

# Memorandum

SUPERFUND RECORDS CTR	_____
Site:	<u>Eastern Surplus OUI</u>
Break:	<u>2.2</u>
Other:	<u>4676</u>

To: Ed Hathaway, EPA  
Rick Leighton, EPA  
Gordon Bullard, Tetra Tech NUS

From: Scott Acone, (978) 318-8162

Date: March 11, 1999

Re: Eastern Surplus Superfund Site, Meddybemps, Maine



SDMS DocID 4676

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Attached for you information is the Draft Completion Report for subject site for work performed in the fall, 1998.



US Army Corps  
of Engineers  
New England District

Environmental Project Management Branch

4676

**NON-TIME CRITICAL REMOVAL ACTION  
EASTERN SURPLUS COMPANY SUPERFUND SITE  
MEDDYBEMPS, MAINE**

Contract No. DACW33-95-D0004

Task Order No. 0016

DCN: MEDY-022599-AACC

Prepared for:

**U.S. ARMY CORPS OF ENGINEERS  
NORTH ATLANTIC DIVISION  
NEW ENGLAND DISTRICT  
696 Virginia Road  
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Prepared by:

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25 February 1999

W.O. No. 03886-118-116

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## LIST OF ACRONYMS

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ACM	Asbestos Containing Material
As	Arsenic
BC	Bottom Composite
BOS	Bottom of Slope
Cd	Cadmium
CENAE	U.S. Army Corps of Engineers, New England District
CO <sub>2</sub>	carbon dioxide
COCs	contaminants of concern
cy	cubic yard
DDT	DictoloroDipheny/Tricholgroettane
ESCSS	Eastern Surplus Company Superfund Site
ft	feet
gal	gallon
IH/NE	Industrial Hygiene of New England
mg/kg	milligrams/kilogram
NGVD	National Geodetic Vertical Datum
PLM	Polarized Light Microscopy
Pb	Lead
PCBs	polychlorinated biphenyls
PPE	Personal protective equipment
REMTC	Reactive and Explosive Materials Training Corporation
SOS	Seacoast Ocean Services
TAL	Target Analyte List
TCLP	Toxicity Characteristic Leaching Procedure
TO	Task Order
TOS	Top of Slope
ug/kg	micrograms/kilogram
USEPA	U.S. Environmental Protection Agency
VOCs	volatile organic compounds
WESTON®	Roy F. Weston, Inc.

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SECTION 1

INTRODUCTION

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## 1. INTRODUCTION

This Draft Completion Report summarizes the Non-Time Critical Removal Action performed by Roy F. Weston (WESTON<sub>g</sub>) at the Eastern Surplus Company Superfund Site (ESCSS) located in Meddybemps, Maine under contract with the U.S. Army Corps of Engineers, New England District (CENAE). The Non-Time Critical Removal Action was performed as Task Order (TO) No. 0016 under Contract No. DACW33-95-D0004.

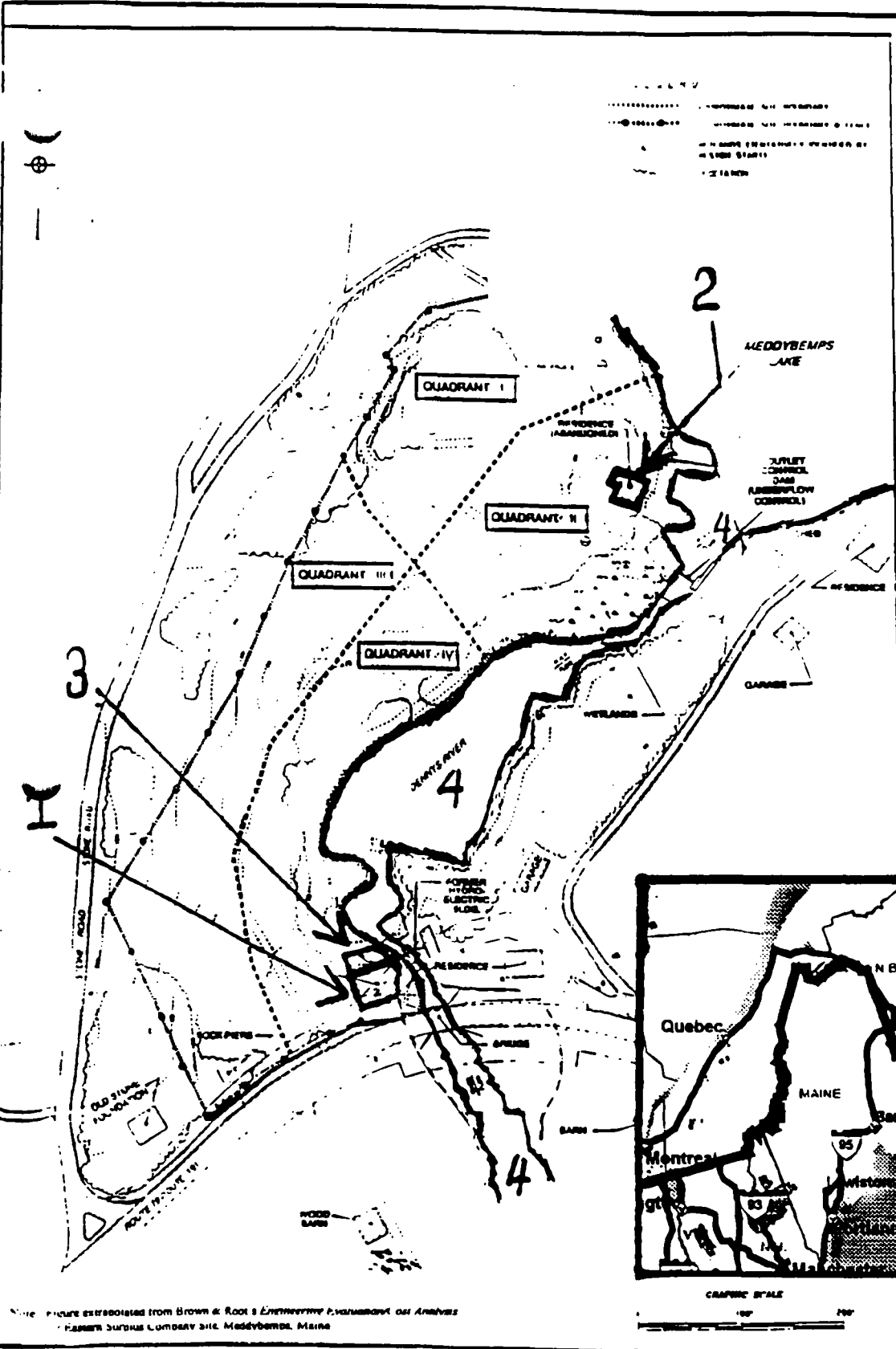
This removal action included the removal, lab packaging, and disposal of waste materials from a concrete block structure, demolition and disposal of two existing structures (one wood frame structure and one concrete block structure), and surveying of the Dennys River bank. A subsequent mobilization effort was performed to remove additional waste materials not scoped under the original project from the hydroelectric structure, to evaluate miscellaneous cylinders stored onsite, and to extend the perimeter fence. This report summarizes the approach and implementation of the scoped activities at the ESCSS as agreed upon with CENAE. A complete progression of site activities is illustrated in **Appendix A** (photo documentation log).

### 1.1 SITE LOCATION

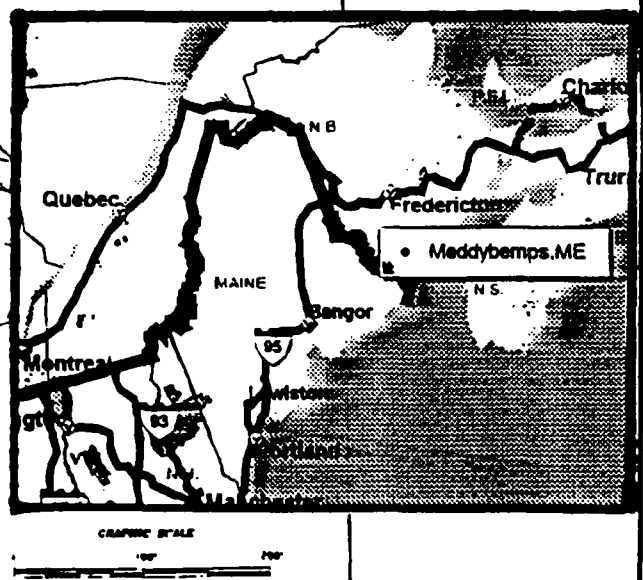
The ESCSS is located in Meddybemps, Maine in Washington County. The site is a 7-acre former salvage and junk yard bounded by Meddybemps Lake to the north, Dennys River to the east, Route 191 to the south, and private property and Stone Road to the west. The eastern boundary of the site slopes steeply to the Dennys River. A Site Plan showing the site location and work areas within the site is presented in Figure 1-1.

### 1.2 SITE HISTORY

The ESCSS property was formerly used to store equipment and materials such as scrap metal, junk cars, old appliances, miscellaneous military equipment, and hazardous substances.



- 1 Concrete Structure
- 2 Wooden Structure
- 3 Excavation (Optional)
- 4 Dennys River



Note: Picture extrapolated from Brown & Root's Engineering Examination on Analysis of Eastern Surplus Company Site, Meddybemps, Maine

EASTERN SURPLUS COMPANY SITE  
MEDDYBEMPS, MAINE

DEPARTMENT OF THE ARMY  
NEW ENGLAND DISTRICT  
CORPS OF ENGINEERS  
CONCORD, MASSACHUSETTS



SITE PLAN



DRAWN T.A.C.  
DATE OCT 1998  
FIGURE NO. 1-1



In addition, a hydroelectric power unit was used to generate electrical power on the Dennys River until approximately 1966, and a military surplus business was operated from the concrete block structure until approximately 1976. The concrete block building was the former office/store for the Eastern Surplus Company (see Item No.1 of Figure 1-1). The eastern side of the building foundation adjacent to the hydroelectric structure has since buckled due to the erosion of the underlying slope along the Dennys River. The embankment will most likely continue to erode and would have resulted in the potential failure (collapse) of the building in the future. A dilapidated wood frame residential structure was formerly located in the northeast portion of the site along the Dennys River (see Item No.2 of Figure 1-1).

The State of Maine began their investigations of the site in 1985 when they found a variety of hazardous materials and/or substances; large volumes of scrap metal, junk cars, old appliances, and miscellaneous military personnel equipment. The hazardous materials and/or substances included: thousands of compressed gas cylinders, 55-gallon drums, 5-gallon cans (paint, thinners, solvents) capacitors and switches and old ammunition. Soil samples taken near transformers indicated the presence of polychlorinated biphenyls (PCBs). The State of Maine and the U.S. Environmental Protection Agency (USEPA) have conducted numerous removal actions since that time. The contaminants of concern (COCs) at the site, defined through previous investigations, are PCBs, metals (As, Cd, and Pb), and volatile organic compounds (VOCs) in site soils and groundwater.

### **1.3 PROJECT OBJECTIVES**

The objectives of the Non-Time Critical Removal Action at the ESCSS were to mobilize the site to remove, lab package, and dispose of waste materials within the concrete block structure and hydro-structure, demolish and dispose of debris from the two structures at the site (wood frame residence and concrete block structure), to perform confirmatory soil sampling for PCB's and Arsenic within the footprint of the concrete foundation, to survey the Dennys riverbank (as a benchmark for future stabilization efforts), and to remove/characterize onsite waste drums generated by previous contractors.

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**SECTION 2**

**SITework**

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## **2. SITEWORK**

This section outlines WESTON's implementation of the project objectives listed in Section 1.3.

### **2.1 MOBILIZATION**

WESTON mobilized the site on 19 October 1998 to perform lab packaging of waste materials from the concrete block structure. This included all personnel, equipment, and materials necessary to construct a staging area for the removal, segregation, and lab packaging of wastes from within the structure (See Section 2.2) and to support demolition activities for the wood structure (See Section 2.3) and concrete structure (See Section 2.4). A second site mobilization was performed on 17 November 1998 to remove waste materials from within the adjacent hydroelectric structure (See Section 2.8).

### **2.2 LAB PACKAGING OF WASTE MATERIALS**

Due to years of neglect and general deterioration of the concrete block structure, waste materials formerly stored inside the building were stacked on benches and shelves and stockpiled randomly on both floors of the structure. Following site mobilization, WESTON constructed a staging area for the waste materials on 19 October 1998. This pad was located approximately 50' northeast of the site decontamination pad in order to avoid interference with the proposed demolition activities. The staging area was constructed of three layers of 6-mil polyethylene sheeting that was secured with sandbags. Because the debris generated as a result of the building demolition was to be managed as general construction debris, effort was made to thoroughly search the building and its contents to remove any material which did not meet this criteria.

WESTON began removal, segregation, and placement of all waste materials from the first floor of the concrete building to the staging area on 19 October 1998. On 20 October 1998, WESTON completed removal of the waste materials from the first floor and began the removal, segregation, and placement of wastes from within the second floor of the building to the staging

area. All waste from the second floor was completely removed and staged by 21 October 1998. Construction debris remaining on both the first and second floors was left in place for removal during the demolition phase.

The wastes that were removed from the concrete building included the following: batteries, mercury lamps, adhesives, paints, grease, DDT, PCB transformers, ballasts, glycerin, aerosols, talcum powder, and small carbon dioxide (CO<sub>2</sub>) cartridges. In addition, one 50 caliber dummy shell and one 30 caliber live shell was relinquished to the onsite EOD specialist from Tetra-Tech/NUS on the same day.

The staged wastes were lab packaged by Seacoast Ocean Services (SOS) of Portland, Maine on 21 October and the lab packs containing waste materials remained in the staging area for transportation and disposal. Wastes were manifested and transported from the site on 29 October 1998 by SOS. A complete summary of lab pack information can be found in Tables 3-1 and 3-2 of Section 3.0.

### **2.3 DEMOLITION OF WOOD FRAME STRUCTURE**

The dilapidated wooden structure was located in the northeast portion of the site adjacent to Meddybemps Lake and the Dennys River. The footprint of the two-story building was approximately 18-ft by 25-ft with an 8-ft by 5-ft one-story addition on the West side of the building. The building was supported by multiple pre-cast concrete pillars located beneath the frame of the structure. It was noted that multiple mattresses, furniture, appurtenances, and miscellaneous construction debris were located within the building on both floors based on visual observations made from the exterior of the structure.

Prior to the demolition of the wooden structure, it was necessary to inspect and/or install erosion and sedimentation controls, to install security and safety measures, and to clear the area of all debris. The existing staked hay bales and silt fence along the eastern side of the structure were inspected and replaced, as necessary, to prevent sediment from entering into the Dennys River along the west bank during demolition activities. High visibility construction fencing was installed along the perimeter of the work area to prevent both the migration of debris into the

Dennys River and to establish control limits in order to prevent any unauthorized access into the work area(s) during demolition. Debris within a 50-foot radius of the building was removed and set aside for future disposal.

Exterior asbestos bulk PLM (Polarized Light Microscopy) samples were collected from the roofing shingles and side shingles on 15 October 1998, and interior samples were collected from the wallboard, joint compound, and ceiling board on 20 October 1998 by Industrial Hygiene of New England (IH/NE) to test for the presence/absence of asbestos. As a result, the State of Maine's Chapter 425 Asbestos Management Regulations and notifications to the State of Maine were not submitted. Asbestos bulk sampling PLM results are presented in **Appendix B**.

