

DEPARTMENT OF THE AIR FORCE AIR FORCE BASE CONVERSION AGENCY

January 26, 2001

MEMORANDUM FOR NYS DEPT OF ENVIRONMENTAL CONSERVATION

ATTN: MR. ART STEMP Office of Environmental Quality, Region V Route 86, PO Box 296 Ray Brook NY 12977-0296

FROM: AFBCA/DA Plattsburgh 22 US Oval Suite 2200

Plattsburgh NY 12903

SUBJECT: Aircraft Refueling System Construction Certification Report

Attached for your information, review, and comment is the May 2000 Final Construction Certification Report for Closure of the Aircraft Refueling System at Plattsburgh AFB (4 Volumes: 1) Bulk Fuel Storage Area [IRP Fuel Site ST-012], 2) Fuel Transfer Pipelines, 3) Flightline Pumphouses, and 4) Flightline Lateral Pipelines).

Informal draft closure reports for the various components of the Aircraft Refueling System were provided to you in 1996 and 1997, immediately after the actual closure activities. A consolidated Draft Construction Certification Report was provided in December 1997.

We have previously reviewed, with you, the closure report data for Volume 1, the Bulk Fuel Storage Area (IRP Fuel Site FT-012), and have implemented groundwater monitoring activities there per your June 17, 1998, letter.

Request a joint review, at your convenience, to evaluate the remainder of the aircraft refueling report to identify what additional actions (if any) are required to close out these petroleum sites.

Our POC is Dave Farnsworth, (518) 563-2871, extension 15.

Site Manager/BRAC Environmental Coordinator

Attachment:

Construction Certification Report (4 Vols) (1 cy)

cc:

NYSDEC (Mr. James Quinn) wo Atch

Feley 1 23- A- Z

To: ISMTP@ADMIN@AFBDA.HDQ[<jaquinn@gw.dec.state.ny.us>],

ISMTP@ADMIN@AFBDA.HDQ[<MORSE.BOB@epamail.epa.gov>]

From: Dave Farnsworth@PLATTSBURGH@AFBDA.OL3

Cc: ddn[don_hunt@urscorp.com], ddn[tnaplatt@westelcom.com], ISMTP@ADMIN@AFBDA.HDQ[<Bruce_Przybyl@urscorp.com>],Joe

Szot@PLATTSBURGH@AFBDA.OL3, Michael Sorel@PLATTSBURGH@AFBDA.OL3,

Stephen Gagnier@PLATTSBURGH@AFBDA.OL3, Yvonne

Lawrence@PLATTSBURGH@AFBDA.OL3

Subject: Monthly Status of Documents and Planned Fiel Activities

Attachment: DOC_STAT.DOC, SAMPSTAT.DOC, BEYOND.RTF Date: 1/10/01 2:08 PM

Bob/Jim:

The monthly Status of Documents and the Planned Field Activities are attached.

dave

STATUS OF PAFB ENVIRONMENTAL DOCUMENTS SENT FOR REGULATORY ACTION/REVIEW

Document	Date Sent*		
Well Abandonment & Repair Plan	2/26/99		
Glycol Sampling Results	10/13/99		
SS-018/028 Draft Groundwater Monitoring Plan	11/3/00	Complete, comments received; revised monitoring plan in progress	
SS-017 Technical Memorandum - Contaminants of Concern	11/28/00	Complete, comments received	
SS-033 Draft Final Proposed Plan	12/6/00	NYSDEC informal concurrence received	
SS-033 Draft ROD	12/15/00	Requested comments NLT 1/17/01	

^{*}Date sent is the date of the cover/transmittal letter.

As of 10 January 01

	DOCUMENTS TO BE SENT OUT				
-	Document	Comment			
•	Response to Comments to the Washrack (Area 2891) and B/2890 Draft Removal Actions Report	To be sent 10 Jan. 01			
•	SS-033 Final Proposed Plan	To be sent 11 Jan. 01			
•	FT-002 (S) Draft Final ROD	To be sent 17 Jan. 01			
•	Draft SEBS/FOST – Parcel K-2	To be sent 17 Jan. 01			
•	FT-002 (GW) Draft Final Revisions to RI/FS and Resp. to Reg. Comments	Pending resolution of NYSDEC issues, informal Resp. to Comments sent 12/21/00			
•	FT-002 (GW) Draft Final Proposed Plan and Draft ROD	Pending resolution of NYSDEC RI/FS issues, (internal DF PP and Resp. to Comments, and internal Draft ROD, prepared)			
•	SS-016 Sampling/Test Results and Revised FS Scope of Work	To be sent 19 Jan. 01			
•	SS-017 DF Site Eval. & FS Report	To be sent 26 Jan. 01			
	Draft Final Sup. Eval. to the EBS (Misc. EBS Factors Report)	To be sent 26 Jan. 01			
•	SS-004 Response to Regulatory Comments (to Draft Final RI)	To be sent late Jan./ early Feb. 01			
•	SS-017 Draft Proposed Plan	To be sent 2 Feb.			
•	SS-018/028 Revised GW Monitoring Plan	To be sent early Feb. 01			
•	Draft SEBS/FOST – Parcel A2.8, Communications Annex (Off-base site)	To be sent early Feb. 01			
•	SS-033 Draft Final ROD	To be sent 15 Feb. 01 (pending Final PP)			
,	FT-002 (S) Final ROD	To be sent mid Feb. 01 (pending DF ROD coord.)			
•	Response to NYSDEC FT-002 Effluent Criteria Determination	To be sent mid Feb. 01			
•	SS-027 Response to USEPA Comments to Draft Final SI Report	To be sent mid Feb. 01			
•	AOC 2612 Workplan	To be sent late Feb. 01			
•	Washrack & B/2890 Equip. Removal Report	To be sent late Feb. 01 (pending resp. to comments)			
•	Draft SEBS/FOST – Parcel A2.2 – New Base Housing (5000 Area)	To be sent late Feb. 01			
	Draft SEBS/FOST – Historic Housing	To be sent late Feb. 01			
•	Response to regulatory letters (5/5/99 & 5/10/99) – Well Management Plan	To be sent (date TBD)			
		As of 10 January 01			

As of 10 January 01

NOTE: Processing of FOSLs and FOSTs will continue to be based on 10/3 working days for regulatory review of Draft/Draft Final FOSLs, and 30/3 working days for FOSTs.

dweilig 315en 1 Feb

Document Review Priority (as of 10 January 2001)

Pri	Document	Remarks
1	SS-033 Draft Final Proposed Plan	Awaiting concurrence letters
2	SS-033 Draft ROD	Requested comments NLT 1/17/00
3	FT-002 (S) Draft Final ROD	To be sent
4	Response to Comments to the Washrack (Area 2891) and B/2890 Draft Removal Actions Report	To be sent
5	Draft SEBS/FOST – Parcel K-2	To be sent
6	FT-002 (GW) Draft Final Revisions to RI/FS	To be sent (pending resolution of NYSDEC issues)
7	FT-002 (GW) Draft Final PP/ Draft ROD	To be sent (pending resolution of RI/FS)
8	SS-016 Sampling/Test Results and FS Revised Scope of Work	To be sent
9	SS-017 DF Site Eval. & FS Report	To be sent
10	SS-004 Resp. to DF RI Comments	To be sent
11	SS-017 Draft Proposed Plan	To be sent
12	SS-018/028 Revised GW Monitoring Plan	To be sent
13	Draft SEBS/FOST – Parcel A2.8, Communications Annex	To be sent
14	Draft Final Sup. Eval to the EBS (Misc. EBS Factors Report)	To be sent
15	SS-033 Draft Final ROD	To be sent (pending public comment to Final PP)
16	FT-002 (S) Final ROD	To be sent (pending Reg. coord. of DF ROD)
17	Response to NYSDEC FT-002 Effluent Criteria Determination	To be sent
18	SS-027 Response to USEPA Comments to Draft Final SI Report	To be sent
19	AOC 2612 Workplan	To be sent
20	Washrack & B/2890 Equip. Removal Report	To be sent (pending response to comments)
21	Draft FOST – Parcel A2.2, New Base Housing (5000 Area)	To be sent
22 23	Draft SEBS/FOST – Historic Housing Glycol Sampling Results	To be sent
24	Well Abandonment & Repair Plan	Awaiting USEPA Comment

Planned Sampling Events and Other Field Activities Plattsburgh AFB (as of 1/10/00)

LOCATIONS	ACTIVITY	EXPECTED DATE(S)	
FT-002 (S)	Treatment Plant biweekly effluent	1/23/01, 2/6/01 & 2/20/01	
	BV monthly performance monitoring	1/19/01 & 2/16/01	
	BV monthly routine process monitoring	1/18/01 & 2/15/01	
	SVE monthly air monitoring	1/18/01 & 2/22/01	
	SVE monthly routine process monitoring	1/18/01 & 2/15/01	
SS-013	Soil removal:	Prelim. conf. sampling results, limited additional soil removal in progress	
	Sup. RI field work	Complete	
SS-016 Monthly air monitoring		1/18/01 & 2/22/01	
Treatment System	Monthly influent/effluent samples	1/16/01 & 2/14/01	
	Monthly sampling @ MW-16-004	1/16/01 & 2/14/01	
SS-017	Performance monitoring	1/19/01 & 2/16/01	
	Monthly soil gas SP-1 south shed	1/18/01 & 2/22/01	
SS-018/028 Routine Groundwater and Seep Sampling		Pending Reg. Review of Revised Sampling Plan	
OTH-3505-1/2	Solid Waste Debris Landfill Excavation	-1: Awaiting confirmatory sampling results, -2: conf sampling to be done. All work on hold until spring.	

NOTE: (1) All sampling, except SS-013 Soil Removal/Confirmatory Sampling and OTH-3505-1/2 (being done by Versar Corp.) to be done by URS Consultants. (2) Performance Monitoring: O2, CO2, TVH, CH4 (w/ system off); Routine Process Monitoring: Temperature, Pressure (w/ system on), Depth to Water (w/ system off).



FINAL CONSTRUCTION CERTIFICATION REPORT

CLOSURE OF THE BULK FUEL STORAGE AREA AT THE AIRCRAFT REFUEL SYSTEM PLATTSBURGH AIR FORCE BASE PLATTSBURGH, NEW YORK

CONTRACT NO. F41624-94-D-8106
DELIVERY ORDER NO. 0003
CDRL A030
DOCUMENT CONTROL NO. D003102

Submitted to:

Air Force Center for Environmental Excellence Brooks Air Force Base, Texas

Submitted by:

OHM Remediation Services Corp. 11560 Great Oaks Way, Suite 500 Alpharetta, Georgia 30022

> Kenneth W. Kukkonen, P.E. Senior Project Manager

May 2, 2000 Revision <u>00</u> OHM Project No. 17257_BFSA

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LIST OF ACRONYMS

ACM asbestos-containing material

AFBCA Air Force Base Conversion Agency

AFCEE Air Force Center for Environmental Excellence

ARS Aircraft Refuel System

AST aboveground storage tank

AVGAS aviation fuel

BFSA Bulk Fuel Storage Area

BTEX benzene, toluene, ethylbenzene, and xylene

CDRL Contract Deliverable Requirement List

cPAH carcinogenic Polynuclear Aromatic Hydrocarbon

CQAR Chemical Quality Assurance Report

CQP Construction Quality Plan

CTM Analytical Laboratories

DO Delivery Order

ECP Environmental Cleanup Plan

ELCD Electrolytic Conductivity Detector

EPA United States Environmental Protection Agency

ESAP Environmental Sampling and Analysis Plan

HASP Health and Safety Plan

JP-4 jet fuel

MDL Method Detection Limit

MTBE methyl tertiary butyl ether

μg/g micrograms per gram
μg/L micrograms per liter

78-

ng/g nanograms per gram

NYSDEC New York State Department of Environmental Conservation

OHM Remediation Services Corp.

OWS Oil / Water Separator

PAFB Plattsburgh Air Force Base

PAH polynuclear aromatic hydrocarbon



Parsons ES Parsons Engineering Science, Incorporated

PCBs Polychlorinated Biphenyls

PID photoionization detector

ppm parts per million

PQL Practical Quantitation Limit

QAPP Quality Assurance Project Plan

QA/QC quality assurance/quality control

QC quality control

SFE Supercritical Fluid Extraction

SOP Standard Operating Procedure

SPE' Solid Phase extraction

STARS Spill Technology and Remediation Series

SVOC semi-volatile organic compound

TAGM Technical and Administrative Guidance Memorandum

TCE trichloroethylene

TCLP Toxicity Characteristic Leachate Procedure

TOGS Technical and Operational Guidance Series

United United Oil Recovery, Inc.

UST underground storage tank

VOC volatile organic compound

EXECUTIVE SUMMARY

OHM Remediation Services Corp. (OHM) was contracted by the Air Force Center for Environmental Excellence (AFCEE) to conduct removal actions to achieve closure of the Aircraft Refuel System (ARS) at Plattsburgh Air Force Base (PAFB). The following volume certifies that removal actions conducted by OHM at the ARS Bulk Fuel Storage Area (BFSA) at PAFB were completed in accordance with the project-specific work plans and appropriate New York State Department of Environmental Conservation (NYSDEC) guidance documents.

The BFSA originally consisted of 1.26 million-gallon aboveground storage tanks (ASTs) 2075 and 2077, 0.84 million-gallon AST 2073, Pumphouse Building 2069, a truck fill stand, a railroad offload area, above- and belowground piping, and oil/water separators (OWSs) 2068 and 2073. Each AST was surrounded by concrete-surfaced earthen berms forming a secondary containment area. The three ASTs were installed on concrete foundation pads, and compacted bentonite clay floored each secondary containment area.

Both removal and assessment activities were conducted in the BFSA. Included as part of the remediation of the BFSA was the demolition and removal of the pumphouse, three ASTs and two OWSs. Removal actions at the BFSA commenced on February 23, 1996, with draining, pigging, and cleaning of the feeder pipelines leading from the ASTs to the pumphouse. The pipeline, coated with an asbestoscontaining material (ACM), was later removed and disposed of at a local landfill. The pumphouse and ASTs were removed in June, and the OWSs were removed in August 1996. As part of the demolition of the pumphouse, salvageable items such as pumps, filters, and scrap metal, were consolidated. The steel ASTs were cleaned and then cut up for recycling, and the pumphouse and OWS debris were taken to a landfill for disposal. Approximately 2,120 cubic yards of soil were removed from the OWS and feeder pipeline excavations and transported to a central soil staging area on Base for subsequent bioremediation via landfarming.

Following removal of the OWSs, confirmatory samples were collected from the excavations and analyzed for volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs) to determine if these constituents remained in excess of NYSDEC guidance values. Subsurface soil and groundwater samples were also collected from the BFSA using Geoprobes® to assess concentrations of targeted VOCs and PAHs. Sample results indicate that concentrations of some targeted constituents remained in the area of the Port Douglas OWS and at several Geoprobe® locations in the BFSA.

Additional assessment activities included soil sampling for lead to determine if repainting of the ASTs had impacted surrounding soils, and sampling of existing area monitoring wells for petroleum constituents.

All excavations were backfilled with imported clean fill material, which had been approved for use based on the results of analytical testing performed on the material (refer to Appendix E). All excavated and disturbed areas were seeded upon completion of the backfill activities.

1.0 INTRODUCTION

OHM Remediation Services Corp. (OHM) was contracted by the Air Force Center for Environmental Excellence (AFCEE) to conduct removal actions to achieve closure of the Aircraft Refuel System (ARS) at Plattsburgh Air Force Base (PAFB). The work was performed under AFCEE Contract No. F41624-94-D-8106, Delivery Order (DO) 0003 and conducted in accordance with the project-specific work plans and New York State Department of Environmental Conservation (NYSDEC) guidance documents referenced in Section 1.5. OHM teamed with Parsons Engineering Science (Parsons ES) to perform the work under this DO. This technical report is presented in four volumes. Each volume describes removal actions conducted for each of the four main components of the ARS. This volume describes and documents removal work conducted at the Bulk Fuel Storage Area (BFSA).

1.1 PROJECT BACKGROUND

1.1.1 General

PAFB is located on the western shore of Lake Champlain in Plattsburgh, New York. The base is divided into two sections (commonly referred to as the "new base" and the "old base") by U.S. Route 9 (Figure 1.1). The U.S. Air Force's 380th Bomb Wing and, later, the 380th Refueling Group operated out of PAFB. The Base and ARS were shut down in 1995.

1.1.2 Aircraft Refuel System Background

The ARS consisted of fuel storage, transportation, pumping, and distribution components. Fuel was stored in the BFSA, transmitted to the refueling apron (the Ramp) through belowground pipelines, temporarily stored in underground storage tanks (USTs), and then transmitted through lateral pipelines from pumphouses to refueling ports installed in the Ramp (Figure 1-2). The following describes each of these components:

- Bulk Fuel Storage Area The BFSA consisted of two 1.26 million-gallon aboveground storage tanks (ASTs) (2075 and 2077), a 0.84 million-gallon AST (2073), a pumphouse, a truck fill stand, a railroad offload area, above- and belowground piping, and two oil/water separators (OWSs). Each of the ASTs was surrounded by concrete-surfaced earthen berms forming a secondary containment area. All of the ASTs were installed on concrete foundation pads, and compacted bentonite clay floored each secondary containment area.
- Product Transmission Pipelines Fuel was delivered to the BFSA via railroad car, and from Port Douglas through a privately owned and operated pipeline. This pipeline was cleaned and pressurized with nitrogen in 1995 independently of this project. Fuel was also transmitted to the BFSA from an off-Base, lakeshore fuel terminal via two 10-inch diameter below ground pipelines. These 10-inch lines had previously been closed in place with grout. Fuel was transmitted from the BFSA to the ARS pumphouses via two 8-inch diameter belowground pipelines. These two 8-inch pipelines carried jet fuel (JP-4) and aviation fuel (AVGAS). The fuel distribution system supplying the ARS pumphouses ran parallel to the flightline and included feeder and recirculation lines of various diameters (e.g. 3-inch, 6-inch, 8-inch, and 10-inch).



• Pumphouses - Eight pumphouses (Buildings 3220, 3230, 3240, 3250, 3260, 3270, 3280, and 3285) were installed along the west edge of the Ramp area. Each of these pumphouses was equipped with six 50,000-gallon USTs and one 2,000-gallon UST, except for Building 3250 which had only two 50,000-gallon USTs and one 2,000-gallon UST, for a total of forty-four 50,000-gallon USTs and eight 2,000-gallon USTs. Transfer valve pits were used to control fuel flow to the laterals located beneath the flight line Ramp. Anode beds, consisting of carbon filled rods, were used to provide cathodic protection to the pumphouse USTs and underground piping.

Pumphouse #3 (Building 3240) was destroyed by fire circa 1968, but the tanks continued to be used for several years. Having been inactivated several years earlier, closure/removal was performed on the following USTs in 1993/1994:

- The six 50,000-gallon USTs at Building 3240 were completely removed;
- All 2,000-gallon USTs, except at Building 3270, were removed;
- The 50,000-gallon USTs at Buildings 3250, 3270, and 3285 were closed in place by cleaning and removing the accessible portions of the tanks, and filling the remainder under their respective pumphouses with clean backfill.
- <u>Lateral Pipelines</u> The lateral pipelines installed alongside and beneath the Ramp were supplied with JP-4 and AVGAS from the pumphouses. A total of 22 pipelines supplied JP-4 to 176 flush-mounted refueling ports installed in the Ramp. Eight of the 22 lateral pipelines were dual pipelines, which also supplied AVGAS to 48 refueling ports.

1.2 PROJECT OBJECTIVES

The objective of the removal actions at the ARS was site closure. The specific objectives of the work conducted at the BFSA were as follows:

- Demolish and remove the pumphouse (2069) and associated equipment;
- Remove three ASTs and two OWSs;
- Draining, pigging, rinsing, and removing the pipelines within the BFSA;
- Removal and disposal of concrete dikes and tank bottoms;
- Conduct subsurface soil sampling and groundwater sampling using Geoprobes® to assess residual concentrations of petroleum hydrocarbons; and
- Collect and analyze surface and subsurface soil samples to assess whether past AST repainting
 activities had contaminated the surrounding soil with lead.

1.3 PROJECT ORGANIZATION AND RESPONSIBILITIES

OHM was the prime contractor responsible for providing all manpower, equipment, tools and supplies to complete closure activities at the BFSA. OHM maintained a full-time onsite staff of



management and remediation personnel for the duration of the project. OHM also mobilized and operated an on-site analytical laboratory to support closure activities.

Parsons ES provided oversight to ensure that removal actions were conducted in accordance with the project-specific work plans and guidance documents. Parsons ES personnel were present during all phases of the remediation.

Subcontractors were used for analytical services and for transportation and disposal of wastes. The three New York State subcontract laboratories used to analyze samples collected from the BFSA were Adirondack Environmental Services located in Albany, Friend Laboratory located in Waverly, and CTM Analytical Laboratories located in Latham. Consolidated Environmental Options, Inc., Carter Steel, and Northern Sanitation were the subcontractors used to transport waste materials generated during the BFSA removal activities.

1.4 REPORT ORGANIZATION

This report is Volume 1 of a four-volume document supporting closure of the ARS at PAFB. This volume is organized into four sections with four appendices. Section 1.0 contains the introduction, Section 2.0 provides a detailed summary of closure activities at the BFSA, Section 3.0 presents analytical results from the soil and groundwater sampling events, and Section 4.0 contains the signed closure certification. The appendices contain extensive documentary material and information. Each of the other three volumes is similar in organization and documents closure activities conducted at the other major sections of the ARS as follows:

- Volume 2 documents removal actions associated with closure of the 8- and 10-inch product transmission pipelines;
- Volume 3 documents removal action associated with closure of the flight line pumphouses;
- Volume 4 documents investigative actions associated with closure of the lateral pipelines under the Ramp.

1.5 REFERENCES

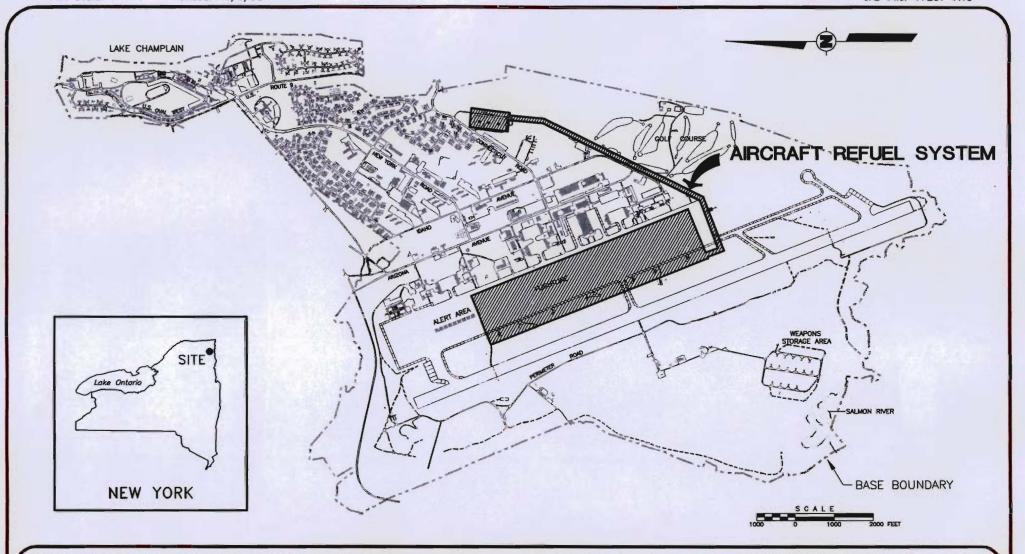
OHM used the following references for preparation of this report and the removal actions described herein:

- Fisher, D. W. 1968. Geology of the Plattsburgh and Rouse=s Point, New York Vermont Quadrangles: New York State Museum and Science Service, Map and Chart Series Number 10. Albany: New York State Museum.
- NYSDEC, August 1992. Spill Technology and Remediation Series (STARS) Memo #1, Petroleum-Contaminated Soil Guidance Policy.
- NYSDEC, October 1993. Technical Operational Guidance Series (TOGS) 1.1.1, NYSDEC Ambient Water Quality Standards and Guidance Values.
- NYSDEC, January 1994. Technical and Administrative Guidance Memo (TAGM) HWR-94-4046, NYSDEC Soil Cleanup Objectives and Cleanup Levels.



- OHM Remediation Services Corp., January 1995. OHM Nationwide Environmental Sampling and Analysis Plan for AFCEE. (Contract No. F41624-94-D-8106, Delivery Order 001).
- OHM Remediation Services Corp., January 1996a. Final Construction Quality Plan for Remedial Actions at Fire Training Area 2, Spill Sites 10 and 17, Old and New Small Arms Ranges, and Aircraft Refuel System, Plattsburgh Air Force Base, Plattsburgh, NewYork, Revision 01. (Contract No. F41624-94-D-8106, Delivery Order 003, CDRL A003, Document Control No. D003035). (CQP)
- OHM Remediation Services Corp., January 1996b. Final Site-Specific Environmental Health and Safety Plan for Remedial Actions at Fire Training Area 2, Spill Sites 10 and 17, Old and New Small Arms Ranges, and Aircraft Refuel System, Plattsburgh Air Force Base, Plattsburgh, New York. Revision 01. (Contract No. F41624-94-D-8106, Delivery Order 003, CDRL A001, Document Control No. D003002). (HASP)
- OHM Remediation Services Corp., January 1996c. <u>Final Environmental Cleanup Plan for Remedial Actions at the Aircraft Refuel System</u>, <u>Plattsburgh Air Force Base</u>, <u>Plattsburgh</u>, <u>New York</u>. Revision 01. (Contract No. F41624-94-D-8106, Delivery Order 003, CDRL A029, Document Control No. D003033). (ECP)
- OHM Remediation Services Corp., January 1996d. <u>Final Environmental Sampling and Analysis Plan for Remedial Actions at Fire Training Area 2, Spill Sites 10 and 17, Old and New Small Arms Ranges, and Aircraft Refuel System Plattsburgh Air Force Base, Plattsburgh, New York. Revision 01. (Contract No. F41624-94-D-8106, Delivery Order 003, CDRL A002, Document Control No. D003029). (ESAP)
 </u>
- OHM Remediation Services Corp., January 1996e. <u>Final Site-Specific Quality Assurance Project Plan for Remedial Actions at Fire Training Area 2, Spill Sites 10 and 17, Old and New Small Arms Ranges, and Aircraft Refuel Systems, Plattsburgh Air Force Base, Plattsburgh, New York. Revision 01. (Contract No. F41624-94-D-8106, Delivery Order 003, CDRL A002, Document Control No. D003030). (QAPP)
 </u>
- OHM Remediation Services Corp., March 1996f. Final Work Plan for Pipeline Abandonment and Removal Addendum to the Environmental Cleanup Plan for Remedial Actions at the Aircraft Refuel System, Plattsburgh Air Force Base, Plattsburgh, New York. Revision 01. (Contract No. F41624-94-D-8106, Delivery Order 003, CDRL A029, Document Control No. D003043).
- OHM Remediation Services Corp., April 1997. Final Closure Report for the Removal of Underground Storage Tanks, Oil/Water Separators, Septic Tanks, and Aboveground Storage Tanks Revision 00. (Contract No. F41624-94-D-8106, Delivery Order 006, CDRL A030, Document Control No. D006046).
- Tetra Tech, Inc., September 1994. Basewide Environmental Baseline Survey, Plattsburgh Air Force Base, New York.

The ECP (OHM, 1996c) was the "Work Plan" for the removal actions described in this report. Additional written and verbal guidance was provided by both on-site and off-site AFCEE and Air Force Base Conversion Agency (AFBCA) representatives during the course of the project.



Legend

BASE BOUNDARY

AIRCRAFT REFUEL SYSTEM



OHM Remediation Services Corp.

OHM Project No. 17257

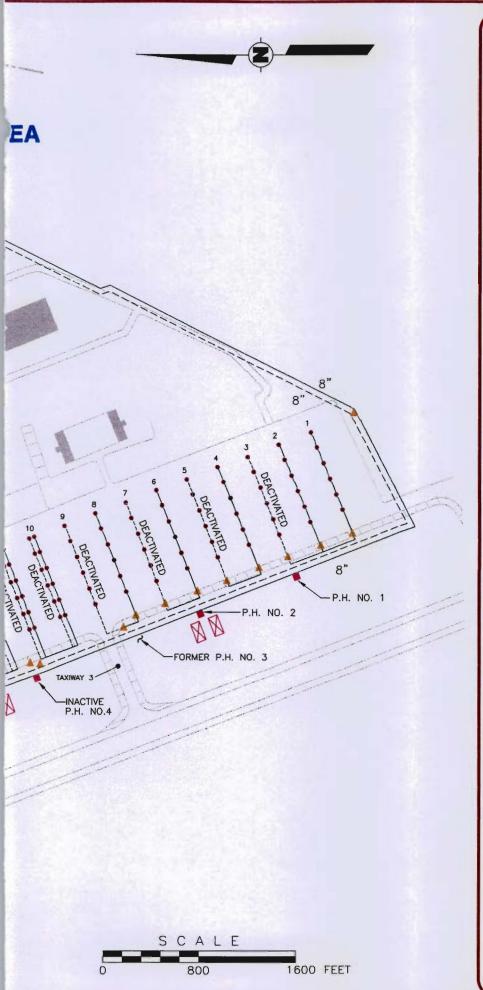
G. Guimond	Approved By: K. Kukkonen	
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	G. Guimond cale: AS SHOWN	

FIGURE 1-1

SITE LOCATION MAP
AIRCRAFT REFUEL SYSTEM
PLATTSBURGH AIR FORCE BASE, NEW YORK

PREPARED FOR

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE BROOKS AIR FORCE BASE, TEXAS



General Notes and Legend

LEGEND:

BASE BOUNDARY

WORK AREA

REFUELING PORT

PUMPHOUSE

VALVE/TRANSFER PIT

ABOVEGROUND STORAGE TANK (AST)
OR OIL/WATER SEPERATOR (OWS)

ANODE/RECTIFIER BED

FUEL TRANSMISSION PIPELINES

PUMP HOUSE	BUILDING NUMBER
P.H. No.1	3220
P.H. No.2	3230
P.H. No.3	N/A
P.H. No.4	3250
P.H. No.5	3260
P.H. No.6	3270
P.H. No.7	3280
P.H. No.8	3285

1	REVISED AS PER AIR FORCE COMMENTS	2/26/99
No.	Revision/Issue	Date

FIGURE 1-2

SITE PLAN

AIRCRAFT REFUEL SYSTEM
PLATTSBURGH AIR FORCE BASE, NEW YORK

PREPARED FOR

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE BROOKS AIR FORCE BASE, TEXAS



OHM Remediation Services Corp.

OHM Project No. 17257

Drawn By: D.L./A.C.S.	Checked By: G. Guimond	Approved By: K. Kukkonen	
Date:	Scale:	Drawing No.	
1/16/96	AS SHOWN	17257-B11	

2.0 REMOVAL ACTIVITIES

This section describes the methods and sequence of remediation and assessment activities performed at the BFSA. It includes descriptions of the health and safety monitoring activities, demolition of the BFSA including the removal of three ASTs, the pumphouse, piping and two OWSs, and site restoration. Site photographs are presented as Appendix A.

2.1 HEALTH AND SAFETY

The HASP (OHM, 1996b) was prepared by OHM for this DO. The HASP included documentation of 40-hour training, medical monitoring for OHM personnel, air monitoring requirements, work zone requirements, health and safety personnel, personnel responsibilities, and emergency procedures.

2.1.1 Daily Meetings

Daily safety meetings were conducted to advise workers of the scheduled work for the day and to discuss hazards associated with that work. All OHM and subcontractor personnel attended the daily safety meetings prior to commencing work.

2.1.2 Air Monitoring Program

Air monitoring was conducted to determine the proper level of personal protective equipment, to determine and document that the level of worker protection was adequate, to assess possible migration of contaminants out of the work area due to site conditions (e.g., during asbestos abatement activities), and to determine the adequacy of contaminant suppression measures.

Real-time air monitoring was conducted in the excavation work zones using an Hnu or Photovac photoionization detector (PID). The PID was calibrated at the start of each work day and was used to monitor concentrations of volatile organic compounds (VOCs) in the breathing zone and at the limits of the work area (upwind and downwind). Measurements were taken to determine if construction activities caused an increase above background VOC levels. Measurements were taken at random intervals throughout the day during all excavation and tank removal activities and at the initiation of any new construction activity. Background levels were established daily prior to the commencement of work. Based on the results of the air monitoring program, Level D personal protection was employed for site preparation, construction activities, and site restoration.

2.2 SITE PREPARATION

Site preparation and mobilization for the removal/closure of the entire ARS commenced on November 1, 1995. Several tasks were performed concurrently. Site preparation and mobilization included, but was not limited to the following:

- Installation of perimeter fencing (orange snow fence);
- Installation of access roads or paths;



- · Setup of support systems;
- Delineation of laydown areas at each pumphouse;
- Delineation and marking of exclusion zones, work zones, support zones;
- Setup of on-site trailers: 3 office trailers, decon trailer, and on-site laboratory.

2.3 PIPELINE CLEANING

Prior to the BFSA pumphouse demolition, all piping inside the building was disconnected. Draining, pigging, and cleaning of the feeder piping from the ASTs began on February 23, 1996. Pigging was performed by forcing foam pigs through the pipes with compressed nitrogen supplied from a trailer. Each line was pigged at least twice; once initially to remove residual product, and again after placing wash water and detergent in the pipes for flushing. The residual product, rinse water, and degreaser were collected in a vacuum trailer positioned at the opposite end of the pipes.

The collected liquid was transported by OHM to UST-2552-A-2 for temporary storage. This UST was selected as a storage vessel because of its 25,000-gallon capacity and because it was equipped with cathodic protection, a leak detection system, and surrounded by a secondary containment system. UST-2552-A-2 was also used for temporary storage of rinse water from tank cleaning activities at the flightline pumphouses and from Delivery Order 006 operations. Consolidated Environmental Options, Inc. periodically emptied and transported the waste material to United Oil Recovery, Inc. (United) in Meriden, Connecticut for treatment and recycling. Pipe cleaning operations were completed on March 4, 1996.

2.4 PUMPHOUSE DEMOLITION AND REMOVAL OF ABOVEGROUND BULK STORAGE TANKS

An asbestos survey of the pumphouse was conducted prior to demolition, including analysis of samples of the roofing material and pipeline coating. No ACMs were found. The pumphouse building was demolished on June 14, 1996. Pumphouse debris was taken by Northern Sanitation to the White Pit C&D Disposal Facility in Schuyler Falls, New York for disposal. OHM also removed a portion of the railroad track to the east of the pumphouse where train cars formerly offloaded fuel. A truck dispensing station, located just north of the pumphouse, was also dismantled and disposed.

Three ASTs were present at the BFSA. AST 2073 had a capacity of 0.84 million gallons, and ASTs 2075 and 2077 had capacities of 1.26 million gallons. All three ASTs were used to store JP-4 jet fuel. AST-2073 was also used to store heating fuel for several years. Tank cleaning was performed in the spring of 1995, prior to OHM's arrival on site. AST demolition began with AST 2077 on June 20, 1996, continued with AST 2075, and ended with AST 2073 on June 25, 1996. The ASTs were cut up for recycling. Scrap steel was taken by Carter Steel for recycling.

2.5 REMOVAL OF ASBESTOS-COATED PIPELINE

Excavation of the BFSA pipelines was performed between July 10, 1996 and July 25, 1996. The pipelines were coated with asbestos, therefore, the pipeline removal was conducted as an asbestos abatement. The pipelines were removed in sections using hydraulic shears to cut the pipe, then the



sections were double-wrapped in polyethylene sheeting for disposal. The piping was taken to the White Pit C&D Disposal Facility. A copy of the landfill's NYSDEC permit is included in Appendix D.

An estimated 952 cubic yards of contaminated soil were excavated during the pipeline removal based on field screening of soil samples. Soil with headspace readings above 20 parts per million (ppm) was excavated and transported to a central soil staging area on Base for subsequent bioremediation via landfarming (Refer to Section 3.2). A summary of the contaminated soil removed from the BFSA is included in Appendix D.

2.6 REMOVAL OF PORT DOUGLAS AND BFSA OWSs

Two steel OWSs were present in the BFSA: the Port Douglas OWS and the BFSA OWS. The function of the Port Douglas OWS was to separate water from fuel arriving at the BFSA from Port Douglas on Lake Champlain. The function of the BFSA OWS was to receive runoff from the three bermed areas around the ASTs and capture any oil present.

The OWSs were emptied using a vacuum truck on July 30, 1996. The recovered liquids were stored in UST-2552-A-2. Cleaning, excavation and removal of the OWSs was completed in early August 1996.

Contaminated soil was removed from each excavation based on field screening results and the presence of staining and petroleum odors. Post-excavation soil and groundwater samples were then collected from each excavation to assess the presence of residual contamination. On September 4, 1996, four composite soil samples and one water sample were collected for VOC and polynuclear aromatic hydrocarbon (PAH) analyses from the BFSA OWS excavation. On September 6, 1996, four composite soil samples were collected for VOC and PAH analyses from the Port Douglas OWS excavation. Two samples were also collected from the water at the bottom of the excavation. Analytical results from these two sampling events are presented and discussed in Sections 3.4 and 3.5.

OHM removed a total of 1,168 cubic yards of contaminated soil from the Port Douglas and BFSA OWS excavations. This material was transported to the central soil staging area for subsequent landfarming. The concrete support structures for the OWSs were broken up and transported by Northern Sanitation to the White Pit C&D Disposal Facility for disposal as general construction debris.

2.7 BFSA GEOPROBE® INVESTIGATION

A Geoprobe® sampling investigation was performed at the BFSA inside the berm limits. A total of 21 subsurface soil samples and 20 groundwater samples were collected between September 30 and October 4, 1996, for off-site analysis of VOCs and PAHs. Resampling at 10 soil and 15 groundwater sample locations was conducted between December 10 and December 12, 1996, due to problems encountered during analysis of the samples collected during the initial sampling event. Three additional locations were also sampled during this second sampling event to gather additional information on the presence and extent of contamination at the BFSA. Analytical results are discussed in Section 3.6 and presented in Appendix C. Figure 2-1 shows the sample locations.

2.8 SITE RESTORATION

Following demolition of the three ASTs, the concrete pads supporting the ASTs, along with the concrete berms surrounding the ASTs, were demolished and staged with concrete debris generated



during demolition of the BFSA pumphouse. Once this was completed, the earthen berms underlying and supporting the concrete berms, along with clean fill, was used to regrade the AST area. Restoration was completed when the BFSA was hydroseeded in September 1996.

Imported borrow material from several sources was used to backfill excavations associated with removal actions conducted by OHM throughout the Base, including those at the BFSA. A summary of the sampling and analyses conducted to verify that the imported material was acceptable for use is presented as Appendix E.

2.9 WASTE DISPOSAL DOCUMENTATION

All of the excavated soil remained on-site and was transported to the on-site treatment facility. As mentioned above, the residual product and rinse water from the BFSA pipelines were temporarily stored with rinse water generated during tank cleaning activities at the Base (under Delivery Orders 003 and 006) in UST-2552-A-2. The material was characterized as a D001 and D018 hazardous waste due to the flash point and benzene concentration. After receiving the waste, United used an OWS to separate the fuel from the water. The water was treated until it met Universal Treatment Standards and discharged when Clean Water Act criteria were achieved. United then blended and shipped the organic fraction for use as an energy source for incineration. A table summarizing the disposal quantities and associated hazardous waste manifest numbers is included in Appendix D. Copies of the hazardous waste manifests are maintained in OHM's project files and can be found in the Delivery Order 006 Closure Report, Volume 1 (OHM, April 1997).

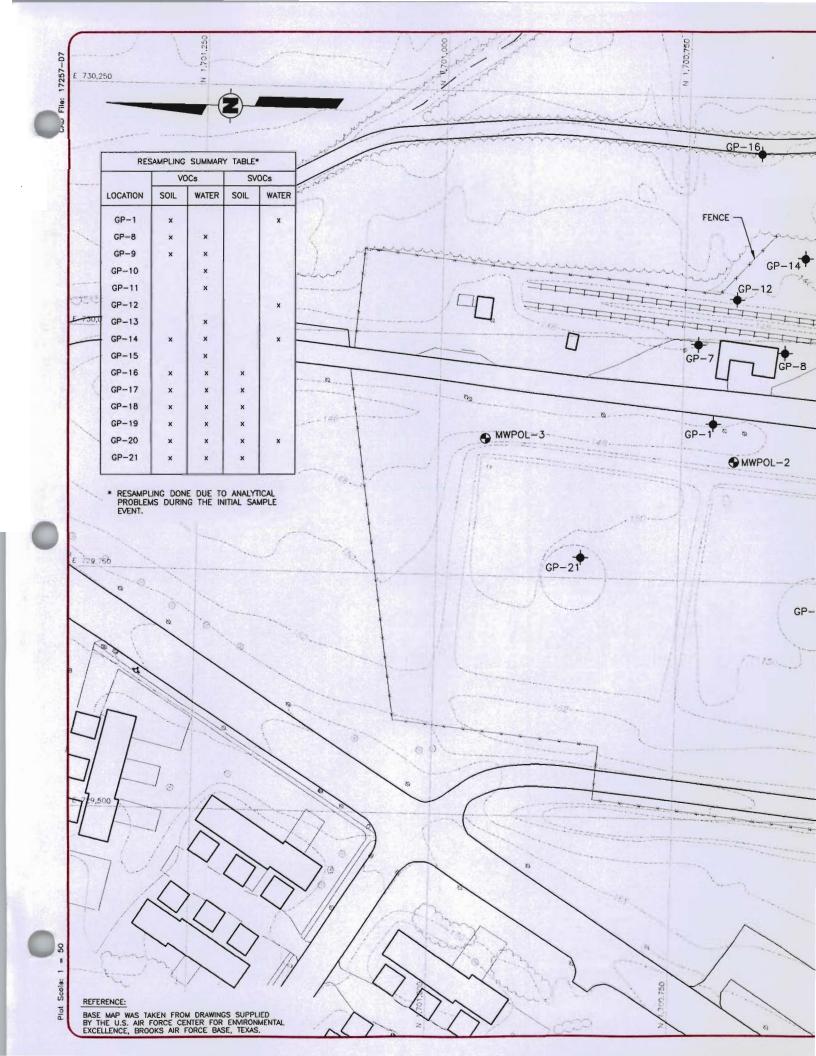
Table 2-1 contains a summary of the disposal information for the asbestos piping, concrete and debris, scrap steel, railroad ties and contaminated soil. Appendix D contains additional transportation and disposal information.

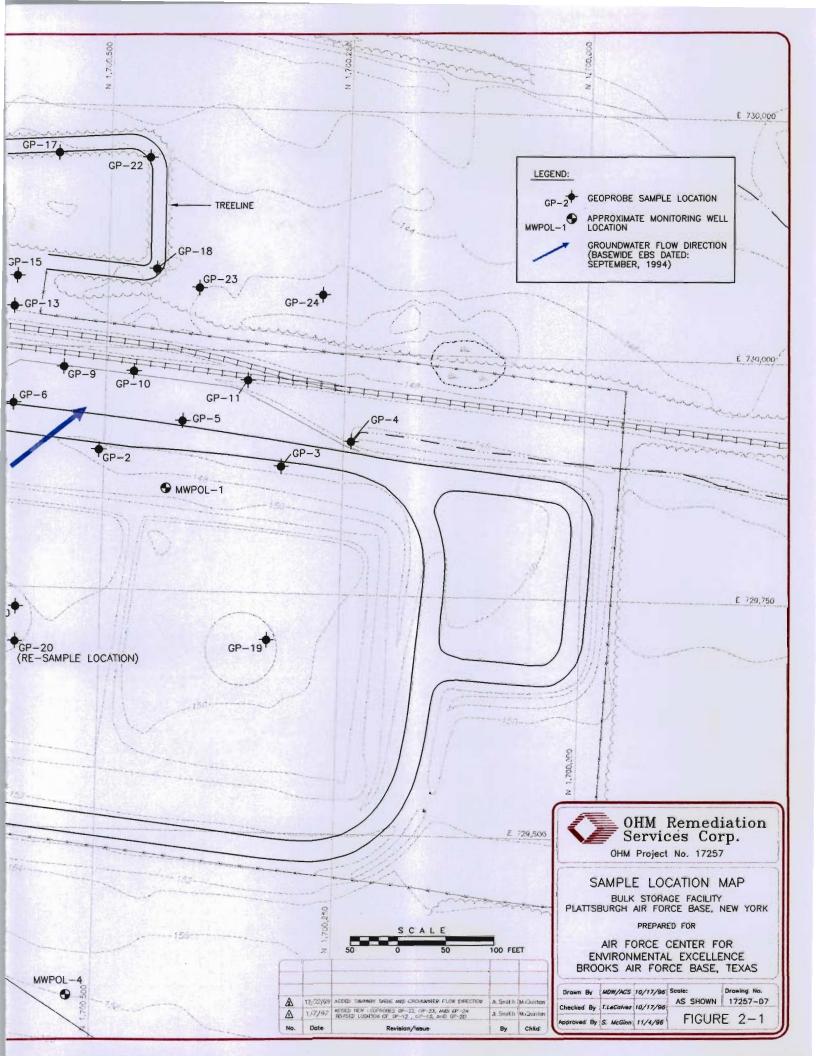
TABLE 2-1
Transportation and Disposal Summary

Material	Transportation Dates	Total Quantity (approximate)	
Asbestos-Coated Piping	04/16/96 - 07/24/96	30,231 linear feet* (various diameters)	
Concrete and Debris	05/03/96 - 08/08/96	4020 cubic yards	
Hazardous Liquid (JP-4, gasoline, oil and water)	01/22/96 – 10/30/96	133,379 gallons**	
Scrap Metal	07/01/96 - 07/18/96	53 tons	
Railroad Ties	07/18/96 - 07/19/96	150 cubic yards	
Contaminated Soil	07/18/96 - 08/28/96	2,120 cubic yards	

^{* -} Quantity includes removal of both the BFSA AST feeder pipelines and the ARS transmission pipelines.

^{** -} The rinse water from the pigging and tank cleaning operations were placed in the same holding tank as the rinse water from the D.O. 006 removal activities, therefore the total quantity reflects all sources.





3.0 SAMPLING AND ANALYTICAL DATA

Sampling activities and analytical results are described and discussed in the following sections. Analytical data are presented in Appendices B and C. Appendix B contains individual closure reports for the ASTs and OWSs. Results of the Geoprobe® samples are presented in Appendix C. United States Environmental Protection Agency (EPA) Methods 8021 and 8270 were used by both the on-site and subcontract laboratories for VOC and PAH analyses, respectively, in accordance with the NYSDEC STARS Memo #1 guidance document, since the BFSA was considered a potential petroleum spill site.

Soil sample results were compared against Toxicity Characteristic Leachate Procedure (TCLP) Alternative Guidance Values provided in STARS Memo #1, with the exception of the soil sample results for lead, which were used to assess contamination from lead paint, not petroleum. Groundwater data were evaluated using the ambient water quality standards presented in NYSDEC TOGS 1.1.1. A matrix summarizing the results of soil and water samples collected from the OWS excavations and during the Geoprobe® investigation is presented as Table 3-1. Detected compounds with concentrations at or above the guidance values are flagged and all detected compounds are color coded to indicate the magnitude of the detected concentration, with respect to guidance values or standards.

3.1 **LEAD SAMPLING**

Past activities at the BFSA included repainting of the three ASTs. Concern was raised by AFCEE over the possibility that repainting may have contaminated the soil surrounding the ASTs with lead. As a result, soil sampling was conducted to assess the presence of lead in soil surrounding the ASTs, and to determine if lead was present at concentrations above the 400 micrograms per gram ($\mu g/g$) screening level established for remediation of the two small arms ranges on Base.

On March 26, 1996, grab soil samples were collected from the secondary containment area (inside the berms) 5 feet away from AST 2075 on the north, south, east, and west sides, respectively. Samples were also collected 10 feet away from the tank on each of the four sides. All eight samples were collected beneath the layer of crushed stone at a depth of 6 to 8 inches below the top of the crushed stone. The samples were sent to Adirondack Environmental Services laboratory in Albany, New York for total lead analysis by EPA Method 6010. Lead concentrations detected in these samples ranged from 9 to 120 μ g/g.

A second round of samples was collected from these same eight locations in April 1996. The purpose of this second sampling event was to assess lead concentrations in soil beneath the bentonite layer that was present. On April 3, 1996, soil samples were collected at distances of 5 and 10 feet from the east and south sides of AST 2075. The four samples were collected from beneath the bentonite layer at a depth of 2 feet below ground surface. On April 10, 1996, samples were collected from the north and west sides of the tank at the same distance intervals. However, the bentonite layer was thicker in these areas and the samples were collected from depths of 3 to 4 feet below ground surface. The eight soil samples collected during this sampling event were also sent to Adirondack Environmental Services for analysis of total lead. Lead concentrations in the samples collected from beneath the bentonite clay layer were lower (4.5 to 9.5 μ g/g) in comparison to the concentrations detected in first round of samples collected just below the ground surface. Lead sampling data for both sampling events are contained in the AST Closure Report provided as Appendix B.



Since lead was not detected above the action level of $400 \mu g/g$ in any of the 16 samples collected around AST 2075, it was not considered necessary to conduct lead sampling around ASTs 2073 and 2077.

3.2 AST PIPE REMOVAL SAMPLING

Between July 11 and July 24, 1996, a series of headspace samples were collected during the AST pipeline removal at the BFSA. A total of 84 soil samples were collected for headspace screening using a portable PID. The headspace sample locations and corresponding PID readings are provided as part of the AST Closure Report in Appendix B. No PID readings above background were measured at 23 of the locations. Readings below 20 ppm were measured at 9 locations. Sixteen locations had measurements between 20 and 100 ppm. Readings between 100 and 1,000 ppm were recorded at 19 locations. PID readings above 1,000 ppm were measured at 17 locations. The highest PID reading (5,910 ppm) was measured in a sample collected within the AST 2075 berm area. Soil with headspace readings above 20 ppm was excavated and transported to the soil storage area on Base for eventual bioremediation. The 20 ppm headspace concentration limit was established by the Base through negotiations with the NYSDEC Region V Spill Response Office and was used to determine which soil would require removal and remediation. This reduced the number of samples requiring analysis in the on-site laboratory and eliminated delays in the on-site work.

On July 12, 1996, two grab soil samples were collected from the AST pipeline removal trenches for analysis of VOCs and PAHs by the on-site laboratory. Sample EX2075-5E was collected from a trench within the AST 2075 berm, and sample EX2077-2W was collected from a trench within the AST 2077 berm. No VOCs or PAHs were detected in sample EX2075-5E at concentrations above the New York State TCLP Alternative Guidance Values presented in the STARS Memo #1. Ethylbenzene, total xylenes, and seven PAHs were detected in sample EX2077-2W at concentrations above guidance values. The sample location with analytical results is shown on Figure 3-1. Complete analytical results are included in Appendix B.1.

3.3 MONITORING WELL SAMPLING

A groundwater sample was collected from each of the four existing monitoring wells within the BFSA to assess whether petroleum-related contaminants were present in groundwater. Monitoring wells 1, 2, and 3 are located downgradient of the three former AST locations. The fourth monitoring well is located upgradient of the former tanks.

On August 8, 1996, monitoring wells MWPOL-1, -2, -3, and -4 were sampled (Figure 2-1). A duplicate sample, an equipment rinsate, and an ambient blank sample were also collected for quality assurance/quality control (QA/QC) purposes. Samples were sent to Friend Laboratory in Waverly, New York for VOC and semi-volatile organic compounds (SVOCs) analyses. No VOCs or SVOCs were detected at concentrations above NYSDEC water quality standards. The only VOC detected was 1,2,4-trimethylbenzene at a concentration of 1 microgram per liter (μ g/L) in sample MWPOL-2. The SVOCs di-n-butylphthalate (1.2 to 6.8 μ g/L) and bis(2-ethylhexyl)phthalate (2.0 to 13 μ g/L) were detected in all four samples. Bis(2-ethylhexyl)phthalate was also present in the equipment rinsate sample at a concentration of 150 μ g/L. No other SVOCs were detected in the monitoring well samples. Monitoring well analytical data are provided as part of the AST Closure Report included as Appendix B.



3.4 PORT DOUGLAS OWS SAMPLE RESULTS

On July 11, 1996, one composite liquid sample was collected from the liquid contained in the Port Douglas (OSW-2068) and BFSA (OWS-2073) OWSs for disposal purposes. This sample was sent to CTM Analytical Laboratories (CTM) in Latham, New York for full TCLP, pesticides/polychlorinated biphenyls (PCBs) (EPA Method 8080), and ignitability (EPA Method 1010) analyses. The liquid was characterized as non-hazardous and transported to UST-2552-A-2 for storage and eventual disposal.

On August 7, 1996, following removal of the OWS, composite soil sample SPPHOWS-1 was collected from the excavated soil stockpile. This sample was analyzed for VOCs and PAHs by the on-site laboratory. Among the compounds detected were elevated levels of benzene, toluene, ethylbenzene, and xylenes (BTEX). Therefore, the material was transported to the central staging area for subsequent bioremediation.

On August 19, 1996, liquid sample BSOWSPH-LQ was collected from the water at the bottom of the Port Douglas excavation. The liquid sample was analyzed for VOCs and PAHs by the on-site laboratory. No PAHs were detected in the liquid sample at concentrations above New York State Class GA Groundwater Standards. The VOC results for this sample were not reported due to a missed holding time.

On September 6, 1996, post-excavation and composite soil samples were collected from each of the four sidewalls for analysis of VOCs and PAHs. Benzene (16.2 nanograms per gram (ng/g)) and naphthalene (215 ng/g) were detected in the sample collected from the west sidewall at concentrations above their respective guidance values of 14 and 200 ng/g. Seven PAHs were detected in the sample collected from the north sidewall at concentrations above guidance values.

On September 12, 1996, liquid sample OWSPH-LQ2 was collected from the water at the bottom of the excavation because the holding time was exceeded for the original sample. This sample was analyzed for VOCs by the on-site laboratory. Benzene (8.9 μ g/L), m,p-xylene (29.6 μ g/L), and o-xylene (9.9 μ g/L) were detected at concentrations above their respective groundwater standards.

All sampling and analysis data for the Port Douglas OWS is provided in the individual closure report included in Appendix B.2.

3.5 BFSA OWS SAMPLE RESULTS

On August 7, 1996, composite sample SPBSOWS-1 was collected from the BFSA OWS soil/sediments stockpile. This sample was analyzed on site for VOCs and PAHs. No VOCs or PAHs were detected.

On September 4, 1996, one groundwater sample was collected from the bottom of the excavation and one composite soil sample was collected from each of the four sidewalls of the excavation. All five samples were analyzed for VOCs and PAHs by the on-site laboratory. No VOCs or PAHs were detected at concentrations exceeding guidance values for soil or in excess of groundwater standards.

All sampling and analytical data are provided in the individual closure report for the BFSA OWS included in Appendix B.3.



3.6 GEOPROBE® SAMPLE RESULTS

A subsurface soil and groundwater investigation was conducted at the BFSA to assess the presence and distribution of contaminants associated with past site activities. Between September 30 and October 4, 1996, Geoprobing® was conducted at 21 locations, designated BSGP-1 through BSGP-21. The 21 locations were selected by the AFBCA and are shown on Figure 2-1. Twenty one soil and 20 groundwater samples were collected and submitted to CTM for analysis of VOCs and PAHs. Because of what appeared to be a separate-phase liquid in the groundwater at location BSGP-14, only a soil sample was collected for analysis. Soil samples were collected from the core interval with the highest PID reading. If no PID reading was noted, soil was collected at the top of groundwater. Soil and groundwater samples were identified by "S" and "W" suffixes, respectively. All sampling locations were marked with stakes and flagging.

A second Geoprobe[®] sampling event was conducted between December 10 and December 12, 1996, during which 10 soil and 15 groundwater samples were recollected. The second sampling event was conducted because several of the original samples were extracted and analyzed outside holding times. In addition to the resampling, one groundwater sample was collected from BSGP-14, and soil and groundwater samples were collected from three additional locations selected by the AFBCA (BSGP-22 through BSGP-24). Upon closer observation of the sample collected from BSGP-14, the separate-phase liquid appeared to be some type of algae that readily dissolved in the water upon shaking.

All original sampling locations were re-sampled with the exception of location BSGP-20. This sampling location was too wet to be accessible to the Geoprobe[®]. Therefore, the closest location that was free of surface water, but still under the footprint of the former AST, was selected. This location was 36 feet west of the original sample location. Second round samples were identified by adding the suffix "A" to the initial sample number, except at locations BSGP-16 and BSGP-20. For the sample identification at location BSGP-16, the suffix "5.5" was used because the highest PID reading was noted at a depth of 5.5 feet. The suffix "1" was used to identify the sample collected at location BSGP-20 because the location was offset from the original location. The samples were shipped to CTM for analysis of VOCs and/or PAHs depending upon the compounds detected during the initial sample analysis. Samples collected from the three new locations were analyzed for both VOCs and PAHs.

A matrix summarizing the results of the soil and groundwater samples collected during the Geoprobe® investigation is presented as Table 3-1. Figure 3-1 shows the sample locations where compounds were detected in soil at concentrations greater than or equal to guidance values. Figure 3-2 shows the sample locations where compounds were detected in the groundwater at concentrations greater than or equal to guidance values. Figures 3-1 and 3-2 present all of the analytical results from both sampling events. Analytical summary tables for both sampling events are included in Appendix C. The summary information included in the following subsections consists only of the results of samples that were extracted and analyzed within holding times.

3.6.1 VOC Results

Ethylbenzene and xylenes were the only VOCs detected in soil samples at concentrations above guidance values. Ethylbenzene (100 to 4,100 ng/g) and xylenes (140 to 2,400 ng/g) were detected at six locations at concentrations equal to or above the 100 ng/g guidance values. The highest concentrations of both VOCs were detected at sample location BSGP-11.

VOCs were detected in groundwater samples from 12 locations at concentrations above



groundwater standards. Benzene was detected at 9 locations at concentrations (2 to 2,600 μ g/L) above the 0.7 μ g/L groundwater standard. Toluene was detected at 4 sample locations at concentrations ranging from 13 to 170 μ g/L. Ethylbenzene (10 locations - 5 to 2,600 μ g/L) and total xylenes (11 locations - 14 to 9,500 μ g/L) were detected at concentrations above the 5 μ g/L groundwater standard. The highest concentrations of benzene, ethylbenzene, and xylenes were detected at sample location BSGP-14 which contained the separate-phase liquid that appeared to be algae. Sample location BSGP-20 contained the highest concentration of toluene.

3.6.2 PAH Results

The PAHs benzo(a)anthracene (240 ng/g), benzo(a)pyrene (200 ng/g), benzo(b)fluoranthene (320 ng/g), and chrysene (190 ng/g) were detected in soil sample BS-GP-08S at concentrations above their respective guidance values. No other PAH exceedences were detected in any of the other soil samples collected during the Geoprobe[®] assessment.

PAHs were detected in groundwater at five locations at concentrations greater than or equal to groundwater standards. Napthalene (34 μ g/L) and acenapthene (25 μ g/L) exceeded the groundwater standards of 10 and 20 μ g/L, respectively, at sample location BSGP-1. Naphthalene also exceeded the groundwater standards at GP-08, GP-12, and GP-20. At sample location BSGP-13, 13 PAHs were detected at concentrations above groundwater standards. The concentrations detected ranged from 8 μ g/L to 100 μ g/L. The sample collected from BSGP-20 contained naphthalene (40 μ g/L) and benzo(a)anthracene (8 μ g/L) at concentrations in excess of groundwater standards.

3.7 QUALITY ASSURANCE/QUALITY CONTROL

The purpose of this section is to summarize the QA/QC procedures used during the project and to discuss any specific quality control (QC) problems and associated corrective actions.

3.7.1 Sampling Quality Control

QC during sampling activities in the field was maintained through the use of Standard Operating Procedures (SOPs) and by the use of QC samples. OHM included sampling SOPs as an Appendix to the QAPP (OHM, 1996e) for use as guidance during sampling activities. In general, stainless steel sampling equipment was used to collect and homogenize samples in the field, and all reusable equipment was decontaminated between uses. Homogenization of samples would only occur after a grab sample for volatiles analysis had been removed and placed in its appropriate container. Project-specific collection logs were used to document the sample collection and to serve as chain-of-custody documentation for samples analyzed by the on-site laboratory. Bound logbooks were also used to document the collection of samples.

QC samples collected during the BFSA sampling activities included field duplicates, ambient blanks, equipment rinsate blanks, and trip blanks. During the BFSA remediation, duplicate sample MWPOL-4D was collected as part of the monitoring well sampling event. Analytical results for this sample are included in Appendix B. A total of four duplicate samples (three soil and one groundwater) were collected during the Geoprobe® sampling events. The analytical results are included in Appendix C. In general, the results of the field duplicates show good sampling precision.

The results of the field-generated blanks are summarized in Table 3-2 along with the laboratory method blanks associated with the samples collected during the OWS removals and the Geoprobe®



(carcinogenic PAHs (cPAHs)) are derived from health based criteria and require detection limits that are not achievable by the published analytical methods. AFCEE, AFBCA and NYSDEC representatives reviewed and approved the MDLs/PQLs used by the on-site laboratory and concluded that the MDLs for the cPAHs would serve as the guidance values.

Laboratory QC samples consisted of initial and continuing calibrations, method blanks, blank spikes, matrix spikes, and matrix spike duplicates. QC samples were analyzed at the frequency required by the respective analytical methods and QC objectives were based on "AFCEE Minimum Analytical Chemistry Laboratory Requirements". Sample data were not accepted unless initial and continuing calibrations were within acceptance limits.

Surrogates were introduced to each sample to evaluate accuracy and extraction efficiency. Samples with poor surrogate recoveries were reanalyzed. If the reanalysis confirmed matrix affects, then the original analysis was reported with the proper qualifier ("S"). If the reanalysis did not confirm matrix affects, then the reanalysis was reported with an "RE" appended to the sample ID.

A summary of method blank results for on-site VOC and SVOC results is provided in Table 3-2. Only the results of method blanks that caused qualification of data are provided in Appendix B.

3.7.3 QC Issues & Data Qualifiers

Specific QC problems experienced during sampling and analysis activities associated with closure of the BFSA were as follows:

- Three of the method blanks analyzed on-site contained o-xylene, which resulted in applying a "B" qualifier to samples SPPHOWS-1 and EX2077-2W. It was not necessary to qualify any data based on the results of PAH method blanks.
- Results of excavation samples OWSPH-S1 and OWSPH-W1 were qualified with and "S" due to high surrogate recoveries.
- As previously noted in Section 3.6, many of the samples collected during the September/October 1996 Geoprobe® sampling event did not meet QA/QC requirements due to missed holding times and poor PAH analysis surrogate recoveries. Therefore, a second sampling event was conducted to obtain data of reliable quality. Analytical results for the first sampling events which were analyzed or extracted outside of the method holding times have been qualified with an "R" which indicates that the data may be considered unusable due to the QC problems. PAH results for two of the samples (BSGP-1W and BSGP-12W) were qualified with an "S" due to poor surrogate recoveries.

No other significant laboratory QA/QC problems associated with samples collected from the BFSA were noted.

Data qualifiers were applied during final review of the data based on the QAPP requirements as well as some additional qualifiers requested by AFCEE. Data qualifier definitions are as follows:

- J Indicates an estimated concentration is below the PQL and above the MDL.
- B Indicates that contamination was also present in an associated blank (field or laboratory) above the MDL.



investigation. In general, the blank sample data indicates good decontamination and sample handling procedures. Ambient blank AB-POL was collected during the monitoring well sampling event to assess the potential introduction of VOC contaminants into the sample from ambient sources (Appendix B). Naphthalene (1 μ g/L) and methylene chloride (59 μ g/L) were the only compounds detected in AB-POL. Methylene chloride is a common laboratory contaminant. An ambient blank was also collected during the BFSA OWS sampling event conducted on September 4, 1996. However, this ambient blank was not analyzed because no VOCs were detected in the associated field samples. Ambient field blanks AFB121096 and AFB121196 were collected during the second Geoprobe® sampling event. No VOCs were detected in either sample (Appendix C).

Equipment rinsate blanks were used to assess the effectiveness of decontamination procedures for sampling equipment and were collected at a frequency of 10%. Seven equipment rinsates were collected during the Geoprobe[®] sampling events. No VOCs or PAHs were detected in any of the seven blanks (Appendix C). A rinsate (ER-POL) was also collected during the monitoring well sampling event. As previously mentioned in Section 3.3, bis(2ethylhexyl)phthalate was detected in all four of the groundwater samples collected and was also present in the rinsate sample at a concentration of 150 μ g/L. Methylene chloride (64 μ g/L) and naphthalene (1 μ g/L) were also detected the rinsate sample. Analytical results for the rinsate blank (ER-POL) are included in Appendix B.

Trip blanks accompanied shipments of VOCs samples to off-site laboratories to ensure that VOC contamination was not introduced during sample handling, transportation and storage. Analytical results for the trip blanks sent with the monitoring well and Geoprobe® samples are provided in Appendices B and C, respectively. Trichloroethylene (TCE) was detected (9 μ g/L) in the trip blank associated with the Geoprobe® samples shipped on 10/1/96. TCE was not detected in any of the field samples sent with this trip blank. VOCs were not detected in any of the other trip blanks.

3.7.2 On-site Laboratory QC

The majority of samples collected at the BFSA were analyzed by off-site laboratories due to the requirement for lead testing which was not done at the on-site laboratory, and due to the Geoprobe[®] investigation being conducted subsequent to the on-site laboratory shutting down. Some of the analyses for samples collected at the BFSA were conducted on-site in a mobile laboratory which was transported to the site for the project. The on-site laboratory was set up to analyze an abbreviated list of VOCs by EPA Method 8021, and PAHs by EPA Method 8270. SOPs were developed for each method and included in the QAPP.

Innovative extraction techniques were used in an attempt to facilitate sample throughput, since the on-site laboratory was also required to analyze samples generated under a separate AFCEE delivery order. Initially, supercritical fluid extraction (SFE) was utilized to extract PAHs from soil samples, and solid phase extraction (SPE) was used to extract PAHs from water samples. Problems with these extraction techniques led to the use of more traditional extraction procedures. Sonication was used to conduct soil sample extractions starting on 07/01/96 after it became evident that persistent maintenance problems associated with the SFE could not be resolved. The presence of an abundance of fine particulates in the water samples had a considerable impact on the ability to move samples through the SPE filters. Separatory funnel extractions replaced SPEs for water samples on 03/13/96. Method detection limits (MDL) studies were conducted by the laboratory for each extraction/analytical method. The MDLs for the on-site laboratory are provided in Appendix F. The PAH extraction techniques used during on-site analysis of samples discussed in this Volume are SFE and sonication for soils and separatory funnel for water samples. The NYSDEC guidance values for many of the target analytes



SAMPLING AND ANALYTICAL DATA

- D Indicates that the sample or sample extract was diluted to bring the contaminant concentration within the linear range of the calibration curve.
- E Indicates an estimated concentration is above the calibration range.
- R Indicates that the data may be considered unusable due to deficiencies in the ability to analyze the sample and meet QC criteria (i.e. analysis or extraction done outside holding time).
- ND The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL. A "U" qualifier, which is synonymous with "ND", was used by some of the off-site laboratories. The numerical value associated with the U is at or below the off-site laboratory PQL.
- S Indicates that reported sample exhibited poor surrogate recoveries. VOC results were qualified if the one surrogate was outside limits and the PAH results were qualified if more than two surrogates were outside limits.
- N Indicates that the ELCD detector (confirmation detector for TCE) was not functioning properly during the analysis.
- RE Indicates that the sample was re-extracted and re-analyzed due to QC problems on the initial analysis.

