# 2021 Hazardous Waste Scanning Project

File Form Naming Convention.

(File\_Type).(Program).(Site\_Number).(YYYY-MM-DD).(File\_Name).pdf

Note 1: Each category is separated by a period "."

Note 2: Each word within category is separated by an underscore " "

Specific File Naming Convention Label:

Report, HW. 915149, 1993-11-03, Remedial \_tourigation\_Report

pdf

#### **REMEDIAL INVESTIGATION REPORT**

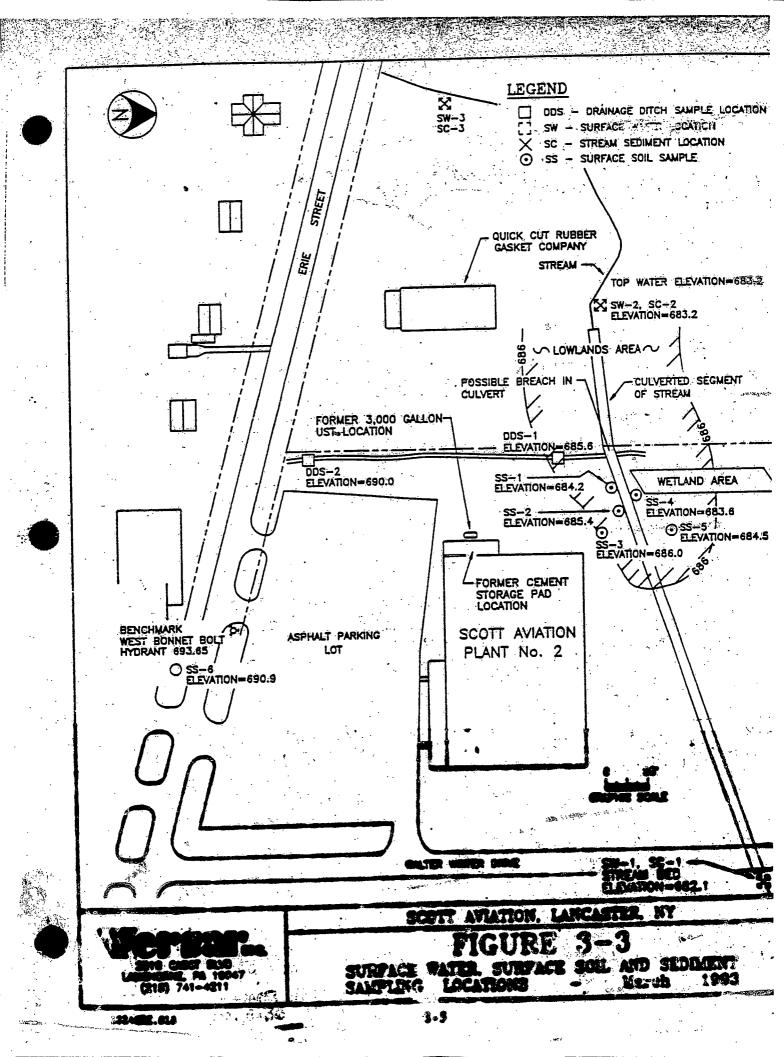
SCOTT AVIATION 225 ERIE STREET LANCASTER, NEW YORK

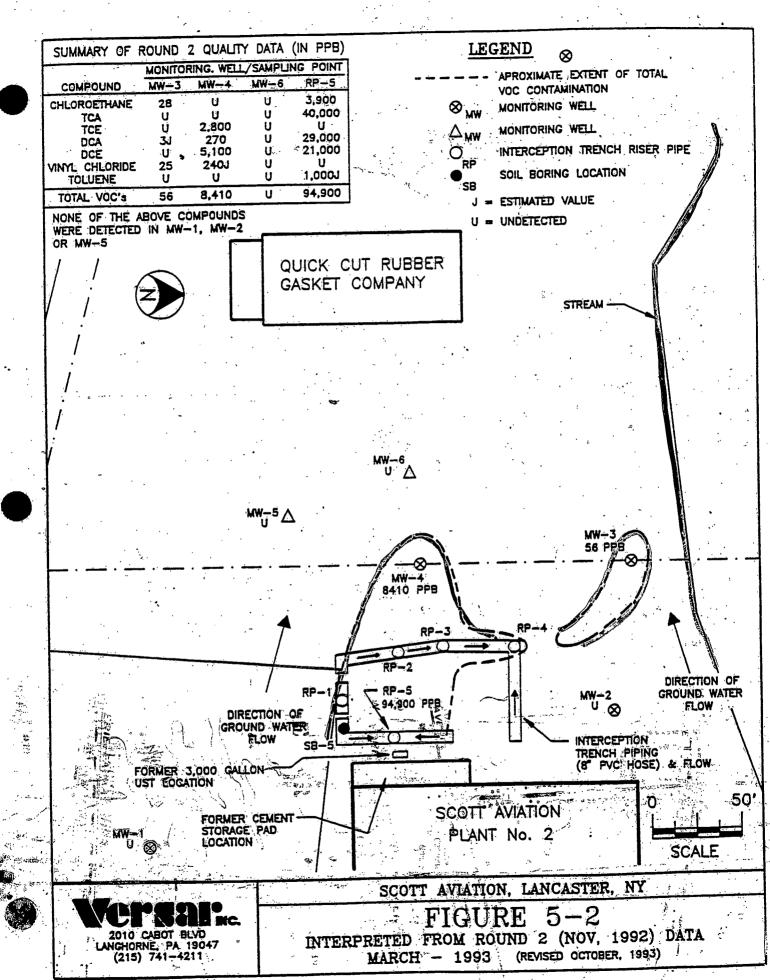
PREPARED FOR:

SCOTT AVIATION 225 ERIE STREET LANCASTER, NEW YORK

PREPARED BY:

VERSAR, INC. 2010 CABOT BOULEVARD WEST LANGHORNE, PENNSYLVANIA 19047





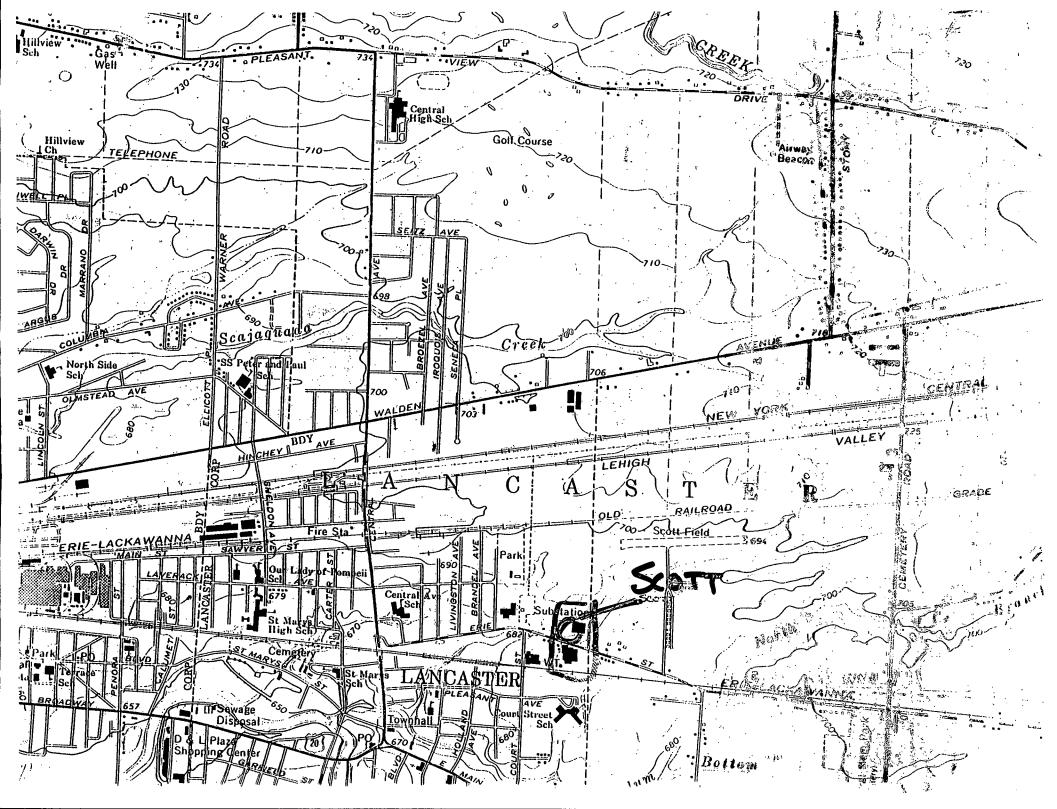


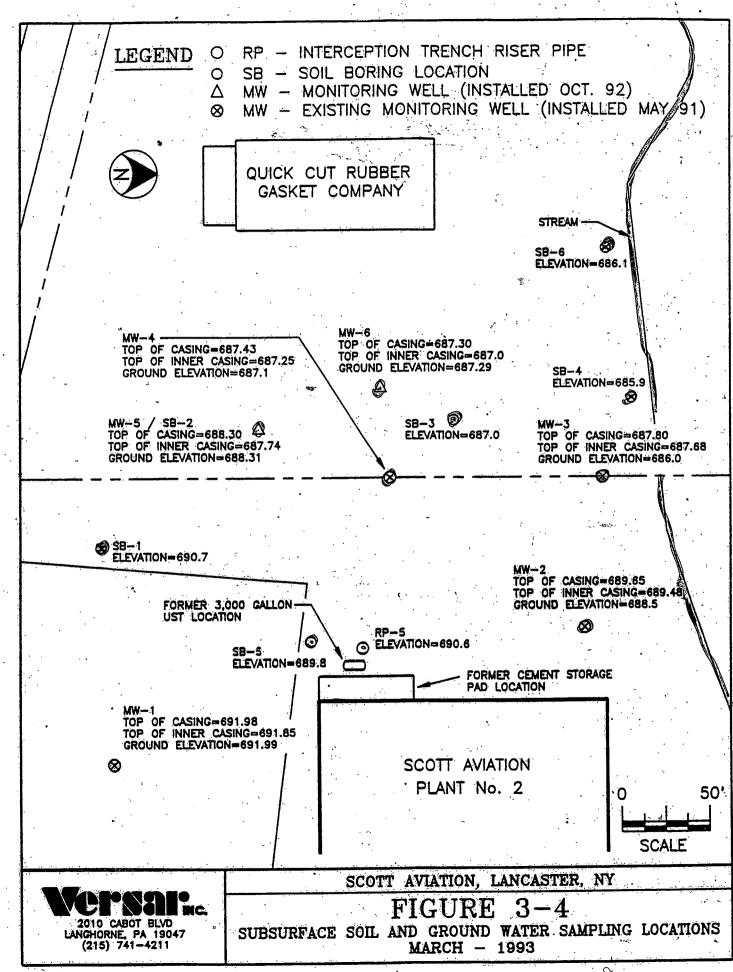
TABLE 5-11

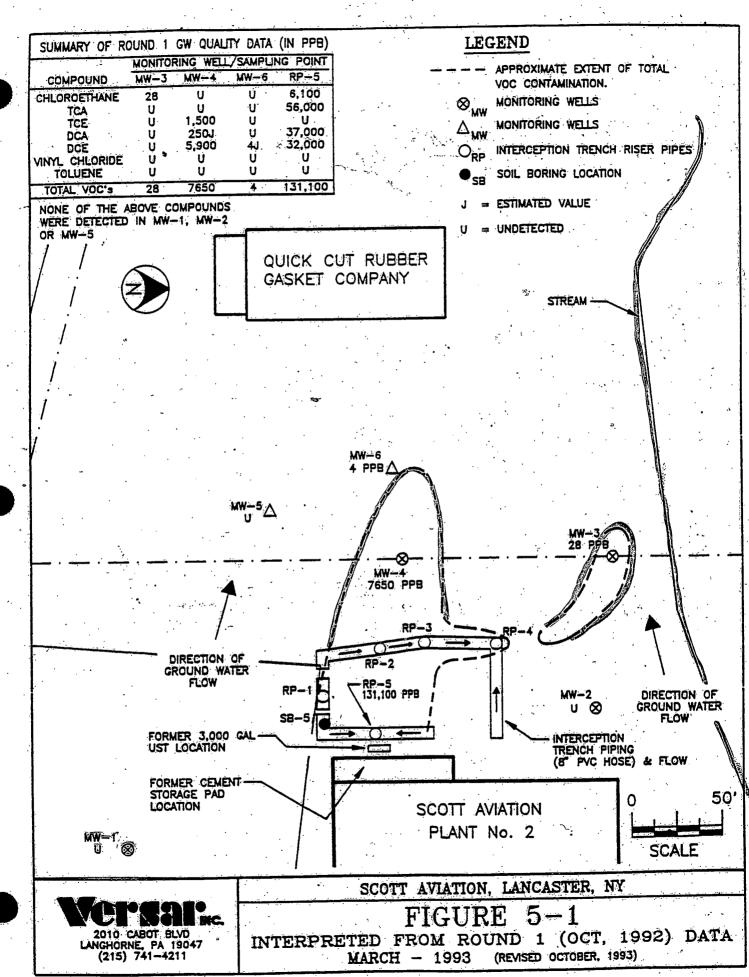
# Inorganic Compounds in Stream and Drainage Ditch Sediments (Results in ppm)

October 30, 1992

•	*	*			
Compound	SC-11	SC-2	SC-3	DDS-1	DDS-21
Aluminum	21000	9400	17000	5990	13300
Antimony	U	U	U	U	U
Arsenic	3.8B	3.8B	5.1	3.8	3.8
Barium	144	99.1	89.4	70.6	61.9
Beryllium	1.8B	0.65B	0.99B	0.688	0.89B
Cadmium	3.7	3.6	1.6	- 1.7	U
Calcium	5030	246000	11500	23300	18600
Chromium	33.3	258	23.3	16.2	17.3
Cobalt	9.98	7.3B	8.5B	5.3B	9.3B
Copper	49.0	152	24.6	60.5	33.9
Iron	28100	63700	24600	22600	211000
Lead	134	127	18.8	89.1	66.2
Magnesium	5820	14700	67100	4760	4110
Manganese	478	1770	768	910	298
Mercury	U	U	U	Ų	υ
Nickel	32.1	62.2	27.1	20.2	16.6
Potassium	2150	8778	1190B	779B	558B
Selenium	U	Ú	U	U	, U
Silver	U	U	U	2.18	- U.
Sodium	339B	586B	2948	335B	445B
Thallium	Ú	U	U	:0	Ü
Vanadium	37.6	44.9	31.8	19.6	28.8
Zinc	292	153	83.5	282	108

