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S.H.



**PORT HEIDEN RRS  
ALASKA**

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**ADMINISTRATIVE RECORD  
COVER SHEET**

**AR File Number** 08



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

**Elmendorf AFB, Alaska**

**FINAL**

**Site Investigation  
Port Heiden RRS, Alaska**

**July, 2000**

**FILE**



**DEPARTMENT OF THE AIR FORCE  
PACIFIC AIR FORCES**

24 Jan 01

MEMORANDUM FOR    ALASKA DEPT OF ENVIRONMENTAL CONSERVATION  
 DIVISION OF SPILL PREVENTION AND RESPONSE  
 GRETCHEN PIKUL  
 555 CORDOVA STREET  
 ANCHORAGE AK 99503

FROM: 611 CES/CEVR  
 Phil Means  
 10471 20th Street Suite 345  
 Elmendorf AFB, AK 99506-2200

SUBJECT: Port Heiden and Driftwood Bay Radio Relay Sites, Site Investigation Report, Jul/Jun 00

1. The Relative Risk Evaluation for select sites at Port Heiden and Driftwood Bay RRS required re-evaluation to correctly rank the site's relative risk. Additional sampling was accomplished to collect the necessary data required by the ranking system, the Air Force Restoration Information Management System (AFRIMS). The results of the sampling are attached for your information and files. The Driftwood Bay sampling was not completed as planned due to a rock slide that blocked access to two of the sites. We are currently evaluating whether or not we'll be able to get back to the site this field season and collect samples in a cost effective manner.
2. We anticipate completing the updated Relative Risk Evaluation by 15 Feb 01 and will inform you of the results. Should you have questions or comments concerning our activities at these sites prior to that time then please give me a call.

PHIL MEANS  
 Remedial Project Manager

Enclosures:

1. Port Heiden RRS Site Investigation Report, Jul 00
2. Driftwood Bay RRS Site Investigation Report. Jun 00

## **PORt HEIDEN RADIO RELAY STATION SITE INVESTIGATION, JUL 2000**

### **I. INTRODUCTION**

Port Heiden Radio Relay Station (Port Heiden RRS) is located on the north side of the Alaska Peninsula approximately 450 miles southwest of Anchorage. In order to fulfill data requirements for the completion of a relative risk scoring, three sites, OT001, AOC03 and AOC04, have been identified as requiring further investigation.

### **II. SITE HISTORY**

Port Heiden RRS was constructed in the late 1950s as part of the Distant Early Warning (DEW) line radar stations. The site was deactivated in 1978 and declared excess in 1981. From 1981 through 1992 the United States Air Force (USAF), United States Army Corps of Engineers (USACOE), and private contractors have performed site investigations, demolition of facilities, and remediation activities at Port Heiden RRS. In 1995 EMCON Alaska, Inc (EMCON), conducted a Preliminary Assessment/Site Investigation (PA/SI) for the USAF. The PA/SI was tasked with reviewing documents related to the past remediation and restoration activities at Port Heiden RRS, conducting a site inspection, preparation of a PA/SI report, and development of a Management Action Plan (MAP).

### **III. GEOLOGY/HYDROLOGY**

Bedrock on the Alaska Peninsula is composed mainly of volcanic rocks, volcaniclastic sedimentary rocks, and plutons. Past glaciation in the Port Heiden RRS area is evidenced by lateral and terminal glacial moraines throughout the area and soils composed of glacial till. Port Heiden RRS was constructed on a moraine approximately 140 feet above sea level. The PA/SI reported that there is a clay layer of unknown thickness that is contacted at approximately 12 feet below ground surface (bgs). Groundwater is reported to be approximately 20 - 35 feet bgs and ponds, lakes, and wetlands are abundant in the vicinity.

#### **IV. IRP SITE OT 001**

IRP site OT 001 includes the former Composite Building, four White Alice Arrays, Burial Site 1, and three former underground storage tank (UST) locations. From 1981 until 1986 the USAF, in several mobilizations, removed building material and electrical transformers, excavated POL and PCB contaminated soil, and shipped drums, barrels, and boxes to Elmendorf AFB containing the contaminated soil and various liquids of petroleum-based composition, solvents, herbicides, cleaning compounds, and other liquids of unknown composition.

In 1986, 1987, and 1988, the COE conducted soil sampling and detected PCBs and halogenated volatile organics.

In 1990, Underwater Construction and Associates, Inc (UC&AI) performed demolition, restoration, and remediation activities under a Defense Environmental Restoration Program (DERP) contract. Northwest EnviroServices, Inc (NWES) was subcontracted to conduct environmental sampling during the remediation activities.

In 1991, the Alaska Department of Environmental Conservation (ADEC) approved a final cleanup goal of 5000 ppm for Total Petroleum Hydrocarbons (TPH) and 25 ppm for Polychlorinated Biphenyl compounds (PCBs) in soil.

In order to fulfill the data requirements for completion of an internal risk scoring for this site, the concentration of the compounds benzene, toluene, ethylbenzene, and xylene (BTEX compounds), were analyzed in surface and/or subsurface soils in the vicinity of the composite building. Nine subsurface samples were collected from underneath the vegetated cap and analyzed using EPA Method 8020.

#### **V. AOC 03 - SPILL/LEAK NO. 1 AT THE HELIPORT**

Petroleum may have been stored here for fueling helicopters. Three trenches were excavated at the site as part of the PA/SI conducted in October 1995. There is no record of any previous work being performed at the heliport. The trenches were dug to approximately 4 feet in depth. A photoionization detector (PID) was used to field screen the trench walls, floor, and excavated soil. The trenches were backfilled with the excavated soil. No samples were collected for analysis at that time.

In order to fulfill the data requirements for completion of an internal risk scoring for this site, five samples were collected from surface and/or subsurface locations and analyzed using EPA Methods 8020 and 8310, and Alaska Methods AK1 01, 102, and 103. Sample locations were selected on based upon the best judgment of on-site personnel.

## **VI. AOC 04 - SEPTIC TANK**

The septic tank was formerly located approximately 200 feet west of the Composite Building. As part of the 1990 field activities, the septic tank was removed. The septic tank piping leading to the outfall area was left in place. During the 1995 PA/SI, the septic tank outfall area (approximately 250 feet northwest of the septic tank) was investigated for fuel related compounds. TPH, diesel range organics (DRO), and gasoline range organics (GRO) were detected, but were attributed to biogenic material eluting in the diesel range. BTEX compounds were non-detect. No soil samples were collected at the septic tank location.

In order to fulfill the data requirements for completion of an internal risk scoring for this site, five samples were collected at the septic tank location. The samples were analyzed using EPA Methods 8260, 8270, priority pollutant metals, 8082, and Alaska Methods AK101, 102, and 103.

## **VII. SAMPLING PROTOCOL**

Soil samples were collected from 6" to 12" in depth. Clean, new, disposal latex gloves were worn throughout the sampling procedure. Clean, stainless steel implements such as spoons, trowels, and bowls, were used for each separate sampling event. Equipment was cleaned using diluted lab grade detergent, tap water, and distilled water.

## **VIII. DECONTAMINATION PROCEDURES**

All reusable sampling equipment was decontaminated prior to taking the first sample and between each subsequent sample. Protective gloves were used when decontaminating sampling equipment. Decontamination procedures were as follows:

- 1) Any excess soil from the sampling equipment was scraped off
- 2) the equipment was washed and scrubed in diluted laboratory grade detergent
- 3) This was followed by a tap water rinse, and a subsequent
- 4) Distilled water rinse

All equipment used in sampling for PCBs was packaged for decontamination in town.

## IX. FIELD WORK AT PORT HEIDEN RRS

Samples were collected by digging a 6-10" hole with an entrenching tool, followed immediately by excavating a few inches deeper with a trowel for sample collection. Larger ( $>3/8"$ ) stones and pebbles were excluded from the sample during the collection process. In the case of the former Composite Building OT 01, digging proceeded through an overlying soil layer which was placed to permit vegetative growth. This emplaced soil layer ranged in thickness from approximately 3" at the northwest corner of the covered pad to 8" at the eastern edge.

All analyses indicate that soil parameters are at acceptable levels at all locations, except for sample 50124008009 which was taken at the southwest corner of the septic tank area, and indicates an Arochlor 1260 concentration above 13,000 ppm.

# TAB

Analytical Data & Summary

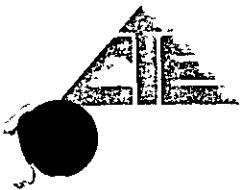
**Summary of Analytical Data, Port Heiden RRS, Aug 2000**

Sample Number	Location	BTEX	GRO	DRO	RRO	Volatile	Semi Volatiles	PCB + Pesticides	PAH by SIMS, ppb
50124008001	Heliport, center						NA	NA	8.13
50124008002	Heliport, NE corner						NA	NA	104.07
50124008003	Heliport, NW corner						NA	NA	11.33
50124008004	Heliport, SW corner						NA	NA	32.32
50124008005	Heliport, center S side						NA	NA	12.63
50124008006	Heliport, SE corner								6
50124008007	Septic Tank, NW corner								
50124008008	Septic Tank, center east side								
50124008009	Septic Tank, SW corner								
50124008010	Sewage Lagoon, N end								
50124008011	Sewage Lagoon, S end								
50124008012	Composite Bldg, N Center								
50124008013	Composite Bldg, NE corner								
50124008014	Composite Bldg, center E side								
50124008015	Composite Bldg, SE corner								
50124008016	Composite Bldg, S center								
50124008017	Composite Bldg, SW corner								
50124008018	Composite Bldg, W center								
50124008019	Composite Bldg, center								

All data is in ppm, unless otherwise noted (PAH in ppb)

Blank spaces represent data below minimum detection limits

NA means 'not analyzed for'



# **CT&E Environmental Services Inc.**

Laboratory Division

## **Laboratory Analysis Report**

200 W Potter Drive  
Anchorage, AK 99518-1605  
Tel (907) 562-2343  
Fax (907) 561-5301  
Web <http://www.cteesi.com>

Carl Hornig  
611 CES/CEVO  
6260 Arctic Warrior Drive  
Elmendorf AFB, AK 995064420

<b>Work Order:</b>	1004965
	Port Haiden Call No. B-247
<b>Client:</b>	Graybar Electric
<b>Report Date:</b>	September 21, 2000

Enclosed are the analytical results associated with the above workorder.

required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintained by CT&E. A copy of our Quality Control Manual that outlines this program is available at your request.

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth in our Quality Assurance Program Plan

If you have any questions regarding this report or if we can be of any other assistance, please call your CT&E Project Manager at (907) 562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

- U Indicates the analyte was analyzed for but not detected.
- J Indicates an estimated value that falls below PQL, but is greater than the MDL.
- B Indicates the analyte is found in the blank associated with the sample.
- \* The analyte has exceeded allowable limits.
- GT Greater Than
- D Secondary Dilution
- LT Less Than
- ! Surrogate out of range



CT&E Ref.# 1004965001  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008001  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 15:50  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede  
Released By *gw maledaink*

## Sample Remarks:

PAHSIM - Naphthalene and Phenanthrene were detected above the PQL in the method blank due to cross contamination. The results for Naphthalene in this sample are estimated  
RRO - Unknown hydrocarbon with several peaks.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Int
<b>Solids</b>								
Total Solids	84.7		%	SM20 2540G		08/28/00	RMV	
<b>Volatile Fuels Department</b>								
Diesel Range Organics	271 U	271	mg/Kg	AK101 GRO		08/22/00	09/01/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Sur>	94.9		%	AK101 GRO	60-120	08/22/00	09/01/00	MAH
4-Bromofluorobenzene <Sur>	73.9		%	AK101 GRO	50-150	08/22/00	09/01/00	MAH
<b>Semivolatile Organic Fuels Department</b>								
Diesel Range Organics	115 U	11.5	mg/Kg	AK102/103		08/29/00	09/02/00	ELB
Residual Range Organics GC	380	18.9	mg/Kg	AK102/103		08/29/00	09/02/00	ELB
<b>Surrogates</b>								
5a Androstane <surr>	90.1		%	AK102/103	60-120	08/29/00	09/02/00	ELB
d-Triacotane <Sur>	93.2		%	AK102/103	60-120	08/29/00	09/02/00	ELB
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Dichlorodifluoromethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Chloromethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Vinyl chloride	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromoform	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Carbon disulfide	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Trifluoromethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloroethene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Carbon disulfide	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS



CT&E Ref.# 1004965001  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008001  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 15:50  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Methylene chloride	0.135 U	0.135	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
trans-1,2-Dichloroethene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Butanone (MEK)	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2,2-Dichloropropane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,1-Trichloroethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloroethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cis-1,2-Dichloroethene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromochloromethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Br. chloroform	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
C. tetrachloride	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Benzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichloroethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloropropene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Trichloroethene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichloropropane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Dibromomethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromodichloromethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Chloroethyl Vinyl Ether	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,2-Trichloroethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cis-1,3-Dichloropropene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Methyl-2-pentanone (MIBK)	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Toluene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
trans-1,3-Dichloropropene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Tetrachloroethene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,3-Dichloropropane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Hexanone	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Dibromochloromethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dibromoethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,1,2-Tetrachloroethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Chlorobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
benzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
m-Xylene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
o-Xylene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Styrene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS



**CT&E Ref.#** 1004965001  
**Client Name** Graybar Electric  
**Project Name/#** Port Haiden Call No. B-247  
**Client Sample ID** 50124008001  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/22/2000 15:50  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Bromoform	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Isopropylbenzene (Cumene)	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,3-Trichloropropane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,2,2-Tetrachloroethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
n-Propylbenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Chlorotoluene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Methyltoluene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
tert-Butylbenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,4-Trimethylbenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
sec-Butylbenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,3-Dichlorobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Isopropyltoluene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,4-Dichlorobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichlorobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
n-Butylbenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dibromo-3-chloropropane	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,4-Trichlorobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Hexachlorobutadiene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Naphthalene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,3-Trichlorobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Methyl-t-butyl ether	0.0271 U	0.0271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
<b>Surrogates</b>								
Dibromofluoromethane <surr>	103		%	SW846-8260B	80-118	08/22/00	08/31/00	SMS
1,2-Dichloroethane-D4 <surr>	99		%	SW846-8260B	74-123	08/22/00	08/31/00	SMS
Toluene-d8 <surr>	102		%	SW846-8260B	79-130	08/22/00	08/31/00	SMS
4-Bromofluorobenzene <Sur>	91.6		%	SW846-8260B	71-141	08/22/00	08/31/00	SMS

**Volatile Organic GC/MS**

Naphthalene	5.87	1.97	ug/Kg	PAH SIM	08/29/00	08/31/00	KWM
Acenaphthylene		1.97 U	ug/Kg	PAH SIM	08/29/00	08/31/00	KWM