A Draft Remedial and Investigative Feasibility Study (prepared by Tetra-Tech NUS 1996) furnished to WESTON by the CENAE on 19 October 1998 for the wood structure, summarizes the results of metals, PCB, and pesticides testing on the structure. Based on a review of this data, metals concentrations did not exceed Toxicity Characteristic Leaching Procedure (TCLP) criteria for hazardous waste as defined under 40CFR 261.24 and PCBs were reported less than the State of Maine Remedial Action Guidelines and Federal guidelines. WESTON collected a composite sample of the building debris for pesticides and herbicides on 22 October 1998 due to levels of pesticides detected in a previous sample (collected by Tetra-Tech/NUS). This sample was analyzed using the TCLP for both pesticides and herbicides to determine whether material would be classified as a characteristic waste. This TCLP data, in conjunction with other sample summary data (prepared by Tetra-Tech NUS), did not trigger any thresholds under 40CFR 261.24 for management of the debris as a hazardous waste.

Prior to demolition activities, a 6-inch thick (40-ft by 60-ft) gravel pad was constructed north of the structure to allow for easy maneuvering in the area without disturbing buried debris or contaminated material.

The building was demolished from the top down using a Link Belt excavator. Material was removed in a direction away from the Meddybemps Lake and the Dennys River. Furthermore, the building addition was pulled away from the main structure to allow access for removal of a refrigerator contained within the first floor. The refrigerator was removed and relocated outside

the footprint of the work area in order to dispose of the freon in accordance with applicable state and federal regulations. Building contents (mattresses, furniture, appurtenances, and dishwashing soap) that were readily accessible from the first floor were removed prior to commencing demolition to minimize the perimeter of the demolition area. Demolition of the structure was completed on 22 October 1998. The construction debris was loaded into three metal 50 cubic yard (cy) rolloff containers, covered, and staged between 22 October through 24 October 1998. Prior to leaving the site, all rolloff containers and trucks moving the containers were decontaminated at the existing concrete decontamination pad.

After the site cleanup activities were completed, the former building site was graded and hay mulch was placed over the soil to prevent dust migration. Restoration of topsoil and vegetative cover was not performed since additional remedial activities will be performed in the Spring of 1999.

#### **2.4 DEMOLITION OF CONCRETE BLOCK STRUCTURE**

The two story concrete block building (formerly used as an office/store for the Eastern Surplus Company, located along the West side of the Dennys River approximately 50- ft north of the Route 191 Bridge, was approximately 30-ft wide by 50-ft long. The building was situated on top of a concrete foundation slab that is buckled on the east side. Due to the poor structural integrity of the foundation and erosion beneath the floor slab, the building was slated for demolition.

Following the removal, segregation, and lab packaging of the waste materials from the building as outlined in Section 2.2, the concrete block structure was prepared for demolition between 23 October and 24 October 1998. The existing silt fence and hay bales were extended to the structures foundation wall to eliminate the potential for fines to migrate into the river during demolition. A containment net was installed along the east retaining wall and the south side of the hydro structure to ensure that no debris entered into the river. A small gravel pad (<10cy of material) was constructed off of the west foundation wall to provide a level staging

area for the construction debris rolloff containers. The empty fuel oil tank located along the northern exterior wall of the structure and the burner located inside the structure were removed on 22 October and staged adjacent to the decontamination pad for disposal by others.

Prior to commencing demolition activities, a visual survey for ACM was performed within the interior of the building by the IH/NE. In addition, bulk PLM samples were collected from the exterior roofing shingles on 15 October. Interior samples from joint compound and ceiling board were collected by IH/NE on 20 October 1998 to confirm the presence or absence of ACM within the building structure. All samples from this structure tested negative for asbestos. As a result, asbestos abatement was not required by the State of Maine's Chapter 425, Asbestos Management Regulations and notifications to the State of Maine were not submitted. Asbestos bulk sampling PLM results are presented in **Appendix B**.

Following confirmation of asbestos samples from the structure, the building was demolished from the roof peak to the foundation wall(s) from 24 October to 29 October 1998. The construction debris was pulled in a westerly direction away from the river to avoid the distribution of waste materials into the river. Demolition activities were performed with care as not to affect the hydro-structure during demolition of the concrete block structure. In addition, the debris was continuously sprayed with water in order to maintain dust suppression measures. The walls and roof of the structure were removed to the same level of the floor slab. Debris located on the floor slab and in the pit area (on the East Side of the floor slab where supporting soil had been washed away below the slab) was loaded into rolloff containers to prevent mixing of debris with the sub-slab soil when the floor slab was removed. Following the debris cleanup, the concrete floor slab was peeled back with the excavator bucket, removed, and placed into rolloff containers. Additional wastes found within this area that were previously inaccessible were removed and segregated in the staging area. All rolloff containers were covered daily and stored onsite until offsite transportation. In addition, the rolloff containers and trucks moving the containers were decontaminated at the site decontamination pad prior to leaving the site.

The chain link perimeter fence was extended approximately 75-ft (from the existing 6-ft high

barbed wire fence to the southeast corner of the building foundation) during the second mobilization on 17 November 1998. This extension will prevent unauthorized site entry in the vicinity of the concrete building foundation along Route 191 in the future.

## 2.5 CONFIRMATORY SOIL SAMPLING

Upon completion of the floor slab removal, a total of ten discrete confirmatory samples were collected from the existing subgrade soil for metals analysis (TAL list) using EPA Method 3050B/6010B and PCB's using EPA Method 3550/8082. The soil samples were collected from the soil beneath the former foundation slab for the concrete structure at a depth of about 6-in below existing grade.

The locations where samples were collected and a summary of results for PCB and arsenic are shown in **Figure 2-1**. A complete analytical summary for confirmatory PCB and metals data is located in **Appendix C**. These locations were selected by the USEPA, CENAE, and WESTON on 29 October 1998. One of these samples was also collected from the soil beneath the former heating oil tank for the building burner to confirm the absence or presence of TAL's.

Four of the soil samples taken from the sub-grade surface exceeded the State of Maine Remedial Action Guidelines for PCBs (Residential Guideline = 2.2 mg/kg). Three of these samples were located within the foundation perimeter and 1 sample was located outside the foundation at the former oil tank location. The PCB concentrations of these (4) exceedances range from 2.7 to 640 mg/kg. All 10 samples exceeded the State of Maine Remedial Action Guidelines for arsenic (Residential Action Guideline = 10 mg/kg). In general, the highest concentrations of PCBs and arsenic were located between 5 and 20 ft west of the hydro structure foundation wall at a depth of approximately 6-12 ft below the top elevation of the foundation wall and at the former fuel storage tank area. An analytical summary table showing sample identification numbers and analyte concentrations is presented as **Table 2-1**.



CLIENT/SUBJECT USACOE - WAD - FIGURE 2-1 W.O. NO. \_\_\_\_\_

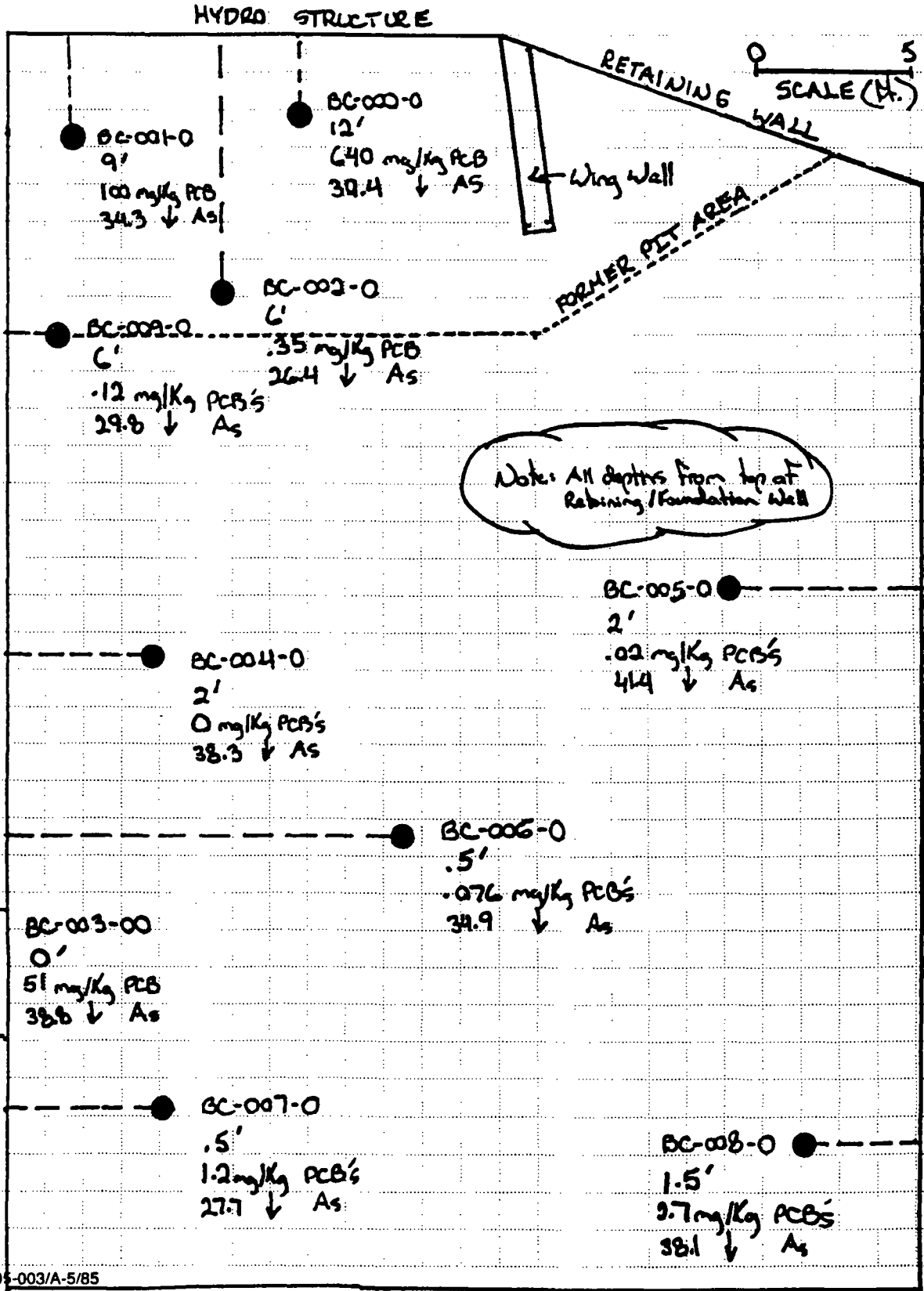
TASK DESCRIPTION Muddybump Sampling data TASK NO. \_\_\_\_\_

PREPARED BY C. Kone DEPT \_\_\_\_\_ DATE 12/8/98

MATH CHECK BY \_\_\_\_\_ DEPT \_\_\_\_\_ DATE \_\_\_\_\_

METHOD REV. BY \_\_\_\_\_ DEPT \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED BY
DEPT _____ DATE _____



**Table 2-1  
Analytical Summary Table**

Sample ID	Contaminant	
	PCB (µg/kg)	Arsenic (mg/kg)
BC-000-0	640	39.4
BC-001-0	100	34.3
BC-001-1	63	40.9
BC-002-0	0.35	26.4
BC-003-0	51	38.8
BC-004-0	ND	38.3
BC-005-0	0.02 <sup>J</sup>	41.4
BC-006-0	0.08	34.9
BC-007-0	1.2	27.7
BC-008-0	2.7	38.1
BC-009-0	0.12	29.8

<sup>J</sup> Value is less than the reporting limit but greater than zero

Note: Aroclors 1016-1254 were not detected above quantitation limits  
(with exception to ID No. BC-0002-0)

## 2.6 DATA VALIDATION

The confirmatory soil sample data sets were validated in accordance with the CENAE Scope of Work. As discussed with the CENAE, disposal characterization data was not included in the data validation process since existing site data was utilized for disposal characterization. Quality control criteria such as chain of custodies, log-in sheets, preservations, holding times, instrument method blanks (for soils/solids), matrix spikes/matrix spike duplicates (for soils/solids), LCS/LFB's, field duplicates, and surrogate recoveries were reviewed. The following qualification is made based on validation findings:

- Sample No. BC-001-1 (field duplicate) was not analyzed within the specified holding times for PCB's or metals, therefore was not validated.

The data validation findings are presented in Appendix D along with the GPL Laboratory Case Narratives for PCB, metals, and pesticide data.

## 2.7 BACKFILLING

Clean backfill material (bank run gravel) was placed into the pit area to create a level surface from which to perform future work on the West Side of the hydro-structure. The backfill (ranging in depth from 2-8 ft.) was tapered toward the center of the pit area and pitched toward the west foundation wall of the hydroelectric structure to prevent runoff from entering the Dennys River. This grading will also minimize pressure caused by excessive overburden on the buckled foundation wall(s). A small section (approx. 25 ft) of the west foundation wall was removed prior to demolition of the structure to create a ramp for accessing the pit area. Backfilling operations were completed prior to demobilization on 29 October 1998. Silt fence and hay bales were placed along the stone retaining wall adjacent to the fill material to divert any runoff from precipitation events away from the wall.

## 2.8 SURVEY OF DENNYS RIVERBANK

WESTON performed a survey of the Dennys River between 20 October and 22 October 1998 to obtain cross section and water surface elevation data. A total of 7 profiles were taped and surveyed at predetermined locations (from approximately 580-ft upstream of the Route 191 bridge along the Dennys River to approximately 130-ft downstream of the bridge). The elevations for each profile were collected at intervals in order to determine elevations at the Top of Slope (TOS), Bottom of Slope (BOS), Dennys River water surface, and centerline of river bottom. Elevations were referenced to approximately 170-ft NGVD as determined by wells at the site that were surveyed previously. In addition, the outlet control dam and the Route 191 bridge were surveyed to determine the location and elevation of these structures relative to the site.

Detailed drawings of the river profiles, outlet control dam and Route 191 structure are included in **Appendix D**. The data collected from the survey event will be used in subsequent flow calculations performed by the CENAE to determine the specifications for the shoreline stabilization effort that is projected for the Spring season.

## 2.9 ADDITIONAL WASTE MATERIALS

Following backfill of the pit area on 29 October 1998, two cylindrical transformers were removed from the hydroelectric structure and placed into drums for characterization and subsequent disposal. A representative sample of the oil from the transformers was collected and sent to the analytical laboratory for PCB analysis (ID No's. OIL-000-0 & WC-000-0). These transformers subsequently tested positive for PCBs (4.83 mg/kg and 48 mg/kg respectively) and were sent for disposal during the second mobilization. Samples were also collected from the turbine and electrical switch oil (ID No's. OIL-001-0 & OIL-002-0) and analyzed for PCBs. PCB's were not detected in these two samples and, as a result, this equipment was left in place as agreed upon by CENAE (see **Appendix D** for analytical data).

During the second mobilization, some waste materials left by previous contractors including drums of capacitors and transformers were included with the waste shipment. Other drums that lacked sufficient characterization data for disposal facility profiling were sampled for PCBs and metals criteria (See sample ID No's WC-013-0, WC-012-0, WC-011-0, and BC-010-0). Wastes were removed from the hydroelectric structure on 17 November 1998 during the second mobilization. Wastes that were removed from the structure included miscellaneous paints and aerosols, transite board, lead-acid batteries, and mercury switches. These materials were lab packaged into appropriate containers, manifested, and prepared for shipment. Following review of the manifests by WESTON and the CENAE, the materials were transported offsite on 18 November 1998 for disposal at Heritage Environmental Services and Global Recycling Technologies (See Table 3-2).