Indicates background location.
Reading was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL).
Not detected





## TABLE 5-3

# VOCs in Subsurface Soils (Results in ppb)

Compound <sup>1</sup>	\$8-1 20- 22'	SB-2 18- 20'	SB-3 18- 20'	SB-4 20- 22'	SB-5A 0-2'	S8-58 <sup>2</sup> 10-12'	S8-5C 14-16	SB-5D 16-18'	S8-6 16- 18'	MW-6 18- 20'
Methylene Chloride	4JB	5JB	U	U	U	10,1	860JB	3200JB	5J	5JB
Acetone "	21B	178	13B	46	170	46	3900B	4000JB	U	.U
1,1-DCA	Ų	U	U .	Ü	27J	U	3500	6700	U	U,
1,2-DCE (total)	U	u	U	Ų	390	U	1500J	5100J	U	u
1,1,1-TCA	U	U	U	U	Ų.	Ų	20000	2900J	U	u.
TCE	U	U	U	3.1	U	U	200000D	120000	Ú	U
Toluene	U	U	U	U	48J	ט	12000	5000J	U	ù
Ethylbenzene	U	U	ט	U	U	U	940J	U	u	U
Xylene	U	U	U	u	U	ט	4300	U	U	Ų
2-Butanone	U	~U	Ü	U	U	- 9J	U	Ü	U	U

- Includes all compounds detected in at least one sample See Oata Validation comment 3 Chain-of-Custody (Appendix) Indicates an estimated value
- Compound detected in blank Undetected
- Diluted sample

# PROJECT REVIEW SCOTT AVAITION, SITE NO. 915149 LANACSTER(V), ERIE CO.

**BACKGROUND:** 

**SITE LOCATION:** 

LAND USE:

LOCAL WATER BODIES:

**TOPOGRAPHY:** 

**LOCAL WATER SUPPLY:** 

HISTORY: Cutting oil tank removal - Spill group

Tank installed 1968

Waste oil samples never tested pos. for solvents

Tank excavated strong solvent odor

Contaminated soil excavated and disposed

**GW** collection trench installed

#### TABLE 5-3

#### **VOCs in Subsurface Soils** (Results in ppb)

M	w	-5

		MW-5								
Compound <sup>1</sup>	SB-1 20- 22'	SB-2 18- 20'	SB-3 18- 20'	SB-4 20- 22'	SB-5A 0-2'	SB-5B <sup>2</sup> 10-12'	SB-5C 14-16'	SB-5D 16-18'	SB-6 16- 18'	MW-6 18- 20'
Methylene Chloride	4JB	5JB	U	U	U	10,J	860JB	3200JB	5J	5JB
Acetone	21B	17B	13B	46	170	46	3900B	4000JB	U	U
1,1-DCA	U	U	U	U	27J	U	3500	6700	U	U
1,2-DCE (total)	U	U	U	U	390	U	1500J	5100J	U	U
1,1,1-TCA	U	U	U	U	U	U	20000	2900J	U	U
TCE	U	U	U	3.J	U	U	200000D	120000	U	U
Toluene	U	U	U	U	48J	U	12000	5000J	U	υ
Ethylbenzene	U	U	U	U	U	. U	940J	U	U	U
Xylene	U	U	U	U	U	U	4300	U	U	U
2-Butanone	U	U	U	U·	U.	9J	U	U	U	U

- includes all compounds detected in at least one sample
- 1. 2. J B U D See Data Validation comment 3 Chain-of-Custody (Appendix)
- Indicates an estimated value
- Compound detected in blank
  - Undetected
- Diluted sample

## **CURRENT PROJECT STATUS:**

**GEOLOGY:** 

**GROUNWATER FLOW: DIRECTION AND PERMEABILITY** 

**SUMMARY OF REMEDIAL INVESTIGATION:** 

**TABLE 5-11** Inorganic Compounds in Stream and Drainage Ditch Sediments (Results in ppm)

mpg

	nb spream	October 30 downstream	0, 1992 downstream	ditch Graad	ditch @colvert	Brand grand	contenio	Limit Tolan
Compound	SC-11	SC-2	SC-3	DDS-1	DDS-2 <sup>1</sup>		•	
Aluminum	21000	9400	17000	5990	13300			
Antimony	U	U	U	U	U			
Arsenic	3.8B	3.8B	5.1	3.8	3,8			
Barium	144	99.1	89.4	70.6	61.9		•	
Beryllium	1.8B	0.65B	0.99B	0.68B	0.89B	1		
Cadmium	3.7	3.6	1.6	1.7	U			
Calcium	5030	246000	11500	23300	18600			
Chromium	<33₹3===	<del>=(-258-)=</del>	23:3===	===16:2===	<del>17:3-3</del>	75	26	111
Cobalt	9.9B	7.3B	8.5B	5.3B	9.3B			
(Copper_	€49.0=	=(152)=	<del></del> 24:6	60.5	33.9	65	19	114
Iron	28100	63700	24600	22600	211000			·
⊄ead>	<del>= 134)=</del>	=(=127-)=	18.8	(-89:1-)	=(=66:2-)=	55	27	250
Magnesium	5820	14700	67100	4760	4110			
(Manganese)	€478===	=/=(=1770=)=	<del>==</del> 768==	910	298-	1200	428	1100
Mercury	U	U	U	U U	U		•	
Nickel	32.1	62.2	27.1	20.2	16.6	1		
Potassium	2150	877B	1190B	779B	558B	4		
Selenium	U	U	U	U	U	From	Cocco	sated
Silver	U	U	U	2.1B	U		eel co	
Sodium	339B	586B	294B	335B	445B	0000	inc comp	رمر دهر ا
Thallium	U	υ	U	U	U		ine com	,55.
Vanadium	37.6	44.9	31.8	19.6	28.8			
Zinc	292	153	83.5	282	108			

1. Indicates background location.

Not detected

5-24

Reading was less than the Contract Required Detection Limit (CRDL) but greater than or В equal to the Instrument Detection Limit (IDL).

#### TABLE 5-2

## Inorganic Compounds in Surface Soils

(Results in ppm)

4> RANGE

	5001	N SIDE		Ý	Noeth s	IDE		DAR	range
Compound	SS-1	SS-2	SS-3	SS-4	SS-5	SS-5D (Dup)	SS-61 Off-9176		
Aluminum	19800	19700	14700	15600	16200	16200	7150		
Antimony	U	U	U	U	· U	U	U		
Arsenic	3.4	5.2	4.8	4.4	4.2	4.2	3.0		
Barium	114	116	104	102	96.7	96.7	51.3		
Beryllium	1.3B	1.4	1.0B	1.2B	1.1B	1.1B	0.66B		
Cadmium	2.3	1.7	2.8	2.4	1.4B	1.4B	U		
Calcium	3470	4030	14700	35000	29500	29500	7670		
Chromium	25.8	25.5	21.6	23.2	19.7	19.7	19.1	53.	1-1,500
Cobalt	20.3	37.6	13.2B	12.8B	11.9B	11.9B	5.6B		
-Copper>	28.8	85.1	69.3	50.9	42.4	42.4	<u>[34.27</u>	25	1-300
Iron	29100	34400	27000	28500	26500	26500	15600		
Lead >	35 <sub>4</sub> 2-	27	46.9	41.5	23.7	23.7	C21.4)	20	10-700
Magnesium	5620	5730	9620	14900	13500	13500	3690		
-Manganese -	849	. 1180	516	430	425	425	<u></u>	9200	50,-10,000
Mercury	U	۲	U	U	U	U	U	·	
Nickel	29.1	34	29.7	29.4	27.9	27.9	15.0		
Potassium	1850	1270B	1030B	1920	1830	1830	514B		
Selenium	U	U	U	U	U	U	U		
Silver	U	2.78	2.3B	2.38	U	U	υ		
Sodium	240B	370B	460B	368	333B	333B	291B		
Thallium	U	U	U	υ	U	ป	U		
Vanadium	37	41.3	32.5	36.8	33.9	33.9	17.7		
Zinc	102	112	205	123	99.5	99.5	141		

<sup>1.</sup> Indicates background sample

(1) Elevatal Composition of Surficial Mat's in U.S.
1971 USGS Paper 5.74-D

B Reading was less than the Contract Required Detection Limit but greater than or equal to the Instrument Detection Limit

U Not detected

#### - TABLE 45-4

#### Inorganic Compounds in Subsurface Soils (Results in ppm)

,		ฑพ-5			(13Gesan	a iii bhii	••,	:-1	8'. :3:	, it;	
Compound	\$8-1 20-22'	SB-2 18-20'	SB-3 18-20'	\$8-4 20-22'	SB-5A 0-2'	SB-58 s 10-121	\$B-5C 14-16	S8-50 <sub>(3</sub> 16-18')		MW-6 18-20	Typical Metal Concentrations <sup>2</sup>
Aluminum	12400	14300	6500	2300	24400	20900	13300	13000	* 2420	7×2780	:::::33000 i
Antimony "	טי.	٦	2	U	ָ י	Ü	U	U	ຼີ ປ	ับ	<1 <sup>3</sup>
Arsunic	4.2	3.3	3.8	U.	6.4	2.7	2.6	- 6.0	1,58	2.28	. 3-12
Bartum	91 ,	97.7	45.8	15.4B	181	124	89.7	- 118°	, 16.2B	24.78	.15-600
Berylllum	.848	1.08	.508	U	1.4	1.3	.768	0.89B	0.32B	Ų	0-1.75
Cadmium	1.2B,,,	1.5	Ü	U	1.8:	U	1.4	Ψ	Ų-	U	0.1-1
-Oziolum	7170	78200	67500	160000	4770	3250 '	0300	61300	95400	120000	130-35000
Chromium "	16.8	19.5	9.6	2 6.6	28.1	22.3	20.6	21.7	5.8	5.7	1.5-40
Cobalt	9.3 .	9.38	6.48	4.28	11.5	8.18.	9.48	11.86	3.4B	2.7B	2.5-60
Copper	44.1	20.4	16.9	16.7	23.4	25.8	31.7	31.8	20.1	. 14.5	1-50
-iron:	21800	21800	13100	7790	31000	23400	20900	23400	7400	7210	O 2000-550,000
Leed "	15.4	15.3	9,1	6.9	53.1	31.8	14.2	15.8	5.0	4:9	4-61
Magnesium	29800	34200	22900	18900	8730	4650	28300	25900	23300	36000	100,5000
-Mangantise	394	399	258	140	183	214	445	- 494	138	168	50-5000
Mercury	Ū,	Ü	· υ	U	IJ	U	U	U-	u	U	<b>9</b> .001-0.2
-Nickel	19.4	19.9	12.9	16.9	31.3	19.8	23.4	-25.8	13.0	10.1	0.5-25
Patesium	2260	2640	1260	429	2050	1200	2770	2320.	**387	<b>510B</b>	8500-43000
Gelenium -	- U	U	U	U	U	U	U	U.	· Ü	Ü	0.1-3.9
Silver	Ū	U.	U	1.5	Ü	2.8	Ū	U	U.	U	. – '}
Bodium	5048	4628	3348	240	322B	310B	3478	- <b>3</b> 748	3068	4068	6009-6000
Theillum	U	U	U	U	U	U	ů.	37	- U	ָּ <b>ਪ</b>	-
Venedium	28.7	31.9	18.0	12.9	42.3	34.0	3 28 9	27.2	12.1	11.5	1-300
Zing	74.0	72.5	55.2	47.4	97.3	95.1	71.7	11.75.6	. 189.7	64.2	9-50

See Data Validation comment 3 Chain-of-Custody (Appendix E).

U= Not detected

∴,**5-8** 

• . • .

14341.P J. 1324TAB1.RI

Based on NYSDEC TAGM: "Determination of Soil Cleanup Objectives and Cleanup Levels," November 1892.

<sup>3.</sup> Based on "Element Concentrations in Soil and Other Sufficial Materials of the Conterminous United States," 1984.

Reading was less that the Contract Required Detection Limit but greater than or equal to the Instrument Detection Limit

## RECEIVED

NOV U 3 1993

N.Y.S. DEPT. OF ENVIRONMENTAL CONSERVATION REGION 9

#### REMEDIAL INVESTIGATION REPORT

Scott Aviation 225 Erie Street Lancaster, New York

Prepared for:

Scott Aviation 225 Erie Street Lancaster, New York

Prepared by:

Versar, Inc. 2010 Cabot Boulevard West Langhorne, Pennsylvania 19047

#### **CERTIFICATION**

Pursuant to Section II (E) (4) of order on Consent Index No. B9-0377-91-06, entered into between the New York State Department of Environmental Conservation and Figgie International, the undersigned, a New York State licensed Professional Engineer with primary responsibility for performance of the Remedial Investigation conducted at the Scott Aviation site in Lancaster, New York certifies that all activities that comprised the Remedial Investigation were performed in full accordance with the requirements of the Department approved workplan, Exhibit 2 of the reference Consent Order.

Stephen M. Schwartz, P.E.

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#### ABBREVIATIONS USED IN THIS REPORT

1,1-DCE	1,1,Dichloroethylene
1,1-DCA	1,1,Dichloroethane
1,2-DCE	1,2,Dichloroethane
1,2-DCA	• •
TCE	Trichloroethylene
bgs	below ground surface
VOCs	volatile organic compounds
Hnu	type of photoionization detector
PCBs	polychlorinated biphenyls
TPHC	total petroleum hydrocarbons
RI	remedial investigation
FS	feasibility study
USDA	United States Department of Agriculture
	underground storage tank
UST	Target Compound List
TCL	
TAL	Target Analyte List
QAPP	Quality Assurance Project Plan
NYSDEC	New York State Department of
	Environmental Conservation
HBA	Habitat Based Assessment
APA	Air Pathways Analysis
RAOs	Remedial Action Objectives
SCGs	Standards, Criteria and Guidances
	<u> </u>

#### EXECUTIVE SUMMARY

Scott Aviation is a manufacturer of gas/vapor detection instruments, aviation products, and health and safety equipment. The facility is located approximately seven miles east of Buffalo, in Lancaster, New York. Building No. 2 is a 43,200 square foot (approximate size) structure that was constructed in 1965. This building, used primarily for product development and manufacturing, contains machine shops and an engineering laboratory. A concrete pad located west of Building No. 2 was used for the storage of metal cuttings and 55-gallon drums of cutting oils, lubricating oils, and solvents. A 3,000 gallon underground storage tank (UST), located adjacent to the concrete pad, was used to store waste oil and spent chlorinated solvents produced during the manufacturing process.

