

REMEDIAL ACTION REPORT

FOR

I.W. INDUSTRIES, INC.

35 MELVILLE PARK ROAD

MELVILLE, NEW YORK

NYSDEC REGISTRY # 1-52-102

FOR SUBMITTAL TO

***THE NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION***

PREPARED BY

FPMgroup

***909 MARCONI AVENUE
RONKONKOMA, NEW YORK 11779***

NOVEMBER, 2000

REMEDIAL ACTION REPORT

Prepared for

Facility: I.W. Industries, Inc.
35 Melville Park Road
Melville, NY 11747
NYSDEC Registry # 1-52-62

FPM File No: 362-00-19

I hereby certify that the remediation activities described herein were implemented and completed in accordance with the New York State Department of Environmental Conservation-approved Remedial Action Work Plan. These activities were witnessed and documented by FPM employees under my supervision.



New York State Professional Engineer # 53370

Kevin J. Phillips
Signature

"It is a violation of Article 130 of the New York State Education Law for any person to alter this document in any way without the express written verification or adoption by a New York State licensed land surveyor or engineer in accordance with Section 7209(2), Article 130, New York State Education Law."

Prepared by

FPM Group
909 Marconi Avenue
Ronkonkoma, NY 11779
(Tel) 631-737-6200
(Fax) 631-737-2410

FPM

TABLE OF CONTENTS

<u>Section</u>	<u>Description</u>	<u>Page No.</u>
1.0	Introduction	1-1
1.1	Remedial Action Report Purpose and Organization	1-1
1.2	Site Setting	1-3
1.3	Site History	1-5
1.4	History of Investigations	1-6
1.5	Summary of Leaching Pool Contamination	1-7
1.6	Summary of Free-Phase Product on Groundwater	1-16
1.7	Summary of the Selected Remedy	1-16
1.8	Remedial Action Objectives	1-18
2.0	Leaching Pool Remediation	2-1
2.1	Leaching Pool Remediation Procedures	2-1
2.1.1	Waste Characterization	2-1
2.1.2	Liquid and Source Soil Removal	2-3
2.1.3	Waste Transportation and Disposal	2-6
2.1.4	End-Point Sampling	2-7
2.1.5	Restoration	2-9
2.2	Field Monitoring Results	2-9
2.2.1	Air Monitoring	2-9
2.2.2	Noise Monitoring	2-11
2.3	Quantities of Removed Material	2-12
2.4	Chemical Analytical Results	2-16
2.5	Summary	2-28
3.0	Quality Assurance/Quality Control	3-1
3.1	Decontamination Procedures	3-1
3.2	Sample Designation	3-1
3.3	Sample Packaging and Shipment	3-2
3.4	Chain-of-Custody Procedures and Sample Tracking	3-2
3.5	QA/QC Samples	3-2
3.6	Sample Analysis	3-7
3.7	Data Validation	3-7
3.8	Analytical Data Evaluation	3-8
4.0	Free-Phase Product Removal	4-1
5.0	References	5-1
6.0	Disclaimer	6-1

APPENDICES

A	Waste Characterization Information
B	Solidification Material, Waste Disposal Documents, and Backfill Certification
C	Laboratory Chemical Analytical Data
D	Data Validation Report

SECTION 1.0 INTRODUCTION

1.1 Remedial Action Report Purpose and Organization

This Remedial Action (RA) report has been prepared by FPM Group (FPM) for the I.W. Industries, Inc. (IWI) Inactive Hazardous Waste Disposal Site (NYSDEC Registry # 1-52-102) located at 35 Melville Park Road, Melville, New York (Site). The Site location is shown in Figure 1.1.1. The Site was placed on the New York State Department of Environmental Conservation (NYSDEC) Registry of Inactive Hazardous Waste Disposal Sites (IHWDS) as a Class 2 site. Between 1982 and 1994, IWI performed several soil, groundwater, and leaching pool investigations at the Site. A Focussed Remedial Investigation (RI) was performed in 1997 and 1998 to obtain data to augment the existing Site information for the purpose of characterizing the nature and extent of potential contamination at the Site. The Focussed RI was completed in January, 1999 and a Focussed Feasibility Study (FS) was completed in February, 1999. The Focussed FS identified several remedial alternatives for the Site and a preferred remedial alternative was identified. Subsequently a Proposed Remedial Action Plan (PRAP) was prepared by the NYSDEC in February, 2000. Following the public comment period for the PRAP, a Record of Decision (ROD) was recorded on March 30, 2000. A Remedial Design (RD) Work Plan was subsequently developed and approved by the NYSDEC in June, 2000. Remedial actions associated with the Site leaching pools were completed in July, 2000 and remedial activities associated with free-phase product on the Site groundwater were initiated in July, 2000.

The purpose of this RA report is to document the leaching pool remediation and the implementation of free-phase product removal. This RA report provides IWI and the NYSDEC with sufficient information to evaluate the completion of leaching pool remediation and to confirm the

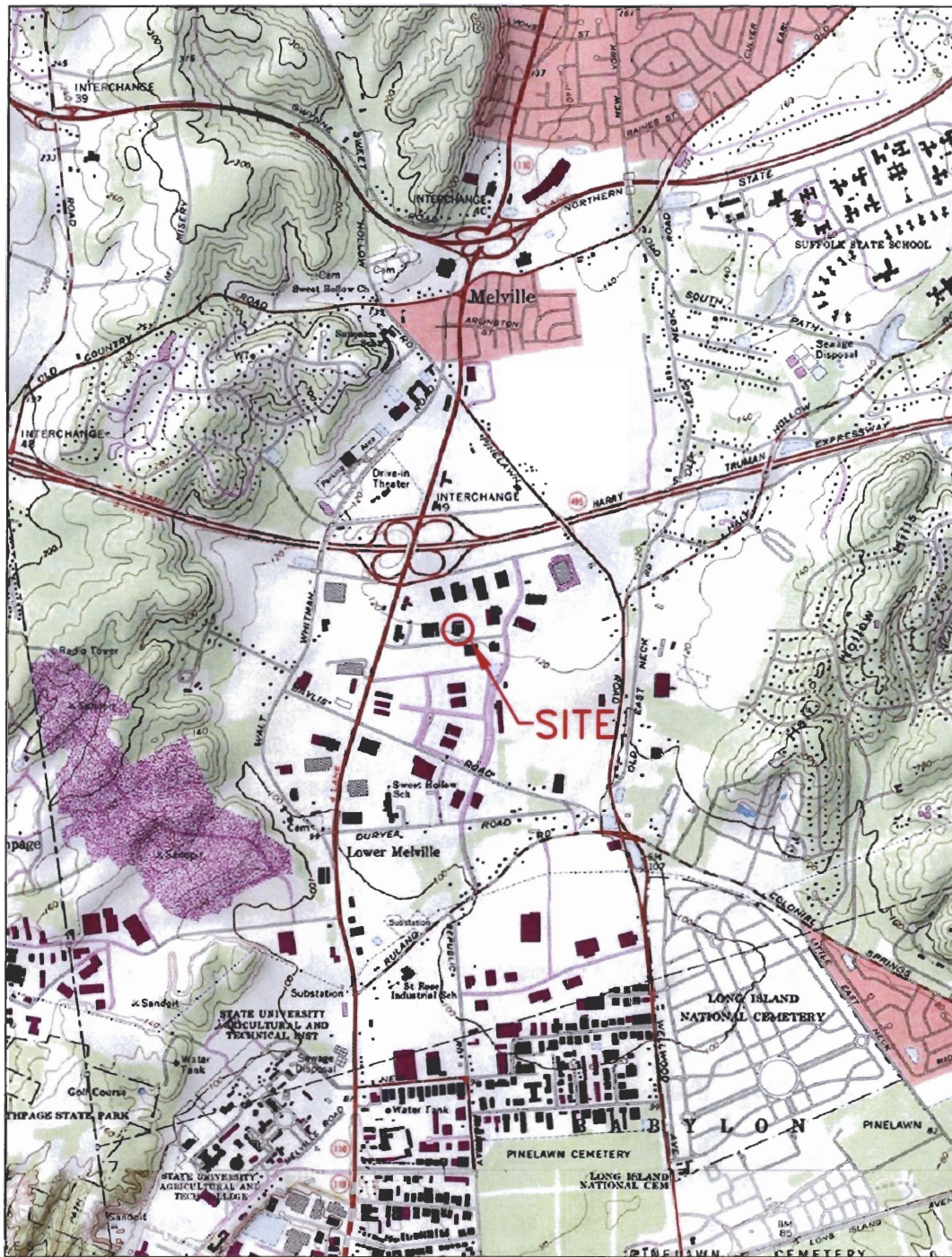
implementation of free-phase product removal. Annual monitoring reports will be prepared to document the ongoing free-phase product removal and groundwater monitoring.

This RA report includes six sections. Section 1.0, Introduction, provides site background information and a summary of the selected remedy with respect to the Site leaching pools and free-phase product. Section 2.0, Leaching Pool Remediation, provides an overview of the leaching pool remediation procedures and results. Section 3.0 provides a summary of the quality assurance/quality control (QA/QC) procedures utilized in the performance of the leaching pool remediation. Section 4.0 documents the implementation of free-phase product removal. Section 5.0 includes the references utilized in the RA report.

1.2 Site Setting

The Site consists of approximately six acres and includes one 100,000-square-foot, one- to two-story building. A Site plan showing the locations of existing subsurface drainage structures, groundwater monitoring wells, soil borings, and storage tanks is presented in Figure 1.2.1. The surface grade at the Site is generally flat and the majority of the Site is paved or covered by the Site building; therefore, surface water runoff is captured by on-Site stormwater leaching pools.

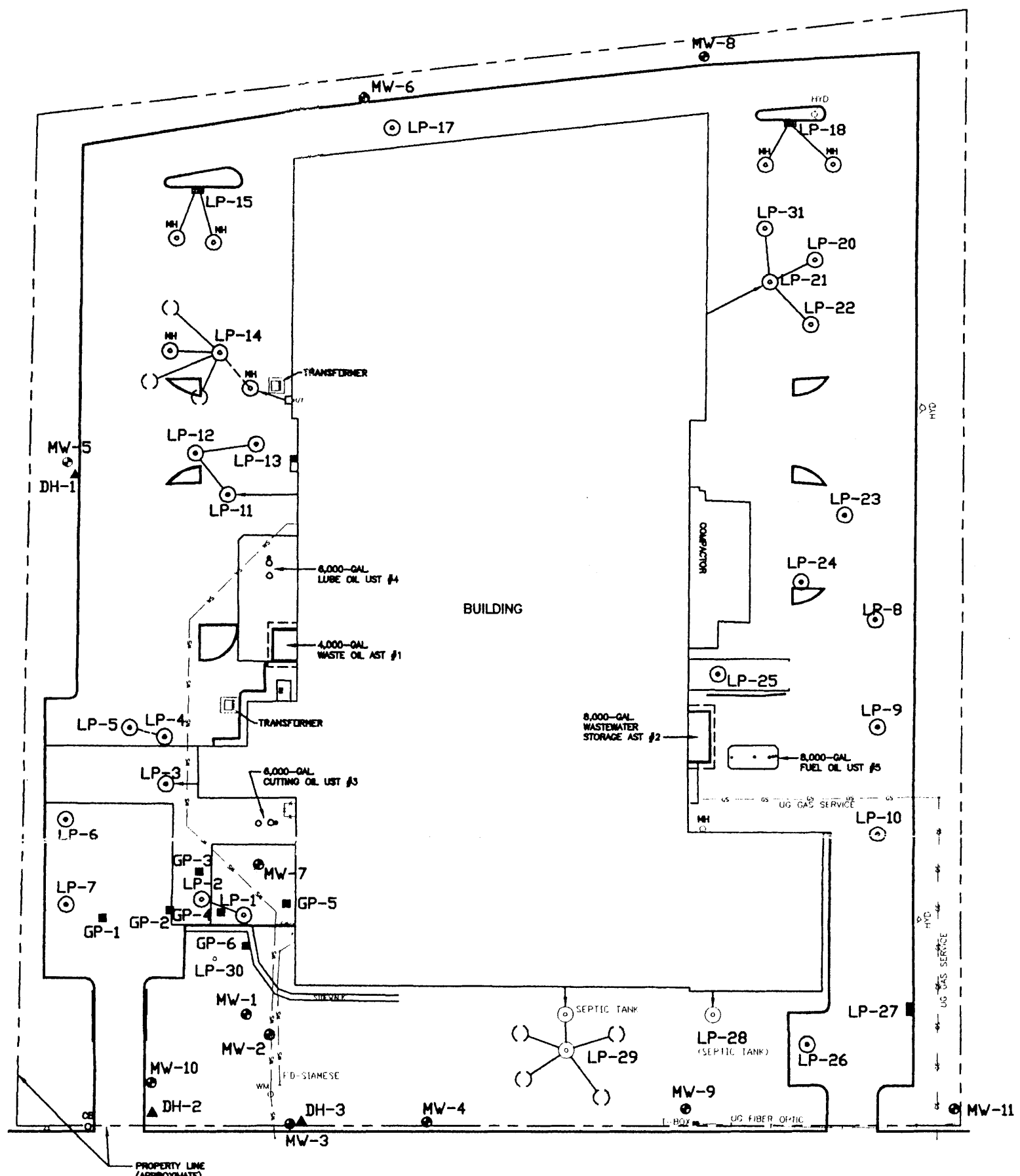
The Site geology was described in detail in the Focussed RI Report (FPM, January, 1999). The geologic units of concern at the Site include the Cretaceous Magothy Formation and the upper Pleistocene Glacial Deposits. The Upper Glacial Deposits are approximately 55 to 57 feet thick beneath the Site and are delineated at their base by light brown to orange brown silty clay with muscovite mica which is interpreted as the top of the Magothy Formation. The Magothy Formation underlies the Upper Glacial Deposits. No field indications of contamination were noted in any of Magothy Formation materials during the RI.



FPM GROUP

FIGURE 1.1.1
SITE LOCATION
IW INDUSTRIES, INC.
MELVILLE, NEW YORK

Drawn By: L.G. Checked By: SOD Date: 11/17/00



MELVILLE PARK ROAD



LEGEND:

- MW-11 MONITORING WELL LOCATION
- DH-1 } SOIL BORING LOCATION
- GP-1 }
- LP-1 } LEACHING POOL LOCATION WITH MANHOLE
- LP-27 }
- () LEACHING POOL LOCATION WITH SUBGRADE ACCESS

Fanning, Phillips & Molnar Engineers		
FIGURE 1.2.1 SITE PLAN 35 MELVILLE PARK ROAD MELVILLE, NEW YORK		
Drawn By: JDS	Checked By: SOD	Date: 8/18/97

There are two primary aquifers beneath the Site. The shallower aquifer is the Upper Glacial (water table) Aquifer which, based on the results of the RI, has a saturated thickness of less than 10 feet beneath the Site. It is associated with the upper Pleistocene Glacial Deposits. The deeper aquifer is the Magothy Aquifer, which underlies the Upper Glacial Aquifer and is associated with the Magothy Formation.

The water table is present approximately 50 feet below grade and the groundwater flow direction is generally to the south with a gradient of 0.0008 to 0.0009. The Site-specific hydraulic conductivity of the Upper Glacial Aquifer ranges from 122 to 368 feet per day.

1.3 Site History

IWI has occupied the Site since it was developed in approximately 1966 and has always conducted operations similar to those which occur at present. Threaded metal parts are manufactured at the IWI facility. Brass rods, composed of roughly a 60/40 mixture of copper and zinc with an approximate lead content of 2.5 percent (known as "Alloy 360"), are fed into screw machines which are used to mill the metal parts. The manufacturing process produces scrap brass. Lubrication and cutting oils are used within the screw machines and both the threaded products and the scrap material are coated with oil as a result of the manufacturing process. Some threaded parts are washed in machines and the oil removed from the parts is skimmed from the washwater and stored in an outdoor above-ground storage tank (AST).

This oil is removed from the Site as non-hazardous used oil. A portion of the washwater is recycled following oil separation while the remainder is either evaporated or disposed of off-Site. Prior to approximately 1984, the wastewater from an older parts washing machine was discharged to two SPDES leaching pools (SPDES #003 and #004) which are referred to in this report as LP-1 and LP-2, respectively. No discharges of wastewater are reported to have occurred since approximately 1984.

In August, 1980, discharges were noted to be occurring from the metal parts washing operation to on-Site leaching pools and in 1982 oil and/or oil emulsion were noted to be present in several leaching pools. Leaching pool LP-3 was subsequently remediated under the supervision of the Suffolk County Department of Health Services (SCDHS). Floating oil was removed from the leaching pools in January, 1983. In 1984, the SCDHS reported that the SPDES outfalls contained oil. The SPDES outfalls were subsequently remediated by pumping out the liquids, pressure-washing the leaching pool walls, and removing impacted sediments. Oil was noted in several leaching pools in 1997 during the performance of the RI. This oil was also removed from the leaching pools and disposed offsite.

In 1993, floating oil was detected on one occasion at two of the on-Site monitoring wells. A soil investigation was also performed in the vicinity of several of the leaching pools. Organic compounds were detected in one soil sample. In 1994, additional monitoring wells were installed and floating oil was detected in one monitoring well. A product recovery device placed in this well recovered a minimal amount of floating oil. Floating oil was also noted in 1997 in two Site wells during the performance of the RI.

1.4 History of Investigations

The history of subsurface investigations at the Site was described in detail in the Focussed RI Report (FPM, January, 1999) and will be summarized here. The Site leaching pools were sampled during the RI and metals, volatile organic compounds (VOCs), and/or semivolatile organic compounds (SVOCs) were detected at concentrations exceeding the NYSDEC Recommended Soil Cleanup Objectives (Objectives). The chemical analytical data for the leaching pool samples are discussed in more detail in Section 1.5 of this report.

The data from soil samples collected at the Site confirm that while visual and olfactory indications of soil contamination are present in samples from the vicinity of leaching pools LP-1 and LP-2, in general,

metals, VOCs or SVOCs were not detected at elevated concentrations in these soils. Site soil will not be further discussed in this RA report.

Groundwater monitoring wells were installed at the Site during several investigations. The locations of the wells are shown on Figure 1.2.1. Summaries of the groundwater chemical analytical results obtained prior to the RI were presented in Tables 4.3.1 through 4.3.9 of the RI Work Plan (FPM, May, 1997) and the groundwater chemical analytical data obtained during the RI were presented in the Focussed RI Report (FPM, January, 1999). The results of the groundwater analyses indicated that concentrations of VOCs and metals are present in the Site groundwater. Free-phase product has also been noted in two Site wells. Groundwater monitoring is planned and the results will be presented in annual monitoring reports. Therefore, Site groundwater will not be further discussed in this RA report. Free-phase product removal efforts are discussed in Section 4.0.

1.5 Summary of Leaching Pool Contamination

Contamination of soils in the Site leaching pools was discussed in detail in the Focussed RI Report (FPM, February, 1999) and will be summarized here. The on-Site leaching pools were investigated in 1997 during the RI and soil samples were collected for chemical analysis from each of the visibly-impacted leaching pools. Floating product was found in leaching pools LP-4, LP-5, LP-6, LP-20, LP-22, and LP-31. No significant evidence of soil contamination was noted in leaching pools LP-17, LP-25, or LP-30, and, therefore, these leaching pools were not sampled in 1997.

The chemical analytical results for the leaching pool soils obtained at the Site from the RI are presented in Tables 1.5.1 and 1.5.2. The laboratory reports for the RI were presented in Appendix C of the RI Report (FPM, January, 1999). Based on these results, impacted soil is present in all of the sampled leaching pools. However, the magnitude of the impact is variable. The following leaching pools were

TABLE 1.5.1
LEACHING POOL SEDIMENT SAMPLES
ORGANIC PARAMETERS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Boring No.	LP-1	LP-2	LP-3	LP-4	LP-5	LP-6	LP-7	LP-8	LP-9	LP-10	LP-11	LP-12	NYSDEC Cleanup Objectives
Sampling Date	7/2/97	7/2/97	7/2/97	7/2/97	7/2/97	7/2/97	7/2/97	7/10/97	7/2/97	7/10/97	7/8/97	7/8/97	
Volatile Organic Compounds in ug/kg													
Chloromethane	ND	ND	2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Carbon disulfide	ND	ND	7 J	4 J	ND	ND	8 J	2 J	ND	8 J	4 J	10 J	2,700
4-Methyl-2-pentanone	ND	ND	6 J	ND	ND	ND	ND	4 J	ND	6 J	ND	12 J	1,000
Xylene (total)	ND	17 JB	6 JB	ND	ND	91	ND	ND	ND	ND	12 J	ND	1,200
Ethylbenzene	ND	ND	ND	ND	ND	22 J	ND	ND	ND	ND	3 J	ND	5,500
2-Butanone	ND	ND	ND	ND	ND	ND	ND	5 J	ND	28	21	40 J	300
Toluene	ND	ND	ND	ND	250	ND	ND	32 J	ND	16 J	80 J	74	1,500
Tetrachloroethene	2 J	3 J	3 J	2 J	4 J	ND	ND	3 J	2 J	27	7 J	28 J	1,400
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	8 J	ND	ND	1,700
Tentatively Identified Volatile Organic Compounds in ug/kg													
Dimethyl sulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Unknown acid	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	91 J	-
Hexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Unknowns	327 J	260 J	515 J	9 J	210 J	520 J	720 J	ND	14 J	ND	254 J	97 J	-
Unknown alkene	ND	ND	ND	ND	ND	ND	ND	14 J	ND	ND	ND	ND	-
Unknown alkane	ND	ND	ND	ND	ND	ND	ND	ND	ND	405	ND	ND	-
Unknown hydrocarbons	2,070 J	3,208 J	1,721 J	230 J	3,061 J	13,660 J	8,000 J	ND	170 J	ND	2,548 J	2,492 J	-
Unknown cyclic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Unknown alcohols	290 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Unknown ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Unknown alkane + C3 sub benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
c3- subs.benzene	ND	ND	ND	11 J	ND	ND	ND	ND	ND	ND	ND	ND	-
c4 subs.benzene	ND	ND	ND	84 J	130 J	ND	ND	6 J	10 J	ND	ND	ND	-
Undecane, 2,5-dimethyl-	ND	ND	180 JN	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Total VOCs	2,689	3,488	2,440	340	3,555	14,293	8,728	66	196	498	2,929	2,844	10,000

Notes: Only analytes detected in one or more samples are included in this table.
 ND = Not Detected.
 B = Analyte is detected in an associated blank.
 J = An estimated value.
 N = Presumptive evidence of a compound.

E = Estimated concentration exceeding the calibration range of the instrument.
 D = Diluted sample result.
 ug/kg = micrograms per kilograms.
 - = NYSDEC Recommended Soil Cleanup Objectives not established for this compound.
Bold values exceed the NYSDEC Recommended Soil Cleanup Objective.

TABLE 1.5.1 (CONTINUED)
LEACHING POOL SEDIMENT SAMPLES
ORGANIC PARAMETERS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Boring No.	LP-13	LP-14	LP-15	LP-18	LP-20	LP-21	LP-22	LP-23	LP-24	LP-26	LP-27	LP-28	LP-29	LP-31	NYSDEC Cleanup Objectives
Sampling Date	7/8/97	7/8/97	7/8/97	7/8/97	7/10/97	7/10/97	7/10/97	7/10/97	7/10/97	7/10/97	7/8/97	7/10/97	7/10/97	7/10/97	
Volatile Organic Compounds in ug/kg															
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	120 J	ND	ND	-
Carbon disulfide	ND	880 J	ND	2 J	ND	4 J	2 J	ND	3 J	ND	ND	24 J	230 J	3 J	2,700
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	7 J	ND	ND	170 J	ND	ND	1,000
Xylene (total)	55	3,500 J	24 J	ND	ND	ND	14 J	ND	340	ND	ND	ND	1,500 J	ND	1,200
Ethylbenzene	25 J	700 J	ND	ND	ND	ND	2 J	ND	54	ND	ND	ND	340 J	ND	5,500
2-Butanone	22 J	240 J	15 J	9 J	ND	30	8 J	ND	ND	6 J	ND	ND	230 J	10 J	300
Toluene	34 J	45,000 JD	120	21	23	180 D	32 JD	ND	4 J	34 J	ND	71,000 JD	130 J	310 D	1,500
Tetrachloroethene	26 J	20 J	12 J	ND	ND	36 JD	95 D	27	69 D	55 J	1 J	85 J	ND	34 JD	1,400
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31 J	1,500 J	ND	1,700
Tentatively Identified Volatile Organic Compounds in ug/kg															
Dimethyl sulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	640 JN	ND	ND	-
Unknown acid	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Hexane	ND	ND	ND	ND	ND	25 JN	ND	ND	ND	ND	ND	ND	ND	ND	-
Unknowns	ND	51,000 J	430 J	29 J	ND	26 J	ND	ND	ND	ND	ND	88 J	ND	ND	-
Unknown alkene	ND	ND	ND	ND	ND	11 J	ND	21 J	56 J	ND	ND	2,250 J	ND	ND	-
Unknown alkane	ND	ND	ND	ND	144 J	225 J	1,851 J	272 J	13 J	717 J	ND	300 J	19,860 J	2,137	-
Unknown hydrocarbons	6,760 J	280,900 J	4,790 J	254 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Unknown cyclic	ND	ND	ND	ND	ND	7 J	130 J	ND	ND	25 J	ND	160 J	ND	ND	-
Unknown alcohols	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Unknown ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,410 J	ND	ND	-
Unknown alkane + C3 sub benzene	ND	ND	ND	ND	ND	ND	230 J	ND	ND	ND	ND	ND	ND	ND	-
c3- subs.benzene	2,360 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
c4 subs.benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,600 J	ND	ND	-
Undecane, 2,5-dimethyl-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Total VOCs	9,282	382,240	5,391	315	167	1,124	2,649	320	1,017	837	1	78,878	23,790	2,534	10,000

Notes: Only analytes detected in one or more samples are included in this table.

ND = Not Detected.

B = Analyte is detected in an associated blank.

J = An estimated value.

N = Presumptive evidence of a compound.

E = Estimated concentration exceeding the calibration range of the instrument.

ug/kg = micrograms per kilograms.

- = NYSDEC Recommended Soil Cleanup Objectives not established for this compound.

D = Diluted sample result.

Bold values exceed the NYSDEC Recommended Soil Cleanup Objective.

TABLE 1.5.1 (CONTINUED)
LEACHING POOL SEDIMENT SAMPLES
ORGANIC PARAMETERS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Boring No.	LP-1	LP-2	LP-3	LP-4	LP-5	LP-6	LP-7	LP-8	LP-9	LP-10	LP-11	LP-12	NYSDEC Cleanup Objectives
Sampling Date	7/2/97	7/2/97	7/2/97	7/2/97	7/2/97	7/2/97	7/2/97	7/10/97	7/2/97	7/10/97	7/8/97	7/8/97	
Semivolatile Organic Compounds in ug/kg													
Fluoranthene	ND	ND	8,500 D	2,500	470,000 JD	23,000	13,000 D	86,000 D	48,000 D	97,000 JD	16,000 D	190,000 D	50,000
Naphthalene	ND	550 J	ND	ND	3,600 J	3,200 J	1,900 JD	ND	ND	ND	550 JD	760 J	13,000
2-Methylnaphthalene	ND	3,900	91 J	3,800	7,300 J	5,400	1,300 JD	ND	ND	ND	1,300 JD	1,500 J	36,400
Phenanthrene	ND	ND	4,500 D	16,000 D	350,000 JD	16,000	4,700 D	30,000 D	16,000	47,000 JD	9,600 D	110,000 D	50,000
Carbazole	ND	ND	860	3,900	20,000 J	2,400 J	ND	7,300	4,800	2,200 J	3,500 JD	8,600	-
Phenol	ND	230 J	89 J	ND	ND	ND	ND	ND	ND	ND	ND	450 J	30
Acenaphthene	ND	ND	450 J	32,000 D	30,000 JD	1,600 J	ND	930 J	890 J	690 J	3,100 JD	5,100	50,000
Dibenzofuran	ND	ND	390 J	22,000 D	23,000 JD	ND	ND	620 J	660 J	540 J	1,700 JD	4,200 J	6,200
Fluorene	ND	ND	780	27,000 D	36,000 JD	3,200 J	1,300 JD	1,400 J	1,500 J	2,000 J	2,600 JD	10,000	50,000
Anthracene	ND	ND	990	3,500	120,000 JD	4,600	720 JD	4,000 J	2,600 J	5,700 J	2,900 JD	25,000	50,000
Pyrene	ND	ND	8,700 D	3,200	300,000 JD	22,000 D	5,800 D	62,000 D	24,000	65,000 JD	13,000 D	80,000 D	50,000
Benzo(a)anthracene*	ND	ND	3,600 D	ND	130,000 JD	14,000	3,000 JD	27,000	13,000	25,000 J	6,200 D	46,000 D	224
Chrysene*	ND	ND	7,300 D	ND	240,000 JD	33,000	5,800 D	49,000 D	31,000	42,000 JD	13,000 D	96,000 D	400
bis(2-Ethylhexyl)phthalate*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50,000
Benzo(b)fluoranthene*	ND	ND	3,100	ND	110,000 JD	11,000	3,600 JD	46,000 D	17,000	36,000 JD	4,600 D	42,000 JD	224
Benzo(k)fluoranthene*	ND	ND	3,100	ND	100,000 JD	9,200	3,300 JD	18,000	13,000	29,000 JD	5,100 D	43,000 JD	224
Benzo(a)pyrene*	ND	ND	2,800	ND	85,000 JD	11,000	3,200 JD	34,000 D	14,000	30,000 JD	4,600 D	32,000 JD	61
Indeno(1,2,3-cd)pyrene*	ND	ND	2,300	ND	66,000 JD	7,800	1,700 JD	32,000	7,200	17,000 JD	3,900 JD	19,000 JD	3,200
Benzo(g,h,i)perylene	ND	ND	3,100	ND	110,000 JD	13,000	2,100 JD	26,000	11,000	12,000 JD	7,000 D	31,000 JD	50,000
Di-n-octylphthalate	ND	ND	ND	ND	ND	ND	ND	780 J	ND	ND	ND	ND	50,000
Dibenz[a,h]anthracene*	ND	ND	ND	ND	ND	ND	ND	2,000 J	ND	ND	ND	ND	14
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,000
4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	900
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,000 J	ND	ND	50,000
Total Carcinogenic SVOCs	ND	ND	22,200	ND	731,000	86,000	20,600	208,000	95,200	179,000	37,400	321,000	10,000

TABLE 1.5.1 (CONTINUED)
LEACHING POOL SEDIMENT SAMPLES
ORGANIC PARAMETERS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Boring No.	LP-1	LP-2	LP-3	LP-4	LP-5	LP-6	LP-7	LP-8	LP-9	LP-10	LP-11	LP-12	NYSDEC Cleanup Objectives
Tentatively Identified Semivolatile Organic Compounds in ug/kg													
Unknowns	9,000 JD	320 J	3,130 J	1,460 J	5,500 J	13,000 J	16,300 JD	2,100 J	ND	10,200 J	48,700 JD	31,000 J	-
Unknown alkanes	131,000 JD	12,770 J	5,830 J	44,400 J	ND	79,600 J	111,700 JD	ND	850 J	1,200 J	45,100 JD	13,700 J	-
Unknown cyclic cpds.	3,800 JD	830 J	ND	2,500 J	ND	7,800 J	6,900 JD	ND	ND	ND	4,400 JD	ND	-
Unknown PNAs	ND	ND	ND	ND	19,100 J	ND	ND	27,200 J	9,000 J	13,500 J	ND	ND	-
Naphthalene, 1-methyl-	ND	570 JN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Dimethylnaphthalene isomer	ND	790 J	ND	4,300 J	ND	ND	17,000 JD	ND	ND	ND	ND	4,600 J	-
Dibenzothiophene	ND	ND	ND	ND	1,000 JN	ND	ND	ND	ND	ND	ND	ND	-
Trimethylnaphthalene isomer	ND	ND	ND	ND	ND	8,700 J	ND	ND	ND	ND	ND	ND	-
4H-Cyclopenta[def]phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	2,600 JN	ND	ND	2,600 JN	-
Unknown ketone	ND	ND	ND	ND	ND	ND	ND	4,800 J	ND	ND	ND	ND	-
Unknown methylated PNA	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,700 J	ND	ND	-
Total Non-carcinogenic SVOCs	143,800	19,960	37,410	166,560	1,495,500	203,500	182,720	253,130	121,900	260,730	176,350	518,510	500,000

Notes: Only analytes detected in one or more samples are included in this table.

ND = Not Detected.

B = Analyte is detected in an associated blank.

J = An estimated value.

N = Presumptive evidence of a compound.

A = TIC is a suspected aldol condensation product.

E = Estimated concentration exceeding the calibration range of the instrument.

D = Diluted sample result.

ug/kg = micrograms per kilogram.

- = NYSDEC Recommended Soil Cleanup Objective not established for this compound.

* = Carcinogenic SVOC.

Bold values exceed the NYSDEC Recommended Soil Cleanup Objective.

TABLE 1.5.1 (CONTINUED)
LEACHING POOL SEDIMENT SAMPLES
ORGANIC PARAMETERS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Boring No.	LP-13	LP-14	LP-15	LP-18	LP-20	LP-21	LP-22	LP-23	LP-24	LP-26	LP-27	LP-28	LP-29	LP-31	NYSDEC Cleanup Objectives
Sampling Date	7/8/97	7/8/97	7/8/97	7/8/97	7/10/97	7/10/97	7/10/97	7/10/97	7/10/97	7/10/97	7/8/97	7/10/97	7/10/97	7/10/97	
Semivolatile Organic Compounds in ug/kg															
Fluoranthene	9,700 J	ND	40,000 D	94,000 D	340 J	320 J	ND	340,000 D	280,000 JD	1,300	5,500 D	ND	ND	ND	50,000
Naphthalene	4,400 J	ND	2,100 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13,000
2-Methylnaphthalene	1,100 J	32,000 J	3,800 J	ND	ND	ND	1,300 D	ND	ND	ND	ND	ND	11,000 JD	1,400 D	36,400
Phenanthrene	8,600 J	ND	41,000 D	33,000 D	200 J	ND	ND	150,000 D	120,000 JD	840	1,800 JD	ND	5,100 JD	ND	50,000
Carbazole	2,600 J	ND	18,000	11,000	ND	ND	ND	20,000	21,000 J	ND	540 JD	ND	ND	ND	-
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8,700 J	ND	ND	30
Acenaphthene	1,200 J	ND	18,000	1,400 J	ND	ND	ND	3,000 J	4,000 J	ND	ND	ND	ND	ND	50,000
Dibenzofuran	1,000 J	ND	13,000	950 J	ND	ND	ND	2,100 J	2,300 J	ND	ND	ND	ND	ND	6,200
Fluorene	1,800 J	4,200 J	15,000	2,000 J	ND	ND	ND	5,100	6,300 J	96 J	ND	ND	ND	ND	50,000
Anthracene	2,600 J	ND	16,000	6,800	ND	ND	ND	16,000	20,000 J	120 J	ND	ND	ND	ND	50,000
Pyrene	9,100 J	ND	32,000	41,000	260 J	660	ND	230,000 D	210,000 JD	1,600	2,900 JD	ND	ND	ND	50,000
Benzo(a)anthracene*	3,800 J	ND	17,000	28,000	100 J	ND	ND	89,000 D	87,000 JD	810	1,300 JD	ND	ND	ND	224
Chrysene*	7,900 J	ND	35,000	60,000	220 J	ND	ND	150,000 D	130,000 JD	1,300	3,800 D	ND	ND	ND	400
bis(2-Ethylhexyl)phthalate*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50,000
Benzo(b)fluoranthene*	3,300 J	ND	17,000	31,000 D	260 J	ND	ND	110,000 D	110,000 JD	ND	1,900 JD	ND	ND	ND	224
Benzo(k)fluoranthene*	2,600 J	ND	19,000	25,000 D	240 J	ND	ND	120,000 D	84,000 JD	ND	1,900 JD	ND	ND	ND	224
Benzo(a)pyrene*	3,100 J	ND	13,000	20,000 JD	170 J	ND	ND	100,000 D	91,000 JD	ND	1,800 JD	ND	ND	ND	61
Indeno(1,2,3-cd)pyrene*	2,000 J	ND	10,000	13,000 JD	94 J	ND	ND	34,000	32,000 J	ND	1,400 JD	ND	ND	ND	3,200
Benzo(g,h,i)perylene	3,400 J	ND	16,000	23,000 D	53 J	ND	ND	25,000	25,000 J	ND	2,300 JD	ND	ND	ND	50,000
Di-n-octylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50,000
Dibenz(a,h)anthracene*	ND	ND	ND	ND	ND	ND	ND	2,000 J	ND	ND	ND	ND	ND	ND	14
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND	600 J	ND	ND	ND	ND	ND	ND	2,000
4-Methylphenol	ND	220,000 JD	ND	ND	ND	ND	ND	ND	ND	ND	ND	420,000 JD	ND	ND	900
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50,000
Total Carcinogenic SVOCs	22,700	ND	111,000	177,000	1,084	ND	ND	605,000	534,000	2,110	12,100	ND	ND	ND	10,000

TABLE 1.5.1 (CONTINUED)
LEACHING POOL SEDIMENT SAMPLES
ORGANIC PARAMETERS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Boring No.	LP-13	LP-14	LP-15	LP-18	LP-20	LP-21	LP-22	LP-23	LP-24	LP-26	LP-27	LP-28	LP-29	LP-31	NYSDEC Cleanup Objectives
Sampling Date	7/8/97	7/8/97	7/8/97	7/8/97	7/10/97	7/10/97	7/10/97	7/10/97	7/10/97	7/10/97	7/8/97	7/10/97	7/10/97	7/10/97	
Tentatively Identified Semivolatile Organic Compounds in ug/kg															
Unknowns	58,700 J	38,100 J	ND	3,200 J	ND	3,670 J	ND	7,200 J	3,830 J	ND	21,600 JD	ND	47,000 JD	ND	-
Unknown alkanes	44,200 J	210,000 J	ND	1,500 J	1,390 J	10,580 J	12,190 JD	ND	ND	12,740 J	ND	46,000 J	6,100 JD	22,230 JD	-
Unknown cyclic cpd.	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Unknown PNAs	ND	ND	13,100 J	18,500 J	ND	ND	2,200 JD	3,000 J	26,500 J	770 J	4,200 JD	ND	173,000 JD	1,800 JD	-
Naphthalene, 1-methyl-	2,500 JN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Dimethylnaphthalene isomer	ND	19,000 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Dibenzothiophene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Trimethylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
4H-Cyclopenta[def]phenanthrene	ND	ND	1,500 JN	2,000 JN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Unknown acid	ND	ND	ND	ND	940 J	ND	ND	ND	ND	ND	ND	3,080,000 J	ND	ND	-
Unknown ketones	ND	ND	ND	ND	2,420 J	2,210 J	ND	2,200 J	2,500 J	420 J	ND	180,000 J	62,300 JD	15,000 JD	-
Unknown alcohol	ND	ND	ND	ND	470 J	1,760 J	ND	ND	ND	ND	ND	824,000 J	64,000 JD	ND	-
Unknown aromatics	ND	ND	ND	ND	ND	ND	ND	7,300 J	ND	ND	ND	ND	ND	ND	-
Unknown amine	ND	ND	ND	ND	ND	ND	ND	ND	1,200 J	ND	ND	ND	86,000 JD	ND	-
Unknown methylated PNA	ND	ND	ND	ND	ND	ND	ND	ND	1,000 J	ND	ND	35,000 J	ND	ND	-
Butylated Hydroxytoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	58,000 JNDA	ND	-
Triclosan	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41,000 JND	ND	-
Total Non-carcinogenic SVOCs	150,900	523,300	229,500	250,350	7,873	19,990	15,690	811,500	723,630	17,880	38,840	4,593,700	553,500	40,430	500,000

Notes: Only analytes detected in one or more samples are included in this table.

- ND = Not Detected.
- B = Analyte is detected in an associated blank.
- J = An estimated value.
- N = Presumptive evidence of a compound.
- A = TIC is a suspected aldol condensation product.