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**SECTION 3**

**TRANSPORTATION AND DISPOSAL**

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### **3. TRANSPORTATION AND DISPOSAL**

This section discusses waste streams that were produced during the performance of this project and contains information pertaining to the transportation and ultimate disposal of these waste streams.

#### **3.1 WASTE MATERIALS**

The waste materials removed from both floors of the concrete block structure were placed into appropriate lab packages and manifested. Table 3-1 contains a list of the packages, waste material descriptions, and the disposal destinations for items removed on 29 October 1998. Table 3-2 contains a list of the packages, waste material descriptions, and disposal destinations for items removed on 18 November 1998. Appendix E contains manifests, packaging slips, and bills of lading. A complete set of "Disposal Facility Manifests" and "Certificates of Disposal" will be included in the final report. Appendix E is not complete with submittal of this Draft Report. All personal protective equipment (PPE) and liner material from the staging area was packaged into drums and shipped offsite with the other lab packages for disposal.

**Table 3-1**

**Waste Materials Shipped 29 October 1998**

Quantity	Volume (gal)	Container	Material	Destination
1	20	DF	Solid Pesticide	HES
1	20	DF	Non-Hazardous Salts	HES
2	55	DF	Paint and Adhesives	HES
1	55	DF	Lead Acid Batteries	HES
1	55	DF	PPE	HES
1	20	DF	Mercury Thermometers	HES
1	5	DF	Flammable Solids	HES
1	5	DF	Pesticide Liquids	HES
2	5	DF	Alkaline Batteries	HES
1	5	DF	Alkaline Liquids	HES
1	20	DF	Lead Salts/Poisons	HES
1	30	DF	Aerosols	HES
1	55	DF	Transite Board	HES
1	1	CW	Mercury Lamps	HES
1	1	CF	Paint and Adhesives	HES
4	55	DM	PCB Transformers	GRT

DF: Plastic or Fiberboard Drum

DM: Metal Drum

CW: Wooden Box

CF: Fiberboard Box

HES: Heritage Environmental Services, 2 Avenue D, Williston, VT 05495

GRT: Global Recycling Technologies, 230 Canton Street, Stoughton, MA 02072

During the second mobilization effort, waste materials from the hydroelectric structure and waste materials left by previous contractors were removed. Table 3-2 contains a list of the packages, waste material descriptions, and the disposal destination for the waste materials removed on 18 November 1998.

**Table 3-2**  
**Waste Materials Shipped 18 November 1998**

Quantity	Volume (gal)	Container	Material	Destination
2	55	DF	Paints and Adhesives	HES
1	20	DF	Paints and Adhesives	HES
1	55	DF	Transite Board	HES
1	5	DF	Lead Acid Batteries	GRT
1	5	DF	Aerosols	HES
1	5	DF	Mercury Switches	HES
4	55	DM	Decontamination Fluid	HES
9	55	DM	Capacitors/Transformers	GRT

DF: Plastic or Fiberboard Drum

DM: Metal Drum

HES: Heritage Environmental Services, 2 Avenue D, Williston, VT 05495

GRT: Global Recycling Technologies, 230 Canton Street, Stoughton, MA 02072

### 3.2 GENERAL CONSTRUCTION DEBRIS

Solid waste that was generated at the site included building demolition debris, concrete, general construction debris, non-hazardous building contents (clothing, mattresses, etc.), etc. Metal that was either removed from the construction debris or picked up around the exterior of both structures was recycled as detailed in Section 3.3.



General construction debris was placed into rolloffs, covered, and shipped from the site to Waste Management's Norridgewalk, Maine facility. Table 3-3 contains a list of the rolloffs of debris generated at the site and date shipped.

**Table 3-3**  
**Inventory of General Construction Debris**

Date	Quantity (cy)	Origin	Disposal Destination
10/29/98	100(approx.)	Wood Frame Structure	WMI, Norridgewalk ME
10/29/98	20	Concrete Structure	TBD

TBD: To Be Determined

### 3.3 METAL DEBRIS

Metal debris that was removed during the building demolition or picked up from the building exteriors was segregated and sent for recycling. One 30-cy rolloff of this material was generated during this project. All remaining structural steel was left on-site per request of EPA.

### 3.4 REFRIGERATORS

One refrigerator was removed from each of the two structures that were demolished. These refrigerators were segregated and sent to Industrial Metal Recycling for freon recycling prior to disposal of the steel refrigerator shell as scrap metal.

### 3.5 DECONTAMINATION WATER

Four drums containing decontamination fluids were generated as a result of site activities. Liquids from these drums were sampled for profiling on 29 October 1998. These drums were stored onsite until their removal on 18 November 1998 during the second mobilization/waste removal. These drums were transported to Heritage Environmental Services for disposal.

Samples were collected from decontamination fluids contained within a 1,000 gallon steel tank that was left onsite by other site contractors. Analytical results will be used for characterization and subsequent disposal in the spring of 1999.

### **3.6 CYLINDERS**

Approximately 75 cylinders collected previously by Tetra-Tech NUS are currently stored onsite in two (2) 55-gallon drums and in one wooden crate. In addition, there are currently other locations throughout the site where cylinders can be observed on the ground surface. At the request of CENAE, a site visit was performed on 18 November 1998 by a qualified cylinder decommissioning/disposal firm (REMTC) in order to evaluate the quantity and condition of the cylinders for decommissioning/disposal. As a result of the evaluation and existing site conditions, it was decided by the CENAE to leave the cylinders in place until the Spring of 1999. This will allow for proper decommissioning and disposal once all remediation sitework is complete

---

**SECTION 4**

**CONCLUSIONS AND RECOMMENDATIONS**

---

#### 4. CONCLUSIONS AND RECOMMENDATIONS

WESTON completed the Non-Time Critical Removal Activities at the Eastern Surplus Superfund Site on 18 November 1998. These activities included waste characterization and lab packaging of debris within the concrete structure, transportation and disposal of drummed waste, ACM bulk sampling of both structures, transportation and disposal of construction debris, demolition and disposal of the wood and concrete structures as construction debris, confirmatory soil sampling, backfill and grading of structures, surveying of the Dennys River, installation of a chain link fence, and cylinder evaluation cylinders.

During the Non-time Critical Removal effort approximately 100 separate source waste streams from within the concrete structure and hydro building were consolidated into 12 waste streams. Over 42 lab pack containers were shipped offsite to Global Recycling Technologies and/or to Heritage Environmental Services. A total of 10 PLM bulk samples from the concrete and wooden structures were evaluated for asbestos and 1 sample were evaluated for total lead content. No reportable concentrations of either asbestos or lead were found. In addition, 4 out of 10 confirmatory soil samples from the soil beneath the former slab were found to contain elevated levels of PCB's (up to 640 mg/kg) and all samples exhibited high levels of Arsenic (> 10 mg/kg). Due to the exceedances reported, additional excavation within and adjacent to the building foundation is required in order to complete the Non-Time Critical Removal Action in the Spring of 1999.

---

**SECTION 5**

**REFERENCES**

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## 5. REFERENCES

Brown and Root Environmental, May 1998, Engineering Evaluation/Cost Analysis, EPA No. 68-W6-0045.

NIOSH/OSHA/USCG/EPA, November 1985, Occupational Safety and Health Guidance Material for Hazardous Waste Site Activities.

Tetra-Tech/NUS, October 1998, Draft Remedial Investigation and Feasibility Study, EPA No. 68-W6-0045.

USACE. 1994. Requirements for the Preparation of Sampling and Analysis Plans. EM-200-1-3.

---

**APPENDIX B**

**ASBESTOS BULK SAMPLE PLM & LEAD ANALYTICAL REPORTS**

---

received  
10-23-98

Debbie Fraser  
Office Manager



Industrial Hygiene/New England  
39 Florida Avenue  
P.O. Box 130  
Bangor, ME 04402-0130

(a division of I.H.S.N.E., Inc.)

Telephone: (207) 947 6645  
Telefax: (207) 947 3264  
Email: ihne@agate.net

Professional Association Members of: SSPC, Down East Association of Industrial Hygienists, MBTA, Northern Environmental Professional Association, and American Industrial Hygiene Association

October 21, 1998

Roy F. Weston  
Attn: Chris Kane  
1 Wall Street  
Manchester, NH. 03101-1501

**RE: ASBESTOS BULK SAMPLING & ANALYSIS USING PLM METHOD  
(IH/NE PROJECT #980491-Meddybumps Sampling)**

Dear Mr. Kane:

Thank you for contacting Industrial Hygiene/New England (IH/NE) regarding asbestos analysis.

As you can see by the enclosed report, the samples tested negative for asbestos content in concentrations greater than 1%.

IH/NE is able to offer services above and beyond sampling and analysis. Those services include:

- ▶ - Abatement project management; project design; and bid solicitation.

If we can further assist you in any way, please give us a call. Again, thank you for selecting IH/NE for your environmental needs.

Sincerely,

A handwritten signature in cursive script that reads "Debbie Fraser".  
Debbie Fraser





# BULK ASBESTOS REPORT

**Industrial Hygiene/New England**  
(a division of I.H.S.N.E., Inc.)

Telephone: 207-947-6645  
Telefax: 207-947-3264

e-mail: [ihne@agate.net](mailto:ihne@agate.net)

[www.agate.net/~ihne](http://www.agate.net/~ihne)

Project # 980491  
Project Name: Meddybumps  
Date: October 21, 1998

SAMPLE	LOCATION	APPEARANCE	SAMPLE TREATMENT	ASBESTOS % TYPE	NON ASBESTOS	
					% Fibrous	% Non Fibrous
B1	Drywall-wall	Grey Fibrous Homogeneous	Teased	None Detected	95% Cellulose	5% Other
B2	Drywall-wall	White Fibrous Homogeneous	Teased	None Detected	15% Cellulose	85% Ca Carbonate
B3	Joint Compound	White Non-Fibrous Homogeneous	Teased	None Detected	5% Cellulose	95% Ca Carbonate
B4	Pink Insulation & backing upper corner room	Various Fibrous Layers # 3	Teased	None Detected	80% Glass	20% Other
B5	Drywall-upper corner room	White Fibrous Homogeneous	Teased	None Detected	10% Cellulose	90% Ca Carbonate
B6	Joint Compound upper corner room	White Non-Fibrous Homogeneous	Teased	None Detected		70% Ca Carbonate 30% Other

Roy F. Weston  
Attn: Chris Kane  
1 Wall Street  
Manchester, NH. 03101-1501

Debbie Fraser  
Office Manager



Industrial Hygiene/New England  
39 Florida Avenue  
P.O. Box 130  
Bangor, ME 04402-0130

(a division of I.H.S.N.E., Inc.)

Telephone: (207) 947 6645  
Telefax: (207) 947 3264  
Email: ihne@agate.net

Professional Association Members of: SSPC, Down East Association of Industrial Hygienists, MBTA, Northern Environmental Professional Association, and American Industrial Hygiene Association

October 16, 1998

Roy F. Weston  
Attn: Steve Whitney  
1 Wall Street  
Manchester, NH. 03101

**RE: ASBESTOS BULK SAMPLING & ANALYSIS USING PLM METHOD  
(IH/NE PROJECT # 980483-Weston)**

Dear Mr. Whitney:

Thank you for contacting Industrial Hygiene/New England (IH/NE) regarding asbestos analysis.

As you can see by the enclosed report, the analytical results tested negative for asbestos content in concentrations greater than 1%.

IH/NE offers services above and beyond sampling and analysis. Those services include:

- Abatement project management; project design; and bid solicitation.

If we can further assist you in any way, please give us a call. Again, thank you for selecting IH/NE for your environmental needs.

Sincerely,

  
Debbie Fraser



# BULK ASBESTOS REPORT

*Industrial Hygiene/New England*  
*(a division of I.H.S.N.E., Inc.)*

Telephone: 207-947-6645  
Telefax: 207-947-3264

e-mail: [ihne@agate.net](mailto:ihne@agate.net)

[www.agate.net/~ihne](http://www.agate.net/~ihne)

Project # 980483  
Project Name: Meddybemps, Maine  
Date: October 16, 1998

SAMPLE	LOCATION	APPEARANCE	SAMPLE TREATMENT	ASBESTOS % TYPE	NON ASBESTOS	
					% Fibrous	% Non Fibrous
B1	Buildings Cement: Wood	Black Non-Fibrous Layers = 2	Ashed	None Detected		30% Ca Carbonate 50% Quartz 20% Other
B2	Buildings Cement: Wood	Black Fibrous Homogeneous	Ashed	None Detected	40% Cellulose	30% Quartz 30% Other
B3	Buildings Cement: Wood	Black Fibrous Layers = 2	Ashed	None Detected	40% Cellulose	30% Quartz 30% Other
B4	Buildings Cement: Wood	Black Fibrous Heterogeneous	Ashed	None Detected	30% Cellulose	20% Quartz 50% Other

Roy F. Weston Inc.  
Attn: Steve Whitney  
1 Wall Street  
Manchester, NH. 03101

Debbie Fraser  
Office Manager



Industrial Hygiene/New England  
39 Florida Avenue  
P.O. Box 130  
Bangor, ME 04402-0130

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Telephone: (207) 947 6645  
Telefax: (207) 947 3264  
Email: ihne@agate.net

Professional Association Members of: SSPC, Down East Association of Industrial Hygienists, MBTA and Northern Environmental Professional Association

October 16, 1998

Roy F. Weston  
Attn: Steve Whitney  
1 Wall Street  
Manchester, NH. 03101

Re: Flame Atomic Absorption Method - Orono, Maine  
IH/NE Project: 980483-Weston Paint Chips

Dear Mr. Whitney:

Thank you for contacting *Industrial Hygiene/New England* for your paint study needs.

As you can see from the report enclosed, the analysis tested negative for Lead in the amounts of 2% or greater.

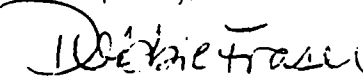
Assuming that the material is all of a homogenous nature, each of the entire areas may be considered to be non leaded based paint.

*Industrial Hygiene/New England* offers services above and beyond lead site surveys and analysis. *IH/NE* offers asbestos sampling and analysis, industrial hygiene needs, air quality issues, regulatory compliance packages and regulatory training. If you have any questions about our services, please do not hesitate to give me a call.

I can be reached at (207) 947-6645, if you have any questions or comments.

Again, thank you for contacting *Industrial Hygiene/New England*.

Respectfully,

  
Debbie Fraser



*Industrial Hygiene/New England*  
(a division of I.H.S.N.E., Inc.)