In 1991, it was discovered that the 3,000 gallon underground tank had leaked. Subsequent field sampling revealed that the release had impacted on-site soils, the drainage ditch located west of the site, and ground water west of Building No. 2.

On June 4, 1992, Scott Aviation and the New York State Department of Environmental Conservation (NYSDEC) entered into an Administrative Order on Consent, which required Scott Aviation to complete a Remedial Investigation and Feasibility Study (RI/FS). Remedial Investigation activities were conducted during October and November 1992. The RI consisted of a soil gas survey, the sampling and analysis of the surface water and stream sediments of the unnamed stream, the installation of two additional ground water monitoring wells, the analysis of a total of six monitoring wells (two rounds), the installation of seven soil borings, the collection of ten subsurface soil samples, the collection of six surface soil samples, a residential well survey, a utilities survey, a habitat based assessment, and an air pathways analysis. The Remedial Investigation Report documents the results of the site investigation, defines the nature and extent of contamination, and identifies potential pathways of contaminant migration. The Risk Assessment provides an assessment of the risks posed to human health and the environment by the potential contaminants of The Standards, Criteria, and Guidances/Remedial Action Objectives Report compares the contaminants of concern to Federal and State requirements and developed a list of remedial action objectives for each medium of concern. After the Remedial Investigation, Risk Assessment and Remedial Action objectives reports are approved by NYSDEC, the Feasibility Study Report will present the basis and procedures used to identify, screen and evaluate remedial action alternatives and select a preferred alternative.

Significant items noted during the RI are presented below:

- Field activities confirmed the presence of VOC contamination in subsurface soils in the area of the former waste storage tank. The contaminants of concern include: 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethylene (1,2-DCE total), 1,1,1-trichloroethane (1,1,1-TCA), trichloroethylene (TCE), toluene, ethylbenzene, xylene, and 2-butanone. Subsurface soil contamination extends from an approximate depth of 2 feet to 18 feet. The subsurface soil contamination extends laterally to the western property boundary.
- Elevated levels of VOCs have been detected in the ground water at onsite and off-site wells and the on-site interception trench. The contaminants of potential concern include: chloroethane, 1,1-DCA, 1,2-DCE (total), 1,1,1-TCA, TCE, toluene, and vinyl chloride. The ground water contaminant plume appears to be moving very slowly in a west-northwesterly direction. The slow movement of the plume is supported by hydrogeologic data, which revealed that the hydraulic conductivity and ground water velocity in the area of the highest contamination is very low. The ground water plume extends from the former waste storage area approximately 100 feet to the west.
- Based on the results of the soil gas survey, ground water sampling, and soil sampling, there is no evidence to suggest that the VOC contamination extends to the neighboring residences or poses a threat to these potential receptors.
- No evidence that site-related activities have impacted the surface water and sediments of the unnamed stream was found during the site investigation. This finding is consistent with the hydrogeologic investigation, which indicates that there is not a hydraulic relationship between ground water and surface water in the vicinity of the site.
- There is no evidence that site-related activities have impacted surface soils located in the lowlands north of the former waste storage area, indicating that no transport pathway exists between the former tank/storage pad and this area.
- The results of the air pathways analysis revealed that based on nearsurface soil concentrations of VOCs detected at the site, there is no threat of impacts to air quality resulting from the volatilization of organic compounds. The volatilization of near surface organics from soil to the air is therefore not a transport pathway.
- No inorganic contamination attributable to site-related activities was confirmed in any media sampled during the RI field investigation.
- No semi-volatile organic compound, PCBs, or pesticides were detected in any media sampled during the RI field investigation.

Based on these observations, the extent of contaminated media at the Scott Aviation site is confined to an area of less than 1/3 acre. The removal of an underground storage tank and visually contaminated soils was an initial step in remediating the release associated with this waste oil tank. Future

remediation of residually contaminated soils at the former tank location will eliminate the source of ground water degradation at the site. The soil remediation in conjunction with the Interim Remedial Measure (IRM) that has already been implemented, i.e. the site ground water interception trench, will provide a continuing restoration of ground water quality.

#### 1.0 INTRODUCTION

Scott Aviation a Division of Figgie International Inc., located in Lancaster, New York, approximately 7 miles due east of Buffalo, is a manufacturer of gas/vapor detection instruments, aviation products, and health and safety equipment. Early in 1991, it was discovered that the underground waste oil and solvent storage tank, located at the southwest corner of Building No. 2, had leaked. Site soils, a drainage ditch located west of the site, and ground water west of the waste storage tank were apparently impacted by the leak. The New York State Department of Environmental Conservation (NYSDEC) listed the site on the New York State Registry of Inactive Hazardous Waste Sites as site No. 915149, based on the identification of certain compounds detected in soil and water samples collected from test pits in the area west of Building No. 2. These compounds were 1,1,1 trichloroethane, 1,1 dichloroethane, trichloroethylene, 1,2 dichloroethylene, and vinyl chloride.

On June 4, 1992, Scott Aviation and the NYSDEC entered into an Administrative Order on Consent that requires Scott Aviation to complete a Remedial Investigation and Feasibility Study (RI/FS) at the site. This report presents the results of the Remedial Investigation (RI) conducted at Scott Aviation.

The RI is conducted to collect data characterizing the site and, to establish potential pathways of contaminant migration.

#### 1.1 Purpose and Objectives

An RI/FS Work Plan, incorporated into the Order on Consent as Exhibit B, was prepared and submitted to the NYSDEC in April 1992 to define the scope of the investigation to be conducted at the site. The results of the investigations conducted in accordance with the Work Plan are presented in this document.

In April 1992, a Quality Assurance Project Plan (QAPP), a Sampling and Analysis Plan (SAP), and a Health and Safety Plan (HASP), incorporated into the Order on Consent as Exhibit B, were prepared and submitted to the NYSDEC as companion documents to the Work Plan. The QAPP defines the laboratory performance requirements and the data quality objectives for the RI. The SAP defines sample collection protocols and the number of samples to be collected from each media. The HASP defines the health and safety procedures to be implemented during the field investigation.

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All work conducted by Versar and its subcontractors was performed in accordance with Consent Order requirements.

The objectives of the investigation were to collect sufficient data to more clearly define the extent of potential contamination in soils and ground water, determine migratory pathways of contaminants from the waste storage area into the surrounding environment, determine potential environmental receptors, and further characterize the physical setting at the Scott Aviation site. Other studies conducted in accordance with the RI Work Plan included a Habitat Based Assessment, an Air Pathways Analysis, and an evaluation of the effectiveness of the existing interception trench constructed downgradient of the former waste storage area and east of the drainage ditch.

#### 1.2 Site Background/History

#### 1.2.1 Site Description

Scott Aviation is located at 225 Erie Street, Lancaster, New York. The company occupies land on both the north and south sides of Erie Street. Scott Aviation's Building No. 2, located north of Erie Street, is a 43,200 square foot (approximate size) brick structure constructed in 1965. Used primarily for product development and manufacturing, Building No. 2 contains machine shops and an engineering laboratory. Based on a review of aerial photographs, a portion of the land currently occupied by Building No. 2 was a parking lot prior to 1965. The remainder of the 22+ acre tract, consisted of open/undeveloped ground.

A concrete pad located at the southwest corner of Building No. 2 was used for the storage of metal cuttings and 55-gallon drums of cutting oils, lubricating oils, and solvents. A 3,000-gallon underground storage tank (UST) located adjacent to the concrete pad was used to store waste oil and spent chlorinated solvents produced during the manufacturing process.

Building No. 2 is bounded by an unnamed stream (culverted across the Scott Aviation property) and open grassed fields to the north, open fields and private residences (one of which is vacant) to the east, Scott Aviation's Building No. 1 and private residences to the south, and Quick Cut Gasket and Rubber Corporation, a private trucking company, and a New York State Electric and Gas substation to the west. The site appears on the United States Geological Survey 7.5 x 15 minute Lancaster, New York Topographic Quadrangle Map (1982).

Approximate coordinates are latitude 42° 54′ 00" and longitude 78° 39′ 30". The site location map is shown as Figure 1-1.

#### 1.2.2 Previous Investigations

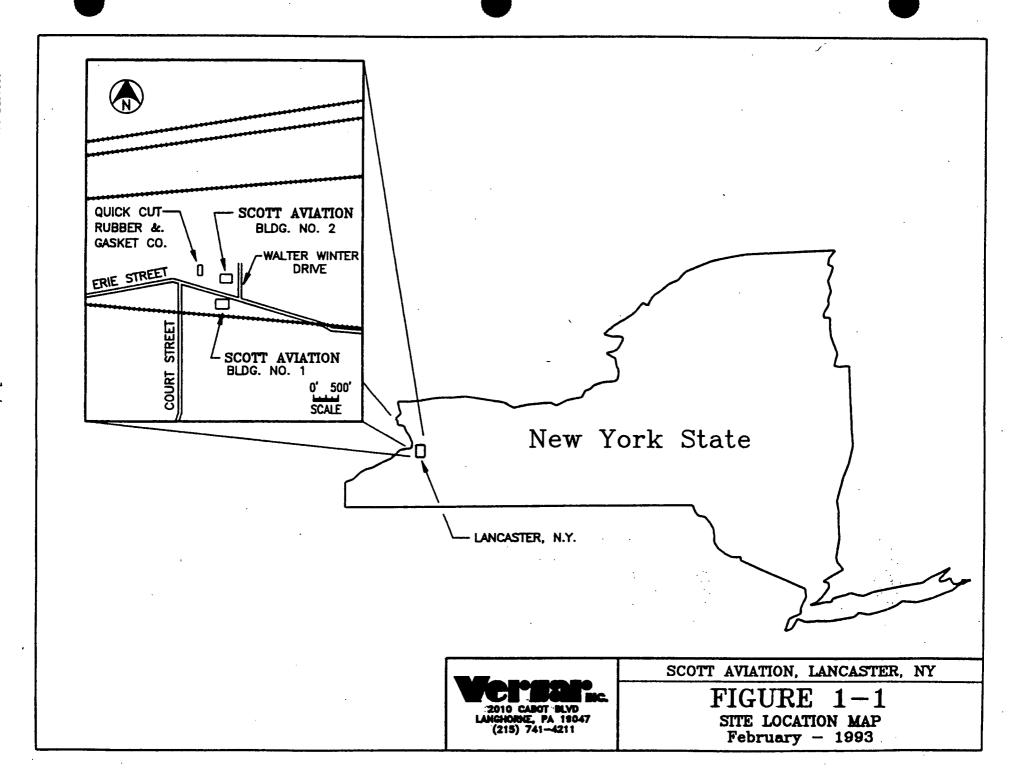
In the summer of 1990, stained soils were detected near the northwest corner of Scott Aviation, Building No. 2, north of the former waste storage pad. On July 20, 1990, Northeast Environmental collected surface soil samples from the affected area. Results of the surface soil sampling indicated the presence of total petroleum hydrocarbons at concentrations of up to 85,000 parts per million (ppm).

A visual site inspection by Environmental Service Group, Inc., a local consultant, revealed that the drainage ditch, located along the western border of the property, had apparently been impacted by activities related to the former waste storage area. This discovery prompted the removal of a 3,000-gallon waste oil tank located adjacent to the concrete pad. Upon removal of the tank, it was apparent that there had been a release from the tank. The New York Department of Environmental Conservation (NYSDEC) was notified that there had been a release. On April 9, 1991, 12-18 inches of visually contaminated soil and the concrete pad were removed from the area west of Building No. 2 under the direction of the NYSDEC.

In a letter dated April 18, 1991, the NYSDEC recommended that Scott Aviation take the following actions: (1) construct an interception trench backfilled with stone to contain contamination; (2) pump the standing water out of the drainage ditch and once the water has recharged, collect samples for volatile organic analysis; (3) install a minimum of four ground water monitoring wells; (4) provide the NYSDEC with material safety data sheets (MSDSs) for all solvents used at the plant; and (5) submit a schedule for the initiation of a detailed site assessment and remedial action plan.

The interception trench was installed in April 1991 and has been continuously operated as an interim remedial measure (IRM). Initial sampling results from the trench revealed the presence of elevated concentrations of chlorinated solvents. Subsequently, Versar, Inc. was contracted by Figgie International to provide consulting services for the Scott Aviation site. Versar prepared a schedule of future site investigation/remedial action activities and submitted it to the NYSDEC in May 1991.