Table 3-1	BFSA -	Sample	Results	Summary
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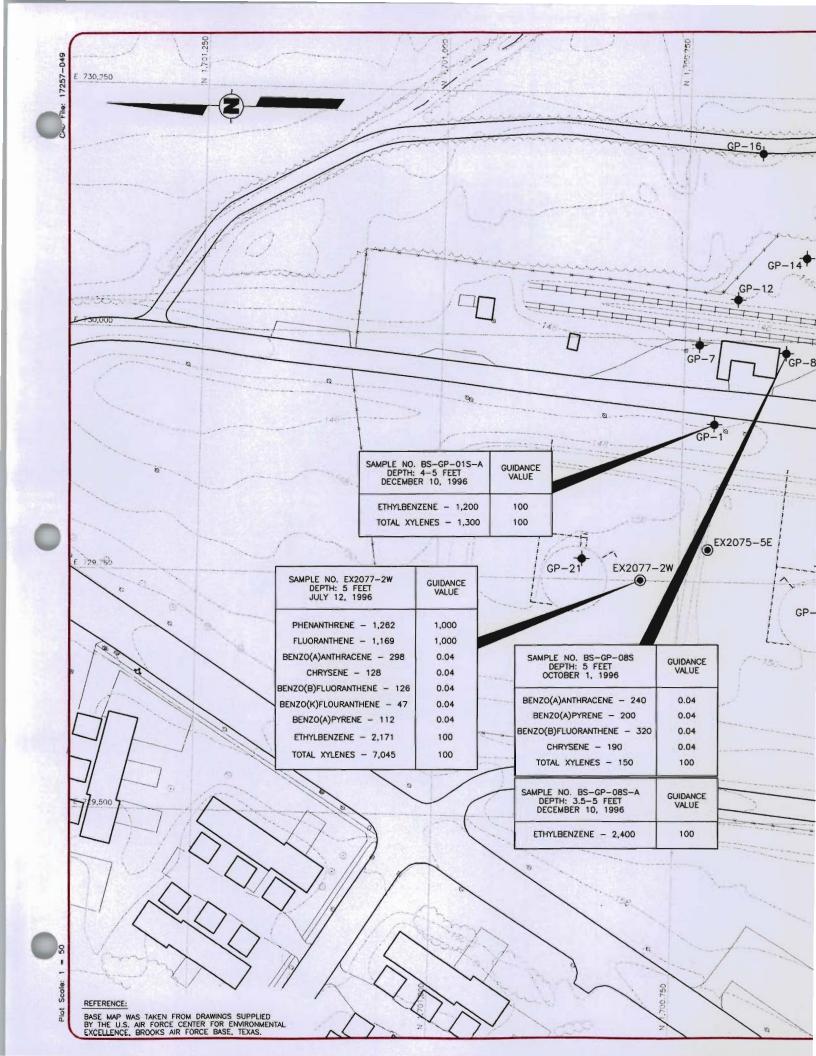
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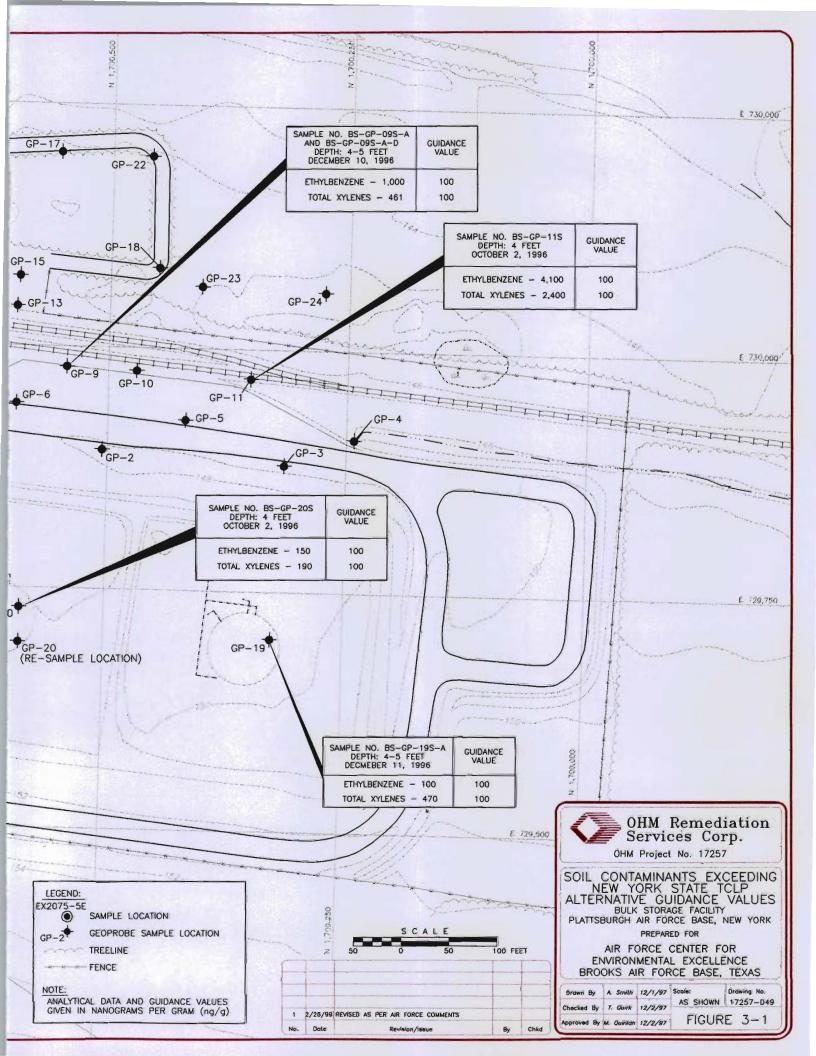
Table 3-1 BFSA - Sample Results Summary

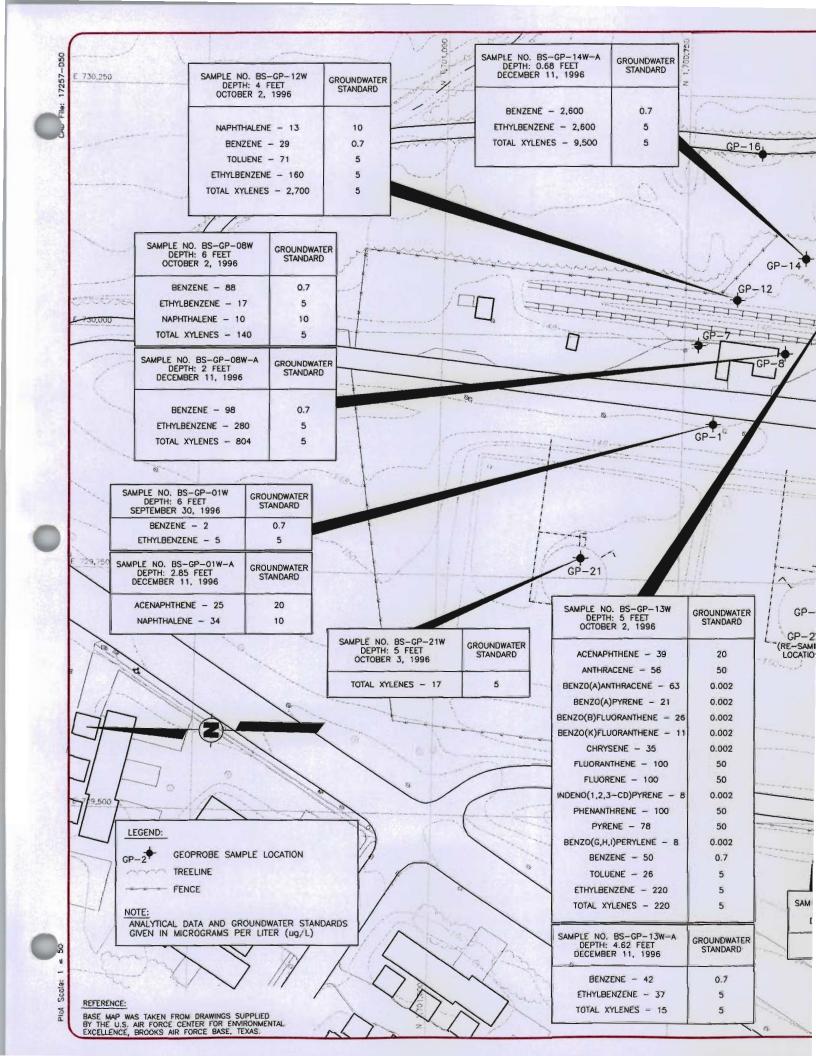
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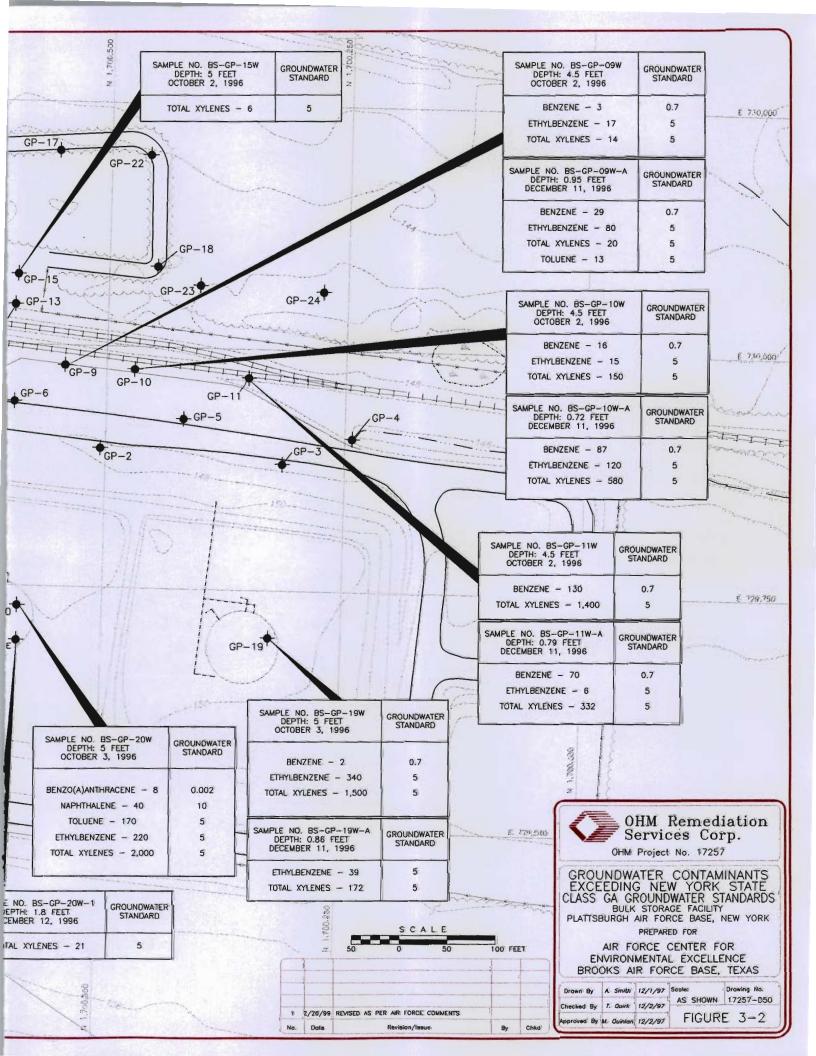
Table 3-2 QC Blank Sample Results Summary

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PID2765	Aqueous	25-Jul-96 Method Blank	25-Jul-96	17		-	-	-	-	-																
ER-POL	Aqueous	08-Aug-96 Equipment Rinsate	14-Aug-96	744		-	-	-	-	-			+												-	1
AB-POL	Aqueous	08-Aug-96 Ambient Blank	14-Aug-96		111	-	-		-	-	- -		+							-]
PID3041	Aqueous	18-Aug-96 Method Blank	18-Aug-96			-	-	-	-																	
GCM3127	Aqueous	22-Aug-96 Method Blank		22-Aug-96	23-Aug-96								J	•			-	-	-	-	-	-	-	-		
GCM3204	Aqueous	28-Aug-96 Method Blank		28-Aug-96	08-Sep-96								-	-					-	-	-	-	-	-		
3CM3264	Soil/Solid	06-Sep-96 Method Blank		06-Sep-96	11-Sep-96			-0					-	-	-		-	-		-	-	-	-	-		
GCM3284	Soil/Solid	07-Sep-96 Method Blank		07-Sep-96	12-Sep-96						3.5		-	-		-	-	-	-	-	-	-	-	-		1
GCM3321	Soil/Solid	08-Sep-96 Method Blank		08-Sep-96	13-Sep-96							\neg	-	-			-	-	-	-	-	-	-	-		7
GCM3331	Soil/Solid	09-Sep-96 Method Blank		09-Sep-96	14-Sep-96								-	-				-	-	-	-	-	-			1
GCM3350	Soil/Solid	10-Sep-96 Method Blank		10-Sep-96	15-Sep-96								-	- 1			-	-	-	-	-	-	-	-		7
PID3438	Aqueous	16-Sep-96 Method Blank	16-Sep-96			-	-	-	-	-																
PID3450	Aqueous	16-Sep-96 Method Blank	16-Sep-96			-	-		-	-																7
PID3413	Aqueous	16-Sep-96 Method Blank	16-Sep-96			-		-	-	-																7
Q BLANK1	Aqueous	30-Sep-96 Equipment Blank	11-Oct-96	05-Oct-96	07-Oct-96	-	-	-	-	-	10	-	-	-				-	-	-	- 1	-	-	-		1
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	Aqueous	02-Oct-96 Trip Blank	12-Oct-96						-	-																1
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	Aqueous	10-Dec-96 Trip Blank	12-Dec-96			1.	-	-	-	-																
	Aqueous	11-Dec-96 Equipment Rinsate	13-Dec-96	12-Dec-96	14-Dec-96		-	-	-			-	-	-		1		-	-	-	-	- 1	-	-		1
	Aqueous	11-Dec-96 Ambient Blank	13-Dec-96				-	-	-	-																1
	Aqueous	11-Dec-96 Trip Blank	14-Dec-96				-		-	-								T								7
ER121296	Aqueous	12-Dec-96 Equipment Rinsate	13-Dec-96		14-Dec-96	1 -	-	-	-	- 1		1.	1.	-			1.	1 -	-	- 1		-		-		









4.0 CONSTRUCTION CERTIFICATION

To the best of our knowledge and belief, closure of the BFSA was completed in accordance with the NYSDEC approved OHM Work Plan (OHM, 1996c) and the NYSDEC STARS Memo #1, as part of the overall removal/closure program of the Aircraft Refueling System at the PAFB, New York.

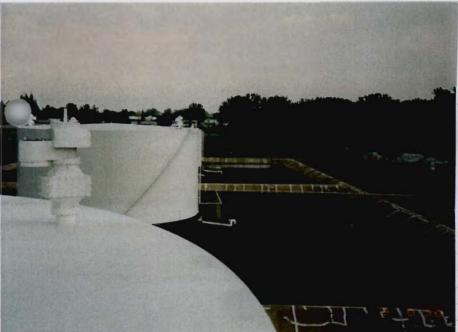


Signature:

David A. Brown, P.E.

Date:

APPENDIX A SITE PHOTOGRAPHS



PHOTOGRAPHIC LOG PARSONS ENGINEERING SCIENCE, INC.

PROJECT: LOCATION:

Demolition at Bulk Storage Area Plattsburgh Air Force Base

PROJECT #:

727307

CLIENT:

OHM/AFCEE

Description:

Previous aboveground storage tanks

at bulk storage area

Photo By:

CRA



Description:

Pumphouse demolition at bulk

storage area

Photo By:

CRA



Description:

Pumphouse demolition at bulk

storage area

Photo By:

CRA



2017



PHOTOGRAPHIC LOG PARSONS ENGINEERING SCIENCE, INC.

PROJECT: Demolition at Bulk Storage Area
LOCATION: Plattsburgh Air Force Base
727307
CLIENT: OHM/AFCEE

Description: Tank demolition at Bulk Storage
Area

Photo By: CRA

Description: Tank demolition at Bulk Storage
Area

Photo By: CRA

Description: Tank demolition at Bulk Storage
Area

Photo By: CRA



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PHOTOGRAPHIC LOG PARSONS ENGINEERING SCIENCE, INC.

PROJECT: Demolition at Bulk Storage Area
LOCATION: Plattsburgh Air Force Base
PROJECT #: 727307
CLIENT: OHM/AFCEE

Description: Demolition of retainment system

Photo By:

Description: Demolition of retainment system

CRA

Photo By:

Description: Site restoration

Photo By: CRA



PHOTOGRAPHIC LOG PARSONS ENGINEERING SCIENCE, INC.

PROJECT: OWS Removal at Bulk Storage Area
LOCATION: Plattsburgh Air Force Base

PROJECT #: 727307

CLIENT: OHM/AFCEE

Description: Vent pipe prior to excavating oil water separator

Photo By: CRA



Description: Partial excavation of oil water separator

Photo By: CRA

Description: Removal of oil water separator

Photo By: CRA

I:\USERS\67149\PAFB\PUMPS\PHOTO.XLS



PHOTOGRAPHIC LOG PARSONS ENGINEERING SCIENCE, INC.

PROJECT: OWS Removal at Bulk Storage Area
LOCATION: Plattsburgh Air Force Base

PROJECT #: 727307
CLIENT: OHM/AFCEE

Description: Partial excavation of Port Henry oil water separator

Photo By: CRA



Description: Excavated Port Henry oil water separators

Photo By: CRA

APPENDIX B AST AND OWS CLOSURE REPORTS

- B.1 AST-2073, AST-2075, AND AST-2077
- **B.2** OWS-2068 (PORT DOUGLAS OWS)
- **B.3 OWS-2073 (BULK STORAGE AREA OWS)**

B.1 AST-2073, AST-2075, AND AST-2077

AST-2073, AST-2075 AND AST-2077 CLOSURE REPORT OHM REMEDIATION SERVICES CORP. PLATTSBURGH AIR FORCE BASE Delivery Order 0003

Date: 11/08/97

OHM Project No. 17257

AST Nos.: AST-2073, -2075 and -2077

AST Size: Two 1.26 Million-Gallon and One 0.84 Million-Gallon

AST Location: Bulk Fuel Storage Area

TABLE OF CONTENTS

Data Summary Sheet

➤ Site Location

➤ AST Information

➤ Sources of Contamination

➤ Site Geology

➤ Soil Quality Analytical Data

➤ Groundwater Quality Analytical Data

Attachment I - Sampling and Analysis Site Reports

➤ Analytical Results (Soil)

➤ Analytical Results (Liquid)

➤ Split Sample Analytical Results - Not Applicable

➤ Soil Sample Collection Log

➤ Sample Location Map (Site Map)

Comments:

Two 1.26 million-gallon above ground storage tanks (ASTs) (ASTs 2075 and 2077) and one 0.84 million-gallon AST (AST 2073) and their associated piping were removed from the Bulk Fuel Storage Area (BFSA). Between 02/23/96 and 03/04/96, the AST feeder pipelines were drained, pigged, and cleaned. The three ASTs had been previously emptied and cleaned prior to OHM's arrival on site. Each AST was surrounded by concrete-surfaced earthen berms forming a secondary containment area. All of the ASTs were installed on concrete foundation pads, and compacted bentonite clay floored each secondary containment area. In June 1996, the ASTs were removed and the steel tanks were cut up for recycling. The AST pipelines were coated with asbestos; therefore, the pipeline removal was handled as an asbestos abatement. Removal of the AST pipelines was completed in July 1996.

Prior to the removal of these tanks, soil samples were collected to determine if past repainting activities had contaminated the soil surrounding the ASTs with lead. On 03/26/96, eight grab soil samples were collected from the AST 2075 secondary containment area just below the ground surface. On 04/03/96 and 04/10/96, additional samples were collected from the same eight locations to determine if lead were present in the soil beneath the layer of bentonite. All 16 samples were sent off site for total lead analysis. Lead was not detected in any sample at concentrations above the $400 \mu g/g$ screening level, which was the lead concentration action level established for remediation of the two small arms ranges on Base.

Between 07/11/96 and 07/24/96, a series of headspace samples were collected during the AST pipeline removal. A total of 84 samples were collected for headspace screening using a portable PID instrument. Soil with headspace readings above 20 ppm was excavated and transported to the on-site soil treatment cell. On 07/12/96, one grab soil sample was collected from the AST 2075 pipeline removal trench and a second soil sample was collected from the AST 2077 removal trench. Both samples were analyzed for volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs). No VOCs or PAHs were detected in the sample collected from the AST 2075 trench at concentrations above the NYSDEC TCLP Alternative Guidance Values. Three VOCs and seven PAHs were detected in the AST 2077 sample at concentrations above Guidance Values.

On 08/08/96, the four monitoring wells around the BFSA were sampled. Three of the wells are located downgradient of the three former AST locations. The fourth well is located upgradient of the former tanks. The samples were sent off site for VOC and semivolatile organic compound (SVOC) analysis. No compounds were detected at concentrations above the NYSDEC Class GA Groundwater Standards.

After removal of the three ASTs and their associated distribution piping, two Geoprobe® Investigations (09/30/96-10/04/96 and 12/10/96-12/12/96) were performed to delineate the extent of contamination in both the soil and groundwater at the BFSA. The samples were sent off site for VOC and PAH analysis. Six of soil samples contained VOCs at concentrations at or above the Guidance Values while 12 of the groundwater samples contained VOCs at or above the Groundwater Standards. PAHs were detected in one soil sample and five groundwater samples at concentrations equivalent to or above the action levels. The analytical results for the Geoprobe® investigation are presented in Appendix C of the ARS Closure Report.

DATA SUMMARY FOR TECHNICAL REPORT SUBMITTAL							
Date: 11/08	3/97			-			
AST Nos.: AS	ST-2073, -2075,	2077 AS	T Location: <u>Bulk</u>	Fuel Storage	Area		
Street Address	s: Connecticut	Road, Bulk Fue	l Storage Area				
	Plattsburgh A	AFB, NY 12901					
Consultant	Information						
Consultant Co	ompleting Repor	t: <u>Par</u>	sons ES		_		
Contact Perso	n and Telephone	e No: <u>Ed</u>	ward J. Ashton ((315) 45 <u>1-956</u>	0		
Mailing Addr	ess:	29	0 Elwood Davis	Road, Suite 31	2		
		<u>Liv</u>	verpool, NY 130	88			
Site Loçation	on/Description	ı Yes/No				Yes/No	
Municipal wate	er in area?	Yes	Basements (v	within 250 feet)?	? .	No	
Municipal wate	er supplied to site?	Yes Yes	Water supply	wells (within 1	,000 feet)?	No	
Municipal sewe	er in area?	Yes	Surface water	r body (within 1	,000 feet)?	Yes	
Storm sewer in	area?	<u>No</u>					
AST Inform	nation AST	Dimension: 67' D	Dia x 40'L (2073) Dia x 40'L (2075 &	2077)	Mat'l of Const.:	Tank - Steel Pip	ing - 8" Steel
AST No.	Product Type	AST Condition 0 - Perforated 4 - No Corrosion	Capacity (Gallons)	Quantity Removed (Gallons)	AST Removed Yes/No	Piping Condition 0 - Perforated 4 - No Corrosion	Piping Removed Yes/No
2073	JP-4	4	0.84 million	0.0	Yes	4	Yes
2075	ЈР-4	4	1.26 million	0.0	Yes	4	Yes
2077	JP-4	4	1.26 million	0.0	Yes	4	Yes
		HO = Heating Oil,	G= Gasoline, D = Die	sel, UG = Unleaded	Gas, JP-4 – Jet Fuel		
Suspected S Eliminated?	Sources of Con Yes	ntamination	Tw	o 1.26 million-	gallon and one ().84 million-gallo	n AST
Free phase pro Contaminated Did sample ar Did sample ar	oduct encountered soil encountered nalysis indicate goallysis indicate analysis indicate a	d? Yes groundwater con attainment of soi	xx tamination above	Amt. exca e NYSDEC Gr a? No	avated (YD³) <u>~9</u> oundwater Stand	Noxx 52 No dards? Yes*	
System, Volum				,			

DATA SUMMARY FOR TECHNICAL REPORT SUBMITTAL

Site Geology

Depth to bedrock:

> 50 feet

Average depth to groundwater:

2.5 - 6.5 feet

General groundwater flow direction:

East, toward Lake Champlain

,		_						
Sample Designation		ARSBSA2075-N5	ARSBSA2075-N10	ARSBSA2075-E5	ARSBSA2075-E10	ARSBSA2075-S5		
Date	Sampled	03/26/96	03/26/96	03/26/96	03/26/96	03/26/96		
Parameters	Method		C	Concentrations (ppm)				
Total Lead	6010	60	120	10.0	13.0	13.5		
Sample De	esignation	ARSBSA2075-S10	ARSBSA2075-W5	ARSBSA2075-W10	ARSBSA-E5A	ARSBSA-E10A		
Date	Sampled	03/26/96	03/26/96	03/26/96	04/03/96	04/03/96		
Parameters	Method	Concentrations (ppm)						
Total Lead	6010	9.0	16.5	21.0	4.5	9.5		
Sample De	esignation	ARSBSA-S5A	ARSBSA-S10A	ARSBSA-N5A	ARSBSA-N10A	ARSBSA-W5A		
Date	e Sampled	04/03/96	04/03/96	04/10/96	04/10/96	04/10/96		
Parameters	Method	Concentrations (ppm)						
Total Lead	6010	6.0	6.0	8.5	5.5	5.0		
Sample D	esignation	ARSBSA-W10A						
Date	e Sampled	04/10/96						
Parameters	Method		C	Concentrations (ppm)				
Total Lead 6010		5.5						

DATA SUMMARY FOR TECHNICAL REPORT SUBMITTAL

Site Geology

Depth to bedrock: > 50 feet Average depth to groundwater: 2.5 - 6.5 feet

General groundwater flow direction: East, toward Lake Champlain

Soil Quality Analytical Data

Sam	ple Designation	EX2075-5E	EX2077-2W					
	Date Sampled	07/12/96	07/12/96					
Parameters	Method			Concentrations (ppb)				
МТВЕ	8021	ND ,	ND					
Benzene	8021	ND	ND					
Trichloroethylene	8021	ND	ND					
Toluene	8021	ND	ND					
Ethylbenzene	8021	ND	2171.4					
Xylenes (total)	8021	ND	7045.3					
Total BTEX	8021	ND	9216.7					
Naphthalene	8270	· ND	ND	χ.				
Total SVOCs	8270	192	4452					

Groundwater Quality Analytical Data (Monitoring Well Samples)

Sample Designation		MWPOL-1	MWPOL-2	MWPOL-3	MWPOL-4	MWPOL-4D
	Date Sampled	08/08/96	08/08/96	08/08/96	08/08/96	08/08/96
Parameterș	Method		C	Concentrations (ppb)	
МТВЕ	8021	ND	ND	ND	ND	ND
Benzene	8021	ND	ND	ND	ND	ND
Trichloroethylene	8021	ND	ND	ND	ND	ND
Toluene	8021	ND	ND	ND	ND	ND
Ethylbenzene	8021	ND	ND	ND	ND	ND
Xylenes (total)	8021	ND	ND	ND	ND	ND
Total BTEX	8021	ND	ND	ND	ND	ND
Naphthalene	8270	ND	ND	ND	ND	ND
Total SVOCs	8270	19.8	4.6	3.2	3.8	ND

Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17257

Site: Bulk Storage Area

Revised Report Date: 11/08/97 Original Report Date: 03/28/96

Sample Collection:

-On 03/26/96, eight grab soil samples were collected from the above ground storage tank (AST) 2075 secondary containment area. Samples ARSBSA2075-N5, -S5, -E5, and -W5 were collected 5 feet away from the tank on the north, south, east, and west sides, respectively. A second sample (ARSBSA2075-N10, -S10, -E10, and -W10) was collected 10 feet away from the tank on each of the four sides. All eight samples were collected beneath a layer of stone from a depth of 6 to 8 inches.

On-Site analysis:

-No samples were analyzed on site.

Off-Site Analysis:

-The samples were shipped to Adirondack Environmental Services for Total Lead analysis by EPA Method 6010.



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CLIENT: OHM Remediation Services Date Sampled: 03/26/96 CLIENT'S SAMPLE ID: ARSBSA2075-N5 Date sample received: 03/27/96

AES sample #: 960327 BO1 . Samples taken by: J. Nichols Location: Plattsburgh AFB

MATRIX: Soil grab

PARAMETER PERFORMED METHOD RESULT UNITS NOTEBK REF TEST DATE

Lead EPA-6010 60 ug/g BS-I-1G-70 03/27/96



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CLIENT: OHM Remediation Services

Date Sampled:

03/26/96

CLIENT'S SAMPLE ID: ARSBSA2075-N10

Date sample received: 03/27/96

AES sample #: 960327 BO2

Samples taken by: J. Nichols

Location: Plattsburgh AFB

MATRIX: Soil

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF TEST DATE
Lead	EPA-6010	120	ug/g	BS-I-1G-70 03/27/96



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CLIENT: OHM Remediation Services

Date Sampled:

03/26/96

CLIENT'S SAMPLE ID: ARSBSA2075-E5

AES sample #: 960327 BO3

Date sample received: 03/27/96

Location: Plattsburgh AFB

Samples taken by: J. Nichols MATRIX: Soil

PARAMETER PERFORMED	METHOD	RESULT	<u>UNITS</u>	NOTEBK REF TEST DATE
Lead	EPA-6010	10.0	ug/g	BS-I-1G-70 03/27/96



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CLIENT: OHM Remediation Services

Date Sampled:

03/26/96

CLIENT'S SAMPLE ID: ARSBSA2075-E10

Date sample received: 03/27/96

AES sample #: 960327 BO4

Samples taken by: J. Nichols

Location: Plattsburgh AFE

MATRIX: Soil

PARAMETER PERFORMED	METHOD	RESULT	<u>UNITS</u>	NOTEBE REF TEST DAT
Lead	EPA-6010	13.0	ug/g	BS-I-1G-70 03/27/9



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CLIENT: OHM Remediation Services

Date Sampled:

03/26/96

CLIENT'S SAMPLE ID: ARSBSA2075-S5

PARAMETER PERFORMED

Date sample received: 03/27/96

AES sample #: 960327 BO5

Samples taken by: J. Nichols

grab

Location: Plattsburgh AFB

TEST DATE

MATRIX: Soil

<u>UNITS</u>

NOTEBK REF

Lead

EPA-6010

METHOD

13.5

RESULT

ug/g

BS-I-1G-70 03/27/96



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CLIENT: OHM Remediation Services

Date Sampled:

03/26/96

CLIENT'S SAMPLE ID: ARSBSA2075-S10

Date sample received: 03/27/96

AES sample #: 960327 BO6

Samples taken by: J. Nichols

Location: Plattsburgh AFB

MATRIX: Soil

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	9.0	ug/g	BS-I-1G-70	03/27/96



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CLIENT: OHM Remediation Services

Date Sampled:

03/26/96

CLIENT'S SAMPLE ID: ARSBSA2075-W5

AES sample #: 960327 BO7

Samples taken by: J. Nichols

Date sample received: 03/27/96 ols Location: Plattsburgh AFB

MATRIX: Soil

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF TEST DATE
Lead	EPA-6010	16.5	ug/g	BS-I-1G-70 03/27/96



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CLIENT: OHM Remediation Services

Date Sampled:

03/26/96

CLIENT'S SAMPLE ID: ARSBSA2075-W10

Date sample received: 03/27/96

AES sample #: 960327 BO8

Samples taken by: J. Nichols

Location: Plattsburgh AFB

MATRIX: Soil grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE

Lead

EPA-6010

21.0

ug/g

BS-I-1G-70 03/27/96

APPROVED BY:

Report date: 03/28/96

Soil Sample Collection Log Plattsburgh AFB - Project # 17257/17499

 $Pg. \underline{1} of \underline{2}$

Date: 3-26-46

Samplers: \(\mathcal{IN}\)/mB

Weather: Sunny/450

Sample		PID	Comp/	Sample	Coord	nates	Sample	# of
ID	Time	Screen	Grab	Depth (ft)	Ref. Pt.	Ref. Pt.	Description	Bottles
ARSBSA2075-N5	7-26-46	N/A	6	6"-8"	N/A	N/A	Bin/Ging Mud	1 × 400
RSBSAZOTS-NIO	3-26-46	N/A	6	6"-8"	NA	N/A	Bin/Gry Mul	18402
ASBSA2075-ES	3-26-96	N/A	6	6"-8"	N/A	N/A	Bin/Gig mud	1 × 462
ARSOSA 2075-E10	3-26-46	N/A	6	6"-8"	N/A	N/A	Bin /Gry mud	1 X 4oz
4 RS BS A 2015-55	3-26-96	N/A	6	6"-8"	N/A	MA	BIN./Gry mud	1 X40Z
ARS BSA2075-910	3-26-46	W/A	6	6"-8"	N/A	NA	Brn/Gry und	1 2400
ARSBSAZUTS-US	1/36 3-26-96	N/A	6	6"-8"	N/A	N/A	Bin/Gry mud	LXHOT
A 1588A2015-WO	3-26-46	NA	6	6"-8"	NA	N/A	B111/61 md	1 Xter
		 						
		-						
				1				- 1

Ref. Pt:	_
Ref. Pt :	
Map Attached: Yes No	•
Sample Type: Screening Confirmation Disposal/Cha	racterization
Split sample Collected: Yes No	
Laboratory Destination: Adironduk COC # 174054	Airbill # 93/7/687
Duplicate Collected: Yes No	Rinsate Collected: Yes No
On-Site Laboratory Chain of Cust	
Requested Analysis: VOCs SVOCs	Other Tatul Pb
Requested Analysis: Vocs SVOCs Relinquished by (dd/tt): fauth 7-71/hl 3-26-46 (645)	Received by (dd/tt):
	Received by (dd/tt):

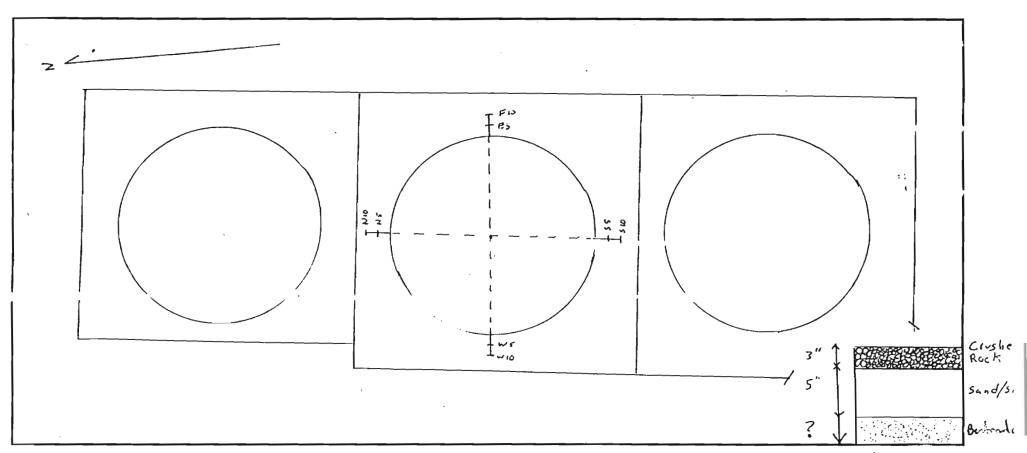
Sample Location Map

Plattsburgh Air Force Base - Project Numbers 17257 and 17499

Date: 3 - 26 - 96

Site Name: ARSBSA - 2075

Page $\frac{2}{\sqrt{2}}$ of $\frac{2}{\sqrt{2}}$



Comments/Observations:

- Sumples taken ut 5' & 10' from base of tank
 Sample depth was between 6" & 8" from Rock surface
- Not to Scale

V.L.N. 780 Prepared by:



CHAIN-OF-CUSTODY RECORD



Field Technical Services
Rev. 08/89

174054

Q.I	H. MATERIALS	CORF	· •	•	P.(D. BOX 551	• FINDLAY, OH 4583	9 551	•	419	419-423-3526			
PROJ.	757 M T'S REPRESENTATIV OAVE FAIN BAMPLE	ike swe	Quin Th	Γ.	1	ATA	PROJECT TELEPHONE NO. 518-562-5524 AGERISUPERVISOR TELEPHONE NO.		NUMBER OF CONTAMERS	SEP	ANALYSIS DESIRED INDICATE SEPARATE CONTAINERS) AES #			
\top	NUMBER NISAWTENT	3-24-4		COMP	X GRAB	Grew/Br	SAMPLE GESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)		1	+	REMARKS 460327801			
+	an-Stagas is	-	-		X	LOTON / BION	4K 2075- JP4	4	1		7/2007/33/74			
	R583A2075-85 USB3A2075-860	-	 		Υ,	Graylan	TANK 2075- JP4	4	1		803 804			
+	ASBSA2075-55	}	 		X	ARSKSA	MANY SCAN TONK 2675- JP4		1		805			
┰	RSBS A2075-510		 -		X	ARSRSA	in mid from Tank 2015-JA4 in Mid Evam	7	ì		806			
+	RSBSA2075-W5 RSBSA2075-W0		+-	_	X	AKSRSA Grew/Brow	MAN 2075-JP4 M Mud fix M Prak 2075- JP	.,,,,	1		807 B08			
			,			ANIBA	7486	31						
TRANSFER	ITEM NUMBER				ANSI IQUIS	FERS HED BY	TRANSFERS ACCEPTED BY	e e e e e e e e e e e e e e e e e e e	DATE	TIME	- 			
1 2	-	- 4	Tenati	han	L. J.	Vichels	Fed EX A11 6:41 9317148313	753	3-26-46	1610	- 724 hour TAT - Temp blank included			
3									i					
4							M. Kell	4	3/27/96	9:38	38 Janutha T. Hick			

Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17257

Site: Bulk Storage Area

Revised Report Date: 11/08/97 Original Report Date: 04/11/96

Sample Collection:

-On 04/03/96, grab soil samples were collected from the above ground storage tank (AST) 2075 secondary containment area. Two samples (ARSBSA-E5A and ARSBSA-E10A) were collected from the east side of AST 2075 and two samples (ARSBSA-S5A and ARSBSA-S10A) were collected from the south side. These four samples were collected beneath the bentonite layer from a depth of 2 feet.

-On 04/10/96, four additional grab samples were collected from the AST 2075 secondary containment area. Two samples (ARSBSA-N5A and ARSBSA-N10A) were collected from the north side of AST 2075 and two samples (ARSBSA-W5A and ARSBSA-W10A) were collected from the west side. The layer of bentonite was thicker in these areas. Therefore, the depths of these samples ranged from 3 to 4 feet.

On-Site analysis:

-No samples were analyzed on site.

Off-Site Analysis:

-The samples were shipped to Adirondack Environmental Services for Total Lead analysis by EPA Method 6010.



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CLIENT: OHM Remediation Services

Date Sampled:

04/03/96

CLIENT'S SAMPLE ID: ARSBSA-E5A

Date sample received: 04/11/96

AES sample #: 960411 AO1

Samples taken by: Client

Location: Plattsburgh AFB

MATRIX:

Sludge

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	4.5	na/a	BS-T-1G-81	04/11/96



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CLIENT: OHM Remediation Services

Date Sampled:

04/03/96

CLIENT'S SAMPLE ID: ARSBSA-E10A

Date sample received: 04/11/96

AES sample #: 960411 AO2

Samples taken by: Client

Location: Plattsburgh AFB

MATRIX:

Sludge

PARAMETER PERFORMED	<u>METHOD</u>	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	9.5	ug/g	BS-I-1G-81	04/11/96



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CLIENT: OHM Remediation Services

Date Sampled:

04/03/96

TEST DATE

CLIENT'S SAMPLE ID: ARSBSA-S5A

Date sample received: 04/11/96 Location: Plattsburgh AFB

AES sample #: 960411 AO3

Samples taken by: Client MATRIX:

Sludge

grab

NOTEBK REF

PARAMETER PERFORMED

<u>METHOD</u>

RESULT

<u>UNITS</u>

Lead

EPA-6010

6.0

ug/g

BS-I-1G-81 04/11/96



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OHM Remediation Services

Date Sampled:

04/03/96

CLIENT'S SAMPLE ID: ARSBSA-S10A

AES sample #: 960411 AO4

Samples taken by: Client

Date sample received: 04/11/96 Location: Plattsburgh AFB

MATRIX: Sludge grab

PARAMETER PERFORMED	<u>METHOD</u>	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE

Lead

EPA-6010

6.0

ug/g

BS-I-1G-81 04/11/96



314 North Pearl Street • Albany, New York 12207 • 518 434-4546 • Fax: 518 434-0891

CLIENT: OHM Remediation Services

Date Sampled:

04/10/96

CLIENT'S SAMPLE ID: ARSBSA-W5A

AES sample #: 960411 AO5

5.0

Date sample received: 04/11/96 Location: Plattsburgh AFB

MATRIX:

Samples taken by: Client Sludge

grab

PARAMETER PERFORMED **METHOD** RESULT <u>UNITS</u> NOTEBK REF TEST DATE

Lead EPA-6010 ug/g

BS-I-1G-81 04/11/96

Soil Sample Collection Log Plattsburgh AFB - Project # 17257/17499

Pg. **1** of **3**

of

Bottles

Date: 4-10-96

Sample

ID

Relinquished by (dd/tt):_

Relinquished by (dd/tt):_

Site: ARSBSA-2075

Weather: Rain Snew 32

Samplers:

Sample

Depth (ft)

PID

Screen

Time

Comp/

Grab

Coordinates

Ref. Pt. Ref. Pt.

Sample

Description

ARSBSA-NFA	1145	N/A	6	3′	N/A	N/A	Grey Mud	18402
ARSBSA-NIUN	1307	N/A	6	3 '	N/A-	NA	Grey Mud	11402
ARSBSA-W5A	1120	N/A	6	4'	N/A	N/H	Grey mud	1 × 402
A RSBSA-WIOA	1100	N/A	6	4'	N/A	MA	Grey mud	1 *402
	<u> </u>							
Ref. Pt :_							•	
Ref. Pt:_						-		
Map Attached:	_	No		w				
Sample Type:	Screening	L Confirm	ation	Disposal/C	haracteriz	ation		
Split sample Co	llected:	Yes (No					
Laboratory Dest	ination: Ada	renduct	COC#	174037		Airbill #	9317168906	
· :				1			: Yes	
-		On-Site	Laborato	ry Chain of (Custody / I	Request f	or Analysis	
Requested Anal	ysis:	VOCs	•	SVOCs	Other	To ful	led (Pb)	

Received by (dd/tt):_

Received by (dd/tt):_

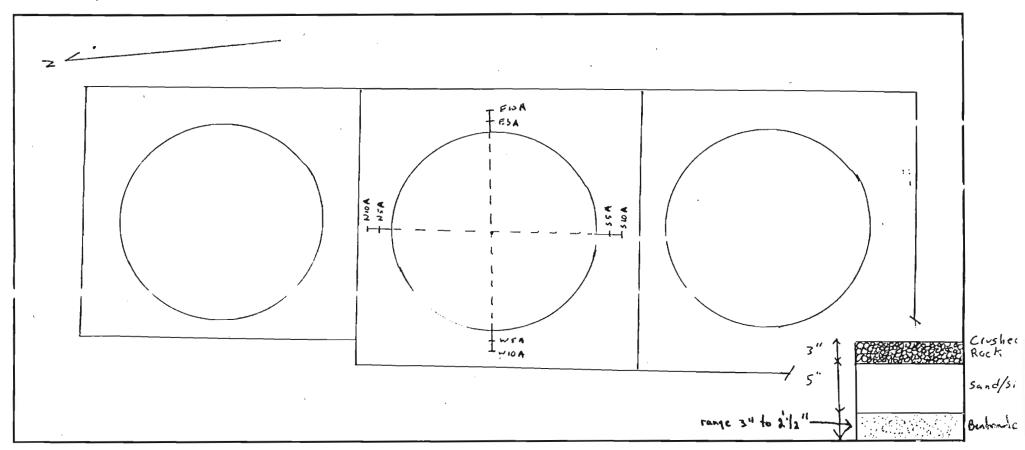
Sample Location Map

Plattsburgh Air Force Base - Project Numbers 17257 and 17499

Date: 04/10/96

Site Name: ARSBSA - 2075

Page __3_ of _3__



Comments/Observations:

- Sumples to Ken ut 5' & 10' from bue cs tank
 Samples taken below benton-te layer, Range 3 inches to 2 feet 6 inches
- Not to Scale

Prepared by:

V.L.N. 7840



CHAIN-OF-CUSTODY RECORD

LAB COPY

Form 0019
Field Technical Services
Rev. 08/89

174037

_																			
	O.H. MATERIALS	S CORF	P	•	Ρ.	O. BOX 551 •		•	419	9-423	3-3526	<u> </u>							_
PR	OJ. NO. PROJE 7257 IENT'S REPRESENTATION PAVE FARMS	CT CONT	uerth Ken Kekkunen					NUMBER CONTAINERS	(INE	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)									
ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SA (IN F	MPLE DESCRIPTION CLUDE MATRIX AND POINT OF SAMPLE)	OF		Ri	\w\/	//	//		/		REMARK	(S	
1	ARSBSA-E5A	4-3-96	1035		X	Grey Mud-	- Below Bedonite	12402	X										
2	HRSBSA-EIOA	4-3-16	1000		X	lercy Mud-	Below Bentonite	IX40Z	X										
3	AKSBSA-S5A	4-3-96	1130		χ		Below Bentonite	1 ×402	X										,
4	ARSBSA-SIOA	4-3-96	1100		X	Grey mid-	Below Bentonite	1 x 4 02	X										
5	ARSBSA-W5A	410-46	1120		Х	Grey mud-1	1 x 46Z	X											
6	ARSBSA-WOA	4-10-46	1106		X	Grey mud-1	1 × 402	X											
7	ARSBSA-N5A	4-10-46	1145		Х	Lauer	Below Bentenite	14402	X										
8	ARSBSA-NIOA	4-10-96	1307		X	Giey mud-B	elew Bentenite	12402	1										
9																			
10																			
	ITEM NUMBER	NUMBER RELINQUISHED BY ACCEPTED BY				ACCEPTED BY	DATE T	IME	ĺ	ARKS - 24	! hi	: 7	A	<u> </u>	hded				
	1 1-8	1-8 Vonuthun L. Nichols Fed. Ex Air Bill # 4317168 406				4+046 15	30	-	Ter	1p	6/44	t	/na	luded					
	2																		
	3																		
_	4									SAME	LER'S S	ZZ.	JAE	-/	Tie	hole			
										/									

Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17257

Site: Bulk Fuel Storage Area, AST Pipe Removal

Revised Report Date: 12/01/97 Original Report Date: 07/26/96

Sample Collection:

-Between July 11 and July 24, 1996, a series of headspace samples were collected during the removal of the above ground storage tank (AST) pipelines at the Bulk Fuel Storage Area (BFSA). A total of 84 headspace samples were collected. The headspace sampling locations and corresponding photoionization detector (PID) readings are shown on the attached maps.

-On 07/12/96, two grab soil samples were collected from the pipeline removal trenches within the AST berms. One sample (EX2075-5E) was collected within the AST 2075 berm and the other sample (EX2077-2W) was collected within the AST 2077 berm.

On-Site analysis:

- -Both soil samples were analyzed for VOCs and PAHs by EPA Methods 8021 and 8270, respectively.
- -o-Xylene, which was detected in sample EX2077-2W, was also present in associated method blanks (PID2753 and PID2765).

Off-Site Analysis:

-No samples were shipped off site for analysis.

Plattsburgh AFB Analytical Results

7/12/96

SampleID: EX2075-5E RE(8021)

Matrix: Soil/Solid

Site ID: ARSBSAPLA

Project No.: 17257

Date:

Time:

1135

Test Code:

8021

Lab:

on-site

Description : Volatiles

Date Extracted: 7/25/96

Date Analyzed: 7/25/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
МТВЕ	ng/g	40	1000	ND	
Benzene	ng/g	5	14	ND	
Trichloroethylene	ng/g	5	700	ND	
Toluene	ng/g	5	100	ND	
Ethylbenzene	ng/g	5	100	ND	
m,p-Xylene	ng/g	5	100	ND	
o-Xylene	ng/g	5	100	ND	

Test Code: 8270 Lab: on-site

Description: Semivolatiles

Date Extracted: 7/16/96 Date Analyzed: 7/16/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	333	200	ND	
Acenaphthene	ng/g	333	400	ND	
Fluorene	ng/g	333	1000	ND	
Phenanthrene	ng/g	333	1000	ND	
Anthracene	ng/g	333	1000	ND	
Fluoranthene	ng/g	333	1000	103	J
Pyrene	ng/g	333	1000	89	J
Benzo(a)anthracene	ng/g	333	0.04	ND	
Chrysene	ng/g	333	0.04	ND	
Benzo(b)fluoranthene	ng/g	333	0.04	ND	
Benzo(k)fluoranthene	ng/g	333	0.04	ND	
Benzo(a)pyrene	ng/g	333	0.04	ND	[
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND	
Dibenz(a,h)anthracene	ng/g	333	1000	ND	i i
Benzo(g,h,i)perylene	ng/g	333	0.04	ND	
Total PAHs	ng/g			192	

ng/g = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} TCLP Alternative Guidance Values obtained from the Stars Memo #1

Plattsburgh AFB Analytical Results

SampleID: EX2077-2W RE(8021/8270)

Matrix: Soil/Solid

Site ID:

ARSBSAPLA

Project No.: 17257

Date:

Date Analyzed: 7/24/96

Time: 7/12/96

1140

Test Code:

8021

Date Extracted: 7/24/96

Lab:

Test Code:

8270

Lab:

on-site

Description: Volatiles

on-site

Description: Semivolatiles

Date Extracted: 7/18/96

Date Analyzed: 7/19/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1000	1000	ND	D
Benzene	ng/g	125	14	ND	D
Trichloroethylene	ng/g	125	700	ND	D
Toluene	ng/g	125	100	ND	D
Ethylbenzene	ng/g	125	100 .	2171.4	#D
m,p-Xylene	ng/g	125	100	5666.7	#D
Ethylbenzene m,p-Xylene o-Xylene	ng/g	125	100	1378.6	#DB

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	333	200	ND	
Acenaphthene	ng/g	333	400	ND	
Fluorene	ng/g	333	1000	128	t l
Phenanthrene	ng/g	333	1000	1262	#
Anthracene	ng/g	333	1000	225	J
Fluoranthene	ng/g	333	1000	1169	#
Pyrene	ng/g	333	1000	957	
Benzo(a)anthracene	ng/g	333	0.04	298	#J
Chrysene	ng/g	333	0.04	128	#J
Benzo(b)fluoranthene	ng/g	333	0.04	126	#J
Benzo(k)fluoranthene	ng/g	333	0.04	47	#J
Benzo(a)pyrene	ng/g	333	0.04	112	#J
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND	
Dibenz(a,h)anthracene	ng/g	333	1000	ND	
Benzo(g,h,i)perylene	ng/g	333	0.04	ND	
Total PAHs	ng/g			4452	

ng/g = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} TCLP Alternative Guidance Values obtained from the Stars Memo #1



Blank ID: PID2753 QC Batch: NA

Test: 8021

Lab: on-site

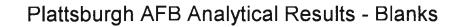
Matrix: Aqueous

Units: ug/l

Date Extracted: 7/24/96

Date Analyzed: 7/24/96

Parameter	Result	Flag	DetectionLimit
MTBE	ND		40
Benzene	ND		5
Trichloroethylene	ND		5
Toluene	ND		5
Ethylbenzene	ND		5
m,p-Xylene	ND		5
o-Xylene	10.47		5



Blank ID: PID2765

QC Batch: NA

Test: 8021

Lab: on-site

Matrix: Aqueous

Units: ug/l

Date Extracted: 7/25/96

Date Analyzed: 7/25/96

Parameter	Result	Flag	DetectionLimit
MTBE	ND		40
Benzene	ND		5
Trichloroethylene	ND		5
Toluene	ND		5
Ethylbenzene	ND		5
m,p-Xylene	ND		5
o-Xylene	.68	J	5

Soil Sample Collection Log

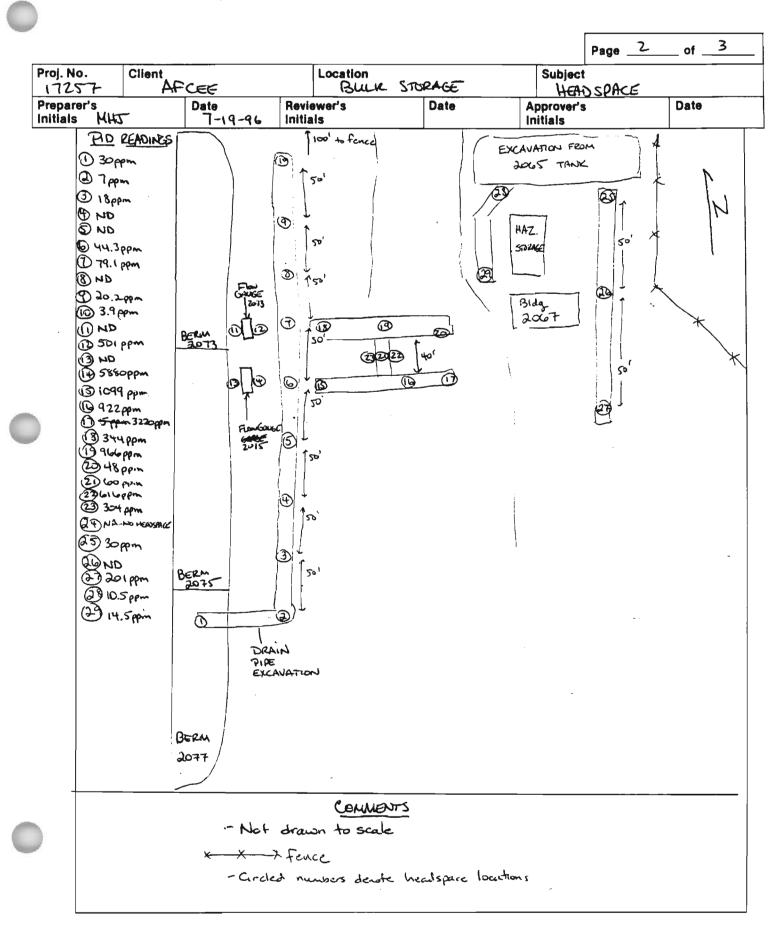
		F	Plattsbur	gh AFB - Pr	oject #17	257/17/49	9		(
Date: 7.12-	Site: Bulk Storage (2073,2075,2017) Pg. 1 of 25								
Weather.	7/1/3			oampiers.	MJ				
Sample ID EX 2075-5E	Time	PID Screen	Comp/ Grab	Sample Depth (ft)	1	inates Ref. Pt.	Sam Descr Brown S	iption	# of Bottles
EX 2077-2W		5807 ppm		3'			Bram 16	oney Soil	2 × 40 m2 1 × 4 or 2 × 40 m2
Map Attached: (Yes'	No			-				
•	-Reference -Head Spa		js:	Yes Yes	Z)0 Z)0				
Sample Type:	Screening	Confirma	tion	Disposal/Cl	naracteriz	ation			-
Requested Analy Split sample Coll		VOCs Yes	No	(SVOC)		Other:			
Laboratory Desti			COC #_			Airbill #_			
	Duplicate (Yes	(NO	Rinsate	Collected:	Yes	No	
		On-Site	Laborato	ry Chain of C	Custody / I	Request fo	or Analysis		-
Requested Analy	1.1	Vocs	, n	SVOCs		emperatu	1.1.	. 1)
Relinquished by	(dd/tt): <u>Ma</u>	U ! Jave	<u>\(\) \(\)</u>	1250	Received	d by (dd/tt): 7 and	y Loclie	1/12/0

OHM Remediation COMPUTATION SHEET Services Corp.

							Page \	of _	3
Proj. No	o.	Client		Location R. 0	k Storage	Subject			
Prepare Initials	·		Date 7-19-96	Reviewer's Initials	Date	Approver's		Date	
		pom	BERM	2073			ROAD		127
	D 25 25 25 25 25 25 25 25 25 25 25 25 25	per per per per per per per per per per							
. 1	© 60 60 60 60 60 60 60 60 60 60 60 60 60 6	M 2077 ① 4201pm ② 52ppm ① 18 ppm ② 126ppm ③ 126ppm 15 1ppm 15 4ppm	~ [†]	300	50				
				location fo			·		

OHM Remediation Services Corp.

COMPUTATION SHEET



OHM Remediation Services Corp.

OHM Remediation COMPUTATION SHEET

of _3 3 Page Proj. No. Client AFCEE Subject Storage 17257 Preparer's Initials MIHO Head space Date Reviewer's Approver's Initials Initials 7-23-96 PID READINGS SERV 1 5,315 ppm (8) 311 ppm 2404 1 3701 ppm 20 3270 ppm @ 660 ppm 2 3580pp 23 2880ppm 23 865 ppm BERM 250 EXISTING EXCAVATION (3) COMMENTS Not drawn to scale Circled numbers represent headspace locations



ONE RESEARCH CIRCLE TELEPHONE (607) 565-3500

Page 3 of 3 WAVERLY, NY 14892-1532 FAX (607) 565-4083

LAB SAMPLE ID

: 28735

OHM Remediation Services

DATE Aug 15, 1996

by CLIENT

SAMPLE SOURCE PLATTSBURGH, NY ORIGIN MWPOL-1 DESCRIPTION

GRAB, PAFB #17257 08/08/96 by C SAMPLED ON DATE RECEIVED 08/09/96

P.O. NO.

LP43082

PID ELCD

103

61

NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by: _

LAB DIRECTOR

The information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost of these services. Your samples will be discarded after 14 days unless we are advised otherwise.

Albany, NY

Buffalo, NY

Jamestown, NY

Boston, MA

Syracuse, NY

Watertown, NY



emivolatiles TELEPHONE (607) 565-3500

Page 2 of 3 ONE RESEARCH CIRCLE WAVERLY, NY 14892-1532

FAX (607) 565-4083

LAB SAMPLE ID : 28736

OHM Remediation Services

DATE Aug 13, 1996

SAMPLE SOURCE ORIGIN DESCRIPTION SAMPLED ON	PLATTSBURGH, NY MWPOL-2 GRAB, PAFB #17257 08/08/96 by CLIENT
DATE RECEIVED	08/09/96
P O. NO.	LP43082

4-Chloro-3-Methylphenol	XD<12
2-Methylnaphthalene	ND<6
Hexach Lorocyc Lopentadiene	ND<6
2,4,6-Trichtorophenol	ND<6
2,4,5-Trichlorophenol	ND<6
2-Chloronaphthalene	MD<6
2-Nitroaniline	ND <24
Dimethyl Phthalate	ND<6
Acenephthylene	MD<6
2,6-Dinitrotoluene	ND<6
3-Mitroaniline	ND<24
Acenaphthene	ND<6
2,4-Dinitrophenol	ND<24
Dibenzofuran	ND<6
2,4-Dinitrotoluene	ND <6
4-Nitrophenol	ND<24
Disthyl Phthalate	ND<6
Fluorene	ND<6
4-Chiorophenyi phenyi ether	ND<6
4-Nitroaniline	ND <24
2-Methyl-4,6-Dinitrophenol	ND<24
1,2-Diphenythydrazine	ND<6
n-Nitrosodiphenylamine	ND<6
Azobenzene	ND<6
4-Bromophenyl phenyl ether	ND<6
Hexach Lorobanzane	ND<6
Pentachlorophenol	ND<24
Phenanthrene	ND<6
Anthracene	ND<6
Di-n-Butyl Phthalate	1.7 J
Fluoranthene	ND <6
Benzidine	ND < 24
Ругепе	ND<6
Butỳi benzyl phthalate	. ND<6
Benzo(a)anthracene	AD<6
3,3-Dichlorobenzidine	ND<12
Chrysene	ND<6

NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by: .

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105

56

FAX (607) 565-4083

Page 3 of 3

LAB SAMPLE ID : 28736

OHM Remediation Services

DATE Aug 15, 1996

SAMPLE SOURCE PLATTSBURGH, NY ORIGIN MWPOL-2

DESCRIPTION GRAB, PAFB #17257

08/08/96 SAMPLED ON by CLIENT

08/09/96 DATE RECEIVED LP43082 P.O. NO.

PID ELCD

PA 68180 NJ 73168 EPA NY 00033 NY 10252

Approved by: .

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N DSemivolatiles TELEPHONE (607) 565-3500

ONE RESEARCH CIRCLE

Page 1 of 3 WAVERLY, NY 14892-1532

FAX (607) 565-4083

DATE Aug 13, 1996

SAMPLE SOURCE PLATTSBURGH, NY ORIGIN DESCRIPTION

MWPOL-3 GRAB, PAFB #17257

SAMPLED ON DATE RECEIVED P.O. NO.

08/08/96 by CLIENT 08/09/96

LP43082

Notebook Reference: 94-249-2405

Date Analyzed: 08/12/96

Date Extracted: 08/09/96

Plattsburgh NY 12901

LAB SAMPLE ID : 28737

Greg Guimond

P.O. Box 2202

OHM Remediation Services

BNA Extractables Analyst : PDB Method: SW846/8270/3510 Units : UG/L Compounds Detected Results ----n-Nitrosodimethylamine ND<5 Aniline ND<5 Bis(2-chloroethyl)ether ND<5 Phenol ND <5 2-Chlorophenol ND <5 1,3-Dichlorobenzene ND<5 1,4-Dichlorobenzene ND<5 1,2-Dichlarabenzene ND <5 Benzyl Alcohol ND<10 bis(2-Chloroisopropylether) ND <5 2-Methylphenol ND <5 Rexach Loroethane ND<5 n-Nitrosodi-n-propylamine ND <5

3-Metiylphenol/4-Methylphenol ND<5 Mitrobenzene ND<5 Isophorone ND<5 2-Nitrophenol ND<5 2,4-Dimethylphenal ND<5 Bis(2-chloroethoxy)methane ND <5 2,4-Dichlorophenol XD <5 1,2,4-Trichlorobenzene ND<5 Naphthalene NO < 5 Benzoic Acid ND<20

J-ANALYTE WAS DETECTED AT A CONCENTRATION LESS THAN THE PRACTICAL QUANTITATION LIMIT.

For questions regarding this report, please call and ask for Customer Services.

ND<10

ND<5

cc :

4-Chloroaniline

Hexach Lorobutadiene

NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by: _

LAB DIRECTOR

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ONE RESEARCH CIRCLE Semivolatiles TELEPHONE (607) 565-3500

Page 2 of 3 WAVERLY, NY 14892-1532

FAX (607) 565-4083

LAB SAMPLE ID : 28737

OHM Remediation Services

Aug 13, 1996

CAMPI E COMOCE	
SAMPLE SOURCE	PLATTSBURGH, NY
ORIGIN	
	MWPOL-3
DESCRIPTION	GRAB, PAFB #17257
CALABLED ON	
SAMPLED ON	08/08/96 by CLIENT
DATE RECEIVED	08/09/96
5.112112521125	
P.O. NO.	LP43082
	<u> </u>

4-Chioro-3-Methylphenol	ND<10
2-Methylnaphthalene	ND<5
Hexachlorocyclopentadiene	XD<5
2,4,6-Trichtaraphenol	ND<5
2,4,5-Trichlorophenol	₩D<5
2-Chloronaphthaisne	ND<5
2-Nitroaniline	ND<20
Dimethyl Phthalate	ND<5
Acenephthylene	ND<5
2,6-Dinitrotoluene	ND<5
3-Nitroaniline	ND<20
Acenaphthene	ND<5
2,4-Dinitrophenol	MD<20
Dibenzofuran	ND<5
2,4-Dinitrotoluene	ND<5
4-Nitrophenol	ND < 20
Diethyl Phthalate	MD<5
Fluorene	ND<5
4-Chicsophenyl phenyl ether	ND <5
4-Witroaniline	ND<20
2-Methyl-4,6-Dinitrophenol	MD<20
1,2-Diphenylhydrazine	ND<5
n-Nitrosodiphenylamine	ND<5
Azobenzene	ND<5
4-Bromophenyl phenyl ether	ND<5
Hexach Lorobenzene	ND<5
Pentachiorophenol	ND<20
Phenanthrene	ND<5
Anthracene	ND<5
Di-n-Butyl Phthalate	1.2 J
Fluoranthen e	ND<5
Benzidine	ND<20
Pyrene	ND<5
Butyl benzyl phthalate	ND<5
Benzo(a)anthracene	ND<5
3,3-Dichlorobenzidine	ND<10
Chrysene	ND<5

PA 68180 NJ 73168 EPA NY 00033 NY 10252

Approved by:

LAB DIRECTOR

The information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost of these services. Your samples will be discarded after 14 days unless we are advised otherwise.

Albany, NY

Buffalo, NY

Jamestown, NY

Boston, MA

Syracuse, NY

ONE RESEARCH CIRCLE

ORATORY

N · C ONE RESEARCH CIRCLE WAVERLY, NY 14892-1532

Page 3 of 3

FAX (607) 565-4083

Aug 13, 1996

LAB SAMPLE ID : 28737

OHM Remediation Services

Bis(2-ethylhexyl)phthalate	2.0
Di-n-Octyl Phthalate	ND<5
Benzo(b)fluoranthene	ND<5
Benzo(k)fluoranthene	ND<5
Benzo(a)pyrene	ND<5
Indeno(1,2,3-cd)pyrene	ND<5
Dibenzo(a,h)anthracene	ND<5
Benzo(ghi)perylene	ND<5
Surrogate Recovery (%)	
2-Fluorophenol	45
Phenol-d6	28
Nitrobenzene-d5	53
2-Fluorobiphenyl	52
2,4,6-Tribromophenol	80
Terphenyl-d14	61

NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by: .

LAB DIRECTOR

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Albany, NY

Buffalo, NY

Jamestown, NY

Boston, MA

Syracuse, NY



ONE RESEARCH CIRCLE TELEPHONE (607) 565-3500

WAVERLY, NY 14892-1532 FAX (607) 565-4083

Aug 15, 1996

LAB SAMPLE ID : 28737

OHM Remediation Services Greg Guimond

P.O. Box 2202

Plattsburgh NY 12901

and that will be to be to		
SAMPLE SOURCE	PLATTSBURGH, NY	
ORIGIN	MWPOL-3	
DESCRIPTION	GRAB, PAFB #17257	
SAMPLED ON	08/08/96 by CLIENT	
DATE RECEIVED	08/09/96	
P.O. NO.	LP43082	

SW846 8021 TARGET ANALYTES	Analyst : TGG	Natebook Reference: 96-132-4156
Method: SW846/8021/5030	Units : UG/L	Date Analyzed: 08/14/96
Compounds Detected	Results	
Dichlorodifluoromethane	MD<0.5	
Chloromethane	ND<0.5	
Vinyl Chloride	ND<0.5	
Bromomethane	ND<0.5	
Chloroethane	ND<0.5	
Trichlorofluoromethane	ND<0.5	
1,1-Dichloroethene	ND<0.5	
Methylene Chloride	ND<0.5	
trans-1,2-Dichloroethene	ND<0.5	
1,1-Dichloroethane	ND<0.5	
2,2-Dichloropropane	ND<0.5	
cis-1,2-Dichloroethene	ND<0.5	
Bromoch (oromethane	ND<0.5	
Chloroform	ND<0.5	
1,1,1-Trichloroethane	ND<0.5	
Carbon Tetrachloride	ND<0.5	
1,1-Dichloropropene	ND<0.5	
Benzene	ND<0.5	
1,2-Dichloroethane	ND<0.5	
Trichloroethene	ND<0.5	
1,2-Dichloropropene	ND<0.5	
Dibromomethane	ND<0.5	
Bromodichloromethane	ND<0.5	
2-Chioroethylvinylether	ND<0.5	
cis-1,3-Dichloropropene	ND<0.5	

For questions regarding this report, please call and ask for Customer Services.

cc :

NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by:

LAB DIRECTOR

The information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost of these services. Your samples will be discarded after 14 days unless we are advised otherwise.