- E = Estimated concentration exceeding the calibration range of the instrument.
 - D = Diluted sample result.
 - ug/kg = micrograms per kilograms.
 - = NYSDEC Recommended Soil Cleanup Objectives not established for this compound.
 - * = Carcinogenic SVOC.
- Bold values exceed the NYSDEC Recommended Soil Cleanup Objective.**

TABLE 1.5.2
LEACHING POOL SEDIMENT SAMPLES
INORGANIC PARAMETERS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Boring No.	LP-1	LP-2	LP-3	LP-4	LP-5	LP-6	LP-7	LP-8	LP-9	LP-10	LP-11	LP-12	NYSDEC Cleanup Objectives
Sampling Date	7/2/97	7/2/97	7/2/97	7/2/97	7/2/97	7/2/97	7/2/97	7/10/97	7/2/97	7/10/97	7/8/97	7/8/97	
Total Metals in mg/kg													
Aluminum	793	776	2,600	1,390	1,260	2,410	2,410	4,830	952	9,500	2,490	22,200	SB
Antimony	ND	ND	7.8 JBN	11.5 JBN	0.68 JBN	1.0 JBN	2.9 JBN	10.6 JN	0.69 JBN	ND	3.2 JBN	0.47 JBN	SB
Arsenic	0.65 B	0.64 B	7	3.6	0.77 B	2.2	2.8	2.6	0.94	8.6	18.1	2.5	7.5
Barium	3.3 B	1.8 B	26.1 B	11.4 B	7.9 B	43.8	56.5	66.2	12.0 B	33.3	32.4	43.5	300
Beryllium	0.05 B	0.04 B	0.25 B	0.10 B	0.09 B	0.16 B	0.16 B	0.33 B	0.11 B	0.19 B	0.16 B	0.25 B	0.16
Cadmium	0.09 B	ND	12.5	3.8	1.6	3.6	3.5	2.5 JN	0.62	2.4 JN	0.71	1.7	10
Calcium	99.8 B	45.6 B	3,300	7,600	8,650	6,580	13,900	4,560	19,300	9,010	1,480	8,710	SB
Chromium	3.2 JN	3.8 JN	20.6 JN	39.8 JN	4.1 JN	35.9 JN	33.7 JN	35.6 JN	7.6 JN	46.0 JN	82.5 JN	23.1 JN	50
Cobalt	0.54 B	0.3 B	6.5 B	2.6 B	1.1 B	3.6 B	4.3 B	4.7 B	1.7 B	4.8 B	11.2	3.5 B	30
Copper	101	88	179,000	62,000	6,470	23,000	29,800	2,880	3,170	5,110	4,610	9,910	25
Iron	1,180	1,470	6,510	5,880	3,170	6,340	6,210	8,970	4,280	9,840	43,100	6,950	2,000
Lead	112 E	91.7 E	7,200 E	2,630 E	298 E	1,110 E	2,090 E	236 N	142 E	885 N	636 E	1,390 E	500
Magnesium	193 B	195 B	1,970	2,390	583 B	2,690	8,110	2,340	10,500	5,190	1,210	4,570	SB
Manganese	9.4 JN	10.4 JN	38.3 JN	49.7 JN	30.3 JN	45.0 JN	48.0 JN	37.8 J	39.8 JN	56.3	290 JN	48.8 JN	SB
Mercury	ND	ND	ND	5.9	ND	ND	ND	0.08 B	ND	0.16	ND	ND	0.1
Nickel	1.4 B	0.95 B	172	72.4	9.0	29.2	41.3	20.5 JN	8.3	29.8 JN	80.9	19.8	13
Potassium	92.2 B	76.5 B	320 B	172 B	160 B	293 B	189 B	703.0	141 B	243 B	223 B	395 B	SB
Selenium	ND	ND	0.81	0.41 B	ND	ND	0.41 B	1.1 J	ND	1.3 J	1.9	0.46 B	2
Silver	ND	ND	17.1 JN	6.6 JN	0.67 JBN	3.0 JN	3.7 JN	0.59 JBN	0.41 JBN	1.2 JBN	1.1 JBN	1.5 JN	SB
Sodium	27.1 B	22.3 B	4,970	1,540	38.1 B	86.5 B	67.1 B	177 B	56.3 B	104 B	66.9 B	107 B	SB
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.92 B	ND	SB
Vanadium	4.0 B	2.8 B	16.3	13.0	5.5 B	17.2	20.6	21.1	10.4	28.9	33.3	26.7	150
Zinc	96.3 E	31.1 E	96,500 E	30,500 E	3,460 E	12,200 E	15,900 E	1,890	1,600 E	3,030	2,460 E	4,520 E	20
Total Organic Carbon (mg/kg)	68,300	34,300	67,000	62,700	33,600	93,800	86,500	17,400	16,200	7,480 J	34,000	67,300	-

Notes: ND = Not Detected.
B = Reported value is less than the Contract Required Detection Limit but greater than the Instrument Detection Limit. SB
E = Reported value is estimated due to the presence of interference.
J = Estimated value.

mg/kg = milligrams per kilogram
N = Matrix spiked sample recovery not within control limits.
= Site Background.
Bold values exceed the NYSDEC Recommended Soil Cleanup Objective.

TABLE 1.5.2 (CONTINUED)
LEACHING POOL SEDIMENT SAMPLES
INORGANIC PARAMETERS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Boring No.	LP-13	LP-14	LP-15	LP-18	LP-20	LP-21	LP-22	LP-23	LP-24	LP-26	LP-27	LP-28	LP-29	LP-31	NYSDEC Cleanup Objective s
Sampling Date	7/8/97	7/8/97	7/8/97	7/8/97	7/10/97	7/10/97	7/10/97	7/10/97	7/10/97	7/10/97	7/8/97	7/10/97	7/10/97	7/10/97	
Total Metals in mg/kg															
Aluminum	4,090	659 J	2,080	1,570	2,210	2,830	2,590	2,750	3,410	7,010	1,230	645 J	10,700 J	4,530	SB
Antimony	1.2 JBN	1.6 JBN	1.0 JBN	ND	ND	0.43 JBN	0.44 JBN	0.63 JBN	0.92 JBN	ND	ND	ND	5.4 JBN	0.41 JBN	SB
Arsenic	2.4	1.9 JB	3.4	1.3	1.3	2.3	1.7	1.3 B	1.4	11.2	1.6	ND	22.9 J	2.2	7.5
Barium	34.6	97.3 J	13.9 B	18.2 B	4.3 B	10.5 B	5.8 B	38.0	41.2	29.6	7.4 B	21.7 JB	593 J	10.7 B	300
Beryllium	0.20 B	0.03 JB	0.17 B	0.12 B	0.11 B	0.11 B	0.16 B	0.19 B	0.21 B	0.28 B	0.11 B	0.05 JB	0.76 JB	0.15 B	0.16
Cadmium	1.2	10.0 J	12.5	0.20 B	0.84 JN	0.64 JN	1.8 JN	0.62 JBN	0.79 JN	0.42 JBN	0.18 B	0.78 JBN	74.5 JN	2.2 JN	10
Calcium	29,500	282 JB	16,400	5,690	313 B	346 B	20,300	1,470	2,280	863	5,250	5,990 J	4,780 J	1,270	SB
Chromium	20.7 JN	27.5 JN	18.3 JN	19.4 JN	7.4 JN	8.8 JN	4.4 JN	15.0 JN	20.0 JN	10.5 JN	4.4 JN	6.1 JN	1,990 JN	5.6 JN	50
Cobalt	3.2 B	6.8 JB	2.3 B	2.0 B	0.91 B	1.8 B	1.4 B	2.2 B	2.9 B	3.5 B	1.4 B	1.4 JB	52.0 J	3.6 B	30
Copper	11,200	7,250 J	31,500	217	53.5	239	167	633	1,270	53.3	145	255 J	22,100 J	138	25
Iron	8,160	1,740 J	6,960	5,540	2,720	3,530	3,610	8,050	5,550	8,180	1,590 J	115,000 J	6,880		2,000
Lead	888 E	1,430 JE	1,230 E	76.3 E	471 N	760 N	1,180 N	107 N	248 N	86.1 N	56.1 E	24.2 JN	2,550 JN	1,150 N	500
Magnesium	15,200	149 JB	9,320	3,230	441 B	583 B	11,800	921	1,070	944	1,130	632 JB	2,840 JB	1,310	SB
Manganese	69.8 JN	6.9 JN	40.2 JN	48.1 JN	14.6	23.6	60.6	34.1	28.0	48.3	77.5 JN	37.7 J	233 J	54.6	SB
Mercury	ND	1.6 J	ND	ND	0.11	ND	ND	ND	0.11 B	0.11	ND	0.54 J	4.8 J	ND	0.1
Nickel	20.1	23.1 J	27.9	5.1	3.4 JBN	7.8 JN	3.2 JBN	7.8 JN	10.7 JN	6.2 JN	5.8	6.5 JBN	114 JN	5.6 JN	13
Potassium	361 B	133 JB	177 B	208 B	130 B	161 B	170 B	415 B	449 B	288 B	90.0 B	442 JB	1,320 JB	203 B	SB
Selenium	ND	4.6 J	ND	ND	0.61 J	0.75	ND	0.87	0.56 B	0.82	ND	2.4 JB	16.0 J	0.73	2
Silver	1.4 JN	8.5 JN	2.9 JN	ND	ND	0.24 JBN	ND	0.16 JBN	0.72 JBN	0.11 JBN	ND	33.4 JN	34.8 JN	0.18 JBN	SB
Sodium	104 B	202 JB	60.4 B	62.7 B	37.7 B	46.3 B	42.6 B	99.7 B	113 B	36.9 B	39.7 B	367 JB	468 JB	152 B	SB
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 JB	ND	SB
Vanadium	17.6	23.2 J	17.4	9.9	8.5	15.6	7.4	11.1	14.7	17.1	5.1 B	2.4 JB	99.0 J	17.6	150
Zinc	5,990 E	3,220 JE	16,800 E	177 E	90.3	220	165	466	657	130	155 E	472 J	22,100 J	227	20
Total Organic Carbon (mg/kg)	35,700	269,000 J	12,300	35,400	20,300	46,000	30,200	41,100	22,300	20,600	7,140	672,000 J	1,000,000 J	60,900	-

Notes: ND = Not Detected.
B = Reported value is less than the Contract Required Detection Limit but greater than the Instrument Detection Limit.
E = Reported value is estimated due to the presence of interference.
J = Estimated value.

mg/kg = milligrams per kilogram
N = Matrix spiked sample recovery not within control limits.
SB = Site Background.
Bold values exceed the NYSDEC Recommended Soil Cleanup Objective.

identified in the Focussed FS and ROD as having one or more target compounds, or analytes, at concentrations that require remediation: LP-3 through LP-15, LP-18, LP-22 through LP-24, LP-28, LP-29, and LP-31. Remediation of the source soil in these leaching pools was performed. The remaining leaching pools, LP-1, LP-2, LP-20, LP-21, LP-26, and LP-27, did not exhibit concentrations of contaminants that required remediation.

1.6 Summary of Free-phase Product on Groundwater

Free-phase product was identified at wells MW-2 and MW-7 in July, 1997 at apparent thicknesses of 0.03 feet and approximately 0.4 feet, respectively. MW-7 is in the vicinity of LP-1 and LP-2 and MW-2 is located downgradient. It appears that the free-phase product originated from oil and/or emulsion which was formerly present in these leaching pools. No free-phase product was noted in these wells or any of the nearby Site wells in May, 2000. Depth to water measurements in the Site wells indicated that the water table was between 0.5 and 1.0 feet higher in May, 2000 than in July, 1997 and, therefore, the free-phase product may no longer be present as a continuous layer on the water table surface. It is anticipated that the free-phase product layer will re-form as the water table declines.

Based on these data, removal of free-phase product was selected as a remedial measure for the Site groundwater. Although free-phase product removal measures were implemented in July, 2000, as described in Section 4.0, it is anticipated that removal of free-phase product will become more feasible once the water table declines.

1.7 Summary of the Selected Remedy

Based upon the results of the RI/FS and the evaluation presented in Section 7 of the ROD, the NYSDEC selected Alternative 2 as described in the FS and ROD as the remedy for the Site. Alternative 2 consists of the removal of source soils from selected leaching pools, removal of recoverable free-phase product from the top of the water table, and groundwater monitoring. This RA report documents the

removal of the source soils from selected leaching pools and the implementation of free-phase product recovery. Groundwater monitoring will be documented in annual monitoring reports for the Site.

Alternative 2 provides for the removal of the source soils from the leach pools, allowing a visual and analytical inspection to ensure that the soils containing constituents in excess of the remedial goals have been removed and properly disposed. Removal of recoverable free-phase petroleum, which has the potential to impact groundwater quality, is also provided. The elements of the selected remedy described in this RA report are as follows:

- Removal of source soil from leach pools 3 through 15, 18, 22 through 24, 28, 29, and 31. To minimize disruptions at this manufacturing facility, remediation of leach pools was accomplished primarily during the July, 2000 plant shut down period. If additional leaching pool remediation becomes necessary, future remediation efforts will also be targeted during plant shut down periods. Verification samples were collected from the remediated leaching pools and are compared with the cleanup goals. In some cases, additional samples were collected in an effort to determine whether any remaining contamination is "marginal" or must be removed. Source soil removal is discussed in Section 2.0 of this report.
- The removal of free-phase product from the top of the water table was implemented by use of specially designed equipment (e.g., oil absorbent materials) to remove floating product from the affected monitoring well(s). This effort is focused in the vicinity of monitoring wells MW-7 and MW-2 and will continue until recoverable product has been removed. Free-phase product removal is discussed in Section 4.0 of this report.

1.8 Remedial Action Objectives

The remedial action objectives for the leach pool source soils are the New York State Standards, Criteria, and Guidance (SCGs) as described in Section 4.1 of the ROD. The SCGs for the leach pool source soils are detailed on Table 1.8.1.

TABLE 1.8.1
CONTAMINANT CONCENTRATIONS IN SOURCE SOILS -
LEACH POOLS SELECTED FOR REMEDIATION¹

Contaminant	Minimum	Maximum	Average	SCG	Number of Leach Pools that Exceed SCG
Metals (ppm)					
Arsenic	ND	22.9	4.4	7.5	2
Cadmium	0.2	74.5	6.4	10	2
Chromium	4.1	1,990	122.8	50	2
Copper	138	179,000	20,034	25	22
Iron	1,590	115,000	13,217	2,000	18
Lead	24.2	7,200	1,275	500	13
Mercury	ND	5.9	0.7	0.1	6
Nickel	3.2	172	35.4	13	12
Zinc	165	96,500	11,117	20	20
VOCs (ppb)					
Xylene	ND	3,500	277	1,200	2
Toluene	ND	71,000	5,855	1,500	2
Total VOCs	ND	382,000	27,103	10,000	4
SVOCs (ppb)					
Fluoranthene	ND	471,000	85,935	50,000	6
Phenanthrene	ND	350,000	56,535	50,000	4
Phenol	ND	450	27	30	4
Dibenzofuran	ND	32,000	3,156	6,200	3
Pyrene	ND	300,000	29,185	50,000	6
Benzo(a)anthracene	ND	130,000	24,630	224	14
Chrysene	ND	240,000	45,000	400	14
Benzo(b)fluoranthene	ND	110,000	27,230	224	14

¹Includes 20 leach pools: 3-15, 18, 22-24, 28, 29, 31.

SECTION 2.0 LEACHING POOL REMEDIATION

This section documents the leaching pool remediation procedures and results. A discussion of the field monitoring results is also included.

2.1 Leaching Pool Remediation Procedures

Source soils impacted with VOCs, SVOCs, and/or metals were removed from selected leaching pools, including LP-3 through LP-15, LP-18, LP-22 through LP-24, LP-28, LP-29, and LP-31. These source soils did not present a hazard to human health prior to their removal since there was no completed exposure pathway as discussed in Section 2.4 of the Focussed FS. However, leach pool source soils have the potential to cause groundwater contamination since sanitary waste or stormwater is routinely directed to the leaching pools for discharge. In addition, if workers were to contact the source soils during maintenance or construction activities, there would be the potential for human exposure. Therefore, removal of the most impacted source soils was performed for the purposes of reducing the potential for groundwater contamination and potential worker contact.

Remediation of the leaching pools included the following steps: waste characterization, removal of the liquids and source soils from the pools, transportation and disposal of the liquids and source soils, collection and analysis of end-point samples, and restoration of the leaching pools. Each of these steps is described in more detail in the following sections. Leaching pool remediation results are described in Sections 2.3 and 2.4.

2.1.1 Waste Characterization

Waste characterization was primarily performed prior to initiating remediation. Waste characterization consisted of the collection and analysis of representative waste samples by the selected remediation contractor, Integrated Technical Services, Inc. (ITS), in consultation with FPM and the

selected waste disposal facilities. Based on the existing chemical analytical data for the materials to be removed as wastes, ITS targeted select disposal facilities to receive the wastes. The targeted waste disposal facilities included the Suffolk County Department of Public Works (SCDPW) Bergen Point sewage treatment plant (non-hazardous, non-oily liquids), the Carteret Biocycle Corporation facility (non-hazardous source soil), and IPC (oily water). The materials to be removed were sampled and analyzed for the parameters required by the targeted disposal facilities as discussed below.

A SCDPW representative, Mr. Kevin Oldham, inspected the liquids in the leaching pools to be remediated on June 29, 2000 and specified the waste characterization sampling protocol for the leaching pool liquids. A composite sample of the leaching pool liquids was prepared for the sanitary pools and for the stormwater pools. Each of these samples was analyzed for VOCs and SVOCs specified by the SCDPW, total lead, copper, and zinc, and total petroleum hydrocarbons (TPH). The analyses were submitted to the SCDPW and approval of the liquid wastes for disposal at the Bergen Point plant was requested. The SCDPW verbally approved the disposal on July 19, 2000 and written approval was received on July 24, 2000. Copies of the chemical analytical data and SCDPW approval letter are included in Appendix A and were previously supplied to the NYSDEC. The SCDPW representative requested to witness liquids pumping at four leaching pools, LP-14, LP-29, LP-12, and LP-24, due to the presence of sludge at the bottom of these pools. The SCDPW representative was notified prior to the pumping of liquids from these pools and was present to witness the liquids pumping.

An ITS representative obtained a sample of the leaching pool source soil on June 29, 2000. The sample was analyzed for the constituents specified by Carteret Biocycle and the results were submitted to Carteret Biocycle for waste classification and approval. FPM reviewed the results of the source soil waste characterization sampling and concluded that the source soil would be classified as non-hazardous waste. Carteret Biocycle subsequently approved the waste for disposal and a contaminated soil profile sheet and a

non-hazardous waste certification sheet were completed. Copies of the source soil waste characterization data and completed profile and certification sheets are included in Appendix A and were previously provided to the NYSDEC.

Although all of the liquids standing in the leaching pools were approved for disposal at the SCDPW Bergen Point sewage treatment plant, oily water which was either removed from the top of the source soil in the vacuum boxes or rolloff containers or which was generated during the decontamination of the vactor and vacuum tank trucks was not likely to be accepted. Therefore, this oily water was contained in a separate tank vessel and was disposed at IPC, which is permitted to accept and treat oily water. Waste characterization for oily water disposed at IPC is performed on a per-load basis when the tank truck arrives at the facility and includes field screening for PCBs, pH, and other parameters. If a load of oily water does not pass the field screening tests, it is returned to the originating facility. All of the loads of oily water that were transported from IWI were accepted at the IPC facility.

2.1.2 Liquid and Source Soil Removal

Prior to removal of materials from the leaching pools, depth to liquid and depth to source soil measurements were obtained. These measurements were compared to post-remediation measurements to evaluate the amount of material removed, as discussed in Section 2.3.

Source soil and associated liquids in selected leaching pools were remediated by removal and off-Site disposal. Source soil removal is designed to reduce constituent concentrations significantly. Source soil removal included accessing the leaching pool interiors, removing accumulated liquids, removing the impacted source soils, pressure-washing to remove soil adhering to the interior of the leaching pools, and transfer of the liquids and source soil to appropriate containers for transportation. Following removal, the liquids and source soil were transported for off-Site disposal as discussed in Section 2.1.3.

ITS was selected to perform the liquid and source soil removal. ITS utilized several subcontractors to provide associated services, including Fred Heyrich, Inc. for vactor services, Freehold Cartage, Inc. for solid waste containers and transportation, Baker Tanks, Inc. for liquid waste pumping and containerization, and RGM Liquid Waste Removal Corp. for vactor services, liquid waste pumping, and liquid and solid waste transportation. The procedures utilized to remediate the leaching pools are described below.

Liquid removal was accomplished using either a vacuum truck, submersible pump, or vactor. Liquids were then transferred to one of two 22,000-gallon tanks which were staged on-site. No separate-phase liquids were encountered in the pools. Following waste disposal approval, the liquid wastes were transferred from the tanks and transported for disposal as discussed in Section 2.1.3.

Source soil removal was accomplished by utilizing a high-vacuum vactor to vacuum the impacted source soil from the interior of the leaching pools. In the cases where the chimney utilized to access the interior of the leaching pool was significantly offset from the center of the leaching pool or was sufficiently lengthy, or where the congealed nature of the source soil restricted removal, a high-pressure water jet (supplied with potable water) was used to break up the source soils and wash the material toward the vactor pipe. These methods were sufficient to remove the source soil from the leaching pools; no additional soil removal methods were utilized.

Source soil removal was conducted at each leaching pool with the objective of obtaining clean end-point samples. The condition of the soil remaining in each pool was monitored during the removal process. If possible, removal of source soil continued at each pool until soil that appeared visibly clean was encountered. In most cases, removal of source soil was conducted either to the base or just below the base of the leaching pool structure. At this point, visibly clean soil was generally noted and an end-point sample was collected as discussed in Section 2.1.4. In some cases, source soil removal was conducted to

several feet below the base of a leaching material and, although the remaining soil appeared less impacted, visibly-clean soil was not encountered. In these cases, removal of more material was not feasible using the vactoring method without risking pool settlement or failure. In these cases, an end-point sample and a deeper sample were collected as described in Section 2.1.4.

Following removal of the liquids and impacted source soil, the interior of each leaching pool was pressure-washed and the accumulated rinseate was removed with the vactor. This rinseate accumulated in the vacuum boxes and rolloff containers holding the source soil and was later removed by a vacuum truck and placed in a separate 22,000-gallon tank designated to hold oily water.

The removed source soil was either vacuumed directly into watertight vacuum boxes (in this case, the vactor was located on the downstream end of the watertight boxes) or the source soil was vacuumed into the vactor truck and was transferred by dumping into watertight rolloff containers. If the soil was placed directly into the vacuum boxes, there was no risk of spillage and no decontamination of the vactor truck was necessary. If the soil was vacuumed into the vactor truck and then transferred into watertight rolloff containers, then the clean-loading method was used to contain any spillage that may have otherwise occurred between the vactor and the rolloff. To clean-load, polyethylene sheeting was placed inside the rolloff container and allowed to drape outside of the container onto the ground. The vactor was driven onto the sheeting such that when the load of soil was transferred, any spilled soil was contained on the sheeting. Following complete loading of each rolloff container, the sheeting was rolled up in a manner to contain the spilled soil and was placed into the rolloff for disposal. Following completion of the soil removal and prior to moving the vactor from the Site, the interior of the vactor was rinsed with a potable water and detergent solution to remove any remaining adhering material and the rinseate was contained with the oily water for offsite disposal. No onsite stockpiling of soil was necessary.

In the case of the soil that was loaded into rolloff containers, some consolidation of the soil was necessary prior to the removal of the waste from the Site. A solidification/stabilization product manufactured by the Keystone Cement Company and formulated from cement kiln dust, Stabilsorb, was mixed with the loads in the rolloff containers until the desired consistency was achieved. Mixing was accomplished using a backhoe bucket. Stabilsorb was also added to several of the vacuum boxes to reduce the free water content. Stabilsorb was added to the vacuum boxes using the vactor prior to final decontamination of the vactor. Following mixing, the backhoe bucket and vactor were decontaminated by washing and the rinseate was contained with the oily water for disposal.

A total of 26.16 tons of Stabilsorb was used for solidification purposes. This weight, together with the weight of the absorbed water were, therefore, added to the total weight of the soil removed from the Site. Documentation regarding Stabilsorb is included in Appendix B.

Following the completion of liquid and source soil removal, the depth to soil in the bottom of each leaching pool was measured as discussed in Section 2.3. These measurements were compared to the measurements obtained prior to remediation and the volumes of removed liquids and source soil were calculated. The calculated volumes of source soil were converted to weights (using a factor of 1.4 tons per cubic yard) and, together with the solidification materials and absorbed water, were compared with the total weight of solid waste removed from the Site. The result of the comparison of liquid waste volumes and solid waste weights is discussed in Section 2.3.

2.1.3 Waste Transportation and Disposal

As discussed above, the liquid wastes were transported in vacuum trucks for disposal. Liquids were transported by RGM to either the SCDPW Bergen Point Sewage Treatment Plant (leaching pool liquids) or to IPC (oily water). A waste receipt was initiated at the time that each load of liquids was

removed from the Site and a completed waste receipt was received from the facility following disposal. The completed waste receipts are included in Appendix B.

The solid wastes were removed from the Site by Freehold Cartage or RGM and were transported to the Carteret Biocycle facility for disposal. A non-hazardous material manifest was initiated for each load of solid waste that was transported and a completed manifest was received from the facility following disposal. The completed non-hazardous material manifests are included in Appendix B.

2.1.4 End-Point Sampling

Following the completion of remediation of each leaching pool, an end-point soil sample was collected and analyzed to document the completeness of remediation. In the cases where leaching pool remediation was terminated prior to encountering visibly-clean soil, a deeper soil sample was obtained from several feet below the top of the remaining soil. The purpose of the deeper sample is to evaluate the vertical extent of contamination which may remain below the base of the excavation.

Each end-point and deeper soil sample was collected using a decontaminated stainless-steel hand auger. The recovered soil was visually inspected and described and field photoionization detector (PID) readings were obtained. A list of the end-point samples, deeper soil samples, and associated visual observations and PID readings is presented in Table 2.1.4.1. It should be noted that an end-point sample was not collected from LP-28 since this was found to be a solid-bottom structure.

Each soil sample was placed into laboratory-supplied sampling bottles. The filled bottles were labeled with the Site name, sample name, collection date and time, and analyses to be performed. The filled bottles were placed into a cooler with ice to depress the sample temperature to four degrees Celsius. A chain of custody form was completed to document the sequence of sample possession. Each filled cooler was transported via overnight courier to Severn Trent Laboratory (STL) in Shelton, Connecticut.

TABLE 2.1.4.1
SAMPLE LIST
I.W. INDUSTRIES SITE LEACHING POOL REMEDIATION
MELVILLE, NEW YORK

Sample Name	Depth Below Grade (in feet)	PID Readings (in parts per million)	Visual Observations
LP-3 end	18.5	0	Light gray to light brown sand
LP-4 end	13.5	0	Dark gray sand
LP-4 @ 15'	15	0	Light brown sand
LP-5 end	15.5	1.8	Light gray sand with petroleum odor
LP-5 @ 18'	18	0	Light brown sand, no odor
LP-6 end	22.5	0	Brown sand, no odor
LP-7 end	23	11.2	Grey-brown sand, slight odor
LP-7 @ 26'	26	0	Brown sand, no odor
LP-8 end	18.0	2.8	Light gray to light brown sand, slight odor
LP-9 end	19.0	2.1	Light brown sand, slight odor
LP-10 end	19.4	118	Light gray to brown, odor
LP-11 end	17.3	0	Light gray to light brown sand, no odor
LP-12 end	18	2.1	Light brown sand
LP-12 @ 20'	20	2.0	Light brown sand
LP-13 end	19.5	0	Reddish brown sand, no odor
LP-14 end	22	0	Brown sand, no odor
LP-15 end	14.3	2.0	Light gray to light brown sand, slight odor
LP-15 @ 16'	16	0.5	Light brown sand, no odor
LP-18 end	20	0	Brown sand, no odor
LP-22 end	25	0	Light brown sand, no odor
LP-23 end	13	12.2	Light gray to light brown sand, slight odor
LP-23 @ 15'	15	5.1	Light brown sand
LP-24 end	16	0	Reddish-brown sand, no odor
LP-24 @ 18'	18	0	Red-brown sand, no odor
LP-29 end	18	0	Gray-brown sand, no odor
LP-31 end	23	0	Brown sand, no odor

Each sample was analyzed by STL for TAL metals, TCL VOCs, and TCL SVOCs. The resulting chemical analytical data are discussed in Section 2.4.

2.1.5 Restoration

Following end-point sampling, each of the leaching pools was restored to its previous function. In most cases, addition of backfill material was necessary to restore the grade inside the leaching pool to an elevation above the base of the structure so as to stabilize the leaching pool structure. Backfill consisted of clean virgin bank-run sand as certified by 110 Sand Company, the backfill supplier. A total of 97.29 tons (approximately 75 cubic yards) of backfill was placed into the leaching pools. The amount placed into each leaching pool was determined based on the amount of soil removal that had occurred below the bottom of the structure. Copies of the backfill certification information and receipts are included in Appendix B.

2.2 **Field Monitoring Results**

This section includes information pertaining to field monitoring performed during leaching pool remediation. Field monitoring was performed to address both worker and community health and safety issues associated with remediation at the Site.

2.2.1 Air Monitoring

Due to the nature of the materials removed from the leaching pools there was the potential for organic vapor emissions to occur as these materials were brought to the Site surface and managed. In addition, there was the potential for organic vapors and/or dust to be associated with the exhaust from the vacuum trucks. To address these concerns, organic vapor and dust monitoring were performed. To monitor organic vapors, a PID was used and maintained in good operating condition. Calibration of the PID was performed on a daily basis according to the manufacturer's instructions. Background levels of organic vapors were measured at the Site prior to beginning work and upwind of the work area

periodically using a PID. Organic vapors were also monitored at the downwind perimeter of the work area several times daily when removal of materials from the leaching pools was occurring or the remediation equipment was operating. Readings were obtained more frequently when odors or other indications of organic vapors were noted.

PID readings for both background and the work area perimeter were recorded in the field logbook.

Logbook recordings include the time, location, and PID readings observed. No significant concentrations of organic vapors were detected at any time during the leaching pool remediation. PID readings generally ranged between zero and 0.2 parts per million (ppm) on both the upwind and downwind perimeters of the work area. On one day readings of 0.8 to 1.2 ppm were noted on the downwind and upwind perimeters, however, the presence of high humidity on this day was the likely cause of the slightly elevated readings. In two cases low-level odors were detected in the downwind vicinity of the leaching pool or vactor, however, no measurable organic vapor readings were noted at these times with the PID. In summary, it does not appear that significant organic vapors were generated during the leaching pool remediation.

Dust monitoring was performed with a Miniram personal monitor calibrated according to the manufacturer's instructions. The Miniram was periodically held in the downwind vicinity of the vactor air discharge during vactoring operations and the readings were recorded in the field logbook. If measurable dust levels were noted, then readings were also obtained upwind of the vactor air discharge. If the downwind particulate level had exceeded the upwind level by more than 150 micrograms per cubic meter, then dust suppression techniques were to be employed.

Dust levels were generally in the range of 0 to 70 micrograms per cubic meter (ug/m^3) in the downwind vicinity of the vactor. Upwind of the vactor, the dust levels were generally comparable or somewhat less, ranging from 0 to 40 ug/m^3 . On only one occasion were elevated dust levels ($250 \text{ ug}/\text{m}^3$) noted. In this instance, lawn mowing was being performed upwind of the vactor area and both upwind

and downwind dust levels were elevated. In no instance was the downwind dust level greater than the upwind dust level by 150 ug/m³ or more.

2.2.2 Noise Monitoring

Due to the use of heavy equipment at the Site during leaching pool remediation, there was the potential for noise to impact the Site workers and the surrounding community. Since the facility was shut down during the initial portion of leaching pool remediation, it was unlikely that Site workers would be impacted by the noise during the shut down. In addition, work was performed only during normal working hours when ambient noise levels are elevated due to ongoing industrial activities in the community. Therefore, the potential for noise impacts on either the Site workers or surrounding community was evaluated to be low.

To address concerns regarding noise and other safety issues, Site workers were barred from entering the work zone. The work zone was established by evaluating both the physical limits of the area within which work was to be performed and also by periodically monitoring noise levels at the work zone boundary with a Realistic[™] hand-held sound level meter. Noise levels were also measured at the closest property boundary. Noise levels were monitored in dBs in the A-weighted, slow-response mode. If noise level readings exceeded an eight-hour time-weighted average of 85 dB at the work zone boundary or at the closest property boundary, appropriate measures were taken to reduce noise exposure beyond these boundaries. These measures included extension of the work zone boundary, relocation of non-essential Site workers, and/or recommending wearing of appropriate hearing protection devices.

In no case was the eight-hour time-weighted average of 85 dB exceeded at the property boundary.

In several cases the work zone boundary was extended to include the area where noise levels were 85 dB or greater and non-essential Site workers were relocated.

2.3 Quantities of Removed Material

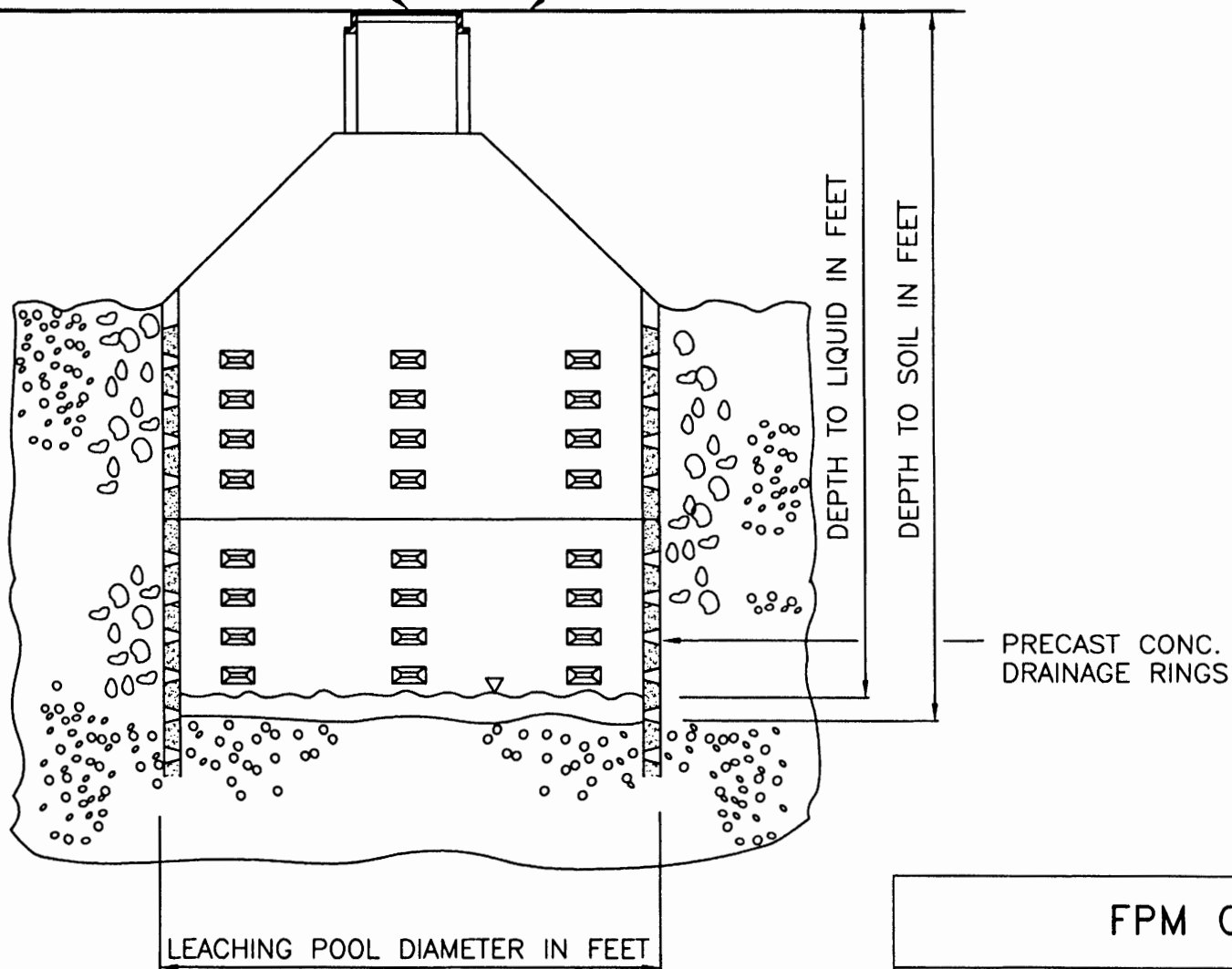
The depths to liquid and source soil were measured in each leaching pool prior to remediation. The measurement locations are shown on Figure 2.3.1. Following remediation, the depth to the remaining soil in each leaching pool was also measured. The results from these measurements are listed in Table 2.3.1 and were used together with visual observations to estimate the total volumes of liquid and source soil removed from the leaching pools.

In general, there is reasonable agreement between the estimated volume of removed liquids from the leaching pools (45,100 gallons) and the amount of liquid disposed at the SCDPW Bergen Point sewage treatment plant (59,500 gallons). The estimate of the total volume of liquids removed from the pools was 14,400 gallons less than the amount transported and disposed at Bergen Point. It is likely that additional liquid that was present in the soil surrounding the leaching pool migrated back into the leaching pool as it was pumped. Therefore, the amount of water removed would be greater than the calculated volume in the leaching pools.

In the case of the oily water transported and disposed at IPC, it was difficult to estimate the anticipated volume of this material. The oily water originated from the pressure washing of the interiors of the leaching pools, from the high-pressure water used to break up the congealed material in the bottom of several leaching pools, from the water which was removed from the top of the rolloff containers and vacuum boxes holding the solid waste, and from the decontamination of the remediation equipment. Since the amount of water utilized in pressure washing and decontamination was not metered, there is no reasonably accurate method to evaluate the anticipated amount of oily water. Therefore, the waste disposal tickets are the only method to evaluate the amount of oily water transported and disposed from the Site. Based on the waste disposal tickets, 19,984 gallons of oily water were disposed from the Site.

CAST IRON COVER
FLUSH TO GRADE

FINISHED GRADE



LEACHING POOL DIAMETER IN FEET

N.T.S.

FPM GROUP

FIGURE 2.3.1
TYPICAL LEACHING POOL CONFIGURATION
I.W. INDUSTRIES SITE
35 MELVILLE PARK ROAD
MELVILLE, NEW YORK

Drawn By: H.C. Checked By: S.D. Date: 8/22/00

TABLE 2.3.1.1
LEACHING POOL REMEDIATION DATA
I.W. INDUSTRIES SITE, MELVILLE, NEW YORK

Leaching Pools Remediated	Pool Diameter (feet)	Remediation Date	Pre-Remediation Depth to Water (feet)	Volume of Water Removed (gals)	Pre-Remediation Depth to Source Soil (feet)	Post-Remediation Depth to Soil (feet)	Volume of Source Soil Removed (cu yd)	Notes
LP-3	8	7/10/00	14	1,600	18	18.5	1	Added 1.5 yd ³ backfill. No odor, light brown sand, PID = 10.
LP-4	8	7/10/00	9	1,400	11.5	13.5	4	Appears gray, with top of soil below rings, took sample at 1.5 below top of remaining soil, gray, light sheen/odor, PID = 0.
LP-5	8	7/11/00	13.8	800	15.0	15.5	0.5	
LP-6	8	7/19/00	14.6	1,900	19	22.5	5	Brown sand, relatively clean, PID = 0.
LP-7	8	7/19/00	8	4,300	18.8	23	5.5	Gray brown sand, slight odor, end and deeper (26') samples, PID @ 26 = 0.
LP-8	8	7/13/00	10.5	2,500	16	18	4	Gray-brown, slight odor, PID = 2.8 on end sample.
LP-9	8	7/13/00	14.5	1,500	17	19	4	Light brown sand, PID end sample = 2.1.
LP-10	8	7/13/00	dry	0	17.4	19.4	4	Light brown, odor, PID = 118.
LP-11	8	7/11/00	8.7	2,700	15.8	17.3	3	
LP-12	8	7/12/00	10	2,700	16.9	18	2	Appears clean, no odor, below rings, PID = 2.1.
LP-13	8	7/14/00	11	2,200	16.2	19.5	3.5	Sides of pool gray, center appears clean light brown sand, below bottom ring.

TABLE 2.3.1.1 (CONTINUED)
LEACHING POOL REMEDIATION DATA
I.W. INDUSTRIES SITE, MELVILLE, NEW YORK

Leaching Pools Remediated	Pool Diameter (feet)	Remediation Date	Pre-Remediation Depth to Water (feet)	Volume of Water Removed (gals)	Pre-Remediation Depth to Source Soil (feet)	Post-Remediation Depth to Soil (feet)	Volume of Source Soil Removed (cu yd)	Notes
LP-14	8 ?	7/21/00	6.5	4,000	16	22	6	Brown sand, sediment removed to below bottom ring, PID = 0.
LP-15	8 ?	7/15/00	8	2,700	12.5	14	3	Light brown sand, appears clean, top is below rings.
LP-18	8 ?	7/17/00	11	2,500	15	20	9	Brown sand, light brown center, top is below ring.
LP-22	10	7/18/00	18	2,400	22	25	4	Light brown sand and gravel, appears clean.
LP-23	8	7/14/00	6	2,200	11.5	13	2	Appears clean, brown sand, top is just below bottom ring.
LP-24	8	7/21/00	9	1,300	11.5	16	5	Brown sand and gravel, appears clean, PID = 0.
LP-28	Septic tank	7/21/00	10	700	-	-	-	One foot of watery sediment removed, concrete bottom structure.
LP-29	10 ?	7/21/00	8	4,700	16	18	3	Gray-brown sand, PID = 0.
LP-31	10	7/18/00	16	3,000	20.5	23	3.5	Brown sand, appears clean, top is even with bottom ring.
Total Volumes Removed:				45,100			72	

The estimated weight of source soil removed from the leaching pools and the actual weight of solid waste transported and disposed from the Site are reasonably comparable if the weight of stabilizing agent and absorbed water are accounted for. A total of 125.38 tons of solid waste was transported from the Site and an estimated 101 tons of source soil (72 cubic yards x 1.4 tons/cubic yard) were removed from the leaching pools. A total of 26.16 tons of Stabilsorb was added to the removed source soil and associated water to solidify the waste prior to transportation. Therefore, the total weight of Stabilsorb, associated water, and source soil (127.16 tons) is comparable to the weight of solid waste removed from the Site (125.38 tons).