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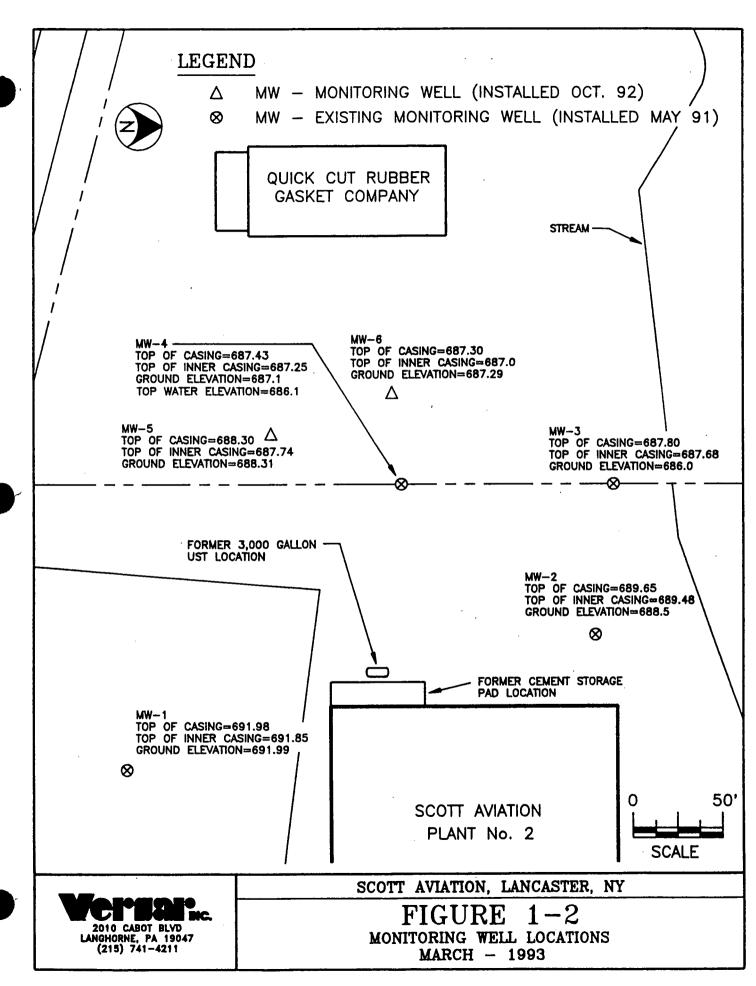
In May 1991, Versar conducted a hydrogeological assessment of the Scott Aviation site to gather information on the geologic profile and the ground water flow direction and to provide preliminary soils and ground water data. The results of the hydrogeological assessment are documented in a report entitled Final Hydrogeological Assessment, Scott Aviation, Lancaster, New York (June 1991). A summary of significant findings and field activities conducted is presented below.

During the week of May 20, 1991, Versar installed four 2-inch diameter, polyvinyl chloride (PVC) ground water monitoring wells in the upper aquifer (see Figure 1-2, Monitoring Well Location Map). The wells were located based on the location of the former underground storage tank and on existing topographic and hydrogeologic conditions as understood from regional mapping. The boreholes were screened for volatile organic compounds using a photoionization detector (Hnu). Soil samples were collected from the boreholes using stainless steel split spoons and shipped to the analytical laboratory to be analyzed for volatile organic compounds (VOCs). Ground water samples were collected from these wells on May 28, 1991, and shipped to the laboratory to be analyzed for VOCs.

Soil and ground water samples collected west of the site (from MW-4) revealed the presence of elevated concentrations of VOCs, but these concentrations were significantly lower than contaminant concentrations measured in the source area (e.g., 10 times lower). Low concentrations of VOCs were detected in soil samples collected northwest of the site. These samples were obtained at or near the area where surface soil discoloration had previously been observed. This location may have been affected by runoff from the waste storage pad. However, no VOCs were detected in the ground water at this location (MW-2). Ground water and soil samples collected north and upgradient (MW-1) (southeast) of the former UST area did not indicate the presence of contamination.

On 5 July 3, 1991, Buffalo Drilling, Inc. under Versar's supervision collected an additional ground water sample from the monitoring well previously shown to contain the highest levels of VOCs (i.e., MW-4). This ground water sample was analyzed for VOCs, semi-volatile organic compounds, pesticides, polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPHC), total metals, dissolved metals, and cyanide. The analytical results of this sampling event indicated that there were elevated levels of VOCs and some metals in the

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ground water. However, semi-volatile organic compounds, pesticides, PCBs, TPHC, and cyanide were undetected in this sample. The VOC analytical results for ground water samples collected from MW-4 are summarized below.

Compound	MW-4A May 1991	MW-4B July 1991
Vinyl Chloride	7 ppb	15 ppb
1,1-Dichloroethane	4.9 ppb	10 ppb
1,2-Dichloroethane	20 ppb	62 ppb
Trichloroethene	59 ppb	380 ppb

In light of the analytical results of ground water samples collected from MW-4, Scott Aviation entered into a Consent Order and Agreement with the New York State Department of Environmental Conservation (No. B9-0377-91-06) to conduct a Remedial Investigation/Feasibility Study at the Building No. 2 site.

#### 1.3 Report Organization

This draft RI report summarizes the data collected for the field investigation conducted at the Scott Aviation Building No. 2 site. It is organized in accordance with the recommended format presented in EPA document 54/6-89/004 entitled Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA Interim Final (October 1988).

Section 1.0, Introduction, contains the history of previous site use and operations, waste streams, waste handling procedures, and a summary of previous site investigations. Section 2.0, Site Setting, describes local climatology and meteorology, surface features, demography and land use, and ecology. It also describes the surface water hydrology, regional and local geology and hydrogeology, and soils. Section 3.0, Study Area Investigation, describes the field activities performed at the site. Section 4.0, Results of Hydrogeologic Investigation, evaluates and interprets site-related hydrogeologic data. Section 5.0, Nature and Extent of Contamination, provides a summary of analytical results and discusses the nature and extent of contamination. Section 6.0, Contaminant Fate and Transport, evaluates contaminant migration in affected media and the fate of contaminants over the period between the release and the present. Section 7.0, Summary and Conclusions, summarizes findings regarding the nature and extent of contamination and the fate and transport of contaminants.

#### 2.0 SITE SETTING

#### 2.1 Climatology

According to information obtained from the National Climatic Center, Asheville, North Carolina, Erie County is typically cold and snowy in the winter seasons and moderately warm in the summer. From late fall through winter, snow squalls are frequent and total snowfall is heavy. In some years, single snowfalls of more than 2 feet have been recorded. The average winter temperature is 26°F, with an average daily minimum temperature of 20°F, while the average summer temperature is 69°F with an average daily maximum temperature of 78°F.

Total annual precipitation in Erie County is 37 inches, of which approximately 18.5 inches, or 50 percent, falls during the period from April to September. On average, in 2 years out of 10, the rainfall in April through September is less than 16 inches. The heaviest rainfall (3.9 inches) on record occurred in Buffalo on August 7, 1963. Thunderstorms occur approximately 31 days each year, most in the summer months. Mean temperature and precipitation data for Buffalo recorded during the period between 1962 and 1991 are summarized below.

D M <u>J</u> <u>J</u> <u>S</u> 0 N J F M 32.6 43.7 55.0 64.8 70.5 69.0 62.5 51.5 40.0 29.5 Mean 24.9 24.7 Temp. (°F)

Mean 3.06 2.70 2.78 2.74 2.96 2.91 2.92 3.22 3.09 3.09 3.33 3.31 Precip.
(In.)

Average seasonal snowfall in Erie County is approximately 97 inches. The greatest snow depth recorded at any one time was 42 inches.

Relative humidity in mid-afternoon averages 60 percent. Humidity is typically higher at night, with the average at dawn approximately 80 percent. The sun shines about 65 percent of the time possible in the summer and 30 percent in the winter. The prevailing wind in the area is from the southwest and average windspeed is highest in the winter (14 miles per hour).

#### 2.2 Surface Features

The Scott Aviation site and surrounding area are flat to gently rolling;

elevations range from approximately 629 to 721 feet above mean sea level (msl). The elevation of the Scott Aviation Building No. 2 facility at grade level is approximately 689 feet above MSL.

Building No. 2 is bordered on the north by open, hummocky ground, Walter Winter Drive and private residences on the east, Scott Aviation Building No. 1 on the south, and Quick Cut Rubber and Gasket Company on the west. A private trucking company and a New York State Electric and Gas Sub-Station are located west of the Quick Cut facility.

An unnamed tributary to Plum Bottom Creek flows east to west immediately north of Building No. 2. This stream is culverted across the Scott Aviation facility and a portion of the Quick Cut property.

Located along the western border of the Scott Aviation property is a drainage ditch flowing northward toward the above mentioned unnamed stream. Flow in the drainage ditch is sustained by surface and parking lot runoff directed toward the ditch via underground pipe. At the confluence of the stream and ditch is a lowland area where water ponds during periods of heavy rainfall.

#### 2.3 Surface Water Hydrology

Scott Aviation is located in the Drainage Basin of the Cayuga Creek, a meandering stream approximately 3/4 of a mile south of the site, with headwaters in Wyoming county. It flows east to west and discharges into the Buffalo River at a point 5 miles west-southwest of the site. The Buffalo River, in turn, discharges into Lake Erie. Tributaries to Cayuga Creek near Lancaster include Little Buffalo Creek, which drains the areas south of Cayuga Creek, and Plum Bottom Creek, which drains the area north of Cayuga Creek. The confluence of these streams is within the City of Lancaster, approximately 1/4 mile southeast of East Lancaster.

An unnamed tributary of Plum Bottom Creek flows in a west-southwest direction across the Scott Aviation site approximately 100 to 200 feet north of Building No. 2. This tributary is culverted underneath the site from east of Walter Winter Drive to a point on the Quick Cut property approximately 200 feet west of the site. This tributary discharges into Plum Bottom Creek more than 6/10 of a mile southwest of the Scott Aviation property. The dimensions of this unnamed stream vary. Near Walter Winter Drive, the stream is 15.5 feet wide and 1.5 feet deep; on the Quick Cut property, the stream is 5 feet wide and 1.35

feet deep. Flow in the stream, as measured on the Quick Cut property, is estimated at  $11.9 \, \text{feet}^3/\text{sec}$ .

A drainage ditch is located along the western border of the site. Flow in this ditch runs north from Erie Street toward an isolated lowlands area and the unnamed, culverted stream. The culvert is exposed at the confluence of the drainage ditch and the unnamed stream. A visual inspection of the pipe revealed a break in the pipe at this location. Two sections of pipe in the culvert had parted slightly in the vicinity of the drainage ditch. The breach, approximately 4 inches wide, occurs near the top of the piping and does not cause water from the drainage ditch to enter the stream.

Ponded water was observed within the lowlands area located at the confluence of the drainage ditch and unnamed stream. The surface area of ponded water is estimated at 200 square feet. Ponded water was also observed in an area approximately 200 feet north of the lowlands. The surface area of ponded water at this location is estimated at 3,000 square feet.

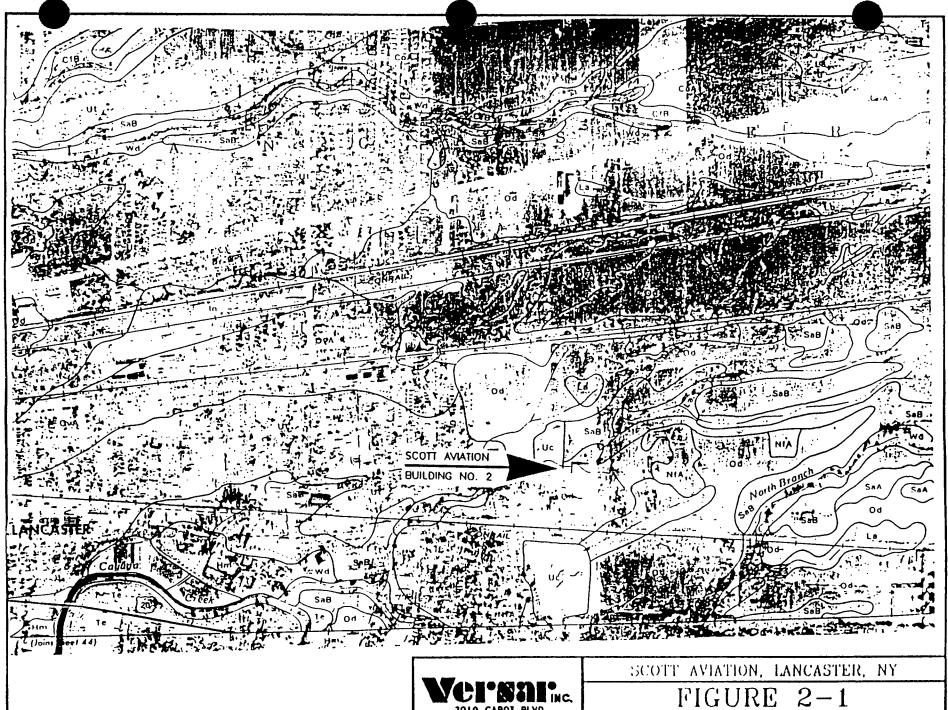
#### 2.4 Soils

The United States Department of Agriculture (USDA) Soil Conservation Service has mapped the soils in and around the study area and identified three distinct soil units as described below. The spatial distribution of the soil types at the site is shown in Figure 2-1.

SaB - Schoharie silt loam (3 to 8 percent slopes) - This soil is, in general, well drained to moderately well drained. It is typically formed in reddish glacial lake sediments that have a high clay content. This soil is found on convex areas of shoulder slopes that parallel dissected drainage ways on the lowland lake plain. A typical soil profile is as follows:

- 0-9" Dark brown silt loam (surface layer)
- 9-31" Brown silty clay loam in the upper part, reddish brown silty clay in the middle, and mottled, reddish brown silty clay in the lower part (subsoil)
- 31-61" Reddish brown silty clay and clay varied with silt (substratum)

General characteristics of the Schoharie silt loam include wetness, low soil strength, poor soil compaction, clayey texture, and slow to very slow permeability (< 0.2 in/hr). According to the USDA Soil Survey of Erie County, New York (1986), the depth to seasonal high water table is 1.5-3.0 feet.



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SPATIAL DISTRIBUTION OF SOIL TYPES February - 1993

- Od Odessa silt loam (0-3 percent slope) This soil is deep and somewhat poorly drained. The Odessa silt loam is high in clay content and is formed on flat plains that were formerly the bottoms of glacial lakes. In general, this soil is found on intermittent drainage ways. A typical soil profile is as follows:
  - 0-9" Very dark grayish brown silt loam (surface layer)
  - 9-22" Mottled, pinkish gray silty clay in the upper part and mottled, reddish brown silty clay in the lower part (subsoil)
  - 22-60" Varied, reddish brown, gray, reddish gray, and weak red silty clay (substratum)

According to the Soil Survey of Erie County, Odessa soils have a perched water table in the upper part of the subsoil from December to May. Permeability is slow to very slow in the subsoil and substratum (< 0.2 in/hr.). Runoff is slow, and there is usually no gravel in the soil.