Albany, NY

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ONE RESEARCH CIRCLE TELEPHONE (607) 565-3500

WAVERLY, NY 14892-1532 FAX (607) 565-4083

P.O. NO.

Page 2 of 3

LAB SAMPLE ID

: 28737

OHM Remediation Services

DATE : Aug 15, 1996

SAMPLE SOURCE
ORIGIN
DESCRIPTION
SAMPLED ON
DATE RECEIVED

PLATTSBURGH, NY
MWPOL-3
GRAB, PAFB #17257
08/08/96
by CLIENT
08/09/96

LP43082

Toluene	ND<0.5
trans-1,3-Dichloropropene	ND<0.5
1,1,2-Trichloroethane	XD<0.5
Tetrachloroethene	NO<0.5
1,3-Dichloropropane	ND<0.5
Dibromochloromethane	ND<0.5
1,2-Dibromoethane (EDB)	ND<0.5
Chilorobenzene	ND<0.5
1,1,1,2-Tetrachloroethane	ND<0.5
Ethylbenzene	ND<0.5
p-Xylene/m-Xylene	ND<0.5
o-Xylene	ND<0.5
Styrene	ND<0.5
Bromoform	ND<0.5
Isopropylbenzene	ND<0.5
8romobenzene	ND<0.5
1,1,2,2-Tetrachioroethane	ND<0.5
1,2,3-Trichloropropane	ND<0.5
n-Propytbenzene	ND<0.5
2-Chlorotoluene	ND<0.5
4-Chlorotoluene	ND<0.5
1,3,5-Trimethylbenzene	ND<0.5
tert-Butylbenzene	ND<0.5
1,2,4-Trimethylbenzene	ND<0.5
sec-Butylbenzene	ND<0.5
1,3-Dichlorobenzene	ND<0.5
1,4-Dichlorobenzene	ND<0.5
4-Isopropyltoluene	ND<0.5
1,2-Dichlorobenzene	ND<0.5
n-Butylbenzene	ND<0.5
1,2-Dibromo-3-chloropropane	ND<0.5
1,2,4-Trichlarobenzene	ND <q.5< td=""></q.5<>
Hexachlorobutadiene	ND<0.5
Naph that ene	ND<0.5
1,2,3-Trichlorobenzene	MD<0.5
MTBE	ND<5
Surrogate Recovery (%)	
•	

QC ()

NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by: _

LAB DIRECTOR

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LAB SAMPLE ID

: 28737

OHM Remediation Services

SAMPLE SOURCE ORIGIN DESCRIPTION SAMPLED ON DATE RECEIVED

P.O. NO.

PLATTSBURGH, NY MWPOL-3 GRAB, PAFB #17257 08/08/96 by CLIENT

Page 3 of 3

08/09/96 LP43082

PID ELCD 110

61

NY 10252 PA 68180 NJ 73168 EPA NY 00033

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LAB DIRECTOR

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Page 1 of 3 WAVERLY, NY 14892-1532 FAX (607) 565-4083

DATE Aug 13, 1996

LAB SAMPLE ID : 28738

OHM Remediation Services Greg Guimond P.O. Box 2202

Plattsburgh NY 12901

SAMPLE SOURCE ORIGIN DESCRIPTION SAMPLED ON DATE RECEIVED P.O. NO.	PLATTSBURGH, NY MWPOL-4 GRAB, PAFB #17257 08/08/96 by CLIENT 08/09/96 LP43082
--	--

BNA Extractables	Analyst : PDB	Notabook Reference : 94-249-248
Method : 5W846/8270/3510	Units: UG/L	Date Analyzed: 08/13/96
Compounds Detected	Results	Date Extracted: 08/09/96
************		***************************************
n-Nitrosodimethylamine	ND<5	
Antline	ND<5	
Bis(2-chloroethyl)ether	ND<5	
Phenoi	KD<5	
2-Chiorophenoi	ND <5	
1,3-Dichlorobenzena	ND<5	
1,4-Dichiorobenzene	ND<5	
1,2-Dichlorobenzene	ND<5	
Benzyl Alcohol	NO<10	
bis(2-Chloroisopropylether)	ND <5	
2-Methylphenol	ND<5	
Hexachloroethane	ND<5	
n-Nitrosodi-n-propylamine	ND<5	
3-Metliytphenal/4-Methylphenal	ND<5	
Nitrobenzene .	ND<5	
I sophorone	ND<5	
2-Nitrophenol	ND<5	
2,4-Dimethylphenol	NED<5	
Bis(2-chloroethoxy)methane	ND<5	
2,4-Dichlorophenal	ND<5	
1,2,4-Trichtorobenzene	ND<5	
Naph tha Lene	ND<5	
Benzoic Acid	ND<20	
4-Chloroaniline	ND<10	
Hexachlorobutadiene	ND<5	
I-ANALYTE WAS DETECTED AT A CONCENTA	ATION LESS THAN THE PRAC	TICAL
QUANTITATION LINIT.		

For questions regarding this report, please call and ask for Customer Services.

cc :

NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by:

LAB DIRECTOR

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Albany, NY

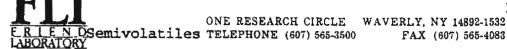
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Page 2 of 3

FAX (607) 565-4083

Aug 13, 1996

LAB SAMPLE ID : 28738

OHM Remediation Services

SAMPLE SOURCE : ORIGIN : DESCRIPTION : SAMPLED ON : OATE RECEIVED : P.O. NO. :	PLATTSBURGH, NY MWPOL-4 GRAB, PAFB #17257 08/08/96 by CLIENT 08/09/96 LP43082
--	--

4-Chlara-3-Methylphenol	ND<10
2-Hethylnaphthalene	ND <5
Hexachlorocyclopentadiene	ND<5
2,4,6-TrichLorophenol	NO <5
2,4,5-Trichtarophenal	XD<5
2-Chloronaphthalene	ND<5
2-Nitroaniline	NO<20
Dimethyl Phthalate	ND<5
Acenaphthylene	ND<5
2,6-Dinitrotoluene	ND<5
3-Nitroaniline	ND<20
Acenaphthene	ND<5
2,4-Dinitrophenol	ND<20
Dibenzofuran	ND<5
2,4-Dinitrotoluena	ND<5
4-Nitrophenol	ND<20
Diethyl Phthalate	ND<5
Fluorene	ND<5
4-Chlogophanyl phenyl ether	NO <5
4-Nitroaniline	ND < 20
2-Methyl-4,6-Dinitrophenol	ND < 20
1,2-Diphenythydrazine	ND <5
n-Nitrosodiphenylamine	ND<5
Azobenzene	ND <5
4-Bromophenyl phenyl ether	ND<5
Hexach Lorobenzene	ND <5
Pentachlorophenol	ND<20
Phenanthrene	XD<5
Anthracane	ND<5
Di-n-Butyl Phthalate	1.4 J
Fluoranthene	ND<5
Benzidine	ND<20
Pyrene	· ND<5
Butyl benzyl phthalate	ND<5
Benzo(a)anthracene	ND<5
3,3-Dichlorobenzidine	ND<10
Chrysene	ND<5

NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by: _

LAB DIRECTOR

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Semivolatiles TELEPHONE (607) 565-3500

Page 3 of 3 ONE RESEARCH CIRCLE WAVERLY, NY 14892-1532

FAX (607) 565-4083

Aug 13, 1996

LAB SAMPLE ID : 28738

OHM Remediation Services

SAMPLE SOURCE ORIGIN DESCRIPTION SAMPLED ON DATE RECEIVED P.O. NO.	PLATTSBURGH, NY MWPOL-4 GRAB, PAFB #17257 08/08/96 by CLIENT 08/09/96 LP43082
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	_
Bis(2-ethy(hexyl)phthalate	2.4
Di-n-Octyl Phthalate	ND<5
Benzo(b)fluoranthene	ND<5
Benzo(k)fluoranthene	ND<5
Benzo(a)pyrene	ND<5
Indeno(1,2,3-cd)pyrene	ND<5
Dibenzo(a,h)anthracene	ND<5
Benzo(ghi)perylene	ND<5
Surrogate Recovery (%)	
2-Fluorophenol	75
Phenol-dó	48
Nitrobenzene-d5	80
2-Fluorobiphenyt	80
2,4,6-Tribromophenal	83
Terphenyl -d14	07

NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by: _

LAB DIRECTOR

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Albany, NY

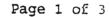
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Volatiles ONE RESEARCH CIRCLE WAVERLY, NY 14892-1532 TELEPHONE (607) 565-3500

FAX (607) 565-4083

Notebook Reference : 96-132-4151

Aug 15, 1996

LAB SAMPLE 10 : 28738

OHM Remediation Services Greg Guimond P.O. Box 2202

Plattsburgh NY 12901

SAMPLE SOURCE :	PLATTSBURGH, NY
ORIGIN :	MWPOL-4
DESCRIPTION :	GRAB, PAFB #17257
SAMPLED ON :	08/08/96 by CLIENT
DATE RECEIVED :	08/09/96
P.Q. NO. :	LP43082

SW846 8021 TARGET ANALYTES	Analyst : TGG	Notebook Reference : 96-1
Method : SW846/8021/5030	Units : UG/L	Date Analyzed: 08/14/96
Compounds Detected	Results	7500 711.00,000 1 00,14,70
Dichtorodifluoromethane	XD<0.5	
Chioromethane	ND<0.5	
Vinyl Chloride	XD<0.5	
Bromomethane	ND<0.5	
Chioroethane	ND<0.5	
Trichlorofluoromethane	NO<0.5	
1,1-Dichloroethene	ND<0.5	
Methylane Chloride	ND<0.5	
trans-1,2-Dichloroethene	ND<0.5	
1,1-Dichloroethane	ND<0.5	
2,2-Dichloropropane	ND<0.5	
cis-1,2-Dichlaroethene	NO<0.5	
Bromochioromethane	ND<0.5	
Chloroform	ND<0.5	
1,1,1-Exichloroethane	ND<0.5	
Carbon Tetrachloride	ND<0.5	
1,1-Dichloropropene	ND<0.5	
Benzene	ND<0.5	
1,2-Dichloroethane	ND<0.5	
Trichloroethene	NO<0.5	
1,2-Dichloropropane	ND<0.5	
Dibromomethane	ND<0.5	
Bromodichloromethane	NO<0.5	
2-Chloroethylvinylether	NO<0.5	
cis-1,3-Dichtoropropene	NO<0.5	

For questions regarding this report, please call and ask for Customer Services.

cc :

NY 10252 PA 68180 NJ 73188 EPA NY 00033

Approved by: _

LAB DIRECTOR

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Page 2 of 3

LAB SAMPLE ID

28738

OHM Remediation Services

DATE Aug 15, 1996

SAMPLE SOURCE ORIGIN DESCRIPTION SAMPLED ON	PLATTSBURGH, NY MWPOL-4 GRAB, PAFB #17257 08/08/96 by CLIENT
DATE RECEIVED	08/08/96 by CLIENT 08/09/96 LP43082
P.O. NO.	: HF43004

Toluene	ND<0.5
trans-1,3-0ichloropropene	MD<0.5
1,1,2-Trichloroethane	ND<0.5
Tetrachloroethene	ND<0.5
1,3-Dichloropropene	ND<0.5
Dibromochloromethane	ND<0.5
1,2-Dibromoethane (EDB)	ND<0.5
Chiorobenzene	ND<0.5
1,1,1,2-Tetrachloroethane	ND<0.5
Ethylbenzene	ND<0.5
p-Xylene/s-Xylene	ND<0.5
o-Xylene	ND<0.5
Styrene	KD<0.5
Bromoform	ND<0.5
Isopropylbenzene	ND<0.5
Bromobenzene	ND<0.5
1,1,2,2-Tetrachloroethane	ND<0.5
1,2,3-Trichloropropane	ND<0.5
n-Proptibe zene	ND<0.5
2-Chiorotaluene	ND<0.5
4-Chilorotoluene	ND<0.5
1,3,5-Trimethylbenzene	ND<0.5
tert-Butylbenzene	ND<0.5
1,2,4-Trimethylbenzene	ND<0.5
sec-Butyl benzene	ND<0.5
1,3-Dichtorobenzene	ND<0.5
1,4-Dichlorobenzene	ND<0.5
4-Isopropyltoluene	ND<0.5
1,2-Dichlorobenzene	ND<0.5
n-Butylbenzene	ND<0.5
1,2-Dibromo-3-chloropropane	ND<0.5
1,2,4-Trichlorobenzene	ND<0.5
Hexachlorobutadiene	ND<0.5
Naphthalene	ND<0.5
1,2,3-Trichtorobenzene	ND<0.5
MTBE	ND <5
Surrogate Recovery (%)	

NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by:

LAB DIRECTOR

The information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceet the cost of these services. Your samples will be discarded after 14 days unless we are advised otherwise.

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LAB SAMPLE ID

28738

OHM Remediation Services

Aug 15, 1996

Page 3 of 3

SAMPLE SOURCE PLATTSBURGH, NY ORIGIN MWPOL-4

DESCRIPTION GRAB, PAFB #17257 08/08/96 SAMPLED ON by CLIENT

08/09/96 DATE RECEIVED LP43082 P.O. NO.

PID 128 62

NY 10252 PA 68180 NJ 73168 EPA.NY 00033

Approved by: _

LAB DIRECTOR

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Albany, NY

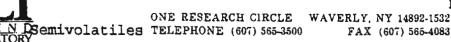
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Page 1 of 3

FAX (607) 565-4083

Notebook Reference: 94-249-2409 Date Analyzed: 08/13/96 Date Extracted: 08/09/96

DATE Aug 13, 1996

LAB SAMPLE ID : 28739

OHM Remediation Services Greg Guimond P.O. Box 2202

Plattsburgh NY 12901

SAMPLE SOURCE ORIGIN DESCRIPTION SAMPLED ON DATE RECEIVED P.O. NO.	PLATTSBURGH, NY MWPOL-4D GRAB, PAFB #17257 08/08/96 by CLIENT 08/09/96 LP43082
--	---

BNA Extractables	Analyst : PDB
Method : SW846/8270/3510	Units : UG/L
Compounds Detected	Results

n-Nitrosodimethylamine	ND<5
Aniline	ND<5
Bis(Z-chloroethyl)ether	ND<5
Phenal	ND<5
2-Chlorophenol	ND<5
1,3-0ichlorobenzene	XD<5
1,4-Dichlorobenzene	NED <5
1,2-Dichlorobenzene	ND<5
Behzyl Alcohol	ND<10
bis(2-Chloroisopropylether)	ND<5
2-Methylphenol	ND<5
Hexachloroethane	ND<5
n-Nitrosodi-n-propylamine	ND<5
3-Methy:phenol/4-Methylphenol	ND<5
Nitrobenzene	ND <s< td=""></s<>
Isophorone	ND<5
2-Nitrophenol	ND<5
2,4-Dimethylphenol	ND<5
Bis(2-chloroethoxy)methane	ND<5
2,4-0ichlorophenol	ND <5
1,2,4-Trichlorobenzene	ND < 5
Waphthalene	ND<5
Benzoic Acid	NO<20
4-Chloroaniline	ND<10
Hexachlorobutadiene	ND<5
* RECOVERY VALUE IS OUTSIDE OF LABORATORY	CONTROL LIMITS.

For questions regarding this report, please call and ask for Customer Services.

cc :

NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by: .

LAB DIRECTOR

The information in this report is accurate to the best of our knowledge and billity. In no event shall our liability exceed the cost of these services. Your samples will be discarded after 14 days unless we are advised otherwise.

Albany, NY

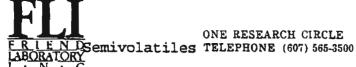
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Page 2 of 3

WAVERLY, NY 14892-1532 FAX (607) 565-4083

DATE Aug 13, 1996

LAB SAMPLE ID : 28739

OHM Remediation Services

SAMPLE SOURCE
ORIGIN
DESCRIPTION
SAMPLED ON
DATE RECEIVED
P.O. NO.

PLATTSBURGH, NY
MWPOL-4D
GRAB, PAFB #17257
08/08/96
DATE RECEIVED
DATE RECEIVED
DATE RECEIVED
DATE RECEIVED
LP43082

4-Chloro-3-Methylphenol	ND<10
2-Methylnaphthalene	ND<5
Hexachi orocycl opentadiene	ND<5
2,4,6-Trichlorophenol	ND<5
2,4,5-Trichtorophenal	ND<5
2-Chloronaphthalene	ND<5
2-Nitroaniline	ND<20
Dimethyl Phthalate	ND<5
Acenaphthylene	ND<5
Z,6-Dinitrotoluene	ND<5
3-Nitroaniline	KD<20
Acenaphthene	ND<5
2,4-Dinitrophenol	ND<20
Dibenzofuran	ND<5
2,4-Dinitrotoluene	ND<5
4-Nitrophenol	ND<20
Diethyl Phthalate	ND<5
Fluorene	ND<5
4-Chicophenyl phenyl ether	ND <5
4-Nitroaniline	ND<20
2-Methyl-4,6-Dinitrophenol	NO<20
1,2-Diphenythydrazine	ND<5
n-Nitrosodiphenylamine	ND<5
Azobenzene	ND<5
4-Bromophenyl phenyl ether	ND<5
Hexachi orobenzene	ND <5
Pentach Loropheno L	ND<20
Phenanthrene	ND<5
Anthracene	ND <5
Di-n-Butyl Phthalate	ND<5
Fluoranthene	NO<5
Benzidine	ND < 20
Pyrene	ND<5
Butyl benzyl phthalate	XD<5
Benzo(a)anthracene	ND<5
3,3-Dichlorobenzidine	ND<10
Chrysene	ND<5

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NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by: _

LAB DIRECTOR

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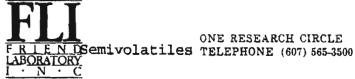
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Page 3 of 3

WAVERLY, NY 14892-1532 FAX (607) 565-4083

DATE Aug 13, 1996

LAB SAMPLE ID : 28739

OHM Remediation Services

CAMELE COURSE	
SAMPLE SOURCE :	PLATTSBURGH, NY
ORIGIN :	MWPOL-4D
DESCRIPTION :	GRAB, PAFB #17257
SAMPLED ON :	08/08/96 by CLIENT
DATE RECEIVED :	08/09/96
P.O. NO. :	LP43082

Bis(2-ethylhexyl)phthalate	ND<5
Di-n-Octyl Phthalate	ND<5
Benzo(b)fluoranthene	ND<5
Benzo(k)fluoranthene	ND<5
Benzo(a)pyrene	ND<5
Indeno(1,2,3-cd)pyrene	ND <5
Dibenzo(a,h)anthracene	ND<5
Benzo(ghi)peryl ene	ND<5
Surrogate Recovery (%)	
Z-Fluor ophenol	10
Phenol-d6	6 *
Nitrobenzene-d5	17 *
2-Fluorobiphenyl	18 *
2,4,6-Tribromophenol	19
Terphenyl-d14	21 *

NY 10252 PA 68180 NJ 73168 EPA NY 00033

Approved by: _

LAB DIRECTOR

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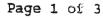
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ONE RESEARCH CIRCLE WAVERLY, NY 14892-1532 TELEPHONE (607) 565-3600

FAX (607) 565-4083

LAB SAMPLE ID : 28739

TGG

Aug 15, 1996

OHM Remediation Services Greg Guimond

P.O. Box 2202

Plattsburgh NY 12901

SAMPLE SOURCE ORIGIN DESCRIPTION SAMPLED ON DATE RECEIVED P.O. NO.

PLATTSBURGH, NY MWPOL-4D GRAB, PAFB #17257 08/08/96 by C by CLIENT

08/09/96 LP43082

Notebook Reference: 96-132-4152

Date Analyzed : 08/14/96 -----

	
SW846 8021 TARGET ANALYTES	Analyst : TGG
Method: SW846/8021/5030	Units : UG/L
Compounds Detected	Resul to

Dichlorodifluoromethane	ND<0.5
Chioromethane	ND<0.5
Vinyt Chloride	MD<0.5
Bronomethane	ND<0.5
Chioroethane	ND<0.5
Trichlorofluoromethane	ND<0.5
1,1-Dichloroethene	ND<0.5
Methylene Chloride	ND<0.5
trans-1,2-Dichloroethene	ND<0.5
1,1-Dichloroethane	ND<0.5
2,2-Dichloropropene	MD<0.5
cis-1,2-Dichloroethene	ND<0.5
Bromochioromethane	NO<0.5
Chioroform	ND<0.5
1,1,1-Seichloroothane	ND<0.5
Carbon Tetrachloride	ND<0.5
1,1-Dichloropropena	ND<0.5
Benzene	ND<0.5
1,2-Dichloroethane	ND<0.5
Trichloroethene	ND<0.5
1,2-Dichloropropane	ND<0.5
Dibromomethane	ND<0.5
Bromodichloromethane	ND<0.5
2-Chloroethylvinylether	NO<0.5
cis-1,3-Dichloropropene	ND<0.5

For questions regarding this report, please call and ask for Customer Services.

CC :

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Approved by: .

LAB DIRECTOR

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Page 2 of 3

LAB SAMPLE ID : 28739

OHM Remediation Services

DATE Aug 15, 1996

SAMPLE SOURCE PLATISBURGH, NY ORIGIN MWPOL-4D DESCRIPTION GRAB, PAFB #17257

08/08/96 SAMPLED ON 08/09/96 DATE RECEIVED

LP43082 P.O. NO.

Toluene	ND<0.5
trans-1,3-Dichloropropene	ND<0.5
1,1,2-Trichloroethane	MD<0.5
Tetrachloroethene	ND<0.5
1,3-Dichtoropropane	MD<0.5
Dibromochloromethane	NO<0.5
1,2-0ibromoethane (EDB)	ND<0.5
Chlorobenzene	ND<0.5
1,1,1,2-Tetrachloroethane	NO<0.5
Ethylbenzene	ND<0.5
p-Xylene/m-Xylene	NO<0.5
a-Xylene	ND<0.5
Styrene	MD<0.5
Bromoform	ND<0.5
Isopropylbenzene	ND<0.5
Bromobenzene	ND<0.5
1,1,2,2-Tetrachloroethane	ND<0.5
1,2,3-Trichloropropane	ND<0.5
n-Prop;4benzene	ND<0.5
2-Chlorotoluene	NED<0.5
4-Chiorotoluene	ND<0.5
1,3,5-Trimethylbenzene	ND<0.5
tert-Butylbenzene	MD<0.5
1,2,4-Trimethylbenzene	ND<0.5
sec-Butylbenzene	ND<0.5
1,3-Dichlorobenzene	ND<0.5
1,4-Dichlorobenzene	ND<0.5
4-Isopropyttaluene	ND<0.5
1,2-Dichlorobenzene	ND<0.5
n-Butylbenzene	NO<0.5
1,2-Dibromo-3-chloropropane	ND<0.5
1,2,4-Trichlorobenzene	ND<0.5
Hexach Lorobutadiene	ND<0.5
Naphthalene	ND<0.5
1,2,3-Trichlorobenzene	ND <c.5< td=""></c.5<>
MTBE	ND<5
Surrogate Recovery (%)	
•	

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Page 3 of 3 WAVERLY, NY 14892-1532 FAX (607) 565-4083

LAB SAMPLE 10 : 28739

OHM Remediation Services

DATE : Aug 15, 1996

SAMPLE SOURCE PLATTSBURGH, NY ORIGIN MWPOL-4D DESCRIPTION

GRAB, PAFB #17257 08/08/96 by C SAMPLED ON by CLIENT

08/09/96 DATE RECEIVED LP43082 P.O. NO.

PID ELCD

119 61

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WAVERLY, NY 14892-1532 FAX (607) 565-4083

Notebook Reference: 94-249-2410

Date Analyzed : 08/13/96 Date Extracted: 08/09/96

Aug 13, 1996

LAB SAMPLE ID : 28740

OHM Remediation Services Greg Guimond P.O. Box 2202

Plattsburgh NY 12901

ORIGIN : DESCRIPTION : SAMPLED ON : DATE RECEIVED :	PLATTSBURGH, NY ER-POL GRAB, PAFB #17257 08/08/96 by CLIENT 08/09/96 LP43082
---	---

BNA Extractables	Analyst : PDB
Method: \$1846/8270/3510	Units : UG/L
Compounds Detected	Results
n-Mitrosodimethylamine	ND<6
Aniline	ND<6
Bis(2-chloroethyl)ether	ND <6
Phenal	ND<6
2-Chlorophenol	ND<6
1,3-Dichlorobenzene	ND<6
1,4-Dichlorobenzene	ND<6
1,2-Dichtorobenzene	ND<6
Benzyl Alcohol	ND<12
bis(2-Chloraisopropylether)	ND<6
2-Methylphenol	ND<6
Hexachioroethane	ND<6
n-Nitrosodi-n-propylamine	ND<6
3-Methylphanol/4-Methylphenol	ND<6
Nitrobenzene	ND<6
Isophorone	- ND<6
2-Nitrophenol	ND<6
2,4-Dimethylphenol	ND<6
Bis(2-chioroethoxy)methane	ND<6
2,4-Dichlarophenol	ND<6
1,2,4-Trichlorobenzene	ND<6
Naphthalene	ND<6
Benzoic Acid	ND<24
4-Chloroaniline	ND<12
Hexachlorobutadiene	NED<6
	•

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ONE RESEARCH CIRCLE Semivolatiles TELEPHONE (607) 565-3500 Page 2 of 3

WAVERLY, NY 14892-1532 FAX (607) 565-4083

DATE Aug 13, 1996

LAB SAMPLE ID :

: 28740

OHM Remediation Services

SAMPLE SOURCE : ORIGIN : DESCRIPTION : SAMPLED ON : DATE RECEIVED : P.O. NO. :	PLATTSBURGH, NY ER-POL GRAB, PAFB #17257 08/08/96 by CLIENT 08/09/96 LP43082
--	---

4-Chlora-3-Methylphenol	ND<12
2-Methylnaphthalene	ND<6
Hexachlorocyclopentadiene	ND<6
2,4,6-Trichlorophenal	ND<6
2,4,5-Trichlorophenal	ND<6
2-Chloronaphthailene	ND<6
2-Nitroaniline	ND<24
Dimethyl Phthalate	ND<6
Acenaphthylene	ND<6
2,6-Dinitrotoluene	MD<6
3-Nitroaniline	ND<24
Acenaph thene	ND<6
2,4-Dinitrophenal	ND<24
Dibenzofuran	ND<6
2,4-Dinitrotoluene	ND<6
4-Witrophenol	ND<24
Diethyl Phthalate	ND<6
Fluorene	ND<6
4-Chlc⇒phenyl phenyl ether	ND <6
4-Nitroaniline	ND < 24
2-Methyl-4,6-Dinitrophenal	ND<24
1,2-Diphenythydrazine	ND<6
n-Xitrosodiphenylamine	MD<6
Azobenzene	ND<6
4-Bromophenyl phenyl ether	ND<6
Hexachiorobenzene	ND<6
Pentachlorophenol	ND<24
Phenanthrene	ND<6
Anthracene	ND<6
Di-n-Butyl Phthalate	ND<6
Fluoranthene	ND<6
Benzidine	ND<24
Pyrene	ND<6
Butyl benzyl phthalate	ND<6
Benzo(a)anthracene	ND<6
3,3-Dichlorobenzidine	ND<12
Chrysene	ND<6

QC (

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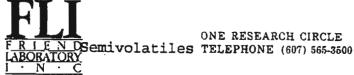
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Page 3 of 3

WAVERLY, NY 14892-1532 FAX (607) 565-4083

DATE Aug 13, 1996

LAB SAMPLE ID : 28740

OHM Remediation Services

SAMPLE SOURCE : ORIGIN : DESCRIPTION : SAMPLED ON : DATE RECEIVED : P.O. NO. :	PLATTSBURGH, NY ER-POL GRAB, PAFB #17257 08/08/96 by CLIENT 08/09/96 LP43082
--	---

Bis(2-ethylhexyl)phthalate	150
Di-n-Octyl Phthalate	ND<6
Benzo(b)fluoranthene	ND<6
Benzo(k)fluoranthene	ND<6
Benzo(a)pyrene	ND<6
Indeno(1,2,3-cd)pyrene	ND <6
Dibenzo(a,h)anthracene	ND<6
Senzo(ghi)perylens	ND <6
Surrogate Recovery (%)	
2-Fluorophenol	53
Phenol-d6	35
Nitrobenzene-d5	78
2-fluorobiphenyl	79
2,4,6-Tribromophenol	77
Terphenyl -d14	04

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FAX (607) 565-4083

Notebook Reference : 96-132-4157

Date Analyzed: 08/14/96

Aug 15, 1996

LAB SAMPLE ID : 28740

OHM Remediation Services Greg Guimond P.O. Box 2202

Plattsburgh NY 12901

SW846 8021 TARGET AMALYTES	Analyst : TGG
Method : SW846/8021/5030	Units : UG/L
Compounds Detected	Results

Dichlorodifluoromethane	ND<0.5
Chioromethane	ND<0.5
Vinyl Chloride	ND<0.5
8romomethane	ND<0.5
Chloroethane	ND<0.5
Trichlorofluoromethane	ND<0.5
1,1-Dichtoroethene	ND<0.5
Hethylene Chloride	64
trans-1,2-Dichloroethene	ND<0.5
1,1-DichLoroethane	ND<0.5
2,2-Dichloropropane	ND<0.5
cis-1,2-Dichloroethene	NO<0.5
Bromochloromethane	ND<0.5
Chloroform	ND<0.5
1,1,1-Exicatoroethane	MD<0.5
Carbon Tetrachloride	ND<0.5
1,1-Dichloropropene	MD<0.5
Benzene	ND<0.5
1,2-Dichloroethane	ND <0.5
Trichloroethene	ND<0.5
1,2-Dichloropropane	ND <0.5
Dibromomethane	ND<0.5
Bromodichtoromethane	ND <0.5
2-Chloroethylvinylether	ND<0.5
cis-1,3-Dichloropropene	ND<0.5

For questions regarding this report, please call and ask for Customer Services.

cc:

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Page 2 of 3

~4000

Aug 15, 1996

LAB SAMPLE ID

28740

OHM Remediation Services

SAMPLE SOURCE ORIGIN DESCRIPTION SAMPLED ON DATE RECEIVED P.O. NO.	PLATTSBURGH, NY ER-POL GRAB, PAFB #17257 08/08/96 by CLIENT 08/09/96 LP43082
--	---

Toluene	MD<0.5
trans-1,3-Dichloropropens	ND<0.5
1,1,2-Trichloroethane	ND<0.5
Tetrachloroethene	MD<0.5
1,3-0ichloropropene	ND<0.5
Dibromochloromethane	ND<0.5
1,2-Dibromoethane (EDB)	ND<0.5
Chlorobenzene	NO<0.5
1,1,1,2-Tetrachloroethane	ND<0.5
Ethylbenzene	NO<0.5
p-Xytene/m-Xyt ene	NO<0.5
o-Xylene	MD<0.5
Styrene	ND<0.5
Bromoform	MD<0.5
Isopropylbenzene	ND<0.5
Bromobenzene	ND<0.5
1,1,2,2-Tetrachloroethane	ND<0.5
1,2,3-Trichtoropropane	MD<0.5
n-Propylbenzene	ND<0.5
2-Chiorotoluene	ND<0.5
4-Chlorotaluene	ND<0.5
1,3,5-Trimethylbenzene	ND<0.5
tert-Butylbenzene	ND<0.5
1,2,4-Trimethylbenzene	ND<0.5
sec-Butyibenzene	ND<0.5
1,3-Dichlorobenzene	ND<0.5
1,4-Dichlorobenzene	ND<0.5
4-Isopropyltoluene	ND<0.5
1,2-Dichlarobenzene	NED<0.5
n-Butylbenzene	NO<0.5
1,2-Dibromo-3-chloropropane	ND<0.5
1,2,4-Trichlorobenzene	ND<0.5
Hexach Lorobutad i ene	ND<0.5
Naphthalene	1
1,2,3-Trichlorobenzene	ND<0.5
MTBE	NO<5
Surrogate Recovery (%)	

ac 🔼

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Page 3 of 3

LAB SAMPLE ID

28740

OHM Remediation Services

DATE Aug 15, 1996

SAMPLE SOURCE PLATTSBURGH, NY ORIGIN

ER-POL DESCRIPTION

GRAB, PAFB #17257 08/08/96 SAMPLED ON by CLIENT

08/09/96 DATE RECEIVED LP43082 P.O. NO.

PID ELCD 121

77

NJ 73168 EPA NY 00033 NY 10252 PA 68180

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Page 1 of 3

LAB SAMPLE ID : 28741

OHM Remediation Services Greg Guimond P.O. Box 2202

Plattsburgh NY 12901

Aug 16, 1996

SAMPLE SOURCE : OFFIGIN : DESCRIPTION : SAMPLED ON : DATE RECEIVED : P.O. NO. :	PLATTSBURGH, NY AB-POL GRAB, PAFB #17257 08/08/96 by CLIENT 08/09/96 LP43082
---	---

Notebook Reference: 96-132-4158

Date Analyzed: 08/14/96

SW846 8021 TARGET AMALYTES	Analyst : TGG
Method : SW846/8021/5030	Units : UG/L
Compounds Detected	Results

Dichlorodifluoromethane	NO<0.5
Chloromethane	ND<0.5
Vinyl Chloride	ND<0.5
Sromomethene	ND<0.5
Chloroethane	ND<0.5
Trichlorofluoromethane	ND<0.5
1,1-Dichloroethene	MD<0.5
Methylene Chloride	59
trans-1,2-Dichloroethene	ND<0.5
1,1-Dichloroethane	ND<0.5
2,2-Dichloropropane	ND<0.5
cis-1,2-Dichloroethene	ND<0.5
Bromoch Loromethane	MD<0.5
Chloroform	ND<0.5
1,1,1- <u>Tr</u> ichloroethane	ND<0.5
Carbon Tetrachloride	ND<0.5
1,1-Dichloropropene -	ND<0.5
Benzene	ND<0.5
1,2-Dichloroethane	ND<0_5
Trichloroethene	MD<0.5
1,2-Dichloropropene	ND<0.5
Dibromomethane	ND<0.5
Bromodich(oromethane	ND<0.5
2-Chloroethylvinylether	ND<0.5
cis-1,3-Dichtaropropens	ND<0.5
The state of the s	J

For questions regarding this report, please call and ask for Customer Services.

cc :

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Approved by:

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LAB SAMPLE ID

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OHM Remediation Services

DATE Aug 15, 1996

Page 2 of 3

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AMPLE SOURCE :	DI MINISDIPAN AND	
ORIGIN :		
DESCRIPTION :		
SAMPLED ON :		
DATE RECEIVED :		
P.O. NO. ;	LP43082	
DESCRIPTION : SAMPLED ON : DATE RECEIVED :	PLATTSBURGH, NY AB-POL GRAB, PAFB #17257 08/08/96 by CLIENT 08/09/96 LP43082	

Totuene	MD<0.5
trans-1,3-Dichloropropene	ND<0.5
1,1,2-Trichloroethane	ND<0.5
Tetrachtoroethene	ND<0.5
1,3-Dichloropropane	ND<0.5
Dibromochloromethane	ND<0.5
1,2-Dibromoethane (EDB)	ND<0.5
Chil probenzene	ND<0.5
1,1,1,2-Tetrachloroethane	ND<0.5
Ethylbenzene	ND<0.5
p-Xylene/a-Xylene	MD<0.5
o-Xylene	ND<0.5
Styrene	ND<0.5
Bromoform	ND<0.5
Isopropythenzene	ND<0.5
Bromobenzene	ND<0.5
1,1,2,2-Tetrachloroethane	ND<0.5
1,2,3-Trichtoropropane	ND<0.5
n-Propylbenzene	ND<0.5
2-Chiorotoluene	ND<0.5
4-Chlorotoluene	ND<0.5
1,3,5-Trimethylbenzene	MD<0.5
tert-Butylbenzene	ND<0.5
1,2,4-Trimethylbenzene	ND<0.5
sec-Buty(benzene	ND<0.5
1,3-Dichlorobenzene	ND<0.5
1,4-Dichlorobenzene	ND<0.5
4-Isopropyltaluene	ND<0.5
1,2-Dichlorobenzene	ND<0.5
n-Butylbenzene	ND<0.5
1,2-Dibromo-3-chloropropane	ND<0.5
1,2,4-Trichlorobenzene	NO<0.5
	ND<0.5
Naphthalene	1
1,2,3-Trichtorobenzene	MD<0.5
NTBE	ND<5
Surrogate Recovery (%)	

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Page 3 of 3 WAVERLY, NY 14892-1532

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DATE

Aug 15, 1996

by CLIENT

LAB SAMPLE ID

28741

OHM Remediation Services

SAMPLE SOURCE **ORIGIN** DESCRIPTION SAMPLED ON

DATE RECEIVED

P.O. NO:

PLATTSBURGH, NY AB-POL GRAB, PAFB #17257

08/08/96 08/09/96

LP43082

PID ELCO

121

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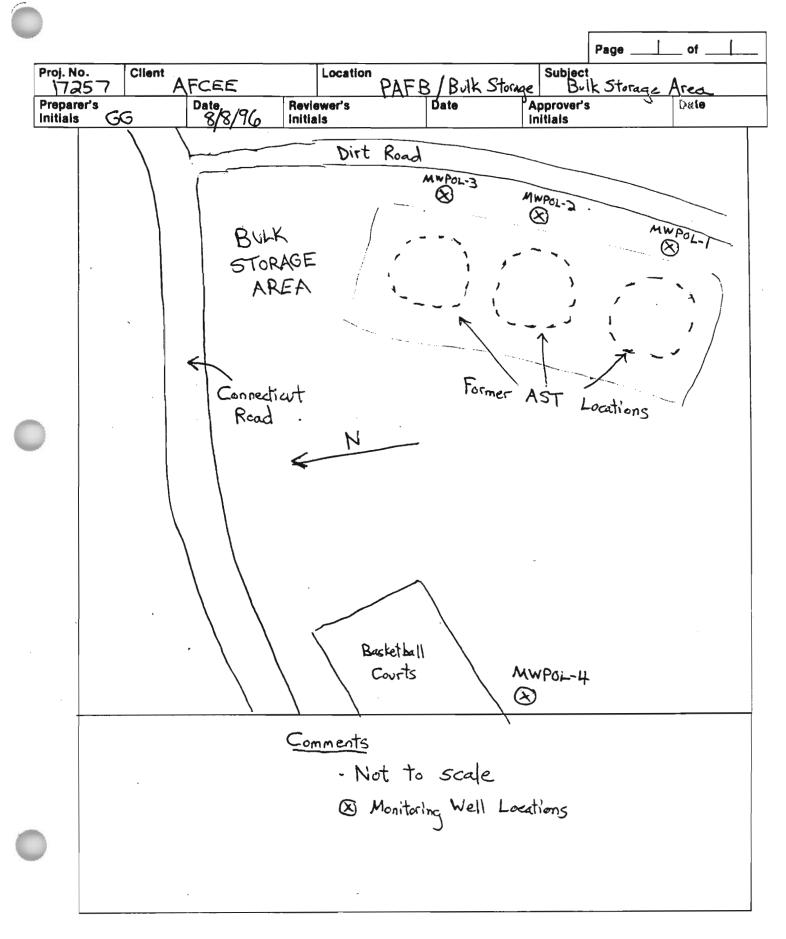
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COMPUTATION SHEET





CHAIN-OF-CUSTODY RECORD

Friend Lab LP43082

Form 0019
Field Technical Services
Rev. 08/89

419-423-3526 O.H. MATERIALS CORP. P.O. BOX 551 FINDLAY, OH 45839-0551 PROJECT LOCATION PROJECT NAME ANALYSIS DESIRED PAFG
PROJ. NO. 1725 PROJECT CONTACT PLATTSBURGH NY

PROJECT TELEPHONE NO. (INDICATE NUMBER -SEPARATE PROJECT MANAGER/SUPERVISOR GREG GUIMOND CONTAINERS) AFCEE KEN KUKKONEN COMP SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE) GRAB SAMPLE NUMBER TIME DATE REMARKS Jayo.mL CROUNDWATER XX 18/8/11/10:45 2714 MWPOL-1 Groundwater Jan HomL 3/8/71 11:15 MWPOL-2 ZXIL Ground water 2x4Unl MWPOL-3 2/2/96/13:15 DIL Greundwater 2x4cm MWFOL-4 8/8/96/15:05 DXIL Jast Kar Groundwater MWPOL-4D 8/896 15:00 DXIL Equipment Rinsate 2×4011 8/8/70 ALIL ER . POL Ambient Brink 2x46mLX 5/8/h6 AB-POL 2 VIBAL Trip Block Preserved at 4°C Temp Blank included 10 day (working) TAT REMARKS ITEM **TRANSFERS TRANSFERS** NUMBER RELINQUISHED BY ACCEPTED BY DATE TIME 1836639965 8/3 1600 1-7 1 2 3 SAMPLER'S SIGNATURE

B.2 OWS-2068 (PORT DOUGLAS OWS)

OWS-2068 CLOSURE REPORT OHM REMEDIATION SERVICES CORP. PLATTSBURGH AIR FORCE BASE Delivery Order 0003

OHM Project No. 17257

Date: <u>04/18/97</u>

OWS No.: OWS-2068 OWS Size: 1,500-Gallon

OWS Location: Bulk Storage Area

TABLE OF CONTENTS

Data Summary Sheet

➤ Site Location

➤OWS Information

➤ Sources of Contamination

➤ Site Geology

➤ Soil Quality Analytical Data

➤ Groundwater Quality Analytical Data

Attachment I - Sampling and Analysis Site Reports

➤ Analytical Results (Soil)

➤ Analytical Results (Liquid)

➤ Split Sample Analytical Results - Not Applicable

➤ Soil Sample Collection Log

➤ Sample Location Map (Site Map)

Comments:

One 1,500-gallon oil/water separator (OWS), holding tank, and piping were excavated and removed from the south side of the Bulk Fuel Storage Area (BFSA) in August 1996. This OWS was also referred to as the Port Douglas OWS. Soil around the OWS was excavated to a depth of approximately 7 feet and temporarily stockpiled adjacent to the excavation on plastic sheeting. Groundwater was encountered at a depth of approximately 6 feet. Staining and hydrocarbon odors were noted at the time of removal. Prior to the removal, a composite sample was collected on 07/11/96 from the liquid contained within OWS-2068 and from the second OWS (OWS-2073) located within the BFSA. The composite sample was analyzed for full TCLP, pesticides/polychlorinated biphenyls (PCBs) and ignitability for disposal purposes. On 08/07/96, one composite soil sample was collected from the excavated soil stockpile. On 08/19/96, one composite soil sample was collected from sidewall of the excavation and one water sample was collected from the bottom of the excavation. Additional soil was removed from the walls of the excavation and on 09/06/96, a composite soil sample was collected from each of the four sidewalls. On 09/12/96, a second water sample was collected from the bottom of the excavation due to a missed holding time. The first composite soil sample collected from the excavation on 08/19/96 was not analyzed due to the removal of additional soil from the walls. All other samples were analyzed for volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs). PAHs and one VOC were detected in the soil samples at concentrations which exceed the NYSDEC TCLP Alternative Guidance Values. VOCs were detected in the water sample at concentrations in excess of the NYSDEC Class GA Groundwater Standards. The stockpiled soil was transported to the on-site treatment cell and the excavation was backfilled to grade with imported clean fill.

	DATA	SUMMAR	Y FOR TECH	NICAL REPO	RT SUBMIT	ΓTAL	
Date: 04/18/	/97						
OWS No.: <u>O</u>	WS-2068	OWS Lo	cation : Bulk Sto	orage Area			
Street Addres	ss: <u>Con</u>	necticut Roa	ad, Bulk Storage	Area			
	Platt	tsburgh AFI	3, NY 12901			_	
Consultant I	nformation						
Consultant C	ompleting Rep	port: <u>F</u>	Parsons ES		_		
Contact Perso	on and Telepho	one No: <u>I</u>	Edward J. Ashtor	n (315) 451-95	560		
Mailing Add	ress:	_2	290 Elwood Dav	is Road, Suite	312		
		<u>I</u>	Liverpool, NY 13	3088			_
•							
Site Location	n/Description	Yes/N				Ye	es/No
Municipal wate	r in area ?	Yes	Ba	sements (within 2	50 feet)?		No
Municipal wate	r supplied to site	? Yes	Wa	ater supply wells (within 1,000 fee	et)?	No
Municipal sewe	er in area?	Yes	Su	rface water body	(within 1,000 fe	et)?	Yes
Storm sewer in	area?	No					
OWS Infor	mation OWS	Dimension: 3		Holding Tank Piping - 7" St	Dimension: 1.5	' dia. x 3' L	
OWS No.	Product Type	OWS Condition 0 - Perforated 4 - No Corrosion	(Gallons)	Quantity Removed (Gallons)	OWS Removed Yes/No	Piping Condition 0 - Perforated 4 - No Corrosion	Removed
2068	ow	4	1,500	300	Yes	. 4	Yes
	* - HO = Heating Oil	, G= Gasoline, D	= Diesel, UG = Unleade	ed Gas, OW = Oil and	Water, ANB = Aci	d Neutalization Ba	ısin
Suspected S Eliminated?	ources of Cor Yes	ntamination	ı 1,	500-gallon OV	VS		
Free phase p	roduct encoun	itered?	Yes xx	Thicknes	s Sheen	No_	
Contaminate	ed soil encount	tered?	Yes <u>xx</u>	Amt. exc	avated (YD3)	~752_No_	
I -	-		ater contaminati			water Standa	ırds? Yes
Did sample	analysis indica	ite attainme	nt of soil cleanu	p criteria? No			

					·		
DATA SUMMARY FOR TECHNICAL REPORT SUBMITTAL							
Site Geology							
Description Depth (Feet)							
	Brown Sand w	vith Minor Silt		0 - 7	(Bottom of excavation	n)	
Depth to bedrock: > 50 feet Average depth to groundwater: 6 feet General groundwater flow direction: East, toward Lake Champlain							
Soil Quality An	alytical Data	(Excavation Cor	nfirmation Sam	oles)			
Sam	ple Designation	OWSPH-E1	OWSPH-N1	OWSPH-S1	OWSPH-W1		
	Date Sampled	09/06/96	09/06/96	09/06/96	09/06/96		
Parameters	Method		(Concentrations (ppt)		
МТВЕ	8021	ND	ND	ND S	ND S		
Benzene	8021	10.1	ND	7.0 S	16.2 S		
Trichloroethylene	8021	ND	ND	ND S	ND S		
Toluene	8021	ND	ND	1.9 JS	8.4 S		
Ethylbenzene	8021	2.4 J	ND	6.9 S	15.7 S		
Xylenes (total)	8021	ND	ND	15.2 S	98.9 S		
Total BTEX	8021	12.5	ND	31.0	139.2		
Naphthalene	8270	ND	ND	28 J	215 J		
Total PAHs	8270	ND	3,259	28	215		
			Split sam	ple results shown in	n <i>italic</i> .		
Groundwater (Duality Analyt	tical Data (Exc	avation Confirm	ation Samples)			
	ple Designation	BSOWSPH-LQ	OWSPH-LQ2	<u>, , , , , , , , , , , , , , , , , , , </u>			
	Date Sampled	08/19/96	09/12/96				
Parameterş	Method		(Concentrations (ppl))		
МТВЕ	8021	NA	ND				
Benzene	8021	NA	8.9				
Trichloroethylene	8021	NA	ND				
Toluene	8021	NA	ND				
Ethylbenzene	8021	NA	1.4 J				
Xylenes (total)	8021	NA	39.5				
Total BTEX	8021	NA	49.8				
Naphthalene	8270	ND	NA	_			
Total PAHs	8270	ND	NA				

Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17257

Site: Bulk Storage Area OWSs

Revised Report Date: 11/04/97 Original Report Date: 07/24/96

Sample Collection:

-On 07/11/96, a composite sample (OWS2065-1) was collected from the liquid contained in the two oil/water separators (OWSs) (OWS-2068 and OWS-2073) at the Bulk Fuel Storage Area. The sample was labeled before the proper identification for each OWS was known. There had been an underground storage tank (UST-2065-A) removed in the vicinity of the two OWSs, under a separate delivery order, therefore the composite sample's identification contained '2065'. Two, full 1-liter containers were collected. The total oil fraction from the two containers was less than 10 mL, therefore, analysis was only performed on the water fraction.

On-Site analysis:

-No samples were analyzed by the on-site laboratory.

Off-Site Analysis:

-The composite sample was shipped to CTM Analytical Laboratories for full TCLP, Pesticides/PCBs (EPA Method 8080) and ignitability (EPA Method 1010) analyses.

CTM Analytical Laboratories, Ltd.

15 Century Hill Drive P.O. Box 727 Latham, NY 12110 518-786-7100 FAX 518-786-7139 GC/MS GC ICAP Sampling Services

OHM REMEDIATION SERVICES CORP CTM PROJECT #: 9913642

P.O.BOX 2202

PLATTSBURGH

NY 12901

Attention: MR. GREG GUIMOND

Purchase Order Number:

Date Sampled: 07/11/96 Time: 9:00

Sampled By: JONES
Sample Id: OWS2065-1

Location: PLATTSBURGH, NEW YORK

CTM Sample No: 960712E 01 Date Received: 07/12/96 Collection Method: GRAB

CTM Task #: 960712E

Matrix: AQU

Parameters and Standard Metho	dology Used	Results	PQL	<u>Unit</u>	Analyst Reference
ACID DIGESTION - FLAME/ICP	SW-846 METHOD 3010	COMPLETED			D-20:130 7/16/96
ARSENIC	ICP, EPA METHOD 200.7	ND	0.010	MG/L '	F-4:101 7/17/96
BARIUM	ICP, EPA METHOD 200.7	0.077	0.050	MG/L	F-4:101 7/17/96
CADMIUM	ICP, EPA METHOD 200.7	ND	0.005	MG/L	F-4:101 7/17/96
CHROMIUM	ICP, EPA METHOD 200.7	ND	0.010	MG/L	F-4:101 7/17/96
LEAD	ICP, EPA METHOD 200.7	0.055	0.003	MG/L	F-4:101 7/17/96
MERCURY DIGESTION - AQUEOUS	EPA METHODS, 1983 245.1	COMPLETED			D-20:133 7/18/96
MERCURY	EPA METHODS, 1983 245.1	0.0002	0.0002	MG/L	E-4:88 7/19/96
SILVER	ICP, EPA METHOD 200.7	ND	0.010	MG/L	F-4:101 7/17/96
SELENIUM	ICP, EPA METHOD 200.7	ND	0.010	MG/L	F-4:101 7/17/96
FLASH POINT	SW-846 METHOD 1010	>200	70	oF	PL 7/19/96
BASE/NEUTRALS, SW-846 8270	SW-846 METHOD 8270	COMPLETED			GCMSB:96 7/18/96
B/N EXTRACTION	SW-846 METHOD 3500A	COMPLETED			DO 7/16/96
1,4-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:96 7/18/96
HEXACHLOROETHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:96 7/18/96
NITROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:96 7/18/96
HEXACHLOROBUTAD I ENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:96 7/18/96
2,4-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:96 7/18/96
HEXACHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:96 7/18/96
PYRIDINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:96 7/18/96
ACID EXTRACTABLES, SW-846 8270	SW-846 METHOD 8270	COMPLETED			GCMSB:96 7/18/96
ACID EXTRACTION	SW-846 METHOD 3550	COMPLETED			DO 7/16/96
2,4,6-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	20	MCG/L	GCMSB:96 7/18/96
2,4,5-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	100	MCG/L	GCMSB:96 7/18/96
M & P CRESOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	40	MCG/L	GCMSB:96 7/18/96
O-CRESOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	20	MCG/L	GCMSB:96 7/18/96
PENTACHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	100	MCG/L	GCMSB:96 7/18/96
VOLATILES, SW-846 8240		COMPLETED			GCMSCD:25 7/12/96
VINYL CHLORIDE	SW 846 8240	ND	2,000	MCG/L	GCMSCD:25 7/12/96
1,1-DICHLOROETHENE	SW 846 8240	ND	1,000	MCG/L	GCMSCD:25 7/12/96
CHLOROFORM	SW 846 8240	ND	1,000	MCG/L	GCMSCD:25 7/12/96
CARBON TETRACHLORIDE	SW 846 8240	ND	1,000	MCG/L	GCMSCD:25 7/12/96

(CONTINUES ON NEXT PAGE)

REMARKS:

CTM Analytical Laboratories, Ltd.

15 Century Hill Drive P.O. Box 727 Latham, NY 12110 518-786-7100 FAX 518-786-7139 GC/MS GC ICAP Sampling Services

OHM REMEDIATION SERVICES CORP

P.O.BOX 2202

PLATTSBURGH

NY 12901

Attention: MR. GREG GUIMOND

Purchase Order Number:

Date Sampled: 07/11/96 Time: 9:00

Sampled By: JONES Sample Id: OWS2065-1

Location : PLATTSBURGH, NEW YORK

CTM PROJECT #: 9913642

CTM Task #: 960712E

CTM Sample No: 960712E 01 Date Received: 07/12/96 Collection Method: GRAB

Matrix: AQU

Parameters and Standard Met	hodology Used	Results	PQL	Unit	Analyst Reference
	(CONTINUED FROM PREVIOUS PAGE)				
BENZENE	SW-846 8240	ND	1,000	MCG/L	GCMSCD:25 7/12/96
1,2-DICHLOROETHANE	SW 846 8240	ND	1,000	MCG/L	GCMSCD:25 7/12/96
TRICHLOROETHENE	SW 846 8240	ND	1,000	MCG/L	GCMSCD:25 7/12/96
TETRACHLOROETHENE	SW 846 8240	ND	1,000	MCG/L	GCMSCD:25 7/12/96
CHLOROBENZENE	SW 846 8240	ND	1,000	MCG/L	GCMSCD:25 7/12/96
2-BUTANONE (MEK)	SW 846 8240	ND	2,000	MCG/L	GCMSCD:25 7/12/96
METHANOL EXTRACTION	SW-846 METHOD 5030	COMPLETED			GCMSCD:25 7/12/96
PURGE & TRAP EXTRACTION	SW-846 METHOD 5030	COMPLETED			GCMSCD:25 7/12/96
PESTICIDE/PCB EXTRACTION	SW-846 METHOD 3500	COMPLETED			DO 7/16/96
GAMMA-BHC	SW-846 METHOD 8080	ND	0.2	MCG/L	GC8D-075 7/17/96
CHLORDANE	SW-846 METHOD 8080	ND	2.0	MCG/L	GC8D-075 7/17/96
ENDRIN	SW-846 METHOD 8080	ND	0.2	MCG/L	GC8D-075 7/17/96
HEPTACHLOR	SW-846 METHOD 8080	ND	0.2	MCG/L	GC8D-075 7/17/96
HEPTACHLOR EPOXIDE	SW-846 METHOD 8080	ND	0.2	MCG/L	GC8D-075 7/17/96
METHOXYCHLOR	SW-846 METHOD 8080	ND	0.2	MCG/L	GC8D-075 7/17/96
TOXAPHENE	SW-846 METHOD 8080	ND	4.0	MCG/L	GC8D-075 7/17/96
PCB1016	SW-846 METHOD 8080	ND	2.0	MCG/L	GC3E-092 7/16/96
PCB1221	SW-846 METHOD 8080	ND	2.0	MCG/L	GC3E-092 7/16/96
PCB1232	SW-846 METHOD 8080	ND	2.0	MCG/L	GC3E-092 7/16/96
PCB1242	SW-846 METHOD 8080	ND	2.0	MCG/L	GC3E-092 7/16/96
PCB1248	SW-846 METHOD 8080	ND	2.0	MCG/L	GC3E-092 7/16/96
PCB1254	SW-846 METHOD 8080	ND	2.0	MCG/L	GC3E-092 7/16/96
PC81260	SW-846 METHOD 8080	ND	2.0	MCG/L	GC3E-092 7/16/96
EXTRACTION FOR HERBICIDES	SW-846 METHOD 8150	COMPLETED			DO 7/17/96
2,4-D	SW-846 METHOD 8150	0.5	0.2	MCG/L	GC8D-075 7/18/96
SILVEX	SW-846 METHOD 8150	ND	0.2	MCG/L	GC8D-075 7/18/96

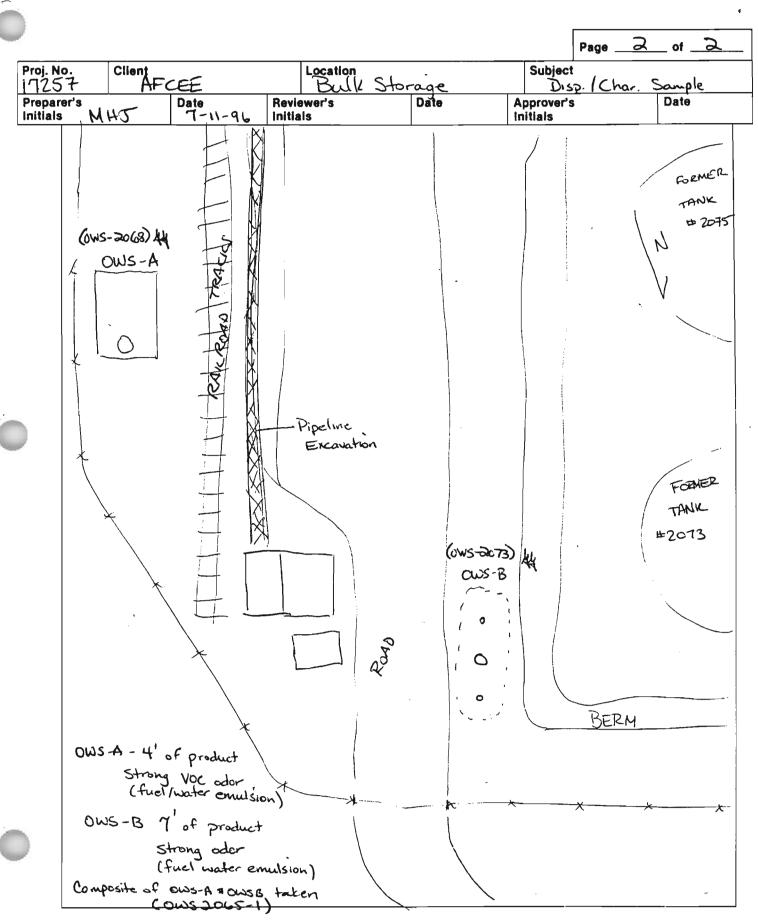
REMARKS:

Soil Sample Collection Log Plattsburgh AFB - Project # 17257) 17499

					`-							
Date: '7-11-91	•			Site: Bus	ue Ste	rage	ous		Pg. <u>1</u> of_2			
Weather: Sunn				Samplers: \	5							
Sample ID Clus 2065-1	Time 0900	PID Screen	Comp/ Grab	Sample Depth (ft)	1	inates Ref. Pt.	Sam Descr Fuel I Wate	iption	# of Bottles			
Map Attached: (-Reference											
Sample Type:	*											
Requested Analy		VOCs Yes (No	SVOCs		Other:	Full TC	LP, Pes Ig	sticides mitabilit			
Laboratory Destin	nation: <u>CTM</u> Duplicate C			17225 No		Airbill #_	124340 Yes	9311 No				
		On-Site I	_aborator	ry Chain of C	Sustody / F	Request fo	or Analysis	:				
Requested Analy		VOCs		SVOCs		-	re:					
Relinquished by	(dd/tt):				Received	d by (dd/tt)):					

OHM Remediation Services Corp.

COMPUTATION SHEET





ITEM NO.

9

10

3

CHAIN-OF-CUSTODY RECORD

CTM

LAB COPY Form 0019 Field Technical Services Rev. 08/89

LP 42814 172255 O.H. MATERIALS CORP. FINDLAY, OH 45839-0551 P.O. BOX 551 419-423-3526 PROJECT NAME PROJECT LOCATION ANALYSIS DESIRED Plattsburgh NY PROJECT TELEPHONE NO. PAFB (INDICATE PROJ. NO. PROJECT CONTACT NUMBER OF CONTAINERS SEPARATE PROJECT MANAGER/SUPERVISOR CLIENT'S REPRESENTATIVE 17257 CONTAINERS) Joe Szot Mo Comier COMP SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE) SAMPLE NUMBER DATE TIME REMARKS OWS2065-1 Fuel / Woter Emulsion 7-11 2-19 Strong VOC ador 0900 96 REMARKS ITEM **TRANSFERS TRANSFERS** -5 day TAT ACCEPTED BY TIME NUMBER **RELINQUISHED BY** DATE - Preserved at 4°C Fed Ex Airbill # 17-11-91 1 243409311 - Temp Blank Included 2

SAMPLER'S SIGNATURE

Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17257

Site: Port Douglas OWS (OWS-2068)

Revised Report Date: 04/18/97 Original Report Date: 09/16/96

Sample Collection:

- -On 08/07/96, a composite sample (SPPHOWS-1) was collected from the excavated soil stockpile associated with the Port Douglas oil/water separator (OWS) (OWS-2068) removal at the Bulk Fuel Storage Area. The material was then transported to the on-site treatment cell.
- -On 08/19/96, a liquid sample (BSOWSPH-LQ) was collected from the groundwater in the bottom of the excavation. A composite soil sample (BSOWSPH) was collected from the four sidewalls of the excavation.
- -On 09/06/96, after removing additional soil from the walls, the excavation was resampled. One composite sample was collected from each of the four excavation sidewalls (OWSPH-N1, -S1, -E1, and -W1).
- -On 09/12/96, a second groundwater sample (OWSPH-LQ2) was collected from the water at the bottom of the excavation due to a missed holding time for VOC analysis of BSOWSPH-LQ.

On-Site analysis:

- -All samples, except for OWSPH-LQ2 and BSOWSPH, were analyzed for VOCs and PAHs by EPA Methods 8021 and 8270, respectively. OWSPH-LQ2 was analyzed for VOCs only due to the missed holding time of the original sample. The composite soil sample (BSOWSPH) was not analyzed due to the additional sampling on 09/06/96 from each excavation sidewall.
- -o-Xylene, which was detected in sample SPPHOWS-1, was also present in an associated method blank (PID3041). o-Xylene was not detected in the method blanks associated with sample OWSPH-W1.
- -The VOC surrogate recoveries for OWSPH-S1 and OWSPH-W1 were high due to matrix effects.

Off-Site Analysis:

-No samples were shipped off site for analysis.