CT&E Ref.# 1004965001  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008001  
Matrix Soil/Solid  
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Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 15:50  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
Acenaphthene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Fluorene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Phenanthrene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Anthracene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Fluoranthene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Pyrene	2.26	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Benzo(a)Anthracene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Chrysene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
[k]Fluoranthene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
E-[k]fluoranthene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Benzo[a]pyrene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Indeno[1,2,3-c,d] pyrene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Dibenzo[a,h]anthracene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Benzo[g,h,i]perylene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
<b>Surrogates</b>								
Naphthalene-d8 <surr/IS>	28		%	PAH SIM	10-148	08/29/00	08/31/00	KWM
Acenaphthene-d10 <surr/IS>	37.2		%	PAH SIM	10-163	08/29/00	08/31/00	KWM
Chrysene-d12 <surr/IS>	60.9		%	PAH SIM	10-140	08/29/00	08/31/00	KWM



CT&E Ref.# 1004965002  
 Client Name Graybar Electric  
 Project Name/# Port Haiden Call No. B-247  
 Client Sample ID 50124008002  
 Matrix Soil/Solid  
 Ordered By

Client PO#  
 Printed Date/Time 09/21/2000 18:05  
 Collected Date/Time 08/22/2000 16:00  
 Received Date/Time 08/25/2000 13:00  
 Technical Director Stephen C. Ede

Released By *Wendebank*

## Sample Remarks:

PAHSIM - Naphthalene and Phenanthrene were detected above the PQL in the method blank due to cross contamination. The results for Naphthalene and Phenanthrene in this sample are estimated.  
DRO/RRO - Unknown hydrocarbon with several peaks.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	86.1		%	SM20 2540G		08/28/00		RMV
<b>Volatile Fuels Department</b>								
Range Organics	2.71 U	2.71	mg/Kg	AK101 GRO		08/22/00	09/01/00	MAH
Surrogates			%	AK101 GRO	60-120	08/22/00	09/01/00	MAH
1,4-Difluorobenzene <Sur>	93.6		%	AK101 GRO	50-150	08/22/00	09/01/00	MAH
4-Bromofluorobenzene <Sur>	71.9		%					
<b>Semivolatile Organic Fuels Department</b>								
Diesel Range Organics	11.5 U	11.5	mg/Kg	AK102/103		08/29/00	09/02/00	ELB
Residual Range Organics GC	54.2	19.0	mg/Kg	AK102/103		08/29/00	09/02/00	ELB
Surrogates			%	AK102/103	60-120	08/29/00	09/02/00	ELB
5a Androstane <surr>	89.9		%	AK102/103	60-120	08/29/00	09/02/00	ELB
d-Triacontane <Sur>	95.2		%					
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Dichlorodifluoromethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Chloromethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Vinyl chloride	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
methane	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
thane	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Difluoromethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloroethene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Carbon disulfide	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS



CT&E Ref.# 1004965002  
Client Name Graybar Electric  
Project Name/# Port Haiden Call No. B-247  
Client Sample ID 50124008002  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 16:00  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Methylene chloride	0.135 U	0.135	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
trans-1,2-Dichloroethene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Butanone (MEK)	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2,2-Dichloropropane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloroethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cis-1,2-Dichloroethene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,1-Trichloroethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromochloromethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Carbon tetrachloride	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Benzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichloroethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloropropene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Trichloroethene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichloropropane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Dibromomethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromodichloromethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,2-Trichloroethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Chloroethyl Vinyl Ether	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cis-1,3-Dichloropropene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Methyl-2-pentanone (MIBK)	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Toluene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
trans-1,3-Dichloropropene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Tetrachloroethene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,3-Dichloropropane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Hexanone	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Dibromochloromethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,1,2-Tetrachloroethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dibromoethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Chlorobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
o-Xylene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
o-Xylene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Styrene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS



**CT&E Ref.#** 1004965002  
**Client Name** Graybar Electric  
**Project Name/#** Port Haden Call No. B-247  
**Client Sample ID** 50124008002  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/22/2000 16:00  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
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#### Volatile Gas Chromatography/Mass Spectroscopy

Bromoform	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Isopropylbenzene (Cumene)	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,3-Trichloropropane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
n-Propylbenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,2,2-Tetrachloroethane	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Chlorotoluene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Chlorotoluene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Methylbenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
tert-Amylbenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,4-Trimethylbenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
sec-Butylbenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,3-Dichlorobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Isopropyltoluene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,4-Dichlorobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichlorobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
n-Butylbenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dibromo-3-chloropropane	0.271 U	0.271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,4-Trichlorobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Hexachlorobutadiene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Naphthalene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Methyl-t-butyl ether	0.0271 U	0.0271	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,3-Trichlorobenzene	0.0141 U	0.0141	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS

#### Surrogates

Dibromofluoromethane <surr>	104	%	SW846-8260B	80-118	08/22/00	08/31/00	SMS
1,2-Dichloroethane-D4 <surr>	98.1	%	SW846-8260B	74-123	08/22/00	08/31/00	SMS
Toluene-d8 <surr>	103	%	SW846-8260B	79-130	08/22/00	08/31/00	SMS
4-Bromofluorobenzene <Sur>	89.4	%	SW846-8260B	71-141	08/22/00	08/31/00	SMS

#### Volatile Organic GC/MS

Naphthalene	4.87	1.90	ug/Kg	PAH SIM	08/29/00	08/31/00	KWM
Acenaphthylene	1.90 U	1.90	ug/Kg	PAH SIM	08/29/00	08/31/00	KWM



CT&E Ref.# 1004965002  
Client Name Graybar Electric  
Project Name/# Port Haiden Call No. B-247  
Client Sample ID 50124008002  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 16:00  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
Acenaphthene	1.94	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Fluorene	1.90 U	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Phenanthrene	14.4	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Anthracene	1.90 U	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Fluoranthene	19.4	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Pyrene	19.6	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Benzo(a)Anthracene	8.29	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
[REDACTED]	8.63	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
[REDACTED]Fluoranthene	8.23	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
[REDACTED]k]fluoranthene	2.90	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Benzo[a]pyrene	7.11	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Indeno[1,2,3-c,d] pyrene	3.91	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Dibenzo[a,h]anthracene	1.90 U	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Benzo[g,h,i]perylene	4.29	1.90	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
<b>Surrogates</b>								
Naphthalene-d8 <surr/IS>	60.2		%	PAH SIM	10-148	08/29/00	08/31/00	KWM
Acenaphthene-d10 <surr/IS>	69.3		%	PAH SIM	10-163	08/29/00	08/31/00	KWM
Chrysene-d12 <surr/IS>	88		%	PAH SIM	10-140	08/29/00	08/31/00	KWM



**CT&E Ref.#** 1004965003  
**Client Name** Graybar Electric  
**Project Name/#** Port Hayden Call No. B-247  
**Client Sample ID** 50124008003  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/22/2000 16:05  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede  
**Released By** *J. W. Colebank*

**Sample Remarks**

PAHSIM - Naphthalene and Phenanthrene were detected above the PQL in the method blank due to cross contamination. The results for Phenanthrene in this sample are estimated  
DRO/RRO - Unknown hydrocarbon with several peaks.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	88.2		%	SM20 2540G		08/28/00	RMV	
<b>Volatile Fuels Department</b>								
Diesel Range Organics	240 U	240	mg/Kg	AK101 GRO		08/22/00	09/01/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	93.3		%	AK101 GRO	60-120	08/22/00	09/01/00	MAH
4-Bromofluorobenzene <Surrogate>	66.6		%	AK101 GRO	50-150	08/22/00	09/01/00	MAH
<b>Semivolatile Organic Fuels Department</b>								
Diesel Range Organics	111 U	11.1	mg/Kg	AK102/103		08/29/00	09/02/00	ELB
Residual Range Organics GC	46.5	18.3	mg/Kg	AK102/103		08/29/00	09/02/00	ELB
<b>Surrogates</b>								
5a Androstane <surrogate>	86		%	AK102/103	60-120	08/29/00	09/02/00	ELB
d-Triacontane <Surrogate>	91		%	AK102/103	60-120	08/29/00	09/02/00	ELB
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Dichlorodifluoromethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Chloromethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Vinyl chloride	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
methane	0.240 U	0.240	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
thane	0.240 U	0.240	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
chlorofluoromethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloroethene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Carbon disulfide	0.240 U	0.240	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS



CT&E Ref.# 1004965003  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008003  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 16:05  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
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**Volatile Gas Chromatography/Mass Spectroscopy**

Methylene chloride	0.120 U	0.120	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
trans-1,2-Dichloroethene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Butanone (MEK)	0.240 U	0.240	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2,2-Dichloropropane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cis-1,2-Dichloroethene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,1-Trichloroethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloroethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
chloromethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
form	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
C. tetrachloride	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Benzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichloroethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloropropene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Trichloroethene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichloropropane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Dibromomethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromodichloromethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,2-Trichloroethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Chloroethyl Vinyl Ether	0.240 U	0.240	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cis-1,3-Dichloropropene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Methyl-2-pentanone (MIBK)	0.240 U	0.240	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Toluene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
trans-1,3-Dichloropropene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Tetrachloroethene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,3-Dichloropropane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Hexanone	0.240 U	0.240	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Dibromochloromethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dibromoethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,1,2-Tetrachloroethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
benzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
enzen	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
-Xylene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
o-Xylene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Styrene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS



**CT&E Ref.#** 1004965003  
**Client Name** Graybar Electric  
**Project Name/#** Port Haden Call No. B-247  
**Client Sample ID** 50124008003  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/22/2000 16:05  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
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#### Volatile Gas Chromatography/Mass Spectroscopy

Bromoform	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Isopropylbenzene (Cumene)	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,3-Trichloropropane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,2,2-Tetrachloroethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
n-Propylbenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Chlorotoluène	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Chlorotoluene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1-methylbenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
t-butylbenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,4-Trimethylbenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
sec-Butylbenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,3-Dichlorobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Isopropyltoluene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,4-Dichlorobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichlorobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
n-Butylbenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dibromo-3-chloropropane	0.240 U	0.240	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,4-Trichlorobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Hexachlorobutadiene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Naphthalene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,3-Trichlorobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Methyl-t-butyl ether	0.0240 U	0.0240	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS

#### Surrogates

Dibromofluoromethane <surr>	102	%	SW846-8260B	80-118	08/22/00	08/31/00	SMS
1,2-Dichloroethane-D4 <surr>	95.9	%	SW846-8260B	74-123	08/22/00	08/31/00	SMS
Toluene-d8 <surr>	102	%	SW846-8260B	79-130	08/22/00	08/31/00	SMS
4-Bromofluorobenzene <Sur>	94.3	%	SW846-8260B	71-141	08/22/00	08/31/00	SMS

#### Volatile Organic GC/MS

Naphthalene	1.87 U	1.87	ug/Kg	PAH SIM	08/29/00	08/31/00	KWM
Acenaphthylene	1.87 U	1.87	ug/Kg	PAH SIM	08/29/00	08/31/00	KWM



CT&E Ref.# 1004965003  
Client Name Graybar Electric  
Project Name/# Port Halden Call No. B-247  
Chent Sample ID 50124008003  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 16:05  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
Acenaphthene	1.87 U	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Fluorene	1.87 U	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Phenanthrene	2.20	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Anthracene	1.87 U	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Fluoranthene	3.39	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Pyrene	3.70	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Benzo(a)Anthracene	1.87 U	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Chrysene	2.04	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
[a]Fluoranthene	1.87 U	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
B[a]fluoranthene	1.87 U	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Benzo[a]pyrene	1.87 U	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Indeno[1,2,3-c,d] pyrene	1.87 U	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Dibenzo[a,h]anthracene	1.87 U	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
Benzo[g,h,i]perylene	1.87 U	1.87	ug/Kg	PAH SIM		08/29/00	08/31/00	KWM
<b>Surrogates</b>								
Naphthalene-d8 <surr/IS>	53.2		%	PAH SIM	10-148	08/29/00	08/31/00	KWM
Acenaphthene-d10 <surr/IS>	61.8		%	PAH SIM	10-163	08/29/00	08/31/00	KWM
Chrysene-d12 <surr/IS>	97.5		%	PAH SIM	10-140	08/29/00	08/31/00	KWM



CT&E Ref.# 1004965004  
Client Name Graybar Electric  
Project Name/# Port Haiden Call No. B-247  
Client Sample ID 50124008004  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 16:10  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Released By *J. Wmdebank*

**Sample Remarks**

PAHSIM - Naphthalene and Phenanthrene were detected above the PQL in the method blank due to cross contamination. The results for Phenanthrene in this sample are estimated  
RRO - Unknown hydrocarbon with several peaks.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	86.0		%	SM20 2540G		08/28/00	RMV	
<b>Volatile Fuels Department</b>								
Diesel Range Organics	210 U	2.10	mg/Kg	AK101 GRO	60-120	08/22/00	09/01/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	97.2		%	AK101 GRO	60-120	08/22/00	09/01/00	MAH
4-Bromofluorobenzene <Surrogate>	53.7		%	AK101 GRO	50-150	08/22/00	09/01/00	MAH
<b>Semivolatile Organic Fuels Department</b>								
Diesel Range Organics	11.4 U	11.4	mg/Kg	AK102/103	60-120	08/29/00	09/02/00	ELB
Residual Range Organics GC	43.7	18.9	mg/Kg	AK102/103	60-120	08/29/00	09/02/00	ELB
<b>Surrogates</b>								
5a Androstane <surr>	83.2		%	AK102/103	60-120	08/29/00	09/02/00	ELB
d-Triacontane <Surrogate>	88.2		%	AK102/103	60-120	08/29/00	09/02/00	ELB
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Dichlorodifluoromethane	0.0109 U	0.0109	mg/Kg	SW846-8260B	08/22/00	08/31/00	SMS	
Chloromethane	0.0109 U	0.0109	mg/Kg	SW846-8260B	08/22/00	08/31/00	SMS	
Vinyl chloride	0.0109 U	0.0109	mg/Kg	SW846-8260B	08/22/00	08/31/00	SMS	
Bromomethane	0.210 U	0.210	mg/Kg	SW846-8260B	08/22/00	08/31/00	SMS	
Ethane	0.210 U	0.210	mg/Kg	SW846-8260B	08/22/00	08/31/00	SMS	
Trifluoromethane	0.0109 U	0.0109	mg/Kg	SW846-8260B	08/22/00	08/31/00	SMS	
1,1-Dichloroethene	0.0109 U	0.0109	mg/Kg	SW846-8260B	08/22/00	08/31/00	SMS	
Carbon disulfide	0.210 U	0.210	mg/Kg	SW846-8260B	08/22/00	08/31/00	SMS	



CT&E Ref.# 1004965004  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No B-247  
Client Sample ID 50124008004  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 16.10  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Methylene chloride	0.105 U	0.105	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
trans-1,2-Dichloroethene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Butanone (MEK)	0.210 U	0.210	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2,2-Dichloropropane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cis-1,2-Dichloroethene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloroethane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,1-Trichloroethane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromochloromethane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Form	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
C <sub>2</sub> , tetrachloride	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Benzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichloroethane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloropropene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Trichloroethene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichloropropane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Dibromomethane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromodichloromethane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,2-Trichloroethane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Chloroethyl Vinyl Ether	0.210 U	0.210	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cis-1,3-Dichloropropene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Methyl-2-pentanone (MIBK)	0.210 U	0.210	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Toluene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
trans-1,3-Dichloropropene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Tetrachloroethene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,3-Dichloropropane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Hexanone	0.210 U	0.210	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Dibromochloromethane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dibromoethane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,1,2-Tetrachloroethane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Chlorobenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
nzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Xylene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
o-Xylene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Styrene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS



