	SW 8260B	03/20/20				

Page 61

Analyzed

10/15/98

10/20/98

Analyzed

10/21/98

10/21/98

<u>Analyzed</u>

10/08/98

<u>Analyzed</u>

10/07/98

<u>Analyzed</u>

10/09/98

10/20/98

#### Department of the Air Force DATES REPORT

Sample: 03C 48030988	053 SW3	Matr	ix: SOIL			)
Analys15	Method	<u>Collected</u> 09/26/98	<u>Received</u> 09/30/98	<u>TCLP_date</u> NA	Extracted	<u>Analyzeu</u> 10/08/98
Organic Carbon, Total						
Sample: 04A 48030988	054 SW1	Matr	XIX: WATER			
-		Collected	Received	TCLP date	Extracted	Analyzed
Analysis	Method	09/26/98	09/30/98	10/12/98	10/14/98	10/13/98
ICP Metals, TCLP Extracted	SW 1311/6010	09/26/98	09/30/98	10/12/98	10/20/98	10/20/30
Mercury, TCLP Extracted	SW 1311/7470					
Sample: 04B 4803098	8054 SW1	Mati	rix: WATER			
Sampic. Cor			Pageaured	TCLP date	Extracted	Analyzed
Analysis	Method	<u>Collected</u>	09/30/98	NA	10/01/98	10/21/98
Organochlorine Pesticides	SW 8081A	09/26/98	09/30/98	NA	10/01/98	10/21/98
Polychlorinated Biphenyls	SW 8082	09/26/98				
Sample: 04C 4803098	8054 SW1	Mat	rix: WATER			has lurad
		collected	Received	TCLP_date	Extracted	Analyzed
<u>Analysis</u>	Method	09/26/98	09/30/98	NA		10/00/00
Volatiles by GC/MS	SW 82605					
Sample: 04D 4803098	38054 SW1	Mat	rix: WATER		But racted	Analyzed
	Nothod	Collected	Received	TCLP date	Extracted	10/07/98
Analysis	SW 8270C	09/26/98	09/30/98	NA	10/01/98	
Semivolatile Organics				220		
Sample: 05A 480309	88055 SD1	Ma	trix: SEDIM	214 1		
<b>-</b>	_	collected	Received	TCLP date	Extracted	Analyzed
Analysis	Method	09/26/98	09/30/98	10/06/9B	10/07/98	10/09/98
ICP Metals, TCLP Extracted	SW 1311/6010	09/26/98	09/30/98	10/06/98	10/20/98	10/20/90
Mercury, TCLP Extracted	SW 1311/14/0					
Sample: 05B 480309	88055 SD1	Ma	atrix: SEDIM	ENT		
Jumpset the			Peratuad	TCLP date	Extracted	Analyzed
Analvsis	Method	<u>Collected</u>	<u>Receives</u>	NA	10/05/98	10/15/98
Organochlorine Pesticides	SW 8081A	09/26/98	09/30/98	NA		10/05/98
Percent Moisture	ASTM D2216	09/26/98	09/30/98	NA	10/05/98	10/15/98
Polychlorinated Biphenyls	SW 8082	09/26/98	09/30/98	NA	10/05/ <b>98</b>	10/21/98
Semivolatile Organics	SW 8270C	09/26/98	09/30/98	NA		10/08/98
Volatiles by GC/MS	SW 8260B	03/20/30				
Sample: 06A 48030	988056 SW1	М	latrix: SOIL		a	Analyzed
	Markad	Collected	Received	TCLP date	Extracted	10/09/98
Analysis	Method	09/26/98	09/30/98	10/06/9B	10/07/98	10/20/98
ICP Metals, TCLP Extracte Mercury, TCLP Extracted	SW 1311/7470	09/26/98	09/30/98	10/06/98	10/20/98	10/ 20/ 20

Page 63

### Department of the Air Force DATES REPORT

Order # 98-09-259 ANALYTICA, INC.

		Matr	ix: SOIL			
Sample: 06B 480309880	056 SW1				nurmacted	Analyzed
		Collected	Received	TCLP date	Excracced	10/15/98
Analysis	Method	09/26/98	09/30/98	NA	10/05/90	10/05/98
Organochlorine Pesticides	SW 8081A	09/26/98	09/30/98	NA	4 6 / AF / AR	10/15/98
Percent Moisture	ASTM D2216	09/26/98	09/30/98	NA	10/05/98	10/21/98
Polychlorinated Biphenyls	SW 8082	09/26/98	09/30/98	NA	10/05/98	10/08/98
Semivolatile Organics	SW 8270C	09/26/98	09/30/98	NA		10,00,00
volatiles by GC/MS	SW 8260B	03/20/50				
		Mati	rix: SOIL			
Sample: 06C 48030988	3056 SW1	• • • • •				analyzed
<b>-</b> - <b>2</b>		collected	Received	TCLP date	Extracted	<u>Anar) 198</u>
Analysis	Method	00/26/98	09/30/98	NA		10/00/00
Organic Carbon, Total	LECO/D513G	09/20/90				
0194		Mat	rix: SEDIME	NT		
Sample: 07A 4803098	8057 SD2	Fice of			_	he alward
50F =			Received	TCLP date	Extracted	Analy200
2021V515	Method	Collected	09/30/98	10/06/98	10/07/98	10/09/98
Analysis top Metals, TCLP Extracted	SW 1311/6010	09/27/98	09/30/98	10/06/98	10/20/98	10/20/98
NEROVEW TOLP Extracted	SW 1311/7470	09/27/98	0),00,00			
Mercury, 1021		Mai	SEDIM	ZNT		
Cample: 07B 4803098	38057 SD2	Ma				
Sampre: 010			negatived	TCLP date	Extracted	Analyzed
	Method	Collected	Received	NA	10/05/98	10/15/98
Analysis Analysis Analysis Pesticides	SW 8081A	09/27/98	09/30/98	NA		10/05/98
Organochiorine rescuence	ASTM D2216	09/27/98	09/30/98	NA	10/05/98	10/16/9B
Percent Moiscure	SW 8082	09/27/98	09/30/98	NA	10/05/98	10/21/98
Polychiorinated Bipheny -	SW 8270C	09/27/98	09/30/98	NA		10/09/98
Semivolatile organics	SW 8260B	09/27/98	09/30/98			
Volatiles by GC/HS						
480309	88058 SW2	Ma	atrix: WAIGF	•		
Sample: Von _ 1001				TCLP date	Extracted	Analyzed
	Method	<u>Collected</u>	Received	10/12/98	10/14/98	10/15/98
Analysis	SW 1311/6010	09/27/98	09/30/98	10/12/98	10/20/98	10/20/98
ICP Metals, ICDP Extracted	SW 1311/7470	09/27/98	09/30/98	20,,		
Mercury, TCLP Excluded				Ð		
- 1- 088 48030	988058 SW2	M	atrix: WAIS	K	-	
Sample: USB 40000	••••		,	TOLP date	Extracted	Analyze
	Method	<u>Collected</u>	Received	NA	10/01/98	10/21/9
Analysis	SW 8081A	09/27/98	09/30/98	NA	10/01/98	10/21/9
Organochlorine Pesticiues	SW 8082	09/27/98	09/30/98			
Polychlorinated Biphenyis						
	988058 SW2	1	Matrix: WAT	SK		
Sample: 08C 4803C	J900000 D=				Extracted	<u>Analyz</u> e
	Nethod	Collecter	d <u>Received</u>	TCLP date		10/09/-
Analysis	CW 8260B	09/27/98	09/30/98	NA		
Volatiles by GC/MS	38 02005					
	0088058 SW2		Matrix: WAT	EK		
Sample: 08D 4803	0300030 5112				Extracted	<u>Analy</u> z
	Nothod	Collecte	ed Received	d TCLP date	10/01/98	10/07/
Analysis	MELING	09/27/91	8 09/30/9	8 NA	2	
Semivolatile Organics	50 52,00					

#### Department of the Air Force DATES REPORT

Sample: 09A 48030988	059 SW1	Matr	ix: WATER			
Dampie		+.11	Received	TCLP date	Extracted	Analyzed
Analysis	Method	Collected	09/30/98	10/12/98	10/14/9B	10/15/98
ICP Metals, TCLP Extracted	SW 1311/6010	09/27/98	09/30/98	10/12/98	10/20/98	10/20/98
Mercury, TCLP Extracted	SW 1311/7470	09/27/98	03730750			
Sample: 09B 48030988	059 SW1	Matr	ix: WATER			
	Nethod	Collected	Received	TCLP date	Extracted	Analyzed
Analysis	CW 9081A	09/27/98	09/30/98	NA	10/01/98	10/21/98
Organochlorine Pesticides Polychlorinated Biphenyls	SW 8082	09/27/9B	09/30/98	NA	10/01/98	10/22/
	0050 GW1	Mat:	rix: WATER			
Sample: 09C 4803098	8033 3HT					analyzed
v	Nothod	Collected	Received	<u>TCLP date</u>	Extracted	10/09/98
Analysis Volatiles by GC/MS	SW 8260B	09/27/98	09/30/98	NA		10/05/20
	0050 <b>G</b> M1	Mat	rix: WATER			
Sample: 09D 4803098	802A 2MT					analyzed
	Nothod	Collected	Received	<u>TCLP date</u>	Extracted	10/07/98
Analysis	SW 8270C	09/27/98	09/30/98	NA	10/01/98	10/07/20
Semivolatile Organics	31 02/00					
Sample: 10A 4803098	38060 SW1	Mat	rix: SOIL			
	Wathod	Collect <u>ed</u>	Received	TCLP date	Extracted	Analyzed
Analysis	<u>Mechou</u>	09/27/98	09/30/98	10/06/98	10/07/98	10/20/98
ICP Metals, TCLP Extracted	SW 1311/7470	09/27/98	09/30/98	10/06/98	10/20/98	10/20/00
Mercury, TCLP Extracted	•					
Sample: 10B 480309	88060 SW1	Ma	trix: SOID			
	Nothod	Collected	Received	TCLP date	Extracted	<u>Analyzed</u>
Analysis		09/27/98	09/30/98	NA	10/05/98	10/15/98
Organochlorine Pesticides	36 0001A	09/27/98	09/30/98	NA		10/18/98
Percent Moisture	R31N 8082	09/27/98	09/30/98	NA	10/05/98	10/21/98
Polychlorinated Biphenyis	SH 8002	09/27/98	09/30/98	NA	10/05/98	10/09/98
Semivolatile Organics	SW 8260B	09/27/98	09/30/98	NA		10,00,00
Volatiles by GC/MS				•		
Sample: 10C '480309	88060 SW1	Ma	atrix: SOIL			
		Collected	Received	<u>TCLP date</u>	Extracted	Analyzed
Analysis		09/27/98	09/30/98	NA		10/08/98
Organic Carbon, Total	TECO/D213G	••••				
Sample: <b>11A 48030</b>	988061 SD1	М	atrix: SEDIN	GENT		
-		Collected	Received	TCLP date	Extracted	Analyzed
Analysis	Method	00/07/08	09/30/98	10/06/98	10/07/98	10/09/98
ICP Metals, TCLP Extracted	d SW 1311/6010	V3/21/30	09/30/98	10/06/98	10/20/98	10/20/98
Mercury, TCLP Extracted	SW 1311/7470	U3/2//38				

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Order # 98-09-259 ANALYTICA, INC.

#### Department of the Air Force DATES REPORT

Page 65

# Sample: 11B 48030988061 SD1

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#### Matrix: SEDIMENT

09/30/98 09/30/98 09/30/98 09/30/98 09/30/98	na Na Na Na	10/05/98 10/05/98 10/05/98	10/15/98 10/05/98 10/18/98 10/21/98 10/09/98
	09/30/98	09/30/98 NA	09/30/98 NA 10/05/98
	09/30/98	09/30/98 NA	09/30/98 NA
	09/30/98	09/30/98 NA	09/30/98 NA 10/05/98
	09/30/98	09/30/98 NA	09/30/98 NA 10/05/98
	09/30/98	09/30/98 NA	09/30/98 NA

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# INSTRUCTIONS FOR COMPLETING CHAIN-OF-CUSTODY RECORD

Record the client name, address, contact, and a phone and fax number where the client contact can be reached in case of questions.

Project ID/Description: Record the name of the project of client/site location, and the project number as assigned by the field team. (example-613215; x,y,z Chemical Co., WA).

P.O.: Record a purchase order number for billing and reference purposes.

Sample Matrix: Use on (1) chain-of-custody record per sample matrix. Circle the matrix which most accurately represents the samples included on the C-O-C, (i.e. water, soil, oil, sludge). For multiphasic samples (e.g., oil and water), or a non1listed matrix, circle "other" and describe the matrix in the space provided.

Date and Time Collected: Record the date and exact time each sample was collected. Use 24 hr. clock.

Client ID: List the complete identifying name/number of each of the samples you send. These ID's must correspond with the identifying labels on the sample containers.

Number of Containers: Indicate the number of containers being shipped for the respective samples to be analyzed.

Comments: The comment section can be used to record the waybill or air bill number if the samples are being sent by a shipping company, any special instructions to the laboratory regarding the processing of the samples or an indication if the samples are suspected to contain high concentrations of any hazardous materials.

Signatures: When releasing custody of these samples, use the "Relinquished By" space to sign your full name, date and time of release. After verifying that all samples indicated are present, the person receiving the samples will sign in the "Received By" space to take custody of the samples.

All other sections of the C-O-C record are for Analytica use, and should be left blank.

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**B** 

YES

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wok

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NC

YES (

### COOLER RECEIPT FORM

£ 3

CLIENT Elman AREBCSN#\_\_\_\_\_ PROJECT Cape Toward ORD# \_ 980925-5

USE OTHER SIDE OF THIS FORM TO NOTE DETAILS CONCERNING CHECK-IN PROBLEMS/DISCREPANCIES

A.	PRELIMINARY EXAMINATION PHASE: Date cooler opened: 7-30-70	Chain of Custody #
	by print Alarce sign	Re NO

1. Did cooler come with a shipping slip air bill, etc. ?\_ If YES, enter carrier name & air bill number here Deleg 3/2 88648/S NO

- 2. Were custody seals on outside of cooler? How many & where: 2 Faront & Side seal date: 9-29- 98 seal name: L. And 3. Were custody seals unbroken and intact on the date and time of arrival?\_\_\_\_\_
- 4. Did you screen samples for radioactivity using the Geiger Counter?\_\_\_\_\_
- 5. Were custody papers sealed in a plastic bag & taped inside to the lid?\_\_\_\_\_
- 6. Were custody papers filled out properly ink, signed, etc ?\_\_\_\_\_
- 7. Did you sign custody papers in the appropriate place?\_\_\_\_\_
- 8. Was project identifiable from custody paper?, If yes, enter project name at the top of this form\_ Æ
- 9. If required, was enough ice used? TES NO Type of ice: WET BLUE Temp <u>C</u> 10. Have designate person initial here to acknowledge receipt of cooler: \_\_\_\_\_\_ date: \_\_\_\_\_\_

B. LOG-IN PHASE: Date samples were logged-in: 5. Buttle Wa 11. Describe type of packing in cooler:\_\_\_\_\_ NO) ÝĒS 12. Were all bottles sealed in separate plastic bags?\_\_\_\_ NO YES 13. Did all bottles arrive unbroken & were labels in good condition?\_\_\_\_\_ NO 14. Were all bottle labels complete ID, date, time, signature, preservative, etc. ?\_\_\_\_ NO

- 15. Did all bottle labels agree with custody papers? Not All Samples
- 16. Number of samples received\_\_\_\_\_\_ Number of bottles received\_\_\_\_\_\_
- 17. Were correct containers used for the tests indicated?
- 18. Were correct preservatives added to samples?
- 19. Was a sufficient amount of sample sent for tests indicated?\_\_\_\_\_\_
- 20. Were bubbles absent in volatile samples? If NO, list by Sample #/ID\_\_\_\_\_
- 21. Was the project manager called and status discussed? If yes, give details on the back of this form\_\_\_\_\_
- By whom?\_\_\_\_\_ 22. Who was called?\_\_\_\_\_

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# 5438 Shuane Drive, Juneau, AK 99801 • (907) 780-6668 • FAX (907) 780-6670

U.S.A.F. 611th/CEVO 21885 2nd Street Elmendorf AFB, AK 99506-4420

Attn: Carl Hornig

Order #: J8-09-141 Date: 11/25/98 12:15 Work ID: Cape Romanzov Landfill Date Received: 09/30/98 Date Completed: 11/25/98

#### SAMPLE IDENTIFICATION

 Sample

 Number
 Client Description

 01
 48030988053
 SW3

 02
 48030988056
 SW1

Sample Number <u>Client Description</u> 03 48030988060 SW1

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. A listing of data qualifiers and analytical codes is located on the TEST METHODOLOGIES page at the end of the report.

If you have any questions regarding the analyses, please feel free to call.

Respectfully Submitted,

David Wetzel Project Manager

# ANALYTICA ALASKA, S.E

5438 Shaune Drive Juneau, AK 99801 (907)780-6668 Tel. (907)780-6670 Fax

# **REPORT OF SIEVE ANALYSIS**

CLIENT: PROJECT: CONTACT: REPORT DATE: LAB NUMBER:	USAF 611 CES/CEVO Cape Romanzof Landfill Carl Hornig 25-Nov-98 J809141-01A	DATE SAMPLED: SAMPLED BY: SAMPLED FROM: MATERIAL: DATE REC'D:	26-Sep-98 Carl Hornig 48030988053 SW3 Soil 30-Sep-98
Technician:	Aaron Wanstall	Total Dry Weight: Dry Weight Fine:	0.4351 kg 110.0 g
Checked By:	David Wetzel		

SIEVE SIZE	CUMULATIVE	UNITS	%RETAINED	X% #10 MINUS	% PASSING	SPECIFICATION
	DRY WEIGHT				1	······
			09/	N/A	100%	
4 "		кg	076	N/A	100%	
3 "		kg	0%		100%	· · · · · · · · · · · · · · · · · · ·
2"		kg	0%		100%	
1 1/2 "		kg	0.0%	N/A	100%	<u> </u>
1 "		kg	0.0%	N/A	100%	<b>↓</b>
2/4 !!	0.0377	kg	8.7%	N/A	91.3%	ļ
	0.0504	kø	11.6%	N/A	88.4%	
1/2	0.0504	ka	14.6%	N/A	85.4%	l
3/8 "	0.0637		24.0%	N/A	76.0%	
#4	0.1044	<u></u>	24.070		67.4%	
#8	0.1420	kg	32.0%		65.0%	
#10	0.1522	kg	35.0%	<u>N/A</u>	40.09/	_ <u></u>
#20	27.1	g	24.6%	75.4%	49.0%	
#40	51.1	g	46.5%	53.5%	34.8%	
#40	66.6		60.5%	39.5%	25.7%	
#60	00.0		66.3%	33.7%	21.9%	
#80	72.9	_ <del></del>	60.5%	30.5%	19.9%	
#100	76.4	<u> </u>	09.3%	21.5%	13.9%	
#200	86.4	g	/8.5%			
Pan	110.0	g				

Sample analyzed according to ASTM D-422, "Particle Size Analysis of Soils".

Reviewed B

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grav. constant (cm/s2) 981

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#### PARTICLE SIZE ANALYSIS WORKSHEET ASTM D422

			Concen. in Suspension	Oven Dry	Mean Particle Diameter			
Sample #	time (min)	R (gm/l)	RL (gm/i)	(gm/l)	weight (gm)	F (70)	(2011)	
	0.67	21.0	5	16	110.0	14.5	66.3	
J809141-01A	0.07	21.0	5	14	110.0	12.7	55.0	
	1	19.0	5	8.5	110.0	7.7	32.8	
	3	13.5		5.5	110.0	5.0	18.3	
	10	10.5	5	3.5	110.0	3.2	10.7	
	30	8.5			110.0	2.7	7.6	
	60	- 0.0	5		110.0	1.8	5.4	
	120 1440	7.0	5		2 110.0	1.8	1.6	

## ANALYTICA ALASKA, S.E

5438 Shaune Drive Juneau, AK 99801 (907)780-6668 Tel. (907)780-6670 Fax

### **REPORT OF SIEVE ANALYSIS**

CLIENT:	USAF 611 CES/CEVO	DATE SAMPLED:	26-Sep-98
PROJECT:	Cape Romanzof Landfill	SAMPLED BY:	Carl Hornig
CONTACT:	Carl Hornig	SAMPLED FROM:	48030988056 SW1
REPORT DATE:	25-Nov-98	MATERIAL:	Soil
LAB NUMBER:	J809141-02A	DATE REC'D:	30-Sep-98
Technician: Date Tested: Checked By:	Aaron Wanstall David Wetzel	Total Dry Weight: Dry Weight Fine:	0.2519 kg 50.0 g

STEVE SIZE	CUMULATIVE	UNITS	%RETAINED	X% #10 MINUS	% PASSING	SPECIFICATION
SIEVESIZE	DRY WEIGHT					
				N/A	100%	
4 "		kg	0%		100%	<del></del>
3 "		kg	0%	N/A	100%	<u> </u>
2"		kg	0%	N/A	100%	<u> </u>
1 1/2 "		kg	0.0%	N/A	100%	<u> </u>
1 1/2		kg	0.0%	N/A	100%	
2/4 #		kg	0.0%	N/A	100.0%	
3/4	0.0054	ko	2.1%	N/A	97.9%	
1/2	0.0004		11.5%	N/A	88.5%	
3/8 "	0.0289	Kg lie	22.8%	N/A	77.2%	
#4	0.0575	<u>kg</u>	22.070	NI/A	64.9%	
#8	0.0885	kg	35.1%		61.5%	
#10	0.0971	kg	38.5%	N/A	45 69/	<u> </u>
#20	12.9	g	25.8%	74.2%	43.0%	_ <b>_</b>
	22.3	g	44.6%	55.4%	34.0%	
#40	28.0	g	56.0%	44.0%	27.0%	_ <u></u>
#00	20.0	+	60.6%	39.4%	24.2%	
#80		+ 5	63.0%	37.0%	22.7%	
#100		<u>_</u>	70.0%	30.0%	18.4%	
#200	35.0	<u>g</u>	/0.0%			
Pan	50.0	g				<u></u>

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Sample analyzed according to ASTM D-422, "Particle Size Analysis of Soils".

Reviewed By

grav. constant (cm/s2) 981

#### PARTICLE SIZE ANALYSIS WORKSHEET ASTM D422

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Sample #	•time (min)	R (gm/l)	RL (gm/i)	Concen. in Suspension (gm/l)	Oven Dry Weight (gm)	[ P (%)	Mean Particle Diameter (um)	Comments
J809141-02A	0.67 1 3 10 30 60 120	17.0 16.0 13.0 9.5 8.0 7.0 6.0	5 5 5 5 5 5 5 5 5	12 11 8 4.5 2	50.0           50.0	24.0 22.0 16.0 9.0 6.0 4.0 2.0 0.0	68.0 56.0 32.9 18.4 10.7 7.6 5.4 1.6	

## ANALYTICA ALASKA, S.E

5438 Shaune Drive Juneau, AK 99801 (907)780-6668 Tel. (907)780-6670 Fax

### **REPORT OF SIEVE ANALYSIS**

CLIENT: PROJECT: CONTACT: REPORT DATE: LAB NUMBER:	USAF 611 CES/CEVO Cape Romanzof Landfill Carl Hornig 25-Nov-98 J809141-03A	DATE SAMPLED: SAMPLED BY: SAMPLED FROM: MATERIAL: DATE REC'D:	27-Sep-98 Carl Hornig 48030988060 SW1 Soil 30-Sep-98
Technician:	Aaron Wanstall	Total Dry Weight: Dry Weight Fine:	0.2693 kg 50.0 g
Checked By:	David Wetzel		

NEVE SIZE	CUMULATIVE	UNITS	%RETAINED	X% #10 MINUS	% PASSING	SPECIFICATIO.
	DRY WEIGHT					
					1000/	
4 "		kg	0%	<u>N/A</u>	100%	
3 "		kg	0%	N/A	100%	
<u></u>		kg	0%	N/A	100%	
1 1/2 "		kg	0.0%	N/A	100%	
1 1/2		kg	0.0%	N/A	100%	
1		kg	0.0%	N/A	100.0%	
3/4 "	0.0281	kg	10.4%	N/A	89.6%	
1/2 "	0.0201	ka	12.0%	N/A	88.0%	
3/8 "	0.0525	ka	25.8%	N/A	74.2%	
#4	0.0095	kg	41.4%	N/A	58.6%	
#8	0.1116	<u>kg</u>	41.470	N/A	54.7%	
#10	0.1220	<u>kg</u>	43.376	61.6%	33.7%	
#20	19.2	<u> </u>	50.4%	40.6%	22.2%	
#40	29.7	g	59.4%	30.2%	16.5%	
#60	34.9	g	09.8%	26.2%	14.3%	
#80	36.9	<u> </u>	73.8%	20.276	13.1%	
#100	38.0	g	76.0%		10.4%	
#200	40.5	g	81.0%	19.0%	10.470	
Pan	50.0	g				<u></u>

Sample analyzed according to ASTM D-422, "Particle Size Analysis of Spils".

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Reviewed By

grav. constant (cm/s2) 981

#### PARTICLE SIZE ANALYSIS WORKSHEET ASTM D422

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Sample #	time (min)	R (gm/l)	RL (gm/l)	Concen. in Suspension (gm/l)	Oven Dry Weight (gm)	[ P (%)	Mean Particle Diameter (um)	Comments
1000111-030	0.67	11.5	5	6.5	50.0	13.0	70.2	
1003 14 1-001	· 1	11.0	5	16	50.0	12.0	57.6	
	3	10.0	5	1 5	50.0	10.0	33.5	
	10	8.5	5	3.5	50.0	7.0	18.5	
	30	65	5	1.5	5 50.0	3.0	10.8	
	50	6.0	5		50.0	2.0	7.6	
	400	6.0	5	· ·	1 50.0	2.0	5.4	
	1440	6.0	5	· [	1 50.0	] 2.0	1.6	i

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Order # J8-09-141 ANALYTICA AK SE

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U.S.A.F. 611th/CEVO DATES REPORT Page 2

Sample:	01A	48030988053 SW3	Matr	rix: SOIL			
Analysis Grain Size		Method ASTM D422	<u>Collected</u> 09/26/98	<u>Received</u> 09/30/98	<u>TCLP date</u> NA	Extracted	<u>Analyzed</u>
Sample:	02A	48030988056 SW1	Matr	ix: SOIL			
<u>Analysis</u> Grain Size		Method ASTM D422	<u>Collected</u> 09/26/98	<u>Received</u> 09/30/98	<u>TCLP date</u> NA	<u>Extracted</u>	<u>Analyzed</u>
Sample:	03A	48030988060 SW1	Mati	rix: SOIL			
<u>Analysis</u> Grain Size		Method ASTM D422	<u>Collected</u> 09/27/98	<u>Received</u> 09/30/98	<u>TCLP date</u> NA	<u>Extracted</u>	<u>Analyzed</u>





# 811 W. 8th Avenue, Anchorage, AK 99501 • (907) 258-2155 • FAX (907) 258-6634

USAF - 611TH CES/CEVO 21885 2ND STREET ELMENDORF AFB, AK 99506-4420 (907) 552-1617/FAX 4601 Attn: MR. CARL HORNIG Order #: A8-09-137 Date Reported: 10/30/98 16:55 Project Name: CAPE ROMANZOF LAND FILL Date Received: 09/29/98

#### SAMPLE IDENTIFICATION

 Sample

 Number
 Client\_Description

 01
 48030988052
 SD3

 02
 48030988053
 SW3

 03
 48030988055
 SD1

 04
 48030988056
 SW1

Sample		
Number	<u>Client Desc</u>	<u>-iption</u>
05	48030988057	SD2
06	48030988060	SW1
07	48030988061	SD1

Enclosed are the analytical results for the submitted samples. All analyses met quality assurance objectives, except where noted in the case narratives. If you have any questions regarding the analyses, please feel free to call.

Bradley C. Olson Vice President - Operations

tabular sampl r p rt - fuels

AAI Project ID: A809137

Analytica Alaska, Inc.

84

811 W. 8th Ave. Anchorage, AK 99501 Phone-(907)258-2155 FAX-(907)258-6634

30-Oct-98

**USAF - 611TH CES/CEVO** 

Client:

Project Name: Sample ID Client Sample ID A809137-02 48030988053 SW3 A809137-01 48030988052 SD3 A809137-04 48030988056 SW1 A809137-03 48030988055 SD1 A809137-07 48030988061 SD1 A809137-06 48030988060 SW1 A809137-05 48030988057 SD2 CAPE ROMANZOF LAND FILL Matrix SOIL SOIL SOIL SOIL SOIL SOIL SOIL Benzene 0 C 0 ¢ C 0 0 Toluene 0 0 0 0 0 0 0 Ethylbenzene Xylenes, Total 0 0 0 0 0 0 ¢ 0 0 0 0 C ¢ 0 GRO u (1.3) mg/Kg U (3.4) mg/Kg U (1.1) | mg/Kg U (1.2) U (1.6) mg/Kg U (1.3) | mg/Kg U (1.5) mg/Kg mg/Kg Units DRO 8.8 (4.8) 5.9 (4.8) 18 (8.1) 20 (4.6) 180 (25) 16 (5.1) 18 (4.5) RRO 1000 (25) | mg/Kg 170 (4.6) mg/Kg 41 (4.8) mg/Kg 94 (8.1) mg/Kg 130 (4.5) mg/Kg 44 (4.8) mg/Kg 100 (5.1) | mg/Kg Units

The Science of ... The Art of Service

The number in parentheses is the reporting limit "U" Indicates analyte was not detected. "()" Indicates analyte was not analyzed for. "J" indicates value is estimated.

Page

188

Order # A8-09-137 Analytica Ak. USAF - 611TH CES/CEVO CASE NARRATIVE

ADEC Laboratory Approval Number: UST-014

The samples were received properly packed in three coolers at  $2.1^{\circ}C$ ,  $4.9^{\circ}$  and 5.1 and were refrigerated upon receipt.

Data Flag Definitions:

- U Indicates this analytes was searched for and not detected at the reporting limits listed.
- D Indicates the surrogate was diluted out of the sample due to high levels of organics native to the samples.
- M Indicates matrix effects are responsible for surrogate recoveries which are out of limits.
- NC Indicates analyte was detected in original analysis but not confirmed in secondary analysis.
- DR Indicates result is from secondary analysis at dilution.
- S Indicates corrective action did not accomplish desired results or corrective action not performed for cause. See QC Evaluation Summary for details.
- B Indicates analyte was found in Method Blank. Result should be considered as potentially blased high. See QC Evaluation Summary for details.
- Indicates sample not preserved according to AK101 requirements. True value 1s greater than or equal to the reported value.
- W Sample reported on a wet weight basis due to missing percent moisture aliquot.
- J Sample result is estimated. See QC Evaluation Summary for details.