Analytical Results (Soil)

Plattsburgh AFB - Project No. 17257

Page 1 of 4

Revised Report Date: 04/18/97 Original Report Date: 09/16/96

On-Site Laboratory

Site: OWSPH

		Sample No	umber	OWSPH-E1		OWSPH-N1			OWSPH-S1		OWSPH-W1		SPPHOWS-	·1		
PAH Analys	sis	Date Sam	pled '	09/06/96		09/06/96			09/06/96		09/06/96		08/07/96			
(Method 827	70)	Date Extra	icted	09/11/96		09/11/96			09/11/96		09/11/96		08/20/96			
,	•	Date Analy	zed	09/13/96		09/13/96			09/13/96		09/13/96		08/22/96			
	Concentration	Detection	Guidance													
Compound	Units	Limit	Values*	Result	Q	Result		2	Result	Q	Result	Q	Result	Q	Result	Q
Naphthalene	ng/g	. 333	200	ND		ND			28	J	215	# J	414	#		
Acenaphthene	ng/g	333	400	ND		ND			ND		ND		ND			}
Fluorene	ng/g	333	1000	DN		ND			ND		ND		ND			1
Phenanthrene	ng/g	333	1000	ND		248		J	ND		. ND		ND			1
Anthracene	ng/g	333	1000	ND	-	135		J	ND		ND		ND			
Fluoranthene	ng/g	333	1000	ND		859			ND		ND		ND			
Pyrene	ng/g	333	1000	ND		673			ND		ND		ND			1
Benzo(a)anthracene	ng/g	333	0.04	ND		283	#	J	ND		ND		ND			T
Chrysene	ng/g	333	0.04	ND	100	273	#	J	ND		ND		ND			
Benzo(b)fluoranthene	ng/g	333	0.04	ND		188	#	J	ND		ND		ND			
Benzo(k)fluoranthene	ng/g	333	0.04	ND		166	#	J	ND		ND		ND			
Benzo(a)pyrene	ng/g	333	0.04	ND		168	#	J	ND	on the one	ND		ND			
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND		137	#	J	ND		ND		ND			
Dibenz(a,h)anthracene	ng/g	333	1000	ND		ND			ND		ND		ND			
Benzo(g,h,i)perylene	ng/g	333	0.04	ND		129	#	J	ND		ND		ND			
Total PAHs	ng/g			ND		3259			28		215		414			

		Sample Nu	umber												
PAH Analys	sis	Date Samp	oled												
(Method 82		Date Extra	cted												
,		Date Analy	zed							V					
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q	_ Result	Q								
Naphthalene	ng/g	333	200												
Acenaphthene	ng/g	333	400												
Fluorene	ng/g	333	1000												
Phenanthrene	ng/g	333	1000												
Anthracene	ng/g	333	1000												
Fluoranthene	ng/g	333	1000			- 1									
Pyrene	ng/g	333	1000												
Benzo(a)anthracene	ng/g	333	0.04												
Chrysene	ng/g	333	0.04						1						
Benzo(b)fluorantherse	ng/g	333	0.04					7							
Benzo(k)fluoranthene	ng/g	333	0.04					-						_	
Benzo(a)pyrene	ng/g	333	0.04												
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04				1								
Dibenz(a,h)anthracene	ng/g	333	1000												
Benzo(g,h,i)perylene	ng/g	333	0.04	-	1										
Total PAHs	ng/g				1										

ND=compound not detected

NA = analysis not applicable for this site

E = estimated concentration is above the calibration range of the instrument

D = sample was diluted, see individual analytical results for corresponding detection limits

RE = ID suffix for re-extraction/re-analysis

J = estimated value is below the practical quantitation limit and above the method detection limit

S = surrogate recovery is outside control limits

Q=Qualifier

AB (or FB)= ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample

LQ = ID suffix for a liquid sample

N = ELCD was not functioning during analysis

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

B = analyte was detected in an associated blank as well as in the sample

EX = ID prefix for an excavation sample

SP = ID prefix for a stockpile sample

^{*} TCLP Alternative Guidance Values obtained from Stars Memo #1

Analytical Results (Water)

Plattsburgh AFB - Project No. 17257

Page 2 of 4

Revised Report Date: 04/18/97

Original Report Date: 09/16/96

On-Site Laboratory

Site: OWSPH

		Sample Nu	umber	BSOWSPH-LO	Q										
PAH Analys	is	Date Sam	pled -	08/19/96											
(Method 827		Date Extra	cted	08/22/96						•					
		Date Analy	yzed	08/24/96											
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Naphthalene	ug/L	5	10	ND											
Acenaphthene	ug/L	5	20	ND											
Fluorene	ug/L	5	50	ND											
Phenanthrene	ug/L	5	50	ND											
Anthracene	ug/L	5	50	ND								_			
Fluoranthene	ug/L	5	50	ND											
Pyrene	ug/L	5	50	ND			L								
Benzo(a)anthracene	ug/L	5	0.002	ND	17/4/2 1/5=								The second		
Chrysene	ug/L	5	0.002	ND											
Benzo(b)fluoranthene	ug/L_	5	0.002	ND											1
Benzo(k)fluoranthene	ug/L	5	0.002	ND											
Benzo(a)pyrene	ug/L	5	0.002	ND										L/co	
Indeno(1,2,3-cd)pyrene	ug/L	5	0.002	ND											
Dibenz(a,h)anthracene	ug/L	5	50	ND											
Benzo(g,h,i)perylene	ug/L	5	0.002	ND					3						
Total PAHs	ug/L			ND											

		Sample No	umber												
PAH Analy	sis	Date Sam	pled												
(Method 82	70)	Date Extra	cted												
,		Date Analy	yzed												
-	Concentration	Detection	Guidance	3-0-50		,									
Compound	Units	Limit	Values*	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Naphthalene	ug/L	5	10												
Acenaphthene	ug/L	5	20												
Fluorene	ug/L	5	50												
Phenanthrene	ug/L	5	50												
Anthracene	ug/L	5	50												
Fluoranthene	ug/L	5	50												
Pyrene	ug/L	5	50												
Benzo(a)anthracene	ug/L	5	0.002			NUMBER OF STREET									1-00-100
Chrysene	ug/L	5	0.002								2				
Benzo(b)fluoranthene	ug/L	5	0.002												
Benzo(k)fluoranthene	ug/L	5	0.002												
Benzo(a)pyrene	ug/L	5	0.002												
Indeno(1,2,3-cd)pyrene	ug/L	5	0.002												
Dibenz(a,h)anthracene	ug/L	5	50						1						
Benzo(g,h,i)perylene	ug/L	5	0.002												
Total PAHs	ug/L														

ND=compound not detected

NA = analysis not applicable for this site

Q=Qualifier

EX = ID prefix for an excavation sample

SP = ID prefix for a stockpile sample

AB (or FB)= ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample

N = ELCD was not functioning during analysis

E = estimated concentration is above the calibration range of the instrument

B = analyte was detected in an associated blank as well as in the sample S = surrogate recovery is outside control limits

LQ = ID suffix for a liquid sample

D = sample was diluted, see individual analytical results for corresponding detection limits RE = ID suffix for re-extraction/re-analysis

J = estimated value is below the practical quantitation limit and above the method detection limit

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

^{*} NYSDEC, Division of Water, Technical & Operational Guidance Series (TOGS)

[#] Results indicate concentrations above the Guidance Values obtained from the NYSDEC Division of Water TOGS



Plattsburgh AFB - Project No. 17257

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Revised Report Date: 04/18/97

Original Report Date: 09/16/96

On-Site Laboratory

Site: OWSPH

		Sample Nu	ımber	OWSPH-E1		OWSPH-N1		OWSPH-S1		OWSPH-W1		SPPHOWS-1			
VOC Analys	is	Date Samp	oled -	09/06/96		09/06/96		09/06/96		09/06/96		08/07/96	The state of the		
(Method 802	1)	Date Extra	cted	09/16/96		09/16/96		09/16/96		09/16/96		08/18/96			
		Date Analy	zed	09/16/96		09/16/96		09/16/96		09/16/96		08/18/96			
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ng/g	40	1000	ND		ND		ND	S	ND	S	1732.2	JD		
Benzene	ng/g	5	14	10.1		ND		7.0	S	16.2	# S	3994.0	# D		
Trichloroethylene	ng/g	5	700	ND		ND		ND	S	ND	S	ND	D		
Toluene	ng/g	5	100	ND		ND		1.9	JS	8.4	S	1089.7	# D		
Ethylbenzene	ng/g	5	100	2.4	j	ND		6.9	S	15.7	S	5822.7	# D		
m,p-Xylene	ng/g	5	100	ND		ND		15.2	S	76.9	S	18113.7	# D		
o-Xylene	ng/g	5	100	ND		ND ·		ND	S	22.0	S	1405.4	# BD		

		Sample Nu	ımber	;											
VOC Analysi	is	Date Samp	oled												
(Method 802	1)	Date Extra	cted												
	•	Date Analy	zed												
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q										
MTBE	ng/g	40	1000												
Benzene	ng/g	5	14												
Trichloroethylene	ng/g	5	700												
Toluene	ng/g	5	100												
Ethylbenzene	ng/g	5	100												
m,p-Xylene	ng/g	5	100												
o-Xylene	ng/g	5	100												

ND=compound not detected

NA = analysis not applicable for this site

Q=Qualifier

EX = ID prefix for an excavation sample

AB (or FB)= iD prefix for an ambient blank sample

J = estimated value is below the practical quantitation limit and above the method detection limit

SP = ID prefix for a stockpile sample

ER = ID prefix for an equipment rinsate sample

E = estimated concentration is above the calibration range of the instrument

B = analyte was detected in an associated blank as well as in the sample

LQ = ID suffix for a liquid sample

D = sample was diluted, see individual analytical results for corresponding detection limits

S = surrogate recovery is outside control limits

N = ELCD was not functioning during analysis

RE = ID suffix for re-extraction/re-analysis

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria # Results indicate concentrations above the TCLP Alternative Guidance Values obtained from the Stars Memo #1



Plattsburgh AFB - Project No. 17257

Page 4 of 4

Revised Report Date: 04/18/97

Original Report Date: 09/16/96

On-Site Laboratory

Site: OWSPH

		Sample Nu	ımber	OWSPH-LQ2	2										
VOC Analysis	3	Date Samp	oled '	09/12/96						-					
(Method 8021))	Date Extra	cted	09/15/96											
,	•	Date Analy	zed	09/15/96											
C	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ug/L	40	50	ND											
Benzene	ug/L	5	0.7	8.9	#										
Trichloroethylene	ug/L	5	5	ND											
Toluene	ug/L	5	5	ND											
Ethylbenzene	ug/L	5	5	1.4	J	1						_			
m,p-Xylene	ug/L	. 5	5	29.6	#							444			
o-Xylene	ug/L	5	5	9.9	#										

		Sample No	umber												
VOC Analy	sis	Date Sam	pled												
(Method 80	21)	Date Extra	cted												
		Date Analy	yzed												
	Concentration	Detection	Guidance		= 3										
Compound	Units	Limit	Values*	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ug/L	40	50												
Benzene	ug/L	5	0.7			C-10-000-000-									
Trichloroethylene	ug/L	5	5												
Toluene	ug/L	5	5							-					
Ethylbenzene	ug/L	5	5									EIG TO THE TOTAL OF THE CO			
m,p-Xylene	ug/L	5	5												
o-Xylene	ug/L	5	5						1						10

S = surrogate recovery is outside control limits

ND=compound not detected

NA = analysis not applicable for this site

J = estimated value is below the practical quantitation limit and above the method detection limit

E = estimated concentration is above the calibration range of the instrument

D = sample was diluted, see individual analytical results for corresponding detection limits RE = ID suffix for re-extraction/re-analysis

* NYSDEC, Division of Water, Technical & Operational Guidance Series (TOGS)

Q=Qualifier

EX = ID prefix for an excavation sample

SP = ID prefix for a stockpile sample

B = analyte was detected in an associated blank as well as in the sample

AB (or FB)= ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample

LQ = ID suffix for a liquid sample

N = ELCD was not functioning during analysis

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

Results indicate concentrations above the Guidance Values obtained from the NYSDEC Division of Water TOGS

Plattsburgh AFB Analytical Results

SampleID: OWSPH-E1

Matrix: Soil/Solid

on-site

Site ID: OWSPH

Test Code:

Project No.: 17257 - Date: 9/6/96 Time: 1120

Description : Volatiles

8021

Date Extracted: 9/16/96 Date Analyzed: 9/16/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	40	1000	ND	
Benzene	ng/g	5	14	10.1	
Trichloroethylene	ng/g	5	700	ND	
Toluene	ng/g	5	100	ND	
Ethylbenzene	ng/g	5	100	2.4	J
Toluene Ethylbenzene m,p-Xylene o-Xylene	ng/g	5	100	ND .	
o-Xylene	ng/g	5	100	ND	

Lab:

Test Code: 8270 Lab: on-site

Description : Semivolatiles

Date Extracted: 9/11/96 Date Analyzed: 9/13/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	333	200	ND	
Acenaphthene	ng/g	333	400	ND	
Fluorene	ng/g	333	1000	ND	
Phenanthrene	ng/g	333	1000	ND	
Anthracene	ng/g	333	1000	ND	
Fluoranthene	ng/g	333	1000	ND	1 1
Pyrene	ng/g	333	1000	ND	
Benzo(a)anthracene	ng/g	333	0.04	ND	
Chrysene	ng/g	333	0.04	ND	
Benzo(b)fluoranthene	ng/g	333	0.04	ND	
Benzo(k)fluoranthene	ng/g	333	0.04	ND	
Benzo(a)pyrene	ng/g	333	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND	
Dibenz(a,h)anthracene	ng/g	333	1000	ND	
Benzo(g,h,i)perylene	ng/g	333	0.04	ND	
Total PAHs	ng/g			ND	

* TCLP Alternative Guidance Values obtained from the Stars Memo #1

Plattsburgh AFB Analytical Results

SampleID: BSOWSPH-LQ

Matrix: Aqueous

Site ID:

OWSPH

Project No.:

17257

Date:

8/19/96

Time:

1350

Test Code:

8270

Lab:

on-site

Description : Semivolatiles

Date Extracted: 8/22/96

Date Analyzed: 8/24/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/i	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: OWSPH-LQ2

Matrix: Aqueous

Site ID: **OWSPH**

Project No.: 17257

Date: 9/12/96 0745

Test Code:

Time:

8021

Lab:

on-site

Description : Volatiles

Date Extracted: 9/15/96

Date Analyzed: 9/15/96

Parameter	Units	Units Detection Limit		Result	DataFlag
MTBE	ug/l	40	50	ND	
Benzene	ug/l	5	0.70	8.9	#
Trichloroethylene	ug/l	5	5	ND	N 1
Trichloroethylene Toluene	ug/l	5	5	ND	1 1
Ethylbenzene	ug/l	5	5	1.4	J
m,p-Xylene	ug/l	5	5	29.6	#
m,p-Xylene o-Xylene	ug/l	5	5	9.9	#

Plattsburgh AFB Analytical Results

SampleID: OWSPH-N1

OWSPH

Matrix: Soil/Solid

Site ID:

Project No.: 17257

· Date :

9/6/96

Time:

1140

Test Code:

Test Code:

8021

Lab:

on-site

Description : Semivolatiles

8270

Lab:

on-site

Description : Volatiles

Date Extracted: 9/16/96

Date Analyzed: 9/16/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	40	1000	ND	
Benzene	ng/g	5	14	ND	
Trichloroethylene	ng/g	5	700	ND	
Toluene	ng/g	5	100	ND	
Ethylbenzene	ng/g	5	100	ND	
m,p-Xylene	ng/g	5	100	ND	
o-Xylene	ng/g	5	100	ND	

Date Extracted: 9/11	Date				
Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	333	200	ND	
Acenaphthene	ng/g	333	400	ND	1 1
Fluorene	ng/g	333	1000	ND	
Phenanthrene	ng/g	333	1000	248	[J
Anthracene	ng/g	333	1000	135	∥J
Fluoranthene	ng/g	333	1000	859	i i
Pyrene	ng/g	333	1000	673	
Benzo(a)anthracene	ng/g	333	0.04	283	#J
Chrysene	ng/g	333	0.04	273	#J
Benzo(b)fluoranthene	ng/g	333	0.04	188	#J
Benzo(k)fluoranthene	ng/g	333	0.04	166	#J
Benzo(a)pyrene	ng/g	333	0.04	168	#J
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	137	#J
Dibenz(a,h)anthracene	ng/g .	333	1000	ND	1
Benzo(g,h,i)perylene	ng/g	333	0.04	129	#J
Total PAHs	ng/g			3259	

ng/g = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the Instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

^{*} TCLP Alternative Guidance Values obtained from the Stars Memo #1

Plattsburgh AFB Analytical Results

SampleID: OWSPH-S1

Matrix: Soil/Solid

Site ID: Project No.: 17257

OWSPH

Date:

9/6/96

Time:

1130

Test Code:

8021

Lab:

on-site

Description: Volatiles

Date Extracted: 9/16/96

Date Analyzed: 9/16/96

Result Parameter Units Detection Regulatory DataFlag Limit Limit * 1000 ND MTBE ng/g 40 5 7.0 Benzene 14 ng/g Trichloroethylene 5 700 Ινσ ng/g 5 100 1.9 JS Toluene ng/g 5 6.9 s Ethylbenzene 100 ng/g m,p-Xylene 5 100 15.2 S ng/g 100 ND o-Xylene ng/g

Test Code: 8270 Lab: on-site

Description: Semivolatiles

Date Extracted: 9/11/96 Date Analyzed: 9/13/96

Parameter	Units	Units Detection Limit		Result	DataFlag
Naphthalene	ng/g	333	200	28	J
Acenaphthene	ng/g	333	400	ND	
Fluorene	ng/g	333	1000	ND	
Phenanthrene	ng/g	333	1000	ND	
Anthracene	ng/g	333	1000	ND	
Fluoranthene	ng/g	333	1000	ND	
Pyrene	ng/g	333	1000	ND	
Benzo(a)anthracene	ng/g	333	0.04	ND	
Chrysene	ng/g	333	0.04	ND	i i
Benzo(b)fluoranthene	ng/g ·	333	0.04	ND	1
Benzo(k)fluoranthene	ng/g	333	0.04	ND	
Benzo(a)pyrene	ng/g	333	0.04	ND	1
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND	i I
Dibenz(a,h)anthracene	ng/g	333	1000	ND	
Benzo(g,h,i)perylene	ng/g	333	0.04	ND	ļ I
Total PAHs	ng/g			28	

ng/g '= ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} TCLP Alternative Guidance Values obtained from the Stars Memo #1

Plattsburgh AFB Analytical Results

SampleID: OWSPH-W1

Matrix: Soil/Solid

Site ID:

OWSPH

Project No.: 17257

Date:

9/6/96

Time:

1135

Test Code:

8021

Lab:

on-site

Description : Volatiles

Date Extracted: 9/16/96

Date Analyzed: 9/16/96

Parameter	Units Detection f		Regulatory Limit *	Result	DataFlag
MTBE Benzene	ng/g	40	1000	ND	s
Benzene	ng/g	5	14	16.2	#S
Trichloroethylene	ng/g	5	700	ND	s
Trichloroethylene Toluene	ng/g	5	100	8.4	s
Ethylbenzene	ng/g	5	100	15.7	s
m,p-Xylene	ng/g	5	100	76.9	s
m,p-Xylene o-Xylene	ng/g	5	100	22.0	s

Test Code: 8270 Lab: Description: Semivolatiles

Date Extracted: 9/11/96 Date Analyzed: 9/13/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	333	200	215	#J
Acenaphthene	ng/g	333	400	ND	
Fluorene	ng/g	333	1000	ND	
Phenanthrene	ng/g	333	1000	ND	
Anthracene	ng/g	333	1000	ND	
Fluoranthene	ng/g	333	1000	ND	
Pyrene	ng/g	333	1000	ND	
Benzo(a)anthracene	ng/g	333	0.04	ND	
Chrysene	ng/g	333	0.04	ND	
Benzo(b)fluoranthene	ng/g	333	0.04	ND	
Benzo(k)fluoranthene	ng/g	333	0.04	ND	
Benzo(a)pyrene	ng/g	333	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND	
Dibenz(a,h)anthracene	ng/g	333	1000	ND	
Benzo(g,h,i)perylene	ng/g	333	0.04	ND	
Total PAHs	ng/g			215	

on-site

ng/g = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

* TCLP Alternative Guidance Values obtained from the Stars Memo #1

indicates concentration above TCLP Alternative Guidance Values located in STARS Memo #1

Plattsburgh AFB Analytical Results

SampleID: SPPHOWS-1

Matrix: Soil/Solid

on-site

Site ID: **OWSPH**

Project No.: 17257

Date:

Time:

1310

Test Code:

8021

Lab:

8/7/96

Description: Volatiles

Date Extracted: 8/18/96

Date Analyzed: 8/18/96

Parameter Units Detection Regulatory Result DataFlag Limit * Limit MTBE 1000 1732.2 2000 #JD ng/g Benzene 250 14 3994.0 #D ng/g 250 700 ND D Trichloroethylene ng/g 250 100 1089.7 #D Toluene ng/g Ethylbenzene 250 100 5822.7 #D ng/g m,p-Xylene 250 100 18113.7 #D ng/g o-Xylene 250 100 1405.4 #BD ng/g

Test Code: 8270 Lab: on-site

Description: Semivolatiles

Date Extracted: 8/20/96 Date Analyzed: 8/22/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	333	200	414	#
Acenaphthene	ng/g	333	400	ND	
Fluorene	ng/g	333	1000	ND	
Phenanthrene	ng/g	333	1000	ND	
Anthracene	ng/g	333	1000	ND	
Fluoranthene	ng/g	333	1000	ND	
Pyrene	ng/g	333	1000	ND	i i
Benzo(a)anthracene	ng/g	333	0.04	ND	
Chrysene	ng/g	333	0.04	ND	
Benzo(b)fluoranthene	ng/g	333	0.04	ND	
Benzo(k)fluoranthene	ng/g	333	0.04	ND	
Benzo(a)pyrene	ng/g	333	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND	1 . [
Dibenz(a,h)anthracene	ng/g	333	1000	ND	ļ I
Benzo(g,h,i)perylene	ng/g	333	0.04	ND	
Total PAHs	ng/g			414	

ng/g = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} TCLP Alternative Guidance Values obtained from the Stars Memo #1



Blank ID: PID3041

QC Batch: NA

Test: 8021

Lab: on-site

Matrix: Aqueous

Units: ug/l

Date Extracted: 8/18/96

Date Analyzed: 8/18/96

Parameter	Result	Flag	DetectionLimit
MTBE	ND		40
Benzene	ND		5
Trichloroethylene	ND		5
Toluene	ND		5
Ethylbenzene	ND		5
m,p-Xylene	ND		5
Toluene Ethylbenzene m,p-Xylene o-Xylene	.64	J	5

Soil Sample Collection Log Plattsburgh AFB - Project # 17257/17499

Date: 8-7-96 Weather: 95° Sunny					Site: BS Bulk Storast /Port Heary Ally Samplers: Mike SCAOC Douglas						
4	Sample ID PPHOWS-1	Time 13:10	PID Screen	Comp/ Grab	Sample		inates	S De	sample escription	# of Bottles	
<u> </u>	PBSOWS-1			<u> </u>	6			Brown	grey	1×40×	
I	net analyzed	13:30		<u>.</u> G						IX 40M	
	, XY										
					<u> </u>						
)				-							
			1								
	Map Attached:	Yes (NO)								
		-Reference -Head Spac		gs:	Yes (No No					
	Sample Type: <	Screening)Confirma	tion	Disposal/Cl	naracteriza	ation				
	Requested Analy	rsis:	voes	> (SVOCs	>	Other:				
	Split sample Coll	ected:	Yes (No)							
	Laboratory Destin			COC#_			Airbill #_				
		Duplicate C	ollected:	Yes (No	Rinsate (Collected:	Yes ·	(NO)		
			On-Site	Laborato	ry Chain of C	ustody / F	Request fo	or Analysis		-	
h.	Requested Analy	111.1	vacs	di	SVOCs)		emperatu	-/VI		1/02/2/2/2/	
	Relinquished by ((qqvii): \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	MA CONTRACTOR	Lar_	13.50		i by (dd/tt): // tut		1)8/1/5	
			•		1-7, 3	•			-	1/1/	

Soil Sample Collection Log Plattsburgh AFB - Project # 17257)17499

Pg. Q of G Date: 8-19-90 Site: Bulk STORAGE Weather: 83° F, Stany Samplers: M.SLase Sample PID Sample Coordinates Sample Comp/ # of Time Screen Grab Depth (ft) Ref. Pt. Ref. Pt. Description **Bottles** BRAY BLACE 2× 40 m LX 402 1x40ml ambient blank NIA Sample was not anal event is screening Map Attached Yes ! -Reference Points: No -Head Space Readings: Sample Type: \ Screening Confirmation Disposal/Characterization VOCs Requested Analysis: (**SVOCs** Other: Yes No Split sample Collected: coc# on S. Fe Airbill #_ Laboratory Destination: Duplicate Collected: Yes No Rinsate Collected: Yes No On-Site Laboratory Chain of Custody / Request for Analysis Requested Analysis:/ /VOCs SVOCs Cooler Temperature:_

Received by (dd/tt):

0730

Relinquished by (dd/tt):/

Soil Sample Collection Log

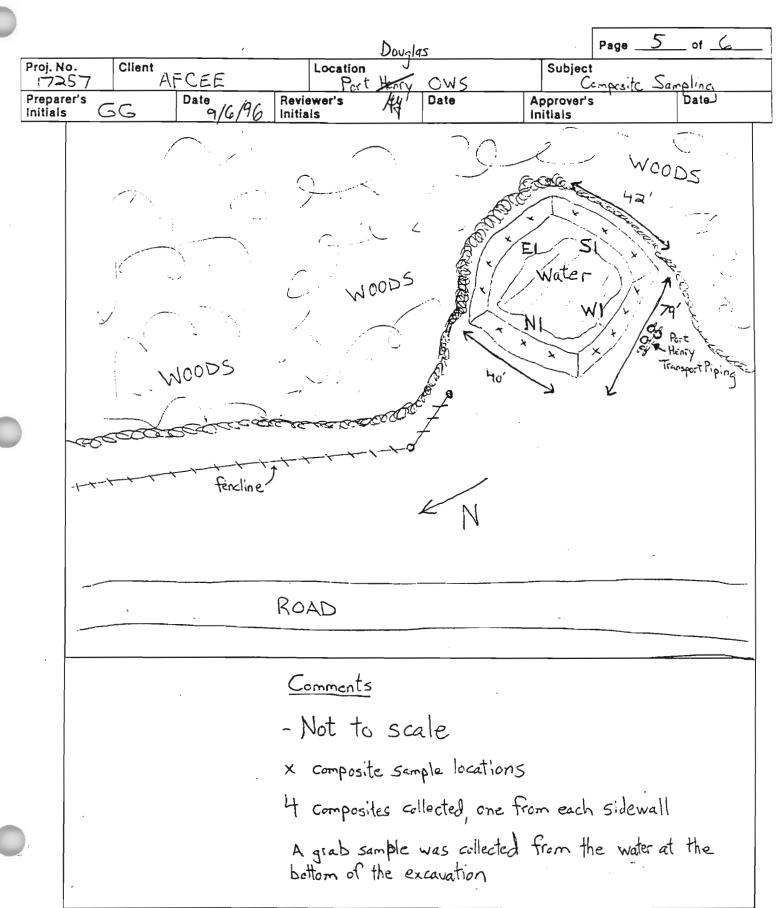
Plattsburgh AFB - Project # 17257/17499 Douglas
Site: Port Heary Oll/Water Separator
Samplers: J. Shirley / G. Guinaval Date: 9(6/96 Weather: Sun 30°F Sample PID Comp/ Sample Coordinates Sample # of Time Screen Grab Depth (ft) Ref. Pt. Ref. Pt. Description **Bottles** OUS-PH-EI 117,0 411 2×404 0025-PH-N1 lib 41 NS-PH-SI 4 DUS-PH-W1 2× 902 Map Attached: Yes No -Reference Points: -Head Space Readings: Sample Type: Screening, Confirmation Disposal/Characterization Requested Analysis: VOCs) SVOCE Other: Split sample Collected: Yes coc#_Ons Laboratory Destination: Airbill # Duplicate Collected: Yes No Rinsate Collected: Yes No On-Site Laboratory Chain of Custody / Request for Analysis Requested Analysis: VOCs Cooler Temperature: Relinquished by (dd/tt): Received by (dd/tt):_

Soil Sample Collection Log

		1	Plattsbur	gh AFB - Pr	oject #17	257/17499	3	
,				Site: Por	Dougla	z		Pg. <u>4</u> 0
Date: 9,	112/96			Site: Por	+ Herry	OWS		
Weather: (21 andy, 65°	`F		Samplers:	GG, 3	Is		
Sample ID	Time	PID Screen	Comp/ Grab	Sample Depth (ft)	Coord Ref. Pt.		Sample Description	# cf Bottle
C.MSPH- L	0745		G	6			excavation liquid	2-40
				•				
								,
	_							
				1	1			
Map Attached	t: (Yea	No						
	-Reference			Van	(VI)	•		
	-Head Spa		ngs:	Yes Yes	No		•	
Sample Type	: Screening	Confirm	ation	Dîsposal/C	haracteriz	ation	-	
Requested A		Voes		SVOCs		Other:		
Split sample	•	Yes	Ø.	0.003		• <u> </u>		
			<u>100</u>					
Laboratory D	estination: <u>0</u> ^		COC#_			Airbill#_		
	Duplicate	Collected:	Yes	NO	Rinsale	Collected:	Yes No	
		On-Site	Laborate	ory Chain of	Custody /	Request for	or Analysis	
Description		- /3	Laborat	-		-	•	
Requested A	•	Voes	4 -	SVOCs		Temperatu	0 0 0 . /	
Relinquished	by (dd/tt):	Α.	Kunzre	29\2\19\ \(\alpha\)	Receive	d by (dd/tt): Jan / Kxu	Mr.
,	•			0 300			0800	
	•				•		4/17/14	-

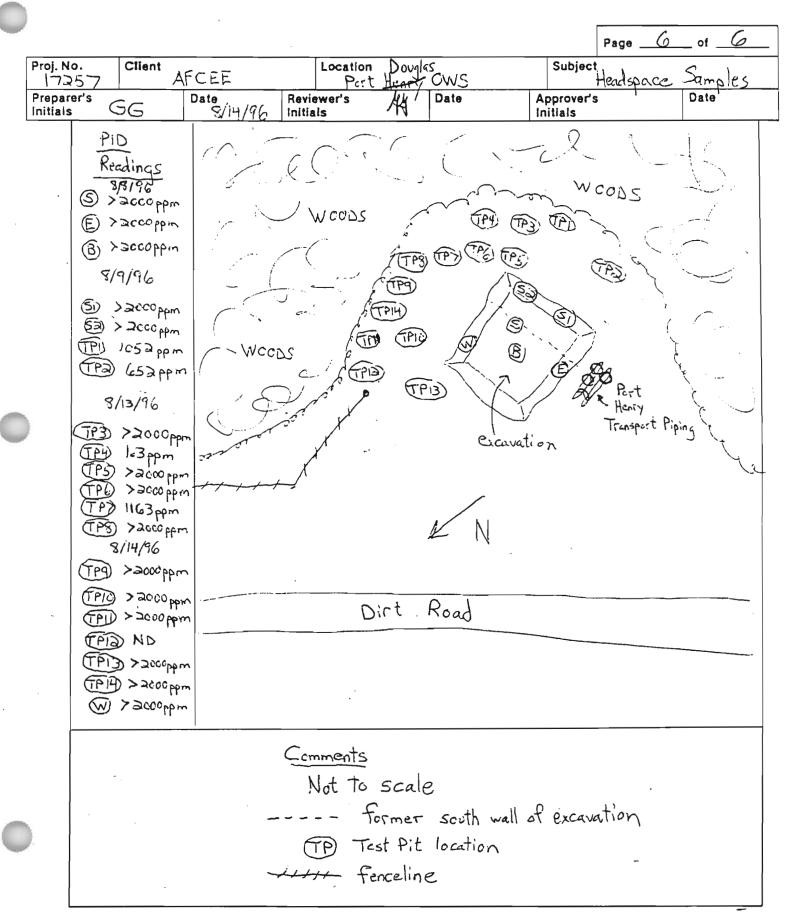


COMPUTATION SHEET





COMPUTATION SHEET



B.3 OWS-2073 (BULK STORAGE AREA OWS)

OWS-2073 CLOSURE REPORT OHM REMEDIATION SERVICES CORP. PLATTSBURGH AIR FORCE BASE **Delivery Order 0003**

OHM Project No. 17257

Date: 04/18/97

OWS No.: <u>OWS-2073</u> OWS Size: 6,000-Gallon

OWS Location: Bulk Storage Area

TABLE OF CONTENTS

Data Summary Sheet

- ➤ Site Location
- ➤OWS Information
- ➤ Sources of Contamination
- ➤ Site Geology
- ➤ Soil Quality Analytical Data
- ➤ Groundwater Quality Analytical Data

Attachment I - Sampling and Analysis Site Reports

- ➤ Analytical Results (Soil)
- ➤ Analytical Results (Liquid)
- ➤ Split Sample Analytical Results Not Applicable
- ➤ Soil Sample Collection Log
- ➤ Sample Location Map (Site Map)

Comments:

One 6,000-gallon oil/water separator (OWS), holding tank, and piping were excavated and removed from the east side of the Bulk Fuel Storage Area in August 1996. This OWS was also referred to as the Bulk Storage Area OWS. Soil around the OWS was excavated to a depth of approximately 5 feet. Groundwater was encountered at a depth of approximately 4 feet. Staining and hydrocarbon odors were noted at the time of removal. On 08/07/96, one soil/sludge composite sample was collected from the stockpile containing the contents of the OWS. On 09/04/96, one composite soil sample was collected from each of the four sidewalls of the excavation and one water sample was collected from the bottom of the excavation. The samples were analyzed for volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs). No VOCs or PAHs were detected in the soil or groundwater samples at concentrations which exceed the NYSDEC TCLP Alternative Guidance Values or NYSDEC Class GA Groundwater Standards, respectively. The excavated soil and sludge were transported to the on-site treatment cell and the excavation was backfilled to grade with imported clean fill.

	DATA	SUMMA	RY FO	OR TECH	NICAL REPO	ORT SUBMI	ГТАL	
Date: 04/18	<u>3/97</u>							
OWS No.: C	OWS-2073	OWS L	ocatio	n : <u>Bulk Sto</u>	orage Area			
Street Addre	ess: Con	necticut R	oad, B	ulk Storage	e Area			
		tsburgh Al		•				
		,						
Consultant	Information							
	Completing Rep	port:	Parson	ns ES				
	son and Teleph				n (315) 451-9	560		
Mailing Add	•				is Road, Suite		_	
				oool, NY 1				
				, , , , , ,				
Site Location	n/Description	Yes,	/No				Yes/	No
Municipal wate		Yes		_	sements (within 2	•		No
	r supplied to site?				ter supply wells (No
Municipal sewer in		<u>Yes</u> No		_ Su	rface water body (within 1,000 feet)?	Yes
Storm sower in					•			
OWS Info	rmation OWS	Dimension:	6' dia. x	28' L	Mat'l of Const.: Ta	ank - Steel	Piping - 12"	Galvanized
OWS No.	Product Type	OWS Condit 0 - Perforate 4 - No Corros	ed	Capacity (Gallons)	Quantity Removed (Gallons)	OWS Removed Yes/No	Piping Condition 0 - Perforated 4 - No Corrosion	Piping Removed Yes/No
2073	ow	4		6,000	1,000	Yes	4	Yes
	* - HO = Heating O	il, G= Gasoline,	D = Diese	el, UG = Unleade	ed Gas, OW = Oil and	Water, ANB = Acid	Neutalization Basin	
Suspected S Eliminated?	Sources of Cor Yes	ıtaminatio	on	6,0	000-gallon OW	/S		
Free phase p	roduct encoun	tered?	Yes _		Thicknes	s	No <u>xx</u>	
Contaminate	d soil encount	ered?	Yes _	XX	Amt. exc	avated (YD3)_	~416_ No	
1	-	-				DEC Groundw	ater Standards	? No
Did sample a	ınalysis indicat	e attainme	nt of so	oil cleanup	criteria? Yes			

DATA SUMMARY FOR TECHNICAL REPORT SUBMITTAL Site Geology Description Depth (Feet) Brown Sand with Minor Silt 0 - 5 (Bottom of excavation) Depth to bedrock: > 50 feet Average depth to groundwater: 4 feet General groundwater flow direction: East, toward Lake Champlain Soil Quality Analytical Data (Excavation Confirmation Samples) **EXBSOWSE EXBSOWSN EXBSOWSS** Sample Designation **EXBSOWSW** Date Sampled 09/04/96 09/04/96 09/04/96 09/04/96 Method **Parameters** Concentrations (ppb) 8021 ND ND ND **MTBE** ND 8021 ND ND ND Benzene ND Trichloroethylene 8021 ND ND ND ND 8021 ND ND ND Toluene ND Ethylbenzene 8021 ND ND ND ND Xylenes (total) 8021 ND ND ND ND Total BTEX ND ND 8021 ND ND Naphthalene 8270 ND ND ND ND Total PAHs 8270 ND ND ND ND Split sample results shown in italic. Groundwater Quality Analytical Data (Excavation Confirmation Samples) Sample Designation **EXBSOWSLO** 09/04/96 Date Sampled Method **Parameters** Concentrations (ppb) **MTBE** 8021 ND 8021 ND Benzene Trichloroethylene 8021 ND ND 8021 Toluene 8021 ND Ethylbenzene Xylenes (total) 8021 ND Total BTEX 8021 ND Naphthalene 8270 ND Total PAHs 8270 ND

Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17257

Site: Bulk Storage Area OWS (OWS-2073)

Revised Report Date: 04/18/97 Original Report Date: 09/16/96

Sample Collection:

-On 08/07/96, a composite sample (SPBSOWS-1) was collected from the soil/sludge stockpile containing the contents of the Bulk Storage Area oil/water separator (OWS) (OWS-2073). The material was transported to the on-site treatment cell after the sampling event. The excavated soil from the OWS removal was also transported to the on-site treatment cell, therefore, an additional soil stockpile sample was not collected.

-On 09/04/96, one composite soil sample was collected from each of the four sidewalls of the excavation (EXBSOWSN, E, W, and S). A grab sample (EXBSOWSLQ) was collected from the groundwater in the bottom of the excavation. An ambient blank (ABBSOWSLQ) was also collected during this sampling event for QC purposes.

On-Site analysis:

-The samples were analyzed for VOCs and PAHs by EPA Methods 8021 and 8270, respectively. The ambient blank, ABBSOWSLQ, was not analyzed because no VOCs were detected in the field samples.

Off-Site Analysis:

-No samples were shipped off site for analysis.



Plattsburgh AFB - Plact No. 1725

Site: OWSBSA

Page 1 of 4

On-Site Laboratory

Revised Report Date: 04/18/97 Original Report Date: 09/16/96

		Sample Nu	ımber	EXBSOWSE		EXBSOWSN		EXBSOWSS		EXBSOWSW		SPBSOWS-1			
PAH Analys	is	Date Samp	oled	09/04/96		09/04/96		09/04/96		09/04/96		08/07/96			
(Method 827	0)	Date Extra	cted	09/10/96		09/10/96		09/10/96		09/10/96		08/20/96			
•	•	Date Analy	zed	09/12/96		09/12/96		09/12/96		09/12/96		08/22/96			
	Concentration	Detection	Guidance				_								
Compound	Units	Limit	Values*	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Naphthalene	ng/g	333	200	ND		ND		ПD		ND		ND ND			
Acenaphthene	ng/g	333	400	ND		ND		ND		ND		ND			
Fluorene	ng/g	333	1000	ND		ND		ND		ND		ND			
Phenanthrene	ng/g	333	1000	ND		ND		ND		ND		ND			
Anthracene	ng/g	333	1000	ND		ND		ND		ND		ND			
Fluoranthene	ng/g	333	1000	ND		ND		ND		ND		ND			
Pyrene	ng/g	333	1000	ND		ND		ND		ND		ND			
Benzo(a)anthracene	ng/g	333	0.04	ND		ND		ND	1	ND		ND			
Chrysene	ng/g	333	0.04	ND		ND		ND		ND		ND			
Benzo(b)fluoranthene	ng/g	333	0.04	ND		ND		ND		ND		ND			1
Benzo(k)fluoranthene	ng/g	333	0.04	ND		ND		ND		ND		ND			
Benzo(a)pyrene	ng/g	333	0.04	ND		ND		ND		ND		ND			1
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND		ND		ND		ND		ND			1
Dibenz(a,h)anthracene	ng/g	333	1000	ND		ND		ND		ND		ND			
Benzo(g,h,i)perylene	ng/g	333	0.04	ND		ND	1	ND		ND		ND			
Total PAHs	ng/g			ND		ND .		ND		ND		ND			1

1		Sample Nu	ımber												
PAH Analys	is	Date Samp	oled '												_
(Method 827	0)	Date Extra	cted												
		Date Analy	zed												
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q										
Naphthalene	ng/g	333	200									1	l		
Acenaphthene	ng/g	333	400									-			
Fluorene	ng/g	333	1000	:		_									
Phenanthrene	ng/g	333	1000												
Anthracene	ng/g	333	1000												
Fluoranthene	ng/g	333	1000												
Pyrene	ng/g	333	1000												
Benzo(a)anthracene	ng/g	333	0.04												
Chrysene	ng/g	333	0.04									}			
Benzo(b)fluoranthene	ng/g	333	0.04												
Benzo(k)fluoranthene	ng/g	333	0.04										,		1
Benzo(a)pyrene	ng/g	333	0.04												
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04					i							
Dibenz(a,h)anthracene	ng/g	333	1000					1			1				
Benzo(g,h,i)perylene	ng/g	333	0.04												
Total PAHs	ng/g					1									

ND=compound not detected

NA = analysis not applicable for this site

Q=Qualifier

EX = ID prefix for an excavation sample SP = ID prefix for a stockpile sample AB (or FB)= ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample

B = analyte was detected in an associated blank as well as in the sample

J = estimated value is below the practical quantitation limit and above the method detection limit E = estimated concentration is above the calibration range of the instrument

D = sample was diluted, see individual analytical results for corresponding detection limits

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

^{*} TCLP Alternative Guidance Values obtained from Stars Memo #1

[#] Results indicate concentrations above the TCLP Atternative Guidance Values obtained from the Stars Memo #1

Results (Water)

Plattsburgh AFB - Plact No. 17257

On-Site Laboratory

Site: OWSBSA

Revised Report Date: 04/18/97 Original Report Date: 09/16/96

		Sample Nu	ımber	EXBSOWSLQ	!										
PAH Analys	sis	Date Samp	oled	09/04/96											
(Method 82)	70)	Date Extra	cted	09/05/96				,							
	•	Date Analy	zed	09/10/96											
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Naphthalene	ug/L	5	10	ND											
Acenaphthene	ug/L	5	20	ND											
Fluorene	ug/L	5	50	ND											
Phenanthrene	ug/L	5	50	ND											
Anthracene	ug/L	5	50	ND	1										
Fluoranthene	ug/L	5	50	ND											
Pyrene	ug/L	5	50	ND											
Benzo(a)anthracene	ug/L	_ 5	0.002	ND											
Chrysene	ug/L	5	0.002	ND											
Benzo(b)fluoranthene	ug/L	5	0.002	ND											
Benzo(k)fluoranthene	ug/L	5	0.002	ND											
Benzo(a)pyrene	ug/L	5	0.002	ND											
Indeno(1,2,3-cd)pyrene	ug/L	5	0.002	ND											
Dibenz(a,h)anthracene	ug/L	5	50	ND											
Benzo(g,h,i)perylene	ug/L	5	0.002	ND											
Total PAHs	ug/L			ND											
		1													
l		Sample Nu	ımber	1						1					

1		Saltiple No				L									
PAH Analys	is	Date Samp	oled												
(Method 827	'0)	Date Extra	cted												
		Date Analy													
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q_	Result	Q_
Naphthalene	ug/L	5	10												
Acenaphthene	ug/L	5	20												
Fluorene	ug/L	5	50												
Phenanthrene	ug/L	5	50												
Anthracene	ug/L	_ 5	50												
Fluoranthene	ug/L	5	50												
Pyrene	ug/L	5	50												
Benzo(a)anthracene	ug/L	5	0.002												
Chrysene	ug/L	5	0.002												
Benzo(b)fluoranthene	ug/L	5	0.002								}				
Benzo(k)fluoranthene	ug/L	_ 5	0.002]				
Benzo(a)pyrene	ug/L	5	0.002												
Indeno(1,2,3-cd)pyrene	ug/L	_ 5	0.002												
Dibenz(a,h)anthracene	ug/L	5	50												
Benzo(g,h,i)perylene	ug/L	5	0.002												
Total PAHs	ug/L	1					1								

ND=compound not detected

NA = analysis not applicable for this site

Q=Qualifier

EX = ID prefix for an excavation sample

AB (or FB)= ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample

J = estimated value is below the practical quantitation limit and above the method detection limit E = estimated concentration is above the calibration range of the instrument

SP = ID prefix for a stockpile sample B = analyte was detected in an associated blank as well as in the sample

D = sample was diluted, see individual analytical results for corresponding detection limits * NYSDEC, Division of Water, Technical & Operational Guidance Series (TOGS)

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

[#] Results indicate concentrations above the Guidance Values obtained from the NYSDEC Division of Water TOGS



Plattsburgh AFB - P. Ject No. 17257



On-Site Laboratory

Site: OWSBSA

Revised Report Date: 04/18/97 Original Report Date: 09/16/96

		Sample Nu	ımber	EXBSOWSE		EXBSOWSN		EXBSOWSS		EXBSOWSW		SPBSOWS-1			
VOC Analys	is	Date Samp	oled	09/04/96		09/04/96		09/04/96		09/04/96		08/07/96			
(Method 802	1)	Date Extra	cted	09/15/96		09/16/96		09/15/96 /		09/16/96		08/18/96			
		Date Analy	zed	09/15/96		09/16/96		09/15/96		09/16/96		08/18/96			
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ng/g	40	1000	ND		ND		ND		ND		ND			
Benzene	ng/g	5	14	NĐ		ND		ND		ND		ND			
Trichloroethylene	ng/g	5	700	ND		ND		ND		ND		ND			
Toluene	ng/g	5	100	ND		ND		ND		ND		ND			
Ethylbenzene	ng/g	5	100	ND		ND		ND		ND		ND			
m,p-Xylene	ng/g	5	100	ND		ND		ИD		ND		ND			
o-Xylene	ng/g	5	100	ND		ND		ND		ND		ND			

		Sample Nu	ımber												
VOC Analysi	s	Date Samp	oled												
(Method 8021	1)	Date Extra	cted												
1	•	Date Analy	zed												
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q										
MTBE	ng/g	40	1000										!		
Benzene	ng/g	5	14												
Trichloroethylene	ng/g	5	700												
Toluene	ng/g	5	100												
Ethylbenzene	ng/g	5	100										-		
m,p-Xylene	ng/g	5	100												
o-Xylene	ng/g	5	100												

ND=compound not detected

NA = analysis not applicable for this site

Q=Qualifier

EX = ID prefix for an excavation sample

AB (or FB)= ID prefix for an ambient blank sample

J = estimated value is the below practical quantitation limit and above the method detection limit

D = sample was diluted, see individual analytical results for corresponding detection limits

SP = ID prefix for a stockpile sample

ER = ID prefix for an equipment rinsate sample

E = estimated concentration is above the calibration range of the instrument

B = analyte was detected in an associated blank as well as in the sample

^{*} TCLP Alternative Guidance Values obtained from Stars Memo #1

Analy Results (Water)

Plattsburgh AFB - P. ct No. 17257

Page 4 of 4

On-Site Laboratory

Site: OWSBSA

Revised Report Date: 04/18/97 Original Report Date: 09/16/96

		Sample Nu	ımber	EXBSOWSLQ											
VOC Analysi	is	Date Samp	oled	09/04/96											
(Method 802	1)	Date Extra	cted	09/15/96				,							
		Date Analy	zed	09/15/96											
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ug/L	40	50	ND											
Benzene	ug/L	5	0.7	ND											
Trichloroethylene	ug/L	5	5	ND											
Toluene	ug/L	5	5	ND											
Ethylbenzene	ug/L	5	5	ND											
m,p-Xylene	ug/L	5	5	ND											
o-Xylene	ug/L	5	5	ND											

		Sample Nu	ımber												
VOC Analys	is	Date Samp	oled												
(Method 802	:1)	Date Extra	cted												
		Date Analy	zed												
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q										
MTBE	ug/L_	40	50												
Benzene	ug/L	5	0.7												
Trichloroethylene	ug/L	5	_5												
Toluene	ug/L.	5	5												
Ethylbenzene	ug/L	5	5												
m,p-Xylene	ug/L_	5	5												
o-Xylene	ug/L	5	5												

ND=compound not detected

NA = analysis not applicable for this site

Q=Qualifier

EX = ID prefix for an excavation sample

AB (or FB)= ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample

J = estimated value is below the practical quantitation limit and above the method detection limit E = estimated concentration is above the calibration range of the instrument

SP = ID prefix for a stockpile sample

LQ = ID suffix for a liquid sample

D = sample was diluted, see individual analytical results for corresponding detection limits

B = analyte was detected in an associated blank as well as in the sample

OC criteria

* NYSDEC, Division of Water, Technical & Operational Guidance Series (TOGS)

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

Results indicate concentrations above the Guidance Values obtained from the NYSDEC Division of Water TOGS

Plattsburgh AFB Analytical Results

SampleID: EXBSOWSE

Matrix: Soil/Solid

Site ID: **OWSBSA**

> Date: Time: 1050 9/4/96

Project No.: 17257

Test Code:

8021 Lab: on-site

Description: Volatiles

Date Extracted: 9/15/96

Date Analyzed: 9/15/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	40	1000	ND	
Benzene	ng/g	5	14	ND	
Trichloroethylene	ng/g	5	700	ND	
Toluene	ng/g	5	100	ND	
Ethylbenzene	ng/g	5	100	ND	
m,p-Xylene	ng/g	5	100	ND	
o-Xylene	ng/g	5	100	ND	

Test Code: 8270 Lab: on-site

Description: Semivolatiles

Date Extracted: 9/10/96 Date Analyzed: 9/12/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	333	200	ND	
Acenaphthene	ng/g	333	400	ND	
Fluorene	ng/g	333	1000	ND	
Phenanthrene	ng/g	333	1000	ND	
Anthracene	ng/g	333	1000	ND	
Fluoranthene	ng/g	333	1000	ND	
Pyrene	ng/g	333	1000	ND	
Benzo(a)anthracene	ng/g	333	0.04	ND	
Chrysene	ng/g	333	0.04	ND	
Benzo(b)fluoranthene	ng/g	333	0.04	ND	
Benzo(k)fluoranthene	ng/g	333	0.04	ND	
Benzo(a)pyrene	ng/g	333	0.04	ND	1
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND	
Dibenz(a,h)anthracene	ng/g	333	1000	ND	
Benzo(g,h,i)perylene	ng/g	333	0.04	ND	
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results

SampleID: EXBSOWSN

Matrix: Soil/Solid

Site ID: **OWSBSA** Project No.: 17257

Time: 1030 - Date : 9/4/96

Test Code:

8021

Test Code:

Lab:

on-site

Description: Semivolatiles

Date Extracted: 9/16/96

Description: Volatiles

Date Analyzed: 9/16/96

Date Extracted: 9/10/96

8270

Date Analyzed: 9/12/96

on-site

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE Benzene	ng/g	40	1000	ND	
Benzene	ng/g	5	14	ND	
Trichloroethylene	ng/g	5	700	ND	
Toluene	ng/g	5	100	ND	
Ethylbenzene	ng/g	5	100	ND	
m,p-Xylene	ng/g	5	100	ND	1
Toluene Ethylbenzene m,p-Xylene o-Xylene	ng/g	5	100	ND	i

Parameter	Units.	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	333	200	ND	
Acenaphthene	ng/g	333	400	ND	
Fluorene	ng/g	333	1000	ND	1
Phenanthrene	ng/g	333	1000	ND	
Anthracene	ng/g	333	1000	ND	
Fluoranthene	ng/g	333	1000	ND	
Pyrene	ng/g	333	1000	ND	
Benzo(a)anthracene	ng/g	333	0.04	ND	
Chrysene	ng/g	333	0.04	ND	i I
Benzo(b)fluoranthene	ng/g	333	0.04	ND	
Benzo(k)fluoranthene	ng/g	333	0.04	ND	
Benzo(a)pyrene	ng/g	333	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND	1 1
Dibenz(a,h)anthracene	ng/g	333	1000	ND	
Benzo(g,h,i)perylene	ng/g	333	0.04	ND	
Total PAHs	ng/g			ND	

Lab:

* TCLP Alternative Guidance Values obtained from the Stars Memo #1

Plattsburgh AFB Analytical Results

SampleID: EXBSOWSS

Matrix: Soil/Solid

Site ID: **OWSBSA** Project No.: 17257

Date:

Test Code:

9/4/96

Time:

1045

8021

Lab:

on-site

Description : Volatiles

Date Extracted: 9/15/96

Date Analyzed: 9/15/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	40	1000	ND	
Benzene	ng/g	5	14	ND	
Trichloroethylene	ng/g	5	700	ND	
Toluene	ng/g	5	100	ND	
Ethylbenzene	ng/g	5	100	ND	
Toluene Ethylbenzene m,p-Xylene o-Xylene	ng/g	5	100	ND	
o-Xylene	ng/g	5	100	ND	

8270 Lab: Test Code: on-site

Description : Semivolatiles

Date Extracted: 9/10/96 Date Analyzed: 9/12/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	333	200	ND	
Acenaphthene	ng/g	333	400	ND	
Fluorene	ng/g	333 ·	1000	ND	
Phenanthrene	ng/g	333	1000	ND	
Anthracene	ng/g	333	1000	ND	
Fluoranthene	ng/g	333	1000	ND	
Pyrene	ng/g	333	1000	ND	1 1
Benzo(a)anthracene	ng/g	333	0.04	ND	
Chrysene	ng/g	333	0.04	ND	1
Benzo(b)fluoranthene	ng/g	333	0.04	ND	1
Benzo(k)fluoranthene	ng/g	333	0.04	ND	1
Benzo(a)pyrene	ng/g	333	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND	ŀ
Dibenz(a,h)anthracene	ng/g	333	1000	ND	1
Benzo(g,h,i)perylene	ng/g	333	0.04	ND	
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results

SampleID: EXBSOWSW

Date Extracted: 9/16/96

Matrix: Soil/Solid

Site ID: **OWSBSA**

> Time: 1040 - Date: 9/4/96

Test Code:

Date Analyzed: 9/16/96

Project No.:

8021

8270

Description : Volatiles

17257

Lab:

on-site

Description : Semivolatiles

Date Extracted: 9/10/96

Test Code:

Date Analyzed: 9/12/96

on-site

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	40	1000	ND	
Benzene	ng/g	5	14 ,	ND	
Trichloroethylene	ng/g	5	700	ND	
Toluene	ng/g	5	100	ND	
Ethylbenzene	ng/g	5	100	ND	
m,p-Xylene	ng/g	5	100	ND	
m,p-Xylene o-Xylene	ng/g	5	100	ND	

Parameter .	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	333	200	ND	
Acenaphthene	ng/g	333	400	ND	1
Fluorene	ng/g	333	1000	ND	
Phenanthrene	ng/g	333	1000	ND	
Anthracene	ng/g	333	1000	ND	
Fluoranthene	ng/g	333	1000	ND	
Pyrene	ng/g	333	1000	ND	
Benzo(a)anthracene	ng/g	333	0.04	ND	1
Chrysene	ng/g	333	0.04	ND	1
Benzo(b)fluoranthene	ng/g	333	0.04	ND	
Benzo(k)fluoranthene	ng/g	333	0.04	ND	
Benzo(a)pyrene	ng/g	333	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND	
Dibenz(a,h)anthracene	ng/g	333	1000	ND	
Benzo(g,h,i)perylene	ng/g	333	0.04	ND	
Total PAHs	ng/g			ND	

Lab:

* TCLP Alternative Guidance Values obtained from the Stars Memo #1

Plattsburgh AFB Analytical Results

SampleID: EXBSOWSLQ

OWSBSA

Matrix: Aqueous

Site ID: Project No.: 17257

Date:

Date Analyzed: 9/15/96

9/4/96

Time:

1100

Test Code:

8021

8270

Description: Volatiles

Date Extracted: 9/15/96

Lab:

on-site

Description: Semivolatiles

Test Code:

Date Extracted: 9/5/96

Date Analyzed: 9/10/96

on-site

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE Benzene Trichloroethylene Toluene Ethylbenzene m,p-Xylene o-Xylene	ug/l ug/l ug/l ug/l ug/l	40 5 5 5 5	50 0.70 5 5	ND ND ND ND ND	
m,p-Xylene o-Xylene	ug/l ug/l	5 5	5 5	ND ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	ľ
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	\$ 1
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	i.
Dibenz(a,h)anthracene	ug/l	5	50	ND	·
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	1
Total PAHs	ug/l		3	ND	

Lab:

Plattsburgh AFB Analytical Results

SampleID: SPBSOWS-1

Matrix: Soil/Solid

Site ID: **OWSBSA**

Project No.: 17257 1320 Time: Date: 8/7/96

Test Code:

Test Code:

8021

Lab:

on-site

Description : Semivolatiles

8270

Lab:

on-site

Description: Volatiles

Date Extracted: 8/18/96

Date Analyzed: 8/18/96

Date Extracted: 8/20/96

Date Analyzed: 8/22/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	40	1000	ND	
Benzene	ng/g	5	14	ND	
Trichloroethylene	ng/g	5	700	ND	
Toluene	ng/g	5	100	ND	
Ethylbenzene	ng/g	5	100	ND	
m,p-Xylene	ng/g	5	100	ND	
o-Xylene	ng/g	5	100	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	333	200	ND	
Acenaphthene	ng/g	333	400	ND	
Fluorene	ng/g	333	1000	ND	
Phenanthrene	ng/g	333	1000	ND	
Anthracene	ng/g	333	1000	ND	
Fluoranthene	ng/g	333	1000	ND	
Pyrene	ng/g	333	1000	ND	
Benzo(a)anthracene	ng/g	333	0.04	ND	
Chrysene	ng/g	333	0.04	ND	
Benzo(b)fluoranthene	ng/g	333	0.04	ND	
Benzo(k)fluoranthene	ng/g	333	0.04	ND	
Benzo(a)pyrene	ng/g	333	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	333	0.04	ND]
Dibenz(a,h)anthracene	ng/g	333	1000	ND	
Benzo(g,h,i)perylene	ng/g	333	0.04	ND	:
Total PAHs	ng/g			ND	

* TCLP Alternative Guidance Values obtained from the Stars Memo #1

Soil Sample Collection Log Plattsburgh AFB - Project #(17257)17499

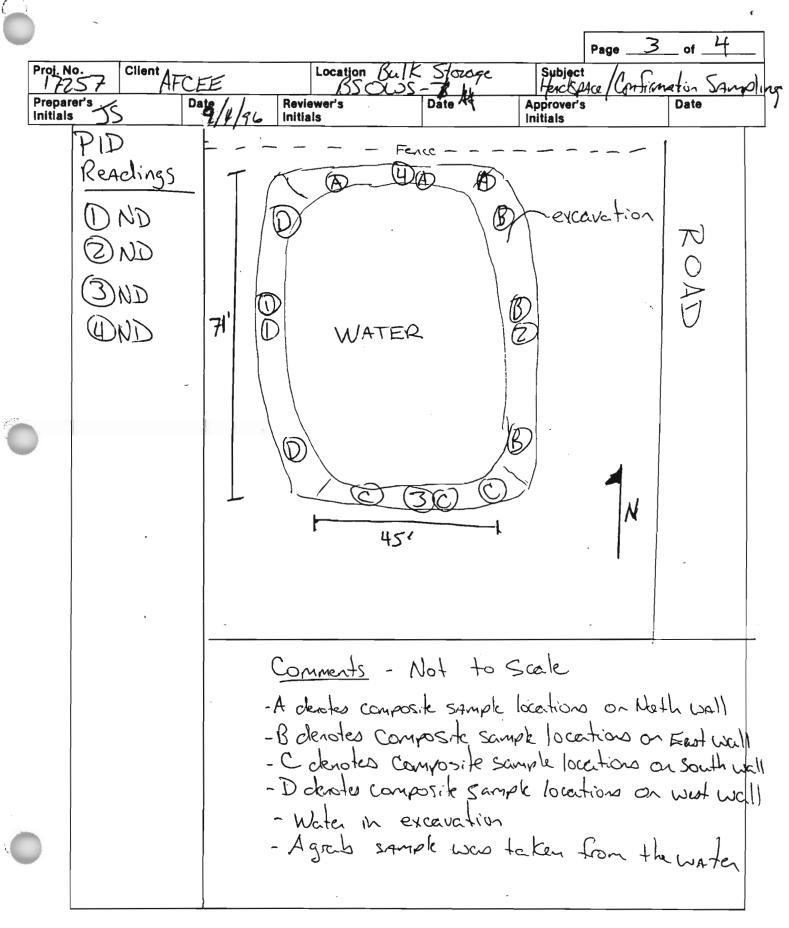
529		To	5 1.	_			Pg. / of /
Date: 8-7-96		Site: BS Samplers:	Bulk	- St6	rasc-		
Weather: 95 Sunny		Samplers:	mike	SCA()(=		
Sample	PID Comp/	Sample	Coord	inatos		ample	# of
	Screen Grab	Depth (ft)	Ref. Pt.		Des	scription	Bottles
PPHOWS-1 13:10	C	61			Beaup		1 × 4 0 ×
PBSOWS-1 13:20	C	ا ما			Brown	grey	1×40×
BBS-1 13:30	G	NIA			ambient	blank	LX 40 M
not run (not a contin	mation someline	event) su					
	7	10					
	-						
1							
				l			
Map Attached: Yes	• <u></u>						
-Reference Po		Yes (No				
-Head Space F	Readings:	Yes <	140				
Sample Type: Screening Co	onfirmation 🤇	Disposal/Cl	naracteriza	ation			
Requested Analysis: Vo	oes (SVOCs		Other:			
Split sample Collected: Ye	es No						
Laboratory Destination: On - Sy				Δirhill #			
							,
Duplicate Colle	ected: Yes	No')	Rinsate (Collected:	Yes	No	
0	n-Site Laborator	v Chain of C	Custody / F	Request fo	or Analysis		
	A a b a constraint					Λ ·.	1
Requested Analysis:	Cs (SVOCs)	1	emperatu	R/V\ T		10/01/01
Relinquished by (dd/tt):	Than .	_ ^	Received	d by (dd/tt): <u> </u>	2 Ven	15/17
	, /	15.50)			(

Soil Sample Collection Log Plattsburgh AFB - Project # 17257/17499

	Date: 9/4/96				Site: Bu	1K 54	H2 (c 40	10,1 vale		of 4
	Date: 9/4/96 Weather: Sun	XOE	,		Samplers:	TCI	1	1011 Car	Coppany	2 to
		/5 /				7,21,	~ kg			
	Sample ID	Time	PID Screen	Comp/ Grab	Sample Depth (ft)	Coord Ref. Pt.		Samp Descrip		# of Bottles
	EXBSONS N	1030	-	C .	3'			Soil for No	-	2×40m
	EXBSOWSW	1540i	-	C	3'			solhunue		1240×1
	ErBsous S	1045	_	<u></u>	3'			1 1	Soultwall	1×90m
	EXBSOUS E	10.50	-	2	~3`			soilfont	Atuall	1x40my
	FiBSOUS LO	1100		G	4'			Liquid from	examin	3×11/46
	ABBSOUSED	1026		G				Ambient 1	Bart.	(2x40m)
	not run ju									
				1						
								 		
										711
	Map Attached: <	Yes	No							
		-Reference -Head Space		cs:	Yes	No No				
		•								
	Sample Type:	Screening	Confirma	rion	Disposal/Cl	haracteriz	ation			
	Requested Analy		VQGS		SVQCS	101000.12	Other:_			
	Split sample Coll	ے ۔	Yes	200			Other			
			165	No #	6r5	د).	A * -1- *11 - #			
	Laboratory Desti			COC#_	(),		Airbill #	1		
		Duplicate C	collected:	Yes C	No	Rinsate	Collected	res	(No)	
			On-Site	Laborato	ry Chain of (Custody /	Request f	or Analysis	٠.	
	Requested Analy	ysis:	YOCs	20	SVOCS	Cooler 7	Temperatu	ıre:		
1	Relinquished by	(dd/tt):	The l		1250		d by (dd/t	•	(34	1,520
	, -,	7	11-12-E) 7	alalar	_	, (= = -			4/8/26
					1/1/76				,	

OHM Remediation Services Corp.

COMPUTATION SHEET



OHM Remediation Services Corp.

