

**Golder Associates Inc.**

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Niagara Falls, NY USA 14304  
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**REPORT ON**

**SOIL REMEDIATION  
NYSDEC VOLUNTARY CLEANUP PROGRAM  
ITT HEAT TRANSFER FACILITY  
SITE NO. V00329-9  
175 STANDARD PARKWAY  
CHEEKTOWAGA, NEW YORK**

*Submitted to:*

*ITT Industries  
10 Mountainview Road  
Upper Saddle River, New Jersey 07458*

*Submitted by:*

*Golder Associates Inc.  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, New York 14304*

Distribution:

9 Copies - ITT Industries; Upper Saddle River, New Jersey  
1 Copy - Golder Associates Inc.; Buffalo, New York

August 27, 2003

RECEIVED  
AUG 29 2003  
NYSDEC - REG. 9  
FOI  
REL - UNREL

003-9260



**Golder Associates Inc.**

2221 Niagara Falls Boulevard, Suite 9  
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August 27, 2003

Our Ref.: 003-9260

ITT Industries  
10 Mountainview Road  
Upper Saddle River, New Jersey 07458

Attention: Ms. Anne Wilmot

RE: REPORT ON SOIL REMEDIATION NYSDEC VOLUNTARY CLEANUP PROGRAM,  
ITT HEAT TRANSFER FACILITY SITE NO. V00329-9,  
175 STANDARD PARKWAY, CHEEKTOWAGA, NEW YORK

Dear Ms. Wilmot:

Golder Associates Inc. (Golder) is pleased to submit the above referenced report on the Soil Remediation for the New York State Department of Environmental Conservation Voluntary Cleanup Program at the ITT Heat Transfer Facility Site No. V00329-9, in Cheektowaga, New York.

Golder appreciates the opportunity to provide professional engineering services to ITT Industries. If you have any questions regarding this report, please do not hesitate to call.

Sincerely,

**GOLDER ASSOCIATES INC.**

A handwritten signature in black ink, appearing to read "Jonathan P. Rizzo".

Jonathan P. Rizzo  
Senior Project Geologist

A handwritten signature in black ink, appearing to read "Brian C. Senefelder".

Brian C. Senefelder, CHMM  
Associate/Office Manager

JPR:BCS/dml

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## 1.0 INTRODUCTION

### 1.1 General

The work description presented in this Soil Remediation Report was implemented at the ITT Heat Transfer (previously referred to as ITT Standard) Facility located at 175 Standard Parkway in Cheektowaga, New York (Site) as shown on Figure 1. This Soil Remediation was performed in support of a Voluntary Cleanup Agreement (VCA) executed between ITT Industries (ITT) and the New York State Department of Environmental Conservation (NYSDEC). Two previous environmental investigations have been performed on a voluntary basis by ITT that consisted of the following:

- Quantitative Environmental Survey Program (QESP at the ITT Standard Facility, Cheektowaga, New York (H2M Associates Inc. (H2M), 1997); and
- Supplement to the Quantitative Environmental Survey Program (Golder Associates, Inc., 1999).

A summary of the previous investigations is provided in the Voluntary Cleanup Program Work Plan (ITT, March 2001).

The reports for these investigations were previously submitted to the NYSDEC by ITT. Based on these investigations, ITT entered into the VCA with the NYSDEC. The scope of the VCA included the preparation of a work plan (ITT, March 2001), performance of a supplemental investigation, and soil remediation, if necessary. The VCA supplemental investigation was performed in March and April 2002. During initial field activities associated with the VCA supplemental investigation suspected petroleum impacted soil was encountered. Subsequently, additional soil borings were advanced as part of the supplemental investigation to delineate the extent of the suspected petroleum impacted soil. Details of the VCA supplemental investigation are provided in the following report:

- Supplemental Investigation NYSDEC Voluntary Cleanup Program, ITT Heat Transfer Facility, Site No. V00329-9, 175 Standard Parkway, Cheektowaga, New York (Golder Associates Inc., August 2002).

The Supplemental Investigation report was prepared in August 2002 and submitted to the NYSDEC. The supplemental investigation included an investigation of a suspected petroleum contaminated area. Included in the Supplemental Investigation Report was a soil remediation plan for removal of the

suspected petroleum impacted soil. The soil remediation activities were performed in support of receiving a letter of Assignable Release and Covenant Not to Sue from the NYSDEC. This report provides details of the soil remediation activities.

### **1.2 Background**

The ITT Heat Transfer facility is located at 175 Standard Parkway in Cheektowaga, Erie County, New York (Figure 1). The facility consists of two buildings totaling 184,778 square feet on approximately 24 acres of property. The Site is bordered to the south and west primarily by residential properties. The land to the north and east is used by Niagara Mohawk Power Corporation (NiMo), and is traversed by unpaved service roads. In addition, railroad tracks are located adjacent to the northernmost service road.

The ITT Heat Transfer facility has been occupied by ITT since 1986. Prior to ITT's occupancy, the Site was owned by American Standard, the precursor company to ITT Standard. American Standard occupied the Site from 1966 to 1986. From 1947 to 1966, U.S. Rubber Reclaiming Co., Inc., a tire recycling facility, operated at the Site. The tire recycling facility reportedly reclaimed rubber from used tires, a process which typically involved the use of aliphatic and aromatic hydrocarbons, particularly hexane and cyclohexane, in mechanical and digestive depolymerization. Prior to the construction of the facility in 1947, the land was undeveloped.

### **1.3 Summary of Voluntary Cleanup Supplemental Investigation**

A Voluntary Cleanup Supplemental Investigation, as part of the VCA, was performed in March and April 2002. The Supplemental Investigation included the installation of two temporary groundwater monitoring wells, the collection of groundwater samples from the new temporary monitoring wells and existing monitoring wells, and the collection of surface and subsurface soil samples.

VOCs were detected in samples collected from existing monitoring wells at the site. Based on the results of the supplemental investigation, and given the limited extent and low concentrations of VOCs in the groundwater and that groundwater at the Site is not currently nor will likely be used in the foreseeable future as a potable water source, no further action was recommended for groundwater at the Site.

Petroleum impacted soil was encountered during the Supplemental Investigation performed at the ITT Heat Transfer Facility as part of the Voluntary Agreement with the NYSDEC. The impacted soil was found to be present in the area identified as APC-10. The impacted material is visually present in an approximate 2 to 6-inch gravel layer located at a depth of 2.1 and 2.6 feet below ground surface (ft bgs). Based on the results of the supplemental investigation, ITT elected to remove and dispose the petroleum impacted soil in APC-10.

#### **1.4 Project Scope and Objectives**

The scope and project objectives are to provide soil remediation including removal of the petroleum impacted soil identified at the facility as requested by the NYSDEC to successfully complete the VCA such that ITT can obtain an Assignable Release and Covenant Not to Sue from the NYSDEC for the facility.

## 2.0 SOIL REMEDIATION

### 2.1 General

Petroleum impacted soil was encountered during the Supplemental Investigation performed at the ITT Heat Transfer Facility in Cheektowaga, New York as part of the Voluntary Agreement with the NYSDEC. The impacted soil was found to be present in the area identified as APC-10. The impacted material is visually present in an approximate 2 to 6-inch gravel layer located at a depth of 2.1 and 2.6-ft bgs. Based on the results of the investigation, ITT removed and disposed the petroleum impacted soil in APC-10 as described below. These activities followed the quality assurance/quality control (QA/QC) procedures and health and safety requirements of the Work Plan included in the VCA.

### 2.2 Soil Excavation

ITT contracted Golder to remove and disposed of the gravel layer impacted by petroleum products. Golder subcontracted SLC Environmental Services, Inc. (SLC) as the remedial contractor for the soil removal activities. Soil removal activities and site restoration occurred on May 7 and 8, 2003. The gravel layer was removed by SLC using a mechanical excavator from the area shown on Figure 3. Excavation commenced with removal and stockpiling of topsoil, followed by removal and stockpiling of the upper 2 feet of non-impacted soil. During excavation it was found that the impacted layer extended further to the north, south, and east of the proposed removal area as shown on Figure 6 of the Supplemental Investigation report. Through discussions with ITT and the NYSDEC Region 9 personnel (Mr. Maurice Moore), it was agreed that the proposed excavation area would be expanded and the impacted soil would be removed within the accessible grassed portion of this area. The proposed excavation area was expanded to the west. The limit of excavation to the east was limited by the facility building. The limit of excavation to the north remained the same as that was proposed and was limited by a concrete pad and asphalt parking lot. The limit of excavation to the south remained the same as that was proposed and was limited by an underground electrical line, fence and asphalt parking lot. The limit of excavation to west was expanded to the west. The petroleum impacted layer to the west appeared to terminate at the apparent backfill for an underground water line where the gravel layer was not encountered. The gravel layer was found to be present to the west of the backfilled water line trench, however, the layer did not appear to be impacted by petroleum

products. Soil excavation continued until all visually impacted soil was removed within the excavation area. Figure 3 presents the limits of excavation for the soil remediation.

The visually impacted gravel layer was removed and placed directly into transport trucks. Excavation continued until visually impacted soil within the accessible grass area was removed. Approximately 145 tons of impacted soil was removed and disposed at Waste Management of New York, L.L.C., Chaffee Landfill. Truck weigh tickets and a Certificate of Disposal for the impacted soil are included in Appendix A.

A sample of the impacted gravel layer was collected for analyses to evaluate disposal options for the soil prior to the removal procedures. The soil was analyzed for total lead, polychlorinated biphenyls, ignitability, and Toxic Characteristic Leaching Procedures (TCLP) for lead. The results of these analyses and the analyses performed during the VCA Supplemental Investigation were used to gain approval for disposal and to establish a waste profile. The results of the disposal options evaluation sample are included in Appendix B.

### **2.3 Confirmatory Soil Sampling**

Upon removal of the visually impacted soil, confirmatory soil samples were collected from two locations, SS-03-01 and SS-03-02. Figure 3 presents the location of the confirmatory soil samples. The confirmatory soil samples were analyzed for TCL VOCs (NYSDEC 95-1) and TCL SVOCs (NYSDEC 95-2). The results of the analyses were used to evaluate whether the petroleum observed in the gravel layer impacted the underlying soil and to ensure the complete removal of the impacted soil within the accessible grassed area. QA/QC procedures to provide a basis for assessing the quality of the data included the collection of a duplicate soil sample and a matrix spike/matrix spike duplicate sample.

Additionally, two soil samples (SS-03-3 and SS-03-04) were collected from the sidewalls of the excavation of the impacted gravel layer. The samples were collected to evaluate the nature of the impacted soil to be left in place on the north and south sides of the excavation. The location of the additional samples is shown on Figure 3.

**2.4 Backfill**

Upon completion of the removal of the impacted gravel layer, the excavation area was backfilled. The stockpile of non-impacted soil was used to backfill the excavation. Additional off-Site clean soil was used to backfill the excavation to the required grade. The backfill was compacted with the bucket and treads of the mechanical excavator. The off-Site source of clean fill was Lafarge Material Product Code 941 "common fill" from the Lafarge North America, Inc. Genesee Fayhe property located in Lancaster, New York. Certification of this clean fill is provided in Appendix C. Topsoil from the stockpile was spread over the excavation area and the area was seeded and mulched.

### **3.0 ANALYTICAL RESULTS**

#### **3.1 Soil Quality Results**

A summary of the soil sample analytical result detections is presented within Table 1. In addition to presenting the analytical results, Table 1 also includes the NYSDEC Technical and Administrative Guidance Memorandum NYSDEC Recommended Soil Clean-up Objectives (TAGM 4046) dated January 24, 1994 for VOCs and SVOCs and STARS Memo #1: Petroleum Contaminated Soil Guidance Policy for disposal of the impacted soil with revised table for Recommended Soil Cleanup Objectives for Fuel Oil Contaminated Soil (NYSDEC, December 2000). Highlighted results within Table 1 indicate exceedances of TAGM 4046 reference values. The laboratory data reports from FLI are presented in Appendix B.

The results of the confirmatory soil samples SS-03-01 and SS-03-02 indicate the presence of VOCs and SVOCs at levels below TAGM 4046 Guidance Values. The results of the additional soil samples SS-03-03 and SS-03-04 indicate the presence of VOCs and SVOCs at levels below TAGM 4046 Guidance Values, with the exception of benzo(a)anthracene, benzo(b)fluoranthene, and benzo(a)pyrene in sample SS-03-03 and benzo(a)anthracene in sample SS-03-04, that were detected at estimated "J" value concentrations, which are slightly above the TAGM 4046 values.

#### **3.2 Data Usability Summary Report**

A Data Usability Summary Report (DUSR) was prepared as part of the VCA for the soil remediation. Samples were also collected in support of the VCA for the removal of petroleum impacted soil. The DUSR was prepared in a manner consistent with the NYSDEC Guidance Memorandum for Data Usability Summary Reports (NYSDEC, 1995).

All sample analyses as part of VCA soil remediation dataset were found to be generally compliant with the method and applicable guideline criteria, except where previously noted. Those results qualified as estimated (J/UJ) should be considered usable. Other results are also qualified, and are usable, as noted. None of the data was rejected.

In general, the data collected as part of the VCA soil remediation program may be considered usable for assessing nature and extent of impacts. The DUSR prepared for the ITT Heat Transfer facility in support of the VCA for the soil remediation is presented in Appendix D.

#### 4.0 SUMMARY AND CONCLUSIONS

A supplemental investigation and soil remediation have been performed at the ITT Heat Transfer facility in Cheektowaga, New York as part of a Voluntary Cleanup Agreement. Supplemental Investigation results were provided previously in the VCA Supplemental Investigation Report (Golder, August 2002). The VCA Supplemental Investigation Report included provisions for the removal and disposal of petroleum impacted soil at the facility. The petroleum impacted soil was removed during May 2003. Approximately 145 tons of petroleum impacted soil was removed from a grass area located directly adjacent to the west side of the facility building. Confirmatory soil samples were collected for analyses to confirm that impacted soil was removed. Additional samples were collected of impacted soil that was not removed and will remain in place.

Confirmatory sample analytical results indicate that there was little or no impact to underlying soil by the petroleum impacted soil and that the impacted soil in the excavation area was effectively removed. The analytical results for additional samples representing the remaining soil indicate only low levels of SVOCs are present slightly above TAGM 4046 Guidance Values, but at estimated concentrations below the laboratory practical quantitation limit.

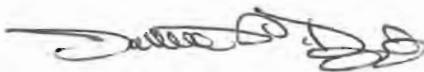
ITT intends to leave the remaining soil in place based on the following:

- Results of confirmatory soil samples where impacted soil was removed;
- The limits of the petroleum impacted soil has been delineated to the west and the extent of the petroleum impacted soil to the south and north is limited based on the results of previous investigations;
- The soil does not exhibit petroleum-type odors in it's covered condition and does not contain any individual contaminant with TAGM 4046 guidance values greater than 10 parts per million, and therefore is considered acceptable for nuisance characteristics according to Spill Technology and Remediation Series (STARS) Memo #1, Petroleum-Contaminated Soil Guidance Policy;
- The remaining petroleum impacted soil area is covered by approximately 2 feet of non-impacted soil and asphalt or concrete. Therefore there is a low risk for exposure and infiltration by precipitation;
- Down-gradient groundwater monitoring wells are not impacted; and
- The Contemplated Use for the property is industrial manufacturing.

ITT will minimize the potential exposure to workers by maintaining the asphalt/concrete cover in this area and advising future workers during excavations in the area.

Based on the results of the Voluntary Cleanup Agreement Supplemental Investigation and Soil Remediation, no further action is recommended for the site.

**GOLDER ASSOCIATES INC.**



Jonathan P. Rizzo  
Senior Project Geologist

Brian C. Senefelder, CHMM  
Associate/Office Manager

JPR:BCS/dml

F/N: G:\Projects\003-9260\Reports\Excavation Report\Final\Heat Transfer Final Excavation Report.Doc

## 5.0 REFERENCES

H2M Associates Inc., "Quantitative Environmental Survey at the ITT Standard Facility, Cheektowaga, New York", February 1997.

H2M Associates Inc., "Quantitative Environmental Survey at the ITT Standard Facility, Cheektowaga, New York" Volumes 1 and 2, May 1997.

Golder Associates Inc., "Supplement to the Quantitative Environmental Survey at the ITT Standard Facility, Cheektowaga, New York" October 1999.

Golder Associates Inc., "Supplemental Investigation NYSDEC Voluntary Cleanup Program ITT Heat Transfer Facility, Site No. V00329-9, 175 Standard Parkway, Cheektowaga, New York" August 2002.

ITT Fluid Technology, "Work Plan NYSDEC Voluntary Cleanup Program ITT Standard Facility, 175 Standard Parkway, Cheektowaga, New York" Revision 1, March 30, 2001

New York State Department of Environmental Conservation, "Guidance Memorandum for Data Usability Summary Reports", 1995

New York State Department of Environmental Conservation, "Memorandum for Determination of Soil Cleanup Levels", December 20, 2000.