2.4 Chemical Analytical Results

End-point samples were collected from each of the leaching pools following remediation, with the exception of LP-28 which was found to be a solid-bottom structure. In addition, deeper samples were collected from below the top of the remaining soil in selected leaching pools as previously discussed in Section 2.1.4. Each of these samples was analyzed for TCL VOCs, TCL SVOCs and TAL metals. These results of these analyses are summarized in Tables 2.4.1 through 2.4.3 and the laboratory results are included in Appendix C.

As shown in Table 2.4.1, although low concentrations of several VOCs were detected in all of the samples, none of the detected concentrations exceeded the NYSDEC Objectives. Exceedances of the NYSDEC Objectives for several VOCs had previously been detected in source soil samples from LP-14, LP-28, and LP-29. Based on the end-point and deeper sample results, the source soils impacted with VOCs have been successfully removed from the Site.

The end-point and deeper sample SVOC results are shown in Table 2.4.2. Although SVOCs were detected in each of the samples, exceedances of the NYSDEC Objectives were noted only for the end-

TABLE 2.4.1
LEACHING POOL SAMPLES
VOLATILE ORGANIC COMPOUNDS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Sample No.	LP-3 end	LP-4 end	LP-4 @ 15'	LP-5 end	LP-5 @ 18'	LP-6 end	LP-7 end	LP-7 @ 26'	LP-8 end	LP-9 end	LP-10 end	LP-11 end	NYSDEC Cleanup Objectives
Sampling Date	7/10/00	7/10/00	7/10/00	7/11/00	7/11/00	7/19/00	7/19/00	7/19/00	7/13/00	7/13/00	7/13/00	7/11/00	
Volatile Organic Compounds in ug/kg													
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	4 J	ND	ND	ND	ND	1,400
Toluene	ND	18 J	1 J	ND	ND	ND	2 J	ND	ND	ND	ND	ND	1,500
Total VOCs	ND	18	1	ND	ND	ND	2	4	ND	ND	ND	ND	10,000

Sample No.	LP-12 end	LP-12 @ 20'	LP-13 end	LP-14 end	LP-15 end	LP-15 @ 16'	LP-18 end	LP-22 end	LP-23 end	LP-23 @ 15'	LP-24 end	LP-24 @ 18'	LP-29 end	LP-31 end	NYSDEC Cleanup Objectives
Sampling Date	7/12/00	7/12/00	7/14/00	7/21/00	7/15/00	7/15/00	7/17/00	7/18/00	7/14/00	7/14/00	7/21/00	7/21/00	7/21/00	7/18/00	
Volatile Organic Compounds in ug/kg															
2-Butanone	ND	ND	4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,400
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,500
Total VOCs	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000

Notes:

Only analytes detected in one or more samples are included in this table.

ND = Not Detected.

B = Analyte is detected in an associated blank.

J = An estimated value.

ug/kg = micrograms per kilograms.

TABLE 2.4.2
LEACHING POOL SAMPLES
SEMIVOLATILE ORGANIC COMPOUNDS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Sample No.	LP-3 end 7/10/00	LP-4 end 7/10/00	LP-4 @ 15' 7/10/00	LP-5 end 7/11/00	LP-5 @ 18' 7/11/00	LP-6 end 7/19/00	LP-7 end 7/19/00	LP-7 @ 26' 7/19/00	LP-8 end 7/13/00	LP-9 end 7/13/00	LP-10 end 7/13/00	LP-11 end 7/11/00	NYSDEC Cleanup Objectives
Sampling Date	7/10/00	7/10/00	7/10/00	7/11/00	7/11/00	7/19/00	7/19/00	7/19/00	7/13/00	7/13/00	7/13/00	7/11/00	
Semivolatile Organic Compounds in ug/kg													
Fluoranthene	450	6,500 J	6,900 J	200,000	2,100	ND	ND	ND	67 J	120 J	270 J	36 J	50,000
Naphthalene	ND	210 J	180 J	ND	ND	ND	100 JB	ND	ND	ND	ND	ND	13,000
2-Methylnaphthalene	ND	160 J	200 J	370 J	ND	ND	ND	ND	ND	ND	89 J	ND	36,400
Phenanthrene	200 J	9,000 J	8,500 J	87,000	1,600	ND	ND	ND	78 J	73 J	310 J	37 J	50,000
Carbazole	ND	1,000 J	1,200 J	3,900 J	100 J	ND	ND	ND	ND	ND	ND	ND	-
Acenaphthene	ND	1,300 J	1,200 J	3,500 J	110 J	ND	ND	ND	ND	ND	ND	ND	50,000
Dibenzofuran	ND	840 J	750 J	3,700 J	80 J	ND	ND	ND	ND	ND	ND	ND	6,200
Fluorene	ND	1,400 J	1,100 J	9,100 J	150 J	ND	ND	ND	ND	ND	38 J	ND	50,000
Anthracene	ND	2,000 J	ND	59,000	680	ND	ND	ND	ND	ND	36 J	ND	50,000
Pyrene	430	6,500 J	6,800 J	270,000	2,900 J	ND	ND	ND	80 J	150 J	260 J	ND	50,000
Benzo(a)anthracene	200 J	3,100 J	3,400 J	110,000	1,500 J	ND	ND	ND	40 J	74 J	100 J	ND	224
Chrysene	350 J	4,000 J	4,800 J	110,000	1,400 J	ND	ND	ND	51 J	91 J	140 J	ND	400
Benzo(b)fluoranthene	270 J	2,800 J	3,300 J	75,000	1,100 J	ND	ND	ND	37 J	74 J	120 J	ND	224
Benzo(k)fluoranthene	240 J	1,900 J	900 J	66,000	900 J	ND	ND	ND	41 J	81 J	110 J	ND	224
Benzo(a)pyrene	210 J	3,100 J	3,200 J	86,000	1,200 J	ND	ND	ND	35 J	80 J	100 J	ND	61
Indeno(1,2,3-cd)pyrene	180 J	2,300 J	2,800 J	60,000	1,000 J	ND	ND	ND	ND	74 J	100 J	ND	3,200
Benzo(g,h,i)perylene	300 J	2,900 J	2,400 J	65,000	1,100 J	ND	ND	ND	ND	67 J	92 J	ND	50,000
Dibenz[a,h]anthracene	57 J	1,000 J	900 J	27,000 J	370 J	ND	ND	ND	ND	ND	ND	ND	14
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50,000

TABLE 2.4.2 (CONTINUED)
LEACHING POOL SAMPLES
SEMIVOLATILE ORGANIC COMPOUNDS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Sample No.	LP-3 end	LP-4 end	LP-4 @ 15'	LP-5 end	LP-5 @ 18'	LP-6 end	LP-7 end	LP-7 @ 26'	LP-8 end	LP-9 end	LP-10 end	LP-11 end	NYSDEC Cleanup Objectives
Sampling Date	7/10/00	7/10/00	7/10/00	7/11/00	7/11/00	7/19/00	7/19/00	7/19/00	7/13/00	7/13/00	7/13/00	7/11/00	
Acenaphthylene	ND	ND	45 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	41,000
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	110 J	ND	7,900

Sample No.	LP-12 end	LP-12 @ 20'	LP-13 end	LP-14 end	LP-15 end	LP-15 @ 16'	LP-18 end	LP-22 end	LP-23 end	LP-23 @ 15'	LP-24 end	LP-24 @ 18'	LP-29 end	LP-31 end	NYSDEC Cleanup Objectives
Sampling Date	7/12/00	7/12/00	7/14/00	7/21/00	7/15/00	7/15/00	7/17/00	7/18/00	7/14/00	7/14/00	7/21/00	7/21/00	7/21/00	7/18/00	
Semivolatile Organic Compounds in ug/kg															
Fluoranthene	ND	65 J	33 J	ND	ND	ND	ND	ND	72 J	41 J	180 J	ND	ND	ND	50,000
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13,000
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36,400
Phenanthrene	ND	40 J	ND	ND	ND	ND	ND	ND	38 J	ND	66 J	ND	ND	ND	50,000
Carbazole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50,000
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,200
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50,000
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33 J	ND	ND	ND	50,000
Pyrene	ND	65 J	ND	ND	ND	ND	ND	ND	75 J	53 J	53 J	ND	ND	ND	50,000
Benzo(a)anthracene	ND	35 J	ND	ND	ND	ND	ND	ND	35 J	ND	50 J	ND	ND	ND	224
Chrysene	ND	51 J	ND	ND	ND	ND	ND	ND	73 J	44 J	120 J	ND	ND	ND	400
Benzo(b)fluoranthene	ND	45 J	ND	ND	ND	ND	ND	ND	75 J	50 J	95 J	ND	ND	ND	224

TABLE 2.4.2 (CONTINUED)
LEACHING POOL SAMPLES
SEMIVOLATILE ORGANIC COMPOUNDS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Sample No.	LP-12 end	LP-12 @ 20'	LP-13 end	LP-14 end	LP-15 end	LP-15 @ 16'	LP-18 end	LP-22 end	LP-23 end	LP-23 @ 15'	LP-24 end	LP-24 @ 18'	LP-29 end	LP-31 end	NYSDEC Cleanup Objectives
Sampling Date	7/12/00	7/12/00	7/14/00	7/21/00	7/15/00	7/15/00	7/17/00	7/18/00	7/14/00	7/14/00	7/21/00	7/21/00	7/21/00	7/18/00	
Benzo(k)fluoranthene	ND	43 J	ND	ND	ND	ND	ND	ND	51 J	38 J	100 J	ND	ND	ND	224
Benzo(a)pyrene	ND	36 J	ND	ND	ND	ND	ND	ND	51 J	ND	78 J	ND	ND	ND	61
Indeno(1,2,3-cd)pyrene*	ND	39 J	ND	ND	ND	ND	ND	ND	120 J	56 J	ND	ND	ND	ND	3,200
Benzo(g,h,i)perylene	ND	42 J	ND	ND	ND	ND	ND	ND	120 J	67 J	ND	ND	ND	ND	50,000
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	55 J	ND	ND	ND	ND	50,000
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41,000
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7,900

Notes:

Only analytes detected in one or more samples are included in this table.

ND = Not Detected.

B = Analyte is detected in an associated blank.

J = An estimated value.

N = Presumptive evidence of a compound.

E = Estimated concentration exceeding the calibration range of the instrument.

D = Diluted sample result.

ug/kg = micrograms per kilogram.

- = NYSDEC Recommended Soil Cleanup Objective not established for this compound.

Bold values exceed the NYSDEC Recommended Soil Cleanup Objective.

TABLE 2.4.3
LEACHING POOL SAMPLES
METALS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Sample No.	LP-3 end	LP-4 end	LP-4 @ 15'	LP-5 end	LP-5 @ 18'	LP-6 end	LP-7 end	LP-7 @ 26'	LP-8 end	LP-9 end	LP-10 end	LP-11 end	NYSDEC Cleanup Objectives
Sampling Date	7/10/00	7/10/00	7/10/00	7/11/00	7/11/00	7/19/00	7/19/00	7/19/00	7/13/00	7/13/00	7/13/00	7/11/00	
Total Metals in mg/kg													
Aluminum	385	699	1,020	1,240	654	495	850	743	624	610	684	789	SB
Antimony	0.74 B	0.61 B	0.62 B	0.44 B	ND	ND	ND	ND	ND	ND	ND	ND	SB
Arsenic	ND	0.58 B	1.2 B	0.59 B	ND	ND	0.66 B	ND	1.0 B	0.53 B	0.95 B	0.61 B	7.5
Barium	1.5 B	3.2 B	7.4 B	3.9 B	4.1 B	1.8 B	5.2 B	3.6 B	3.6 B	3.3 B	2.3 B	2.4 B	300
Beryllium	0.043 B	0.065 B	0.068 B	0.066 B	ND	0.051 B	0.047 B	ND	ND	0.048 B	0.068 B	0.065 B	0.16
Cadmium	0.28 B	0.20 B	0.30 B	0.055 B	ND	ND	ND	ND	ND	ND	ND	ND	10
Calcium	59.8 B	150 B	1,020 B	122 B	112 B	28.7 B	45.6 B	65.8 B	89.6 B	64.9 B	154 B	36.6 B	SB
Chromium	1.0 B	2.5	6.1	2.2	5.1	1.3 B	6.4	1.8 B	2.6	1.8 B	1.3 B	1.6 B	50
Cobalt	0.23 B	0.50 B	0.62 B	0.44 B	0.43 B	0.41 B	0.49 B	0.34 B	0.89 B	0.71 B	0.54 B	0.60 B	30
Copper	3,140	2,810	5,040	68.7	21.8	2.1 B	2.8 B	3.9 B	22.1	8.3	235	3.9 B	25
Iron	580	2,060	1,900	1,280	1,130	1,140	1,820	1,710	1,790	1,800	2,220	3,170	2,000
Lead	132	138	250	24.0	6.8	1.1 JN	3.0 JN	3.1 JN	6.1	2.6	12.0	7.6	500
Magnesium	79.9 B	200 B	708 B	212 B	262 B	114 B	240 B	172 B	222 B	166 B	208 B	182 B	SB
Manganese	3.4	14.3	9.5	8.9	9.6	7.1	9.9	8.0	34.7	54.7	31.6	30.5	SB
Mercury	ND	0.0048JN	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0031JBN	0.1
Nickel	3.5 B	4.3 B	7.6 B	2.3 B	2.6 B	1.1 B	1.3 B	1.2 B	1.4 B	1.4 B	1.9 B	1.2 B	13

TABLE 2.4.3 (CONTINUED)
LEACHING POOL SAMPLES
METALS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Sample No.	LP-3 end	LP-4 end	LP-4 @ 15'	LP-5 end	LP-5 @ 18'	LP-6 end	LP-7 end	LP-7 @ 26'	LP-8 end	LP-9 end	LP-10 end	LP-11 end	NYSDEC Cleanup Objectives
Sampling Date	7/10/00	7/10/00	7/10/00	7/11/00	7/11/00	7/19/00	7/19/00	7/19/00	7/13/00	7/13/00	7/13/00	7/11/00	
Potassium	20.7 B	55.6 B	68.1 B	59.9 B	86.9 B	44.9 B	151 B	47.4 B	77.2 B	49.3 B	47.0 B	81.5 B	SB
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
Silver	0.33 B	0.36 B	1.8 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	SB
Sodium	19.1 B	16.9 B	25.3 B	17.5 B	20.7 B	9.1 B	20.8 B	46.5 B	11.9 B	10.1 B	11.9 B	15.8 B	SB
Thallium	ND	ND	1.1 B	0.66 U	ND	ND	ND	ND	ND	ND	ND	ND	SB
Vanadium	1.2 B	2.8 B	5.5 B	3.5 B	2.3 B	2.7 B	3.4 B	3.0 B	2.4 B	2.5 B	2.4 B	3.3 B	150
Zinc	1,800	1,610	2,540	99.3	16.2	5.7	9.5	11.2	14.6	8.5	127	6.2	20

Notes:

ND = Not Detected.
 B = Reported value is less than the Contract Required Detection Limit but greater than the Instrument Detection Limit.
 J = Estimated value.
 mg/kg = milligrams per kilogram
 N = Matrix spiked sample recovery not within control limits.
 SB = Site Background.
Bold values exceed the NYSDEC Recommended Soil Cleanup Objective.

TABLE 2.4.3 (CONTINUED)
LEACHING POOL SAMPLES
METALS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Sample No.	LP-12 end	LP-12 @ 20'	LP-13 end	LP-14 end	LP-15 end	LP-15 @ 16'	LP-18 end	LP-22 end	LP-23 end	LP-23 @ 15'	LP-24 end	LP-24 @ 18'	LP-29 end	LP-31 end	NYSDEC Cleanup Objectives
Sampling Date	7/12/00	7/12/00	7/14/00	7/21/00	7/15/00	7/15/00	7/17/00	7/18/00	7/14/00	7/14/00	7/21/00	7/21/00	7/21/00	7/18/00	
Total Metals in mg/kg															
Aluminum	845	1,100	1,050	422	936	892	1,450	687	897	731	1,240	1,160	574	784	SB
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SB
Arsenic	1.4 B	1.6 B	1.3 B	ND	1.6 B	1.7 B	2.4	0.84 B	1.1 B	1.3 B	1.3 B	4.2	ND	0.73 B	7.5
Barium	4.2 B	5.1 B	5.2 B	1.8 B	4.9 B	4.6 B	4.9 B	3.4 B	5.8 B	2.8 B	6.8 B	7.8 B	3.0 B	2.3 B	300
Beryllium	0.082B	0.080B	0.090B	ND	0.066B	0.058B	0.090B	0.043B	0.084B	0.078B	0.073B	0.14 B	ND	0.044B	0.16
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.086B	ND	ND	10
Calcium	45.7 B	140 B	87.2 B	24.7 B	88.7 B	109 B	112 B	107 B	300 B	61.6 B	221 B	99.3 B	60.1 B	27.0 B	SB
Chromium	1.9	3.3	1.7	1.7 B	1.7 B	2.0	2.2	1.3 B	2.9	1.8 B	6.4	2.8	4.8	1.4 B	50
Cobalt	1.0 B	1.2 B	1.3 B	0.29 B	1.0 B	0.64 B	1.1 B	0.50 B	1.7 B	0.72 B	1.1 B	3.5 B	0.19 B	0.57 B	30
Copper	7.6	13.3	7.9	1.2 B	2.5 B	4.0 B	3.1 B	1.9 B	43.2	9.4	97.3	58.6	3.1 B	2.4 B	25
Iron	3,410	3,200	3,600	1,380	3,300	2,520	3,580	3,540	3,200	2,690	5,060	7,540	731	1,990	2,000
Lead	2.4	7.9	6.5	2.6 JN	2.3	1.6	2.2	2.4 JN	22.2	8.5	52.2JN	4.9 JN	5.9 JN	16.0JN	500
Magnesium	178 B	274 B	263 B	88.0 B	218 B	276 B	316 B	162 B	322 B	226 B	381 B	358 B	126 B	210 B	SB
Manganese	124	95.9	31.5	5.6	104	40.9	49.6	ND	143	58.0	ND	ND	5.9	11.5	SB
Mercury	0.0039 JBN	0.0037 JBN	0.0078 JN	0.0021 B	0.0028 JBN	ND	0.012 JN	ND	0.0086 JN	0.010 JN	0.057	ND	ND	ND	0.1

TABLE 2.4.3 (CONTINUED)
LEACHING POOL SAMPLES
METALS DATA
I. W. INDUSTRIES, MELVILLE, NEW YORK

Sample No.	LP-12 end	LP-12 @ 20'	LP-13 end	LP-14 end	LP-15 end	LP-15 @ 16'	LP-18 end	LP-22 end	LP-23 end	LP-23 @ 15'	LP-24 end	LP-24 @ 18'	LP-29 end	LP-31 end	NYSDEC Cleanup Objectives
Sampling Date	7/12/00	7/12/00	7/14/00	7/21/00	7/15/00	7/15/00	7/17/00	7/18/00	7/14/00	7/14/00	7/21/00	7/21/00	7/21/00	7/18/00	
Nickel	1.7 B	3.6 B	2.1 B	1.0 B	1.6 B	1.5 B	1.9 B	0.89 B	2.6 B	1.9 B	2.1 B	3.8 B	0.53 B	1.4 B	13
Potassium	56.8 B	69.8 B	56.8 B	48.8 B	46.7 B	91.9 B	78.0 B	71.3 B	67.7 B	46.5 B	112 B	144 B	56.3 B	63.5 B	SB
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SB
Sodium	17.9 B	14.4 B	11.0 B	11.2 B	32.8 B	34.6 B	12.4 B	14.6 B	16.0 B	11.6 B	13.6 B	11.7 B	10.4 B	12.0 B	SB
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SB
Vanadium	2.4 B	3.0 B	2.9 B	1.5 B	3.3 B	2.6 B	3.3 B	1.7 B	3.9 B	2.2 B	5.4 B	8.5 B	1.0 B	2.1 B	150
Zinc	12.8	16.4	ND	3.8	6.9	7.7	5.7	7.8	ND	ND	50.1	49.9	14.9	5.8	20

Notes:

ND = Not Detected.

B = Reported value is less than the Contract Required Detection Limit but greater than the Instrument Detection Limit.

J = Estimated value.

mg/kg = milligrams per kilogram

N = Matrix spiked sample recovery not within control limits.

SB = Site Background.

Bold values exceed the NYSDEC Recommended Soil Cleanup Objective.

point samples from LP-3, LP-4, LP-5, LP-9, LP-10, and LP-24. The deeper samples in LP-4 and LP-5 also exhibited exceedances of the NYSDEC Objectives. Prior to remediation, exceedances of the NYSDEC Objectives for SVOCs had been noted in all but two of the leaching pools targeted for remediation.

The magnitude of the exceedances varies significantly between the samples. The exceedances noted in the LP-9, LP-10, and LP-24 samples were each for one SVOC and the detected concentrations only slightly exceeded the NYSDEC Objectives. The exceedances noted in the LP-3 end-point, LP-4 end-point and deeper, LP-5 end-point, and LP-5 deeper samples were for several SVOCs in each sample. These exceedances were generally one order of magnitude above the NYSDEC Objectives, although some of the exceedances in the LP-5 end-point sample were two orders of magnitude above the Objectives. The detected concentrations represent significant reductions in SVOC concentrations relative to the initial SVOC concentrations in the source soil in each of these leaching pools. Although the detected SVOC concentrations in the LP-5 end-point sample remain elevated, the reduction in SVOC concentrations in the deeper LP-5 sample, collected 2.5 feet below the end-point sample, indicates that these concentrations are decreasing significantly with depth. In addition, none of the SVOCs exhibiting these exceedances was detected in groundwater samples obtained from wells located downgradient of these leaching pools. Based on this information, it appears that the SVOC concentrations in the Site leaching pools have been significantly reduced and the remaining SVOCs do not present a significant threat to groundwater. Groundwater monitoring is planned at the Site, as discussed in the RD Work Plan (FPM, June, 2000).

The end-point and deeper sample metals results are shown on Table 2.4.3. Significant reductions in leaching pool source soil metals concentrations have been achieved. Exceedances of the NYSDEC Objectives for arsenic, beryllium, cadmium, chromium, cobalt, lead, mercury, nickel, and selenium, which had previously been noted in Site leaching pools, were no longer present following remediation.

However, exceedances of the NYSDEC Objectives were noted for select metals in several of the samples. These exceedances include copper and/or zinc in the end-point samples from LP-3 through LP-5, LP-10, LP-23, and LP-24 and the deeper samples from LP-5 and LP-24. Copper and zinc were previously detected in all of the sampled leaching pools at concentrations up to four orders of magnitude above the Objectives. The detected concentrations in the end-point and deeper soil samples represent significant reductions in copper and zinc relative to the initial concentrations in the source soil in each of these leaching pools. In addition, neither dissolved copper nor zinc were detected in groundwater samples obtained from the Site monitoring wells. Based on this information, it appears that the copper and zinc concentrations in the Site leaching pools have been significantly reduced and the remaining concentrations do not present a significant threat to groundwater. Groundwater monitoring at Site wells is planned, as previously discussed.

Exceedances of the NYSDEC Objective for iron were detected in several of the end-point and deeper samples, including the LP-4, LP-10 through LP-13, LP-15, LP-18, and LP-22 through LP-24 end-point samples and the deeper samples at LP-12, LP-15, LP-23, and LP-24. All of the exceedances are lower, generally by a factor of two, than the initial concentrations detected in these leaching pools and are within the same order of magnitude as the NYSDEC Objective. These concentrations are also comparable to the iron concentrations detected in Site soil (Table 4.7.2, Focussed RI Report, FPM, January 1999). Based on this information, it appears that iron concentrations have been reduced relative to the initial concentrations and are comparable to ambient Site soil conditions.

2.5 Summary

Based on the information presented in Sections 2.3 and 2.4, it appears that the majority of the leaching pool source soil has been successfully remediated. A total of 125.38 tons of source soil and approximately 65,000 gallons of associated leaching pool liquids and oily water were removed from the

Site and properly disposed. Source soil was removed from each of the targeted leaching pools until visibly clean soil was encountered or excavation had proceeded to below the bottom of the structure and, therefore, additional material could not be removed without risking pool settlement or failure. The remaining soil was then sampled to confirm its condition.

The end-point sample results indicate that the VOCs formerly present in the Site leaching pools have been successfully remediated; no exceedances of the NYSDEC Objectives were noted for any VOCs. Concentrations of SVOCs and metals were also significantly reduced in the leaching pools; most of the exceedances previously noted have been reduced to below the NYSDEC Objectives. Exceedances of the NYSDEC Objectives for several SVOCs were noted in several of the end-point samples. Exceedances of the NYSDEC Objectives were also noted in several samples for select metals, including copper, zinc, and/or iron. However, the detected concentrations represent significant reductions in SVOCs and metals relative to the initial concentrations in the leaching pools. In addition, none of the detected SVOCs were noted in groundwater samples obtained downgradient of the affected leaching pools. Dissolved copper or zinc were also not detected in groundwater samples obtained from the Site. Based on this information, it appears that the SVOC and metals concentrations in the leaching pools have been significantly reduced and the remaining SVOCs and metals do not present a significant threat to groundwater. Groundwater monitoring is planned for the Site.

In addition, since the remaining soil is located below the base of the leaching pool rings (where it is unlikely to be accessed in the future) and has also been covered by clean backfill material, it is highly unlikely to be contacted by workers during maintenance or construction activities. Therefore, the potential for contact of the remaining soil by workers is nearly eliminated.

SECTION 3.0

QUALITY ASSURANCE/QUALITY CONTROL

This section of the work plan describes the quality assurance/quality control procedures utilized during the leaching pool remediation.

3.1 Decontamination Procedures

Dedicated disposable sampling equipment (disposable gloves, sampling spoons, etc.) was utilized whenever possible to reduce the risk of cross-contamination. When it was not possible to use disposable equipment, all non-disposable sampling equipment (i.e., hand auger buckets) was decontaminated prior to use at each location. The equipment to be decontaminated was scrubbed in a bath of potable water and low-phosphate detergent followed by a potable water rinse. The equipment was then rinsed successively with ten percent nitric acid (one percent for carbon steel) and distilled water. Hexane rinses were occasionally required for the hand auger buckets to remove oily contamination. The equipment was then allowed to air dry prior to use if time permitted. Between sampling events the decontaminated equipment was stored temporarily onsite in a dedicated plastic bag to reduce the potential for cross-contamination.

Remediation equipment, including the backhoe, vacuum trucks, water tanks, and vactor, was also decontaminated prior to leaving the Site or between uses with different types of waste. Remediation equipment was decontaminated by rinsing with potable water and detergent. The rinseates were contained and disposed with the oily water, as described in Section 2.1.2.

3.2 Sample Designation

All leaching pool end point samples, deeper samples, and associated QA/QC samples were identified with sequential numbers referencing the leaching pool from which they were obtained or with which they are associated. When additional samples were collected from the same location, they were

clearly labeled with the sampling date and time so as to facilitate identification. If a deeper soil sample was collected, it was also labeled with the sample depth referenced to grade.

3.3 Sample Packaging and Shipment

All samples were placed in laboratory-supplied bottles with appropriate preservatives and the bottles were labeled as described above. The filled bottles were placed in laboratory-supplied coolers and packed with ice to depress the temperature to 4 degrees Celsius. The shipping coolers were secured with tape and were delivered to the laboratory by an overnight carrier. In the event the samples could not be delivered to the laboratory overnight, the samples remained in the custody of FPM personnel overnight and the samples were delivered to the laboratory the following day.

3.4 Chain-of-Custody Procedures and Sample Tracking

For each day of sampling, a chain-of-custody sheet was completed and submitted to the laboratory; a copy of the chain-of-custody was also retained by FPM. The chain-of-custody sheet included the project name, the sampler's signature, the sampling locations, intervals, and analysis parameters requested. The air bill number for the overnight courier was also placed on the chain-of-custody to facilitate tracking.

Samples were tracked by FPM through the field collection and shipping processes and by Severn-Trent Laboratory through the laboratory analysis and laboratory report preparation processes. FPM assembled, reviewed, and evaluated the analytical results as they were received and prepared draft data tables summarizing the results. FPM also transmitted the completed chemical analytical data packages to the data validator for review and received and evaluated the data validation report.

3.5 QA/QC Samples

QA/QC samples, including equipment blank samples, trip blank samples, duplicate samples, and matrix spike/matrix spike duplicate (MS/MSD) samples, were obtained during the leaching pool end-point soil sampling.

During leaching pool remediation one equipment blank sample per day was obtained. Each equipment blank sample was prepared by pouring laboratory-supplied, deionized water through the sampling equipment and into a set of sample containers. The equipment blank samples were tested for the same analytes as the soil samples. The equipment blank sample results were reviewed to evaluate the potential for field or laboratory contamination.

The results of the equipment blank samples, designated EB-1 through EB-9, are summarized in Table 3.5.1 and the laboratory data are included in Appendix C. These results indicate that the equipment decontamination procedures were successful in the prevention of cross-contamination between samples and that the sample results are not significantly impacted by the sampling procedures. Low concentrations of several VOCs, including acetone, methylene chloride, chloroform, and, in one case, trichloroethene, were detected in the equipment blank samples. A low concentration of one SVOC, diethylphthalate, was detected in one equipment blank sample. Low concentrations of metals, including copper, iron, and zinc (the metals of concern in the leaching pool end-point samples), were detected in some or all of the samples. However, the detected concentrations are generally low and are unlikely to contribute to the observed primary sample concentrations via cross-contamination. One equipment blank sample, EB-5, exhibited a zinc concentration of 260 mg/l. The associated environmental sample results were appropriately qualified as per the data validation report.

One trip blank sample was provided by the laboratory for each set of samples submitted to the laboratory for VOC analysis. The trip blank samples were prepared by the laboratory from analyte-free, deionized water and remained in the coolers in which the samples were stored. Trip blank samples were analyzed for VOCs only. The purposes of trip blank samples are to ensure that no cross-contamination of VOCs occurs in the sample cooler and to attest to laboratory water quality.

TABLE 3.5.1
QUALITY ASSURANCE/QUALITY CONTROL SAMPLES
I. W. INDUSTRIES, MELVILLE, NEW YORK

Sample No.	EB-1	EB-2	EB-3	EB-4	EB-5	EB-6	EB-7	EB-8	EB-9	TB-1	TB-2	TB-3	TB-4	TB-5	TB-6	TB-7	TB-8	LP-8 end	LP-80 end (duplicate)
Sampling Date	7/10/00	7/11/00	7/12/00	7/13/00	7/14/00	7/17/00	7/18/00	7/19/00	7/21/00	7/10/00	7/11/00	7/12/00	7/13/00	7/14/00	7/17/00	7/19/00	7/20/00	7/13/00	7/13/00
Volatile Organic Compounds in ug/l																		in ug/kg	
Acetone	ND	ND	ND	ND	2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	1 J	2 J	1 J	4 J	4 J	3 J	2 J	1 J	4 J	2 J	3 J	2 J	5 J	6 J	2 J	2 J	2 J	ND	ND
Chloroform	0.6 J	0.7 J	0.6 J	0.7 J	0.5 J	ND	ND	ND	11	0.8 J	0.8 J	0.8 J	0.7 J	0.7 J	0.8 J	0.7 J	0.6 J	ND	ND
Trichloroethene	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds in ug/l																		in ug/kg	
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	78 J	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	67 J	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	80 J	ND
Benzo[a]anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	40 J	ND
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	51 J	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	120 JB	86 JB
Benzo[b]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	37 J	ND
Benzo[k]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	41 J	ND
Benzo[a]pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	35 J	ND
Indeno[1,2,3-cd]pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	32 J	ND
Benzo[g,h,i]perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	98 J
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	4 JB	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Total Metals in ug/l																		in mg/kg	
Aluminum	ND	ND	15.0 B	ND	ND	ND	14.8 JB	15.0 JB	24.2 JB	NA	NA	NA	NA	NA	NA	NA	NA	624	636
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	1.0 B	0.49 B
Barium	ND	ND	ND	ND	ND	ND	0.15 B	0.19 B	ND	NA	NA	NA	NA	NA	NA	NA	NA	3.6 B	3.7 B
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.046 B
Calcium	33.1 B	16.6 B	24.7 B	26.3 B	80.0 B	18.2 B	44.1 B	59.2 B	47.2 B	NA	NA	NA	NA	NA	NA	NA	NA	89.6 B	111 B
Chromium	ND	ND	ND	ND	ND	ND	ND	0.40 B	ND	NA	NA	NA	NA	NA	NA	NA	NA	2.6	2.1

TABLE 3.5.1 (CONTINUED)
QUALITY ASSURANCE/QUALITY CONTROL SAMPLES
I. W. INDUSTRIES, MELVILLE, NEW YORK

Sample No.	EB-1	EB-2	EB-3	EB-4	EB-5	EB-6	EB-7	EB-8	EB-9	TB-1	TB-2	TB-3	TB-4	TB-5	TB-6	TB-7	TB-8	LP-8 end	LP-80 end (duplicate)
Sampling Date	7/10/00	7/11/00	7/12/00	7/13/00	7/14/00	7/17/00	7/18/00	7/19/00	7/21/00	7/10/00	7/11/00	7/12/00	7/13/00	7/14/00	7/17/00	7/19/00	7/20/00	7/13/00	7/13/00
Total Metals in ug/l (Cont'd)																			
Cobalt	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	0.89 B	1.0 B
Copper	ND	ND	ND	ND	ND	ND	ND	0.66 B	ND	NA	NA	NA	NA	NA	NA	NA	NA	22.1	15.3
Iron	ND	ND	33.8 B	ND	ND	12.2 B	26.1 B	11.9 B	ND	NA	NA	NA	NA	NA	NA	NA	NA	1,790	2,070
Lead	ND	ND	ND	ND	ND	ND	1.6 B	1.6 B	ND	NA	NA	NA	NA	NA	NA	NA	NA	6.1	5.4
Magnesium	7.2 B	ND	ND	ND	ND	ND	6.1 B	8.2 B	4.1 B	NA	NA	NA	NA	NA	NA	NA	NA	222 B	256 B
Manganese	0.30 B	ND	0.50 B	ND	0.31 B	0.50 B	0.77 B	ND	0.55 B	NA	NA	NA	NA	NA	NA	NA	NA	34.7	63.9
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	1.4 B	1.5 B
Potassium	ND	ND	ND	ND	ND	ND	45.1 B	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	77.2 B	46.4 B
Sodium	31.3 B	43.2 B	53.0 B	86.1 B	52.6 B	28.8 B	33.7 JB	44.4 JB	27.5 JB	NA	NA	NA	NA	NA	NA	NA	NA	11.9 B	17.5 B
Vanadium	ND	ND	ND	ND	ND	ND	0.35 B	0.57 B	0.56 B	NA	NA	NA	NA	NA	NA	NA	NA	2.4 B	2.6 B
Zinc	6.9 B	2.9 B	4.3 B	4.1 B	260	1.9 B	ND	5.2 B	9.6 B	NA	NA	NA	NA	NA	NA	NA	NA	14.6	13.7

Notes:

Only analytes detected in one or more samples are included in this table.

ND = Not Detected.

NA = Not Analyzed.

B = Reported value is less than the Contract Required Detection Limit but greater than the Instrument Detection Limit (for metals), or analyte is detected in associated blank (for VOCs or SVOCs).

J = An estimated value.

ug/kg = micrograms per kilogram

ug/l = micrograms per liter

mg/kg = milligrams per kilogram

The results from the trip blank samples, designated TB-1 through TB-8, are summarized in Table 3.5.1 and the laboratory data are included in Appendix C. The few detections for VOCs in the trip blank samples were for methylene chloride and chloroform, which are common laboratory contaminants and were detected at low concentrations. A low concentration of 1,1,2,2-tetrachloroethane was also detected in one trip blank sample, but was not detected in any of the other samples. Based on this information, there does not appear to be the potential for significant cross-contamination of the primary samples by VOCs.

MS/MSD samples were submitted to the laboratory by obtaining an extra volume of sample. The frequency of MS/MSD samples was a minimum of one per sample delivery group (20 primary samples). The purpose of the MS/MSD samples is to confirm the accuracy and precision of the laboratory.

The MS/MSD sample results were reviewed by the data validator and the results of the review are included in the data validation report in Appendix D. The MS/MSD results are discussed in Section 3.7 below.

One blind duplicate sample was obtained and was prepared by obtaining an extra volume of sample. The purpose of the blind duplicate sample is to attest to the precision of the laboratory. The results from the blind duplicate sample (LP-80 end) and its associated parent sample (LP-8 end) are summarized in Table 3.5.1, discussed in the data validation report, and the data are included in Appendix C. The results show that, in general, the primary and duplicate sample results vary by less than 10 percent and, therefore, that the laboratory results are reasonably precise. Variations between the primary and duplicate sample results may be affected by differences in sample matrix, particularly for soil samples. The results for primary and duplicate soil samples are consistent with minor variations in sample matrix.

3.6 Sample Analysis

All samples were submitted to a New York State Department of Health ELAP- and CLP-certified laboratory. The laboratory testing conformed to USEPA Contract Laboratory Protocol (CLP) with data reporting conforming to ASP. Laboratory testing and data reporting were performed by a subcontracted laboratory, Severn-Trent Laboratory, located in Shelton, Connecticut.

The ASP laboratory reports are presented in Appendix C and include sample analytical results, methods of analysis, surrogate recoveries, reportable field and laboratory QA/QC sample analytical results, method limits of detection, and sample practical quantification limits (PQLs). All samples were analyzed for TCL VOCs using EPA Methods 624/8240, TCL SVOCs using EPA Methods 625/8270, and TAL metals by EPA 7000 Series Methods with NYSDEC ASP Category B deliverables.

3.7 Data Validation

All samples obtained and analyzed were subjected to data validation by an independent contractor using NYSDEC ASP Revision 5/95 and EPA Region II Functional Guidelines. The data validation subcontractor was Data Validation Services of North Creek, New York. The data validation was performed to verify that the analytical results are of sufficient quality to be relied upon to assess the potential contamination in the remaining soils in the vicinity of the leaching pools. The results of the data validation, including a statement of data usability, are presented in Appendix D. A general discussion of data usability is presented below.

The majority of the data quality issues identified for the VOCs were related to low-level detections of common laboratory contaminants (methylene chloride, acetone, and chloroform) in blank samples and excessive matrix interference. The data quality issues for the SVOCs were primarily related to matrix effects. Data quality issues for the metals were primarily related to matrix spike recovery, laboratory control sample recovery, and blank responses. The results of the data validation were used to qualify the

analytical data received from the laboratory. The qualifications recommended in the data validation reports have been applied to the data tables presented in the preceding sections.

3.8 Analytical Data Evaluation

FPM received and reviewed the analytical packages from STL and prepared draft summary data tables. The results from the QA/QC samples were also reviewed and evaluated. Following completion of the data validation, any modifications made to the data packages were incorporated into finalized summary data tables. The summary data tables were reviewed with respect to field observations and field screening measurements (PID readings) and any discrepancies were resolved.

SECTION 4.0 FREE-PHASE PRODUCT REMOVAL

This section includes information pertaining to the initiation of free-phase product removal at the Site. Additional information will be provided in the annual monitoring reports.

Free-phase product removal has been initiated in the area where recoverable free-phase product was formerly present on the water table surface. The measured free-product thicknesses in July, 1997 at the Site ranged from 0.03 feet at well MW-2 to 0.4 feet at well MW-7. Free-phase product was not detected in May or July, 2000 at wells MW-2, MW-7, or any nearby Site wells. The water table elevation was noted to be 0.5 to 1.0 feet higher in May and July, 2000 than in July, 1997 and, therefore, it is likely that the free-phase product was not present as a continuous layer due to the elevated water table surface. However, it is anticipated that the free-phase product layer will reform as the water table declines. Therefore, free-phase product recovery efforts were initiated in July, 2000 at wells MW-2 and MW-7 in anticipation of an eventual decline in the water table.

The product removal method utilized depends primarily on the apparent thickness of the product in the wells and the surface conditions in the vicinity of the wells, as discussed in the RA Work Plan. Free-phase product apparent thicknesses were monitored in July, 2000 in wells MW-2 and MW-7 and no measurable free-phase product was detected, although a visible sheen was noted on the water from well MW-7. Therefore, product-absorbent materials were selected as the most appropriate free-phase product removal method at that time. The apparent thickness of the free-phase product will be measured in each of the Site wells on a quarterly basis to confirm the appropriate selection of product recovery methods.

Hydrophobic product-absorbent materials are widely utilized in industry and environmental remediation to absorb and remove free-phase product for disposal. These materials are manufactured in forms suitable for insertion into groundwater monitoring wells (e.g. Soak-Eze) and may be utilized to

absorb thin free-phase product layers. On July 25, 2000, a Soak-Eze was placed into each of wells MW-2 and MW-7 in contact with the water table surface, which is the location where free-phase product would be anticipated to accumulate. The Soak-Eze have been periodically removed and inspected to evaluate if they are spent. A monitoring log of the Soak-Eze inspections is maintained and a copy is presented in Table 4.1.1. When spent, the absorbent materials are placed into a sealed, labeled 55-gallon drum for eventual proper disposal off-site, as discussed below. Since monitoring was initiated in July, 2000, no measurable free-phase product has been noted in either MW-2 or MW-7 or in any of the nearby wells.