COMPUTATION SHEET

Bulk Stonage Proj. No. Client Location **Subject** AFCEL HEADSPACE I CO BSOWS 1725 Approver's Preparer's Date Review Initials Reviewer's Date MS Initials Initials PID READING Fence 8-8-96 D 220 ppm 2400 ppm 3) 80 ppm RODI WATER 4)217ppm 2 (F) 7/1 PID REMOINGS 8-19-96 P 262 PPM 35 ppm 3034 ppm 49 146 ppm TID RODINGS 451 8-27-96 OND 2) ND 3) 32 ppm \$ 62 ppm SAMPLE TAKE AT WEST WALL 600 ppm COMMENTS - NOT DRAW TO SCALE Broken Line denotes Exemption was dug Back 4 and Sample 1x, 2x, 3x, 4x - denotes second Hendspace Samples WATER IN EXCAUNTION INdicates Second Sample Taken in WAST WALL

APPENDIX C GEOPROBE® ANALYTICAL RESULTS

- C.1 ANALYTICAL SUMMARY TABLE
- C.2 ANALYTICAL DATA SHEETS

C.1 ANALYTICAL SUMMARY TABLE



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Revised Report Date: 04/08/97 Original Report Date: 01/15/97

Si

ite:	BSAGP

		Sample Nu	ımber	BS-GP-01S		BS-GP-02S		BS-GP-03S		BS-GP-04S		BS-GP-05S		BS-GP-06S	
PAH Analy	sis	Date Samp	oled	09/30/96		09/30/96		09/30/96		10/01/96	122	10/01/96		10/01/96	
(Modified Metho	od 8270)	Date Extra	cřed	10/07/96		10/07/96		10/07/96		10/07/96		10/07/96		10/07/96	
'	•	Date Analy	zed	10/08/96		10/08/96		10/08/96		10/08/96		10/08/96		10/08/96	
	Concentration	Detection	Guidance							-					
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	_ Q_
Naphthalene	ng/g	200	200	ND		ND		ND		ND		ND		ND	
Acenaphthene	ng/g	200	400	ND		ND		ND		ND		ND		ND	'
Fluorene	ng/g	200	1000	ND		ND		ND		ND 1		ND		ND	
Phenanthrene	ng/g	200	1000	ND		ND		NĎ		ND ³		NĎ		D	
Anthracene	ng/g	200	1000	ND		ND		ND		ND		ND		DN	
Fluoranthene	ng/g	200	1000	ND		ND		ND		ND		ND		ND	
Pyrene	ng/g	200	1000	ND		ND		ND		ND		ND		ND	
Benzo(a)anthracene	ng/g	200	0.04	ND		ND		ND		ND		ND		ND	
Chrysene	ng/g	200	0.04	ND		ND		ND		ND		ND_		ND	
Benzo(b)fluoranthene	ng/g	200	0.04	ND		ND		ND		ND		ND		ND	
Benzo(k)fluoranthene	ng/g	200	0.04	ND		ND		ND		ND		ND		ND	
Benzo(a)pyrene	ng/g	200	0.04	ND		ND		ND		ND		ND		ND	
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND		ND		ND		ND		ND		ND	
Dibenz(a,h)anthracene	ng/g	200	1000	ND		ND		ND		ND		ND		ND	
Benzo(g,h,i)perylene	ng/g	200	0.04	ND		ND		ND		ND		ND		ND	
Total PAHs	ng/g			ND		ND		ND		ND		ND		ND	

		Sample Nu	mber	BS-GP-06SDF	•	BS-GP-07S		BS-GP-08S		BS-GP-09S		BS-GP-10S		BS-GP-11S	
PAH Analysi	is .	Date Samp	led	10/01/96		10/01/96		10/01/96		10/01/96		10/02/96		10/02/96	
(Modified Method		Date Extra	cted	10/07/96		10/07/96		10/07/96		10/07/96		10/07/96		10/07/96	
,	,	Date Analy	zed	10/08/96		10/08/96		10/08/96		10/08/96		10/08/96		10/08/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Naphthalene	ng/g	200	200	ND		ND		ND		ND		ND		ND	
Acenaphthene	ng/g	200	400	ND		ND		270		ND		ND		ND _	
Fluorene	ng/g	200	1000	ND		ND		300		ND		ND		ND	
Phenanthrene	ng/g	200	1000	ND		ND		560		ND		ND		ND	
Anthracene	ng/g	200	1000	ND		ND		250		ND		ND		ND	
Fluoranthene	ng/g	200	1000	ND		ND		600		ND		ND		ND	
Pyrene	ng/g	200	1000	ND		ND		390		ND		ND		ND	
Benzo(a)anthracene	ng/g	200	0.04	ND		ND		240	#	ND		ND		ND	
Chrysene	ng/g	200	0.04	ND		ND		190	#	ND		ND		ND ND	
Benzo(b)fluoranthene	ng/g	200	0.04	ND		ND		320	#	ND		ND		ND	
Benzo(k)fluoranthene	ng/g	200	0.04	ND		ND		ND		ND		ND		ND	1
Benzo(a)pyrene	ng/g	200	0.04	ND		ND		200	#	ND		ND		ND	1
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND		ND		ND		ND		ND		ND	
Dibenz(a,h)anthracene	ng/g	200	1000	ND		ND		ND		ND		ND		ND	
Benzo(g,h,i)perylene	ng/g	200	0.04	ND		ND		ND		ND		ND		ND	
Total PAHs	ng/g			ND		ND		3320		ND		ND_		ND	

ND=compound not detected

NA = analysis not applicable for this site

ng/g=ppb Q=Qualifier

EX = ID prefix for an excavation sample SP = ID prefix for a stockpile sample

AB (or FB)= ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample

J = estimated value is below the practical quantitation limit and above the method detection limit

B = analyte was detected in an associated blank as well as in the sample

LQ = ID suffix for a liquid sample

E = estimated concentration is above the calibration range of the instrument D = sample was diluted, see individual analytical results for corresponding detection limits

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

[#] Results indicate concentrations above the TCLP Alternative Guidance Values obtained from the Stars Memo #1

^{*} Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits

^{**} TCLP Alternative Guidance Values obtained from Stars Memo #1



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Revised Report Date: 04/08/97 Original Report Date: 01/15/97

Site: BSAGP

		Sample Nu	ımber	BS-GP-12S		BS-GP-13S		BS-GP-14S		BS-GP-15S		BS-GP-16S		BS-GP-16S-5	.5
PAH Analys	is	Date Samp	oled	10/02/96		10/02/96		10/02/96		10/02/96	•	10/02/96		12/10/96	
(Modified Method	1 8270)	Date Extra	cted	10/07/96		10/07/96		10/07/96		10/07/96		10/17/96		12/11/96	
,	•	Date Analy	zed	10/08/96		10/08/96		10/08/96		10/08/96		10/24/96		12/12/96	_
	Concentration	Detection	Guidance			-									
Compound	Units	Limit*	Values**	Result	Q	Result	Q								
Naphthalene	ng/g	200	200	ND		ND		ND		ND		ND	R	ND	
Acenaphthene	ng/g	200	400	ND		ND		ND		ND		ND	R	ND	
Fluorene	ng/g	200	1000	ND		ND		ND		ND		ND	R	ND	
Phenanthrene	ng/g	200	1000	ND		ND		ND		ND	:	ND	R	ND	
Anthracene	ng/g	200	1000	ND		ND		ND		ND		ND	R	ND	
Fluoranthene	ng/g	200	1000	ND		ND		ND		ND		ND	R	ND	
Pyrene	ng/g	200	1000	ND		ND		ND	,	ND		ND	R	ND _	
Benzo(a)anthracene	ng/g	200	0.04	ND		ND		ND		ND		ND	R	DД	
Chrysene	ng/g	200	0.04	ND		ND		ND		ND		ND	R	ND	
Benzo(b)fluoranthene	ng/g	200	0.04	ND		ND		ND		ND		ND	R	ND _	
Benzo(k)fluoranthene	ng/g	200	0.04	ND		ND		ND		ND		ND	R	ND	
Benzo(a)pyrene	ng/g	200	0.04	ND		ND		ND		ND		ND	R	ND	
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND		ND		ND		ND		ND	R	ND	
Dibenz(a,h)anthracene	ng/g	200	1000	ND		ND		ND		ND		ND	R	_ ND	
Benzo(g,h,i)perylene	ng/g	200	0.04	ND		ND		ND		ND		ND	R	ND	
Total PAHs	ng/g			ND		ND		ND		ND		ND		ND	

		Sample Nu	mber	BS-GP-17S		BS-GP-17S-A		BS-GP-18S		BS-GP-18S-A		BS-GP-18S-A	-D	BS-GP-19S	
PAH Analys	is	Date Samp	led	10/02/96		12/10/96	1.00	10/02/96		12/10/96		12/10/96		10/02/96	
(Modified Method	1 8270)	Date Extra	cted	10/17/96		12/11/96	File	10/17/96		12/11/96		12/11/96		10/17/96	
,	•	Date Analy	zed	10/18/96		12/12/96		10/18/96		12/12/96		12/12/96		10/18/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q_
Naphthalene	ng/g	200	200	ND	R	ND		ND	R	ND		ND		ND	R
Acenaphthene	ng/g	200	400	ND	R	ND		ND	R	ND		ND		ND	R
Fluorene	ng/g	200	1000	ND	R	ND		ND	R	ND		ND		ND	R
Phenanthrene	ng/g	200	1000	ND	R	ND		ND	R	ND		ND	l	ND	R
Anthracene	ng/g	200	1000	ND	R	ND		ND	R	ND		ND		ND _	R
Fluoranthene	ng/g	200	1000	ND	R	ND		ND	R	ND		ND		ND	R
Pyrene	ng/g	200	1000	ND	R			ND	R	ND		ND	1	ND	R
Benzo(a)anthracene	ng/g	200	0.04	ND	R	ND		ND	R	ND		ND		ND	R
Chrysene	ng/g	200	0.04	ND	R	ΝD		ND	R	ND		ND		ND	R
Benzo(b)fluoranthene	ng/g	200	0.04	ND	R	ND		ND	R	ND		ND		ND	R
Benzo(k)fluoranthene	ng/g	200	0.04	ND	R	ND		ND	R	ND		ND		ND	R
Benzo(a)pyrene	ng/g	200	0.04	ND	R			ND	R	ND		ND		ND	R
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND	R	ND		ND	R	NĎ		ND		ND	R
Dibenz(a,h)anthracene	ng/g	200	1000	ND	R	ND		ND	R	ND		ND		ND	R
Benzo(g,h,i)perylene	ng/g	200	0.04	ND	R	ND		ND	R	ND		ND		ND	R
Total PAHs	ng/g			ND		ND		ND		ND		ND		ND	

ND=compound not detected

NA = analysis not applicable for this site

Q=Quatifier

ng/g=ppb

EX = ID prefix for an excavation sample

AB (or FB)= ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample

J = estimated value is below the practical quantitation limit and above the method detection limit

E = estimated concentration is above the calibration range of the instrument

SP = ID prefix for a stockpile sample
B = analyte was detected in an associated blank as well as in the sample

LQ = ID suffix for a liquid sample

D = sample was diluted, see individual analytical results for corresponding detection limits

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

[#] Results indicate concentrations above the TCLP Alternative Guidance Values obtained from the Stars Memo #1

^{*} Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits

^{**} TCLP Alternative Guidance Values obtained from Stars Memo #1



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Revised Report Date: 04/08/97 Original Report Date: 01/15/97

Site: BSAGP

		Sample Nu	ımber	BS-GP-19S-A		BS-GP-20S		BS-GP-20S-1		BS-GP-21S		BS-GP-21S-A		BS-GP-22S	
PAH Analys	is	Date Samp	oled	12/11/96		10/02/96		12/12/96		10/02/96		12/12/96		12/11/96	
(Modified Method	d 8270)	Date Extra	cted	12/12/96		10/17/96		12/12/96		10/17/96		12/12/96		12/12/96	
		Date Analy	zed	12/14/96		10/18/96		12/14/96		10/18/96		12/14/96		12/14/96	
	Concentration	Detection	Guldance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Naphthalene	ng/g	200	200	ND		ND	R	ND		ND	R	ND		ND .	
Acenaphthene	ng/g	200	400	ND		ND	R	ND		ND	R	ND		ND	
Fluorene	ng/g	200	1000	ND		ND	R	ND		ND	R	ND		ND	
Phenanthrene	ng/g	200	1000	ND		ND	R	ND		ND	R	ND		ND	
Anthracene	ng/g	200	1000	ND		ND	R	ND		ND	R	ND		ND	
Fluoranthene	ng/g	200	1000	ND		ND	R	ND		ND	R	ND		ND	
Pyrene	ng/g	200	1000	ND		ND	R	ND		ND	R	ND		ND	
Benzo(a)anthracene	ng/g	200	0.04	ND		ND	R	ND		ND	R	ND		ND	
Chrysene	ng/g	200	0.04	ND		ND	R	ND		ND	R	ND		ND	
Benzo(b)fluoranthene	ng/g	200	0.04	ND		ND	R	ND		ND	R	ND		ND	
Benzo(k)fluoranthene	ng/g	200	0.04	ND		ND	R	ND		ND	R	ND		ND	
Benzo(a)pyrene	ng/g	200	0.04	ND		ND	R	ND		ND	R	ND		ND	
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND		ND	R	ND		ND	R	ND		ND	
Dibenz(a,h)anthracene	ng/g	200	1000	ND		ND	R	ND		ND	R	ND		ND	
Benzo(g,h,i)perylene	ng/g	200	0.04	ND		ND	R	ND		ND	R	ND		ND	\Box
Total PAHs	ng/g			ND		ND		ND		ND		ND		ND	

		Sample Nu	ımber	BS-GP-23S		BS-GP-24S									
PAH Analy	sis	Date Samp	oled	12/11/96		12/11/96									
(Modified Metho	od 8270)	Date Extra	cted	12/12/96		12/12/96									
	•	Date Analy	zed	12/14/96		12/12/96									
	Concentration	Detection	Guidance										\neg		
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Naphthalene	ng/g	200	200	ND	Γ.	ND									
Acenaphthene	ng/g	200 .	400	ND		ND									1
Fluorene	ng/g	200	1000	ND		ND									
Phenanthrene	ng/g	200	1000	ND		ND									
Anthracene	ng/g	200	1000	ND		ND									
Fluoranthene	ng/g	200	1000	ND		ND									
Pyrene	ng/g	200	1000	ND		ND							\top		
Benzo(a)anthracene	ng/g	200	0.04	ND		ND									
Chrysene	ng/g	200	0.04	ND		ND									
Benzo(b)fluoranthene	ng/g	200	0.04	ND		ND								_	
Benzo(k)fluoranthene	ng/g	200	0.04	ND		ND									
Benzo(a)pyrene	ng/g	200	0.04	ND		ND									+-
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND		ND									
Dibenz(a,h)anthracene	ng/g	200	1000	ND		ND									
Benzo(g,h,i)perylene	ng/g	200	0.04	ND		ND									\top
Total PAHs	ng/g		_	ND		ND									1

ND=compound not detected

NA = analysis not applicable for this site

Q=Qualifier

ng/g=ppb

EX = ID prefix for an excavation sample

AB (or FB)= ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample

J = estimated value is below the practical quantitation limit and above the method detection limit

SP = ID prefix for a stockpile sample

LQ = ID suffix for a liquid sample

** TCLP Alternative Guidance Values obtained from Stars Memo #1

E = estimated concentration is above the calibration range of the instrument

B = analyte was detected in an associated blank as well as in the sample

D = sample was diluted, see individual analytical results for corresponding detection limits

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

[#] Results indicate concentrations above the TCLP Alternative Guidance Values obtained from the Stars Memo #1

^{*} Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits

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Revised Report Date: 04/08/97 Original Report Date: 01/15/97

Site: BSAGP

		Sample Nu	ımber	BS-GP-01W		BS-GP-01W-	A	BS-GP-02W		BS-GP-03W		BS-GP-04W		BS-GP-04WD	Р
PAH Analys	is	Date Samp	oled	09/30/96		12/11/96		09/30/96		09/30/96		10/01/96		10/01/96	
(Modified Method	1 8270)	Date Extra	cted	10/04/96		12/12/96		10/04/96		10/04/96		10/04/96		10/05/96	
		Date Analy	zed	10/07/96		12/17/96		10/07/96		10/07/96		10/09/96		10/07/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Naphthalene	ug/L	5	10	ND		34	#	ND		ND		ND		ND	
Acenaphthene	ug/L	5	20	ND		25	#	ND		ND		ND		ND	
Fluorene	ug/L	5	50	ND		19		ND		ND		ND		ND	
Phenanthrene	ug/L	5	50	ND		22		ND		ND		ND		ND	
Anthracene	ug/L	5	50	ND		9		ND		ND		ND		ND	
Fluoranthene	ug/L	5	50	ND		ND		ND		ND		ND		ND	\Box
Pyrene	ug/L	5	50	ND		ND		ND		ND		ND		ND	
Benzo(a)anthracene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	
Chrysene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	\Box
Benzo(b)fluoranthene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	
Benzo(k)fluoranthene	ug/L	5 ,	0.002	ND		ND		ND		ND		ND		ND	
Benzo(a)pyrene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	
Indeno(1,2,3-cd)pyrene	ug/L	5	0.002	ND		ND	-	ND		ND		ND		ND	
Dibenz(a,h)anthracene	ug/L	5	50	ND		ND		ND		ND		ND		ND	
Benzo(g,h,i)perylene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	
Total PAHs	ug/L			ND		109		ND		ND		ND		ND	

		Sample Nu	ımber	BS-GP-05W		BS-GP-06W		BS-GP-07W		BS-GP-08W		BS-GP-09W		BS-GP-10W	
PAH Analys	is	Date Samp	oled	10/01/96		10/01/96		10/01/96		10/02/96		10/02/96		10/02/96	
(Modified Method	d 8270)	Date Extra	cted	10/04/96		10/04/96		10/04/96		10/05/96		10/05/96		10/08/96	
•	•	Date Analy	zed	10/07/96	-11-5-72	10/04/96		10/08/96		10/08/96		10/08/96		10/17/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Naphthalene	ug/L	5	10	ND		ND		ND		10	#	7		ND	
Acenaphthene	ug/L	5	20	ND		ND		ND		9 ,		ND		ND	
Fluorene	ug/L	5	50	ND		ND		ND		7		ND		ND	
Phenanthrene	ug/L	5	50	ND		ND		ND		12		ND		ND	
Anthracene	ug/L	5	50	ND		ND		ND		ND		ND		ND	
Fluoranthene	ug/L	5	50	ND		ND		ND		8		ND		ND	
Pyrene	ug/L	5	50	ND_		ND		ND		ND		ND		ND	
Benzo(a)anthracene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	
Chrysene	ug/L	- 5	0.002	ND		ND		ND		ND		ND		ND	
Benzo(b)fluoranthene	ug/L	5	0.002	ND		ND		ND		ND_		ND		ND	
Benzo(k)fluoranthene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	
Benzo(a)pyrene	ug/L	5	0.002	ND		ND		ND		ND	5	ND		ND	
Indeno(1,2,3-cd)pyrene	ug/L	5	0.002	ND		ND		ND		ND		ИD		ND	
Dibenz(a,h)anthracene	ug/L	5	50	ND		ND		ND		ND		ND		ND	
Benzo(g,h,i)perylene	ug/L	5	0.002	ND		ΝĎ		ND		ND		ND		ND	
Total PAHs	ug/L			ND		ND		ND		46		7		ND	

ND=compound not detected

NA = analysis not applicable for this site

Q=Qualifier

EX = ID prefix for an excavation sample SP = ID prefix for a stockpile sample

AB (or FB)= ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample

J = estimated value is below the practical quantitation limit and above the method detection limit E = estimated concentration is above the calibration range of the instrument

B = analyte was detected in an associated blank as well as in the sampl LQ = ID suffix for a liquid sample

D = sample was diluted, see individual analytical results for corresponding detection limits RE = ID suffix for re-extraction/re-analysis

- S = surrogate recovery is outside control limits N = ELCD was not functioning during analysis
- R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

[#] Results indicate concentrations above the Guidance Values obtained from the NYSDEC Division of Water, Technical & Operational Guidance Series (TOGS)

^{*} Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits

^{**} Class GA Guidance Values obtained from NYSDEC TOGS



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Revised Report Date: 04/08/97 Original Report Date: 01/15/97

Site: BSAGP

		Sample Nu	ımber	BS-GP-11W		BS-GP-12W		BS-GP-12W-A		BS-GP-13W		BS-GP-14W-A		BS-GP-15W	
PAH Analysi	is	Date Samp	oled	10/02/96		10/02/96		12/12/96		10/02/96		12/11/96		10/02/96	
(Modified Method	l 8270)	Date Extra	cted	10/08/96		10/05/96		12/12/96		10/08/96		12/12/96		10/08/96	
	•	Date Analy	zed	10/17/96		10/08/96		12/17/96		10/17/96		12/14/96		10/17/96	
	Concentration	Detection	Guidance									_			
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q_	Result	Q
Naphthalene	ug/L	5	10	ND		13	#	ND		ND		ND		ND	
Acenaphthene	ug/L	5	20	ND		ND		ND		39	#	ND		ND	
Fluorene	ug/L	5	50	ND		ND		ND		100	#	ND		ND	
Phenanthrene	ug/L	5	50	ND		ND		ND		100	#	ND		ND	
Anthracene	ug/L	5	50	ND		ND		ND		56	#	ND		ND	
Fluoranthene	ug/L	5	50	ND		ND		ND		100	#	ND		ND	
Pyrene	ug/L	5	50	ND		ND		ND		78	#	ND		ND	
Benzo(a)anthracene	ug/L	5	0.002	ND		ND		ND		63	#	ND		ND	
Chrysene	ug/L	5	0.002	ND		ND		ND		35	#	ND		ND	
Benzo(b)fluoranthene	ug/L	5	0.002	ND		ND		ND		26	#	ND		ND	
Benzo(k)fluoranthene	ug/L	5	0.002	ND		ND		ND		11	#	ND		ND	
Benzo(a)pyrene	ug/L	5	0.002	ND		ND		ND		21	#	ND		ND	
Indeno(1,2,3-cd)pyrene	ug/L	5	0.002	ND		ND		ND		8	#	ND		ND	
Dibenz(a,h)anthracene	ug/L	5	50	ND		ND		ND		ND		ND		ND	
Benzo(g,h,i)perylene	ug/L	5	0.002	ND		ND		ND		. 8	#	ND		ND	
Total PAHs	ug/L			ND		13		ND		645		ND		ND	

		Sample Nu	ımber	BS-GP-16W		BS-GP-17W		BS-GP-18W		BS-GP-19W		BS-GP-20W		BS-GP-20W-1	
PAH Analy	sis	Date Samp	oled	10/03/96		10/03/96		10/03/96		10/03/96		10/03/96		12/12/96	
(Modified Metho	d 8270)	Date Extra	cted	10/05/96		10/05/96		10/05/96		10/05/96		10/05/96		12/12/96	
	,	Date Analy	zed	10/09/96		10/17/96		10/17/96		10/09/96		10/08/96		12/14/96	
	Concentration	Detection	Guidance						_						
Compound	Units	Limit*	Values**	Result	Q	Result	Q								
Naphthalene	ug/L	5	10	ND		ND		ND		ND		40	#	ND	
Acenaphthene	ug/L	5	20	ND		ND		ND		ND		6		ND	
Fluorene	ug/L	5	50	ND		ND		ND		ND		8		ND	
Phenanthrene	ug/L	5	50	ND		ND		ND		ND.		22	1	ND	
Anthracene	ug/L	5	50	ND		ND		ND		ND		8		ND	
Fluoranthene	ug/L	5	50	ND		ND		ND		ND		23	1	ND	
Pyrene	ug/L	5	50	ND		ND		ND		ND		18		ND	
Benzo(a)anthracene	ug/L	5	0.002	ND		ND		ND		ND		8	#	ND	
Chrysene	ug/L	5	0.002	ND		ND									
Benzo(b)fluoranthene	ug/L	5	0.002	ND		ND									
Benzo(k)fluoranthene	ug/L	5	0.002	ND		ND									
Benzo(a)pyrene	ug/L	5	0.002	ND		ND									
Indeno(1,2,3-cd)pyrene	ug/L	5	0.002	ND		ND									
Dibenz(a,h)anthracene	ug/L	5	50	ND		ND									
Benzo(g,h,i)perylene	ug/L	5	0.002	ND		ND _									
Total PAHs	ug/L			ND		ND		ND		ND		133		ND	

ND=compound not detected

NA = analysis not applicable for this site

Q=Qualifier

EX = ID prefix for an excavation sample SP = ID prefix for a stockpile sample

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D = sample was diluted, see individual analytical results for corresponding detection limits

S = surrogate recovery is outside control limits N = ELCD was not functioning during analysis

RE = ID suffix for re-extraction/re-analysis R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

Results indicate concentrations above the Guidance Values obtained from the NYSDEC Division of Water, Technical & Operational Guidance Series (TOGS)

^{*} Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits

^{**} Class GA Guidance Values obtained from NYSDEC TOGS





Revised Report Date: 04/08/97 Original Report Date: 01/15/97

Site: BSAGP

		Sample Nu	ımber	BS-GP-21W		BS-GP-22W		BS-GP-23W		BS-GP-24W-A	١	EQ BLANK1		EQ BLANK2	
PAH Analys	is	Date Samp	oled	10/03/96		12/11/96		12/12/96		12/12/96		09/30/96		10/01/96	
(Modified Method	1 8270)	Date Extra	cted	10/05/96		12/12/96		12/12/96		12/12/96		10/05/96		10/04/96	
	•	Date Analy	zed	10/08/96		12/14/96		12/17/96		12/17/96		10/07/96		10/07/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Naphthalene	ug/L	5	10	ND		ND		ND		ND		ND		ND	
Acenaphthene '	ug/L	5	20	ND		ND		ND		ND		ND		ND	
Fluorene	ug/L	5	50	ND		ND		ND		ND		ND		ND	
Phenanthrene	ug/L	5	50	ND		ND		ND		ND		ND		ND	
Anthracene	ug/L	5	50	ND		ND		ND		ND		ND		ND	
Fluoranthene	ug/L	5	50	ND		ND		ND .		ND		ND		ND	
Pyrene	ug/L	5	50	ND		ND		ND		ND		ND		ND	
Benzo(a)anthracene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	
Chrysene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	
Benzo(b)fluoranthene	ug/L	5	0.002	ND		ND		ND		NĎ		ND		ND	
Benzo(k)fluoranthene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	
Benzo(a)pyrene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	
Indeno(1,2,3-cd)pyrene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	
Dibenz(a,h)anthracene	ug/L	5	50	ND		ND		ND		ND		ND		ND	
Benzo(g,h,i)perylene	ug/L	5	0.002	ND		ND		ND		ND		ND		ND	
Total PAHs	ug/L			ND		ND		ND		ND		ND		ND	

		Sample Nu	ımber	ER100296		ER100396		ER121096		ER121196		ER121296			
PAH Analys	is	Date Samp	oled	10/02/96		10/03/96		12/10/96		12/11/96		12/12/96			
(Modified Method	1 8270)	Date Extra	cted ·	10/08/96		10/08/96		12/11/96		12/12/96	i	12/12/96			
	• .	Date Analy	zed	10/09/96		10/17/96		12/14/96		12/14/96		12/14/96			
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Naphthalene	ug/L	5	10	ND		ND ND		ND		ND		ND			
Acenaphthene	ug/L	5	20	ND		ND		ND		ND		ND			
Fluorene	ug/L	5	50	ND		ND		ND		ND.		ND			\top
Phenanthrene	ug/L	5	50	ND		ND		ND		ND		ND			
Anthracene	ug/L	5	50	ND		ND		ND		ND		ND			
Fluoranthene	ug/L	5	50	ND		ND		ND		ND	. 1	ND			
Pyrene	ug/L	5	50	ND		ND		ND		ND		ND			
Benzo(a)anthracene	ug/L	5	0.002	ND		ND		ND		ND		ND			
Chrysene	ug/L	5	0.002	ND		ND		ND		ND		ND		•	
Benzo(b)fluoranthene	ug/L	5	0.002	ND		ND		ND	09001201	ND		ND			
Benzo(k)fluoranthene	ug/L	5	0.002	ND		ND		ND		ND		ND			T
Benzo(a)pyrene	ug/L	5	0.002	ND		ND		ND		ND		ND			
Indeno(1,2,3-cd)pyrene	ug/L	5	0.002	ND		ND		ND		ND		ND			
Dibenz(a,h)anthracene	ug/L	5	50	ИĎ		ND		ND		ND		ND			
Benzo(g,h,i)perylene	ug/L	5	0.002	ND		ND		ND		ND		ND			
Total PAHs	ug/L			ND		ND		ND		ND		ND			

ND=compound not detected

NA = analysis not applicable for this site

Q=Qualifier EX = ID prefix for an excavation sample

AB (or FB)= ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample

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J = estimated value is below the practical quantitation limit and above the method detection limit E = estimated concentration is above the calibration range of the instrument

B = analyte was detected in an associated blank as well as in the sample

LQ = ID suffix for a liquid sample

D = sample was diluted, see individual analytical results for corresponding detection limits

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

[#] Results indicate concentrations above the Guidance Values obtained from the NYSDEC Division of Water, Technical & Operational Guidance Series (TOGS)

^{*} Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits

^{**} Class GA Guidance Values obtained from NYSDEC TOGS



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Revised Report Date: 01/15/97 Original Report Date: 07/31/96

Site: BSAGP

		Sample Nu	mber	BS-GP-01S		BS-GP-01S-A	١	BS-GP-02S		BS-GP-03S		BS-GP-04S		BS-GP-05S	
VOC Analys	is	Date Samp	led	09/30/96		12/10/96		09/30/96		09/30/96		10/01/96		10/01/96	
(Modified Method	1 8021)	Date Extra	cted	10/11/96		12/14/96		10/11/96		10/11/96		10/11/96		10/10/96	
		Date Analy	zed	10/11/96		12/14/96		10/11/96		10/11/96		10/11/96		10/10/96	
	Concentration	Detection	Guidance												-
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ng/g	1	1000	ND	İ	ND	D	ND		ND		ND	i	ND	
Benzene	ng/g	0.5	14	ND		ND	D	ND		ND		ND		ND	
Trichloroethylene	ng/g	1	700	ND		ND	D	ND		ND		ND		ND	
Toluene	ng/g	1	100	ND		ND	D	ND		ND		ND		ND	
Ethylbenzene	ng/g	1	100	2.0		1200.0	# D	ND		ND		ND		ND	1
Xylenes, total	ng/g	1	100	ND		1300.0	# D	ND		ND		ND		ND	

		Sample Nu	ımber	BS-GP-06S		BS-GP-06SDF)	BS-GP-07S		BS-GP-08S		BS-GP-08S-A		BS-GP-09S	
VOC Analysis	s	Date Samp	oled	10/01/96		10/01/96		10/01/96		10/01/96		12/10/96		10/01/96	
(Modified Method	8021)	Date Extra	cted	10/10/96		10/11/96		10/11/96		10/12/96		12/13/96		10/12/96	
	,	Date Analy	zed	10/10/96		10/11/96		10/11/96		10/12/96		12/13/96		10/12/96	-
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ng/g	1	1000	ND		ND		ND		ND		ND	D	ND	
Benzene	ng/g	0.5	14 :	ND		ND		ND		7.0		ND	D	ND	
Trichloroethylene	ng/g	1	700	ND		ND		ND		ND_		ND	D	ND	
Toluene	ng/g	1	100	ND		ND		ND		3.0		ND	D	3.0	
Ethylbenzene	ng/g	1	100	ND		ND		ND		40.0		2400.0	# D	11.0	
Xylenes, total	ng/g	1	100	ND		ND		ND		150.0	#	ND	D	6.0	

ND=compound not detected

NA = analysis not applicable for this site

Q=Qualifier

EX = ID prefix for an excavation sample

AB (or FB)= ID prefix for an ambient blank sample

J = estimated value is the below practical quantitation limit and above the method detection limit

SP = ID prefix for a stockpile sample

ER = ID prefix for an equipment rinsate sample

E = estimated concentration is above the calibration range of the instrument

B = analyte was detected in an associated blank as well as in the sample

LQ = ID suffix for a liquid sample

D = sample was diluted, see individual analytical results for corresponding detection limits

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

[#] Results indicate concentrations above the TCLP Alternative Guidance Values obtained from the Stars Memo #1

^{*} Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits



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Site: BSAGP

		Sample Nu	ımber	BS-GP-09S-A		BS-GP-09S-A	-D	BS-GP-10S		BS-GP-11S		BS-GP-12S		BS-GP-13S	
VOC Analys	is	Date Samp	oled	12/10/96		12/10/96		10/02/96		10/02/96		10/02/96		10/02/96	
(Modified Method	1 8021)	Date Extra	ćted	12/15/96		12/14/96		10/16/96		10/16/96		10/15/96		10/12/96	
		Date Analy	zed	12/15/96		12/14/96	_	10/16/96		10/16/96		10/15/96		10/12/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ng/g	1	1000	ND	D	ND	D	ND	D	ND	D	ND		ND	
Benzene	ng/g	0.5	14	ND	D	ND	D	ND	D	ND	D	ND		ND	
Trichloroethylene	ng/g	1	700	ND	D	ND	D	ND	D	ND	D	ND		ND	
Toluene	ng/g	1 '	100	ND	D	ND	D	ND	D	ND	D	ND		ND	
Ethylbenzene	ng/g	1	100	ND	D	1000.0	# D	ND	D	4100.0	# D	ND		ND	
Xylenes, total	ng/g	1	100	461.0	# D	ND	D	55.0	D	2400.0	# D	ND		ND	

		Sample Nu	ımber	BS-GP-14S		BS-GP-14S-A		BS-GP-15S		BS-GP-16S		BS-GP-16S-5.	5	BS-GP-17S	
VOC Analys	is	Date Samp	oled	10/02/96		12/10/96		10/02/96		10/02/96		12/10/96		10/02/96	
(Modified Method	1 8021)	Date Extra	cted	10/16/96		12/13/96		10/12/96		10/17/96		12/12/96		10/17/96	
		Date Analy	zed	10/16/96		12/13/96		10/12/96		10/17/96		12/12/96		10/17/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ng/g	1	1000	ND		ND		ND		ND	R	ND		ND	R
Benzene	ng/g	0.5	14	ND		8.0		ND		ND	R	ND		ND	R
Trichloroethylene	ng/g	1	700	ND		ND		ND		ND	R	ND		ND	R
Toluene	ng/g	1	100	ND		ND		ND		6.0	R	ND		ND	R
Ethylbenzene	ng/g	1	100	2.0		8.0		ND		ND	R	ND		ND	R
Xylenes, total	ng/g	1	100	1.0		17.0		ND		ND	R	ND		ND	R

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LQ = ID suffix for a liquid sample

D = sample was diluted, see individual analytical results for corresponding detection limits # Results indicate concentrations above the TCLP Alternative Guidance Values obtained from the Stars Memo #1

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

^{*} Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits



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		Sample Nu	ımber	BS-GP-17S-A		BS-GP-18S		BS-GP-18S-A		BS-GP-19S		BS-GP-19S-A		BS-GP-20S	
VOC Analysis	s	Date Samp	oled	12/10/96		10/02/96		12/10/96		10/02/96		12/11/96		10/02/96	
(Modified Method	8021)	Date Extra	cted	12/13/96		10/17/96		12/13/96		10/17/96		12/14/96		10/17/96	
	-	Date Analy	zed	12/13/96		10/17/96		12/13/96		10/17/96		12/14/96		10/17/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ng/g	1	1000	ND		ND	R	ND		ND	R	ND		ND	R
Benzene	ng/g	0.5	14	ND		ND	R	ND		ND	R	ND		ND	R
Trichloroethylene	ng/g	1	700	ND		ND	R	ND		ND	R	ND		ND	R
Toluene	ng/g	1	100	ND		ND	R	ND		ND	R	ND		10.0	R
Ethylbenzene	ng/g	1	100	ND		ND	R	ND		ND	R	100.0	#	150.0	# R
Xylenes, total	ng/g	1	100	ND		ND	R	ND		ND	R	470.0	#	190.0	# R

		Sample Nu	ımber	BS-GP-20S-1		BS-GP-21S		BS-GP-21S-A		BS-GP-22S		BS-GP-23S		BS-GP-24S	
VOC Analys	is	Date Samp	oled	12/12/96		10/02/96		12/12/96		12/11/96		12/11/96		12/11/96	
(Modified Method	d 8021)	Date Extra	cted	12/14/96		10/17/96		12/14/96		12/14/96		12/14/96		12/14/96	
1		Date Analy	zed	12/14/96		10/17/96		12/14/96		12/14/96		12/14/96		12/14/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ng/g	1	1000	ND		ND	R	ND		ND		ND		ND	
Benzene	ng/g	0.5	14	_ ND _		ND	R	ND _		ND		ND		ND	
Trichloroethylene	ng/g	1	700	ND		ND	R	ND_		ND		ND		ND	
Toluene	ng/g	1	100	ND		_ND	R	ND		ND		ND		ND	
Ethylbenzene	ng/g	1	100	17.0		15.0	R	ND		ND		_ ND		ND	
Xylenes, total	ng/g	1	100	38.0		32.0	R	ND		ND		ND _		ND	

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J = estimated value is the below practical quantitation limit and above the method detection limit

SP = ID prefix for a stockpile sample

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B = analyte was detected in an associated blank as well as in the sample

D = sample was diluted, see individual analytical results for corresponding detection limits

R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria

[#] Results indicate concentrations above the TCLP Alternative Guidance Values obtained from the Stars Memo #1
* Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits



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Site: BSAGP

		Sample Nu	mber	BS-GP-01W		BS-GP-02W		BS-GP-03W		BS-GP-04W		BS-GP-04WD	Р	BS-GP-05W	
VOC Analysi	s	Date Samp	led	09/30/96		09/30/96		09/30/96		10/01/96		10/01/96		10/01/96]
(Modified Method	8021)	Date Extra	ćted .	10/10/96		10/11/96		10/11/96		10/11/96		10/11/96		10/10/96	
,	•	Date Analy	zed	10/10/96		10/11/96		10/11/96		10/11/96		10/11/96		10/10/96	
	Concentration	Detection	Guidance												ļ
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ug/L	1	50	ND		ND		ПD		ND		ND		ND	
Benzene	ug/L	0.5	0.7	2.0	#	ND		ND		ND		ND		ND	
Trichloroethylene	ug/L	1	5	ND		ND		ND		ND		ND		ND	1
Toluene	ug/L	1	5	ND		ND		ND		ND		ND		ND	\perp
Ethylbenzene	ug/L	1	5	5.0	#	ND		ND		ND		ND		ND	
Xylenes, total	ug/L	1	5	4.0		ND		ND		ND		ND_ND		2.0	

		Sample Nu	ımber	BS-GP-06W		BS-GP-07W		BS-GP-08W		BS-GP-08W-	A	BS-GP-09W		BS-GP-09W-	Α
VOC Analysi	s	Date Samp	oled	10/01/96		10/01/96		10/02/96		12/11/96		10/02/96		12/11/96	
(Modified Method	8021)	Date Extra	cted	10/11/96		10/10/96		10/11/96		12/15/96		10/12/96		12/16/96	
,	•	Date Analy	zed	10/11/96		10/10/96		10/11/96		12/15/96		10/12/96		12/16/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ug/L	1	50	ND		3.0		2.0		ND	D	1.0		3.0	
Benzene	ug/L	0.5	0.7	ND		ND		88.0	#	98.0	# D	3.0	#	29.0	#
Trichloroethylene	ug/L	1	5	ND		ND		ND		ND	D	ND		ND	
Toluene	ug/L	1	5	ND		ND		2.0		ND	D	1.0		13.0	#
Ethylbenzene	ug/L	1	5	ND		ND		17.0	#	280.0	# D	17.0	#	80.0	#
Xylenes, total	ug/L	1	5	ND		ND		140.0	#	804.0	# D	14.0	#	20.0	#

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[#] Results indicate concentrations above the Guidance Values obtained from the NYSDEC Division of Water, Technical & Operational Guidance Series (TOGS)

^{*} Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits

^{**} Class GA Guidance Values obtained from NYSDEC TOGS



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Original Report Date: 07/31/96

Site: BSAGP

		Sample Nu	ımber	BS-GP-10W		BS-GP-10W-	4	BS-GP-11W		BS-GP-11W-	A	BS-GP-12W		BS-GP-13W	
VOC Analys	is	Date Samp	oled	10/02/96		12/11/96		10/02/96		12/11/96		10/02/96		10/02/96	
(Modified Method	1 8021)	Date Extra	cted	10/18/96		12/15/96		10/16/96		12/16/96		10/16/96		10/18/96	
,	•	Date Analy	zed	10/18/96		12/15/96		10/16/96		12/16/96		10/16/96		10/18/96	
	Concentration	Detection	, Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ug/L	1	50	ND	DR	ND	D	ND	D	ND		ND	D	38.0	DR
Benzene	ug/L	0.5	0.7	16.0	# DR	87.0	# D	130.0	# D	70.0	#	29.0	# D	50.0	# DR
Trichloroethylene	ug/L	1	5	ND	DR	ND	D	ND	D	ND		ND	D	ND	DR_
Toluene	ug/L	1	5	ND	DR	ND	D	ND	D	2.0		71.0	# D	26.0	# DR
Ethylbenzene	ug/L	1	5	15.0	# DR	120.0	# D	ND	D	6.0	#	160.0	# D	220.0	# DR
Xylenes, total	ug/L	1	5	150.0	# DR	580.0	# D	1400.0	# D	332.0	#	2700.0	# D	220.0	# DR

		Sample Nu	ımber	BS-GP-13W	-A	BS-GP-14W-	A	BS-GP-15W		BS-GP-15W-A	A	BS-GP-16W		BS-GP-16W-A	\
VOC Analysi	is	Date Samp	oled	12/11/96		12/11/96		10/02/96		12/11/96		10/03/96		12/11/96	
(Modified Method	l 8021)	Date Extra	cted	12/15/96		12/15/96		10/17/96		12/14/96		10/17/96		12/14/96	
,	·	Date Analy	zed	12/15/96	•	12/15/96		10/17/96		12/14/96		10/17/96		12/14/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ug/L	1	50	ND		ND	D	ND	R	ND		ND		ND ND	
Benzene	ug/L	0.5	0.7	42.0	#	2600.0	# D	0.6	R	ND		ND		ND_	
Trichloroethylene	ug/L	1	5	ND		ND	D	ND	R	ND		ND		ND	
Toluene	ug/L	1	5	ND		ND	D	ND	R	ND		ND		ND	
Ethylbenzene	ug/L	1	5	37.0	#	2600.0	# D	2.0	R	ND		ND		ND	
Xylenes, total	ug/L	1	5	15.0	#	9500.0	# D	6.0	# R	ND		2.0		2.0	

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Q=Qualifier EX = ID prefix for an excavation sample AB (or FB)= ID prefix for an ambient blank sample

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[#] Results indicate concentrations above the Guidance Values obtained from the NYSDEC Division of Water, Technical & Operational Guidance Series (TOGS)

^{*} Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits

^{**} Class GA Guidance Values obtained from NYSDEC TOGS



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Site: BSAGP

		Sample Nu	ımber	BS-GP-17W		BS-GP-17W-A		BS-GP-18W		BS-GP-18W-A		BS-GP-19W		BS-GP-19W-	A
VOC Analys	is	Date Samp	oled	10/03/96		12/11/96		10/03/96		12/11/96		10/03/96		12/11/96	
(Modified Method	8021)	Date Extra	cted	10/17/96		12/14/96		10/17/96		12/14/96		10/17/96		12/19/96	
		Date Analy	zed	10/17/96		12/14/96		10/17/96		12/14/96		10/17/96		12/19/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ug/L	1	50	ND		ND		ND		ND		ND		ND	\Box
Benzene	ug/L	0.5	0.7	ND		ND		ND		ND		2.0	#	ND	
Trichloroethylene	ug/L	1	5	ND		ND		ND		ND		ND		ND	\Box
Toluene	ug/L	1	5	ND		ND		ND		ND		3.0		2.0	
Ethylbenzene	ug/L	1	5	NĐ		ND		ND .		ND		340.0	#	39.0	#
Xylenes, total	ug/L	1	5	2.0		ND		ND		4.0		1500.0	#	172.0	#

		Sample Nu	ımber	BS-GP-20W		BS-GP-20W-1		BS-GP-21W		BS-GP-21W-A	1	BS-GP-22W		BS-GP-23W	
VOC Analysi	s	Date Samp	oled	10/03/96		12/12/96		10/03/96		12/12/96		12/11/96		12/12/96	
(Modified Method	8021)	Date Extra	cted	10/18/96		12/14/96		10/17/96		12/14/96		12/14/96		12/14/96	
	,	Date Analy	zed	10/18/96		12/14/96		10/17/96		12/14/96		12/14/96		12/14/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit*	Values**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ug/L	1	50	ND	DR	ND		ND		ND		ND		ND	
Benzene	ug/L	0.5	0.7	ND	DR	ND		ND		ND		ND		ND	
Trichloroethylene	ug/L	1	5	ND	DR	ND		ND		ND		ND		ND	
Toluene	ug/L_	1	5	170.0	# DR	ND		2.0		ND		ND		2.0	
Ethylbenzene	ug/L	1	5	220.0	# DR	4.0		3.0		ND		ND		ND	
Xylenes, total	ug/L	1	5	2000.0	# DR	21.0	#	17.0	#	ND		3.0		ND	

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^{*} Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits







Site: BSAGP

		Sample Nu	ımber	BS-GP-24W		EQ BLANK1		EQ BLANK2		ER100296		ER100396		ER121096	
VOC Analysis		Date Sampled		12/11/96		09/30/96		10/01/96		10/02/96		10/03/96		12/10/96	
(Modified Method 8021)		Date Extracted		12/14/96		10/11/96		10/11/96		10/16/96		10/17/96		12/13/96	
		Date Analyzed		12/14/96		10/11/96		10/11/96		10/16/96		10/17/96		12/13/96	
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ug/L	1	50	ND		ND		ND		ND		ND		ND	
Benzene	ug/L	0.5	0.7	ND		ND		ND		ND		ND		_ ND	
Trichloroethylene	ug/L	1	5	ND		ND		ND		ND		ND		ND	
Toluene	ug/L	1	5	ND		ND		ND		ND	L .	ND		ND	
Ethylbenzene	ug/L	1	5	ND		ND		ND		ND		ND		ND	1
Xylenes, total	ug/L	1	5	ND		ND		ND		ND		ND		ND	

		Sample Nu	ımber	AFB121096		AFB121196		ER121196		ER121296					
VOC Analysis		Date Sampled		12/10/96		12/11/96		12/11/96		12/12/96					
(Modified Method 8021)		Date Extra	cted	12/13/96		12/13/96		12/13/96		12/13/96					
;		Date Analy	zed	12/13/96		12/13/96		12/13/96		12/13/96		•			
	Concentration	Detection	Guidance												
Compound	Units	Limit	Values*	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
MTBE	ug/L	1	50	ND		ND		ND		ND					
Benzene	ug/L	0.5	0.7	ND		ND		ND		ND					
Trichloroethylene	ug/L	1	5	ND		ND		ND		ND					\perp
Toluene	ug/L	1	5	ND		ND		ND		ND					
Ethylbenzene	ug/L	1	5	ND		ND		ND		ND					
Xylenes, total	ug/L	1	5	ND		ND		ND		ND					

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J = estimated value is below the practical quantitation limit and above the method detection limit

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[#] Results indicate concentrations above the Guidance Values obtained from the NYSDEC Division of Water, Technical & Operational Guidance Series (TOGS)

^{*} Detection Limit may vary for some samples, see individual analytical results for the corresponding detection limits

C.2 ANALYTICAL DATA SHEETS

Plattsburgh AFB Analytical Results

SampleID: BS-GP-01S

Matrix: Soil/Solid

Site ID: **BSAGP**

9/30/96

Project No.: 17257

-Date:

1100

Test Code:

Time:

Test Code:

8021

Lab:

CTM

8270

Description: Volatiles Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Description : Semivolatiles

Date Extracted: 10/7/96

Date Analyzed: 10/8/96

СТМ

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14 .	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	2.0	
Xylenes, total	ng/g	1	100	ND	

Parameter	Units	Detection Limit	Regulatory	Result	DataFlag
Naphthalene	ng/g	190	200	ND	
Acenaphthene	ng/g	190	400	ND	
Fluorene	ng/g	190	1000	ND	
Phenanthrene	ng/g	190	1000	ND	
Anthracene	ng/g	190	1000	ND	
Fluoranthene	ng/g	190	1000	ND	
Pyrene	ng/g	190	1000	ND	
Benzo(a)anthracene	ng/g	190	0.04	ND	
Chrysene	ng/g	190	0.04	ND	
Benzo(b)fluoranthene	ng/g	190	0.04	ND	
Benzo(k)fluoranthene	ng/g	190	0.04	ND	
Benzo(a)pyrene	ng/g	190	0.04	ND	1
Indeno(1,2,3-cd)pyrene	ng/g	190	0.04	ND	1
Dibenz(a,h)anthracene	ng/g	190	1000	ND	
Benzo(g,h,i)perylene	ng/g	190	0.04	ND	
Total PAHs	ng/g			ND	

Lab:

Plattsburgh AFB Analytical Results

SampleID: BS-GP-01S-A

Matrix: Soil/Solid

Site ID: **BSAGP**

Project No.: 17257 -Date : 12/10/96 Time: 0845

Test Code:

8021 Lab: **CTM**

Description : Volatiles

Date Extracted: 12/14/96

Date Analyzed: 12/14/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	230	1000	ND	D
Benzene	ng/g	120	14	ND	D
Trichloroethylene	ng/g	230	700	ND	D
Toluene	ng/g	230	100	ND	D
Ethylbenzene	ng/g	230	100	1200.0	#D
m,p-Xylene	ng/g	230	100	1300.0	#D
o-Xylene	ng/g	230	100	ND	D
Xylenes, total	ng/g	230	100	1300.0	#D

Plattsburgh AFB Analytical Results

SampleID: BS-GP-01W

Matrix: Aqueous

Site ID:

BSAGP

Date Extracted: 10/10/96

Project No.: 17257

Date:

9/30/96

1320

Test Code:

8021

Lab:

Test Code:

Time:

CTM

Description: Semivolatiles

8270

Lab:

CTM

Description: Volatiles

Date Analyzed: 10/10/96

Date Extracted: 10/4/96

Date Analyzed: 10/7/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	2.0	#
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	5.0	#
Trichloroethylene Toluene Ethylbenzene Xylenes, total	ug/l	1	5	4.0	

Parameter	Units	Detection Limit	Regulatory Limit * -	Result	DataFlag
Naphthalene	ug/l	5	10	ND	s
Acenaphthene	ug/l	5	20	ND	s
Fluorene	ug/l	5	50	ND	s
Phenanthrene	ug/l	5	50	ND	s
Anthracene	ug/l	5	50	ND	s
Fluoranthene	ug/l	5	50	ND	s
Pyrene	ug/l	5	50	ND	s
Benzo(a)anthracene	ug/l	5	0.002	ND	s
Chrysene	ug/l	5	0.002	ND	s
Benzo(b)fluoranthene	ug/l	5	0.002	ND	s
Benzo(k)fluoranthene	ug/l	5	0.002	ND	S
Benzo(a)pyrene	ug/l	5	0.002	ND	s
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND .	s
Dibenz(a,h)anthracene	ug/l	5	50	ND	s
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	s
Total PAHs	ug/l			ND	

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: BS-GP-01W-A

Matrix: Aqueous

Site ID: **BSAGP** Project No.: 17257

Time: 1246 -Date: 12/11/96

Test Code:

8270

Lab:

Description: Semivolatiles

CTM

Date Extracted: 12/12/96 Date Analyzed: 12/17/96 Parameter Units Detection Regulatory Result DataFlag Limit Limit * Naphthalene 10 ug/i Acenaphthene 20 25 ug/l 19 Fluorene 50 ug/l 50 22 Phenanthrene ug/l Anthracene ug/l 5 50 9 5 Fluoranthene ug/l 50 ND 50 ND Pyrene ug/l Benzo(a)anthracene ug/l 0.002 ND 5 Chrysene 0.002 ND ug/l 5 ND Benzo(b)fluoranthene ug/l 0.002 Benzo(k)fluoranthene 5 0.002 ND ug/l 5 Benzo(a)pyrene 0.002 ND ug/l 5 Indeno(1,2,3-cd)pyrene ug/l 0.002 ND 15 Dibenz(a,h)anthracene ug/l 50 ND ND Benzo(g,h,i)perylene ug/i 0.002 Total PAHs ug/l 109

ng/g = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

Plattsburgh AFB Analytical Results

SampleID: BS-GP-02S

Project No.: 17257

Matrix: Soil/Solid

Site ID:

BSAGP

·Date:

9/30/96

Time:

Test Code:

1415

Test Code:

8021

Description : Semivolatiles

Lab:

CTM

8270

Lab:

CTM

Description: Volatiles

Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Date Extracted: 10/7/96

Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1 ,	100	ND	
Xylenes, total	ng/g	1	100	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	190	200	ND	
Acenaphthene	ng/g	190	400	ND	
Fluorene	ng/g	190	1000	ND	
Phenanthrene	ng/g	190	1000	ND	
Anthracene	ng/g	190	1000	ND	
Fluoranthene	ng/g	190	1000	ND	
Pyrene	ng/g	190	1000	ND	
Benzo(a)anthracene	ng/g	190	0.04	ND	
Chrysene	ng/g	190	0.04	ND	
Benzo(b)fluoranthene	ng/g	190	0.04	ND	
Benzo(k)fluoranthene	ng/g	190	0.04	ND I	
Benzo(a)pyrene	ng/g	190	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	190	0.04	ND	
Dibenz(a,h)anthracene	ng/g	190	1000	ND	•
Benzo(g,h,i)perylene	ng/g	190	0.04	ND	
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-02W

Matrix: Aqueous

Site ID: **BSAGP** Project No.: 17257

Time: -Date: 9/30/96

Test Code:

Test Code:

1445

8021

Lab:

CTM

Description : Semivolatiles

8270

Description : Volatiles

Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Parameter	Units	Detection Limit	Regulatory	Result	DataFlag
мтве	ug/l	1		ND	
Benzene	ug/l	0.5		ND '	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

Date Extracted: 10/4	Date	Date Analyzed: 10/7/96				
Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag	
Naphthalene	ug/l	5	10	ND		
Acenaphthene	ug/l	5	20	ND		
Fluorene	ug/l	5	50	ND		
Phenanthrene	ug/l	5	50	ND		
Anthracene	ug/l	5	50	ND		
Fluoranthene	ug/l	5	50	ND		
Pyrene	ug/l	5	50	ND	!	
Benzo(a)anthracene	ug/l	5	0.002	ND		
Chrysene	ug/l	5	0.002	ND		
Benzo(b)fluoranthene	ug/l	5	0.002	ND		
Benzo(k)fluoranthene	ug/l	5	0.002	ND		
Benzo(a)pyrene	ug/l	5	0.002	ND		
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	l i	
Dibenz(a,h)anthracene	ug/l	5	50	ND		
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	1	
Total PAHs	ug/l		11	ND		

Lab:

CTM

Plattsburgh AFB Analytical Results

SampleID: BS-GP-03S

Matrix: Soil/Solid

Site ID: BSAGP

Project No.: 17257

- Date :

9/30/96

1501

Description : Semivolatiles

Test Code:

8021

Time:

Test Code:

8270

Lab:

CTM

Description: Volatiles

Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	ND	
Xylenes, total	ng/g	1	100	ND	

Date Extracted: 10/7	Date	Analyzed	10/8/96		
Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	200	200	ND	
Acenaphthene	ng/g	200	400	ND '	1
Fluorene	ng/g	200	1000	ND	i i
Phenanthrene	ng/g	200	1000	ND	
Anthracene	ng/g	200	1000	ND	
Fluoranthene	ng/g	200	1000	ND	1
Pyrene	ng/g	200	1000	ND	
Benzo(a)anthracene	ng/g	200	0.04	ND	
Chrysene	ng/g	200	0.04	ND	
Benzo(b)fluoranthene	ng/g	200	0.04	ND	
Benzo(k)fluoranthene	ng/g	200	0.04	ND	! !
Benzo(a)pyrene	ng/g	200	0.04	ND	1
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND	
Dibenz(a,h)anthracene	ng/g	200	1000	ND	1 1
Benzo(g,h,i)perylene	ng/g	200	0.04	ND	1
Total PAHs	ng/g	1		ND	1

Lab:

CTM

Plattsburgh AFB Analytical Results

SampleID: BS-GP-03W

Matrix: Aqueous

Site ID: **BSAGP**

Project No.: 17257

-Date:

9/30/96

1530

Time:

Test Code:

8021 Lab: CTM

Description: Volatiles

Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/i	1	5	ND	
Toluene	ug/l	1	5	ND ·	
Toluene Ethylbenzene	ug/i	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

Test Code: **CTM** 8270 Lab:

Description: Semivolatiles

Date Extracted: 10/4/96 Date Analyzed: 10/7/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/i	5	50	ND	'
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/i	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-04S

Matrix: Soil/Solid

Site ID: **BSAGP**

Project No.: 17257

·Date: 10/1/96 Time:

0925

8270

Test Code:

8021 Lab: CTM

Test Code:

Lab: **CTM**

Description: Volatiles

Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Description: Semivolatiles Date Extracted: 10/7/96

Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	ND	
Xylenes, total	ng/g	1	100	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	190	200	ND	
Acenaphthene	ng/g	190	400	ND	
Fluorene	ng/g	190	1000	ND	
Phenanthrene	ng/g	190	1000	ND	
Anthracene	ng/g	190	1000	ND	
Fluoranthene	ng/g	190	1000	ND	
Pyrene	ng/g	190	1000	ND	
Benzo(a)anthracene	ng/g	190	0.04	ND	
Chrysene	ng/g	190	0.04	ND	
Benzo(b)fluoranthene	ng/g	190	0.04	ND	
Benzo(k)fluoranthene	ng/g	190	0.04	ND	
Benzo(a)pyrene	ng/g	190	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	190	0.04	ND	
Dibenz(a,h)anthracene	ng/g	190	1000	ND	
Benzo(g,h,i)perylene	ng/g	190	0.04	ND	
Total PAHs	ng/g		. '	ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-04W

Matrix: Aqueous

Site ID:

Project No.: 17257

BSAGP

-Date:

10/1/96

Time:

Test Code:

1000

Test Code:

8021

Lab:

CTM

Description: Semivolatiles

8270

Description : Volatiles

Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/i	1	5	ND	
Ethylbenzene	ug/l	1]	5	ND	
Xylenes, total	ug/l	1	5	ND :	

Date Extracted: 10/4/96 Date Analyzed: 10/9/96 Units Detection Regulatory Result DataFlag Parameter Limit Limit * Naphthalene 10 ND ug/l ND Acenaphthene ug/l 20 ND Fluorene 50 ug/l Phenanthrene 5 50 ND ug/l ND Anthracene 50 ug/i Fluoranthene 5 50 ND ug/l ND Pyrene ug/l 50 ND Benzo(a)anthracene ug/l 0.002 5 0.002 ND Chrysene ug/l ND Benzo(b)fluoranthene ug/l 0.002 ND Benzo(k)fluoranthene 0.002 ug/l 0.002 ND Benzo(a)pyrene ug/l ND Indeno(1,2,3-cd)pyrene ug/l 0.002 Dibenz(a,h)anthracene 50 ND ug/l 5 ИD Benzo(g,h,i)perylene 0.002 ug/l Total PAHs ug/l ND

Lab:

CTM

Plattsburgh AFB Analytical Results

SampleID: BS-GP-04WDP

Matrix: Aqueous

Site ID:

BSAGP

Project No.: 17257

Date:

10/1/96

Time:

Test Code:

1010

Test Code:

8021

Lab:

CTM

Description : Semivolatiles

8270

Lab:

CTM

Description : Volatiles

Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Date Extracted: 10/5/96

Date Analyzed: 10/7/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/ł	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	l
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/i	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l	1		ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-05S

Matrix: Soil/Solid

Site ID: BSAGP

Project No.: 17257 1020 -Date: 10/1/96 Time:

Test Code:

8021

Description: Semivolatiles

Lab:

CTM

Test Code:

8270

CTM

Description : Volatiles

Date Extracted: 10/10/96

Date Analyzed: 10/10/96

Date Extracted: 10/7/96

Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1 .	100	ND	
Ethylbenzene	ng/g	1	100	ND	
Xylenes, total	ng/g	1	100	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	190	200	ND	
Acenaphthene	ng/g	190	400	ND	
Fluorene	ng/g	190	1000	ND	
Phenanthrene	ng/g	190	1000	ND	
Anthracene	ng/g	190	1000	ND	
Fluoranthene	ng/g	190	1000	ND	
Pyrene	ng/g	190	1000	ND	
Benzo(a)anthracene	ng/g	190	0.04	ND	
Chrysene	ng/g	190	0.04	ND	
Benzo(b)fluoranthene	ng/g	190	0.04	ND	
Benzo(k)fluoranthene	ng/g	190	0.04	ND	
Benzo(a)pyrene	ng/g	190	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	190	0.04	ND	
Dibenz(a,h)anthracene	ng/g	190	1000	ND	
Benzo(g,h,i)perylene	ng/g	190	0.04	ND	
Total PAHs	ng/g			ND	

Lab:

Plattsburgh AFB Analytical Results

SampleID: BS-GP-05S

Matrix: Soil/Solid

Site ID: BSAGP

Project No.: 17257 - Date: 10/1/96 Time: 1020

Test Code: 8021

Lab: CTM

Description: Volatiles

Date Extracted: 10/10/96 Date Analyzed: 10/10/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	ND	1
Xylenes, total	ng/g	1	100 ,	ND	

Test Code:	8270	Lab :	CTM
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Description : Semivolatiles

Date Extracted: 10/7/96 Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	190	200	ND	
Acenaphthene	ng/g	190	400	ND	
Fluorene	ng/g	190	1000	ND	
Phenanthrene	ng/g	190	1000	ND	1 1
Anthracene	ng/g	190	1000	ND	
Fluoranthene	ng/g	190	1000	ND	l I
Pyrene	ng/g	190	1000	ND	
Benzo(a)anthracene	ng/g	190	0.04	ND	
Chrysene	ng/g	190	0.04	ND	
Benzo(b)fluoranthene	ng/g	190	0.04	ND	
Benzo(k)fluoranthene	ng/g	190	0.04	ND	l l
Benzo(a)pyrene	ng/g	190	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	190	0.04	ND	1
Dibenz(a,h)anthracene	ng/g	190	1000	ND	1
Benzo(g,h,i)perylene	ng/g	190	0.04	ND	1
Total PAHs	ng/g			ND	

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample

AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

* NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: BS-GP-05W

Matrix: Aqueous

Site ID:

BSAGP

-Date:

10/1/96

1115

Test Code:

8021

Lab:

CTM

Time:

Project No.: 17257

Description : Volatiles

Date Analyzed: 10/10/96

Date Extracted: 10/10/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/i	0.5 `	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND D	
Xylenes, total	ug/l	1	5	2.0	

CTM Test Code: 8270 Lab:

Description: Semivolatiles

Date Extracted: 10/4/96

Date Analyzed: 10/7/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	! #
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	i I
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	I I
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	i [
Total PAHs	ug/i			ND	

* TCLP Alternative Guidance Values obtained from the Stars Memo #1

Plattsburgh AFB Analytical Results

10/1/96

SampleID: BS-GP-06S

Matrix: Soil/Solid

Site ID:

BSAGP

Project No.: 17257

-Date:

Time:

1240

Description: Semivolatiles

Test Code:

8021

Test Code:

8270

Lab:

CTM

Description: Volatiles

Date Extracted: 10/10/96

Date Analyzed: 10/10/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	ND	
Xylenes, total	ng/g	1	100	ND	

Date Extracted: 10/7	Date	Analyzed	10/8/96		
Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	200	200	ND	
Acenaphthene	ng/g	200	400	ND	
Fluorene	ng/g	200	1000	ND	
Phenanthrene	ng/g	200	1000	ND	
Anthracene	ng/g	200	1000	ND	
Fluoranthene	ng/g	200	1000	ND	
Pyrene	ng/g	200	1000	ND	
Benzo(a)anthracene	ng/g	200	0.04	ND	
Chrysene	ng/g	200	0.04	ND	
Benzo(b)fluoranthene	ng/g	200	0.04	ND	
Benzo(k)fluoranthene	ng/g	200	0.04	ND	•
Benzo(a)pyrene	ng/g	200	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND	
Dibenz(a,h)anthracene	ng/g	200	1000	ND	
Benzo(g,h,i)perylene	ng/g	200	0.04	ND	
Total PAHs	ng/a	1	1	מא '	

Lab:

CTM

Plattsburgh AFB Analytical Results

SampleID: BS-GP-06SDP

Date Extracted: 10/11/96

Matrix: Soil/Solid

Site ID:

BSAGP

- Date :

Date Analyzed: 10/11/96

10/1/96

Time:

1245

Description: Semivolatiles

8270

Test Code:

8021

Lab:

Test Code:

Lab:

CTM

Description: Volatiles

Project No.: 17257

CTM

Date Extracted: 10/7/96

Date Analyzed: 10/8/96

ı						
l	Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
١	MTBE	ng/g	1	1000	ND	
1	Benzene	ng/g	0.6	14	ND	
I	Trichloroethylene	ng/g	1	700	ND	
ı	Toluene	ng/g	1	100	ND	
	Ethylbenzene	ng/g	1	100	ND	
١	Xylenes, total	ng/g	1	100	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	200	200	ND	
Acenaphthene	ng/g	200	400	ND	
Fluorene	ng/g	200	1000	ND	
Phenanthrene	ng/g	200	1000	ND	
Anthracene	ng/g	200	1000	ND	[
Fluoranthene	ng/g	200	1000	ND	
Pyrene	ng/g	200	1000	ND	
Benzo(a)anthracene	ng/g	200	0.04	ND	
Chrysene	ng/g	200	0.04	ND	l
Benzo(b)fluoranthene	ng/g	200	0.04	ND	1
Benzo(k)fluoranthene	ng/g	200	0.04	ND	
Benzo(a)pyrene	ng/g	200	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND	1
Dibenz(a,h)anthracene	ng/g	200	1000	ND	
Benzo(g,h,i)perylene	ng/g	200	0.04	ND	
Total PAHs	ng/g			ND	

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was delected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: BS-GP-06W

Matrix: Aqueous

Site ID:

BSAGP

Project No.: 17257

Date:

10/1/96

Time:

1300

Description: Semivolatiles

Test Code:

8021

Lab:

CTM

Test Code:

8270

Lab:

CTM

Description : Volatiles

Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Date Extracted: 10/4/96

Date Analyzed: 10/4/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE Benzene	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5 ′	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l .	5	50	ND	
Anthracene	ug/l	5	50	ND	1
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-07S

Matrix: Soil/Solid

Site ID:

BSAGP

Project No.: 17257

Date:

10/1/96

Time:

1330

Test Code: Description : Volatiles

8021

Lab:

CTM

8270

Test Code: Description : Semivolatiles

Date Extracted: 10/7/96

Lab:

CTM

Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	ND	
Ethylbenzene Xylenes, total	ng/g	1	100	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	190	200	ND	
Acenaphthene	ng/g	190	400	ND	
Fluorene	ng/g	190	1000	ND	
Phenanthrene	ng/g	190	1000	ND	
Anthracene	ng/g	190	1000	ND	
Fluoranthene	ng/g	190	1000	ND	
Pyrene	ng/g	190	1000	ND	
Benzo(a)anthracene	ng/g	190	0.04	ND	i
Chrysene	ng/g	190	0.04	ND	
Benzo(b)fluoranthene	ng/g	190	0.04	ND	
Benzo(k)fluoranthene	ng/g	190	0.04	ND	
Benzo(a)pyrene	ng/g	190	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	190 .	0.04	ND	1 1
Dibenz(a,h)anthracene	ng/g	190	1000	ND	1
Benzo(g,h,i)perylene	ng/g	190	0.04	ND	
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results

10/1/96

SampleID: BS-GP-07W

Matrix: Aqueous

Site ID:

BSAGP

Project No.: 17257

Date:

Time:

1345

Test Code:

8021

Lab:

CTM

Test Code:

8270

Lab:

CTM

Description: Volatiles

Date Extracted: 10/10/96

Date Analyzed: 10/10/96

Date Extracted: 10/4/96

Description: Semivolatiles

Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/i	1	50	3.0	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/I	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	1
Phenanthrene	ug/l	5	50	ND	1 1
Anthracene	ug/l	5	50	ND	l
Fluoranthene	ug/i	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5 .	0.002	ND	
Chrysene	ug/l	5	0.002	ND	l I
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/i	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	1 1
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Revised Report Date: 4/8/97

Plattsburgh AFB Analytical Results

Original Report Date: 1/15/97

SampleID: BS-GP-08S

BSAGP

Matrix : Soil/Solid

Project No.: 17257

-Date:

10/1/96

1445

Description : Semivolatiles

Test Code:

Site ID:

8021

Lab:

CTM

Test Code:

Time:

8270

CTM

Description: Volatiles

Date Extracted: 10/12/96

Date Analyzed: 10/12/96

Date Extracted: 10/7/96

Date Analyzed: 10/8/96

Lab:

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	7.0	
Trichloroethylene	ng/g	1	700	ND	
Toluene Ethylbenzene Xylenes, total	ng/g	1	100	3.0	i I
Ethylbenzene	ng/g	1	100	40.0	
Xylenes, total	ng/g	1	100	150.0	#

Parameter	Units	Detection Limit	Regulatory	Result	DataFlag
Naphthalene	ng/g	190	200	ND	
Acenaphthene	ng/g	190	400	270	
Fluorene	ng/g	190	1000	300	
Phenanthrene	ng/g	190	1000	560	
Anthracene	ng/g	190	1000	250	
Fluoranthene	ng/g	190	1000	600	
Pyrene	ng/g	190	1000	390	
Benzo(a)anthracene	ng/g	190	0.04	240	#
Chrysene	ng/g	190	0.04	190	#
Benzo(b)fluoranthene	ng/g	190	0.04	320	#
Benzo(k)fluoranthene	ng/g	190	0.04	ND	
Benzo(a)pyrene	ng/g	190	0.04	200	#
Indeno(1,2,3-cd)pyrene	ng/g	190	0.04	ND	1
Dibenz(a,h)anthracene	ng/g	190	1000	ND	
Benzo(g,h,i)perylene	ng/g	190	0.04	ND	
Total PAHs	ng/g			3320	

Revised Report Date: 4/8/97

Plattsburgh AFB Analytical Results

Original Report Date: 1/15/97

SampleID: BS-GP-08S-A

Matrix: Soil/Solid

Site ID: **BSAGP** Project No.: 17257

-Date:

12/10/96

0910

Time:

Test Code:

8021

Lab:

CTM

Description : Volatiles

Date Extracted : 12/13/96

Date Analyzed: 12/13/96

Date Extracted . 12/13/30 Date Attalyzed .				
Units	Detection Limit	Regulatory Limit *	Result	DataFlag
ng/g	115	1000	ND	D
ng/g	57	14	ND	D
ng/g	57	700	ND	D
ng/g	115	100	ND	D
ng/g	115	100	2400.0	#D
ng/g	115	100	ND	D
ng/g	115	100	ND	D
ng/g	115	100	ND	D
	ng/g ng/g ng/g ng/g ng/g ng/g ng/g	Units Detection Limit ng/g 115 ng/g 57 ng/g 57 ng/g 115 ng/g 115 ng/g 115 ng/g 115 ng/g 115	Units Detection Limit Regulatory Limit * ng/g 115 1000 ng/g 57 14 ng/g 57 700 ng/g 115 100 ng/g 115 100	Units Detection Limit Regulatory Limit Result ng/g 115 1000 ND ng/g 57 14 ND ng/g 57 700 ND ng/g 115 100 ND ng/g 115 100 2400.0 ng/g 115 100 ND ng/g 115 100 ND ng/g 115 100 ND

Plattsburgh AFB Analytical Results

SampleID: BS-GP-08W

Matrix: Aqueous

Site ID:

BSAGP

Date:

10/2/96

0730

Test Code:

8021

Lab:

CTM

Time:

Project No.: 17257

Description: Volatiles

Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	2.0	
Benzene	ug/l	0.5	0.70	88.0	#
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/i	1	5	2.0	
Töluene Ethylbenzene	ug/l	1 .	5	17.0	#
Xylenes, total	ug/l	1	5	140.0	#

8270 CTM Lab: Test Code:

Description: Semivolatiles

Date Extracted: 10/5/96 Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	10	#
Acenaphthene	ug/l	5	20	9	
Fluorene	ug/l	5	50	7	
Phenanthrene	ug/l	5	50	12	1
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	8	1
Pyrene	ug/l	5	50	ND	1
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	1 I
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	l #
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	l i
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			46	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-08W-A

Matrix: Aqueous

Site ID: **BSAGP**

Project No.: 17257 Time: 1151 · Date : 12/11/96

Test Code:

8021

CTM

Description: Volatiles

Date Extracted: 12/15/96

Date Analyzed: 12/15/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
МТВЕ	ug/l	10	50	ND	D
Benzene	ug/l	5	0.70	98.0	#D
Trichloroethylene	ug/l	10	5	ND	D
Toluene	ug/l	10	5	ND	D
Ethylbenzene	ug/l	10	5	280.0	#D
m,p-Xylene	ug/l	10	5	760.0	#D
m,p-Xylene o-Xylene	ug/l	10	5	44.0	#D
Xylenes, total	ug/I	10	5	804.0	#D

Lab:

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: BS-GP-09S

Matrix : Soil/Solid

Site ID:

BSAGP

Project No.: 17257

Date:

10/1/96

Time:

1645

Test Code:

8021

Lab:

CTM

Description : Semivolatiles

Test Code:

8270

Lab:

CTM

Description: Volatiles

Date Extracted: 10/12/96

Date Analyzed: 10/12/96

Date Extracted: 10/7/96

Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	1
Toluene	ng/g	1	100	3.0	
Ethylbenzene	ng/g	1	100	11.0	
Xylenes, total	ng/g	1	100	6.0	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	180	200	ND	
Acenaphthene	ng/g	180	400	ND	
Fluorene	ng/g	180	1000	ND	!
Phenanthrene	ng/g	180	1000	ND	1 1
Anthracene	ng/g	180	1000	ND	
Fluoranthene	ng/g	180	1000	ND	
Pyrene	ng/g	180	1000	ND	I I
Benzo(a)anthracene	ng/g	180	0.04	ND	1 1
Chrysene	ng/g	180	0.04	ND	
Benzo(b)fluoranthene	ng/g	180	0.04	ND	
Benzo(k)fluoranthene	ng/g	180	0.04	ND	
Benzo(a)pyrene	ng/g	180	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	180	0.04	ND	! !
Dibenz(a,h)anthracene	ng/g	180	1000	ND	
Benzo(g,h,i)perylene	ng/g	180	0.04	ND	
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results Revised Report Date: 4/8/97

Original Report Date: 1/15/97

SampleID: BS-GP-09S-A

Matrix: Soil/Solid

Site ID: **BSAGP**

Project No.: 17257

-Date:

Time:

12/10/96

0925

Test Code:

8021

Lab:

CTM

Description: Volatiles

Date Extracted: 12/15/96

Date Analyzed: 12/15/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	120 .	1000	ND	D
Benzene	ng/g	58	14	ND	D
Trichloroethylene	ng/g	120	700	ND	D
Toluene	ng/g	120	100	ND	D
Ethylbenzene	ng/g	120	100	ND	D
m,p-Xylene	ng/g	120	100	400.0	#D
o-Xylene	ng/g	120	100	61.0	D
Xylenes, total	ng/g	120	100	461.0	#D

Revised Report Date: 4/8/97

Plattsburgh AFB Analytical Results

12/10/96

Original Report Date: 1/15/97

SampleID: BS-GP-09S-A-D

Matrix: Soil/Solid

Site ID: **BSAGP**

Project No.: 17257

-Date:

Time:

0925

Test Code:

8021

Lab:

CTM

Description : Volatiles

Date Extracted: 12/14/96

Date Analyzed: 12/14/96

Parameter	Units Detection Regulatory Limit Limit *			Result	DataFlag
мтве	ng/g	120	1000	ND	D
Benzene	ng/g	58	14	ND	D
Trichloroethylene	ng/g	120	700	ND	D
Toluene	ng/g	120	100	ND	D
Ethylbenzene	ng/g	120	100	1000.0	#D
m,p-Xylene	ng/g	120	100	ND	D
o-Xylene	ng/g	120	100	ND	D
Xylenes, total	ng/g	120	100	ND	D

Plattsburgh AFB Analytical Results

SampleID: BS-GP-09W

Matrix: Aqueous

Site ID:

BSAGP

Project No.: 17257

Date:

10/2/96

Time:

Test Code:

0745

Description: Semivolatiles

Test Code:

8021

Lab:

CTM

8270

Lab:

CTM

Description: Volatiles

Date Extracted: 10/12/96

Date Analyzed: 10/12/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	1.0	
Benzene	ug/l	0.5	0.70	3.0	#
Trichloroethylene	ug/l	1	5 ,	ND	
Toluene	ug/l	1	5	1.0	
Ethylbenzene	ug/l	1	5	17.0	#
Xylenes, total	ug/l	1	5	14.0	#

Date Analyzed: 10/8/96 Date Extracted: 10/5/96 Result DataFlag Parameter Units Detection Regulatory Limit * Limit 10 Naphthalene ug/l Acenaphthene 20 ND ug/l Fluorene 50 ИD ug/l ∥5 50 ND Phenanthrene ug/i 5 50 ND Anthracene ug/l 5 Fluoranthene 50 ND ug/l 50 ND Pyrene ug/l 0.002 ND Benzo(a)anthracene ug/i Chrysene ug/l 15 0.002 ND 5 0.002 ND Benzo(b)fluoranthene ug/l 5 Benzo(k)fluoranthene ug/l 0.002 ND 5 Benzo(a)pyrene ug/l 0.002 ND 0.002 ND Indeno(1,2,3-cd)pyrene ug/l 5 50 ND Dibenz(a,h)anthracene ug/l Benzo(g,h,i)perylene 0.002 ND ug/l Total PAHs ug/l

Plattsburgh AFB Analytical Results

SampleID: BS-GP-09W-A

Matrix: Aqueous

Site ID: **BSAGP**

Project No.: 17257

Date:

12/11/96 Time: 1015

Test Code:

8021

Lab:

CTM

Description : Volatiles

Date Extracted: 12/16/96

Date Analyzed: 12/16/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	3.0	
Benzene	ug/l	0.5	0.70	29.0	#
Trichloroethylene	ug/l	1	5	ND	i li
Toluene	ug/l	1	5	13.0	#
Ethylbenzene	ug/l	1	5	80.0	#
m,p-Xylene	ug/l	1	5	15.0	#
o-Xylene	ug/l	1	5	5.0	#
Xylenes, total	ug/l	1	5	20.0	#

Plattsburgh AFB Analytical Results

SampleID: BS-GP-10S

Matrix: Soil/Solid

Site ID: BSAGP

.......