1112 198 Date: Analyst: Date: 11,02,98 pra Analyst:

Order # A8-09-137 USAF - 611TH CES/CEVO Analytica Ak. TEST RESULTS by SAMPLE

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Client ID: Test Description: Collected:	48030988052 SD3 GRO in soil by 09/26/98 00:00	AK101.		Lab ID: Method: Matrix:	DIA 5030/AK101 SOIL
ANALYSIS DA ANALY INSTRUMENT Sample	ATE: 10/09/98 XST: SWG ID: BORIS e reported on a d	dry weight basis.	) D & M	FILE ID: UNITS: ILUTION: OISTURE:	B8100907.D <b>mg/Kg</b> 1 51.5
<u>PARAMETER</u> Gasoline Ra	nge Organics	<u>CAS # or ID</u> GRO	<u>result</u> U	<u>LIMIT</u> 3.4	<u>_</u>
<u>ς</u> α,α,α-Trifluor p-Bromofluor	URROGATE otoluene obenzene	<u>%RECOVERY</u> 90 % 64 %		60 60	1 <u>1TS</u> - 120 - 120
Client ID: Test Description Collected:	48030988052 SD DRO/RRO 1N SO1 09/26/98 00:00	)3 1-AK102&103 )		Lab ID: Method: Matrix:	01B 3550/AK102/3 SOIL
EXTRACTION SANALYSIS	DATE: 10/07/98 DATE: 10/21/98 LYST: GSM T ID: WOOF le reported on a	dry weight basis.	÷	FILE ID: UNITS: DILUTION: MOISTURE:	W8102127.D mg/Kg 1 51.5
<u>PARAMETER</u> Diesel Ran Residual F	ge Organics Lange Organics	<u>CAS # or ID</u> DRO RRO	<u>RESULT</u> 18 94	<u>LIMI</u> 8. 8.	<u>r o</u> 1 1
0-	<u>SURROGATE</u> Terphenyl Squalane	<u>%RECOVERY</u> 35 M % 53 M %		<u>ل</u> 60 60	<u>IMITS</u> - 120 - 120

Page 4

Order <b># A8-09-</b> Analytica Ak.	137 US TES	AF - 611TH CESTCENO T RESULTS by SAMPLE			
Client ID: Test Description:	<b>48030988053 SW3</b> GRO in soil by AJ 09/26/98 00:00	X101.		Lab ID: Method: Matrix:	02A 5030/AK101 SOIL
ANALYSIS DA' ANALY INSTRUMENT Sample	TE: 10/09/98 ST: SWG ID: BORIS reported on a dr	y weight basis.	FI DII % MO3	LE ID: UNITS: UTION: ISTURE:	B8100908.D <b>mg/Kg</b> 1 18.3
<u>PARAMETER</u> Gasoline Ran	ge Organics	<u>CAS # or ID</u> GRO	<u>result</u> U	<u>LIMIT</u> 1.3	
<u>SU</u> α,α,α-Trifluoro p-Bromofluoro	<u>RROGATE</u> btoluene bbenzene	<u>%RECOVERY</u> 80 % 73 %		<u>LI</u> 60 60	<u>MITS</u> - 120 - 120
Client ID: Test Description:	48030988053 SW3 DRO/RRO in soil	-AK102&103		Lab ID Method Matrix	: <b>02B</b> : 3550/AK102/ : SOIL
Collected: EXTRACTION D ANALYSIS D ANAL INSTRUMENT Sampl	ATE: 10/07/98 ATE: 10/21/98 YST: GSM ID: WOOF e reported on a c	dry weight basis.	י D א M	FILE ID: UNITS: ILUTION: OISTURE:	W8102123.D mg/Kg 1 18.3
<u>PARAMETER</u> Diesel Rang Residual Ra	ge Organics ange Organics	<u>Cas # or ID</u> DRO RRO	<u>RESULT</u> 5.9 <b>41</b>	<u>LIM</u> 4 4	<u>.8</u> .8
0-	SURROGATE Terphenyl	<u>%RECOVERY</u> 82 % 120 %		60 60	<u>LIMITS</u> - 120 - 120

Squalane

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USAF - 611TH CES/CEVO

84 Page 5

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Order # A8-09-137 Analytica Ak.

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USAF - 611TH CES/CEVO TEST RESULTS by SAMPLE

Client ID: 48 Test Description: GR Collected: 09	030988055 SD1 0 in soil by /26/98 00:00	AK101.		Lab ID: Method: Matrix:	03A 5030/AK101 SOIL
ANALYSIS DATE: ANALYST: INSTRUMENT ID: Sample re	10/09/98 SWG BORIS sported on a d	lry weight basis.	÷	FILE ID: UNITS: DILUTION: MOISTURE:	B8100909.D <b>mg/Kg</b> 1 19.1
<u>PARAMETER</u> Gasoline Range	Organics	<u>CAS # or ID</u> GRO	<u>result</u> U	LIMIT 1.6	<u>_</u>
<u>SURR</u> α, α, α, α-Trifluoroto p-Bromofluorobe	<u>OGATE</u> luene nzene	<u>%RECOVERY</u> 89 % 73 %		<u>LI</u> 60 60	<u>MITS</u> - 120 - 120
Client ID: 4 Test Description: D Collected: 0	8030988055 SE RO/RRO in soi 19/26/98 00:00	01 1-AK102&103		Lab ID: Method: Matrix:	03B 3550/AK102/3 SOIL
EXTRACTION DATE ANALYSIS DATE ANALYSI INSTRUMENT II Sample :	S: 10/07/98 S: 10/21/98 T: GSM D: WOOF reported on a	dry weight basis	5. ·	FILE ID: UNITS: DILUTION: % MOISTURE:	W8102141.D mg/Kg 1 19.1
<u>PARAMETER</u> Diesel Range Residual Rang	Organics e Organics	<u>CAS # or ID</u> DRO RRO	<u>RESULT</u> 8.8 44	<u>LIMI</u> 4. 4.	<u>T</u> Q 8 8
<u>SUR</u> o-Ter So	<u>ROGATE</u> phenyl µualane	<u>%RECOVERY</u> 72 % 105 %		<u>1</u> 60 60	<u>- 120</u> - 120 - 120

Page 6

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USAF - 611TH CES/CEVO TEST RESULTS by SAMPLE

Order # A8-09-137

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Analytica Ak.

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Client ID:         48030988056 SW1           Test Description:         GRO in soil by 2           09/26/98 00:00	AK101.	I P D	ab ID: ( lethod: ! fatrix: ;	04A 5030/AK101 SOIL
Collected: ANALYSIS DATE: 10/09/98 ANALYST: SWG INSTRUMENT ID: BORIS Sample reported on a c	lry weight basis. <u>CAS # or ID</u>	FILI UI DILU & MOIS <u>RESULT</u>	S ID: NITS: FION: TURE: <u>LIMIT</u> 1.2	B8100910.D mg/Kg 1 14.5 
<u>PARAMETER</u> Gasoline Range Organics <u>SURROGATE</u> α,α,α-Trifluorotoluene p-Bromofluorobenzene	GRO <u>%RECOVERY</u> 89 % 38 %	0	<u>LI</u> 60 60	<u>MITS</u> - 120 - 120
Client ID:       48030988056 50         Test Description:       DRO/RRO in soit         Collected:       09/26/98 00:00	N1 il-AK102&103 0		Lab ID: Method: Matrix:	04B 3550/AK102/3 SOIL
EXTRACTION DATE: 10/07/98 ANALYSIS DATE: 10/21/98 ANALYST: GSM INSTRUMENT ID: WOOF	dry weight basis.	F] DI] % MO	LE ID: UNITS: LUTION: ISTURE:	W8102129.D mg/Kg 1 14.5
Sample reported on a <u>PARAMETER</u> Diesel Range Organics Residual Range Organics	<u>CAS # or ID</u> DRO RRO	<u>RESULT</u> 20 170	<u>LIMI</u> 4. 4.	T <u>Q</u> .6 .6
<u>SURROGATE</u> o-Terphenyl Squalane	<u>%recovery</u> 53 M % 73 %		60 60	<u>LIMITS</u> - 120 - 120

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Page 7

USAF - 611TH CES/CEVO TEST RESULTS by SAMPLE

Order # A8-09-137

Analytica Ak.

Client ID: 480 Test Description: GRC	30988057 SD2	101.			Lab ID: 0 Method: 5 Matrix: 6	95A 3030/AK101 SOIL
Collected: 097 ANALYSIS DATE: ANALYST: INSTRUMENT ID: Sample re	10/09/98 SWG BORIS ported on a dr	y weight bas	sis.	E D: % M(	TILE ID: 1 UNITS: 1 ILUTION: DISTURE: LIMIT	B8100911.D mg/Kg 1 23.4
<u>PARAMETER</u> Gasoline Range	Organics	<u>CAS # or ID</u> GRO		U 110547	1.1 LIN	<u>11TS</u>
<u>SURR(</u> α,α,α-Trifluoroto) p-Bromofluorober	<u>)GATE</u> Luene nzene	<u>%RECOVE</u> 89 47	<u>RY</u> % %		60 60	- 120 - 120
Client ID: 4 Test Description: D	8030988057 SD2 RO/RRO in soll 9/26/98 00:00	-AK102&103			Lab ID: Method: Matrix:	05B 3550/AK102/3 SOIL
EXTRACTION DATE ANALYSIS DATE	5: 10/07/98 5: 10/22/98 5: GSM				FILE ID: UNITS: DILUTION:	W8102187.D <b>mg/Kg</b> 5
INSTRUMENT I Sample	D: WOOF reported on a	dry weight b	asis.	÷	MOISTURE:	23.4
<u>PARAMETER</u> Diesel Range Residual Rang	Organics Je Organics	<u>CAS # or :</u> DRO RRO	<u>ID</u>	<u>RESULT</u> 180 1000	<u>LIMI</u> 2 2	<u>T</u> <u>Q</u> 25 25
SUI o-Te: So	ROGATE rphenyl qualane	<u>%RECO</u> D I	<u>VERY</u> ) % ) %		60 60	<u>LIMITS</u> - 120 - 120

84 195 Page 8

Order # A8-09-137 Analytica Ak. USAF - 611TH CES/CEVO TEST RESULTS by SAMPLE

Client ID: Test Description: Collected:	48030988060 SW1 GRO in soil by 09/26/98 00:00	<u>AK101</u> .		Lab ID: 0 Method: 5 Matrix: 5	6A 030/AK101 SOIL
ANALYSIS DA ANALY INSTRUMENT Sample	ATE: 10/09/98 IST: SWG ID: BORIS e reported on a d	lry weight basis.	FI DIL % MOI	UNITS: I UTION: STURE:	ng/Kg 1 12.5
<u>PARAMETER</u> Gasoline Ra	nge Organics	<u>CAS # or ID</u> GRO	<u>result</u> U	<u>LIMIT</u> 1.5	<u> </u>
<u>s</u> α,α,α-Trifluor p-Bromofluor	URROGATE otoluene obenzene	<u>%RECOVERY</u> 85 % 80 %		<u>LIM</u> 60 - 60 -	<u>11TS</u> 120 120
Client ID: Test Description Collected:	48030988060 SW : DRO/RRO in soi 09/26/98 00:00	1 1-AK102&103		Lab ID: Method: Matrix:	06B 3550/AK102/3 SOIL
EXTRACTION ANALYSIS ANA INSTRUMEN	DATE: 10/07/98 DATE: 10/21/98 LYST: GSM TT ID: WOOF	dry weight basis.	н р: % Ми	ILE ID: UNITS: LUTION:	W8102143.D mg/Kg 1 12.5
Sam <u>p PARAMETER</u> Diesel Ran Residual J	nge Organics Range Organics	<u>CAS # or ID</u> DRO RRO	<u>RESULT</u> 18 130	<u>LIMI</u> 4.9 4.9	<u>c Q</u> 5
o	<u>SURROGATE</u> -Terphenyl Squalane	<u>%RECOVERY</u> 72 % 107 %		<u>ь</u> 60 60	<u>IMITS</u> - 120 - 120

Page 9

Order <b># A8-09</b> Analytica Ak.	-137 t TI	ISAF - 611TH CES/CEW SST RESULTS by SAMPLI	5 E		
Client ID: Test Description:	48030988061 SD1 GRO in soll by 09/26/98 00:00	AK101.	]	Lab ID: 0 Method: 5 Matrix: S	7A 030/AK101 OIL
Collected: ANALYSIS DA ANALY INSTRUMENT Sample	ATE: 10/09/98 (ST: SWG ID: BORIS e reported on a c	iry weight basıs.	FIL U DILU % MOIS	E ID: B NITS: M TION: ] TURE: 2	8100913.D <b>ng/Kg</b> 22.1
<u>PARAMETER</u> Gasoline Ra	nge Organics	<u>CAS # or ID</u> GRO	<u>result</u> U	<u>LIMIT</u> 1.3	<u>_Q</u>
<u>s</u> α,α,α-Trifluor p-Bromofluor	OURROGATE Cotoluene Cobenzene	<u>%RECOVERY</u> 85 % 71 %		<u>LIM</u> 60 - 60 -	<u>115</u> 120 120
Client ID: Test Description Collected:	<b>48030988061 SI</b> : DRO/RRO in SO 09/26/98 00:0	D1 il-AK102&103 0		Lab ID: Method: Matrix:	07B 3550/AK102/3 SOIL
EXTRACTION ANALYSIS ANA	DATE: 10/07/98 DATE: 10/21/98 LLYST: GSM		F	ILE ID: UNITS: LUTION:	W8102125.D mg/Kg 1
INSTRUMEN Samp	NT ID: WOOF ple reported on a	a dry weight basis.	¥ MC	ISTURE:	22.1
<u>PARAMETER</u> Diesel Ran Residual 1	nge Organics Range Organics	<u>CAS # or ID</u> DRO RRO	<u>result</u> 16 100	<u>LIMI)</u> 5.1 5.2	
o	<u>SURROGATE</u> -Terphenyl Squalane	<u>%RECOVERY</u> 77 % 114 %		<u>L</u> 60 60	<u>IMITS</u> - 120 - 120

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USAF - 611TH CES/CEVO

Order # A8-09-137 Analytica Ak. USAF - 611TH CES/CEVO TEST METHODOLOGIES

Method AK101 from the State of Alaska Department of Environmental Conservation (ADEC), Storage Tank Program, Underground Storage Tanks Procedures Manual, 18 AAC 78, as amended through January 31, 1996; is referenced for the analysis of gasoline range organics (GRO).

The quantitation range extends from the beginnning of C6 to the beginning of C10.

Methods AK102 & AK103 from the State of Alaska Department of Environmental Conservation (ADEC), Storage Tank Program, Underground Storage Tanks Procedures Manual, 18 (ADEC), as amended through January 31, 1996; is referenced for the analysis of AAC 78, as amended through January 31, 1996; is referenced for the analysis of diesel range organics (DRO).

The quantitation range for AK102 extends from the beginning of C10 to the beginning of C25. The standard used is a 1:1:1 mixture of Kerosene, DF1, and DF2.

The quantitation range for AK103 extends from the beginning of C25 to the end of C36. A mixture of 1:1 SAE 30 & SAE 40 motor oils are used for instrument calibration.

Solids are prepared via sonication according to methods AK102, AK103, and USEPA SW-846 method 3550.

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# Support Documentation

"The Science of Analysis, The Art of Service"



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811 W. 8th Avenue, Anchorage, AK 99501 • (907) 258-2155 • FAX (907) 258-6634

USAF - 611TH CES/CEVO 21885 2ND STREET ELMENDORF AFB, AK 99506-4420 (907) 552-1617/FAX 4601 Attn: MR. CARL HORNIG Order #: A8-09-136 Date Reported: 10/29/98 12:47 Project Name: CAPE ROMANZOF LAND FILL Date Received: 09/29/98

#### SAMPLE IDENTIFICATION

 Sample

 Number
 Client Description

 01
 48030988051
 SW3

 02
 48030988054
 SW1

 03
 48030988058
 SW2

Sample	Client Description
04	48030988059 SW1
05	TRIP BLANK

Enclosed are the analytical results for the submitted samples. All analyses met quality assurance objectives, except where noted in the case narratives. If you have any questions regarding the analyses, please feel free to call.

Bradley C. Olson Vice President - Operations

USAF - 611TH CES/CEVO CASE NARRATIVE

Order # A8-09-136 Analytica Ak.

ADEC Laboratory Approval Number: UST-014

The samples were received properly packed in three coolers at 2.1°C, 4.9°C, and 5.1°C, and were refrigerated upon receipt.

Data Flag Definitions:

- U Indicates this analytes was searched for and not detected at the reporting limits listed.
- D Indicates the surrogate was diluted out of the sample due to high levels of organics native to the samples.
- M Indicates matrix effects are responsible for surrogate recoveries which are out of limits.
- NC Indicates analyte was detected in original analysis but not confirmed in secondary analysis.

DR - Indicates result is from secondary analysis at dilution.

- S Indicates corrective action did not accomplish desired results or corrective action not performed for cause. See QC Evaluation Summary for details.
- B Indicates analyte was found in Method Blank. See QC Evaluation Summary for details.
- < Indicates sample not preserved according to AK101 requirements. True value is greater than or equal to the reported value.

10,29 198 Date: Analyst: Date: 10 129198 hillera

Analyst:

Order # A8-09-136 Analytica Ak. USAF - 611TH CES/CEVO TEST RESULTS by SAMPLE

		Lab	ID: 01A
Client ID: 48030988051 Test Description: GRO in wate: Collected: 09/26/98 00	<b>SW3</b> r by AK101. :00	Met) Mat	nod: 5030/AK101 rix: WATER
ANALYSIS DATE: 10/08/98		FILE ID:	B8100820.D
ANALYST: SWG		UNITS:	µg/L
INSTRUMENT ID: BORIS		DILUTION:	1
<u>PARAMETER</u>	<u>CAS # or ID</u>	<u>result l</u>	100
Gasoline Range Organics	GRO	V	
<u>SURROGATE</u>	<u>%RECOVERY</u>	6	<u>LIMITS</u>
α,α,α-Trifluorotoluene	87 %		0 - 120
p-Bromofluorobenzene	90 %		0 - 120
Client ID: 4803098805	51 SW3	La	b ID: 01B
Test Description: DRO in wat	er by AK102.	Me	thod: 3510\AK102
Collected: 09/26/98 (	00:00	Ma	trix: WATER
EXTRACTION DATE: 09/30 ANALYSIS DATE: 10/1 ANALYST: GSM	0/98 4/98	FILE UN DILUT	ID: W8101448.D ITS: μg/ml ION: 1
PARAMETER	<u>CAS # or ID</u>	<u>result</u>	<u>LIMIT Q</u>
Diesel Range Organics	DRO	U	0.21
<u>SURROGATE</u>	<u>&amp;recovery</u>		<u>LIMITS</u>
o-Terphenyl	87		60 - 120
Client ID: 48030988 Test Description: RRO in W Collected: 09/26/98	<b>051 SW3</b> Water by AK103. 00:00		Lab ID: 01B Method: 3510\AK103 Matrix: WATER
EXTRACTION DATE: 09/ ANALYSIS DATE: 10/ ANALYST: GSI INSTRUMENT ID: WO	/30/98 /14/98 M OF		INITS: µg/ml JTION: 1
PARAMETER	<u>CAS # or ID</u>	<u>result</u>	<u>LIMIT</u> <u>O</u>
Residual Range Organ	Lics RRO	U	0.21
<u>SURROGATE</u>	<u>%RECOVERY</u>		<u>LIMITS</u>
Squalane	79 %		60 - 120

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Page 4

<b>Order # A8-09-136</b>	USA	PECHATS by SAMPLE			
Analytica Ak.	TEST	RESOURCE 23			
				Lab ID: 0	2A
48030988	054 SW1			Method: 5	030/AK101
Client 1D: GRO in W	ater by AF	(101.		Matrix: W	ATER
Test Description: 09/26/98	3 00:00				
Collected: 05, 20,				E TD: 1881	00821.D
10/08	3/98		E T T T		L
ANALYSIS DAIE. 20,00	-,				
ANALYST: SHO	c		DIFO	TION: 1	
INSTRUMENT ID: BORIS	0			T TMTT	0
	c	AS # OT ID	RESULT	<u>100</u>	
PARAMETER	inn G	\$RO	U	100	
Gasoline Range Organ					
		*RECOVERY		LIM	<u>115</u>
SURROGATE		85 %		60 -	120
a, a, a-Trifluorotoluene		20 %		60 -	120
p-Bromofluorobenzene		09 0			
£					
				Lab ID:	02B
Glient ID: 480309	88054 SW1	_		Method:	3510\AK102
most Description: DRO in	water by	AK102.		Matrix:	WATER
09/26/	98 00:00				
Corrected.				FILE ID:	B8101941.D
TYTENCTION DATE: 0	9/30/98			UNITS:	μց/աl
EXTRACTION DATE: 1	L0/19/98		T	DTLITTON:	1
ANALISIS DALL	ENA				
	BERTHA				
INSTRUMENT ID:				7 31477	· 0
		CAS # or ID	RESULT	<u>111111</u>	
PARAMETER		DRO	ប	0.20	,
Diesel Range Organ	105				THO .
	-	*RECOVERY		<u>4</u>	120
SURROGAT	<u>'E</u>	104 %		60	- 120
o-Terpheny	71				
	_				
		-		Lab ID	: 02B
Client ID: 48030	0988054 SW	1		Method	: 3510\AK103
Test Description: RRO	in water D	Y ARIUS.		Matrix	: WATER
Collected: 09/20	6/98 00:00				_
				FILE ID:	B8101941.I
EXTRACTION DATE:	09/30/98			UNITS:	μց/ա1
ANALYSIS DATE:	10/19/98			DILUTION:	1
ANALYST:	ENA				
TNOTDIMENT ID:	BERTHA				
INSTRUMENT 121				LIM	<u>IT 0</u>
		<u>CAS # or ID</u>	KESULI	0.	40
PARAMETER	rganics	RRO	U	0.	
Residual Range of	- 3				1.TMITS
	አጥፑ	&RECOVERY		60	- 120
SURROG	<u> </u>	106 %		60	
Squal	ane ,				

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USAF - 611TH CES/CEVO

Page 5

Order # A8-09-136	USA	F - 6111H CES/CEVO			
Analytica Ak.	TESI	RESULTS DY SAMPLIS			
				Lab ID: 037	1
Client ID: 4803098	8058 SW2	21.03		Method: 503	30/AK101
Test Description: GRO in	water by A	VI01.		Matrix: WA	TER
Collected: 09/27/9	98 00:00				_
			FIL	E ID: B810	0822.D
ANALYSIS DATE: 10/0	08/98		U	NITS: µg/L	
ANALYST: SWG			DILU	TION: 1	
INSTRUMENT ID: BOR	IS				
			RESULT	LIMIT	<u> </u>
PARAMETER	5	<u>AS # 01_10</u>	U	100	
Gasoline Range Orga	nics (	jk0			
		*DECOVERY		LIMI	<u>IS</u>
SURROGATE		SRECOVERI 95 %		60 -	120
a.a.a-Trifluorotoluene	2	00 %		60 -	120
p-Bromofluorobenzene	2	07 0			
*					
				Lab ID: 0	3B
Client ID: 48030	988058 SW2	- W1 40		Method: 3	510\AK102
Test Description: DRO is	n water by	AKIU2.		Matrix: W	ATER
Collected: '09/27	/98 00:00				
				FILE ID: P	38101943.D
EXTRACTION DATE:	09/30/98			UNITS:	ug/ml
ANALYSIS DATE:	10/19/98		1	DILUTION:	L
ANALYST:	ENA				
INSTRUMENT ID:	BERTHA				
		and # or ID	RESULT	LIMIT	<u> </u>
PARAMETER		CAS # OL ID	<del>U</del>	0.22	
Diesel Range Organ	nics	DRO			
		SPECOVERY		LIM	ITS
SURROGA	TE	102 \$		60 -	120
o-Terphen	yl	702 *	•		
				<u> </u>	
				Lab ID:	03B
Client ID: 4803	30988058 SW	2 		Method:	3510\AK103
Test Description: RRO	in water D	Y ARIUS.		Matrix:	WATER
Collected: 09/2	27/98 00:00				
				FILE ID:	B8101943.D
EXTRACTION DATE:	09/30/98			UNITS:	µg/ml
ANALYSIS DATE:	10/19/98			DILUTION:	1
ANALYST :	ENA				
INSTRUMENT ID:	BERTHA				-
		CAS # OF TD	RESULT	LIMI	<u> </u>
PARAMETER			U	4.4	1
Residual Range C	rganics	RRU			
		SPECOVERY		Ŀ	IMITS
SURRO	GATE	107 %		60	- 120
Squa	lane	10, 0			

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USAF - 611TH CES/CEVO

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Page 6

Order # A8-09-136 Analytica Ak.	USAF - 611TH CES/CEVO TEST RESULTS by SAMPLE		Page 6
		Lab I	D: 04A
Client ID: 4803098805 Test Description: GRO in wat	er by AK101. 00:00	Metho Matri	d: 5030/ARIOI x: WATER
Collected:		FILE ID:	B8100823.D
ANALYSIS DATE: 10/08/ ANALYST: SWG INSTRUMENT ID: BORIS	98	UNITS : DILUTION :	<b>µg/</b> L 1
PARAMETER	<u>CAS # OF ID</u> S GRO	<u>RESULT</u> U	<u>MIT O</u> 100
Gasoline Range Organic			LIMITS
<u>SURROGATE</u> α,α,α-Trifluorotoluene p-Bromofluorobenzene	<u>%RECOVERY</u> 87 % 90 %	60 60	- 120 - 120
		Lab	ID: 04B
Client ID: 48030988 Test Description: DRO in W Collected: 09/27/98	<b>059 SW1</b> ater by AK102. ; 00:00	Met Mat	hod: 3510\AK102 rıx: WATER
EXTRACTION DATE: 09, ANALYSIS DATE: 10, ANALYST: EN	/30/98 /19/98 A RTHA	FILE I UNIT DILUTIC	D: B8101945.D S: μg/ml N: 1
<u>PARAMETER</u> Diesel Range Organic	<u>CAS # or ID</u> S DRO	<u>result</u> ] U	0.23 <u>0</u>
SURROGATE o-Terphenyl	<u>%RECOVERY</u> 110 %	6	<u>LIMITS</u> 0 - 120
Client ID: 480309 Test Description: RRO in	88059 SW1 water by AK103.	La Ma Ma	b ID: 04B thod: 3510\AK103 atrix: WATER
Collected: 09/2// EXTRACTION DATE: 0 ANALYSIS DATE: 1 ANALYST: 1	9/30/98 0/19/98 ENA BERTHA	FILE UN DILUT	ID: B8101945.D ITS: <b>µg/ml</b> ION: 1
INSTRUMENT ID. <u>PARAMETER</u> Residual Range Org	<u>CAS # or ID</u> anics RRO	<u>result</u> U	<u>LIMIT 0</u> 4.7
<u>SURROGAT</u> Squalar	TE <u>%RECOVERY</u> Ne 111 %		<u>LIMITS</u> 60 - 120

Order # A8-09-136 Analytica Ak.

#### USAF - 611TH CES/CEVO TEST METHODOLOGIES

Method AK101 from the State of Alaska Department of Environmental Conservation (ADEC), Storage Tank Program, Underground Storage Tanks Procedures Manual, 18 AAC 78, as amended through January 31, 1996; is referenced for the analysis of gasoline range organics (GRO).

The quantitation range is from the beginning of C6 to the beginning of C10.

Method AK102 from the State of Alaska Department of Environmental Conservation (ADEC), Storage Tank Program, Underground Storage Tanks Procedures Manual, 18 AAC 78, as amended through January 31, 1996; is referenced for the analysis of diesel range organics (DRO).

The quantitation range extends from the beginning of C10 to the beginning of C25. The standard used is a 1:1:1 mixture of Kerosine, DF1, and DF2.

Waters are prepared via liquid/liquid extraction per AK102.

Liquids are prepared according to method AK103 and USEPA SW-846 method 3510.

Method AK103 from the State of Alaska Department of Environmental Conservation (ADEC), Storage Tank Program, Underground Storage Tanks Procedures Manual, 18 AAC 78, as amended through January 31, 1996; is referenced for the analysis of residual range organics (RRO).

The quantitation range of this method extends from the beginning of C25 to the end of C36. A mixture of 1:1:1 SAE 30, SAE 40, & SAE 50 motor oils are used for instrument calibration.



# Support Documentation

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325 Interlocken Parkway Suite 200 Broomfield, CO 80021 (303) 469-8868 (800) 873-8707 FAX (303) 469-5254



an Analytica Group company

Department of the Air Force 611 CES/CEVO 21-885 2nd St. Elmendorf AFB, AK 99506-0875 Attn: Carl A. Hornig Order #: 98-11-140 Date: 12/03/98 16:08 Work ID: CAPE ROMANZOF - CALL #B002 Date Received: 11/17/98 Date Completed: 12/03/98

#### SAMPLE IDENTIFICATION

Sample <u>Number</u> <u>Client Description</u> 01 48030988054 SW1 Sample <u>Number</u> <u>Client Description</u> 02 48030988059 SW1

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. A listing of data qualifiers and analytical codes is located on the TEST METHODOLOGIES page at the end of the report.

If you have any questions regarding the analyses, please feel free to call.

Sincerely,

Toon

Claire K. Toon Project Manager

Order # 98-11-140 ANALYTICA, INC.

#### Department of the Air Force CASE NARRATIVE

Samples were prepared and analyzed according to methods outlined in the following references:

 Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 3, January 1995.

The results reported here are from samples which were re-extracted, outside the analytical holding times, per client request. Results for these samples were previously reported as AEL sample numbers 9809259-04B and 9809259-09B.

Problems encountered with the analyses are discussed in the following narrative.

The results from this analysis do not confirm the detection of toxaphene at 18 ug/L in the original extract of sample 48030988059 SW1. No toxaphene was detected in the second extract of this sample. The laboratory is currently investigating the cause of this discrepancy, and believes the first analysis to be in error. A more detailed description of how the error occurred will be provided as this information becomes available.

Order # 98-11-140 ANALYTICA, INC.

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Department of the Air Force TEST RESULTS by SAMPLE

	Co	llected: 09/26/9	8 Matr	cix: WATEP	ર	
Sample: 01A 48030988054 SW1	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	Analy	<u>/zed</u>
Test Description Organochlorine Pesticides Aldrin alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) alpha-Chlordane gamma-Chlordane 4,4'-DDD 4,4'-DDD 4,4'-DDT Dieldrin Endosulfan I Endosulfan II Endosulfan Sulfate Endrin Endrin Aldehyde Heptachlor Heptachlor Epoxide Methoxychlor	SW 8081A	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.025 0.025 0.025 0.025 0.025 0.050 0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	12/0 12/0	1/98 1/98 1/98 1/98 1/98 1/98 1/98 1/98
Toxaphene SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl		100 60.0	Min: Min:	45 45	Max: Max:	124 124

Page 3

Page 4

Order # 98-11-140 ANALYTICA, INC.

#### Department of the Air Force TEST RESULTS by SAMPLE

48030988059 SW1	Collected: 09/27/9	8 Matr	ix: WATER	٤	
Sample: 02A 48030900000 Data Method	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Ana</u>	lyzed
Test DescriptionOrganochlorine PesticidesSW 801Aldrinalpha-BHCbeta-BHCdelta-BHCgamma-BHC (Lindane)alpha-Chlordanegamma-Chlordane4,4'-DDD4,4'-DDD4,4'-DDTDieldrinEndosulfan IEndosulfan IIEndosulfan SulfateEndrınEndrin AldehydeHeptachlorHeptachlorHeptachlorEpoxide	81A ND ND ND ND ND ND ND ND ND ND ND ND ND	0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.028 0.028 0.28 0.28 0.28	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	12/ 12/ 12/ 12/ 12/ 12, 12, 12, 12, 12, 12, 12, 12, 12, 12,	01/98 01/98 01/98 01/98 01/98 01/98 01/98 01/98 01/98 01/98 01/98 01/98 01/98 201/98 201/98 201/98 201/98 201/98
Toxaphene SURROGATES, % Recovery Tetrachlorometaxylene Decachlorobiphenyl	90.9 54.5	Min: Min:	45 45	Max: Max:	124 124

Order # 98-11-140 ANALYTICA, INC.