New York State Department of Environmental Conservation, "Voluntary Cleanup Agreement: ITT Heat Transfer Site No. V00329-9", August 15, 2001.

TABLE 1  
 SOIL ANALYTICAL RESULTS  
 VOLATILE ORGANIC, SEMI-VOLATILE ORGANIC  
 VCP PROJECT  
 ITT STANDARD  
 CHEEKTOWAGA, NEW YORK

Official Name Sample Date Lab Sample ID.	Recommended Soil Cleanup Objectives TAGM 4046 (Jan. 24, 1994)	SS-03-01 05/07/03 L104379-1	DUP-03-01 05/07/03 L104379-3	SS-03-02 05/07/03 L104379-2	SS-03-03 05/08/03 L104379-4	SS-03-04 05/08/03 L104379-7
<b>Volatiles</b>						
Acetone	0.2	0.096	0.14	0.17	0.059	
2-Butanone (MEK)	0.3	0.029	0.041	0.033		
Carbon Disulfide	2.7		0.003 J		0.007 J	
Dibromochloromethane						
Ethylbenzene	5.5				0.003 J	
Toluene (Methylbenzene)	1.5				0.005 J	
Xylene (total)	1.2	0.021 J	0.005 J		0.021 J	
<b>Semi-Volatiles</b>						
Acenaphthene	50				0.18 J	
Anthracene	50				0.2 J	
Benz(a)anthracene	0.224 or MDL				0.26 J	0.21 J
Benz(b)fluoranthene	0.22				0.27 J	
Benz(k)fluoranthene	0.22				0.13 J	
Benz(a)pyrene	0.061 or MDL				0.16 J	
Chrysene	0.4				0.31 J	0.24 J
bis(2-Ethylhexyl)phthalate	50	0.1 J			0.72 J	0.72 J
Fluoranthene	50				0.24 J	
Fluorene	50				7.5	
2-Methylnaphthalene	36.4	0.09 J	0.087 J		3.8	
Naphthalene	13	0.1 J	0.11 J		0.72 J	0.61 J
N-Nitrosodiphenylamine	NV				1.2	0.95 J
Phenanthrene	50				0.54 J	0.54 J
Pyrene	50					

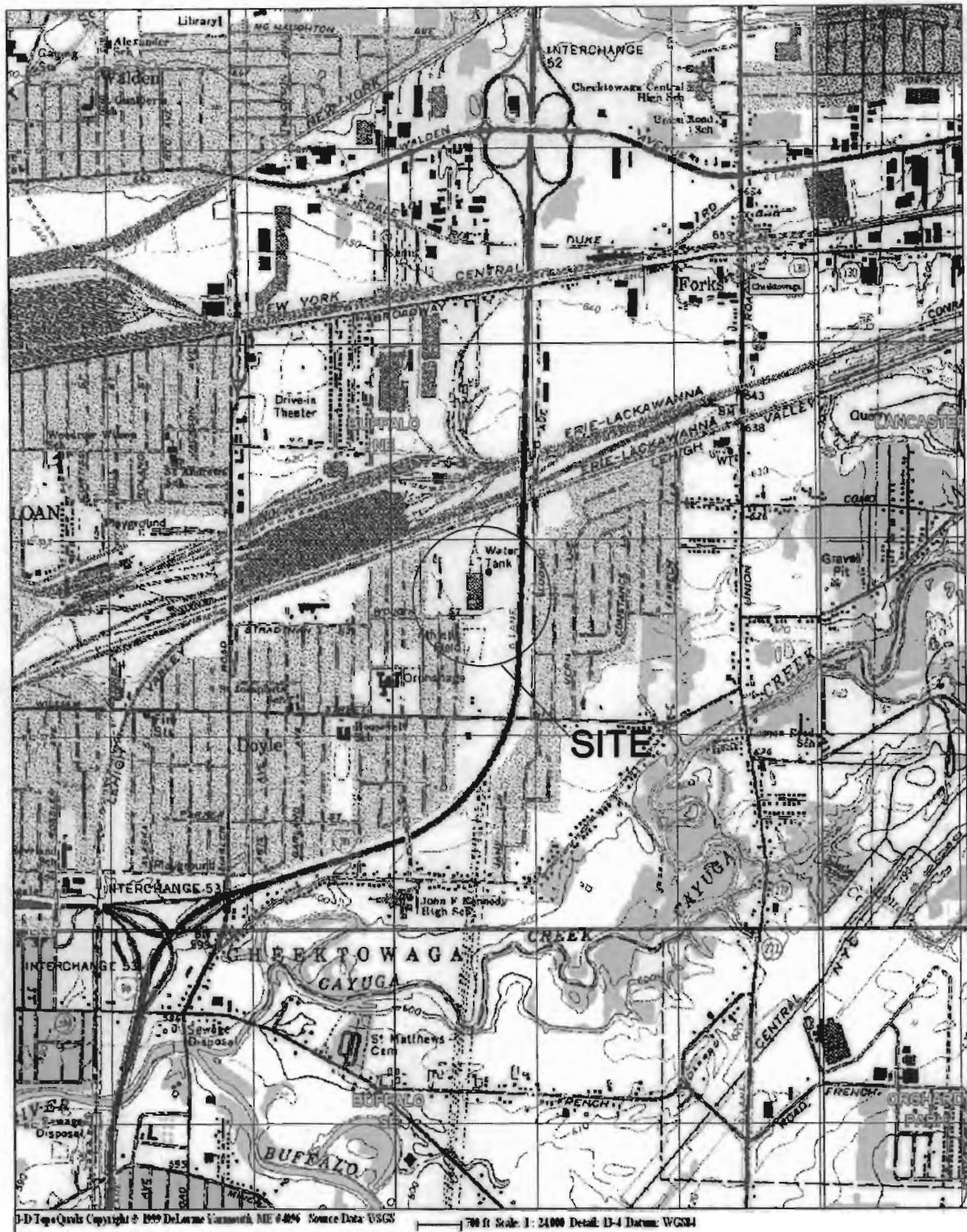
**USEPA Defined Organic Data Qualifiers:**

J = Estimated concentration value:  
 1) Result is below the PQL but criteria are met.

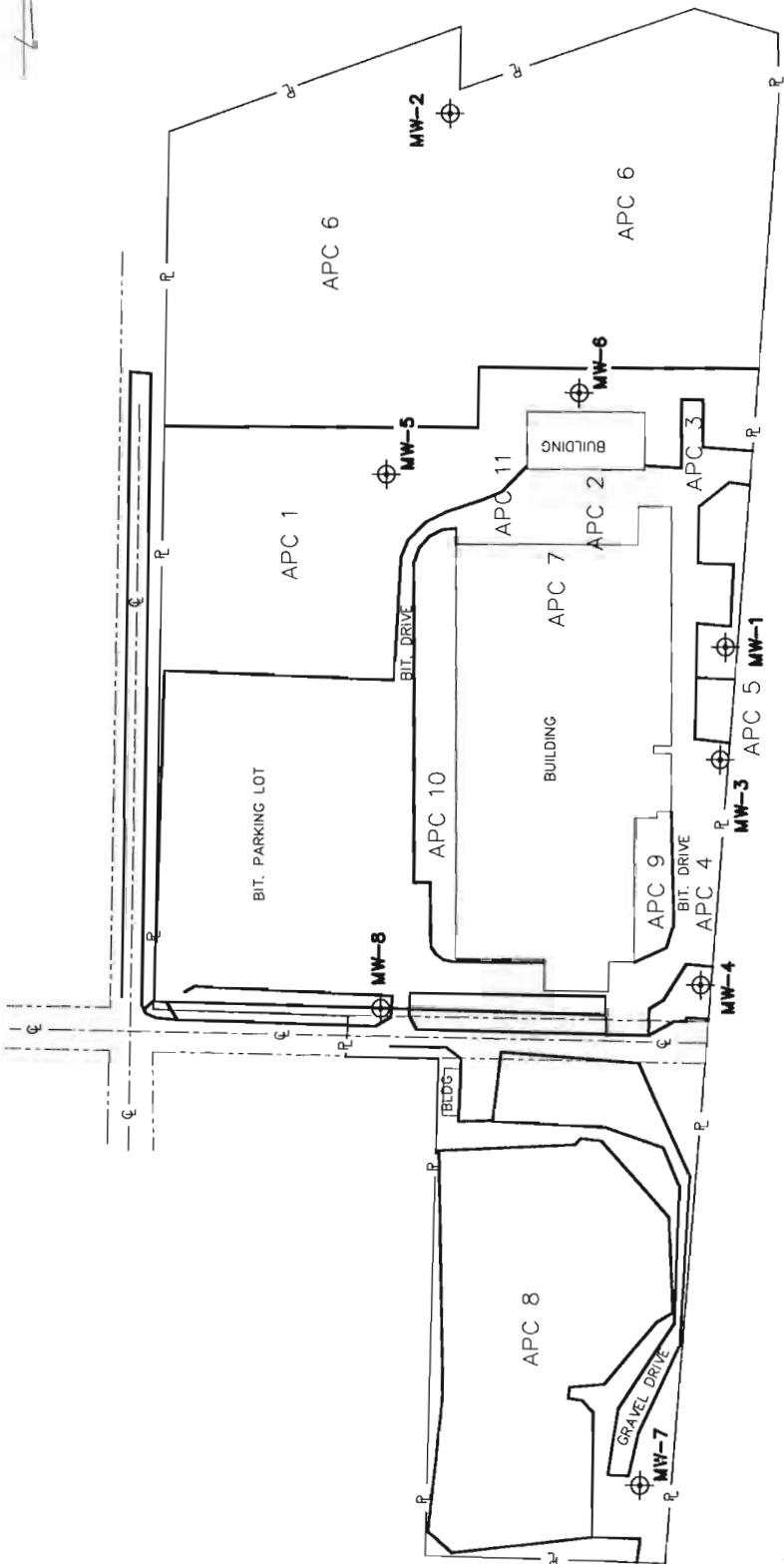
**Footnotes:**

All soil analytical results reported in milligrams per kilograms (mg/kg).  
 blank = Not detected above the practical quantitation limits (PQL) or lower limit of quantitation (LLQ), or not analyzed.  
 NV = No value.  
 0.79 = Sample concentration exceeds respective TAGM 4046 Recommended Soil Cleanup Objectives (1/94)  
 (revised 12/20/00)

Table By: JPR  
 Checked: AJN  
 Date: 8/27/2003



 <b>Golder Associates</b> Buffalo, New York	TITLE					
	<b>FACILITY LOCATION MAP</b>					
CLIENT/PROJECT	DRAWN	DCW	DATE	JOB NO.		
ITT HEAT TRANSFER CHEEKTOWAGA, NEW YORK	CHECKED <i>JPR</i>	SCALE <i>AS SHOWN</i>	08/27/03	003-9260	FIGURE NO.	1
	REVIEWED <i>BCS</i>	FILE NO.	003-9260			



#### APC Descriptions

- APC 1 — Tire Recycling Areas
- APC 2 — Pre-1982 Waste Disposal Practices
- APC 3 — Current Hazardous Waste Storage Area
- APC 4 — Past Hazardous Waste Storage Area
- APC 5 — Transformers
- APC 6 — Possible Former Landfilling Area
- APC 7 — Former Fuel Oil Storage Tank
- APC 8 — Standard Park Ball Field
- APC 9 — Drain Outside Loading Dock
- APC 10 — Roof Drain Adjacent to Vapor Degreaser Vents
- APC 11 — Catch Basin

**LEGEND**

— MONITORING WELL LOCATION

200  
0  
feet  
scale

#### CLIENT/PROJECT

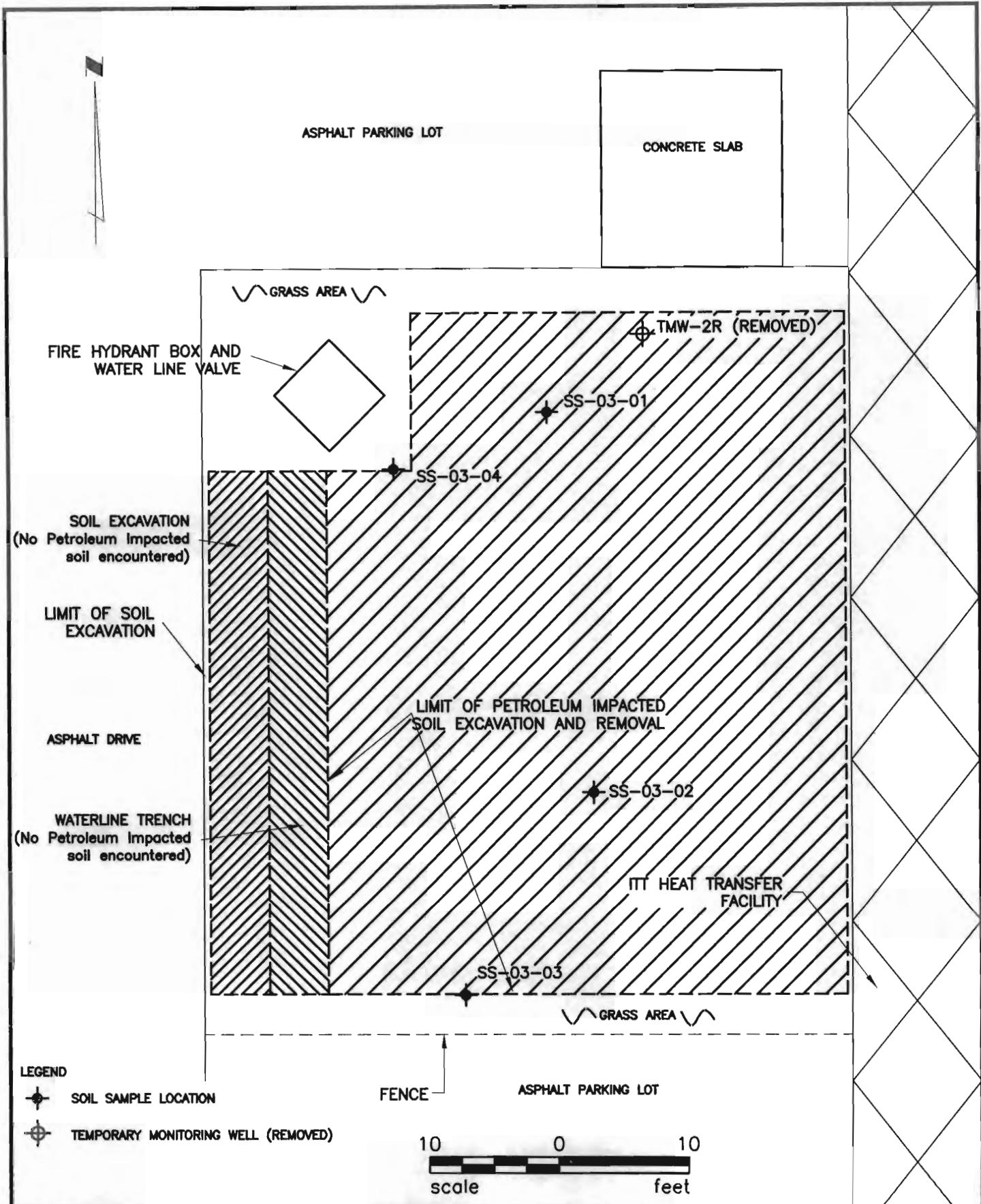
IT'T INDUSTRIES  
IT'T HEAT TRANSFER FACILITY  
CHEEKETOWAGA, NEW YORK



#### TITLE

SITE LAYOUT AND AREAS OF  
POTENTIAL CONCERN (APCS) MAP

DATE	08/27/03	SCALE	AS SHOWN	FILE NO.	003-9260	DWG NO.	0039260A134	
DRAWN	JR	RECHECKED	BS				FIGURE	2

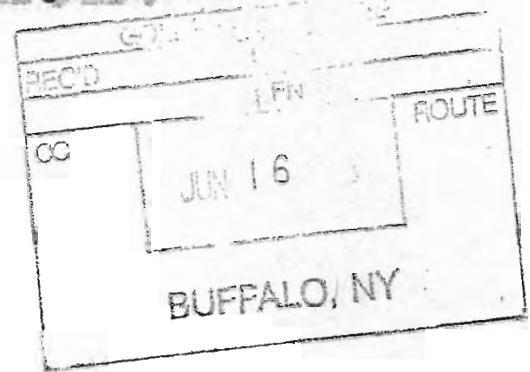


**APPENDIX A**

**IMPACTED SOIL DISPOSAL WEIGH TICKETS  
AND CERTIFICATE OF DISPOSAL**

# Waste Management

C.I.D. Landfill, Inc.  
10860 Olean Road  
Chaffee, NY 14030-9799  
Telephone: (716) 496-5000  
Fax: (716) 496-5500



## Certificate of Disposal

Date: 5/7/03 & 5/8/03 Time: \_\_\_\_\_  
Customer Name: ITT STANDARD/SLC  
Customer Address: 175 STANDARD PKWY  
CHEEKTOWAGA, NY  
Total Tons Disposed of: 144.84

Tickets- 110514 Tons- 16.23  
110516 Tons- 15.78  
110559 Tons- 18.05  
110561 Tons- 18.86  
110576 Tons- 18.39  
110582 Tons- 17.22  
110608 Tons- 21.82  
110655 Tons- 18.49

I hereby certify the disposal in accordance with all State, Federal, and Local regulations of the material delivered to C.I.D. Landfill, Inc. from the above-referenced customer on the above-referenced date.