Uc - Udorthents, smoothed - According to the soil survey, these soils are formed in deep, manmade cuts or fills most of which are located near industrial sites, urban developments, or construction sites. Udorthents consists of various kinds of excavated earthy material that has been stockpiled for use as fill or topdressing, soil and rock material that has been trucked from other areas and leveled, or soil deposits that are left in areas that have been excavated or deeply scalped. In general, the soils are variable in composition (loamy soil mixed with slag or cinders, concrete, asphalt or other wastes). A soil profile may contain a surface layer 1-8 inches thick consisting of brown or grayish brown, very gravelly, loamy sand to silty clay loam. The substratum may consist of light olive brown, brown, or dark yellowish brown, very gravelly, loamy sand to silty clay.

Udorthent soils are mostly excessively drained. Often the fill has been placed on very poorly drained to moderately drained soils, and the soil texture, stone content, soil reaction, and depth to bedrock vary considerably from one area to another. The depth to the seasonal high water table and soil permeability vary and depend on topography, degree of compaction, soil texture, and other related factors.

Based on observations from test pits excavated in the area of the former UST, virgin soil west of Building No. 2 has been regraded several times.

Distinct layering is apparent and the composition of fill materials ranges from sand to clay.

## 2.5 Geology

## 2.5.1 Physiographic Setting

Erie County is located in two physiographic provinces. The western edge and the northern half of the county are within the Erie-Ontario Lake plain province. The southern section of the county is in the Allegheny Plateau province. The Erie-Ontario Plain, in general, has little significant relief except near drainage ways. The topography of the Erie-Ontario Plain is typical of an abandoned lakebed. However, on its southern and eastern boundaries, which are formed by ancient glacial lake beaches, the topography changes to that of the Allegheny Plateau. In these areas, steep valley walls are commonplace and wide ridgetops and flat-topped hills occur between the drainage ways.

Elevations in the county range from a high of 1,935 feet above mean sea level to a low of 569 feet above mean sea level at the Lake Erie shoreline. On the Erie-Ontario Plain, elevations range from 700 to 1,000 feet above mean sea level. Elevations on the Allegheny Plateau range from 1,500 to 1,900 feet.

#### 2.5.2 Regional Geology

Erie County is underlain by bedrock of the Upper Silvrean and the Middle and Upper Devonian geologic periods. The rock formations occur in bands that, in general, have an east-west orientation. The older (Silurian age) bedrock is found in the northern section of the county. The beds become progressively younger to the south.

The Salina Group, the oldest bedrock formation, forms a 5-6 mile wide band along the northernmost section of the county. The Salina Group is composed primarily of shale and dolomite.

Stratigraphically above the Salina Group is the Akron Dolomite and Bertie Group. This formation forms a band only 1/2 mile wide.

The Onondaga Limestone occurs immediately south of the Bertie Group. This is the oldest formation from the Devonian period and occurs in a band approximately 2 miles wide. The Devonian age Hamilton Group is above (south) of the Onondaga formation. It consists primarily of shales and limestone and forms a 4-mile wide band.

The Genesee Group overlies the Hamilton Group. The Genesee is characterized by limestone and shale. This formation, in turn, is overlain by the Sonyea Group which consists of shale.

Above the Sonyea Group in the south central portion of Erie County are the sandstones and shales of the Java and West Fall Groups. These formations extend southward into the valleys near the northern edge of the Allegheny Plateau.

The Canadaway Group, a formation consisting of shale, sandstone, and siltstone, are the youngest rocks in Erie County. This formation occupies the remainder of the county to the southern border at Cattaraugus Creek.

The bedrock in Erie County dips 50 feet per mile toward the southwest. In general, the bedrock has retained much of the form it had when it was originally deposited as silts and sands in ancient seas that covered the area 300 million years ago.

Western New York was covered and uncovered by several advances and retreats of glacial ice. As the ice moved south, it accumulated soil material and pieces of bedrock lying in its path, ultimately redepositing them as mixtures of unconsolidated materials of various sizes, shapes, and mineral content. In addition, glacial lakes occupied a large portion of northern Erie County for several long periods of time.

## 2.5.3 Local Geology

Scott Aviation lies within the Erie-Ontario Plain Physiographic Province. As noted above, the Erie-Ontario Plain is characterized by a lack of significant relief and typifies the topography of an abandoned, glacial lakebed.

### 2.5.3.1 Surficial Geology

Based on information contained in *Ground-Water Resources of the Erie-Niagara Basin, New York* (LaSala 1968), bedrock in the area of Scott Aviation is covered with unconsolidated glacial deposits consisting of till: a non-sorted mixture of clay, silt, sand, and stones deposited directly from the ice sheet that once covered the region. The characteristics of the till depend upon the types of rocks over which the ice passed and the vigor with which the ice crushed and abraded the rock. Typically, the till overlying shale formations in the Erie-Niagara Basin is dark gray and clayey or silty. The thickness of the till varies from a thin cover of two or three feet to more than 200 feet.

Overlying the till are lakebed deposits. Lake deposits consist of bedded clay, silt, and sand that settled out in glacial lakes that were fed by melting ice. They can range in thickness from a thin skin to 300 feet or more.

The subsurface geology encountered in the recently installed boreholes consisted generally of massive clay or silty clay from surface to approximately 14 feet below ground surface (bgs), clay with interstratified saturated fine sand and silt lenses from 14 to 20 feet bgs, and silty sand and gravel from 20 to 24 feet bgs with some clay. In the boring for MW-6, weathered black shale was encountered from 24 to 26 feet bgs. Complete saturation of the subsurface soils was noted at approximately 18 to 19 feet bgs in the borings during drilling.

#### 2.5.3.2 Bedrock Geology

The bedrock beneath Building No. 2 consists of the Devonian aged Marcellus Formation (Hamilton Group). In western New York, this formation consists of predominantly dense fissile, gray to black shale with a few thin limestone and sandstone interbeds. The thickness of this formation is estimated at 30-55 feet. Based on test borings, the depth to bedrock at the site is, approximately 25 feet below ground surface.

The contact between the Skaneateles Formation (Hamilton Group), which underlies Building No. 1, and the Marcellus Formation, which underlies Building No. 2, crosses Erie Street between the two buildings. In western New York, the Skaneateles Formation consists of gray limestone overlain by gray to black shale. The thickness of this formation is estimated at 60-90 feet.

The Middle Devonian aged Onondaga Limestone underlies the Marcellus Formation. The thickness of this formation is estimated at 108 feet.

#### 2.6 Hydrogeology

The soil, lake deposits, and till (surficial deposits) and the bedrock differ in the types of water-bearing openings they contain. The surficial deposits are composed of grains packed together with open spaces, or pore spaces, between the grains (primary porosity). Water permeates the surficial deposits because it can fill the pore spaces between the grains.

The sediments composing the bedrock initially contained pore spaces. However, these pore spaces were closed when the sediments were compacted and

cemented. Ground water in bedrock is encountered mostly within joints and fractures (secondary porosity).

## 2.6.1 Occurrence of Ground Water in Surficial Deposits

In Erie County, only small amounts of water are contained within the till (LaSala 1968) due to the low permeability of the material. Large diameter wells can obtain only small water supplies.

Lakebed deposits consist of horizontally bedded sand, silt and clay. The permeability of the clay beds is, in general, so low as to yield no water to wells. The lakebed deposits also contain thick sections of water bearing fine sands that can be utilized for water supply. In general, lakebed deposits are not commonly used as a source of potable water.

Shale formations, like the Marcellus and Skaneateles Formations (Hamilton Group) that underlie the study area, are cut by both vertical and bedding-plane joints along which are hairline openings. Openings along the thin limestone interbedded with the shale may be widened by solution. Also, a discontinuous zone of fracturing that follows the upper surface of the rock is common.

Locally, this zone consists of only shallow tension cracks as the result of the movement of glacial ice over the rock. In other places, the fractured zone is as thick as 10 feet and consists of crumpled and broken rock. According to LaSala (1968), some exposures show convoluted beds interfolded with glacial deposits.

Recharge to the shale occurs via percolation through the overlying glacial deposits. In general, the water table lies within surficial deposits above the bedrock. The water table exists within the shale only where glacial deposits are thin or absent. The fractured zone in the upper bedrock is, in general, hydrologically connected to the glacial deposits. The glacial deposits and the fracture zone, therefore, act as a single water bearing zone. The vertical joints and bedding planes, which extend into the shale at depth, receive water where they intersect the overlying surficial deposits.

Shale formations in the Erie-Niagara basin typically contain small volumes of water. However, large volumes of ground water are present within the limestone interbeds which have been enlarged by solution openings.

Ground water in the Onondaga Limestone, which stratigraphically underlies the Marcellus Formation, occurs primarily in bedding plane and vertical joints.

Bedding-plane joints can be continuous for some miles, but they are not water bearing everywhere. Water bearing joints in the Onondaga Limestone have, in general, been enlarged by the solution of the rock by ground water. Bedding-plane joints can be as large as 1/8 inch wide where vertical joints are typically narrow.

Limestone in the region contains large volumes of water. Some wells completed in the Onondaga limestone can yield up to 300 gallons per minute.

### 2.7 Demography and Land Use

The Scott Aviation site is situated within the Township of Lancaster, a southeastern suburb of metropolitan Buffalo, New York. The Township incorporates the Village of Lancaster and a portion of the Village of Depew within its 42 square miles. Approximately 32,362 people live in the Township according to the 1990 census. Situated at an average of 700 feet above mean sea level, Lancaster Township contains approximately 140 miles of roadway.

The area surrounding the site is zoned as light industrial to the southwest and general industrial in the remaining directions. The central portion of Lancaster Township, mainly along the railroad tracks as well as north of the New York State Thruway, consists of large industrial and commercial areas. The remaining portions of the Township are residential or undeveloped.

#### 3.0 STUDY AREA INVESTIGATION

#### 3.1 Vadose Zone Investigation

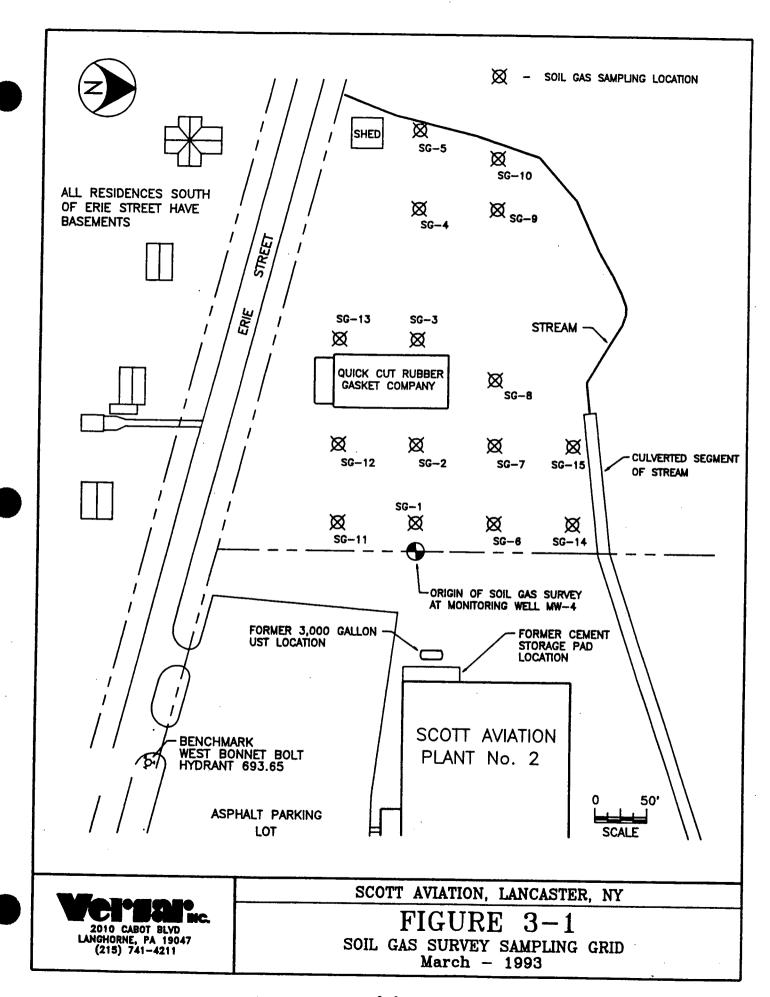
On October 26, 1992, a vadose zone investigation was conducted at the site, utilizing a soil gas survey method subcontracted to Tracer Research Corporation of Monmouth Junction, New Jersey. The survey served as a screening tool to ensure that soil borings and monitoring wells were located in areas of suspected contamination, thereby minimizing the potential for sampling uncontaminated areas. In addition, this survey aided in delineating contaminant plume boundaries, and the selection of surface water and sediment sampling locations.

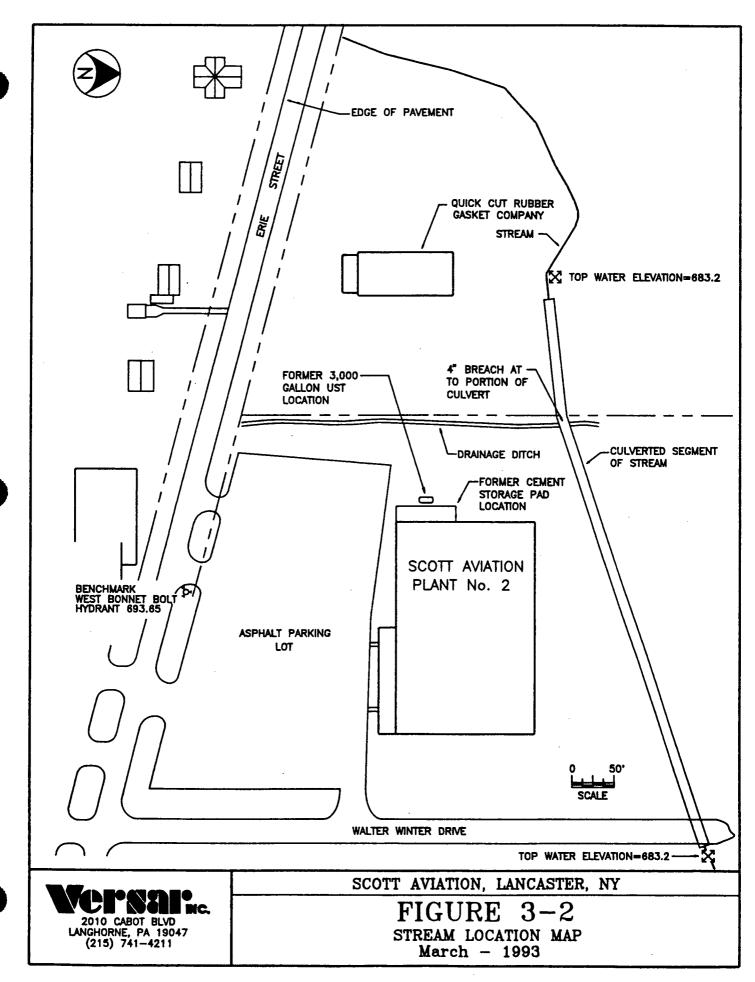
The survey was conducted using the "active" soil gas sampling method. Samples were obtained by evacuating a small amount of soil gas from the soil through hollow stainless steel probes driven hydraulically into the ground. The samples were analyzed immediately on-site by highly sensitive gas chromatographic equipment. The active soil gas survey allows for the immediate identification and quantification of contaminants and the tracking of potential contaminant plumes at the site. Analytes for this survey were as follows: vinyl chloride; toluene; 1,1-dichloroethylene (1,1-DCE); 1,2-dichloroethylene (1,2-DCE); 1,1-dichloroethane (1,1-DCA); 1,2-dichloroethane (1,2-DCA); and trichloroethylene (TCE).