Based on the current rate of use, the absorbent materials will be serviced approximately once every two weeks until such time that a more appropriate servicing frequency becomes apparent. The objective of optimizing the servicing frequency is to establish the most rapid, cost-efficient product removal rate. As discussed in the RA Work Plan, if free-phase product thicknesses increase to more than one inch, then hydrophobic bailers will be placed in the affected wells. If the free-phase product thicknesses are reduced to less than one inch in wells with hydrophobic bailers, then the bailers will likely be removed and absorbent materials will be utilized to continue free-phase product removal.

Free-phase product removal and monitoring efforts will continue to be documented by the completion of monitoring logs. The monitoring log will be completed by FPM personnel each time a monitoring event occurs. Copies of the monitoring logs will be included in the annual monitoring reports.

The removed product and spent absorbent materials will be placed into labeled drums and stored indoors on-Site pending disposal. The filled drums will be removed by a licensed waste hauler and transported off-Site for proper disposal. Disposal will occur at an appropriate permitted disposal facility and the waste will likely be classified as non-hazardous. Waste manifests will be completed to document the proper disposal of the product and spent absorbent materials. It is anticipated that free-phase product

TABLE 4.1.1
FREE-PHASE PRODUCT MONITORING DATA
I. W. INDUSTRIES SITE, 35 MELVILLE PARK ROAD
MELVILLE, NEW YORK

Date	Notes
07/25/00	MW-7: No free-phase product detected by interface probe. DTW 49.07 feet. Petroleum odor and product residue on probe. Installed Soak-Eze. MW-2: No free-phase product detected by interface probe. DTW 49.10 feet. No odor or evidence of product on probe. Installed Soak-Eze.
08/10/00	MW-7: Checked Soak-Eze, 25% saturated, re-installed same Soak-Eze. MW-2: Checked Soak-Eze, 25% saturated, re-installed same Soak-Eze. No measurable free-phase product.
08/23/00	MW-7: Removed Soak-Eze, 33% saturated, and installed a fresh Soak-Eze. MW-2: Removed Soak-Eze, 33% saturated, and installed a fresh Soak-Eze. No measurable free-phase product.
09/15/00	MW-7: Removed Soak-Eze, 25% saturated, and installed a fresh Soak-Eze. MW-2: Removed Soak-Eze, 33% saturated, and installed a fresh Soak-Eze. No measurable free-phase product.
09/29/00	MW-7: Checked Soak-Eze, 25% saturated, reinstalled same Soak-Eze. MW-2: Checked Soak-Eze, 25% saturated, reinstalled same Soak-Eze. No measurable free-phase product.
11/9/00	MW-7: Checked Soak-Eze, 50% saturated, reinstalled same Soak-Eze. MW-2: Checked Soak-Eze, 25% saturated, reinstalled same Soak-Eze. No measurable free-phase product.

removal efforts will continue for approximately one year. Free-phase product monitoring will be performed quarterly for a minimum of three additional years. Free-phase product removal will be reinitiated if additional recoverable (greater than 0.01 foot) free-phase product is noted.

SECTION 5.0 REFERENCES

- Anson Environmental, Ltd., 1994. *Environmental Investigation, 35 Melville Park Road, Melville, New York.*
- Fanning, Phillips and Molnar, February, 1999. *Focussed Feasibility Study for I.W. Industries, Inc., 35 Melville Park Road, Melville, New York.*
- Fanning, Phillips and Molnar, January, 1999. *Focussed Remedial Investigation Report for I.W. Industries, Inc., 35 Melville Park Road, Melville, New York.*
- Fanning, Phillips and Molnar, May, 1997. *Remedial Investigation Work Plan for I.W. Industries, Inc., 35 Melville Park Road, Melville, New York.*
- New York State Department of Environmental Conservation, March, 2000. *Record of Decision. I.W. Industries Site, Huntington (T), Suffolk County, Site Number 1-152-102.*
- New York State Department of Environmental Conservation, February, 2000. *Proposed Remedial Action Plan. I.W. Industries, Huntington (T), Suffolk County, New York, Site Number 1-52-102.*
- New York State Department of Environmental Conservation, 1995. *TAGM-4046 (revision 4/95).*
- U.S. Geological Survey, 1964. *Water-Supply Paper 1669-D, "Hydrogeology of the Huntington-Smithtown Area, Suffolk County, Long Island, New York".*

SECTION 6.0 DISCLAIMER

Conclusions from this data are limited to those areas focused on in the study and represent our best judgement using analytical techniques and our past experience. Even though our investigation has been scientific and thorough, it is possible that certain areas of this property may pose environmental concerns that yet are undiscovered. In addition, environmental regulations may change in the future and could have an effect on our conclusions.

APPENDIX A

WASTE CHARACTERIZATION INFORMATION

- APL

AQUA PRO-TECH LABORATORIES

CERTIFICATIONS

NJ DEF 07010 / NY DOH 11634 / CT PH-0233

US ARMY CORPS (USACE)

ANALYTICAL RESULTS SUMMARY

Client Integrated Technical Services, Inc.
 PO Box 156, 874 Piney Hollow Rd
 Winslow, NJ 08085
Contact Paul Molnar
Project
Report Date 07/17/2000 13:25

APL Order ID Number 20070268
Date Sampled 07/06/2000 10:00
Date Received 07/07/2000 15:25
Matrix Wastewater
Site IW Industries
Customer Service Rep.

Sample Number/ Parameter	Method	Analysis Time	Analyst	Result	Units	MDL
20070268-001 IW Sanitary						
Arsenic	EPA 200.7	07/14/2000 1:00	MARK	<0.0050	mg/L	0.008
BN + 15	EPA 625					
Cadmium	EPA 200.7	07/14/2000 1:00	MARK	<0.0020	mg/L	0.002
Chromium	EPA 200.7	07/14/2000 1:00	MARK	<0.020	mg/L	0.02
Chromium (VI), Hexavalent (Cr)	SM 3500 Cr-D	07/13/2000 11:45		<0.01	mg/L	0.01
Copper	EPA 200.7	07/14/2000 1:00	MARK	0.08	mg/L	0.01
Lead	EPA 200.7	07/14/2000 1:00	MARK	0.023	mg/L	0.01
Manganese	EPA 200.7	07/14/2000 1:00	MARK	0.044	mg/L	0.01
Nickel	EPA 200.7	07/14/2000 1:00	MARK	<0.0050	mg/L	0.005
Silver	EPA 200.7	07/14/2000 1:00	MARK	<0.030	mg/L	0.03
TPHC (DRO)	6015					
VOs + 10	EPA 624		SUDIP	SA		
Zinc	EPA 200.7	07/14/2000 1:00	MARK	0.49	mg/L	0.04
20070268-002 IW Storm Drain						
Arsenic	EPA 200.7	07/14/2000 1:00	MARK	<0.0050	mg/L	0.008
BN + 15	EPA 625					
Cadmium	EPA 200.7	07/14/2000 1:00	MARK	<0.0020	mg/L	0.002
Chromium	EPA 200.7	07/14/2000 1:00	MARK	<0.020	mg/L	0.02
Chromium (VI), Hexavalent (Cr)	SM 3500 Cr-D			<0.01	mg/L	0.01
Copper	EPA 200.7	07/14/2000 1:00	MARK	0.11	mg/L	0.01
Lead	EPA 200.7	07/14/2000 1:00	MARK	0.017	mg/L	0.01
Manganese	EPA 200.7	07/14/2000 1:00	MARK	0.020	mg/L	0.01
Nickel	EPA 200.7	07/14/2000 1:00	MARK	<0.0050	mg/L	0.005
Silver	EPA 200.7	07/14/2000 1:00	MARK	<0.030	mg/L	0.03
TPHC (DRO)	3015					
VOs + 10	EPA 624		SUDIP	SA		

SA: See attached report

Brian Wood
 Laboratory Director

QA

1275 BLOOMFIELD AVENUE, BLDG. 6, FAIRFIELD, NJ 07004 TEL 973 227 3422 FAX 973 227 2813

-APL

CERTIFICATIONS

AQUA PRO-TECH LABORATORIES

NJ DEP 07010 / NY DOH 11634 / CT PH-0233

US ARMY CORPS (USACE)

ANALYTICAL RESULTS SUMMARY

Client Integrated Technical Services, Inc.
PO Box 156, 874 Piney Hollow
Rd
Winslow, NJ 08095
Contact Paul Molnar
Project
Report Date 07/17/2000 13:25

APL Order ID Number 20070268
Date Sampled 07/08/2000 9:30
Date Received 07/07/2000 15:26
Matrix Wastewater
Site IW Industries
Customer Service Rep.

Sample Number/ Parameter	Method	Analysis Time	Analyst	Result	Units	MDL
Zinc	EPA 200.7	07/14/2000 1:00	MARK	0.41	mg/L	0.04

SA: See attached report

Brian Wood
Laboratory Director

QA

1275 BLOOMFIELD AVENUE, 1 .DG. 8, FAIRFIELD, NJ 07004 TEL 973 227 0422 FAX 973 227 2813

TOTAL P.03

AQUA PRO-TECH LABORATORIES
EPA Method 624/ 3260B Analytical Report

Client Sample

IWI Storm Drain

Client: Integrated Technical Services

Project: IW Industries

Matrix: WATER

Lab Sample ID: 20070268-002

Sample wt/vol: 20.0 (g/ml) ML

Lab File ID: 4/2959.D

Level: (low/med) LOW

Date Collected: 7/3/00

% Moisture

Soil Aliquot Volume: (uL)

Date Analyzed: 7/11/00

Soil Extract Volume: (uL)

Dilution Factor: 1.0

CONCENTRATION

CAS NO.	COMPOUND	ug/l	Q	MDL	PQL
75-71-8	Dichlorodifluoromethane		U	1.4	5.0
74-87-3	Chloromethane		U	1.1	5.0
75-01-4	Vinyl Chloride		U	1.0	5.0
74-83-9	Bromomethane		U	1.0	5.0
75-00-3	Chloroethane		U	0.48	5.0
75-69-4	Trichlorofluoromethane		U	4.8	5.0
107-02-8	Acrolein		U	2.3	5.0
67-64-1	Acetone		U	3.0	5.0
75-35-4	1,1-Dichloroethene		U	1.9	5.0
75-65-0	tert-Butyl Alcohol		U	1.8	5.0
75-08-2	Methylene Chloride		U	0.97	5.0
75-15-0	Carbon Disulfide		U	0.64	5.0
107-13-1	Acrylonitrile		U	1.3	5.0
1634-04-4	Methyl tert-Butyl Ether		U	0.83	5.0
158-60-5	trans-1,2-Dichloroethene		U	0.91	5.0
75-34-3	1,1-Dichloroethane		U	0.75	5.0
108-05-4	Vinyl Acetate		U	1.1	5.0
78-93-3	2-Butanone		U	1.2	5.0
594-20-7	2,2-Dichloropropane		U	1.4	5.0
158-59-2	cis-1,2-Dichloroethene		U	0.83	5.0
67-66-3	Chloroform		U	0.69	5.0
74-97-5	Bromochloromethane		U	0.47	5.0
71-55-6	1,1,1-Trichloroethane		U	0.82	5.0
563-58-6	1,1-Dichloropropene		U	0.47	5.0
56-23-5	Carbon Tetrachloride		U	2.7	5.0
107-06-2	1,2-Dichloroethane		U	0.56	5.0
71-43-2	Benzene		U	0.38	5.0
79-01-6	Trichloroethene		U	0.39	5.0
78-87-5	1,2-Dichloropropane		U	0.69	5.0
75-27-4	Bromodichloromethane		U	1.0	5.0
74-95-3	Dibromomethane		U	1.2	5.0
110-75-8	2-Chloroethylvinyl ether		U	0.41	5.0
108-10-1	4-Methyl-2-Pentanol		U	0.67	5.0
10061-01-5	cis-1,3-Dichloropropene		U	0.52	5.0
108-88-3	Toluene		U	0.58	5.0
10061-02-6	trans-1,3-Dichloropropene		U	0.75	5.0
79-00-5	1,1,2-Trichloroethane		U	0.48	5.0

Qualifiers: U - Undetected, J - Estimated Concentration, D - Diluted,

B - Detected in Blank, E - Exceeds Calibration Range

AQUA PRO-TECH LABORATORIES
EPA Method 624 B260B Analytical Report

Client Sample

IWI Storm Drain

Client: Integrated Technical ServicesProject: IWI IndustriesMatrix: WATERLab Sample ID: 20070268-002Sample wt/vol: 20.0 (g/ml) MLLab File ID: 4/2959.DLevel: (low/med) LOWDate Collected: 7/6/00

% Moisture _____

Soil Aliquot Volume: _____ (uL)

Date Analyzed: 7/11/00

Soil Extract Volume: _____ (uL)

Dilution Factor: 1.0

CONCENTRATION

CAS NO.	COMPOUND	ug/l	Q	MDL	PQL
591-78-6	2-Hexanone		U	1.3	5.0
142-28-9	1,3-Dichloropropane		U	0.54	5.0
127-18-4	Tetrachloroethene		U	0.33	5.0
124-48-1	Dibromochloromethane		U	0.92	5.0
106-93-4	1,2-Dibromoethane		U	0.58	5.0
108-90-7	Chlorobenzene		U	0.40	5.0
630-20-6	1,1,1,2-Tetrachloroethane		U	0.77	5.0
100-41-4	Ethylbenzene		U	0.38	5.0
1330-20-7	m+p-Xylenes		U	0.85	10
1330-20-7	o-Xylene		U	0.52	5.0
100-42-5	Styrene		U	0.47	5.0
98-82-8	Isopropylbenzene		U	0.48	5.0
75-25-2	Bromoform		U	1.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane		U	0.95	5.0
98-18-4	1,2,3-Trichloropropane		U	0.52	5.0
103-65-1	n-Propylbenzene		U	0.45	5.0
106-86-1	Bromobenzene		U	0.41	5.0
108-87-8	1,3,5-Trimethylbenzene		U	0.42	5.0
95-49-8	2-Chlorotoluene		U	0.53	5.0
105-43-4	4-Chlorotoluene		U	0.48	5.0
98-06-6	tert-Butylbenzene		U	0.41	5.0
95-63-6	1,2,4-Trimethylbenzene		U	0.48	5.0
135-98-8	sec-Butylbenzene		U	0.36	5.0
99-87-6	4-Isopropyltoluene		U	0.38	5.0
541-73-1	1,3-Dichlorobenzene		U	0.42	5.0
106-48-7	1,4-Dichlorobenzene		U	0.43	5.0
104-51-8	n-Butylbenzene		U	0.56	5.0
95-50-1	1,2-Dichlorobenzene		U	0.31	5.0
96-12-8	1,2-Dibromo-3-chloropropane		U	1.2	5.0
120-82-1	1,2,4-Trichlorobenzene		U	0.54	5.0
87-68-3	Hexachlorobutadiene		U	0.82	5.0
91-20-3	Naphthalene		U	0.50	5.0
87-61-6	1,2,3-Trichlorobenzene		U	0.48	5.0

Qualifiers: U - Undetected, J - Estimated Concentration, D - Diluted,

B - Detected in Blank, E - Exceeds Calibration Range

AQUA PRO-TECH LABORATORIES
EPA Method 824/8260B Analytical Report
TENTATIVELY IDENTIFIED COMPOUNDS

Client Sample

IWI Storm Drain

Client: Integrated Technical Services

Project: IW Industries

Matrix: (soil/water) WATER

Lab Sample ID: 20070268-002

Sample wt/vol: 20.0 (g/ml) ML

Lab File ID: 4V2959.D

Level: (low/med) LOW

Date Collected: 7/6/00

% Moisture:

Date Analyzed: 7/11/00

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION

Number TICs found: 0

uL

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
---------	---------------	----	------------	---

Qualifiers: J - Estimated Concentration, N - CAS number present,
D - Diluted

Total Est. Conc: 0

ACUA PRO-TECH Laboratories
Fairfield, NJ

DIESEL RANGE ORGANICS (DRO) ANALYTICAL REPORT
EPA Method 8015B

Client:	<u>Integrated Tech. Services</u>	GC File:	<u>star073</u>
Project:	<u>IV Industries</u>	Date Extracted:	<u>7/12/00</u>
Sample ID:	<u>M Storm Drain</u>	Date Analyzed:	<u>7/13/00</u>
Lab Sample ID:	<u>20070213-002</u>	Sample Weight (g):	<u> </u>
Date Collected:	<u>7/6/00</u>	Sample Volume (mL):	<u>880</u>
Matrix (soil/water):	<u>Water</u>	Final Extract Volume (mL):	<u>10</u>
% Moisture:	<u> </u>	Extract Dilution Factor:	<u>1</u>

ANALYTICAL RESULTS

PARAMETER	CONCENTRATION	UNIT:3	MDL	PQL
TPH - DRO	40.57	mg/L	0.11	0.57

AQUA PRO-TECH Laboratories
Fairfield, NJ**DIESEL RANGE ORGANICS (DRO) ANALYTICAL REPORT**
EPA Method 8015B

Client:	<u>Integrational Tech. Services</u>	GC File:	<u>star072</u>
Project:	<u>IV Industries</u>	Date Extracted:	<u>7/12/00</u>
Sample ID:	<u>IV Sanitary</u>	Date Analyzed:	<u>7/13/00</u>
Lab Sample ID:	<u>20070281-001</u>	Sample Weight (g):	<u> </u>
Date Collected:	<u>7/8/00</u>	Sample Volume (mL):	<u>940</u>
Matrix (soil/water):	<u>Water</u>	Final Extract Volume (mL):	<u>10</u>
% Moisture:	<u> </u>	Extract Dilution Factor:	<u>1</u>

ANALYTICAL RESULTS

PARAMETER	CONCENTRATION	UNITS	MDL	PQL
TPH - DRO	1.36	mg/L	0.11	0.53

AQUA PHASE TECH LABORATORIES

File: L Sample

EPA Method 825/82/00 Analytical Report

RW: Storm Drain

Client: Integrated Technical Services

Project: RW Industries

Matrix: WATER

Lab Sample ID: 20071-268-002

Sample wt/vol: 940 (g/l) ML

Lab File ID: S9877.D

Level: (low/med) LOW

Date Collected: 7/8/00

% Moisture:

Date Extracted: 7/10/00

Concentration/Extract Volume: 1000 (ul)

Injection Volume: 1.0 (ul)

Date Analyzed: 7/19/00

Dilution Factor: 1.0

CONCENTRATION:

CAS NO.	COMPOUND	ug/l	O	MDL	PCL
110-86-1	Pyridine		U	2.1	11
82-75-9	N-nitrosodimethylamine		U	3.3	11
87-53-3	Aniline		U	4.5	11
111-44-1	1,2-Dichloroethyl ether		U	1.1	11
541-73-1	1,3-Dichlorobenzene		U	2.2	11
106-46-7	1,4-Dichlorobenzene		U	2.7	11
100-51-8	Benzyl Alcohol		U	1.7	11
95-50-1	1,2-Dichloroethane		U	2.0	11
108-60-1	N,N-Dichloroethyl ether		U	2.0	11
621-04-7	N-nitrosodimethylamine		U	2.0	11
67-72-1	Hexachlorocyclopentadiene		U	3.7	11
98-95-3	Nitrobenzene		U	2.9	11
78-59-1	Isophorone		U	2.2	11
111-91-1	bis(2-Chloroethyl) methane		U	2.0	11
120-82-1	1,2,4-Trichlorobenzene		U	3.5	11
91-20-3	Nitrobenzene		U	3.0	11
106-47-9	4-Chloroaniline		U	2.7	11
87-68-3	Hexachlorobutadiene		U	1.4	11
91-57-8	2-Methylnaphthalene		U	2.1	11
77-47-4	Hexachlorocyclopentadiene		U	3.2	11
91-58-7	2-Chloronaphthalene		U	2.6	11
88-74-4	2-Nitroaniline		U	3.4	11
131-11-3	Dimethylphthalate		U	3.8	11
208-90-8	Acenaphthylene		U	3.0	11
608-20-2	2,6-Dinitrotoluene		U	2.9	11
99-09-2	3-Nitroaniline		U	3.4	11
83-32-8	Acenaphthene		U	3.1	11
132-64-9	Dibenzofuran		U	3.8	11
121-14-2	2,4-Dinitrotoluene		U	3.9	11
86-73-7	Fluorene		U	3.7	11
84-66-2	Diethylphthalate		U	5.0	11
7006-72-3	4-Chlorophenyl phenyl ether		U	2.4	11
100-01-6	4-Nitroaniline		U	3.3	11
86-30-8	N-nitrosodimethylamine		U	2.9	11
105-33-3	1,2-Diphenylhydrazine		U	4.4	11
101-85-3	4-Bromophenyl phenyl ether		U	3.2	11
118-74-1	Hexachlorobenzene		U	3.2	11
86-01-8	Phenanthrene	1.0	U	3.1	11

Qualifiers: U - Undetected, J - Estimated Concentration, D - Diluted,

B - Detected in Blank, E - Exceeds Calibration Range

AQUA PRO-TECH LABORATORIES
EPA Method 625/8270C Analytical Report

Client Sample

IWI Storm Drain

Client: Integrated Technical ServicesProject: IW IndustriesMatrix: WATERLab Sample ID: 20070268-002Sample wt/vol: 940 (g/ml) MLLab File ID: S3877.DLevel: (low/med) LOWDate Collected: 7/6/00% Moisture: Date Extracted: 7/10/00Concentrated Extract Volume: 1000 (uL)Injection Volume: 1.0 (uL)Date Analyzed: 7/19/00Dilution Factor: 1.0

CONCENTRATION:

CAS NO.	COMPOUND	ug/l	C	MDL	PQL
120-12-7	Anthracene		U	2.2	11
88-74-8	Carbazole		U	3.9	11
84-74-2	Di-n-butylphthalate		U	4.6	11
206-44-0	Fluoranthene	3.4	J	3.6	11
92-87-5	Benzidine		U	15	11
129-00-0	Pyrene	2.3	J	3.6	11
85-68-7	Butylbenzylphthalate		U	4.4	11
56-55-3	Benzo[a]anthracene	1.1	J	2.4	11
91-94-1	3,3'-Dichlorobenzidine		U	5.5	11
218-01-9	Chrysene	2.5	J	2.4	11
117-81-7	bis(2-Ethylhexyl)phthalate	1.3	J	3.8	11
117-84-0	Di-n-octylphthalate		U	4.1	11
205-99-2	Benzo[b]fluoranthene	2.8	J	2.9	11
207-08-9	Benzo[k]fluoranthene	1.3	J	2.9	11
50-32-8	Benzo[a]pyrene	1.6	J	2.6	11
193-39-5	Indeno(1,2,3-cd)pyrene	1.4	J	2.4	11
53-70-3	Dibenzo[a,h]anthracene		U	2.2	11
191-24-2	Benzo[g,h,i]perylene	1.5	J	1.9	11

Qualifiers: U - Undetected, J - Estimated Concentration, D - Diluted,

B - Detected in Blank, E - Exceeds Calibration Range

AQUA PICO-TECH LABORATORIES
EPA Method 1625/8270C Analytical Report
TENTATIVELY IDENTIFIED COMPOUNDS

Client Sample

IWI Storm Drain

Client: Integrated Technical Services

Project: IWI Industries

Matrix: (soil/water) WATER

Lab Sample ID: 20070268-002

Sample wt/vol: 94.0 (g/ml) ML

Lab File ID: S9877.D

Level: (low/med) LCW

Date Collected: 7/6/00

% Moisture:

Date Extracted: 7/10/00

Concentrated Extract Volume: 10.0 (uL)

Date Analyzed: 7/19/00

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

CONCENTRATION

Number TICs found: 1

ug/l

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 026158-81-6	Octadecanoic acid, 2-[(1-oxohexa	36.23	84	JN

Qualifiers: J - Estimated Concentration, N - CAS number present,
D - Diluted

Total Est. Conc: 84

AQUA PR 3-TECH LABORATORIES
EPA Method 525/5270C Analytical Report

Client Sample

Sanitary

Client: Integrated Technical Services

Project: JW Industries

Matrix: WATER

Lab Sample ID: 20071268-001

Sample wt/vol: 94 (g/v) ML

Lab File ID: SUB 13 D

Level: (low/mid) LOW

Date Collected: 7/6/01

% Moisture:

Date Extracted: 7/10/00

Concentrated Extract Volume: 100X (uL)

Injection Volume: 1.0 (uL)

Date Analyzed: 7/19/00

Dilution Factor: 1.0

CONCENTRATION:

CAS NO.	COMPOUND	ug/l	Q	MDL	POL
110-86-1	Pyridine		U	2.1	11
62-75-9	N-nitroso-dimethanamine		U	3.3	11
62-53-3	Aniline		U	4.5	11
111-44-4	bis(2-Chloroethoxy) ether		U	1.1	11
541-73-1	1,3-Dichlorobenzene		U	2.2	11
106-46-7	1,4-Dichlorobenzene		U	2.7	11
100-51-6	Benzyl Alcohol		U	1.7	11
95-60-1	1,2-Dichlorobenzene		U	2.0	11
100-60-1	bis(2-Chloroethoxy) ether		U	2.0	11
621-64-7	N-nitroso-di-n-propylamine		U	2.0	11
67-72-1	Hexachloroethane		U	3.7	11
98-96-3	Nitrobenzene		U	2.9	11
78-59-1	Isophorone		U	2.2	11
111-91-1	bis(1-Chloroethyl) methane		U	2.0	11
120-82-1	1,2,4-Trichlorobenzene		U	3.5	11
81-20-3	Naphthalene	1.9	J	3.0	11
106-47-8	4-Chlorophenol		U	2.7	11
67-60-3	Hexachlorobutadiene		U	1.4	11
91-57-8	2-Methylnaphthalene	4.9		2.1	11
77-47-4	Hexachlorocyclopentadiene		U	3.2	11
91-64-7	2-Chloronaphthalene		U	2.8	11
88-74-4	2-Nitroaniline		U	3.4	11
131-11-3	Dimethylphthalate		U	3.8	11
208-98-0	Acenaphthylene		U	3.0	11
806-20-2	2,6-Dinitrofluorene		U	2.9	11
99-08-2	3-Nitroaniline		U	3.4	11
83-32-6	Acenaphthene		U	3.1	11
132-64-9	Dibenzofuran		U	2.5	11
121-14-2	2,4-Dinitrotoluene		U	3.9	11
86-73-7	Fluorene		U	3.7	11
84-66-2	Dibenzophthalone	15		5.0	11
7006-72-3	4-Chlorophenyl phenyl ether		U	2.4	11
100-01-0	4-Nitroaniline		U	3.3	11
86-30-6	N-nitroindole pyrimine		U	2.8	11
109-33-9	1,2-Diphenylhydrazine		U	4.4	11
101-85-4	4-Bromophenyl phenyl ether		U	3.2	11
118-74-1	Hexachlorobenzene		U	2.2	11
85-01-8	Phenanthrene	0.70	J	3.1	11

Qualifiers: U - Undetected, J - Estimated Concentration, D - Diluted,

B - Detected in blank, E - Exceeds Calibration Range

AQUA PFI-TECH LABORATORIES
EPA Method 825/8270C Analytical Report

Client Sample

PM Sanitary

Client: Integrated Technical Services

Project: IW Industries

Matrix: WATER

Lab Sample ID: 20070268-001

Sample Wt/vol: 940 (g/l) ML

Lab File ID: S9875.0

Level: (low/mod) LOW

Date Collected: 7/6/03

% Moisture: _____

Date Extracted: 7/10/03

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 7/19/03

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

CONCENTRATION:

CAS NO.	COMPOUND	ug/l	Q	MDL	PQL
120-12-7	Anthracene		U	2.2	11
88-74-8	Carbazole		U	3.9	11
84-74-2	Di-n-nitylphthalate		U	4.6	11
206-44-0	Fluoranthene		U	3.6	11
92-87-6	Benzidine		U	15	11
129-00-0	Pyrene	0.00	J	3.8	11
85-68-7	Butylbenzylphthalate	1.5	J	4.4	11
96-55-3	Benzofluoranthene		U	2.4	11
91-94-1	3,3'-Dichlorobenzidine		U	5.6	11
218-01-9	Chrysene		U	2.4	11
117-81-7	bis(2-Ethylhexyl)phthalate	5.7		3.8	11
117-84-0	Di-n-octylphthalate	2.5	J	4.1	11
205-99-7	Benzobifluoranthene		U	2.9	11
207-08-9	Benzofluoranthene		U	2.9	11
50-32-8	Benzofluorene		U	2.8	11
193-39-5	Indeno(1,2,3-cd)pyrene		U	2.4	11
53-70-3	Dibenzofluoranthene		U	2.2	11
181-24-2	Benzofluoranthene		U	1.9	11

Qualifiers: U - Undetected, J - Estimated Concentration, D - Diluted,

B - Detected in blank E - Exceeds Calibration Range

AQUA PRO-TECH LABORATORIES
EPA Method 625/82/00 Analytical Report
TENTA' VELY IDENTIFIED COMPOUNDS

Client Sample

IMI Sanitary

Client: Integrated Technical Services

Project: IW Industries

Matrix: (soil/water) WATER

Lab Sample ID: 20070268-001

Sample wt/vol: 940 (g/ml) ML

Lab File ID: S9878.0

Level: (low/med) LOW

Date Collected: 7/6/00

% Moisture:

Date Extracted: 7/10/00

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 7/18/00

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

CONCENTRATION

Number TICs found: 15

up:1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000099-37-6	Benzene, 1-methyl-4-(1-methylethyl)-	9.77	25	JN
2. 001120-71-4	Undecane	11.24	20	JN
3.	unknown	12.54	18	J
4. 000112-40-3	Undecane	13.26	20	JN
5. 017301-23-4	Undecane, 2,6-dimethyl-	13.49	20	JN
6. 017302-28-2	Nonane, 2,6-dimethyl-	14.58	24	JN
7. 000629-50-5	Tridecane	15.13	26	JN
8.	unknown	16.00	20	J
9. 074645-98-0	Dodecane, 2,7,10-trimethyl-	16.43	17	JN
10. 000629-50-0	Tetradecane	16.87	20	JN
11. 001120-16-1	1-Tetralene	35.19	34	JN
12. 000295-65-6	Cyclohexadecane	36.94	23	JN
13.	unknown	37.42	113	J
14. 000801-54-1	Cholesterol	38.84	18	JN
15.	unknown	39.65	51	J

Qualifiers: J - Estimated Concentration; N - CAS number present,
 D - Diluted

Total Est. Conc: 449

Page 1 of 1

FORM I SV-TIC

RECEIVED JUL 2 10 2111

COUNTY OF SUFFOLK



ROBERT J. GAFFNEY
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF PUBLIC WORKS

CHARLES J. BARTHA, P.E.
COMMISSIONER

July 24, 2000

Stephanie O. Davis
FPM Group
909 Marconi Ave.
Ronkonkoma, NY 11779

Re: I.W. Industries, Melville
Acceptability of Waste

Dear Ms. Davis:

This is written to confirm that the liquid portion of three sanitary cesspools and the storm drains servicing the above referenced were acceptability for disposal at the County's Bergen Point Facility and that this work was performed under supervision from this office on 6,12,13,21 July 00.

Very truly yours

Kevin J. Oldham
Principal Engineering Aide

KJO:lt

Cc: R. Strzepek
D. Krol
P. Schramel

SUFFOLK COUNTY IS AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

07/18/2000 13:16
01 18 00 01:01p

IW INDUSTRIES - 15317372410
FPM Group

631-737-2410

P.3



Carteret Biocycle Corporation
24 Middlesex Avenue, Carteret, NJ

Phone: 732-541-8909

Approval Number:

Contaminated Soil Profile Sheet

Generator Information:

Name: I W INDUSTRIES

Address: 35 MELVILLE PARK RD

City: MELVILLE State: NY

Zip Code: 11747

Agent or Contact Person: STEPHANIE DAVIS

Telephone: 631-737-6200

Company Name: FPM GROUP

Billing Information

Name: ITS

Phone: 604-567-8140

Address: 70 BOX 151

Fax: 604-567-6128

City: WINSTON

State: NC

Zip Code: 27045

Site Description:

Address: 35 MELVILLE PARK RD

City: MELVILLE State: NY

Zip Code: _____

Existing Site Land Use: MFG FACILITY

How Many Years: 15+

Previous Site Land Uses and years Each: N/A

Is This Site a State or Federal Superfund Site? Yes _____ No X

Soil Description:

Source of Contamination (LST, Other): REMOVAL OF SOLIDS FROM LEACHING POOLS

Estimated Volume of Soil: 200 TONS

Type of Contamination (Gas, Kerosene, Oil, etc.): DIESEL FUEL

If Contamination is Other Than Above Please Specify: N/A

Is a Soil Analysis Attached to this Form? YES

Certification

I hereby certify that the above information is a true and accurate description to the best of my knowledge of the material we intend to ship to Carteret Biocycle Corporation's Facility.

Signed: Edwin D. Winkler
Print Name: EDWIN D. WINKLER

Date: 7/18/2000
Title: V.P.

34 Middlesex Avenue - Carteret, NJ 07008
Phone: 732-541-8909 Fax: 732-541-8105 Website: www.fpm.com





APPROVAL NUMBER: _____

NON-HAZARDOUS WASTE CERTIFICATION SHEET

PCB Certification

I, the undersigned, under penalty of law, do hereby certify that the material to be submitted to the Carteret Biocycle Corporation's facility does not contain polychlorinated biphenols (PCBs) at concentration greater than 2 ppm and was not derived from a source containing PCB's at a concentration greater than 50 ppm as defined in 40 CFR 751.

Herbicide/Pesticide Certification

I, the undersigned, under penalty of law, do hereby certify that the material to be submitted to the Carteret Biocycle Corporation's facility does not contain Herbicides or Pesticides at concentrations that would render it a hazardous waste as defined in 40 CFR 261.

Non-hazardous Waste Certification

I, the undersigned under penalty of law do hereby certify that the material to be submitted to the Carteret Biocycle Corporation's facility is not a listed hazardous waste, nor does it contain a listed hazardous waste, nor does it exhibit any of the characteristics of a hazardous waste as defined in 40 CFR 261.

The undersigned also acknowledges they have used due diligence in determining the Non-Hazardous status of the said material, as defined in 40 CFR. Should at any time after delivery, the material accepted by Carteret Biocycle Corporation be found non-conforming to the above, it becomes the responsibility of the Generator/Agent to remove the waste from Carteret Biocycle Corporation's property within five (5) days of notification (notification is to be verbal followed by written notification, overnight receipted). It is the Generator/Agent's responsibility to abide by all Federal, State, and Local regulations associated with the removal of their waste. If the waste is not removed within the specified time period, said disposal shall be arranged by a Carteret Biocycle Corporation representative and billed to the Generator/Agent at cost plus basis. Furthermore the Generator/Agent will be responsible for any and all costs for decontamination required at Carteret Biocycle Corporation's facility, that is related to the Generator/Agent's material and all liability for such nonconforming waste shall revert to the Generator/Agent.

*

I CERTIFY THAT I AM AUTHORIZED TO EXECUTE THIS ON BEHALF OF:

I. W. INDUSTRIES, Inc.

GENERATOR NAME

EDWIN D. WIGBERTOFF

PRINT NAME

V.P.

TITLE

Edwin D. Wigbertoff

AUTHORIZED SIGNATURE

7/18/2000

DATE

1/18/99



APL

IQUA PRO-TECH LABORATORIES

CERTIFICATIONS

N.J. DEP #07010/NY DOH #11634

CT #PH-0233

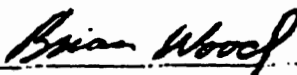
ANALYTICAL RESULTS SUMMARY

Client Integrated Technical Services, I
PO Box 156, 874 Finey Hollow
Rd
Winslow, NJ 08095
Contact Paul Molnar
Project
Report Date 07/14/2000 18:03

APL Order ID Number 20070289
Date Sampled 07/06/2000 10:30
Date Received 07/07/2000 15:25
Matrix Soil
Site IW Industries
Customer Service Rep.

Sample Number/ Parameter	Method	Analysis Time	Analyst	Result	Units
20070289-001	IWI-Storm Drain				
Corrosivity	SV/1110	07/11/2000 10:30	JEN	8.5	pH Units
Ignitability	SV/1010	07/14/2000 17:00	RAVI	>80	°C
Reactivity - cyanide	SV/9010	07/11/2000 13:40	RAVI	<0.32	mg/kg
Reactivity - sulfide	SV/9030	07/11/2000 13:40	RAVI	<3.2	mg/kg
TCLP Arsenic	SV/1311	07/14/2000 9:52	RAVI	<0.05	mg/L
TCLP Barium	SV/1311	07/14/2000 9:52	RAVI	1.78	mg/L
TCLP Cadmium	SV/1311	07/14/2000 9:52	RAVI	<0.02	mg/L
TCLP Chromium	SV/1311	07/14/2000 9:52	RAVI	<0.20	mg/L
TCLP Lead	SV/1311	07/14/2000 9:52	RAVI	0.220	mg/L
TCLP Mercury	SV/1311	07/14/2000 17:00	RAVI	0.0024	mg/L
TCLP Selenium	SV/1311	07/14/2000 9:52	RAVI	<0.25	mg/L
TCLP Silver	SV/1311	07/14/2000 9:52	RAVI	<0.30	mg/L

SA: See attached report

Brian Wood
Laboratory Director

AQUA PRO-TECH LABORATORIES
Fairfield, NJ**PCB ANALYTICAL REPORT**

Client:	Integrated Technical	Lab Sample ID:	20070269-1
Project:	TW Industries	GC Run ID:	GC2E6192
Sample ID:	TW-Storm Drain	Analysis Date:	7/10/2000
Date Sampled:	7/6/2000	Extraction Date:	7/10/2000
Matrix: (soil/water):	soil	Sample Wt / Vol:	30 g
% Moisture:	21%	Final Volume (ml):	10
Concentration Units:	µg/g	Dilution Factor:	1

Compound	Result	PQL	Qualifier
Aroclor 1015	ND	21	U
Aroclor 1221	ND	21	U
Aroclor 1232	ND	21	U
Aroclor 1242	ND	21	U
Aroclor 1248	ND	21	U
Aroclor 1254	ND	21	U
Aroclor 1260	ND	21	U

Qualifiers:

U - compound not detected at the specified detection limit
J - below PQL

AQUA PRO-TECH Laboratories
Fairfield, NJ

DIESEL RANGE ORGANICS (DRO) ANALYTICAL REPORT
EPA Method 8015B

Client:	<u>Integral Tech. Services</u>	GC File:	<u>star077</u>
Project:	<u>III Industries</u>	Date Extracted:	<u>7/13/00</u>
Sample ID:	<u>IW - Storm Drain</u>	Date Analyzed:	<u>7/13/00</u>
Lab Sample ID:	<u>2007026 II-002</u>	Sample Weight (g):	<u>30</u>
Date Collected:	<u>7/6/00</u>	Sample Volume (mL):	<u> </u>
Matrix (soil/water):	<u>Soil</u>	Final Extract Volume (mL):	<u>10</u>
% Moisture:	<u>21</u>	Extract Dilution Factor:	<u>1</u>

ANALYTICAL RESULTS

PARAMETER	CONCENTRATION
TPH - DRO	306

UNITS	MDL	PQL
mg/kg	4.22	21.1

AQJA PRO-TECH Laboratories
Fairfield, NJ**DIESEL RANGE ORGANICS (DRO) ANALYTICAL REPORT**
EPA Method 8015B

Client:	<u>Integrated Tech. Services</u>	GC File:	<u>star076</u>
Project:	<u>IT Industries</u>	Date Extracted:	<u>7/13/00</u>
Sample ID:	<u>IW - Storm Drain</u>	Date Analyzed:	<u>7/13/00</u>
Lab Sample ID:	<u>200702E3-001</u>	Sample Weight (g):	<u>30</u>
Date Collected:	<u>7/6/00</u>	Sample Volume (mL):	<u> </u>
Matrix (soil/water):	<u>Soil</u>	Final Extract Volume (mL):	<u>10</u>
% Moisture:	<u>21</u>	Extract Dilution Factor:	<u>1</u>

ANALYTICAL RESULTS

PARAMETER	CONCENTRATION
TPH - DRO	734

UNITS	MDL	PQL
mg/kg	4.22	21.1

AQ JA PRO-TECH Laboratories
Fairfield, NJ

DIESEL RANGE ORGANICS (DRO) ANALYTICAL REPORT
EPA Method 8015B

Client:	<u>Integrated Tech. Services</u>	GC File:	<u>star078</u>
Project:	<u>IV Industries</u>	Date Extracted:	<u>7/13/00</u>
Sample ID:	<u>IWI Storm Drain</u>	Date Analyzed:	<u>7/13/00</u>
Lab Sample ID:	<u>2007028-003</u>	Sample Weight (g):	<u>30</u>
Date Collected:	<u>7/6/00</u>	Sample Volume (mL):	<u> </u>
Matrix (soil/water):	<u>Soil</u>	Final Extract Volume (mL):	<u>10</u>
% Moisture:	<u>21</u>	Extract Dilution Factor:	<u>1</u>

ANALYTICAL RESULTS

PARAMETER	CONCENTRATION
TPH - DRO	774

UNITS	MDL	PQL
mg/kg	4.22	21.1

AQUA PRO-TECH LABORATORIES
Fairfield, NJ**PCB ANALYTICAL REPORT**

Client:	Integrated Technical	Lab Sample ID:	20070269-1
Project:	TW Industries	GC Run ID:	GC2E6192
Sample ID:	IWI-Storm Drain	Analysis Date:	7/10/2000
Date Sampled:	7/6/2000	Extraction Date:	7/10/2000
Matrix: (soil/water):	soil	Sample Wt./Vol:	30 g
% Moisture:	21%	Final Volume (ml):	10
Concentration Units:	µg/kg	Dilution Factor:	1

Compound	Result	PQL	Qualifier
Aroclor 1016	ND	21	U
Aroclor 1221	ND	21	U
Aroclor 1232	ND	21	U
Aroclor 1242	ND	21	U
Aroclor 1248	ND	21	U
Aroclor 1254	ND	21	U
Aroclor 1260	ND	21	U

Qualifiers:

U - compound not detected at the specified detection limit
J - below PQL

APPENDIX B

**SOLIDIFICATION MATERIAL,
WASTE DISPOSAL DOCUMENTS, AND
BACKFILL CERTIFICATION INFORMATION**

KEYSTONE
INTEGRATED TECHNICAL
SERVICES INC
T W INDUSTRIES
MELVILLE, NY

TRUCK DELIVERY ORDER

CONSIGNEE TO:
INTEGRATED TECHNICAL
SERVICES INC
T W INDUSTRIES
MELVILLE, NY

120481
004560-104
07-24-00
0579-2091
080115
067050
CUSTOMER NO.
DATE SHIPPED
CUSTOMER ORDER NO.
KEYSTONE ORDER NO.
MILEAGE
B/L NO.