THE FOLLOWING CODES APPLY TO THE ANALYTICAL REPORT

RESULT field ... ND = not detected at the reported limit NA = analyte not applicable (see case narrative/methods for discussion) Q (qualifier) field... GENERAL: \* = Recovery or %RPD outside method specifications H = value is estimated due to analysis run outside EPA holding times E = reported concentration is above the instrument calibration range D = analyte was diluted to bring within instrument calibration range or to remove matrix interferences ORGANIC ANALYSIS DATA QUALIFIERS: B = analyte was detected in the laboratory method blank J = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL) INORGANIC ANALYSIS DATA QUALIFIERS: B = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL) W = post digestion spike did not meet criteria (85-115%) S = reported value determined by the Method of Standard Additions

Order # 98-11-140 ANALYTICA, INC.

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3520 P:	Continuous Liquid-Liquid Extraction	METHOD :	3520B
5520-	(Pesticides)		00013
PST_8W:	ORGANOCHLORINE PESTICIDES	METHOD:	DUOTH

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Order # 98-11-140 ANALYTICA, INC.

#### Department of the Air Force DATES REPORT

4803098	)54 SW1	Matrix: WATER			~	
Analysis	Method	<u>Collected</u>	<u>Received</u>	<u>TCLP date</u>	<u>Extracted</u>	<u>Analyzed</u>
	SW 8081A	09/26/98	11/17/98	NA	11/18/98	12/01/98
Sample: 02A 48030988059 SW1		Matrix: WATER				1
nalysis Method	Method	<u>Collected</u>	<u>Received</u>	<u>TCLP date</u>	<u>Extracted</u>	<u>Analyzeu</u>
prganochlorine Pesticides SW 8081A	SW 8081A	09/27/98	11/17/98	NA	11/18/98	12/01/98
325 Interlocken Parkway #200 Broomfield, CO 80021 Phone: (303) 469-8868 Fax. (303) 469-5254

Analytica Environmental Laboratories



🗂 Urg	ent 🗌 For Review	🗆 Please Comment 🔲 Pleas	se Reply 🚺 Please Recycle
Re:	Toxaphene Memo	CC;	
Phone	907-552-2612		
		Dete: Decemb	er 30, 1998
Fau	907-552-#601	Pages: 3	
To:	Carl Homig, on CEGICE		
	A LILL AN RAA CESICE	VO From: Claire To	on, AEL

#### • Comments:

Attached is a copy of the memo Dr. Huntington created in regard to the false positive reported for toxaphene for the Cape Romanzof project. I will follow up with hardcopy in the mail. If you should have any further questions, please feel free to give me a call at 800-873-8707 Ext. 110.

### DEC 30 '98 02:05PM ANALYTICA GROUP





325 Interlocken Parkway Suite 200 Broomfield, CO 8002 i (303) 469-8868 (800) 873-8707 FAX (303) 469-5254

Memo to: From: Subject: Date:

Angie Caudell John Huntington Toxaphene False Positives 12/15/98

We have already acknowledged that the analysis of sample 98-09-259 -09A resulted in a false positive for Toxaphene. The client (Elmendorf AFB) sample number is 38030988059 SW1. We have investigated the events leading up to this result and we believe we understand what occurred. This memo serves to document our observations and presents the general Corrective Actions we have undertaken.

# Cause of the False Positive.

The analytical runs conducted on this sample are summarized in the attached database output. The first analysis was conducted on 10/21/98 using the PCB extract, produced in prep batch 9801259. The chromatogram shows a clear Toxaphene pattern and no evidence for PCBs.

The pesticide extract, which is derived from the same extract used for PCBs but is not subjected to sulfuric acid cleanup, was analyzed on 10/26/98 and 10/29/98. This analysis also showed clear evidence for Toxaphene. There are no prior sample runs that show the presence of Toxaphene, so carryover on the autosampler is unlikely.

In reviewing the prep history, we realized that the laboratory had a project from a known high-level Toxaphene site which was prepared on 10/7/98, six days after the sample prep date of 10/1/98 for the Elmendorf samples. One of the samples associated with this project had over 5,000 ppm of Toxaphene, and another had over 2,000 ppm. Thus they would be likely candidates for contamination except for the fact that the prep was conducted later than the Elmendorf samples.

However, further review shows that the Elmendorf samples and the high-Toxaphene samples were subjected to final concentration on the same day. If crossover contamination occurred at this step, it would have only required 0.0003% of the high level sample extract to be communicated to the Elmendorf sample in order to result in the observed apparent concentration..

We are confident that this is exactly what occurred – cross contamination in the sample prep lab due to the extremely high concentration samples concentrated at the same time as the Elmendorf sample.

#### Corrective Action.

Corrective action for this kind of problem falls into two categories: a) prevention of the contamination by improved laboratory practices; and b) detection of cross-contamination events in time to take corrective action prior to issuance of a report.

<u>Category a) Corrective Actions</u>. In general, a review of laboratory practice in the sample prep laboratory indicates that proper cleaning, of glassware is being conducted, and that proper precautions are in place to avoid carryover from syringes, pipettes, etc. A training review is in order, however, given this occurance.

More importantly, sample prep had been informed by the project manager that the Toxaphene site could have samples with concentrations as high as 10,000 ppm. Knowing this, the sample prep laboratory should have isolated the preparation of these samples from any others. Dirty glassware arising from such a sample set should be cleaned at least twice with special attention, and no other samples should be handled when such samples are being worked with. In addition, notes and flags should follow the sample extracts as they work their way through the laboratory. The latter procedures were followed, but isolation of the high-level samples from the others during sample prep did not occur.

Our general sample prep SOPs are being revised to call specifically for such isolation in time of high-level sample preps, and for special handling of glassware from such preps. This isolation of suspected high level samples from normal samples is the main emphasis of our corrective action.

<u>Category b) Corrective Actions</u>. The failure to take action when a Toxaphene hit was observed in the Elmendorf sample was due mainly to the fact that the start date of the sample prep preceded the extraction for the high-level samples. Thus the reviewer assumed that there was no possibility of cross-contamination. The review procedure for these kinds of problems is being revised to include reviewing the sample prep completion date information.

In addition, Toxaphene itself is among a group of seldom-seen targets that need to raise flags when detected. In general, all detections of targets such as this should be reviewed in greater detail than normal. This should include a review of the sample history within the laboratory with the intent of uncovering any potential contamination opportunities. The sooper such a review occurs the easier it is to conduct and the more likely it will be successful.

All of these issues will be easier to control when we install the new LIMS sometime in February of 1999, because our ability to quickly access relevent information will be much improved.

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Department of the Air Force 611 CES/CEVO 21-885 2nd St. Elmendorf AFB, AK 99506-0875 Attn: Carl A. Hornig Order #: 98-10-036 Date: 11/05/98 13:43 Work ID: CAPE ROMANZOF - CALL #B002 Date Received: 10/05/98 Date Completed: 11/05/98

#### SAMPLE IDENTIFICATION

 Sample

 Number
 Client Description

 01
 48030988
 063
 CMW3

 02
 48030988
 064
 CMW6

 03
 48030988
 065
 MW1

 04
 48030988
 066
 MW7

 05
 48030988
 067
 MW4

 Sample

 Number
 Client Description

 06
 48030988
 068
 CMW5

 07
 48030988
 069
 CMW5

 08
 48030988
 070
 CMW1

 09
 TRIP BLANK

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. A listing of data qualifiers and analytical codes is located on the TEST METHODOLOGIES page at the end of the report.

If you have any questions regarding the analyses, please feel free to call.

Sincerely,

Claire K. Toon Project Manager

Samples were prepared and analyzed according to methods outlined in the following references:

 Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 4, January 1996.

Problems encountered with the analyses are discussed in the following narrative.

The Trip Blank contains toluene and m,p-xylenes at levels below reporting limits. Re-analysis on the following day did not confirm the presence of these compounds. The presence of these compounds in the samples is due to an isolated contamination incident, and is not attributed to the samples. Methylene chloride was also present in the Trip Blank; however, no methylene chloride was detected in the samples.

The pesticides and PCB analyses of sample "48030988 070 CMW1" are reported with one of the two surrogate recoveries below quality control guidelines. These low recoveries were verified by secondary analyses, and are attributed to sample matrix effect. The method blank and method blank spike associated with these analyses show all surrogate recoveries within QC limits.

The 8270 semivolatile results for samples "48030988 065 MW1", "48030988 069 CMW5", and "48030988 070 CMW1" are reported with surrogate and sixth internal standard recoveries outside quality control guidelines. These results were confirmed by secondary analysis and are attributed to sample matrix effects. The method blank and method blank spike, which are analyzed in the absence of sample matrix, show all surrogate recoveries within QC guidelines.

The sample conatiners received for TCLP metals analysis were preserved with nitric acid. Due to the nature of the TCLP analysis, samples should not be preserved prior to TCLP extraction. However, since the samples contained less than 0.5% solids, and the filtrate is therefore the TCLP extract, preservation in this case did not impact the results. All sample results were below the TCLP Maximum Contaminant Levels.

#### Department of the Air Force TEST RESULTS by SAMPLE

Sample: 01A 48030988 063 CMW3

Collected: 09/29/98 Matrix: WATER

Sample: UIR 40000000	Mathod	Result <u>Q</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Test Description	<u>Necnod</u>			/ <del>-</del>	10/13/98
Volatiles by GC/MS	Di Olove	ND	5.0	ug/L	10/13/98
Dichlorodifluoromethane		ND	5.0	ug/L	10/13/98
Chloromethane		ND	2.0	ug/L	10/13/98
Vinyl Chloride		ND	5.0	ug/հ	10/13/98
Bromomethane		ND	5.0	ug/L	10/13/98
Chloroethane		ND	2.0	ug/L	10/13/98
Trichlorofluoromethane		ND	2.0	ug/L	10/13/98
1,1-Dichloroethene		ND	2.0	ug/L	10/13/98
Trichlorotrifluoroethane		ND	10	ug/L	10/13/98
Methylene Chloride		ND	2.0	ug/L	10/13/98
trans-1,2-Dichloroethene		ND	2.0	ug/L	10/13/98
1,1-Dichloroethane		ND	2.0	ug/L	10/13/98
2,2-Dichloropropane		ND	2.0	ug/L	10/13/98
cis-1,2-Dichloroethene		ND	2.0	ug/L	10/13/98
Bromochloromethane		ND	2.0	ug/L	10/13/98
Chloroform		ND	2.0	ug/L	10/13/98
1,1,1-Trichloroethane		ND	2.0	ug/L	10/13/90
Carbon Tetrachloride		ND	2.0	ug/L	10/13/90
1,1-Dichloropropene		ND	2.0	ug/L	10/13/90
Benzene		ND	2.0	ug/L	10/13/98
1,2-Dichloroethane		ND	2.0	ug/L	10/13/98
Trichloroethene		ND	2.0	ug/L	10/13/98
1,2-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromomethane		ND	2.0	ug/L	10/13/98
Bromodichloromethane		ND	2.0	ug/L	10/13/98
cis-1,3-Dichloropropene		1.2 J	2.0	ug/L	10/13/98
Toluene		ND	2.0	ug/L	10/13/98
trans-1,3-Dichloroproper	ne	ND	2.0	ug/L	10/13/98
1,1,2-Trichloroethane		ND	2.0	ug/L	10/13/98
Tetrachloroethene		ND	2.0	ug/L	10/13/98
1,3-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromochloromethane		ND	2.0	ug/L	10/13/98
1,2-Dibromoethane	1	ND	2.0	ug/L	10/13/98
Chlorobenzene		ND	2.0	ug/L	10/13/98
Ethylbenzene		ND	2.0	ug/L	10/13/98
1,1,1,2-Tetrachloroetha	ne	0.66 J	2.0	ug/L	10/13/98
m,p-Xylenes.		ND	2.0	ug/L	10/13/98
o-Xylene		ND	2.0	ug/L	10/13/98
Styrene		ND	2.0	ug/L	10/13/98
Bromoform		ND	2.0	ug/L	10/13/98
Isopropylbenzene		ND	2.0	ug/L	10/13/98
Bromobenzene		ND	2.0	) ug/L	10/13/98
n-Propylbenzene			2.0	) ug/L	10/13/98
1,1,2,2-Tetrachloroetha	ane	ND	2.0	) ug/L	10/13/98
1,2,3-Trichloropropane		ND	2.0	) ug/Ն	10/13/98
2-Chlorotoluene		ND	2.0	0 ug/L	10/13/98
1,3,5-Trimethylbenzene		NTO	2.	0 ug/L	10/13/98
4-Chlorotoluene		2.12			

#### Department of the Air Force TEST RESULTS by SAMPLE

Sample: 01A 48030988 063 CMW3

Collected: 09/29/98 Matrix: WATER

Sample: UIA 40050500 000					مم	alvzed
	Method	<u>Result 0</u>	Limit	Units	<u>- 11 - </u>	<u> </u>
Test Description	SW 8260B	(continued fr	com previous	; page)	10	/13/98
Volatiles by GC/MS		ND	2.0	ug/L	10	/13/98
tert-Butylbenzene		ND	2.0	ug/L	10	/13/98
1,2,4-Trimethylbenzene		ND	2.0	ug/L	10	/13/98
sec-Butylbenzene		ND	2.0	ug/L	1(	/12/98
4-Isopropyltoluene		ND	2.0	ug/L	10	)/13/90 n/13/98
1,3-Dichlorobenzene		ND	2.0	ug/L	1	J/13/90
1,4-Dichlorobenzene		ND	2.0	ug/L	Τſ	J/ 13/ 30
n-Butylbenzene		ND	2.0	ug/L	10	0/13/90
1,2-Dichlorobenzene		ND	10	ug/L	14	0/13/98
1,2-Dibromo-3-chloropropane		ND	2.0	ug/L	1	0/13/98
1,2,4-Trichlorobenzene		ND	2.0	ug/L	1	0/13/98
Hexachlorobutadiene		ND	2.0	ug/L	1	0/13/98
Napthalene		ND	2.0	ug/L	1	.0/13/98
1,2,3-Trichlorobenzene		ND	50	ug/L	1	.0/13/98
Acetone		ND	10	ug/L	נ	0/13/98
Acrylonitrile		ND	50	ug/L	1	_0/13/98
2-Butanone		ND	2.0	ug/L	3	L0/13/98
Carbon Disulfide		ND	10	ug/L	]	10/13/98
trans-1,4-Dichloro-2-buten		ND	10	ug/L		10/13/98
2-Chloroethyl Vinyl Ether		ND	20	ug/L		10/13/98
2-Hexanone			2.0	ug/L		10/13/98
Todomethane			20	ug/L		10/13/98
4-Methyl-2-pentanone			5.0	ug/L		10/13/98
Vinvl Acetate		ND ND	2.0	ug/L		10/13/98
tert-Butyl methyl ether		ND				
SURROGATES, & Recovery		100	Min:	80	Max:	120
Dibromofluoromethane		100	Min:	88	Max:	110
Toluene d-8		104	Min:	86	Max:	115
n-Bromofluorobenzene		100				
P-DIOMOLIGOLIGO,						

### Department of the Air Force TEST RESULTS by SAMPLE

Sample: 01D 48030988 063 CMW3

Collected: 09/29/98 Matrix: WATER

Sample: 01D 48030988 065 CMM	· <del>- /</del>				Analyzed
	Method	<u>Result 0</u>	<u>Limit</u> U	nits	<u></u>
Test Description	SW 8270C		<b>F O 1</b>	a/L	10/31/98
Semivolatile Organics		ND	5.0 0	rg/1	10/31/98
Phenol		ND	5.0 0		10/31/98
bis(2-Chloroethy1) ether		ND	5.0 4		10/31/98
2-Chlorophenol		ND	5.0		10/31/98
1,3-Dichlorobenzene		ND	5.0	ug/L	10/31/98
1,4-Dichlorobenzene		ND	10		10/31/98
Benzyl alcohol		ND	5.0	ug/L	10/31/98
1,2-Dichlorobenzene		ND	5.0	ug/b væ/T	10/31/98
2-Methylphenol	r	ND	5.0	ug/L væ/I	10/31/98
bis (2-Chloroisopropyi) ethe	-	ND	5.0	ug/L	10/31/98
4-Methylphenol		ND	5.0	ug/L	10/31/98
n-Nitroso-di-n-propylamine		ND	5.0	ug/L	10/31/98
Hexachloroethane		ND	5.0	ug/L	10/31/98
Nitrobenzene		ND	5.0	ug/L	10/31/98
Isophorone		ND	5.0	ug/L	10/31/98
2-Nitrophenol		ND	5.0	ug/L	10/31/98
2,4-Dimethylphenol		ND	50	ug/L	10/31/98
Benzoic acid		ND	5.0	ug/L	10/31/98
bis(2-Chloroethoxy)methane		ND	5.0	ug/L	10/31/98
2,4-Dichlorophenol		ND	5.0	ug/L	10/31/98
1,2,4-Trichlorobenzene		ND	5.0	ug/L	10/31/98
Naphthalene		ND	5.0	ug/L	10/31/98
4-Chloroaniline		ND	5.0	ug/L	10/31/98
Hexachlorobutadiene		ND	5.0	ug/L	10/31/98
4-Chloro-3-methylphenol		ND	5.0	ug/L	10/31/98
2-Methylnaphthalene		ND	5.0	ug/L	10/31/98
Hexachlorocyclopentadiene		ND	5.0	ug/L	10/31/98
2,4,6-Trichlorophenol		ND	5.0	ug/L	10/31/98
2,4,5-Trichlorophenol		ND	10	ug/L	10/31/98
2-Chloronaphthalene		ND	50	ug/L	10/31/98
2-Nitroaniline		ND	5.0	ug/L	10/31/98
Dimethylphthalate		ND	5.0	ug/L	10/31/98
Acenaphthylene		ND	50	ug/L	10/31/98
3-Nitroanıline		ND	5.0	ug/L	10/31/98
Acenaphthene		ND	50	ug/L	10/31/98
2,4-Dinitrophenol		ND	50	ug/L	10/31/98
4-Nitrophenol		ND	5.0	ug/L	10/31/98
Dibenzofuran		ND	5.0	ug/L	10/31/98
2,6-Dinitrotoluene		ND	5.0	ug/L	10/31/98
2,4-Dinitrotoluene		ND	5.0	ug/L	10/31/98
Diethylphthalate		ND	5.0	ug/L	10/31/98
4-Chlorophenyl-phenyleth	er	ND	5.0	ug/L	10/21/00
Fluorene		ND	5.0	ug/L	10/21/20
4-Nitroaniline	•	ND	50	ug/L	TO/21/08
4,6-Dinitro-2-methylphen	101	ND	5.0	ug/L	10/21/00
n-Nitrosodiphenylamine		ND	5.0	) ug/L	10/31/90
4-Bromophenyl-phenylethe	er				

Page 5

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#### Department of the Air Force TEST RESULTS by SAMPLE

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48030988 063 CMW	3	Collected: C	9/29/91	8 Mati	ix: WATE	<u></u> 2	
Sample: 01D 40050500 000	Method	Result	<u> </u>	Limit	<u>Units</u>	<u>A</u>	nalyzed
Test Description	SW 8270C	(continue	ed from	previou	s page/	1	0/31/98
Semivolatile Organics	Sh OZ/CE	NI	2	5.0	ug/L	1	0/31/98
Hexachlorobenzene		N	2	5.0	ug/L		0/31/98
Pentachlorophenol		N	D	5.0	ug/L	1	0/31/98
Phenanthrene		N	D	5.0	ug/L	1	0/31/90
Anthracene		N	D	5.0	ug/L	1	0/31/90
Di-n-butylphthalate		N	D	5.0	ug/L	1	0/31/90
Fluoranthene		N	ם	5.0	ug/L	1	.0/31/98
Pyrene		N	D	5.0	ug/L	1	10/31/96
Butylbenzylphthalate		N	D	20	ug/L	]	10/31/98
3,3'-Dichlorobenzidine		N	 ID	5.0	ug/L	-	10/31/98
Benzo(a)Anthracene		- ĭ		5.0	ug/L	-	10/31/98
Chrysene		1.	0 JB	5.0	ug/L		10/31/98
Bis (2-Ethylhexyl) phthalate		ر 		5.0	ug/L		10/31/98
Di-n-octylphthalate		-	NT)	5.0	ug/L		10/31/98
Benzo(b) fluoranthene		•		5.0	ug/L		10/31/98
Benzo(k)fluoranthene		-		5.0	ug/L		10/31/98
Benzo(a)pyrene			ND	5.0	ug/L		10/31/98
Indeno (1, 2, 3-cd) pyrene			NT)	5.0	ug/L		10/31/98
Dibenz (a, h) anthracene			ND	5.0	ug/L		10/31/98
Benzo(q,h,i)perylene							
SURROGATES, & Recovery		64	0	Min:	21	Max:	100
2-Fluorophenol		60	. 0	Min:	10	Max:	94
d5-Phenol		77	7 0	Min:	35	Max:	114
d5-Nitrobenzene		77		Min:	43	Max:	116
2-Fluorobiphenyl		8-	. 7	Min:	10	Max:	123
2 4.6-Tribromophenol		80	5.) 5 0	Min:	33	Max:	141
d14-Terphenyl		6:	5.0	••			

Department of the Air Force TEST RESULTS by SAMPLE

Collected: 09/29/98 48030988 063 CMW3 Sample: 01E <u>Analyzed</u> <u>Units</u> Limit Result 0 Method Test Description SW 8081A 10/26/98 Organochlorine Pesticides uq/L 0.025 ND 10/26/98 ug/L 0.025 Aldrin ND 10/26/98 ug/Lalpha-BHC 0.025 ND 10/26/98 ug/L beta-BHC 0.025 ND 10/26/98 delta-BHC 0.025 ug/L ND 10/26/98 gamma-BHC (Lindane) uq/L 0.025 ND 10/26/98 alpha-Chlordane ug/L 0.025 ND 10/26/98 gamma-Chlordane ug/L 0.050 ND 10/26/98 uq/L 4,4'-DDD 0.050 ND 10/26/98 uq/L 4,4'-DDE 0.050 ND 10/26/98 ug/L 4.4'-DDT 0.025 ND 10/26/98 Dieldrin ug/L 0.050 ND 10/26/98 Endosulfan I uq/L 0.050 ND 10/26/98 Endosulfan II ug/L 0.050 ND 10/26/98 Endosulfan Sulfate uq/L 0.050 ND 10/26/98 ug/L Endrin 0.050 ND 10/26/98 Endrin Aldehyde 0.025 ug/L ND 10/26/98 ug/L Heptachlor 0.025 ND 10/26/98 Heptachlor Epoxide ug/L 0.25 ND 10/26/98 Methoxychlor ug/L 0.75 ND Toxaphene SURROGATES, % Recovery 124 Max: 45 Min: 75.0 124 Tetrachlorometaxylene 45 Max: Min: 60.0 Decachlorobiphenyl Polychlorinated Biphenyls SW 8082 10/26/98 1.0 ug/L ND 10/26/98 PCB-1221 uq/L 0.50 ND 10/26/98 ug/L PCB-1232 0.50 ND 10/26/98 ug/L PCB-1242 0.50 ND 10/26/98 PCB-1248 ug/L 0.50 ND 10/26/98 ug/L PCB-1254 0.50 ND 10/26/98 PCB-1260 0.50 ug/L ND PCB-1016 SURROGATES, % Recovery 133 Max: 29 Min: 75.0 137 Tetrachlorometaxylene Max: 26 Min: 60.0 Decachlorobiphenyl

48030988 063 CMW3 Sample: 01G

Matrix: WATER Collected: 09/29/98

Sampre. Une term		- 14 0	Limit	Units	<u>Analyzed</u>
Test Description ICP Metals, TCLP Extracted Arsenic Barium Cadmium Chromium Lead Selenium Silver Mercury, TCLP Extracted	<u>Method</u> SW 1311/6010 SW 1311/7470	Result O ND 0.50 ND ND ND ND ND ND ND	Limit 0.050 0.020 0.010 0.050 0.10 0.10 0.010 0.010	Units mg/L mg/L mg/L mg/L mg/L mg/L mg/L	10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/20/98

Page 7

Matrix: WATER

#### Department of the Air Force TEST RESULTS by SAMPLE

Sample: 02A 48030988 064 CMW6

Collected: 09/29/98 Matrix: WATER

Sample: 02A 40050500			Limit	<u>Units</u>	<u>Analyzed</u>
Test Description	Method	Result V			
Volatiles by GC/MS	SW 8260B	ND	5.0	ug/L	10/13/98
Dichlorodifluoromethane		ND	5.0	ug/L	10/13/98
Chloromethane		ND CIN	2.0	ug/L	10/13/98
Vinvl Chloride		ND	5.0	ug/L	10/13/98
Bromomethane		ND	5.0	ug/L	10/13/98
Chloroethane		NT)	2.0	ug/L	10/13/98
Trichlorofluoromethane		ND	2.0	ug/L	10/13/98
1 1-Dichloroethene		NTD	2.0	ug/L	10/13/98
Trichlorotrifluoroethane		ND	10	ug/L	10/13/98
Methylene Chloride		ND	2.0	ug/L	10/13/98
trans-1.2-Dichloroethene		ND	2.0	ug/L	10/13/98
1 1-Dichloroethane		ND	2.0	ug/L	10/13/98
2.2-Dichloropropane			2.0	ug/L	10/13/98
cis-1 2-Dichloroethene		ND	2.0	ug/L	10/13/98
Bromochloromethane			2.0	ug/L	10/13/98
chloroform			2.0	ug/L	10/13/98
1 1 1-Trichloroethane			2.0	ug/L	10/13/98
Carbon Tetrachloride			2.0	uq/L	10/13/98
1 1 -Dichloropropene		ND	2.0	ug/L	10/13/98
$\mathbf{L}, \mathbf{L} = \mathbf{D} \mathbf{L} \mathbf{U} \mathbf{L} \mathbf{U} = \mathbf{U} \mathbf{L} \mathbf{U} \mathbf{U} \mathbf{U} \mathbf{U} \mathbf{U} \mathbf{U} \mathbf{U} U$			2.0	ug/L	10/13/98
1.2-Dichloroethane		ND	2.0	uq/L	10/13/98
Trichloroethene			2.0	ug/L	10/13/98
1 2-Dichloropropane			2.0	ug/L	10/13/98
pibromomethane			2.0	uq/L	10/13/98
Bromodichloromethane		ND	2.0	ug/L	10/13/98
signi 3-Dichloropropene			2.0	ug/L	10/13/98
		1.2 0	2.0	uq/L	10/13/98
trang_1_3-Dichloroproper	ne		2.0	uq/L	10/13/98
1 2 Trichloroethane		UN ND	2.0	ug/L	10/13/98
Totrachloroethene		UM T	2.0	uq/L	10/13/98
1 a pichloropropane		ND T	2.0	ug/L	10/13/98
Dibromochloromethane		UM T	2.0	uq/L	10/13/98
1.2.Dibromoethane		ND	2.0	ug/L	10/13/98
chlorobenzene			2.0	uq/L	10/13/98
Ethylbenzene		ND	2.0	ug/L	10/13/98
1 1 1 2-Tetrachloroetha	ne		2.0	uq/L	10/13/98
n n-Yvlenes		0.090	2.0	ug/L	10/13/98
m, p - Ay = 200000		ND	2.0	ug/L	10/13/98
Churche		ND	2.0	ug/L	10/13/98
Bromofott		ND	2.0	) ug/L	10/13/98
Jaopropylbenzene			2.0	) ug/L	10/13/98
Isopropy idence		ND	2.0	n uq/L	10/13/98
Bromobenzene		UM	2	n ug/L	10/13/98
n-propyrbennene n 1 2 2 metrachloroeth	ane	ND	2.	0 ug/L	10/13/98
1, 2, 2 Trichloropropane		UN	2.	0 ua/L	10/13/98
1, 2, 3 - 111 CHIOLOGY Spanned		ND	2. ว	n ua/L	10/13/98
2-Chiolocordene	•	ND	<u>د</u> . ح	0 ug/L	10/13/98
1, 3, 5 TI INCON INCOMPOSE		ND	۷.	,-	
4-Chiorocordene					

Order # 98-10-036 ANALYTICA, INC.

#### Department of the Air Force TEST RESULTS by SAMPLE

Sample: 02A 48030988 064 CMW6		Collected: 09/29/98	Mati	rix: WATER	Ł	
Sampre: Cerr		Result 0	Lim <u>it</u>	<u>Units</u>	An	<u>alyzed</u>
Test Description	Methoa	(continued from	previou	s page)		
Volatiles by GC/MS	SW 8260B	ND	2.0	ug/L	10	/13/98
tert-Butylbenzene		ND	2.0	ug/L	10	/13/98
1,2,4-Trimethylbenzene		NTD	2.0	ug/L	10	/13/98
sec-Butylbenzene		ND	2.0	ug/L	10	/13/98
4-Isopropyltoluene		ND	2.0	ug/L	10	/13/98
1,3-Dichlorobenzene		ND	2.0	ug/L	10	/13/98
1,4-Dichlorobenzene		ND	2.0	ug/L	10	/13/98
n-Butylbenzene		ND	2.0	ug/L	10	/13/98
1,2-Dichlorobenzene		ND	10	ug/L	10	)/13/98
1,2-Dibromo-3-chloropropane		ND	2.0	ug/L	10	)/13/98
1,2,4-Trichlorobenzene		ND	2.0	ug/L	l	)/13/98
Hexachlorobutadiene		NT	2.0	ug/L	10	0/13/98
Napthalene		ND	2.0	ug/L	1	0/13/98
1,2,3-Trichlorobenzene		ND	50	ug/L	1	0/13/98
Acetone		ND	10	ug/L	1	0/13/98
Acrylonitrile		ND	50	ug/L	l	0/13/98
2-Butanone		ND	2.0	ug/L	1	0/13/98
Carbon Disulfide		NTD	10	ug/L	1	.0/13/98
trans-1,4-Dichloro-2-buten		NTD	10	ug/L	נ	.0/13/98
2-Chloroethyl Vinyl Ether		ND	20	ug/L	1	.0/13/98
2-Hexanone		ND	2.0	ug/L	3	.0/13/98
Iodomethane		ND	20	ug/L	3	10/13/98
4-Methyl-2-pentanone		NTD	5.0	ug/L	3	10/13/98
Vinyl Acetate		NTO	2.0	ug/L	3	10/13/98
tert-Butyl methyl ether						
SURROGATES, % Recovery		98.0	Min:	80	Max:	120
Dibromofluoromethane		104	Min:	88	Max:	110
Toluene d-8 p-Bromofluorobenzene		106	Min:	86	Max:	115

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#### Department of the Air Force TEST RESULTS by SAMPLE

Sample:	02D	48030988	064	CMW6	
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Collected: 09/29/98 Matrix: WATER

Sampre: 022	M-hhad	Result 0	<u>Limit</u>	Units	Analyzed
Test Description	Method				( /
Semivolatile Organics	SW 8270C	ND	5.0	ug/L	11/02/98
Phenol		ND	5.0	ug/L	11/02/98
bis(2-Chloroethyl) ether		ND	5.0	ug/L	11/02/98
2-Chlorophenol		ND	5.0	ug/L	11/02/98
1,3-Dichlorobenzene		ND	5.0	ug/L	11/02/98
1,4-Dichlorobenzene			10	ug/L	11/02/98
Benzyl alcohol		NTD	5.0	ug/L	11/02/98
1,2-Dichlorobenzene		ND	5.0	ug/L	11/02/98
2-Methylphenol		NT	5.0	ug/L	11/02/98
bis (2-Chloroisopropyl)	ether	ND	5.0	ug/L	11/02/98
4-Methylphenol		ND	5.0	ug/L	11/02/98
n-Nitroso-di-n-propylam	ine		5.0	ug/L	11/02/98
Hexachloroethane		ND	5.0	ug/L	11/02/98
Nitrobenzene		ND	5.0	uq/L	11/02/98
Isophorone			5.0	ug/L	11/02/98
2-Nitrophenol			5.0	uq/L	11/02/98
2.4-Dimethylphenol			50	uq/L	11/02/98
Benzoic acid		ND	5.0	ug/L	11/02/98
bis (2-Chloroethoxy) meth	hane		5.0	ug/L	11/02/98
2.4-Dichlorophenol			5.0	uq/L	11/02/98
1.2.4-Trichlorobenzene		ND	5.0	ug/L	11/02/98
Naphthalene		ND	5.0	ug/L	11/02/98
4-Chloroaniline		ND	5.0	ug/L	11/02/98
Hexachlorobutadiene			5.0	ug/L	11/02/98
4-Chloro-3-methylpheno	1		5.0	ug/L	11/02/98
2-Methylnaphthalene		ND	5.0	ug/L	11/02/98
Hexachlorocyclopentadi	ene		5.0	ug/L	11/02/98
2.4.6-Trichlorophenol		ND	5.0	ug/L	11/02/98
2.4.5-Trichlorophenol			10	ug/L	11/02/98
2-Chloronaphthalene		DN ND	50	ug/L	11/02/98
2-Nitroaniline		UM NTD	5 0	ug/L	11/02/98
Dimethylphthalate		ND ND	5.0	ug/L	11/02/98
Acenaphthylene			50	uq/L	11/02/98
3-Nitroaniline			5.0	uq/L	11/02/98
Acenaphthene			50	ug/L	11/02/98
2.4-Dinitrophenol			50	ug/L	11/02/98
4-Nitrophenol			5.0	ug/L	11/02/98
Dibenzofuran			5.0	ug/L	11/02/98
2.6-Dinitrotoluene		ND	5.0	ug/L	11/02/98
2.4-Dinitrotoluene		ND	5.0	ug/L	11/02/98
Diethylphthalate		ND	5.0	) ug/L	11/02/98
4-Chlorophenyl-phenyl	ether		5.0	) ug/L	11/02/98
Fluorene			5.0	) ua/L	11/02/98
4-Nitroaniline			5.0	) ua/L	11/02/98
4 6-Dinitro-2-methylp	henol	UN NT	5 (	) ug/L	11/02/98
n-Nitrosodiphenylamin	1e	ND	5.	0 ua/L	11/02/98
4-Bromophenyl-phenyle	ether	ND	2.		