Telephone: 207-947-6645  
Telefax: 207-947-3264

e-mail: [ihne@agate.net](mailto:ihne@agate.net)

[www.agate.net/~ihne](http://www.agate.net/~ihne)

PROJECT: 980483

LOCATION: Weston

DATE: October 16, 1998

<i>Sample ID</i>	<i>Sample #</i>	<i>Weight (g)</i>	<i>Lead Concentration (%)</i>
BS Wood frame bldg.	16225	0.1027	0.09

Roy F. Weston, Inc.  
Attn: Steve Whitney  
1 Wall Street  
Manchester, NH 03101

---

**APPENDIX C**

**LABORATORY ANALYTICAL REPORTS**

---

GP Work Order # 9811008

SAMPLE ANALYSIS REPORT

Prepared For:

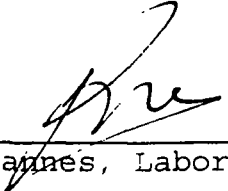
ROY F. WESTON, INC.  
ONE WALL STREET  
MANCHESTER, NH 03301-1501

MEDDY. EASTERN SURPLUS COMPANY

Prepared By:

GPL Laboratories, LLLP  
202 Perry Parkway  
Gaithersburg, MD 20877

November 12, 1998

  
\_\_\_\_\_  
Yemane Yohannes, Laboratory Director

GPL LABORATORIES, LLLP  
ANALYTICAL RESULTS

Project: MEDDY. EASTERN SURPLUS COMPANY

ROY F. WESTON, INC.  
ONE WALL STREET  
MANCHESTER, NH 03301-1501  
Atten: CHRIS KANE

GPL LABORATORIES, LLLP  
202 Perry Parkway  
Gaithersburg, MD 20877

Atten: Client Services  
Phone: (301) 926-6802

Certified by: P.I.

SAMPLE IDENTIFICATION

<u>GP ID</u>	<u>Client ID</u>
9811008-01A	OIL-000-0
9811008-02A	OIL-001-0
9811008-03A	OIL-002-0
9811008-04A	WC-000-0
9811008-04B	
9811008-04C	



GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811008-01A  
Client ID: OIL-000-0  
Collected: 10/29/98  
Dilution: 1

Matrix: LIQUID  
Method: SW846 8082  
Units: mg/Kg

Analyst: JSB  
Analyzed: 11/04/98  
Prepared: 11/02/98

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Qualifier</u>
Aroclor 1016	BQL	1.0	
Aroclor 1221	BQL	1.0	
Aroclor 1232	BQL	1.0	
Aroclor 1242	BQL	1.0	
Aroclor 1248	BQL	1.0	
Aroclor 1254	4.0	1.0	
Aroclor 1260	0.83	1.0	J

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811008-02A  
Client ID: OIL-001-0  
Collected: 10/29/98  
Dilution: 1

Matrix: SOLID  
Method: SW846 8082  
Units: mg/Kg

Analyst: JSB  
Analyzed: 11/04/98  
Prepared: 11/02/98

GC TARGET COMPOUNDS

Parameter	Result	Rep.Lim.	Qualifier
Aroclor 1016	BQL	1.0	
Aroclor 1221	BQL	1.0	
Aroclor 1232	BQL	1.0	
Aroclor 1242	BQL	1.0	
Aroclor 1248	BQL	1.0	
Aroclor 1254	BQL	1.0	
Aroclor 1260	BQL	1.0	

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811008-03A  
Client ID: OIL-002-0  
Collected: 10/29/98  
Dilution: 1

Matrix: LIQUID  
Method: SW846 8082  
Units: mg/Kg

Analyst: JSB  
Analyzed: 11/03/98  
Prepared: 11/02/98

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Qualifier</u>
Aroclor 1016	BQL	1.0	
Aroclor 1221	BQL	1.0	
Aroclor 1232	BQL	1.0	
Aroclor 1242	BQL	1.0	
Aroclor 1248	BQL	1.0	
Aroclor 1254	BQL	1.0	
Aroclor 1260	BQL	1.0	

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811008-048  
Client ID: WC-000-0  
Collected: 10/29/98  
Dilution: 1

Matrix: LIQUID  
Method: SW846 8082  
Units: ug/Kg

Analyst: TMK  
Analyzed: 11/07/98  
Prepared: 11/02/98

GC TARGET COMPOUNDS

Parameter	Result	Rep.Lim.	Qualifier
Aroclor 1016	13	2.0	
Aroclor 1221	BQL	4.0	
Aroclor 1232	BQL	2.0	
Aroclor 1242	BQL	2.0	
Aroclor 1248	BQL	2.0	
Aroclor 1254	BQL	2.0	
Aroclor 1260	35	2.0	

GPL LABORATORIES, LLLP  
METALS ANALYSIS RESULTS

GP ID: 9811008-04  
Client ID: WC-000-0

Matrix: LIQUID  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7470	1.3	0.20	ug/L	1	11/04/98	11/05/98 LCM
Silver	SW846 6010	BQL	3.0	ug/L	1	11/11/98	11/12/98 DDH
Arsenic	SW846 6010	11.0	5.0	ug/L	1	11/11/98	11/12/98 DDH
Barium	SW846 6010	829	10.0	ug/L	1	11/11/98	11/12/98 DDH
Cadmium	SW846 6010	50.3	3.0	ug/L	1	11/11/98	11/12/98 DDH
Chromium	SW846 6010	37.2	5.0	ug/L	1	11/11/98	11/12/98 DDH
Lead	SW846 6010	312	3.0	ug/L	1	11/11/98	11/12/98 DDH
Selenium	SW846 6010	BQL	5.0	ug/L	1	11/11/98	11/12/98 DDH

GPL LABORATORIES, LLLP  
WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9811008-02  
Client ID: OIL-001-0

Matrix: SOLID  
Collected: 10/29/98

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Units</u>	<u>Dil.</u>	<u>Prepared</u>	<u>Analyzed By</u>
Percent Solids	MCAW 160.3	66.7		%			11/11/98 JH

## *GPL Laboratories, LLLP*

### **Possible notes and definitions for this report:**

- BQL** = Below Quantitation Limit
- J** = Value is less than the reporting limits but greater than zero
- P** = Indicates that there is greater than 25% difference for detected pesticide/Aroclor results between the two GC columns
- B** = Indicates that the compound was found in the associated blank
- E** = Indicates that the concentration exceeded the calibration range of the instrument
- U** = Indicates that the compound was analyzed for but not detected, number indicates the reporting limit
- D** = Indicates that the compound was found in an analysis at a secondary dilution factor
- \*** = Value obtained from a 1:5 dilution
- +** = Value obtained from a 1:10 dilution
- #** = Value obtained from a 1:20 dilution
- =** = Value obtained from a 1:25 dilution
- ^** = Value obtained from a 1:50 dilution
- ~** = Value obtained from a 1:100 dilution
- |** = Value obtained from a 1:250 dilution
- @** = Value obtained from a 1:125 dilution (medium level)
- \$** = Value obtained from a 1:500 dilution
- &** = Value obtained from a 1:1000 dilution
- N** = Flashpoint not observed; heated to specified limit
- R** = Flammable at room temperature
- TNTC** = Too numerous to count
- B.P.** = Detection limit taken from boiling point
- F.F.** = Sample gave off flammable fumes

202 Perry Parkway  
Gaithersburg, Maryland 20877  
(301) 926-6802

Contract #/Billing Reference

1 of 1 Pgs.

Project: Meddybemps - Eastern Staples Co.					Turnaround Time		7 day	7 day	7 day										
Client: WESTON					# of Containers		1	3	3										
Send Results To: Mr. Chad Kane					Container Type		402 CC	1/2 CP	1/2 CP										
Address: One Wall St Manchester, NH 03301-1501					Preservative Used		-	-	-										
Phone: (603) 656-5428					Type of Analysis														
Sample ID#	Date Sampled	Time Sampled	Sample Matrix	Sampler's Initials	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082	PCB 3341/8082
OIL-000-0	10/29/82	1600	Liquid	JCS	X														
OIL-001-0	10/29/82	1625	Grease	JCS	X														
OIL-002-0	10/29/82	1610	Liquid	JCS	X														
WC-000-0	10/29/82	1800	Liquid	JCS		X	X												acid. by 1 bottle for metals analysis (pH < 2)
Relinquished By: [Signature]					Date/Time		10/30/82	1700	Received By: FedEx		Relinquished By:		Received for Laboratory By: [Signature]		Date/Time		10/31/82	12:00 PM	
Relinquished By:					Date/Time				Received By:		Date/Time		Shipper:		Airbill No.:				
Relinquished By:					Date/Time				Received By:		Lab Comments:		Temp:		70°				



**SAMPLE RECEIPT CHECKLIST**

Client Name WESTON  
 Date Received 10/31/98  
 Time Received 10:12 AM  
 Received By SKRUT

Carrier Name \_\_\_\_\_  
 Prepared (Logged In) By SK 11/2/98  
Initials Date  
 Project MEDLEY CAMP Eastern SWPC  
 Site \_\_\_\_\_  
 VOA Holding Blank ID. No. \_\_\_\_\_

Airbill/Manifest Present?	YES NO
No. <u>808867025010</u>	<input checked="" type="checkbox"/> <input type="checkbox"/>
Shipping Container in Good Condition?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Custody Seals Present on Shipping Container?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Condition: Good <input checked="" type="checkbox"/> Broken <input type="checkbox"/>	
Chain-of-Custody Present?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Chain-of-Custody Agrees with Sample Labels?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Chain-of-Custody Signed?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Packing Present in Shipping Container?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Type of Packing <u>Bubble wrap</u>	
<u>Vermiculite</u>	
Custody Seals on Sample Bottles?	<input type="checkbox"/> <input checked="" type="checkbox"/>
Condition: Good <input type="checkbox"/> Broken <input type="checkbox"/>	
Total Number of Sample Bottles <u>6</u>	
Total Number of Samples <u>4</u>	
Samples Intact?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Sufficient Sample Volume for Indicated Test?	<input checked="" type="checkbox"/> <input type="checkbox"/>

Trip Blanks Received?	YES NO
No. of Sets _____	<input type="checkbox"/> <input checked="" type="checkbox"/>
VOA Vials Have Zero Headspace?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Preservatives Added to Sample?	<input type="checkbox"/> <input checked="" type="checkbox"/>
pH Check Required?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Performed By? <u>SK</u>	
Ice Present in Shipping Container?	<input checked="" type="checkbox"/> <input type="checkbox"/>
<u>1 small Ice pack</u>	
Container # _____	Temperature <u>8.02</u>
_____	_____
_____	_____
_____	_____
_____	_____
Project Manager: Contacted?	
Name: _____	
Date Contacted: <u>11/2/98</u>	

Any **NO** response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked N/A.

COMMENTS: PA altered by SKR. as per COC (1 bottle)  
Repackaged by same Blank WL-000-0 receiver  
in 1 L Plastics

Checklist Completed by SKRUT  
 Date 11/2/98

**CASE NARRATIVE**

**PCB ANALYSIS**

Client : WESTON\_NE

W.O. No. : 9811008

SDG# : N/A

Date : 11/17/98

1. Three solid and one liquid samples were received on October 31, 1998. The samples were extracted and analyzed for PCB compounds using 8082 methodologies.
2. Samples OIL-000-0, OIL-001-0 and OIL-002 were extracted by the waste dilution method. A Laboratory Control Standard was extracted and analyzed with these samples.
3. Sample WC-000-0 was extracted by the liquid-liquid method.
4. Due to limited sample quantity, only 500 mL of sample WC-000-0 were extracted, instead of the usual 1000 mL. Detection limits were adjusted accordingly.
5. Due to software limitations, some forms were corrected manually.

7/17/98  
11/17/98

WA  
11/17/98

**GPL LABORATORIES, LLLP  
METALS CASE NARRATIVE**

PROJECT: WESTON\_NE  
GP Work Order: 9811008  
DATE: November 16, 1998

The following data package comprises one water sample which was received at GPL Laboratories on October 31, 1998. The sample was analyzed for silver, arsenic, barium, cadmium, chromium, lead, and selenium by ICP, and mercury by cold vapor AA.

The sample ID was modified to accommodate the computer software used to generate the data package. The following change was made:

CLIENT ID	REPORTED ID	LABORATORY ID
WC-000-0	WC-000	9811008-04A

A matrix spike, and duplicate were performed on the sample. A serial dilution was performed also for the ICP analytes. The matrix spike was outside of the control limits for selenium; all associated data was flagged with an "N". A post digestion analytical spike was also performed with good recovery.

All QA/QC criteria were met with the exception of those mentioned above.

RA 11-16-98  
RW 11-16-98

GP Work Order # 9811009

SAMPLE ANALYSIS REPORT

Prepared For:

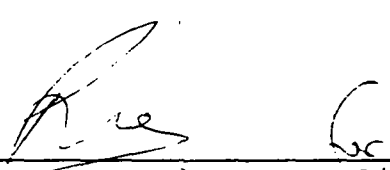
ROY F. WESTON, INC.  
ONE WALL STREET  
MANCHESTER, NH 03301-1501

MEDDY EASTERN SURPLUS COMPANY

Prepared By:

GPL Laboratories, LLLP  
202 Perry Parkway  
Gaithersburg, MD 20877

November 17, 1998

  
\_\_\_\_\_  
Yemane Yohannes, Laboratory Director

GPL LABORATORIES, LLLP  
ANALYTICAL RESULTS

Project: MEDDY EASTERN SURPLUS COMPANY

ROY F. WESTON, INC.  
ONE WALL STREET  
MANCHESTER, NH 03301-1501  
Atten: CHRIS KANE

GPL LABORATORIES, LLLP  
202 Perry Parkway  
Gaithersburg, MD 20877

Atten: Client Services  
Phone: (301) 926-6802

Certified by: \_\_\_\_\_

SAMPLE IDENTIFICATION

<u>GP ID</u>	<u>Client ID</u>
9811009-01A	BC-000-0
9811009-02A	BC-001-0
9811009-03A	BC-001-1
9811009-04A	BC-001-2
9811009-05A	BC-002-0
9811009-06A	BC-003-0
9811009-07A	BC-004-0
9811009-08A	BC-005-0
9811009-09A	BC-006-0
9811009-10A	BC-007-0
9811009-11A	BC-008-0
9811009-12A	BC-009-0

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811009-01A  
Client ID: BC-000-0  
Collected: 10/29/98  
Dilution: 1000

Matrix: SOIL  
Method: SW846 8082  
Units: ug/Kg

Analyst: JSB  
Analyzed: 11/04/98  
Prepared: 10/29/98

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Qualifier</u>
Aroclor 1016	BQL	17000	
Aroclor 1221	BQL	17000	
Aroclor 1232	BQL	17000	
Aroclor 1242	BQL	17000	
Aroclor 1248	BQL	34000	
Aroclor 1254	BQL	34000	
Aroclor 1260	640000	34000	

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811009-02A  
Client ID: BC-001-0  
Collected: 10/29/98  
Dilution: 200

Matrix: SOIL  
Method: SW846 8082  
Units: ug/Kg

Analyst: JSB  
Analyzed: 11/04/98  
Prepared: 10/29/98

GC TARGET COMPOUNDS

Parameter	Result	Rep.Lim.	Qualifier
Aroclor 1016	BQL	3400	
Aroclor 1221	BQL	3400	
Aroclor 1232	BQL	3400	
Aroclor 1242	BQL	3400	
Aroclor 1248	BQL	6800	
Aroclor 1254	BQL	6800	
Aroclor 1260	100000	6800	

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811009-05A  
Client ID: BC-002-0  
Collected: 10/29/98  
Dilution: 1

Matrix: SOIL  
Method: SW846 8082  
Units: ug/Kg

Analyst: JSB  
Analyzed: 11/03/98  
Prepared: 10/29/98

GC TARGET COMPOUNDS

Parameter	Result	Rep.Lim.	Qualifier
Aroclor 1016	BQL	17	
Aroclor 1221	BQL	17	
Aroclor 1232	BQL	17	
Aroclor 1242	BQL	17	
Aroclor 1248	BQL	34	
Aroclor 1254	51	34	
Aroclor 1260	300	34	



GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811009-06A  
Client ID: BC-003-0  
Collected: 10/29/98  
Dilution: 200