C.I.D. Landfill, Inc.

By:

Printed Name



4800

4800

CHAFFEE LANDFILL

TICKET: 110614  
DATE: 05/07/2003  
TIME: 12:48 - 12:53

Cambridge Business Forms, Inc. • (847) 519-1800

CUSTOMER: 174-1073 /ITT STANDARD/SLC (CW7345)

GENERATOR: /Non App

COUNTY: ERIE / ERIE

TRUCK: AT&T

TRAILER:

PROF #: CW7345 / PETROLEUM IMPACTED SOIL

MANIFEST:

ROUTE: NA / Non App

GRND: 69 / 4H1640

P.O.:

CUYDS: @

COMMENT:

GROSS: 60640 LBS  
TARE: 29180 LBS  
NET: 32460 LBS  
TONS: 16.23

COMMODITY	UNIT	QNTY
ADZ/COVER - CONT		16.23
FUELSUR/Fuel Sut		

IN OPERATOR: JENNY

DRIVER:



OUT OPERATOR: JENNY



CHAFFEE LANDFILL

TICKET: 110516  
DATE: 05/07/2003  
TIME: 12:42 - 12:55

CUSTOMER: 174-1073 /ITT STANDARD/SLC (CW7345)

GENERATOR: /Non App

COUNTY: ERIE / ERIE

TRUCK: AT&amp;A23

TRAILER:

PROF #: CW7345 / PETROLEUM IMPACTED SOIL

MANIFEST:

ROUTE: NA / Non App GRID: 69 / 4H1648

P.O.:

CUYOS: 0

COMMENT:

GROSS: 68400 LBS  
TARE: 29840 LBS  
NET: 31560 LBS  
TONS: 15.78

COMMODITY	UNIT	QNTY
AD2/COVER - CONT		15.78
FUELSUR/Fuel Sut		

IN OPERATOR: JENNY

OUT OPERATOR: JENNY

DRIVER: Jenny



00000 CHAFFEE LANDFILL.

TICKET: 110559  
DATE: 05/07/2003  
TIME: 14:52 - 15:05

CUSTOMER: 174-1073 /ITT STANDARD/SLC (CW7345)

GENERATOR: /Non App

COUNTY: ERIE / ERIE

TRUCK: AT&A-07

TRAILER:

PROF #: CW7345 / PETROLEUM IMPACTED SOIL

MANIFEST:

ROUTE: NA / Non App GRID: 69 / 4H1640

P.O. #

CUYDS: 0

COMMENT: 175 STANDARD PKWY

GROSS: 64140 LBS

TARE: 28040 LBS

NET: 36100 LBS

TONG: 18.05

Cambridge Business Forms, Inc. • (847) 518-1800

00000

COMMODITY UNIT QNTY

AD2/COVER - CONT 18.05

FUELSUR/Fuel Sur

IN OPERATOR: SUSAN

OUT OPERATOR: SUSAN

DRIVER: \_\_\_\_\_

00000



WASTE MANAGEMENT  
CHAFFEE LANDFILL  
10860 OLEAN ROAD  
CHAFFEE, NEW YORK 14030  
(716) 496-5000

CHAFFEE LANDFILL

TICKET: 110561  
DATE: 05/07/2003  
TIME: 14:53 - 15:07

CUSTOMER: 174-1073 /ITT STANDARD/SLC (CW7345)

GENERATOR: /Non App

COUNTY: ERIE / ERIE

TRUCK: AT&A-23

TRAILER:

PROF #: CW7345 / PETROLEUM IMPACTED SOIL

MANIFEST:

ROUTE: NA / Non App GRID: 69 / 4H1640

P.O.:

CUYDS: @

COMMENT: 175 STANDARD PKWY

GROSS: 66480 LBS

TARE: 28760 LBS

NET: 37720 LBS

TONS: 18.86

COMMODITY	UNIT	QNTY
AD2/COVER - CONT		18.86
FUELSUR/Fuel Sut		

IN OPERATOR: SUSAN

OUT OPERATOR: SUSAN

DRIVER: 

CHAFFEE LANDFILL  
10860 OLEAN ROAD  
CHAFFEE, NEW YORK 14030  
(716) 496-5000

CHAFFEE LANDFILL

TICKET: 110576  
DATE: 05/07/2003  
TIME: 15:35 - 15:48

CUSTOMER: 174-1673 / ITT STANDARD/SLC (CW7345)

GENERATOR: /Non App

COUNTY: ERIE / ERIE

TRUCK: AT&A-08

TRAILER:

PROF #: CW7345 / PETROLEUM IMPACTED SOIL

MANIFEST:

ROUTE: NA / Non App GRID: 69 / 4H1E40

P.O.:

CUYDS: 0

COMMENT: 175 STANDARD PKWY

GROSS: 64820 LBS

TARE: 28040 LBS

NET: 36780 LBS

TONS: 18.39

COMMODITY UNIT QNTY

AD2/COVER - CONT 18.39

FUELSUR/Fuel 9ut

IN OPERATOR: SUSAN

OUT OPERATOR: SUSAN

DRIVER: \_\_\_\_\_



Cambridge Business Forms, Inc. • (847) 519-1800

CHAFFEE LANDFILL

TICKET# 110582  
DATE: 05/07/2003  
TIME: 15:59 - 16:15

CUSTOMER: 174-1073 / ITT STANDARD/SLC (CW7345)

GENERATOR: /Non App

COUNTY: ERIE / ERIE

TRUCK: AT&A-12

TRAILER:

PROF #: CW7345 / PETROLEUM IMPACTED SOIL

MANIFEST:

ROUTE: NA / Non App GRID: 69 / 4H1640

P.O.:

CUYDS: 0

COMMENT: 175 STANDARD PKWY

GROSS: 62989 LBS  
TARE: 22540 LBS  
NET: 34440 LBS  
TONS: 17.22

COMMODITY	UNIT	QNTY
ADE/COVER - CONT		17.22
FUELSUR/Fuel Sur		

IN OPERATOR: SUSAN

DRIVER: Susan Pfaff

OUT OPERATOR: SUSAN



000

0.25

## CHAFFEE LANDFILL

TICKET: 110736

DATE: 05/04/2002  
TIME: 09:25 - 09:40

CUSTOBER: 174 1073 / ITT STANDARD/SLC (CM7345)

GENERATOR: Non App

COUNTY: ERIE / ERIE

TRUCK: AT&amp;T'S

TRAILER:

PROF #: CM7345 / PETROLEUM TREATED SOIL.

MANIFEST #:

ROUTE: NA / Non App BRIG: 69 / 4H1640

P.D.:

BUYER: ♀

COURIERT: 175 STANDARD FIVE

COMMODITY: UNIT ONLY

ADZ/CUYER - CONT 21.82  
FUEL SUR/Fuel SurGROSS: 72560 LBS  
TARE: 20920 LBS  
NET: 43640 LBS  
YARD: 21.82

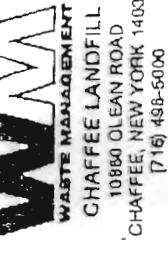
IN OPERATOR: SUSAN

DRIVER: C

OUT OPERATOR: SUSAN

00

00/00



20.02

## CHAFFEE LANDFILL

TICKET: 110655  
DATE: 05/08/2003  
TIME: 12:50 - 13:17

CUSTOMER #: 174-1673 / VT STANDARD/SLC (CW7345)

GENERATOR: Non App

COUNTY: ERIE / ERIE

TRUCK #: ATKA 23

TRAILER:

PROOF #: CW7345 / EPIROLEUM IMPACTED SOIL

MANIFEST #:

ROUTE: MA / Non App GRID: 69 / HIGHWAY  
P. O. :

CITY/STATE: W

COMMENT: 175 STANDARD PAY

GROSS: 6576.0 LBS  
TARE: 207.00 LBS  
NET: 3690.0 LBS  
TONG: 10.49

COMMODITY	UNIT	QTY
ASD/COVER - COMM	BL. 49	
FUEL/SUR/Fuel Sur		

IN OPERATOR: SUSAN

OUT OPERATOR: SUSAN

DRIVER: S.C.

00/00/00

**APPENDIX B**

**FRIEND LABORATORY INC.  
ANALYTICAL REPORTS**

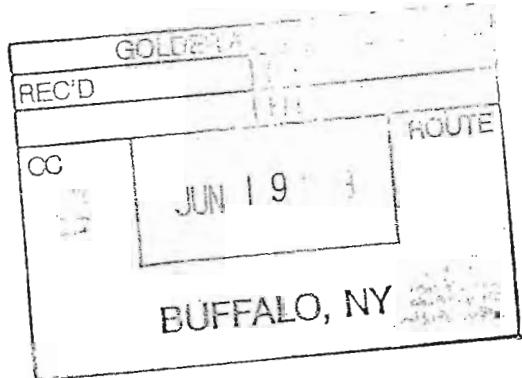


32 ITHACA STREET                    WAVERLY, NY 14892-1532  
TELEPHONE (607) 565-3500            FAX (607) 565-4083

GOLDER ASSOCIATES, INC.

003-9260, ITT HEAT TRANSFER

SAMPLED MAY 7 & 8, 2003



## CHAIN OF CUSTODY RECORD

**FLI**  
FRIEND  
LABORATORY  
• N • C

ONE RESEARCH CIRCLE  
WAVERLY NY 14892-1532  
Telephone (607) 565-3500  
Fax (607) 565-4083

Sample Site: ITT Heat Transfer

P.O. #

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED			SAMPLE NUMBER	NOTES TO LABORATORY
			95-1	95-2	95-3		
5-7-03 12:10	SS - 03-1	2	Description: Grab Composite Other Matrix: DW WW MW <del>Air</del> Air	95-1 95-2	Asp Nysoec	-1	Sodium sulfite NaOH & Zirconic acetate pH >9 Acetic Buffer pH <3
5-7-03 1500	SS - 03-2	2	Description: Grab Composite Other Matrix: DW WW MW <del>Air</del> Air	95-1 95-2	Asp Nysoec	-2	HNO <sub>3</sub> pH <2 H <sub>2</sub> SO <sub>4</sub> pH <2 Ascorbic acid & HCl pH <2 HCl pH <2 Sodium thiosulfate Untreated
5-7-03 0830	DUF-03-1	2	Description: Grab Composite Other Matrix: DW WW MW <del>Air</del> Air	95-1 95-2	Asp Nysoec	-3	NaOH pH >12 HNO <sub>3</sub> pH <2 H <sub>2</sub> SO <sub>4</sub> pH <2 Ascorbic acid & HCl pH <2 HCl pH <2 Sodium thiosulfate Untreated
5-8-03 0830	SS - 03-3	2	Description: Grab Composite Other Matrix: DW WW MW <del>Air</del> Air	95-1 95-2	Asp Nysoec	-4	95-1 95-2
RElinquished By		DATE / TIME	Accepted By		DATE / TIME	NOTES TO LABORATORY	
<i>[Signature]</i>		5-8-03 1700	<i>John Jones</i>		5-9-03 305	Whippency \$10.18 1/3	
SAMPLER						Petroleum on	55-03-3
SUSPECTED CONTAMINATION LEVEL							
SLIGHT	MODERATE	HIGH	(please circle)				

CUSTOMER CODE #

**CHAIN OF CUSTODY RECORD**

ONE RESEARCH CIRCLE  
WAVERLY NY 14892-1532  
Telephone (607) 565 3500  
**Fax (607) 565-4083**

**ELI**  
F R I E N D  
L A B O R A T O R Y  
I N C.

### **Sample Site:**

117 Heat Transfer

Sample

# Columbia Analytical

Suite 250

1 Mustard Street  
Rochester, N.Y. 14609-0859

1 Mustard Street  
Rochester, N.Y. 14609-0859

WW = Wastewater  
DW = Drinking water

Air = Air

**LSW** = Liquid Solid Waste  
**Soil** = Soil/Sludge (dry weight basis)

Liquid Solid Waste

02316951

WW = Wastewater  
DW = Drinking water

Air = Air  
LSW = Liquid Solid Waste  
Soil = Soil/Sludge (dry weight basis)

## Laboratory Chronicle

**FLI**  
**FRIEND**  
**LABORATORY**  
**INC**

The sample fractions listed below are released by the Sample Custodian for analysis. The recipient of these samples is legally responsible for the integrity and safekeeping of these samples in accordance with FLI evidentiary custody procedures. Residual sample(s) must be returned as a set to the Sample Custodian. Use departmental custody logs to transfer extracts, digestates and distillates to the Sample Custodian after completion of analysis.

Lab Department

Volatiles

SDG/Project

Golden Ass.

Fraction/Parameter

95-1

Number	Sample ID	Sample Origin	Number	Sample ID	Sample Origin
	104379-1				
1	-2				
1	-3				
1	-4				
1	-5				
1	-6				
1	-7				
C	↓ -8				

Number	Relinquished By	Date	Time	Received By	Date	Time	*
1	Toni Jones	5/16/03	10:41	Alex Ray	5/16/03	14:41	
1	Alex Ray	6/14/03	15:54	Toni Jones	6/14/03	15:54	
2							
2							
3							
3							

\* Enter C to indicate sample or aliquot consumed during testing; R for return to Sample Custodian; L for return to cooler.

This form is transferred with samples. It MUST be returned to the Sample Custodian after completion of analysis.

## Laboratory Chronicle

**FLI**  
FR IEND  
L A B O R A T O R Y  
INC

The sample fractions listed below are released by the Sample Custodian for analysis. The recipient of these samples is legally responsible for the integrity and safekeeping of these samples in accordance with FLI evidentiary custody procedures. Residual sample(s) must be returned as a set to the Sample Custodian. Use departmental custody logs to transfer extracts, digestates and distillates to the Sample Custodian after completion of analysis.

Lab Department

## Semivolatiles

SDG/Project

### Fraction/Parameter

95-2

Number	Sample ID	Sample Origin	Number	Sample ID	Sample Origin
	104379-1				
	-2				
	-3				
	-4				
	-5				
	-6				
	-7				
↓	-8				

Number	Relinquished By	Date	Time	Received By	Date	Time	*
1	Jenice Jones	5/15/03	8:00	Catherine P. Wende	5/15/03	8:00	
1	Catherine P. Wende	5/15/03	15:15	Jenice Jones	5/15/03	15:15	
2							
2							
3							
3							

\* Enter C to indicate sample or aliquot consumed during testing; R for return to Sample Custodian; L for return to cooler.

This form is transferred with samples. It MUST be returned to the Sample Custodian after completion of analysis.

## Laboratory Chronicle

**FLI**  
FRIEND  
LABORATORY  
INC

The sample fractions listed below are released by the Sample Custodian for analysis. The recipient of these samples is legally responsible for the integrity and safekeeping of these samples in accordance with FLI evidentiary custody procedures. Residual sample(s) must be returned as a set to the Sample Custodian. Use departmental custody logs to transfer extracts, digestates and distillates to the Sample Custodian after completion of analysis.

Lab Department Wilhem  
 Fraction/Parameter TS

SDG/Project Golden Ass.

Number	Sample ID	Sample Origin	Number	Sample ID	Sample Origin
	104379-1				
	-2				
	-3				
	-4				
	-5				
	-6				
	-7				
	↓ -8				

Number	Relinquished By	Date	Time	Received By	Date	Time	*
1	Tony Jones	5/12/03	1330	Teresa B. Bush	5/12/03	13:30	
1	Teresa B. Bush	5/12/03	17:45	Tony Jones	5/12/03	1745	
2							
2							
3							
3							

\* Enter C to indicate sample or aliquot consumed during testing, R for return to Sample Custodian; L for return to cooler.

This form is transferred with samples. It MUST be returned to the Sample Custodian after completion of analysis.

## Laboratory Chronicle

**FLI**  
FRIEND  
LABORATORY  
INC

The sample fractions listed below are released by the Sample Custodian for analysis. The recipient of these samples is legally responsible for the integrity and safekeeping of these samples in accordance with FLI evidentiary custody procedures. Residual sample(s) must be returned as a set to the Sample Custodian. Use departmental custody logs to transfer extracts, digestates and distillates to the Sample Custodian after completion of analysis.

Lab Department Alm Uolatels  
Fraction/Parameter 95-2

SDG/Project Golden

Number	Relinquished By	Date	Time	Received By	Date	Time	*
1	Lora Jones	6/17/03	1406	Pauline Brown	6/17/03	1406	
1	Vally Potts	6/17/03	1558	Donna Jones	6/17/03	1558	
2							
2							
3							
3							

\* Enter C to indicate sample or aliquot consumed during testing; R for return to Sample Custodian; L for return to cooler.