Page 10

1

#### Department of the Air Force TEST RESULTS by SAMPLE

A	Collected: 09/29/9	8 Matrix: WATE	R
Sample: 02D 1000000	Popult 0	Limit <u>Units</u>	<u>Analyzed</u>
Test Description Method	<u>Result</u>	previous page)	
Semivolatile Organics SW 8270C	(CONCINCE LION	5.0 ug/L	11/02/98
Hexachlorobenzene	ND	5.0 ug/L	11/02/98
Pentachlorophenol	ND	5.0 ug/L	11/02/98
Phenanthrene	ND	5.0 ug/L	11/02/98
Anthracene	ND	5.0 ug/L	11/02/98
Di-n-butylphthalate	ND	5.0 ug/L	11/02/98
Fluoranthene	ND	5.0 ug/L	11/02/98
Pvrene	1 0 .TB	5.0 ug/L	11/02/98
Butylbenzylphthalate		20  ug/L	11/02/98
3.3'-Dichlorobenzidine	ND	5.0 ug/L	11/02/98
Benzo (a) Anthracene	ND	5.0 ug/L	11/02/98
Chrysene		5.0 ug/L	11/02/98
Bis(2-Ethylhexyl)phthalate	J.I J	5.0 ug/L	11/02/98
Di-n-octylphthalate	ND	5.0 ug/L	11/02/98
Benzo(b) fluoranthene	ND	5.0 ug/L	11/02/98
Benzo(k)fluoranthene	ND	5.0 ug/L	11/02/98
Benzo(a)pyrene	ND	5.0 ug/L	11/02/98
Indeno(1,2,3-cd)pyrene	ND	5.0 ug/L	11/02/98
Dibenz(a,h)anthracene	ND	5.0 ug/L	11/02/98
Benzo(g,h,i)perylene	112		
SURROGATES, & Recovery	66 0	Min: 21	Max: 100
2-Fluorophenol	54 7	Min: 10	Max: 94
d5-Phenol	72 0	Min: 35	Max: 114
d5-Nitrobenzene	96.0	Min: 43	Max: 116
2-Fluorobiphenyl	80.0	Min: 10	Max: 123
2,4,6-Tribromophenol	110	Min: 33	Max: 141
d14-Terphenyl	724		

#### Department of the Air Force TEST RESULTS by SAMPLE

(0000088 064 CM	we Co	llected: 09/29/98	Mat:	rix: WATE	R	
Sample: 02E 48030988 004 cm	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	An	alyzed
Test Description	SW 8081A	_	0 005	ua/1	10	/26/98
organochiorine reputer		ND	0.025	ug/1	10	/26/98
Aldrin almha-BHC		ND	0.025	ug/1	10	/26/98
alpha-bic		ND	0.025	ug/L	10	)/26/98
		ND	0.025	ug/L	10	)/26/98
commanBHC (Lindane)		ND	0.025	ug/L	10	0/26/98
alpha-Chlordane		ND	0.025	աց/ <u>–</u> ազ/ ե	1	0/26/98
arpha-Chlordane		ND	0.025	ug/L	1	0/26/98
gamma-chioramic		ND	0.050	ug/1	1	0/26/98
		ND	0.050	ug/2	1	0/26/98
4,4 - DDE		ND	0.050		1	0/26/98
$4, 4^{-}$ - DD1		ND	0.025	ug/L	1	0/26/98
Dietarin Dietarin		ND	0.050	ug/E	1	0/26/98
Endosullan I		ND	0.050	ug/L	1	0/26/98
Endosulian ii		ND	0.050	ug/L	1	0/26/98
Endosullan Sullace		ND	0.050		1	L0/26/98
Engrin Redamme Aldobyde		ND	0.050	ug/L	-	10/26/98
Endrin Aldenyde		ND	0.025	ug/1		10/26/98
Heptachior Epoxide		ND	0.025			10/26/98
Heptachior Epoxide		ND	0.25	ug/L		10/26/98
Methoxychior		ND	0.75	ug/L		
Toxaphene Becoverv				45	Max·	124
SURROGATES, & RECOVERY		85.0	Min:	45	Max	124
Tetrachiorometaxyiene		95.0	Min:	40	nan .	
Decachiorobiphenyi						
- 1	SW 8082					10/26/98
polychiorinated Dipitelij ==		ND	1.0	ug/L		10/26/98
PCB-1221		ND	0.50			10/26/98
PCB-1232		ND	0.50	ug/L		10/26/98
PCB-1242		ND	0.50	ug/D		10/26/98
PCB-1248		ND	0.50	ug/L		10/26/98
PCB-1254		ND	0.50			10/26/98
PCB-1520		ND	0.50	, ug/L		
PCB-1016				20	Max·	133
SURROGATES, & RECOVERY		85.0	Min	: 49	Max.	137
Tetrachloromeraxylene Decachlorobiphenyl		95.0	Min	: 20	Hax.	* <b>-</b> ·

Sample: 02G 48030988 064 CMW6

Collected: 09/29/98 Matrix: WATER

Sample: 02G 40050500 000				Thite	Analyzed
Test Description	Method	<u>Result 0</u>	Limit	OULES	
Test Description ICP Metals, TCLP Extracted Arsenic Barium Cadmium Chromium Lead Selenium	SW 1311/6010	ND 0.31 ND ND ND ND	0.050 0.020 0.0050 0.010 0.050 0.10	mg/L mg/L mg/L mg/L mg/L mg/L	10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98
Silver Mercury, TCLP Extracted	SW 1311/7470	ND	0.0020	mg/L	10/20/98



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Page 13

Order # 98-10-036 ANALYTICA, INC.

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 03A 48030988 065 MW1

Collected: 09/30/98 Matrix: WATER

Sampre: ••••	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Test Description				/ <b>-</b>	10/13/98
Volatiles by GC/MS		ND	5.0	ug/L	10/13/98
Dichlorodifluoromethane		5.3	5.0	ug/L	10/13/98
Chloromethane		ND	2.0	ug/L	10/13/98
Vinyl Chloride		ND	5.0	ug/L	10/13/98
Bromomethane		ND	5.0	ug/L	10/13/98
Chloroethane		ND	2.0	ug/L	10/13/98
Trichlorofluoromethane		ND	2.0	ug/L	10/13/98
1,1-Dichloroethene		ND	2.0	ug/L	10/13/90
Trichlorotrifluoroethane		ND	10	ug/L	10/13/90
Methylene Chloride		ND	2.0	ug/L	10/13/90
trans-1,2-Dichloroethene		ND	2.0	ug/L	10/13/98
1,1-Dichloroethane		ND	2.0	ug/L	10/13/98
2,2-Dichloropropane		ND	2.0	ug/L	10/13/98
cis-1,2-Dichloroethene		ND	2.0	ug/L	10/13/98
Bromochloromethane		ND	2.0	ug/L	10/13/98
Chloroform		ND	2.0	ug/L	10/13/98
1,1,1-Trichloroethane		NTD	2.0	ug/L	10/13/98
Carbon Tetrachloride		ND	2.0	ug/L	10/13/98
1,1-Dichloropropene		ND	2.0	ug/L	10/13/98
Benzene		ND	2.0	ug/L	10/13/98
1,2-Dichloroethane		ND	2.0	ug/L	10/13/98
Trichloroethene		ND	2.0	ug/L	10/13/98
1,2-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromomethane		ND	2.0	ug/L	10/13/98
Bromodichloromethane		NT)	2.0	ug/L	10/13/98
cis-1,3-Dichloropropene		0 97 J	2.0	ug/L	10/13/98
Toluene		0197 C	2.0	ug/L	10/13/98
trans-1,3-Dichloropropene	1	ND	2.0	ug/L	10/13/98
1,1,2-Trichloroethane		NT)	2.0	ug/L	10/13/98
Tetrachloroethene		ND	2.0	ug/L	10/13/98
1,3-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromochloromethane		ND	2.0	ug/L	10/13/98
1.2-Dibromoethane		ND	2.0	ug/L	10/13/98
Chlorobenzene		ND	2.0	ug/L	10/13/98
Ethylbenzene		ND	2.0	ug/L	10/13/98
1,1,1,2-Tetrachloroethan	e	0 48 J	2.0	ug/L	10/13/98
m,p-Xylenes		0.40 0 ND	2.0	) ug/L	10/13/98
o-Xylene		ND	2.0	) ug/L	10/13/98
Styrene	× *		2.0	) ug/L	10/13/98
Bromoform			2.0	ug/L	10/13/98
Isopropylbenzene			2.0	0 ug/L	10/13/98
Bromobenzene			2.	0 ug/L	10/13/98
n-Propylbenzene		ND	2.	0 ug/L	10/13/98
1,1,2,2-Tetrachloroethan	ne		2.	0 ug/L	10/13/98
1.2.3-Trichloropropane			2.	0 ug/L	10/13/98
2-Chlorotoluene		רשע עראנ	2.	0 ug/L	10/13/98
1.3.5-Trimethylbenzene			2.	0 ug/L	10/13/98
4-Chlorotoluene		TIT)		-	



#### Department of the Air Force TEST RESULTS by SAMPLE

Sample: 03A 48030988 065 MW1

Collected: 09/30/98 Matrix: WATER

Sample: USA 48050500 000					Δn	alvzed
	Method	<u>Result</u> <u>Q</u>	Limit	Units	<u></u>	
Test Description	SW 8260B	(continued from	previou	s page/	10	/13/98
Volatiles by GC/MS	<b>D C</b>	ND	2.0	ug/L	10	/13/98
tert-Butylbenzene		ND	2.0	ug/L	10	/13/98
1,2,4-Trimethylbenzene		ND	2.0	ug/L	10	1/13/98
sec-Butylbenzene		ND	2.0	ug/L	10	)/13/98
4-Isopropyltoluene		ND	2.0	ug/L	10	)/13/98
1,3-Dichlorobenzene		ND	2.0	ug/L		)/13/90 0/13/99
1,4-Dichlorobenzene		ND	2.0	ug/L	10	J/13/90
n-Butylbenzene		ND	2.0	ug/L	10	J/13/90
1,2-Dichlorobenzene		ND	10	ug/L	10	0/13/90
1,2-Dibromo-3-chloropropane		ND	2.0	ug/L	10	0/13/98
1,2,4-Trichlorobenzene		• ND	2.0	ug/L	1	0/13/98
Hexachlorobutadiene		ND	2.0	ug/L	1	0/13/98
Napthalene		 NTD	2.0	ug/L	1	0/13/98
1,2,3-Trichlorobenzene			50	ug/L	1	.0/13/98
Acetone		NT	10	ug/L	1	.0/13/98
Acrylonitrile			50	ug/L	1	_0/13/98
2-Butanone		ND	2.0	ug/L	1	10/13/98
Carbon Disulfide		ND	10	ug/L	3	10/13/98
trans-1, 4-Dichloro-2-buten		ND	10	ug/L	]	10/13/98
2-Chloroethyl Vinyl Ether		ND	20	uq/L	1	10/13/98
2-Hexanone		ND	2.0	ug/L		10/13/98
Indomethane			20	ug/L		10/13/98
4-Methyl-2-pentanone			5.0	uq/L	:	10/13/98
Vinvl Acetate			2.0	uq/L		10/13/98
tert-Butyl methyl ether		UN	2.0	- 31		
SURROGATES, & Recovery		100	Mine	80	Max:	120
Dibromofluoromethane		100	Min·	88	Max:	110
Toluene d-8		104	Mine	86	Max:	115
- Bromofluorobenzene		110	₽-1 <b>-</b> +++++			
h-promortgorgagese and						



Order # 98-10-036 ANALYTICA, INC.

#### Department of the Air Force TEST RESULTS by SAMPLE

Sample: 03D 48030988 065 MW1 Collected: 09/30/98 Matrix: WATER

	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Test Description	SW 8270C		- 0		11/02/98
Bhenol		ND	5.0	ug/L	11/02/98
bic (2-Chloroethyl) ether		ND	5.0	ug/L	11/02/98
2-chlorophenol		ND	5.0	ug/l	11/02/98
1 3-D1 chlorobenzene		ND	5.0	ug/L	11/02/98
1,3-Dichlorobenzene		ND	5.0	ug/L	11/02/98
Popravl alcohol		ND	10	ug/b	11/02/98
1.2-Dichlorobenzene		ND	5.0	ug/L	11/02/98
1,2-Dichiologenzene		ND	5.0	ug/L	11/02/98
bis (2-Chloroisopropyl)	ether	ND	5.0	ug/11	11/02/98
DIS (2-CHIOIOIDOP-OFI-)		ND	5.0	ug/ц	11/02/98
4-Methyrphenor	ine	ND	5.0	ug/L	11/02/98
n-Nitroso-ur-n-propress		ND	5.0	ug/L	11/02/98
Hexachioroechane		ND	5.0	ug/L	11/02/98
Nitrobenzene		ND	5.0	ug/L	11/02/98
Isophorone		ND	5.0	ug/L	11/02/98
2-Nitrophenol		ND	5.0	ug/L	11/02/90
2,4-Dimetnyiphenoi		ND	50	ug/L	11/02/98
Benzoic acid	ane	ND	5.0	ug/L	11/02/98
bis (2-Chloroethoxy) meth		ND	5.0	ug/L	11/02/98
2,4-Dichlorophenoi		ND	5.0	ug/L	11/02/98
1,2,4-Trichlorobenzene		ND	5.0	ug/L	11/02/98
Naphthalene		ND	5.0	ug/L	11/02/98
4-Chloroaniline		ND	5.0	ug/L	11/02/98
Hexachioroputadiene	1	ND	5.0	ug/L	11/02/98
4-Chloro-3-methylphenol	L	ND	5.0	ug/L	11/02/98
2-Methylnaphtnalene	220	ND	5.0	ug/L	11/02/98
Hexachlorocyclopentadie	Elle	ND	5.0	ug/L	11/02/98
2,4,6-Trichlorophenol		ND	5.0	ug/L	11/02/98
2,4,5-Trichlorophenol		ND	10	ug/L	11/02/98
2-Chloronaphtnalene		ND	50	ug/L	11/02/98
2-Nitroaniline		ND	5.0	ug/L	11/02/98
Dimethylphthalate		ND	5.0	ug/L	11/02/98
Acenaphthylene		ND	50	ug/L	11/02/98
3-Nitroaniline		ND	5.0	ug/L	11/02/98
Acenaphthene		ND	50	ug/L	11/02/98
2,4-Dinitrophenol		ND	50	ug/L	11/02/98
4-Nitrophenol		ND	5.0	ug/L	11/02/98
Dibenzofuran		ND	5.0	ug/L	11/02/98
2,6-Dinitrotoluene		ND	5.0	ug/L	11/02/98
2,4-Dinitrotoluene		ND	5.0	ug/L	11/02/98
Diethylphthalate		ND	5.0	) ug/L	11/02/98
4-Chlorophenyl-phenyle	ether	ND	5.0	) ug/L	11/02/98
Fluorene		ND	5.0	) ug/L	11/02/98
4-Nitroaniline	7	ND	50	) ug/L	11/02/98
4,6-Dinitro-2-methylp	nenoi	ND	5.0	) ug/L	11/02/98
n-Nitrosodiphenylamin	e ther	Л	5.0	0 ug/L	11/02/98
4-Bromophenyl-phenyle	115T				



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#### Department of the Air Force TEST RESULTS by SAMPLE

Sample: 03D 48030988 065 MW1		Collected: 09,	/30/98	3 Mati	ix: WATE	R	
Sample. CC	Method	Result	<u>o</u>	<u>Limit</u>	<u>Units</u>	A	<u>nalyzed</u>
<u>Test Description</u>	SW 8270C	(continued	from	previou	va/I	נ	1/02/98
Nevachlorobenzene		ND		5.0		1	1/02/98
pertachlorophenol		ND		5.0		3	1/02/98
Phonophic Phonoph		ND		5.0		]	1/02/98
Phenancincene		ND		5.0			1/02/98
pi_n_butylphthalate		ND		5.0		-	11/02/98
Fluoranthene		ND		5.0			11/02/98
Filloranchene		ND		5.0	ug/L		11/02/98
Pyrene Butulbengylphthalate		3.5	JB	5.0	ug/L		11/02/98
2 2 L-Dichlorobenzidine		ND		20	ug/D		11/02/98
Bongo (a) Anthracene		ND		5.0	ug/1		11/02/98
Chrusene		ND	_	5.0			11/02/98
Dic (2-Ethylbexyl) phthalate		14	в	5.0	ug/L		11/02/98
pi p-octvlphthalate		ND		5.0	ug/D		11/02/98
Di-n-occytphenalese Dence (b) fluoranthene		ND		5.0	ug/b		11/02/98
Benzo (b) fluoranthene		ND		5.0	ug/L		11/02/98
Benzo (k) Truoranchene		ND		5.0	ug/L		11/02/98
Benzo (a) pyrene		ND	ł	5.0	ug/L		11/02/98
Indeno(1,2,3-cd)pyrche		ND	)	5.0	ug/L		11/02/98
Dibenz (a, ii) anthracene		NE	)	5.0	ug/L		11/02/00
Benzo (g, n, 1) peryrene						Monte	100
SURROGATES, & RECOVERY		0.640	) *	Min:	21	Max:	94
2-Fluorophenol		6.60	) *	Min:	10	Max:	114
d5-Pheno1		69.0	)	Min:	35	Max:	114
d5-Nitrobenzene		75.(	)	Min:	43	Max:	103
2-Fluorobipneny		16.0	)	Min:	10	Max:	143
2,4,6-Tribromophenol		96.0	D	Min:	33	Max:	1 년 1
d14-Terpheny1							



124

124

Matrix: WATER

Order # 98-10-036 ANALYTICA, INC.

Department of the Air Force TEST RESULTS by SAMPLE

Collected: 09/30/98 48030988 065 MW1 Sample: 03E Analyzed <u>Units</u> <u>Limit</u> <u>Result 0</u> Method\_ Test Description SW 8081A Organochlorine Pesticides 10/26/98 0.025 uq/LND 10/26/98 Aldrin ug/L 0.025 ND 10/26/98 alpha-BHC 0.025 ug/L ND 10/26/98 beta-BHC ug/L 0.025 ND10/26/98 delta-BHC ug/L 0.025 ND gamma-BHC (Lindane) 10/26/98 ug/L 0.025 ND 10/26/98 alpha-Chlordane ug/L 0.025 ND 10/26/98 gamma-Chlordane ug/L 0.050 ND 10/26/98 4,4'-DDD ug/L 0.050 ND 10/26/98 4,4'-DDE ug/L 0.050 ND 10/26/98 4,4'-DDT ug/L 0.025 ND 10/26/98 Dieldrin 0.050 ug/L ND 10/26/98 Endosulfan I ug/L 0.050 ND Endosulfan II 10/26/98 ug/L 0.050 ND Endosulfan Sulfate 10/26/98 0.050 ug/L ND 10/26/98 Endrin uq/L 0.050 ND 10/26/98 Endrin Aldehyde ug/L 0.025 ND Heptachlor 10/26/98 ug/L 0.025 ND Heptachlor Epoxide 10/26/98 ug/L 0.25 ND Methoxychlor 10/26/98 ug/L 0.75 ND Toxaphene SURROGATES, % Recovery Max: 45 Min: 85.0 Tetrachlorometaxylene Max: Min: 45 85.0 Decachlorobiphenyl

SW 8082 Polychlorinated Biphenyls 10/26/98 ug/L 1.0 ND 10/26/98 PCB-1221 ug/L 0.50 ND 10/26/98 PCB-1232 ug/L 0.50 ND 10/26/98 PCB-1242 ug/L 0.50 ND 10/26/98 PCB-1248 ug/L 0.50 ND PCB-1254 10/26/98 uq/L 0.50 ND 10/26/98 PCB-1260 ug/L 0.50 ND PCB-1016 SURROGATES, % Recovery 133 29 Max: Min: 85.0 Tetrachlorometaxylene 137 Max: 26 Min: 85.0 Decachlorobiphenyl

40020098 065 MW1

Matrix: WATER Collected: 09/30/98

Sample: 03G 48030988 065 MM					
	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Test Description	SW 1311/6010	_			10/1F/09
ICP Metals, TCLP Extracted	011 2022/ 000	ND	0.050	mg/L	10/15/90
Arsenic		0.33	0.020	mg/L	10/15/98
Barium		ND	0.0050	mg/L	10/15/98
Cadmium		ND	0.010	mg/L	10/15/98
Chromium		ND	0.050	mg/L	10/15/98
Lead		ND	0 10	mg/L	10/15/98
Selenium			0.10	mα/1	10/15/98
Cilmor .		ND	0.010		10/20/98
Silver TCLP Fytracted	SW 1311/7470	ND	0.0020	шЭлл	
Mercury, ICEP Excluded					



#### Department of the Air Force TEST RESULTS by SAMPLE

Sample: 04A 48030988 066 MW7 Collected: 09/30/98 Matrix: WATER

	Method	Result Q	<u>Limit</u>	<u>Units</u>	Analyzed
Test Description	SW 8260B				10/13/98
Volatiles by GC/MS		ND	5.0	ug/L	10/13/98
Dichlorodilluoromethane		ND	5.0	ug/L	10/13/98
		ND	2.0	ug/L	10/13/98
Vinyl Chloride		ND	5.0	ug/L	10/13/98
Bromomethane		ND	5.0	ug/L	10/13/98
Chioroethane		ND	2.0	ug/L	10/13/90
Trichloroiluoromethane		ND	2.0	ug/L	10/13/90
1,1-Dichloroethene		ND	2.0	ug/L	10/13/90
Trichlorotrifluoroethane		ND	10	ug/L	10/13/98
Methylene Chioride		ND	2.0	ug/L	10/13/98
trans-1, 2-Dichloroethene		ND	2.0	ug/L	10/13/98
1,1-Dichloroethane		ND	2.0	ug/L	10/13/98
2,2-Dichloropropane		ND	2.0	ug/L	10/13/98
cis-1,2-Dichloroethene		ND	2.0	ug/L	10/13/98
Bromochloromethane		ND	2.0	ug/L	10/13/98
Chloroform		ND	2.0	ug/L	10/13/98
1,1,1-Trichloroethane		ND	2.0	ug/L	10/13/98
Carbon Tetrachloride		ND	2.0	ug/L	10/13/98
1,1-Dichloropropene		ND	2.0	ug/L	10/13/98
Benzene		ND	2.0	ug/L	10/13/98
1,2-Dichloroethane		ND	2.0	ug/L	10/13/98
Trichloroethene		ND	2.0	ug/L	10/13/98
1,2-Dichloropropane		NTD	2.0	ug/L	10/13/98
Dibromomethane		ND	2.0	ug/L	10/13/98
Bromodichloromethane		ND	2.0	ug/L	10/13/98
cis-1,3-Dichloropropene		1 1 J	2.0	ug/L	10/13/98
Toluene		1.1 U ND	2.0	ug/L	10/13/98
trans-1,3-Dichloropropene		ND	2.0	ug/L	10/13/98
1,1,2-Trichloroethane		ND	2.0	ug/L	10/13/98
Tetrachloroethene		ND	2.0	uq/L	10/13/98
1,3-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromochloromethane		ND	2.0	uq/L	10/13/98
1,2-Dibromoethane			2.0	ug/L	10/13/98
Chlorobenzene			2.0	uq/L	10/13/98
Ethylbenzene			2.0	ug/L	10/13/98
1,1,1,2-Tetrachloroethane	•		2.0	ug/L	10/13/98
m.p-Xylenes		0.54 U ND	2.0	ug/L	10/13/98
o-Xylene		ND	2.0	uq/L	10/13/9B
Styrene		ND	2.0	ug/L	10/13/98
Bromoform			2.0	ug/L	10/13/98
Isopropylbenzene			2.0	ug/L	10/13/98
Bromobenzene		טא אדר	2.0	ua/L	10/13/98
n-Propylbenzene			2.0	υσ/Ι	10/13/98
1.1.2.2-Tetrachloroethan	e	ND	2.0	) ua/L	10/13/98
1 2 3-Trichloropropane		ND	2.0	) ua/I	10/13/98
2-Chlorotoluene		ND	2.0	, ω <u>σ</u> /Γ	10/13/98
1.3.5-Trimethylbenzene		UN	2.1	, <u>-</u> , - ) υα/L	10/13/98
4-Chlorotoluene		עא	£ + 1		



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Order # 98-10-036 ANALYTICA, INC.

#### Department of the Air Force TEST RESULTS by SAMPLE

## Sample: 04A 48030988 066 MW7

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Collected: 09/30/98 Matrix: WATER

Test Description	Met	hod	<u>Result</u>	0	<u>Limit</u>	<u>Units</u>	A	nalyzed
Test_Description	SW	8260B	(continued	from	previou	s page)		
Volatiles by GC/MS		•	ND		2.0	ug/L	1	0/13/98
tert-Butyibenzene			ND		2.0	ug/L	1	.0/13/98
1,2,4-Trimethylbenzene			ND		2.0	ug/L	1	.0/13/98
sec-Butylbenzene			ND		2.0	ug/L	3	0/13/98
4-Isopropyltoluene			ND		2.0	ug/L	1	13/98
1,3-Dichlorobenzene			ND		2.0	ug/L	1	LO/13/98
1,4-Dichlorobenzene					2.0	ua/L	-	L0/13/98
n-Butylbenzene			ND		2.0	uq/L	-	L0/13/98
1,2-Dichlorobenzene			ND		10	11g/L	-	10/13/98
1,2-Dibromo-3-chloropropane					2.0	ug/L	-	10/13/98
1,2,4-Trichlorobenzene			ND		2.0	- <u>-</u> , - υσ/Γ	-	10/13/98
Hexachlorobutadiene			ND		2.0	ມ <u>ສ</u> /ມ		10/13/98
Napthalene					2.0	υσ/L		10/13/98
1,2,3-Trichlorobenzene					50	ug/L		10/13/98
Acetone					10	ug/L		10/13/98
Acrylonitrile			ND		50	ug/I		10/13/98
2-Butanone			DM T		20			10/13/98
Carbon Disulfide			עא		2.0	ug/L		10/13/98
trans-1,4-Dichloro-2-buten			ND		10	ug/1 		10/13/98
2-Chloroethyl Vinyl Ether			ND		10	ug/b		10/13/98
2-Hexanone			ND		20	ug/L		10/13/98
Iodomethane			ND		2.0	ug/L		10/13/98
4-Methyl-2-pentanone			ND		20	ug/L		10/13/98
Vinvl Acetate			ND		5.0	ug/ե		10/13/90
tert-Butyl methyl ether			ND		2.0	ug/L		10/13/90
SURROGATES. & Recovery								2.20
Dibromofluoromethane			100		Min:	80	Max:	120
Toluene d-8			104		Min:	88	Max:	110
n-Bromofluorobenzene			112		Min:	86	Max:	115
P-Promorrancemento								





Department of the Air Force TEST RESULTS by SAMPLE

Sample: 04D 48030988 066 MW7 Collected: 09/30/98 Matrix: WATER

Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Semivolatile Organics	SW 8270C		5 0	11 <b>0</b> /T	11/01/98
Phenol		ND	5.0	ug/2	11/01/98
bis(2-Chloroethyl) ether		ND	5.0	ug/L	11/01/98
2-Chlorophenol		ND	5.0	ug/L	11/01/98
1,3-Dichlorobenzene		ЦИ ND	5.0	ug/L	11/01/98
1,4-Dichlorobenzene			10	ug/Ι	11/01/98
Benzyl alcohol		ND	5.0	ug/L	11/01/98
1,2-Dichlorobenzene		ND	5.0	ω <u>э</u> , _ 11α/L	11/01/98
2-Methylphenol		ND	5.0	ug/L	11/01/98
bis (2-Chloroisopropyl) ethe	er	ND	5.0	ц <u>э</u> , – ца/ь	11/01/98
4-Methylphenol		ND	5.0	ug/L	11/01/98
n-Nitroso-di-n-propylamine		UN ND	5.0	uσ/L	11/01/98
Hexachloroethane		UN NT	5.0	ug/L	11/01/98
Nitrobenzene		ND	5.0	ug/1	11/01/98
Isophorone	`	ND	5.0		11/01/98
2-Nitrophenol		ND	5.0	ug/L	11/01/98
2,4-Dimethylphenol		ND	5.0		11/01/98
Benzoic acid		ND	50		11/01/98
bis(2-Chloroethoxy)methane		ND	5.0	ug/1	11/01/98
2,4-Dichlorophenol		ND	5.0	ug/L	11/01/98
1,2,4-Trichlorobenzene		ND	5.0	ug/D	11/01/98
Naphthalene		ND	5.0	υσ/L	11/01/98
4-Chloroaniline		ND	5.0	ug/I	11/01/98
Hexachlorobutadiene		ND	5.0	ug/L	11/01/98
4-Chloro-3-methylphenol		ND	5.0	ug/D	11/01/98
2-Methylnaphthalene		ND	5.0	ug/5	11/01/98
Hexachlorocyclopentadiene		ND	5.0	ug/1	11/01/98
2,4,6-Trichlorophenol		DN ND	5.0	ug/L	11/01/98
2,4,5-Trichlorophenol		ND	3.0	ug/1	11/01/98
2-Chloronaphthalene		ND	±0	υσ/L	11/01/98
2-Nitroaniline		UN ND	E 0	ug/ =	11/01/98
Dimethylphthalate		ND	5.0	ug/L	11/01/98
Acenaphthylene		UM	5.0	υσ/L	11/01/98
3-Nitroaniline		UM ND	50	ug/L	11/01/98
Acenaphthene			50	ug/1	11/01/98
2,4-Dinitrophenol		ND	50	ug/L	11/01/98
4-Nitrophenol			50	ug/L	11/01/98
Dibenzofuran		ND	5.0	- <u>9</u> , - υα/L	11/01/98
2,6-Dinitrotoluene		ND	5.0	ug/L	11/01/98
2,4-Dinitrotoluene			5.0	ug/L	11/01/98
Diethylphthalate		ND	5.0	ug/L	11/01/98
4-Chlorophenyl-phenylethe	r		5.0	ug/L	11/01/98
Fluorene		NU	5.0	ug/I.	11/01/98
4-Nitroaniline		NU	5.0	υα/T	11/01/98
4,6-Dinitro-2-methylphend	ol (		5 O	ug/L	11/01/98
n-Nitrosodiphenylamine			5.0	ua/L	11/01/98
4-Bromophenyl-phenylether	<b>:</b>	UN	5.0	-,c-	



Department of the Air Force TEST RESULTS by SAMPLE

# Sample: 04D 48030988 066 MW7 Collected: 09/30/98 Matrix: WATER

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Test Description	Method	<u>Result</u> <u>0</u>	<u>Limit</u>	<u>Units</u>	A	nalyzed
Semivolatile Organics	SW 8270C	(continued fr	com previou	s page)	-	- / /
Hevachlorobenzene		ND	5.0	ug/L	1	1/01/98
Pentachlorophenol		ND	5.0	ug/L	1	.1/01/98
Phonanthrene		ND	5.0	ug/L	1	.1/01/98
Phenancin enc		ND	5.0	ug/L	1	.1/01/98
Anuliacene Di m butulohthalate		ND	5.0	ug/L	3	1/01/98
DI-A-Ducyiphenarate		ND	5.0	ug/L	]	1/01/98
Fluoranchene		ND	5.0	ug/L	3	L1/01/98
Pyrene		ND	5.0	ug/L	3	1/01/98
ButyIDenzyiphthalate		ND	20	ug/L	1	L1/01/98
3,3'-Dichloropenzidine		ND	5.0	ug/L	3	L1/01/98
Benzo (a) Anthracene		ND	5.0	ug/L	-	11/01/98
Chrysene		1.4 JB	5.0	ug/L		11/01/98
Bis (2-Ethylnexyl) phthalate		ND	5.0	ug/L	:	11/01/98
Di-n-octylphthalate		ND	5.0	ug/L		11/01/98
Benzo (b) fluoranthene			5.0	ug/L	•	11/01/98
Benzo(k)fluoranthene		ND	5.0	uq/L		11/01/98
Benzo(a)pyrene		ND	5.0	ug/L		11/01/98
Indeno(1,2,3-cd)pyrene		NTD	5.0	uq/L		11/01/98
Dibenz (a, h) anthracene			5.0	uq/L		11/01/98
Benzo(g,h,i)perylene		ND		217		
SURROGATES, % Recovery		F0 7	Min·	21	Max:	100
2-Fluorophenol		50.7	Min ·	10	Max:	94
d5-Phenol		44./	Min·	35	Max:	114
d5-Nitrobenzene		59.0	Min.	43	Max:	116
2-Fluorobiphenyl		77.0	Min.	10	Max	123
2,4,6-Tribromophenol		60.0	Min.	22	Max	141
d14-Terphenyl		63.0	PILII:	22		

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Order # 98-10-036 ANALYTICA, INC.