Matrix: SOIL  
Method: SW846 8082  
Units: ug/Kg

Analyst: JSB  
Analyzed: 11/04/98  
Prepared: 10/29/98

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Qualifier</u>
Aroclor 1016	BQL	3400	
Aroclor 1221	BQL	3400	
Aroclor 1232	BQL	3400	
Aroclor 1242	BQL	3400	
Aroclor 1248	BQL	6800	
Aroclor 1254	BQL	6800	
Aroclor 1260	51000	6800	

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811009-07A  
Client ID: BC-004-0  
Collected: 10/29/98  
Dilution: 1

Matrix: SOIL  
Method: SW846 8082  
Units: ug/Kg

Analyst: JSB  
Analyzed: 11/03/98  
Prepared: 10/29/98

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Qualifier</u>
Aroclor 1016	BQL	17	
Aroclor 1221	BQL	17	
Aroclor 1232	BQL	17	
Aroclor 1242	BQL	17	
Aroclor 1248	BQL	34	
Aroclor 1254	BQL	34	
Aroclor 1260	BQL	34	

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811009-08A  
Client ID: BC-005-0  
Collected: 10/29/98  
Dilution: 1

Matrix: SOIL  
Method: SW846 8082  
Units: ug/Kg

Analyst: JSB  
Analyzed: 11/03/98  
Prepared: 10/29/98

GC TARGET COMPOUNDS

Parameter	Result	Rep.Lim.	Qualifier
Aroclor 1016	BQL	17	
Aroclor 1221	BQL	17	
Aroclor 1232	BQL	17	
Aroclor 1242	BQL	17	
Aroclor 1248	BQL	34	
Aroclor 1254	BQL	34	
Aroclor 1260	20	34	J

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811009-09A  
Client ID: BC-006-0  
Collected: 10/29/98  
Dilution: 1

Matrix: SOIL  
Method: SW846 8082  
Units: ug/Kg

Analyst: JSB  
Analyzed: 11/03/98  
Prepared: 10/29/98

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Qualifier</u>
Aroclor 1016	BQL	17	
Aroclor 1221	BQL	17	
Aroclor 1232	BQL	17	
Aroclor 1242	BQL	17	
Aroclor 1248	BQL	34	
Aroclor 1254	BQL	34	
Aroclor 1260	76	34	

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811009-10A  
Client ID: BC-007-0  
Collected: 10/29/98  
Dilution: 5

Matrix: SOIL  
Method: SW846 8082  
Units: ug/Kg

Analyst: JSB  
Analyzed: 11/04/98  
Prepared: 10/29/98

GC TARGET COMPOUNDS

Parameter	Result	Rep.Lim.	Qualifier
Aroclor 1016	BQL	85	
Aroclor 1221	BQL	85	
Aroclor 1232	BQL	85	
Aroclor 1242	BQL	85	
Aroclor 1248	BQL	170	
Aroclor 1254	BQL	170	
Aroclor 1260	1200	170	

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811009-11A  
Client ID: BC-008-0  
Collected: 10/29/98  
Dilution: 10

Matrix: SOIL  
Method: SW846 8082  
Units: ug/Kg

Analyst: JSB  
Analyzed: 11/04/98  
Prepared: 10/29/98

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Qualifier</u>
Aroclor 1016	BQL	170	
Aroclor 1221	BQL	170	
Aroclor 1232	BQL	170	
Aroclor 1242	BQL	170	
Aroclor 1248	BQL	340	
Aroclor 1254	BQL	340	
Aroclor 1260	2700	340	

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811009-12A  
Client ID: BC-009-0  
Collected: 10/29/98  
Dilution: 1

Matrix: SOIL  
Method: SW846 8082  
Units: ug/Kg

Analyst: JSB  
Analyzed: 11/04/98  
Prepared: 10/29/98

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Qualifier</u>
Aroclor 1016	BQL	17	
Aroclor 1221	BQL	17	
Aroclor 1232	BQL	17	
Aroclor 1242	BQL	17	
Aroclor 1248	BQL	34	
Aroclor 1254	BQL	34	
Aroclor 1260	120	34	

**GPL LABORATORIES, LLLP  
METALS ANALYSIS RESULTS**

GP ID: 9811009-01  
Client ID: BC-000-0

Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7471	BQL	0.04	mg/Kg	1	11/05/98	11/06/98 LCM
Silver	SW846 6010	BQL	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Aluminum	SW846 6010	15700	22.3	mg/Kg	2	11/12/98	11/13/98 DDH
Arsenic	SW846 6010	39.4	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Barium	SW846 6010	38.8	1.1	mg/Kg	2	11/12/98	11/13/98 DDH
Beryllium	SW846 6010	0.64	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Calcium	SW846 6010	1340	111	mg/Kg	2	11/12/98	11/13/98 DDH
Cadmium	SW846 6010	BQL	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Cobalt	SW846 6010	13.3	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Chromium	SW846 6010	31.5	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Copper	SW846 6010	29.4	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Iron	SW846 6010	32700	11.1	mg/Kg	2	11/12/98	11/13/98 DDH
Potassium	SW846 6010	844	55.7	mg/Kg	2	11/12/98	11/13/98 DDH
Magnesium	SW846 6010	7470	55.7	mg/Kg	2	11/12/98	11/13/98 DDH
Manganese	SW846 6010	852	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Sodium	SW846 6010	70.2	55.7	mg/Kg	2	11/12/98	11/13/98 DDH
Nickel	SW846 6010	39.9	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Lead	SW846 6010	18.0	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Antimony	SW846 6010	BQL	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Selenium	SW846 6010	BQL	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Thallium	SW846 6010	1.2	1.1	mg/Kg	2	11/12/98	11/13/98 DDH
Vanadium	SW846 6010	27.4	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Zinc	SW846 6010	66.6	1.1	mg/Kg	2	11/12/98	11/13/98 DDH



GPL LABORATORIES, LLLP  
METALS ANALYSIS RESULTS

GP ID: 9811009-02  
Client ID: BC-001-0

Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7471	BQL	0.04	mg/Kg	1	11/05/98	11/06/98 LCM
Silver	SW846 6010	BQL	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Aluminum	SW846 6010	13900	22.0	mg/Kg	2	11/12/98	11/13/98 DDH
Arsenic	SW846 6010	34.3	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Barium	SW846 6010	32.7	1.1	mg/Kg	2	11/12/98	11/13/98 DDH
Beryllium	SW846 6010	0.52	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Calcium	SW846 6010	1670	110	mg/Kg	2	11/12/98	11/13/98 DDH
Cadmium	SW846 6010	BQL	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Cobalt	SW846 6010	12.6	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Chromium	SW846 6010	28.0	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Copper	SW846 6010	27.0	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Iron	SW846 6010	25800	11.0	mg/Kg	2	11/12/98	11/13/98 DDH
Potassium	SW846 6010	840	55.1	mg/Kg	2	11/12/98	11/13/98 DDH
Magnesium	SW846 6010	7350	55.1	mg/Kg	2	11/12/98	11/13/98 DDH
Manganese	SW846 6010	718	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Sodium	SW846 6010	162	55.1	mg/Kg	2	11/12/98	11/13/98 DDH
Nickel	SW846 6010	36.9	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Lead	SW846 6010	14.7	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Antimony	SW846 6010	0.56	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Selenium	SW846 6010	BQL	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Thallium	SW846 6010	BQL	1.1	mg/Kg	2	11/12/98	11/13/98 DDH
Vanadium	SW846 6010	21.8	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Zinc	SW846 6010	54.9	1.1	mg/Kg	2	11/12/98	11/13/98 DDH

GPL LABORATORIES, LLLP  
METALS ANALYSIS RESULTS

GP ID: 9811009-05  
Client ID: BC-002-0

Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7471	BQL	0.03	mg/Kg	1	11/05/98	11/06/98 LCM
Silver	SW846 6010	BQL	0.41	mg/Kg	2	11/12/98	11/13/98 DDH
Aluminum	SW846 6010	14500	27.1	mg/Kg	2	11/12/98	11/13/98 DDH
Arsenic	SW846 6010	26.4	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Barium	SW846 6010	34.8	1.4	mg/Kg	2	11/12/98	11/13/98 DDH
Beryllium	SW846 6010	0.54	0.41	mg/Kg	2	11/12/98	11/13/98 DDH
Calcium	SW846 6010	1810	135	mg/Kg	2	11/12/98	11/13/98 DDH
Cadmium	SW846 6010	BQL	0.41	mg/Kg	2	11/12/98	11/13/98 DDH
Cobalt	SW846 6010	9.6	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Chromium	SW846 6010	23.7	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Copper	SW846 6010	29.9	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Iron	SW846 6010	24200	13.5	mg/Kg	2	11/12/98	11/13/98 DDH
Potassium	SW846 6010	755	67.6	mg/Kg	2	11/12/98	11/13/98 DDH
Magnesium	SW846 6010	5300	67.6	mg/Kg	2	11/12/98	11/13/98 DDH
Manganese	SW846 6010	463	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Sodium	SW846 6010	93.8	67.6	mg/Kg	2	11/12/98	11/13/98 DDH
Lead	SW846 6010	27.5	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
	SW846 6010	16.0	0.41	mg/Kg	2	11/12/98	11/13/98 DDH
Antimony	SW846 6010	BQL	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Selenium	SW846 6010	BQL	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Thallium	SW846 6010	BQL	1.4	mg/Kg	2	11/12/98	11/13/98 DDH
Vanadium	SW846 6010	23.4	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Zinc	SW846 6010	85.2	1.4	mg/Kg	2	11/12/98	11/13/98 DDH

GPL LABORATORIES, LLLP  
METALS ANALYSIS RESULTSGP ID: 9811009-07  
Client ID: BC-004-0Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7471	0.04	0.04	mg/Kg	1	11/05/98	11/06/98 LCM
Silver	SW846 6010	BQL	0.40	mg/Kg	2	11/12/98	11/13/98 DDH
Aluminum	SW846 6010	16300	26.9	mg/Kg	2	11/12/98	11/13/98 DDH
Arsenic	SW846 6010	38.3	0.67	mg/Kg	2	11/12/98	11/13/98 DDH
Barium	SW846 6010	26.9	1.3	mg/Kg	2	11/12/98	11/13/98 DDH
Beryllium	SW846 6010	0.51	0.40	mg/Kg	2	11/12/98	11/13/98 DDH
Calcium	SW846 6010	571	134	mg/Kg	2	11/12/98	11/13/98 DDH
Cadmium	SW846 6010	BQL	0.40	mg/Kg	2	11/12/98	11/13/98 DDH
Cobalt	SW846 6010	11.1	0.67	mg/Kg	2	11/12/98	11/13/98 DDH
Chromium	SW846 6010	25.3	0.67	mg/Kg	2	11/12/98	11/13/98 DDH
Copper	SW846 6010	24.5	0.67	mg/Kg	2	11/12/98	11/13/98 DDH
Iron	SW846 6010	27300	13.4	mg/Kg	2	11/12/98	11/13/98 DDH
Potassium	SW846 6010	546	67.2	mg/Kg	2	11/12/98	11/13/98 DDH
Magnesium	SW846 6010	5280	67.2	mg/Kg	2	11/12/98	11/13/98 DDH
Manganese	SW846 6010	552	0.67	mg/Kg	2	11/12/98	11/13/98 DDH
Sodium	SW846 6010	89.2	67.2	mg/Kg	2	11/12/98	11/13/98 DDH
Nickel	SW846 6010	29.0	0.67	mg/Kg	2	11/12/98	11/13/98 DDH
Lead	SW846 6010	14.8	0.40	mg/Kg	2	11/12/98	11/13/98 DDH
Antimony	SW846 6010	BQL	0.67	mg/Kg	2	11/12/98	11/13/98 DDH
Selenium	SW846 6010	BQL	0.67	mg/Kg	2	11/12/98	11/13/98 DDH
Thallium	SW846 6010	BQL	1.3	mg/Kg	2	11/12/98	11/13/98 DDH
Vanadium	SW846 6010	26.1	0.67	mg/Kg	2	11/12/98	11/13/98 DDH
Zinc	SW846 6010	59.0	1.3	mg/Kg	2	11/12/98	11/13/98 DDH

GPL LABORATORIES, LLLP  
METALS ANALYSIS RESULTS

GP ID: 9811009-08  
Client ID: BC-005-0

Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7471	BQL	0.03	mg/Kg	1	11/05/98	11/06/98 LCM
Silver	SW846 6010	BQL	0.41	mg/Kg	2	11/12/98	11/13/98 DDH
Aluminum	SW846 6010	12800	27.1	mg/Kg	2	11/12/98	11/13/98 DDH
Arsenic	SW846 6010	41.4	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Barium	SW846 6010	28.2	1.4	mg/Kg	2	11/12/98	11/13/98 DDH
Beryllium	SW846 6010	0.50	0.41	mg/Kg	2	11/12/98	11/13/98 DDH
Calcium	SW846 6010	1390	135	mg/Kg	2	11/12/98	11/13/98 DDH
Cadmium	SW846 6010	BQL	0.41	mg/Kg	2	11/12/98	11/13/98 DDH
Cobalt	SW846 6010	12.4	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Chromium	SW846 6010	29.4	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Copper	SW846 6010	24.6	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Iron	SW846 6010	28700	13.5	mg/Kg	2	11/12/98	11/13/98 DDH
Potassium	SW846 6010	900	67.7	mg/Kg	2	11/12/98	11/13/98 DDH
Magnesium	SW846 6010	7270	67.7	mg/Kg	2	11/12/98	11/13/98 DDH
Manganese	SW846 6010	709	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Sodium	SW846 6010	88.3	67.7	mg/Kg	2	11/12/98	11/13/98 DDH
Nickel	SW846 6010	37.2	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Lead	SW846 6010	14.8	0.41	mg/Kg	2	11/12/98	11/13/98 DDH
Antimony	SW846 6010	BQL	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Selenium	SW846 6010	BQL	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Thallium	SW846 6010	BQL	1.4	mg/Kg	2	11/12/98	11/13/98 DDH
Vanadium	SW846 6010	24.0	0.68	mg/Kg	2	11/12/98	11/13/98 DDH
Zinc	SW846 6010	62.5	1.4	mg/Kg	2	11/12/98	11/13/98 DDH

GPL LABORATORIES, LLLP  
METALS ANALYSIS RESULTSGP ID: 9811009-09  
Client ID: BC-006-0Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7471	BQL	0.03	mg/Kg	1	11/05/98	11/06/98 LCM
Silver	SW846 6010	BQL	0.36	mg/Kg	2	11/12/98	11/13/98 DDH
Aluminum	SW846 6010	13800	23.8	mg/Kg	2	11/12/98	11/13/98 DDH
Arsenic	SW846 6010	34.9	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Barium	SW846 6010	28.1	1.2	mg/Kg	2	11/12/98	11/13/98 DDH
Beryllium	SW846 6010	0.53	0.36	mg/Kg	2	11/12/98	11/13/98 DDH
Calcium	SW846 6010	3770	119	mg/Kg	2	11/12/98	11/13/98 DDH
Cadmium	SW846 6010	BQL	0.36	mg/Kg	2	11/12/98	11/13/98 DDH
Cobalt	SW846 6010	12.5	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Chromium	SW846 6010	32.1	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Copper	SW846 6010	28.1	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Iron	SW846 6010	29800	11.9	mg/Kg	2	11/12/98	11/13/98 DDH
Potassium	SW846 6010	1050	59.6	mg/Kg	2	11/12/98	11/13/98 DDH
Magnesium	SW846 6010	7680	59.6	mg/Kg	2	11/12/98	11/13/98 DDH
Manganese	SW846 6010	616	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Sodium	SW846 6010	125	59.6	mg/Kg	2	11/12/98	11/13/98 DDH
Nickel	SW846 6010	37.6	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Lead	SW846 6010	14.8	0.36	mg/Kg	2	11/12/98	11/13/98 DDH
Antimony	SW846 6010	BQL	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Selenium	SW846 6010	BQL	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Thallium	SW846 6010	BQL	1.2	mg/Kg	2	11/12/98	11/13/98 DDH
Vanadium	SW846 6010	27.8	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Zinc	SW846 6010	60.1	1.2	mg/Kg	2	11/12/98	11/13/98 DDH