This form is transferred with samples. It MUST be returned to the Sample Custodian after completion of analysis.

# *Chain of Custody*

**Submission:** R2316951    **Client:** Friend Laboratories

**Lab ID:** 642688    **Matrix** NON-AQ

Received into CAS-Rochester Custody: 5/20/03

**Container:** 6426881

Date of Custody	User	Dept	Storage Location	Purpose	Empty
05/21/03 11:29	bcollom	Sample Management	Cooler 3	Storage	<input type="checkbox"/>
05/22/03 7:35	glaforce	Organic Extractions	Cooler 3	Analysis	<input type="checkbox"/>

**Lab ID:** 642689    **Matrix** NON-AQ

Received into CAS-Rochester Custody: 5/20/03

**Container:** 6426891

Date of Custody	User	Dept	Storage Location	Purpose	Empty
05/21/03 11:29	bcollom	Sample Management	Cooler 3	Storage	<input type="checkbox"/>
05/22/03 7:36	glaforce	Organic Extractions	Cooler 3	Analysis	<input type="checkbox"/>

**Lab ID:** 642690    **Matrix** NON-AQ

Received into CAS-Rochester Custody: 5/20/03

**Container:** 6426901

Date of Custody	User	Dept	Storage Location	Purpose	Empty
05/21/03 11:29	bcollom	Sample Management	Cooler 3	Storage	<input type="checkbox"/>
05/22/03 7:36	glaforce	Organic Extractions	Cooler 3	Analysis	<input type="checkbox"/>

**Lab ID:** 642691    **Matrix** NON-AQ

Received into CAS-Rochester Custody: 5/20/03

**Container:** 6426911

Date of Custody	User	Dept	Storage Location	Purpose	Empty
05/21/03 11:29	bcollom	Sample Management	Cooler 3	Storage	<input type="checkbox"/>
05/22/03 7:35	glaforce	Organic Extractions	Cooler 3	Analysis	<input type="checkbox"/>

# *Chain of Custody*

**Submission:** R2316951    **Client:** Friend Laboratories

**Lab ID:** 642692    **Matrix** NON-AQ

Received into CAS-Rochester Custody: 5/20/03

**Container:** 6426921

Date of Custody	User	Dept	Storage Location	Purpose	Empty
05/21/03 11:29	bcollom	Sample Management	Cooler 3	Storage	<input type="checkbox"/>
05/22/03 7:35	glaforce	Organic Extractions	Cooler 3	Analysis	<input type="checkbox"/>

**Lab ID:** 642693    **Matrix** NON-AQ

Received into CAS-Rochester Custody: 5/20/03

**Container:** 6426931

Date of Custody	User	Dept	Storage Location	Purpose	Empty
05/21/03 11:29	bcollom	Sample Management	Cooler 3	Storage	<input type="checkbox"/>
05/22/03 7:35	glaforce	Organic Extractions	Cooler 3	Analysis	<input type="checkbox"/>

**Lab ID:** 642694    **Matrix** NON-AQ

Received into CAS-Rochester Custody: 5/20/03

**Container:** 6426941

Date of Custody	User	Dept	Storage Location	Purpose	Empty
05/21/03 11:29	bcollom	Sample Management	Cooler 3	Storage	<input type="checkbox"/>
05/22/03 7:35	glaforce	Organic Extractions	Cooler 3	Analysis	<input type="checkbox"/>

**Lab ID:** 642695    **Matrix** NON-AQ

Received into CAS-Rochester Custody: 5/20/03

**Container:** 6426951

Date of Custody	User	Dept	Storage Location	Purpose	Empty
05/21/03 11:29	bcollom	Sample Management	Cooler 3	Storage	<input type="checkbox"/>
05/22/03 7:35	glaforce	Organic Extractions	Cooler 3	Analysis	<input type="checkbox"/>

# *Chain of Custody*

*Submission:* R2316951    *Client:* Friend Laboratories

*Lab ID:* 642697    *Matrix:* NON-AQ

Received into CAS-Rochester Custody: 5/20/03

*Container:* 6426971

Date of Custody	User	Dept	Storage Location	Purpose	Empty
05/21/03 11:29	bcollom	Sample Management	Cooler 3	Storage	<input type="checkbox"/>
05/22/03 7:35	glaforce	Organic Extractions	Cooler 3	Analysis	<input type="checkbox"/>



32 ITHACA STREET  
TELEPHONE (607) 565-3500

WAVERLY, NY 14892-1582  
FAX (607) 565-4083

Date: 17-JUN-2003

Lab Sample ID: L104379-1

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-01  
Description: GRAB, 003/9260  
Sampled On: 07-MAY-03 12:10 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	78.9	%		12-MAY-03 16:21	CLP 3.0	02-123-84
ASP 95-1						
Chloromethane	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Bromomethane	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Vinyl chloride	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Chloroethane	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Methylene chloride	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Acetone	96	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Carbon disulfide	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
1,1-Dichloroethene	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
trans-1,2-Dichloroethene	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
1,1-Dichloroethane	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
cis-1,2-Dichloroethene	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
MEK(2-Butanone)	29	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Chloroform	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
1,1,1-Trichloroethane	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Carbon tetrachloride	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Benzene	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
1,2-Dichloroethane	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Trichloroethene	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
1,2-Dichloropropane	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Bromodichloromethane	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
cis-1,3-Dichloropropene	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
MIBK(4-Methyl-2-pentanone)	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Toluene	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
trans-1,3-Dichloropropene	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
1,1,2-Trichloroethane	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Tetrachloroethene	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
2-Hexanone	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Dibromochloromethane	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Chlorobenzene	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Ethylbenzene	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
p-Xylene/m-Xylene	10 J	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
o-Xylene	11 J	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Styrene	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
Bromoform	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148
1,1,2,2-Tetrachloroethane	U	ug/kg	12	19-MAY-03 20:54	ASP 95-1	02-067-8148

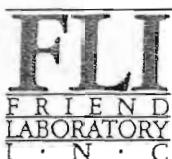
Results calculated on a dry weight basis.

Approved by: *David J. Davis* NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC *est*

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)  
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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



32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-1

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-01  
Description: GRAB, 003/9260  
Sampled On: 07-MAY-03 12:10 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
--------------------	--------	-------	-----------------	---------------	--------	--------------------

Library Search Compounds:	Result	Units	Qual	Rention Time
Cyclohexane, 1-methyl-4-(1-methyl ethyl)	210	ug/kg	NJ	21.86
Benzene, 1,2,3-Trimethyl	85	ug/kg	NJ	22.75
Benzene, 1-methyl-4-(1-methyl ethyl)	100	ug/kg	NJ	23.25
1,2,4-Trimethyl benzene	92	ug/kg	NJ	23.54
Undecane	210	ug/kg	NJ	23.87
Naphthalene, decahydro-,trans	71	ug/kg	NJ	24.06
Benzene, 1-methyl-4-(1-methyl ethyl)	120	ug/kg	NJ	24.48
Benzene, (1-ethyl-2,3-dimethyl)	63	ug/kg	NJ	24.61
Decane	45	ug/kg	NJ	21.79
4-methyl-Decane	57	ug/kg	NJ	22.3
1-ethyl-2-methyl-Benzene	45	ug/kg	NJ	22.46
Unknown Hydrocarbon	56	ug/kg	J	24.21
Unknown Hydrocarbon	50	ug/kg	J	24.31

Library Search Comment: 13 library search compounds detected.

Surrogate Recovery:			
1,2-Dichloroethane-d4	101	%	02-067-8148
Toluene-d8	125	%	02-067-8148
4-Bromofluorobenzene	93	%	02-067-8148

ASP 95-2

Bis(2-chloroethylether)	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Phenol	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
2-Chlorophenol	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
1,3-Dichlorobenzene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
1,4-Dichlorobenzene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
1,2-Dichlorobenzene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Bis(2-chloroisopropylether)	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
2-Methylphenol	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Hexachloroethane	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
N-Nitrosodi-N-propylamine	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
4-Methylphenol	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Nitrobenzene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457

Results calculated on a dry weight basis.

Approved by:  
David J. Davis  
Lab Director

Page 2 of 4  
NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc 22R

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)  
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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



32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-1

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-01  
Description: GRAB, 003/9260  
Sampled On: 07-MAY-03 12:10 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Isophorone	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
2-Nitrophenol	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
2,4-Dimethylphenol	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Bis(2-chloroethoxymethane)	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
2,4-Dichlorophenol	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
1,2,4-Trichlorobenzene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Naphthalene	100 J	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
4-Chloroaniline	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Hexachlorobutadiene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
4-Chloro-3-methylphenol	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
2-Methylnaphthalene	90 J	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Hexachlorocyclopentadiene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
2,4,6-Trichlorophenol	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
2,4,5-Trichlorophenol	U	ug/kg	2100	03-JUN-03 14:51	ASP 95-2	02-011-2457
2-Chloronaphthalene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
2-Nitroaniline	U	ug/kg	2100	03-JUN-03 14:51	ASP 95-2	02-011-2457
Dimethyl phthalate	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Acenaphthylene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
2,6-Dinitrotoluene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
3-Nitroaniline	U	ug/kg	2100	03-JUN-03 14:51	ASP 95-2	02-011-2457
Acenaphthene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
2,4-Dinitrophenol	U	ug/kg	2100	03-JUN-03 14:51	ASP 95-2	02-011-2457
Dibenzofuran	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
2,4-Dinitrotoluene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
4-Nitrophenol	U	ug/kg	2100	03-JUN-03 14:51	ASP 95-2	02-011-2457
Diethyl phthalate	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Fluorene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
4-Chlorophenylphenylether	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
4-Nitroaniline	U	ug/kg	2100	03-JUN-03 14:51	ASP 95-2	02-011-2457
2-Methyl-4,6-dinitrophenol	U	ug/kg	2100	03-JUN-03 14:51	ASP 95-2	02-011-2457
N-Nitrosodiphenylamine	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
4-Bromophenylphenylether	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Hexachlorobenzene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Pentachlorophenol	U	ug/kg	2100	03-JUN-03 14:51	ASP 95-2	02-011-2457
Phenanthrene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Anthracene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Carbazole	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Di-n-butyl phthalate	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Fluoranthene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Pyrene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Butylbenzyl phthalate	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Benzo(a)anthracene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457

Results calculated on a dry weight basis.

Approved by:

Daniel J. Davis  
Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC CAR

Page 3 of 4  
 KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
 mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)  
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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-1

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-01  
Description: GRAB, 003/9260  
Sampled On: 07-MAY-03 12:10 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
3,3-Dichlorobenzidine	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Chrysene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Bis-2-ethylhexyl phthalate	100 J	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Di-n-octyl phthalate	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Benzo(b)fluoranthene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Benzo(k)fluoranthene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Benzo(a)pyrene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Indeno(1,2,3-cd)pyrene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Dibenzo(a,h)anthracene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457
Benzo(g,h,i)perylene	U	ug/kg	840	03-JUN-03 14:51	ASP 95-2	02-011-2457

Extraction Information:

15-MAY-03 00:00

03-030-19

Library Search Compounds:	Result	Units	Qual	Rention Time
Unknown	260	ug/kg	J	12.14
Dodecanoic Acid	390	ug/kg	NJ	23.86
Hexadecanoic Acid	190	ug/kg	NJ	28.88
Phosphonic Acid, dioctadecyl ester	1700	ug/kg	NJ	34.41
1-Hexacosanol	180	ug/kg	NJ	35.34
1-Heptadecanol	1400	ug/kg	NJ	36.28
Unknown	190	ug/kg	J	36.61
1-chloro-octadecane	290	ug/kg	NJ	38.38
1-Tetracosanol	260	ug/kg	NJ	38.49
1-Decene	810	ug/kg	NJB	22.66

Library Search Comment: 10 library search compounds detected.

Surrogate Recovery:

2-Fluorophenol	58	%	02-011-2457
Phenol-d5	67	%	02-011-2457
2-Chlorophenol-d4	74	%	02-011-2457
1,2-Dichlorobenzene-d4	68	%	02-011-2457
Nitrobenzene-d5	74	%	02-011-2457
2-Fluorobiphenyl	79	%	02-011-2457
2,4,6-Tribromophenol	76	%	02-011-2457
Terphenyl-d14	79	%	02-011-2457

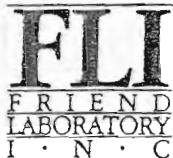
Results calculated on a dry weight basis.

Approved by: *D. M. Davis* NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC: *ear*

KEY: ND or U = None Detected      < = less than      ug/L = micrograms per liter (equivalent to parts per billion)  
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)  
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32 ITHACA STREET  
TELEPHONE (607) 565-8500

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

Date: 12-JUN-2003

Lab Sample ID: L104379-2

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-02  
Description: GRAB, 003/9260  
Sampled On: 07-MAY-03 15:00 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

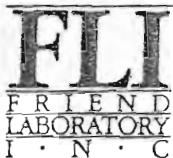
Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	83.8	%		12-MAY-03 16:21	CLP 3.0	02-123-84
<b>ASP 95-1</b>						
Chloromethane	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Bromomethane	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Vinyl chloride	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Chloroethane	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Methylene chloride	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Acetone	170	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Carbon disulfide	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
1,1-Dichloroethene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
trans-1,2-Dichloroethene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
1,1-Dichloroethane	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
cis-1,2-Dichloroethene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
MEK(2-Butanone)	33	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Chloroform	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
1,1,1-Trichloroethane	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Carbon tetrachloride	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Benzene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
1,2-Dichloroethane	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Trichloroethene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
1,2-Dichloropropane	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Bromodichloromethane	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
cis-1,3-Dichloropropene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
MIBK(4-Methyl-2-pentanone)	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Toluene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
trans-1,3-Dichloropropene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
1,1,2-Trichloroethane	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Tetrachloroethene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
2-Hexanone	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Dibromochloromethane	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Chlorobenzene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Ethylbenzene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
p-Xylene/m-Xylene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
o-Xylene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Styrene	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
Bromoform	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149
1,1,2,2-Tetrachloroethane	U	ug/kg	10	19-MAY-03 21:27	ASP 95-1	02-067-8149

Results calculated on a dry weight basis.

Approved by: *Daniel J. Dain* Page 1 of 4  
NY 10252 NJ 73168 PA 68180 EPA NY 00033  
Lab Director QC *ear*

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)  
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32 ITHACA STREET  
TELEPHONE (607) 565-8500

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

Date: 12-JUN-2003

Lab Sample ID: L104379-2

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-02  
Description: GRAB, 003/9260  
Sampled On: 07-MAY-03 15:00 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
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Library Search Compounds:	Result	Units	Qual	Rention Time		
Naphthalene, 1 methyl-	25	ug/kg	NJ	21.63		
Naphthalene, 2-methyl	23	ug/kg	NJ	22.52		
Benzene, 1,2,3-trimethyl-	21	ug/kg	NJ	22.74		
Benzene, 1-methyl-3-propyl	19	ug/kg	NJ	23.81		
Benzene, 1-ethenyl-4-methyl	28	ug/kg	NJ	23.92		
Benzene, 1-methyl-4-(1-methyl ethyl)	26	ug/kg	NJ	24.48		
Benzene, 1-ethyl-2,3-dimethyl	31	ug/kg	NJ	24.6		
Naphthalene	10	ug/kg	NJ	12.03		
1,2,4-Trimethylbenzene	15	ug/kg	NJ	23.53		
trans-decahydro-Naphthalene	11	ug/kg	NJ	24.06		
1-methyl-2-propyl-Benzene	11	ug/kg	NJ	24.29		
4-ethyl-1,2-dimethyl-Benzene	16	ug/kg	NJ	24.42		

Library Search Comment: 12 library search compounds detected.

Surrogate Recovery:

1,2-Dichloroethane-d4	111	%	02-067-8149
Toluene-d8	110	%	02-067-8149
4-Bromofluorobenzene	87	%	02-067-8149

ASP 95-2

Bis(2-chloroethyl)ether	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Phenol	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
2-Chlorophenol	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
1,3-Dichlorobenzene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
1,4-Dichlorobenzene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
1,2-Dichlorobenzene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Bis(2-chloroisopropylether)	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
2-Methylphenol	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Hexachloroethane	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
N-Nitrosodi-N-propylamine	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
4-Methylphenol	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Nitrobenzene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Isophorone	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458

Results calculated on a dry weight basis.