SEAL.#
SILO# 70

INSTRUCTIONS:

SHIPPER

CARRIER

TRAILER NO. T-204

BULK	DESCRIPTION	WEIGHT	RATE
------	-------------	--------	------

26.16

1 LOAD 8170 STABLESORE

8 AM

5:59am 7-24-00

DELIVERY TIME

79700 1b

GROSS

ARRIVED AT DESTINATION

27380 1b

TARE

UNLOADING COMPLETED

DRIVER

[Signature]

52320 1b

NET

MATERIAL RECEIVED IN GOOD ORDER

CONSIGNEE

RECEIVED BY

(FULL NAME)

CEMENT DUST +
BACKFILL

STATE CERTIFICATION

ALL CLAIMS MUST BE MADE ON RECEIPT OF GOODS

SOLIDS

CBC
Delivery Report - DR & Approval#

7/28/00

1

From: 7/24/00
To: 7/28/00
Approval# 200304
Generator I W INDUSTRIES
Origin 35 MELVILLE PARK RD.
MELVILLE, NY

#Loads 6
TOTAL 125.38

<u>Date</u>	<u>Ticket#</u>	<u>Approval #</u>	<u>Truck#</u>	<u>Loc.</u>	<u>Manifest#s.</u>	<u>Net Tons</u>
7/26/00	11975	200304	652	A3	16554	24.40
7/27/00	11989	200304	625	A3	16555	18.62
7/27/00	12011	200304	489	A3	16556	20.05
7/27/00	12030	200304	625	A3	16557	19.65
7/28/00	12070	200304	489	A3	16559	22.94
7/28/00	12071	200304	652	A3	16558	19.72

16554

MANIFEST

K

Integrated Technical Services, Inc.
874 Piney Hollow Road Winslow, NJ 08095
609-567-8140 Fax 609-567-2105
Non-Hazardous Material Manifest

APPROVAL#
00304

GENERATOR'S NAME & ADDRESS:

V Industries
5 Melville Park Road
Melville, NY

SITE ADDRESS:

STATE MANIFEST NO.

GENERATOR'S PHONE #: 631-293-9494 ESTIMATED QUANTITY: 22 tons

DESCRIPTION OF MATERIAL:

NON-DOT REGULATED/RCRA NON-HAZARDOUS PETROLEUM HYDROCARBON CONT. MATERIAL

I hereby certify that the above described materials is not a hazardous waste as defined by 40 CFR Part 261 nor is it contaminated by PCB as defined by 40 CFR Part 761. Additionally, it is the same material which was analyzed and described in the application for treatment provided to ITS, which resulted in the approval number listed above. It is properly classified and packaged for transportation in accordance with applicable regulations.

Name: John T. Spicofera

Title: Plant Manager

Signature: John T. Spicofera

Date: 7/26/00

TRANSPORTER

Company: FCI

Phone: 732-462-1001

Address: Rt 33 Freehold NJ

Gross Weight:

Tare Weight:

Net Weight:

Driver: D Van Pelt

I hereby certify the above described materials were picked up at the above described generator address without incident and will be delivered without tampering of any kind.

Driver Signature: D Van Pelt

Date: 7/26/00

DESTINATION

I hereby certify that the above described materials was delivered to Carteret Biocycle Corporation at 24 Middlesex Avenue, Carteret, New Jersey.

Driver Signature:

Date:

I hereby certify that the above described material has been accepted at Carteret Biocycle Corporation.

Authorized Signature:

Date:

K-20432

Integrated Technical Services, Inc.
874 Piney Hollow Road Winslow, NJ 08095
609-567-8140 Fax 609-567-2105
Non-Hazardous Material Manifest

APPROVAL#

200304

GENERATOR'S NAME & ADDRESS:

■ HV Industries
35 Melville Park Road
Melville, NY

SITE ADDRESS:

■ GENERATOR'S PHONE #: 631-293-9494 ESTIMATED QUANTITY: 22 tons

DESCRIPTION OF MATERIAL:

NON-DOT REGULATED/RCRA NON-HAZARDOUS PETROLEUM HYDROCARBON CONT. MATERIAL

■ I hereby certify that the above described materials is not a hazardous waste as defined by 40 CFR Part 261 nor is it contaminated by PCB as defined by 40 CFR Part 761. Additionally, it is the same material which was analyzed and described in the application for treatment provided to ITS, which resulted in the approval number listed above. It is properly classified and packaged for transportation in accordance with applicable regulations.

■ Name: JOHN T. SPRUFERATitle: PLANT MANAGER■ Signature: John T. SprufesDate: 7/16/00**TRANSPORTER**■ Company: Freehold CartagePhone: 732-462-1001■ Address: 825 Hwy 33 Freehold■ Driver: Bill Burns

Gross Weight: _____

Tare Weight: _____

Net Weight: _____

■ I hereby certify the above described materials were picked up at the above described generator address without incident and will be delivered without tampering of any kind.

■ Driver Signature: Bill BurnsDate: 7-26-00**DESTINATION**

■ I hereby certify that the above described materials was delivered to Carteret Bicycle Corporation at 24 Middlessex Avenue, Carteret, New Jersey.

■ Driver Signature: _____

Date: _____

■ I hereby certify that the above described material has been accepted at Carteret Bicycle Corporation.

Authorized Signature: _____

Date: _____

Integrated Technical Services, Inc.
 874 Piney Hollow Road Winslow, NJ 08095
 609-567-8140 Fax 609-567-2105
Non-Hazardous Material Manifest

APPROVAL#
 00304

GENERATOR'S NAME & ADDRESS:

N Industries
 5 Melville Park Road
 Melville, NY

SITE ADDRESS:

GENERATOR'S PHONE #: 631-293-9494 **ESTIMATED QUANTITY:** 22 tons

DESCRIPTION OF MATERIAL:

NON-DOT REGULATED/RCRA NON-HAZARDOUS PETROLEUM HYDROCARBON CONT. MATERIAL

I hereby certify that the above described materials is not a hazardous waste as defined by 40 CFR Part 261 nor is it contaminated by PCB as defined by 40 CFR Part 761. Additionally, it is the same material which was analyzed and described in the application for treatment provided to ITS, which resulted in the approval number listed above. It is properly classified and packaged for transportation in accordance with applicable regulations.

Name: John T. Spicifer

Title: Plant Manager

Signature: John T. Spicifer

Date: 7/26/00

TRANSPORTER

Company: Freehold Cartage Inc

Phone: (732) 462-1001

Address: 825 A733E, Freehold, NJ 07728

Gross Weight:

Tare Weight:

Net Weight:

Driver: A. A. Brossier

I hereby certify the above described materials were picked up at the above described generator address without incident and will be delivered without tampering of any kind.

Driver Signature: A. A. Brossier

Date: 7/26/00

DESTINATION

I hereby certify that the above described materials was delivered to Carteret Biocycle Corporation at 24 Middlesex Avenue, Carteret, New Jersey.

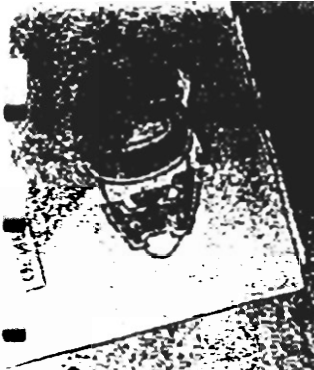
Driver Signature:

Date:

I hereby certify that the above described material has been accepted at Carteret Biocycle Corporation.

Authorized Signature:

Date:



Technical Services, Inc.
1000 Road Winslow, NJ 08095
609-667-8140 Fax 609-667-2105
Hazardous Material Manifest

APPROVAL#
200304

GENERATOR'S NAME & ADDRESS:
W. H. Smith
15 Main Park Road
Middletown, NJ

SITE ADDRESS:

GENERATOR'S PHONE # 609-283-9494 ESTIMATED QUANTITY: 22 tons

DESCRIPTION OF MATERIAL

NON-CONTAMINATED NON-HAZARDOUS PETROLEUM HYDROCARBON CONT. MATERIAL

I hereby certify that the above described materials is not a hazardous waste as defined by 40 C.F.R. Part 261 nor is it a hazardous waste as defined by 40 C.F.R. Part 701. Additionally, it is the same material which was analyzed and found to be non-hazardous as provided in the analysis report provided to the generator. It is hereby certified for transportation in accordance with applicable regulations.

Signature: *[Handwritten Signature]*
Date: *[Handwritten Date]*

Title: *[Handwritten Title]*
Date: *[Handwritten Date]*

TRANSPORTER

Company: Freehold Carriage
Address: 285 Hwy 33, Freehold
NJ 08038
Driver: Bill Brown

Phone: 732-462-1001
Gross Weight: _____
Tare Weight: _____
Net Weight: _____

I hereby certify the above described materials were picked up at the above described generator address without incident and will be delivered without tampering of any kind.

Driver Signature: *[Handwritten Signature]*
Date: 7-27-00

DESTINATION

I hereby certify that the above described materials was delivered to Carteret Bicycle Corporation at 24 Middlesex Avenue, Carteret, New Jersey.

Driver Signature: _____
Date: _____

I hereby certify that the above described material has been accepted at Carteret Bicycle Corporation.

Authorized Signature: _____
Date: _____

Integrated Technical Services, Inc.
874 Piney Hollow Road Winslow, NJ 08095
609-567-8140 Fax 609-567-2105
Non-Hazardous Material Manifest

APPROVAL#
200304

GENERATOR'S NAME & ADDRESS:
IW Industries
15 Melville Park Road
Melville, NY

SITE ADDRESS:

GENERATOR'S PHONE #: 631-293-9494 **ESTIMATED QUANTITY:** 22 tons

DESCRIPTION OF MATERIAL:

NON-DOT REGULATED/RCRA NON-HAZARDOUS PETROLEUM HYDROCARBON CONT. MATERIAL

I hereby certify that the above described materials is not a hazardous waste as defined by 40 CFR Part 261 nor is it contaminated by PCB as defined by 40 CFR Part 761. Additionally, it is the same material which was analyzed and described in the application for treatment provided to ITS, which resulted in the approval number listed above. It is properly classified and packaged for transportation in accordance with applicable regulations.

Name: John T. Sprafkin

Title: Plant Manager

Signature: John T. Sprafkin

Date: 7/28/00

TRANSPORTER

Company: FCI

Phone: 732 462 1001

Address: RT 33 FREEHOLD NJ

Gross Weight:

Driver: D. Van Riper

Tare Weight:

Net Weight:

I hereby certify the above described materials were picked up at the above described generator address without incident and will be delivered without tampering of any kind.

Driver Signature: D. Van Riper

Date: 7/28/00

DESTINATION

I hereby certify that the above described materials was delivered to Carteret Bicycle Corporation at 24 Middlesex Avenue, Carteret, New Jersey.

Driver Signature:

Date:

I hereby certify that the above described material has been accepted at Carteret Bicycle Corporation.

Authorized Signature:

Date:

Integrated Technical Services, Inc.
 874 Piney Hollow Road Winslow, NJ 08095
 609-567-8140 Fax 609-567-2105
Non-Hazardous Material Manifest

APPROVAL#
 10304

GENERATOR'S NAME & ADDRESS:

Industries
 Melville Park Road
 Melville, NY

SITE ADDRESS:

GENERATOR'S PHONE #: 631-293-9494 **ESTIMATED QUANTITY:** 22 tons

DESCRIPTION OF MATERIAL:

NON-DOT REGULATED/RCRA NON-HAZARDOUS PETROLEUM HYDROCARBON CONT. MATERIAL

I hereby certify that the above described materials is not a hazardous waste as defined by 40 CFR Part 261 nor is it contaminated by PCB as defined by 40 CFR Part 761. Additionally, it is the same material which was analyzed and described in the application for treatment provided to ITS, which resulted in the approval number listed above. It is properly classified and packaged for transportation in accordance with applicable regulations.

Name: John T. Spaulina
 Signature: John T. Spaulina

Title: Plant Manager
 Date: 7/28/00

TRANSPORTER

Company: Freehold Cartage Inc
 Address: 825 A133 E. Freehold, NJ
 Driver: Alvin L. Buehl 07728

Phone: (732) 462-1001

Gross Weight: _____
 Tare Weight: _____
 Net Weight: _____

I hereby certify the above described materials were picked up at the above described generator address without incident and will be delivered without tampering of any kind.

Driver Signature: OR Buehl

Date: 7/28/00

DESTINATION

I hereby certify that the above described materials was delivered to Carteret Bicycle Corporation at 24 Middlesex Avenue, Carteret, New Jersey.

Driver Signature: _____

Date: _____

I hereby certify that the above described material has been accepted at Carteret Bicycle Corporation.

Authorized Signature: _____

Date: _____

Non Hazardous waste Document



R G M
LIQUID WASTE REMOVAL CORP.
 972 Nicolls Road, Deer Park, N.Y. 11729
 (516) 586-0002

JOB WORK ORDER

152859

Arrived on job
 Left job

A.M./P.M.
 A.M./P.M.

MECHANIC
Kane

HELPER

DATE

7/26/00

JOB NAME <i>Generator</i>		JOB PHONE	
ADDRESS <i>Iw. Industries</i>		☐ LATE NIGHT	
CITY <i>35 Melville Park rd</i>		☐ SUNDAY	
BILL TO <i>Melville N.Y. 11747</i>		☐ HOLIDAY	
ADDRESS		☐ NEW	
		☐ REFERRAL	
		☐ REPEAT	

PUMPING	<i>Transporter:</i>	
	<i>RGM/Earthcare N.Y.</i>	
CHEMICALS	<i>972 Nicolls Rd</i>	
	<i>Deer Park NY 11729</i>	
LINE CLEANING		
SINK TUB TOILET	<i>TSEF Facility</i>	
LABOR	<i>RGM/Earthcare</i>	<i>2000 gal liquid</i>
OTHER	<i>972 Nicolls Rd</i>	<i>Industrial</i>
	<i>Deer Park NY 11729</i>	<i>Non Hazardous</i>

Licensed 333084W ID# 35#1
107 3yds Solids Industrial

Purchaser shall provide access to job site. It shall be the obligation of the Purchaser to inform the Service Company of any above or below ground or hidden perils. The Seller shall not be responsible for damage above or below ground to property or hidden perils. Signor assumes liability representatively and personally for payment of contract amount.

NET 10 DAYS. 1 1/2% Service Charge per Month on Overdue Accounts

SUB TOTAL	
TAX	
TOTAL	

DATE PAID _____
 CHECK NO. _____
 AMT. REC'D. _____
☐ CASH ☐ M.C. ☐ VISA ☐ LEFT BILL

GENERATOR SIGNED STATEMENT

I, _____, hereby affirm that I am the owner, or user, of the Individual Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and:
 (1). That the facilities to be pumped contain only sanitary sewage; (2). That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hauler. That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this Statement knowing that the waste will be disposed of at a Municipal Septage Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.

"I, hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law".

[Signature]
 Customer's Signature Date

WATER TO
BERGEN POINT



R G M

JOB WORK ORDER

LIQUID WASTE REMOVAL CORP.
972 Nicolls Road, Deer Park, N.Y. 11729
(631) 586-0002

140037

Arrived on job 7:00 A.M./P.M.
Left job 3:16 A.M./P.M.

MECHANIC Day HELPER DATE 7/20/00

JOB NAME <i>J.W. FND</i>		JOB PHONE	
ADDRESS <i>McLure Pk. Rd.</i>		☐ LATE NIGHT ☐ SUNDAY ☐ HOLIDAY	
CITY <i>McLure</i>		PHONE	
BILL TO		ADDRESS	
		☐ NEW ☐ REFERRAL ☐ REPEAT	

PUMPING	<i>S/S 3 tanks removed</i>
CHEMICALS	<i>halls's</i>
LINE CLEANING	
SINK TUB TOILET	
LABOR	
OTHER	

SUB TOTAL	
TAX	
TOTAL	

Purchaser shall provide access to job site. It shall be the obligation of the Purchaser to inform the Service Company of any above or below ground or hidden perils. The Seller shall not be responsible for damage above or below ground to property or hidden perils. Signor assumes liability representatively and personally for payment of contract amount.

DATE PAID
CHECK NO.
AMT. REC'D.
☐ CASH ☐ M.C. ☐ VISA ☐ LEFT BILL

NET 10 DAYS, 1 1/2% Service Charge per Month on Overdue Accounts.

GENERATOR SIGNED STATEMENT

I, John S. Baker, hereby affirm that I am the owner, or user, of the individual Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and:
(1). That the facilities to be pumped contain only sanitary sewage; (2). That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hauler. That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this Statement knowing that the waste will be disposed of at a Municipal Sewage Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.
"I, hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law".

John S. Baker 7/20/00
Customer's Signature Date



R G M

JOB WORK ORDER

LIQUID WASTE REMOVAL CORP.
972 Nicolls Road, Deer Park, N.Y. 11729
(631) 586-0002

2805
140869

Arrived on job 11:00 A.M./P.M.
Left job 11:30 A.M./P.M.

MECHANIC Jmr HELPER DATE 7/20/00

JOB NAME <i>Iw industries</i>		JOB PHONE	
ADDRESS <i>35 McLure Park Road</i>		☐ LATE NIGHT ☐ SUNDAY ☐ HOLIDAY	
CITY <i>McLure</i>		PHONE	
BILL TO		ADDRESS	
		<i>974 Pine Hollow Road</i>	
		☐ NEW ☐ REFERRAL ☐ REPEAT	

PUMPING	<i>6500 Gall Pumped from Pond Tank on Site</i>
CHEMICALS	
LINE CLEANING	
SINK TUB TOILET	
LABOR	
OTHER	

SUB TOTAL	
TAX	
TOTAL	

Purchaser shall provide access to job site. It shall be the obligation of the Purchaser to inform the Service Company of any above or below ground or hidden perils. The Seller shall not be responsible for damage above or below ground to property or hidden perils. Signor assumes liability representatively and personally for payment of contract amount.

DATE PAID
CHECK NO.
AMT. REC'D.
☐ CASH ☐ M.C. ☐ VISA ☐ LEFT BILL

NET 10 DAYS, 1 1/2% Service Charge per Month on Overdue Accounts.

GENERATOR SIGNED STATEMENT

I, John S. Baker, hereby affirm that I am the owner, or user, of the individual Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and:
(1). That the facilities to be pumped contain only sanitary sewage; (2). That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hauler. That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this Statement knowing that the waste will be disposed of at a Municipal Sewage Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.
"I, hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law".

John S. Baker

RG M

143742

MECHANIC

☐ SUNDAY ☐ HOLIDAY

☐ NEW
☐ REFERRAL
☐ REPEAT

--	--

5.	
----	--

--	--

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

11

10

--	--

1

[illegible]

1

THE LANCET VIENNA

11. That the facilities to be pumped contain only sanitary sewage; (2). That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed professional plumber. That neither I nor any person in my family or in my company have added any chemical solvent waste or industrial waste of any kind to the facility to be pumped and that I make this statement knowing that the waste will be disposed of as a hazardous large waste Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.

12. I hereby affirm under penalty of perjury that information given on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

JOB WORK ORDER

R G M

LIQUID WASTE REMOVAL CORP.
972 Nicolls Road, Deer Park, N.Y. 11729

705 (631) 586-0002

140591



Arrived on job ... 7:00 A.M. / P.M.
Left job ... 12:15 A.M. / P.M.

JOB NAME: WUT DATE: 7/24/00
 ADDRESS: Melville Park Rd
 CITY: Melville
 BILL TO: Melville
 ADDRESS:
 PHONE:

☐ LATE NIGHT
☐ SUNDAY
☐ HOLIDAY

☐ NEW
☐ REFERRAL
☐ REPEAT

PUMPING: \$1500

CHEMICALS: Original White

LINE CLEANING:

SINK TUB TOILET: 64903

LABOR: 78003

OTHER:

SUB TOTAL:
 TAX:
 TOTAL:
 DATE PAID:
 CHECK NO.:

NET 10 DAYS. 1 1/2% Service Charge per Month on Overdue Accounts.

GENERATOR SIGNED STATEMENT

I, WUT, hereby affirm that I am the owner, or user, of the individual Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and: (1) That the facilities to be pumped contain only sanitary sewage; (2) That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hauler; That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this Statement knowing that the waste will be disposed of at a Municipal Sewage Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.

I, hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Signature: WUT Date: 7/24/00

JOB WORK ORDER

R G M

LIQUID WASTE REMOVAL CORP.
972 Nicolls Road, Deer Park, N.Y. 11729

(631) 586-0002

140492



Arrived on job ... 3:00 A.M. / P.M.
Left job ... 3:00 A.M. / P.M.

JOB NAME: Tw Inc DATE: 7/24/00
 ADDRESS:
 CITY: Melville
 BILL TO:
 ADDRESS:
 PHONE:

☐ LATE NIGHT
☐ SUNDAY
☐ HOLIDAY

☐ NEW
☐ REFERRAL
☐ REPEAT

PUMPING: Pumped 2000 from First Tank and back to

CHEMICALS: Out with Sewer

LINE CLEANING:

SINK TUB TOILET:

LABOR:

OTHER:

SUB TOTAL:
 TAX:
 TOTAL:
 DATE PAID:
 CHECK NO.:

NET 10 DAYS. 1 1/2% Service Charge per Month on Overdue Accounts.

GENERATOR SIGNED STATEMENT

I, Tw Inc, hereby affirm that I am the owner, or user, of the individual Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and: (1) That the facilities to be pumped contain only sanitary sewage; (2) That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hauler; That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this Statement knowing that the waste will be disposed of at a Municipal Sewage Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.

I, hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Signature: Tw Inc Date: 7/24/00



R G M

JOB WORK ORDER

LIQUID WASTE REMOVAL CORP.

972 Nicolls Road, Deer Park, N.Y. 11729

(631) 586-0002

140243

Arrived on job 12:30 A.M./P.M.

Left job 2:30 A.M./P.M.

MECHANIC

HELPER

DATE

JOB NAME	L W L	
ADDRESS	Melville Park RO	
CITY	Melville	
BILL TO	PHONE	
ADDRESS	☐ LATE NIGHT ☐ SUNDAY ☐ HOLIDAY	
ADDRESS	☐ NEW ☐ REFERRAL ☐ REPEAT	

PUMPING

5500 gals

CHEMICALS

Liquid waste

LINE CLEANING

SINK TUB TOILET

LABOR

TRK# 69403

OTHER

TRK# 78003

SUB TOTAL

TAX

TOTAL

Purchaser shall provide access to job site. It shall be the obligation of the Purchaser to inform the Service Company of any above or below ground or hidden perils. The Seller shall not be responsible for damage above or below ground to property or hidden perils. Signor assumes liability representatively and personally for payment of contract amount.

DATE PAID

CHECK NO.

AMT. REC'D.

☐ CASH ☐ M.C. ☐ VISA ☐ LEFT BILL

NET 10 DAYS. 1 1/2% Service Charge per Month on Overdue Accounts.

GENERATOR SIGNED STATEMENT

I, _____, hereby affirm that I am the owner, or user, of the individual Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and:

(1). That the facilities to be pumped contain only sanitary sewage; (2). That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hauler. That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this Statement knowing that the waste will be disposed of at a Municipal Sewage Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.

"I, hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law".

Customer's Signature

Date



R G M

JOB WORK ORDER

LIQUID WASTE REMOVAL CORP.

972 Nicolls Road, Deer Park, N.Y. 11729

(631) 586-0002

138812

Arrived on job 12:30 A.M./P.M.

Left job 2:30 A.M./P.M.

MECHANIC

HELPER

DATE

JOB NAME	I T S L	
ADDRESS	MEVILLE PK RD	
CITY	MELVILLE	
BILL TO	PHONE	
ADDRESS	☐ LATE NIGHT ☐ SUNDAY ☐ HOLIDAY	
ADDRESS	☐ NEW ☐ REFERRAL ☐ REPEAT	

PUMPING

Pumped 6500

CHEMICALS

Gallons from
SEPTIC TANK - 1 POOL
F FRAK TANK.

LINE CLEANING

SINK TUB TOILET

LABOR

OTHER

SUB TOTAL

TAX

TOTAL

Purchaser shall provide access to job site. It shall be the obligation of the Purchaser to inform the Service Company of any above or below ground or hidden perils. The Seller shall not be responsible for damage above or below ground to property or hidden perils. Signor assumes liability representatively and personally for payment of contract amount.

DATE PAID

CHECK NO.

AMT. REC'D.

☐ CASH ☐ M.C. ☐ VISA ☐ LEFT BILL

NET 10 DAYS. 1 1/2% Service Charge per Month on Overdue Accounts.

GENERATOR SIGNED STATEMENT

I, _____, hereby affirm that I am the owner, or user, of the individual Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and:

(1). That the facilities to be pumped contain only sanitary sewage; (2). That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hauler. That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this Statement knowing that the waste will be disposed of at a Municipal Sewage Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.

"I, hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law".

Customer's Signature

Date



R G M

JOB WORK ORDER

2805

LIQUID WASTE REMOVAL CORP.

972 Nicolls Road, Deer Park, N.Y. 11729

905 (631) 586-0002

140198

Arrived on job 10:30 A.M./P.M.

Left job 7:20 P.M.

MECHANIC

HELPER

DATE

7/21/00

JOB NAME	LWR		
ADDRESS	Melville Park Road		
CITY	Melville	☐ LATE NIGHT	☐ SUNDAY
BILL TO	PHONE		
ADDRESS	☐ NEW		
	☐ REFERRAL		
	☐ REPEAT		

PUMPING

5,500 gals

CHEMICALS

Liquid waste

LINE CLEANING

SINK TUB TOILET

LABOR

TRAC# 69403

OTHER

TRAC# 78003

(County Road)

SUB TOTAL

TAX

TOTAL

DATE PAID

CHECK NO.

AMT. REC'D.

☐ CASH ☐ M.C. ☐ VISA ☐ LEFT BILL

NET 10 DAYS. 1 1/2% Service Charge per Month on Overdue Accounts.

GENERATOR SIGNED STATEMENT

I, _____, hereby affirm that I am the owner, or user, of the individual Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and:

(1). That the facilities to be pumped contain only sanitary sewage; (2). That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hauler. That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this Statement knowing that the waste will be disposed of at a Municipal Sewage Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.

"I, hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law."

John S. Baskin

Customer's Signature

7/21/00

Date



R G M

JOB WORK ORDER

2805

LIQUID WASTE REMOVAL CORP.

972 Nicolls Road, Deer Park, N.Y. 11729

905 (631) 586-0002

140196

Arrived on job 11:53 A.M./P.M.

Left job 7:20 P.M.

MECHANIC

HELPER

7:20 P.M.

JOB NAME	LWR		
ADDRESS	Melville Park Road		
CITY	Melville	☐ LATE NIGHT	☐ SUNDAY
BILL TO	PHONE		
ADDRESS	☐ NEW		
	☐ REFERRAL		
	☐ REPEAT		

PUMPING

5,500 gals

CHEMICALS

Liquid waste (County)

LINE CLEANING

SINK TUB TOILET

LABOR

TRAC# 69403

OTHER

TRAC# 78003

SUB TOTAL

TAX

TOTAL

DATE PAID

CHECK NO.

AMT. REC'D.

☐ CASH ☐ M.C. ☐ VISA ☐ LEFT BILL

NET 10 DAYS. 1 1/2% Service Charge per Month on Overdue Accounts.

GENERATOR SIGNED STATEMENT

I, _____, hereby affirm that I am the owner, or user, of the individual Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and:

(1). That the facilities to be pumped contain only sanitary sewage; (2). That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hauler. That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this Statement knowing that the waste will be disposed of at a Municipal Sewage Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.

"I, hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law."

John S. Baskin

Customer's Signature

7/21/00

Date

RGM

LIQUID WASTE REMOVAL CORP.



072 Nicoll's Road, Deer Park, N.Y. 11729

140528

(631) 586-0002

Arrived on job	0705	A.M./P.M.
Left job	1700	A.M./P.M.
Mechanic	K. A.	DATE
Helper	W.	7/21/00

JOE NAME	JOE PHONE	☐ LATE NIGHT ☐ SUNDAY ☐ HOLIDAY
T.W. Industries ADDRESS 35 Melville Pk. Rd. CITY Melville N.Y. 11747	PHONE	
BILL TO		

ADDRESS	☐ NEW	☐ REFERRAL	☐ REPEAT

PUMPING	1 SUPER SUCKER
CHEMICALS	1 BOKA TRUCK, 1 SEWER JET
LINE CLEANING	
SINK TUB TOILET	3
LABOR	Mark, Mike
OTHER	1 Storm drain / septic tank
	2 CASSPOLS / roll off tank
	10 hrs. demand on site

Purchaser shall provide access to job site. It shall be the obligation of the Purchaser to inform the Service Company of any above or below ground or hidden perils. The Seller shall not be responsible for damage above or below ground to property or hidden perils. Seller assumes liability representatively and personally for payment of contract amount.

NET 10 DAYS 1%^{1/2} Service Charge per Month on Outstanding Accounts.

GENERATOR SIGNED STATEMENT

I, _____, hereby affirm that I am the owner, or user, of the individual _____ Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and:

(1). That the facilities to be pumped contain only sanitary sewage; (2). That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hater. That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this Statement knowing that the waste will be disposed of at a Municipal Solid Waste Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind has been added, legal action may be undertaken by the appropriate regulatory agency and that I shall be liable for all costs involved.

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor or pursuant to Section 2-0.05 of the Penal Law.

Optim 6 Performance 7/21/00

JOB WORK ORDER

R G M

LIQUID WASTE REMOVAL CORP.

972 Nicolls Road, Deer Park, N.Y. 11729

138312

(631) 586-0002



Arrived on job 11:55 A.M.
Left job 11:55 P.M.

JOB NAME I.T.S. DATE 7/20/00
 ADDRESS 35 Melville Park Rd
 CITY Melville Ny 11747
 BILL TO Melville Ny 11747
 ADDRESS
 PHONE

☐ LATE NIGHT
☐ SUNDAY
☐ HOLIDAY

☐ NEW
☐ REFERRAL
☐ REPEAT

PUMPING 8,000 gallons waste water
Removed
 CHEMICALS

LINE CLEANING Pumped frac tank NW 150E BLK
 SINK TUB TOILET
 LABOR

OTHER Transport to Bergen Point for Disposal

69401-78801

Purchaser shall provide access to job site. It shall be the obligation of the Purchaser to inform the Service Company of any above or below ground or hidden perils. The Seller shall not be responsible for damage above or below ground to property or hidden perils. Signor assumes liability representatively and personally for payment of contract amount.

SUB TOTAL
 TAX
 TOTAL

DATE PAID
 CHECK NO.

AMT. REC'D.
☐ CASH ☐ M.C. ☐ VISA ☐ LEFT BILL

NET 10 DAYS. 1 1/2% Service Charge per Month on Overdue Accounts.

GENERATOR SIGNED STATEMENT

I, hereby affirm that I am the owner, or user, of the individual Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and:
 (1) That the facilities to be pumped contain only sanitary sewage; (2) That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hauler. That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this statement knowing that the waste will be disposed of at a Municipal Sewage Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.
 I, hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.46 of the Penal Law.

Customer's Signature
[Signature]
 Date

JOB WORK ORDER

R G M

LIQUID WASTE REMOVAL CORP.

972 Nicolls Road, Deer Park, N.Y. 11729

140867

(631) 586-0002



Arrived on job 12:45 A.M.
Left job 1:15 P.M.

JOB NAME I n d u s t r i a l DATE 7/20/00
 ADDRESS 35 Melville Park Road
 CITY Melville
 BILL TO I n d u s t r i a l
 ADDRESS 874 Pinetallow Road
 PHONE

☐ LATE NIGHT
☐ SUNDAY
☐ HOLIDAY

☐ NEW
☐ REFERRAL
☐ REPEAT

PUMPING 6,500 gal Pumped
from frac tank on site
 CHEMICALS

LINE CLEANING
 SINK TUB TOILET
 LABOR

OTHER

SUB TOTAL
 TAX
 TOTAL

DATE PAID
 CHECK NO.

AMT. REC'D.
☐ CASH ☐ M.C. ☐ VISA ☐ LEFT BILL

NET 10 DAYS. 1 1/2% Service Charge per Month on Overdue Accounts.

GENERATOR SIGNED STATEMENT

I, hereby affirm that I am the owner, or user, of the individual Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and:
 (1) That the facilities to be pumped contain only sanitary sewage; (2) That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hauler. That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this statement knowing that the waste will be disposed of at a Municipal Sewage Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.
 I, hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.46 of the Penal Law.

Customer's Signature
X More Warburton
 Date 7/20/00

110 Sand Company

170 Cabot Street
West Babylon, New York 11704

PIT LOCATION: BETHPAGE/SPAGNOLI ROAD, MELVILLE, N.Y. 11747 (516) 694-2822

April 17, 2000

Clifford Broman & Son, Inc.
170 Cabot Street
West Babylon, NY 11704

To Whom It May Concern:

Kindly be advised the material at 110 Sand Company in Melville, New York is naturally mined and screened and is free of any contaminants. Attached is our New York State source approval letter. Any further questions may be directed to Mr. Thomas F. O'Connor, State of New York Department of Transportation at (516)952-6184.

Thank you,

110 SAND COMPANY



Linda Knieste
Office Manager

MT/enc.



New York State
Department of Transportation
Hauppauge, N.Y. 11788

Joseph H. Boardman
Commissioner

George E. Pataki
Governor

Jan. 11, 1999

110 Sand Co.
170 Cabot St.
West Babylon, N.Y. 11704

The 1998 Annual Sand & Gravel Report for your operating location has been approved.

Source # 10-34F,G

Sand Test # 98AF 41

Gravel Test # 98AG20

The above test numbers are to be used for the next two years, at which time the source will be sampled and tested again. If there are any questions regarding your aggregate approval, please contact Mr. Thomas F. O'Connor of my staff at (516) 952-6184.

Very Truly Yours,

A handwritten signature in cursive script that reads "William Brudi".

William Brudi
Regional Materials Engineer - Region 10

CUSTOMER COPY

110 Sand Company

170 Cabot Street
West Babylon, New York 11704

TELEPHONES

Office - 631-249-4108
Scalehouse - 631-694-2822
Landfill - 631-694-2848

CUSTOMER NO.	P.O. NUMBER	TRUCK NO.	TYPE OF SALE	JOB NO.	OUR ORDER NUMBER	TICKET NO.
12650		3306	SHIPPING		010055	388818

CUSTOMER NAME:				GROSS	TARE	NET	UNIT	WEIGHED BY
BROMAN & SON, INC.				60.91	19.53	41.38	TONS	GIL

DATE	TAX PERCENTAGE	TRUCK CODE	MATERIAL CODE
7/18/00			200

MATERIAL DESCRIPTION:		IN	OUT	CHECK NO./CHARGE TYPE	LICENSE NO.
BANK RUN			10:52		TX 6703

DELIVERY ADDRESS		TOTAL TODAY	
		QUANTITY THIS ORDER TODAY	41.38
		LOADS THIS ORDER TODAY	1

RECEIVED BY:		OFFICE USE ONLY	
CARRIER SIGNATURE: BROMAN-06-PETE			
CUSTOMER SIGNATURE:			

SEE REVERSE SIDE FOR COLLECTION TERMS

PHONE 631-249-4108

FAX 631-249-4126

CLIFFORD BROMAN & SON, INC.

170 CABOT STREET

WEST BABYLON, N.Y. 11704

Name I.T.S. Date 7-10 2000
Address # 35
Job _____ Truck No. 05

	Hrs. Truck Hire		
40.91	Tons Bank Run		
	Tons Gravel		
	Tons Sand		
	Tons Fill		
	Tons Grit		
	Tons Stone		
	Tons Top Soil		
		476.	06

Trucks Driven Over Sidewalk at Customer's Risk

09967

Rec'd
By _____

S-2922

PHONE 631-249-4108

FAX 631-249-4126

CLIFFORD BROMAN & SONS, INC.

170 CABOT STREET

WEST BABYLON, N.Y. 11704

Name I.T.S. Date 7-18 2000

Address 35 MELVILLE PK RD.

Job MELVILLE Truck No. 6

11.38	Hrs. Truck Hire		
	Tons Bank Run		
	Tons Gravel		
	Tons Sand		
	Tons Fill		
	Tons Grit		
	Tons Stone		
	Tons Top Soil		

Trucks Driven Over Sidewalk at Customer's Risk

08279 Rec'd By [Signature]
S-2922

JOB #

G/L #

PHASE

COST

CH 9-4199

FORD BROMAN & SON, Inc.
170 CABOT STREET
WEST BABYLON, N.Y. 11704

Name I.T.S. Date 7-24 2020
 Address 35 Mcville PK Rd Mileage
 Job Truck No. 04

	Hrs. Truck Hire		
15 TON	<u>Yds. Bank Run</u>	15	TON
	Yds. Gravel		
	Yds. Sand		
	Yds. Fill		
	Yds. Grit		
	Yds. Stone		
	Yds. Top Soil		

Trucks Driven Over Sidewalk at Customer's Risk

JUL 27

14844

 Rec'd
 By [Signature]

S-2922

APPENDIX C

LABORATORY CHEMICAL ANALYTICAL DATA

RECEIVED AUG 23 2000

OTF
CC: 100



Committed To Your Success

August 22, 2000

Severn Trent Laboratories
200 Monroe Turnpike
Monroe, Connecticut 06468

Ms. Stephanie Davis
FANNING PHILLIPS + MOLNAR
909 Marconi Avenue
Ronkonkoma, NY 11779

Tel: (203) 261-4458
Fax: (203) 268-5346
www.stl-inc.com

Dear Ms. Davis :

Please find enclosed the analytical results of 35 sample(s) received at our laboratory on July 12-19, 2000. This report contains sections addressing the following information at a minimum:

- sample summary
- analytical methodology
- state certifications
- definition of data qualifiers and terminology
- analytical results
- chain-of-custody

STL Report #7000-1349A	Purchase Order #362-00-19
Project ID: IW	

Copies of this analytical report and supporting data are maintained in our files for a minimum of five years unless special arrangements have been made. Unless specifically indicated, all analytical testing was performed at this laboratory location and no portion of the testing was subcontracted.

We appreciate your selection of our services and welcome any questions or suggestions you may have relative to this report. Please contact your customer service representative at (203) 929-8140 for any additional information. Thank you for utilizing our services; we hope you will consider us for your future analytical needs.

I have reviewed and approved the enclosed data for final release.

Very truly yours,

Jeffrey C. Curran
Laboratory Manager

JCC

Other Laboratory Locations:

- Mobile, AL
- Anaheim, CA
- Aurora, CO
- Miramar, FL
- Pensacola, FL
- Tallahassee, FL
- Tampa, FL
- Savannah, GA
- University Park, IL
- Valparaiso, IN
- Billerica, MA

- Westfield, MA
- Sparks, MD
- Edison, NJ
- Whippany, NJ
- Amherst, NY
- Newburgh, NY
- Corpus Christi, TX
- Austin, TX
- Houston, TX
- Colchester, VT

Sales Office Locations:

- Cantonment, FL
- Orlando, FL
- South Pasadena, FL
- New Orleans, LA
- Waterford, MI
- Holly Springs, NC
- Blairstown, NJ
- Morristown, NJ
- Schenectady, NY
- Cleveland, OH

a part of

Severn Trent Services Inc.

7000-1349A
FANNING PHILLIPS & MOLNAR

Case Narrative

Sample Receipt – Samples collected on July 10, 2000 and not received at STL until July 12, 2000 were received at 13°C. Samples collected on July 13, 2000 and received at STL on July 14, 2000 were received at 11°C. The client was notified, and the laboratory was instructed to proceed with the analyses. All other samples were received in good condition and at the proper temperature.

Volatile Organics – Volatile organics were determined by purge and trap GC/MS using NYSDEC '95 Protocols. The instrumentation used was a Tekmar Model 2000/2016 Concentrator/Archon 51 autosampler interfaced with a Hewlett-Packard Model 5970A/5971A GC/MS/DS.