GPL LABORATORIES, LLLP  
METALS ANALYSIS RESULTS

GP ID: 9811009-10  
Client ID: BC-007-0

Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Oil.	Prepared	Analyzed By
Mercury	SW846 7471	0.24	0.03	mg/Kg	1	11/05/98	11/06/98 LCM
Silver	SW846 6010	BQL	0.36	mg/Kg	2	11/12/98	11/13/98 DDH
Aluminum	SW846 6010	13600	24.1	mg/Kg	2	11/12/98	11/13/98 DDH
Arsenic	SW846 6010	27.7	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Barium	SW846 6010	47.5	1.2	mg/Kg	2	11/12/98	11/13/98 DDH
Beryllium	SW846 6010	0.54	0.36	mg/Kg	2	11/12/98	11/13/98 DDH
Calcium	SW846 6010	8600	120	mg/Kg	2	11/12/98	11/13/98 DDH
Cadmium	SW846 6010	BQL	0.36	mg/Kg	2	11/12/98	11/13/98 DDH
Cobalt	SW846 6010	10.9	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Chromium	SW846 6010	24.8	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Copper	SW846 6010	23.9	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Iron	SW846 6010	27200	12.0	mg/Kg	2	11/12/98	11/13/98 DDH
Potassium	SW846 6010	1070	60.2	mg/Kg	2	11/12/98	11/13/98 DDH
Magnesium	SW846 6010	6640	60.2	mg/Kg	2	11/12/98	11/13/98 DDH
Manganese	SW846 6010	762	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Sodium	SW846 6010	282	60.2	mg/Kg	2	11/12/98	11/13/98 DDH
Nickel	SW846 6010	33.1	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Lead	SW846 6010	16.3	0.36	mg/Kg	2	11/12/98	11/13/98 DDH
Antimony	SW846 6010	BQL	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Selenium	SW846 6010	BQL	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Thallium	SW846 6010	BQL	1.2	mg/Kg	2	11/12/98	11/13/98 DDH
Vanadium	SW846 6010	23.0	0.60	mg/Kg	2	11/12/98	11/13/98 DDH
Zinc	SW846 6010	61.8	1.2	mg/Kg	2	11/12/98	11/13/98 DDH

GPL LABORATORIES, LLLP  
METALS ANALYSIS RESULTSGP ID: 9811009-11  
Client ID: BC-008-0Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7471	BQL	0.03	mg/Kg	1	11/05/98	11/06/98 LCM
Silver	SW846 6010	BQL	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Aluminum	SW846 6010	12400	22.3	mg/Kg	2	11/12/98	11/13/98 DDH
Arsenic	SW846 6010	38.1	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Barium	SW846 6010	30.5	1.1	mg/Kg	2	11/12/98	11/13/98 DDH
Beryllium	SW846 6010	0.47	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Calcium	SW846 6010	1500	111	mg/Kg	2	11/12/98	11/13/98 DDH
Cadmium	SW846 6010	BQL	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Cobalt	SW846 6010	12.1	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Chromium	SW846 6010	23.4	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Copper	SW846 6010	26.4	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Iron	SW846 6010	28100	11.1	mg/Kg	2	11/12/98	11/13/98 DDH
Potassium	SW846 6010	722	55.7	mg/Kg	2	11/12/98	11/13/98 DDH
Magnesium	SW846 6010	6860	55.7	mg/Kg	2	11/12/98	11/13/98 DDH
Manganese	SW846 6010	1140	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Sodium	SW846 6010	81.4	55.7	mg/Kg	2	11/12/98	11/13/98 DDH
Nickel	SW846 6010	36.4	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Lead	SW846 6010	15.3	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Antimony	SW846 6010	0.70	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Selenium	SW846 6010	BQL	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Thallium	SW846 6010	BQL	1.1	mg/Kg	2	11/12/98	11/13/98 DDH
Vanadium	SW846 6010	20.8	0.56	mg/Kg	2	11/12/98	11/13/98 DDH
Zinc	SW846 6010	56.0	1.1	mg/Kg	2	11/12/98	11/13/98 DDH

GPL LABORATORIES, LLLP  
METALS ANALYSIS RESULTS

GP ID: 9811009-12  
Client ID: BC-009-0

Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7471	BQL	0.03	mg/Kg	1	11/05/98	11/06/98 LCM
Silver	SW846 6010	BQL	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Aluminum	SW846 6010	14000	22.1	mg/Kg	2	11/12/98	11/13/98 DDH
Arsenic	SW846 6010	29.8	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Barium	SW846 6010	27.6	1.1	mg/Kg	2	11/12/98	11/13/98 DDH
Beryllium	SW846 6010	0.50	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Calcium	SW846 6010	793	110	mg/Kg	2	11/12/98	11/13/98 DDH
Cadmium	SW846 6010	BQL	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Cobalt	SW846 6010	10.3	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Chromium	SW846 6010	25.3	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Copper	SW846 6010	21.4	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Iron	SW846 6010	27000	11.0	mg/Kg	2	11/12/98	11/13/98 DDH
Potassium	SW846 6010	859	55.2	mg/Kg	2	11/12/98	11/13/98 DDH
Magnesium	SW846 6010	6720	55.2	mg/Kg	2	11/12/98	11/13/98 DDH
Manganese	SW846 6010	431	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Sodium	SW846 6010	93.5	55.2	mg/Kg	2	11/12/98	11/13/98 DDH
Nickel	SW846 6010	31.7	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Lead	SW846 6010	11.5	0.33	mg/Kg	2	11/12/98	11/13/98 DDH
Antimony	SW846 6010	BQL	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Selenium	SW846 6010	BQL	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Thallium	SW846 6010	BQL	1.1	mg/Kg	2	11/12/98	11/13/98 DDH
Vanadium	SW846 6010	21.4	0.55	mg/Kg	2	11/12/98	11/13/98 DDH
Zinc	SW846 6010	53.1	1.1	mg/Kg	2	11/12/98	11/13/98 DDH



GPL LABORATORIES, LLLP  
WET CHEMISTRY ANALYSIS RESULTSGP ID: 9811009-01  
Client ID: BC-000-0Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAWW 160.3	92.0		%			11/11/98 JH

GP ID: 9811009-02  
Client ID: BC-001-0Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAWW 160.3	93.7		%			11/11/98 JH

GP ID: 9811009-05  
Client ID: BC-002-0Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAWW 160.3	93.5		%			11/11/98 JH

GP ID: 9811009-06  
Client ID: BC-003-0Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAWW 160.3	87.7		%			11/11/98 JH

GP ID: 9811009-07  
Client ID: BC-004-0Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAWW 160.3	90.1		%			11/11/98 JH

GP ID: 9811009-08  
Client ID: BC-005-0Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAWW 160.3	95.2		%			11/11/98 JH

GPL LABORATORIES, LLLP  
WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9811009-09  
Client ID: BC-006-0

Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAWW 160.3	93.6		%			11/11/98 JH

GP ID: 9811009-10  
Client ID: BC-007-0

Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAWW 160.3	90.9		%			11/11/98 JH

GP ID: 9811009-11  
Client ID: BC-008-0

Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAWW 160.3	95.1		%			11/11/98 JH

GP ID: 9811009-12  
Client ID: BC-009-0

Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAWW 160.3	92.3		%			11/11/98 JH

## *GPL Laboratories, LLLP*

### Possible notes and definitions for this report:

- BQL** = Below Quantitation Limit
- J** = Value is less than the reporting limits but greater than zero
- P** = Indicates that there is greater than 25% difference for detected pesticide/Aroclor results between the two GC columns
- B** = Indicates that the compound was found in the associated blank
- E** = Indicates that the concentration exceeded the calibration range of the instrument
- U** = Indicates that the compound was analyzed for but not detected, number indicates the reporting limit
- D** = Indicates that the compound was found in an analysis at a secondary dilution factor
- \*** = Value obtained from a 1:5 dilution
- +** = Value obtained from a 1:10 dilution
- #** = Value obtained from a 1:20 dilution
- =** = Value obtained from a 1:25 dilution
- ^** = Value obtained from a 1:50 dilution
- ~** = Value obtained from a 1:100 dilution
- l** = Value obtained from a 1:250 dilution
- @** = Value obtained from a 1:125 dilution (medium level)
- \$** = Value obtained from a 1:500 dilution
- &** = Value obtained from a 1:1000 dilution
- N** = Flashpoint not observed; heated to specified limit
- R** = Flammable at room temperature
- TNTC** = Too numerous to count
- B.P.** = Detection limit taken from boiling point
- F.F.** = Sample gave off flammable fumes

# GP ENVIRONMENTAL SERVICES, INC.

202 Perry Parkway  
Gaithersburg, Maryland 20877  
(301) 926-6802

Contract #/Billing Reference

1 of 1 Pgs.

Project: Meddybemps - Eastern Supply Co.					Turnaround Time 7-day / 7-day				
Client: WESTON					# of Containers				
Send Results To: Mr. Chris Kane					Container Type: B01, B02, CG				
Address: One Will Street					Preservative Used				
Manchester, NH 03301-1501					Type of Analysis				
Phone: (603) 656-5428					PCB 3541/8082 744 30500/610B				

Sample ID#	Date Sampled	Time Sampled	Sample Matrix	Sampler's Initials	PCB	3541/8082	744	30500/610B	Lab Cooler No.	CLIENT COMMENTS
BC-000-0	10/26/96	0815	Soil	gas	X	X				
BC-001-0		0817			X	X				Need to do MS/MSD for PCBs use extra vol. from BC-001-2
BC-001-1		0817			X	X				
BC-001-2		0817			X	X				
BC-002-0		0820			X	X				
BC-003-0		0823			X	X				
BC-004-0		0827			X	X				
BC-005-0		0830			X	X				
BC-006-0		0833			X	X				
BC-007-0		0839			X	X				
BC-008-0		0845			X	X				
<del>BC-009-0</del>		<del>0847</del>			<del>X</del>	<del>X</del>				

Relinquished By: <i>gas</i>	Date/Time: 10/26/96 1700	Received By: Fed Ex	Relinquished By:	Received for Laboratory By: <i>SEA</i>	Date/Time: 11/2/96 11:00 AM
Relinquished By:	Date/Time:	Received By:	Date/Time:	Shipper:	Airbill No.:
Relinquished By:	Date/Time:	Received By:	Lab Comments:		Temp: 5.0°C

G.P. W.O. \_\_\_\_\_

**SAMPLE RECEIPT CHECKLIST**

o. 9811008  
 Client Name NGSTON  
 Date Received 10/31/98  
 Time Received 12:12 AM  
 Received By SKATI

Carrier Name Fed Ex  
 Prepared (Logged In) By SE 11/2/98  
Initials Date  
 Project Meadowlands FACTEC-Singulus CO  
 Site \_\_\_\_\_  
 VOA Holding Blank I.D. No. \_\_\_\_\_

Airbill/Manifest Present? No. <u>505867025009</u>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Shipping Container in Good Condition?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Custody Seals Present on Shipping Container? Condition: Good <input checked="" type="checkbox"/> Broken <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>
Chain-of-Custody Present?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Chain-of-Custody Agrees with Sample Labels?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Chain-of-Custody Signed?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Packing Present in Shipping Container? Type of Packing <u>VERMICULITE</u>	<input checked="" type="checkbox"/> <input type="checkbox"/>
Custody Seals on Sample Bottles? Condition: Good <input type="checkbox"/> Broken <input checked="" type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>
Total Number of Sample Bottles <u>12</u>	
Total Number of Samples <u>11</u>	
Samples Intact?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Sufficient Sample Volume for Indicated Test?	<input checked="" type="checkbox"/> <input type="checkbox"/>

Trip Blanks Received? No. of Sets _____	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
VOA Vials Have Zero Headspace?	<u>NR</u>
Preservatives Added to Sample?	<u>NR</u>
pH Check Required? Performed By? _____	<u>NR</u>
Ice Present in Shipping Container?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Container# _____ Temperature _____	<u>401 5.0°C</u>
_____	<u>11/2/98</u>
_____	_____
Project Manager Contacted? Name: <u>Paul J. ...</u> Date Contacted: <u>11/2/98</u>	

Any **NO** response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked **N/A**.

COMMENTS: Temperature by Tony Bland  
Sample BC0090 in COL (marked out) sample received 1 box  
inc.

Checklist Completed by [Signature]  
 Date 11/2/98

**DATA REVIEW CHECKLIST**

Site: Middle Eastern Samples Co  
Meddybemps, Maine

→ not analyzed field dup available

PL Labs. Lab Number: 9811004

WESTON Sample IDs: BC-000-C, BC-001-C, BC-001-1, BC-001-2  
BC-002-C, BC-003-C through BC-008-C

Data	Fraction					Comments
	Soils	GC10				
Chain of Custody	✓	✓				
Log-in Sheet	✓	✓				
Preservation	✓	✓				
Holding Time	✓	✓				
Trip Blanks	NA	NA				
Instrument/Method Blanks (soils/solids)	✓	Limit = 0.338 mg/kg				no action since sample results greater than 5x
Instrument/Method Blanks (Aqueous)	NA	NA	BC-001S			Antimony, arsenic, chromium, lead, manganese & mercury did not meet these limits
MS/MSD - Soil/Solid	Matrix Interference	30 ms/MSD				not reported - no action since MS not GC limits
MS/MSD - Aqueous	NA					
LCS/LFB	✓					
Blank Spikes (BS/BSD)	NA					
Lab Duplicates	NA					
Field Duplicates	BC-001-C	NA				
Surrogate Recoveries	At least one surrogate on each column and within GC limits					

Calibration  
 ✓ = Data reviewed  
 NA = Not Applicable

Note: Data reviewed but not commented on is considered acceptable.

Qualifiers Used: (Pest/PCBs) - no qualifications made but next time advise lab to provide calibration for RSD + %D  
 Also surrogates recover should be 30-150 + lab rec'd 50-150  
 This lab's ranges were much too broad.  
 Metals  
 criteria for spike recoveries used  
 less than 20% RPD for Duplicates

Data Reviewer Initials: DFC

Date: 1/21/99

CASE NARRATIVE

PCB ANALYSIS

Client : WESTON\_NE

W.O. No. : 9811009

SDG# : N/A

Date : 11/17/98

1. Ten soil samples were received on October 31, 1998. The samples were extracted and analyzed for PCB compounds using 8082 methodologies.
2. Matrix spike and matrix spike duplicate analyses were performed on sample BC-000-0. Due to matrix interferences and very high level of compounds found in the background sample, MS/MSD Form I & III were not generated. A Laboratory Control Standard was performed with this batch of samples. The LCS was used to verify the laboratory performance.
3. Surrogate TCX and DCB recoveries for samples BC-000-0, BC-001-0, BC003-0, BC-007-0 and BC-008-0 were outside QC limits due to high levels of PCBs detected in the samples and dilutions.
4. Due to software limitations, some forms were corrected manually.

m<sup>2</sup>  
11/17/98  
MA 11/18/98

GPL LABORATORIES, LLLP  
METALS CASE NARRATIVE

PROJECT: WESTON\_NE  
GP Work Order: 9811009  
DATE: November 18, 1998

The following data package comprises ten soil samples which were received at GPL Laboratories on October 31, 1998. The samples were analyzed for HSL metals by SW846 methods.