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 04E 48030988 066 MW/
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Collected: 09/30/98 Matrix: WATER

Test Description	Method	<u>Result</u> <u>O</u>	<u>Limit</u>	<u>Units</u>	<u>A</u>	nalyzed
Organochlorine Pesticides	SW 8081A			( <del>-</del>	-	0/06/08
Aldrin		ND	0.025	ug/L	1	0/20/90
alpha-BHC		ND	0.025	ug/L	1	0/26/90
beta-BHC		ND	0.025	ug/L	L -	10/26/98
delta-BHC		ND	0.025	ug/L	<u>د</u> -	0/26/90
gamma-BHC (Lindane)		ND	0.025	ug/L	1	
alpha-Chlordane		ND	0.025	ug/L	-	LU/26/98
gamma-Chlordane		ND	0.025	ug/L	]	10/26/98
		ND	0.050	ug/L	]	10/26/98
		ND	0.050	ug/L	]	10/26/98
		ND	0.050	ug/L	-	10/26/98
4,4 -DDI Dioldrin		ND	0.025	ug/L		10/26/98
Endocultan I		ND	0.050	ug/L	-	10/26/98
Endosulfan II		ND	0.050	ug/L		10/26/98
Endosulfan Sulfate		ND	0.050	ug/L		10/26/98
Endosurian Suitace		ND	0.050	ug/L		10/26/98
Endrin Aldebude		ND	0.050	ug/L		10/26/98
Endrin Ardenyde		ND	0.025	ug/L		10/26/98
Heptachior Provide		ND	0.025	ug/L		10/26/98
Heptachior Epoxide		ND	0.25	ug/L		10/26/98
Methoxychior		ND	0.75	ug/L		10/26/98
Toxaphene support REG & Bocovery						
SURROGATES, & Recovery		80.0	Min:	45	Max:	124
Decachlorobiphenyl		70.0	Min:	45	Max:	124
Polychlorinated Biphenyls	SW 8082	NTC.	1 0			10/26/98
PCB-1221		ND	0.50	ug/L		10/26/98
PCB-1232		ND	0.50	ug/L		10/26/98
PCB-1242		ND	0.50	ug/1		10/26/98
PCB-1248		ND	0.50	ug/1		10/26/98
PCB-1254			0.50	ug/#		10/26/98
PCB-1260		ND	0.50	ug/D		10/26/98
PCB-1016		ND	0.50	цдул		20,20,00
SURROGATES, & Recovery			Min -	20	Max·	133
Tetrachlorometaxylene		80.0	Min:	25	Max	137
Decachlorobiphenyl		70.0	MTU:	20	1-1444.5 4	

Sample: 04G 48030988 066 MW7 Collected: 09/30/98 Matrix: WATER

Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	Analyzed
ICP Metals, TCLP Extracted Arsenic Barium Cadmium Chromium Lead Selenium Silver Mercury, TCLP Extracted	SW 1311/6010 SW 1311/7470	ND 1.5 ND 0.057 ND ND ND ND	0.050 0.020 0.010 0.050 0.10 0.010 0.010	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/20/98





#### Department of the Air Force TEST RESULTS by SAMPLE

# Sample: 05A 48030988 067 MW4 Collected: 09/30/98 Matrix: WATER

- Teat Deceription	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Volatiles by GC/MS	SW 8260B				10/13/98
Dichlorodifluoromethane		ND	5.0	ug/L væ/T	10/13/98
Chloromethane		ND	5.0	ug/u	10/13/98
Vinvl Chloride		ND	2.0	ug/L	10/13/98
Bromomethane		ND	5.0	ug/b	10/13/98
Chloroethane		ND	5.0	ug/L	10/13/98
Trichlorofluoromethane		ND	2.0	ug/b væ/t	10/13/98
1.1-Dichloroethene		ND	2.0	ug/L	10/13/98
Trichlorotrifluoroethane		ND	2.0	ug/L	10/13/98
Methylene Chloride		ND	10	ug/L	10/13/98
trans-1.2-Dichloroethene		ND	2.0	ug/L	10/13/98
1 1-Dichloroethane		ND	2.0	ug/L	10/13/98
2 2-Dichloropropane		ND	2.0	ug/L	10/13/98
cis-1.2-Dichloroethene		ND	2.0	ug/L	10/13/98
Bromochloromethane		ND	2.0	ug/L	10/13/98
Chloroform		ND	2.0	ug/L	10/13/98
1 1 1-Trichloroethane		ND	2.0	ug/L	10/13/98
Carbon Tetrachloride		ND	2.0	ug/L	10/13/98
1 1-Dichloropropene		ND	2.0	ug/L	10/13/90
L, L DICMICA OPPOPT		ND	2.0	ug/L	10/13/90
1 2-Dichloroethane		ND	2.0	ug/L	10/13/98
Trichloroethene		ND	2.0	ug/L	10/13/90
1 2-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromomethane		ND	2.0	ug/L	10/13/98
Bromodichloromethane		ND	2.0	ug/L	10/13/98
cis-1.3-Dichloropropene		ND	2.0	ug/L	10/13/98
		1.0 J	2.0	ug/L	10/13/98
trans-1.3-Dichloropropene		ND	2.0	ug/L	10/13/98
1 1 2-Trichloroethane		ND	2.0	ug/L	10/13/98
Tetrachloroethene		ND	2.0	ug/L	10/13/98
1.3-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromochloromethane		ND	2.0	ug/L	10/13/98
1 2-Dibromoethane		ND	2.0	ug/L	10/13/98
Chlorobenzene		ND	2.0	ug/L	10/13/98
Ethylbenzene		ND	2.0	ug/ມ /T	10/13/98
1.1.1.2-Tetrachloroethane	2	ND	2.0	ug/L	10/13/98
m.p-Xvlenes		0.49 J	2.0		10/13/98
o-Xvlene		ND	2.0		10/13/98
Styrene		ND	2.0	ug/5	10/13/98
Bromoform		ND	2.0	ug/L	10/13/98
Isopropylbenzene		ND	2.0	ug/1	10/13/98
Bromobenzene		ND	2.0	ug/1	10/13/98
n-Pronylbenzene		ND	2.0	ug/L	10/13/98
1,1,2,2-Tetrachloroethan	e	ND	2.0	ug/L	10/13/98
1.2.3-Trichloropropane		ND	2.0	ug/1	10/13/98
2-Chlorotoluene		ND	2.0		10/13/98
1,3,5-Trimethylbenzene		ND	2.0	່ ແຜ່/ມ ນາດ/T.	10/13/98
4-Chlorotoluene		ND	2.0	, 49/1	,,



Order # 98-10-036 ANALYTICA, INC.

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 05A 48030988 067 MW4 Collected: 09/30/98 Matrix: WATER

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	Met	rhođ	Result Q	<u>Limit</u>	<u>Units</u>	<u>A</u>	<u>nalyzed</u>
Test Description	CM	8260B	(continued fro	m previou	s page)		
Volatiles by GC/MS	31	02002	ND	2.0	ug/L	1	0/13/98
tert-Butylbenzene			ND	2.0	ug/L	1	.0/13/98
1,2,4-Trimethylbenzene			ND	2.0	ug/L	1	.0/13/98
sec-Butylbenzene			ND	2.0	ug/L	1	.0/13/98
4-Isopropyltoluene			NTD	2.0	ug/L	נ	.0/13/98
1,3-Dichlorobenzene			ND	2.0	ug/L	1	.0/13/98
1,4-Dichlorobenzene			ND	2.0	ug/L	1	0/13/98
n-Butylbenzene			ND	2.0	uq/L	]	10/13/98
1,2-Dichlorobenzene			ND	10	uq/L	1	LO/13/98
1,2-Dibromo-3-chloropropane			ND	2.0	ug/L	1	10/13/98
1,2,4-Trichlorobenzene			ND	2.0	ug/L		10/13/98
Hexachlorobutadiene				2.0	ug/L		10/13/98
Napthalene				2.0	ug/L	-	10/13/98
1,2,3-Trichlorobenzene			ND ND	50	- <u>э</u> , – ua/L		10/13/98
Acetone				10	υσ/L		10/13/98
Acrylonitrile			UN NTD	±° 50	ug/L		10/13/98
2-Butanone				20	uα/L		10/13/98
Carbon Disulfide				10	uσ/L		10/13/98
trans-1,4-Dichloro-2-buten			ND	10	ug/1		10/13/98
2-Chloroethyl Vinyl Ether			ND	20	ug/L		10/13/98
2-Hexanone			ND	20	ug/D		10/13/98
Iodomethane			ND	2.0	ug/D		10/13/98
4-Methyl-2-pentanone			ND	20 E 0			10/13/98
Vinyl Acetate			ND	5.0	ug/L		10/13/98
tert-Butyl methyl ether			ND	2.0	ug/u		20, 20, 20
SURROGATES, % Recovery				16 m .	90	Max·	120
Dibromofluoromethane			100	Min:	0V 00	Max	110
Toluene d-8			106	Min:	00 02	Max.	115
p-Bromofluorobenzene			106	MIN:	00	1.1QV •	



#### Department of the Air Force TEST RESULTS by SAMPLE

Sample: 05D 48030988 067 MW4 Collected: 09/30/98 Matrix: WATER

	Method	Result 0	<u>Limit</u>	<u>Units</u>	Analyzed
Test Description	SW 8270C			-	11/01/08
Semivolatile Olganico	-	ND	5.0	ug/L	11/01/98
hig (2-Chloroethyl) ether		ND	5.0	ug/L	11/01/98
Bis(2-chiorocchy1, dense		ND	5.0	ug/L	11/01/98
2-Chiorophenor		ND	5.0	ug/L	11/01/98
1, 3-Dichlorobenzene		ND	5.0	ug/L	11/01/98
I, 4-DICHIOLODCHIZCHO		ND	10	ug/L	11/01/98
1 2 Dichlorobenzene		ND	5.0	ug/L	11/01/98
1,2-DICHIOIODENSCHO		ND	5.0	ug/L	11/01/98
bic (2-Chloroisopropyl) eth	ner	ND	5.0	ug/L	11/01/98
A Mathylphenol		ND	5.0	ug/L	11/01/98
4-Methyiphenoi	2	ND	5.0	ug/L	11/01/98
n-Nitroso-di-n-propyia		ND	5.0	ug/L	11/01/90
Hexachioroechane		ND	5.0	ug/L	11/01/90
Nitrobenzene		ND	5.0	ug/L	11/01/98
Isophorone		ND	5.0	ug/L	11/01/98
2-Nitrophenol		ND	5.0	ug/L	11/01/98
2,4-Dimetnyiphenoi		ND	50	ug/L	11/01/98
Benzoic acid	•	ND	5.0	ug/L	11/01/98
bis (2-Chloroetnoxy) methan	C	ND	5.0	ug/L	11/01/98
2,4-Dichlorophenol		ND	5.0	ug/L	11/01/98
1,2,4-Trichlorobenzene		ND	5.0	ug/L	11/01/98
Naphthalene		ND	5.0	ug/L	11/01/98
4-Chloroaniline		ND	5.0	ug/L	11/01/98
Hexachlorobutadiene		ND	5.0	ug/L	11/01/98
4-Chloro-3-methylphenol		ND	5.0	ug/L	11/01/98
2-Methylnaphthalene		ND	5.0	ug/L	11/01/98
Hexachlorocyclopentadiene	2	ND	5.0	ug/L	11/01/98
2,4,6-Trichlorophenol		ND	5.0	ug/L	11/01/98
2,4,5-Trichlorophenol		ND	10	ug/L	11/01/98
2-Chloronaphtnalene		ND	50	ug/L	11/01/98
2-Nitroaniline		ND	5.0	ug/L	11/01/98
Dimethylphthalate		ND	5.0	ug/L	11/01/98
Acenaphtnylene		ND	50	ug/L	11/01/98
3-Nitroaniline		ND	5.0	ug/L	11/01/98
Acenaphthene		ND	50	ug/L	11/01/98
2,4-Dinitrophenol		ND	50	ug/L	11/01/98
4-Nitrophenol		ND	5.0	ug/L	11/01/98
Dibenzoiuran		ND	5.0	ug/L	11/01/98
2,6-Dinitrotoluene		ND	5.0	ug/L	11/01/98
2,4-Dinitrotoluene		ND	5.0	ug/L	11/01/98
Diethylphthalate	~~~	ND	5.0	ug/L	11/01/98
4-Chloropheny1-phenyleth	12T	ND	5.0	ug/L	11/01/98
Fluorene		ND	5.0	ug/L	11/01/98
4-Nitroaniline	201	ND	50	ug/L	11/01/98
4,6-Dinitro-2-metnyipner	101	ND	5.0	) ug/L	11/01/98
n-Nitrosodiphenylamine		ND	5.0	) ug/L	11/01/98
4-Bromophenyl-phenylethe	51				



Order # 98-10-036 ANALYTICA, INC. Department of the Air Force TEST RESULTS by SAMPLE

Sample: 05D 48030988 067 MW4		Collected: 09/30/98	8 Mat	rix: WATE	R	
- Dest Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	1	Analyzed
<u>Test Description</u>	SW 8270C	(continued from	previou	s page)		/ 01 / 09
Semivoratire organico		ND	5.0	ug/L	-	
Hexachiorobenzene		ND	5.0	ug/L	-	
Pentachiorophenor		ND	5.0	ug/L	-	11/01/98
Phenanthrelle		ND	5.0	ug/L	•	11/01/98
Anthracene		ND	5.0	ug/L		11/01/98
Di-n-butyIphthalace		ND	5.0	ug/L		11/01/98
Fluorantnene		ND	5.0	ug/L		11/01/98
Pyrene		ND	5.0	ug/L		11/01/98
Butylbenzylphthalate		ND	20	ug/L		11/01/98
3,3'-Dichlorobenzidine		ND	5.0	ug/L		11/01/98
Benzo (a) Anthracene		ND	5.0	ug/L		11/01/98
Chrysene		ND	5.0	ug/L		11/01/98
Bis (2-Ethylhexyl) phthalate		NTD	5.0	ug/L		11/01/98
Di-n-octylphthalate			5.0	ug/L		11/01/98
Benzo(b)fluoranthene		ND	5.0	uq/L		11/01/98
Benzo(k)fluoranthene		ND	5.0	ug/L		11/01/98
Benzo(a)pyrene		ND	5.0	ug/L		11/01/98
Indeno (1,2,3-cd) pyrene		ND	5.0	ug/L		11/01/98
Dibenz (a, h) anthracene			5.0	ug/L		11/01/98
Benzo(g,h,i)perylene		ND	5.0	~g/ =		·
SURROGATES, % Recovery			Min.	21	Max:	100
2-Fluorophenol		48.7	Min.	10	Max:	94
d5-Phenol		44.0		35	Max:	114
d5-Nitrobenzene		69.0	Min:	13	Max:	116
2-Fluorobiphenyl		70.0	MIN:	د <del>ي</del> ۱0	Max	123
2.4.6-Tribromophenol		54.7	Mill:	22 TO	Max	141
d14-Terphenyl		55.0	Min:	22	nan .	

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10/26/98

10/26/98

10/26/98

10/26/98

10/26/98

133

137

Max:

Max:

Order # 98-10-036 ANALYTICA, INC.

PCB-1232

PCB-1242

PCB-1248

PCB-1254

PCB-1260

PCB-1016

Department of the Air Force TEST RESULTS by SAMPLE

Samale: 058 48030988 067 MW4		Collected:	09/30/9	8 Mati	rix: WATE	R	
Sampie. VII	Method	Resul	<u>t 0</u>	<u>Limit</u>	<u>Units</u>	A	nalyzed
<u>Test Description</u>	SW 8081A			0.005	$n\sigma/t$	1	0/26/98
organochiorine repercent		נ	1D	0.025	ug/L	1	0/26/98
Aldrin		1	ND.	0.025	ug/11	- 1	0/26/98
alpha-BHC		1	ND.	0.025	ug/11 _/T	- 1	0/26/98
beta-BHC		1	ND.	0.025	ug/L	1	0/26/98
delta-BHC			ND	0.025	ug/L	1	0/20/90
gamma-BHC (Lindane)			ND	0.025	ug/L	د د	0/20/00
alpha-Chlordane			ND	0.025	ug/L	1	0/26/96
gamma-Chlordane			ND	0.050	ug/L	1	.0/26/98
4,4'-DDD			ND	0.050	ug/L	]	0/26/98
4,4'-DDE			ND	0.050	ug/L	]	0/26/98
4,4'-DDT				0.025	ug/L	-	L0/26/98
Dieldrin			NT)	0.050	ug/L	-	10/26/98
Endosulfan I				0.050	ug/L		10/26/98
Endosulfan II				0 050	ua/L		10/26/98
Endosulfan Sulfate				0.050	ug/L		10/26/98
Fndrin				0.050	110/L		10/26/98
Endrin Aldehyde			ND	0.030	ug/L		10/26/98
Houtschlor			ND	0.025			10/26/98
Heptachior Epoxide			ND	0.025			10/26/98
Heptachior Epoxice			ND	0.25	ug/L		10/26/98
Methoxychior			ND	0.75	ug/L		10/20/20
Toxaphene					_		104
SURROGATES, * Recovery		9	0.0	Min:	45	Max:	124
Tetrachlorometaxylene		8	5.0	Min:	45	Max:	124
Decachlorobipheny⊥							
Polychlorinated Biphenyls	SW 8082	1	NT	1.0	ug/L		10/26/98
PCB-1221			MD CIN	0.50	ug/L		10/26/98

Sample: 05G 48030988 067 MW4

SURROGATES, % Recovery

Tetrachlorometaxylene

Decachlorobiphenyl

Matrix: WATER Collected: 09/30/98

0.50

0.50

0.50

Min:

Min:

0.50 ug/L

0.50 ug/L

ug/L

ug/L

ug/L

29

26

ND

ND

ND

ND

ND

ND

90.0

85.0

Sample: 056 4000000			<b>.</b>	Units	Analyzed
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	011100	
ICP Metals, TCLP Extracted	SW 1311/6010	ND	0.050	mg/L	10/15/98
Arsenic		0.40	0.020	mg/L	10/15/98
Barium		ND	0.0050	mg/L	10/15/98
Cadmium		ND	0.010	mg/L	10/15/98
Chromium		ND	0.050	mg/L	10/15/98
Lead		ND	0.10	mg/L	10/15/98
Selenium		ND	0.010	mg/L	10/20/98
Silver Mercury, TCLP Extracted	SW 1311/7470	ND	0.0020	шЧл	

Order # 98-10-036 ANALYTICA, INC.

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 06A 48030988 068 CMW5 Col:	mple: 06A	48030988	068	CMW5	Colle
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cted: 09/30/98 Matrix: WATER

	Method	Result 0	<u>Limit</u>	<u>Units</u>	Analyzed
Test Description	SW 8260B			<i>.</i> _	10/12/98
Volatiles by GC/MS		ND	5.0	ug/L	10/13/98
Dichlorodifluoromethane		ND	5.0	ug/L	10/13/98
Chloromethane		ND	2.0	ug/L	10/13/90
Vinyl Chloride		ND	5.0	ug/L	10/13/90
Bromomethane		ND	5.0	ug/L	10/13/90
Chloroethane		ND	2.0	ug/L	10/13/90
Trichlorofluoromethane		ND	2.0	ug/L	10/13/90
1,1-Dichloroethene		ND	2.0	ug/L	10/13/90
Trichlorotrifiuoroechane		ND	10	ug/L	10/13/98
Methylene Chloride		ND	2.0	ug/L	10/13/98
trans-1,2-Dichloroethene		ND	2.0	ug/L	10/13/98
1,1-Dichloroethane		ND	2.0	ug/L	10/13/98
2,2-Dichloropropane		ND	2.0	ug/L	10/13/98
cis-1,2-Dichloroethene		ND	2.0	ug/L	10/13/98
Bromochloromethane		ND	2.0	ug/L	10/13/98
Chloroform		ND	2.0	ug/L	10/13/98
1,1,1-Trichloroethane		ND	2.0	ug/L	10/13/98
Carbon Tetrachloride		ND	2.0	ug/L	10/13/98
1,1-Dichloropropene		 010	2.0	ug/L	10/13/98
Benzene		ND	2.0	ug/L	10/13/98
1,2-Dichloroethane		ND NT	2.0	ug/L	10/13/98
Trichloroethene		ND	2.0	ug/L	10/13/98
1,2-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromomethane		ND	2.0	ug/L	10/13/98
Bromodichloromethane		ND	2.0	ug/L	10/13/98
cis-1,3-Dichloropropene		11.7	2.0	ug/L	10/13/98
Toluene			2.0	ug/L	10/13/98
trans-1,3-Dichloropropene		ND	2.0	ug/L	10/13/98
1,1,2-Trichloroethane		ND	2.0	ug/L	10/13/98
Tetrachloroethene		ND	2.0	ug/L	10/13/98
1,3-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromochloromethane		ND	2.0	ug/L	10/13/98
1,2-Dibromoethane		ND	2.0	ug/L	10/13/98
Chlorobenzene			2.0	ug/L	10/13/98
Ethylbenzene		ND	2.0	ug/L	10/13/98
1,1,1,2-Tetrachloroethane	2	0.64 .7	2.0	ug/L	10/13/98
m,p-Xylenes		0.04 C	2.0	ug/L	10/13/98
o-Xylene		ND	2.0	uq/L	10/13/98
Styrene		ND	2.0	uq/L	10/13/98
Bromoform		ND	2.0	uq/L	10/13/98
Isopropylbenzene		ND	2.0	ug/L	10/13/98
Bromobenzene		ND	2.0	) uq/L	10/13/98
n-Propylbenzene		ND	2.0	) ug/L	10/13/98
1,1,2,2-Tetrachloroethan	e		2.0	) ua/L	10/13/98
1,2,3-Trichloropropane			2 1	) uq/L	10/13/98
2-Chlorotoluene			2.1	) ua/L	10/13/98
1,3,5-Trimethylbenzene			2.	0 uq/L	10/13/98
4-Chlorotoluene		LAT.		<u> </u>	

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 06A 48030988 068 CMW5 Collected: 09/30/98 Matrix: WATER

-	Method	Result 0	Limit	<u>Units</u>	<u>Analyzed</u>
Test Description	SW 8260B	(continued from	previou	s page)	
Volatiles by GC/MS	3W 82005	ND	2.0	ug/L	10/13/98
tert-Butylbenzene		ND	2.0	ug/L	10/13/98
1,2,4-Trimethylbenzene		ND	2.0	ug/L	10/13/98
sec-Butylbenzene		NTD	2.0	ug/L	10/13/98
4-Isopropyltoluene		NT	2.0	uq/L	10/13/98
1,3-Dichlorobenzene		ND	2.0	uq/L	10/13/98
1,4-Dichlorobenzene		ND	2.0	uq/L	10/13/98
n-Butylbenzene		ND	2.0	uq/L	10/13/98
1,2-Dichlorobenzene			10	uq/L	10/13/98
1,2-Dibromo-3-chloropropane			2.0	ug/L	10/13/98
1,2,4-Trichlorobenzene		ND	2.0	ug/L	10/13/98
Hexachlorobutadiene		ND	2.0	ug/L	10/13/98
Napthalene		ND	2.0	ug/L	10/13/98
1,2,3-Trichlorobenzene		ND	50	ug/L	10/13/98
Acetone		ND	10	ug/L	10/13/98
Acrylonitrile			50	ug/L	10/13/98
2-Butanone			20	ug/L	10/13/98
Carbon Disulfide			10	,_ ນດ/L	10/13/98
trans-1,4-Dichloro-2-buten			10	ug/L	10/13/98
2-Chloroethyl Vinyl Ether		ND NTD	20	υσ/L	10/13/98
2-Hexanone			20	ug/L	10/13/98
Iodomethane		ND	2.0	ug/⊑ ug/L	10/13/98
4-Methyl-2-pentanone			5 0	ug/L	10/13/98
Vinyl Acetate		UN ND	2.0	ug/L	10/13/98
tert-Butyl methyl ether		UA	2.0	49/2	,,
SURROGATES, % Recovery			Min.	80	Max: 120
Dibromofluoromethane		102	Mir.	88	Max: 110
Toluene d-8		104	Mir -	86	Max: 115
p-Bromofluorobenzene		T00	MT11:	00	





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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 06D 48030988 068 CMW5 Collected: 09/30/98

Matrix: WATER

Test Description	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	Analyzed
Semivolatile Organics	SW 8270C		<b>F</b> 0	$n\sigma/T$	11/01/98
Phenol		ND	5.0		11/01/98
bis(2-Chloroethyl) ether		ND	5.0	ug/L	11/01/98
2-Chlorophenol		ND	5.0	ug/#	11/01/98
1,3-Dichlorobenzene		ND	5.0		11/01/98
1,4-Dichlorobenzene		ND	5.0	ug/L	11/01/98
Benzyl alcohol		ND	E 0	ug/L	11/01/98
1,2-Dichlorobenzene			5.0		11/01/98
2-Methylphenol		ND	5.0	ug/⊅ ug/L	11/01/98
bis(2-Chloroisopropyl) eth	er	ND	5.0	ug/L	11/01/98
4-Methylphenol		ND	5.0	ug/L	11/01/98
n-Nitroso-di-n-propylamine			5.0	υσ/L	11/01/98
Hexachloroethane		ND	5.0	ug/=	11/01/98
Nitrobenzene		UM ND	5.0	ug/L	11/01/98
Isophorone		ЦИ Т	5.0	ug/L	11/01/98
2-Nitrophenol		ND	5.0	ug/L	11/01/98
2,4-Dimethylphenol		ND	5.0	ug/1	11/01/98
Benzoic acid		ND	50	ug/D	11/01/98
bis(2-Chloroethoxy)methane	\$	ND	5.0	ug/D	11/01/98
2,4-Dichlorophenol		UM TR	5.0	ug/D	11/01/98
1,2,4-Trichlorobenzene			5.0		11/01/98
Naphthalene		ND ND	5.0		11/01/98
4-Chloroaniline			5.0	ug/1	11/01/98
Hexachlorobutadiene		ND	5.0	ug, z	11/01/98
4-Chloro-3-methylphenol		UM ND	5.0	ug/L	11/01/98
2-Methylnaphthalene			5.0	ug/L	11/01/98
Hexachlorocyclopentadiene		ND	5.0	ug/L	11/01/98
2,4,6-Trichlorophenol			5.0	ug/L	11/01/98
2,4,5-Trichlorophenol		ND	10	ug/L	11/01/98
2-Chloronaphthalene		ND	50	ug/L	11/01/98
2-Nitroaniline		ND ND	5.0	ug/L	11/01/98
Dimethylphthalate		ND ND	5.0	ug/L	11/01/98
Acenaphthylene		ND	50	ug/L	11/01/98
3-Nitroaniline		ND	5.0	ug/L	11/01/98
Acenaphthene		ND	50	uq/L	11/01/98
2,4-Dinitrophenol		ND	50	uq/L	11/01/98
4-Nitrophenol		NT	5.0	ua/L	11/01/98
Dibenzofuran		ND	5.0	uq/L	11/01/98
2,6-Dinitrotoluene		ND	5.0	uq/L	11/01/98
2,4-Dinitrotoluene		ND	5.0	uq/L	11/01/98
Diethylphthalate		ND	5.0	ug/L	11/01/98
4-Chlorophenyl-phenylethe	er	ND	5.0	uq/L	11/01/98
Fluorene		ND	5.0	uq/L	11/01/98
4-Nitroaniline	-		50	uq/L	11/01/98
4,6-Dinitro-2-methylphen	21		5.0	uq/L	11/01/98
n-Nitrosodiphenylamine		NT	5.0	ug/L	11/01/98
4-Bromophenyl-phenylethe	r	1422			•



Indeno(1,2,3-cd)pyrene

Dibenz (a, h) anthracene

Benzo(g,h,i)perylene SURROGATES, % Recovery

2-Fluorophenol

d5-Nitrobenzene

d14-Terphenyl

2-Fluorobiphenyl

2,4,6-Tribromophenol

d5-Phenol

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 06D 48030988 068 CMW5		Collected: 09/30/9	8 Matrix: WATER
	Method	<u>Result 0</u>	<u>Limit Units</u>
Test Description	SW 8270C	(continued from	n previous page)
Semivolatile Organics	2	ND	5.0 ug/L
Hexachlorobenzene		ND	5.0 ug/L
Pentachlorophenol		ND	5.0 ug/L
Phenanthrene		ND	5.0 ug/L
Anthracene		ND	5.0 ug/L
Di-n-butylphthalate		ND	5.0 ug/L
Fluoranthene		ND	5.0 ug/L
Pyrene		ND	5.0 ug/L
Butylbenzylphthalate		ND	20 ug/L
3,3'-Dichlorobenzidine		ND	5.0 ug/L
Benzo (a) Anthracene		ND	5.0 ug/L
Chrysene		1.3 JB	5.0 ug/L
Bis (2-Ethylhexyl) phtnalate		ND	5.0 ug/L
Di-n-octylphthalate		ND	5.0 ug/L
Benzo(b)fluoranthene		ND	5.0 ug/L
Benzo(k)fluoranthene			5.0 ug/L
Benzo (a) pyrene		ND	5.0 ug/L





<u>Analyzed</u>

11/01/98

11/01/98 11/01/98 11/01/98 11/01/98 11/01/98 11/01/98 11/01/98 11/01/98 11/01/98 11/01/98 11/01/98 11/01/98 11/01/98 11/01/98 11/01/98 11/01/98

11/01/98

11/01/98

100

94

114

116

123

141

Max:

Max:

Max:

Max:

Max:

Max:

ug/L

ug/L

21

10

35

43

10

33

5.0

5.0

Min:

Min:

Min:

Min:

Min:

Min:

ND

ND

51.3

46.7

67.0

70.0

61.3

74.0

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Department of the Air Force TEST RESULTS by SAMPLE

Sample: 06E 48030988 068 CMW5

Collected: 09/30/98 Matrix: WATER

	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	A	nalyzed
Organochlorine Pesticides	SW 8081A				1	0/26/98
Aldrin		ND	0.025	ug/L	1	0/26/98
Alulin alaba-BHC		ND	0.025	ug/L		0/26/98
hota-BHC		ND	0.025	ug/L	1	0/26/98
dolto-BHC		ND	0.025	ug/ь		0/26/98
derta-Bhc (Lindane)		ND	0.025	ug/L		0/26/98
gamma-Bre (lindane)		ND	0.025	ug/և	1	0/20/90
alpha-Chiordane		ND	0.025	ug/L	1	0/20/90
gamma-chioidane		ND	0.050	ug/L	1	0/26/90
4,4'-DDD		ND	0.050	ug/L	1	0/26/98
4,4'-DDE		ND	0.050	ug/L	L -	10/26/90
4,4 - DD1		ND	0.025	ug/L		LU/26/98
Dieldrin		ND	0.050	ug/L	1	LU/26/98
Endosulian 1		ND	0.050	ug/L	-	10/26/98
Endosultan 11		ND	0.050	ug/L		10/26/98
Endosultan Sulfate		ND	0.050	ug/L		10/26/98
Endrin		ND	0.050	ug/L		10/26/98
Endrin Aldehyde		ND	0.025	ug/L		10/26/98
Heptachlor		ND	0.025	ug/L	10/26/98	
Heptachlor Epoxide		ND	0.25	ug/L		10/26/98
Methoxychlor		ND	0.75	ug/L		10/26/98
Toxaphene				-		
SURROGATES, & Recovery		75.0	Min:	45	Max:	124
Tetrachlorometaxylene		95.0	Min:	45	Max:	124
Decachlorobiphenyl		<i></i>				
Polychlorinated Biphenyls	SW 8082		1 0			10/26/98
PCB-1221		ND	1.0	ug/2		10/26/98
PCB-1232		ND	0.50	ug/⊅ va/ī		10/26/98
PCB-1242		ND	0.50	ug/D		10/26/98
PCB-1248		ND	0.50	ug/L		10/26/98
PCB-1254		ND	_ 0.50	ug/D		10/26/98
PCB-1260		ND	0.50	ug/D		10/26/98
PCB-1016		ND	0.50	ug/ n		_ , _ , _ , _
SURROGATES, & Recovery			<b>v</b> .	20	Max·	133
Tetrachlorometaxylene		75.0	Min:	23	Max	137
Decachlorobiphenyl		95.0	Min:	20	1.1002.	