Sample Calculation:

Sample ID – LP-12@20'
Compound – Methylene Chloride

$$\frac{(64840)(250)}{(332223)(1.163)(5)(.92)} = 9.12 = 9 \text{ UG/KG.}$$

Samples LP-80 END and LP-23 END were analyzed twice due to results having surrogate recoveries out of criteria and/or suppression of internal standard areas.

No problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were extracted and analyzed according to NYSDEC 95 protocols and USEPA CLP OLM3.2 by capillary GC/MS. The instrumentation used was a Hewlett-Packard gas chromatograph interfaced with a mass selective detector using an RTX-5 30 meter column with 0.25 mm ID and 0.5 um film thickness.

Due to the implementation of an electronic pressure controlled method a secondary ion (63) was used for the quantitation of Bis(2-chloroethyl)ether. A non-target compound, aniline (quant ion 93), was determined to coelute with Bis(2-chloroethyl)ether with this new method. Quantitation using the secondary ion ensures correct integration and quantitation of both compounds.

Sample LP-15 was lost during initial concentration. The sample was re-extracted four days out of NYSDEC hold but within CLP holding times.

Samples LP-3 END, LP-4 END, LP-4@15', LP-10 END, and LP-23@15' exhibited internal standard area suppression. The samples were re-analyzed with similar results

confirming matrix interference. Both analyses are reported. The re-analyses are indicated by the suffix "RE" or "DL".

Samples EB-4, LP-11 END, LP-4@15', LP-15@16' and SBLKZPFMS all had one surrogate out of recovery criteria, but within CLP protocol acceptance criteria.

The spike recovery for the compound, pentachlorophenol, was above recovery limits for LP-5@18'MSB. The recovery for 4-bromophenyl-phenylether was above recovery limits in SBLKZPFMS and 2,4-dimethylphenol was below recovery limits in SBLKCPFMS, SBLKAPFMS, SBLKFPFMS, and SBLKIPFMS.

The pH of sample LP-18 END was not reported due to insufficient sample volume.

The following samples were analyzed at dilutions due to the presence of high levels of target compounds:

LP-4 ENDDL	1:4
LP-4@15'DL	1:5
LP-5 END	1:100

Sample Calculation:

Sample ID – LP-4 END

Compound - Acenaphthene

$$\frac{(1098431)(40)(500)(1.0)(2)}{(653109)(1.007)(2.0)(30.0)(0.86)} = 1294 = 1300\text{ug/kg}$$

Metals – ICAP metals were determined using a JA61E trace ICAP; mercury was determined by cold vapor technique using a Leeman Labs mercury analyzer; following guidance provided in SW846 according to methods: ICAP – 3010A, 3050B/6010B; mercury-7470A, 7471A.

One "*" resulted from duplicate analysis of sample LP-5@18 for iron.

Sample LP-5@18 failed the spike control limits for mercury resulting in one "N" flag.

No problems occurred during analysis. All appropriate protocols were employed. All data appears to be consistent.

TABLE VO-1.0
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

0003

Aqueous

All values are ug/L.

Client Sample I.D.	Method Blank	EB-1	TB-1	Quant. Limits with no Dilution
Lab Sample I.D.	VBKLM4	001349A-04	001349A-05	
Method Blank I.D.	VBKLM4	VBKLM4	VBKLM4	
Quant. Factor	1.00	1.00	1.00	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	1J	2J	10
Acetone	U	U	U	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	.6J	.8J	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	U	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received		07/12/00	07/12/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/18/00	07/18/00	07/18/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1.2
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

All values are ug/L.

Client Sample I.D.	TB-3	EB-4	TB-4	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-16	001349A-21	001349A-22	
Method Blank I.D.	VLK4	VLK4	VLK4	
Quant. Factor	1.00	1.00	1.00	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	2J	4J	5J	10
Acetone	U	U	U	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	.8J	.7J	.7J	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	U	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received	07/13/00	07/14/00	07/14/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/18/00	07/18/00	07/18/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE VO-1.3
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

All values are ug/L.

Client Sample I.D.	EB-5	TB-5		Quant. Limits with no Dilution
Lab Sample I.D.	001349A-26	001349A-27		
Method Blank I.D.	VBLKM4	VBLKM4		
Quant. Factor	1.00	1.00		
Chloromethane	U	U		10
Bromomethane	U	U		10
Vinyl Chloride	U	U		10
Chloroethane	U	U		10
Methylene Chloride	4J	6J		10
Acetone	2J	U		10
Carbon Disulfide	U	U		10
1,1-Dichloroethene	U	U		10
1,1-Dichloroethane	U	U		10
1,2-Dichloroethene (total)	U	U		10
Chloroform	.5J	.7J		10
1,2-Dichloroethane	U	U		10
2-Butanone	U	U		10
1,1,1-Trichloroethane	U	U		10
Carbon Tetrachloride	U	U		10
Bromodichloromethane	U	U		10
1,2-Dichloropropane	U	U		10
cis-1,3-Dichloropropene	U	U		10
Trichloroethene	U	U		10
Dibromochloromethane	U	U		10
1,1,2-Trichloroethane	U	U		10
Benzene	U	U		10
trans-1,3-Dichloropropene	U	U		10
Bromoform	U	U		10
4-Methyl-2-Pentanone	U	U		10
2-Hexanone	U	U		10
Tetrachloroethene	U	U		10
1,1,2,2-Tetrachloroethane	U	U		10
Toluene	U	U		10
Chlorobenzene	U	U		10
Ethylbenzene	U	U		10
Styrene	U	U		10
Xylene (total)	U	U		10
Date Received	07/15/00	07/15/00		
Date Extracted	N/A	N/A		
Date Analyzed	07/18/00	07/18/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE VO-1.4
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

All values are ug/L.

Client Sample I.D.	Method Blank	EB-6	TB-6	Quant. Limits with no Dilution
Lab Sample I.D.	VBKLM8	001349A-29	001349A-30	
Method Blank I.D.	VBKLM8	VBKLM8	VBKLM8	
Quant. Factor	1.00	1.00	1.00	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	3J	2J	10
Acetone	U	U	U	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	.8J	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	U	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received		07/19/00	07/19/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/21/00	07/21/00	07/21/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1.5
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-3 END	LP-4 END	Quant. Limits with no Dilution
Lab Sample I.D.	VBLKK9	001349A-01	001349A-02	
Method Blank I.D.	VBLKK9	VBLKK9	VBLKK9	
Quant. Factor	1.00	1.14	1.16	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	14	6J	10
Acetone	15	57B	18B	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	U	18	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received		07/12/00	07/12/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/17/00	07/17/00	07/17/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1.6
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

0009

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-5 END	LP-5@18' MS	LP-11 END	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-06	001349A-07MS	001349A-08	
Method Blank I.D.	VLKK9	VLKK9	VLKK9	
Quant. Factor	1.18	1.14	1.18	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	6J	10J	8J	10
Acetone	27B	27B	24B	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	53X	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	50X	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	57X	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	.9J	57X	U	10
Chlorobenzene	U	53X	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received	07/12/00	07/12/00	07/12/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/17/00	07/17/00	07/17/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE VO-1.7
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

0010

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-4@15'	LP-5@18'	Quant. Limits with no Dilution
Lab Sample I.D.	VBLKKA	001349A-03	001349A-07	
Method Blank I.D.	VBLKKA	VBLKKA	VBLKKA	
Quant. Factor	1.00	1.15	1.14	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	14	10J	10
Acetone	20	46B	43B	10
Carbon Disulfide	U	.6J	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	1J	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received		07/12/00	07/12/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/18/00	07/18/00	07/18/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1.8
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

0011

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-5@18' MSD 001349A-07	LP-12 END	LP-12@20'	Quant. Limits with no Dilution
Lab Sample I.D.	MSD	001349A-11	001349A-12	
Method Blank I.D.	VBKKA	VBKKA	VBKKA	
Quant. Factor	1.14	1.08	1.09	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	12	7J	9J	10
Acetone	20B	17B	U	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	44X	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	48X	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	66X	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	48X	U	U	10
Chlorobenzene	56X	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received	07/12/00	07/13/00	07/13/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/18/00	07/18/00	07/18/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1.9
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

0012

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-15	LP-15@16'	Quant. Limits with no Dilution
Lab Sample I.D.	VBLKXH	001349A-13	001349A-14	
Method Blank I.D.	VBLKXH	VBLKXH	VBLKXH	
Quant. Factor	1.00	1.26	1.15	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	12J	7J	10
Acetone	U	57	U	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	U	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received		07/13/00	07/13/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/20/00	07/20/00	07/20/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1.10
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-80 END	LP-10 END	LP-23 END	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-18	001349A-20	001349A-23	
Method Blank I.D.	VBLKXH	VBLKXH	VBLKXH	
Quant. Factor	1.12	1.10	1.15	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	U	7J	10
Acetone	U	U	U	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	U	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received	07/14/00	07/14/00	07/15/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/20/00	07/20/00	07/20/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE VO-1.11
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

0014

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-23@15'			
Lab Sample I.D.	001349A-24			Quant.
Method Blank I.D.	VBLKKH			Limits
Quant. Factor	1.11			with no
				Dilution
Chloromethane	U			10
Bromomethane	U			10
Vinyl Chloride	U			10
Chloroethane	U			10
Methylene Chloride	8J			10
Acetone	42			10
Carbon Disulfide	U			10
1,1-Dichloroethene	U			10
1,1-Dichloroethane	U			10
1,2-Dichloroethene (total)	U			10
Chloroform	U			10
1,2-Dichloroethane	U			10
2-Butanone	U			10
1,1,1-Trichloroethane	U			10
Carbon Tetrachloride	U			10
Bromodichloromethane	U			10
1,2-Dichloropropane	U			10
cis-1,3-Dichloropropene	U			10
Trichloroethene	U			10
Dibromochloromethane	U			10
1,1,2-Trichloroethane	U			10
Benzene	U			10
trans-1,3-Dichloropropene	U			10
Bromoform	U			10
4-Methyl-2-Pentanone	U			10
2-Hexanone	U			10
Tetrachloroethene	U			10
1,1,2,2-Tetrachloroethane	U			10
Toluene	U			10
Chlorobenzene	U			10
Ethylbenzene	U			10
Styrene	U			10
Xylene (total)	U			10
Date Received	07/15/00			
Date Extracted	N/A			
Date Analyzed	07/20/00			

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE VO-1.12
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

0015

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-8 END	LP-80 END RE	Quant. Limits with no Dilution
Lab Sample I.D.	VBLKKI	001349A-17	001349A-18RE	
Method Blank I.D.	VBLKKI	VBLKKI	VBLKKI	
Quant. Factor	1.00	1.11	1.12	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	6J	6J	10
Acetone	6J	18B	18B	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	U	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received		07/14/00	07/14/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/21/00	07/21/00	07/21/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1.13
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

0015

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP 9 END	LP-23 END RE	LP-13 END	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-19	001349A-23RE	001349A-25	
Method Blank I.D.	VBKKI	VBKKI	VBKKI	
Quant. Factor	1.12	1.15	1.09	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	9J	5J	8J	10
Acetone	32B	13B	83B	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	4J	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	U	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received	07/14/00	07/15/00	07/15/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/21/00	07/21/00	07/21/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE VO-1.14
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-18 END			
Lab Sample I.D.	001349A-28			Quant.
Method Blank I.D.	VBLKKI			Limits
Quant. Factor	1.11			with no
				Dilution
Chloromethane	U			10
Bromomethane	U			10
Vinyl Chloride	U			10
Chloroethane	U			10
Methylene Chloride	7J			10
Acetone	U			10
Carbon Disulfide	U			10
1,1-Dichloroethene	U			10
1,1-Dichloroethane	U			10
1,2-Dichloroethene (total)	U			10
Chloroform	U			10
1,2-Dichloroethane	U			10
2-Butanone	U			10
1,1,1-Trichloroethane	U			10
Carbon Tetrachloride	U			10
Bromodichloromethane	U			10
1,2-Dichloropropane	U			10
cis-1,3-Dichloropropene	U			10
Trichloroethene	U			10
Dibromochloromethane	U			10
1,1,2-Trichloroethane	U			10
Benzene	U			10
trans-1,3-Dichloropropene	U			10
Bromoform	U			10
4-Methyl-2-Pentanone	U			10
2-Hexanone	U			10
Tetrachloroethene	U			10
1,1,2,2-Tetrachloroethane	U			10
Toluene	U			10
Chlorobenzene	U			10
Ethylbenzene	U			10
Styrene	U			10
Xylene (total)	U			10
Date Received	07/19/00			
Date Extracted	N/A			
Date Analyzed	07/21/00			

See Appendix for qualifier definitions

- Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.0
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

0018

Aqueous

page 1 of 2

All values are ug/L.

Client Sample I.D.	Method Blank	EB-5		
Lab Sample I.D.	SBLKFP	001349A-26		Quant. Limits
Method Blank I.D.	SBLKFP	SBLKFP		with no
Quant. Factor	1.00	1.00		Dilution
Phenol	U	U		10
bis(2-Chloroethyl) ether	U	U		10
2-Chlorophenol	U	U		10
1,3-Dichlorobenzene	U	U		10
1,4-Dichlorobenzene	U	U		10
1,2-Dichlorobenzene	U	U		10
2-Methylphenol	U	U		10
2,2'-oxybis(1-Chloropropane)	U	U		10
4-Methylphenol	U	U		10
N-Nitroso-di-n-propylamine	U	U		10
Hexachloroethane	U	U		10
Nitrobenzene	U	U		10
Isophorone	U	U		10
2-Nitrophenol	U	U		10
2,4-Dimethylphenol	U	U		10
bis(2-Chloroethoxy)methane	U	U		10
2,4-Dichlorophenol	U	U		10
1,2,4-Trichlorobenzene	U	U		10
Naphthalene	U	U		10
4-Chloroaniline	U	U		10
Hexachlorobutadiene	U	U		10
4-Chloro-3-methylphenol	U	U		10
2-Methylnaphthalene	U	U		10
Hexachlorocyclopentadiene	U	U		10
2,4,6-Trichlorophenol	U	U		10
2,4,5-Trichlorophenol	U	U		25
2-Chloronaphthalene	U	U		10
2-Nitroaniline	U	U		25
Dimethylphthalate	U	U		10
Acenaphthylene	U	U		10
2,6-Dinitrotoluene	U	U		10
3-Nitroaniline	U	U		25
Acenaphthene	U	U		10
2,4-Dinitrophenol	U	U		25
4-Nitrophenol	U	U		25
Date Received		07/15/00		
Date Extracted	07/19/00	07/19/00		
Date Analyzed	07/25/00	07/25/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.0
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

0019

Aqueous

page 2 of 2

All values are ug/L.

Client Sample I.D.	Method Blank	EB-5		Quant. Limits with no Dilution
Lab Sample I.D.	SBLKFP	001349A-26		
Method Blank I.D.	SBLKFP	SBLKFP		
Quant. Factor	1.00	1.00		
Dibenzofuran	U	U		10
2,4-Dinitrotoluene	U	U		10
Diethylphthalate	U	U		10
4-Chlorophenyl-phenylether	U	U		10
Fluorene	U	U		10
4-Nitroaniline	U	U		25
4,6-Dinitro-2-methylphenol	U	U		25
N-Nitrosodiphenylamine (1)	U	U		10
4-Bromophenyl-phenylether	U	U		10
Hexachlorobenzene	U	U		10
Pentachlorophenol	U	U		25
Phenanthrene	U	U		10
Anthracene	U	U		10
Carbazole	U	U		10
Di-n-butylphthalate	U	U		10
Fluoranthene	U	U		10
Pyrene	U	U		10
Butylbenzylphthalate	U	.7J		10
3,3'-Dichlorobenzidine	U	U		10
Benzo(a)anthracene	U	U		10
Chrysene	U	U		10
bis(2-Ethylhexyl)phthalate	U	U		10
Di-n-octylphthalate	U	U		10
Benzo(b)fluoranthene	U	U		10
Benzo(k)fluoranthene	U	U		10
Benzo(a)pyrene	U	U		10
Indeno(1,2,3-cd)pyrene	U	U		10
Dibenz(a,h)anthracene	U	U		10
Benzo(g,h,i)perylene	U	U		10
Date Received		07/15/00		
Date Extracted	07/19/00	07/19/00		
Date Analyzed	07/25/00	07/25/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.1
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Aqueous

page 1 of 2

All values are ug/L.

Client Sample I.D.	Method Blank	EB-1	EB-2	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKAP	001349A-04	001349A-09	
Method Blank I.D.	SBLKAP	SBLKAP	SBLKAP	
Quant. Factor	1.00	1.09	1.11	
Phenol	U	U	U	10
bis(2-Chloroethyl) ether	U	U	U	10
2-Chlorophenol	U	U	U	10
1,3-Dichlorobenzene	U	U	U	10
1,4-Dichlorobenzene	U	U	U	10
1,2-Dichlorobenzene	U	U	U	10
2-Methylphenol	U	U	U	10
2,2'-oxybis(1-Chloropropane)	U	U	U	10
4-Methylphenol	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	10
Hexachloroethane	U	U	U	10
Nitrobenzene	U	U	U	10
Isophorone	U	U	U	10
2-Nitrophenol	U	U	U	10
2,4-Dimethylphenol	U	U	U	10
bis(2-Chloroethoxy) methane	U	U	U	10
2,4-Dichlorophenol	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	10
Naphthalene	U	U	U	10
4-Chloroaniline	U	U	U	10
Hexachlorobutadiene	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	10
2-Methylnaphthalene	U	U	U	10
Hexachlorocyclopentadiene	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	25
2-Chloronaphthalene	U	U	U	10
2-Nitroaniline	U	U	U	25
Dimethylphthalate	U	U	U	10
Acenaphthylene	U	U	U	10
2,6-Dinitrotoluene	U	U	U	10
3-Nitroaniline	U	U	U	25
Acenaphthene	U	U	U	10
2,4-Dinitrophenol	U	U	U	25
4-Nitrophenol	U	U	U	25
Date Received		07/12/00	07/12/00	
Date Extracted	07/17/00	07/17/00	07/17/00	
Date Analyzed	07/25/00	07/26/00	07/25/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor

Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.1
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

0021

Aqueous
page 2 of 2

All values are ug/L.

Client Sample I.D.	Method Blank	EB-1	EB-2	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKAP	001349A-04	001349A-09	
Method Blank I.D.	SBLKAP	SBLKAP	SBLKAP	
Quant. Factor	1.00	1.09	1.11	
Dibenzofuran	U	U	U	10
2,4-Dinitrotoluene	U	U	U	10
Diethylphthalate	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	10
Fluorene	U	U	U	10
4-Nitroaniline	U	U	U	25
4,6-Dinitro-2-methylphenol	U	U	U	25
N-Nitrosodiphenylamine (1)	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	10
Hexachlorobenzene	U	U	U	10
Pentachlorophenol	U	U	U	25
Phenanthrene	U	U	U	10
Anthracene	U	U	U	10
Carbazole	U	U	U	10
Di-n-butylphthalate	U	U	U	10
Fluoranthene	U	U	U	10
Pyrene	U	U	U	10
Butylbenzylphthalate	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	10
Benzo(a)anthracene	U	U	U	10
Chrysene	U	U	U	10
bis(2-Ethylhexyl)phthalate	U	U	U	10
Di-n-octylphthalate	U	U	U	10
Benzo(b)fluoranthene	U	U	U	10
Benzo(k)fluoranthene	U	U	U	10
Benzo(a)pyrene	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	10
Dibenz(a,h)anthracene	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	10
Date Received		07/12/00	07/12/00	
Date Extracted	07/17/00	07/17/00	07/17/00	
Date Analyzed	07/25/00	07/26/00	07/25/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.2
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

0022

Aqueous

page 1 of 2

All values are ug/L.

Client Sample I.D.	EB-3	EB-4		Quant. Limits with no Dilution
Lab Sample I.D.	001349A-15	001349A-21		
Method Blank I.D.	SBLKAP	SBLKAP		
Quant. Factor	1.09	1.09		
Phenol	U	U		10
bis(2-Chloroethyl) ether	U	U		10
2-Chlorophenol	U	U		10
1,3-Dichlorobenzene	U	U		10
1,4-Dichlorobenzene	U	U		10
1,2-Dichlorobenzene	U	U		10
2-Methylphenol	U	U		10
2,2'-oxybis(1-Chloropropane)	U	U		10
4-Methylphenol	U	U		10
N-Nitroso-di-n-propylamine	U	U		10
Hexachloroethane	U	U		10
Nitrobenzene	U	U		10
Isophorone	U	U		10
2-Nitrophenol	U	U		10
2,4-Dimethylphenol	U	U		10
bis(2-Chloroethoxy)methane	U	U		10
2,4-Dichlorophenol	U	U		10
1,2,4-Trichlorobenzene	U	U		10
Naphthalene	U	U		10
4-Chloroaniline	U	U		10
Hexachlorobutadiene	U	U		10
4-Chloro-3-methylphenol	U	U		10
2-Methylnaphthalene	U	U		10
Hexachlorocyclopentadiene	U	U		10
2,4,6-Trichlorophenol	U	U		10
2,4,5-Trichlorophenol	U	U		25
2-Chloronaphthalene	U	U		10
2-Nitroaniline	U	U		25
Dimethylphthalate	U	U		10
Acenaphthylene	U	U		10
2,6-Dinitrotoluene	U	U		10
3-Nitroaniline	U	U		25
Acenaphthene	U	U		10
2,4-Dinitrophenol	U	U		25
4-Nitrophenol	U	U		25
Date Received	07/13/00	07/14/00		
Date Extracted	07/17/00	07/17/00		
Date Analyzed	07/26/00	07/26/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor

Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

0023

TABLE SV-1.2
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Aqueous

page 2 of 2

All values are ug/L.

Client Sample I.D.	EB-3	EB-4		Quant. Limits with no Dilution
Lab Sample I.D.	001349A-15	001349A-21		
Method Blank I.D.	SBLKAP	SBLKAP		
Quant. Factor	1.09	1.09		
Dibenzofuran	U	U		10
2,4-Dinitrotoluene	U	U		10
Diethylphthalate	U	U		10
4-Chlorophenyl-phenylether	U	U		10
Fluorene	U	U		10
4-Nitroaniline	U	U		25
4,6-Dinitro-2-methylphenol	U	U		25
N-Nitrosodiphenylamine (1)	U	U		10
4-Bromophenyl-phenylether	U	U		10
Hexachlorobenzene	U	U		10
Pentachlorophenol	U	U		25
Phenanthrene	U	U		10
Anthracene	U	U		10
Carbazole	U	U		10
Di-n-butylphthalate	U	U		10
Fluoranthene	U	U		10
Pyrene	U	U		10
Butylbenzylphthalate	U	U		10
3,3'-Dichlorobenzidine	U	U		10
Benzo(a)anthracene	U	U		10
Chrysene	U	U		10
bis(2-Ethylhexyl)phthalate	.5J	U		10
Di-n-octylphthalate	U	U		10
Benzo(b)fluoranthene	U	U		10
Benzo(k)fluoranthene	U	U		10
Benzo(a)pyrene	U	U		10
Indeno(1,2,3-cd)pyrene	U	U		10
Dibenz(a,h)anthracene	U	U		10
Benzo(g,h,i)perylene	U	U		10
Date Received	07/13/00	07/14/00		
Date Extracted	07/17/00	07/17/00		
Date Analyzed	07/26/00	07/26/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.3
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Aqueous

page 1 of 2

All values are ug/L.

Client Sample I.D.	Method Blank	EB-6		Quant. Limits with no Dilution
Lab Sample I.D.	SBLKIP	001349A-29		
Method Blank I.D.	SBLKIP	SBLKIP		
Quant. Factor	1.00	1.00		
Phenol	U	U		10
bis(2-Chloroethyl)ether	U	U		10
2-Chlorophenol	U	U		10
1,3-Dichlorobenzene	U	U		10
1,4-Dichlorobenzene	U	.4J		10
1,2-Dichlorobenzene	U	U		10
2-Methylphenol	U	U		10
2,2'-oxybis(1-Chloropropane)	U	U		10
4-Methylphenol	U	U		10
N-Nitroso-di-n-propylamine	U	U		10
Hexachloroethane	U	U		10
Nitrobenzene	U	U		10
Isophorone	U	U		10
2-Nitrophenol	U	U		10
2,4-Dimethylphenol	U	U		10
bis(2-Chloroethoxy)methane	U	U		10
2,4-Dichlorophenol	U	U		10
1,2,4-Trichlorobenzene	U	U		10
Naphthalene	.1J	U		10
4-Chloroaniline	U	U		10
Hexachlorobutadiene	U	U		10
4-Chloro-3-methylphenol	U	U		10
2-Methylnaphthalene	U	U		10
Hexachlorocyclopentadiene	U	U		10
2,4,6-Trichlorophenol	U	U		10
2,4,5-Trichlorophenol	U	U		25
2-Chloronaphthalene	U	U		10
2-Nitroaniline	U	U		25
Dimethylphthalate	U	U		10
Acenaphthylene	U	U		10
2,6-Dinitrotoluene	U	U		10
3-Nitroaniline	U	U		25
Acenaphthene	U	U		10
2,4-Dinitrophenol	U	U		25
4-Nitrophenol	U	U		25
Date Received		07/19/00		
Date Extracted	07/20/00	07/20/00		
Date Analyzed	08/02/00	08/04/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.3
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Aqueous

page 2 of 2

All values are ug/L.

Client Sample I.D.	Method Blank	EB-6		
Lab Sample I.D.	SBLKIP	001349A-29		Quant. Limits with no Dilution
Method Blank I.D.	SBLKIP	SBLKIP		
Quant. Factor	1.00	1.00		
Dibenzofuran	U	U		10
2,4-Dinitrotoluene	U	U		10
Diethylphthalate	U	.1J		10
4-Chlorophenyl-phenylether	U	U		10
Fluorene	U	U		10
4-Nitroaniline	U	U		25
4,6-Dinitro-2-methylphenol	U	U		25
N-Nitrosodiphenylamine (1)	U	U		10
4-Bromophenyl-phenylether	U	U		10
Hexachlorobenzene	U	U		10
Pentachlorophenol	U	U		25
Phenanthrene	U	U		10
Anthracene	U	U		10
Carbazole	U	U		10
Di-n-butylphthalate	U	U		10
Fluoranthene	U	U		10
Pyrene	U	U		10
Butylbenzylphthalate	U	.1J		10
3,3'-Dichlorobenzidine	U	U		10
Benzo(a)anthracene	U	U		10
Chrysene	U	U		10
bis(2-Ethylhexyl)phthalate	.5J	U		10
Di-n-octylphthalate	U	U		10
Benzo(b)fluoranthene	U	U		10
Benzo(k)fluoranthene	U	U		10
Benzo(a)pyrene	U	U		10
Indeno(1,2,3-cd)pyrene	U	U		10
Dibenz(a,h)anthracene	U	U		10
Benzo(g,h,i)perylene	U	U		10
Date Received		07/19/00		
Date Extracted	07/20/00	07/20/00		
Date Analyzed	08/02/00	08/04/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.4
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-3 END	LP-3 END RE	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKZP	001349A-01	001349A-01RE	
Method Blank I.D.	SBLKZP	SBLKZP	SBLKZP	
Quant. Factor	1.00	1.13	1.13	
Phenol	U	6J	6J	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	5J	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	U	8J	8J	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received		07/12/00	07/12/00	
Date Extracted	07/17/00	07/17/00	07/17/00	
Date Analyzed	07/25/00	07/28/00	08/01/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.4
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-3 END	LP-3 END RE	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKZP	001349A-01	001349A-01RE	
Method Blank I.D.	SBLKZP	SBLKZP	SBLKZP	
Quant. Factor	1.00	1.13	1.13	
Dibenzofuran	U	5J	6J	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	U	U	4J	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	13J	14J	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	U	210J	200J	330
Anthracene	U	32J	29J	330
Carbazole	U	37J	32J	330
Di-n-butylphthalate	U	14J	13J	330
Fluoranthene	U	470	450	330
Pyrene	U	490	430	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	U	210J	200J	330
Chrysene	U	370	350J	330
bis(2-Ethylhexyl)phthalate	74J	290JB	300JB	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	U	300J	270J	330
Benzo(k)fluoranthene	U	280J	240J	330
Benzo(a)pyrene	U	210J	210J	330
Indeno(1,2,3-cd)pyrene	U	180J	180J	330
Dibenz(a,h)anthracene	U	62J	57J	330
Benzo(g,h,i)perylene	U	180J	200J	330
Date Received		07/12/00	07/12/00	
Date Extracted	07/17/00	07/17/00	07/17/00	
Date Analyzed	07/25/00	07/28/00	08/01/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor

Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.5
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-4 END	LP-4 END DL	LP-4@15'	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-02	001349A-02DL	001349A-03	
Method Blank I.D.	SBLKZP	SBLKZP	SBLKZP	
Quant. Factor	1.16	4.65	1.12	
Phenol	6J	U	12J	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy) methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	210J	230J	180J	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	160J	210J	200J	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	26J	24J	45J	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	1300	1200J	1200	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received	07/12/00	07/12/00	07/12/00	
Date Extracted	07/17/00	07/17/00	07/17/00	
Date Analyzed	07/29/00	08/01/00	07/29/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.5
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-4 END	LP-4 END DL	LP-4@15'	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-02	001349A-02DL	001349A-03	
Method Blank I.D.	SBLKZP	SBLKZP	SBLKZP	
Quant. Factor	1.16	4.65	1.12	
Dibenzofuran	840	850J	750	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	U	U	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	1400	1200J	1100	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	8300E	9000	10000E	330
Anthracene	2000	2000	U	330
Carbazole	1000	890J	1200	330
Di-n-butylphthalate	U	U	U	330
Fluoranthene	6500E	6500	7600E	330
Pyrene	5500E	6500	5300E	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	3200E	3100	4500E	330
Chrysene	4200E	4000	3500E	330
bis(2-Ethylhexyl)phthalate	460B	450JB	500B	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	3500E	2800	4800E	330
Benzo(k)fluoranthene	1900	2300	900	330
Benzo(a)pyrene	3100	3000	3200E	330
Indeno(1,2,3-cd)pyrene	3200E	2300	3300E	330
Dibenz(a,h)anthracene	1000	840J	990	330
Benzo(g,h,i)perylene	3500E	2900	2400	330
Date Received	07/12/00	07/12/00	07/12/00	
Date Extracted	07/17/00	07/17/00	07/17/00	
Date Analyzed	07/29/00	08/01/00	07/29/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.6
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-4@15' DL	LP-5 END	LP-5@18'	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-03DL	001349A-06	001349A-07	
Method Blank I.D.	SBLKZP	SBLKZP	SBLKZP	
Quant. Factor	5.58	117.	1.12	
Phenol	U	U	7J	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	200J	U	13J	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	260J	370J	7J	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	37J	U	5J	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	1100J	3500J	110J	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received	07/12/00	07/12/00	07/12/00	
Date Extracted	07/17/00	07/17/00	07/17/00	
Date Analyzed	08/02/00	08/04/00	08/02/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor

Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.6
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-4@15' DL	LP-5 END	LP-5@18'	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-03DL	001349A-06	001349A-07	
Method Blank I.D.	SBLKZP	SBLKZP	SBLKZP	
Quant. Factor	5.58	117.	1.12	
Dibenzofuran	680J	3700J	80J	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	U	U	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	950J	9100J	150J	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	8500	87000	1600	330
Anthracene	1500J	59000	680	330
Carbazole	1100J	3900J	100J	330
Di-n-butylphthalate	U	U	U	330
Fluoranthene	6900	200000	2100	330
Pyrene	6800	270000	2900	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	3400	110000	1500	330
Chrysene	4800	110000	1400	330
bis(2-Ethylhexyl)phthalate	540JB	U	260JB	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	3300	75000	1100	330
Benzo(k)fluoranthene	2700	66000	900	330
Benzo(a)pyrene	3200	86000	1200	330
Indeno(1,2,3-cd)pyrene	2800	60000	1000	330
Dibenz(a,h)anthracene	940J	20000J	370	330
Benzo(g,h,i)perylene	2700	65000	1100	330
Date Received	07/12/00	07/12/00	07/12/00	
Date Extracted	07/17/00	07/17/00	07/17/00	
Date Analyzed	08/02/00	08/04/00	08/02/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.7
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-5@18' MS	LP-5@18' MSD	LP-11 END	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-07MS	001349A-07	001349A-08	
Method Blank I.D.	SBLKZP	SBLKZP	SBLKZP	
Quant. Factor	1.13	1.14	1.10	
Phenol	1500X	1500X	U	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	1400X	1400X	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	950X	1100X	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	960X	1000X	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy) methane	U	U	U	330
2,4-Dichlorophenol	10J	11J	U	330
1,2,4-Trichlorobenzene	1200X	1300X	U	330
Naphthalene	11J	11J	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	1800X	1700X	U	330
2-Methylnaphthalene	11J	9J	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	6J	6J	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	1400X	1400X	U	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	2300X	2400X	U	830
Date Received	07/12/00	07/12/00	07/12/00	
Date Extracted	07/17/00	07/17/00	07/17/00	
Date Analyzed	08/02/00	08/02/00	07/26/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.7
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-5@18' MS	LP-5@18' MSD	LP-11 END	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-07MS	001349A-07 MSD	001349A-08	
Method Blank I.D.	SBLKZP	SBLKZP	SBLKZP	
Quant. Factor	1.13	1.14	1.10	
Dibenzofuran	100J	87J	U	330
2,4-Dinitrotoluene	1500X	1500X	U	330
Diethylphthalate	4J	5J	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	200J	180J	U	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	1100X	1200X	U	830
Phenanthrene	1600	1400	37J	330
Anthracene	680	570	9J	330
Carbazole	100J	100J	U	330
Di-n-butylphthalate	U	U	U	330
Fluoranthene	2000	1900	36J	330
Pyrene	4800EX	4600EX	28J	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	1500	1200	14J	330
Chrysene	1500	1200	20J	330
bis(2-Ethylhexyl)phthalate	280JB	340JB	U	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	1100	930	U	330
Benzo(k)fluoranthene	1000	840	U	330
Benzo(a)pyrene	1400	1100	U	330
Indeno(1,2,3-cd)pyrene	1200	970	U	330
Dibenz(a,h)anthracene	420	360J	U	330
Benzo(g,h,i)perylene	1300	1100	U	330
Date Received	07/12/00	07/12/00	07/12/00	
Date Extracted	07/17/00	07/17/00	07/17/00	
Date Analyzed	08/02/00	08/02/00	07/26/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.8
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-12 END	LP-12@20'	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKCP	001349A-11	001349A-12	
Method Blank I.D.	SBLKCP	SBLKCP	SBLKCP	
Quant. Factor	1.00	1.08	1.04	
Phenol	U	U	4J	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	U	U	U	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received		07/13/00	07/13/00	
Date Extracted	07/18/00	07/18/00	07/18/00	
Date Analyzed	07/26/00	07/31/00	07/31/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor

Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.8
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-12 END	LP-12@20'	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKCP	001349A-11	001349A-12	
Method Blank I.D.	SBLKCP	SBLKCP	SBLKCP	
Quant. Factor	1.00	1.08	1.04	
Dibenzofuran	U	U	2J	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	U	6J	5J	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	3J	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	U	8J	40J	330
Anthracene	U	U	6J	330
Carbazole	U	U	6J	330
Di-n-butylphthalate	U	10J	U	330
Fluoranthene	U	4J	65J	330
Pyrene	U	5J	65J	330
Butylbenzylphthalate	U	6J	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	U	U	35J	330
Chrysene	U	U	51J	330
bis(2-Ethylhexyl)phthalate	55J	340JB	120JB	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	U	U	45J	330
Benzo(k)fluoranthene	U	U	43J	330
Benzo(a)pyrene	U	U	36J	330
Indeno(1,2,3-cd)pyrene	U	U	39J	330
Dibenz(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	42J	330
Date Received		07/13/00	07/13/00	
Date Extracted	07/18/00	07/18/00	07/18/00	
Date Analyzed	07/26/00	07/31/00	07/31/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.9
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

0036

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-15@16'	LP-8 END	LP-80 END	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-14	001349A-17	001349A-18	
Method Blank I.D.	SBLKCP	SBLKCP	SBLKCP	
Quant. Factor	1.08	1.14	1.12	
Phenol	U	4J	4J	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy) methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	U	6J	U	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received	07/13/00	07/14/00	07/14/00	
Date Extracted	07/18/00	07/18/00	07/18/00	
Date Analyzed	07/27/00	07/31/00	07/31/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.9
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

0037

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-15@16'	LP-8 END	LP-80 END	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-14	001349A-17	001349A-18	
Method Blank I.D.	SBLKCP	SBLKCP	SBLKCP	
Quant. Factor	1.08	1.14	1.12	
Dibenzofuran	U	3J	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	U	7J	6J	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	9J	U	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	U	78J	17J	330
Anthracene	U	18J	3J	330
Carbazole	U	7J	3J	330
Di-n-butylphthalate	U	7J	6J	330
Fluoranthene	U	67J	25J	330
Pyrene	U	80J	33J	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	U	40J	13J	330
Chrysene	U	51J	24J	330
bis(2-Ethylhexyl)phthalate	92JB	120JB	86JB	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	U	37J	18J	330
Benzo(k)fluoranthene	U	41J	15J	330
Benzo(a)pyrene	U	35J	15J	330
Indeno(1,2,3-cd)pyrene	U	32J	U	330
Dibenz(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	98J	330
Date Received	07/13/00	07/14/00	07/14/00	
Date Extracted	07/18/00	07/18/00	07/18/00	
Date Analyzed	07/27/00	07/31/00	07/31/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.10
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP 9 END	LP-10 END	LP-10 END RE	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-19	001349A-20	001349A-20RE	
Method Blank I.D.	SBLKCP	SBLKCP	SBLKCP	
Quant. Factor	1.12	1.06	1.06	
Phenol	5J	U	4J	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	24J	26J	330
1,2-Dichlorobenzene	U	110J	110J	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy) methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	22J	25J	330
Naphthalene	U	5J	7J	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	89J	88J	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	U	8J	U	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received	07/14/00	07/14/00	07/14/00	
Date Extracted	07/18/00	07/18/00	07/18/00	
Date Analyzed	07/31/00	07/31/00	08/01/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor

Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.10
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

0039

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP 9 END	LP-10 END	LP-10 END RE	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-19	001349A-20	001349A-20RE	
Method Blank I.D.	SBLKCP	SBLKCP	SBLKCP	
Quant. Factor	1.12	1.06	1.06	
Dibenzofuran	U	13J	15J	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	4J	5J	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	4J	38J	37J	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	73J	310J	340J	330
Anthracene	18J	36J	37J	330
Carbazole	9J	18J	20J	330
Di-n-butylphthalate	7J	9J	9J	330
Fluoranthene	120J	270J	310J	330
Pyrene	150J	260J	240J	330
Butylbenzylphthalate	U	22J	22J	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	74J	100J	110J	330
Chrysene	91J	140J	150J	330
bis(2-Ethylhexyl)phthalate	100JB	430B	430B	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	74J	120J	120J	330
Benzo(k)fluoranthene	81J	110J	100J	330
Benzo(a)pyrene	80J	100J	96J	330
Indeno(1,2,3-cd)pyrene	74J	100J	82J	330
Dibenz(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	67J	92J	74J	330
Date Received	07/14/00	07/14/00	07/14/00	
Date Extracted	07/18/00	07/18/00	07/18/00	
Date Analyzed	07/31/00	07/31/00	08/01/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.11
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-23 END	LP-23@15'	LP-23@15' RE	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-23	001349A-24	001349A-24RE	
Method Blank I.D.	SBLKCP	SBLKCP	SBLKCP	
Quant. Factor	1.12	1.16	1.16	
Phenol	4J	5J	5J	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	2J	2J	5J	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	5J	3J	4J	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	U	U	U	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received	07/15/00	07/15/00	07/15/00	
Date Extracted	07/18/00	07/18/00	07/18/00	
Date Analyzed	07/31/00	07/31/00	08/01/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.11
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-23 END	LP-23@15'	LP-23@15' RE	Quant. Limits with no Dilution
Lab Sample I.D.	001349A-23	001349A-24	001349A-24RE	
Method Blank I.D.	SBLKCP	SBLKCP	SBLKCP	
Quant. Factor	1.12	1.16	1.16	
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	6J	6J	6J	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	38J	24J	26J	330
Anthracene	10J	8J	6J	330
Carbazole	12J	8J	8J	330
Di-n-butylphthalate	8J	7J	7J	330
Fluoranthene	72J	40J	41J	330
Pyrene	75J	58J	53J	330
Butylbenzylphthalate	U	59J	55J	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	35J	18J	18J	330
Chrysene	73J	43J	44J	330
bis(2-Ethylhexyl)phthalate	240JB	69JB	65JB	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	75J	49J	50J	330
Benzo(k)fluoranthene	51J	37J	38J	330
Benzo(a)pyrene	51J	28J	28J	330
Indeno(1,2,3-cd)pyrene	120J	73J	56J	330
Dibenz(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	120J	78J	67J	330
Date Received	07/15/00	07/15/00	07/15/00	
Date Extracted	07/18/00	07/18/00	07/18/00	
Date Analyzed	07/31/00	07/31/00	08/01/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.12
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-13 END			
Lab Sample I.D.	001349A-25			Quant.
Method Blank I.D.	SBLKCP			Limits
Quant. Factor	1.09			with no Dilution
Phenol	U			330
bis(2-Chloroethyl) ether	U			330
2-Chlorophenol	U			330
1,3-Dichlorobenzene	U			330
1,4-Dichlorobenzene	U			330
1,2-Dichlorobenzene	U			330
2-Methylphenol	U			330
2,2'-oxybis(1-Chloropropane)	U			330
4-Methylphenol	U			330
N-Nitroso-di-n-propylamine	U			330
Hexachloroethane	U			330
Nitrobenzene	U			330
Isophorone	U			330
2-Nitrophenol	U			330
2,4-Dimethylphenol	U			330
bis(2-Chloroethoxy)methane	U			330
2,4-Dichlorophenol	U			330
1,2,4-Trichlorobenzene	U			330
Naphthalene	4J			330
4-Chloroaniline	U			330
Hexachlorobutadiene	U			330
4-Chloro-3-methylphenol	U			330
2-Methylnaphthalene	U			330
Hexachlorocyclopentadiene	U			330
2,4,6-Trichlorophenol	U			330
2,4,5-Trichlorophenol	U			830
2-Chloronaphthalene	U			330
2-Nitroaniline	U			830
Dimethylphthalate	U			330
Acenaphthylene	U			330
2,6-Dinitrotoluene	U			330
3-Nitroaniline	U			830
Acenaphthene	U			330
2,4-Dinitrophenol	U			830
4-Nitrophenol	U			830
Date Received	07/15/00			
Date Extracted	07/18/00			
Date Analyzed	08/01/00			

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.12
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-13 END			
Lab Sample I.D.	001349A-25			Quant.
Method Blank I.D.	SBLKCP			Limits
Quant. Factor	1.09			with no
				Dilution
Dibenzofuran	3J			330
2,4-Dinitrotoluene	U			330
Diethylphthalate	6J			330
4-Chlorophenyl-phenylether	U			330
Fluorene	5J			330
4-Nitroaniline	U			830
4,6-Dinitro-2-methylphenol	U			830
N-Nitrosodiphenylamine (1)	U			330
4-Bromophenyl-phenylether	U			330
Hexachlorobenzene	U			330
Pentachlorophenol	U			830
Phenanthrene	30J			330
Anthracene	6J			330
Carbazole	U			330
Di-n-butylphthalate	7J			330
Fluoranthene	33J			330
Pyrene	23J			330
Butylbenzylphthalate	U			330
3,3'-Dichlorobenzidine	U			330
Benzo(a)anthracene	12J			330
Chrysene	24J			330
bis(2-Ethylhexyl)phthalate	130JB			330
Di-n-octylphthalate	U			330
Benzo(b)fluoranthene	14J			330
Benzo(k)fluoranthene	12J			330
Benzo(a)pyrene	U			330
Indeno(1,2,3-cd)pyrene	U			330
Dibenz(a,h)anthracene	U			330
Benzo(g,h,i)perylene	U			330
Date Received	07/15/00			
Date Extracted	07/18/00			
Date Analyzed	08/01/00			

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.13
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-15	LP-18 END	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKPP	001349A-13	001349A-28	
Method Blank I.D.	SBLKPP	SBLKPP	SBLKPP	
Quant. Factor	1.00	1.07	1.07	
Phenol	10J	3JB	3JB	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy) methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	2J	U	3JB	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	U	U	U	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received		07/13/00	07/19/00	
Date Extracted	07/22/00	07/22/00	07/22/00	
Date Analyzed	07/31/00	07/31/00	07/31/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

6644A

TABLE SV-1.13
7000-1349A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-15	LP-18 END	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKPP	001349A-13	001349A-28	
Method Blank I.D.	SBLKPP	SBLKPP	SBLKPP	
Quant. Factor	1.00	1.07	1.07	
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	4J	4JB	4JB	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	16J	4JB	2JB	330
Anthracene	10J	2JB	U	330
Carbazole	U	U	U	330
Di-n-butylphthalate	5J	7JB	8JB	330
Fluoranthene	28J	7JB	4JB	330
Pyrene	37J	6JB	4JB	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	16J	U	U	330
Chrysene	15J	U	U	330
bis(2-Ethylhexyl)phthalate	26J	25JB	39JB	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	13J	U	U	330
Benzo(k)fluoranthene	10J	U	U	330
Benzo(a)pyrene	13J	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	330
Dibenz(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	330
Date Received		07/13/00	07/19/00	
Date Extracted	07/22/00	07/22/00	07/22/00	
Date Analyzed	07/31/00	07/31/00	07/31/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE AS-1.0
7000-1349A
FANNING PHILLIPS + MOLNAR
TAL METALS

All values are ug/L.