The sample IDs were modified to accommodate the computer software used to generate the data package. The following changes were made:

CLIENT ID	REPORTED ID	LABORATORY ID
BC-000-0	BC-000	9811009-01A
BC-001-0	BC-001	9811009-02A
BC-002-0	BC-002	9811009-05A
BC-003-0	BC-003	9811009-06A
BC-004-0	BC-004	9811009-07A
BC-005-0	BC-005	9811009-08A
BC-006-0	BC-006	9811009-09A
BC-007-0	BC-007	9811009-10A
BC-008-0	BC-008	9811009-11A
BC-009-0	BC-009	9811009-12A

The preparation blank was contaminated with lead. Reanalysis was not required however, because the sample concentrations were greater than 10x the blank concentration.

A matrix spike and duplicate were performed on sample BC-001-0 for all required analytes. A serial dilution was performed also for the ICP analytes. The matrix spike was outside of the control limits for antimony, chromium, and mercury; all associated data was flagged with an "N". The matrix spike could not be recovered for arsenic, lead, and manganese. The spike addition was insignificant relative to the sample concentrations. A post digestion analytical spike was also performed with good recoveries. The duplicate was outside of the control limits for manganese; all associated data was flagged with an "\*\*".

All QA/QC criteria were met with the exception of those mentioned above.

RA 11-18-98  
RW 11-18-98



**DATA REVIEW CHECKLIST**

Medley Eastern Samples Co

Site: Meddibemps, Maine

PL Labs. Lab Number: 9811009

WESTON Sample IDs: BC-000-C, BC-001-C, BC-001-1, BC-001-2

BC-002-0, BC-003-0 through BC-008-0

*→ not analyzed; field dup. inaccurate*

Data	Fraction				Comments
	8000	6010			
Reviewed <i>90 Solids</i>	<i>8000</i>	<i>6010</i>			
Chain of Custody	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Log-in Sheet	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Preservation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Holding Time	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Trip Blanks	NA	NA			
Instrument/Method Blanks (soils/solids)	<input checked="" type="checkbox"/>	<i>Lead = 0.338 mg/l, no action since sample results greater than 5x</i>			
Instrument/Method Blanks (Aqueous)	NA	NA	<i>BC-001S → Antimony, arsenic, chromium, lead, manganese &amp; mercury did not meet limits</i>		
MS/MSD - Soil/Solid	<i>Matrix Interference</i>	<i>sums (MSD) not reported</i>			<i>no action → max 10% met GC limits</i>
MS/MSD - Aqueous	NA				
LCS/LFB	<input checked="" type="checkbox"/>				
Blank Spikes (BS/BSD)	NA				
Lab Duplicates	NA				
Field Duplicates	<i>BC-001-0</i>	NA			
Surrogate Recoveries	<i>At least one surrogate on each column &amp; within GC limits</i>				

Calibration

✓ = Data reviewed

NA = Not Applicable

Note: Data reviewed but not commented on is considered acceptable.

Qualifiers Used:

Pest/PCBs - No qualifications made but next time advise lab to provide calibration for SD + 90 D + also surrogate  
 Also info on CLP type form. Also recov should be 30-150  
 + LCS recov 50-150  
 This lab's ranges 40-150  
 were much too broad.

Metals

Criteria for spike recoveries used  
 were 75-125% RPD for Duplicates  
 less than 20%

Data Reviewer Initials: DFG

Date: 1/21/99

Utals → UT1/J1 - Pos + non-detected results in all sample  
for antimony, arsenic, chromium,  
lead, manganese + mercury ~~did not~~  
~~meet~~ were estimated since 90 recv.  
did not meet QC limits in <sup>matrix</sup> spike  
Sample

UT2/J2 - Estimate pos + non-detected antimony, manganese, + sodium  
since RPD for lab duplicates  
greater than 20%. for antimony  
in all samples

GP Work Order # 9811169

SAMPLE ANALYSIS REPORT

Prepared For:

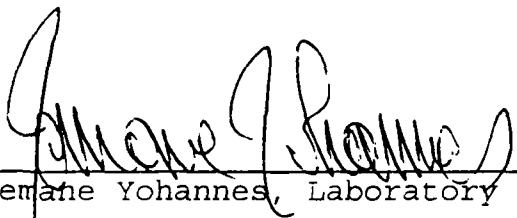
ROY F. WESTON, INC.  
ONE WALL STREET  
MANCHESTER, NH 03301-1501

MEDDY. EASTERN SURPLUS COMPANY

Prepared By:

GPL Laboratories. LLLP  
202 Perry Parkway  
Gaithersburg, MD 20877

December 3, 1998

  
\_\_\_\_\_  
Yemane Yohannes, Laboratory Director

GPL LABORATORIES, LLLP  
ANALYTICAL RESULTS

Project: MEDDY. EASTERN SURPLUS COMPANY

ROY F. WESTON, INC.  
ONE WALL STREET  
MANCHESTER, NH 03301-1501  
Atten: CHRIS KANE

GPL LABORATORIES, LLLP  
202 Perry Parkway  
Gaithersburg, MD 20877

Atten: Client Services  
Phone: (301) 926-6802

Certified by: \_\_\_\_\_

SAMPLE IDENTIFICATION

<u>GP ID</u>	<u>Client ID</u>
9811169-01A	WC-013-0
9811169-01B	
9811169-02A	WC-012-0
9811169-02B	
9811169-03A	WC-011-0
9811169-03B	
9811169-04A	BC-010-0
9811169-04B	

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811169-01A  
Client ID: WC-013-0  
Collected: 11/17/98  
Dilution: 1

Matrix: WATER  
Method: SW846 8082  
Units: ug/L

Analyst: JSB  
Analyzed: 12/03/98  
Prepared: 11/24/98

GC TARGET COMPOUNDS

Parameter	Result	Rep.Lim.	Qualifier
Aroclor 1016	BQL	1.0	
Aroclor 1221	BQL	2.0	
Aroclor 1232	BQL	1.0	
Aroclor 1242	BQL	1.0	
Aroclor 1248	BQL	1.0	
Aroclor 1254	0.48	1.0	J
Aroclor 1260	1.1	1.0	

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTSGP ID: 9811169-02A  
Client ID: WC-012-0  
Collected: 11/17/98  
Dilution: 1Matrix: WATER  
Method: SW846 8082  
Units: ug/LAnalyst: JSB  
Analyzed: 12/03/98  
Prepared: 11/24/98

## GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Qualifier</u>
Aroclor 1016	BQL	1.0	
Aroclor 1221	BQL	2.0	
Aroclor 1232	BQL	1.0	
Aroclor 1242	BQL	1.0	
Aroclor 1248	BQL	1.0	
Aroclor 1254	0.13	1.0	J
Aroclor 1260	0.26	1.0	J

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811169-03A  
Client ID: WC-011-0  
Collected: 11/17/98  
Dilution: 1

Matrix: WATER  
Method: SW846 8082  
Units: ug/L

Analyst: JSB  
Analyzed: 12/03/98  
Prepared: 11/24/98

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Qualifier</u>
Aroclor 1016	BQL	1.0	
Aroclor 1221	BQL	2.0	
Aroclor 1232	BQL	1.0	
Aroclor 1242	BQL	1.0	
Aroclor 1248	BQL	1.0	
Aroclor 1254	0.67	1.0	J
Aroclor 1260	0.66	1.0	J

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9811169-04A  
Client ID: BC-010-0  
Collected: 11/17/98  
Dilution: 2

Matrix: SOIL  
Method: SW846 8082  
Units: ug/Kg

Analyst: ALE  
Analyzed: 12/01/98  
Prepared: 11/30/98

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Qualifier</u>
Aroclor 1016	BQL	44	
Aroclor 1221	BQL	44	
Aroclor 1232	BQL	44	
Aroclor 1242	BQL	44	
Aroclor 1248	BQL	88	
Aroclor 1254	1000	88	
Aroclor 1260	1300	88	



**GPL LABORATORIES, LLLP**  
**METALS ANALYSIS RESULTS**

GP ID: 9811169-01  
Client ID: WC-013-0

Matrix: WATER  
Collected: 11/17/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7470	BQL	0.20	ug/L	1	11/24/98	11/25/98 LCM
Silver	SW846 6010	BQL	3.0	ug/L	1	11/30/98	12/03/98 DDH
Arsenic	SW846 6010	11.6	10.0	ug/L	1	11/30/98	12/03/98 DDH
Barium	SW846 6010	22.5	10.0	ug/L	1	11/30/98	12/03/98 DDH
Cadmium	SW846 6010	4.3	3.0	ug/L	1	11/30/98	12/03/98 DDH
Chromium	SW846 6010	5.0	5.0	ug/L	1	11/30/98	12/03/98 DDH
Lead	SW846 6010	11.3	3.0	ug/L	1	11/30/98	12/03/98 DDH
Selenium	SW846 6010	BQL	5.0	ug/L	1	11/30/98	12/03/98 DDH

GP ID: 9811169-02  
Client ID: WC-012-0

Matrix: WATER  
Collected: 11/17/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7470	BQL	0.20	ug/L	1	11/24/98	11/25/98 LCM
Silver	SW846 6010	BQL	3.0	ug/L	1	11/30/98	12/03/98 DDH
Arsenic	SW846 6010	BQL	10.0	ug/L	1	11/30/98	12/03/98 DDH
Barium	SW846 6010	BQL	10.0	ug/L	1	11/30/98	12/03/98 DDH
Cadmium	SW846 6010	BQL	3.0	ug/L	1	11/30/98	12/03/98 DDH
Chromium	SW846 6010	BQL	5.0	ug/L	1	11/30/98	12/03/98 DDH
Lead	SW846 6010	BQL	3.0	ug/L	1	11/30/98	12/03/98 DDH
Selenium	SW846 6010	BQL	5.0	ug/L	1	11/30/98	12/03/98 DDH

GP ID: 9811169-03  
Client ID: WC-011-0

Matrix: WATER  
Collected: 11/17/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7470	0.24	0.20	ug/L	1	11/24/98	11/25/98 LCM
Silver	SW846 6010	BQL	3.0	ug/L	1	11/30/98	12/03/98 DDH
Arsenic	SW846 6010	12.9	10.0	ug/L	1	11/30/98	12/03/98 DDH
Barium	SW846 6010	66.4	10.0	ug/L	1	11/30/98	12/03/98 DDH
Cadmium	SW846 6010	BQL	3.0	ug/L	1	11/30/98	12/03/98 DDH
Chromium	SW846 6010	BQL	5.0	ug/L	1	11/30/98	12/03/98 DDH
Lead	SW846 6010	22.0	3.0	ug/L	1	11/30/98	12/03/98 DDH
Selenium	SW846 6010	BQL	5.0	ug/L	1	11/30/98	12/03/98 DDH

GPL LABORATORIES, LLLP  
METALS ANALYSIS RESULTSGP ID: 9811169-04  
Client ID: BC-010-0Matrix: SOIL  
Collected: 11/17/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010T	BQL	30.0	ug/L	1	11/23/98	11/25/98 DDH
TCLP Arsenic	SW846 6010T	BQL	50.0	ug/L	1	11/23/98	11/25/98 DDH
TCLP Barium	SW846 6010T	1070	100	ug/L	1	11/23/98	11/25/98 DDH
TCLP Cadmium	SW846 6010T	54.3	30.0	ug/L	1	11/23/98	11/25/98 DDH
TCLP Chromium	SW846 6010T	BQL	50.0	ug/L	1	11/23/98	11/25/98 DDH
TCLP Mercury	SW846 7470T	BQL	2.0	ug/L	1	11/24/98	11/25/98 LCM
TCLP Lead	SW846 6010T	110	30.0	ug/L	1	11/23/98	11/25/98 DDH
TCLP Selenium	SW846 6010T	BQL	50.0	ug/L	1	11/23/98	11/25/98 DDH

GPL LABORATORIES, LLLP  
WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9811169-04  
Client ID: BC-010-0

Matrix: SOIL  
Collected: 11/17/98

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Units</u>	<u>Dil.</u>	<u>Prepared</u>	<u>Analyzed By</u>
Percent Solids	MCAW 160.3	77.4		%			11/30/98 DT

## *GPL Laboratories, LLLP*

### Possible notes and definitions for this report:

- BQL** = Below Quantitation Limit
- J** = Value is less than the reporting limits but greater than zero
- P** = Indicates that there is greater than 25% difference for detected pesticide/Aroclor results between the two GC columns
- B** = Indicates that the compound was found in the associated blank
- E** = Indicates that the concentration exceeded the calibration range of the instrument
- U** = Indicates that the compound was analyzed for but not detected, number indicates the reporting limit
- D** = Indicates that the compound was found in an analysis at a secondary dilution factor
- \*** = Value obtained from a 1:5 dilution
- +** = Value obtained from a 1:10 dilution
- #** = Value obtained from a 1:20 dilution
- =** = Value obtained from a 1:25 dilution
- ^** = Value obtained from a 1:50 dilution
- ~** = Value obtained from a 1:100 dilution
- !** = Value obtained from a 1:250 dilution
- @** = Value obtained from a 1:125 dilution (medium level)
- \$** = Value obtained from a 1:500 dilution
- &** = Value obtained from a 1:1000 dilution
- N** = Flashpoint not observed; heated to specified limit
- R** = Flammable at room temperature
- TNTC** = Too numerous to count
- B.P.** = Detection limit taken from boiling point
- F.F.** = Sample gave off flammable fumes

Contract #/Billing Reference

1 of 1 Pgs.