CT&E Ref.# 1004965004  
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Project Name/# Port Hayden Call No B-247  
Client Sample ID 50124008004  
Matrix Soil/Solid  
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Printed Date/Time 09/21/2000 18:05  
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Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Bromoform	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Isopropylbenzene (Cumene)	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromobenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,3-Trichloropropane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
n-Propylbenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,2,2-Tetrachloroethane	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Chlorotoluene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Chlorotoluene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
methylbenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cylbenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,4-Trimethylbenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
sec-Butylbenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,3-Dichlorobenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Isopropyltoluene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,4-Dichlorobenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichlorobenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
n-Butylbenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dibromo-3-chloropropane	0.210 U	0.210	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,4-Trichlorobenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Hexachlorobutadiene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Naphthalene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,3-Trichlorobenzene	0.0109 U	0.0109	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Methyl-t-butyl ether	0.0210 U	0.0210	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
<b>Surrogates</b>								
Dibromofluoromethane <surr>	102		%	SW846-8260B	80-118	08/22/00	08/31/00	SMS
1,2-Dichloroethane-D4 <surr>	99.5		%	SW846-8260B	74-123	08/22/00	08/31/00	SMS
Toluene-d8 <surr>	102		%	SW846-8260B	79-130	08/22/00	08/31/00	SMS
4-Bromofluorobenzene <Sur>	86.2		%	SW846-8260B	71-141	08/22/00	08/31/00	SMS
<b>Volatile Organic GC/MS</b>								
Naphthalene	1.91 U	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Acenaphthylene	1.91 U	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM



CT&E Ref.# 1004965004  
Client Name Graybar Electric  
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Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
Acenaphthene	1.91 U	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Fluorene	1.91 U	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Phenanthrene	6.03	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Anthracene	1.91 U	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Fluoranthene	7.62	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Pyrene	6.55	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Benzo(a)Anthracene	3.19	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Chrysene	3.39	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
[a]Fluoranthene	2.88	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
[k]fluoranthene	1.91 U	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Benzo[a]pyrene	2.66	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Indeno[1,2,3-c,d] pyrene	1.91 U	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Dibenzof[a,h]anthracene	1.91 U	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Benzo[g,h,i]perylene	1.91 U	1.91	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
<b>Surrogates</b>								
Naphthalene-d8 <surr/IS>	62.5		%	PAH SIM	10-148	08/29/00	09/01/00	KWM
Acenaphthene-d10 <surr/IS>	73.3		%	PAH SIM	10-163	08/29/00	09/01/00	KWM
Chrysene-d12 <surr/IS>	97.7		%	PAH SIM	10-140	08/29/00	09/01/00	KWM



**CT&E Ref.#** 1004965005  
**Client Name** Graybar Electric  
**Project Name/#** Port Haiden Call No. B-247  
**Client Sample ID** 50124008005  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/22/2000 16:20  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Released By

#### Sample Remarks

PAHSIM - Naphthalene and Phenanthrene were detected above the PQL in the method blank due to cross contamination. The results for Phenanthrene in this sample are estimated.

DRO/RRO - Unknown hydrocarbon with several peaks

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	83.0		%	SM20 2540G		08/28/00	RMV	
<b>Volatile Fuels Department</b>								
Range Organics	2.52 U	2.52	mg/Kg	AK101 GRO		08/22/00	09/01/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	92.6		%	AK101 GRO	60-120	08/22/00	09/01/00	MAH
4-Bromofluorobenzene <Surrogate>	70.2		%	AK101 GRO	50-150	08/22/00	09/01/00	MAH
<b>Semivolatile Organic Fuels Department</b>								
Diesel Range Organics	11.9 U	11.9	mg/Kg	AK102/103		08/29/00	09/03/00	ELB
Residual Range Organics GC	102	19.7	mg/Kg	AK102/103		08/29/00	09/03/00	ELB
<b>Surrogates</b>								
5a Androstane <surrogate>	104		%	AK102/103	60-120	08/29/00	09/03/00	ELB
d-Triacontane <Surrogate>	114		%	AK102/103	60-120	08/29/00	09/03/00	ELB
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Dichlorodifluoromethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Chloromethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Vinyl chloride	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromomethane	0.252 U	0.252	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
thane	0.252 U	0.252	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Nitrofluoromethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloroethene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Carbon disulfide	0.252 U	0.252	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS



CT&E Ref.# 1004965005  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008005  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 16:20  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Methylene chloride	0.126 U	0.126	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
trans-1,2-Dichloroethene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Butanone (MEK)	0.252 U	0.252	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2,2-Dichloropropane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloroethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,1-Trichloroethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cis-1,2-Dichloroethene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromochloromethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Form	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Chloro tetrachloride	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Benzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloropropene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichloroethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Trichloroethene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichloropropane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Dibromomethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromodichloromethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,2-Trichloroethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Chloroethyl Vinyl Ether	0.252 U	0.252	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cis-1,3-Dichloropropene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Methyl-2-pentanone (MIBK)	0.252 U	0.252	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Toluene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
trans-1,3-Dichloropropene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Tetrachloroethene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,3-Dichloropropane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Hexanone	0.252 U	0.252	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Dibromochloromethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,1,2-Tetrachloroethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dibromoethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Chlorobenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
-benzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
-Xylene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
o-Xylene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Styrene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS



CT&E Ref.# 1004965005  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No B-247  
Client Sample ID 50124008005  
Matrix Soil/Solid  
Ordered By

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Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 16:20  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Bromoform	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Isopropylbenzene (Cumene)	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromobenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,3-Trichloropropane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
n-Propylbenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,2,2-Tetrachloroethane	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Chlorotoluene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Chlorotoluene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1-methylbenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1-ethylbenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,4-Trimethylbenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
sec-Butylbenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,3-Dichlorobenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Isopropyltoluene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,4-Dichlorobenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichlorobenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
n-Butylbenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dibromo-3-chloropropane	0.252 U	0.252	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,4-Trichlorobenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Hexachlorobutadiene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Naphthalene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Methyl-t-butyl ether	0.0252 U	0.0252	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,3-Trichlorobenzene	0.0131 U	0.0131	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
<b>Surrogates</b>								
Dibromofluoromethane <surr>	105		%	SW846-8260B	80-118	08/22/00	08/31/00	SMS
1,2-Dichloroethane-D4 <surr>	98		%	SW846-8260B	74-123	08/22/00	08/31/00	SMS
Toluene-d8 <surr>	103		%	SW846-8260B	79-130	08/22/00	08/31/00	SMS
4-Bromofluorobenzene <Sur>	88.3		%	SW846-8260B	71-141	08/22/00	08/31/00	SMS
<b>Volatile Organic GC/MS</b>								
Naphthalene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Acenaphthylene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM



CT&E Ref.# 1004965005  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No B-247  
Client Sample ID 50124008005  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 16:20  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Unit
<b>Semivolatile Organic GC/MS</b>								
Acenaphthene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Fluorene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Phenanthrene	2.75	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Anthracene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Fluoranthene	3.76	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Pyrene	3.96	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Benzo(a)Anthracene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Chrysene	2.16	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
[a]Fluoranthene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
[b,k]fluoranthene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Benzo[a]pyrene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Indeno[1,2,3-c,d] pyrene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Dibenzo[a,h]anthracene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Benzo[g,h,i]perylene	1.97 U	1.97	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
<b>Surrogates</b>								
Naphthalene-d8 <surr/IS>	57.2		%	PAH SIM	10-148	08/29/00	09/01/00	KWM
Acenaphthene-d10 <surr/IS>	68.7		%	PAH SIM	10-163	08/29/00	09/01/00	KWM
Chrysene-d12 <surr/IS>	98.3		%	PAH SIM	10-140	08/29/00	09/01/00	KWM



CT&E Ref.# 1004965006  
Client Name Graybar Electric  
Project Name/# Port Haiden Call No. B-247  
Client Sample ID 50124008006  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 16:30  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Released By *J. W. Molebank*

**Sample Remarks**

PAHSIM - Naphthalene and Phenanthrene were detected above the PQL in the method blank due to cross contamination. The results for this sample are not effected.  
DRO/RRO - Unknown hydrocarbon with several peaks.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	75.8		%	SM20 2540G		08/28/00	RMV	
<b>Volatile Fuels Department</b>								
Diesel Range Organics	2.41 U	2.41	mg/Kg	AK101 GRO	60-120	08/22/00	09/01/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Sur>	95.7		%	AK101 GRO	50-150	08/22/00	09/01/00	MAH
4-Bromofluorobenzene <Sur>	50.9		%	AK101 GRO	60-120	08/22/00	09/01/00	MAH
<b>Semivolatile Organic Fuels Department</b>								
Diesel Range Organics	13.4	12.9	mg/Kg	AK102/103	60-120	08/29/00	09/03/00	ELB
Residual Range Organics GC	96.5	21.3	mg/Kg	AK102/103	50-150	08/29/00	09/03/00	ELB
<b>Surrogates</b>								
5a Androstane <surr>	89.6		%	AK102/103	60-120	08/29/00	09/03/00	ELB
d-Triacontane <Sur>	99.3		%	AK102/103	60-120	08/29/00	09/03/00	ELB
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Dichlorodifluoromethane	0.0125 U	0.0125	mg/Kg	SW846-8260B	60-120	08/22/00	08/31/00	SMS
Chloromethane	0.0125 U	0.0125	mg/Kg	SW846-8260B	50-150	08/22/00	08/31/00	SMS
Vinyl chloride	0.0125 U	0.0125	mg/Kg	SW846-8260B	60-120	08/22/00	08/31/00	SMS
Bromomethane	0.241 U	0.241	mg/Kg	SW846-8260B	60-120	08/22/00	08/31/00	SMS
ethane	0.241 U	0.241	mg/Kg	SW846-8260B	60-120	08/22/00	08/31/00	SMS
Chlorofluoromethane	0.0125 U	0.0125	mg/Kg	SW846-8260B	60-120	08/22/00	08/31/00	SMS
1,1-Dichloroethene	0.0125 U	0.0125	mg/Kg	SW846-8260B	60-120	08/22/00	08/31/00	SMS
Carbon disulfide	0.241 U	0.241	mg/Kg	SW846-8260B	60-120	08/22/00	08/31/00	SMS



CT&E Ref.# 1004965006  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008006  
Matrix Soil/Solid  
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Printed Date/Time 09/21/2000 18:05  
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Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Methylene chloride	0.121 U	0.121	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
trans-1,2-Dichloroethene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Butanone (MEK)	0.241 U	0.241	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2,2-Dichloropropane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloroethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,1-Trichloroethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cis-1,2-Dichloroethene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromochloromethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Form	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Carbon tetrachloride	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Benzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1-Dichloropropene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichloroethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Trichloroethene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichloropropane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Dibromomethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromodichloromethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Chloroethyl Vinyl Ether	0.241 U	0.241	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,2-Trichloroethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
cis-1,3-Dichloropropene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Methyl-2-pentanone (MIBK)	0.241 U	0.241	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Toluene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
trans-1,3-Dichloropropene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Tetrachloroethene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,3-Dichloropropane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Hexanone	0.241 U	0.241	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Dibromochloromethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dibromoethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,1,2-Tetrachloroethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Chlorobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
-benzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
-Xylene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
o-Xylene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Styrene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS



CT&E Ref.#	1004965006	Client PO#	
Client Name	Graybar Electric	Printed Date/Time	09/21/2000 18:05
Project Name/#	Port Haiden Call No. B-247	Collected Date/Time	08/22/2000 16:30
Client Sample ID	50124008006	Received Date/Time	08/25/2000 13:00
Matrix	Soil/Solid	Technical Director	Stephen C. Ede
Ordered By			

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Bromoform	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Isopropylbenzene (Cumene)	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Bromobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,3-Trichloropropane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,1,2,2-Tetrachloroethane	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
n-Propylbenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
2-Chlorotoluene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Chlorotoluene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
methylbenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
t-butylbenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,4-Trimethylbenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
sec-Butylbenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,3-Dichlorobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
4-Isopropyltoluene	0.0461	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,4-Dichlorobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dichlorobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
n-Butylbenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2-Dibromo-3-chloropropane	0.241 U	0.241	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,4-Trichlorobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Hexachlorobutadiene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Naphthalene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
1,2,3-Trichlorobenzene	0.0125 U	0.0125	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
Methyl-t-butyl ether	0.0241 U	0.0241	mg/Kg	SW846-8260B		08/22/00	08/31/00	SMS
<b>Surrogates</b>								
Dibromofluoromethane <surr>	106		%	SW846-8260B	80-118	08/22/00	08/31/00	SMS
1,2-Dichloroethane-D4 <surr>	101		%	SW846-8260B	74-123	08/22/00	08/31/00	SMS
Toluene-d8 <surr>	102		%	SW846-8260B	79-130	08/22/00	08/31/00	SMS
4-Bromofluorobenzene <Sur>	80.2		%	SW846-8260B	71-141	08/22/00	08/31/00	SMS
<b>Volatile Organic GC/MS</b>								
Naphthalene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Acenaphthylene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM



**CT&E Ref.#** 1004965006  
**Client Name** Graybar Electric  
**Project Name/#** Port Haden Call No B-247  
**Client Sample ID** 50124008006  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/22/2000 16:30  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
Acenaphthene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Fluorene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Phenanthrene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Anthracene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Fluoranthene	2.99	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Pyrene	3.01	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Benzo(a)Anthracene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Chrysene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Fluoranthene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Benzo[k]fluoranthene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Benzo[a]pyrene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Indeno[1,2,3-c,d] pyrene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Dibenzo[a,h]anthracene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
Benzo[g,h,i]perylene	2.18 U	2.18	ug/Kg	PAH SIM		08/29/00	09/01/00	KWM
<b>Surrogates</b>								
Naphthalene-d8 <surr/IS>	52.2		%	PAH SIM	10-148	08/29/00	09/01/00	KWM
Acenaphthene-d10 <surr/IS>	63.2		%	PAH SIM	10-163	08/29/00	09/01/00	KWM
Chrysene-d12 <surr/IS>	88.9		%	PAH SIM	10-140	08/29/00	09/01/00	KWM



**CT&E Ref.#** 1004965007  
**Client Name** Graybar Electric  
**Project Name/#** Port Haiden Call No. B-247  
**Client Sample ID** 50124008007  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/23/2000 8:46  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