Client Sample I.D.	EB-1	EB-2	EB-3	EB-4
Lab Sample I.D.	001349A-04	001349A-09	001349A-15	001349A-21
Aluminum	10.5U	10.5U	15.0B	10.5U
Antimony	2.1U	2.1U	2.1U	2.1U
Arsenic	2.0U	2.0U	2.0U	2.0U
Barium	0.20U	0.20U	0.20U	0.20U
Beryllium	0.20U	0.20U	0.20U	0.20U
Cadmium	0.40U	0.40U	0.40U	0.40U
Calcium	33.1B	16.6B	24.7B	26.3B
Chromium	1.0U	1.0U	1.0U	1.0U
Cobalt	0.50U	0.50U	0.50U	0.50U
Copper	1.0U	1.0U	1.0U	1.0U
Iron	10.5U	10.5U	33.8B	10.5U
Lead	1.3U	1.3U	1.3U	1.3U
Magnesium	7.2B	7.0U	7.0U	7.0U
Manganese	0.30B	0.20U	0.50B	0.20U
Mercury	0.10U	0.10U	0.10U	0.10U
Nickel	1.0U	1.0U	1.0U	1.0U
Potassium	98.0U	98.0U	98.0U	98.0U
Selenium	3.4U	3.4U	3.4U	3.4U
Silver	1.0U	1.0U	1.0U	1.0U
Sodium	31.3B	43.2B	53.0B	86.1B
Thallium	3.8U	3.8U	3.8U	3.8U
Vanadium	1.0U	1.0U	1.0U	1.0U
Zinc	6.9B	2.9B	4.3B	4.1B

See Appendix for qualifier definitions

TABLE AS-1.1
7000-1349A
FANNING PHILLIPS + MOLNAR
TAL METALS

Aqueous

All values are ug/L.

Client Sample I.D.	EB-5	EB-6		
Lab Sample I.D.	001349A-26	001349A-29		
Aluminum	10.5U	10.5U		
Antimony	2.1U	2.1U		
Arsenic	2.0U	2.0U		
Barium	0.20U	0.20U		
Beryllium	0.20U	0.20U		
Cadmium	0.40U	0.40U		
Calcium	80.0B	18.2B		
Chromium	1.0U	1.0U		
Cobalt	0.50U	0.50U		
Copper	1.0U	1.0U		
Iron	10.5U	12.2B		
Lead	1.3U	1.3U		
Magnesium	7.0U	7.0U		
Manganese	0.31B	0.50B		
Mercury	0.10U	0.10U		
Nickel	1.0U	1.0U		
Potassium	98.0U	98.0U		
Selenium	3.4U	3.4U		
Silver	1.0U	1.0U		
Sodium	52.6B	28.8B		
Thallium	3.8U	3.8U		
Vanadium	1.0U	1.0U		
Zinc	260.	1.9B		

See Appendix for qualifier definitions

TABLE AS-1.2
7000-1349A
FANNING PHILLIPS + MOLNAR
TAL METALS

Soil

All values are mg/Kg dry weight basis.

Client Sample I.D.	LP-3 END	LP-4 END	LP-4@15'	LP-5 END
Lab Sample I.D.	001349A-01	001349A-02	001349A-03	001349A-06
Aluminum	385.	699.	1020	1240
Antimony	0.74B	0.61B	0.62B	0.44B
Arsenic	0.40U	0.58B	1.2B	0.59B
Barium	1.5B	3.2B	7.4B	3.9B
Beryllium	0.043B	0.065B	0.068B	0.066B
Cadmium	0.28B	0.20B	0.30B	0.055B
Calcium	59.8B	150.B	1020B	122.B
Chromium	1.0B	2.5	6.1	2.2
Cobalt	0.23B	0.50B	0.62B	0.44B
Copper	3140	2810	5040	68.7
Iron	580.*	2060*	1900*	1280*
Lead	132.	138.	250.	24.0
Magnesium	79.9B	200.B	708.B	212.B
Manganese	3.4	14.3	9.5	8.9
Mercury	0.0022UN	0.0048N	0.0018UN	0.0026UN
Nickel	3.5B	4.3B	7.6B	2.3B
Potassium	20.7B	55.6B	68.1B	59.9B
Selenium	0.67U	0.73U	0.70U	0.59U
Silver	0.33B	0.36B	1.8B	0.17U
Sodium	19.1B	16.9B	25.3B	17.5B
Thallium	0.75U	0.82U	1.1B	0.66U
Vanadium	1.2B	2.8B	5.5B	3.5B
Zinc	1800	1610	2540	99.3

See Appendix for qualifier definitions

TABLE AS-1.3
7000-1349A
FANNING PHILLIPS + MOLNAR
TAL METALS

Soil

All values are mg/Kg dry weight basis.

Client Sample I.D.	LP-5@18'	LP-5@18' D	LP-5@18' S	LP-11 END
Lab Sample I.D.	001349A-07	001349A-07D	001349A-07S	001349A-08
Aluminum	654.	755.	1700	789.
Antimony	0.41U	0.41U	86.1	0.43U
Arsenic	0.39U	0.89B	8.6	0.61B
Barium	4.1B	3.9B	363.	2.4B
Beryllium	0.039U	0.048B	9.8	0.065B
Cadmium	0.039U	0.039U	0.88B	0.041U
Calcium	112.B	107.B	NR	36.6B
Chromium	5.1	4.6	42.3	1.6B
Cobalt	0.43B	0.38B	90.0	0.60B
Copper	21.8	21.7	69.2	3.9B
Iron	1130*	1480*	2530	3170*
Lead	6.8	6.9	11.0	7.6
Magnesium	262.B	319.B	NR	182.B
Manganese	9.6	11.6	115.	30.5
Mercury	0.0026UN	0.0072	0.033N	0.0031BN
Nickel	2.6B	2.6B	93.1	1.2B
Potassium	86.9B	78.0B	NR	81.5B
Selenium	0.66U	0.66U	1.8	0.70U
Silver	0.19U	0.19U	8.9	0.20U
Sodium	20.7B	14.3B	NR	15.8B
Thallium	0.74U	0.74U	10.5	0.78U
Vanadium	2.3B	2.4B	93.3	3.3B
Zinc	16.2	16.4	110.	6.2

See Appendix for qualifier definitions

TABLE AS-1.4
7000-1349A
FANNING PHILLIPS + MOLNAR
TAL METALS

Soil

All values are mg/Kg dry weight basis.

Client Sample I.D.	LP-12 END	LP-12@20'	LP-15	LP-15@16'
Lab Sample I.D.	001349A-11	001349A-12	001349A-13	001349A-14
Aluminum	845.	1100	939.	892.
Antimony	0.37U	0.40U	0.44U	0.43U
Arsenic	1.4B	1.6B	1.6B	1.7B
Barium	4.2B	5.1B	4.9B	4.6B
Beryllium	0.082B	0.080B	0.066B	0.058B
Cadmium	0.035U	0.038U	0.042U	0.041U
Calcium	45.7B	140.B	88.7B	109.B
Chromium	1.9	3.3	1.7B	2.0
Cobalt	1.0B	1.2B	1.0B	0.64B
Copper	7.6	13.3	2.5B	4.0B
Iron	3410*	3200*	3300*	2520*
Lead	2.4	7.9	2.3	1.6
Magnesium	178.B	274.B	218.B	276.B
Manganese	124.	95.9	104.	40.9
Mercury	0.0039BN	0.0037BN	0.0028BN	0.0030UN
Nickel	1.7B	3.6B	1.6B	1.5B
Potassium	56.8B	69.8B	46.7B	91.9B
Selenium	0.60U	0.65U	0.71U	0.69U
Silver	0.18U	0.19U	0.21U	0.20U
Sodium	17.9B	14.4B	32.8B	34.6B
Thallium	0.67U	0.73U	0.80U	0.77U
Vanadium	2.4B	3.0B	3.3B	2.6B
Zinc	12.8	16.4	6.9	7.7

See Appendix for qualifier definitions

TABLE AS-1.5
7000-1349A
FANNING PHILLIPS + MOLNAR
TAL METALS

All values are mg/Kg dry weight basis.

Client Sample I.D.	LP-8 END	LP-80 END	LP 9 END	LP-10 END
Lab Sample I.D.	001349A-17	001349A-18	001349A-19	001349A-20
Aluminum	624.	636.	610.	684.
Antimony	0.40U	0.41U	0.45U	0.44U
Arsenic	1.0B	0.49B	0.53B	0.95B
Barium	3.6B	3.7B	3.3B	2.3B
Beryllium	0.039U	0.046B	0.048B	0.068B
Cadmium	0.039U	0.039U	0.043U	0.042U
Calcium	89.6B	111.B	64.9B	154.B
Chromium	2.6	2.1	1.8B	1.3B
Cobalt	0.89B	1.0B	0.71B	0.54B
Copper	22.1	15.3	8.3	235.
Iron	1790*	2070*	1800*	2220*
Lead	6.1	5.4	2.6	12.0
Magnesium	222.B	256.B	166.B	208.B
Manganese	34.7	63.9	54.7	31.6
Mercury	0.0034UN	0.0022UN	0.0028UN	0.0032UN
Nickel	1.4B	1.5B	1.4B	1.9B
Potassium	77.2B	46.4B	49.3B	47.0B
Selenium	0.66U	0.66U	0.73U	0.72U
Silver	0.19U	0.19U	0.21U	0.21U
Sodium	11.9B	17.5B	10.1B	11.9B
Thallium	0.73U	0.74U	0.81U	0.80U
Vanadium	2.4B	2.6B	2.5B	2.4B
Zinc	14.6	13.7	8.5	127.

See Appendix for qualifier definitions

TABLE AS-1.6
7000-1349A
FANNING PHILLIPS + MOLNAR
TAL METALS

All values are mg/Kg dry weight basis.

Client Sample I.D.	LP-23 END	LP-23@15'	LP-13 END	LP-18 END
Lab Sample I.D.	001349A-23	001349A-24	001349A-25	001349A-28
Aluminum	897.	731.	1050	1450
Antimony	0.43U	0.42U	0.33U	0.37U
Arsenic	1.1B	1.3B	1.3B	2.4
Barium	5.8B	2.8B	5.2B	4.9B
Beryllium	0.084B	0.078B	0.090B	0.090B
Cadmium	0.041U	0.040U	0.032U	0.035U
Calcium	300.B	61.6B	87.2B	112.B
Chromium	2.9	1.8B	1.7	2.2
Cobalt	1.7B	0.72B	1.3B	1.1B
Copper	43.2	9.4	7.9	3.1B
Iron	3200*	2690*	3600*	3580*
Lead	22.2	8.5	6.5	2.2
Magnesium	322.B	226.B	263.B	316.B
Manganese	143.	58.0	31.5	49.6
Mercury	0.0086N	0.010N	0.0078N	0.012N
Nickel	2.6B	1.9B	2.1B	1.9B
Potassium	67.7B	46.5B	56.8B	78.0B
Selenium	0.70U	0.69U	0.54U	0.59U
Silver	0.20U	0.20U	0.16U	0.17U
Sodium	16.0B	11.6B	11.0B	12.4B
Thallium	0.78U	0.77U	0.60U	0.66U
Vanadium	3.9B	2.2B	2.9B	3.3B
Zinc	30.6	12.5	10.7	5.7

See Appendix for qualifier definitions



ORGANICS APPENDIX

- U - Indicates that the compound was analyzed for but not detected.
- J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.
- B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.
- N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.
- S - Estimated due to surrogate outliers.
- X - Matrix spike compound.
- (1) - Cannot be separated.
- (2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.
- A - This flag indicates that a TIC is a suspected aldol condensation product.
- E - Indicates that it exceeds calibration curve range.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- C - Confirmed by GC/MS.
- T - Compound present in TCLP blank.
- P - This flag is used for a pesticide/aroclor target analyte when there is a greater than 25 percent difference for detected concentrations between the two GC columns (see Form X).



0053

INORGANICS APPENDIX

C - Concentration qualifiers

U - Indicates analyte was not detected at method reporting limit.

B - Indicates analyte result between IDL and contract required detection limit (CRDL)

Q - QC qualifiers

E - Reported value is estimated because of the presence of interference

M - Duplicate injection precision not met

N - Spiked sample recovery not within control limits

S - The reported value was determined by the method of standard additions (MSA)

W - Post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance

* - Duplicate analysis not within control limit

+ - Correlation coefficient for MSA is less than 0.995

M - Method codes

P - ICP

A - Flame AA

F - Furnace AA

CV - Cold vapor AA (manual)

C - Cyanide

NR - Not Required

NC - Not Calculated as per protocols

STATE CERTIFICATIONS

In some instances it may be necessary for environmental data to be reported to a regulatory authority with reference to a certified laboratory. For your convenience, the laboratory identification numbers for the STL-Connecticut laboratory are provided in the following table. Many states certify laboratories for specific parameters or tests within a category (i.e. method 325.2 for wastewater). The information in the following table indicates the lab is certified in a general category of testing such as drinking water or wastewater analysis. The laboratory should be contacted directly if parameter-specific certification information is required.

STL-Connecticut Certification Summary (as of April 2000)

State	Responsible Agency	Certification	ID Number
Connecticut	Department of Health Services	Drinking Water, Wastewater	PH-0497
Maine	Department of Health and Environmental Services	Drinking Water, Wastewater/Solid, Hazardous Waste	CT023
Massachusetts	Department of Environmental Protection	Potable/Non-Potable Water	CT023
New Hampshire	Department of Environmental Services	Drinking Water, Wastewater	2528
New Jersey	Department of Environmental Protection	Drinking Water, Wastewater	46410
New York	Department of Health	CLP, Drinking Water, Wastewater, Solid/Hazardous Waste	10602
North Carolina	Division of Environmental Management	Wastewater	388
Rhode Island	Department of Health	Chemistry...Non-Potable Water and Wastewater	A43
Washington	Department of Ecology	Wastewater/Hazardous Waste	C231
Wisconsin	Department of Natural Resources	Wastewater	998355710

7000-1349A
FANNING PHILLIPS + MOLNAR
SAMPLE SUMMARY

0055

CLIENT ID	LAB ID	MATRIX	DATE COLLECTED	DATE RECEIVED
LP-3 END	001349A-01	SOIL	07/10/00	07/12/00
LP-4 END	001349A-02	SOIL	07/10/00	07/12/00
LP-4@15'	001349A-03	SOIL	07/10/00	07/12/00
EB-1	001349A-04	WATER	07/10/00	07/12/00
EB-1	001349A-05	WATER	07/10/00	07/12/00
LP-5 END	001349A-06	SOIL	07/11/00	07/12/00
LP-5@18'	001349A-07	SOIL	07/11/00	07/12/00
LP-5@18'	001349A-07D	SOIL	07/11/00	07/12/00
LP-5@18'	001349A-07MS	SOIL	07/11/00	07/12/00
LP-5@18'	001349A-07MSB	SOIL	07/11/00	07/12/00
LP-5@18'	001349A-07MSD	SOIL	07/11/00	07/12/00
LP-5@18'	001349A-07S	SOIL	07/11/00	07/12/00
LP-11 END	001349A-08	SOIL	07/10/00	07/12/00
EB-2	001349A-09	WATER	07/10/00	07/12/00
EB-2	001349A-10	WATER	07/10/00	07/12/00
LP-12 END	001349A-11	SOIL	07/12/00	07/13/00
LP-12@20'	001349A-12	SOIL	07/12/00	07/13/00
LP-15	001349A-13	SOIL	07/12/00	07/13/00
LP-15@16'	001349A-14	SOIL	07/12/00	07/13/00
EB-3	001349A-15	WATER	07/12/00	07/13/00
EB-3	001349A-16	WATER	07/12/00	07/13/00
LP-8 END	001349A-17	SOIL	07/13/00	07/14/00
LP-80 END	001349A-18	SOIL	07/13/00	07/14/00
LP 9 END	001349A-19	SOIL	07/13/00	07/14/00
LP-10 END	001349A-20	SOIL	07/13/00	07/14/00
EB-4	001349A-21	WATER	07/13/00	07/14/00
EB-4	001349A-22	WATER	07/13/00	07/14/00
LP-23 END	001349A-23	SOIL	07/14/00	07/15/00

7000-1349A
FANNING PHILLIPS + MOLNAR
SAMPLE SUMMARY

0056

CLIENT ID	LAB ID	MATRIX	DATE COLLECTED	DATE RECEIVED
BP-23@15'	001349A-24	SOIL	07/14/00	07/15/00
BP-13 END	001349A-25	SOIL	07/14/00	07/15/00
BB-5	001349A-26	WATER	07/14/00	07/15/00
BB-5	001349A-27	WATER	07/14/00	07/15/00
BP-18 END	001349A-28	SOIL	07/17/00	07/19/00
BB-6	001349A-29	WATER	07/17/00	07/19/00
BB-6	001349A-30	WATER	07/17/00	07/19/00

STL CT ANALYTICAL SUMMARY

Page:1

Client ID: EB-1, EB-2, EB-3, EB-4, EB-5, EB-6, LP 9 END, LP-10 END, LP-11
 END, LP-12 END, LP-12@20', LP-13 END, LP-15, LP-15@16', LP-18
 END, LP-23 END, LP-23@15', LP-3 END, LP-4 END, LP-4@15', LP-5
 END, LP-5@18', LP-8 END, LP-80 END, TB-1, TB-2, TB-3, TB-4 ...

Job Number: 7000-1349A

Date: 8/17/100

Sample Matrix	Analysis	Description
1 SOIL	BNA-NCLP3.2-TCL	TCL Semi-Volatile Or
0 SOIL	BNA-NCLP3.2-TCL	TCL Semi-Volatile Or
0 SOIL	MET-NCLP4.0-TAL	TAL Metals
1 SOIL	VOA-NCLP3.2-TCL	TCL Volatile Organic
20 SOIL	VOA-NCLP3.2-TCL	TCL Volatile Organic
6 WATER	BNA-NCLP3.2-TCL	TCL Semi-Volatile Or
6 WATER	MET-NCLP4.0-TAL	TAL Metals
12 WATER	VOA-NCLP3.2-TCL	TCL Volatile Organic



Committed To *Your* Success

August 30, 2000

Severn Trent Laboratories
200 Monroe Turnpike
Monroe, Connecticut 06468

Ms. Stephanie Davis
FANNING PHILLIPS + MOLNAR
909 Marconi Avenue
Ronkonkoma, NY 11779

Tel: (203) 261-4458
Fax: (203) 268-5346
www.stl-inc.com

Dear Ms. Davis :

Please find enclosed the analytical results of 14 sample(s) received at our laboratory on July 19-22, 2000. This report contains sections addressing the following information at a minimum:

- . sample summary
- . analytical methodology
- . state certifications
- . definition of data qualifiers and terminology
- . analytical results
- . chain-of-custody

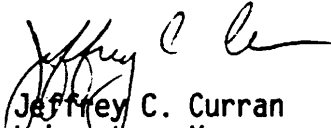
STL Report #7000-1536A	Purchase Order #362-00-19
Project ID: IW	

Copies of this analytical report and supporting data are maintained in our files for a minimum of five years unless special arrangements have been made. Unless specifically indicated, all analytical testing was performed at this laboratory location and no portion of the testing was subcontracted.

We appreciate your selection of our services and welcome any questions or suggestions you may have relative to this report. Please contact your customer service representative at (203) 929-8140 for any additional information. Thank you for utilizing our services; we hope you will consider us for your future analytical needs.

I have reviewed and approved the enclosed data for final release.

Very truly yours,


Jeffrey C. Curran
Laboratory Manager

JCC

Other Laboratory Locations:

- Mobile, AL
- Anaheim, CA
- Aurora, CO
- Miramar, FL
- Pensacola, FL
- Tallahassee, FL
- Tampa, FL
- Savannah, GA
- University Park, IL
- Valparaiso, IN
- Billerica, MA

- Westfield, MA
- Sparks, MD
- Edison, NJ
- Whippany, NJ
- Amherst, NY
- Newburgh, NY
- Corpus Christi, TX
- Austin, TX
- Houston, TX
- Colchester, VT

Sales Office Locations:

- Cantonment, FL
- Orlando, FL
- South Pasadena, FL
- New Orleans, LA
- Waterford, MI
- Holly Springs, NC
- Blairstown, NJ
- Mornstown, NJ
- Schenectady, NY
- Cleveland, OH

a part of

Severn Trent Industries, Inc.

0001

7000-1536A
FANNING PHILLIPS & MOLNAR

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Volatile Organics - Volatile organics were determined by purge and trap GC/MS using NYSDEC '95 Protocols. The instrumentation used was a Tekmar Model 2000/2016 Concentrator/Archon 51 autosampler interfaced with a Hewlett-Packard Model 5970A/5971A GC/MS/DS.

Sample Calculation:

Sample ID –LP-22 END
Compound –Acetone

$$\frac{(113640)(250)}{(469806)(.313)(5)(.94)} = 41.1 = 41 \text{ UG/KG.}$$

Samples LP-7 END and LP-7@26' were analyzed twice due to results having exhibiting suppression of internal standard areas and surrogate recoveries out of criteria. Both analyses were reported since matrix interference was proven.

Semi-Volatile Organics - Semi-volatile organic samples were extracted and analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in USEPA CLP_OLM3.2 Methods. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

Samples LP-31 END, LP-22 END, LP-6 END, LP-24@18', LP-29 END and LP-14 END exhibited internal standard area suppression. The samples were re-analyzed with similar results confirming matrix interference. Both analyses are reported. The re-analyses are indicated by the suffix "RE".

Samples LP-7 END, LP-7@26' and LP-24 END exhibited internal standard area suppression. The samples were re-analyzed at 1:10 dilutions with similar results confirming matrix interference. Both analyses are reported. The more dilute analyses are indicated by the suffix "DL". The samples were diluted due to the presence of high levels of non-target compounds.

Samples LP-22 END, LP-7 END, LP-22 ENDRE, LP-24@18' and LP-29 END all had one surrogate out of recovery criteria, but within CLP protocol acceptance criteria.

The spike recovery for the compound, 2,4-dimethylphenol, was below recovery limits for SBLKKPFMS, SBLKIPFMS and SBLKUPFMS.

Sample Calculation:

Sample ID – LP-31 END

Compound - phenol

$$\frac{5974(40)500(2)}{483744(2.134)2(30)0.92} = 4.19 = 4 \text{ ug/kg}$$

Metals – ICAP metals were determined using a JA61E trace ICAP; mercury was determined by cold vapor technique using a Leeman Labs mercury analyzer; following guidance provided in SW846 according to methods: ICAP – 3010A, 3050B/6010B; mercury-7470A, 7471A.

Lead failed the controls for spike recovery analysis of sample LP-14 END resulting in one “N” flag.

No other problems occurred during analysis. All appropriate protocols were employed. All data appears to be consistent.

TABLE VO-1.0
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

Client Sample I.D.	Method Blank	TB-7	EB-8	Quant. Limits with no Dilution
Lab Sample I.D.	VBLKLQ	001536A-07	001536A-08	
Method Blank I.D.	VBLKLQ	VBLKLQ	VBLKLQ	
Quant. Factor	1.00	1.00	1.00	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	2J	1J	10
Acetone	U	U	U	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	.7J	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	U	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received		07/20/00	07/20/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/25/00	07/25/00	07/25/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1.1
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

Client Sample I.D.	EB-9	TB-8		Quant. Limits with no Dilution
Lab Sample I.D.	001536A-13	001536A-14		
Method Blank I.D.	VBKQLQ	VBKQLQ		
Quant. Factor	1.00	1.00		
Chloromethane	U	U		10
Bromomethane	U	U		10
Vinyl Chloride	U	U		10
Chloroethane	U	U		10
Methylene Chloride	4J	2J		10
Acetone	U	U		10
Carbon Disulfide	U	U		10
1,1-Dichloroethene	U	U		10
1,1-Dichloroethane	U	U		10
1,2-Dichloroethene (total)	U	U		10
Chloroform	11	.6J		10
1,2-Dichloroethane	U	U		10
2-Butanone	U	U		10
1,1,1-Trichloroethane	U	U		10
Carbon Tetrachloride	U	U		10
Bromodichloromethane	U	U		10
1,2-Dichloropropane	U	U		10
cis-1,3-Dichloropropene	U	U		10
Trichloroethene	U	U		10
Dibromochloromethane	U	U		10
1,1,2-Trichloroethane	U	U		10
Benzene	U	U		10
trans-1,3-Dichloropropene	U	U		10
Bromoform	U	U		10
4-Methyl-2-Pentanone	U	U		10
2-Hexanone	U	U		10
Tetrachloroethene	U	U		10
1,1,2,2-Tetrachloroethane	U	U		10
Toluene	U	U		10
Chlorobenzene	U	U		10
Ethylbenzene	U	U		10
Styrene	U	U		10
Xylene (total)	U	U		10
Date Received	07/22/00	07/22/00		
Date Extracted	N/A	N/A		
Date Analyzed	07/25/00	07/25/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE VO-1.2
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

Client Sample I.D.	Method Blank	EB-7		Quant. Limits with no Dilution
Lab Sample I.D.	VBLKM8	001536A-03		
Method Blank I.D.	VBLKM8	VBLKM8		
Quant. Factor	1.00	1.00		
Chloromethane	U	U		10
Bromomethane	U	U		10
Vinyl Chloride	U	U		10
Chloroethane	U	U		10
Methylene Chloride	U	2J		10
Acetone	U	U		10
Carbon Disulfide	U	U		10
1,1-Dichloroethene	U	U		10
1,1-Dichloroethane	U	U		10
1,2-Dichloroethene (total)	U	U		10
Chloroform	U	U		10
1,2-Dichloroethane	U	U		10
2-Butanone	U	U		10
1,1,1-Trichloroethane	U	U		10
Carbon Tetrachloride	U	U		10
Bromodichloromethane	U	U		10
1,2-Dichloropropane	U	U		10
cis-1,3-Dichloropropene	U	U		10
Trichloroethene	U	U		10
Dibromochloromethane	U	U		10
1,1,2-Trichloroethane	U	U		10
Benzene	U	U		10
trans-1,3-Dichloropropene	U	U		10
Bromoform	U	U		10
4-Methyl-2-Pentanone	U	U		10
2-Hexanone	U	U		10
Tetrachloroethene	U	U		10
1,1,2,2-Tetrachloroethane	U	U		10
Toluene	U	U		10
Chlorobenzene	U	U		10
Ethylbenzene	U	U		10
Styrene	U	U		10
Xylene (total)	U	U		10
Date Received		07/19/00		
Date Extracted	N/A	N/A		
Date Analyzed	07/21/00	07/21/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1.3
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

0005

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-31 END	LP-22 END	Quant. Limits with no Dilution
Lab Sample I.D.	VBLKKJ	001536A-01	001536A-02	
Method Blank I.D.	VBLKKJ	VBLKKJ	VBLKKJ	
Quant. Factor	1.00	1.11	1.06	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	16	10J	10
Acetone	8J	41B	41B	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	U	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received		07/19/00	07/19/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/24/00	07/24/00	07/24/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1.4
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-7 END	LP-7 END RE	LP-7@26'	Quant. Limits with no Dilution
Lab Sample I.D.	001536A-04	001536A-04RE	001536A-05	
Method Blank I.D.	VLKKJ	VLKKJ	VLKKJ	
Quant. Factor	1.23	1.23	1.10	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	7J	6J	8J	10
Acetone	5JB	7JB	15B	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	4J	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	2J	2J	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received	07/20/00	07/20/00	07/20/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/24/00	07/24/00	07/24/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE VO-1.5
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-7@26' RE	LP-6 END	LP-24 END	Quant. Limits with no Dilution
Lab Sample I.D.	001536A-05RE	001536A-06	001536A-09	
Method Blank I.D.	VBKKJ	VBKKJ	VBKKJ	
Quant. Factor	1.10	1.05	1.12	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	7J	3J	4J	10
Acetone	48B	10B	13B	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	4J	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	U	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received	07/20/00	07/20/00	07/22/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/24/00	07/24/00	07/24/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE VO-1.6
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL VOLATILE ORGANICS

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-24@18'	LP-29 END	LP-14 END	Quant. Limits with no Dilution
Lab Sample I.D.	001536A-10	001536A-11	001536A-12	
Method Blank I.D.	VBLKKJ	VBLKKJ	VBLKKJ	
Quant. Factor	1.10	1.05	1.23	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	3J	2J	3J	10
Acetone	U	U	14B	10
Carbon Disulfide	U	U	U	10
1,1-Dichloroethene	U	U	U	10
1,1-Dichloroethane	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	10
Chloroform	U	U	U	10
1,2-Dichloroethane	U	U	U	10
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	10
Carbon Tetrachloride	U	U	U	10
Bromodichloromethane	U	U	U	10
1,2-Dichloropropane	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	10
Trichloroethene	U	U	U	10
Dibromochloromethane	U	U	U	10
1,1,2-Trichloroethane	U	U	U	10
Benzene	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	10
Bromoform	U	U	U	10
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	10
Toluene	U	U	U	10
Chlorobenzene	U	U	U	10
Ethylbenzene	U	U	U	10
Styrene	U	U	U	10
Xylene (total)	U	U	U	10
Date Received	07/22/00	07/22/00	07/22/00	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/24/00	07/24/00	07/24/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.0
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Aqueous
page 1 of 2

All values are ug/L.

Client Sample I.D.	Method Blank	EB-8	EB-9	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKPP	001536A-08	001536A-13	
Method Blank I.D.	SBLKPP	SBLKPP	SBLKPP	
Quant. Factor	1.00	1.05	1.08	
Phenol	U	U	U	10
bis(2-Chloroethyl) ether	U	U	U	10
2-Chlorophenol	U	U	U	10
1,3-Dichlorobenzene	U	U	U	10
1,4-Dichlorobenzene	U	U	U	10
1,2-Dichlorobenzene	U	U	U	10
2-Methylphenol	U	U	U	10
2,2'-oxybis(1-Chloropropane)	U	U	U	10
4-Methylphenol	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	10
Hexachloroethane	U	U	U	10
Nitrobenzene	U	U	U	10
Isophorone	U	U	U	10
2-Nitrophenol	U	U	U	10
2,4-Dimethylphenol	U	U	U	10
bis(2-Chloroethoxy)methane	U	U	U	10
2,4-Dichlorophenol	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	10
Naphthalene	.1U	U	U	10
4-Chloroaniline	U	U	U	10
Hexachlorobutadiene	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	10
2-Methylnaphthalene	U	U	U	10
Hexachlorocyclopentadiene	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	25
2-Chloronaphthalene	U	U	U	10
2-Nitroaniline	U	U	U	25
Dimethylphthalate	U	U	U	10
Acenaphthylene	U	U	U	10
2,6-Dinitrotoluene	U	U	U	10
3-Nitroaniline	U	U	U	25
Acenaphthene	U	U	U	10
2,4-Dinitrophenol	U	U	U	25
4-Nitrophenol	U	U	U	25
Date Received		07/20/00	07/22/00	
Date Extracted	07/25/00	07/25/00	07/25/00	
Date Analyzed	08/02/00	08/07/00	08/08/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

2011

TABLE SV-1.0
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Aqueous

page 2 of 2

All values are ug/L.

Client Sample I.D.	Method Blank	EB-8	EB-9	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKPP	001536A-08	001536A-13	
Method Blank I.D.	SBLKPP	SBLKPP	SBLKPP	
Quant. Factor	1.00	1.05	1.08	
Dibenzofuran	U	U	U	10
2,4-Dinitrotoluene	U	U	U	10
Diethylphthalate	3J	4JB	.4JB	10
4-Chlorophenyl-phenylether	U	U	U	10
Fluorene	U	U	U	10
4-Nitroaniline	U	U	U	25
4,6-Dinitro-2-methylphenol	U	U	U	25
N-Nitrosodiphenylamine (1)	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	10
Hexachlorobenzene	U	U	U	10
Pentachlorophenol	U	U	U	25
Phenanthrene	U	U	U	10
Anthracene	U	U	U	10
Carbazole	U	U	U	10
Di-n-butylphthalate	.2J	.2JB	U	10
Fluoranthene	U	U	U	10
Pyrene	U	U	U	10
Butylbenzylphthalate	U	.2J	U	10
3,3'-Dichlorobenzidine	U	U	U	10
Benzo(a)anthracene	U	U	U	10
Chrysene	U	U	U	10
bis(2-Ethylhexyl)phthalate	U	.4J	.3J	10
Di-n-octylphthalate	U	U	U	10
Benzo(b)fluoranthene	U	U	U	10
Benzo(k)fluoranthene	U	U	U	10
Benzo(a)pyrene	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	10
Dibenz(a,h)anthracene	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	10
Date Received		07/20/00	07/22/00	
Date Extracted	07/25/00	07/25/00	07/25/00	
Date Analyzed	08/02/00	08/07/00	08/08/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.1
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Aqueous

page 1 of 2

All values are ug/L.

Client Sample I.D.	Method Blank	EB-7		Quant. Limits with no Dilution
Lab Sample I.D.	SBLKIP	001536A-03		
Method Blank I.D.	SBLKIP	SBLKIP		
Quant. Factor	1.00	1.00		
Phenol	U	U		10
bis(2-Chloroethyl) ether	U	U		10
2-Chlorophenol	U	U		10
1,3-Dichlorobenzene	U	U		10
1,4-Dichlorobenzene	U	U		10
1,2-Dichlorobenzene	U	U		10
2-Methylphenol	U	U		10
2,2'-oxybis(1-Chloropropane)	U	U		10
4-Methylphenol	U	U		10
N-Nitroso-di-n-propylamine	U	U		10
Hexachloroethane	U	U		10
Nitrobenzene	U	U		10
Isophorone	U	U		10
2-Nitrophenol	U	U		10
2,4-Dimethylphenol	U	U		10
bis(2-Chloroethoxy) methane	U	U		10
2,4-Dichlorophenol	U	U		10
1,2,4-Trichlorobenzene	U	U		10
Naphthalene	.1U	U		10
4-Chloroaniline	U	U		10
Hexachlorobutadiene	U	U		10
4-Chloro-3-methylphenol	U	U		10
2-Methylnaphthalene	U	U		10
Hexachlorocyclopentadiene	U	U		10
2,4,6-Trichlorophenol	U	U		10
2,4,5-Trichlorophenol	U	U		25
2-Chloronaphthalene	U	U		10
2-Nitroaniline	U	U		25
Dimethylphthalate	U	U		10
Acenaphthylene	U	U		10
2,6-Dinitrotoluene	U	U		10
3-Nitroaniline	U	U		25
Acenaphthene	U	U		10
2,4-Dinitrophenol	U	U		25
4-Nitrophenol	U	U		25
Date Received		07/19/00		
Date Extracted	07/20/00	07/20/00		
Date Analyzed	08/02/00	08/07/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor

Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.1
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Aqueous
page 2 of 2

All values are ug/L.