Project No.: 17257

Date:

10/2/96

Time: 0

0940

Test Code:

8021

Lab:

СТМ

Test Code: 8270

Description: Semivolatiles

CTM

Description : Volatiles

Date Extracted: 10/16/96

Date Analyzed: 10/16/96

Date Extracted: 10/7/96

Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	23	1000	ND	D
Benzene	ng/g	12	14	ND	D
Trichloroethylene	ng/g	23	700	ND	D
Toluene	ng/g	23	100	ND	D
Ethylbenzene	ng/g	23	100	ND	D
Xylenes, total	ng/g	23	100	55.0	D

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	190	200	ND	
Acenaphthene	ng/g	190	400	ND	
Fluorene	ng/g	190	1000	ND	
Phenanthrene	ng/g	190	1000	ND	
Anthracene	ng/g	190	1000	ND	
Fluoranthene	ng/g	190	1000	ND	
Pyrene	ng/g	190	1000	ND	1
Benzo(a)anthracene	ng/g	190	0.04	ND	
Chrysene	ng/g	190	0.04	ND	
Benzo(b)fluoranthene	ng/g	190	0.04	ND	l
Benzo(k)fluoranthene	ng/g	190	0.04	ND	1 1
Benzo(a)pyrene	ng/g	190	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	190	0.04	ND	l !
Dibenz(a,h)anthracene	ng/g	190	1000	ND	1 1
Benzo(g,h,i)perylene	ng/g	190	0.04	ND	l i
Total PAHs	ng/g			ND	

Lab:

Plattsburgh AFB Analytical Results

SampleID: BS-GP-10W

Matrix: Aqueous

Site ID:

MTBE

Benzene

Toluene

Trichloroethylene

Ethylbenzene

Xylenes, total

BSAGP

Date:

10/2/96

#DR

#DR

Time:

1455

Test Code:

8021

Units

ug/l

ug/l

ug/l

ug/l

ug/l

ug/ł

10

10

Lab:

5

5

CTM

Description: Volatiles

Project No.: 17257

Date Extracted: 10/18/96

Parameter

Date Analyzed: 10/18/96

DataFlag Detection Regulatory Result Limit Limit * 50 ND DR 10 5 0.70 16.0 #DR 10 5 DR ND 5 DR 10 ND

15.0

150.0

CTM Test Code: 8270 Lab:

Description: Semivolatiles

Date Extracted: 10/8/96

Date Analyzed: 10/17/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/i	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/i	5	50	ND	i I
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	1
Pyrene	ug/i	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/i	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	1
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	1 1
Dibenz(a,h)anthracene	ug/l	5	50	ND	1 1
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-10W-A

Matrix: Aqueous

Site ID: **BSAGP**

Project No.: 17257

12/11/96

Time:

0905

Test Code:

8021

Lab:

CTM

- Date :

Description: Volatiles

Date Extracted: 12/15/96

Date Analyzed: 12/15/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	10	50	ND	D
Benzene	ug/l	5	0.70	87.0	#D
Trichloroethylene	ug/l	10	5	ND	D
Toluene	ug/l	10	5	ND	D
Ethylbenzene	ug/I	10	5	120.0	#D
m,p-Xylene	ug/I	10	5	580.0	#D
m,p-Xylene o-Xylene	ug/l	10	5	ND	D
Xylenes, total	ug/l	10	5	580.0	#D

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: BS-GP-11S

Matrix: Soil/Solid

CTM

Site ID: BSAGP

Date: 10/2/96 Time:

Project No.: 17257

Test Code:

8021 Lab :

Test Code:

1000

Description: Semivolatiles

8270

Description : Volatiles

Date Extracted: 10/16/96

Date Analyzed: 10/16/96

Date Extracted: 10/7/96

Date Analyzed: 10/8/96

CTM

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1100	1000	ND	D
Benzene	ng/g	570	14	ND	D
Trichloroethylene	ng/g	1100	700	ND	D
Toluene	ng/g	1100`	100	ND	D
Ethylbenzene	ng/g	1100	100	4100.0	#D
Xylenes, total	ng/g	1100	100	2400.0	#D

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	190	200	ND	
Acenaphthene	ng/g	190	400	ND	
Fluorene Phenanthrene	ng/g	190	1000	ND	
Phenanthrene	ng/g	190	1000	ND	
Anthracene	ng/g	190	1000	ND	
Fluoranthene	ng/g	190	1000	ND	
Pyrene	ng/g	190	1000	ND	
Benzo(a)anthracene	ng/g	190	0.04	ND	
Chrysene	ng/g	190	0.04	ND	1
Benzo(b)fluoranthene	ng/g	190	0.04	ND	
Benzo(k)fluoranthene	ng/g	190	0.04	ND	i I
Benzo(a)pyrene	ng/g	190	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	190	0.04	ND	
Dibenz(a,h)anthracene	ng/g	190	1000	ND	
Benzo(g,h,i)perylene	ng/g	190	0.04	ND	
Total PAHs	ng/g			ND	

Lab:

Plattsburgh AFB Analytical Results

SampleID: BS-GP-11W

Matrix: Aqueous

Site ID:

BSAGP

Project No.: 17257

Date:

10/2/96

Time:

1610

Test Code:

8021

Lab:

CTM

Test Code: **Description: Semivolatiles**

8270

Lab:

CTM

Description: Volatiles

Date Extracted: 10/16/96

Date Analyzed: 10/16/96

Date Extracted: 10/8/96

Date Analyzed: 10/17/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	10	50	ND	D
Benzene	ug/l	5	0.70	130.0	#D
Trichloroethylene	ug/l	10	5	ND	D
Toluene	ug/l	10	5	ND	D
Ethylbenzene	ug/l	10	5	ND	D
Xylenes, total	ug/l	10	5	1400.0	#D

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Revised Report Date: 4/8/97

Plattsburgh AFB Analytical Results

Original Report Date: 1/15/97

SampleID: BS-GP-11W-A

Matrix: Aqueous

Site ID: **BSAGP**

Project No.: 17257

Date:

Time: 12/11/96

1110

Test Code:

8021

Lab:

CTM

Description : Volatiles

Date Extracted: 12/16/96

Date Analyzed: 12/16/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	70.0	#
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	2.0	! !
Ethylbenzene	ug/l	1	5	6.0	#
m,p-Xylene	ug/i	1	5	330.0	#
Ethylbenzene m,p-Xylene o-Xylene	ug/l	1	5	2.0	l I
Xylenes, total	ug/l	1	5	332.0	#

ng/g = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

^{*} TCLP Alternative Guidance Values obtained from the Stars Memo #1

Plattsburgh AFB Analytical Results

SampleID: BS-GP-12S

Matrix: Soil/Solid

Site ID: **BSAGP**

Project No.: 17257

Date:

10/2/96

Time:

1120

Description: Semivolatiles

Date Extracted: 10/7/96

Test Code:

8021

Lab:

CTM

Test Code:

8270

Lab:

CTM

Date Analyzed: 10/8/96

Description: Volatiles

Date Extracted: 10/15/96

Date Analyzed: 10/15/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	ND '	
Xylenes, total	ng/g	1	100	ND	

	1	·	<u> </u>		
Parameter	Units	Detection	Regulatory	Result	DataFlag
		Limit	Limit *	~	
Naphthalene	ng/g	190	200	ND	
Acenaphthene	ng/g	190	400	ND	
Fluorene	ng/g	190	1000	ND	ļ
Phenanthrene	กg/g	190	1000	ND	
Anthracene	ng/g	190	1000	ND	
Fluoranthene	ng/g	190	1000	ND	
Pyrene	ng/g	190	1000	ND	
Benzo(a)anthracene	ng/g	190	0.04	ND	
Chrysene	ng/g	190	0.04	ND	
Benzo(b)fluoranthene	ng/g	190	0.04	ND	
Benzo(k)fluoranthene	ng/g	190	0.04	ND	
Benzo(a)pyrene	ng/g	190	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	190	0.04	ND	I
Dibenz(a,h)anthracene	ng/g	190	1000	ND	
Benzo(g,h,i)perylene	ng/g	190	0.04	ND	1
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-12W

Matrix: Aqueous

Site ID:

BSAGP

Project No.: 17257

Date:

10/2/96

1535

Time:

Test Code:

8021

Lab:

CTM

Description: Volatiles

Date Extracted: 10/16/96

Date Analyzed: 10/16/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	50	50	ND	D
Benzene	ug/l	25	0.70	29.0	#D
Trichloroethylene	ug/l	50	5	ND	D
Toluene	ug/l	50	5	71.0	#D
Ethylbenzene	ug/l	50	5	160.0	#D
Xylenes, total	ug/l	50	5	2700.0	#D

Test Code: CTM 8270 Lab:

Description: Semivolatiles

Date Extracted: 10/5/96 Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	13	#S
Acenaphthene	ug/l	5	20	ND	s
Fluorene	ug/l	5	50	ND	s
Phenanthrene	ug/l	5	50	ND	s
Anthracene	ug/l	5 ·	50	ND	s
Fluoranthene	ug/l	5	50	ND	s
Pyrene	ug/l	5	50	ND	s
Benzo(a)anthracene	ug/l	5	0.002	ND	s
Chrysene	ug/I	5	0.002	ND	s
Benzo(b)fluoranthene	ug/l	5	0.002	ND	s
Benzo(k)fluoranthene	ug/l	5	0.002	ND	s
Benzo(a)pyrene	ug/l	5	0.002	ND	s
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	s
Dibenz(a,h)anthracene	ug/l	5	50	ND	s
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	s
Total PAHs	ug/l			13	

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: BS-GP-12W-A

Matrix: Aqueous

Site ID: **BSAGP**

Project No.: 17257

Time: 1030 Date: 12/12/96

Test Code:

8270

Lab:

CTM

Description : Semivolatiles

Date Extracted: 12/12	2/96	Date	Date Analyzed: 12/17/96				
Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag		
Naphthalene	ug/l	5	10	ND			
Acenaphthene	ug/l	5	20	ND			
Fluorene	ug/l	5	50	ND			
Phenanthrene	ug/l	5	50	ND			
Anthracene	ug/l	5	50	ND			
Fluoranthene	ug/l	5	50	ND			
Pyrene	ug/l	5	50	ND			
Benzo(a)anthracene	ug/l	5	0.002	ND			
Chrysene	ug/l	5	0.002	ND			
Benzo(b)fluoranthene	ug/l	5	0.002	ND			
Benzo(k)fluoranthene	ug/l	5	0.002	ND			
Benzo(a)pyrene	ug/l	5	0.002	ND			
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	1		
Dibenz(a,h)anthracene	ug/l	5	50	ND			
Benzo(g,h,i)perylene	ug/l	5	0.002	ND			
Total PAHs	ug/l			ND			

ng/g = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

Plattsburgh AFB Analytical Results

SampleID: BS-GP-13S

Matrix: Soil/Solid

Site ID: BSAGP

Project No.: 17257 Date: 10/2/96

8021

1 Lab:

CTM

Time:

1140

Test Code: 80

Description : Volatiles

Date Extracted: 10/12/96

Date Analyzed: 10/12/96

Parameter Units Detection Regulatory Result DataFlag Limit * Limit MTBE 1000 ND ng/g ND Benzene 0.6 ng/g 14 700 ND Trichloroethylene ng/g Toluene 100 ND ng/g Ethylbenzene 100 ND ng/g Xylenes, total 100 ND ng/g

Test Code: 8270 Lab:

Description: Semivolatiles

Date Extracted: 10/7/96 Date Analyzed: 10/8/96

Parameter Units Detection Regulatory Result DataFlag Limit Limit * Naphthalene 190 200 ND ng/g Acenaphthene 400 ND ng/g 190 190 1000 ND Fluorene ng/g Phenanthrene 190 1000 ND ng/g Anthracene 190 1000 ND ng/g Fluoranthene 190 1000 ng/g ND Pyrene ng/g 190 1000 ND Benzo(a)anthracene ng/g 190 0.04 ND Chrysene ng/g 190 0.04 ND Benzo(b)fluoranthene ng/g 190 0.04 ND Benzo(k)fluoranthene 0.04 190 ND ng/g Benzo(a)pyrene 190 0.04 ND ng/g 0.04 Indeno(1,2,3-cd)pyrene ng/g 190 ND Dibenz(a,h)anthracene ng/g 190 1000 ND Benzo(g,h,i)perylene 190 0.04 ND ng/g Total PAHs ng/g ND

CTM

Plattsburgh AFB Analytical Results

SampleID: BS-GP-13W

Matrix: Aqueous

Site ID:

BSAGP

Project No.: 17257

Date:

10/2/96

Time:

1640

Test Code:

8021

Lab:

CTM

Test Code:

Description: Semivolatiles

Description: Volatiles

Date Extracted: 10/18/96

Date Analyzed: 10/18/96

Date Extracted: 10/8/96

Lab:

CTM

8270

Date Analyzed: 10/17/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	10	50	38.0	DR
Benzene	ug/l	5	0.70	50.0	#DR
Trichloroethylene	ug/l	10	5	ND	DR
Totuene	ug/l	10	5	26.0	#DR
Ethylbenzene	ug/l	10	5	220.0	#DR
Xylenes, total	ug/l	10	5	220.0	#DR

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	39	#
Fluorene	ug/i	5	50	100	#
Phenanthrene	ug/l	5	50	100	#
Anthracene	ug/l	5	50	56	#
Fluoranthene	ug/l	5	50	100	#
Pyrene	ug/l	5	50	78	#
Benzo(a)anthracene	ug/l	5	0.002	63	#
Chrysene	ug/l	5	0.002	35	#
Benzo(b)fluoranthene	ug/l	5	0.002	26	#
Benzo(k)fluoranthene	ug/l	5	0.002	11	#
Benzo(a)pyrene	ug/l	5	0.002	21	#
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	8	#
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	8	#
Total PAHs	ug/l			645	

Plattsburgh AFB Analytical Results

12/11/96

SampleID: BS-GP-13W-A

Matrix: Aqueous

BSAGP Site ID:

Project No.: 17257

Date:

Time:

1200

Test Code:

8021

Lab:

CTM

Description: Volatiles

Date Extracted: 12/15/96

Date Analyzed: 12/15/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/i	1	50	ND	
Benzene	ug/l	0.5	0.70	42.0	#
Trichloroethylene	ug/i	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	37.0	#
m,p-Xylene	ug/l	1	5	15.0	#
o-Xylene	ug/l	1	5	ND	
Xylenes, total	ug/i	1	5	15.0	#

Plattsburgh AFB Analytical Results

SampleID: BS-GP-14S

Matrix: Soil/Solid

Site ID:

BSAGP

Project No.: 17257

Date:

10/2/96

Time:

1215

Description: Semivolatiles

Test Code:

8021

Lab:

CTM

Test Code:

8270

Lab:

CTM

Description : Volatiles

Date Extracted: 10/16/96

Date Analyzed: 10/16/96

Date Extracted: 10/7/96

Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1 .	100	ND	
Ethylbenzene	ng/g	1	100	2.0	
Xylenes, total	ng/g	1	100	1.0	

Parameter	Units	Detection Limit	Regulatory	Result	DataFlag
Naphthalene	ng/g	190	200	ND	
Acenaphthene	ng/g	190	400	ND	
Fluorene	ng/g	190	1000	ND	
Phenanthrene	ng/g	190	1000	ND	
Anthracene	ng/g	190	1000	ND	
Fluoranthene	ng/g	190	1000	ND	
Pyrene	ng/g	190	1000	ND	
Benzo(a)anthracene	ng/g	190	0.04	ND	
Chrysene	ng/g	190	0.04	ND	
Benzo(b)fluoranthene	ng/g	190	0.04	ND	
Benzo(k)fluoranthene	ng/g	190	0.04	ND	
Benzo(a)pyrene	ng/g	190	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	190	0.04	ND	
Dibenz(a,h)anthracene	ng/g	190	1000	ND	
Benzo(g,h,i)perylene	ng/g	190	0.04	ND	
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results Revised Report Date: 4/8/97

Original Report Date: 1/15/97

SampleID: BS-GP-14S-A

Matrix: Soil/Solid

Site ID: **BSAGP**

Project No.: 17257

Time:

1020

Test Code:

8021

Lab:

CTM

Date:

12/10/96

Description : Volatiles

Date Extracted: 12/13/96

Date Analyzed: 12/13/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE Benzene	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	0.8	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	8.0	
Toluene Ethylbenzene m,p-Xylene	ng/g	1	100	17.0	
o-Xylene	ng/g	1	100	ND	
Xylenes, total	ng/g	 1	100	17.0	

Plattsburgh AFB Analytical Results

12/11/96

SampleID: BS-GP-14W-A

Description: Volatiles

Date Extracted: 12/15/96

Matrix: Aqueous

Site ID: BSAGP

Project No.: 17257

· Date :

1205

Test Code:

8021

Time:

Test Code:

Lab:

CTM

Description: Semivolatiles

Date Analyzed: 12/15/96

Date Extracted: 12/12/96

8270

Date Analyzed: 12/14/96

CTM

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	200	50	ND	D
Benzene	ug/l	100	0.70	2600.0	#D
Trichloroethylene	ug/l	200	5	ND	D
Toluene	ug/l	200	5	ND	D
Ethylbenzene	ug/i	200	5	2600.0	#D
m,p-Xylene	ug/l	200	5	7800.0	#D
o-Xylene	ug/l	200	5	1700.0	#D
Xylenes, total	ug/l	200	5	9500.0	#D

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	i i
Phenanthrene	ug/I	5	50	ND	
Anthracene	ug/l	5	50	ND	1
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	i i
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND]
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Lab:

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: BS-GP-15S

Matrix: Soil/Solid

CTM

Site ID: **BSAGP**

Project No.: 17257

10/2/96 Time: Date:

Test Code:

8021

Lab:

Test Code:

1200

Description: Semivolatiles

8270

Description : Volatiles

Date Extracted: 10/12/96

Date Analyzed: 10/12/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	ND	
Xylenes, total	ng/g	1	100	ND	

Date Extracted: 10/7/96 Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	200	200	ND	
Acenaphthene	ng/g	200	400	ND	
Fluorene	ng/g	200	1000	ND	
Phenanthrene	ng/g	200	1000	ND	
Anthracene	ng/g	200	1000	ND	1
Fluoranthene	ng/g	200 .	1000	ND	1 1
Pyrene	ng/g	200	1000	ND	1 1
Benzo(a)anthracene	ng/g	200	0.04	ND	1 11
Chrysene	ng/g	200	0.04	ND	
Benzo(b)fluoranthene	ng/g	200	0.04	ND	l V
Benzo(k)fluoranthene	ng/g	200	0.04	ND	1 1
Benzo(a)pyrene	ng/g	200	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND	
Dibenz(a,h)anthracene	ng/g	200	1000	ND	
Benzo(g,h,i)perylene	ng/g	200	0.04	ND	1 1
Total PAHs	ng/g			ND	

Lab:

CTM

Plattsburgh AFB Analytical Results

SampleID: BS-GP-15W

Matrix: Aqueous

Site ID:

BSAGP

Project No.: 17257

Date:

10/2/96

Time:

Test Code:

1720

Test Code:

8021

Lab:

CTM

8270

Description: Volatiles

Date Extracted: 10/17/96

Date Analyzed: 10/17/96

Description : Semivolatiles

CTM

Date Extracted: 10/8/96 Date Analyzed: 10/17/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
МТВЕ	ug/l	1	50	ND	R
Benzene	ug/l	0.5	0.70	0.6	R
Trichloroethylene	ug/l	1	5	ND	R
Toluene	ug/l	1	5	ND	R
Ethylbenzene	ug/l	1	5	2.0	R
Xylenes, total	ug/l	1	5	6.0	#R

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND .	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND ·	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Lab:

Revised Report Date: 4/8/97

Plattsburgh AFB Analytical Results

Original Report Date: 1/15/97

SampleID: BS-GP-15W-A

Matrix: Aqueous

Site ID: BSAGP

Project No.: 17257

Date: 12/11/96 Time:

Test Code:

8021

Lab:

СТМ

 \neg

1215

Description : Volatiles

Date Extracted: 12/14/96

Date Analyzed: 12/14/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/i	0.5	0.70	ND	l i
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
m,p-Xylene	ug/l	1	5	ND	
o-Xylene	ug/l	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-16W

Date Extracted: 10/17/96

Project No.: 17257

Matrix: Aqueous

Site ID:

BSAGP

Date:

Date Analyzed: 10/17/96

10/3/96

0725

Test Code:

Time:

8021

Lab:

Test Code:

8270

Lab:

CTM

Description: Volatiles

CTM

Description: Semivolatiles

Date Extracted: 10/5/96

Date Analyzed: 10/9/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
Xylenes, total	ug/l	1	5	2.0	

	1	1			
Parameter	Units	Detection	Regulatory	Result	DataFlag
	<u> </u>	Limit	Limit *		
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/i	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Revised Report Date: 4/8/97

Plattsburgh AFB Analytical Results

Original Report Date: 1/15/97

SampleID: BS-GP-16W-A

Matrix: Aqueous

Site ID: **BSAGP**

Date:

Project No.: 17257

Time: 1355 12/11/96

Test Code:

8021 Lab:

CTM

Description: Volatiles

Date Extracted: 12/14/96

Date Analyzed: 12/14/96

Parameter Units Detection Regulatory Result DataFlag Limit Limit * MTBE 50 ND ug/l Benzene 0.5 0.70 ND ug/l 5 ND Trichloroethylene ug/l 5 ND Toluene ug/l Ethylbenzene 5 ND ug/l m.p-Xylene 5 2.0 ug/l 5 ND o-Xylene ug/l Xylenes, total ug/l 2.0

Date Extracted: 10/17/96

Plattsburgh AFB Analytical Results

SampleID: BS-GP-17S

Matrix: Soil/Solid

Site ID: **BSAGP**

Project No.: 17257

Date:

10/2/96

1600

Description: Semivolatiles

Test Code:

8021

Time:

Lab:

CTM

Test Code:

8270

Lab:

CTM

Description: Volatiles

Date Analyzed: 10/17/96

Date Extracted: 10/17/96

Date Analyzed: 10/18/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE Benzene	ng/g	1	1000	ND	R
Benzene	ng/g	0.5	14	ND	R
Trichloroethylene Toluene	ng/g	1	700	ND	R
Toluene	ng/g	1	100	ND	R
Ethylbenzene	ng/g	1	100	ND	R
Xylenes, total	ng/g	1	100	ND	R

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	200	200	ND	R
Acenaphthene	ng/g	200	400	ND	R
Fluorene	ng/g	200	1000	ND	R
Phenanthrene	ng/g	200	1000	ND	R
Anthracene	ng/g	200	1000	ND	R
Fluoranthene	ng/g	200	1000	ND	R
Pyrene	ng/g	200	1000	ND	R
Benzo(a)anthracene	ng/g	200	0.04	ND	R
Chrysene	ng/g	200	0.04	ND	R
Benzo(b)fluoranthene	ng/g	200	0.04	ND	R
Benzo(k)fluoranthene	ng/g	200	0.04	ND	R
Benzo(a)pyrene	ng/g	200	0.04	ND	R
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND	R
Dibenz(a,h)anthracene	ng/g	200	1000	ND	R
Benzo(g,h,i)perylene	ng/g	200	0.04	ND	R
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-17S-A

Date Extracted: 12/13/96

Matrix: Soil/Solid

Site ID: **BSAGP**

Project No.: 17257

Date:

Date Analyzed: 12/13/96

12/10/96

1245

Test Code:

Time:

8021

Lab:

8270

Lab:

CTM

Description: Volatiles

CTM

Description: Semivolatiles

Date Extracted: 12/11/96

Test Code:

Date Analyzed: 12/12/96

Parameter	Units	Detection	Regulatory	Result	DataFlag
		Limit	Limit *		
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.7	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	ND	
m,p-Xylene	ng/g	1	100	ND	
o-Xylene	ng/g	1	100	ND	
MTBE Benzene Trichloroethylene Toluene Ethylbenzene m,p-Xylene o-Xylene Xylenes, total	ng/g	1	100	ND	

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Parameter	Units	Detection	Regulatory	Result	DataFlag
		Limit	Limit *		
Naphthalene	ng/g	230	200	ND	
Acenaphthene	ng/g	230	400	ND	
Fluorene	ng/g	230	1000	ND	
Phenanthrene	ng/g	230	1000	ND	
Anthracene	ng/g	230	1000	ND	
Fluoranthene	ng/g	230	1000	ND	
Pyrene	ng/g	230	1000	ND]
Benzo(a)anthracene	ng/g	230	0.04	ND	
Chrysene	ng/g	230	0.04	ND	[
Benzo(b)fluoranthene	ng/g	230	0.04	ND .	
Benzo(k)fluoranthene	ng/g	230	0.04	ND	
Benzo(a)pyrene	ng/g	230	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	230	0.04	ND	
Dibenz(a,h)anthracene	ng/g	230	1000	DИ	
Benzo(g,h,i)perylene	ng/g	230	0.04	ND	
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-17W

Matrix: Aqueous

Site ID:

BSAGP

Project No.: 17257

Date:

10/3/96

0800

Test Code:

Time:

8021

Lab:

CTM

Test Code:

8270

Lab:

CTM

Description: Volatiles

Date Extracted: 10/17/96

Date Analyzed: 10/17/96

Date Extracted: 10/5/96

Description: Semivolatiles

Date Analyzed: 10/17/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE Benzene	ug/i	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/ł	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
Toluene Ethylbenzene Xylenes, total	ug/l	1	5	2.0	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	l [
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/t	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-17W-A

Matrix: Aqueous

Site ID: **BSAGP**

Project No.: 17257

Date: 12/11/96 Time:

Test Code:

8021

1405

Lab:

CTM

Description: Volatiles

Date Extracted: 12/14/96

Date Analyzed: 12/14/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1 .	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
m,p-Xylene	ug/l	1	5	ND	
o-Xylene	ug/l	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-18S

Matrix: Soil/Solid

Site ID:

BSAGP

Project No.: 17257

10/2/96

Time:

1645

Test Code:

8021

Description : Semivolatiles

Lab:

CTM

Test Code:

8270

Lab:

CTM

Description: Volatiles

Date Extracted: 10/17/96

Date Analyzed: 10/17/96

Date:

Date Extracted: 10/17/96

Date Analyzed: 10/18/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	2	1000	ND	R
Benzene	ng/g	0.8	14	ND	R
Trichloroethylene	ng/g	2	700	ND	R
Toluene	ng/g	2	100	ND	R
Ethylbenzene	ng/g	2	100	ND	R
Xylenes, total	ng/g	2	100	ND .	R

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	260	200	ND	R
Acenaphthene	ng/g	260	400	ND	R
Fluorene	ng/g	260	1000	ND	R
Phenanthrene	ng/g	260	1000	ND	R
Anthracene	ng/g	260	1000	ND	R
Fluoranthene	ng/g	260	1000	ND	R
Pyrene	ng/g	260	1000	ND	R
Benzo(a)anthracene	ng/g	260	0.04	ND	R
Chrysene	ng/g	260	0.04	ND	R
Benzo(b)fluoranthene	ng/g	260	0.04	ND	R
Benzo(k)fluoranthene	ng/g	260	0.04	ND	R
Benzo(a)pyrene	ng/g	260 .	0.04	ND	R
Indeno(1,2,3-cd)pyrene	ng/g	260	0.04	ND	R
Dibenz(a,h)anthracene	ng/g	260	1000	ND	R
Benzo(g,h,i)perylene	ng/g	260	0.04	ND	R
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-18S-A

Matrix: Soil/Solid **BSAGP**

Project No.: 17257

1425 Time: - Date : 12/10/96

Test Code:

8270

Test Code:

Site ID:

8021

Lab:

CTM

Description: Volatiles

Date Extracted: 12/13/96

Date Analyzed: 12/13/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	ND	
m,p-Xylene	ng/g	1	100	ND ,	
o-Xylene	ng/g	1	100	ND	
Xylenes, total	ng/g	1	100	ND	

Description: Semivolatiles Date Extracted: 12/11/96 Date Analyzed: 12/12/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	200	200	ND	
Acenaphthene	ng/g	200	400	ND	1
Fluorene	ng/g	200	1000	ND	
Phenanthrene	ng/g	200	1000	ND	í í
Anthracene	ng/g	200	1000	ND	
Fluoranthene	ng/g	200	1000	ND	1
Pyrene	ng/g	200	1000	ND	
Benzo(a)anthracene	ng/g	200	0.04	ND	
Chrysene	ng/g	200	0.04	ND	l #
Benzo(b)fluoranthene	ng/g	200	0.04	ND	
Benzo(k)fluoranthene	ng/g	200	0.04	ND	
Benzo(a)pyrene	ng/g	200	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND	
Dibenz(a,h)anthracene	ng/g	200	1000	ND	
Benzo(g,h,i)perylene	ng/g	200	0.04	ND	
Total PAHs	ng/g			ND	

Lab:

CTM

ng/g = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} TCLP Alternative Guidance Values obtained from the Stars Memo #1

Plattsburgh AFB Analytical Results

SampleID: BS-GP-18S-A-D

Matrix: Soil/Solid

Site ID:

BSAGP

Date: 12/10/96

Time:

1425

Test Code:

Project No.: 17257

8270

Lab:

СТМ

Description: Semivolatiles

Date Extracted: 12/11/96

Date Analyzed: 12/12/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	220	200	ND	
Acenaphthene	ng/g	220	400	ND	
Fluorene	ng/g	220	1000	ND	
Phenanthrene	ng/g	220	1000	ND	
Anthracene	ng/g	220	1000	ND	
Fluoranthene	ng/g	220	1000	ND	
Pyrene	ng/g	220	1000	ND	
Benzo(a)anthracene	ng/g	220	0.04	ND	
Chrysene	ng/g	220	0.04	ND	
Benzo(b)fluoranthene	ng/g	220	0.04	ND	
Benzo(k)fluoranthene	ng/g	220	0.04	ND	
Benzo(a)pyrene	ng/g	220	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	220	0.04	ND	
Dibenz(a,h)anthracene	ng/g	220	1000	ND	
Benzo(g,h,i)perylene	ng/g	220	0.04	ND .	
Total PAHs	ng/g			ND	

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: BS-GP-18W

Description: Volatiles

Date Extracted: 10/17/96

Matrix: Aqueous

Site ID:

BSAGP

Project No.: 17257

Date:

Date Analyzed: 10/17/96

10/3/96

0815

Test Code:

8021

Lab:

CTM

Time:

Description: Semivolatiles

Test Code:

Date Extracted: 10/5/96

8270

Date Analyzed: 10/17/96

CTM

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE Benzene	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND '	
Xylenes, total	ug/l	1	5	ND	

Parameter	Units	Detection	Regulatory	Result	DataFlag
		Limit	Limit *	-	
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/i	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Lab:

Revised Report Date: 4/8/97 Plattsburgh AFB Analytical Results

Original Report Date: 1/15/97

SampleID: BS-GP-18W-A

Matrix: Aqueous

Site ID: **BSAGP** Project No.: 17257

12/11/96 Time: Date:

1310

Test Code:

8021

Lab:

CTM

Description : Volatiles

Date Extracted: 12/14/96

Date Analyzed: 12/14/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
m,p-Xylene	ug/l	1	5	2.0	
o-Xylene	ug/l	1	5	2.0	
Xylenes, total	ug/l	1	5 ,	4.0	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-19S

Matrix: Soil/Solid

Site ID: BSAGP

Time:

Project No.: 17257

Date:

10/2/96

1710

Test Code:

8021

Lab:

CTM

Test Code: **Description: Semivolatiles**

8270

Lab:

CTM

Description: Volatiles

Date Extracted: 10/17/96

Date Analyzed: 10/17/96

Date Extracted: 10/17/96

Date Analyzed: 10/18/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	R
Benzene Trichloroethylene	ng/g	0.7	14	ND	R
Trichloroethylene	ng/g	1	700	ND	R
Toluene	ng/g	1	100	ND	R
Ethylbenzene	ng/g	1	100 .	ND	R
Xylenes, total	ng/g	1	100	ND	R

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	250	200	ND	R
Acenaphthene	ng/g	250	400	ND	R
Fluorene	ng/g	250	1000	ND	R
Phenanthrene	ng/g	250	1000	ND	R
Anthracene	ng/g	250	1000	ND	R
Fluoranthene	ng/g	250	1000	NĐ	R
Pyrene	ng/g	250	1000	ND	R
Benzo(a)anthracene	ng/g	250	0.04	ND	R
Chrysene	ng/g	250	0.04	ND	R
Benzo(b)fluoranthene	ng/g	250	0.04	NÐ	R
Benzo(k)fluoranthene	ng/g	250	0.04	ND	R
Benzo(a)pyrene	ng/g	250	0.04	ND	R
Indeno(1,2,3-cd)pyrene	ng/g	250	0.04	ND	R
Dibenz(a,h)anthracene	ng/g	250	1000	ND	R
Benzo(g,h,i)perylene	ng/g	250	0.04	ND	R
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-19S-A

Matrix: Soil/Solid

Site ID: **BSAGP**

Project No.: 17257 12/11/96 Time: Date:

Test Code:

8021

0750

Lab:

CTM

Description: Volatiles

Date Extracted: 12/14/96

Date Analyzed: 12/14/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND .	
Benzene	ng/g	0.6	14	ND	l. I
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	1
Ethylbenzene	ng/g	1	100	100.0	#
m,p-Xylene	ng/g	1	100	470.0	#
o-Xylene	ng/g	1	100	ND	
Xylenes, total	ng/g	1	100	470.0	#

CTM Test Code: Lab: 8270

Description: Semivolatiles

Date Extracted: 12/12/96 Date Analyzed: 12/14/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	200	200	ND	
Acenaphthene	ng/g	200	400	ND	
Fluorene	ng/g	200	1000	ND	ľ
Phenanthrene	ng/g	200	1000	ND	
Anthracene	ng/g	200	1000	ND ·	
Fluoranthene	ng/g	200	1000	ND	1
Pyrene	ng/g	200	1000	ND	
Benzo(a)anthracene	ng/g	200	0.04	ND	
Chrysene	ng/g	200	0.04	ND	
Benzo(b)fluoranthene	ng/g	200	0.04	ND	
Benzo(k)fluoranthene	ng/g	200	0.04	ND	
Benzo(a)pyrene	ng/g	200	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND	
Dibenz(a,h)anthracene	ng/g	200	1000	ND	
Benzo(g,h,i)perylene	ng/g	200	0.04	ND	
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-19W

Matrix: Aqueous

Site ID:

Project No.: 17257

BSAGP

Date:

10/3/96

DataFlag

Time:

0900

Test Code:

Units

8021

Lab:

CTM

Description : Volatiles

Date Extracted: 10/17/96 Parameter

Date Analyzed: 10/17/96

Regulatory Detection Result Limit Limit *

MTBE ND 50 ug/l Benzene 0.5 0.70 2.0 ug/l ND Trichloroethylene ug/l 3.0 Toluene ug/l Ethylbenzene ug/l 340.0 Xylenes, total ug/i 1500.0

CTM Test Code: 8270 Lab:

Description: Semivolatiles

Date Extracted: 10/5/96

Date Analyzed: 10/9/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	1 1
Fluorene	ug/l	5	50	ND	l jí
Phenanthrene	ug/l	5	50	ND	! !
Anthracene	ug/l	5	50	ND	(I
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND]	1
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	i ł
Benzo(b)fluoranthene	ug/l	5	0.002	ND]	(
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5 .	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	1 1
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	l li
Total PAHs	ug/l			ND	

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: BS-GP-19W-A

Matrix: Aqueous

CTM

2.0

172.0

Site ID: **BSAGP**

Xylenes, total

Project No.: 17257

1315 -Date: 12/11/96 Time:

Test Code: 8021

Description: Volatiles

Lab:

Date Analyzed: 12/19/96

Date Extracted: 12	/19/96	Date	Analyzed	: 12/19/96	
Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataF
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	1
Trichloroethylene	ug/l	∥1	5	ND	li
Toluene	ug/l	1	5	2.0	ľ
Ethylbenzene	ug/i	∦1	5	39.0	#
m p-Xvlene	ll ua/l	∥ 1	15	170.0	<i>#</i>

ug/l

ug/l

Plattsburgh AFB Analytical Results

SampleID: BS-GP-20S

Matrix: Soil/Solid

Site ID: **BSAGP** Project No.: 17257

Date: 10/2/96 Time:

1810

Test Code:

8021

Lab:

CTM

Description: Volatiles

Date Extracted: 10/17/96

Date Analyzed: 10/17/96

Parameter Units Detection Regulatory Result DataFlag Limit Limit * MTBE 1000 ND ng/g Benzene 0.5 14 ND R ng/g R Trichloroethylene 700 ND ng/g 100 10.0 R Toluene ng/g Ethylbenzene ng/g 100 150.0 #R #R Xylenes, total ng/g 100 190.0

Test Code: 8270 Lab: CTM

Description: Semivolatiles

Date Extracted: 10/17/96 Date Analyzed: 10/18/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	190	200	ND	R
Acenaphthene	ng/g	190	400	ND	R
Fluorene	ng/g	190	1000	ND	R /
Phenanthrene	ng/g	190	1000	ND	R
Anthracene	ng/g	190	1000	ND ·	R
Fluoranthene	ng/g	190	1000	ND	R
Pyrene	ng/g	190	1000	ND	R
Benzo(a)anthracene	ng/g	190	0.04	ND	R
Chrysene	ng/g	190	0.04	ND	R
Benzo(b)fluoranthene	ng/g	190	0.04	ND	R
Benzo(k)fluoranthene	ng/g	190	0.04	ND	R
Benzo(a)pyrene	ng/g	190	0.04	ND	R
Indeno(1,2,3-cd)pyrene	ng/g	190	0.04	ND	R
Dibenz(a,h)anthracene	ng/g	190	1000	ND	R
Benzo(g,h,i)perylene	ng/g	190	0.04	ND	R
Total PAHs	ng/g			ND	

* TCLP Alternative Guidance Values obtained from the Stars Memo #1

Plattsburgh AFB Analytical Results

SampleID: BS-GP-20S-1

Matrix: Soil/Solid

Site ID:

BSAGP

Project No.: 17257

Date:

12/12/1996

Time:

0835

Test Code:

8021

Lab:

CTM

Description: Volatiles

Date Extracted: 12/14/1996

Date Analyzed: 12/14/1996

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
МТВЕ	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND .	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	17.0	
m,p-Xylene	ng/g	1	100	28.0	
m,p-Xylene o-Xylene	ng/g	1	100	10.0	1
Xylenes, total	ng/g	1	100	38.0	

CTM Test Code: 8270 Lab:

Description : Semivolatiles

Date Extracted: 12/12/1996 Date Analyzed: 12/14/1996

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	210	200	ND	
Acenaphthene	ng/g	210	400	ND	
Fluorene	ng/g	210	1000	ND	1 1
Phenanthrene	ng/g	210	1000	ND	1 1
Anthracene	ng/g	210	1000	ND	1 1
Fluoranthene	ng/g	210	1000	ND	1
Pyrene	ng/g	210	1000	ND	
Benzo(a)anthracene	ng/g	210	0.04	ND	1 1
Chrysene	ng/g	210	0.04	ND	
Benzo(b)fluoranthene	ng/g	210	0.04	ND	1 1
Benzo(k)fluoranthene	ng/g	210	0.04	ND	
Benzo(a)pyrene	ng/g	210	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	210	0.04	ND	i #
Dibenz(a,h)anthracene	ng/g	210	1000	ND	1 1
Benzo(g,h,i)perylene	ng/g	210	0.04	ND	1 1
Total PAHs	ng/g			ND	

ng/g = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} TCLP Alternative Guidance Values obtained from the Stars Memo #1

Plattsburgh AFB Analytical Results

SampleID: BS-GP-20W

Matrix : Aqueous

Site ID:

BSAGP

Date:

10/3/96

1020

Test Code:

8021

Lab:

CTM

Description: Semivolatiles

8270

Lab:

CTM

Description: Volatiles

Project No.: 17257

Date Extracted: 10/18/96

Date Analyzed: 10/18/96

Date Extracted: 10/5/96

Test Code:

Time:

Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
МТВЕ	ug/l	10	50	ND	DR
Benzene	ug/l	5	0.70	ND	DR
Trichloroethylene	ug/l	10	5	ND	DR
Toluene	ug/l	10	5	170.0	#DR
Ethylbenzene	ug/l	10	5	220.0	#DR
Xylenes, total	ug/l	10	5 ·	2000.0	#DR

Parameter	Units	Detection Limit	Regulatory	Result	DataFlag
		- CITTILL	Limit		
Naphthalene	ug/l	5	10	40	#
Acenaphthene	ug/l	5	20	6	
Fluorene	ug/l	5	50	8	
Phenanthrene	ug/i	5	50	22	
Anthracene	ug/l	5	50	8	l i
Fluoranthene	ug/i	5	50	23	l l
Pyrene	ug/l	5	50	18	I I
Benzo(a)anthracene	ug/l	5	0.002	8	#
Chrysene	ug/l	5	0.002	ND	1
Benzo(b)fluoranthene	ug/l	5	0.002	ND	1 1
Benzo(k)fluoranthene	ug/l	5	0.002	ND	! I
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	1
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			133	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-20W-1

Matrix: Aqueous

Site ID: BSAGP

Test Code:

-Date: 12/12/96 Time: 0950

Test Code:

8270

Description : Semivolatiles

Project No.: 17257

8021 Lab: CTM

Description: Volatiles

Date Extracted: 12/14/96 Date Analyzed: 12/14/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE Benzene Trichloroethylene Toluene Ethylbenzene m,p-Xylene o-Xylene Xylenes, total	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/i	1	5	ND	
Toluene	ug/l	1 1	5	ND	
Ethylbenzene	ug/l	1	5	4.0	
m,p-Xylene	ug/l	1	5	18.0	#
o-Xylene	ug/l	1	5	3.0	l
Xylenes, total	ug/l	[1	5	21.0	#

Date Extracted: 12/12/96		Date	Analyzed	12/14/96	
Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	1
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/ł	5	0.002	ND	
Total PAHs	ua/I	li .		l ND	1

Lab:

CTM

Plattsburgh AFB Analytical Results

SampleID: BS-GP-21S

Matrix: Soil/Solid

Site ID: **BSAGP**

Project No.: 17257

10/2/96 -Date:

Time:

1820

Test Code:

8021

Lab:

CTM

Test Code:

Description : Volatiles

Date Extracted: 10/17/96

Date Analyzed: 10/17/96

Description : Semivolatiles

Date Extracted: 10/17/96

8270

Date Analyzed: 10/18/96

CTM

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	R
Benzene	ng/g	0.6	14	ND	R
Trichloroethylene	ng/g	1	700	ND	R
Toluene	ng/g	1	100	ND	R
Ethylbenzene	ng/g	1	100	15.0	R
Xylenes, total	ng/g	1	100	32.0	R

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	200	200	ND	R
Acenaphthene	ng/g	200	400	ND	R
Fluorene	ng/g	200	1000	ND	R
Phenanthrene	ng/g	200	1000	ND	R
Anthracene	ng/g	200	1000	ND	R
Fluoranthene	ng/g	200	1000	ND	R
Pyrene	ng/g	200	1000	ND	R
Benzo(a)anthracene	ng/g	200 .	0.04	ND	R
Chrysene	ng/g	200	0.04	ND	R
Benzo(b)fluoranthene	ng/g	200	0.04	ND	R
Benzo(k)fluoranthene	ng/g	200	0.04	ND	R
Benzo(a)pyrene	ng/g	200	0.04	ND	R
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND	R
Dibenz(a,h)anthracene	ng/g	200	1000	ND	R
Benzo(g,h,i)perylene	ng/g	200	0.04	ND	R
Total PAHs	ng/g			ND	

Lab:

Plattsburgh AFB Analytical Results

SampleID: BS-GP-21S-A

8021

Matrix: Soil/Solid

CTM

Date Analyzed: 12/14/96

Site ID: BSAGP

Test Code:

AGP

Lab:

Project No.: 17257

Description : Volatiles

Date Extracted : 12/14/96

7257

-Date: 12/12/96

Time: 0845

Test Code:

Description: Semivolatiles

8270

Date Extracted: 12/12/96

Date Analyzed: 12/14/96

CTM

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.5	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	1
Ethylbenzene	ng/g	1	100	ND	
m,p-Xylene	ng/g	1	100	ND	
o-Xylene	ng/g	1	100	ND	
Xylenes, total	ng/g	1	100	ND	

		·	·		
Parameter	Units	Detection	Regulatory	Result	DataFlag
		Limit	Limit *		
Naphthalene	ng/g	180	200	ND	
Acenaphthene	ng/g	180 .	400	ND	
Fluorene	ng/g	180	1000	ND	
Phenanthrene	ng/g	180	1000	ND	
Anthracene	ng/g	180	1000	ND .	
Fluoranthene	ng/g	180	1000	ND	1
Pyrene	ng/g	180	1000	ND	
Benzo(a)anthracene	ng/g	180	0.04	ND	
Chrysene	ng/g	180	0.04	ND	
Benzo(b)fluoranthene	ng/g	180	0.04	ND	
Benzo(k)fluoranthene	ng/g	180	0.04	ND	1
Benzo(a)pyrene	ng/g	180	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	180	0.04	ND	
Dibenz(a,h)anthracene	ng/g	180	1000	ND	
Benzo(g,h,i)perylene	ng/g	180	0.04	ND	
Total PAHs	ng/g			ND	

Lab:

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: BS-GP-21W

Matrix : Aqueous

Site ID: BSAGP

Test Code:

-Date: 10/3/96 Time: 1100

Project No.: 17257

8021 Lab:

Test Code:

Lab: CTM

Description: Volatiles

Date Extracted: 10/17/96

Date Analyzed: 10/17/96

CTM

Description : Semivolatiles

8270

Date Extracted: 10/5/96

Date Analyzed: 10/8/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene Toluene Ethylbenzene	ug/i	1	5	ND	
Toluene	ug/l	1	5	2.0	
Ethylbenzene	ug/l	1	5	3.0	
Xylenes, total	ug/l	1	5	17.0	#

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	1
Phenanthrene	ug/l	5	50	ND	!!
Anthracene	ug/l	5	50	ND ·	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	1 1
Chrysene	ug/l	5	0.002	ND	!
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	1 1
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	1 1
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-21W-A

Matrix: Aqueous

Site ID: **BSAGP**

Project No.: 17257

-Date: 12/12/96 1010

Test Code:

8021

Lab:

CTM

Time:

Description: Volatiles

Date Extracted: 12/14/96		Date	Analyzed :	12/14/96	
Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	i l
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	l
Ethylbenzene	ug/l	1	5	ND	1 1
m,p-Xylene o-Xylene	ug/l	1	5	ND	
o-Xylene	ug/l	1	5	ND	i "
Xylenes, total	ug/l	1	5	ND	

ng/g = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

Plattsburgh AFB Analytical Results

SampleID: BS-GP-22S

Matrix: Soil/Solid

Site ID:

BSAGP

Project No.: 17257

- Date :

0945

Test Code:

8021

Time:

Test Code:

Description : Semivolatiles

Lab:

CTM

12/11/96

8270

CTM

Description : Volatiles

Date Extracted: 12/14/96

Date Analyzed: 12/14/96

Date Extracted: 12/12/96

Date Analyzed: 12/14/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	2	1000 ,	ND	
Benzene	ng/g	0.8	14	ND	
Trichloroethylene	ng/g	2	700	ND	
Toluene	ng/g	2	100	ND	İ
Ethylbenzene	ng/g	2	100	ND	
m,p-Xylene	ng/g	2	100	ND	
o-Xylene	ng/g	2	100	ND	
Ethylbenzene m,p-Xylene o-Xylene Xylenes, total	ng/g	2	100	ND ,	1

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	250	200	ND	
Acenaphthene	ng/g	250	400	ND	1
Fluorene	ng/g	250	1000	ND	
Phenanthrene	ng/g	250	1000	ND	
Anthracene	ng/g	250	1000	ND ·	1 1
Fluoranthene	ng/g	250	1000	ND	
Pyrene	ng/g	250	1000	ND	
Benzo(a)anthracene	ng/g	250	0.04	ND	
Chrysene	ng/g	250	0.04	ND	1
Benzo(b)fluoranthene	ng/g	250	0.04	ND	
Benzo(k)fluoranthene	ng/g	250	0.04	ND	! I
Benzo(a)pyrene	ng/g	250	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	250	0.04	ND	
Dibenz(a,h)anthracene	ng/g	250	1000	ND]
Benzo(g,h,i)perylene	ng/g	250	0.04	ND	
Total PAHs	ng/g			ND	

Lab:

Plattsburgh AFB Analytical Results

SampleID: BS-GP-22W

BSAGP

Date Extracted: 12/14/96

Matrix: Aqueous

Site ID: Project No.: 17257

Date:

Date Analyzed: 12/14/96

12/11/96

Lab:

Time:

Test Code:

1420

Test Code:

8021

8270

Lab:

CTM

Description: Volatiles

CTM

Description : Semivolatiles

Date Extracted: 12/12/96

Date Analyzed: 12/14/96

Parameter Units Detection Regulatory Result DataFlag Limit Limit * MTBE ug/l 50 ND Benzene 0.5 0.70 ND ug/l Trichloroethylene 5 ND ug/l 5 ND Toluene ug/l 5 lиd Ethylbenzene ug/l m,p-Xylene ug/l 2.0 o-Xylene 1.0 ug/l Xylenes, total ug/l 3.0

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/ł	5	0.002	ND	1 1
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	[
Benzo(k)fluoranthene	ug/l	5	0.002	ND	1 1
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	l 1
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-23S

Matrix: Soil/Solid

Site ID: **BSAGP**

12/11/96

Project No.: 17257

- Date :

Time:

1220

Test Code:

8021

Test Code:

8270

CTM

Lab:

CTM

Description: Semivolatiles

Date Extracted: 12/14/96

Description : Volatiles

Date Analyzed: 12/14/96

Date Extracted: 12/12/96

Lab:

Date Analyzed: 12/14/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ng/g	1	1000	ND	
Benzene	ng/g	0.6	14	ND	
Trichloroethylene	ng/g	1	700	ND	
Toluene	ng/g	1	100	ND	
Ethylbenzene	ng/g	1	100	ND	
m,p-Xylene	ng/g	1	100	ND	
o-Xylene	ng/g	1 '	100	ND	
Xylenes, total	ng/g	1	100 /	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	200	200	ND	
Acenaphthene	ng/g	200	400	ND	1 1
Fluorene	ng/g	200	1000	ND	
Phenanthrene	ng/g	200	1000	ND	
Anthracene	ng/g	200	1000	ND	
Fluoranthene	ng/g	200	1000	ND	1
Pyrene	ng/g	200	1000	ND	
Benzo(a)anthracene	ng/g	200	0.04	ND	1 1
Chrysene	ng/g .	200	0.04	ND	1 1
Benzo(b)fluoranthene	ng/g	200	0.04	ND	
Benzo(k)fluoranthene	ng/g	200	0.04	ND	
Benzo(a)pyrene	ng/g	200	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND	
Dibenz(a,h)anthracene	ng/g	200	1000	ND	
Benzo(g,h,i)perylene	ng/g	200	0.04	ND	
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-23W

Matrix: Aqueous

Site ID: Project No.: 17257

BSAGP

Date Extracted: 12/14/96

Date:

12/12/96

Time:

0830

Test Code:

8021

Lab:

Date Analyzed: 12/14/96

CTM

Test Code:

8270

Lab:

CTM

Description : Volatiles

Description : Semivolatiles

Date Extracted: 12/12/96

Date Analyzed: 12/17/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
МТВЕ	ug/l	1 .	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	2.0	
Ethylbenzene	ug/l	1	5	ND	
m,p-Xylene	ug/l	1	5	ND	
o-Xylene	ug/l	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/i	5	50	ND	
Phenanthrene	ug/l ·	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/i	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/i	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5 .	0.002	ND	
Total PAHs	ug/l			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-24S

Matrix: Soil/Solid

Site ID: **BSAGP** Project No.: 17257

1045 · Date : 12/11/96 Time:

Test Code:

ng/g

8021

MTBE

Benzene

Toluene

o-Xylene

Ethylbenzene

Xylenes, total

m,p-Xylene

Lab:

CTM

ND

Description : Volatiles

Date Extracted: 12/14/96

Date Analyzed: 12/14/96

Parameter Units Detection Regulatory Result DataFlag Limit Limit * 1000 ng/g ND ng/g 0.6 14 ND Trichloroethylene 700 ND ng/g ND ng/g 100 ND 100 ng/g 100 ND ng/g ND 100 ng/g

100

СТМ Test Code: 8270 Lab:

Description : Semivolatiles

Date Extracted: 12/12/96 Date Analyzed: 12/12/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ng/g	200	200	NĐ	
Acenaphthene	ng/g	200	400	ND	
Fluorene	ng/g	200	1000	ND	
Phenanthrene	ng/g	200	1000	ND	
Anthracene	ng/g	200	1000	ND	
Fluoranthene	ng/g	200	1000	ND	
Pyrene	ng/g	200	1000	ND	
Benzo(a)anthracene	ng/g	200	0.04	ND	
Chrysene	ng/g	200	0.04	ND	
Benzo(b)fluoranthene	ng/g	200	0.04	ND	
Benzo(k)fluoranthene	ng/g	200	0.04	ND	
Benzo(a)pyrene	ng/g	200	0.04	ND	
Indeno(1,2,3-cd)pyrene	ng/g	200	0.04	ND	
Dibenz(a,h)anthracene	ng/g	200	1000	ND	
Benzo(g,h,i)perylene	ng/g	200	0.04	ND	
Total PAHs	ng/g			ND	

Plattsburgh AFB Analytical Results

SampleID: BS-GP-24W

Matrix: Aqueous

Site ID: BSAGP

Time: 1450 Project No.: 17257 - Date : 12/11/96

Test Code:

8021

Lab:

CTM

Description : Volatiles

Date Extracted: 12/14/96

Date Analyzed: 12/14/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
МТВЕ	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
m,p-Xylene	ug/l	1	5	ND	
o-Xylene	ug/l	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

Plattsburgh AFB Analytical Results Revised Report Date: 4/8/97

Original Report Date: 1/15/97

SampleID: BS-GP-24W-A

Matrix: Aqueous

Site ID: **BSAGP**

0745 Project No.: 17257 12/12/96 Time: ·Date:

Test Code:

8270

Lab:

CTM

Description : Semivolatiles

Date Extracted: 12/12/96

Date Analyzed: 12/17/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: EQ BLANK1

Matrix: Aqueous

Site ID:

BSAGP

Project No.: 17257

Date :

Time:

1620

Test Code:

8021

Lab:

CTM

9/30/96

Test Code:

Description: Semivolatiles

8270

Lab:

CTM

Description: Volatiles

Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Date Extracted: 10/5/96

Date Analyzed: 10/7/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	1
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	NĐ	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	1
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	NÐ	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Plattsburgh AFB Analytical Results

SampleID: EQ BLANK2

Matrix: Aqueous

BSAGP

Project No.: 17257

10/1/96 · Date :

Time:

1200

Description: Semivolatiles

Test Code:

8021

Lab:

Test Code:

8270

ug/l

Site ID:

СТМ

Description: Volatiles

Date Extracted: 10/11/96

Date Analyzed: 10/11/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	40	50	ND	
Benzene	ug/i	5	0.70	ND	
Trichloroethylene	ug/l	5	5	ND	
Toluene	ug/i	5	5	ND	
Ethylbenzene	ug/l	5	5	ND	
Xylenes, total	ug/l	10	5	ND	

Date Extracted: 10/4/96 Date Analyzed: 10/7/96 DataFlag Parameter Units Detection Regulatory Result Limit * Limit ND Naphthalene 10 ND Acenaphthene 20 ug/l Fluorene 50 ND ug/l 50 ND Phenanthrene ug/i 50 ND Anthracene ug/l Fluoranthene ug/l 50 ND Pyrene 50 ND ug/l 0.002 ND Benzo(a)anthracene ug/l ND Chrysene ug/l 0.002 ND 0.002 Benzo(b)fluoranthene ug/l ND Benzo(k)fluoranthene ug/l 0.002 0.002 ND Benzo(a)pyrene ug/l 0.002 ND Indeno(1,2,3-cd)pyrene ug/l 50 ND Dibenz(a,h)anthracene ug/l Benzo(g,h,i)perylene ug/l 0.002 ND

Lab:

CTM

ND

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

Total PAHs

NYSDEC Groundwater Quality Standards or Guidance Values

[#] indicates concentration above the NYSDEC groundwater quality standards or quidance values

Plattsburgh AFB Analytical Results

SampleID: ER100296

Matrix: Aqueous

Site ID:

BSAGP

Project No.: 17257

Date:

10/2/96

Time:

1645

Test Code:

8021

Lab:

CTM

Description : Volatiles

Date Extracted: 10/16/96

Date Analyzed: 10/16/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	1
Xvlenes total	ua/l	1 ·	5	ND i	

CTM Test Code: 8270 Lab:

Description: Semivolatiles

Date Extracted: 10/8/96 Date Analyzed: 10/9/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	1
Fluorene	ug/l	5	50	ND	l 1
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	1 !
Pyrene	ug/l	5	50	ND	1
Benzo(a)anthracene	ug/l .	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	1 1
Benzo(b)fluoranthene	ug/l	5	0.002	ND	1 1
Benzo(k)fluoranthene	ug/l	5	0.002	ND	1
Benzo(a)pyrene	ug/l	5	0.002	ND	1
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	ï l
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Plattsburgh AFB Analytical Results

SampleID: ER100396

BSAGP

Matrix: Aqueous

Project No.: 17257

Site ID:

- Date : 10/3/96 Time:

0730

Test Code:

8021

Lab:

CTM

Description: Volatiles

Date Extracted: 10/17/96

Date Analyzed: 10/17/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

CTM Test Code: 8270 Lab:

Description: Semivolatiles

Date Extracted: 10/8/96 Date Analyzed: 10/17/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	1 I
Pyrene	ug/i	5	50	ND	i I
Benzo(a)anthracene	ug/l	5	0.002	ND	1 1
Chrysene	ug/l	5	0.002	ND	1
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/i	5	0.002	ND	1
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	l 1
Total PAHs	ug/l			ND	

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Revised Report Date: 4/8/97

Plattsburgh AFB Analytical Results

Original Report Date: 1/15/97

SampleID: AFB121096

BSAGP

Matrix: Aqueous

Project No.: 17257

· Date:

12/10/96 Time: 14:15

Test Code:

8021

Site ID:

Lab:

CTM

Description: Volatiles

Date Extracted: 12/13/96

Date Analyzed: 12/13/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	_
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

RE = ID suffix for re-extraction/re-analysis * NYSDEC Groundwater Quality Standards or Guidance Values

indicates concentration above the NYSDEC groundwater quality standards or guidance values

Plattsburgh AFB Analytical Results

SampleID: ER121096

Matrix: Aqueous

Site ID: BSAGP

Matrix . Aquet

Project No.: 17257

-Date: 12/10/96

Time: 1110

Test Code:

8021

Lab:

Test Code:

_

Description : Volatiles

Date Extracted: 12/13/96

Date Analyzed: 12/13/96

CTM

Description : Semivolatiles

Date Extracted: 12/11/96

8270

Date Analyzed: 12/14/96

CTM

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
m,p-Xylene	ug/l	1	5	ND	
m,p-Xylene o-Xylene	ug/l	1	5	ND	
Xylenes, total	ug/l	1	5	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l '	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	
Dibenz(a,h)anthracene	ug/l	5 .	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			NÐ	

Lab:

Plattsburgh AFB Analytical Results

SampleID: AFB121196

Project No.: 17257

Matrix: Aqueous

Site ID:

BSAGP

Date :

12/11/96

14:25

Test Code:

8021

Time:

Lab:

CTM

Description: Volatiles

Date Extracted: 12/13/96

Date Analyzed: 12/13/96

Parameter Units Detection Regulatory Result DataFlag Limit Limit * MTBE 50 ND ug/l Benzene 0.70 ug/l 0.5 ND Trichloroethylene ND ug/l Toluene ND ug/l Ethylbenzene ND ug/l Xylenes, total ND ug/l

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria S = surrogate recovery is outside control limits

EX = ID prefix for excavation sample SP = ID prefix for stockpile sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample RE = ID suffix for re-extraction/re-analysis

^{*} NYSDEC Groundwater Quality Standards or Guidance Values

Plattsburgh AFB Analytical Results

SampleID: ER121196

Matrix: Aqueous

Site ID: **BSAGP** Project No.: 17257

Date: 12/11/96 Time: 1500

Test Code:

8021 Lab:

CTM

8270

Test Code:

Description: Volatiles

Date Extracted: 12/13/96

Date Analyzed: 12/13/96

Units	Detection Limit	Regulatory Limit *	Result	DataFlag
ug/l	1	50	ND	
ug/l	0.5	0.70	ND	
ug/l	1	5	ND	
ug/l	1	5	ND	
ug/l	1	5	ND	
ug/l	1	5	ND	
ug/l	1	5	ND	
ug/l	1	5	ND	
	ug/l ug/l ug/l ug/l ug/l ug/l	Limit ug/l 1 ug/l 0.5 ug/l 1 ug/l 1 ug/l 1 ug/l 1 ug/l 1 ug/l 1	Limit Limit * ug/l 1 50 ug/l 0.5 0.70 ug/l 1 5 Limit Limit *	

Description: Semivolatiles Date Extracted: 12/12/96 Date Analyzed: 12/14/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND]
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/i	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/i	5	0.002	ND	
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	NÐ	
Dibenz(a,h)anthracene	ug/l	5	50	ND	[
Benzo(g,h,i)perylene	ug/l	5	0.002	ND	
Total PAHs	ug/l			ND	

Lab:

CTM

Plattsburgh AFB Analytical Results

SampleID: ER121296

Project No.: 17257

Matrix: Aqueous

Site ID:

BSAGP

- Date :

12/12/96

Time:

0910

Test Code:

8021

Lab:

CTM

Description: Semivolatiles

Test Code:

8270

Lab:

CTM

Description: Volatiles

Date Extracted: 12/13/96

Date Analyzed: 12/13/96

Date Extracted: 12/12/96

Date Analyzed: 12/14/96

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
MTBE	ug/l	1	50	ND	
Benzene	ug/l	0.5	0.70	ND	
Trichloroethylene	ug/l	1	5	ND	
Toluene	ug/l	1	5	ND	
Ethylbenzene	ug/l	1	5	ND	
m,p-Xylene	ug/l	1	5	ND	
o-Xylene	ug/l	1	5	ND	
Xylenes, total	ug/i	1	5	ND	

Parameter	Units	Detection Limit	Regulatory Limit *	Result	DataFlag
Naphthalene	ug/l	5	10	ND	
Acenaphthene	ug/l	5	20	ND	
Fluorene	ug/l	5	50	ND	
Phenanthrene	ug/l	5	50	ND	
Anthracene	ug/l	5	50	ND	
Fluoranthene	ug/l	5	50	ND	l i
Pyrene	ug/l	5	50	ND	
Benzo(a)anthracene	ug/l	5	0.002	ND	
Chrysene	ug/l	5	0.002	ND	
Benzo(b)fluoranthene	ug/l	5	0.002	ND	
Benzo(k)fluoranthene	ug/l	5	0.002	ND	
Benzo(a)pyrene	ug/l	5	0.002	ND	1 I
Indeno(1,2,3-cd)pyrene	ug/l	5	0.002	ND	1
Dibenz(a,h)anthracene	ug/l	5	50	ND	
Benzo(g,h,i)perylene	ug/l	5	0.002	NĐ	
Total PAHs	ug/l			ND	

ug/l = ppb mg/kg = ppm ND=compound not detected NA = analysis not applicable for this site J = estimated value is below the practical quantitation limit and above the method detection limit B = analyte was detected in an associated blank as well as in the sample D = sample was diluted, see corresponding detection limit E = estimated concentration is above the calibration range of the instrument R = data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria EX = ID prefix for excavation sample SP = ID prefix for excavation sample AB(or FB) = ID prefix for an ambient blank sample ER = ID prefix for an equipment rinsate sample LQ = ID suffix for a liquid sample

^{*} NYSDEC Groundwater Quality Standards or Guidance Values # indicates concentration above the NYSDEC groundwater quality standards or guidance values

APPENDIX D TRANSPORTATION AND DISPOSAL DOCUMENTATION

- D.1 HAZARDOUS WASTE REMOVAL
- D.2 ASBESTOS PIPE REMOVAL
- D.3 CONCRETE AND DEBRIS REMOVAL
- D.4 SCRAP STEEL REMOVAL
- D.5 RAILROAD TIE REMOVAL
- D.6 CONTAMINATED SOIL REMOVAL

D.1 HAZARDOUS WASTE REMOVAL

TRANSPORTATION AND DISPOSAL DOCUMENTATION

HAZARDOUS WASTE REMOVAL

(Rinse water from pigging and tank cleaning operations) PLATTSBURGH AFB – D.O. 003

DATE	MANIFEST # NY4571924774-	TRUCK PLATE #	QUANTITY (GALLONS)	TOTAL QUANTITY	COMMENTS
01/22/96	00001	CT V 21931	5500	5500	JP-4, gasoline, oil and water
01/22/96	00002	CT V 26580	5400	10900	JP-4, gasoline, oil and water
01/24/96	96004	CT V 21931	5500	16400	JP-4, gasoline, oil and water
01/24/96	96005	CT V 17860	4640	21040	JP-4, gasoline, oil and water
01/26/86	96003	CT V 21932	5320	26360	JP-4, gasoline, oil and water
01/30/96	96005	CT V 21932	5280	31640	JP-4, gasoline, oil and water
02/20/96	96008	CT V 21932	5300	36940	JP-4, gasoline, oil and water
02/22/96	96009	CT 59751	5485	42425	JP-4, gasoline, oil and water
03/21/96	96010	CT V 21932	5100	47525	JP-4, gasoline, oil and water
03/25/96	96011	CT V 26579	5445	52970	JP-4, gasoline, oil and water
03/26/96	96012·	CT V 21932	5200	58170	JP-4, gasoline, oil and water
03/28/96	96013	CT V 26579	5400	63570	JP-4, gasoline, oil and water
06/03/96	96014	CT 59751	5500	69070	JP-4, gasoline, oil and water
06/05/96	96015	CT 59751	5500	74570	JP-4, gasoline, oil and water
06/06/96	96016	CT V 21932	5300	79870	JP-4, gasoline, oil and water
06/07/96	96017	CT 59751	5400	85270	JP-4, gasoline, oil and water
06/10/96	96018	CT 59751	5480	90750	JP-4, gasoline, oil and water
06/13/96	96018	CT V 21932	5300	96050	JP-4, gasoline, oil and water
06/13/96	96019	CT 59751	5400	101450	JP-4, gasoline, oil and water
06/17/96	00020	CT V 21932	5300	106750	JP-4, gasoline, oil and water
06/18/96	96021	CT V 21932	5300	112050	JP-4, gasoline, oil and water
06/18/96	96022	CT 59751	5425	117475	JP-4, gasoline, oil and water
10/28/96	96023	-	5490	122965	JP-4, gasoline, oil and water
10/29/96	96024	CT 59751	5500	128465	JP-4, gasoline, oil and water
10/30/96	96025	CT V 26580	4914	133379	JP-4, gasoline, oil and water

Note: This Table includes the rinse water from the ARS pigging operations, the ARS pumphouse tank cleaning operations, and the D.O. 006 tank cleaning operations. Rinse waters were combined in a 25K storage tank on Base and periodically transported off site for disposal.