Project: <i>ESCSS Meddybumps, ME</i>	Turnaround Time	<i>7-day</i>	<i>7-day</i>	<i>7-day</i>
Client: <i>CENAE</i>	# of Containers	<i>2</i>	<i>3</i>	<i>3</i>
Send Results To: <i>Chris Kane</i>	Container Type	<i>2 G/L AT</i>	<i>1L HDPE</i>	
Address: <i>1 Wall St</i>	Preservative Used	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>Manchester NH 03101</i>	Type of Analysis			
Phone: <i>603 656 5400 F: 603 656 5501</i>				

Sample ID#	Date Sampled	Time Sampled	Sample Matrix	Sampler's Initials	Type of Analysis										Lab Cooler No.	CLIENT COMMENTS	
					PCB	ICLP-Metals	PCB	PCP	PCP-Metals	PCP-Metals	PCP-Metals	PCP-Metals	PCP-Metals	PCP-Metals			PCP-Metals
<i>WC-013-0</i>	<i>11/17/98</i>	<i>1210</i>	<i>L</i>	<i>SJN</i>		<i>X</i>	<i>X</i>										
<i>WC-012-0</i>	<i>11/17/98</i>	<i>1215</i>	<i>L</i>	<i>SJW</i>		<i>X</i>	<i>X</i>										
<i>WC-011-0</i>	<i>11/17/98</i>	<i>1245</i>	<i>L</i>	<i>SJW</i>		<i>X</i>	<i>X</i>										
<i>BC-010-0</i>	<i>11/17/98</i>	<i>1230</i>	<i>S</i>	<i>SJW</i>	<i>X</i>												

Relinquished By: <i>STEVEN WHITNEY</i> <i>Steven Whitney</i>	Date/Time: <i>11/17/98 1400</i>	Received By:	Relinquished By:	Received for Laboratory By: <i>[Signature]</i>	Date/Time: <i>11/19/98 11:22 AM</i>
Relinquished By:	Date/Time:	Received By:	Date/Time:	Shipper:	Airbill No.:
Relinquished By:	Date/Time:	Received By:	Lab Comments:	Temp: <i>4.1°C</i>	

G.P. W.O. \_\_\_\_\_

**SAMPLE RECEIPT CHECKLIST**

No. 9811169  
 Client Name CENPE  
 Date Received 11/18/98  
 Time Received 8:17 AM  
 Received By SL

Carrier Name Fed Ex  
 Prepared (Logged In) By SL Initials SL Date 11/18/98  
 Project ESGSS MARIETTA, GA  
 Site \_\_\_\_\_  
 VOA Holding Blank I.D. No. \_\_\_\_\_

	YES	NO
Airbill/Manifest Present? No. <u>707456637602</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Shipping Container in Good Condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custody Seals Present on Shipping Container? Condition: Good <input checked="" type="checkbox"/> Broken <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chain-of-Custody Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chain-of-Custody Agrees with Sample Labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chain-of-Custody Signed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Packing Present in Shipping Container? Type of Packing <u>Vermiculite</u> <u>Bubble wrap</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custody Seals on Sample Bottles? Condition: Good <input type="checkbox"/> Broken <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Total Number of Sample Bottles <u>4</u>		
Total Number of Samples <u>4</u>		
Samples Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sufficient Sample Volume for Indicated Test?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	YES	NO
Trip Blanks Received? No. of Sets _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOA Vials Have Zero Headspace? <u>NR</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preservatives Added to Sample? <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
pH Check Required? Performed By? <u>SL</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ice Present in Shipping Container? <input checked="" type="checkbox"/> <u>Small Ice Packs</u> Container# _____ Temperature _____ <u>#1</u> <u>4.1°C</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Project Manager Contacted? Name: <u>Russell Jannides</u> Date Contacted: <u>11/18/98</u>		

Any NO response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked N/A.

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Checklist Completed by SL  
 Date 11/18/98

A. Case Narrative

*GPL Laboratories, LLLP*

**CASE NARRATIVE**

**PCB ANALYSIS**

Client : WESTON\_NE

W.O. No. : 9811169

SDG# : N/A

Date : 12/7/98

1. One soil and three water samples were received on November 18, 1998. The samples were extracted and analyzed for PCB compounds using the 8082 methodologies.
2. For the soil analysis, matrix spike and matrix spike duplicate analyses were shared with work order #9811164 and for the water analysis, they were shared with work order #9811195. A laboratory control spike was performed with each batch of samples.
3. For the water analysis, surrogate DCB recovery for samples WC-013-0 and WC-011-0 were outside QC limits on both columns. As per method requirements, only one surrogate was used to evaluate the data.
4. Concentrations reported on Form I are the lower values of results generated by two columns. However, the most reliable results are determined by the analyst based on the evaluation of quality control parameters. Flagged concentrations (\*) on Form I indicate that reported results are the higher values.
5. Due to software limitations, some form's corrections were entered manually.

  
12/9/98

MA 12/9/98



**GPL LABORATORIES, LLLP  
METALS CASE NARRATIVE**

PROJECT: WESTON\_NE  
Description: MEDDY. EASTERN SURPLUS COMPANY  
GP Work Order: 98-11-169  
DATE: December 14, 1998

The following data package comprises four water samples which were received at GPL Laboratories on November 18, 1998. The three water samples were analyzed for total silver, arsenic, barium, cadmium, chromium, lead, selenium, and mercury; and one water sample was analyzed for TCLP metals by SW846 methods.

The sample ID's were modified to accommodate the computer software used to generate the data package. The following changes were made:

CLIENT ID	MODIFIED ID	LAB ID
WC-013-0	-013-0	9811169-01B
WC-012-0	-012-0	9811169-02B
WC-011-0	-011-0	9811169-03B
WC-010-	-010-0	9811169-04B

The TCLP results were reported on separate forms (RW1169).

Some of the calibration blanks were high for lead in the the TCLP ICP run. Reanalysis was not performed because the sample result was well below the TCLP regulatory limit.

A duplicate, matrix spike, and serial dilution were performed on sample WC-012-0 for all required ICP analytes. All were within the control limits.

A duplicate and matrix spike were performed on sample WC-013-0 for mercury. They were within the control limits.

A duplicate and matrix spike were performed on sample WC-010-0 for TCLP analytes. A serial dilution was performed also for the ICP analytes. All were within the control limits.

All QA/QC criteria were met.

RA 12/14/98  
Pru 12.14.98

GP Work Order # 9901030

SAMPLE ANALYSIS REPORT

Prepared For:

ROY F. WESTON, INC.  
ONE WALL STREET  
MANCHESTER, NH 03301-1501

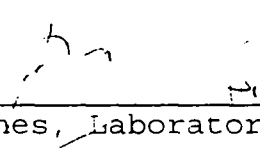
MEDDY. EASTERN SURPLUS COMPANY

Prepared By:

GPL Laboratories, LLLP  
202 Perry Parkway  
Gaithersburg, MD 20877

January 25, 1999

1

  
\_\_\_\_\_  
Yemane Yohannes, Laboratory Director

GPL LABORATORIES, LLLP  
ANALYTICAL RESULTS

Project: MEDDY. EASTERN SURPLUS COMPANY

ROY F. WESTON, INC.  
ONE WALL STREET  
MANCHESTER, NH 03301-1501  
Atten: CHRIS KANE

GPL LABORATORIES, LLLP  
202 Perry Parkway  
Gaithersburg, MD 20877

Atten: Client Services  
Phone: (301) 926-6802

Certified by: \_\_\_\_\_

SAMPLE IDENTIFICATION

<u>GP ID</u>	<u>Client ID</u>
9901030-01A	BC-001-1

GPL LABORATORIES, LLLP  
ORGANIC ANALYSIS RESULTS

GP ID: 9901030-01A  
Client ID: BC-001-1  
Collected: 10/29/98  
Dilution: 100

Matrix: SOIL  
Method: SW846 8082  
Units: ug/Kg

Analyst: JSB  
Analyzed: 01/12/99  
Prepared: 01/10/99

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Qualifier</u>
Aroclor 1016	BQL	1800	
Aroclor 1221	BQL	1800	
Aroclor 1232	BQL	1800	
Aroclor 1242	BQL	1800	
Aroclor 1248	BQL	3700	
Aroclor 1254	BQL	3700	
Aroclor 1260	63000	3700	

GPL LABORATORIES, LLLP  
METALS ANALYSIS RESULTSGP ID: 9901030-01  
Client ID: BC-001-1Matrix: SOIL  
Collected: 10/29/98

Parameter	Method	Result	Rep.Lim.	Units	Dil.	Prepared	Analyzed By
Mercury	SW846 7471	BQL	0.03	mg/Kg	1	01/14/99	01/16/99 LCM
Silver	SW846 6010	BQL	0.63	mg/Kg	2	01/13/99	01/15/99 DDH
Aluminum	SW846 6010	10900	42.0	mg/Kg	2	01/13/99	01/15/99 DDH
Arsenic	SW846 6010	40.9	1.0	mg/Kg	2	01/13/99	01/15/99 DDH
Barium	SW846 6010	24.1	2.1	mg/Kg	2	01/13/99	01/15/99 DDH
Beryllium	SW846 6010	BQL	0.63	mg/Kg	2	01/13/99	01/15/99 DDH
Calcium	SW846 6010	1190	210	mg/Kg	2	01/13/99	01/15/99 DDH
Cadmium	SW846 6010	BQL	0.63	mg/Kg	2	01/13/99	01/15/99 DDH
Cobalt	SW846 6010	9.7	1.0	mg/Kg	2	01/13/99	01/15/99 DDH
Chromium	SW846 6010	20.4	1.0	mg/Kg	2	01/13/99	01/15/99 DDH
Copper	SW846 6010	22.0	1.0	mg/Kg	2	01/13/99	01/15/99 DDH
Iron	SW846 6010	22700	21.0	mg/Kg	2	01/13/99	01/15/99 DDH
Potassium	SW846 6010	693	105	mg/Kg	2	01/13/99	01/15/99 DDH
Magnesium	SW846 6010	5080	105	mg/Kg	2	01/13/99	01/15/99 DDH
Manganese	SW846 6010	527	1.0	mg/Kg	2	01/13/99	01/15/99 DDH
Sodium	SW846 6010	BQL	105	mg/Kg	2	01/13/99	01/15/99 DDH
Nickel	SW846 6010	27.5	1.0	mg/Kg	2	01/13/99	01/15/99 DDH
Lead	SW846 6010	14.1	0.63	mg/Kg	2	01/13/99	01/15/99 DDH
Antimony	SW846 6010	BQL	1.0	mg/Kg	2	01/13/99	01/15/99 DDH
Selenium	SW846 6010	BQL	1.0	mg/Kg	2	01/13/99	01/15/99 DDH
Thallium	SW846 6010	BQL	2.1	mg/Kg	2	01/13/99	01/15/99 DDH
Vanadium	SW846 6010	16.1	1.0	mg/Kg	2	01/13/99	01/15/99 DDH
Zinc	SW846 6010	51.2	2.1	mg/Kg	2	01/13/99	01/15/99 DDH

GPL LABORATORIES, LLLP  
WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9901030-01  
Client ID: BC-001-1

Matrix: SOIL  
Collected: 10/29/98

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Rep.Lim.</u>	<u>Units</u>	<u>Dil.</u>	<u>Prepared</u>	<u>Analyzed By</u>
Percent Solids	MCAWW 160.3	92.5		%			01/13/99 DT

# ***GPL LABORATORIES, LLLP***

## **Possible notes and definitions for this report:**

- BQL** = Below Quantitation Limit
- J** = Value is less than the reporting limits but greater than zero
- P** = Indicates that there is greater than 25% difference for detected pesticide/Aroclor results between the two GC columns
- B** = Indicates that the compound was found in the associated blank
- E** = Indicates that the concentration exceeded the calibration range of the instrument
- U** = Indicates that the compound was analyzed for but not detected. number indicates the detection limit
- D** = Indicates that the compound was found in an analysis at a secondary dilution factor
- \*** = Value obtained from a 1:5 dilution
- +** = Value obtained from a 1:10 dilution
- #** = Value obtained from a 1:20 dilution
- =** = Value obtained from a 1:25 dilution
- ^** = Value obtained from a 1:50 dilution
- ~** = Value obtained from a 1:100 dilution
- !** = Value obtained from a 1:250 dilution
- @** = Value obtained from a 1:125 dilution (medium level)
- \$** = Value obtained from a 1:500 dilution
- &** = Value obtained from a 1:1000 dilution
- N** = Flashpoint not observed: heated to specified limit
- R** = Flammable at room temperature
- TNTC** = Too numerous to count
- B.P.** = Detection limit taken from boiling point
- F.F.** = Sample gave off flammable fumes





**SAMPLE RECEIPT CHECKLIST**

Client Name 99. 01. 030 Carrier Name W. House  
 Date Received WESTON NC Prepared (Logged In) By J 1/03/99  
 Time Received 11:29/99 Initials Date  
 Received By 15:00 Project RE-126  
T. J. ANDRES Site \_\_\_\_\_  
 VOA Holding Blank I.D. No. \_\_\_\_\_

Airbill/Manifest Present? No. _____	YES NO — <input checked="" type="checkbox"/>	Trip Blanks Received? No. of Sets _____	YES NO — <input checked="" type="checkbox"/>
Shipping Container in Good Condition?	— <input checked="" type="checkbox"/>	VOA Vials Have Zero Headspace?	— <input checked="" type="checkbox"/>
Custody Seals Present on Shipping Container? Condition: Good _____ Broken _____	— <input checked="" type="checkbox"/>	Preservatives Added to Sample?	— <input checked="" type="checkbox"/>
Chain-of-Custody Present?	<input checked="" type="checkbox"/> —	pH Check Required? Performed By? _____	— <input checked="" type="checkbox"/>
Chain-of-Custody Agrees with Sample Labels?	<input checked="" type="checkbox"/> —	Ice Present in Shipping Container?	— <input checked="" type="checkbox"/>
Chain-of-Custody Signed?	<input checked="" type="checkbox"/> —	Container# _____ Temperature _____	
Packing Present in Shipping Container? Type of Packing _____	— <input checked="" type="checkbox"/>		
Custody Seals on Sample Bottles? Condition: Good _____ Broken _____	— <input checked="" type="checkbox"/>		
Total Number of Sample Bottles <u>1</u>			
Total Number of Samples <u>1</u>			
Samples Intact?	<input checked="" type="checkbox"/> —	Project Manager Contacted?	
Sufficient Sample Volume for Indicated Test?	<input checked="" type="checkbox"/> —	Name: <u>T. J. ANDRES</u>	
		Date Contacted: <u>1/03/99</u>	

Any **NO** response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked N/A.

COMMENTS: RE-126 From 98-11-000

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Checklist Completed by J  
Date 1/03/99

**CASE NARRATIVE**

**PCBs ANALYSIS**

Client : WESTON\_NE

W.O. No. : 9901030

SDG# : N/A

Date : 1/13/99

1. One soil sample was received on January 8, 1999. The sample was extracted and analyzed for PCB compounds using the 8082 methodologies.
2. Samples were extracted past the holding time per client request.
3. Matrix spike and matrix spike duplicate analyses were performed on sample BC-001-1 DL. Due to very high levels of PCB compounds found in the background sample, percent recoveries were outside of QC limits hence MS/MSD Form III was not generated. A laboratory control spike was performed on this batch of samples. The LCS was used to verify the laboratory performance.
4. Surrogate TCX on one column for sample BC-001-1 DL and DCB on one column for sample BC-001-1 DL MS and on both columns for samples BC-001-1 DL and BC-001-1 DL MSD were outside of QC limits due to matrix interferences.
5. Due to software limitations, some form's were corrected manually.

*[Handwritten signature]*  
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**GPL LABORATORIES, LLLP  
METALS CASE NARRATIVE**

CLIENT: Roy F. Weston, Inc.  
GP Work Order: 99-01-030  
DATE: January 25, 1999

The following data package comprises one soil sample which was received at GPL Laboratories on January 8, 1999. The samples were analyzed for HSL metals by SW 846 methods.

The sample ID was modified to accommodate the computer software used to generate the data package. The following change was made:

CLIENT ID	MODIFIED ID	LAB ID
BC-001-1	-001-1	9901030-01A

The preparation blank was contaminated with zinc. Reanalysis was not required however, because the sample concentration was greater than 10x the blank concentrations.

A duplicate and matrix spike were performed on the sample for all required analytes. A serial dilution was performed also for the ICP analytes. The matrix spike was outside the control limits for antimony; all associated data was flagged with an "N". The matrix spike could not be recovered for arsenic. The spike addition was insignificant relative to the sample concentration. A post digestion analytical spike was performed with good recoveries. The duplicate was outside of the control limits for arsenic; all associated data was flagged with an "\*".

All QA/QC criteria were met with the exceptions of those mentioned above.

RA 1/25/99  
SD 1/25/99