Sample: 06G 48030988 068 CMW5

Collected: 09/30/98 Matrix: WATER

o an para a sa sa sa sa sa sa sa sa sa sa sa sa				Thits	Analyzed
Test Description	Method	<u>Result 0</u>	<u>Limit</u>	UNILS	<u>11102)</u>
ICP Metals, TCLP Extracted Arsenic Barium Cadmium Chromium Lead	SW 1311/6010	ND 0.34 ND ND ND	0.050 0.020 0.0050 0.010 0.050 0.10	mg/L mg/L mg/L mg/L mg/L mg/L	10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98
Selenium Silver Mercury, TCLP Extracted	SW 1311/7470	ND ND	0.010 0.0020	mg/L mg/L	10/15/98 10/20/98

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Order # 98-10-036 Department of the Air Force ANALYTICA, INC. TEST RESULTS by SAMPLE

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# Sample: 07A 48030988 069 CMW5 Collected: 09/30/98 Matrix: WATER

meet Description	Method	Result O	Limit	Units	Analyzed
<u>Test Description</u>	SW 8260B				
Dichlorodifluoromethane		ND	5.0	ug/L	10/13/98
Chloromethane		ND	5.0	ug/L	10/13/98
Vinyl Chloride		ND	2.0	ug/L	10/13/98
Promomethane		ND	5.0	ug/L	10/13/98
Chloroethane		ND	5.0	ug/L	10/13/98
Trichlorofluoromethane		ND	2.0	ug/L	10/13/98
1 1-Duchloroethepe		ND	2.0	ug/L	10/13/98
Trichlorotrifluoroethane		ND	2.0	ug/L	10/13/98
Methylene Chloride		ND	10	ug/L	10/13/98
trans-1 2-Dichloroethene		ND	2.0	ug/L	10/13/98
1 1-Duchloroethane		ND	2.0	ug/L	10/13/98
2.2-Dichloropropage		ND	2.0	ug/L	10/13/98
cis-1 2-Dichloroethene		ND	2.0	ug/L	10/13/98
Bromochloromethane		ND	2.0	ug/L	10/13/98
Chloroform		ND	2.0	ug/L	10/13/98
1 1 1-Trichloroethane		ND	2.0	ug/L	10/13/98
Carbon Tetrachloride		ND	2.0	ug/L	10/13/98
1 1-Dichloropropene		ND	2.0	ug/L	10/13/98
T, I-DICHIOIOPIOPENC		ND	2.0	ug/L	10/13/98
1 2-Dichloroethane		ND	2.0	ug/L	10/13/98
Trichloroethere		ND	2.0	ug/L	10/13/98
1.2-Dichloropropage		ND	2.0	ug/L	10/13/98
Dibromomethane		ND	2.0	ug/L	10/13/98
Bromoduchloromethane		ND	2.0	ug/L	10/13/98
sig_1_2_Dichloropropene		ND	2.0	ug/L	10/13/98
Tolyone		0.75 J	2.0	ug/L	10/13/98
trans_1_3_Dichloropropene		ND	2.0	ug/L	10/13/98
1 3 2-Trichloroethane		ND	2.0	ug/L	10/13/98
Tetrachloroethene		ND	2.0	ug/L	10/13/98
1 3-Dichloropropage		ND	2.0	ug/L	10/13/98
Dibromochloromethane		ND	2.0	ug/L	10/13/98
1 2-Dibromoethane		ND	2.0	ug/L	10/13/98
Chlorobenzene		ND	2.0	ug/L	10/13/98
Fthylbenzene		ND	2.0	ug/L	10/13/98
1 1 1 2-Tetrachloroethane		ND	2.0	ug/L	10/13/98
m n-Yvlenes		0.40 J	2.0	ug/L	10/13/98
o-Xylene		ND	2.0	ug/L	10/13/98
Styrene		ND	2.0	ug/L	10/13/98
Bromoform		ND	2.0	ug/L	10/13/98
Isopropylbenzene		NĎ	2.0	ug/L	10/13/98
Bromobenzene		ND	2.0	ug/L	10/13/98
n-Propylbenzene		ND	2.0	ug/L	10/13/98
1 1 2 2 Tetrachloroethane		ND	2.0	ug/L	10/13/98
1 2 3-Trichloropropage		ND	2.0	ug/L	10/13/98
2-Chlorotoluene		ND	2.0	ug/L	10/13/98
1 3 5-Trimethylbenzene		ND	2.0	ug/L	10/13/98
4-Chlorotoluene		ND	2.0	ug/L	10/13/98


Page 34

Order # 98-10-036 ANALYTICA, INC.

p-Bromofluorobenzene

Department of the Air Force TEST RESULTS by SAMPLE

Complet 07A 48030988 069 CMW	5	Collected: 09/30/98	Mat:	CIX: WATER	•	
Sample: Ora Close	Method	Result O	<u>Limit</u>	<u>Units</u> page)	Ana	alyzed
Test Description	SW 8260B	(continued from	previou	) 10/L	10	/13/98
Volatiles by contact		ND	2.0	ug/L	10	/13/98
tert-BucyiDenzene		ND	2.0	ug/L	10	/13/98
1, 2, 4-IIIImcch j $2$ -ch =		ND	2.0	ug/L	10	/13/98
sec-Bucyidendene		ND	2.0	ug/1	10	/13/98
4-Isopropyrcordene		ND	2.0	ug/1	10	/13/98
1, 3-Dichlorobenzene		ND	2.0	ug/L	10	/13/98
1,4-Dichlorobenzene		ND	2.0		10	)/13/98
n-Butyibenzene		ND	2.0	ug/L	10	)/13/98
1,2-Dichiorobenzenc		ND	10	ug/L	1(	0/13/98
1,2-Dibromo-3-Chicropropro-		ND	2.0	ug/E	1(	0/13/98
1,2,4-Trichiorobenzene		ND	2.0	ug/b		0/13/98
Hexachlorobuladiene		ND	2.0	ug/b		0/13/98
Napthalene		ND	2.0	ug/L	1	0/13/98
1,2,3-Trichlorobenzene		ND	50	ug/L	1	0/13/98
Acetone		ND	10	ug/L	1	0/13/98
Acrylonitrile		ND	50	ug/L		0/13/98
2-Butanone		ND	2.0	ug/L		0/13/98
Carbon Disulfide		ND	10	ug/L		0/13/98
trans-1,4-Dichloro-2-Ducen		ND	10	ug/L	1	0/13/98
2-Chloroethyl Vinyl Ether		ND	20	ug/L	L -	0/13/98
2-Hexanone		ND	2.0	ug/L	L -	0/13/30
Iodomethane		ND	20	ug/L	لـ	LU/13/90
4-Methyl-2-pentanone		ND	5.0	ug/L	-	10/13/90
Vinyl Acetate		ND	2.0	ug/L	-	10/13/90
tert-Butyl methyl ether						
SURROGATES, % Recovery		102	Min:	80	Max:	120
Dibromofluoromethane		104	Min:	88	Max:	110
Toluene d-8		106	Min:	86	Max:	115
		TOO				



ANALYTICA, INC.

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 07D 48030988 069 CMW5 Collected: 09/30/98 Matrix: WATER

	Method	Result 0	<u>Limit</u>	<u>Units</u>	Analyzed
Test Description				<i>i</i> -	11/01/98
Semivolatile Organics		ND	5.0	ug/L	11/01/98
Phenol		ND	5.0	ug/L	11/01/98
bis(2-Chloroethyl) ether		ND	5.0	ug/L	11/01/98
2-Chlorophenol		ND	5.0	ug/L	11/01/98
1,3-Dichlorobenzene		ND	5.0	ug/L	11/01/98
1,4-Dichlorobenzene		ND	10	ug/L	11/01/98
Benzyl alcohol		ND	5.0	ug/L	11/01/98
1,2-Dichlorobenzene		ND	5.0	ug/L	11/01/98
2-Methylphenol	ther	ND	5.0	ug/L	11/01/90
bis (2-Chloroisopropyi)	echier	ND	5.0	ug/L	11/01/90
4-Methylphenol		ND	5.0	ug/L	11/01/98
n-Nitroso-di-n-propylami	ue.	ND	5.0	ug/L	11/01/98
Hexachloroethane		ND	5.0	ug/L	11/01/98
Nitrobenzene		ND	5.0	ug/L	11/01/98
Isophorone		ND	5.0	ug/L	11/01/98
2-Nitrophenol		ND	5.0	ug/L	11/01/98
2,4-Dimethylphenol		ND	50	ug/L	11/01/98
Benzoic acid		ND	5.0	ug/L	11/01/98
bis (2-Chloroethoxy) metha	ane	ND	5.0	ug/L	11/01/98
2,4-Dichlorophenol		ND	5.0	ug/L	11/01/98
1,2,4-Trichlorobenzene		ND	5.0	ug/L	11/01/98
Naphthalene		ND	5.0	ug/L	11/01/98
4-Chloroaniline		ND	5.0	ug/L	11/01/98
Hexachlorobutadiene		ND	5.0	ug/L	11/01/98
4-Chloro-3-methylphenol		ND	5.0	ug/L	11/01/98
2-Methylnaphthalene		ND	5.0	ug/L	11/01/98
Hexachlorocyclopentadie	ene	ND	5.0	ug/L	11/01/98
2,4,6-Trichlorophenol		ND	5.0	ug/L	11/01/98
2,4,5-Trichlorophenol		ND	10	ug/L	11/01/98
2-Chloronaphthalene		ND	50	ug/L	11/01/98
2-Nitroanıline	,	ND	5.0	ug/L	11/01/98
Dimethylphthalate		ND	5.0	ug/L	11/01/98
Acenaphthylene		ND	50	ug/L	11/01/98
3-Nitroaniline		ND	<b>.</b> 5.0	ug/L	11/01/98
Acenaphthene		ND	50	ug/L	11/01/98
2,4-Dinitrophenol		ND	50	ug/L	11/01/98
4-Nitrophenol		ND	5.0	ug/L	11/01/98
Dibenzofuran		ND	5.0	ug/L	11/01/98
2,6-Dinitrotoluene		ND	5.0	ug/L	11/01/98
2,4-Dinitrotoluene		ND	5.0	ug/L	11/01/98
Diethylphthalate		ND	5.0	) ug/L	11/01/98
4-Chlorophenyl-phenyle	ether	ND	5.0	) ug/L	11/01/98
Fluorene		NTD	5.0	) ug/L	11/01/98
4-Nitroaniline	-	ND	50	) ug/L	11/01/98
4,6-Dinitro-2-methylph	henol	NTD	5.0	) ug/L	11/01/98
n-Nitrosodiphenylamine	e		5.	0 ug/L	11/01/98
4-Bromophenyl-phenyle	ther	***			



Page 35

# Order # 98-10-036

Department of the Air Force TEST RESULTS by SAMPLE

# Sample: 07D 48030988 069 CMW5

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Collected: 09/30/98 Matrix: WATER

					π.	nalvzed
Test Description	Method	<u>Result O</u>	<u>Limit</u>	Units	A	laryzed
Comivolatile Organics	SW 8270C	(continued from	previou	s page)	۹.	1/01/08
Merschlorobenzene		ND	5.0	ug/L		1/01/00
Hexaciiioiobenzene		ND	5.0	ug/L	- -	1/01/00
Pentachiorophenor		ND	5.0	ug/L	1	1/01/90
Phenanchrene		ND	5.0	ug/L	1	1/01/98
Anthracene		ND	5.0	ug/L	1	1/01/98
		ND	5.0	ug/L	1	1/01/98
Fluoranthene		ND	5.0	ug/L	1	1/01/98
Pyrene		ND	5.0	ug/L	1	1/01/98
Butylbenzylphthalate		ND	20	ug/L	1	1/01/98
3,3'-Dichlorobenzialite		ND	5.0	ug/L	1	.1/01/98
Benzo (a) Anthracene		ND	5.0	ug/L	1	.1/01/98
Chrysene		ND	5.0	ug/L	1	1/01/98
Bis (2-Ethylhexyl) phthalate		ND	5.0	ug/L	נ	1/01/98
Di-n-octylphthalate		ND	5.0	ug/L	1	1/01/98
Benzo (b) fluoranthene		ND	5.0	ug/L	1	11/01/98
Benzo(k)fluoranthene		ND	5.0	ug/L	-	11/01/98
Benzo (a) pyrene		ND	5.0	ug/L	-	11/01/98
Indeno (1,2,3-cd) pyrene		NT	5.0	ug/L		11/01/98
Dibenz (a, h) anthracene		ND	5.0	ug/L	•	11/01/98
Benzo(g,h,i) perylene		112		-		
SURROGATES, % Recovery		0 733 *	Min:	21	Max:	100
2-Fluorophenol		λ 97 *	Min:	10	Max:	94
d5-Phenol		74 0	Min:	35	Max:	114
d5-Nitrobenzene		75.0	Min:	43	Max:	116
2-Fluorobiphenyl		10.0	Min:	10	Max:	123
2,4,6-Tribromophenol		10.0	Mint	33	Max:	141
d14-Terphenyl		04.0	7.976 89 4			



Department of the Air Force TEST RESULTS by SAMPLE

Sample: 07E 48030988 069 CMW5 Collected: 09/30/98 Matrix: WATER

The Description	Method	<u>Result</u> O	<u>Limit</u>	<u>Units</u>	A	<u>nalyzed</u>
Organochlorine Pesticides	SW 8081A			<b>/ T</b>	T	0/26/98
Aldrin		ND	0.025	ug/L	1	0/26/98
alpha-BHC		ND	0.025	ug/L	1	0/26/98
beta-BHC		ND	0.025	ug/L	1	0/26/98
delta-BHC		ND	0.025	ug/L	1	0/26/98
gamma-BHC (Lindane)		ND	0.025	ug/L		0/26/98
alpha-Chlordane		ND	0.025	ug/L	1	0/26/98
arpha-Chiordane		ND	0.025	ug/L	1	0/26/98
		ND	0.050	ug/ь		0/26/98
		ND	0.050	ug/հ	1	0/26/90
		ND	0.050	ug/L	1	0/20/30
		ND	0.025	ug/L	1	0/26/90
Dieldrin E. hlfer I		ND	0.050	ug/L	L c	10/26/90
		ND	0.050	ug/L		LU/26/98
Endosulian 11		ND	0.050	ug/L	3	10/26/98
Endosullan Sullace		ND	0.050	ug/L	]	10/26/98
Endrin		ND	0.050	ug/L	]	10/26/98
Endrin Aldenyde		ND	0.025	ug/L		10/26/98
Heptachlor		ND	0.025	ug/L	•	10/26/98
Heptachlor Epoxide		ND	0.25	ug/L	•	10/26/98
Methoxychlor		ND	0.75	ug/L		10/26/98
Toxaphene						
SURROGATES, & Recovery		75.0	Min:	45	Max:	124
Tetrachlorometaxylene Decachlorobiphenyl		75.0	Min:	45	Max:	124
Polychlorinated Biphenyls	SW 8082	310	1 0	ug/L		10/26/98
PCB-1221			0 50	ug/L		10/26/98
PCB-1232			0.50	ug/L		10/26/98
PCB-1242		DM	0.50	υσ/L		10/26/98
PCB-1248		ND	0.50	ug/1		10/26/98
PCB-1254		ND	0.50	ug/1		10/26/98
PCB-1260			0.50	ug/1-		10/26/98
PCB-1016		ND	0.50	49/ J		
SURROGATES, % Recovery		•	Mi-	29	Max:	133
Tetrachlorometaxylene		75.0	MIII: Min.	26	Max:	137
Decachlorobiphenyl		75.0	P1_11:	20		

Sample: 07G 48030988 069 C	<b>W5</b> Colle	cted: 09/30/	98 Mat	rix: WATER	
Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
ICP Metals, TCLP Extracted Arsenic Barium Cadmium Chromium Lead Selenium Silver	SW 1311/6010 SW 1311/7470	ND 0.42 ND ND ND ND ND ND	0.050 0.020 0.010 0.010 0.050 0.10 0.010 0.020	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 08A 48030988 070 CMW1

Collected: 09/30/98 Matrix: WATER

	Method	Result 0	<u>Limit</u>	<u>Units</u>	Analyzed
Test Description	SW 8260B				
Volatiles by GC/MS		ND	5.0	ug/L	10/13/98
Dichlorodilluoromethane		ND	5.0	ug/L	10/13/98
Chlorometnane		ND	2.0	ug/L	10/13/98
Vinyi Chloride		ND	5.0	ug/L	10/13/98
Bromomethane		ND	5.0	ug/L	10/13/98
Chloroethane		ND	2.0	ug/L	10/13/98
Trichlorofluoromethane		ND	2.0	ug/L	10/13/98
1,1-Dichloroethene		ND	2.0	ug/L	10/13/98
Trichlorotrifluoroethane		ND	10	ug/L	10/13/98
Methylene Chioride		ND	2.0	ug/L	10/13/98
trans-1,2-Dichioroethene		ND	2.0	ug/L	10/13/98
1,1-Dichloroethane		ND	2.0	ug/L	10/13/98
2,2-Dichloropropane		ND	2.0	ug/L	10/13/98
cis-1,2-Dichloroethene		ND	2.0	ug/L	10/13/98
Bromochloromethane		ND	2.0	ug/L	10/13/98
Chloroform		ND	2.0	ug/L	10/13/98
1,1,1-Trichloroethane		ND	2.0	ug/L	10/13/98
Carbon Tetrachloride		ND	2.0	ug/L	10/13/98
1,1-Dichloropropene		ND	2.0	ug/L	10/13/98
Benzene		ND	2.0	ug/L	10/13/98
1,2-Dichloroethane		ND	2.0	ug/L	10/13/98
Trichloroethene		ND	2.0	ug/L	10/13/98
1,2-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromomethane		ND	2.0	ug/L	10/13/98
Bromodichloromethane		ND	2.0	ug/L	10/13/98
cis-1,3-Dichloropropene		1.1 J	J. 2.0	ug/L	10/13/98
Toluene		 DTD	2.0	ug/L	10/13/98
trans-1,3-Dichloropropene		ND	2.0	ug/L	10/13/98
1,1,2-Trichloroethane		ND	2.0	ug/L	10/13/98
Tetrachloroethene		ND	2.0	ug/L	10/13/98
1,3-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromochloromethane		ND	2.0	ug/L	10/13/98
1,2-Dibromoethane		ND	2.0	ug/L	10/13/98
Chlorobenzene		ND	2.0	ug/L	10/13/98
Ethylbenzene		ND	2.0	ug/L	10/13/98
1,1,1,2-Tetrachloroethane		1.1	J 2.0	ug/L	10/13/98
m,p-Xylenes		ND	2.0	ug/L	10/13/98
o-Xylene		ND	2.0	ug/L	10/13/98
Styrene		ND	2.0	ug/L	10/13/98
Bromoform		ND	2.0	ug/L	10/13/98
Isopropylbenzene		ND	2.0	ug/L	10/13/98
Bromobenzene		ND	2.0	ug/L	10/13/98
n-Propylbenzene	_	ND	2.0	) ug/L	10/13/98
1,1,2,2-Tetrachloroethane	3	ND	2.0	) ug/L	10/13/98
1,2,3-Trichloropropane		ND	2.0	) ug/L	10/13/98
2-Chlorotoluene		ND	2.0	0 ug/L	10/13/98
1,3,5-Trimethylbenzene		ND	2.	0 ug/L	10/13/98
4-Chlorotoluene					



Page 39

Order # 98-10-036 ANALYTICA, INC.

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 08A 48030988 070 CMW1 Collected: 09/30/98 Matrix: WATER

					Δn	alvzed
Test Description	Method	<u>Result</u> <u>O</u>	<u>Limit</u>	Units	<u> </u>	<u>ary200</u>
Volatiles by GC/MS	SW 8260B	(continued from	previou	s page/	10	/13/98
tort - Butylbenzene		ND	2.0	ug/L	10	/13/98
1 2 A-Trimethylbenzene		ND	2.0	ug/L	10	/13/98
1,2,4-IIImcony 12000-000-		ND	2.0	ug/L	10	/13/98
A Teerrory toluene		ND	2.0	ug/L	10	/13/98
4-Isopropyrcorache		ND	2.0	ug/L	10	/12/08
1, 3-Dichiorobenzene		ND	2.0	ug/L	, TO , TO	12/90
1,4-Dichlorobenzene		ND	2.0	ug/L	10	/13/90
n-Butylbenzene		ND	2.0	ug/L	10	)/13/98
1,2-Dichlorobenzene		ND	10	ug/L	10	)/13/98
1,2-Dibromo-3-chloropropane		ND	2.0	ug/L	10	)/13/98
1,2,4-Trichlorobenzene		ND	2.0	ug/L	1(	)/13/98
Hexachlorobutadiene		ND	2.0	ug/L	1(	0/13/98
Napthalene		ND	2.0	ug/L	10	0/13/98
1,2,3-Trichlorobenzene		ND	50	ug/L	10	0/13/98
Acetone		ND	10	ug/L	1	0/13/98
Acrylonitrile		ND	50	ug/L	1	0/13/98
2-Butanone		NT	2.0	ug/L	1	0/13/98
Carbon Disulfide		ND	10	ug/L	1	0/13/98
trans-1,4-Dichloro-2-buten		NTO	10	ug/L	1	0/13/98
2-Chloroethyl Vinyl Ether			20	ug/L	1	0/13/98
2-Hexanone			2.0	ug/L	1	.0/13/98
Iodomethane			20	uq/L	1	.0/13/98
4-Methyl-2-pentanone		ND	5.0	ug/L	1	.0/13/98
Vinyl Acetate			2 0	ug/L	1	0/13/98
tert-Butyl methyl ether		IND	2.0			
SURROGATES, % Recovery			Min	80	Max:	120
Dibromofluoromethane		100	Min.	88	Max:	110
Toluene d-8		104	Min.	86	Max:	115
p-Bromofluorobenzene	-	102	MT11:	00	1	



Matrix: WATER

Order # 98-10-036 ANALYTICA, INC.

4-Nitrophenol

Dibenzofuran

Fluorene

2,6-Dinitrotoluene

2,4-Dinitrotoluene

4-Chlorophenyl-phenylether

4,6-Dinitro-2-methylphenol

4-Bromophenyl-phenylether

n-Nitrosodiphenylamine

Diethylphthalate

4-Nitroaniline

Department of the Air Force TEST RESULTS by SAMPLE Page 40

11/01/98

11/01/98

11/01/98

11/01/98

11/01/98

11/01/98

11/01/98

11/01/98

11/01/98

11/01/98

5.0

5.0

5.0

5.0

5.0

5.0

5.0

50

5.0

5.0

ND

ND

 $\mathbf{ND}$ 

ND

ND

ND

ND

 $\mathbf{ND}$ 

ND

ND

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

# Sample: 08D 48030988 070 CMW1

Collected: 09/30/98

	Method	<u>Result Q</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
Semivolatile Organics	SW 8270C	_		/-	11/01/98
Phenol		ND	5.0	ug/L	11/01/98
bis(2-Chloroethyl) ether	:	ND	5.0	ug/L	11/01/98
2-Chlorophenol		ND	5.0	ug/L	11/01/98
1.3-Dichlorobenzene		ND	5.0	ug/L	11/01/98
1,4-Dichlorobenzene		ND	5.0	ug/I	11/01/98
Benzyl alcohol		ND	10	ug/L	11/01/98
1,2-Dichlorobenzene		ND	5.0	ug/L	11/01/98
2-Methylphenol		ND	5.0	ug/L	11/01/98
bis (2-Chloroisopropyl)	ether	ND	5.0	ug/L	11/01/98
4-Methylphenol		ND	5.0	ug/L	11/01/98
n-Nitroso-di-n-propylam	ine	ND	5.0	ug/L	11/01/98
Hexachloroethane		ND	5.0	ug/L	11/01/98
Nitrobenzene		ND	5.0	ug/1	11/01/98
Isophorone		ND	5.0	ug/L	11/01/98
2-Nitrophenol		ND	5.0	ug/1	11/01/98
2,4-Dimethylphenol		ND	5.0	ug/L	11/01/98
Benzoic acid		ND	50	ug/L	11/01/98
bis (2-Chloroethoxy) meth	ane	ND	5.0		11/01/98
2,4-Dichlorophenol		ND	5.0		11/01/98
1,2,4-Trichlorobenzene		ND	5.0	ug/L	11/01/98
Naphthalene		ND	5.0		11/01/98
4-Chloroaniline		ND	5.0		11/01/98
Hexachlorobutadiene		ND	5.0	ug/D	11/01/98
4-Chloro-3-methylphenol	<u> </u>		5.0	ug/L	11/01/98
2-Methylnaphthalene		ND	5.0	ug/L	11/01/98
Hexachlorocyclopentadie	ene		5.0	ug/L	11/01/98
2,4,6-Trichlorophenol		ND	5.0	ug/L	11/01/98
2,4,5-Trichlorophenol			10	ug/L	11/01/98
2-Chloronaphthalene		ND	50	ug/L	11/01/98
2-Nitroaniline		ND	5.0	ug/L	11/01/98
Dimethylphthalate		ND	5.0	ug/L	11/01/98
Acenaphthylene			50	ug/L	11/01/9
3-Nitroaniline			5.0	ug/L	11/01/95
Acenaphthene		ND	50	ug/L	11/01/9
2,4-Dinitrophenol		ND	50	ug/L	11/01/9
			_		

Department of the Air Force TEST RESULTS by SAMPLE

Sample: 08D 48030988 070 CMW1

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Collected: 09/30/98 Matrix: WATER

Sampre. 002 coort				•.		aluzed
	Method	<u>Result</u> Q	<u>Limit</u>	<u>Units</u>	A	<u>IAI YZEG</u>
Test Description	SW 8270C	(continued from	previou	s page/	1 '	1/01/98
Semivolatile Organics		ND	5.0	ug/L		1/01/98
Hexachlorobenzene		ND	5.0	ug/L	1. 1	1/01/00
Pentachlorophenol		ND	5.0	ug/L	1.	1/01/98
Phenanthrene		ND	5.0	ug/L	1	1/01/90
Anthracene		ND	5.0	ug/L	1	1/01/98
Di-n-butylphthalate		ND	5.0	ug/L	1	1/01/98
Fluoranthene		ND	5.0	ug/L	1	1/01/98
Pyrene		ND	5.0	ug/L	1	1/01/98
Butylbenzylphthalate		ND	20	ug/L	1	.1/01/98
3,3'-Dichlorobenzidine		ND	5.0	ug/L	1	.1/01/98
Benzo (a) Anthracene		ND	5.0	uq/L	1	1/01/98
Chrysene			5.0	uq/L	1	1/01/98
Bis(2-Ethylhexyl)phthalate		1.0 05	5.0	uq/L	1	L1/01/98
Di-n-octylphthalate		ND	5.0	uq/L	3	11/01/98
Benzo(b) fluoranthene			5.0	ug/L		11/01/98
Benzo(k) fluoranthene		ND	5.0	ug/L		11/01/98
Benzo (a) pyrene			5.0	-5/- υα/L		11/01/98
Indeno (1,2,3-cd) pyrene		ND	5.0	ug/1		11/01/98
Dibenz(a, h) anthracene		ND	5.0	ug/2		11/01/98
Benzo (g, h, i) pervlene		ND	5.0	u9/ 1		
SUBROGATES. & Recovery				21	Max:	100
2-Fluorophenol		48.0	Min:	10	Max	94
d5-phenol		16.7	Min:	25	Max	114
dE-NitrobenZene		73.0	Min:	30	Max	116
		180 *	Min:	43	Mav	123
$2 - F_1 u O O F_1 c O F_2 - F_1 u O O F_2 c $		80.0	Min:	10	Max	141
2,4,6-IIIDIONOPHENDI		69.0	Min:	د د	Max:	747 
a14-Terpneny+						



Department of the Air Force TEST RESULTS by SAMPLE

Page 42

Sample: 08E 48030988 070 CM	INI C	ollected: 09/30/9	8 Mat	rix: WAT	ER	
Test Description	Method	<u>Result</u> O	<u>Limit</u>	Units	<u>A</u>	<u>nalyzed</u>
Organochlorine Pesticides	SW 8081A		0.005	10g/T	٦	0/26/98
Aldrin		ND	0.025	ug/II	- 1	0/26/98
alpha-BHC		ND	0.025	ug/1	- 1	0/26/98
beta-BHC		ND	0.025	ug/b	- 1	0/26/98
delta-BHC		ND	0.025		-	0/26/98
gamma-BHC (Lindane)		ND	0.025	ug/15 10g/15	- 1	0/26/98
alpha-Chlordane		ND	0.025	ug/L	- 1	0/26/98
gamma-Chlordane		ND	0.025	ug/L	- 1	0/26/98
4,4'-DDD		ND	0.050	ug/L	1	0/26/98
4,4'-DDE		ND	0.050	ug/L	-	0/26/98
4,4'-DDT		ND	0.050	ug/L	-	0/26/98
Dieldrin		ND	0.025	ug/15	-	0/26/98
Endosulfan I		ND	0.050	ug/11 11/1		0/26/98
Endosulfan II		ND	0.050	ug/1 /T	•	10/26/98
Endosulfan Sulfate		ND	0.050	ug/L	•	10/26/98
Endrin		ND	0.050	ug/L		10/26/98
Endrin Aldehyde		ND	0.050	ug/L		10/26/98
Heptachlor		ND	0.025	ug/L		10/26/98
Heptachlor Epoxide		ND	0.025	ug/u		10/26/98
Methoxychlor		ND	0.25	ug/L		10/26/98
Toxaphene		ND	0.75	ug/L		10/20/50
SURROGATES, & Recovery		65 0	Min:	45	Max:	124
Tetrachlorometaxylene		170*	Min:	45	Max:	124
Decachlorobiphenyl		17:0				
Polychlorinated Biphenyls	SW 8082		1 0	110 /T.		10/26/98
PCB-1221		UN	1.0	ug/L		10/26/98
PCB-1232		ND	0.50	ug/I		10/26/98
PCB-1242		ND	0.50	ug/1 vg/1		10/26/98
PCB-1248		ND	0.50	ug/1		10/26/98
PCB-1254		ND	0.50			10/26/98
PCB-1260		ND	0.50			10/26/98
PCB-1016		ND	0.50	ug/ 1		_0, _0, 20
SURROGATES, % Recovery			×	20	Max·	133
Tetrachlorometaxylene		65.0	MITU:	23	Max·	137
Decachlorobiphenyl		17.0 *	Min:	20	1.101.27 •	·

Sample: 08G 48030988 070 CMW1 Collected: 09/30/98 Matrix: WATER

Test Description	Method	<u>Result 0</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>
ICP Metals, TCLP Extracted Arsenic Barium Cadmium Chromium Lead Selenium Silver Mercury, TCLP Extracted	SW 1311/6010 SW 1311/7470	ND 0.79 ND 0.011 ND ND ND	0.050 0.020 0.010 0.050 0.10 0.010 0.010 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98 10/15/98



Page 43

Order # 98-10-036 ANALYTICA, INC.