Client Sample I.D.	Method Blank	EB-7		Quant. Limits with no Dilution
Lab Sample I.D.	SBLKIP	001536A-03		
Method Blank I.D.	SBLKIP	SBLKIP		
Quant. Factor	1.00	1.00		
Dibenzofuran	U	U		10
2,4-Dinitrotoluene	U	U		10
Diethylphthalate	U	U		10
4-Chlorophenyl-phenylether	U	U		10
Fluorene	U	U		10
4-Nitroaniline	U	U		25
4,6-Dinitro-2-methylphenol	U	U		25
N-Nitrosodiphenylamine (1)	U	U		10
4-Bromophenyl-phenylether	U	U		10
Hexachlorobenzene	U	U		10
Pentachlorophenol	U	U		25
Phenanthrene	U	U		10
Anthracene	U	U		10
Carbazole	U	U		10
Di-n-butylphthalate	U	U		10
Fluoranthene	U	U		10
Pyrene	U	U		10
Butylbenzylphthalate	U	U		10
3,3'-Dichlorobenzidine	U	U		10
Benzo(a)anthracene	U	U		10
Chrysene	U	U		10
bis(2-Ethylhexyl)phthalate	.5J	U		10
Di-n-octylphthalate	U	U		10
Benzo(b)fluoranthene	U	U		10
Benzo(k)fluoranthene	U	U		10
Benzo(a)pyrene	U	U		10
Indeno(1,2,3-cd)pyrene	U	U		10
Dibenz(a,h)anthracene	U	U		10
Benzo(g,h,i)perylene	U	U		10
Date Received		07/19/00		
Date Extracted	07/20/00	07/20/00		
Date Analyzed	08/02/00	08/07/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.2
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-31 END	LP-31 END RE	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKPP	001536A-01	001536A-01RE	
Method Blank I.D.	SBLKPP	SBLKPP	SBLKPP	
Quant. Factor	1.00	1.09	1.09	
Phenol	10J	4JB	5JB	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy) methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	2J	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	U	U	U	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received		07/19/00	07/19/00	
Date Extracted	07/22/00	07/22/00	07/22/00	
Date Analyzed	07/31/00	08/08/00	08/10/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.2
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-31 END	LP-31 END RE	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKKP	001536A-01	001536A-01RE	
Method Blank I.D.	SBLKKP	SBLKKP	SBLKKP	
Quant. Factor	1.00	1.09	1.09	
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	4J	U	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	16J	U	U	330
Anthracene	10J	U	U	330
Carbazole	U	U	U	330
Di-n-butylphthalate	5J	U	U	330
Fluoranthene	28J	U	U	330
Pyrene	37J	U	U	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	16J	U	U	330
Chrysene	15J	U	U	330
bis(2-Ethylhexyl)phthalate	26J	39JB	40JB	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	13J	U	U	330
Benzo(k)fluoranthene	10J	U	U	330
Benzo(a)pyrene	13J	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	330
Dibenz(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	330
Date Received		07/19/00	07/19/00	
Date Extracted	07/22/00	07/22/00	07/22/00	
Date Analyzed	07/31/00	08/08/00	08/10/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.3
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

0016

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-22 END	LP-22 END RE	LP-7 END	Quant. Limits with no Dilution
Lab Sample I.D.	001536A-02	001536A-02RE	001536A-04	
Method Blank I.D.	SBLKKP	SBLKKP	SBLKKP	
Quant. Factor	1.01	1.01	1.03	
Phenol	4JB	U	U	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	100JB	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	U	U	U	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received	07/19/00	07/19/00	07/20/00	
Date Extracted	07/22/00	07/22/00	07/22/00	
Date Analyzed	08/08/00	08/10/00	08/08/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.3
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-22 END	LP-22 END RE	LP-7 END	Quant. Limits with no Dilution
Lab Sample I.D.	001536A-02	001536A-02RE	001536A-04	
Method Blank I.D.	SBLKRP	SBLKRP	SBLKRP	
Quant. Factor	1.01	1.01	1.03	
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	U	U	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	830
1,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	U	U	U	330
Anthracene	U	U	U	330
Carbazole	U	U	U	330
Di-n-butylphthalate	U	U	U	330
Fluoranthene	U	U	U	330
Pyrene	U	U	U	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	U	U	U	330
Chrysene	U	U	U	330
Bis(2-Ethylhexyl)phthalate	U	U	U	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	U	U	U	330
Benzo(k)fluoranthene	U	U	U	330
Benzo(a)pyrene	U	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	330
Benz(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	330
Date Received	07/19/00	07/19/00	07/20/00	
Date Extracted	07/22/00	07/22/00	07/22/00	
Date Analyzed	08/08/00	08/10/00	08/08/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.4
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

page 1 o

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-7 END DL	LP-7@26'	LP-7@26' DL	Quant Limit with Dilut
Lab Sample I.D.	001536A-04DL	001536A-05	001536A-05DL	
Method Blank I.D.	SBLKRP	SBLKRP	SBLKRP	
Quant. Factor	10.3	1.08	10.8	
Phenol	U	U	U	33
bis(2-Chloroethyl) ether	U	U	U	33
2-Chlorophenol	U	U	U	33
1,3-Dichlorobenzene	U	U	U	33
1,4-Dichlorobenzene	U	U	U	33
1,2-Dichlorobenzene	U	U	U	33
2-Methylphenol	U	U	U	33
2,2'-oxybis(1-Chloropropane)	U	U	U	33
4-Methylphenol	U	U	U	33
N-Nitroso-di-n-propylamine	U	U	U	33
Hexachloroethane	U	U	U	33
Nitrobenzene	U	U	U	33
Isophorone	U	U	U	33
2-Nitrophenol	U	U	U	33
2,4-Dimethylphenol	U	U	U	33
bis(2-Chloroethoxy) methane	U	U	U	33
2,4-Dichlorophenol	U	U	U	33
1,2,4-Trichlorobenzene	U	U	U	33
Naphthalene	U	U	U	33
4-Chloroaniline	U	U	U	33
Hexachlorobutadiene	U	U	U	33
4-Chloro-3-methylphenol	U	U	U	33
2-Methylnaphthalene	U	U	U	33
Hexachlorocyclopentadiene	U	U	U	33
2,4,6-Trichlorophenol	U	U	U	33
2,4,5-Trichlorophenol	U	U	U	8
2-Chloronaphthalene	U	U	U	3
2-Nitroaniline	U	U	U	8
Dimethylphthalate	U	U	U	3
Acenaphthylene	U	U	U	3
2,6-Dinitrotoluene	U	U	U	3
3-Nitroaniline	U	U	U	8
Acenaphthene	U	U	U	3
2,4-Dinitrophenol	U	U	U	8
4-Nitrophenol	U	U	U	8
Date Received	07/20/00	07/20/00	07/20/00	
Date Extracted	07/22/00	07/22/00	07/22/00	
Date Analyzed	08/11/00	08/08/00	08/11/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.4
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-7 END DL	LP-7@26'	LP-7@26' DL	Quant. Limits with no Dilution
Lab Sample I.D.	001536A-04DL	001536A-05	001536A-05DL	
Method Blank I.D.	SBLKPP	SBLKPP	SBLKPP	
Quant. Factor	10.3	1.08	10.8	
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	U	U	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	U	U	U	330
Anthracene	U	U	U	330
Carbazole	U	U	U	330
Di-n-butylphthalate	U	U	U	330
Fluoranthene	170JB	U	U	330
Pyrene	490JB	U	U	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	U	U	U	330
Chrysene	U	U	U	330
bis(2-Ethylhexyl)phthalate	U	U	U	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	U	U	U	330
Benzo(k)fluoranthene	U	U	U	330
Benzo(a)pyrene	U	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	330
Dibenz(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	330
Date Received	07/20/00	07/20/00	07/20/00	
Date Extracted	07/22/00	07/22/00	07/22/00	
Date Analyzed	08/11/00	08/08/00	08/11/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.5
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil
page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-6 END	LP-6 END RE		Quant. Limits with no Dilution
Lab Sample I.D.	001536A-06	001536A-06RE		
Method Blank I.D.	SBLKKP	SBLKKP		
Quant. Factor	1.04	1.04		
Phenol	3JB	U		330
bis(2-Chloroethyl) ether	U	U		330
2-Chlorophenol	U	U		330
1,3-Dichlorobenzene	U	U		330
1,4-Dichlorobenzene	U	U		330
1,2-Dichlorobenzene	U	U		330
2-Methylphenol	U	U		330
2,2'-oxybis(1-Chloropropane)	U	U		330
4-Methylphenol	U	U		330
N-Nitroso-di-n-propylamine	U	U		330
Hexachloroethane	U	U		330
Nitrobenzene	U	U		330
Isophorone	U	U		330
2-Nitrophenol	U	U		330
2,4-Dimethylphenol	U	U		330
bis(2-Chloroethoxy) methane	U	U		330
2,4-Dichlorophenol	U	U		330
1,2,4-Trichlorobenzene	U	U		330
Naphthalene	U	U		330
4-Chloroaniline	U	U		330
Hexachlorobutadiene	U	U		330
4-Chloro-3-methylphenol	U	U		330
2-Methylnaphthalene	U	U		330
Hexachlorocyclopentadiene	U	U		330
2,4,6-Trichlorophenol	U	U		330
2,4,5-Trichlorophenol	U	U		830
2-Chloronaphthalene	U	U		330
2-Nitroaniline	U	U		830
Dimethylphthalate	U	U		330
Acenaphthylene	U	U		330
2,6-Dinitrotoluene	U	U		330
3-Nitroaniline	U	U		830
Acenaphthene	U	U		330
2,4-Dinitrophenol	U	U		830
4-Nitrophenol	U	U		830
Date Received	07/20/00	07/20/00		
Date Extracted	07/22/00	07/22/00		
Date Analyzed	08/08/00	08/10/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.5
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-6 END	LP-6 END RE		Quant. Limits with no Dilution
Lab Sample I.D.	001536A-06	001536A-06RE		
Method Blank I.D.	SBLKKP	SBLKKP		
Quant. Factor	1.04	1.04		
Dibenzofuran	U	U		330
2,4-Dinitrotoluene	U	U		330
Diethylphthalate	U	U		330
4-Chlorophenyl-phenylether	U	U		330
Fluorene	U	U		330
4-Nitroaniline	U	U		830
4,6-Dinitro-2-methylphenol	U	U		830
N-Nitrosodiphenylamine (1)	U	U		330
4-Bromophenyl-phenylether	U	U		330
Hexachlorobenzene	U	U		330
Pentachlorophenol	U	U		830
Phenanthrene	U	U		330
Anthracene	U	U		330
Carbazole	U	U		330
Di-n-butylphthalate	U	U		330
Fluoranthene	U	U		330
Pyrene	U	U		330
Butylbenzylphthalate	U	U		330
3,3'-Dichlorobenzidine	U	U		330
Benzo(a)anthracene	U	U		330
Chrysene	U	U		330
bis(2-Ethylhexyl)phthalate	36JB	44JB		330
Di-n-octylphthalate	U	U		330
Benzo(b)fluoranthene	U	U		330
Benzo(k)fluoranthene	U	U		330
Benzo(a)pyrene	U	U		330
Indeno(1,2,3-cd)pyrene	U	U		330
Dibenz(a,h)anthracene	U	U		330
Benzo(g,h,i)perylene	U	U		330
Date Received	07/20/00	07/20/00		
Date Extracted	07/22/00	07/22/00		
Date Analyzed	08/08/00	08/10/00		

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.6
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-24 END	LP-24 END DL	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKUP	001536A-09	001536A-09DL	
Method Blank I.D.	SBLKUP	SBLKUP	SBLKUP	
Quant. Factor	1.00	1.17	11.7	
Phenol	U	U	U	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
1-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
2-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
1,4,6-Trichlorophenol	U	U	U	330
1,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	U	U	U	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received		07/22/00	07/22/00	
Date Extracted	07/27/00	07/27/00	07/27/00	
Date Analyzed	08/08/00	08/08/00	08/11/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.6
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	LP-24 END	LP-24 END DL	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKUP	001536A-09	001536A-09DL	
Method Blank I.D.	SBLKUP	SBLKUP	SBLKUP	
Quant. Factor	1.00	1.17	11.7	
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	3J	U	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	U	66J	U	330
Anthracene	U	33J	U	330
Carbazole	U	U	U	330
Di-n-butylphthalate	U	U	U	330
Fluoranthene	U	180J	68JD	330
Pyrene	U	53J	220JD	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	U	50J	U	330
Chrysene	U	120J	U	330
Bis(2-Ethylhexyl)phthalate	11J	150JB	U	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	U	95J	U	330
Benzo(k)fluoranthene	U	100J	U	330
Benzo(a)pyrene	U	78J	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	330
Dibenz(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	330
Date Received		07/22/00	07/22/00	
Date Extracted	07/27/00	07/27/00	07/27/00	
Date Analyzed	08/08/00	08/08/00	08/11/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.7
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil
page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-24@18'	LP-24@18' RE	LP-29 END	Quant. Limits with no Dilution
Lab Sample I.D.	001536A-10	001536A-10RE	001536A-11	
Method Blank I.D.	SBLKUP	SBLKUP	SBLKUP	
Quant. Factor	1.15	1.15	1.08	
Phenol	U	U	U	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	U	U	U	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received	07/22/00	07/22/00	07/22/00	
Date Extracted	07/27/00	07/27/00	07/27/00	
Date Analyzed	08/08/00	08/10/00	08/08/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.7
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil
page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-24@18'	LP-24@18' RE	LP-29 END	Quant. Limits with no Dilution
Lab Sample I.D.	001536A-10	001536A-10RE	001536A-11	
Method Blank I.D.	SBLKUP	SBLKUP	SBLKUP	
Quant. Factor	1.15	1.15	1.08	
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	U	U	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	U	U	8J	330
Anthracene	U	U	U	330
Carbazole	U	U	U	330
Di-n-butylphthalate	U	U	U	330
Fluoranthene	U	U	14J	330
Pyrene	U	U	26J	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	U	U	U	330
Chrysene	U	U	U	330
Bis(2-Ethylhexyl)phthalate	U	U	120JB	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	U	U	U	330
Benzo(k)fluoranthene	U	U	U	330
Benzo(a)pyrene	U	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	330
Dibenz(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	330
Date Received	07/22/00	07/22/00	07/22/00	
Date Extracted	07/27/00	07/27/00	07/27/00	
Date Analyzed	08/08/00	08/10/00	08/08/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.8
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil
page 1 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-29 END RE	LP-14 END	LP-14 END RE	Quant. Limits with no Dilution
Lab Sample I.D.	001536A-11RE	001536A-12	001536A-12RE	
Method Blank I.D.	SBLKUP	SBLKUP	SBLKUP	
Quant. Factor	1.08	1.12	1.12	
Phenol	U	U	U	330
bis(2-Chloroethyl) ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	16J	13J	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
bis(2-Chloroethoxy) methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	830
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	830
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	830
Acenaphthene	U	U	U	330
2,4-Dinitrophenol	U	U	U	830
4-Nitrophenol	U	U	U	830
Date Received	07/22/00	07/22/00	07/22/00	
Date Extracted	07/27/00	07/27/00	07/27/00	
Date Analyzed	08/10/00	08/08/00	08/10/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE SV-1.8
7000-1536A
FANNING PHILLIPS + MOLNAR
TCL SEMI-VOLATILE ORGANICS

Soil

page 2 of 2

All values are ug/Kg dry weight basis.

Client Sample I.D.	LP-29 END RE	LP-14 END	LP-14 END RE	Quant. Limits with no Dilution
Lab Sample I.D.	001536A-11RE	001536A-12	001536A-12RE	
Method Blank I.D.	SBLKUP	SBLKUP	SBLKUP	
Quant. Factor	1.08	1.12	1.12	
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	U	U	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	830
4,6-Dinitro-2-methylphenol	U	U	U	830
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	830
Phenanthrene	10J	10J	10J	330
Anthracene	U	U	U	330
Carbazole	U	U	U	330
Di-n-butylphthalate	U	U	U	330
Fluoranthene	11J	17J	19J	330
Pyrene	24J	32J	33J	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	330
Benzo(a)anthracene	U	U	13J	330
Chrysene	U	14J	15J	330
bis(2-Ethylhexyl)phthalate	120JB	U	U	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	U	U	U	330
Benzo(k)fluoranthene	U	U	U	330
Benzo(a)pyrene	U	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	330
Dibenz(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	330
Date Received	07/22/00	07/22/00	07/22/00	
Date Extracted	07/27/00	07/27/00	07/27/00	
Date Analyzed	08/10/00	08/08/00	08/10/00	

See Appendix for qualifier definitions

Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any
variation in sample weight/volume, % moisture and
sample dilution.

TABLE AS-1.0
7000-1536A
FANNING PHILLIPS + MOLNAR
TAL METALS

Aqueous

All values are ug/L.

Client Sample I.D.	EB-7	EB-8	EB-9	
Lab Sample I.D.	001536A-03	001536A-08	001536A-13	
Aluminum	14.8B	15.0B	24.2B	
Antimony	2.1U	2.1U	2.1U	
Arsenic	3.1U	3.1U	3.1U	
Barium	0.15B	0.19B	0.10U	
Beryllium	0.20U	0.20U	0.20U	
Cadmium	0.20U	0.20U	0.20U	
Calcium	44.1B	59.2B	47.2B	
Chromium	0.30U	0.40B	0.30U	
Cobalt	0.30U	0.30U	0.30U	
Copper	0.30U	0.66B	0.30U	
Iron	26.1B	11.9B	7.2U	
Lead	1.6B	1.6B	1.3U	
Magnesium	6.1B	8.2B	4.1B	
Manganese	0.77B	0.30U	0.55B	
Mercury	0.10U	0.10U	0.10U	
Nickel	0.40U	0.40U	0.40U	
Potassium	45.1B	32.0U	32.0U	
Selenium	1.5U	1.5U	1.5U	
Silver	0.30U	0.30U	0.30U	
Sodium	33.7B	44.4B	27.5B	
Thallium	5.3U	5.3U	5.3U	
Vanadium	0.35B	0.57B	0.56B	
Zinc	1.2U	5.2B	9.6B	

See Appendix for qualifier definitions

TABLE AS-1.1
7000-1536A
FANNING PHILLIPS + MOLNAR
TAL METALS

Soil

All values are mg/Kg dry weight basis.

Client Sample I.D.	LP-31 END	LP-22 END	LP-7 END	LP-7@26'
Lab Sample I.D.	001536A-01	001536A-02	001536A-04	001536A-05
Aluminum	784.	687.	850.	743.
Antimony	0.42U	0.37U	0.42U	0.45U
Arsenic	0.73B	0.84B	0.66B	0.43U
Barium	2.3B	3.4B	5.2B	3.6B
Beryllium	0.044B	0.043B	0.047B	0.043U
Cadmium	0.040U	0.036U	0.040U	0.043U
Calcium	27.0B	107.B	45.6B	65.8B
Chromium	1.4B	1.3B	6.4	1.8B
Cobalt	0.57B	0.50B	0.49B	0.34B
Copper	2.4B	1.9B	2.8B	3.9B
Iron	1990	3540	1820	1710
Lead	16.0N	2.4N	3.0N	3.1N
Magnesium	210.B	162.B	240.B	172.B
Manganese	11.5	72.6	9.9	8.0
Mercury	0.0020U	0.0018U	0.0025U	0.0029U
Nickel	1.4B	0.89B	1.3B	1.2B
Potassium	63.5B	71.3B	151.B	47.4B
Selenium	0.68U	0.61U	0.68U	0.73U
Silver	0.20U	0.18U	0.20U	0.21U
Sodium	12.0B	14.6B	20.8B	46.5B
Thallium	0.76U	0.68U	0.76U	0.81U
Vanadium	2.1B	1.7B	3.4B	3.0B
Zinc	5.8	7.8	9.5	11.2

See Appendix for qualifier definitions

TABLE AS-1.2
7000-1536A
FANNING PHILLIPS + MOLNAR
TAL METALS

Soil

All values are mg/Kg dry weight basis.

Client Sample I.D.	LP-6 END	LP-24 END	LP-24@18'	LP-29 END
Lab Sample I.D.	001536A-06	001536A-09	001536A-10	001536A-11
Aluminum	495.	1240	1160	574.
Antimony	0.41U	0.51U	0.44U	0.41U
Arsenic	0.39U	1.3B	4.2	0.39U
Barium	1.8B	6.8B	7.8B	3.0B
Beryllium	0.051B	0.073B	0.14B	0.039U
Cadmium	0.039U	0.048U	0.086B	0.039U
Calcium	28.7B	221.B	99.3B	60.1B
Chromium	1.3B	6.4	2.8	4.8
Cobalt	0.41B	1.1B	3.5B	0.19B
Copper	2.1B	97.3	58.6	3.1B
Iron	1140	5060	7540	731.
Lead	1.1N	52.2N	4.9N	5.9N
Magnesium	114.B	381.B	358.B	126.B
Manganese	7.1	47.5	356.	5.9
Mercury	0.0022U	0.057	0.0022U	0.0028U
Nickel	1.1B	2.1B	3.8B	0.53B
Potassium	44.9B	112.B	144.B	56.3B
Selenium	0.66U	0.82U	0.72U	0.67U
Silver	0.19U	0.24U	0.21U	0.20U
Sodium	9.1B	13.6B	11.7B	10.4B
Thallium	0.74U	0.92U	0.80U	0.75U
Vanadium	2.7B	5.4B	8.5B	1.0B
Zinc	5.7	50.1	49.9	14.9

See Appendix for qualifier definitions

TABLE AS-1.3
7000-1536A
FANNING PHILLIPS + MOLNAR
TAL METALS

Soil

All values are mg/Kg dry weight basis.

Client Sample I.D.	LP-14 END			
Lab Sample I.D.	001536A-12			
Aluminum	422.			
Antimony	0.37U			
Arsenic	0.35U			
Barium	1.8B			
Beryllium	0.035U			
Cadmium	0.035U			
Calcium	24.7B			
Chromium	1.7B			
Cobalt	0.29B			
Copper	1.2B			
Iron	1380			
Lead	2.6N			
Magnesium	88.0B			
Manganese	5.6			
Mercury	0.0021B			
Nickel	1.0B			
Potassium	48.8B			
Selenium	0.59U			
Silver	0.17U			
Sodium	11.2B			
Thallium	0.66U			
Vanadium	1.5B			
Zinc	3.8			

See Appendix for qualifier definitions

ORGANICS APPENDIX

- U - Indicates that the compound was analyzed for but not detected.
- J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.
- B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.
- N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.
- S - Estimated due to surrogate outliers.
- X - Matrix spike compound.
- (1) - Cannot be separated.
- (2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.
- A - This flag indicates that a TIC is a suspected aldol condensation product.
- E - Indicates that it exceeds calibration curve range.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- C - Confirmed by GC/MS.
- T - Compound present in TCLP blank.
- P - This flag is used for a pesticide/aroclor target analyte when there is a greater than 25 percent difference for detected concentrations between the two GC columns (see Form X).



INORGANICS APPENDIX

C - Concentration qualifiers

U - Indicates analyte was not detected at method reporting limit.

B - Indicates analyte result between IDL and contract required detection limit (CRDL)

Q - QC qualifiers

E - Reported value is estimated because of the presence of interference

M - Duplicate injection precision not met

N - Spiked sample recovery not within control limits

S - The reported value was determined by the method of standard additions (MSA)

W - Post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance

• - Duplicate analysis not within control limit

+ - Correlation coefficient for MSA is less than 0.995

M - Method codes

P - ICP

A - Flame AA

F - Furnace AA

CV - Cold vapor AA (manual)

C - Cyanide

NR - Not Required

NC - Not Calculated as per protocols

STATE CERTIFICATIONS

In some instances it may be necessary for environmental data to be reported to a regulatory authority with reference to a certified laboratory. For your convenience, the laboratory identification numbers for the STL-Connecticut laboratory are provided in the following table. Many states certify laboratories for specific parameters or tests within a category (i.e. method 325.2 for wastewater). The information in the following table indicates the lab is certified in a general category of testing such as drinking water or wastewater analysis. The laboratory should be contacted directly if parameter-specific certification information is required.

STL-Connecticut Certification Summary (as of April 2000)

State	Agency	Certification	Lab Number
Connecticut	Department of Health Services	Drinking Water, Wastewater	PH-0497
Maine	Department of Health and Environmental Services	Drinking Water, Wastewater/Solid, Hazardous Waste	CT023
Massachusetts	Department of Environmental Protection	Potable/Non-Potable Water	CT023
New Hampshire	Department of Environmental Services	Drinking Water, Wastewater	2528
New Jersey	Department of Environmental Protection	Drinking Water, Wastewater	46410
New York	Department of Health	CLP, Drinking Water, Wastewater, Solid/Hazardous Waste	10602
North Carolina	Division of Environmental Management	Wastewater	388
Rhode Island	Department of Health	Chemistry...Non-Potable Water and Wastewater	A43
Washington	Department of Ecology	Wastewater/Hazardous Waste	C231
Wisconsin	Department of Natural Resources	Wastewater	998355710

7000-1536A
FANNING PHILLIPS + MOLNAR
SAMPLE SUMMARY

CLIENT ID	LAB ID	MATRIX	DATE COLLECTED	DATE RECEIVED
-31 END	001536A-01	SOIL	07/18/00	07/19/00
P-22 END	001536A-02	SOIL	07/18/00	07/19/00
-7	001536A-03	WATER	07/18/00	07/19/00
P-7 END	001536A-04	SOIL	07/19/00	07/20/00
7@26'	001536A-05	SOIL	07/19/00	07/20/00
P-6 END	001536A-06	SOIL	07/19/00	07/20/00
B-7	001536A-07	WATER	07/19/00	07/20/00
B-8	001536A-08	WATER	07/19/00	07/20/00
P-24 END	001536A-09	SOIL	07/21/00	07/22/00
24@18'	001536A-10	SOIL	07/21/00	07/22/00
P-29 END	001536A-11	SOIL	07/21/00	07/22/00
P-14 END	001536A-12	SOIL	07/21/00	07/22/00
B-9	001536A-13	WATER	07/21/00	07/22/00
B-8	001536A-14	WATER	07/20/00	07/22/00

STL CT ANALYTICAL SUMMARY

Page:1

Client ID: EB-7, EB-8, EB-9, LP-14 END, LP-22 END, LP-24 END, LP-24@18',
LP-29 END, LP-31 END, LP-6 END, LP-7 END, LP-7@26', TB-7, TB-8
Job Number: 7000-1536A

Date: 8/25/100

Sample Matrix	Analysis	Description
9 SOIL	BNA-NCLP3.2-TCL	TCL Semi-Volatile Or
9 SOIL	MET-NCLP4.0-TAL	TAL Metals
9 SOIL	VOA-NCLP3.2-TCL	TCL Volatile Organic
3 WATER	BNA-NCLP3.2-TCL	TCL Semi-Volatile Or
3 WATER	MET-NCLP4.0-TAL	TAL Metals
5 WATER	VOA-NCLP3.2-TCL	TCL Volatile Organic

APPENDIX D

DATA VALIDATION REPORT

CC 500

REC'D NOV 9 - 2000

Data Validation Services

120 Cobble Creek Road P. O. Box 208
North Creek, NY 12853
Phone (518) 251-4429
Fax (518) 251-4428

LETTER OF TRANSMITTAL

TO: Stephanie Davis

COMPANY: Fanning, Phillips & Molnar

FROM: Judy Harry 

DATE: 10-30-00

ENCLOSED: Validation report for IW site
STL SDG Nos. A1349 and A1536

Associated invoice

COMMENTS:

Data Validation Services

120 Cobble Creek Road P. O. Box 208

North Creek, N. Y. 12853

Phone 518-251-4429

Facsimile 518-251-4428

October 27, 2000

Stephanie Davis
Fanning Phillips & Molnar
909 Marconi Ave.
Ronkonkoma, NY 11779

RE: Validation of IW Industries Site Data Packages
STL-CT SDG Nos. A1349 and A1536

Dear Ms. Davis:

Review has been completed for the data packages generated by Severn Trent Laboratories, pertaining to samples collected at the IW Industries Site. Twenty seven soil samples were analyzed for TCL/TAL volatiles, semivolatiles, and metals. Equipment and trip blanks, and matrix spikes/duplicates were processed. Methodologies utilized are those of the 1995 NYSDEC ASP/CLP and USEPA SW846.

Data validation was performed with guidance from the most current editions of the USEPA CLP National Functional Guidelines for Organic and Inorganic Data Review and the USEPA Region 2 SOPs HW-2 and HW-6. The following items were reviewed:

- * Data Completeness
- * Custody Documentation
- * Holding Times
- * Surrogate and Internal Standard Recoveries
- * Matrix Spike Recoveries/Duplicate Correlations
- * Preparation/Calibration Blanks
- * Control Spike/Laboratory Control Samples
- * Instrumental Tunes
- * Calibration Standards
- * Instrument IDLs
- * Method Compliance
- * Sample Result Verification

Those items showing deficiencies are discussed in the following sections of this report. All others were found to be acceptable as outlined in the above-mentioned validation procedures, and as applicable for the methodology. Unless noted specifically in the following text, reported results are substantiated by the raw data, and generated in compliance with protocol requirements.

In summary, sample processing of organic parameters was primarily conducted with compliance to protocol requirements and with adherence to quality criteria. The metals processing included noncompliant blank and LCS responses, and an outlying holding time. Numerous samples exhibited matrix effects that resulted in the qualification of organic values and reporting limits as estimated. Edits to, and qualification of, reported results are discussed in the following analytical sections.

Copies of laboratory case narratives are attached to this narrative, and should be reviewed in conjunction with this narrative.

Volatile Analyses

The laboratory reported detections for some samples at concentrations that fall below the Instrument Detection Limits (IDLs) reported by the laboratory, and may reflect instrument noise. All values below 1 ug/kg are below the reported IDLs, and should be edited to nondetection.

Samples LP3 END, LP4 END, and LP4@15 were received at elevated cooler temperatures (13 degrees C). Results for the volatile fractions should be considered as estimated ("J" and "UJ"), with a possible low bias.

Sample LP80 END showed matrix effect on surrogate and internal standard recoveries indicating that all reported results for the sample be qualified as estimated ("J" and "UJ").

Reported results for all analytes in LP-7 END should be derived from the reanalysis ("-RE"), and considered estimated ("J" and "UJ") due to matrix effects (outlying internal standard and surrogate recoveries).

Due to matrix interferences resulting in low internal standard responses, reported results for the following analytes should be considered estimated ("J" and "UJ" qualifiers) for sample LP-7@26 (use "RE"):

1,1,1-trichloroethane, carbon tetrachloride, bromodichloromethane, 1,2-dichloropropane, trans-1,3-dichloropropene, cis-1,3-dichloropropene, trichloroethene, dibromochloromethane, 1,1,2-trichloroethane, benzene, bromoform, 2-hexanone, 4-methyl-2-pentanone, tetrachloroethene, 1,1,2,2-tetrachloroethane, toluene, chlorobenzene, ethylbenzene, styrene, and xylenes

LP23 END showed a slightly elevated surrogate recovery (BFB at one percentage point high). Reported results (which are nondetection) are unaffected.

Methylene chloride, chloroform, and acetone were detected in certain of the method blanks, trip blanks, and/or field blanks at concentrations similar to those of the associated samples. The reported detected results for these analytes in the project samples should therefore be edited to reflect nondetection ("U") at either the CRDL, or at the originally reported value, whichever is greater.

Volatile matrix spikes of LP5@18 and batch QC showed acceptable accuracy and precision. Field duplicate correlations of LP8 END and LP80 END were also acceptable.

Semivolatile Analyses

The laboratory reported detections for some samples at concentrations that fall below the Instrument Detection Limits (IDLs) reported by the laboratory, and may reflect instrument noise. All soil values below 33 ug/kg, and equipment blank values below 1 ug/L, are below the reported IDLs, and should be edited to nondetection at the CRDLs.

Results for those analytes reported with the laboratory "E" qualifier should be derived from the dilution analysis when possible. If the analyte is not present in the dilution, the initial result should be used, but considered estimated due to exceeding the instrument linear response range.

Many samples exhibited matrix effect resulting in low recoveries of multiple internal standards. These were rerun, sometimes at dilution. The following summarizes the best analysis values and qualifications for the affected samples. These edits should follow the replacement of values flagged as "E", as noted above. Unless noted below, the initial analysis results should be used preferentially over the reanalysis (-RE) results:

LP31 END:

Results for the following analytes should be qualified as estimated ("J" and "UJ"):

4,6-dinitro-2-methylphenol, n-nitrosodiphenylamine, 4-bromophenylphenyl ether, hexachlorobenzene, pentachlorophenol, phenanthrene, carbazole, anthracene, di-n-butylphthalate, fluoranthene, pyrene, butylbenzylphthalate, 3,3'-dichlorobenzidine, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, chrysene, di-n-octylphthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene

LP14 END, LP6 END, LP29 END, LP24@18 (use "-RE"), LP22 END, LP10 END, and LP5@18:

Results for the following analytes should be qualified as estimated ("J" and "UJ"):

Pyrene, butylbenzylphthalate, 3,3'-dichlorobenzidine, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, chrysene, di-n-octylphthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene

LP3 END and LP23@15 (use "-RE" for both):

Results for the following analytes should be qualified as estimated ("J" and "UJ"):

di-n-octylphthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene

LP7 END, LP7@26, LP24 END, LP4 END, LP4@15 showed matrix effect significant enough that all their reported results should be qualified as estimated ("J" and "UJ") with a possible large bias.

Bis(2-ethylhexyl)phthalate, diethyl-phthalate and di-n-butylphthalate were detected in project blanks at levels similar to those of the samples at the instrument level. Sample results for these analytes should be edited to nondetection ("U") at the sample CRDLs or at the originally reported values, whichever are greater.

Due to poor spectral quality, the detection of nitrobenzene in LP14 END should be edited to nondetection ("370 U").

The following analytes produced outlying responses in the daily standards that warrant qualification of associated sample results as estimated ("J"):

Standard	Analyte	%D	Affected Samples
08-08-00	2,4-dinitrophenol	36	EB-7 and EB-8

Matrix spikes of LP5@18 and batch QC showed acceptable accuracy and precision. Field duplicate correlations of LP8 END and LP80 END were also acceptable.

Results for 2,4-dimethylphenol should be considered estimated, with a low bias, in the equipment blanks in SDG A1349 due to low recoveries (10% to 48%) in the QC check standards.

Although stated in the laboratory case narrative as being performed outside holding time, the reextraction of LP15@18 was performed within the NYSASP and USEPA holding times for soils, and no qualification is indicated.

Metals/CN Analyses

The mercury analysis of LP31 END was performed at 34 days from collection, beyond the allowable 28 day holding time. The result is therefore considered estimated ("J"), with a possible low bias. This should have been noted in the case narrative.

Lead produced low recovery in the matrix spike of LP14 END (74% below 75% limit). Therefore the results for lead in the soil samples in SDG A1536 should be considered estimated ("J"), with a very slight bias. The duplicate correlation for this sample was acceptable.

Mercury produced an elevated recovery in the matrix spike of LP5@18. Detected mercury results in the samples in SDG A1349 should therefore be considered estimated ("J"). Duplicate correlations were acceptable.

The LCS associated with the equipment blanks in SDG A1536 produced noncompliant recoveries for aluminum (78%) and sodium (137%). The aluminum results for EB-7, EB-8, and EB-9 are therefore considered estimated ("J").

The field duplicate correlations for LP3 END and LP80 END were acceptable, and the serial dilution correlations for LP14 END and LP5@18 were acceptable.

The soil method blank produced noncompliant response above CRDL for manganese. Therefore, the results for that element in samples LP22 END, LP24 END, and LP28@18 are considered contamination, and edited to nondetection ("U") at elevated reporting limits corresponding to the originally reported concentrations.

The equipment blank EB-5 associated with samples in SDG A1349 produced a response for zinc above the CRDL. The detected results for that element in samples LP23 END, LP23@15, and LP13 END are within a factor of five of that blank concentration at instrument level, and are therefore considered contamination. The sample values can be considered as elevated reporting limits ("U").

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,



Judy Harry

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical Requirements					
		*VOA GC/MS Method #	*BNA GC/MS Method #	*VOA GC Method #	*Pest PCBs Method #	*Metals	*Other
LP-3 END	001349A-01	X	X			X	
P-4 END	001349A-02	X	X			X	
LP-4015'	001349A-03	X	X			X	
B-1	001349A-04	X	X			X	
TR-1	001349A-05	X					
P-5 END	001349A-06	X	X			X	
LP-5018'	001349A-07	X	X			X	
LP-5018'	001349A-07D					X	
P-5018'	001349A-07MS	X	X				
LP-5018'	001349A-07MSB	X	X				
P-5018'	001349A-07MSD	X	X				
LP-5018'	001349A-07S					X	
P-11 END	001349A-08	X	X			X	
LP-2	001349A-09	X	X			X	
P-2	001349A-10	X					
LP-12 END	001349A-11	X	X			X	
P-12020'	001349A-12	X	X			X	
LP-15	001349A-13	X	X			X	
P-15016'	001349A-14	X	X			X	
TR-3	001349A-15	X	X			X	

0071

Customer Sample Code	Laboratory Sample Code	Analytical Requirements					
		*VOA GC/MS Method #	*BNA GC/MS Method #	*VOA GC Method #	*Pest PCBs Method #	*Metals	*Other
LP-31 END	001536A-01	X	X			X	
P-22 END	001536A-02	X	X			X	
EB-7	001536A-03	X	X			X	
P-7 END	001536A-04	X	X			X	
LP-7026'	001536A-05	X	X			X	
W-6 END	001536A-06	X	X			X	
W-7	001536A-07	X					
W-8	001536A-08	X	X			X	
P-24 END	001536A-09	X	X			X	
W-24018'	001536A-10	X	X			X	
P-29 END	001536A-11	X	X			X	
LP-14 END	001536A-12	X	X			X	
B-9	001536A-13	X	X			X	
TS-8	001536A-14	X					

7000-1349A
FANNING PHILLIPS & MOLNAR

Case Narrative

Sample Receipt – Samples collected on July 10, 2000 and not received at STL until July 12, 2000 were received at 13°C. Samples collected on July 13, 2000 and received at STL on July 14, 2000 were received at 11°C. The client was notified, and the laboratory was instructed to proceed with the analyses. All other samples were received in good condition and at the proper temperature.

Volatile Organics – Volatile organics were determined by purge and trap GC/MS using NYSDEC '95 Protocols. The instrumentation used was a Tekmar Model 2000/2016 Concentrator/Archon 51 autosampler interfaced with a Hewlett-Packard Model 5970A/5971A GC/MS/DS.

Sample Calculation:

Sample ID – LP-12@20'
Compound – Methylene Chloride

$$\frac{(64840)(250)}{(332223)(1.163)(5)(.92)} = 9.12 = 9 \text{ UG/KG.}$$

Samples LP-80 END and LP-23 END were analyzed twice due to results having surrogate recoveries out of criteria and/or suppression of internal standard areas.

No problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were extracted and analyzed according to NYSDEC 95 protocols and USEPA CLP OLM3.2 by capillary GC/MS. The instrumentation used was a Hewlett-Packard gas chromatograph interfaced with a mass selective detector using an RTX-5 30 meter column with 0.25 mm ID and 0.5 um film thickness.

Due to the implementation of an electronic pressure controlled method a secondary ion (63) was used for the quantitation of Bis(2-chloroethyl)ether. A non-target compound, aniline (quant ion 93), was determined to coelute with Bis(2-chloroethyl)ether with this new method. Quantitation using the secondary ion ensures correct integration and quantitation of both compounds.

Sample LP-15 was lost during initial concentration. The sample was re-extracted four days out of NYSDEC hold but within CLP holding times.

Samples LP-3 END, LP-4 END, LP-4@15', LP-10 END, and LP-23@15' exhibited internal standard area suppression. The samples were re-analyzed with similar results

confirming matrix interference. Both analyses are reported. The re-analyses are indicated by the suffix "RE" or "DL".

Samples EB-4, LP-11 END, LP-4@15', LP-15@16' and SBLKZPFMS all had one surrogate out of recovery criteria, but within CLP protocol acceptance criteria.

The spike recovery for the compound, pentachlorophenol, was above recovery limits for LP-5@18'MSB. The recovery for 4-bromophenyl-phenylether was above recovery limits in SBLKZPFMS and 2,4-dimethylphenol was below recovery limits in SBLKCPFMS, SBLKAPFMS, SBLKFPFMS, and SBLKIPFMS.

The pH of sample LP-18 END was not reported due to insufficient sample volume.

The following samples were analyzed at dilutions due to the presence of high levels of target compounds:

LP-4 ENDDL	1:4
LP-4@15'DL	1:5
LP-5 END	1:100

Sample Calculation:

Sample ID – LP-4 END
Compound - Acenaphthene

$$\frac{(1098431)(40)(500)(1.0)(2)}{(653109)(1.007)(2.0)(30.0)(0.86)} = 1294 = 1300\text{ug/kg}$$

Metals – ICAP metals were determined using a JA61E trace ICAP; mercury was determined by cold vapor technique using a Leeman Labs mercury analyzer; following guidance provided in SW846 according to methods: ICAP – 3010A, 3050B/6010B; mercury-7470A, 7471A.

One "*" resulted from duplicate analysis of sample LP-5@18 for iron.

Sample LP-5@18 failed the spike control limits for mercury resulting in one "N" flag.

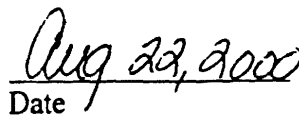
No problems occurred during analysis. All appropriate protocols were employed. All data appears to be consistent.

9C

I certify that this data package is in compliance with the terms and conditions of this 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 designee, as verified by the following signature.



Jeffrey D. Curran
Laboratory Manager


Date

7000-1536A
FANNING PHILLIPS & MOLNAR

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Volatile Organics - Volatile organics were determined by purge and trap GC/MS using NYSDEC '95 Protocols. The instrumentation used was a Tekmar Model 2000/2016 Concentrator/Archon 51 autosampler interfaced with a Hewlett-Packard Model 5970A/5971A GC/MS/DS.

Sample Calculation:

Sample ID –LP-22 END
Compound –Acetone

$$\frac{(113640)(250)}{(469806)(.313)(5)(.94)} = 41.1 = 41 \text{ UG/KG.}$$

Samples LP-7 END and LP-7@26' were analyzed twice due to results having exhibiting suppression of internal standard areas and surrogate recoveries out of criteria. Both analyses were reported since matrix interference was proven.

Semi-Volatile Organics - Semi-volatile organic samples were extracted and analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in USEPA CLP OLM3.2 Methods. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

Samples LP-31 END, LP-22 END, LP-6 END, LP-24@18', LP-29 END and LP-14 END exhibited internal standard area suppression. The samples were re-analyzed with similar results confirming matrix interference. Both analyses are reported. The re-analyses are indicated by the suffix "RE".

Samples LP-7 END, LP-7@26' and LP-24 END exhibited internal standard area suppression. The samples were re-analyzed at 1:10 dilutions with similar results confirming matrix interference. Both analyses are reported. The more dilute analyses are indicated by the suffix "DL". The samples were diluted due to the presence of high levels of non-target compounds.

Samples LP-22 END, LP-7 END, LP-22 ENDRE, LP-24@18' and LP-29 END all had one surrogate out of recovery criteria, but within CLP protocol acceptance criteria.

The spike recovery for the compound, 2,4-dimethylphenol, was below recovery limits for SBLKKPFMS, SBLKIPFMS and SBLKUPFMS.