Approved by:  
David J. Davis  
Lab Director

Page 2 of 4  
NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc ecr

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

Date: 12-JUN-2003

Lab Sample ID: L104379-2

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-02  
Description: GRAB, 003/9260  
Sampled On: 07-MAY-03 15:00 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
2-Nitrophenol	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
2,4-Dimethylphenol	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Bis(2-chloroethoxymethane)	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
2,4-Dichlorophenol	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
1,2,4-Trichlorobenzene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Naphthalene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
4-Chloroaniline	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Hexachlorobutadiene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
4-Chloro-3-methylphenol	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
2-Methylnaphthalene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Hexachlorocyclopentadiene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
2,4,6-Trichlorophenol	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
2,4,5-Trichlorophenol	U	ug/kg	2000	03-JUN-03 15:50	ASP 95-2	02-011-2458
2-Chloronaphthalene-	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
2-Nitroaniline	U	ug/kg	2000	03-JUN-03 15:50	ASP 95-2	02-011-2458
Dimethyl phthalate	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Acenaphthylene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
2,6-Dinitrotoluene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
3-Nitroaniline	U	ug/kg	2000	03-JUN-03 15:50	ASP 95-2	02-011-2458
Acenaphthene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
2,4-Dinitrophenol	U	ug/kg	2000	03-JUN-03 15:50	ASP 95-2	02-011-2458
Dibenzofuran	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
2,4-Dinitrotoluene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
4-Nitrophenol	U	ug/kg	2000	03-JUN-03 15:50	ASP 95-2	02-011-2458
Diethyl phthalate	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Fluorene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
4-Chlorophenylphenoxyether	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
4-Nitroaniline	U	ug/kg	2000	03-JUN-03 15:50	ASP 95-2	02-011-2458
2-Methyl-4,6-dinitrophenol	U	ug/kg	2000	03-JUN-03 15:50	ASP 95-2	02-011-2458
N-Nitrosodiphenylamine	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
4-Bromophenylphenoxyether	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Hexachlorobenzene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Pentachlorophenol	U	ug/kg	2000	03-JUN-03 15:50	ASP 95-2	02-011-2458
Phenanthrene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Anthracene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Carbazole	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Di-n-butyl phthalate	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Fluoranthene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Pyrene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Butylbenzyl phthalate	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Benzo(a)anthracene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
3,3-Dichlorobenzidine	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458

Results calculated on a dry weight basis.

Approved by: *David J. Davis*  
Lab Director

Page 3 of 4

NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc *ear*

KEY: ND or U = None Detected      < = less than      ug/L = micrograms per liter (equivalent to parts per billion)  
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)  
B = analyte was detected in the method or trip blank      J = result estimated below the quantitation limit

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32 ITHACA STREET  
TELEPHONE (607) 565-8500

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

Date: 12-JUN-2003

Lab Sample ID: L104379-2

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-02  
Description: GRAB, 003/9260  
Sampled On: 07-MAY-03 15:00 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Chrysene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Bis-2-ethylhexyl phthalate	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Di-n-octyl phthalate	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Benzo(b)fluoranthene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Benzo(k)fluoranthene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Benzo(a)pyrene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Indeno(1,2,3-cd)pyrene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Dibenz(a,h)anthracene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458
Benzo(g,h,i)perylene	U	ug/kg	790	03-JUN-03 15:50	ASP 95-2	02-011-2458

Extraction Information:

15-MAY-03 00:00

03-030-19

Library Search Compounds:	Result	Units	Qual	Rention Time
Unknown	480	ug/kg	J	12.14
1-methyl Naphthalene	520	ug/kg	NJ	20.25
1-Dotriacanol	750	ug/kg	NJ	30.41
1-Eicosanol	450	ug/kg	NJ	36.29
Unknown	670	ug/kg	J	37.57
Unknown	10000	ug/kg	J	38.12

Library Search Comment: Six library search compounds detected.

Surrogate Recovery:

2-Fluorophenol	62	%	02-011-2458
Phenol-d5	73	%	02-011-2458
2-Chlorophenol-d4	81	%	02-011-2458
1,2-Dichlorobenzene-d4	77	%	02-011-2458
Nitrobenzene-d5	85	%	02-011-2458
2-Fluorobiphenyl	88	%	02-011-2458
2,4,6-Tribromophenol	60	%	02-011-2458
Terphenyl-d14	83	%	02-011-2458

Results calculated on a dry weight basis.

Approved by:

David J. Davis  
Lab Director

Page 4 of 4

NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc asR

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-3

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: DUP-03-1  
Description: GRAB, 003/9260  
Sampled On: 07-MAY-03 00:00 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	77.2	%		12-MAY-03 16:21	CLP 3.0	02-123-84
<b>ASP 95-1</b>						
Chloromethane	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Bromomethane	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Vinyl chloride	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Chloroethane	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Methylene chloride	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Acetone	140	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Carbon disulfide	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
1,1-Dichloroethene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
trans-1,2-Dichloroethene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
1,1-Dichloroethane	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
cis-1,2-Dichloroethene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
MEK(2-Butanone)	41	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Chloroform	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
1,1,1-Trichloroethane	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Carbon tetrachloride	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Benzene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
1,2-Dichloroethane	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Trichloroethene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
1,2-Dichloropropane	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Bromodichloromethane	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
cis-1,3-Dichloropropene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
MIBK(4-Methyl-2-pentanone)	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Toluene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
trans-1,3-Dichloropropene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
1,1,2-Trichloroethane	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Tetrachloroethene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
2-Hexanone	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Dibromochloromethane	3 J	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Chlorobenzene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Ethylbenzene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
p-Xylene/m-Xylene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
o-Xylene	5 J	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Styrene	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
Bromoform	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150
1,1,2,2-Tetrachloroethane	U	ug/kg	12	19-MAY-03 21:59	ASP 95-1	02-067-8150

Results calculated on a dry weight basis.

Approved by:

Lab Director

Page 1 of 4

NY 10252 NJ 73168 PA 68180 EPA NY 00033

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KEY: ND or U = None Detected

< = less than

ug/L = micrograms per liter (equivalent to parts per billion)

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-3

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: DUP-03-1  
Description: GRAB, 003/9260  
Sampled On: 07-MAY-03 00:00 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Library Search Compounds:						
				Rention Time		
1-methyl-4-(1-methyl ethyl)-cyclohex	23	ug/kg	NJ	21.85		
Naphthalene,1-methyl-	53	ug/kg	NJ	22.48		
1,2,4-trimethyl benzene	19	ug/kg	NJ	22.73		
Benzene, 1-methyl-4-(1-methyl ethyl)	22	ug/kg	NJ	23.23		
1,2,3-trimethyl benzene	28	ug/kg	NJ	23.52		
Unknown hydrocarbon	24	ug/kg	J	23.9		
Benzene,1 (1-methyl-2-(1-methyl ethyl))	27	ug/kg	NJ	24.47		
Benzene,4-ethyl-1,2-dimethyl	30	ug/kg	NJ	24.6		
2,3-dihydro-4,7-dimethyl-1H-Indene	6	ug/kg	NJ	16.48		
2-ethenyl-1,3,5-trimethyl Benzene	6	ug/kg	NJ	20.31		
decahydro Naphthalene	6	ug/kg	NJ	24.05		
Unknown	6	ug/kg	J	24.29		
Library Search Comment: 12 library search compounds detected.						
Surrogate Recovery:						
1,2-Dichloroethane-d4	93	%				02-067-8150
Toluene-d8	120	%				02-067-8150
4-Bromofluorobenzene	82	%				02-067-8150
ASP 95-2						
Bis(2-chloroethyl)ether	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Phenol	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
2-Chlorophenol	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
1,3-Dichlorobenzene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
1,4-Dichlorobenzene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
1,2-Dichlorobenzene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Bis(2-chloroisopropylether)	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
2-Methylphenol	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Hexachloroethane	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
N-Nitrosodi-N-propylamine	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
4-Methylphenol	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Nitrobenzene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Isophorone	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459

Results calculated on a dry weight basis.

Approved by:  
Lab Director

Page 2 of 4  
NY 10252 NJ 73168 PA 68180 EPA NY 00033

occk

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
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32 ITHACA STREET  
TELEPHONE (607) 565-3500

WAVERLY, NY 14892-1582  
FAX (607) 565-4088

Date: 17-JUN-2003

Lab Sample ID: L104379-3

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: DUP-03-1  
Description: GRAB, 003/9260  
Sampled On: 07-MAY-03 00:00 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
2-Nitrophenol	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
2,4-Dimethylphenol	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Bis(2-chloroethoxymethane)	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
2,4-Dichlorophenol	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
1,2,4-Trichlorobenzene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Naphthalene	110 J	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
4-Chloroaniline	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Hexachlorobutadiene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
4-Chloro-3-methylphenol	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
2-Methylnaphthalene	87 J	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Hexachlorocyclopentadiene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
2,4,6-Trichlorophenol	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
2,4,5-Trichlorophenol	U	ug/kg	2100	03-JUN-03 16:49	ASP 95-2	02-011-2459
2-Chloronaphthalene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
2-Nitroaniline	U	ug/kg	2100	03-JUN-03 16:49	ASP 95-2	02-011-2459
Dimethyl phthalate	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Acenaphthylene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
2,6-Dinitrotoluene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
3-Nitroaniline	U	ug/kg	2100	03-JUN-03 16:49	ASP 95-2	02-011-2459
Acenaphthene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
2,4-Dinitrophenol	U	ug/kg	2100	03-JUN-03 16:49	ASP 95-2	02-011-2459
Dibenzofuran	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
2,4-Dinitrotoluene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
4-Nitrophenol	U	ug/kg	2100	03-JUN-03 16:49	ASP 95-2	02-011-2459
Diethyl phthalate	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Fluorene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
4-Chlorophenylphenylether	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
4-Nitroaniline	U	ug/kg	2100	03-JUN-03 16:49	ASP 95-2	02-011-2459
2-Methyl-4,6-dinitrophenol	U	ug/kg	2100	03-JUN-03 16:49	ASP 95-2	02-011-2459
N-Nitrosodiphenylamine	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
4-Bromophenylphenylether	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Hexachlorobenzene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Pentachlorophenol	U	ug/kg	2100	03-JUN-03 16:49	ASP 95-2	02-011-2459
Phenanthrene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Anthracene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Carbazole	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Di-n-butyl phthalate	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Fluoranthene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Pyrene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Butylbenzyl phthalate	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Benzo(a)anthracene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
3,3-Dichlorobenzidine	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459

Results calculated on a dry weight basis.

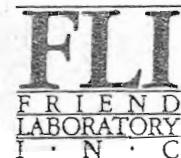
Approved by:  
David J. Davis  
Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc/ear

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-3

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: DUP-03-1  
Description: GRAB, 003/9260  
Sampled On: 07-MAY-03 00:00 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Chrysene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Bis-2-ethylhexyl phthalate	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Di-n-octyl phthalate	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Benzo(b)fluoranthene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Benzo(k)fluoranthene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Benzo(a)pyrene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Indeno(1,2,3-cd)pyrene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Dibenz(a,h)anthracene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459
Benzo(g,h,i)perylene	U	ug/kg	860	03-JUN-03 16:49	ASP 95-2	02-011-2459

Extraction Information:

15-MAY-03 00:00

03-030-19

Library Search Compounds:	Result	Units	Qual	Rention Time
Unknown	270	ug/kg	J	12.15
Unknown	190	ug/kg	J	25.76
Hexadecanoic Acid	180	ug/kg	NJ	28.89
Unknown PAH	220	ug/kg	J	32.32
Unknown	3100	ug/kg	J	36.25
1-nonadecanol	730	ug/kg	NJ	36.29
Unknown	4500	ug/kg	J	38.13
1-Decene	870	ug/kg	NJB	22.67
(E)-3-Eicosene	960	ug/kg	NJ	34.42

Library Search Comment: Nine library search compounds detected.

Surrogate Recovery:

2-Fluorophenol	57	%	02-011-2459
Phenol-d5	69	%	02-011-2459
2-Chlorophenol-d4	76	%	02-011-2459
1,2-Dichlorobenzene-d4	67	%	02-011-2459
Nitrobenzene-d5	79	%	02-011-2459
2-Fluorobiphenyl	82	%	02-011-2459
2,4,6-Tribromophenol	74	%	02-011-2459
Terphenyl-d14	83	%	02-011-2459

Results calculated on a dry weight basis.

Approved by:

Lab Director

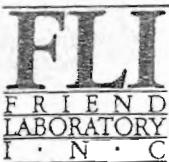
Page 4 of 4

NY 10252 NJ 73168 PA 68180 EPA NY 00033

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KEY: ND or U = None Detected      < = less than      ug/L = micrograms per liter (equivalent to parts per billion)  
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)  
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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-4

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-3  
Description: GRAB, 003/9260  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	80	%		12-MAY-03 16:21	CLP 3.0	02-123-84
ASP 95-1						
Chloromethane	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Bromomethane	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Vinyl chloride	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Chloroethane	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Methylene chloride	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Acetone	59	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Carbon disulfide	7 J	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
1,1-Dichloroethene	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
trans-1,2-Dichloroethene	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
1,1-Dichloroethane	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
cis-1,2-Dichloroethene	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
MEK(2-Butanone)	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Chloroform	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
1,1,1-Trichloroethane	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Carbon tetrachloride	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Benzene	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
1,2-Dichloroethane	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Trichloroethene	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
1,2-Dichloropropane	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Bromodichloromethane	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
cis-1,3-Dichloropropene	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
MIBK(4-Methyl-2-pentanone)	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Toluene	5 J	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
trans-1,3-Dichloropropene	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
1,1,2-Trichloroethane	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Tetrachloroethene	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
2-Hexanone	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Dibromochloromethane	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Chlorobenzene	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Ethylbenzene	3 J	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
p-Xylene/m-Xylene	12 J	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
o-Xylene	9 J	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Styrene	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
Bromoform	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151
1,1,2,2-Tetrachloroethane	U	ug/kg	12	19-MAY-03 22:32	ASP 95-1	02-067-8151

Results calculated on a dry weight basis.

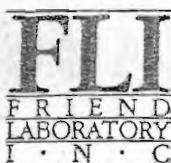
Approved by: *David J. Davis*  
Lab Director

Page 1 of 5

qc/ear

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-4

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-3  
Description: GRAB, 003/9260  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
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Library Search Compounds:	Result	Units	Qual	Rention Time	
Benzene, 1,2,3-trimethyl benzene	180	ug/kg	NJ	22.73	
1,2,4-trimethyl benzene	180	ug/kg	NJ	23.52	
Undecane	700	ug/kg	NJ	23.85	
Benzene, methyl (1-methyl ethyl)	150	ug/kg	NJ	24.41	
Benzene, 1-methyl-2-(1-methyl ethyl)	190	ug/kg	NJ	24.47	
Benzene, 2-ethyl-1,4-dimethyl	190	ug/kg	NJ	24.59	
1-ethyl-2-methyl Benzene	87	ug/kg	NJ	21.87	
2,2,4,6,6-pentamethyl-3-Heptene	110	ug/kg	NJ	22.24	
Unknown	110	ug/kg	J	23.01	
1-methyl-3-(1-methyl ethyl) Benzene	100	ug/kg	NJ	23.13	
trans-decahydro-Naphthalene	150	ug/kg	NJ	24.05	
Unknown	89	ug/kg	J	24.29	

Library Search Comment: 12 library search compounds detected.

Surrogate Recovery:

1,2-Dichloroethane-d4	106	%	02-067-8151
Toluene-d8	114	%	02-067-8151
4-Bromofluorobenzene	88	%	02-067-8151

ASP 95-2

Bis(2-chloroethyl)ether	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Phenol	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
2-Chlorophenol	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
1,3-Dichlorobenzene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
1,4-Dichlorobenzene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
1,2-Dichlorobenzene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Bis(2-chloroisopropylether)	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
2-Methylphenol	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Hexachloroethane	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
N-Nitrosodi-N-propylamine	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
4-Methylphenol	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Nitrobenzene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Isophorone	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496

Results calculated on a dry weight basis.

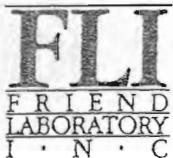
Approved by:  
Lab Director

Page 2 of 5  
NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC OK

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-4

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-3  
Description: GRAB, 003/9260  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
2-Nitrophenol	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
2,4-Dimethylphenol	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Bis(2-chloroethoxymethane)	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
2,4-Dichlorophenol	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
1,2,4-Trichlorobenzene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Naphthalene	3800	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
4-Chloroaniline	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Hexachlorobutadiene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
4-Chloro-3-methylphenol	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
2-Methylnaphthalene	7500	ug/kg	4100	03-JUN-03 17:47	ASP 95-2	02-011-2460
Hexachlorocyclopentadiene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
2,4,6-Trichlorophenol	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
2,4,5-Trichlorophenol	U	ug/kg	2100	09-JUN-03 11:43	ASP 95-2	02-011-2496
2-Chloronaphthalene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
2-Nitroaniline	U	ug/kg	2100	09-JUN-03 11:43	ASP 95-2	02-011-2496
Dimethyl phthalate	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Acenaphthylene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
2,6-Dinitrotoluene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
3-Nitroaniline	U	ug/kg	2100	09-JUN-03 11:43	ASP 95-2	02-011-2496
Acenaphthene	180 J	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
2,4-Dinitrophenol	U	ug/kg	2100	09-JUN-03 11:43	ASP 95-2	02-011-2496
Dibenzofuran	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
2,4-Dinitrotoluene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
4-Nitrophenol	U	ug/kg	2100	09-JUN-03 11:43	ASP 95-2	02-011-2496
Diethyl phthalate	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Fluorene	240 J	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
4-Chlorophenylphenylether	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
4-Nitroaniline	U	ug/kg	2100	09-JUN-03 11:43	ASP 95-2	02-011-2496
2-Methyl-4,6-dinitrophenol	U	ug/kg	2100	09-JUN-03 11:43	ASP 95-2	02-011-2496
N-Nitrosodiphenylamine	720 J	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
4-Bromophenylphenylether	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Hexachlorobenzene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Pentachlorophenol	U	ug/kg	2100	09-JUN-03 11:43	ASP 95-2	02-011-2496
Phenanthrene	1200	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Anthracene	200 J	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Carbazole	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Di-n-butyl phthalate	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Fluoranthene	720 J	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Pyrene	540 J	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Butylbenzyl phthalate	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Benzo(a)anthracene	260 J	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
3,3-Dichlorobenzidine	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496

Results calculated on a dry weight basis.