### Department of the Air Force TEST RESULTS by SAMPLE

Sample: 09A TRIP BLANK

Collected: 09/29/98 Matrix: WATER

	Method	Result 0	<u>Limit</u>	Units	<u>Analyzed</u>
Test Description	SW 8260B				( (
Volatiles by GC/MD		ND	5.0	ug/L	10/13/98
Dichiorodilluoromethane Chlementhane		ND	5.0	ug/L	10/13/98
Chloromethane		ND	2.0	ug/L	10/13/98
Vinyi Chioride		ND	5.0	ug/L	10/13/98
Bromomethalle		ND	5.0	ug/L	10/13/98
Cnioroethane		ND	2.0	ug/L	10/13/98
Trichlorofluoromechane		ND	2.0	ug/L	10/13/98
1,1-Dichloroethene		ND	2.0	ug/L	10/13/98
Trichlorotrifiuoroethane		11	10	ug/L	10/13/98
Metnylene Chiofide		ND	2.0	ug/L	10/13/98
trans-1,2-Dichioroethene		ND	2.0	ug/L	10/13/98
1,1-Dichloroethane		ND	2.0	ug/L	10/13/98
2,2-Dichloropropane		ND	2.0	ug/L	10/13/98
cis-1,2-Dichloroethene		ND	2.0	ug/L	10/13/98
Bromochloromethane		ND	2.0	ug/L	10/13/98
Chloroform		ND	2.0	ug/L	10/13/98
1,1,1-Trichloroethane		ND	2.0	ug/L	10/13/98
Carbon Tetrachioride		ND	2.0	ug/L	10/13/98
1,1-Dichloropropene		ND	2.0	ug/L	10/13/98
Benzene		ND	2.0	ug/L	10/13/98
1,2-Dichloroethane		ND	2.0	ug/L	10/13/98
Trichloroethene		ND	2.0	ug/L	10/13/98
1,2-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromomethane		ND	2.0	ug/L	10/13/98
Bromodichloromethane		ND	2.0	ug/L	10/13/98
cis-1,3-Dichloropropene		0.94 J	2.0	ug/L	10/13/98
Toluene	_	ND	2.0	ug/L	10/13/98
trans-1,3-Dichloropropene	5	ND	2.0	ug/L	10/13/98
1,1,2-Trichloroethane		ND	2.0	ug/L	10/13/98
Tetrachloroethene		ND	2.0	ug/L	10/13/98
1,3-Dichloropropane		ND	2.0	ug/L	10/13/98
Dibromochioromethane		ND	2.0	ug/L	10/13/98
1,2-Dibromoethane		ND	2.0	ug/L	10/13/98
Chlorobenzene		ND	2.0	ug/L	10/13/98
Etnylbenzene	0	ND	2.0	ug/L	10/13/98
1,1,1,2-Tetrachioroethan	C	0.63 J	2.0	ug/L	10/13/98
m,p-Xylenes		ND	2.0	ug/L	10/13/98
o-Xylene		ND	2.0	ug/L	10/13/98
Styrene		ND	2.0	ug/L	10/13/98
Bromoloim		ND	2.0	ug/L	10/13/98
Isopropyibenzene		ND	2.0	ug/L	10/13/98
Bromobenzene		ND	2.0	ug/L	10/13/98
n-propyidenzene		ND	2.0	ug/L	10/13/98
1,1,2,2-Tetrachloroethan	16	ND	2.0	ug/L	10/13/98
1,2,3-Trichloropropane		ND	2.0	ug/L	10/13/98
2-Chlorotoluene		ND	2.0	ug/L	10/13/98
1,3,5-Trimethyldenzene		ND	2.0	ug/L	. 10/13/98
4-Chlorotoluene					



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# Department of the Air Force TEST RESULTS by SAMPLE

Page 44

Sample: 09A TRIP BLANK		Collected: 09/29/9	8 Mat	rix: WATE	R	
Test Description	Method	<u>Result O</u>	<u>Limit</u>	<u>Units</u>	A	<u>malyzed</u>
Volatiles by GC/MS	SW 8260B	(continued from	n previou	s page)	2	0/13/98
tert-Butylbenzene		ND	2.0	ug/L	1	0/13/98
1.2.4-Trimethylbenzene		ND	2.0	ug/L	ב ר	0/13/98
sec-Butylbenzene		ND	2.0	ug/L	ב ד	0/13/98
4-Isopropyltoluene		ND	2.0	ug/L	ע ד	0/13/98
1.3-Dichlorobenzene		ND	2.0	ug/L	د. ۲	0/13/98
1.4-Dichlorobenzene		ND	2.0	ug/L	لـ ۲	0/13/90
n-Butvlbenzene		ND	2.0	ug/L	لہ ۔	
1 2-Dichlorobenzene		ND	2.0	ug/L	ل م	10/13/90
1 2-Dibromo-3-chloropropane		ND	10	ug/L		
1 2 4-Trichlorobenzene		ND	2.0	ug/L	-	
Hexachlorobutadiene		ND	2.0	ug/L	-	10/13/90
Nanthalene		ND	2.0	ug/L	•	10/13/90
1 2 3-Trichlorobenzene		ND	2.0	ug/L		10/13/98
Acetone		ND	50	ug/L		10/13/98
Acculonitrile		ND	10	ug/L		10/13/98
2-Butanone		ND	50	ug/L		10/13/98
Carbon Disulfide		ND	2.0	ug/L		10/13/98
trang_1 A-Dichloro-2-buten		ND	10	ug/L		10/13/98
2 Chloroethyl Vinyl Ether		ND	10	ug/L		10/13/98
2-Chioroechyr Vrhyr Bener		ND	20	ug/L		10/13/98
Z-Hexanone Jadomathana		ND	2.0	ug/L		10/13/98
1000methane		ND	20	ug/L		10/13/98
4-Methyl-z-pencanone		ND	5.0	ug/L		10/13/98
Vinyi Acecace		ND	2.0	ug/L		10/13/98
tert-Bucyl methyl concr						
SURROGALDS, & RECOVELY		100	Min:	80	Max:	120
Dipromol Luoromechane		104	Min:	88	Max:	110
p-Bromofluorobenzene		106	Min:	86	Max:	115

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Page 45

THE FOLLOWING CODES APPLY TO THE ANALYTICAL REPORT

RESULT field... ND = not detected at the reported limit NA = analyte not applicable (see case narrative/methods for discussion) Q (qualifier) field... GENERAL: \* = Recovery or %RPD outside method specifications H = value is estimated due to analysis run outside EPA holding times E = reported concentration is above the instrument calibration range D = analyte was diluted to bring within instrument calibration range or to remove matrix interferences ORGANIC ANALYSIS DATA QUALIFIERS: B = analyte was detected in the laboratory method blank J = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL) INORGANIC ANALYSIS DATA QUALIFIERS: B = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL) W = post digestion spike did not meet criteria (85-115%) S = reported value determined by the Method of Standard Additions

### Department of the Air Force TEST METHODOLOGIES

PCB_8W:	POLYCHLORINATED BIPHENYLS	METHOD:	8082
3520_P:	Continuous Liquid-Liquid Extraction (Pesticides)	METHOD :	3520B
PCBPRS:	Continuous Liquid-Liquid Extraction (PCBs)	METHOD :	3520B
PST_8W:	ORGANOCHLORINE PESTICIDES	METHOD:	8081A
1311EM:	TCLP EXTRACTION Toxicity Characteristic Leachate Procedure (Metals	METHOD:	1311
1311HG:	MERCURY, TCLP Extracted Maximum Contaminant Level (mg/L)	METHOD: 0.2	1311/7470 2
ICPTWE:	Acid Digestion of TCLP Extracts for Total Metals Analysis by Inductively Coupled Plasma (ICP) Spectroscopy according to SW-846.	METHOD :	3010A
1311_M:	METALS (ICP), TCLP Extracted	METHOD:	1311/6010
	Maximum Contaminant Level (mg/B)	5.	0
	Arsenic	10	0
	Barlum	1.	0
		5.	0
		5.	0
		1.	0
•	Silver	5.	0
8260_W:	VOLATILE ORGANIC COMPOUNDS (GC/MS)	METHOD:	8260B
3520_B:	Continuous Liquid-Liquid Extraction - BNAs The continuous liquid-liquid extraction used with method (3520) is modified to conform with the EPA methodology (OLMO1.0) in which dual pH extraction replaced with one 18 hour extraction at a pH of <	METHOD: this -CLP has bee 2.0.	3520B en
8270_W:	SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS)	METHOD	: 8270

Page 46

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## Department of the Air Force DATES REPORT

Sample: 01A 48030988	063 CMW3	Mati	rix: WATER			
מחבן מכו כ	Method	Collected	Received	TCLP date	Extracted	Analyzed
Volatiles by GC/MS	SW 8260B	09/29/98	10/05/98	NA		10/13/98
Sample: 01D 48030988	063 CMW3	Mat:	rix: WATER			
	Method	<u>Collected</u>	Received	TCLP date	Extracted	Analyzed
Semivolatile Organics	SW 8270C	09/29/98	10/05/98	NA	10/05/98	10/31/98
Sample: 01E 48030988	3 063 CMW3	Mat	rix: WATER			
Analyza a	Method	Collected	Received	TCLP date	Extracted	Analyzed
Analysis	SW 8081A	09/29/98	10/05/98	NA	10/06/98	10/26/98
Polychlorinated Biphenyls	SW 8082	09/29/98	10/05/98	NA	10/06/98	10/26/98
Sample: 01G 48030988	8 063 CMW3	Mat	rix: WATER			
	Nethod	Collected	Received	TCLP date	Extracted	Analyzed
Analysis	SW 1311/6010	09/29/98	10/05/98	10/12/98	10/14/98	10/15/98
ICP Metals, TCLP Extracted Mercury, TCLP Extracted	SW 1311/7470	09/29/98	10/05/98	10/12/98	10/20/98	10/20/98
Sample: 02A 4803098	8 064 CMW6	Mat	rix: WATER			
	Method	Collected	Received	TCLP date	Extracted	Analyzed
Volatiles by GC/MS	SW 8260B	09/29/98	10/05/98	NA		10/13/98
Sample: 02D 4803098	8 064 CMW6	Mat	trix: WATER			
	Method	Collected	Received	TCLP date	Extracted	Analyzed
Analysis Semivolatile Organics	SW 8270C	09/29/98	10/05/98	NA	10/05/98	11/02/98
Sample: 02E 4803098	8 064 CMW6	Ma	trix: WATER			
	Method	Collected	Received	<u>TCLP date</u>	Extracted	<u>Analyzed</u>
Analysis	SW 8081A	09/29/98	10/05/98	NA	10/06/98	10/26/98
Polychlorinated Biphenyls	SW 8082	09/29/98	10/05/98	NA	10/06/98	10/26/98
Sample: 02G 4803098	38 064 CMW6	Ма	trix: WATER			
1	Method	Coll <u>ected</u>	Received	TCLP_date	Extracted	Analyzed
AUGIVELS TOD Matale TOLD Extracted	SW 1311/6010	09/29/98	10/05/98	10/12/98	10/14/98	10/15/98
Mercury, TCLP Extracted	SW 1311/7470	09/29/98	10/05/98	10/12/98	10/20/98	10/20/98
Sample: 03A 480309	88 065 MW1	Ma	atrix: WATER			
a se a la carte de la carte de la carte de la carte de la carte de la carte de la carte de la carte de la carte	Method	Collected	Received	<u>TCLP date</u>	Extracted	Analyzed
Analysis	SW 8260B	09/30/98	10/05/98	NA		10/13/98
volatiles by GC/MS						

### Department of the Air Force DATES REPORT

Sample: 03D 48030988	065 MW1	Matr	ix: WATER			
	Method	Collected	Received	TCLP date	Extracted	Analyzed
<u>Analysis</u> Semivolatile Organics	SW 8270C	09/30/98	10/05/98	NA	10/05/98	11/02/98
Sample: 03E 48030988	065 MW1	Mati	cix: WATER			
*		collocted	. Received	TCLP date	Extracted	Analyzed
Analysis	Method		10/05/98	NA	10/06/98	10/26/98
Organochlorine Pesticides	SW BO81A	09/30/98	10/05/98	NA	10/06/98	10/26/98
Polychlorinated Biphenyls	SW 8082	09/30/98	10/03/20			
Sample: 03G 48030988	8 065 MW1	Mat	rix: WATER			
	Mathod	Collected	Received	TCLP date	Extracted	Analyzed
Analysis	SW 1311/6010	09/30/98	10/05/98	10/12/98	10/14/98	10/15/98
Mercury, TCLP Extracted	SW 1311/7470	09/30/98	10/05/98	10/12/98	10/20/98	10/20/98
0.000	8 066 MW7	Mat	rix: WATER			
Sample: 04A 4803090						booluged
Test ver C	Method	<u>Collected</u>	Received	TCLP date	Extracted	Analyzeu
Marysis Volatiles by GC/MS	SW 8260B	09/30/98	10/05/98	NA		10/13/98
Sample: 04D 4803098	8 066 MW7	Mat	rix: WATER			
	Nathod	Collected	Received	TCLP date	Extracted	Analyzed
Analysis	Method	09/30/98	10/05/98	NA	10/05/98	11/01/98
Semivolatile Organics	SW 82/0C	07/20/20				
Sample: 04E 4803098	88 066 MW7	Mat	crix: WATER			
	Method	Collected	Received	TCLP date	Extracted	Analyzed
Analysis	SW BOBIA	09/30/98	10/05/98	NA	10/06/98	10/26/98
Organochlorine Pesticides Polychlorinated Biphenyls	SW 8082	09/30/98	10/05/98	NA	10/06/98	10/26/98
0	88 055 MW7	Ма	trix: WATER			
Sampie: 046 480303						healwood
Analysis	Method	<u>Collected</u>	Received	<u>TCLP_date</u>	Extracted	<u>Analy288</u>
TCP Merals, TCLP Extracted	SW 1311/6010	09/30/98	10/05/98	10/12/98	10/14/98	10/10/98
Mercury, TCLP Extracted	SW 1311/7470	09/30/98	10/05/98	10/12/98	10/20/98	10/20/90
Sample: 05A 480309	88 067 MW4	Ма	trix: WATER			
•		- 12	Pacetved	TCLP date	Extracted	Analyzed
Analysis	Method	Corrected	10/05/99	NA		10/13/98
Volatiles by GC/MS	SW 8260B	03/30/38	10,03,70			
Sample: 05D 480309	88 067 MW4	Ma	atrix: WATER	L		
	Mathod	Collected	<u>Received</u>	TCLP date	Extracted	Analyzed
Analysis		09/30/98	10/05/98	NA	10/05/98	11/01/98
Semivolatile Organics	SW 8270C	02,00,20				

## Department of the Air Force DATES REPORT

Sample 05E 48030988	3 067 MW4	Matr	ix: WATER			
	Method	Collected	Received	<u>TCLP date</u>	Extracted	Analyzed
Analysis	SW 8081A	09/30/98	10/05/98	NA	10/06/98	10/26/98
Organochiorine Pesticides	SW 8082	09/30/9B	10/05/98	NA	10/06/98	10/26/98
Polychlorinated Biphenyis	5					
Sample: 05G 48030988	8 067 MW4	Mati	ix: WATER			
	Mathod	Collected	Received	<u>TCLP date</u>	Extracted	Analyzed
Analysis	Mechod	09/30/98	10/05/98	10/12/98	10/14/98	10/15/98
ICP Metals, TCLP Extracted	SW 1311/7470	09/30/98	10/05/98	10/12/98	10/20/98	10/20/98
Mercury, TCLP Extracted	34 1911/ 400					
Sample: 06A 4803098	8 068 CMW5	Mat	rix: WATER			
	Machad	collected	Received	TCLP date	Extracted	Analyzed
Analysis	Method	09/30/98	10/05/98	NA		10/13/98
Volatiles by GC/MS	SW 8260B	03, 30, 50	,			
Sample: 06D 4803098	8 068 CMW5	Mat	rix: WATER			
	Vethod	Collected	Received	TCLP date	Extracted	<u>Analyzed</u>
Analysis	Method	09/30/98	10/05/98	NA	10/05/98	11/01/98
Semivolatile Organics	SH 8270C	••••				
Sample: 06E 4803098	38 068 CMW5	Mat	rix: WATER			
	Method	Collected	Received	TCLP date	Extracted	Analyzed
Analysis	SW BOBIA	09/30/98	10/05/98	NA	10/06/98	10/26/98
Organochiorine Festicides	SW 8082	09/30/98	10/05/98	NA	10/06/9B	10/26/98
Polychiorinated Biphenyio						
Sample: 06G 480309	88 068 CMW5	Mat	rix: WATER			
• · · · · · · · · · · · · · · ·	Method	Collected	Received	<u>TCLP_date</u>	Extracted	Analyzed
Analysis	SW 1311/6010	09/30/98	10/05/98	10/12/98	10/14/98	10/15/98
ICP Metals, ICLP Extracted	SW 1311/7470	09/30/98	10/05/98	10/12/9B	10/20/98	10/2C/9B
Mercury, ICLP Extracted	0.0 2022, 0000					
Sample: 07A 480309	88 069 CMW5	Ma	trix: WATER			
	Method	Collected	Received	<u>TCLP date</u>	Extracted	Analyzed
Analysis	SW 8260B	09/30/98	10/05/98	NA		10/13/9B
Volatiles by GC/MS						
Sample: 07D 480309	88 069 CMW5	Ма	trix: WATER			
	Method	Collected	Received	TCLP date	Extracted	Analyzed
Analysis	SW 8270C	09/30/98	10/05/98	NA	10/05/98	11/01/98
Semivolatile organics						
Sample: 07E 480309	988 069 CMW5	Ma	trix: WATER	t		
	Method	Collected	Received	TCLP date	Extracted	<u>Analyzed</u>
Analysis	SW BORIA	09/30/98	10/05/98	NA	10/06/98	10/26/98
Organochiorine Pesticides	SW 8082	09/30/98	10/05/98	NA	10/06/98	10/26/98
Polychiorinated Biphenyis	5. 6065					

Page 50

Order # 98-10-036 ANALYTICA, INC. Department of the Air Force DATES REPORT

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Sample: 07G 48030988	069 CMW5	Mat:	rix: WATER			
Analysis	<u>Method</u>	<u>Collected</u>	<u>Received</u>	<u>TCLP date</u>	<u>Extracted</u>	<u>Analyzed</u>
ICP Metals, TCLP Extracted	SW 1311/6010	09/30/98	10/05/98	10/12/98	10/14/98	10/15/98
Mercury, TCLP Extracted	SW 1311/7470	09/30/98	10/05/98	10/12/98	10/20/98	10/20/98
Sample: 08A 48030988	070 CMW1	Mat	rix: WATER			
<u>Analysis</u>	Method	<u>Collected</u>	<u>Received</u>	<u>TCLP_date</u>	Extracted	<u>Analyzed</u>
Volatiles by GC/MS	SW 8260B	09/30/98	10/05/98	NA		10/13/98
Sample: 08D 48030988	070 CMW1	Mat	rix: WATER			
<u>Analysis</u>	Method	<u>Collected</u>	<u>Received</u>	<u>TCLP date</u>	<u>Extracted</u>	<u>Analyzed</u>
Semivolatile Organics	SW 8270C	09/30/98	10/05/98	NA	10/05/98	11/01/98
Sample: 08E 48030988	3 070 CMW1	Mat	rix: WATER			
<u>Analysis</u>	Method	<u>Collected</u>	<u>Received</u>	<u>TCLP date</u>	<u>Extracted</u>	<u>Analyzed</u>
Organochlorine Pesticides	SW 8081A	09/30/98	10/05/98	NA	10/06/98	10/26/98
Polychlorinated Biphenyls	SW 8082	09/30/98	10/05/98	NA	10/06/98	10/26/98
Sample: 08G 4803098	8 070 CMW1	Ma	trix: WATER			
<u>Analysis</u>	<u>Method</u>	<u>Collected</u>	<u>Received</u>	<u>TCLP date</u>	<u>Extracted</u>	<u>Analyzed</u>
ICP Metals, TCLP Extracted	SW 1311/6010	09/30/98	10/05/98	10/12/98	10/14/98	10/15/98
Mercury, TCLP Extracted	SW 1311/7470	09/30/98	10/05/98	10/12/98	10/20/98	10/20/98
Sample: 09A TRIP BL	ANK	Ма	trix: WATER			
Analysis	Method	<u>Collected</u>	<u>Received</u>	<u>TCLP date</u>	<u>Extracted</u>	<u>Analyzed</u>
Volatiles by GC/MS	SW 8260B	09/29/98	10/05/98	NA		10/13/98



# INSTRUCTIONS FOR COMPLETING CHAIN-OF-CUSTODY RECORD

Record the client name, address, contact, and a phone and fax number where the client contact can be reached in case of questions.

Project ID/Description: Record the name of the project of client/site location, and the project number as assigned by the field team. (example-613215; x,y,z Chemical Co., WA).

P.O.: Record a purchase order number for billing and reference purposes.

Sample Matrix: Use on (1) chain-of-custody record per sample matrix. Circle the matrix which most accurately represents the samples included on the C-O-C, (i.e. water, soil, oil, sludge). For multiphasic samples (e.g., oil and water), or a non1listed matrix, circle "other" and describe the matrix in the space provided.

Date and Time Collected: Record the date and exact time each sample was collected. Use 24 hr. clock.

Client ID: List the complete identifying name/number of each of the samples you send. These ID's must correspond with the identifying labels on the sample containers.

Number of Containers: Indicate the number of containers being shipped for the respective samples to be analyzed.

Comments: The comment section can be used to record the waybill or air bill number if the samples are being sent by a shipping company, any special instructions to the laboratory regarding the processing of the samples or an indication if the samples are suspected to contain high concentrations of any hazardous materials.

Signatures: When releasing custody of these samples, use the "Relinquished By" space to sign your full name, date and time of release. After verifying that all samples indicated are present, the person receiving the samples will sign in the "Received By" space to take custody of the samples.

All other sections of the C-O-C record are for Analytica use, and should be left blank.

### COOLER RECEIPT FORM

÷} CLIENTER COM A 805-24 PROJECT Cape Tomanofford# 5810036 USE OTHER SIDE OF THIS FORM TO NOTE DETAILS CONCERNING CHECK-IN PROBLEMS/DISCREPANCIES

#### 

sign

by print mee

NO 1. Did cooler come with a shipping slip air bill, etc. ?\_\_ If YES, enter carrier name & air bill number here: fold 3128864 NO 2. Were custody seals on outside of cooler?\_\_\_\_\_ How many & where: 2 - Siles seal date: 10-2-98 seal name: NO 3. Were custody seals unbroken and intact on the date and time of arrival?\_ 4. Did you screen samples for radioactivity using the Geiger Counter?\_\_\_\_\_ SO 5. Were custody papers sealed in a plastic bag & taped inside to the lid?\_\_\_\_ NO 6. Were custody papers filled out properly ink, signed, etc ?\_\_\_\_\_ NO 7. Did you sign custody papers in the appropriate place?\_\_\_\_\_ NO 8. Was project identifiable from custody paper?, If yes, enter project name at the top of this form\_ NO 9. If required, was enough ice used? TES NO Type of ice: WET BLUE Temp <u>y</u> oc 10. Have designate person initial here to acknowledge receipt of cooler date: 10-5-0 B. LOG-IN PHASE: Date\_samples were logged-in:\_\_\_

	11 Describe size of proling in cooler: Bubble here litt solent Pa	
	11. Describe type of packing in cooler YES NOT	2
	13. Did all bottles arrive unbroken & were labels in good condition?	
	14. Were all bottle labels complete ID, date, time, signature, preservative, etc. ? No Tasta (YES) NO	,
	15. Did all bottle labels agree with custody papers?	
	16. Number of samples received Number of bottles received /	
	17. Were correct containers used for the tests indicated?	
	18. Were correct preservatives added to samples?	
	19. Was a sufficient amount of sample sent for tests indicated	:
ı)	20. Were bubbles absent in volatile samples. If ives, give details on the back of this form YES	
	22. Who was called? HIQ10, By whom? (Darres date 10-5-98)	

Rest & PCB required confirmed by Angle

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# **Facsimile Cover Page**



Analytica Environmental Laboratories, Inc. 325 Interlocken Parkway Suite 200 Broomfield, CO 80021

Voice: (303) 469-8868 Fax: (303) 469-5254

Sender: Claire Toon Sent: Thursday, Dec 3, 1998 4:19 p.m.

### To:

Company: 611 CES/CEVO Phone: FAX: 1-907-552-4601

### Please Deliver to:

Carl Hornig

8



Pages:

Message:

The documents accompanying this transmission may contain information which is legally privileged and/or confidential. The information is intended only for the use of the individual or entity named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or use of any of the information contained in this transmission is strictly prohibited. If you have received this transmission in error, please immediately notify us by telephone and mail the orginal transmission to us. Thank you for your cooperation and assistance.

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Department of the Air Force	Order #: 98-11-140
611 CES/CEVO	Date: 12/03/98 16:08
21-885 2nd St.	Work ID: CAPE ROMANZOF - CALL #B002
Elmendorf AFB, AK 99506-0875	Date Received: 11/17/98
Attn: Carl A. Hornig	Date Completed: 12/03/98

SAMPLE IDENTIFICATION

	Sample		Sample	
	Number	Client Description	Number	Client Description
à	01	48030988054 SW1	02	48030988059 5#1

Enclosed are the analytical results for the submitted sample(s). Please à review the CASE NARRATIVE for a discussion of any data and/or quality control issues. A listing of data qualifiers and analytical codes is located on the TEST METHODOLOGIES page at the end of the report.

If you have any questions regarding the analyses, please feel free to call.

Sincerely,

Claire K. Toon Project Manager TEL NO. (303)469-5254

TEL NO. (303)469-5254

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Order # 98-11-140 ANALYTICA, INC.

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### Department of the Air Force CASE NARRATIVE

Page 2

Samples were prepared and analyzed according to methods outlined in the following references:

O Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 3, January 1995.

The results reported here are from samples which were re-extracted, outside the analytical holding times, per client request. Results for these samples were previously reported as AEL sample numbers 9809259-04B and 9809259-09B.

Problems encountered with the analyses are discussed in the following narrative.

The results from this analysis do not confirm the detection of toxaphene at 18
ug/L in the original extract of sample 48030988059 SW1. No toxaphene was
detected in the second extract of this sample. The laboratory is currently
investigating the cause of this discrepancy, and believes the first analysis to
be in error. A more detailed description of how the error occurred will be
provided as this information becomes available.

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TEL NO. (303)469-5254

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Order # 98-11-140 a ANALYTICA, INC.

Department of the Air Force TEST RESULTS by SAMPLE

à	Sample: 01A 48030988054 SW1		Collected:	09/26/	'98 Mat	rix: WA	TER	
à	Test Description	Method	Resul	t Q	Limit	Units	Analyzed	ļ
à	Organochlorine Pesticides	3N OOOTY	ľ	D	0.025	ug/L	12/01/98	
à	Aldrin		7		0.025	ug/L	12/01/98	1
à	alpha-BHC		- 1	ло По	0.025	ug/L	12/01/98	ł
à	beta-BHC		-	 10	0.025	ug/L	12/01/98	\$
à	delta-BHC		-	ភ្	0.025	uq/L	12/01/98	3
à	gamma-BHC (Lindane)		-	 ຫ	0.025	ug/L	12/01/98	3
à	alpha-Chlordane		-	л. П	0.025	ug/L	12/01/98	3
à	gamma-Chlordane			ND OF	0.050	uq/L	12/01/98	3
à	4,4'-DDD				0.050	ug/L	12/01/98	3
à	4,4'-DDE				0.050	ug/L	12/01/98	3
à	4,4'-DDT			ND	0.025	ug/L	12/01/98	8
à	Dieldrin				0.050	ug/L	12/01/98	8
à	Endosulfan I			ND	0.050	uq/L	12/01/98	8
à	Endosulfan II			ND	0.050	ug/L	12/01/9	8
à	Endosulfan Sulfate			ND	0.050	ug/L	12/01/9	8
à	Endrin			NT	0.050	ug/L	12/01/9	8
à	Endrin Aldehyde			ND	0.025	ug/L	12/01/9	8
à	Heptachlor				0.025	ug/L	12/01/9	8
à	Heptachlor Epoxide			ND	0.25	ug/L	12/01/9	8
	Methoxychlor			ND	0.75	ug/L	12/01/9	8
-	Toxaphene			μD.	0	-97-	· · · ·	
	SURROGATES, & Recovery			<b>NO</b>	Mine	45	Max: 124	
	Tetrachlorometaxylene		10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Min•	45	Max: 124	
à	Decachlorobiphenyl			/.0	÷1.4.4.4 ≠	10		

Order # 98-11-140 à ANALYTICA, INC.