The survey was performed north, south, and west of the former waste storage area on a 75  $\times$  75 foot grid. A total of 15 soil gas data points were completed in the survey; their locations are depicted on Figure 3-1. Depths of data point collection ranged from 5 to 8.5 feet bgs.

## 3.2 Surface Water and Sediment Investigation

There are two drainage pathways that carry surface runoff from the site: an unnamed stream, partly culverted, and an intermittent drainage ditch. The unnamed stream, located north of the Scott Aviation Building No. 2, flows from east to west-southwest, intercepting Erie Street west of Quick Cut Gasket. The stream is culverted through a corrugated steel pipe from the east side of Walter Winter Drive, through the Scott Aviation property, to a point behind the Quick Cut building (Figure 3-2). The drainage ditch runs north-south,



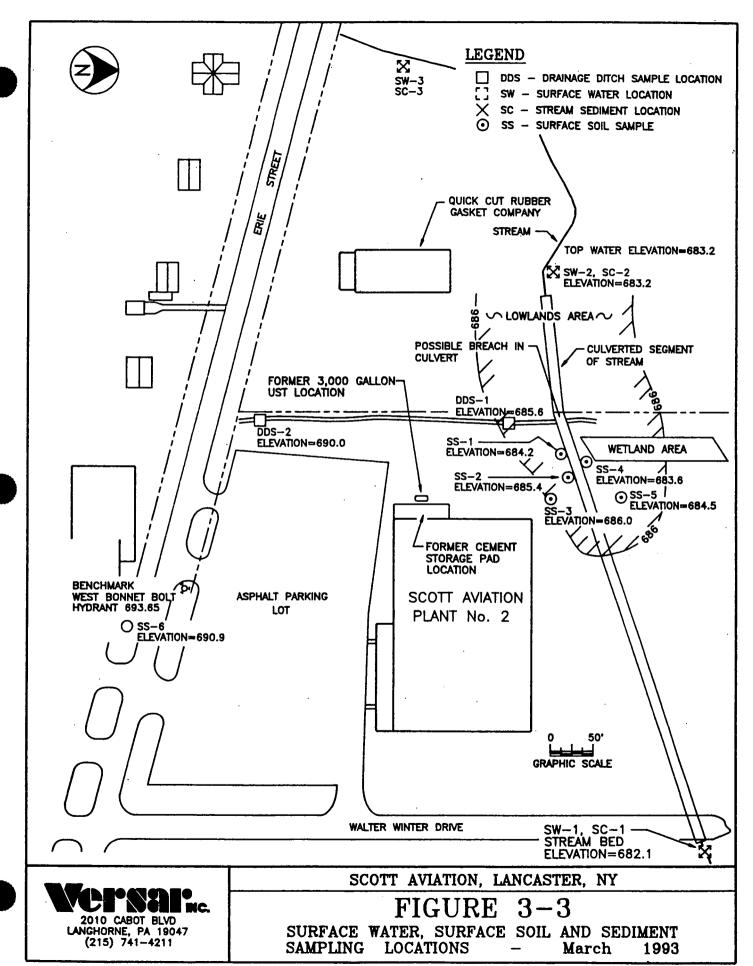


immediately east of MW-4 and MW-3, and flows north intercepting the culverted stream. The culvert is open at the interception point; intermittent drainage ditch waters discharge into the stream.

Three surface water samples, SW-1, SW-2, and SW-3, were collected from the unnamed stream. Sample SW-1, the upstream sampling location, was collected east of the existing culvert, just east of Walter Winter Drive. SW-2, the source location, was collected immediately west of the existing culvert. SW-3 was collected at a point approximately halfway between where the stream bends to the south and where it intercepts Erie Street. For surface water sampling locations, see Figure 3-3.

Surface water samples were collected to determine if the stream has been impacted by the overland flow of contaminants, transport within the stream, or the migration of contaminants from ground water to surface water. SW-1, SW-2, and SW-3 were collected according to the procedures outlined in the QAPP, and were chemically analyzed for Target Compound List (TCL) VOCs, Target Analyte List (TAL) metals (total and dissolved), and dissolved oxygen. In accordance with the requirements for the habitat based assessment, the following stream characteristics were measured: depth, flow rate, substrate, bed morphology, and gradients. When integrated on the site potentiometric surface map, this information provided insight into the relationship between surface water and ground water. It will be discussed further in Section 4.3 Aquifer and Surface Water Relationships.

Stream sediment samples and drainage ditch sediment samples were also collected on-site. Three stream sediment samples; SC-1, SC-2, and SC-3, were collected from the same locations as the surface water samples (see Figure 3-3). These samples were collected along with two drainage ditch sediment samples, DDS-1 and DDS-2, in order to determine if the site drainage sediments have been impacted by the overland transport of contaminants via surface runoff from the nearby parking lot, transport within the stream, transport from ditch to stream, migration of contaminants from ground water to stream sediments, and to evaluate the potential migration pathway to fish and wildlife. The five sediment samples were analyzed for TCL VOCs and TAL metals. Sediment sample collection followed all outlined procedures in the QAPP.



Because surface drainage flows west-northwest towards the ditch and the stream, sediment samples SC-1 and DDS-2 are considered the upgradient samples for the sediment investigation.

### 3.3 Geological Investigation

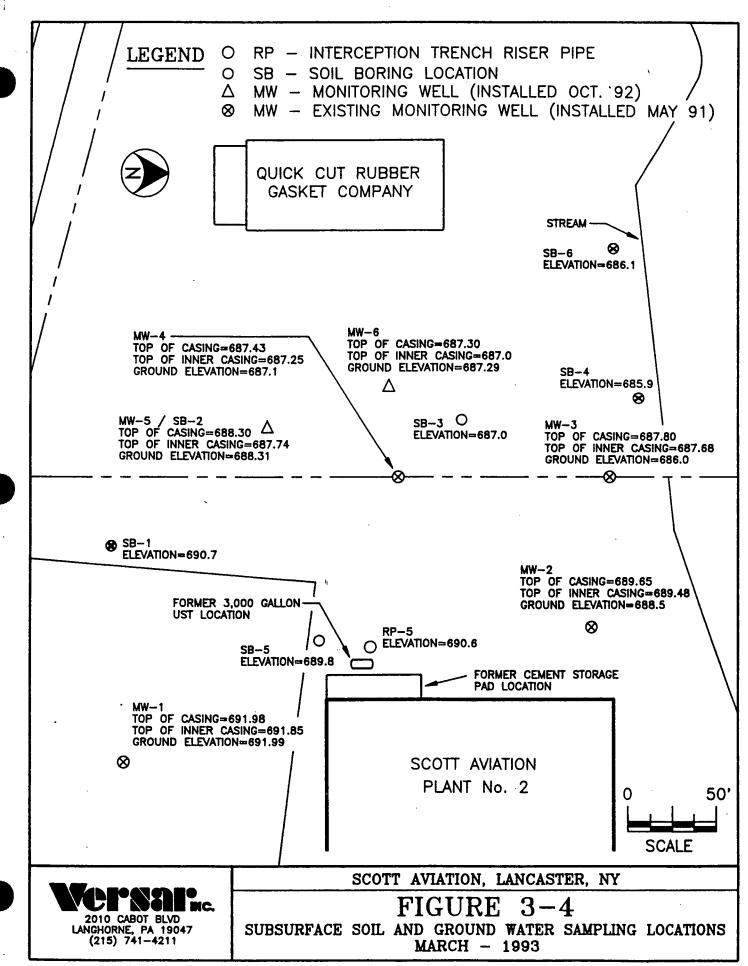
The site geological investigation consisted of the sampling of subsurface soils located northwest, west, and southwest of the former waste storage area, in order to determine the vertical and horizontal extent of soil contamination at the site. Seven borings, SB-1 through SB-6 and MW-6, were installed under the direction of a Versar geologist. These locations are depicted on Figure 3-4. Excluding the background soil boring SB-1, final boring locations were based on the results of the soil gas survey.

Borings SB-1 through SB-6 and MW-6 were drilled to depths ranging from 18 to 26 feet bgs. Soil boring SB-2 was chosen along with boring MW-6 to be converted into ground water monitoring wells SB-2/MW-5 and MW-6. This decision was agreed upon by both the Versar geologist and NYSDEC representative on-site.

Soil samples from the borings were collected with standard split-spoon samplers at continuous 2-foot intervals from the ground surface to the completion of each boring. The sampling method employed (split-spoon barrel sampling) utilizes a 2-foot long, 2.5-inch outer diameter split-spoon sampler driven into the soil with a 140-pound hammer from a 30-inch drop height. Organic vapors within the borehole, split spoons, and breathing zone were monitored with a photoionization detector (Hnu) at each boring location.

Upon retrieval, each spoon was monitored for volatile organic compounds with the Hnu, both before and after it was opened. All Hnu readings and any visible signs of staining were documented on the lithologic boring logs. The amount of sample recovery (in inches, or percent spoon) and the blow counts required to drive the spoon according to standard penetration tests were also recorded at 6, 12, 18, and 24 inches of advance. Soil samples were described according to the Unified Soil Classification System and the Munsell color chart. Copies of the soil boring logs are presented in Appendix A.

Borings not selected for monitoring well installation (SB-1, SB-3, SB-4, SB-5, and SB-6) were sealed with bentonite grout immediately upon completion.



Each abandoned borehole was inspected at 24-hour periods following initial sealing and, if necessary, additional grout was added to each hole. Borehole abandonment followed procedures outlined in the QAPP and approved site sampling plan.

Sampling and drill cuttings were containerized in 55-gallon drums, sealed, and stored on-site at a centralized location. Each drum was labeled as to the contents and boring location, and the date the contents were generated. Under the terms of the Order on Consent, Scott Aviation, at its sole discretion, has chosen the option of maintaining drummed investigation derived wastes on-site, in accordance with federal and NYSDEC regulations, pending the determination of any need for the development of a site remediation plan.

Equipment decontamination activities were completed on-site following all procedures outlined in the site sampling plan. Steam-cleaner water was also captured and containerized in 55-gallon DOT drums to be disposed of at a later date.

A total of ten soil samples were collected for laboratory analysis from the seven borings. Four samples were collected from SB-5, and one each from the remaining boreholes. Boreholes were continuously split-spoon sampled from the surface to the top of the interstratified aquifer, and samples for laboratory analysis were generally collected from the soil-water interface in each boring. Borehole SB-5 was completed between the former waste storage pad and the interception trench. Four soil samples were collected from this boring as follows: one at the surface; one between the surface and the top of the uppermost confined aquifer exhibiting the highest head space reading; one from the soil-water interface; and one between the top of the uppermost confined aquifer and the bedrock exhibiting the highest head space reading. The sample from boring SB-5 with the highest headspace reading (14-16 feet bgs) was analyzed for full TCL parameters to form a baseline for comparison. Samples were collected in this manner in order to determine variations in contaminant concentrations with depth.

# 3.4 Surface Soil Investigation

The surficial lowlands north of the former waste storage area have been targeted as a potential area of concern because they are topographically downgradient of the former waste storage area and because stained soils have previously been identified in this section of the property. A total of six

surface soil samples were collected by Versar personnel under the observation of a NYSDEC representative on October 26, 1992. For background purposes, five samples were collected from the lowlands area and one, SS-6, was collected adjacent to the front of Scott Aviation's Building No. 1 (see Figure 3-3). These samples were collected to investigate the potential for the migration of contaminants from the former waste storage area into the lowland area via overland flow. Of the five surface soil samples collected from the lowlands area, two were located north of the culverted stream segment to evaluate the potential fish and wildlife migration pathway. Because the stream is culverted along the length of the Scott Aviation property, the migration of contaminants from the waste storage area north of the stream is deemed unlikely. The soil samples were collected from 2-6 inches bgs using stainless steel hand augers or scoops, and were submitted for laboratory analysis of TCL VOCs and TAL metals.

## 3.5 Hydrogeological Investigation

The installation of additional monitoring wells was completed to supplement ground water data acquired during the Preliminary Hydrogeologic Assessment at Scott Aviation. Potentiometric, hydraulic conductivity, and water quality data from a total of six monitoring wells provided the framework for characterization of ground water flow and contaminant transport.

# 3.5.1 Monitoring Well Installation

Previous analytical results from samples collected from MW-4 have confirmed that ground water west of Building No. 2 has been impacted by activities related to the former underground storage tank.

To investigate ground water conditions west and southwest of MW-4, two additional ground water monitoring wells were installed within the uppermost confined aquifer. Monitoring well MW-5 was installed southwest of existing well MW-4 to examine the potential for the migration of contaminants southwest of the former waste storage area. Monitoring well MW-6 was installed to examine the potential for the migration of contaminants hydrologically downgradient of MW-4.

Analytical results from the May 1991 sampling of monitoring well MW-3 revealed the absence of VOCs in the ground water northwest of the former waste storage area. Therefore, no additional ground water monitoring wells were installed northwest of MW-4.

Monitoring wells MW-5 and MW-6 were constructed with 2-inch diameter, Schedule 40 PVC screen with slot size of .010 inches. Schedule 40 PVC riser pipe extends from the top of the screened interval to the ground surface. For additional well construction details, see Appendix A.