**Released By** *Windlebank*

**Sample Remarks**

8270 - LCS/LCSD recovery for pyridine is biased low. The result for this compound is estimated.  
 8270 - Internal standard perylene-d12 is biased low. The result of benzo[b]fluoranthene may bias high.  
 8082 - Surrogate recovery does not meet QC goals due to sample dilution.  
 DRO/RRO - Unknown hydrocarbon with several peaks.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	81.4		%	SM20 2540G		08/28/00	RMV	
<b>As by ICP/MS</b>								
Barium	108	1.09	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Vanadium	63.4	0.109	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
<b>Volatile Fuels Department</b>								
Gasoline Range Organics	2.39 U	2.39	mg/Kg	AK101 GRO		08/23/00	09/01/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	96.2		%	AK101 GRO	60-120	08/23/00	09/01/00	MAH
4-Bromofluorobenzene <Surrogate>	58.1		%	AK101 GRO	50-150	08/23/00	09/01/00	MAH
<b>Semivolatile Organic Fuels Department</b>								
Diesel Range Organics	27.4	12.1	mg/Kg	AK102/103		08/29/00	09/03/00	ELB
Residual Range Organics GC	111	20.0	mg/Kg	AK102/103		08/29/00	09/03/00	ELB
<b>Surrogates</b>								
5a Androstane <surrogate>	101		%	AK102/103	60-120	08/29/00	09/03/00	ELB
contane <Surrogate>	117		%	AK102/103	60-120	08/29/00	09/03/00	ELB
<b>Semivolatile Organic Gas Chromatography</b>								
Aroclor-1016	1.06 U	1.06	mg/Kg	SW846-8082		08/30/00	09/04/00	WA



**CT&E Ref.#** 1004965007  
**Client Name** Graybar Electric  
**Project Name/#** Port Haiden Call No B-247  
**Client Sample ID** 50124008007  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/23/2000 8:46  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
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#### Semivolatile Organic Gas Chromatography

Aroclor-1221	1.06 U	1.06	mg/Kg	SW846-8082	08/30/00	09/04/00	WAA	
Aroclor-1232	1.06 U	1.06	mg/Kg	SW846-8082	08/30/00	09/04/00	WAA	
Aroclor-1242	1.06 U	1.06	mg/Kg	SW846-8082	08/30/00	09/04/00	WAA	
Aroclor-1248	1.06 U	1.06	mg/Kg	SW846-8082	08/30/00	09/04/00	WAA	
Aroclor-1254	1.06 U	1.06	mg/Kg	SW846-8082	08/30/00	09/04/00	WAA	
Aroclor-1260	13.6	1.06	mg/Kg	SW846-8082	08/30/00	09/04/00	WAA	
gates								
o-ro biphenyl <Surrogate>	221	!	%	SW846-8082	36.1-1249	08/30/00	09/04/00	WAA

#### Volatile Gas Chromatography/Mass Spectroscopy

Dichlorodifluoromethane	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
Chloromethane	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
Vinyl chloride	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
Bromomethane	0.239 U	0.239	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
Chloroethane	0.239 U	0.239	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
Trichlorofluoromethane	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
1,1-Dichloroethene	0.0124 U	0.239	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
Carbon disulfide	0.239 U	0.120	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
Methylene chloride	0.120 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
trans-1,2-Dichloroethene	0.0124 U	0.239	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
2-Butanone (MEK)	0.239 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
2,2-Dichloropropane	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
cis-1,2-Dichloroethene	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
1,1-Dichloroethane	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
1,1,1-Trichloroethane	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SMS
Bromoform	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SM
Carbon tetrachloride	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SM
e	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SM
1,1-Chloroethane	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SM
1,1-Dichloropropene	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SM
Trichloroethene	0.0124 U	0.0124	mg/Kg	SW846-8260B	08/23/00	08/31/00	SM



CT&E Ref.# 1004965007  
Client Name Graybar Electric  
Project Name/# Port Haiden Call No. B-247  
Client Sample ID 50124008007  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 8.46  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
1,2-Dichloropropane	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Dibromomethane	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromodichloromethane	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Chloroethyl Vinyl Ether	0.239 U	0.239	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,2-Trichloroethane	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
cis-1,3-Dichloropropene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-methyl-2-pentanone (MIBK)	0.239 U	0.239	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-methylpropane	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
3-Dichloropropene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-dimethylethene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,3-Dichloropropane	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Hexanone	0.239 U	0.239	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Dibromochloromethane	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dibromoethane	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,1,2-Tetrachloroethane	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chlorobenzene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Ethylbenzene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
P & M -Xylene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
o-Xylene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Styrene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromoform	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Isopropylbenzene (Cumene)	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromobenzene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
1,2,3-Trichloropropane	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
n-Propylbenzene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
1,1,2,2-Tetrachloroethane	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
2-Chlorotoluene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
4-Chlorotoluene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
1,3,5-Trimethylbenzene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
Butylbenzene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
2,3,5-Trimethylbenzene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
2,4,5-Tributylbenzene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
1,3-Dichlorobenzene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
4-Isopropyltoluene	0.0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM



CT&E Ref.# 1004965007  
 Client Name Graybar Electric  
 Project Name/# Port Haiden Call No B-247  
 Client Sample ID 50124008007  
 Matrix Soil/Solid  
 Ordered By

Client PO# 09/21/2000 18 05  
 Printed Date/Time 08/23/2000 8 46  
 Collected Date/Time 08/25/2000 13 00  
 Received Date/Time Stephen C. Ede  
 Technical Director

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Int
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
<b>1,4-Dichlorobenzene</b>								
1,4-Dichlorobenzene	0 0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dichlorobenzene	0 0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
n-Butylbenzene	0 0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dibromo-3-chloropropane	0 239 U	0.239	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2,4-Trichlorobenzene	0 0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Hexachlorobutadiene	0 0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
alene	0 0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
chlorobenzene	0 0124 U	0.0124	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
-t-butyl ether	0 0239 U	0.0239	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
<b>Surrogates</b>								
Dibromofluoromethane <surr>	101		%	SW846-8260B	80-118	08/23/00	08/31/00	SMS
1,2-Dichloroethane-D4 <surr>	96.4		%	SW846-8260B	74-123	08/23/00	08/31/00	SMS
Toluene-d8 <surr>	99.4		%	SW846-8260B	79-130	08/23/00	08/31/00	SMS
4-Bromofluorobenzene <Sur>	86		%	SW846-8260B	71-141	08/23/00	08/31/00	SMS
<b>Semivolatile Organic GC/MS</b>								
N-Nitrosodimethylamine	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pyridine	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Aniline	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Phenol	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Bis(2-Chloroethyl)ether	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chlorophenol	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,3-Dichlorobenzene	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,4-Dichlorobenzene	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzyl alcohol	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,2-Dichlorobenzene	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Methylphenol (o-Cresol)	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-chloroisopropyl)ether	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
ethylphenol (p&m-Cresol)	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
m-rosodi-n-propylamine	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachloroethane	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Nitrobenzene	0 399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ



CT&E Ref.# 1004965007  
 Client Name Graybar Electric  
 Project Name/# Port Haiden Call No. B-247  
 Client Sample ID 50124008007  
 Matrix Soil/Solid  
 Ordered By

Client PO#  
 Printed Date/Time 09/21/2000 18:05  
 Collected Date/Time 08/23/2000 8:46  
 Received Date/Time 08/25/2000 13:00  
 Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
Isophorone	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Nitrophenol	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dimethylphenol	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzoic acid	2.02 U	2.02	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Bis(2-Chloroethoxy)methane	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,2,4-Trichlorobenzene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Phthalene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Nitroaniline	0.810 U	0.810	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Isobutadiene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Nitro-3-methylphenol	0.810 U	0.810	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dichlorophenol	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Methylnaphthalene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachlorocyclopentadiene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4,6-Trichlorophenol	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4,5-Trichlorophenol	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chloronaphthalene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Nitroaniline	2.02 U	2.02	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dimethylphthalate	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1-Chloronaphthalene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Acenaphthylene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,6-Dinitrotoluene	0.399 U	2.02	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
3-Nitroaniline	2.02 U	2.02	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Acenaphthene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dinitrophenol	2.02 U	2.02	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Nitrophenol	2.02 U	2.02	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dibenzofuran	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dinitrotoluene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Diethylphthalate	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Chlorophenyl-phenylether	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Toluene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Aniline	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Nitro-4,6-dinitrophenol	2.02 U	2.02	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
N-Nitrosodiphenylamine	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Bromophenyl-phenylether	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ



CT&E Ref.# 1004965007  
 Client Name Graybar Electric  
 Project Name/# Port Haiden Call No B-247  
 Client Sample ID 50124008007  
 Matrix Soil/Sohd  
 Ordered By

Client PO#  
 Printed Date/Time 09/21/2000 18 05  
 Collected Date/Time 08/23/2000 8 46  
 Received Date/Time 08/25/2000 13 00  
 Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
Hexachlorobenzene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pentachlorophenol	2.02 U	2.02	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Phenanthrene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Anthracene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Di-n-butylphthalate	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Fluoranthene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pyrene	0.542	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Biphenyl	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Phenol	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
o,p'-Dichlorobiphenyl	0.810 U	0.810	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
p,p'-Dichlorobenzidine	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo(a)Anthracene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Chrysene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
bis(2-Ethylhexyl)phthalate	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
di-n-Octylphthalate	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[b]Fluoranthene	0.522	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[k]fluoranthene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[a]pyrene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Indeno[1,2,3-c,d] pyrene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dibenzof[a,h]anthracene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[g,h,i]perylene	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,6-Dichlorophenol	0.399 U	0.399	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
<b>Surrogates</b>								
2-Fluorophenol <Surrogate>	56.8		%	SW846-8270C	18-83	08/29/00	08/30/00	L
Phenol-d6 <Surrogate>	67.7		%	SW846-8270C	24-88	08/29/00	08/30/00	L
Nitrobenzene-d5 <Surrogate>	72.6		%	SW846-8270C	18-109	08/29/00	08/30/00	L
2-Fluorobiphenyl <Surrogate>	74.6		%	SW846-8270C	30-103	08/29/00	08/30/00	L
2,4,6-Tribromophenol <Surrogate>	88.8		%	SW846-8270C	18-122	08/29/00	08/30/00	L
Terphenyl-d14 <Surrogate>	113		%	SW846-8270C	21-142	08/29/00	08/30/00	L
<b>Priority Pollutants</b>								
Antimony	1.09 U	1.09	mg/Kg	SW846 6020		08/31/00	09/21/00	K
Arsenic	3.10	0.547	mg/Kg	SW846 6020		08/31/00	09/21/00	K



CT&E Environmental Services Inc.

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**CT&E Ref.#** 1004965007  
**Client Name** Graybar Electric  
**Project Name/#** Port Haiden Call No. B-247  
**Client Sample ID** 50124008007  
**Matrix** Soil/Solid  
**Ordered By**

<b>Client PO#</b>	
<b>Printed Date/Time</b>	09/21/2000 18:05
<b>Collected Date/Time</b>	08/23/2000 8:46
<b>Received Date/Time</b>	08/25/2000 13:00
<b>Technical Director</b>	Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Priority Pollutants</b>								
Beryllium	0.356	0.0438	mg/Kg	SW846 6020		08/31/00	09/21/00	KGP
Cadmium	0.0547 U	0.0547	mg/Kg	SW846 6020		08/31/00	09/21/00	KGP
Chromium	9.09	1.09	mg/Kg	SW846 6020		08/31/00	09/21/00	KGP
Copper	25.3	3.28	mg/Kg	SW846 6020		08/31/00	09/21/00	KGP
Lead	6.33	3.28	mg/Kg	SW846 6020		08/31/00	09/21/00	KGP
Nickel	11.1	3.28	mg/Kg	SW846 6020		08/31/00	09/21/00	KGP
Platinum	0.547 U	0.547	mg/Kg	SW846 6020		08/31/00	09/21/00	KGP
Rhenium	0.526	0.219	mg/Kg	SW846 6020		08/31/00	09/21/00	KGP
Silver	0.240	0.0109	mg/Kg	SW846 6020		08/31/00	09/21/00	KGP
Zinc	58.9	2.74	mg/Kg	SW846 6020		08/31/00	09/21/00	KGP
Mercury by Cold Vapor	0.0591	0.0230	mg/Kg	SW846-7471A		08/30/00	08/31/00	JDP



CT&E Environmental Services Inc.

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CT&E Ref.# 1004965008  
 Client Name Graybar Electric  
 Project Name/# Port Haiden Call No. B-247  
 Client Sample ID 50124008008  
 Matrix Soil/Solid  
 Ordered By

Client PO#  
 Printed Date/Time 09/21/2000 18:05  
 Collected Date/Time 08/23/2000 8:55  
 Received Date/Time 08/25/2000 13:00  
 Technical Director Stephen C. Ede  
 Released By *J. Windlebank*

Sample Remarks

8270 - Internal standard perylene-d12 is biased low. The samples are non-detect. The results are not affected.  
 8270 - LCS/LCSD recovery for pyridine is biased low. The result for this compound is estimated  
 RRO - Unknown hydrocarbon with several peaks

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>							08/28/00	RMV
Total Solids	87.1		%	SM20 2540G				
<b>ls by ICP/MS</b>						08/31/00	09/21/00	KGF
Vanadium	121	0.935	mg/Kg	SW846 6020	60-120	08/31/00	09/21/00	KGF
	53.8	0.0935	mg/Kg	SW846 6020	50-150	08/31/00	09/21/00	MAI
<b>Volatile Fuels Department</b>						08/23/00	09/01/00	MAI
Gasoline Range Organics	212 U	2.12	mg/Kg	AK101 GRO				
<b>Surrogates</b>						08/23/00	09/01/00	MAI
1,4-Difluorobenzene <Sur>	98.2		%	AK101 GRO	60-120	08/23/00	09/01/00	MAI
4-Bromofluorobenzene <Sur>	62.1		%	AK101 GRO	50-150	08/23/00	09/01/00	MAI
<b>Semivolatile Organic Fuels Department</b>								
Diesel Range Organics	114 U	11.4	mg/Kg	AK102/103	60-120	08/29/00	09/03/00	EL
Residual Range Organics GC	38.3	18.9	mg/Kg	AK102/103	60-120	08/29/00	09/03/00	EL
<b>Surrogates</b>								
5a Androstanone <surr>	96.6		%	AK102/103	60-120	08/29/00	09/03/00	EL
d-Triacontane <Sur>	102		%	AK102/103	60-120	08/29/00	09/03/00	EL
<b>Volatile Organic Gas Chromatography</b>								
Aroclor-1016	0.0485 U	0.0485	mg/Kg	SW846-8082	60-120	08/30/00	09/04/00	W
Aroclor-1221	0.0485 U	0.0485	mg/Kg	SW846-8082	60-120	08/30/00	09/04/00	W



CT&E Ref.# 1004965008  
 Client Name Graybar Electric  
 Project Name/# Port Haiden Call No. B-247  
 Client Sample ID 50124008008  
 Matrix Soil/Sohd  
 Ordered By