D.2 ASBESTOS PIPE REMOVAL

TRANSPORTATION AND DISPOSAL DOCUMENTATION

ASBESTOS PIPE REMOVAL PLATTSBURGH AFB – D.O. 003 AIRCRAFT REFUEL SYSTEM

DATE	TICKET	LINEAR	TOTAL	DISPATCH	COMMENTS
	#	FT	FT	#	001212111
04/16/96	20448	880	880	312938	8": 42x20', 40x1'
04/17/96	21005	890	1770	312939	8": 43x20', 30x1'
04/17/96	21006	820	2590	312929	8": 24x20'; 10": 17x20'
04/17/96	21007	982	3572	312932	8": 22x20', 42x1'; 6": 12x20'; 10"; 13x20'
04/18/96	20460	820	4392	310047	8": 20x20'; 6": 7x20'; 10": 14x20'
04/18/96	20461	880	5272	240054	8": 31x20'; 6": 4x20'; 10": 9x20'
04/22/96	20472	760	6032	310006	8": 23x20'; 6": 5x20'; 10": 5x20'; mixed: 100x1'
04/23/96	21252	940	6972	312935	8": 28x20'; 6": 9x20'; 10": 10x20'
04/23/96	21253	679	7651	310019	8": 18x20'; 6": 9x20'; 10": 5x20'; mixed: 39x1'
04/25/96	20180	838	8489	208807	8": 23x20'; 6": 8x20'; 10": 9x20'; mixed: 38x1'
04/25/96	20181	821	9310	310021	8": 21x20'; 6": 7x20'; 10": 9x20'; mixed: 81x1'
04/29/96	20188	886	10196	310007	8": 18x20'; 6": 9x20'; 10": 9x20'; mixed: 166x1'
05/01/96	21019	932	11128	310024	8": 24x20'; 6": 15x20'; 10": 5x20'; 3": 1x12'; mixed: 40x1'
05/01/96	21018	928	12056	310025	8": 24x20'; 6": 10x20'; 10": 10x20'; mixed: 48x1'
05/03/96	21028	852	12908	310035	8": 18x20'; 10": 5x20'; 3": 10x20'; mixed: 192x1'
05/07/96	21355	958	13866	310036	8": 25x20'; 10": 5x20'; 3": 9x20'; mixed: 18x1'
05/07/96	21356	620	14486	310038	8": 18x20'; 6": 9x20'; 3": 1x20'; mixed: 60x1'
05/09/96	21368	935	15421	310039	8": 14x20'; 6": 8x20'; 10": 13x20'; 3": 5x20'; mixed:
					135x1'
05/09/96	21369	1035	16456	318935	8": 17x20'; 10": 13x20'; 3": 18x20'; mixed: 35x1'
05/17/96	21405	988	17444	310072	8": 20x20'; 6": 2x20'; 10": 14x20'; 3": 12x20'; mixed:
	21126	10.60	10501	210070	28x1'
05/17/96	21406	1060	18504	310073	8": 13x20'; 6": 11x20'; 10": 10x20'; 3": 7x20'; mixed: 40x1'
05/17/06	21400	881	19385	318936	8": 13x20'; 6": 15x20'; 10": 2x20'; 3": 8x20'; mixed:
05/17/96	21409	881	19383	318930	8 : 13x20 ; 6 : 13x20 ; 10 : 2x20 ; 3 : 8x20 ; Illixed.
05/22/96	21148	1191	20576	318937	8": 20x20'; 6": 12x20'; 10": 20x20'; 3": 11x20'; mixed:
03/22/90	21140	1171	20370	310/37	71x1'
05/22/96	21149	995	21571	318938	8": 14x20'; 6": 5x20'; 10": 13x20'; 3": 3x20'; mixed:
03/22/70	211.7		210.1	310750	155x1'
05/28/96	21450	959	22530	318951	8": 22x20'; 6": 1x20'; 10": 11x20'; 3": 9x20'; mixed: 99x1'
05/28/96	,21451	937	23467	318952	8": 13x20'; 6": 5x20'; 10": 13x20'; 3": 10x20'; mixed:
	,	-			117x1'
05/31/96	23757	630	24097	319084	8": 2x20'; 10": 2x20'; 3": 21x20'; mixed: 130x1'
06/06/96	21191	740	24837	319079	8": 37x20'
06/06/96	21063	763	25600	319080	8": 38x20', 3x1'
06/17/96	21099	1013	26613	325775	8": 35x20', 13x1'; 6": 30x10'
07/10/96	23632	720	27333	325888	8": 13x1'; 6": 4x20'; 10": 18x20'
07/16/96	23645	740	28073	325887	8": 34x20', 44x1'; 3": 16x1'
07/17/96	23745	1039	29112	325889	8": 38x20', 94x1'; 6": 9x20'; 3": 5x1'
07/24/96	11945	683	29795	325892	8": 19x20', 131x1'; 6": 6x20', 32x1'; 3": 20x1'
07/24/96	11955	436	30231	325893	8": 11x20', 70x1'; 6": 1x20', 14x1'; 3": 1x20', 92x1'

Note: Table includes asbestos removal information for both the Bulk Fuel Storage Area AST pipelines and the Aircraft Refuel System transmission pipelines.

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GENERAL CONDITIONS

Inspections

1. The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3). A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Permit Changes and Renewals

- 2. The Department reserves the right to modify, suspend or revoke this permit when:
 - a) the scope of the permitted activity is exceeded or a violation of any condition of the permit or provisions of the ECL and pertinent regulations is found;
 - b) the permit was obtained by misrepresentation or failure to disclose relevant facts;
 - c) new material information is discovered; or
 - d) environmental conditions, relevant technology, or applicable law or regulation have materially changed since the permit was issued.
- 3. The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms, fees or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.
- 4. The permittee must submit a renewal application at least:
 - a) 180 days before expiration of permits for State Pollutant Discharge Elimination System (SPDES),
 Hazardous Waste Management Facilities (HWMF), major Air Pollution Control (APC) and Solid Waste
 Management Facilities (SWMF); and
 - b) 30 days before expiration of all other permit types.
- 5. Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Other Legal Obligations of Permittee

- 6. The permittee has accepted expressly, by the execution of the application, the full legal responsibilities for all damages, direct or indirect, of whatever nature and by whomever suffered, arising out of the project described in this permit and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from this project.
- 7. This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.
- 8. The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required for this project.

SPECIAL CONDITIONS

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1. SUBMITTAL

Unless otherwise specified, all submissions required by this permit shall be made to the Region 5 office of the Department of Environmental Conservation (P.O. Box 296, Ray Brook, NY 12977), to the attention of the Regional Solid and Hazardous Materials Engineer.

2. OPERATIONAL REQUIREMENTS

The operation of this facility shall be in accordance with the provisions of this permit, 6NYCRR360 (effective October 9,93), and the permit documents.

3. PERMIT DOCUMENTS

The following documents where submitted in support of the original permit application and revised for the renewal/modification and are included by reference as part of the permit.

- a. BARRY WHITE CONSTRUCTION & DEMOLITION DEBRIS LANDFILL
 Application to the New York State Department of Environmental Conservation, prepared by Robert Sutherland, P.E. and dated February 5,1991 revised February 2, 1996.
- b.` BARRY WHITE CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL OPERATION AND MAINTENANCE MANUAL.
- c. Drwg. #90105-XS dated August 13,1990 with latest revision dated February 02,96, titled Profiles & cross-sections & Adjoining property map.
- d. Drwg. 90105-EP dated June 01,1990 with latest revision dated February 2, 1996, titled Engineering Plan White Pit Construction and Demolition Debris Landfill.

4. ACCEPTABLE WASTE

Wastes accepted for disposal at the landfill are limited to those solid wastes meeting the definition of "Construction & Demolition (C&D) Debris" as defined in 6 NYCRR 360-1.2(b)(38).

5. RECYCLABLES AND PROCESSING

The seperation of metal, uncontaminated concrete, concrete products, asphalt pavement, brick, soil and rock from incoming C&D Debris shall be limited to the area shown on the permit plans. All non-recyclable material must be placed in the landfill within thirty (30) days of receipt. The facilities annual report shall include an accounting of materials recycled including quantities and destination.

6. CLOSURE

The facility shall be closed in accordance with the approved Closure Plan and as shown on drwg, 90105-EP with a final elevation of 368, feet A.M.S.L. and contoured as shown on the drawing.

7. REPORTS

An annual report in accordance with 6 NYCRR 360-7.5(b) must be submitted to the department's central office and regional office no later than 60 days after the first day of January each year.

DEC PERMIT NUMBER 5-0946-00025/00006		Robert P. C	Toweller
FACILITY ID NUMBER 10001	PROGRAM NUMBER		Page 3 of 3

D.3 CONCRETE AND DEBRIS REMOVAL



CONCRETE AND DEBRIS REMOVAL PLATTSBURGH AFB – D.O. 003 BULK FUEL STORAGE AREA – AIRCRAFT REFUEL SYSTEM

TICKET#	DATE	SOURCE	TYPE	VOLUME (CY)	TOTAL VOLUME (CY)
21030	05/03/96	Bulkstorage	concrete	30	30
21031	05/03/96	Bulkstorage	concrete	30	60
21032	05/03/96	Bulkstorage	concrete	30	90
21025	05/03/96	Bulkstorage		30	120
21027	05/03/96	Bulkstorage		30	150
21026	05/03/96	Bulkstorage		30	180
21034	05/06/96	Bulkstorage	concrete	30	210
21357	05/07/96	Bulkstorage	concrete	30	240
21365	05/09/96	Bulkstorage		30	270
21087	06/13/96	Bulkstorage		30	300
21093	06/14/96	Bulkstorage	concrete	30	330
21095	06/14/96	Bulkstorage	wood	30	360
21094	06/14/96	Bulkstorage	wood	30	390
21103	06/17/96	Bulkstorage	wood	30	420
11835	06/19/96	Bulkstorage	concrete	30	450
23574	06/20/96	Bulkstorage		30	480
23575	06/20/96	Bulkstorage	concrete	30	510
23576	06/20/96	Bulkstorage	concrete	30	540
23577	06/20/96	Bulkstorage	concrete	30	570
23578	06/20/96	Bulkstorage	concrete	30	600
23579	06/20/96	Bulkstorage	concrete	30	630
20111	06/21/96	Bulkstorage	concrete	30	660
20112	06/21/96	Bulkstorage	concrete	30	690
20113	06/21/96	Bulkstorage	concrete	30	720
20114	06/21/96	Bulkstorage	concrete	30	750
20115	06/21/96	Bulkstorage	concrete	30	780
20116	06/21/96	Bulkstorage	concrete	30	810
20117	06/21/96	Bulkstorage	concrete	30	. 840
23509	06/21/96	Bulkstorage	wood	30	870
23510	06/21/96	Bulkstorage	wood	30	900
23511	06/21/96	Bulkstorage	wood	30	930
23512	06/21/96	Bulkstorage	wood	30 .	960
23513	06/21/96	Bulkstorage	wood	30	990
23514	06/21/96	Bulkstorag	wood	30	1020
20118	06/24/96	Bulkstorag	concrete	30	1050
20119	06/24/96	Bulkstorage	concrete	30	1080
20120	06/24/96	Bulkstorage	concrete	30	1110
20121	06/24/96	Bulkstorage	concrete	30	1140
20122	06/24/96	Bulkstorage	concrete	30	1170



CONCRETE AND DEBRIS REMOVAL PLATTSBURGH AFB – D.O. 003 BULK FUEL STORAGE AREA – AIRCRAFT REFUEL SYSTEM

TICKET#	DATE	SOURCE	TYPE	VOLUME (CY)	TOTAL VOLUME (CY)
20123	06/24/96	Bulkstorage		30	1200
20124	06/24/96	Bulkstorage		30	1230
20125	06/24/96	Bulkstorage	concrete	30	1260
20126	06/24/96	Bulkstorage		30	1290
23823	06/24/96	Bulkstorage		30	1320
23822	06/24/96	Bulkstorage		30	1350
23824	06/24/96	Bulkstorage		30	1380
23825	06/24/96	Bulkstorage		30	1410
23826	06/24/96	Bulkstorage		30	1440
23828	06/24/96	Bulkstorage		30	1470
23827	06/24/96	Bulkstorage		30	1500
20128	06/25/96	Bulkstorage		30	1530
20129	06/25/96	Bulkstorage		30	1560
20130	06/25/96	Bulkstorage	concrete	30	1590
20131	06/25/96	Bulkstorage	concrete	30	1620
20132	06/25/96	Bulkstorage		30	1650
20133	06/25/96	Bulkstorage	concrete	30	1680
20134	06/25/96	Bulkstorage	concrete	. 30	1710
23517	06/25/96	Bulkstorage	concrete	30	1740
23518	06/25/96	Bulkstorage	concrete	30	1770
23519	06/25/96	Bulkstorage		30	1800
23520	06/25/96	Bulkstorage	concrete	30	1830
23521	06/25/96	Bulkstorage	concrete	30	1860
23522	06/25/96	Bulkstorage	concrete	30	1890
23523	06/25/96	Bulkstorage	concrete	30	. 1920
20135	06/25/96	Bulkstorage	concrete	30	1950
23841	06/28/96	Bulkstorage	concrete	30	1980
23560	07/16/96	Bulkstorage	concrete	30	2010
23559	07/16/96	Bulkstorage	concrete	30	2040
23644	07/16/96	Bulkstorage	concrete	30	2070
23562	07/16/96	Bulkstorage	concrete	30	2100
23895	07/18/96	Bulkstorag	concrete	30	2130
23657	07/22/96	Bulkstorage	asphalt	30	2190
23659	07/22/96	Bulkstorage	concrete	30	2220
23660	07/22/96	Bulkstorage	concrete	30	2250
23661	07/22/96	Bulkstorage	concrete	30	2280
23662	07/22/96	Bulkstorage	concrete	30	2310

TRANSPORTATION AND DISPOSAL DOCUMENTATION

CONCRETE AND DEBRIS REMOVAL PLATTSBURGH AFB – D.O. 003 BULK FUEL STORAGE AREA – AIRCRAFT REFUEL SYSTEM

TICKET#	DATE	SOURCE	TYPE	VOLUME (CY)	TOTAL VOLUME (CY)
11868	07/23/96	Bulkstorage	concrete	30	2310
11869	07/23/96	Bulkstorage		30	2340
11870	07/23/96	Bulkstorage		30	2370
11871	07/23/96	Bulkstorage		30	2400
23664	07/24/96	Bulkstorage		30	2430
23668	07/25/96	Bulkstorage		30	2460
23672	07/26/96	Bulkstorage		30	2490
23673	07/26/96	Bulkstorage	concrete	30	2520
23674	7/26/96/	Bulkstorage	concrete	30	2550
23675	07/26/96	Bulkstorage		30	. 2580
23676	07/26/96	Bulkstorage		30	2610
23677	07/26/96	Bulkstorage		30	2640
23678	07/26/96	Bulkstorage		30	2670
23679	07/26/96	Bulkstorage	concrete	30	2700
23681	07/29/96	Bulkstorage	concrete	30	2730
23682	07/29/96	Bulkstorage	concrete	30	2760
23683	07/29/96	Bulkstorage	concrete	30	2790
23684	07/29/96	Bulkstorage	concrete	30	2820
23685	07/29/96	Bulkstorage	concrete	30	2850
23687	07/30/96	Bulkstorage	concrete	30	2880
23688	07/30/96	Bulkstorage	concrete	30	2910
23692	07/31/96	Bulkstorage	concrete	30	2940
23693	07/31/96	Bulkstorage	concrete	30	2970
23694	07/31/96	Bulkstorage	concrete	30	3000
23695	07/31/96	Bulkstorage	concrete	30	3030
23696	07/31/96	Bulkstorage	concrete	30	3060
23697	07/31/96	Bulkstorage	concrete	30	3090
23698.	07/31/96	Bulkstorage	concrete	30	3120
23699	07/31/96	Bulkstorage	concrete	30	3150
23702	08/01/96	Bulkstorage	concrete	30	3180
23703	08/01/96	Bulkstorage	concrete	30	3210
23704	08/01/96	Bulkstorage		30	3240
23705	08/01/96	Bulkstorage	concrete	30	3270
23706	08/01/96	Bulkstorage	concrete	30	3300
23707	08/01/96	Bulkstorage	concrete	30	3330
23708	08/01/96	Bulkstorage	concrete	30	3360
23709	08/01/96	Bulkstorage	concrete	30	3390
23710	08/01/96	Bulkstorage	concrete	30	3420
24829	08/02/96	Bulkstorage	concrete	30	3450

TRANSPORTATION AND DISPOSAL DOCUMENTATION

CONCRETE AND DEBRIS REMOVAL PLATTSBURGH AFB - D.O. 003 BULK FUEL STORAGE AREA - AIRCRAFT REFUEL SYSTEM

TICKET#	DATE	SOURCE	TYPE	VOLUME (CY)	TOTAL VOLUME (CY)
24828	08/02/96	Bulkstorage	concrete	30	3480
24827	08/02/96	Bulkstorage		30	3510
24826	08/02/96	Bulkstorage	concrete	30	3540
24826	08/02/96	Bulkstorage	concrete	30	3570
24825	08/02/96	Bulkstorage	concrete	30	3600
23713	08/02/96	Bulkstorage	concrete	30	3630
24835	08/05/96	Bulkstorage	concrete	30	3660
24836	08/05/96	Bulkstorage	concrete	30	3690
24834	08/05/96	Bulkstorage	concrete	30	3720
24833	08/05/96	Bulkstorage	concrete	30	3750
24832	08/05/96	Bulkstorage	concrete	30	3780
24831	08/05/96	Bulkstorage	concrete	30	3810
24839	08/06/96	Bulkstorage		30	3840
24840	08/06/96	Bulkstorage	concrete	30	3870
24841	08/06/96	Bulkstorage	concrete	30	3900
24842	08/06/96	Bulkstorage	concrete	30	3930
24843	08/06/96	Bulkstorage		30	3960
24858	08/07/96	Bulkstorage	concrete	30	3990
24862	08/08/96	Bulkstorage	Trash	30	4020

D.4 SCRAP STEEL REMOVAL

TRANSPORTATION AND DISPOSAL DOCUMENTATION

SCRAP STEEL REMOVAL PLATTSBURGH AFB – D.O. 003 BULK FUEL STORAGE AREA – AIRCRAFT REFUEL SYSTEM

TICKET	DATE	NET WT	TARE WT	GROSS WT	US TONS	CUMMULATIVE
NUMBER		(LBS)	(LBS)	(LBS)		TONS
101	07/01/96	11280	41290	52570	5.64	5.64
102	07/01/96	7630	41440	49070	3.815	9.455
103	07/01/96	31270	40970	72240	15.635	25.09
104	07/02/96	8440	42160	50600	4.22	29.31
105	07/18/96	47620	31780	79400	23.81	53.12

D.5 RAILROAD TIE REMOVAL

TRANSPORTATION AND DISPOSAL DOCUMENTATION

RAILROAD TIE REMOVAL PLATTSBURGH AFB – D.O. 003 BULK FUEL STORAGE AREA – AIRCRAFT REFUEL SYSTEM

TICKET#	DATE	TYPE	VOLUME (CY)	TOTAL VOLUME (CY)
23930	07/18/96	RR TIE	30	30
23933	07/19/96	RR TIE	30	60
23932	07/19/96	RR TIE	30	90
11864	07/19/96	RR TIE	30	120
11865	07/19/96	RR TIE	30	150

Note: A composite sample of the railroad ties was collected for disposal analysis. The analytical results are attached.

DATA SUMMARY REPORT

DATE: 06/26/96

PAGE: 1

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: RR-01 ASC Sample Number: JP9859 Sample Date: 960619 Facility Code: 017257A

Parameters

Units

CV10 Wet Chemistry

Solids, Total

41.1

Sample Point ID: RR-01 ASC Sample Number: JP9859

Sample Date: 960619 Facility Code: 017257A

Parameters

Units

MS52 GCMS TCLP Leachate BNA

2,4-Dinitrotoluene Hexachlorobenzene Hexachloroethane Hexachlorobutadiene 2-Methylphenol	mg/L mg/L mg/L mg/L mg/L	<.100 <.100 <.100 <.100 <:100
4-Methylphenol Nitrobenzene Pentachlorophenol Pyridine 2,4,5-Trichlorophenol	mg/L mg/L mg/L mg/L mg/L	<.100 <.100 <.200 <.100 <.100
2,4,6-Trichlorophenol	mg/L	< . 100



Often Remediation Services Corp.

CHAIN-OF-CUSTODY RECORD

Form 001 Field Technical Service Rev. 08/8

LP42698

1	I. MATERIALS	CORP	·. •		P.C	D. BOX 551	• FINDLAY, C)H 45839-0551	•	419	9-423-	3526					
PROJECT NAME PAFB PROJECT CONTACT PROJECT CONTACT PROJECT CONTACT PROJECT CONTACT PROJECT CONTACT PROJECT MANAGER/SUPERVISOR CLIENT'S REPRESENTATIVE PROJECT MANAGER/SUPERVISOR MO COMICCO					NUMBER	(IND SEPA	ALYSIS ICATE ARATE ITAINER	DESIRE	D C								
TEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB		SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)		, o	/	/3/			//			EMARKS
	R-01	6-19	1330	X		Rail Ro	ad Ties (Cr	ushal)_	1×13	1							
2														\perp			
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								Arra Car								U	

D.6 CONTAMINATED SOIL REMOVAL



CONTAMINATED SOIL REMOVAL PLATTSBURGH AFB – D.O. 003 BULK FUEL STORAGE AREA – AIRCRAFT REFUEL SYSTEM

TICKET	DATE	SOURCE	VOLUME	CUMULATIVE VOLUME
NUMBER	_		(CY)	(CY)
1537	07/18/96	AST PIPE REMOVAL	180	180
1536	07/18/96	AST PIPE REMOVAL	142	322
1456	07/19/96	AST PIPE REMOVAL	108	430
1457	07/19/96	AST PIPE REMOVAL	72	502
1556	07/22/96	AST PIPE REMOVAL	126	628
1557	07/22/96	AST PIPE REMOVAL	108	736
1459	07/23/96	AST PIPE REMOVAL	108	844
1460	07/23/96	AST PIPE REMOVAL	108	952
-	_		Total	952
. 1465	08/08/96	PT DOUGLAS OWS	160	160
1464	08/08/96	PT DOUGLAS OWS	128	288
1467	08/09/96	PT DOUGLAS OWS	96	384
1466	08/09/96	PT DOUGLAS OWS	. 112	496
1543	08/13/96	PT DOUGLAS OWS	256	752
			Total	752
	٠			
1482	08/27/96	BFSA OWS	176	176
1480	08/27/96	BFSA OWS	176	352
1483	08/28/96	BFSA OWS	64	416
	<u> </u>		Total	416

APPENDIX E
IMPORTED BORROW SAMPLING & ANALYSIS
SUMMARY



February 11, 1997

Mr. Joseph Szot, AFCEE Field Engineer AFCEE/DAP 426 US Oval, Suite 2210 Plattsburgh, NY 12903

RE: Contract No. F41624-94-D-8106

Delivery Order No. 0006

Plattsburgh Air Force Base, New York Summary of Backfill Material Sources

Dear Joe:

As requested on 02/07/97, a summary of the sampling events at the different backfill material sources has been compiled. There have been a total of four sand pits that were sampled during remediation activities for Delivery Orders 003 and 006. Each pit was a potential source of backfill material for various excavations throughout the Base. The pits were sampled and analyzed for full TCLP analyses to ensure that the backfill material could be classified as non-hazardous. None of the analyses revealed compounds at concentrations that would characterize any of the samples as hazardous material.

The four sand pits that were sampled are: Joe Ormsby's Lapham Mills Road Pit (Peru, NY), Joe Ormsby's Christian Pit (Peru, NY), Barry White's Shingle Street Pit (Schuyler Falls, NY) and Plattsburgh Quarry's Ad Cock Pit (Morrisonville, NY). The sampling activities at these various sand pits are summarized below:

11/29/95: A composite sample (CF-001) was collected from Ormsby's Lapham Mills Road

Sand Pit. The analysis results are included in the Sampling & Analysis Report

dated 12/05/95.

06/04/96: A composite sample (CF-002A) was collected from Ormsby's Lapham Mills Road

Sand Pit. The analysis results are included in the Sampling & Analysis Report

dated 06/10/96.

06/25/96: A composite sample (ADCOCKPIT-01) was collected from Plattsburgh Quarry's

Ad Cock Pit. The sample was analyzed but this pit was never used as a backfill

material source due to accounting problems.

07/19/96: A composite sample (CF-719) was collected from Ormsby's Lapham Mills Road

Sand Pit. The analysis results are included in the Sampling & Analysis Report

dated 07/30/96.

07/24/96:

Composite samples (SCF-1 and SCF-2) were collected from Barry White's Shingle Street Sand Pit. Only the sample SCF-1 was analyzed because the sand pit was not used as a backfill source, at this time, due to a contractual problem. The results for the analysis are included in the Sampling & Analysis Report dated 07/31/96.

07/25/96:

A composite sample (CFCP-1) was collected from Ormsby's Christian Pit. The analysis results are included in the Sampling & Analysis Report dated 08/01/96. This pit was scheduled to be used as the new backfill material source but was never used.

08/13/96:

A composite sample (CF-813) was collected from Ormsby's Lapham Mills Road Sand Pit. The analysis results are included in the Sampling & Analysis Report dated 08/23/96.

10/10/96:

A composite sample (CF-1010) was collected from Ormsby's Lapham Mills Road Sand Pit. The analysis results are included in the Sampling & Analysis Report dated 10/31/96.

11/20/96:

A composite sample (CF-1120) was collected from Ormsby's Lapham Mills Road Sand Pit. The analysis results are included in the Sampling & Analysis Report dated 12/03/96.

01/14/97:

A composite sample (CP-01-14-97) was collected from Ormsby's Christian Pit. This pit was Ormsby's new source of backfill material but the pit was not used because Ormsby's contract had expired and a new vendor was chosen. The analysis results are included in the Sampling & Analysis Report dated 02/11/97.

01/28/97:

A composite sample (CF-0128) was collected from Barry White's Shingle Street Sand Pit. OHM personnel did not note any substantial change in the sand pit configuration since the 07/25/96 sampling event. The analysis results are included in the Sampling & Analysis Report dated 02/06/97.

The backfill material is currently taken from Barry White's Shingle Street Sand Pit. An additional sample will need to be collected from this pit to complete the backfilling operations at Spill Site 10. I have prepared a report for the 01/14/97 sampling event at Ormsby's Christian Pit for your records. This sand pit has not been used to this date, but the analytical data may be useful if Mr. Ormsby is awarded a new contract in the future. Please let me know if there is any other information that you may need in regards to the backfill material sampling activities.

Sincerely,

Gregory Guimond Sr. Technologist

CC:

M. Cormier, OHM B. Coats, OHM Project File

Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17499

Site: Ormsby's Christian Pit, Peru, NY

Date: 02/07/96

Sample Collection:

-A composite sample (CP-01-14-97) was collected from Ormsby's Christian Pit in Peru, NY on 01/14/97. The sand from the pit was scheduled to be used as backfill material at the Spill Site 10 excavations and the remaining Delivery Order 006 excavations. The sample was collected to confirm that the material is free of contaminants.

-A map of the pit and the sample locations is included with this report.

-Mr. Ormsby's contract had expired after the sample was shipped to the off-site laboratory and analysis was performed. The new contract was awarded to a different vendor.

Off-Site Analysis:

-The sample CP-01-14-97 was shipped to Premier Laboratory, LLC in Brooklyn, CT for a full TCLP analysis. The analysis results are included with this report.

-The sample results were compared to the Hazardous Waste Regulatory Levels for Toxicity Characteristic. None of the constituents of concern, if detected, exceeded the regulatory levels. A copy of the regulatory levels is included with this report.



Premier Laboratory, LLC.

Route 205 - Regional Building Brooklyn, CT 06234 Telephone: 860-774-6814 Fax: 860-774-2689

ANALYTICAL DATA REPORT

Report Number: E701155 Project: Plattsburgh Air Force Base

prepared for:

OHM Remediation Services P.O. Box 2202 Plattsburgh, NY 12901

Attn: Greg Guimond

Receive Date: 01/15/97 Report Date: 01/22/97

> Robert Laferriere General Manager

Connecticut Department of Health Services PH-0465
Maine Department of Environmental Protection TBD
Massachusetts Department of Environmental Quality CT008
New Hampshire Department of Environmental Services 2020
New York Department of Health 11549
Rhode Island Department of Health A44 0022

METALS ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, LLC.

Client:

OHM Remediation Services Corp.

PL Order No: E701155

Location:

Plattsburgh, NY

PL Sample No: 1

Project:

Plattsburgh Air Force Base

Sample Description: CP-01-14-97

Date Collected: 01/14/97 Date Received: 01/15/97

Matrix: Soil

Percent Moisture: 8.6%

				Starte	:d	Comple	eted	
Parameter	Result	QL	Units	Date	By	Date	By	Dilution
Mercury by Cold Vapo	or by SW-846 747	O. TCLP						
Mercury	0.00027 U	0.00027	mg/L	01/17/97	BS	01/21/97	MM	
Metals by ICP by SW-	-846 6010A. TCL	P						
Silver	0.020 U	0.020	mg/L	01/17/97	BS	01/20/97	BS	
Arsenic	0.50 U	0.50	mg/L	01/17/97	BS	01/20/97	BS	
Barium	0.76	0.010	mg/L	01/17/97	RZ	01/20/97	BS	
Cadmium	0.018	0.010	mg/L	01/17/97	BS	01/20/97	BS	
Chromium	0.024 U	0.024	mg/L	01/17/97	BS	01/20/97	BS	
Lead	0.80	0.050	mg/L	01/17/97	BS	01/20/97	BS	
Selenium	0.10 U	0.10	mg/L	01/17/97	BS	01/20/97	BS	

Laboratory: Premier Laboratory, LLC.

PL Report No:

E701155

01/14/97

01/15/97

PL Sample No:

Date Collected: Date Received:

Date Extracted: Date Analyzed:

01/16/97

8240, TCLP

Method: Level:

LOW

GC Column:

Units:

ug/L (Wet Weight)

Ву:

By: WW

Customer:

OHM Remediation Services Corp.

Location:

Plattsburgh, NY

Plattsburgh Air Force Base Project:

Sample Description: CP-01-14-97

Matrix:

Soil N/A

10

Percent Moisture:

Sample Weight/Volume:

Dilution Factor:

Soil Extract Volume:

Soil Aliquot Volume:

Lab Data File:

C5984

CAS No.	Parameter	Result	Qual	QL
71-43-2	Benzene	. 50	Ū	50
78-93-3	2-Butanone (MEK)	100	U	100
56-23-5	Carbon tetrachloride	. 50	U	50
108-90-7	Chlorobenzene	50	U	50
67-66-3	Chloroform	50	U	50
106-46-7	1,4-Dichlorobenzene	50	U	50
107-06-2	1,2-Dichloroethane	50	U	50
75-35-4	Li-Dichloroethene	50	U	50
127-18-4	Tetrachloroethene	50	U	50
79-01-6	Trichloroethene (TCE)	50	U	50
75-01-4	Vinyl chloride	100	U	100

Laboratory: Premier Laboratory, LLC.

OHM Remediation Services Corp. Customer:

Location:

Plattsburgh, NY

Project:

Plattsburgh Air Force Base

Sample Description: CP-01-14-97

Date Collected: 01/14/97

Date Received: 01/15/97

Date Extracted: 01/17/97 Date Analyzed: 01/20/97

By: CDV By: KRB

Method:

PL Report No:

PL Sample No:

8150, TCLP

Lcvel:

LOW

E701155

GC Column:

Units:

ug/L (Wet Weight)

Matrix:

Soil

Percent Moisture:

N/Λ

pH:

Sample Weight/Volume:

50 mL 5

Extract Volume: Injection Volume:

Dilution Factor:

Lab Data File:

4012029

CAS No.	Parameter	Result	Qual	QI.
93-72-1	2,4,5-TP (Silvex)	20	U	20
94-75-7	2,4-D (2,4-Dichlorophenoxyacetic acid)	20	U	20

Laboratory: Premier Laboratory, LLC.

Customer: OHM Remediation Services Corp.

Location:

Plansburgh, NY

PL Report No: PL Sample No: E701155

Project:

Plattsburgh Air Force Base

Sample Description: CP-01-14-97

Date Collected:

01/14/97 01/15/97 Matrix: Percent Moisture: Soil

Date Received: Date Extracted:

01/17/97

pH:

N/A

01/20/97

50 mL

Date Analyzed:

Sample Weight/Volume:

Method:

\$080, TCLP

Extract Volume:

2

Level:

LOW

Injection Volume:

GC Column:

Dilution Factor: Lab Data File:

8012007

Units:

ug/L (Wet Weight)

By: CDV

By: KRB

CAS No.	Parameter	Result	Qual	QL
59-89-9	gamma-BHC (Lindane)	0.20	U	0.20
57-74-9	Chlordane	0.40	U	0.40
72-20-8	Endrin	0.20	U	0.20
76-44-8	Heptachlor	0.40	U	0.40
1024-57-3	Heptachlor epoxide	0.40	U	0.40
72-43-5	Methoxychlor	0.20	U	0.20
8001-35-2	Toxaphene	10	U	10

Laboratory: Premier Laboratory, LLC.

Customer:

OHM Remediation Services Corp.

E701155

Location:

Plattsburgh, NY

PL Report No: PL Sample No:

1

Project:

Plattsburgh Air Force Base

Sample Description: CP-01-14-97

Date Collected:

01/14/97

Matrix: Percent Moisture: Soil

Date Received: Date Extracted: 01/15/97 01/17/97

N/A

pH:

Date Analyzed:

01/21/97

500 mL

Sample Weight/Volume:

Method:

8270, TCLP

Extract Volume:

Level:

Injection Volume: Dilution Factor:

GC Column:

LOW

Lab Data File:

A00032

Units:

ug/l, (Wet Weight)

By: CDV

By: RAW

CAS No.	Parameter	Result	Qual	QL
121-14-2	2.4-Dinitrotoluene	10	U	10
118-74-1	Hexachlorobenzene	10	U	10
87-68-3	Hexachlorobutadiene	10	U	10
67-72-1	Hexachloroethane	10	U	10
95-48-7	2-Methylphenol	10	U	10
98-95-3	Nitrobenzene	10	U	10
87-86-5	Pentachlorophenol	10	U	10
110-86-1	Pyridine	20	U	20
95-95-4	2,4,5-Trichlorophenol	10	U	10
88-06-2	2,4.6-Trichlorophenol	10	U	10
	3- & 4-Methylphenols	10	U	10



10

CHAIN-OF-CUSTODY RECORD

1/14/97

CORD

Field Technical Services

172314

Thansfer 3

Form)0019

Field Technical Services
Rev. 08/89 O.H. MATERIALS CORP. P.O. BOX 551 FINDLAY, OH 45839-0551 419-423-3526 PROJECT NAME PROJECT LOCATION PROJECT SOURCE OF SECULIARIES CLIENT'S REPRESENTATIVE OF PROJECT MANAGERYSUPERVISOR ANALYSIS DESIRED (INDICATE NUMBER CONTAINERS SEPARATE CONTAINERS) KELL KOKKOWERLY AFCEE / VOF CZO DATE TIME OF BAR SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE) SAMPLE NUMBER REMARKS SOIL FAOR CHRISTON ON 1/97 15:30 0 7.172 CP-01-14-97 Thomas Blanch Comment REMARKS ITEM TRANSFERS **TRANSFERS** RELINQUISHED BY NUMBER ACCEPTED BY DATE | TIME COM. Mr. Com. J. Fr. A LARDER AND TO ME 1 2 3

Sample Collection Log Plattsburgh AFB - Project #17257

. g. <u> </u>	Pg	of	2
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Date: 1/14/97

Site: Christian Pit

Weather:

Samplers: MR

Sample ID	Time	Matrix	Comp/ Grab	Sample Depth	Sample Description	# of Bottles
CP-01-14-97	1530	5	C	_	Gold Sand From Back Fill	IXIL
	<u></u>	<u> </u>		<u> </u>	Serie .	
<u></u>	 					
						,

Map Attached: Yes

No

-Reference Points:

Yes

No

-Head Space Readings:

Yes

No

Sample Type:

Screening

Confirmation

Disposal/Characterization

Requested Analysis:

VOCs

SVOCs

Other: Full TCLP

Split Sample Collected:

Yes

(No)

Laboratory Destination: Premier Lab COC # 172314

Airbill # 2821166040

Duplicate Sample:

Yes

(No)

Equipment Rinsate Sample:

Yes

Comments:

No visible signs of contamination were noted at the pit.

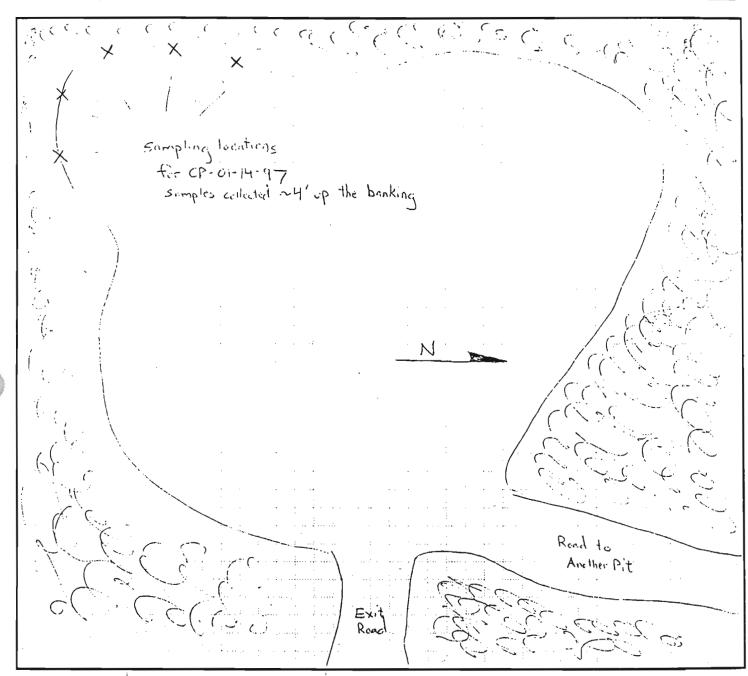
Page	of
, age	01

Site Map: Headspace / Confirmation Sampling Plattsburgh AFB - Project #17499

Site Name: Ormsby's Christian Pit

Date: 1/14/97

Prepared by: CC:



<u>Ref</u> Points

A/N

Comments

- Not drawn to scale

. x denotes sampling locations for the composite sample

@ - vegetation

- The pit configuration has not changed dramatically since the 07/25/96 sampling event. A soil pile in the middle has been removed and some soil has been removed from the corner of the pit (where the sample was collected). There were no visible signs of contamination.

Sampling & Analysis Site Report Plattsburgh AFB - Project #17499

Site: Ormsby Sand Mine, Peru, NY

Date: 12/03/96

Sample Collection:

- -A composite sample (CF-1120) was collected from the Ormsby Sand Mine in Peru, NY on 11/20/96. The sand from the mine is used for backfill material at many of the sites throughout the base. The sample was collected to confirm that the material is free of contaminants.
- -A map of the pit and the sample locations is included with this report.

Off-Site Analysis:

- -The sample CF-1120 was shipped to Laboratory Resources in Brooklyn, CT for a full TCLP analysis. The analysis results are included with this report.
- -The sample results were compared to the Hazardous Waste Regulatory Levels for Toxicity Characteristic. None of the constituents of concern, if detected, exceeded the regulatory levels. A copy of the regulatory levels is included with this report.



Laboratory Resources, Inc.

New England Division

Route 205 - Regional Building Brooklyn, CT 06234 Telephone: 203-774-6814 Fax: 203-774-2689

ANALYTICAL DATA REPORT

Report Number: E611281 Project: Plattsburgh Air Force Base

prepared for:

OHM Remediation Srevices P.O. Box 2202 Plattsburgh, NY 12901

Attn: Greg Guimond

Receive Date: 11/21/96 Report Date: 11/27/96

> T.F. McCommas Laboratory Director

Connecticut Department of Health Services PH-0465
Maine Department of Environmental Protection TBD
Massachusetts Department of Environmental Quality CT008
New Hampshire Department of Environmental Services 2020
New York Department of Health 11549
Rhode Island Department of Health A44 0022

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.

Division:

New England

LRI Order No: E611281

LRI Sample No: 1

Date Collected: 11/20/96

Date Received: 11/21/96

Client:

OHM Remediation Services Corp.

Location:

Plattsburgh, NY

Project:

Plattsburgh Air Force Base

Sample Description: CF-1120

Matrix: Soil

Percent Moisture: 5.1%

				Starte	ed	Comple	eted	
Parameter	Result	QL	Units	Date	Ву	Date	Ву	Dilution
Mercury by Cold Vapor b	y SW-846 747	0, TCLP						
Mercury	0.00027 U	0.00027	mg/L	11/22/96	MM	11/25/96	MM	
•								
Metals by ICP by SW-846	6010A, TCL	<u>P</u>						
Silver	0.020 U	0.020	mg/L	11/22/96	MM	11/26/96	BS	
Arsenic	0.20 U	0.20	mg/L	11/22/96	MM	11/26/96	BS	
Barium	0.63	0.020	mg/L	11/22/96	MM	11/26/96	BS	
Cadmium	U010.0	0.010	mg/L	11/22/96	MM	11/26/96	BS	
Chromium	0.024 U	0.024	mg/L	11/22/96	MM	11/26/96	BS	
Lead	0.050 U	0.050	mg/L	11/22/96	MM	11/26/96	BS	
Selenium	0.10 U	0.10	mg/L	11/22/96	MM	11/26/96	BS	

Laboratory: Laboratory Resources, Inc.

Division: LRI Report No: New England

Date Collected:

E611281

1

LRI Sample No:

11/20/96 11/21/96

Date Received:

By:

Date Extracted: Date Analyzed:

11/25/96 By: WW

Method:

8240, TCLP LOW

Level: GC Column:

Units:

ug/L (Wet Weight)

Customer:

OHM Remediation Services Corp.

Location:

Plattsburgh, NY

Plattsburgh Air Force Base Project:

Sample Description: CF-1120

Matrix:

Soil N/A

10

Percent Moisture:

Sample Weight/Volume:

Dilution Factor:

Soil Extract Volume: Soil Aliquot Volume:

Lab Data File:

C5450

CAS No.	Parameter	Result	Qual	QL
71-43-2	Benzene	50	U	50
78-93-3	2-Butanone (MEK)	100	U	100
56-23-5	Carbon tetrachloride	50	U	50
108-90-7	Chlorobenzene	50	U	50
67-66-3	Chloroform	50	U	50
106-46-7	1,4-Dichlorobenzene	50	Ü	50
107-06-2	1,2-Dichloroethane	50	Ŭ	50
75-35 4	1,1-Dichloroethene	50	U	50
127-18-4	Tetrachloroethene	50	U	50
79-01-6	Trichloroethene (TCE)	50	U	50
75-01-4	Vinyl chloride	. 100	U	100

Laboratory: Laboratory Resources, Inc.

Division:

New England

LRI Report No:

LRI Sample No:

E611281

Date Collected:

Date Received: Date Extracted:

11/22/96 Date Analyzed:

11/25/96

11/20/96

11/21/96

8150, TCLP

Level: GC Column:

Method:

Units:

LOW

ug/L (Wet Weight)

By: DMH

By: KRB

Customer:

OHM Remediation Services Corp.

Location: Plattsburgh, NY

Project:

Plattsburgh Air Force Base

Sample Description: CF-1120

Matrix:

Soil

Percent Moisture:

N/A

pH:

Sample Weight/Volume:

50 mL 5

Extract Volume:

Injection Volume: Dilution Factor:

Lab Data File: 4112507

CAS No.	Parameter	Result	Qual	QL
93-72-1	2,4,5-TP (Silvex)	2.0	U	2.0
94-75-7	2,4-D (2,4-Dichlorophenoxyacetic acid)	2.0	U	2.0

Laboratory: Laboratory Resources, Inc.

Division: LRI Report No: New England

E611281

LRI Sample No: 1

Date Collected: 11/20/96 Date Received: 11/21/96

Date Extracted: 11/25/96 Date Analyzed:

11/25/96

Method: 8080, TCLP Level: LOW

GC Column:

Units:

ug/L (Wet Weight)

By: DMH

By: KRB

Customer:

OHM Remediation Services Corp.

Location:

Plattsburgh, NY

Plattsburgh Air Force Base Project:

Sample Description: CF-1120

Matrix:

Percent Moisture:

Soil N/A

pH:

Sample Weight/Volume:

50 mL 2

Extract Volume: Injection Volume:

Dilution Factor:

1

Lab Data File:

8112506

CAS No.	Parameter	Result	Qual	QL
59-89-9	gamma-BHC (Lindane)	0.20	U	. 0.20
57-74-9	Chlordane	0.40	U	0.40
72-20-8	Endrin	0.20	U	0.20
76-44-8	Heptachlor	0.40	U	0.40
1024-57-3	Heptachlor epoxide	0.40	U	0.40
72-43-5	Methoxychlor	0.20	U	0.20
8001-35-2	Toxaphene	10	U	10

Laboratory: Laboratory Resources, Inc.

Division:

New England

LRI Report No:

E611281 1

LRI Sample No:

Date Collected: 11/20/96 Date Received: 11/21/96

Date Extracted:

Date Analyzed:

11/25/96 8270, TCLP

LOW

11/22/96

Level:

GC Column:

Units:

Method:

ug/L (Wet Weight)

By: DMH

By: RAW

Customer:

OHM Remediation Services Corp.

Location:

Plattsburgh, NY

Project: Plattsburgh Air Force Base

Sample Description: CF-1120

Matrix:

Soil

Percent Moisture:

N/A

pH:

Sample Weight/Volume:

500 mL

Extract Volume:

Injection Volume: Dilution Factor:

Lab Data File:

E02713

CAS No.	Parameter	Result	Qual	QL
121-14-2	2,4-Dinitrotoluene	10	U	10
118-74-1	Hexachlorobenzene	10	U	10
87-68-3	Hexachlorobutadiene	10	U	10
67-72-1	Hexachloroethane	10	U	10
95-48-7	2-Methylphenol	10	U	10
98-95-3	Nitrobenzene	10	U	10
87-86-5	Pentachlorophenol	10	U	10
110-86-1	Pyridine	20	U	20
95-95-4	2,4,5-Trichlorophenol	10	U	10
88-06-2	2,4,6-Trichlorophenol	10	U	10
	3- & 4-Methylphenols	. 10	U	10

HAZARDOUS WASTE REGULATORY LEVELS FOR TOXICITY CHARACTERISTIC

CONSTITUENT	REGULATORY LEVEL (mg/L)
Arsenic	5.0
Barium	100.0
Benzene	0.5*
Cadmium	1.0
Carbon tetrachloride	0.5*
Chlordane	0.03*
Chlorobenzene	100.0*
Chloroform	6.0*
Chromium	5.0
o-Cresol	200.0*
m-Cresol	200.0*
Cresol (Total)	200.0*
2,4-D	10.0
1,4-Dichlorobenzene	7.5*
1,2-Dichloroethane	0.5*
1,1-Dichloroethylene	0.7*
2,4-Dinitrotoluene	0.13*
Endrin	0.02
Heptachlor (and its epoxide)	0.008*
Hexachlorobenzene	0.13*
Hexachloro-1,3butadiene	0.5*
Hexachloroethane	3.0*
Lead	5.0
Lindane	0.4

CONSTITUENT	REGULATORY LEVEL (mg/L)
Mercury	0.2
Methoxychlor	10.0
Methyl ethyl ketone	200.0*
Nitrobenzene	2.0*
Pentachlorophenol	100.0*
Pyridine	5.0*
Selenium	1.0
Silver	5.0
Tetrachloroethylene	0.7*
Toxaphene	0.5
Trichloroethylene	0.5*
2,4,5-Trichlorophenol	400.0*
2,4,6-Trichlorophenol	2.0*
2,4,5-TP (Silvex)	1.0
Vinyl chloride	0.2*

^{*} New Toxicity Characteristics Effective 9/25/90



CHAIN-OF-CUSTODY RECORD

Lab Resources

PO計 1030137

ı	O.H. MATERIALS	CORP	·. •		Ρ.0	D. BOX 551	• FINDLAY, OH 45839-	0551	•	41	9-423	3-352	6									
	OJECT NAME PAFE OJ. NO 1149 PROJECT 1735 JU JENT'S REPRESENTATIVE AFCE	PAFB PROJECT CONTACT SENTATIVE SENTATIVE			onc	PROJECT MAN	PROJECT LOCATION PROJECT TELEPHONE NO. (518) 5 62-3923 PROJECT MANAGER/SUPERVISOR Ken Kukkonen			(INI	ALYS DICATE PARATE NTAINE	:	SIRED							<u></u>		
ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB		SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)						/	/	/	/	<u>//.</u>		REMA	ARKS		
1	CF-1120	176	15 ₂₅	χ			Gold Sand		MI	. X												
2																\perp			_			
3																				_		
4								<u>'</u>											_			
5								۶.														2
6							ع. ،	~ -														
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8																						\exists
9																						
10																						\exists
	NOMBER NO MER		F		IANSF IQUIS	ERS HED BY	TRANSFERS ACCEPTED BY		DATE	TIME		ARKS	F							olank in		
_	1		A	He	i n	s ()	12/13/4/10/13/20	,	76.	1600			0:	(W	Min	icho	n Lev	el C	ictor f	Parkage retein		
	2		FE			·			B				1	 > (ja,	, T	AT		Physic	retern	coole	î .
	3													_								
	4							•			SAM	PLER'S	SIGNA ,	TURE リ リトクンイ	kantis.	.]	Luciens	الترثيب الم				

Soil Sample Collection Log Plattsburgh AFB - Project # 17257 17499

Date: 11/20/96 Weather: Clary, ~25°7	Site: Ormsby Sand Mine, Poru Samplers: GG
Sample	Compt Sample Coordinates

Sample ID	Time	PID Screen	Comp/ Grab	Sample Depth (ft)	Coord Ref. Pt.	inates Ref. Pt.	Sample Description	# of Bottles
CF-1120	1525		C	4'up banking	/ .	/	ach sand composite	· /x/L
							9	
							÷.	
						,		

			1		!
Map Attached: Yes	No	•			
	nce Points: pace Readings:	Yes Yes	No No		
Sample Type: Screening	ng Confirmation	Disposal	Characterization		
Requested Analysis:	VOCs	SVOCs	Other:_	FUI TCLP	
Split sample Collected:	Yes No				
Laboratory Destination:	-ab Res coc	# 16421	5 Airbill #	1243410420	
Duplica	te Collected: Yes	No	Rinsate Collected	: Yes No	
	On-Site Labora	atory Chain o	f Custody / Request	for Analysis .	
Requested Analysis:	VOCs	SVOCs	Cooler Temperate	ıre:	

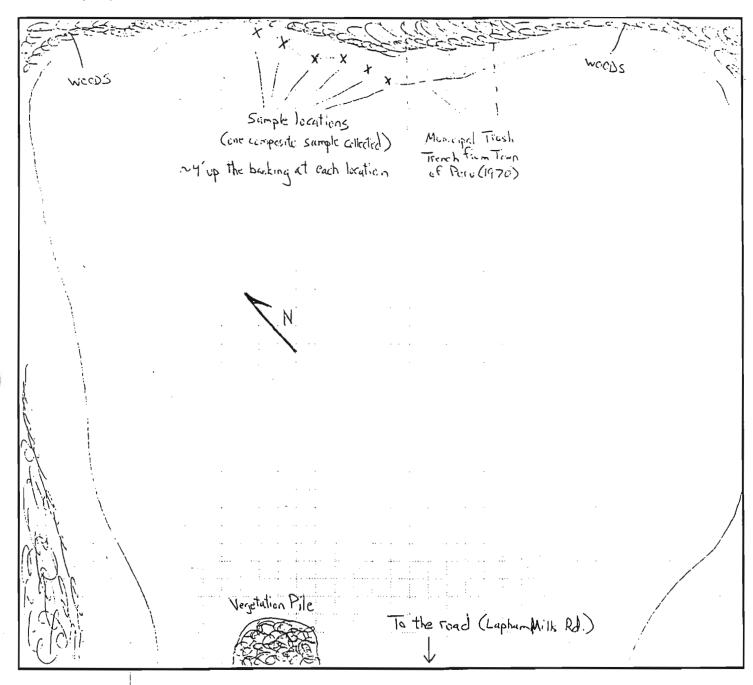
Relinquished by (dd/tt):_

Site Map: Headspace / Confirmation Sampling Plattsburgh AFB - Project #17499

Clean Fill Source Site Name: Comsty Soul Mine, Para

Date: 11/20/96

Prepared by: 6.6.



Ref **Points**

NA

Comments

- Not drawn to scale
- X denotes sampling locations One composite sample collected (CF-1120)

Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17499

Site: Ormsby Sand Mine, Peru, NY

Date: 10/31/96

Sample Collection:

- -A composite sample (CF-1010) was collected from the Ormsby Sand Mine in Peru, NY on 10/10/96. The sand from the mine is used for backfill material at many of the sites throughout the base. The sample was collected to confirm that the material is free of contaminants.
- -A map of the pit and the sample locations is included with this report.

On-Site Analysis:

-The on-site laboratory has been shipped off of the Air Force Base to another job site. All samples will be analyzed by off-site laboratories.

Off-Site Analysis:

- -The sample CF-1010 was shipped to CTM Laboratories in Latham, NY for a full TCLP analysis. The analysis results are included with this report.
- -The sample results were compared to the Hazardous Waste Regulatory Levels for Toxicity Characteristic. None of the constituents of concern, if detected, exceeded the regulatory levels. A copy of the regulatory levels is included with this report.

15 Century Hill Drive PO. Box 727 Latham, NY 12110 518-786-7100 FAX 518-786-7139



Laboratory Analysis Report
Prepared for: OHM REMEDIATION SERVICES CORP
CIM Project Number: 9913642
CIM Task Number: 961011J
07 NOV 1996

IMPORTANT - PLEASE NOTE

- 1. All results are calculated on a dry weight basis unless otherwise specified.
- 2. PQL = Practical Quantitation Limit.
- 3. A result with a "D" means that the result was "Detected" below the Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).
- 4. ND = Not Detected at or above the PQL.
- 5. NTP = Non-target peaks (1-5 peaks). MNTP = Many non-target peaks (5+ peaks).
- 6. pH results not performed in the field should be considered estimated since the holding time is 15 minutes from the sampling time.
- 7. If the samples are collected independently of our laboratory, CTM is not responsible for the possible contamination during the sampling procedure.
- 8. Methylene chloride and acetone are common laboratory artifacts for volatile organic analysis. Bis-(2-ethyl-hexyl) phthalate and di-n-butylphthalate are common laboratory artifacts for GC/MS semivolatile analysis. Other compounds may also appear as laboratory artifacts for the organic analyses. The above compounds will be flagged as suspected laboratory artifacts if the detected value is less than five (5) times of the PQL in the sample. Acetone will be flagged as a suspected laboratory artifact only up to two and a half (2.5) times of the PQL.
- 9. If air samples are collected independently of our laboratory, CTM is not responsible for inadequate sample volume for air analysis.

AUTHORIZED FOR RELEASE: Chicatissia Tens

DATE: 11/5/96

CERTIFICATIONS:

NYS E.L.A.P. ID NO: 10358 MA: NY052 CT: PH-0551 NJ: 73581

15 Century Hill Drive PO. Box 727 Latham, NY 12110 518-786-7100 FAX 518-786-7139

OHM REMEDIATION SERVICES CORP P.O.BOX 2202

PLATTSBURGH

NY 12901

Attention: MR. GREG GUIMOND

Purchase Order Number: 1026625 Date Sampled: 10/10/96 Time: 13:15

Sampled By: GUIMOND Sample Id: CF-1010

Location : PLATTSBURGH, NY

GC/MS GC ICAP Sampling Services

CTM PROJECT #: 9913642

CTM Task #: 961011J

CTM Sample No: 961011J 01
Date Received: 10/11/96
Collection Method: COMPOSITE

offection method: com

Matrix: SOLID

Parameters and Standard Metho	odology Used	Results	PQL	Unit	Analyst Reference
,	N	GOUDI 5755			TMU 10/15/04
TCLP-ZERO HEADSPACE EXTRACTIO		COMPLETED		•	TMH 10/15/96 GCMSEA116 10/17/9
TCLP VOLATILES	SW-846 METHOD 8240	COMPLETED			GCMSEA116 10/17/9
PURGE & TRAP EXTRACTION	SW-846 METHOD 5030	COMPLETED	-	466.0	
CONZENE (TOLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSEA116 10/17/9
CARBON TETRACHLORIDE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSEA116 10/17/9
CHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSEA116 10/17/9
CHLOROFORM (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSEA116 10/17/9
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSEA116 10/17/9
1,2-DICHLOROETHANE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSEA116 10/17/9
1,1-DICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSEA116 10/17/9
METHYL ETHYL KETONE (TCLP)	SW-846 METHOD 8240	ND	10	MCG/L	GCMSEA116 10/17/
TETRACHLOROETHYLENE (TCLP)	SW-846 METHOO 8240	ND	5	MCG/L	GCMSEA116 10/17/
TRICHLOROETHENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSEA116 10/17/
VINYL CHLORIDE (TCLP)	SW-846 METHOO 8240	ND	10	MCG/L	GCMSEA116 10/17/
TCLP BASE/NEUTRALS	SW-846 METHOD 8270 BASE/NEUTRALS	COMPLETED			GCMSB:41 10/22/9
EXTRACTION FOR TCLP B/N	SW-846 METHOD 8270	COMPLETED			ACM 10/17/96
HEXACHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	5	MCG/L	GCMSB:41 10/22/9
HEXACHLOROBUTADIENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND "	5	MCG/L	GCMSB:41 10/22/9
PYRIDINE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	5	MCG/L	GCMSB:41 10/22/9
2,4-DINITROTOLUENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	5	MCG/L	GCMSB:41 10/22/9
HEXACHLOROETHANE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	5	MCG/L	GCMSB:41 10/22/9
NITROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	5	MCG/L	GCMSB:41 10/22/9
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	5	MCG/L	GCMSB:41 10/22/9
TOUR EXTRACTION	SW-846 METHOD 1311	COMPLETED			MPC 10/15/04
TCLP ACID EXTRACTABLES	SW-846 METHOD 8270	COMPLETED			GCMSB:41 10/22/9
EXTRACTION FOR TCLP ACID/EXT.	SW-846 METHOD 8270	COMPLETED			ACM 10/17/96
O-CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	5	MCG/L	GCMSB:41 10/22/9
PENTACHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	25	MCG/L	GCMSB:41 10/22/9
	SW-846 METHOD 8270 ACID FRACTION	ND .	25	MCG/L	GCMSB:41 10/22/9
	SW-846 METHOD 8270 ACID FRACTION	ND	5	MCG/L	GCMSB:41 10/22/9
M & P CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	10	MCG/L	GCMSB:41 10/22/9
ACID DIGESTION ON TCLP EXTRAC		COMPLETED			D-21:91 10/16/96
MOID DIGESTION ON LCCL CXIKAC	113M OHO METROD DOTO	COMPLETED			<u> </u>

(CONTINUES ON NEXT PAGE)

REMARKS:

15 Century Hill Drive PO Box 727 Latham, NY 12110 518-786-7100 FAX 518-786-7139

OHM REMEDIATION SERVICES CORP P.O.BOX 2202

PLATTSBURGH

NY 12901

Attention: MR. GREG GUIMOND

Purchase Order Number: 1026625 Date Sampled: 10/10/96 Time: 13:15

Sampled By : GUIMOND Sample Id: CF-1010

Location : PLATISBURGH, NY.

GC/MS GC ICAP Sampling Services

CTM PROJECT #: 9913642

CTM Task #: 961011J

CTM Sample No: 961011J 01
Date Received: 10/11/96
Collection Method: COMPOSITE

Matrix: SOLID

Parameters and Standard Methodology Used PQL Unit Analyst Reference Results (CONTINUED FROM PREVIOUS PAGE) MERCURY PREPARATION - TCLP SW-846 METHOD 7471 COMPLETED 0-21:93 10/16/96 ARSENIC, BY TCLP SW-846 METHOD 6010 0.010 MG/L F-5:28 10/16/96 BARIUM, BY TCLP SW-846 METHOD 6010 0.64 0.60 MG/L F-5:28 10/16/96 CADMIUM, BY TCLP SW-846 METHOD 6010 0.005 F-5:28 10/16/96 ND MG/L CHROMIUM, BY TCLP SW-846 METHOD 6010 0.010 ND MG/L F-5:28 10/16/96 LEAD, BY TCLP SW-846 METHOD 6010 0.005 MG/L F-5:28 10/16/96 ND MERCURY, BY TCLP SW-846 METHOD 7471 ND 0.0002 MG/L E-4:129 10/17/96 SELENIUM, BY TCLP SW-846 METHOD 6010 ND 0.050 MG/L F-5:28 10/16/96 SILVER, BY TCLP SW-846 METHOD 6010 ND 0.010 MG/L F-5:32 10/21/96 TCLP PESTICIDES/HERBICIDES SW-846 METHODS 8080/8150 COMPLETED 00 10/25/96 EXTRACTION FOR TCLP PESTICIDE SW-846 METHOD 8080 COMPLETED 00 10/23/96 CHLORDANE (TCLP) SW-846 METHOD 8080 0.5 MCG/L GC3F:18 10/23/96 ENDRIN (TCLP) SW-846 METHOD 8080 MO 0.05 MCG/L GC3F:18 10/23/96 HEPTACHLOR (TCLP) SW-846 METHOD 8080 0.05 NĐ MCG/L GC3F:18 10/23/96 HEPTACHLOR EPOXIDE (TCLP) SW-846 METHOD 8080 ND 0.05 MCG/L GC3F:18 10/23/96 LINDANE (TCLP) SW-846 METHOD 8080 0.05 GC3F:18 10/23/96 NĎ MCG/L METHOXYCHLOR (TCLP) SW-846 METHOD 8080 0.05 MCG/L GC3F:18 10/23/96 ND TOXAPHENE (TCLP) SW-846 METHOD 8080 ND 1.0 MCG/L GC3F:18 10/23/96 EXTRACTION FOR TCLP HERBICIDE SW-846 METHOD 8150 COMPLETED DO 10/22/96 2,4-D (TCLP) SW-846 METHOD 8150 0.20 ND MCG/L GC3F:19 10/25/96 2,4,5-TP (SILVEX) (TCLP) SW-846 METHOD 8150 0.20 MCG/L GC3F:19 10/25/96 ND

REMARKS:

END OF REPORT

LEGEND: MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM



CHAIN-OF-CUSTODY RECORD

Pot 1030025 164233



Rev. 08/89

O.H. MATERIALS CORP. P.O. BOX 551 FINDLAY, OH 45839-0551 419-423-3526 PROJECT NAME PROJECT LOCATION PAFB PROJECT TELEPHONE NO. ANALYSIS DESIRED (INDICATE PROJECT CONTACT NUMBER OF CONTAINERS SEPARATE | (518) 502 - 3123 17499 Gran Guimond
CLIENT'S REPRESENTATIVE CONTAINERS) AFCEE Jos SZOT Ken Kukkuner ITEM NO. SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE) SAMPLE NUMBER DATE TIME REMARKS Chan Fill composite 11/10 1315 CF-1010 2 3 5 6 8 9 10 REMARKS They like worked of ITEM **TRANSFERS TRANSFERS** NUMBER RELINQUISHED BY ACCEPTED BY DATE TIME THE TAT (TERMS by 10/16/16) FEDEX AIDIT 1/10 110. 27113 5141 71 2 Plane cete a coulst That you SAMPLER'S SIGNATURE March Holland St.

Soil Sample Collection Log Plattsburgh AFB - Project # 17257/17499

Date:	10/10/76
-------	----------

Site: Clean Fill Sturce Ormsby Sand Mine, Peru Samplers: G. G.

Weather: Claudy, 65%

Relinquished by (dd/tt):_

Pg. of =

	, ,			(. د). د			
Sample ID	Time	PID Screen	Comp/ Grab	Sample Depth (ft)	Coord Ref. Pt.	inates Ref. Pt.	Sample Description	# of Bottles
C.F-1010	1315	/	C	4'up bank	/	1	gold sand	IXIL
							,	
							1.	<u> </u>
					_			
Map Allached:	(Yes)	No						
	-Reference -Head Spa		ngs:	Yes (No No	•		
Sample Tune:	Sarazina	Comfine		Disposal/C		ation .		
Sample Type:	Screening .		ation				Full TCLP	
Requested Anal		VOCs		SVOCs		Other:	70	
Split sample Co	llected:	Yes	(No)	1	_			
Laboratory Dest	ination:C	$\top \wedge \setminus$	COC#_	16423	3	Airbill #_	2311305146	
	Duplicate	Collected	Yes	No	Rinsate	Collected:	Yes No	·
		On-Site	e Laborato	ory Chain of	Custody /	Request fo	or Analysis	
Requested Anal	lysis:	VOCs		SVOCs	Cooler	Temperatu	re:	

Received by (dd/tt):_

Site Map: Headspace / Confirmation Sampling Plattsburgh AFB - Project #17499

Site Name: Chan Fill Scarce

Date: 10/10/96

Crosby Sand Mine, Peru

Prepared by: ____G, G.

×10	605	X X X	G. T. C.		Scale Scor
	Conecto	imposite sample callected) The banking at each loc	Municipal Trash Trench from Town of Peru (170)		
1					
منعار برويموج معن		N			
Y .					
- 'woo			to the road (Lapp	oan Mills Rd.)	