Newly installed wells MW-5 and MW-6 and existing wells MW-1 through MW-4 were developed with bailers, in accordance with the procedures specified in the SAP. Details of well development including; quantities of water removed, Ph, conductivity, and temperature measurements recorded during the development, and comments are provided in Appendix B.

Water levels measurements in wells MW-1 through MW-6 were obtained using an electronic static water level indicator. Data from November 16, 1992 and August, 1993 are summarized below.

TABLE 3-1												
Well	Well Depth			Elevation Water Table Nov. 1992	Elevation Water Table Aug. 1993	Elevation BOS						
MW-1	27.1 ft	6.54 ft	691.85	685.31	682.91	664.75*						
MW-2	17.3 ft	3.63 ft	689.48	685.85	683.52	672.18						
MW-3	27.7 ft	3.50 ft	687.68	684.18	680.70	659.98*						
MW-4	25.9 ft	2.77 ft	687.25	684.48	681.12	661.35*						
MW-5	23.1 ft	3.31 ft	687.74	684.43		664.65*						
MW-6	25.0 ft	3.35 ft	687.00	683.65	680.86	658.65*						

TOC - Top of inner well casing

BOS - Bottom of screen/well

#### 3.5.2 Monitoring Well and Interception Trench Sampling

Ground water samples previously analyzed from monitoring well MW-4 revealed significant concentrations of VOCs within the interstratified aquifer. VOCs that were detected above minimum detection levels included: vinyl chloride; 1,1-dichloroethane; 1,2-dichloroethane (total); and trichloroethene (TCE). No semi-volatile organic compounds, pesticides, PCBs, or TPHCs were detected in this well.

Two rounds of ground water samples were collected from each of the four original monitoring wells and the two newly installed monitoring wells, for a total of 12 samples. Ground water monitoring wells were sampled according to procedures outlined in the NYSDEC-approved QAPP attached to the workplan. All

Based on information obtained from split spoon sampling, these wells were installed on top
of the bedrock surface.

ground water samples were analyzed for TCL VOCs, TAL metals (total and dissolved), Ph, conductivity, and temperature.

Ground water samples were collected on October 30, 1992 and November 17, 1992. Prior to sampling, the monitoring wells were purged of three equivalent well volumes, or one well volume if bailed dry, to ensure that the samples were representative of the formation water within the aquifer. As measured with an Hnu, no organic vapors were detected within the interior of the well casing prior to purging.

To evaluate the interception trench as a deterrent to the westward migration of contaminants, the trench was sampled at vertical pipe RP-5 (see Figure 3-4) in conjunction with the monitoring well sampling program, in accordance with procedures outlined in the NYSDEC-approved QAPP. The contents of the trench were not purged prior to sampling. The interception trench samples were also analyzed for TCL VOCs, TAL metals (total and dissolved), Ph, conductivity, and temperature.

Analytical data derived from each round of field sampling activities is discussed and interpreted in section 5.0 of this report.

#### 3.5.3 Hydraulic Testing

Aquifer testing was conducted in each of the six monitoring wells at the Scott Aviation site to evaluate aquifer hydraulic conductivity trends and the relationship to ground water contaminant transport. Slug tests were performed from November 18 to November 20, 1992, following the second round of ground water sampling.

Testing was performed using a 5-foot long PVC slug with a 2-inch diameter. After introduction of the slug into each well, water level measurements were determined through the use of a pressure transducer and time-drawdown data were electronically recorded via a "hermit" (data logger). Time-drawdown data were acquired from slug-in and slug-out tests and downloaded from the hermit to a computer diskette for later formatting and modeling.

Time-drawdown data were formatted as an ASCII file for entry into the AQTESOLV modeling code. This aquifer test evaluation software program provides a rapid plot of time-drawdown data and allows convenient curve matching to a family of type curves stored in the program for unconfined and confined aquifer settings. The Cooper-Bredehoft method for confined aquifers was selected for

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curve matching and data interpretation, based on characterization of aquifer information acquired during drilling and well installation.

Time-drawdown data and the selected type curve matches for the slug-in and slug-out tests for each well are presented in Appendix C. Individual monitoring well hydraulic conductivities and aquifer hydraulic conductivity trends are reported and discussed in Section 4.0.

#### 3.6 Residential Investigation

Residences in the immediate vicinity of Scott Aviation's Building No. 2 were surveyed to identify those homes with basements and/or private water supply wells and determine whether any of these residences lay within interpreted contaminant transport pathways.

The homes situated on the south side of Erie Street and to the east of Court Street have basements. These homes are located approximately 300 to 700 feet southwest of Scott Aviation Building No. 2. The homes in the immediate vicinity of Scott Aviation (from Walter Winter Drive to Court Street along Erie Street) are on public water supply. A single home known to have had a private supply well is located on the northeast corner of the intersection of Erie Street and Walter Winter Drive. Reportedly now out of service, this well is located in an upgradient direction from Building No. 2. This residence now receives potable water through the public supply distribution system.

Investigation of the local geology reveals that a surficial clay layer about 10 feet thick is located in the area between Scott Aviation's Building No. 2 and the residences described above. The impermeable nature of this clay appears to limit the migration of VOCs originating from the former waste oil tank near Building No. 2. The lack of off-site movement of these contaminants is verified by soil gas data and analysis of subsurface soil and ground water samples collected to the west of the Scott property, near the Quick Cut Rubber and Gasket building. These data are reviewed in Sections 5.2, 5.3, and 5.4 of this report.

## 3.7 Underground Utilities Investigation

Before subsurface activities commenced, a review of underground utilities was conducted at the site and adjacent property. This survey included the marking out of sewer, water, gas, and electric lines along Erie Street by local utility companies, and the interviewing of Scott Aviation personnel to determine

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the location of utilities within the property boundaries. After the preliminary identification of underground utility lines, a site walk-over was conducted to check for drains, manholes, or other surface features that may be tied into or indicate the presence of any additional pipes or cables.

Dye and smoke tests were not deemed necessary because the utilities were not observed to traverse the area immediately west of Building No. 2, where the former waste oil tank had been located and where the bulk of the Remedial Investigation was conducted. The absence of manholes, storm water sumps, or catch basins contiguous to the study area eliminated the need for sampling of such features. Storm water in the area west of Scott Aviation Building No. 2 appears to be conveyed to a low-lying section of the property, just to the north of the culverted stream, via a drainage ditch which runs along the property line between the Scott and Quick Cut facilities. Water and sediment samples taken from this drainage ditch are discussed in Section 5.0.

Up-to-date site utility maps are not available for the Scott Aviation property. According to Scott personnel, water, sewer, and gas lines enter the east side of Building No. 2 from Walter Winter Drive. Electrical lines run from the southwest corner of Building No. 2 to Erie Street, cross the parking lot, and skirt the former tank area to the southeast. The only utility line known to exist west of Building No. 2 is a fiber optic telephone cable that runs aboveground from the building to the drainage ditch and continues underground toward the firehouse on Erie Street. With its aboveground configuration and small diameter, the fiber optic cable does not constitute a likely off-site migration pathway.

### 3.8 Habitat Based Assessment

Prior to commencing site characterization activities, a Habitat Based Assessment (HBA) was performed to evaluate potential impacts of the former Scott Aviation waste storage area on fish and wildlife. The primary focus of the HBA was to document whether fish and wildlife resources are present and if potential migration pathways to these resources are complete. The HBA consisted of the following tasks: (1) preparation of a site map, (2) a description of fish and wildlife in the vicinity of the site, (3) a qualitative description of the value of the habitat to fish and wildlife, and (4) identification of fish and wildlife regulatory criteria. The results of the site characterization will be used to determine if a migration pathway exists and what impact, if any, it is likely to

have on fish and wildlife resources. Data from the Habitat Based Assessment is discussed in Section 5.8 of this report, and the HBA document is presented in Appendix F.

# 3.9 Air Pathways Analysis

An Air Pathways Analysis (APA) was conducted, in accordance with NYSDEC guidance, to evaluate potential effects the site may have on ambient air quality. The focus of the APA was ambient exposure as a result of volatilization of VOCs found in site-related soils and surface water. The APA is presented in Section 5.9 of this report.

#### 4.0 RESULTS OF HYDROGEOLOGIC INVESTIGATION

Geologic and hydrogeologic data acquired during the drilling, installation, and sampling of six ground water monitoring wells at the Scott Aviation site provides the basis for determining aquifer geometry, hydraulic gradient, and hydraulic conductivities. Raw data used to define these parameters was generated from sample logs, water level measurements, and slug tests. Data reduction involved the preparation of cross sections, a potentiometric surface map, and hydraulic conductivity trend map. Final interpretations were evaluated for consistency with published regional geologic and hydrogeologic data for the western New York and Erie County areas.

## 4.1 Aquifer Characteristics

Aquifer geometry, hydraulic gradient, and hydraulic conductivities were quantified as a prerequisite to determining ground water flowpaths and velocities. Uppermost confined aquifer thickness was measured for estimating transmissivity and for evaluating the potential for separate phase contaminant transport pathways. A comparison of total aquifer thickness and vertical monitoring coverage afforded by 10-15 foot well screen intervals supported that assessment.

Hydraulic gradient and hydraulic conductivity data were mapped and interpreted to verify previously determined ground water flow directions, to calculate velocities, and to check for any site specific anomalies that might exert an influence on ground water flow patterns.

The nature of the uppermost confined aquifer, previously described as the interstratified aquifer, was found to have the characteristics of a confined aquifer based on the following observations:

- Soil samples collected in the upper 10 feet of overburden from site borings were classified primarily as clays (CL) with low moisture content.
- At depths below 10 feet, sand laminae showed a gradation of moisture content increasing through an apparent transition to saturated conditions.
- Water level measurements in well screens set at 10 feet or more below grade rose to within 2-4 feet of the land surface after well completion, indicating the presence of a potentiometric surface.

### 4.1.1 Aquifer Geometry

The classification of soils penetrated during drilling activities, together with observations relative to the degree of saturation in these soils, were used to characterize the thickness and areal distribution of the uppermost confined aquifer. Regional geologic reports (LaSala 1968) indicate that the Scott Aviation site is situated in an area of glaciolacustrine deposits and till overlying bedrock of the Devonian Skaneateles Formation. In Erie County, aquifers developed in these glacial deposits occur both as confined and unconfined.

Local aquifer development at the Scott site appears to be consistent with the regional hydrogeologic setting based on Unified Soil Classification System (USCS) data acquired during drilling. Approximately 25 feet of overburden is present and overlies a weathered shale formation. The upper 10 feet is represented by a dense, unsaturated clay confining unit. Where undisturbed by excavation, this clay unit may restrict the migration of gaseous phase VOCs and serve as a barrier to the infiltration of any near surface releases. A depth to the top of the former tank of 2 feet below grade, tank diameter of 5 feet, and the fact that the tank was not installed in ground water suggests that several feet of this upper clay unit remained beneath the tank following its installation.

Underlying the clay unit is an interstratified/laminated sand and clay unit averaging about 15 feet in thickness and uniformly developed at the six monitoring well locations. The latter stratigraphic unit, interpreted to be the glaciolacustrine facies described by LaSala, is depicted in the geologic cross sections shown in Figures 4.1 and 4.2.

Monitoring ground water with 10-15 foot well screens in the thin, uppermost confined aquifer (less than 16 feet in thickness) makes it unlikely that separate phase contaminant transport pathways will go undetected. In MW-5, which lies both downgradient and downdip of the former underground storage tank and the area showing the highest concentrations of VOC soil contamination, a 15-foot well screen providing 90-100% monitoring coverage of the aquifer revealed no volatile ground water contamination. This finding indicates that no contaminant transport pathway occurs at the aquifer/bedrock interface. (A discussion of contaminant distribution trends in ground water is presented in Section 5.0.) Use of complete vertical monitoring coverage of site wells

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MW-4 MW-2 MW-5 NE SW 687.0 688.3 (ELEVATION @ GRADE) 686.5 (ELEVATION @ GRADE) DATUM 687.0 ABOVE M.S.L. W.L. 685.85 ∴SP POTENTIOMETRIC W.L. 684.48 W.L. 684.43 SURFACE ML/ SP ML, CL TOP OF CONFINED WELL SCREEN (5-15' B.G.) T.D. 15' WELL SCREEN (10 - 25' B.G.)SP ML SP KEY TO USCS SYMBOLS BED-WELL SCREEN ROCK (16 - 26' B.G.)ML (SILT) T.D. 25' CL (CLAY) SCALE HORIZ. T.D. 26' SM (SILTY SAND) VERT. SP (POORLY GRADED SAND) SCOTT AVIATION, LANCASTER, NY ML/SP (SILT/SAND) FIGURE 4-1 LANGHORNE, PA 19047 (215) 741-4211 GEOLOGICAL CROSS SECTION

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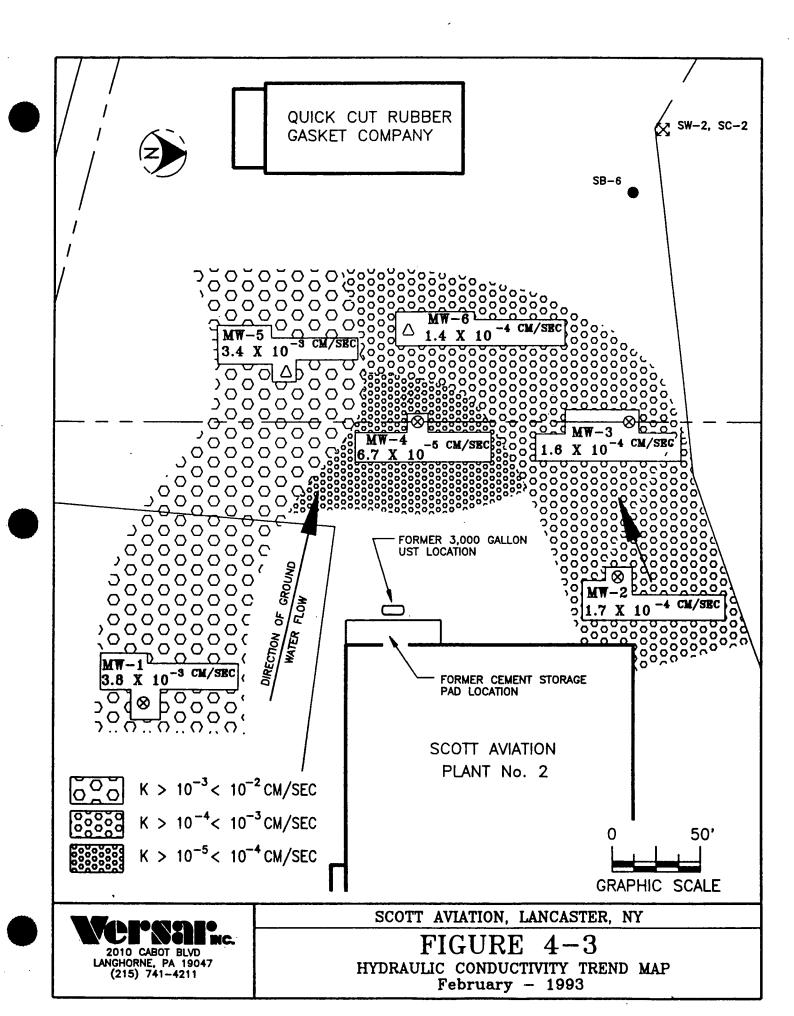
ensures that potential contaminant transport pathways along the soil/bedrock interface are adequately evaluated.