Approved by:  
Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC ECR

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
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32 ITHACA STREET  
TELEPHONE (607) 565-3500

WAVERLY, NY 14892-1532  
FAX (607) 565-4088

Date: 17-JUN-2003

Lab Sample ID: L104379-4

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-3  
Description: GRAB, 003/9260  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Chrysene	310 J	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Bis-2-ethylhexyl phthalate	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Di-n-octyl phthalate	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Benzo(b)fluoranthene	270 J	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Benzo(k)fluoranthene	130 J	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Benzo(a)pyrene	160 J	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Indeno(1,2,3-cd)pyrene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Dibenzo(a,h)anthracene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496
Benzo(g,h,i)perylene	U	ug/kg	830	09-JUN-03 11:43	ASP 95-2	02-011-2496

Extraction Information:

15-MAY-03 00:00

03-030-19

Library Search Compounds:	Result	Units	Qual	Rention Time
Unknown	17000	ug/kg	J	15.91
Unknown	1500	ug/kg	J	17.29
Unknown	1400	ug/kg	J	18.16
Unknown	960	ug/kg	J	18.78
Unknown	950	ug/kg	J	19.22
1-methyl naphthalene	2400	ug/kg	NJ	20.23
Unknown	1800	ug/kg	J	20.54
1,7-dimethyl naphthalene	1200	ug/kg	NJ	21.85
2,3-dimethyl naphthalene	1300	ug/kg	NJ	22.09
2,7-dimethyl naphthalene	840	ug/kg	NJ	22.16
Unknown	870	ug/kg	J	22.29
2,3,6-trimethyl naphthalene	1500	ug/kg	NJ	23.69
1,4,6-trimethyl Naphthalene	1200	ug/kg	NJ	23.8
1,2,4,5-Tetramethyl benzene	2100	ug/kg	NJ	16.47
Unknown Hydrocarbon	1800	ug/kg	J	19.05
Unknown Hydrocarbon	820	ug/kg	J	23.85
Unknown Hydrocarbon	1700	ug/kg	J	34.37

Library Search Comment: 17 library search compounds detected.

Results calculated on a dry weight basis.

Approved by:

Lab Director

Page 4 of 5  
NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc/akr

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-4

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: ss-03-3  
Description: GRAB, 003/9260  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Surrogate Recovery:						
2-Fluorophenol	47	%				02-011-2496
Phenol-d5	56	%				02-011-2496
2-Chlorophenol-d4	63	%				02-011-2496
1,2-Dichlorobenzene-d4	48	%				02-011-2460
1,2-Dichlorobenzene-d4	51	%				02-011-2496
Nitrobenzene-d5	65	%				02-011-2460
Nitrobenzene-d5	69	%				02-011-2496
2-Fluorobiphenyl	71	%				02-011-2460
2-Fluorobiphenyl	80	%				02-011-2496
2,4,6-Tribromophenol	60	%				02-011-2496
Terphenyl-d14	69	%				02-011-2496
Terphenyl-d14	69	%				02-011-2460

Results calculated on a dry weight basis.

Approved by:

Lab Director

Page 5 of 5  
NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc/pah

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32 ITHACA STREET  
TELEPHONE (607) 565-8500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-5

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: L104379-4MS, SS-03-3  
Description: L104379-4  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
<b>ASP 95-1</b>						
Chloromethane	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Bromomethane	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Vinyl chloride	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Chloroethane	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Methylene chloride	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Acetone	7 J	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Carbon disulfide	4 J	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
1,1-Dichloroethene	73	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
trans-1,2-Dichloroethene	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
1,1-Dichloroethane	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
cis-1,2-Dichloroethene-	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
MEK(2-Butanone)	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Chloroform	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
1,1,1-Trichloroethane	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Carbon tetrachloride	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Benzene	54	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
1,2-Dichloroethane	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Trichloroethene	58	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
1,2-Dichloropropane	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Bromodichloromethane	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
cis-1,3-Dichloropropene	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
MIBK(4-Methyl-2-pentanone)	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Toluene	68	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
trans-1,3-Dichloropropene	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
1,1,2-Trichloroethane	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Tetrachloroethene	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
2-Hexanone	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Dibromochloromethane	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Chlorobenzene	58	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Ethylbenzene	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
p-Xylene/m-Xylene	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
o-Xylene	4 J	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Styrene	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
Bromoform	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128
1,1,2,2-Tetrachloroethane	U	ug/kg	11	16-MAY-03 19:04	ASP 95-1	02-067-8128

Results calculated on a dry weight basis.

Approved by:  
Lab Director

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QC RR

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-5

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: L104379-4MS, SS-03-3  
Description: L104379-4  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Surrogate Recovery:						
1,2-Dichloroethane-d4	92	%				02-067-8128
Toluene-d8	126	%				02-067-8128
4-Bromofluorobenzene	98	%				02-067-8128
<b>ASP 95-2</b>						
Bis(2-chloroethyl)ether	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Phenol	810 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
2-Chlorophenol	740 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
1,3-Dichlorobenzene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
1,4-Dichlorobenzene	470 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
1,2-Dichlorobenzene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Bis(2-chloroisopropyl)ether	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
2-Methylphenol	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Hexachloroethane	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
N-Nitrosodi-N-propylamine	540 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
4-Methylphenol	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Nitrobenzene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Isophorone	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
2-Nitrophenol	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
2,4-Dimethylphenol	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Bis(2-chloroethoxymethane)	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
2,4-Dichlorophenol	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
1,2,4-Trichlorobenzene	530 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Naphthalene	3100	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
4-Chloroaniline	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Hexachlorobutadiene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
4-Chloro-3-methylphenol	850	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
2-Methylnaphthalene	6900 E	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Hexachlorocyclopentadiene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
2,4,6-Trichlorophenol	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
2,4,5-Trichlorophenol	U	ug/kg	2000	09-JUN-03 12:42	ASP 95-2	02-011-2497
2-Chloronaphthalene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
2-Nitroaniline	U	ug/kg	2000	09-JUN-03 12:42	ASP 95-2	02-011-2497
Dimethyl phthalate	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Acenaphthylene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
2,6-Dinitrotoluene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
3-Nitroaniline	U	ug/kg	2000	09-JUN-03 12:42	ASP 95-2	02-011-2497
Acenaphthene	720 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497

Results calculated on a dry weight basis.

Approved by:

David J. Davis  
Lab Director

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qc 22R

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-5

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: L104379-4MS, SS-03-3  
Description: L104379-4  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
2,4-Dinitrophenol	U	ug/kg	2000	09-JUN-03 12:42	ASP 95-2	02-011-2497
Dibenzofuran	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
2,4-Dinitrotoluene	500 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
4-Nitrophenol	1100 J	ug/kg	2000	09-JUN-03 12:42	ASP 95-2	02-011-2497
Diethyl phthalate	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Fluorene	200 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
4-Chlorophenylphenylether	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
4-Nitroaniline	U	ug/kg	2000	09-JUN-03 12:42	ASP 95-2	02-011-2497
2-Methyl-4,6-dinitrophenol	U	ug/kg	2000	09-JUN-03 12:42	ASP 95-2	02-011-2497
N-Nitrosodiphenylamine	650 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
4-Bromophenylphenylether	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Hexachlorobenzene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Pentachlorophenol	580 J	ug/kg	2000	09-JUN-03 12:42	ASP 95-2	02-011-2497
Phenanthrene	870	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Anthracene	130 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Carbazole	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Di-n-butyl phthalate	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Fluoranthene	340 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Pyrene	830	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Butylbenzyl phthalate	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Benzo(a)anthracene	130 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
3,3-Dichlorobenzidine	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Chrysene	140 J	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Bis-2-ethylhexyl phthalate	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Di-n-octyl phthalate	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Benzo(b)fluoranthene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Benzo(k)fluoranthene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Benzo(a)pyrene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Indeno(1,2,3-cd)pyrene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Dibenzo(a,h)anthracene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497
Benzo(g,h,i)perylene	U	ug/kg	820	09-JUN-03 12:42	ASP 95-2	02-011-2497

Extraction Information:

15-MAY-03 00:00

03-030-19

Results calculated on a dry weight basis.

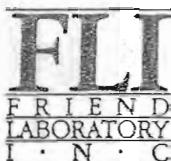
Approved by:  
Lab Director

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NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC *OK*

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-5

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: L104379-4MS, SS-03-3  
Description: L104379-4  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Surrogate Recovery:						
2-Fluorophenol	21	%				02-011-2497
Phenol-d5	24	%				02-011-2497
2-Chlorophenol-d4	29	%				02-011-2497
1,2-Dichlorobenzene-d4	25	%				02-011-2497
Nitrobenzene-d5	31	%				02-011-2497
2-Fluorobiphenyl	32	%				02-011-2497
2,4,6-Tribromophenol	22	%				02-011-2497
Terphenyl-d14	26	%				02-011-2497

Analysis Comment: E - Estimated above calibration range. D - Diluted.

Results calculated on a dry weight basis.

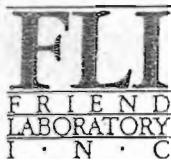
Approved by: *David J. Davis*  
Lab Director

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NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc ear

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

WAVERLY, NY 14892-1532  
FAX (607) 565-4088

Date: 17-JUN-2003

Lab Sample ID: L104379-6

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: L104379-4MSD/DUP, SS-03-3  
Description: L104379-4  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
ASP 95-1						
Chloromethane	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Bromomethane	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Vinyl chloride	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Chloroethane	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Methylene chloride	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Acetone	8 J	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Carbon disulfide	4 J	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
1,1-Dichloroethene	53	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
trans-1,2-Dichloroethene	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
1,1-Dichloroethane	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
cis-1,2-Dichloroethene	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
MEK(2-Butanone)	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Chloroform	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
1,1,1-Trichloroethane	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Carbon tetrachloride	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Benzene	55	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
1,2-Dichloroethane	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Trichloroethene	60	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
1,2-Dichloropropane	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Bromodichloromethane	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
cis-1,3-Dichloropropene	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
MIBK(4-Methyl-2-pentanone)	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Toluene	63	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
trans-1,3-Dichloropropene	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
1,1,2-Trichloroethane	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Tetrachloroethene	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
2-Hexanone	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Dibromochloromethane	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Chlorobenzene	59	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Ethylbenzene	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
p-Xylene/m-Xylene	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
o-Xylene	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Styrene	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
Bromoform	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129
1,1,2,2-Tetrachloroethane	U	ug/kg	12	16-MAY-03 19:37	ASP 95-1	02-067-8129

Results calculated on a dry weight basis.

Approved by:  
David J. Davis  
Lab Director

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NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc/ak

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

Date: 17-JUN-2003

Lab Sample ID: L104379-6

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: L104379-4MSD/DUP, SS-03-3  
Description: L104379-4  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Surrogate Recovery:						
1,2-Dichloroethane-d4	87	%				02-067-8129
Toluene-d8	117	%				02-067-8129
4-Bromofluorobenzene	108	%				02-067-8129
ASP 95-2						
Bis(2-chloroethyl)ether	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Phenol	1100	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
2-Chlorophenol	1100	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
1,3-Dichlorobenzene	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
1,4-Dichlorobenzene	560 J	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
1,2-Dichlorobenzene	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Bis(2-chloroisopropyl)ether	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
2-Methylphenol	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Hexachloroethane	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
N-Nitrosodi-N-propylamine	710 J	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
4-Methylphenol	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Nitrobenzene	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Isophorone	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
2-Nitrophenol	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
2,4-Dimethylphenol	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Bis(2-chloroethoxymethane)	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
2,4-Dichlorophenol	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
1,2,4-Trichlorobenzene	840	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Naphthalene	4600	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
4-Chloroaniline	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Hexachlorobutadiene	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
4-Chloro-3-methylphenol	1400	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
2-Methylnaphthalene	9700 E	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Hexachlorocyclopentadiene	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
2,4,6-Trichlorophenol	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
2,4,5-Trichlorophenol	U	ug/kg	2100	09-JUN-03 13:42	ASP 95-2	02-011-2498
2-Chloronaphthalene	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
2-Nitroaniline	U	ug/kg	2100	09-JUN-03 13:42	ASP 95-2	02-011-2498
Dimethyl phthalate	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Acenaphthylene	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
2,6-Dinitrotoluene	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
3-Nitroaniline	U	ug/kg	2100	09-JUN-03 13:42	ASP 95-2	02-011-2498
Acenaphthene	1300	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498

Results calculated on a dry weight basis.

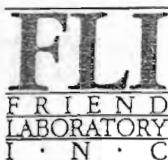
Approved by: *David J. Davis*  
Lab Director

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NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC *OK*

KEY: ND or U = None Detected      < = less than      ug/L = micrograms per liter (equivalent to parts per billion)  
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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-6

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: L104379-4MSD/DUP, SS-03-3  
Description: L104379-4  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
2,4-Dinitrophenol	U	ug/kg	2100	09-JUN-03 13:42	ASP 95-2	02-011-2498
Dibenzofuran	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
2,4-Dinitrotoluene	840	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
4-Nitrophenol	1300 J	ug/kg	2100	09-JUN-03 13:42	ASP 95-2	02-011-2498
Diethyl phthalate	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Fluorene	440 J	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
4-Chlorophenylphenoxyether	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
4-Nitroaniline	U	ug/kg	2100	09-JUN-03 13:42	ASP 95-2	02-011-2498
2-Methyl-4,6-dinitrophenol	U	ug/kg	2100	09-JUN-03 13:42	ASP 95-2	02-011-2498
N-Nitrosodiphenylamine	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
4-Bromophenylphenoxyether	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Hexachlorobenzene	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Pentachlorophenol	920 J	ug/kg	2100	09-JUN-03 13:42	ASP 95-2	02-011-2498
Phenanthere	1700	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Anthracene	270 J	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Carbazole	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Di-n-butyl phthalate	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Fluoranthene	610 J	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Pyrene	1700	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Butylbenzyl phthalate	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Benzo(a)anthracene	270 J	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
3,3-Dichlorobenzidine	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Chrysene	300 J	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Bis-2-ethylhexyl phthalate	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Di-n-octyl phthalate	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Benzo(b)fluoranthene	300 J	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Benzo(k)fluoranthene	94 J	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Benzo(a)pyrene	150 J	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Indeno(1,2,3-cd)pyrene	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Dibenzo(a,h)anthracene	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498
Benzo(g,h,i)perylene	U	ug/kg	830	09-JUN-03 13:42	ASP 95-2	02-011-2498

Extraction Information:

15-MAY-03 00:00

03-030-19

Results calculated on a dry weight basis.

Approved by:  
Daniel J. Davis  
Lab Director

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NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc/qcR

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-6

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: L104379-4MSD/DUP, SS-03-3  
Description: L104379-4  
Sampled On: 08-MAY-03 08:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Surrogate Recovery:						
2-Fluorophenol	29	%				02-011-2498
Phenol-d5	36	%				02-011-2498
2-Chlorophenol-d4	41	%				02-011-2498
1,2-Dichlorobenzene-d4	30	%				02-011-2498
Nitrobenzene-d5	44	%				02-011-2498
2-Fluorobiphenyl	50	%				02-011-2498
2,4,6-Tribromophenol	36	%				02-011-2498
Terphenyl-d14	46	%				02-011-2498

Analysis Comment: E - Estimated above calibration range.

Results calculated on a dry weight basis.