Client PO#  
 Printed Date/Time 09/21/2000 18:05  
 Collected Date/Time 08/23/2000 8:55  
 Received Date/Time 08/25/2000 13:00  
 Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic Gas Chromatography</b>								
Aroclor-1232	0.0485 U	0.0485	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1242	0.0485 U	0.0485	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1248	0.0485 U	0.0485	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1254	0.0485 U	0.0485	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1260	0.322	0.0485	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Surrogates								
Chlorobiphenyl <Surrogate>	84.8		%	SW846-8082	36.1-124.9	08/30/00	09/04/00	WAA
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Dichlorodifluoromethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chloromethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Vinyl chloride	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromomethane	0.212 U	0.212	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chloroethane	0.212 U	0.212	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Trichlorofluoromethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dichloroethene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Carbon disulfide	0.212 U	0.212	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Methylene chloride	0.106 U	0.106	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
trans-1,2-Dichloroethene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
2-Butanone (MEK)	0.212 U	0.212	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
2,2-Dichloropropane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
1,1,1-Trichloroethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
cis-1,2-Dichloroethene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
1,1-Dichloroethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
Bromochloromethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
Chloroform	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
Carbon tetrachloride	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
benzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
chloroethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
chloropropene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
Trichloroethene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM
1,2-Dichloropropane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SM



**CT&E Ref.#** 1004965008  
**Client Name** Graybar Electric  
**Project Name/#** Port Hayden Call No. B-247  
**Client Sample ID** 50124008008  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/23/2000 8:55  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Int
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Dibromomethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromodichloromethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Chloroethyl Vinyl Ether	0.212 U	0.212	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,2-Trichloroethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
cis-1,3-Dichloropropene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
4-Methyl-2-pentanone (MIBK)	0.212 U	0.212	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Toluene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
,3-Dichloropropene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dichloroethene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dichloropropane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Hexanone	0.212 U	0.212	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Dibromochloromethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,1,2-Tetrachloroethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dibromoethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chlorobenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Ethylbenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
P & M -Xylene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
o-Xylene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Styrene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromoform	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Isopropylbenzene (Cumene)	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromobenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2,3-Trichloropropene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,2,2-Tetrachloroethane	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
n-Propylbenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Chlorotoluene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
4-Chlorotoluene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,3,5-Trimethylbenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
tert-Butylbenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
4-Trimethylbenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
styrene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
chlorobenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
4-Isopropyltoluene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,4-Dichlorobenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS



**CT&E Ref.#** 1004965008  
**Client Name** Graybar Electric  
**Project Name/#** Port Haiden Call No. B-247  
**Client Sample ID** 50124008008  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/23/2000 8:55  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
1,2-Dichlorobenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
n-Butylbenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dibromo-3-chloropropane	0.212 U	0.212	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2,4-Trichlorobenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Hexachlorobutadiene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Naphthalene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Methyl-t-butyl ether	0.0212 U	0.0212	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Trichlorobenzene	0.0110 U	0.0110	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
<b>Isotopes</b>								
Dibromofluoromethane <surr>	106		%	SW846-8260B	80-118	08/23/00	08/31/00	SMS
1,2-Dichloroethane-D4 <surr>	102		%	SW846-8260B	74-123	08/23/00	08/31/00	SMS
Toluene-d8 <surr>	103		%	SW846-8260B	79-130	08/23/00	08/31/00	SMS
4-Bromofluorobenzene <Sur>	94.3		%	SW846-8260B	71-141	08/23/00	08/31/00	SMS
<b>Semivolatile Organic GC/MS</b>								
N-Nitrosodimethylamine	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pyridine	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Aniline	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Phenol	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Bis(2-Chloroethyl)ether	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chlorophenol	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,3-Dichlorobenzene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,4-Dichlorobenzene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzyl alcohol	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,2-Dichlorobenzene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Methylphenol (o-Cresol)	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
(2-chloroisopropyl)ether	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Methylphenol (p&m-Cresol)	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
iso-di-n-propylamine	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,1-Dichloroethane	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Nitrobenzene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Isophorone	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ



**CT&E Ref.#** 1004965008  
**Client Name** Graybar Electric  
**Project Name/#** Port Haden Call No. B-247  
**Client Sample ID** 50124008008  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/23/2000 8:55  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Int
<b>Semivolatile Organic GC/MS</b>								
2-Nitrophenol	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dimethylphenol	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzoic acid	1.89 U	1.89	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Bis(2-Chloroethoxy)methane	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,2,4-Trichlorobenzene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Naphthalene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Chloroaniline	0.757 U	0.757	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Chlorobutadiene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
o-3-methylphenol	0.757 U	0.757	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,6-chlorophenol	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Methylnaphthalene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachlorocyclopentadiene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4,6-Trichlorophenol	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4,5-Trichlorophenol	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chloronaphthalene	0.373 U	1.89	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Nitroaniline	1.89 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dimethylphthalate	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1-Chloronaphthalene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Acenaphthylene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,6-Dinitrotoluene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
3-Nitroaniline	1.89 U	1.89	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Acenaphthene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dinitrophenol	1.89 U	1.89	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Nitrophenol	1.89 U	1.89	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dibenzofuran	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dinitrotoluene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Diethylphthalate	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Chlorophenyl-phenylether	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Fluorene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
troaniline	0.373 U	1.89	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4'-yl-4,6-dinitrophenol	1.89 U	1.89	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
sodiphenylamine	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Bromophenyl-phenylether	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachlorobenzene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ



**CT&E Ref.#** 1004965008  
**Client Name** Graybar Electric  
**Project Name/#** Port Hayden Call No. B-247  
**Client Sample ID** 50124008008  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/23/2000 8:55  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Int
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#### Semivolatile Organic GC/MS

Pentachlorophenol	1.89 U	1.89	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Phenanthrene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Anthracene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Di-n-butylphthalate	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Fluoranthene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pyrene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Azobenzene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
nzylphthalate	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
'lorobenzidine	0.757 U	0.757	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
B- <sub>1</sub> (a)Anthracene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Chrysene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
bis(2-Ethylhexyl)phthalate	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
di-n-Octylphthalate	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[b]Fluoranthene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[k]fluoranthene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[a]pyrene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Indeno[1,2,3-c,d] pyrene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dibenzo[a,h]anthracene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[g,h,i]perylene	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,6-Dichlorophenol	0.373 U	0.373	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ

#### Surrogates

2-Fluorophenol <Surrogate>	51.6	%	SW846-8270C	18-83	08/29/00	08/30/00	LZ
Phenol-d6 <Surrogate>	60.4	%	SW846-8270C	24-88	08/29/00	08/30/00	LZ
Nitrobenzene-d5 <Surrogate>	64.8	%	SW846-8270C	18-109	08/29/00	08/30/00	LZ
2-Fluorobiphenyl <Surrogate>	66.1	%	SW846-8270C	30-103	08/29/00	08/30/00	LZ
2,4,6-Tribromophenol <Surrogate>	79.1	%	SW846-8270C	18-122	08/29/00	08/30/00	LZ
Terphenyl-d14 <Surrogate>	99.7	%	SW846-8270C	21-142	08/29/00	08/30/00	LZ

#### Priority Pollutants

As. <sub>11</sub> ony	0.935 U	0.935	mg/Kg	SW846 6020	08/31/00	09/21/00	KGF
Arsenic	2.81	0.467	mg/Kg	SW846 6020	08/31/00	09/21/00	KGF
Beryllium	0.321	0.0374	mg/Kg	SW846 6020	08/31/00	09/21/00	KGF



**CT&E Ref.#** 1004965008  
**Client Name** Graybar Electric  
**Project Name/#** Port Haiden Call No. B-247  
**Client Sample ID** 50124008008  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/23/2000 8:55  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Priority Pollutants</b>								
Cadmium	0.0467 U	0.0467	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Chromium	9.40	0.935	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Copper	17.2	2.80	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Lead	3.53	2.80	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Nickel	9.38	2.80	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Selenium	0.467 U	0.467	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Silver	0.187 U	0.187	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Thallium	0.188	0.00935	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
	37.9	2.34	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
M [REDACTED] by Cold Vapor	0.0228 U	0.0228	mg/Kg	SW846-7471A		08/30/00	08/31/00	JDT



**CT&E Ref.#** 1004965009  
**Client Name** Graybar Electric  
**Project Name/#** Port Haiden Call No. B-247  
**Client Sample ID** 50124008009  
**Matrix** Soil/Solid  
**Ordered By**

<b>Client PO#</b>	
<b>Printed Date/Time</b>	09/21/2000 18:05
<b>Collected Date/Time</b>	08/23/2000 9:10
<b>Received Date/Time</b>	08/25/2000 13:00
<b>Technical Director</b>	Stephen C. Ede

Released By J. Windesbank

## Sample Remarks

8260 - Field surrogate recovery biased low(71%). All other QC criteria was met. The results should not be significantly affected.

8270 - LCS/LCSD recovery for pyridine is biased low. The result for this compound is estimated.

8270 - Sample was diluted 5X due to dark color. Detection limit raised 5X due to matrix interference. Sample has a very high concentration of PCB.

8270 - Internal standard chrysene-d<sub>12</sub> and perylene-d<sub>12</sub> are biased low. The samples are non-detect. The results are not affected.

8270- Surrogate recovery for terphenyl-d14 is biased high possibly due to matrix or/and dilution

8082 - Surrogate recovery does not meet QC goals due to  
1111

DRO/RRO - Surrogate recoveries outside controls due to sample dilution.

matrix interference.

DRO/RRO - Pattern consistent with Aroclor 1260.

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For more information about the National Institute of Child Health and Human Development, please visit our website at [www.nichd.nih.gov](http://www.nichd.nih.gov).

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	83.5		%	SM20 2540G			08/28/00	RMV
<b>Metals by ICP/MS</b>								
Barium	133	1.00	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Vanadium	53.2	0.100	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
<b>Volatile Fuels Department</b>								
Gasoline Range Organics	195 U	1.95	mg/Kg	AK101 GRO		08/23/00	09/04/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	91.5		%	AK101 GRO	60-120	08/23/00	09/04/00	MAH
4-Bromofluorobenzene <Surrogate>	50.1		%	AK101 GRO	50-150	08/23/00	09/04/00	MAH
<b>Semivolatile Organic Fuels Department</b>								
Diesel Range Organics	1310	11.7	mg/Kg	AK102/103		08/29/00	09/03/00	ELB
Fuel Range Organics GC	1180	19.2	mg/Kg	AK102/103		08/29/00	09/03/00	ELB
<b>Surrogates</b>								
5a Androstanane <surr>	150	!	%	AK102/103	60-120	08/29/00	09/03/00	ELB



CT&E Ref.# 1004965009  
Client Name Graybar Electric  
Project Name/# Port Haiden Call No B-247  
Client Sample ID 50124008009  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 9:10  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic Fuels Department</b>								
d-Triacontane <Sum>	201	!	%	AK102/103	60-120	08/29/00	09/03/00	ELB
<b>Semivolatile Organic Gas Chromatography</b>								
Aroclor-1016	2570 U	2570	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1221	2570 U	2570	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1232	2570 U	2570	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1242	2570 U	2570	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
██████████ 248	2570 U	2570	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1254	2570 U	2570	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1260	13100	2570	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
<b>Surrogates</b>								
Decachlorobiphenyl <Surrogate>			%	SW846-8082	36 1-124 9	08/30/00	09/04/00	WAA
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Dichlorodifluoromethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chloromethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Vinyl chloride	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromomethane	0.195 U	0.195	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chloroethane	0.195 U	0.195	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Trichlorofluoromethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dichloroethene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Carbon disulfide	0.195 U	0.195	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Methylene chloride	0.0977 U	0.0977	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
trans-1,2-Dichloroethene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Butanone (MEK)	0.195 U	0.195	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2,2-Dichloropropane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
c ██████████ Dichloroethene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
██████████ chloroethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dichloroethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromochloromethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS



CT&E Ref.# 1004965009  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008009  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 9:10  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Chloroform	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Carbon tetrachloride	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Benzene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dichloropropene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dichloroethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Trichloroethene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dichloropropane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Dibromomethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chloromethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Ethyl Vinyl Ether	0.195 U	0.195	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,2-Trichloroethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
cis-1,3-Dichloropropene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
4-Methyl-2-pentanone (MIBK)	0.195 U	0.195	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Toluene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
trans-1,3-Dichloropropene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Tetrachloroethene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,3-Dichloropropane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Hexanone	0.195 U	0.195	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Dibromo-chloromethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dibromoethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,1,2-Tetrachloroethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chlorobenzene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Ethylbenzene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
P & M -Xylene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
o-Xylene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Styrene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromoform	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Isopropylbenzene (Cumene)	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromobenzene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2,3-Trichloropropane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
benzene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
trachloroethane	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Chlorotoluene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
4-Chlorotoluene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS



**CT&E Ref.#** 1004965009  
**Client Name** Graybar Electric  
**Project Name/#** Port Hayden Call No. B-247  
**Client Sample ID** 50124008009  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/23/2000 9:10  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
1,3,5-Trimethylbenzene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
tert-Butylbenzene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2,4-Trimethylbenzene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
sec-Butylbenzene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,3-Dichlorobenzene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
4-Isopropyltoluene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,4-Dichlorobenzene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dichlorobenzene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,1-Trifluoro-3-chloropropane	0.195 U	0.195	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2,4-Trichlorobenzene	0.0278	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Hexachlorobutadiene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Naphthalene	0.0102 U	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2,3-Trichlorobenzene	0.0711	0.0102	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Methyl-t-butyl ether	0.0195 U	0.0195	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
<b>Surrogates</b>								
Dibromofluoromethane <surr>	101		%	SW846-8260B	80-118	08/23/00	08/31/00	SMS
1,2-Dichloroethane-D4 <surr>	97		%	SW846-8260B	74-123	08/23/00	08/31/00	SMS
Toluene-d8 <surr>	102		%	SW846-8260B	79-130	08/23/00	08/31/00	SMS
4-Bromofluorobenzene <Sur>	70.6	!	%	SW846-8260B	71-141	08/23/00	08/31/00	SMS
<b>Semivolatile Organic GC/MS</b>								
N-Nitrosodimethylamine	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pyridine	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Aniline	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Phenol	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Bis(2-Chloroethyl)ether	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chlorophenol	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,1-Dichlorobenzene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,2-Dichlorobenzene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzyl alcohol	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ



CT&E Ref.# 1004965009  
Client Name Graybar Electric  
Project Name/# Port Haiden Call No. B-247  
Client Sample ID 50124008009  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 9:10  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
2-Methylphenol (o-Cresol)	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
bis(2-chloroisopropyl)ether	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
3&4-Methylphenol (p&m-Cresol)	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
N-Nitroso-di-n-propylamine	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachloroethane	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Nitrobenzene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Isophorone	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Nitrophenol	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-methylphenol	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
E [REDACTED] acid	9.75 U	9.75	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Bis(2-Chloroethoxy)methane	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,2,4-Trichlorobenzene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Naphthalene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Chloroaniline	3.91 U	3.91	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachlorobutadiene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Chloro-3-methylphenol	3.91 U	3.91	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dichlorophenol	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Methylnaphthalene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachlorocyclopentadiene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4,6-Trichlorophenol	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4,5-Trichlorophenol	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chloronaphthalene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Nitroaniline	9.75 U	9.75	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1-Chloronaphthalene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dimethylphthalate	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Acenaphthylene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,6-Dinitrotoluene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
3-Nitroaniline	9.75 U	9.75	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Acenaphthene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dinitrophenol	9.75 U	9.75	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4 [REDACTED] phenol	9.75 U	9.75	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,4-duran	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dinitrotoluene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Diethylphthalate	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ



**CT&E Ref.#** 1004965009  
**Client Name** Graybar Electric  
**Project Name/#** Port Haiden Call No. B-247  
**Client Sample ID** 50124008009  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18 05  
**Collected Date/Time** 08/23/2000 9:10  
**Received Date/Time** 08/25/2000 13 00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
4-Chlorophenyl-phenylether	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Fluorene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Nitroaniline	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Methyl-4,6-dinitrophenol	9.75 U	9.75	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
N-Nitrosodiphenylamine	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Bromophenyl-phenylether	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachlorobenzene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pentachlorophenol	9.75 U	9.75	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Phenanthrene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Azobutene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Di-n-butylphthalate	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Fluoranthene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pyrene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Azobenzene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Butylbenzylphthalate	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
3,3-Dichlorobenzidine	3.91 U	3.91	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo(a)Anthracene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Chrysene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
bis(2-Ethylhexyl)phthalate	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
di-n-Octylphthalate	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[b]Fluoranthene	2.42	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[k]fluoranthene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[a]pyrene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Indeno[1,2,3-c,d] pyrene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dibenzo[a,h]anthracene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[g,h,i]perylene	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,6-Dichlorophenol	1.93 U	1.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
<b>Surrogates</b>								
2-Fluorophenol <Surrogate>	47.7		%	SW846-8270C	18-83	08/29/00	08/30/00	LZ
1,4-Dioxane-d6 <Surrogate>	62.2		%	SW846-8270C	24-88	08/29/00	08/30/00	LZ
1,1,2,2-Tetrachloroethane-d5 <Surrogate>	71.2		%	SW846-8270C	18-109	08/29/00	08/30/00	LZ
2-Fluorobiphenyl <Surrogate>	79.9		%	SW846-8270C	30-103	08/29/00	08/30/00	LZ
2,4,6-Tribromophenol <Surrogate>	73.6		%	SW846-8270C	18-122	08/29/00	08/30/00	LZ



CT&E Ref.# 1004965009  
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Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008009  
Matrix Soil/Solid  
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Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 9:10  
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Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
Terphenyl-d14 <Surrogate>	208	†	%	SW846-8270C	21-142	08/29/00	08/30/00	LZ
<b>Priority Pollutants</b>								
Antimony	1.00 U	1.00	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Arsenic	4.33	0.502	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Beryllium	0.393	0.0402	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Cadmium	1.41	0.0502	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Copper	11.5	1.00	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Lead	74.2	3.01	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Nickel	34.4	3.01	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Selenium	11.1	3.01	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Silver	0.772	0.502	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Thallium	9.38	0.201	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Zinc	0.104	0.0100	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Mercury by Cold Vapor	365	2.51	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
	0.115	0.0238	mg/Kg	SW846-7471A		08/30/00	08/31/00	JDT



CT&E Ref.# 1004965010  
Client Name Graybar Electric  
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Client Sample ID 50124008010  
Matrix Soil/Solid  
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Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 9:25  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Released By *J. Winklebank*

**Sample Remarks**

8270 - LCS/LCSD recovery for pyridine is biased low. The result for this compound is estimated.  
8270 - Internal standard perylene-d12 is biased low. The samples are non-detect. The results are not affected.  
8270 - Sample was diluted 5X due to dark color. Detection limit raised 5X due to matrix interference.  
GRO/BTEX - Field surrogate recovery is biased low  
due to high sample weight and moisture dilution of  
surrogate.  
DRO/RRO - Unknown hydrocarbon with several peaks

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
T ds	56.3		%	SM20 2540G		08/28/00	RMV	
<b>Metals by ICP/MS</b>								
Banum	67.5	1.72	mg/Kg	SW846 6020	08/31/00	09/21/00	KGF	
Vanadium	58.8	0.172	mg/Kg	SW846 6020	08/31/00	09/21/00	KGF	
<b>Volatile Fuels Department</b>								
Gasoline Range Organics	5.22 U	5.22	mg/Kg	AK101 GRO	08/23/00	09/01/00	MAH	
<b>Surrogates</b>								
1,4-Difluorobenzene <Sur>	99.1		%	AK101 GRO	60-120	08/23/00	09/01/00	MAH
4-Bromofluorobenzene <Sur>	36.8	!	%	AK101 GRO	50-150	08/23/00	09/01/00	MAH
<b>Semivolatile Organic Fuels Department</b>								
Diesel Range Organics	92.6	17.4	mg/Kg	AK102/103	08/29/00	09/03/00	ELB	
Residual Range Organics GC	737	28.6	mg/Kg	AK102/103	08/29/00	09/03/00	ELB	
<b>Surrogates</b>								
5-Methylstane <surr>	94.6		%	AK102/103	60-120	08/29/00	09/03/00	ELB
5-Methylstane <Sur>	109		%	AK102/103	60-120	08/29/00	09/03/00	ELB



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**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic Gas Chromatography</b>								
Aroclor-1016	0.775 U	0.775	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1221	0.775 U	0.775	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1232	0.775 U	0.775	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1242	0.775 U	0.775	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1248	0.775 U	0.775	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1254	0.775 U	0.775	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1260	9.92	0.775	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
L. Chlorobiphenyl <Surrogate>	54.1		%	SW846-8082	36.1-124.9	08/30/00	09/04/00	WAA
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Dichlorodifluoromethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chloromethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Vinyl chloride	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromomethane	0.522 U	0.522	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chloroethane	0.522 U	0.522	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Trichlorofluoromethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dichloroethene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Carbon disulfide	0.522 U	0.522	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Methylene chloride	0.261 U	0.261	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
trans-1,2-Dichloroethene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Butanone (MEK)	0.522 U	0.522	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2,2-Dichloropropane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
cis-1,2-Dichloroethene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dichloroethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,1-Trichloroethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromochloromethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chloroform	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Tetrachloride	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,1,2-Tetrachloroethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dichloropropene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dichloroethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS



CT&E Ref.# 1004965010  
Client Name Graybar Electric  
Project Name/# Port Haiden Call No. B-247  
Client Sample ID 50124008010  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 9:25  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Trichloroethene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dichloropropane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Dibromomethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromodichloromethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,2-Trichloroethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Chloroethyl Vinyl Ether	0.522 U	0.522	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
cis-1,3-Dichloropropene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
4-Methyl-2-pentanone (MIBK)	0.522 U	0.522	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
t <sub>1</sub> -1,3-Dichloropropene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Tetrachloroethene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,3-Dichloropropane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Hexanone	0.522 U	0.522	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Dibromochloromethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dibromoethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,2-Tetrachloroethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chlorobenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Ethylbenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
P & M -Xylene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
o-Xylene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Styrene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromoform	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Isopropylbenzene (Cumene)	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromobenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2,3-Trichloropropane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,2,2-Tetrachloroethane	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
n-Propylbenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Chlorotoluene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
4-Chlorotoluene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,3,5-Trimethylbenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
t <sub>1</sub> -lbenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
methylbenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
sec-Butylbenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,3-Dichlorobenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS



CT&E Ref.# 1004965010  
Client Name Graybar Electric  
Project Name/# Port Haiden Call No B-247  
Client Sample ID 50124008010  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 9:25  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
4-Isopropyltoluene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,4-Dichlorobenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dichlorobenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
n-Butylbenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dibromo-3-chloropropane	0.522 U	0.522	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2,4-Trichlorobenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Hexachlorobutadiene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Naphthalene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chlorobenzene	0.0272 U	0.0272	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
t-butyl ether	0.0522 U	0.0522	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
<b>Surrogates</b>								
Dibromofluoromethane <surr>	104		%	SW846-8260B	80-118	08/23/00	08/31/00	SMS
1,2-Dichloroethane-D4 <surr>	99.9		%	SW846-8260B	74-123	08/23/00	08/31/00	SMS
Toluene-d8 <surr>	101		%	SW846-8260B	79-130	08/23/00	08/31/00	SMS
4-Bromofluorobenzene <Sur>	73		%	SW846-8260B	71-141	08/23/00	08/31/00	SMS
<b>Semivolatile Organic GC/MS</b>								
N-Nitrosodimethylamine	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pyridine	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Aniline	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Phenol	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Bis(2-Chloroethyl)ether	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chlorophenol	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,3-Dichlorobenzene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,4-Dichlorobenzene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzyl alcohol	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,2-Dichlorobenzene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Methylphenol (o-Cresol)	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chloroisopropyl)ether	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Ethylphenol (p&m-Cresol)	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
N-Nitroso-di-n-propylamine	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachloroethane	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ



CT&E Ref.# 1004965010  
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Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
Nitrobenzene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Isophorone	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Nitrophenol	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dimethylphenol	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzoic acid	14.7 U	14.7	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Bis(2-Chloroethoxy)methane	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,2,4-Trichlorobenzene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Naphthalene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Aniline	5.89 U	5.89	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1-Chlorobutadiene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Chloro-3-methylphenol	5.89 U	5.89	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dichlorophenol	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Methylnaphthalene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachlorocyclopentadiene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4,6-Trichlorophenol	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4,5-Trichlorophenol	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chloronaphthalene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Nitroaniline	14.7 U	14.7	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dimethylphthalate	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1-Chloronaphthalene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Acenaphthylene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,6-Dinitrotoluene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
3-Nitroaniline	14.7 U	14.7	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Acenaphthene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dinitrophenol	14.7 U	14.7	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Nitrophenol	14.7 U	14.7	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dibenzofuran	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dinitrotoluene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Diethylphthalate	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Chlorophenyl-phenylether	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Aniline	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Methyl-4,6-dinitrophenol	14.7 U	14.7	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
N-Nitrosodiphenylamine	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ



CT&E Ref.# 1004965010  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008010  
Matrix Soil/Solid  
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Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 9:25  
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Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
4-Bromophenyl-phenylether	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachlorobenzene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pentachlorophenol	14.7 U	14.7	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Phenanthrene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Anthracene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Di-n-butylphthalate	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Fluoranthene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pyrene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
[REDACTED]	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Ethylbenzylphthalate	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
3,3-Dichlorobenzidine	5.89 U	5.89	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo(a)Anthracene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Chrysene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
bis(2-Ethylhexyl)phthalate	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
di-n-Octylphthalate	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[b]Fluoranthene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[k]fluoranthene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[a]pyrene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Indeno[1,2,3-c,d] pyrene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dibenzo[a,h]anthracene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[g,h,i]perylene	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,6-Dichlorophenol	2.90 U	2.90	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
<b>Surrogates</b>								
2-Fluorophenol <Sur>	29.5		%	SW846-8270C	18-83	08/29/00	08/30/00	LZ
Phenol-d6 <Sur>	47.2		%	SW846-8270C	24-88	08/29/00	08/30/00	LZ
Nitrobenzene-d5 <Sur>	55		%	SW846-8270C	18-109	08/29/00	08/30/00	LZ
2-Fluorobiphenyl <Sur>	60.4		%	SW846-8270C	30-103	08/29/00	08/30/00	LZ
2,4,6-Tribromophenol <Sur>	59.8		%	SW846-8270C	18-122	08/29/00	08/30/00	LZ
Terphenyl-d14 <Sur>	92.8		%	SW846-8270C	21-142	08/29/00	08/30/00	LZ
<b>Priority Pollutants</b>								
Antimony	1.72 U	1.72	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF



**CT&E Ref.#** 1004965010  
**Client Name** Graybar Electric  
**Project Name/#** Port Haden Call No. B-247  
**Client Sample ID** 50124008010  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/23/2000 9:25  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Priority Pollutants</b>								
Arsenic	1.88	0.862	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Beryllium	0.258	0.0690	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Cadmium	0.0862 U	0.0862	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Chromium	3.00	1.72	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Copper	13.0	5.17	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Lead	5.17 U	5.17	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Nickel	5.17 U	5.17	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Selenium	1.23	0.862	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
	0.345 U	0.345	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
	0.0400	0.0172	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Zinc	46.2	4.31	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Mercury by Cold Vapor	0.0607	0.0324	mg/Kg	SW846-7471A		08/30/00	08/31/00	JDT



CT&E Ref.# 1004965011  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No B-247  
Client Sample ID 50124008011  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18.05  
Collected Date/Time 08/23/2000 9 40  
Received Date/Time 08/25/2000 13 00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic Gas Chromatography</b>								
Aroclor-1016	0 0818 U	0.0818	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1221	0 0818 U	0.0818	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1232	0 0818 U	0.0818	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1242	0 0818 U	0.0818	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1248	0 0818 U	0.0818	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1254	0 0818 U	0.0818	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
Aroclor-1260	1 62	0 0818	mg/Kg	SW846-8082		08/30/00	09/04/00	WAA
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Dichlorodifluoromethane	0.0287 U	0 0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chloromethane	0.0287 U	0 0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Vinyl chloride	0.0287 U	0 0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromomethane	0.551 U	0.551	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chloroethane	0.551 U	0.551	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Trichlorofluoromethane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dichloroethene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Carbon disulfide	0.551 U	0.551	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Methylene chloride	0.276 U	0.276	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
trans-1,2-Dichloroethene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Butanone (MEK)	0.551 U	0.551	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2,2-Dichloropropane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
cis-1,2-Dichloroethene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dichloroethane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,1-Trichloroethane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromoform	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chloroform	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chlorotrachloride	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chloroform	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dichloropropene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,2-Dichloroethane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS



CT&E Ref.# 1004965011  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008011  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 9:40  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Trichloroethene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dichloropropane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Dibromomethane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromodichloromethane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,2-Trichloroethane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Chloroethyl Vinyl Ether	0.551 U	0.551	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
cis-1,3-Dichloropropene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
4-Methyl-2-pentanone (MIBK)	0.551 U	0.551	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
,3-Dichloropropene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Tetrachloroethene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,3-Dichloropropane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Hexanone	0.551 U	0.551	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Dibromochloromethane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dibromoethane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,1,2-Tetrachloroethane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Chlorobenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Ethylbenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
P & M -Xylene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
o-Xylene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Styrene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromoform	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Isopropylbenzene (Cumene)	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Bromobenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2,3-Trichloropropane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,2,2-Tetrachloroethane	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
n-Propylbenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2-Chlorotoluene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
4-Chlorotoluene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,3,5-Trimethylbenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
2,5-dimethylbenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
3,5-dimethylbenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
sec-butylbenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,3-Dichlorobenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS



**CT&E Ref.#** 1004965011  
**Client Name** Graybar Electric  
**Project Name/#** Port Hayden Call No B-247  
**Client Sample ID** 50124008011  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18 05  
**Collected Date/Time** 08/23/2000 9:40  
**Received Date/Time** 08/25/2000 13.00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
4-Isopropyltoluene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,4-Dichlorobenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dichlorobenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
n-Butylbenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2-Dibromo-3-chloropropane	0.551 U	0.551	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,2,4-Trichlorobenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Hexachlorobutadiene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
Naphthalene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1-Dimethyl ether	0.0551 U	0.0551	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
1,1,2-Trichlorobenzene	0.0287 U	0.0287	mg/Kg	SW846-8260B		08/23/00	08/31/00	SMS
<b>Surrogates</b>								
Dibromofluoromethane <surr>	102		%	SW846-8260B	80-118	08/23/00	08/31/00	SMS
1,2-Dichloroethane-D4 <surr>	99.1		%	SW846-8260B	74-123	08/23/00	08/31/00	SMS
Toluene-d8 <surr>	100		%	SW846-8260B	79-130	08/23/00	08/31/00	SMS
4-Bromofluorobenzene <Sur>	70.7	!	%	SW846-8260B	71-141	08/23/00	08/31/00	SMS
<b>Semivolatile Organic GC/MS</b>								
N-Nitrosodimethylamine	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pyridine	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Aniline	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Phenol	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Bis(2-Chloroethyl)ether	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chlorophenol	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,3-Dichlorobenzene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,4-Dichlorobenzene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzyl alcohol	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,2-Dichlorobenzene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chlorophenol (o-Cresol)	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chloroisopropyl)ether	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chloroethylphenol (p&m-Cresol)	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
N-Nitroso-di-n-propylamine	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachloroethane	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ



CT&E Ref.# 1004965011  
Client Name Graybar Electric  
Project Name/# Port Harden Call No. B-247  
Client Sample ID 50124008011  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 9:40  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
Nitrobenzene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Isophorone	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Nitrophenol	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dimethylphenol	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzoic acid	14.8 U	14.8	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Bis(2-Chloroethoxy)methane	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,2,4-Trichlorobenzene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Naphthalene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Aniline	5.94 U	5.94	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1,3-Butadiene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Chloro-3-methylphenol	5.94 U	5.94	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dichlorophenol	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Methylnaphthalene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachlorocyclopentadiene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4,6-Trichlorophenol	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4,5-Trichlorophenol	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Chloronaphthalene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Nitroaniline	14.8 U	14.8	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
1-Chloronaphthalene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dimethylphthalate	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Acenaphthylene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,6-Dinitrotoluene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
3-Nitroaniline	14.8 U	14.8	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Acenaphthene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dinitrophenol	14.8 U	14.8	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Nitrophenol	14.8 U	14.8	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dibenzofuran	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,4-Dinitrotoluene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Diethylphthalate	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
4-Chlorophenyl-phenylether	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Aniline	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2-Methyl-4,6-dinitrophenol	14.8 U	14.8	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
N-Nitrosodiphenylamine	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ



CT&E Ref.# 1004965011  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008011  
Matrix Soil/Solid  
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Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 9:40  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Semivolatile Organic GC/MS</b>								
4-Bromophenyl-phenylether	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Hexachlorobenzene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Pentachlorophenol	14.8 U	14.8	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Phenanthrene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Anthracene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Di-n-butylphthalate	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Fluoranthene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
P	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
ne	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
b <sub>n</sub> -benzylphthalate	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
3,3-Dichlorobenzidine	5.94 U	5.94	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo(a)Anthracene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Chrysene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
bis(2-Ethylhexyl)phthalate	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
di-n-Octylphthalate	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[b]Fluoranthene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[k]fluoranthene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[a]pyrene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Indeno[1,2,3-c,d] pyrene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Dibenzo[a,h]anthracene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
Benzo[g,h,i]perylene	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
2,6-Dichlorophenol	2.93 U	2.93	mg/Kg	SW846-8270C		08/29/00	08/30/00	LZ
<b>Surrogates</b>								
2-Fluorophenol <Surrogate>	33.5		%	SW846-8270C	18-83	08/29/00	08/30/00	LZ
Phenol-d6 <Surrogate>	54.5		%	SW846-8270C	24-88	08/29/00	08/30/00	LZ
Nitrobenzene-d5 <Surrogate>	66.2		%	SW846-8270C	18-109	08/29/00	08/30/00	LZ
2-Fluorobiphenyl <Surrogate>	73		%	SW846-8270C	30-103	08/29/00	08/30/00	LZ
2,4,6-Tribromophenol <Surrogate>	72.7		%	SW846-8270C	18-122	08/29/00	08/30/00	LZ
Terphenyl-d14 <Surrogate>	121		%	SW846-8270C	21-142	08/29/00	08/30/00	LZ
<b>Priority Pollutants</b>								
Antimony	1.61 U	1.61	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF



CT&amp;E Environmental Services Inc.

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**CT&E Ref.#** 1004965011  
**Client Name** Graybar Electric  
**Project Name/#** Port Haiden Call No. B-247  
**Client Sample ID** 50124008011  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18.05  
**Collected Date/Time** 08/23/2000 9 40  
**Received Date/Time** 08/25/2000 13 00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Priority Pollutants</b>								
Arsenic	1 81	0.804	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Beryllium	0 282	0.0644	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Cadmium	0 0804 U	0.0804	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Chromium	2 78	1.61	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Copper	11 9	4.83	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Lead	4 83 U	4.83	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Nickel	4 83 U	4 83	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
S	1 61	0.804	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
'	0 322 U	0.322	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Zinc	0 0161 U	0.0161	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
Mercury by Cold Vapor	35 1	4.02	mg/Kg	SW846 6020		08/31/00	09/21/00	KGF
	0 0595	0.0351	mg/Kg	SW846-7471A		08/30/00	08/31/00	JDT



CT&E Ref.# 1004965012  
Client Name Graybar Electric  
Project Name/# Port Haiden Call No. B-247  
Client Sample ID 50124008012  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 10:00  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Released By *J. Windlebank*

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**Sample Remarks**

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	89.2		%	SM20 2540G		08/28/00	RMV	
<b>Volatile Fuels Department</b>								
Gasoline Range Organics	1.88 U	1.88	mg/Kg	AK101/8021B		08/23/00	09/01/00	MAH
	0.00940 U	0.00940	mg/Kg	AK101/8021B		08/23/00	09/01/00	MAH
	0.0376 U	0.0376	mg/Kg	AK101/8021B		08/23/00	09/01/00	MAH
Ethylbenzene	0.0376 U	0.0376	mg/Kg	AK101/8021B		08/23/00	09/01/00	MAH
P & M -Xylene	0.0376 U	0.0376	mg/Kg	AK101/8021B		08/23/00	09/01/00	MAH
o-Xylene	0.0376 U	0.0376	mg/Kg	AK101/8021B		08/23/00	09/01/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	94.1		%	AK101/8021B	60-120	08/23/00	09/01/00	MAH
4-Bromofluorobenzene <Surrogate>	67		%	AK101/8021B	50-150	08/23/00	09/01/00	MAH



CT&amp;E Environmental Services Inc.

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CT&E Ref.# 1004965013  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No B-247  
Client Sample ID 50124008013  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18 05  
Collected Date/Time 08/23/2000 10 15  
Received Date/Time 08/25/2000 13 00  
Technical Director Stephen C. Ede

Released By *J. W. Molebank*

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	89.9		%	SM20 2540G		08/28/00	RMV	
<b>Volatile Fuels Department</b>								
Gasoline Range Organics	1.76 U	1.76	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
R	0.00882 U	0.00882	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
	0.0353 U	0.0353	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
Ethylbenzene	0.0353 U	0.0353	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
P & M -Xylene	0.0353 U	0.0353	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
o-Xylene	0.0353 U	0.0353	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	95.6		%	AK101/8021B	60-120	08/23/00	09/02/00	MAH
4-Bromofluorobenzene <Surrogate>	71		%	AK101/8021B	50-150	08/23/00	09/02/00	MAH



CT&amp;E Environmental Services Inc.

8 70

CT&E Ref.# 1004965014  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008014  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 10:20  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede  
Released By *J. W. Molebank*

## Sample Remarks

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	91.2		%	SM20 2540G		08/28/00	RMV	
<b>Volatile Fuels Department</b>								
Gasoline Range Organics	1.97 U	1.97	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
F	0.00987 U	0.00987	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
	0.0395 U	0.0395	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
Ethylbenzene	0.0395 U	0.0395	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
P & M -Xylene	0.0395 U	0.0395	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
o-Xylene	0.0395 U	0.0395	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	106		%	AK101/8021B	60-120	08/23/00	09/02/00	MAH
4-Bromofluorobenzene <Surrogate>	67.2		%	AK101/8021B	50-150	08/23/00	09/02/00	MAH



CT&amp;E Environmental Services Inc.

8 71

CT&E Ref.# 1004965015  
Client Name Graybar Electric  
Project Name/# Port Haiden Call No B-247  
Client Sample ID 50124008015  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 10:40  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Released By *J. Wimblebank*

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**Sample Remarks**

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	87.4		%	SM20 2540G		08/28/00	RMV	
<b>Volatile Fuels Department</b>								
Gasoline Range Organics	1.91 U	1.91	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
	0.00956 U	0.00956	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
	0.0383 U	0.0383	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
Ethylbenzene	0.0383 U	0.0383	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
P & M -Xylene	0.0383 U	0.0383	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
o-Xylene	0.0383 U	0.0383	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	97.1		%	AK101/8021B	60-120	08/23/00	09/02/00	MAH
4-Bromofluorobenzene <Surrogate>	62.6		%	AK101/8021B	50-150	08/23/00	09/02/00	MAH



CT&E Ref.# 1004965016  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008016  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 10:45  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Released By *J. Windesbank*

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	86.1		%	SM20 2540G		08/23/00	RMV	
<b>Volatile Fuels Department</b>								
Gasoline Range Organics	1.84 U	1.84	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
	0.00921 U	0.00921	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
	0.0368 U	0.0368	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
Ethylbenzene	0.0368 U	0.0368	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
P & M -Xylene	0.0368 U	0.0368	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
o-Xylene	0.0368 U	0.0368	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	95.1		%	AK101/8021B	60-120	08/23/00	09/02/00	MAH
4-Bromofluorobenzene <Surrogate>	62.2		%	AK101/8021B	50-150	08/23/00	09/02/00	MAH



CT&E Environmental Services Inc.

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CT&E Ref.# 1004965017  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008017  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 11:00  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Released By *J.W. Wmolebank*

Sample Remarks

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	89.6		%	SM20 2540G		08/28/00	RMV	
<b>Volatile Fuels Department</b>								
Gasoline Range Organics	1.61 U	1.61	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
	0.00803 U	0.00803	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
	0.0321 U	0.0321	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
Ethylbenzene	0.0321 U	0.0321	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
P & M -Xylene	0.0321 U	0.0321	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
o-Xylene	0.0321 U	0.0321	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	95.7		%	AK101/8021B	60-120	08/23/00	09/02/00	MAH
4-Bromofluorobenzene <Surrogate>	65.3		%	AK101/8021B	50-150	08/23/00	09/02/00	MAH



CT&amp;E Environmental Services Inc.

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CT&E Ref.# 1004965018  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No. B-247  
Client Sample ID 50124008018  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 11:10  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede

Released By *J. Winklebank*

Sample Remarks

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	90.5		%	SM20 2540G		08/28/00	RMV	
<b>Volatile Fuels Department</b>								
Gasoline Range Organics	1.27 U	1.27	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
	0.00637 U	0.00637	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
	0.0255 U	0.0255	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
Ethylbenzene	0.0255 U	0.0255	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
P & M -Xylene	0.0255 U	0.0255	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
o-Xylene	0.0255 U	0.0255	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	96.6		%	AK101/8021B	60-120	08/23/00	09/02/00	MAH
4-Bromofluorobenzene <Surrogate>	62.9		%	AK101/8021B	50-150	08/23/00	09/02/00	MAH



CT&E Ref.# 1004965019  
Client Name Graybar Electric  
Project Name/# Port Haiden Call No. B-247  
Client Sample ID 50124008019  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/23/2000 11:15  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede  
Released By *J. Wmlebank*

## Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	86.2		%	SM20 2540G		08/28/00	RMV	
<b>Volatile Fuels Department</b>								
Gasoline Range Organics	1.75 U	1.75	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
	0.00875 U	0.00875	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
	0.0350 U	0.0350	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
Ethylbenzene	0.0350 U	0.0350	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
P & M-Xylene	0.0350 U	0.0350	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
o-Xylene	0.0350 U	0.0350	mg/Kg	AK101/8021B		08/23/00	09/02/00	MAH
<b>Surrogates</b>								
1,4-Difluorobenzene <Surrogate>	95.9		%	AK101/8021B	60-120	08/23/00	09/02/00	MAH
4-Bromofluorobenzene <Surrogate>	64.6		%	AK101/8021B	50-150	08/23/00	09/02/00	MAH



CT&E Ref.# 1004965020  
Client Name Graybar Electric  
Project Name/# Port Hayden Call No B-247  
Client Sample ID Trip Blank  
Matrix Soil/Solid  
Ordered By

Client PO#  
Printed Date/Time 09/21/2000 18:05  
Collected Date/Time 08/22/2000 0:00  
Received Date/Time 08/25/2000 13:00  
Technical Director Stephen C. Ede  
Released By *Jed undebank*

## Sample Remarks.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Solids</b>								
Total Solids	100		%	SM20 2540G		09/06/00	MCM	
<b>Volatile Fuels Department</b>								
Gasoline Range Organics	2.55 U	2.55	mg/Kg	AK101 GRO		08/22/00	09/02/00	MAH
1,4-Difluorobenzene <Surrogate>	102		%	AK101 GRO	60-120	08/22/00	09/02/00	MAH
4-Bromofluorobenzene <Surrogate>	79.9		%	AK101 GRO	50-150	08/22/00	09/02/00	MAH
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
Dichlorodifluoromethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Chloromethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Vinyl chloride	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Bromomethane	0.255 U	0.255	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Chloroethane	0.255 U	0.255	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Trichlorofluoromethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,1-Dichloroethene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Carbon disulfide	0.255 U	0.255	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Methylene chloride	0.127 U	0.127	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
trans-1,2-Dichloroethene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
2-Butanone (MEK)	0.255 U	0.255	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
2,2-Dichloropropane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
cis-1,2-Dichloroethene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,1-Dichloroethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,1,1-Trichloroethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Perchloromethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Form	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Carbon tetrachloride	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Benzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS



CT&E Ref.#	1004965020	Client PO#	
Client Name	Graybar Electric	Printed Date/Time	09/21/2000 18:05
Project Name/#	Port Hayden Call No B-247	Collected Date/Time	08/22/2000 0:00
Client Sample ID	Trip Blank	Received Date/Time	08/25/2000 13:00
Matrix	Soil/Solid	Technical Director	Stephen C. Ede
Ordered By			

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
1,2-Dichloroethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,1-Dichloropropene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Trichloroethene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,2-Dichloropropane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Dibromomethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Bromodichloromethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
2-Chloroethyl Vinyl Ether	0.255 U	0.255	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1-Chloroethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Dichloropropene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
4-Methyl-2-pentanone (MIBK)	0.255 U	0.255	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Toluene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
trans-1,3-Dichloropropene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Tetrachloroethene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,3-Dichloropropane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
2-Hexanone	0.255 U	0.255	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Dibromochloromethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,1,1,2-Tetrachloroethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,2-Dibromoethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Chlorobenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Ethylbenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
P & M-Xylene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
o-Xylene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Styrene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Bromoform	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Isopropylbenzene (Cumene)	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Bromobenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,2,3-Trichloropropane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
n-Propylbenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,1,2,2-Tetrachloroethane	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
2-Chlorotoluene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
o-Toluene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
m-Toluene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
tert-Butylbenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,2,4-Trimethylbenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS



**CT&E Ref.#** 1004965020  
**Client Name** Graybar Electric  
**Project Name/#** Port Hayden Call No. B-247  
**Client Sample ID** Trip Blank  
**Matrix** Soil/Solid  
**Ordered By**

**Client PO#**  
**Printed Date/Time** 09/21/2000 18:05  
**Collected Date/Time** 08/22/2000 0'00  
**Received Date/Time** 08/25/2000 13:00  
**Technical Director** Stephen C. Ede

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>								
sec-Butylbenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,3-Dichlorobenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
4-Isopropyltoluene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,4-Dichlorobenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,2-Dichlorobenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
n-Butylbenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,2-Dibromo-3-chloropropane	0.255 U	0.255	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,2-Trichlorobenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,3-Dibutadiene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Naphthalene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
1,2,3-Trichlorobenzene	0.0132 U	0.0132	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
Methyl-t-butyl ether	0.0255 U	0.0255	mg/Kg	SW846-8260B		08/22/00	09/07/00	SMS
<b>Surrogates</b>								
Dibromofluoromethane <surr>	103		%	SW846-8260B	80-118	08/22/00	09/07/00	SMS
1,2-Dichloroethane-D4 <surr>	98.2		%	SW846-8260B	74-123	08/22/00	09/07/00	SMS
Toluene-d8 <surr>	101		%	SW846-8260B	79-130	08/22/00	09/07/00	SMS
4-Bromofluorobenzene <Sur>	107		%	SW846-8260B	71-141	08/22/00	09/07/00	SMS

## CHAIN OF CUSTODY RECORD

1004965

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CT&E Environmental Services Inc.  
Lab rat ry Divisi n

1 CLIENT: **GILLES / CRVO**  
 CONTACT: **CALL HERNIG** PHONE NO: **1552-6201**

PROJECT: **PORT Heiden**

REPORTS TO:

FAX NO: **1552-4601**

INVOICE TO:

PO NUMBER:

CT&amp;E Reference:

PAGE 1 OF 2

No.	SAMPLE TYPE	Preservatives Used	Analyses Required
C O N T A N G E R S	G C = GRAB		
1			
2			
3			
4			
5			

REMARKS	
<del>GEO</del>	<del>EX</del>
<del>PAU/RRO</del>	<del>STO SIMS</del>
<del>FULL 8021</del>	<del>8260</del>
<del>8270</del>	<del>RPM + PAU</del>
<del>PCB</del>	

<b>5</b> Collected/Relinquished By: (1)		Date: <b>2-5</b>	Time: <b>1300</b>	Received By: <b>Call Hernig</b>	4 Shipping Carrier: <b>UPS</b>	Samples Received Cold? (Circle) YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Temperature °C: <b>5.3</b>
<b>5</b> Relinquished By: (2)		Date: <b>2-5</b>	Time: <b>1300</b>	Received By: <b>Call Hernig</b>	Data Deliverables Required:	Chain of Custody Seal: (Circle)	
<b>Relinquished By: (3)</b>		Date: <b>2-5</b>	Time: <b>1300</b>	Received By: <b>Call Hernig</b>	Level I    Level II    Level III	INTACT    BROKEN    ABSENT	
<b>Relinquished By: (4)</b>		Date: <b>2-5</b>	Time: <b>1300</b>	Received By: <b>Call Hernig</b>	Requested Turnaround Time and Special Instructions:		



# CHAIN OF CUSTODY RECORD

1004965

1

## CT&E Environmental Services Inc.

80

① CLIENT: **GILCESS/CEVO**

CONTACT: **CHL HERNANES** PHONE NO: **(907) 552-6204**

PROJECT: **PORT HEIDEN SITE**

REPORTS TO:

FAX NO: **(907) 552-4661**

INVOICE TO

**Grey Star** P.O. NUMBER:

No. **C** SAMPLE **T** Preservatives Used

**O** **N** **R** **S**

**A** **I** **G** = **GRAB**

**C** = **COMP**

**T** = **TEST**

**A** = **ANALYSIS**

**M** = **MEASURE**

**B** = **BREAK**

**G** = **GRAB**

**R** = **RETRIEVE**

**E** = **EXTRACT**

**N** = **NEUTRALIZE**

**T** = **TEST**

**A** = **ANALYSIS**

**S** = **STABILIZE**

**H** = **HEAT**

**C** = **COLD**

**D** = **DECONTAMINATE**

**F** = **FREEZE**

**L** = **LIQUIDATE**

**P** = **PIPELINE**

**V** = **VIAL**

**W** = **WATER**

**S** = **SOIL**

&lt;p

1



## SAMPLE RECEIPT FORM

CITIGE WORKS

1004965

Yes \_\_\_\_\_  
No \_\_\_\_\_

- Are samples **RUSH**, priority, or *within 72 hrs* of **hold time**?  
If yes, have you done *e-mail notification*?
- Are samples *within 24 hrs* of **hold time** or **due date**?  
If yes, have you *spoken with Supervisor*?
- Are there any **problems** (e.g., ids, analyses)?
- Were samples preserved correctly and pH verified?

# TAB

Photographs



Soil sampling through fertile soil cap, Former Composite Building, Port Heiden RRS

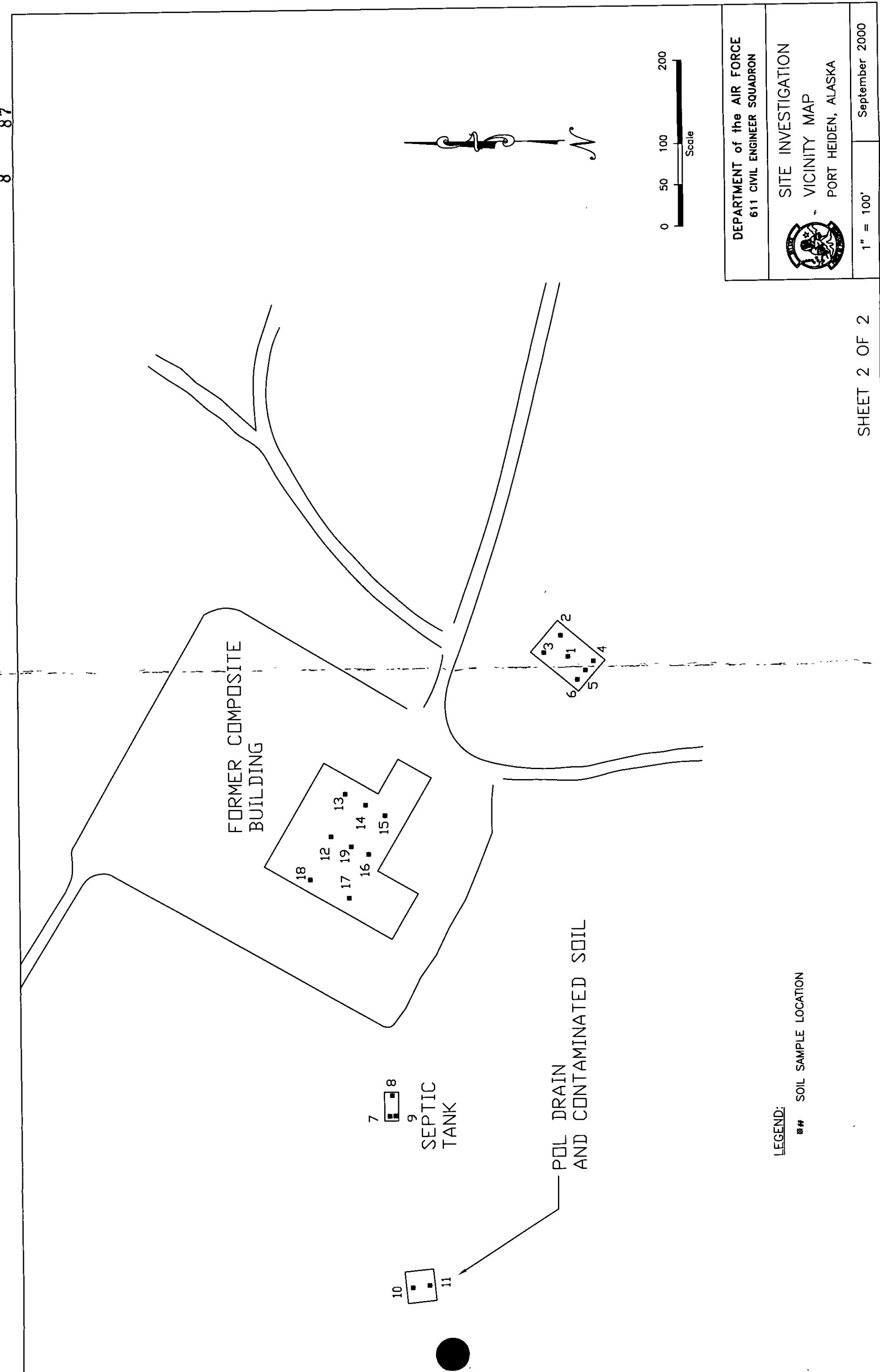


Soil sampling at sewage lagoon area, AOC 04, Port Heiden RRS, Jul 2000

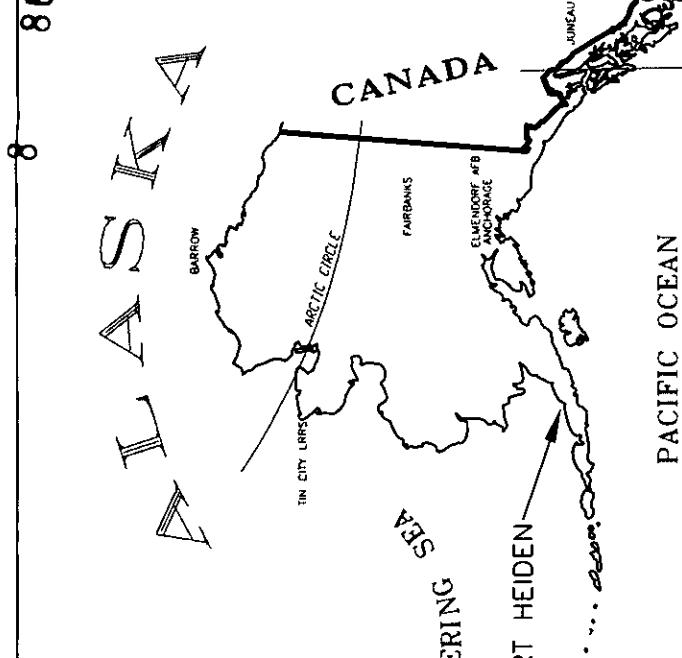
# TAB

Maps & Sample Locations

8 87



8 86



PACIFIC OCEAN

BERING  
ST

PORT HEIDEN



DEPARTMENT of the AIR FORCE  
611 CIVIL ENGINEER SQUADRON

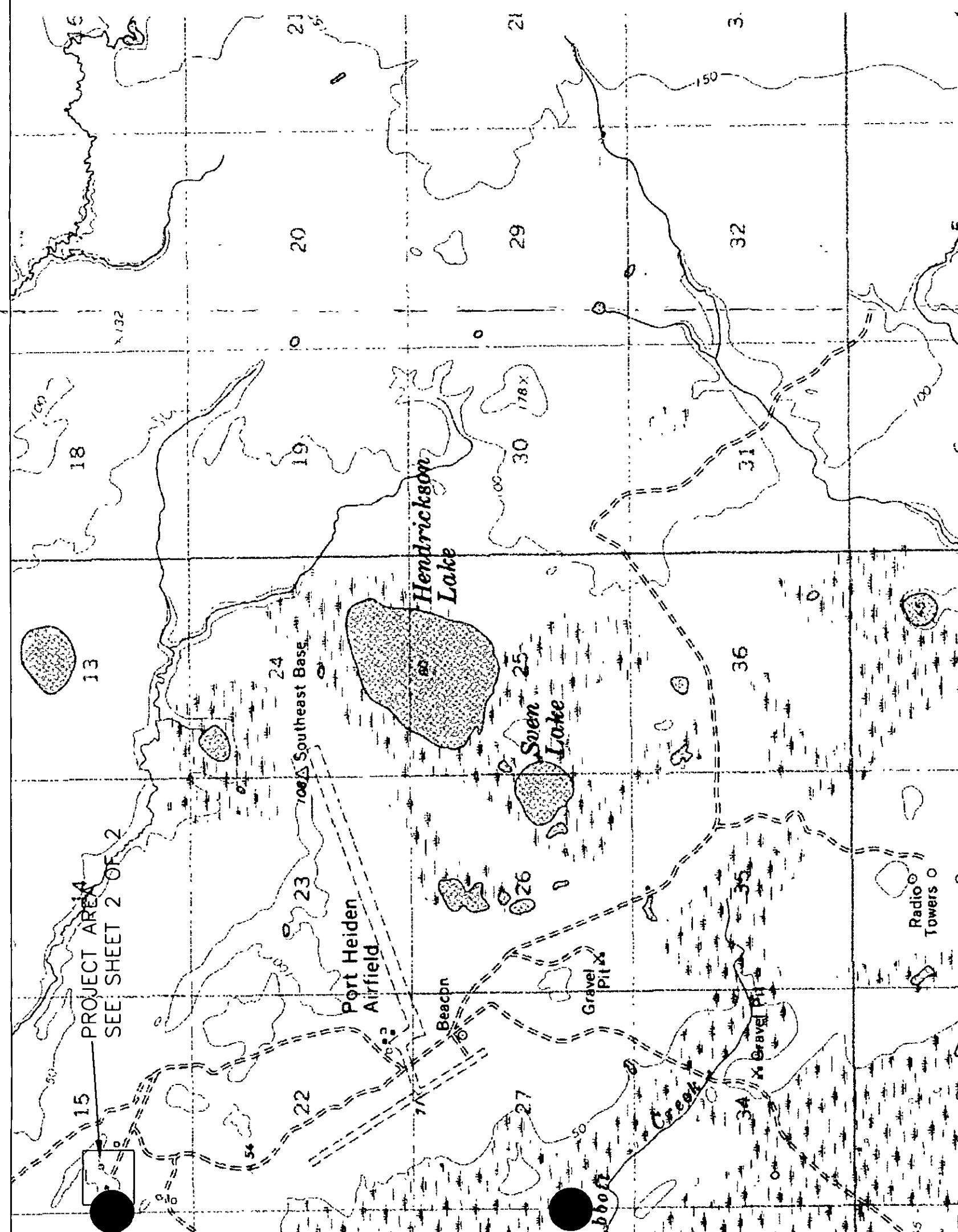


SITE INVESTIGATION

VICINITY MAP  
PORT HEIDEN, ALASKA

September 2000

SHEET 1 OF 2

1" =  $\frac{1}{2}$  MILE

**FINAL PAGE**

**ADMINISTRATIVE RECORD**

**FINAL PAGE**