PID Readings	Ref. Points	Comments: - Not drawn to scale
N/A	N/A	X-denotes Sample locations One composite sample was collected (CF-1010)

Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17499

Site: Ormsby Sand Mine, Peru, NY

Date: 08/23/96

Sample Collection:

- -A composite sample (CF-813) was collected from the Ormsby Sand Mine in Peru, NY on 08/13/96. The sand from the mine is used for backfill material at many of the sites throughout the base. The sample was collected to confirm that the material is free of contaminants.
- -A map of the pit and the sample locations is included with this report.

On-Site Analysis:

-No samples were analyzed on-site.

Off-Site Analysis:

- -The sample CF-813 was shipped to CTM Laboratories in Latham, NY for a full TCLP analysis. The analysis results are included with this report.
- -The sample results were compared to the Hazardous Waste Regulatory Levels for Toxicity Characteristic. None of the constituents of concern, if detected, exceeded the regulatory levels. A copy of the regulatory levels is included with this report.

15 Century Hill Drive PO. Box 727 Latham, NY 12110 518-786-7100 FAX 518-786-7139



Laboratory Analysis Report
Prepared for: OHM REMEDIATION SERVICES CORP
CTM Project Number: 9913642
CTM Task Number: 960816H
23 AUG 1996

IMPORTANT - PLEASE NOTE

- 1. All results are calculated on a dry weight basis unless otherwise specified.
- 2. PQL = Practical Quantitation Limit.
- A result with a "D" means that the result was "Detected" below the Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).
- 4. ND = Not Detected at or above the PQL.
- 5. NTP = Non-target peaks (1-5 peaks). MNTP = Many non-target peaks (5+ peaks).
- 6. pH results not performed in the field should be considered estimated since the holding time is 15 minutes from the sampling time.
- 7. If the samples are collected independently of our laboratory, CTM is not responsible for the possible contamination during the sampling procedure.
- 8. Methylene chloride and acetone are common laboratory artifacts for volatile organic analysis. Bis-(2-ethyl-hexyl) phthalate and di-n-butylphthalate are common laboratory artifacts for GC/MS semivolatile analysis. Other compounds may also appear as laboratory artifacts for the organic analyses. The above compounds will be flagged as suspected laboratory artifacts if the detected value is less than five (5) times of the PQL in the sample. Acetone will be flagged as a suspected laboratory artifact only up to two and a half (2.5) times of the PQL.
- 9. If air samples are collected independently of our laboratory, CTM is not responsible for inadequate sample volume for air analysis.

AUTHORIZED FOR RELEASE: Chiestersher Hes

DATE: 8/23/96

CERTIFICATIONS:

NYS E.L.A.P. ID NO: 10358

MA: NY052

CT: PH-0551

NJ: 73581

15 Century Hill Drive P.O. Box 727 Latham, NY 12110 518-786-7100 FAX 518-786-7139

OHM REMEDIATION SERVICES CORP P.O.BOX 2202

PLATTSBURGH

NY 12901

Attention: MR. GREG GUIMOND

Purchase Order Number: 153141 Date Sampled: 08/13/96 Time: 9:00

Sampled By : SLADE Sample Id: CF-813

Location : PLATTSBURGH, NEW YORK

GC/MS GC ICAP Sampling Services

CTM PROJECT #: 9913642

CTM Task #: 960816H

CTM Sample No: 960816H 01 Date Received: 08/16/96 Collection Method: COMPOSITE

Matrix: SOIL

Parameters and Standard Metho	dology Used	Results	PQL	Unit	· Analyst Referen
TCLP-ZERO HEADSPACE EXTRACTIO	NSW-846 METHOD 1311	COMPLETED			TH 8/19/96
TCLP VOLATILES	SW-846 METHOD 8240	COMPLETED			GCMSCD:95 8/20/9
PURGE & TRAP EXTRACTION	SW-846 METHOD 5030	COMPLETED			GCMSCD:95 8/20/9
BENZENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:95 8/20/9
CARBON TETRACHLORIDE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:95 8/20/9
CHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:95 8/20/9
CHLOROFORM (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:95 8/20/9
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:95 8/20/9
1,2-DICHLOROETHANE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:95 8/20/9
1,1-DICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ИD	5	MCG/L	GCMSCD:95 8/20/9
METHYL ETHYL KETGRE (TCLP)	SW-846 METHOD 8240	ND	10	MCG/L	GCMSCD:95 8/20/9
TETRACHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:95 8/20/9
TRICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:95 8/20/9
VINYL CHLORIDE (TCLP)	SW-846 METHOD 8240	ND	10	MCG/L	GCMSCD:95 8/20/9
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED			D-21:13 8/16/96
TCLP ACID EXTRACTABLES	SW-846 METHOD 8270	COMPLETED			GCMSB:4 8/21/96
EXTRACTION FOR TCLP ACID/EXT.	SW-846 METHOD 8270	COMPLETED			MPC 8/20/96
O-CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	20	MCG/L	GCMSB:4 8/21/96
PENTACHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	100	MCG/L	GCMSB:4 8/21/96
2,4,5-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	100	MCG/L	GCMSB:4 8/21/96
2,4,6-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	20	MCG/L ~	GCMSB:4 8/21/96
M & P CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	40	MCG/L	GCMSB:4 8/21/96
TCLP BASE/NEUTRALS	SW-846 METHOD 8270 BASE/NEUTRALS	COMPLETED			GCMS8:4 8/21/96
EXTRACTION FOR TCLP B/N	SW-846 METHOD 8270	COMPLETED			MPC 8/20/96
HEXACHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:4 8/21/96
HEXACHLOROBUTADIENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:4 8/21/96
PYRIDINE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:4 8/21/96
2,4-DINITROTOLUENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:4 8/21/96
HEXACHLOROETHANE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:4 8/21/96
NITROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:4 8/21/96
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:4 8/21/96
TCLP PESTICIDES/HERBICIDES	SW-846 METHODS 8080/8150	COMPLETED			DO 8/20/96

(CONTINUES ON NEXT PAGE)

REMARKS:

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15 Century Hill Drive PO. Box 727 Latham, NY 12110 516-786-7100 FAX 518-786-7139

OHM REMEDIATION SERVICES CORP

P.O.BOX 2202

PLATTSBURGH

NY 12901

Attention: MR. GREG GUIMOND

Purchase Order Number: 153141

Date Sampled: 08/13/96 Time: 9:00

Sampled By : SLADE Sample 1d: CF-813

Location : PLATTSBURGH, NEW YORK

GC/MS GC ICAP Sampling Services

CTM PROJECT #: 9913642

CTM Task #: 960816H

CTM Sample No: 960816H 01 Date Received: 08/16/96 Collection Method: COMPOSITE

Matrix: SOIL

Parameters and Standard Method	dology Used		Results	PQL	Unit	Analyst Referenc
	(CONTINUED	FROM PREVIOUS PAGE)				
EXTRACTION FOR TCLP PESTICIDE	SW-846 METHOD	8080	COMPLETED			DO 8/19/96
CHLORDANE (TCLP)	SW-846 METHOD	8080	ND	2.0	MCG/L	GC3F:8 8/20/96
ENDRIN (TCLP)	SW-846 METHOD	8080	סא	0.20	MCG/L	GC3F:8 8/20/96
HEPTACHLOR (TCLP)	SW-846 METHOD	8080	ND	0.20	MCG/L	GC3F:8 8/20/96
HEPTACHLOR EPOXIDE (TCLP)	SW-846 METHOD	8080	ND	0.20	MCG/L	GC3F:8 8/20/96
LINDANE (TCLP)	SW-846 METHOD	8080	ND	0.20	MCG/L	GC3F:8 8/20/96
METHOXYCHLOR (TCLP)	SW-846 METHOD	8020	ND	0.20 ·	MCG/L	GC3F:8 8/20/96
TOXAPHENE (TCLP)	SW-846 METHOD	8080	NO	4.0	MCG/L	GC3F:8 8/20/96
EXTRACTION FOR TCLP HERBICIDE	SW-846 METHOD	8150	COMPLETED			DO 8/19/96
2,4-D (TCLP)	SW-846 METHOD	8150	ND	0.20	MCG/L	GC3F:7 8/20/96
2,4,5-TP (SILVEX) (TCLP)	SW-846 METHOD	8150	ND	0.20	MCG/L	GC3F:7 8/20/96
ACID DIGESTION ON TCLP EXTRACT	TSW-846 METHOD	3010	COMPLETED			D-21:19 8/21/96
MERCURY PREPARATION - TCLP	SW-846 METHOD	7471	COMPLETED			D-21:17 8/20/96
ARSENIC, BY TCLP	SW-846 METHOD	6010	ND	0.010	MG/L	F-4:123 8/22/96
BARIUM, BY TCLP	SW-846 METHOD	6010	0.15	0.050	MG/L	F-4:123 8/22/96
CADMIUM, BY TCLP	SW-846 METHOD	6010	ND	0.005	MG/L	F-4:123 8/22/96
CHROMIUM, BY TCLP	SW-846 METHOD	6010	ND	0.010	MG/L	F-4:123 8/22/96
LEAD, BY TCLP	SW-846 METHOD	6010	ND	0.37	MG/L	F-4:123 8/22/96
MERCURY, BY TCLP	SW-846 METHOD	7471	ND	0.0002	MG/L	E-4:107 8/21/96
SELENIUM, BY TCLP	SW-846 METHOD	6010	ND	0.050	MG/L	F-4:123 8/22/96
SILVER, BY TCLP	SW-846 METHOD	6010	ND	0.010	MG/L	F-4:123 8/22/96

REMARKS:

J. U

OHAN Remodiation Services Corp.

CHAIN-OF-CUSTODY RECORD

LP43083

Form 0019
Field Technical Services
Rev. 08/89

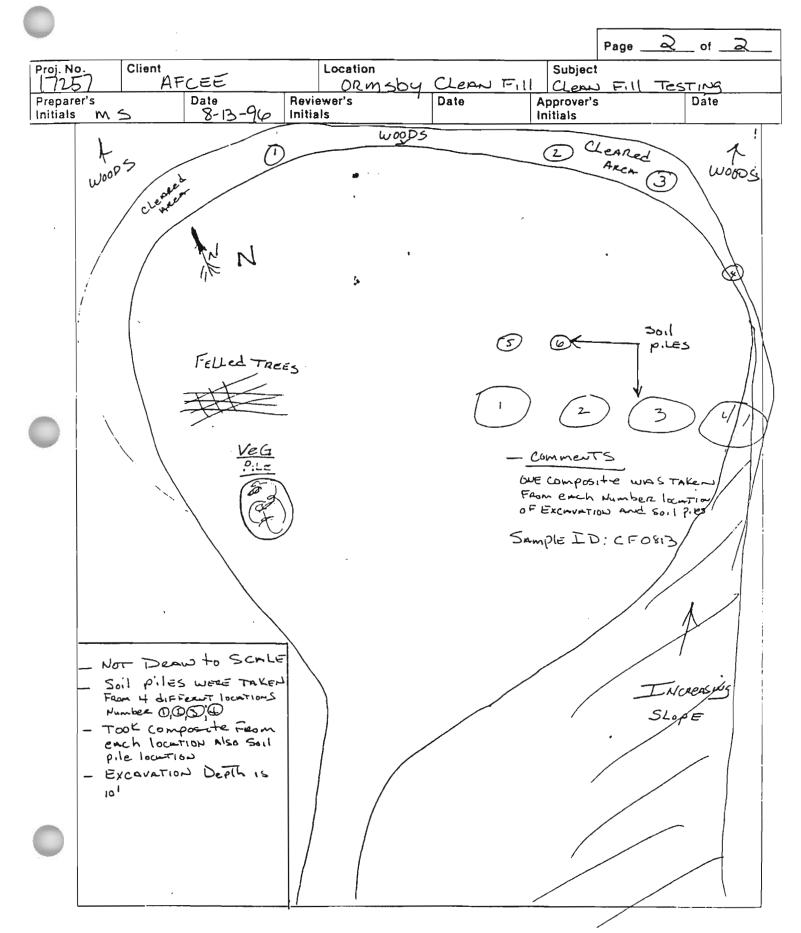
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O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526																
O.H. MATERIALS CORP. P.O. BOX 551 FINDLAY, OH 45839-0551 PROJECT NAME PROJECT LOCATION PROJECT LOCATION PROJECT LOCATION PROJECT TELEPHONE NO (518) 562-3923 CLIENT'S REPRESENTATIVE PROJECT MANAGER/SUPERIVISOR Kein Kukkonen									ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)							
TEM NO	SAMPLE NUMBER	DATE	THAE	CON	GRAB	,	SAMPLE DESCRIPTION INCLUDE MATRIX AND POINT OF SAMPLE)	Q				//	//	//		REMARKS
	F-813	8/13	0900	X		G	iklen Sancl	IXIL								
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3	· · · · · · · · · · · · · · · · · · ·															
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Soil Sample Collection Log Plattsburgh AFB - Project # 17257/17499

Date: \$-/	3-9%			Site: ORM	1569	Clep:	F1/1		Pg. 1 of 2
Weather:	Surry	,		Samplers:	m.Le	. SCA	DE		
Sample		PID Screen	Comp/ Grab	Sample Depth (ft)		dinates Ref. Pt.	San Descr	nple ription	# of Bottles
CF - 8K	3 9.10		0	6			SAND	C!(24~)	1×1L
								_	
		-		<u> </u>					
					<u> </u>	1-			
		-		-					
		-							
Map Attached	:(Yes	No		ינו	_				
	-Reference			Yes'	No				
•	-Head Spa	ice Readin	igs:	Yes (No.,				
Sample Type:	Screening	Confirma	ation	Disposal/C	haracteriz	ation			
Requested An	alysis:	VOCS		SWOCs) _{k,k}	Other:			
Split sample C	Collected:	Yes (No		164				
Laboratory De	stination:		COC #_			Airbill #_			
	Duplicate (Collected:	Yes	No	Rinsate	Collected:	Yes	No	
		On-Site	Laborato	ory Chain of C	Custody /	Request fo	or Analysis	/ , .	D 61/
Requested Ar	nalysis: , , ,	1/NOGs	1. 11	SVOCs	Cooler 1	Temperatu	ге:	MASS	1gw y
Relinquished 1	by (dd/tt):	16 al	Sta	ll	_Receive	d by (dd/tt):		
	/ /		•	8-13-91				8/1	7/96 9



COMPUTATION SHEET



Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17499

Site: Christian Sand Pit, Peru, NY

Date: 08/01/96

Sample Collection:

- -A composite sample (CFCP-1) was collected from the Christian Sand Pit in Peru, NY on 07/25/96. The sand from the pit was used for backfill material at many of the sites throughout the base. The sample was collected to confirm that the material is free of contaminants.
- -A map of the pit and the sample locations is included with this report.

On-Site Analysis:

-No samples were analyzed on-site.

Off-Site Analysis:

- -The sample CFCP-1 was shipped to CTM Laboratories in Latham, NY for a full TCLP analysis. The analysis results are included with this report.
- -The sample results were compared to the Hazardous Waste Regulatory Levels for Toxicity Characteristic. None of the constituents of concern, if detected, exceeded the regulatory levels. A copy of the regulatory levels is included with this report.

15 Century Hill Drive PO. Box 727 Latham, NY 12110 518-786-7100 FAX 518-786-7139



Laboratory Analysis Report
Prepared for: OHM REMEDIATION SERVICES CORP
CTM Project Number: 9913642

CTM Task Number: 960729A 01 AUG 1996

IMPORTANT - PLEASE NOTE

- 1. All results are calculated on a dry weight basis unless otherwise specified.
- 2. PQL = Practical Quantitation Limit.
- 3. A result with a "D" means that the result was "Detected" below the Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).
- 4. ND = Not Detected at or above the PQL.
- 5. NTP = Non-target peaks (1-5 peaks). MNTP = Many non-target peaks (5+ peaks).
- 6. pH results not performed in the field should be considered estimated since the holding time is 15 minutes from the sampling time.
- 7. If the samples are collected independently of our laboratory, CTM is not responsible for the possible contamination during the sampling procedure.
- 8. Methylene chloride and acetone are common laboratory artifacts for volatile organic analysis. Bis-(2-ethyl-hexyl) phthalate and di-n-butylphthalate are common laboratory artifacts for GC/MS semivolatile analysis. Other compounds may also appear as laboratory artifacts for the organic analyses. The above compounds will be flagged as suspected laboratory artifacts if the detected value is less than five (5) times of the POL in the sample. Acetone will be flagged as a suspected laboratory artifact only up to two and a half (2.5) times of the PQL.
- 9. If air samples are collected independently of our laboratory, CTM is not responsible for inadequate sample volume for air analysis.

AUTHORIZED FOR RELEASE: Christinalia Hess

DATE: 8/1/96

CERTIFICATIONS:

NYS E.L.A.P. ID NO: 10358

MA: NY052

CT: PH-0551

NJ: 73581

15 Century Hill Drive PO. Box 727 Latham, NY 12110 518-786-7100 FAX 518-786-7139

OHM REMEDIATION SERVICES CORP P.O.BOX 2202 PLATTSBURGH NY 12901

Attention: MR. GREG GUIMOND

Purchase Order Number: 1024783

Date Sampled: 07/25/96 Time: 15:20

Sampled By: JONES
Sample Id: CFCP-1

Location : PLATTSBURGH, NEW YORK

GC/MS GC ICAP Sampling Services

CTM PROJECT #: 9913642

CTM Task #: 960729A

CTM Sample No: 960729A 01
Date Received: 07/27/96
Collection Method: COMPOSITE

Matrix: SOIL

Parameters and Standard Method	dology Used	Results	PQL	Unit	Analyst Referenc
TCLP-ZERO HEADSPACE EXTRACTION	NSW-846 METHOD 1311	COMPLETED			00 7/28/96
TCLP VOLATILES	SW-846 METHOD 8240	COMPLETED			GCMSCD:86 7/30/96
PURGE & TRAP EXTRACTION	SW-846 METHOD 5030	COMPLETED			GCMSCD:86 7/30/96
BENZENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:86 7/30/96
CARBON TETRACHLORIDE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:86 7/30/96
CHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:86 7/30/96
CHLOROFORM (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:86 7/30/96
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:86 7/30/96
1,2-DICHLOROETHANE (TCLP)	SW-846 METHOD 8240	DИ	5	MCG/L	GCMSCD:86 7/30/96
1,1-DICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	5 .	MCG/L	GCMSCD:86 7/30/96
METHYL ETHYL KETONE (TCLP)	SW-846 METHOD 8240	מא	10	MCG/L	GCMSCD:86 7/30/96
TETRACHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:86 7/30/96
TRICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ИD	5	MCG/L	GCMSCD:86 7/30/96
VINYL CHLORIDE (TCLP)	SW-846 METHOD 8240	ND	10	MCG/L	GCMSCD:86 7/30/96
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED			D-20:145 7/28/96
TCLP ACID EXTRACTABLES	SW-846 METHOD 8270	COMPLETED			GCMSB:106 7/30/96
EXTRACTION FOR TCLP ACID/EXT.	SW-846 METHOD 8270	COMPLETED			00 7/29/96
O-CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	20	MCG/L	GCMSB:106 7/30/96
PENTACHLOROPHENOL (TCLP)	SW-646 METHOD 6270 ACID FRACTION	ND .	100	MCG/L	GCMSB:106 7/30/96
2,4,5-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	100	MCG/L	GCMSB:106 7/30/96
2,4,6-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ИD	20	MCG/L	GCMSB:106 7/30/96
M & P CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ДИ	40	MCG/L	GCMSB:106 7/30/96
TCLP BASE/NEUTRALS	SW-846 METHOD 8270 BASE/NEUTRALS	COMPLETED			GCMSB:106 7/30/96
EXTRACTION FOR TCLP B/N	SW-846 METHOD 8270	COMPLETED			00 7/29/96
HEXACHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ОМ	20	MCG/L	GCMSB:106 7/30/96
HEXACHLOROBUTADIENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMS8:106 7/30/96
DABIDINE (LCFb)	SW-846 METHOD 8270 BASE/NEUTRALS	ָםא	20	MCG/L	GCMSB:106 7/30/96
2,4-DINITROTOLUENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:106 7/30/96
HEXACHLOROETHANE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:106 7/30/96
NITROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:106 7/30/96
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:106 7/30/96
TCLP PESTICIDES/HERBICIDES	SW-846 METHODS 8080/8150	COMPLETED			DO 7/30/96

(CONTINUES ON NEXT PAGE)

REMARKS:

15 Century Hill Drive P.O. Box 727 Latham, NY 12110 518-786-7100 FAX 518-786-7139 GC/MS GC ICAP Sampling Services

OHM REMEDIATION SERVICES CORP

P.O.BOX 2202

PLATTSBURGH

NY 12901

Attention: MR. GREG GUIMOND

Purchase Order Number: 1024783
Date Sampled: 07/25/96 Time: 15:20

Sampled By : JONES Sample Id: CFCP-1

Location : PLATTSBURGH, NEW YORK

CTM PROJECT #: 9913642

CTM Task #: 960729A

CTM Sample No: 960729A 01
Date Received: 07/27/96

Collection Method: COMPOSITE

Matrix: SOIL

Parameters and Standard Method	dology U	sed		Results	POL	<u>Unit</u>	Analyst Refere
	(CONT	INUED F	FROM PREVIOUS PAGE)				
EXTRACTION FOR TCLP PESTICIDE	SW-846	METHOD	8080	COMPLETED			00 7/29/96
CHLORDANE (TCLP)	SW-846	METHOD	8080	ND	2.0	MCG/L	GC8D:79 7/30/96
ENDRIN (TCLP)	SW-846	METHOD	8080	DИ	0.20	MCG/L	GC80:79 7/30/96
HEPTACHLOR (TCLP)	SW-846	METHOD	8080	DИ	0.20	MCG/L	GC80:79 7/30/96
HEPTACHLOR EPOXIDE (TCLP)	SW-846	METHOD	8080	ND	0.20	MCG/L	GC8D:79 7/30/96
LINDANE (TCLP)	SW-846	METHOD	8080	ND	0.20	MCG/L	GC8D:79 7/30/96
METHOXYCHLOR (TCLP)	SW-846	METHOD	8080	ND	0.20	MCG/L	GC8D:79 7/30/96
TOXAPHENE (TCLP)	SW-846	DORTAM	8080	ND	4.0	MCG/L	GC8D:79 7/30/96
EXTRACTION FOR TCLP HERBICIDE	SW-846	METHOD	8150	COMPLETED			DO 7/29/96
2,4-D (TCLP)	SW-846	METHOD	8150	ND	0.20	MCG/L	GC8D:99 7/30/96
2,4,5-TP (SILVEX) (TCLP)	SW-846	METHOD	8150	ND	0.20	MCG/L	GC8D:99 7/30/96
ACID DIGESTION ON TCLP EXTRACT	rsw-846	METHOD	3010	COMPLETED			D-20:148 7/30/9
MERCURY PREPARATION - TCLP	SW-846	METHOD	7471	COMPLETED			D-20:147 7/29/9
ARSENIC, BY TCLP	SW-846	METHOD	6010	ND	0.010	MG/L	F-4:106 7/31/96
BARIUM, BY TCLP	SW-846	METHOD	6010	0.55	0.30	MG/L	F-4:106 7/31/96
CADMIUM, BY TCLP	SW-846	METHOD	6010	ND	0.005	MG/L	F-4:106 7/31/96
CHROMIUM, BY TCLP	SW-846	METHOD	6010	ND	0.010	MG/L	F-4:106 7/31/96
LEAD, BY TOLP	sw-846	METHOD	6010	ON	0.010	MG/L	F-4:106 7/31/96
MERCURY, BY TCLP	SW-846	METHOD	7471	ND	0.0002	MG/L	E-4:96 7/30/96
SELENIUM, BY TCLP	SW-846	METHOD	6010	ND	0.050	MG/L	F-4:106 7/31/96
SILVER, BY TCLP	SW-846	METHOD	6010	ND	0.010	MG/L	F-4:106 7/31/96
•							

REMARKS:



CHAIN-OF-Cos (ODY RECORD

1601717

Form 0019

Field Technical Services
Rev. 08/0!

CTM PO. # 1024783 172363 O.H. MATERIALS CORP. P.O. BOX 551 • FINDLAY, OH 45839-0551 419-423-3526 PROJECT NAME PROJECT LOCATION ANALYSIS DESIRED Plattsburgh, NY DAFB INDICATE PROJECT CONTACT SEPARATE CLIENT'S REPRESENTATIVE PROJECT MANAGER/SUPERVISOR . CONTAINERS) Toe Szot Ken Kukkouon DATE TIME O SAMPLE DESCRIPTION (INCLUDE MATRIX ALD POINT OF SAMPLE SAMPLE NUMBER REMARKS 7.25 1520 X Tan Sand from CFCP-1 1:12 96 Christian Pit (Clea Fill) 10 REMARKS -Preserved at 4°C ITEM **TRANSFERS** TRAN FERS DATE TIME NUMBER **RELINQUISHED BY** ACCEP 'ED BY - Temp Blank Included (@1.7°C) - 5 day TAT en 3/27/46 7.26 1530 FCd Ex F 1 6111 #1= 12434101 13 7/27/4 11:11 4

Soil Sample Collection Log Plattsburgh AFB - Project # 17257/17499

Date: 7-25-96

Weather: PIC 750

Sile: CLEAN FILL CHRISTIAN PIT

Samplers: MJ, MJ

Pg. 1 of 2

Sample ID	Time	PID Screen	Comp/ Grab	Sample Depth (ft)	Coord Ref. Pt.		Sample Description	# of Bottles
CFCP-1	1520	72.	C	1.5-21			Tan Sand	1212
	,							
						-		
				1				

Map Allached: (Yes	No		•					
	-Reference -Head Spac		gs:	Yes (No No	-			
Sample Type:	Screening	Confirma	ition	DisposalCh	nairacteriza	ation			,
Requested Analy	ysis:	VOCs		SVOCs		Other:	FULLI	CLP	
Split sample Coll	ected:	Yes	No						
Laboratory Desti	nation:	۸	COC#_	172263	3	Airbill # _			
	Duplicate C	ollected:	Yes (No	Rinsate (Collected:	Yes	No	
·		On-Site	Laborato	ry Chain of C	ustody / F	Request fo	or Analysis		
Requested Analy	ysis:	VOCs		SVOCs	Cooler T	emperatu	re:		
Relinquished by	(dd/tt):				Received	d by (dd/tt):		



COMPUTATION SHEET

 $\frac{2}{2}$ of $\frac{2}{2}$ Page _ Client Proj. No. Location Subject 17499/17257 CHRISTIAN PIT-CLEAN FICE TUP Surple Preparer's Initials MHJ Date 7-25-96 Approver's Date Date Reviewer's Initials Initials COVERED 201 WITH VEG. VeG. PILE COVERED , WI VEG. ROAD TO ANOTHER PIT EXIT ROAD - Not drawn to scale 3-denotes vegitation Pit doesn't seem to have been used in some time. No trash or staining

Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17499

Site: Ormsby Sand Mine, Peru, NY

Date: 07/30/96

Sample Collection:

- -A composite sample (CF-719) was collected from the Ormsby Sand Mine in Peru, NY on 07/19/96. The sand from the pit was used for backfill material at many of the sites throughout the base. The sample was collected to confirm that the material is free of contaminants.
- -A map of the pit and the sample locations is included with this report.

On-Site Analysis:

-No samples were analyzed on-site.

Off-Site Analysis:

- -The sample CF-719 was shipped to CTM Laboratories in Latham, NY for a full TCLP analysis. The analysis results are included with this report.
- -The sample results were compared to the Hazardous Waste Regulatory Levels for Toxicity Characteristic. None of the constituents of concern, if detected, exceeded the regulatory levels. A copy of the regulatory levels is included with this report.

15 Century Hill Drive PO. Box 727 Latham, NY 12110 518-786-7100 FAX 518-786-7139



Laboratory Analysis Report
Prepared for: OHM REMEDIATION SERVICES CORP
CTM Project Number: 9913642
CTM Task Number: 960723H
02 AUG 1996

IMPORTANT - PLEASE NOTE

- 1. All results are calculated on a dry weight basis unless otherwise specified.
- 2. PQL = Practical Quantitation Limit.
- 3. A result with a "D" means that the result was "Detected" below the Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).
- 4. ND = Not Detected at or above the PQL.
- 5. NTP = Non-target peaks (1-5 peaks). MNTP = Many non-target peaks (5+ peaks).
- 6. pH results not performed in the field should be considered estimated since the holding time is 15 minutes from the sampling time.
- 7. If the samples are collected independently of our laboratory, CTM is not responsible for the possible contamination during the sampling procedure.
- 8. Methylene chloride and acetone are common laboratory artifacts for volatile organic analysis. Bis-(2-ethyl-hexyl) phthalate and di-n-butylphthalate are common laboratory artifacts for GC/MS semivolatile analysis. Other compounds may also appear as laboratory artifacts for the organic analyses. The above compounds will be flagged as suspected laboratory artifacts if the detected value is less than five (5) times of the PQL in the sample. Acetone will be flagged as a suspected laboratory artifact only up to two and a half (2.5) times of the PQL.
- 9. If air samples are collected independently of our laboratory, CTM is not responsible for inadequate sample volume for air analysis.

AUTHORIZED FOR RELEASE: Checkeyster Hers

DATE: 8/2/96

CERTIFICATIONS: NYS E.L.A.P. ID NO: 10358

MA: NY052

CT: PH-0551

NJ: 73581

15 Century Hill Drive P.O. Box 727 Lalham, NY 12110 18-786-7100 FAX 518-786-7139

11

OHM REMEDIATION SERVICES CORP

P.O.BOX 2202

PLATTSBURGH

NY 12901

Attention: MR. GREG GUIMOND

Purchase Order Number:

Date Sampled: 07/19/96 Time: 11:50

Sampled By: JONES Sample Id: CF-719

Location : PLATTSBURGH, NEW YORK

GC/MS GC ICAP Sampling Services

CTM PROJECT #: 9913642

CTM Task #: 960723H

CTM Sample No: 960723H 01
Date Received: 07/23/96
Collection Method: COMPOSITE

Matrix: SOIL

Parameters and Standard Metho	dology Used	Results	PQL	Unit	Analyst Reference
TCLP-ZERO HEADSPACE EXTRACTIO	NSW-846 METHOD 1311	COMPLETED			DO 7/24/96
TCLP VOLATILES	SW-846 METHOD 8240	COMPLETED			
PURGE & TRAP EXTRACTION	SW-846 METHOD 5030	COMPLETED			
BENZENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:85 7/29/96
CARBON TETRACHLORIDE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:85 7/29/96
CHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:85 7/29/96
CHLOROFORM (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:85 7/29/96
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:85 7/29/96
1,2-DICHLOROETHANE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:85 7/29/96
1,1-DICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GČMSCD:85 7/29/96
METHYL ETHYL KETONE (TCLP)	SW-846 METHOD 8240	ND	10	MCG/L	GCMSCD:85 7/29/96
TETRACHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:85 7/29/96
TRICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	5	MCG/L	GCMSCD:85 7/29/96
VINYL CHLORIDE (TCLP)	SW-846 METHOD 8240	ND	10	MCG/L	GCMSCD:85 7/29/96
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED			D-20:140 7/23/96
TCLP ACID EXTRACTABLES	SW-846 METHOD 8270	COMPLETED			
EXTRACTION FOR TCLP ACID/EXT.	SW-846 METHOD 8270	COMPLETED			DO 7/25/96
O-CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	20	MCG/L	GCMSB:105 7/29/96
PENTACHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	100	MCG/L	GCMSB:105 7/29/96
2,4,5-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	NO	100	MCG/L	GCMSB:105 7/29/95
2,4,6-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	20	MCG/L	GCMSB:105 7/29/96
M & P CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	40	MCG/L	GCMSB: 105 7/29/96
TCLP BASE/NEUTRALS	SW-846 METHOD 8270 BASE/NEUTRALS	COMPLETED			
EXTRACTION FOR TCLP B/N	SW-846 METHOD 8270	COMPLETED			DO 7/25/96
HEXACHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:105 7/29/96
HEXACHLOROBUTADIENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	· NO	20	MCG/L	GCMSB:105 7/29/96
PYRIDINE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:105 7/29/96
2,4-DINITROTOLUENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:105 7/29/96
HEXACHLOROETHANE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:105 7/29/96
NITROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:105 7/29/96
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	GCMSB:105 7/29/96
TCLP PESTICIDES/HERBICIDES	SW-846 METHODS 8080/8150	COMPLETED			DO 7/30/96

(CONTINUES ON NEXT PAGE)

REMARKS:

15 Century Hill Drive P.O. Box 727 Latham, NY 12110 i18-786-7100 FAX 518-786-7139

OHM REMEDIATION SERVICES CORP

P.O.80X 2202

PLATTSBURGH

NY 12901

Attention: MR. GREG GUIMOND

Purchase Order Number:

Date Sampled: 07/19/96 Time: 11:50

Sampled By: JONES Sample Id: CF-719

Location : PLATTSBURGH, NEW YORK

GC/MS GC ICAP Sampling Services

CTM PROJECT #: 9913642

CTM Task #: 960723H

CTM Sample No: 960723H 01 Date Received: 07/23/96 Collection Method: COMPOSITE

Matrix: SOIL

	Parameters and Standard Method	dology Used		Results_	PQL	Unit	Analyst Reference
		(CONTINUED F	ROM PREVIOUS PAGE)				
	EXTRACTION FOR TCLP PESTICIDE	SW-846 METHOD	8080	COMPLETED			DO 7/24/96
	CHLORDANE (TCLP)	SW-846 METHOD	8080	ND	2.0	MCG/L	GC8D:78 7/27/95
	ENDRIN (TCLP)	SW-846 METHOD	8080	ND	0.20	MCG/L	GC8D:78 7/27/96
	HEPTACHLOR (TCLP)	SW-846 METHOD	8080	ND	0.20	MCG/L	GC8D:78 7/27/96
	HEPTACHLOR EPOXIDE (TCLP)	SW-846 METHOD	8080	ND	0.20	MCG/L	GC8D:78 7/27/96
	LINDANE (TCLP)	SW-846 METHOD	8080	ND	0.20	MCG/L	GC8D:78 7/27/96
h.	METHOXYCHLOR (TCLP)	SW-846 METHOD	8080	ND	0.20	MCG/L	GC8D:78 7/27/96
	TOXAPHENE (TCLP)	SW-846 METHOD	8080	ND	4.0	MCG/L	GC8D:78 7/27/96
	EXTRACTION FOR TCLP HERBICIDE	SW-846 METHOD	8150	COMPLETED			DO 7/28/96
	2,4-D (TCLP)	SW-846 METHOD	8150	ND	0.20	MCG/L	GC8D:79 7/30/96
	2,4,5-TP (SILVEX) (TCLP)	SW-846 METHOD	8150	ND	0.20	MCG/L	GC8D:79 7/30/96
	ACID DIGESTION ON TCLP EXTRACT	SW-846 METHOD	3010	COMPLETED			D-20:141 7/24/96
	MERCURY PREPARATION - TCLP	SW-846 METHOD	7471	COMPLETED			D-20:143 7/24/96
	ARSENIC, BY TCLP	SW-846 METHOD	6010	ND	0.010	MG/L	F-4:104 7/25/96
	BARIUM, BY TCLP	SW-846 METHOD	6010	0.50	0.26	MG/L	F-4:104 7/25/96
	CADMIUM, BY TCLP	SW-846 METHOD	6010	0.008	0.005	MG/L	F-4:104 7/25/96
	CHROMIUM, BY TCLP	SW-846 METHOD	6010	ND	0.010	MG/L	F-4:104 7/25/96
	LEAD, BY TCLP	SW-846 METHOD	6010	0.32	0.010	MG/L	F-4:104 7/25/96
	MERCURY, BY TCLP .	SW-846 METHOD	7471	ND	0.0002	MG/L	E-4:94 7/25/96
	SELENIUM, BY TCLP	SW-846 METHOD	6010	ND	0.050	MG/L	F-4:104 7/25/96
	SILVER, BY TCLP	SW-846 METHOD	6010	ND	0.010	MG/L	F-4:104 7/25/96

REMARKS:

LEGEND: MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM



CHAIN-OF-CUSTODY RECORD

Field Technical Services
Rev. 06/86

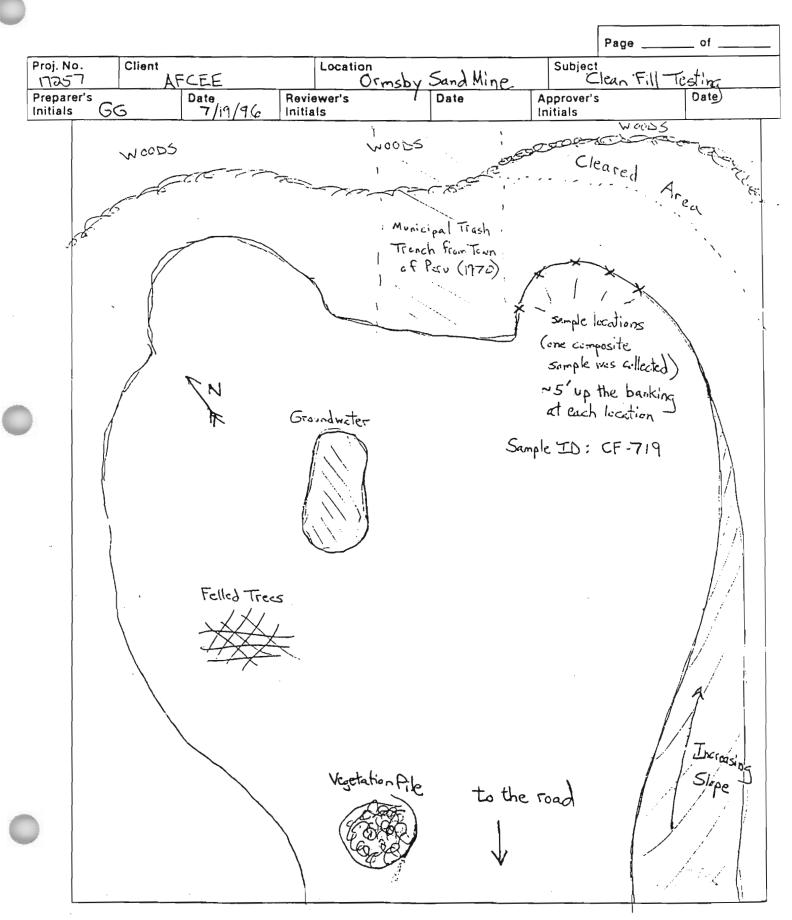
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Soil Sample Collection Log Plattsburgh AFB - Project # 17257/17499

Date: 7-14-96			Site: Pen	Clean	- Eill			Pg. <u>\</u> of
Wealher: اتاریولیم	175		Samplers: A					
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	120 120	ے ا	2'	Net. Pt.	ı İ			1213
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	eference Points:		Yes (20				
	ead Space Readi	ngs:	Yes (No				
			_					
Sample Type: `Sc	reening Confirm	ation	Disposal/Cl	naracteriz	ation			•
Requested Analysis:	VOCs		SVOCs		Other: F	- rele	TUP	
Split sample Collecte	ed: Yes (No						
Laboratory Destinati	on:	COC#_			Airbill #			
Du	plicate Collected	Yes (No	Rinsate	- Collected:		No	
	On-Site	Laborato	ry Chain of C	Sustody / I	Request fo	or Analysis		-
Requested Analysis:	VOCs		SVOCs	Cooler T	emperatu	re:	: 	
Relinquished by (dd/	/tt):			Received	d by (dd/tt)):		



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Soil Sample Collection Log Plattsburgh AFB - Project # 17257/17499

Pg. 1 of Z

Date: 6,125191	ع			Site: Morri	-slavingh Istaville	Quari,	es/	Pg. 1 of Z
Weather: Rain	1650			Samplers:		230		
Sample ID	Time	PID Screen	Comp/ Grab	Sample Depth (ft)	Coord Ref. Pt.		Sample Description	# of Bottles
AXXXX (17-01	1135		<u>C</u> _	1.5-2'			Gold Brown Sant	1412
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Map Attached: (Y	es	No						
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-}	Head Space	e Reading	js:	Yes (No)			
Sample Type: 8	creening	Confirma	ion	Disposal/Ch	aracteriza	ation Cl	ean Fill Screening	
Requested Analysi	s:	VOCs		SVOCs		Other:	Full TCLP	
Split sample Collec	ted:	Yes M	No		•			
Laboratory Destina				17223	3	Airbill # _	N/A	
D	ouplicate Co	ollected:	Yes (No	Rinsate C	Collected:	Yes No	
		On-Site l	aborator	y Chain of C	ustody / F	Request fo	or Analysis	
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CHAIN-OF-CUSTODY RECORD



TRANSFER 1

Form 0019 Field Technical Services Rev. 08/89

72233

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ITEM NO.	SAMPLE NUMBER		TIME	СОМР	GRAB	(SAMPLE DESCRIPTION INCLUDE MATRIX AND POINT OF SAMPLE)	.	o				/	//	/	/	REMARKS	
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CHAIN-OF-CUSTODY RECORD

Form 0019
Field Technical Services
Rev. 08/89

172233

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ITEM NO.	SAMPLE NUMBER		TIME	COMP	GRAB		SAMPLE DE (INCLUDE I POINT OI	ESCRIPTION MATRIX AND SAMPLE)		OF			<u> </u>	<u> </u>	//				R	EMARKS	
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David Bushey, Champlein Laboratory Re: Full TCLP (Soil, Fastest TAT)

- Please Fax the results to us ASAP. You can give our fax # to the sub-contracted lab if that would be faster.

FAX: 562-5435

For billing purposes you can mail the invoice to Dave Voiat OHM Corp. / PAFB P.O. Box 2262 Platsburgh, NY 12901-0268

or you can mail the invoice to me with the hard copy of the results at the same address (Grea Guimond).

If you have any questions please call Tel. 562-3923

Thanks,

Arey Auros

Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17499

Site: Ormsby Sand Mine, Peru, NY

Date: 06/10/96

Sample Collection:

- -A composite sample (CF-002A) was collected from the Ormsby Sand Mine in Peru, NY on 06/04/96. The sand from the pit was used for backfill material at many of the sites throughout the base. The sample was collected to confirm that the material is free of contaminants.
- -A map of the pit and the sample locations is included with this report.

On-Site Analysis:

-No samples were analyzed on-site.

Off-Site Analysis:

- -The sample CF-002A was shipped to OHM Analytical Division (OHMAD) in Findlay, OH for a full TCLP analysis. The analysis results are included with this report.
- -The sample results were compared to the Hazardous Waste Regulatory Levels for Toxicity Characteristic. None of the constituents of concern, if detected, exceeded the regulatory levels. A copy of the regulatory levels is included with this report.

DATA SUMMARY REPORT

DATE: 06/10/96

PAGE: 1

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CF-002A ASC Sample Number: JP9050 Sample Date: 960604 Facility Code: 017257A

Parameters

Jnits

CV10 Wet Chemistry

Solids, Total

95.4

Sample Point ID: CF-002A ASC Sample Number: JP9050 Sample Date: 960604 Facility Code: 017257A

Parameters

Units

GS52 TCLP Leachate Herbicide

2,4-D mg/L <.250 2,4,5-TP (Silvex) mg/L <.250

> Sample Point ID: CF-002A ASC Sample Number: JP9050 Sample Date: 960604 Facility Code: 017257A

Parameters

Units

GS54 TCLP Leachate Pesticide

Chlordane Endrin Heptachlor Heptachlor epoxide Gamma-BHC (Lindane)	mg/L mg/L mg/L mg/L	<.020 <.002 <.002 <.002 <.002
Methoxychlor Toxaphene	ig/L	< .002 < .040



DATE: 06/10/96

PAGE: 2

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CF-002A ASC Sample Number: JP9050

Sample Data: 960604 Facility Code: 017257A

Parameters

Units

ME52 TCLP Leachate Metals

Arsenic	mg/L	< .100
Barium	mg/L	.660
Cadmium	mg/L	< .005
Chromium	mg/L	< .020
Lead	mg/L	< .100
Mercury Selenium Silver	mg/L mg/L mg/L	<.0001 <.100 <.020

Sample Point ID: CF-002A ASC Sample Number: JP9050

Sample Date: 960604 Facility Code: 017257A

Parameters

Units

MSS2 OCMS TCLP Leachate BNA

2,4-Dinitrotoluene Hexachlorobenzene Hexachloroethane Hexachlorobutadiene 2-Methylphenol	mg/L mg/L mg/L mg/L	<.100 <.100 <.100 <.100 <.100 <.100
4-Methylphenol Nitrobenzene Pentachlorophenol Pyridine 2,4,5-Trichlorophenol	mg/L mg/L mg/L mg/L mg/L	<.100 <.100 <.100 <.100
2,4,6-Trichlorophenol	mg/L	< .100



DATE: 06/10/96

PAGE: 3

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CF-002A ASC Sample Number: JP9050 Sample Date: 960604 Facility Code: 017257A

Parameters

Units

NV50 ZHE Leachate Volatiles

Benzene 2-Butanone Carbon tetrachloride Chlorobenzene Chloroform	mg/L mg/L mg/L mg/L mg/L	<.125 .125</.125</.125</.125</.125</th
1,4-Dichlorobenzene 1,2-Dichloroethane 1,1-Dichloroethene Tetrachloroethene Trichloroethene	mg/L mg/L mg/L mg/L mg/L	<.125 .125</.125</.125</.125</.125</td
Vinyl chloride	mg/L	<.125



CHAIN-OF-CUSTODY RECORD

Field Technical Services, Rev. 08/89

LP 42685

174046

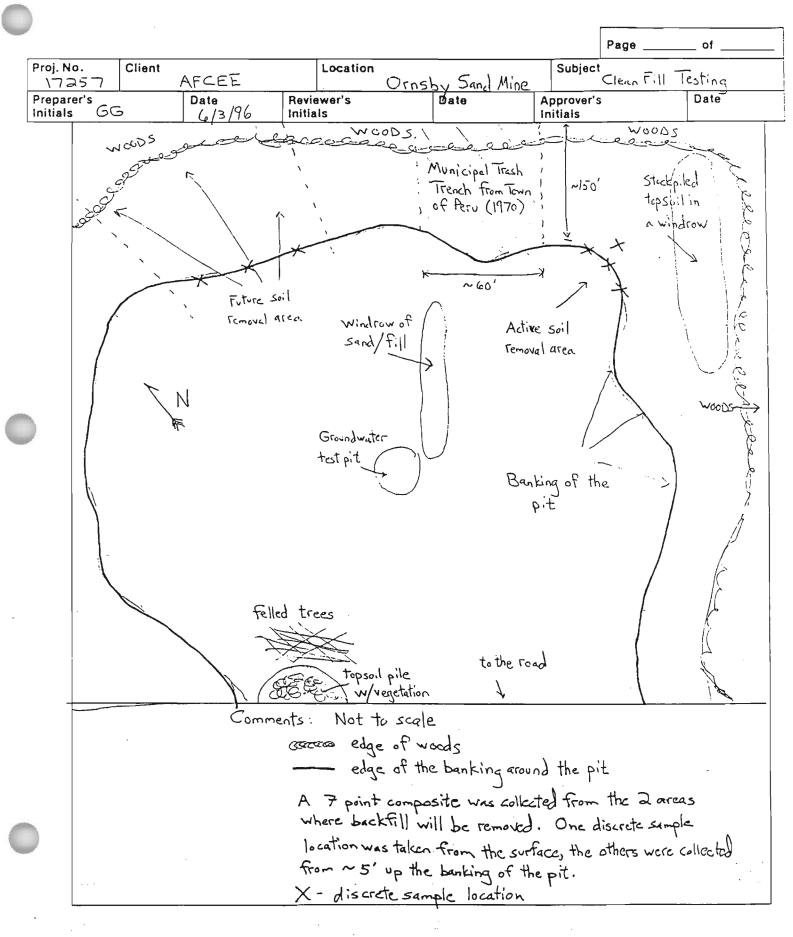
O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526												3.1								
	PROJECT LOCATION OF ALL A CO.												ואו עפ	IS DE	CIDET		7		////////	. N . r
Platisburgh AFB Platisburgh NY PROJ. NO. PROJECT CONTACT PROJECT TELEPHONE NO.										_د ا		DICATE	Ε	SINCL	/	//	/,	//////	ride.	
17257 Greg Guimon (518) 562-3923 CLIENT'S REPRESENTATIVE D PROJECT MANAGER/SUPERVISOR										123	NUMBER CONTAINERS	CO	TARATI MIATU		/	//	/,	/,		1.00
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Soil Sample Collection Log Plattsburgh AFB - Project # 17257/17499

Date: (0/4/	196			Site: Orm	sby Sar	d Mine P	Pro, NY		Pgof
Weather: Cle	ar, 75'F			Samplers:	•	,			Ĭ.
Sample ID	Time	PID Screen	Comp/ Grab	Sample Depth (ft)	1	dinates Ref. Pt.	Sam Descr	nple ription	# of Bottle
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Map Attached:	Yes)	No							
	-Referenc -Head Spa	e Points:	ngs:	Yes Yes	No				
Sample Type:	Screening	Confirm	nation	Disposal	haracter	ization			
Requested Anal	lysis:	VOCs		SVOCs		Other:	Full -	TCLP	
Split sample Co	llected:	Yes	No						
Laboratory Dest	lination: 0	MAD	COC#	1740	46	_ Airbill # _	136205	56430	^
	Duplicate	Collected	: Yes	No	Rinsate	e Collected:	Yes	NO	
Requested Ana	lveie-	On-Sit	e Laboral	ory Chain of	·	/ Request fo		:	
Relinguished by	-	H HIVE		6/4/96		remperatured by (dd/tt)			

OHM Remediation Services Corp.

COMPUTATION SHEET



Sampling & Analysis Site Report On-Site Laboratory Plattsburgh AFB - Project #17499

Site: Ormsby Sand Mine, Peru, NY

Date: 12/05/95

Sample Collection:

- -A composite sample (CF-001) was collected from the Ormsby Sand Mine in Peru, NY on 11/29/96. The sand from the pit was used for backfill material at many of the sites throughout the base. The sample was collected to confirm that the material is free of contaminants.
- -A map of the pit and the sample locations is included with this report.

On-Site Analysis:

-No samples were analyzed on-site.

Off-Site Analysis:

- -The sample CF-001 was shipped to OHM Analytical Division (OHMAD) in Findlay, OH for a full TCLP analysis. The analysis results are included with this report.
- -The sample results were compared to the Hazardous Waste Regulatory Levels for Toxicity Characteristic. None of the constituents of concern, if detected, exceeded the regulatory levels. A copy of the regulatory levels is included with this report.

DATA SUMMARY REPORT

DATE: 12/05/95

PAGE: 1

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CF-001 ASC Sample Number: JP0872 Sample Date: 951129

Facility Code: 017499A

Parameters

Units

Conventional Data (CV10)

Solids, Total

8 93.1

Sample Point ID: CF-001 ASC Sample Number: JP0872 Sample Date: 951129 Facility Code: 017499A

Parameters

Units

RCRA TCLP Leachate Herbicide Analysis, GC, (GS52)

2,4-D 2,4,5-TP (Silvex) mg/L <.250 mg/L <.250

Sample Point ID: CF-001 ASC Sample Number: JP0872 Sample Date: 951129 Facility Code: 017499A

Parameters

Units

RCRA TCLP Leachate Pesticide Analysis, GC, (GS54)

Endrin	mg/L	<.002
Heptachlor	mg/L	<.002
Heptachlor epoxide	mg/L	<.002
Methoxychlor	mg/L	<.002
Gamma-BHC (Lindane)	mg/L	<.002
alpha-Chlordane	mg/L	< .002
gamma-Chlordane	mg/L	< .002



DATE: 12/05/95

PAGE: 2

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CF-001 ASC Sample Number: JP0872 Sample Date: 951129 Facility Code: 017499A

Parameters

Units

RCRA TCLP Leachate Metals Analysis, (ME52)

Arsenic	mg/L	<.100
Barium	mg/L	.411
Cadmium	mg/L	<.005
Chromium	mg/L	<.020
Lead	mg/L	<.100
Mercury	mg/L	<.0001
Selenium	mg/L	<.100
Silver	mg/L	<.020

Sample Point ID: CF-001 ASC Sample Number: JP0872 Sample Date: 951129 Facility Code: 017499A

Parameters

Units

RCRA TCLP Leachate Base/Neutral/Acid Analysis, Ms, (MS52)

2,4-Dinitrotoluene Hexachlorobenzene Hexachloroethane Hexachlorobutadiene 2-Methylphenol	mg/L mg/L mg/L mg/L	<.100 <.100 <.100 <.100 <.100
4-Methylphenol Nitrobenzene Pentachlorophenol Pyridine 2,4,5-Trichlorophenol	mg/L mg/L mg/L mg/L	<.100 <.100 <.100 <.100 <.100
2,4,6-Trichlorophenol	mg/L	< .100



DATE: 12/05/95

PAGE: 3

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CF-001 ASC Sample Number: JP0872 Sample Date: 951129 Facility Code: 017499A

Parameters

Units

RCRA TCLP Leachate (ZHE) Volatile Analysis, MS, (MV50)

Benzene Carbon tetrachloride Chlorobenzene Chloroform 1,4-Dichlorobenzene	mg/L mg/L mg/L mg/L	<.125 <.125 <.125 <.125 <.125 <.125
1,2-Dichloroethane 1,1-Dichloroethylene Methyl ethyl ketone Tetrachloroethylene Trichloroethylene	mg/L mg/L mg/L mg/L	<.125 .125</.125</.125</.125</.125</td
Vinyl chloride	mg/L	<.125



ITEM NO.

9

10

1

2

3

CHAIN-OF-CUSTODY RECORD

 Form 0019 Field Technical Services Rev. 08/89

161982 O.H. MATERIALS CORP. P.O. BOX 551 • FINDLAY, OH 45839-0551 419-423-3526 PROJECT LOCATION PROJECT NAME Platsburgh, NY ANALYSIS DESIRED PROJECT CONTACT (INDICATE NUMBER OF CONTAINERS PROJECT MANAGER/SUPERVISOR SEPARATE 17499 Matt Jones CONTAINERS) Mike Quinlen AFCOE GRAB SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE) SAMPLE NUMBER DATE | TIME REMARKS Clean Fill from Peru, NY 1212 11-29 95 1530 X 1 CF-001 2×40ml REMARKS - 3 day TAT - Temp Blank included TRANSFERS TRANSFERS ITEM ACCEPTED BY DATE TIME RELINQUISHED BY NUMBER Fed Ex Arbilt 11.29 1530 7588873246

Soil Sample Collection Log Plattsburgh AFB - Project # 17257/17499

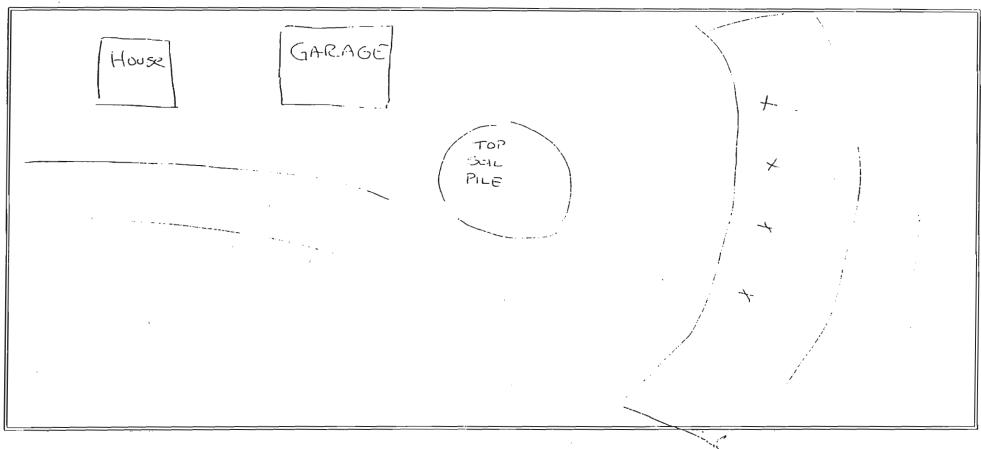
	Date: :1 (2°	1195			Site Name: Clean Fill - Read Ny								
	Weather:		(012		Samplers: LCJ								
	Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)		dinates Ref. Pt.	S	# of Bottles					
	(F-001	1530	C	0-6	NIA	بناب	Clean Fill		· or kyard	12126			
h	Ref. Pt: \(\mathcal{D}\) (A												
9	Ref. Pt: <u>P10</u>												
	Map Attach	ed: (Ý	es	No									
	Sample Typ	oe: S	Screenin	ıg C	onfirmati	on Dis	posal/Charact	erization					
	Split Sample	e _, Colle	cted:	Yes		Fed Ex							
	Laboratory	Destina	ation: _	ASC		coc#_	61982	Airbill #7	2888	73246			
	Duplicate Taken: Yes No Rinsate Taken: Yes No												
	On-site Laboratory Chain of Custody/Request for Analysis												
	Requested	Testing	g: VC)Cs	SVOCs	Other 1	-ull TCLP		_				
	Relinquishe	ed by(d	d/tt): <u></u> ∭	alther	Mer	~ 1540	Received by (dd/tt):					
	Relinquished by(dd/tt): Received by (dd/tt):												

Sample Location Map Plattsburgh AFB - Project #17257/17499

Date: 11/29/95

Site Name: Claur Fill Stockyard - Risk Ky

Pg. <u>Cof.</u> 2



Comments/Observations:

X - indicates unique sampling location for composite

- Samples taken 1.5-2' into soil pile

No visable stains or odors at soil pile

Prepared by: M. James

15 Century Hill Drive P.O. Box 727 Latham, NY 12110 518-786-7100 FAX 518-786-7139

OHM REMEDIATION SERVICES P.O. BOX 2202 NY 12901

PLATTSBURGH

Attention: MR. JACOB DUNNELL

Purchase Order Number: 102-33-18 Date Sampled: 05/23/96 Time: 09:50

Sampled By : GUIMOND

Sample Id: TS-1

Location : PLATTSBURGH, NEW YORK

Parameters and Standard Methodology Used

TCLP EXTRACTION SW-846 METHOD 1311 ACID DIGESTION ON TCLP EXTRACTSW-846 METHOD 3010 MERCURY PREPARATION - TCLP SW-846 METHOD 7471 ARSENIC, BY TCLP SW-846 METHOD 6010 BARIUM, BY TCLP SW-846 METHOD 6010 CADMIUM, BY TCLP SW-846 METHOD 6010 CHROMIUM, BY TCLP SW-846 METHOD 6010 SW-846 METHOD 6010 LEAD, BY TCLP MERCURY, BY TCLP SW-846 METHOD 7471 SELENIUM, BY TCLP SW-846 METHOD 6010 SILVER, BY TCLP SW-846 METHOD 6010

GC/MS GC ICAP Sampling Services

CTM PROJECT #: 96.06198

CTM Task #: 960524C

CTM Sample No: 960524C 05 Date Received: 05/24/96 Collection Method: COMPOSITE

Matrix: SOIL

	Results	PQL	<u>Unit</u>	Analyst Referen
CC	OMPLETED			D-20:71 5/28/96
C	OMPLETED			0-20:73 5/29/96
C	OMPLETED			D-20:75 5/30/96
	0.011	0.010	Mu/L	F-4:57 5/30/90
	1.4	0.50	MG/L	F-4:57 5/30/96
NC)	0.005	MG/L	F-4:57 5/30/96
NE		0.010	MG/L	F-4:57 5/30/96
	0.010	0.010	MG/L	F-4:57 5/30/96
NC)	0.0002	MG/L	E-4:65 5/31/96
NE		0.050	MG/L	F-4:57 5/30/96
N)	0.010	MG/L	F-4:59 5/31/96

REMARKS:

Soil Sample Collection Log Plattsburgh AFB - Project # 17257 17499

Pg.<u>l</u>of<u>2</u>

of

Bottles

: :

Sample

Description

Date: 05/23/96

Sample

<u>D</u>

Relinquished by (dd/tt):_

Site: Gonya Farm

Sample

Depth (ft)

Weather: clar, as

PID

Screen

Time

Comp/

Grab

Samplers: J. Dunnell, M. Quinlan

Coordinates

Ref. Pt. Ref. Pt.

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Ref. Pt :_ Ref. Pt :_	N/A					- -	
Map Attached:	Yes	No			- ·	· 	
Sample Type:	Screening	Confirm	nation	Disposal/C	Characterizatio	n other: TCLP Metal	٠ د
Split sample Co	lected:	Yes	No				
aboratory Dest	ination: <u> </u>	<u> </u>	COC#	172480	Air	rbill#_1362056950	
<u></u>	Duplicate (Collected	: Yes	(40)	Rinsate Coll	lected: Yes 🕠	
	-	On-Sit	e Laborat	ory Chain of	Custody / Req	uest for Analysis	
Requested Anal	ysis:	VOCs		SVOCs	Other		
i: Relinquished by	(dd/tt):				Received by	y (dd/tt):	

Received by (dd/tt):

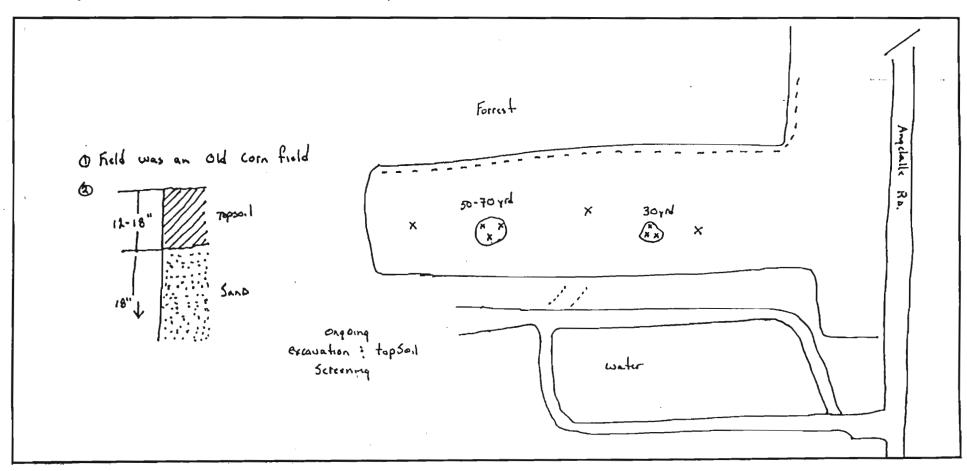
Sample Location Map

Plattsburgh Air Force Base - Project Numbers 17257 and 17499

Date: 05/13/96

Site Name: Gonya Farm

Page ___2 of _2_



Comments/Observations:

- Not to Scale

- 9 point composite, x denotes sample locations

--- - Drainage Swath surrounds entire field

Prepared by: J. Jume 1 7967



CHAIN-OF-CUSTODY RECORD

LP#42545

Form 00:19
Field Technical Services
Rev. 08/89

172480

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O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 •								41	9-423	3-352	6										
PROJECT NAME PROJECT LOCATION PROJECT LOCATION Rattaburgh, NY PROJECT TELEPHONE NO. 17499 Jacob Dansell PROJECT MANAGER/SUPERVISOR Kin Kukkonin PROJECT MANAGER/SUPERVISOR Kin Kukkonin							NUMBER	(INC SEP COM	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)												
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APPENDIX F METHOD DETECTION LIMITS



Method Detection Limits Volatile Organic Compounds Method SW846-8021 Plattsburgh AFB – D.O. 003 Soil and Aqueous Samples

Effective Date: The entire project

Compound	MDL (ug/L or ng/g)
MTBE	11.7
Benzene	0.73
Trichloroethylene	0.52
Toluene	1.06
Ethylbenzene	0.79
m,p-Xylene	. 1.93
o-Xylene	0.58

Note: The listed MDLs are based on a 5 gram soil sample or a 5 mL aqueous sample. Instrument detector response was used to determine if contaminant concentrations in the samples were above the MDLs. Therefore, comparison of sample concentrations to MDLs did not take into account slight variations in sample weight/volume.



Method Detection Limits Semivolatile Organic Compounds Method SW846-8270 modified Plattsburgh AFB – D.O. 003 Supercritical Fluid Extraction Soil Samples

Effective Dates: 12/01/95 through 06/30/96

Compound	MDL (ng/g)
Naphthalene	190
Acenaphthene	120
Fluorene	90
Phenanthrene	100
Anthracene	210
Fluoranthene	140
Pyrene	160
Benzo(a)anthracene	290
Chrysene	400
Benzo(k)fluoranthene	580
Benzo(b)fluoranthene	450
Benzo(a)pyrene	490
Indeno(1,2,3-cd)pyrene	520
Dibenz(a,h)anthracene	370
Benzo(g,h,i)perylene	400

Note: The listed MDLs are based on a 1.5 gram soil sample. Instrument detector response was used to determine if contaminant concentrations in the samples were above the MDLs. Therefore, comparison of sample concentrations to MDLs did not take into account slight variations in sample weight.



Method Detection Limits Semivolatile Organic Compounds Method SW846-8270 modified Plattsburgh AFB – D.O. 003 Sonication Soil Samples

Effective Dates: 07/01/96 through the end of the project

Compound	MDL (ng/g)
Naphthalene	126
Acenaphthene	70
Fluorene	76
Phenanthrene	44
Anthracene	46
Fluoranthene	60
Pyrene	. 54
Benzo(a)anthracene	48
Chrysene	49
Benzo(k)fluoranthene	44
Benzo(b)fluoranthene	32
Benzo(a)pyrene	43
Indeno(1,2,3-cd)pyrene	40
Dibenz(a,h)anthracene	43
Benzo(g,h,i)perylene	38

Note: The listed MDLs are based on a 5 gram soil sample. Instrument detector response was used to determine if contaminant concentrations in the samples were above the MDLs. Therefore, comparison of sample concentrations to MDLs did not take into account slight variations in sample weight.



Method Detection Limits Semivolatile Organic Compounds Method SW846-8270 modified Plattsburgh AFB - D.O. 003 Solid Phase Disc Extraction Aqueous Samples

Effective Dates: 12/01/95 through 03/12/96

Compound	MDL (ug/L)
Naphthalene	0.75
Acenaphthene	0.36
Fluorene	0.33
Phenanthrene	0.26
Anthracene	0.39
Fluoranthene	0.28
Pyrene	0.24
Benzo(a)anthracene	0.26
Chrysene	0.34
Benzo(k)fluoranthene	0.28
Benzo(b)fluoranthene	0.52
Benzo(a)pyrene	0.28
Indeno(1,2,3-cd)pyrene	0.41
Dibenz(a,h)anthracene	0.34
Benzo(g,h,i)perylene	0.24

Note: The listed MDLs are based on a sample volume of 1 liter. Instrument detector response was used to determine if contaminant concentrations in samples were above the MDLs. Therefore, comparison of sample concentrations to MDLs did not take into account slight variations in sample volume.



Method Detection Limits Semivolatile Organic Compounds Method SW846-8270 modified Plattsburgh AFB – D.O. 003 Separatory Funnel Extraction Aqueous Samples

Effective Dates: 03/13/96 through the end of the project

Compound	MDL (ug/L)
Naphthalene	0.88
Acenaphthalene	0.72
Fluorene	0.68
Phenanthrene	0.76
Anthracene	0.77
Fluoranthene	0.67
Pyrene	0.68
Benzo(a)anthracene	0.49
Chrysene	0.46
Benzo(k)fluoranthene	0.69
Benzo(b)fluoranthene	0.69
Benzo(a)pyrene	0.71
Indeno(1,2,3-cd)pyrene	0.60
Dibenz(a,h)anthracene	0.70
Benzo(g,h,i)perylene	0.55

Note: The listed MDLs are based on a sample volume of 1 liter. Instrument detector response was used to determine if contaminant concentrations in samples were above the MDLs. Therefore, comparison of sample concentrations to MDLs did not take into account slight variations in sample volume.