Approved by:  
*David J. Davis*  
Lab Director

Page 4 of 4  
NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc ear

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TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-7

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-4  
Description: GRAB, 003/9260  
Sampled On: 08-MAY-03 11:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	72.9	%		12-MAY-03 16:21	CLP 3.0	02-123-84
ASP 95-1						
Chloromethane	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Bromomethane	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Vinyl chloride	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Chloroethane	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Methylene chloride	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Acetone	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Carbon disulfide	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
1,1-Dichloroethene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
trans-1,2-Dichloroethene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
1,1-Dichloroethane	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
cis-1,2-Dichloroethene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
MEK(2-Butanone)	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Chloroform	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
1,1,1-Trichloroethane	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Carbon tetrachloride	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Benzene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
1,2-Dichloroethane	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Trichloroethene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
1,2-Dichloropropane	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Bromodichloromethane	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
cis-1,3-Dichloropropene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
MIBK(4-Methyl-2-pentanone)	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Toluene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
trans-1,3-Dichloropropene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
1,1,2-Trichloroethane	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Tetrachloroethene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
2-Hexanone	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Dibromochloromethane	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Chlorobenzene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Ethylbenzene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
p-Xylene/m-Xylene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
o-Xylene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Styrene	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
Bromoform	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147
1,1,2,2-Tetrachloroethane	U	ug/kg	1500	19-MAY-03 20:21	ASP 95-1	02-067-8147

Results calculated on a dry weight basis.

Approved by:  
David J. Davis  
Lab Director

Page 1 of 5  
NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc ea

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-7

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-4  
Description: GRAB, 003/9260  
Sampled On: 08-MAY-03 11:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Library Search Compounds:						
	Result	Units	Qual	Rention Time		
Unknown	1700	ug/kg	J	17.85		
Unknown	1500	ug/kg	J	19.05		
Naphthalene, 1-methyl	3400	ug/kg	JN	21.65		
1,4-Methanonaphthalene,1,4-dihydro	1800	ug/kg	JN	22.54		
Benzene,1-methyl-2-(1-methylethyl)	1900	ug/kg	JN	24.48		
Tridecane	1300	ug/kg	JN	13.49		
1,2,3,4-tetrahydro-6-methyl-Naphthalene	1200	ug/kg	JN	18.24		
Unknown	1300	ug/kg	J	18.28		
1,1-dimethyl-1H-Indene	1300	ug/kg	JN	18.72		
Undecane	1300	ug/kg	JN	23.87		
trans-decahydro Naphthalene	1400	ug/kg		24.06		

Library Search Comment: 11 library search compounds detected.

Surrogate Recovery:

1,2-Dichloroethane-d4	78	%	02-067-8147
Toluene-d8	99	%	02-067-8147
4-Bromofluorobenzene	98	%	02-067-8147

ASP 95-2

Bis(2-chloroethylether)	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Phenol	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
2-Chlorophenol	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
1,3-Dichlorobenzene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
1,4-Dichlorobenzene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
1,2-Dichlorobenzene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Bis(2-chloroisopropylether)	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
2-Methylphenol	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Hexachloroethane	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
N-Nitrosodi-N-propylamine	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
4-Methylphenol	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Nitrobenzene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Isophorone	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
2-Nitrophenol	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468

Results calculated on a dry weight basis.

Approved by:

Lab Director

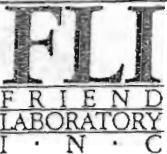
Page 2 of 5

NY 10252 NJ 73168 PA 68180 EPA NY 00033

qc\_oak

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32 ITHACA STREET  
TELEPHONE (607) 565-8500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-7

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-4  
Description: GRAB, 003/9260  
Sampled On: 08-MAY-03 11:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
2,4-Dimethylphenol	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Bis(2-chloroethoxymethane)	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
2,4-Dichlorophenol	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
1,2,4-Trichlorobenzene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Naphthalene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
4-Chloroaniline	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Hexachlorobutadiene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
4-Chloro-3-methylphenol	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
2-Methylnaphthalene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Hexachlorocyclopentadiene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
2,4,6-Trichlorophenol	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
2,4,5-Trichlorophenol	U	ug/kg	4600	04-JUN-03 16:04	ASP 95-2	02-011-2468
2-Chloronaphthalene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
2-Nitroaniline	U	ug/kg	4600	04-JUN-03 16:04	ASP 95-2	02-011-2468
Dimethyl phthalate	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Acenaphthylene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
2,6-Dinitrotoluene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
3-Nitroaniline	U	ug/kg	4600	04-JUN-03 16:04	ASP 95-2	02-011-2468
Acenaphthene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
2,4-Dinitrophenol	U	ug/kg	4600	04-JUN-03 16:04	ASP 95-2	02-011-2468
Dibenzofuran	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
2,4-Dinitrotoluene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
4-Nitrophenol	U	ug/kg	4600	04-JUN-03 16:04	ASP 95-2	02-011-2468
Diethyl phthalate	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Fluorene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
4-Chlorophenylphenylether	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
4-Nitroaniline	U	ug/kg	4600	04-JUN-03 16:04	ASP 95-2	02-011-2468
2-Methyl-4,6-dinitrophenol	U	ug/kg	4600	04-JUN-03 16:04	ASP 95-2	02-011-2468
N-Nitrosodiphenylamine	610 J	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
4-Bromophenylphenylether	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Hexachlorobenzene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Pentachlorophenol	U	ug/kg	4600	04-JUN-03 16:04	ASP 95-2	02-011-2468
Phenanthrene	950 J	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Anthracene	210 J	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Carbazole	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Di-n-butyl phthalate	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Fluoranthene	720 J	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Pyrene	540 J	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Butylbenzyl phthalate	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Benzo(a)anthracene	260 J	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
3,3-Dichlorobenzidine	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Chrysene	240 J	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468

Results calculated on a dry weight basis.

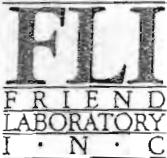
Approved by:  
Lab Director

Page 3 of 5  
NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC QAR

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mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)  
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32 ITHACA STREET  
TELEPHONE (607) 565-8500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-7

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-4  
Description: GRAB, 003/9260  
Sampled On: 08-MAY-03 11:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Bis-2-ethylhexyl phthalate	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Di-n-octyl phthalate	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Benzo(b)fluoranthene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Benzo(k)fluoranthene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Benzo(a)pyrene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Indeno(1,2,3-cd)pyrene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Dibenzo(a,h)anthracene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468
Benzo(g,h,i)perylene	U	ug/kg	1800	04-JUN-03 16:04	ASP 95-2	02-011-2468

Extraction Information:

15-MAY-03 00:00

03-030-19

Library Search Compounds:	Result	Units	Qual	Rention Time
Unknown PAH	850	ug/kg	J	15.55
Decahydro-2-methyl naphthalene	1900	ug/kg	NJ	16.01
Unknown Aromatic	1400	ug/kg	J	16.53
Unknown	1900	ug/kg	J	17.38
Unknown Aromatic	1100	ug/kg	J	17.65
1-ethyl-4-(1-methyl ethyl) Benzene	760	ug/kg	NJ	17.92
Unknown	1000	ug/kg	J	18.03
Unknown Aromatic	1900	ug/kg	J	18.24
Unknown	680	ug/kg	J	18.31
Unknown	2260	ug/kg	J	18.44
Unknown	740	ug/kg	J	18.75
Unknown	1100	ug/kg	J	18.86
Unknown	1000	ug/kg	J	19.04
Unknown	1840	ug/kg	J	19.12
Unknown	750	ug/kg	J	19.46
Unknown	680	ug/kg	J	19.73
Unknown	710	ug/kg	J	19.95
1-methyl Naphthalene	1300	ug/kg	NJ	20.28
Unknown	1000	ug/kg	J	20.62
2,6-diemthyl Naphthalene	860	ug/kg	NJ	21.93
2,3,6-trimethyl Naphthalene	900	ug/kg	NJ	23.77
1,4,6-trimethyl Naphthalene	680	ug/kg	NJ	24.11
Unknown	860	ug/kg	J	26.1
2,2,4,6,6-Pentamethyl-3-heptene	1100	ug/kg	NJ	12.27
Unknown Hydrocarbon	1000	ug/kg	J	22.41

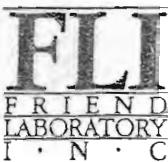
Results calculated on a dry weight basis.

Approved by: *David J. Davis* Page 4 of 5  
Lab Director NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC *CCR*

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)  
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 17-JUN-2003

Lab Sample ID: L104379-7

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT HEAT TRANSFER  
Origin: SS-03-4  
Description: GRAB, 003/9260  
Sampled On: 08-MAY-03 11:30 by CLIENT  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Library Search Compounds:	Result	Units	Qual	Rention Time		
Unknown Hydrocarbon	680	ug/kg	J	25.06		
Unknown Hydrocarbon	1400	ug/kg	J	25.8		
Library Search Comment:	27 library search compounds detected.					
Surrogate Recovery:						
2-Fluorophenol	43	%				02-011-2468
Phenol-d5	50	%				02-011-2468
2-Chlorophenol-d4	57	%				02-011-2468
1,2-Dichlorobenzene-d4	44	%				02-011-2468
Nitrobenzene-d5	56	%				02-011-2468
2-Fluorobiphenyl	59	%				02-011-2468
2,4,6-Tribromophenol	58	%				02-011-2468
Terphenyl-d14	54	%				02-011-2468

Results calculated on a dry weight basis.

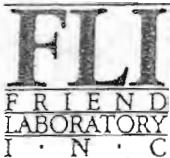
Approved by: *Daniel J. Davis*  
Lab Director

Page 5 of 5  
NY 10252 NJ 73168 PA 68180 EPA NY 00033

*qc kar*

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)  
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 12-JUN-2003

Lab Sample ID: L104379-8

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source:	FRIEND LABORATORY, INC.
Origin:	TRIP BLANK
Description:	95-045-109-6
Sampled On:	07-MAY-03 00:00 by LAB
Date Received:	09-MAY-03 15:05
P.O. No:	N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
<b>ASP 95-1</b>						
Chloromethane	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Bromomethane	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Vinyl chloride	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Chloroethane	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Methylene chloride	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Acetone	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Carbon disulfide	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
1,1-Dichloroethene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
trans-1,2-Dichloroethene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
1,1-Dichloroethane	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
cis-1,2-Dichloroethene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
MEK(2-Butanone)	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Chloroform	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
1,1,1-Trichloroethane	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Carbon tetrachloride	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Benzene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
1,2-Dichloroethane	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Trichloroethene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
1,2-Dichloropropane	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Bromodichloromethane	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
cis-1,3-Dichloropropene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
MIBK(4-Methyl-2-pentanone)	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Toluene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
trans-1,3-Dichloropropene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
1,1,2-Trichloroethane	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Tetrachloroethene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
2-Hexanone	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Dibromochloromethane	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Chlorobenzene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Ethylbenzene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
p-Xylene/m-Xylene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
o-Xylene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Styrene	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
Bromoform	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139
1,1,2,2-Tetrachloroethane	U	ug/l	10	19-MAY-03 15:59	ASP 95-1	02-067-8139

Results calculated on a dry weight basis.

Approved by:  
Lab Director

Page 1 of 2

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC ear

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
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B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 12-JUN-2003

Lab Sample ID: L104379-8

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: FRIEND LABORATORY, INC.  
Origin: TRIP BLANK  
Description: 95-045-109-6  
Sampled On: 07-MAY-03 00:00 by TAB  
Date Received: 09-MAY-03 15:05  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
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Library Search Compounds:	Result	Units	Qual	Rention Time	
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Library Search Comment: No library search compounds detected.

Surrogate Recovery:

1,2-Dichloroethane-d4	105	%	02-067-8139
Toluene-d8	106	%	02-067-8139
4-Bromofluorobenzene	96	%	02-067-8139

Results calculated on a dry weight basis.

Approved by: *Daniel J. Davis*  
Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

*qc seal*

Page 2 of 2

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## Laboratory Validation and Usability Assessment

Project: Golder Associates, Inc.  
003-9260 ITT Heat Transfer  
Sampled May 7 & 8, 2003

The data reported in this package have been reviewed for compliance with QC acceptance limits as specified in the method cited for each analysis.

These statistical limits are typically based on historical laboratory data for a given sample matrix, and will not exceed any default limits specified by the method. CLP acceptance limits are also considered.

The following Quality Control operations are considered in the validation of reported results:

Holding times, surrogate recovery, spiked sample recovery, duplicates/spiked duplicate precision, tuning criteria, internal standard variation, continuing calibration variation, reference (check) sample recovery, and instrument, method, trip and field blanks. The appropriate frequency for each operation is also considered.

Every effort has been made to report data that is compliant with the EPA methodology cited for each analysis. In cases where the laboratory was unable to meet all method requirements prior to sample expiry, either due to the nature of the sample or other technical difficulty, results are reported with qualification with the understanding that qualified results may not be suitable for compliance purposes. The internal technical review is based on the USEPA Contract Laboratory Program *National Functional Guidelines for Organic Review* (EPA 540/R-94/012, February 1994) and *National Functional Guidelines for Inorganic Review* (EPA 540/R-94/013, February 1994).

### Validation

Five site samples, one matrix spike/matrix spike duplicate set, and a trip blank were received on May 9, 2003. The temperature, as received with ice, was 1.3°C.

## **Volatiles**

Site samples were analyzed by NYSDEC ASP method 95-1 for the Target Compound List using a five-milliliter purge volume.

RTX-624 0.25-mm ID capillary columns are used with a Hewlett-Packard 5890 GC in combination with a 5971A Mass Selective Detector. A Tekmar 2016 autosampler is used to analyze samples for the MSD-C instrument. HP Chemstation version B.02.04 is used to acquire data. HP Chemstation Enviroquant software G1701AA version A.03.00 is used to process data. The current mass spectral library is the NIST NBS75K.

Surrogate recoveries were within acceptance limits for the site samples.

Site sample SS-03-3 was spiked in duplicate. Spike recoveries were within the acceptance limits.

Precision, as indicated by RPD, was within the acceptance limits, with one exception. RPD for 1,1-Dichloroethene was above the acceptance limit. Since 1,1-Dichloroethene was not detected in the site sample, no qualification was made.

One low-level soil blank spike and one medium-level blank spike were associated with the site samples. Blank spike recoveries were within acceptance limits.

No other analytical difficulties were encountered.

## **Semivolatiles**

Site samples were analyzed by NYSDEC ASP method 95-2 for the Target Compound List, using a two-microliter injection.

RTX-5 0.28-mm ID capillary columns are used with a Hewlett-Packard 5890 GC in combination with a 5971A Mass Selective Detector. A HP 7673 autosampler is used to inject samples. HP Chemstation version B.02.04 is used to acquire data. HP Chemstation Enviroquant software G1701AA version A.03.00 is used to process data. The current mass spectral library is the NIST NBS75K.

Surrogate recoveries were within acceptance limits for the site samples.

Site sample SS-03-3 was spiked in duplicate. Spike recoveries were within the acceptance limits, with nine exceptions.

Below the acceptance limits were: N-Nitrosodi-n-propylamine in the MS and MSD, and 1,2,4-Trichlorobenzene and Pyrene in the MS only. Slightly below the acceptance limits were 1,4-Dichlorobenzene in the MS and MSD, and 2-Chlorophenol, Acenaphthene, and 2,4-Dinitrotoluene in the MS only.

For site sample SS-03-3, the N-Nitrosodi-n-propylamine, 1,2,4-Trichlorobenzene, and Pyrene results may be considered as estimated, and the 1,4-Dichlorobenzene, 2-Chlorophenol, Acenaphthene, and 2,4-Dinitrotoluene results may be considered as usable estimates.

Precision, as indicated by RPD, was within the acceptance limits, with four exceptions.

RPD was above the acceptance limits for 1,2,4-Trichlorobenzene, 4-Chloro-3-methylphenol, Acenaphthene, and Pyrene. Since 1,2,4-Trichlorobenzene and 4-Chloro-3-methylphenol were not detected in the site sample, no (further) qualification was made. The Acenaphthene and Pyrene results for site sample SS-03-3 may be considered as estimated.

One blank spike was associated with the site samples. Blank spike recoveries were within acceptance limits.

Cyclododecane and 1-Decene were tentatively identified in the method blank. These compounds were mostly not identified in the site samples, and no qualification was made. The 1-Decene results for site samples SS-03-1 and DUP-03-1, and the Cyclododecane results for site samples SS-03-1, SS-03-2, SS-03-3, and DUP-03-1, were flagged with a "B", to indicate possible laboratory contribution.

A table of tentatively identified alkanes is located at the end of this narrative.

No other analytical difficulties were encountered.

## Usability Assessment

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his/her designee, as verified by the following signature.