 

 16:56 DEC 03, 1998 ID: ANALYTICA
 TEL NO. (303)469 5254
 #((194 PHGE 5/8)

 0rder # 98-11-140
 Department of the Air Force
 Page 4

 TEST RESULTS by SAMPLE

à	Sample: 02A 48030988059 SW1		Collected: 09/27/	98 Mat	rix: WATH	ER
à	Test Description	Method	Result Q	Limit	Units	Analyzed
à	Organochlorine Pesticides	2W SUGIA	ND	0.028	ug/L	12/01/98
à	Aldrin		ND	0.028	ug/L	12/01/98
à	alpha-BHC		ND	0.028	ug/L	12/01/98
à	beta-BHC		ND	0.028	ug/L	12/01/98
à	delta-BHC		ND	0.028	ug/L	12/01/98
<u>à</u>	gamma-BHC (Lindane)		ND	0.028	ug/L	12/01/98
à	alpha-Chlordane		ND	0.028	ug/L	12/01/98
à	gamma-Chlordane		ND	0.056	ug/L	12/01/98
a	4,4'-DDD		ND	0.056	ug/L	12/01/98
à	4,4'-DDE		ND ND	0.056	ug/L	12/01/98
a	4,4'-DDT		NT)	0.028	ug/L	12/01/98
à	Dieldrin		ND	0.056	ua/L	12/01/98
à	Endosulfan I		ND	0.056	-9,- υσ/L	12/01/98
à	Endosulfan II			0.056	-9/- ug/T.	12/01/98
à	Endosulfan Sulfate		ND	0.056	ug/2	12/01/98
à	Endrin			0.056	ug/2	12/01/98
à	Endrin Aldehyde		NU ND	0.030	ug/L	12/01/98
à	Heptachlor		ND	0.028	ug/D	12/01/98
à	Heptachlor Epoxide		ND	0.026	ug/L	12/01/98
-	Methoxychlor		ND	0.28	ug/L	12/01/98
	Toxaphene		ND	0.83	ug/L	12/01/90
	SURROGATES, & Recovery					101
	Tetrachlorometaxylene		90.9	Min:	45 1	Mari 124 Mari 124
à	Decachlorobiphenyl		54.5	M1U:	40	Max: 124

TEL NO: (303)469-5654

84 278 Page 5

Order # 98-11-140 ANALYTICA, INC.

### Department of the Air Force TEST METHODOLOGIES

THE FOLLOWING CODES APPLY TO THE ANALYTICAL REPORT

RESULT field... ND = not detected at the reported limit NA = analyte not applicable (see case narrative/methods for discussion) Q (qualifier) field... GENERAL: \* = Recovery or %RPD outside method specifications H = value is estimated due to analysis run outside EPA holding times E = reported concentration is above the instrument calibration range D = analyte was diluted to bring within instrument calibration range or to remove matrix interferences ORGANIC ANALYSIS DATA QUALIFIERS: B = analyte was detected in the laboratory method blank J = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL) INORGANIC ANALYSIS DATA QUALIFIERS: B = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL) W = post digestion spike did not meet criteria (85-115%) S = reported value determined by the Method of Standard Additions



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Page 7 Department of the Air Force Order # 98-11-140 à DATES REPORT ANALYTICA, INC.

à	Sample: 01A 48030988054 SW1		Matrix: WATER		
û à ûà	Analysis Organochlorine Pesticides	Method SW 8081A	Collected 09/26/98	Received 11/17/98	TCLP date NA
ôô à	Sample: 02A 48030988059 SW1		Matrix: WATER		
û à ûà	Analysis Organochlorine Pesticides	Method SW 8081A	Collected 09/27/98	Received 11/17/98	TCLP date NA



## 811 W. 8th Avenue, Anchorage, AK 99501 • (907) 258-2155 • FAX (907) 258-6634

USAF - 611TH CES/CEVO 21885 2ND STREET ELMENDORF AFB, AK 99506-4420 (907) 552-1617/FAX 4601 Attn: MR. CARL HORNIG Order #: A8-10-007 Date Reported: 10/29/98 12:37 Project Name: CAPE ROMANZOF LAND FILL Date Received: 10/02/98

### SAMPLE IDENTIFICATION

Sample		
Number	<u>Client Desc</u>	ription
01	48030988063	CMW3
02	48030988064	CMW6
03	48030988065	MW1
04	48030988066	MW7
05	48030988067	MW4

Sample		
Number	<u>Client Descr</u>	<u>iption</u>
06	48030988068	CMW5
07	48030988069	CMW5
08	48030988070	CMW1
09	TRIP BLANK	

Enclosed are the analytical results for the submitted samples. All analyses met quality assurance objectives, except where noted in the case narratives. If you have any questions regarding the analyses, please feel free to call.

Bradley C. Olson Vice President - Operations

tabular sample r port - fuels

Analytica Alaska, Inc.

811 W. 8th Ave. Anchorage, AK 99501 Phone-(907)258-2155 FAX-(907)258-6634

AAI Project ID: A810007

28-Oct-98

**USAF - 611TH CES/CEVO** 

Client:

Project Name: CAPE ROM	ANZOF I	AND FILL						220	880	Units
Sample ID Client Sample ID	Matrix	Benzene	Toluene	Ethylbenzene	Xylenes, Total	GRO	Units	URO	NAC	
						11 1100		U (0.22)	U (0.22)	ից/տլ
A810007-01 48030988063 CMW3	WATER	0		0					U (0.22)	ug/mL
ASTOORT OF ARDINGRADIA CMWG	WATER	0	_	0	0	(UUT) U	J'U			
		0		0	0	U (100)	1/6r	0 (0.20)	0 (0.20)	1911
A810007-03 40030900000 MEV 1				>	<u>+</u>	U (100)	ца/г	0.23 (0.21)	U (0.21)	µg/mL.
A810007-04 48030988066 MW7	WATER	v						0.29 (0.22)	3.2 (0.22)	Hg/mL
A810007-05 48030988067 MW4	WATER	0		0		(001) O		0 22 (0 22)	U (0.22)	ug/mL
ASTOCOT-DE ASOTOSARDES CMW5	WATER	0		0	0	(001) 0	hind			
	WATED	>		2	0	U (100)	μg/L	0.26 (0.23)	U (V.Z.3)	pg/iiic
A810007-07 48030988069 CMW5	WATEN	•				11 /400/		U (0.22)	U (0.22)	hð/mr
A810007-08 48030988070 CMW1	WATER	0		0	-	0 (100)	Г. Ч			
		<u></u>		0	0	U (100)	1/8rl	0	-	hint
1A810007-09 TRIP BLANK		<								

A810007-09 TRIP BLANK

WATER

The Science of ... The Art of Service

The number in parentheses is the reporting limit "U" indicates analyte was not detected. "()" Indicates analyte was not analyzed for. "J" indicates value is estimated.

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Order # A8-10-007 Analytica Ak.

### USAF - 611TH CES/CEVO CASE NARRATIVE

Page 2

ADEC Laboratory Approval Number: UST-014

The samples were received properly packed in four coolers at 3.2°C, 3.8°C, 5.9°C, and 6.2°C, and were refrigerated upon receipt.

Data Flag Definitions:

- U Indicates this analytes was searched for and not detected at the reporting limits listed.
- D Indicates the surrogate was diluted out of the sample due to high levels of organics native to the samples.
- M Indicates matrix effects are responsible for surrogate recoveries which are out of limits.
- NC Indicates analyte was detected in original analysis but not confirmed in secondary analysis.
- DR Indicates result is from secondary analysis at dilution.
- S Indicates corrective action did not accomplish desired results or corrective action not performed for cause. See QC Evaluation Summary for details.
- B Indicates analyte was found in Method Blank. See QC Evaluation Summary for details.
- Indicates sample not preserved according to AK101 requirements. True value is greater than or equal to the reported value.

Analyst:

g/a

Date: 10 /29 / 9% Date: 10 29,98

Analyst:

Order # A8-10-007 Analytica Ak.

Client ID: 48030988063 Test Description: GRO in water Collected: 09/29/98 00:	<b>CMW3</b> by AK101. 00		Lab ID: <b>01A</b> Method: 5030/AK101 Matrix: <b>WATER</b>
ANALYSIS DATE: 10/13/98 ANALYST: SWG INSTRUMENT ID: NAT		FI. I DIL	LE ID: N8101307.D JNITS: <b>µg/L</b> JTION: 1
PARAMETER	CAS # or ID	RESULT	LIMIT O
Gasoline Range Organics	GRO	υ	100
SURROGATE	<u> *RECOVERY</u>		LIMITS
a, a, a-Trifluorotoluene	95 %		60 - 120
p-Bromofluorobenzene	94 %		60 - 120
Client ID: 48030988063	CMW3	<u></u>	Lab ID: 01B
Test Description: DRO in water	by AK102.		Method: 3510\AK102
Collected: 09/29/98 00:	00		Matrix: WATER
EXTRACTION DATE: 10/05/9 ANALYSIS DATE: 10/12/9 ANALYST: GSM INSTRUMENT ID: WOOF	8 8	ם	FILE ID: W8101247.D UNITS: µg/ml ILUTION: 1
<u>PARAMETER</u> Diesel Range Organics	<u>CAS # or ID</u> DRO	<u>result</u> <b>u</b>	<u>LIMIT</u> <u>O</u> 0.22
<u>SURROGATE</u> o-Terphenyl	<u>%RECOVERY</u> 94 %		<u>LIMITS</u> 60 - 120
Client TD: 48030988063	CIMW3		Lab ID: 01B
Test Description: RRO in water	by AK103.		Method: 3510\AK103
Collected: 09/29/98 00:	00		Matrix: WATER
	0		FILE TD: W8101247.D
ANALVETS DATE: 10/12/9	8		UNITS: ug/ml
ANALUST GSM		Г	ILUTION: 1
INSTRUMENT ID: WOOF		-	
DADAMETED	CAS # or TD	RESILT	LIMIT O
Residual Range Organics	RRO	υ	0.22
ctmp(Chmp	<b>\$DECOURD</b> V		LIMITS
Squalane	120 %		60 - 120

Page 4

USAF - 611TH CES/CEVO TEST RESULTS by SAMPLE

	<u> </u>			Tob TD: 023				
Client ID:	48030988064 CMW	6		Method: $5030/AK101$				
Test Description:	GRO in water by	AK101.		Matrix. WATER				
Collected:	09/29/98 00:00			Matrix, Marka				
			τī	TE TD. N8101308.D				
ANALYSIS DATE	: 10/13/98		F I	LE ID: NOICISCO.S				
ANALYST	: SWG			UNITS: $\mu g/L$				
INSTRUMENT ID	: NAT		DIL	UTION: I				
PARAMETER		<u>CAS # or ID</u>	RESULT					
Gasoline Ran	ge Organics	GRO	σ	100				
000012000								
ST	TRROGATE	<u> %RECOVERY</u>		LIMITS				
a a a-Trifluoro	toluene	93 %		60 - 120				
	benzene	91 %		60 - 120				
p-Bromorruore	Denzene							
	·····	· · · · · · · · · · · · · · · · · · ·						
Client ID:	48030988064 CM	W6		Mathod: $3510$ AK102				
Test Description:	DRO in water by	Y AK102.		Metrica: 3510 (Atto2				
Collected:	09/29/98 00:00			MATTIX: WAIER				
EXTRACTION D	ATE: 10/05/98			FILE ID: W8101249.D				
ANALYSIS D	ATE: 10/12/98			UNITS: $\mu g/m I$				
TANA	YST: GSM		1	DILUTION: 1				
TNGTRIMENT	TD: WOOF							
110 1101 1111 1								
DADAMETER		CAS # or ID	RESULT	LIMIT O				
Diogol Papa	e Organics	DRO	σ	0.22				
Diesei Rang	e organico							
5	TEDOGATE	<b>%RECOVERY</b>		LIMITS				
21	ombanyl	93 %		60 - 120				
0-1	erbuenyr	•••						
				Lab ID: 02B				
Client ID:	48030988064	1W6		Method: 3510\AK103				
Test Description:	RRO in water h	by AK103.		Matrix: WATER				
Collected:	09/29/98 00:00	)		Maclin, Malla				
				ETTE TD. W8101249 D				
EXTRACTION I	DATE: 10/05/98			$\frac{1}{100} = \frac{1}{100} ANALYSIS I	DATE: 10/12/98			
ANAI	LYST: GSM			DIFULION: 1				
INSTRUMENT	ID: WOOF							
			RESULT	LIMIT Q				
PARAMETER	- ·	<u>CHD # OL ID</u>	<u></u> Π	0.22				
Residual Ra	ange Organics	KKO	v					
	CITEBOCATE	<b>%RECOVERY</b>		LIMITS				
i	SUKRUGAIE	119 %		60 - 120				
	squarane	117 U						

Order # A8-10-007 Analytica Ak.

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USAF - 611TH CES/CEVO TEST RESULTS by SAMPLE

	·····		
Client ID: 48030988065 MW1 Test Description: GRO in water by	AK101.		Lab ID: <b>03A</b> Method: 5030/AK101
Collected: 09/30/98 00:00			Matrix: WATER
ANALYSIS DATE: 10/13/98 ANALYST: SWG INSTRUMENT ID: NAT		F	TILE ID: N8101309.D UNITS: <b>µg/L</b> TLUTION: 1
<u>PARAMETER</u> Gasoline Range Organics	<u>CAS # or ID</u> GRO	<u>result</u> v	<u>LIMIT Q</u> 100
<u>SURROGATE</u> α,α,α-Trifluorotoluene p-Bromofluorobenzene	<u>%RECOVERY</u> 98 % 91 %		<u>LIMITS</u> 60 - 120 60 - 120
Client ID: 48030988065 MW1 Test Description: DRO in water by Collected: 09/30/98 00:00	AK102.		Lab ID: <b>03B</b> Method: 3510\AK102 Matrix: <b>WATER</b>
EXTRACTION DATE: 10/05/98 ANALYSIS DATE: 10/13/98 ANALYST: GSM INSTRUMENT ID: WOOF			FILE ID: W8101251.D UNITS: µg/ml DILUTION: 1
<u>PARAMETER</u> Diesel Range Organics	<u>CAS # or ID</u> DRO	<u>result</u> U	<u>LIMIT</u> <u>Q</u> 0.20
<u>SURROGATE</u> o-Terphenyl	<u> </u>		<u>LIMITS</u> 60 - 120
Client ID:48030988065 MWTest Description:RRO in water bCollected:09/30/98 00:00	1 Y AK103.		Lab ID: <b>03B</b> Method: 3510\AK103 Matrix: WATER
EXTRACTION DATE: 10/05/98 ANALYSIS DATE: 10/13/98 ANALYST: GSM INSTRUMENT ID: WOOF			FILE ID: W8101251.D UNITS: µg/ml DILUTION: 1
<u>PARAMETER</u> Residual Range Organics	<u>CAS # or ID</u> RRO	<u>result</u> V	<u>LIMIT</u> <u>O</u> 0.20
<u>SURROGATE</u> Squalane	<u>%RECOVERY</u> 120 %		<u>LIMITS</u> 60 - 120

Order # A8-10-007 Analytica Ak.

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USAF - 611TH CES/CEVO TEST RESULTS by SAMPLE

Client ID: Test Description:	<b>48030988066 MW7</b> GRO in water by	AK101.		Lab ID: <b>04A</b> Method: 5030/AK101
Collected:	09/30/98 00:00			Matrix: WATER
ANALYSIS DATH ANALYSI	E: 10/13/98 F: SWG		1	FILE ID: N8101310.D
INSTRUMENT II	D: NAT		D	ILUTION: 1
PARAMETER		CAS # or ID	RESULT	LIMIT O
Gasoline Rar	nge Organics	GRO	σ	100
<u>.st</u>	JRROGATE	*RECOVERY		LIMITS
α,α,α-Trifluoro	otoluene	98 %		60 - 120
p-Bromofluoro	obenzene	93 %		60 - 120
Client ID:	48030988066 MW7			Lab ID: 04B
Test Description:	DRO in water by	AK102.		Method: 3510\AK102
Collected:	09/30/98 00:00			Matrix: WATER
EXTRACTION DA	ATE: 10/05/98			FILE ID: W8101253.D
ANALYSIS DA	ATE: 10/13/98			UNITS: µg/ml
ANALY	(ST: GSM			DILUTION: 1
INSTRUMENT	ID: WOOF			
PARAMETER		CAS # or ID	RESULT	LIMIT O
Diesel Range	e Organics	DRO	0.23	0.21
<u>st</u>	JRROGATE	*RECOVERY		LIMITS
0-Te	erphenyl	89 %		60 - 120
Client ID:	48030988066 MW7			Lab ID: 04B
Test Description:	RRO in water by	AK103.		Method: 3510\AK103
Collected:	09/30/98 00:00			Matrix: WATER
EXTRACTION DA	ATE: 10/05/98			FILE ID: W8101253.D
ANALYSIS DA	ATE: 10/13/98			UNITS: µg/ml
ANALY	ST: GSM			DILUTION: 1
INSTRUMENT	ID: WOOF			
PARAMETER		CAS # or ID	RESULT	LIMIT O
Kesidual Rar	nge Organics	RRO	υ	0.21
SU	JRROGATE	*RECOVERY		LIMITS
5	squalane	114 %		60 - 120
Order # A8-10-007 Analytica Ak. Page 7

Client ID:	48030988067 MW4		<u> </u>	Lab ID: 05A
Test Description:	GRO in water by	AK1 01		Method: 5030/AK101
Collected.	09/30/98 00:00			Matrix: WATER
correcteu.	0,50,50 00.00			
ANALYSIS DATE	: 10/13/98		Fl	LE ID: N8101311.D
ANALYST	': SWG			UNITS: $\mu q/L$
TNSTRUMENT TD	I. NAT		DII	UTION: 1
PARAMETER		CAS # or ID	RESULT	LIMIT O
Gasoline Ran	ge Organics	GRO	σ	100
		8 DT(0177D1/		TTMTTC
<u></u>	IRROGATE	<u>FRECOVERY</u>		<u>DIMITS</u> 120
$\alpha, \alpha, \alpha$ -Trifluoro	toluene	96 8		60 - 120
p-Bromofluoro	benzene	92 8		60 - 120
	49020089067 3844			1.ab TD: 058
Test Description.	DDO in water by	<b>NK100</b>		Method: $3510$ AK102
Test Description:	DRO IN WALEE Dy	ARIVZ.		Matrix, WATER
collected:	09/30/98 00:00			MALLIA: WAIDA
EXTRACTION DA	ATTE: 10/05/98			FILE ID: W8101269.D
ANALVEIS DE	TE. 10/13/98			UNITS: ug/ml
ANALISIS DE	VGT. CGM		т	DILUTION: 1
TNOTDIMENT			-	
TNOTROMINI	ID. WOOF			
PARAMETER		CAS # or ID	RESULT	LIMIT O
Diesel Range	Organics	DRO	0.29	0.22
Diebei hangt		2		
SU	JRROGATE	&RECOVERY		<u>LIMITS</u>
0-Te	erphenyl	98 %		60 - 120
Client ID:	48030988067 MW4			Lab ID: 05B
Test Description:	RRO in water by	AK103.		Method: 3510\AK103
Collected:	09/30/98 00:00			Matrix: WATER
				ETTE TD. M0101360 D
EXTRACTION DA	ATE: 10/05/98			TRITTC/~1
ANALYSIS DA	ATE: 10/13/98			$\frac{\mu g}{m r}$
ANAL	YST: GSM			DITOITON: T
INSTRUMENT	ID: WOOF			
PARAMETER		CAS # or ID	RESULT	LIMIT _O
Residual Ray	nge Organics		3.2	0.22
NESIWURI NGI				- ·
SI	URROGATE	<b>%RECOVERY</b>		LIMITS
:	Squalane	120 %		60 - 120

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USAF - 611TH CES/CEVO TEST RESULTS by SAMPLE Page 8

Client ID: 48030988068	CMW5		Lab ID: 06A
Test Description: GRO in wate	r by AK101.		Method: 5030/AK101
Collected: 09/30/98 00	:00		Matrix: WATER
ANALYSIS DATE: 10/13/98			FILE ID: N8101312.D
ANALYST: SWG			UNITS: $u \mathbf{g} / \mathbf{I}$
INSTRUMENT ID: NAT		D	ILUTION: 1
		-	
PARAMETER	<u>CAS # or ID</u>	<u>RESULT</u>	LIMIT O
Gasoline Range Organics	GRO	σ	100
SURROGATE	*RECOVERY		LIMITS
α,α,α-Trifluorotoluene	97 %		60 - 120
p-Bromofluorobenzene	91 %		60 - 120
Client ID: 48030988068	CMW5		Lab ID: 06B
Test Description: DRO in wate	T by AK102		Method: $3510$ AK102
Collected: 09/30/98 00	· 00		Matrix, WATED
			MALLIA. WALAN
EXTRACTION DATE: 10/05/	98		FILE ID: W8101255.D
ANALYSIS DATE: 10/13/	98		
ANALYST: GSM			DILITION · 1
INSTRUMENT ID: WOOF			
PARAMETER	CAS # or TD	RESILT	
Diesel Range Organics	DRO	0.22	0.22
2 2			
SURROGATE	<u><b>*RECOVERY</b></u>		LIMITS
o-Terphenyl	98 %		60 - 120
Client ID: 48030988068	CMW5	~	Ish ID. <b>669</b>
Test Description: RRO in wate	r by AK103		Method: $3510$ AK103
Collected: 09/30/98 00	:00		Matrix, WATER
	•		Matlix. Wrigh
EXTRACTION DATE: 10/05/	98		FILE ID: W8101255.D
ANALYSIS DATE: 10/13/	98		UNITS: µq/ml
ANALYST: GSM			DILUTION: 1
INSTRUMENT ID: WOOF			
PARAMETER	CAS # or ID	RESULT	LIMIT O
Residual Range Organics	RRO	σ	0.22
SURROGATE	*RECOVERY		LIMITS
Squalane	119 %		60 - 120

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Page 9

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Client ID: 480309880	69 CMW5	<u>.</u>	Lab ID: 073
Test Description: GRO in wa	ter by AK101.		Method: $5030/3x101$
Collected: 09/30/98	00:00		Matrix: WATER
ANALYSIS DATE: 10/13/	00		
ANALYST: SWG			FILE ID: N8101313.D
INSTRUMENT TD. NAT			UNITS: µg/L
			DILUTION: 1
PARAMETER	<u>CAS # or ID</u>	RESULT	
Gasoline Range Organic:	s GRO	<u> </u>	100
<u>SURROGATE</u>	*RECOVERY		LINTEO
$\alpha, \alpha, \alpha$ -Trifluorotoluene	91 %		
p-Bromofluorobenzene	94 %		60 - 120
	J7 7		60 - 120
Client ID: 480309890	50 (DIGAE	· · · · · · · · · · · · · · · · · · ·	
Test Description: DPO in wat			Lab ID: 07B
Collected: 00/20/00 (	Ler by AK102.		Method: 3510\AK102
09/30/98 (	10:00		Matrix: WATER
EXTRACTION DATE: 10/05	./98		
ANALYSIS DATE: 10/12			FILE ID: W8101257.D
ANALYST. COM	5/ 38		UNITS: $\mu g/ml$
INSTRUMENT ID. MOOT			DILUTION: 1
INSIROMENI ID: WOOF			
PARAMETER	CAS # or ID	DECIT	
Diesel Range Organics		0.26	
5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	2.10	0.20	0.23
SURROGATE	<b>%RECOVERY</b>		LTMTTS
o-Terphenyl	92 %		60 - 120
			00 - 120
Client ID: 4803098806	9 CMW5		
Test Description: RRO in wat	er by AK103		Lad ID: 07B
Collected: 09/30/98 0	0.00		Method: 3510\AK103
	0.00		Matrix: WATER
EXTRACTION DATE: 10/05	/98		FILE ID. WOLALDER D
ANALYSIS DATE: 10/13	/98		
ANALYST: GSM			DITECTOR: $\mu g/m I$
INSTRUMENT ID: WOOF			DIPOLION: T
PARAMETER	<u>CAS # or ID</u>	RESULT	LIMIT
Residual Range Organics	RRO	<u>U</u>	0.23
_		-	V.2J
SURROGATE	<b>%RECOVERY</b>		LIMITS
Squalane	112 %		60 - 120

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USAF - 611TH CES/CEVO TEST RESULTS by SAMPLE Page 10

Client ID:	48030988070 CM	w1		Lab ID: <b>08A</b>
Test Description:	GRO in water b	y AK101.		Method: 5030/AK101
Collected:	09/30/98 00:00			Matrix: WATER
ANALYSIS DATE	: 10/13/98		F	ILE ID: N8101316.D
ANALISI INCODIMENDI I			DT	UNITS: $\mu g / L$
INSIRUMENT IL	): NAT		DI	LUIION: I
PARAMETER		CAS # or ID	RESULT	LIMIT Q
Gasoline Rar	nge Organics	GRO	σ	100
SU	JRROGATE	*RECOVERY		LIMITS
α,α,α-Trifluoro	otoluene	99 %		60 - 120
p-Bromofluoro	benzene	93 %		60 - 120
-				
Client ID:	48030988070 CM	W1		Lab ID: 08B
Test Description:	DRO in water b	y AK102.		Method: 3510\AK102
Collected:	09/30/98 00:00	-		Matrix: WATER
EXTRACTION DA	ATE: 10/05/98			FILE ID: W8101259.D
ANALYSIS DA	ATE: 10/13/98			UNITS: µg/ml
ANALY	(ST: GSM			DILUTION: 1
INSTRUMENT	ID: WOOF			
PARAMETER		CAS # or ID	RESULT	LIMIT _O_
Diesel Range	e Organics	DRO	<u> </u>	0.22
SU	JRROGATE	%RECOVERY		LIMITS
0-Te	erphenyl	90 <del>%</del>		60 - 120
			<u>_</u>	
Client ID:	48030988070 CM	Wl		Lab ID: 08B
Test Description:	RRO in water b	y AK103.		Method: 3510\AK103
Collected:	09/30/98 00:00			Matrix: WATER
EXTRACTION DA	ATE: 10/05/98			FILE ID: W8101259.D
ANALYSIS DA	ATE: 10/13/98			UNITS: $\mu g/ml$
ANALY	(ST: GSM			DILUTION: 1
INSTRUMENT	ID: WOOF			
PARAMETER		<u>CAS # or ID</u>	RESULT	LIMIT O
Residual Ran	nge Organics	RRO	σ	0.22
ST	JRROGATE	<b>%RECOVERY</b>		LIMITS
\$	Squalane	109 %		60 - 120

Order # A8-10-007 Analytica Ak.

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USAF - 611TH CES/CEVO TEST RESULTS by SAMPLE

Page 11

Client ID: Test Description: Collected:	TRIP BLANK GRO in water by 09/30/98 00:00	AK101.		<u>, , , , , , , , , , , , , , , , , , , </u>	Lab I Metho Matri	D: 09 d: 50 x: W2	<b>)A</b> )30/AK101 <b>(TER</b>
ANALYSIS DATE: ANALYST: INSTRUMENT ID:	10/13/98 SWG NAT			FI: I DILI	LE ID: UNITS: UTION:	N810 <b>µg/I</b> 1	91317.D
<u>PARAMETER</u> Gasoline Ran <u>c</u>	e Organics	<u>CAS # or :</u> GRO	<u>ID</u>	<u>RESULT</u> U	<u>LIM</u> 1	<u>IT</u> 00	<u> </u>
<u>SUF</u> α,α,α-Trifluorot p-Bromofluorok	ROGATE coluene penzene	<u>%RECO</u> 99 93	/ <u>ERY</u> * *		60 60	<u>LIMI1</u> - -	<u>'S</u> 120 120

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Order # A8-10-007 Analytica Ak. USAF - 611TH CES/CEVO TEST METHODOLOGIES Page 12

Method AK101 from the State of Alaska Department of Environmental Conservation (ADEC), Storage Tank Program, Underground Storage Tanks Procedures Manual, 18 AAC 78, as amended through January 31, 1996; is referenced for the analysis of gasoline range organics (GRO).

The quantitation range is from the beginning of C6 to the beginning of C10.

Method AK102 from the State of Alaska Department of Environmental Conservation (ADEC), Storage Tank Program, Underground Storage Tanks Procedures Manual, 18 AAC 78, as amended through January 31, 1996; is referenced for the analysis of diesel range organics (DRO).

The quantitation range extends from the beginning of C10 to the beginning of C25. The standard used is a 1:1:1 mixture of Kerosine, DF1, and DF2.

Waters are prepared via liquid/liquid extraction per AK102.

Liquids are prepared according to method AK103 and USEPA SW-846 method 3510.

Method AK103 from the State of Alaska Department of Environmental Conservation (ADEC), Storage Tank Program, Underground Storage Tanks Procedures Manual, 18 AAC 78, as amended through January 31, 1996; is referenced for the analysis of residual range organics (RRO).

The quantitation range of this method extends from the beginning of C25 to the end of C36. A mixture of 1:1:1 SAE 30, SAE 40, & SAE 50 motor oils are used for instrument calibration.



## Support Documentation



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ORD# 98 7SN# A8 I ELL	-09-228 0924 MEN_AFB	ANALYTICA, INC. CLIENT INVOICE			INVOICE# DATE PAGE	114497 10/26/98 1
INVOICE TO ATTEN WORK II P.O. #	Department of the Air Force 611 Civil Eng./CEVO 21885 2nd St. Elmendorf AFB, AK 99506-4420 Carl A. Horniq CAPE ROMANZOF - CALL #B002 F65501-94A0009 FCA S98040117		REMIT TO ATTEN PHONE	Analytica 325 Inter Suite 200 Broomfiel Accounts (303) 469	Environme locken Par d, Colorad Receivable -8868	ntal Labs kway lo 80021
RECEIVEI REPORT ATTEI	09/25/98 REPORTED 10/26/98 Department of the Air Force Carl A. Hornig	<u>Charged to Will</u> <u>VISA 09/25/98,</u> <u>request.</u> <u>Ref. S98040117</u>	iam Croy per clien C.R.		-	

	ID	CODE	DESCRIPTION	REMARKS	PRICE	QTY	DISCOUNT	AMOUNT
TESTS		PCB_8S	Polychlorinated Biphenyls		99.00	46		4554.00

SUBTOTAL \_\_\_\_\_\$4,554.00

TOTAL INVOICE AMOUNT \_\_\_\_\$4,554.00

**All invoices are due and payable upon receipt.** Outstanding balances over 30 days are subject to a finance charge of 1.5% per month.

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