Laboratory validation and  
Usability assessment conducted by:

*Elizabeth A Keator*

Date: June 17, 2003

Elizabeth A. Keator  
Quality Assurance

### SEMIVOLATILE TENTATIVELY IDENTIFIED ALKANES

NYSDEC SAMPLE NAME	CAS NUMBER	ALKANE COMPOUND NAME	ESTIMATED CONCENTRATION	UNITS
DUP-03-1	294-62-2	Cyclododecane	510	ug/kg
SBLK19	294-62-2	Cyclododecane	310	ug/kg
SS-03-1	294-62-2	Cyclododecane	790	ug/kg
SS-03-2	74663-85-7 294-62-2	Nonylcyclopropane Cyclododecane	1400 950	ug/kg ug/kg
SS-03-3	1120-21-4 17301-23-4 629-50-5 74645-98-0 629-59-4 17312-62-8 629-62-9 544-76-3 294-62-2 629-78-7 593-45-3 629-92-5 112-95-8	Undecane 2,6-Dimethylundecane Tridecane 2,7,10-Trimethyldodecane Tetradecane 5-Propyldecane Pentadecane Hexadecane Cyclododecane Heptadecane Octadecane Nonadecane Eicosane	2400 1500 4000 1200 3000 1100 3800 3400 1500 2400 1500 1000 1200	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg
SS-03-3 DL	1120-21-4 17301-23-4 4292-75-5 629-50-5 629-59-4 629-62-9 544-76-3  629-78-7 593-45-3 629-92-5 112-95-8 295-65-8	Undecane Unknown alkane 2,6-Dimethylundecane Hexylcyclohexane Tridecane Tetradecane Pentadecane Hexadecane Unknown alkane Heptadecane Octadecane Nonadecane Eicosane Cyclohexadecane	2600 1400 2800 1400 6400 2900 3600 3500 1700 3500 2300 1600 2000 1400	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg
SS-03-4	6044-71-9 4292-75-5 74645-98-0	6-Methyldodecane Hexylcyclohexane 2,7,10-Trimethyldodecane	2100 1100 1100	ug/kg ug/kg ug/kg



REC'D  
82 ITHACA STREET  
TELEPHONE (607) 565-3500

CC

TES  
DO3-9260  
WAVERLY, NY 14892-1582  
FAX (607) 565-4083

Date: 16-APR-2003

Lab Sample ID: L102732-1

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT STD HEAT TRANSFER  
Origin: SOIL 4-1-03 003-9260  
Description: GRAB  
Sampled On: 01-APR-03 08:30 by CLIENT  
Date Received: 02-APR-03 12:48  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	76.1	%		03-APR-03 11:21	CLP 3.0	02-123-64
Lead	21.2	mg/kg	5.45	15-APR-03 02:09	EPA 6010	03-013-02
<b>EPA 8082</b>						
PCB 1016	U	ug/kg	12	10-APR-03 08:12	EPA 8082	03-008-5696
PCB 1221	U	ug/kg	24	10-APR-03 08:12	EPA 8082	03-008-5696
PCB 1232	U	ug/kg	12	10-APR-03 08:12	EPA 8082	03-008-5696
PCB 1242	U	ug/kg	12	10-APR-03 08:12	EPA 8082	03-008-5696
PCB 1248	U	ug/kg	12	10-APR-03 08:12	EPA 8082	03-008-5696
PCB 1254	U	ug/kg	12	10-APR-03 08:12	EPA 8082	03-008-5696
PCB 1260	U	ug/kg	12	10-APR-03 08:12	EPA 8082	03-008-5696

Extraction Information:

08-APR-03 00:00 EPA 3550 03-029-14

Surrogate Recovery:

Tetrachloro-m-xylene

60

%

03-008-5696

Decachlorobiphenyl

91

%

03-008-5696

Results calculated on a dry weight basis.

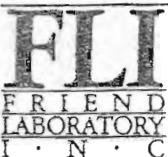
Approved by:  
Cynthia J. Hay  
Lab Director

Page 1 of 1  
NY 10252 NJ 73168 PA 68180 EPA NY 00033

ac/mw

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)  
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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32 ITHACA STREET  
TELEPHONE (607) 565-3500

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

Date: 16-APR-2003

Lab Sample ID: L102732-2

Golder Associates, Inc.  
Jonathan Rizzo  
2221 Niagara Falls Boulevard  
Suite 9  
Niagara Falls, NY 14304-4069

Sample Source: ITT STD HEAT TRANSFER  
Origin: SOIL 4-1-03 003-9260  
Description: GRAB  
Sampled On: 01-APR-03 08:30 by CLIENT  
Date Received: 02-APR-03 12:48  
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Ignitability	non-ignitable			03-APR-03 00:00	SW846	01-008-12
Lead	U	mg/l	0.440	15-APR-03 12:35	EPA 6010 TCLP	03-013-02

Approved by:

*Cynthia J. Hay*

Page 1 of 1

Lab Director

*ac/mys*

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)  
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)  
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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PAGE 1 OF 1

**GOLDER ASSOCIATES CHAIN OF CUSTODY RECORD**

PROJECT NO./NAME 003-9260		CLIENT NAME Golder Associates Inc.		SAMPLE SITE: ITT STANDARD (HEAT TRANSFER)		SAMPLER'S SIGNATURE: 	
SAMPLE NO.	SAMPLING DATE	TIME	ORIGIN/SOURCE	CONTAINERS	# OF	DESCRIPTION	ANALYSES TESTS REQUESTED
1	4/1/03	0830	SOIL 4-1-03	3		X	PCBs Ignitability/flashpoint • 2 Lead (total) -1 Lead (TCLP) -2
RELINQUISHED BY: 	DATE/TIME 4/1/03	RELINQUISHED BY: SIGNATURE 1600 PRINT	DATE/TIME 4/2/03	RECEIVED BY: SIGNATURE 1245 PRINT	DATE/TIME 4/2/03	RECEIVED BY: SIGNATURE 1245 PRINT	RELINQUISHED BY: SIGNATURE DATE/TIME PRINT
PRINT REMARKS: 							

**APPENDIX C**

**LAFARGE NORTH AMERICA, INC.  
CLEAN FILL CERTIFICATION**

MAY-23-2003 10:03

SLC ENVIRONMENTAL SERVICES

716 433 0802

P.02/02

MAY-22-2003 THU 02:17 PM LAFARGE NA

FAX NO. 11034000000



Construction Materials

5/22/03

A T & A Trucking  
77 W. Dillard Avenue  
Lancaster, NY 14086

Re: Lafarge Mining Material Product 941

To Whom It May Concern:

Lafarge Material Product code 941 "common fill" mined from the Genesee Fayhe property located at 6125 Genesee St., Lancaster, N.Y. (DEC permit # 9-02732) to the best of my knowledge has no known hazardous waste or industrial waste contaminants.

Sincerely,

A handwritten signature in black ink, appearing to read "Len Studley".

Len Studley  
Safety and Environment Manager

Eastern U.S. Region  
270 Northport-Parkway, Suite 100, Amherst, NY 14228  
Office: (716) 655-3300 Fax: (716) 655-3351  
Web: [www.lafagenorthamerica.com](http://www.lafagenorthamerica.com)

OCW

TOTAL P.02

**APPENDIX D**

**DATA USABILITY SUMMARY REPORT (DUSR)**

**Golder Associates Inc.**

2221 Niagara Falls Boulevard, Suite 9  
Niagara Falls, NY USA 14304  
Telephone (716) 215-0650  
Fax (716) 215-0655  
[www.golder.com](http://www.golder.com)



REPORT ON

DATA USABILITY SUMMARY  
NYSDEC VOLUNTARY CLEANUP PROGRAM  
SOIL REMEDIATION  
ITT HEAT TRANSFER FACILITY  
SITE No. V00329-9  
175 STANDARD PARKWAY  
CHEEKTOWAGA, NEW YORK

Submitted to:

ITT Industries, Inc  
10 Mountainview Road  
Upper Saddle River, New Jersey 07458

DISTRIBUTION:

9 Copies - ITT Industries; Upper Saddle River, New Jersey  
1 Copy - Golder Associates Inc.; Buffalo, New York

August 27, 2003

003-9260



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## 1.0 INTRODUCTION

This report presents the findings of the data quality review performed on the analysis of environmental samples collected from the ITT Heat Transfer Facility (formerly referred to as the ITT Standard Facility) in Cheektowaga, New York. Samples were collected in May 2003 as part of soil remediation activities associated with the removal of petroleum impacted soil as part of Voluntary Cleanup Agreement (VCA) executed between ITT Industries (ITT) and the New York State Department of Environmental Conservation (NYSDEC) (ITT, 2001). This report has been prepared in a manner consistent with that called for in the VCP work plan (ITT, 2001) and is consistent with the NYSDEC Guidance Memorandum for Data Usability Summary Reports (NYSDEC, 1995). The laboratory QA personnel validated the data collected as part of the VCP in accordance with National Functional Guidelines for Data Validation.

## 2.0 DATA SET

Data reviewed included data obtained from the VCA soil remediation sampling activities, performed in May, 2003.

Four soil samples were collected as part of the VCA soil remediation. A field duplicate and a matrix spike/matrix spike duplicate (MS/MSD) soil sample were also collected. These soil samples were analyzed for the following parameters:

- VOCs; and
- SVOCs.

## 3.0 ANALYTICAL METHODOLOGIES

Samples collected during the VCA soil remediation were analyzed by the following methodologies for the corresponding parameters:

- VOCs – NYSDEC Analytical Services Protocol (ASP) (10/95) Method 95-1; and
- SVOCs – NYSDEC ASP (10/95) Method 95-2.

NYSDEC ASP data deliverables packages and compliance with ASP QA/QC criteria were also required of the VCA investigation data.

#### **4.0 DATA DELIVERABLE COMPLETENESS**

The analytical data packages for the VCA soil remediation were prepared in accordance with NYSDEC ASP Category B data deliverable requirements.

#### **5.0 HOLDING TIMES**

Holding times were reviewed for samples collected as part of the VCA soil remediation sampling program. NYSDEC ASP methods 95-1 (VOCs) and 95-2 (SVOCs) require that no more than 48 hours elapse between the time of sampling and the verified time of sample receipt (VTSR) by the laboratory. The time of sample receipt reported on the chains-of-custody (the time that the samples were actually unpacked and logged into the laboratory tracking system) indicated that some samples exceeded the 48-hour holding time criteria. Documentation was obtained from the sample courier that proved the samples were received earlier in the day than that noted on the chain of custody, for both shipments. Consequently, no samples exceeded the 48-hour criteria for duration between sample collection and the VTSR. Some samples were analyzed on the tenth day after the VTSR for NYSDEC ASP method 95-1; however, these analyses were performed more than 240 hours (exactly 10 days) after VTSR. This minor potential exceedance (depending on interpretation) of holding times for method 95-1 is not likely to affect data quality for the analyses. No other holding time exceedances were identified for any of the analyses conducted as part of the VCA sampling. All samples for the VCA sampling were received by the laboratory on ice at temperatures below 4 degrees Centigrade.

#### **6.0 QUALITY CONTROL (QC) DATA**

##### **6.1 QC Blanks**

A trip blank and a method blank were utilized as part of the VCA soil remediation sampling program. No VOCs (NYSDEC ASP method 95-1) were detected in the trip blank.

Cyclododecane and 1-Decene were tentatively identified in the method blank. These compounds were generally not identified in the site samples, and no quantification was made. The 1-Decene results for site samples SS-03-1 and DUP-03-1, and the Cyclododecane results for site samples SS-03-1, SS-03-2, SS-03-3, and DUP-03-1 were flagged with a "B" by the laboratory, to indicate possible laboratory contribution.

## **6.2 Surrogate/Internal Standard Recoveries (Organics Only)**

VOC and SVOC surrogate recoveries were within acceptance limits for all VCA soil remediation samples.

## **6.3 Matrix Spike Recoveries/Matrix Spike Duplicates**

As part of the VCA remediation analyses a Matrix Spike (MS) and Matrix Spike Duplicate (MSD) sample set were submitted as part of site sample SS-03-3 for analysis. Recoveries were within acceptance limits for VOCs (NYSDEC ASP method 95-1). Recoveries were within acceptance limits for SVOCs (NYSDEC ASP method 95-2), with nine exceptions. N-nitrosodi-n-propylamine in the MS and MSD, and 1,2,4-trichlorobenzene and pyrene in the MS only were below acceptance limits. Furthermore, slightly below acceptance limits were 1,4-dichlorobenzene in the MS and MSD, and 2-chlorophenol, acenaphthene, and 2,4-dinitrotoluene in the MS only. For site sample SS-03-3, the N-nitrosodi-n-propylamine, 1,2,4-trichlorobenzene, 1,4-dichlorobenzene, 2-chlorophenol, and 2,4-dinitrotoluene results may be considered usable estimated reporting limits. Detected results for acenaphthene and pyrene are usable and qualified as estimated values.

Precision as indicated by RPD for VOCs (NYSDEC ASP method 95-1) was within acceptance limits, with one exception. The RPD for 1,1-dichlorethane was above the acceptance limit. Since benzene was not detected in the site sample, no further qualification was made. The RPD was above acceptance limits for four SVOCs (NYSDEC ASP method 95-2). Acenaphthene and pyrene results may be considered as estimated values for site sample SS-03-3. 1,2,4-trichlorobenzene and 4-chloro-3-methyl-phenol were not detected in the site sample; therefore no further qualification is necessary.

## **6.4 Field Duplicates**

A soil field duplicate sample was collected as part of the VCA sampling for the soil remediation. Soil sample SS-03-01 and the corresponding duplicate DUP-03-01 were analyzed for VOCs and SVOCs. Concentrations of VOCs and SVOCs were generally consistent between soil sample SS-03-01 and the corresponding duplicate.

### 6.5 Blank Spikes

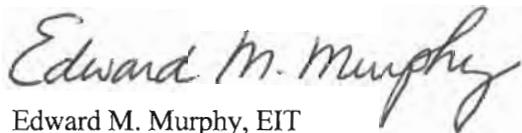
One low-level and one medium level VOC soil blank spike were associated with the VCA soil remediation samples. Blank spike recoveries were within acceptance limits. One SVOC blank spike was associated with the VCA soil remediation samples. Recoveries were within acceptance limits.

### 7.0 SUMMARY

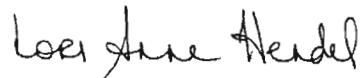
All sample analyses as part VCA soil remediation dataset were found to be generally compliant with the method and applicable guideline criteria, except where previously noted. Those results qualified as estimated (J/UJ) should be considered usable. Other results are also qualified, and are usable, as noted. None of the data were rejected.

In general, the data collected as part of the VCA soil remediation project may be considered usable for assessing the adequacy of remedial activities.

GOLDER ASSOCIATES INC.



Edward M. Murphy, EIT  
Chemical/Environmental Engineer



Lori Hendel  
Senior Chemist



Brian C. Seneffelder, CHMM  
Senior Scientist/Associate

## 8.0 REFERENCES

H2M Associates Inc., "Quantitative Environmental Survey at the ITT Standard Facility, Cheektowaga, New York", February 1997.

H2M Associates Inc., "Quantitative Environmental Survey at the ITT Standard Facility, Cheektowaga, New York" Volumes 1 and 2, May 1997.

Golder Associates Inc., "Supplement to the Quantitative Environmental Survey at the ITT Standard Facility, Cheektowaga, New York" October 1999.

ITT Fluid Technology, "Work Plan NYSDEC Voluntary Cleanup Program ITT Standard Facility, 175 Standard Parkway, Cheektowaga, New York" Revision 1, March 30, 2001

New York State Department of Environmental Conservation, "Guidance Memorandum for Data Usability Summary Reports", 1995.

New York State Department of Environmental Conservation, "Voluntary Cleanup Agreement: ITT Heat Transfer Site No. V00329-9", August 15, 2001

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February 16, 2004

Our Ref.: 003-9260

ITT Industries  
10 Mountainview Road  
Upper Saddle River, New Jersey 07458

Attention: Ms. Anne Wilmot

**RE: CERTIFICATION - NYSDEC VOLUNTARY CLEANUP PROGRAM, ITT HEAT TRANSFER FACILITY SITE NO. V00329-9,  
175 STANDARD PARKWAY, CHEEKTOWAGA, NEW YORK**

Dear Ms. Wilmot:

Golder Associates Inc. (Golder) is pleased to submit the above referenced certification for the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program at the ITT Heat Transfer Facility Site No. V00329-9, in Cheektowaga, New York. Included in the Voluntary Cleanup Agreement (VCA), effective date August 6, 2001, between ITT and the NYSDEC, was a remedial action work plan, a supplemental investigation, and soil remediation. Reports on the supplemental investigation and soil remediation were submitted to the NYSDEC on August 26, 2002 and August 8, 2003, respectively. This letter presents certification that the Remedial Action Work Plan was implemented according to the VCA.

**STATEMENT OF CERTIFICATION**

I certify that the Remedial Action Work Plan was implemented and that all investigation and construction activities were completed substantially in accordance with the Department-approved Remedial Action Work Plan and were personally witnessed by a person under direct supervision. This Certification of Construction is issued under the seal of Mr. Francis T. Adams, New York Professional Engineers (P.E.) License No. 067131-1.

Golder appreciates the opportunity to provide professional engineering services to ITT Industries. If you have any questions regarding this report, please do not hesitate to call.

Sincerely,

**GOLDER ASSOCIATES INC.**

*Francis T. Adams*

Francis T. Adams, P.E.

Associate

New York State P.E. License No. 067131-1



2/16/04  
Date

JPR/dml

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