## 4.1.2 Hydraulic Conductivity

Slug tests were performed in each of the six monitoring wells to quantify aquifer hydraulic conductivities in the site vicinity. Time-drawdown data from slug-in and slug-out tests were recorded via pressure transducers and a data logger and then downloaded for computer modeling. Slug tests were plotted using the AQTESOLV modeling code and were interpreted with the Cooper-Bredehoft method for confined aquifers. AQTESOLV drawdown curves for the twelve slug tests performed are presented in Appendix C. Hydraulic conductivities were determined for each well from slug-in and slug-out data; their mean values are reported in Table 4-1 below.

TABLE 4-1 Hydraulic Conductivities in Scott Aviation Site Monitoring Wells								
Monitoring Well I.D. Number	Mean Hydraulic Conductivity							
MW-1	3.8 x 10 <sup>-3</sup> cm/sec (10.6 ft/day)							
MW-2	1.7 x 10 <sup>-4</sup> cm/sec (0.48 ft/day)							
MW-3	1.6 x 10 <sup>-4</sup> cm/sec (0.45 ft/day)							
MW-4	$6.7 \times 10^{-5} \text{ cm/sec}$ (0.18 ft/day)							
MW-5	$3.4 \times 10^{-3} \text{ cm/sec}$ (9.5 ft/day)							
MW - 6	1.4 x 10 <sup>-4</sup> cm/sec (0.39 ft/day)							

Hydraulic conductivities at the site span a range of three orders of magnitude and are consistent with anticipated values for fine-grained sands and silts. Figure 4.3 shows a trend of hydraulic conductivities in the uppermost confined aquifer that increase in a southerly direction away from the unnamed stream transecting the site. (The only exception to this trend is the anomalously low hydraulic conductivity which occurs in the vicinity of MW-4.) However, since no direct relationship exists between the Pleistocene glaciolacustrine deposits of the uppermost confined aquifer and the Holocene stream deposits, the stream does not affect this trend.



The presence of volatile organic compounds in ground water samples from MW-4 is likely to be related to a former underground storage tank located near this portion of the site. The base of the former 3,000-gallon tank appears to have been in close proximity to the top of the uppermost confined aquifer, which occurs at an average depth of only 10 feet below grade. Over time, leakage from perforations observed during the removal of this tank through the remaining unexcavated portion of the clay confining unit caused contaminants to enter the uppermost confined aquifer.

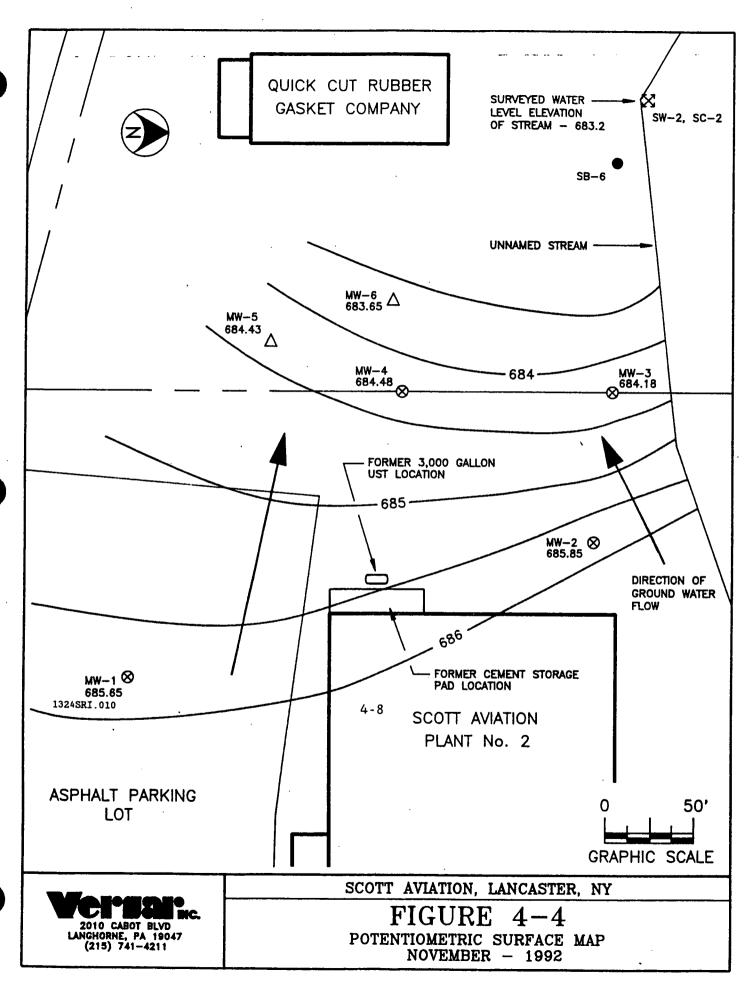
The laminated character of the uppermost confined aquifer and slug test data from MW-4 indicate the presence of low vertical and horizontal hydraulic conductivities in the area at and downgradient of the former UST. These factors have limited the migration of tank related contaminants to an area of approximately 1/3 acre, west of Building No. 2. (Contaminant distribution trends are discussed in detail in Section 5.0).

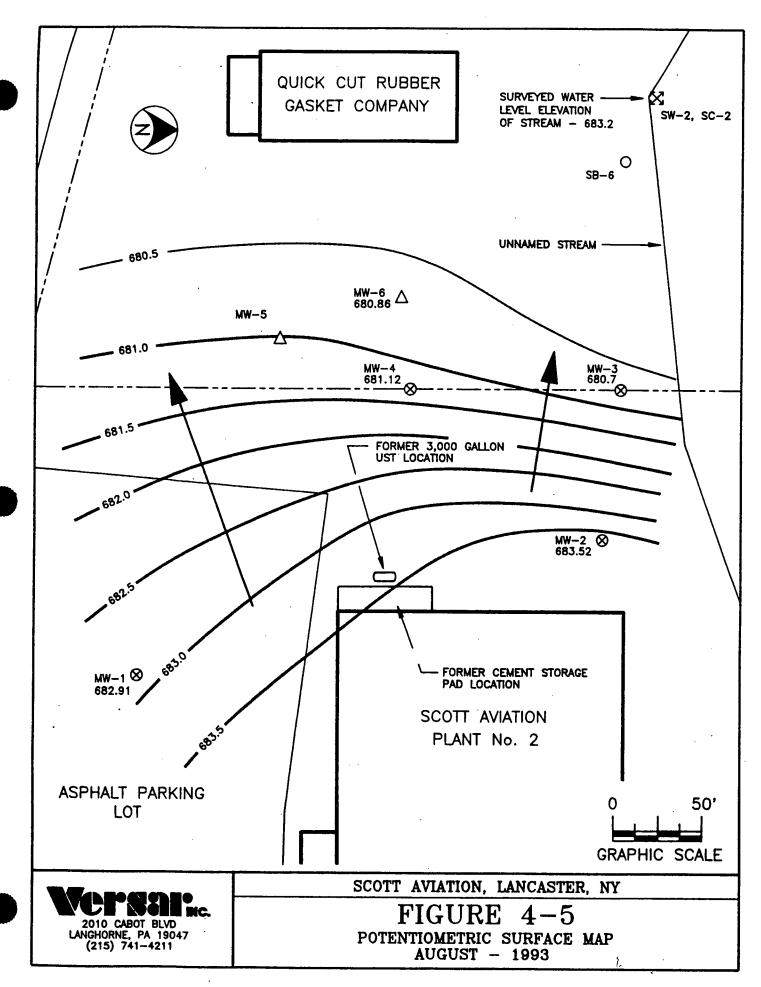
A hydraulic conductivity of only  $6.7 \times 10^{-5}$  cm/sec in the aquifer segment where MW-4 was installed will be a significant consideration during the site feasibility study and subsequent planning of remedial design or remedial action. Although the specific capacity of MW-4 has not yet been determined, the time/drawdown data indicate that it will not be able to sustain much yield during pumping, a factor that will need to be evaluated when ground water remediation requirements and design parameters are assessed. Well development data, presented in Appendix B, shows that MW-4 can be bailed dry following the removal of 13 gallons of water over a 20 minute period.

Transmissivity in the uppermost confined aquifer ranges from  $1.0 \times 10^{-3}$  cm/sec (2.7 ft<sup>2</sup>/day) at the central part of the site to  $5.7 \times 10^{-2}$  cm/sec (1.6 x  $10^2$  ft<sup>2</sup>/day) to the south. A limited volume of water flows through this thin, silty, low permeability aquifer, particularly in the central and northern portions of the study area.

### 4.1.3 Hydraulic Gradient

Potentiometric surface maps (Figures 4-4 and 4-5) were prepared from synoptic water level measurements acquired from the six site monitoring wells during mid-November 1992 and August 1993 (see Table 3-1). The potentiometric surface slopes toward the west with a slight refraction at the contact between the lower and higher permeability aquifer deposits shown in Figure 4-3.





The refraction is probably attributable to the difference in head loss in these two separate portions of the aquifer.

In the northern sector of the site, a hydraulic gradient of 0.022 was calculated in contrast to a much gentler gradient of 0.007 in the southern portion. This order of magnitude increase in hydraulic gradient is inversely proportional to the hydraulic conductivity change which occurs from north to south. As expected, head loss is greater in the lower hydraulic conductivity aquifer segment to the north. The net effect of this change in hydraulic conductivity and gradients is a slight shift in the direction of ground water. During November 1992, this shift in flow occurred from a westerly to northwesterly direction near the middle of the site. In August 1993, following a 2-3 foot decline in the potentiometric surface, this shift occurred from a westerly to southwesterly direction.

It is significant to note that the shift in ground water flowpaths at the site between Fall, 1992 and Summer, 1993 may have been affected by the change in recharge patterns over that period of time. In Fall, 1992 recharge to the aquifer was accelerated due to the conveyance of stormwater from the parking lot to the interception trench area. At this time, the volume of water being pumped from the trench for off-site disposal increased by several thousand gallons per month.

In 1993, this surface water drainage pattern was again modified, when stormwater was diverted away from the interception trench to the unnamed stream via catch basins on Walter Winter Drive. The northwesterly component of ground water flow observed in the October and November 1992 potentiometric surface maps may explain the relationship between the northern limit of the interception trench and VOC concentrations recorded in MW-3. Sections 5.5.1 and 5.5.2 discuss this former VOC transport pathway in further detail.

#### 4.2 Ground Water Flow

The preliminary phases of the Scott Aviation investigation involved the installation of four ground water monitoring wells and established the basis for siting additional wells during the subsequent Remedial Investigation. In the Preliminary Hydrogeologic Assessment, VOCs were detected in ground water samples from MW-4. Using the initial monitoring array and the installation and sampling of two additional monitoring wells, MW-5 and MW-6, the extent of VOC contamination in ground water was evaluated.

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The new wells were sited in a downgradient and downdip direction from MW-4, located at the western site boundary near the former waste oil tank area. Monitoring well MW-6 was installed due west of MW-4 at a distance of approximately 50 feet and was verified to be downgradient of the latter well. VOCs were detected at very low concentrations in MW-6 during the ground water sampling conducted in October and November 1992. Monitoring well MW-5 was installed 75 feet to the southwest of MW-4, in a downgradient and downdip direction from MW-4. It is screened from the top of the aquifer to the overburden/bedrock interface. Ground water quality data obtained from this well were considered in the evaluation of possible contaminant migration along the surface of the shale bedrock underlying the uppermost confined aquifer. No VOCs were detected in MW-5 during either of the two rounds of ground water sampling conducted.

#### 4.2.1 Direction and Rate of Ground Water Flow

Using the potentiometric data presented in Figure 4.4, ground water flow directions at the Scott Aviation site were determined to be predominantly westerly at the northern portion of the study area, with a slight shift from northwest to southwest between the Fall of 1992 and Summer of 1993. Based on this interpretation of flowpaths in the uppermost confined aquifer, monitoring wells installed in accordance with the Remedial Investigation work plan appear to have been properly sited to accurately assess the extent of ground water contamination.

Ground water flow velocities were evaluated using hydraulic conductivity data obtained from slug tests, hydraulic gradients calculated from potentiometric measurements, and an assumed aquifer porosity of 25%. This porosity value was selected based on the fine grained and laminated nature of the uppermost confined aquifer as described in site boring logs.

A range of ground water velocities from 0.04 feet/day to 0.29 feet/day was calculated from the above referenced data. The slower velocities occur at the north portion of the site adjacent to the unnamed stream and appear to be associated with siltier aquifer materials and correspondingly lower hydraulic conductivities in this area. Velocities of less than a tenth of a foot per day persist in the aquifer through the area of MW-4 and explain, in part, why VOCs were not detected in MW-5 and were detected at very low concentrations in MW-6, located downgradient of MW-4 and just west of the site boundary.

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Velocities in the uppermost confined aquifer increase to just over a quarter of a foot per day in the sandier aquifer deposits developed near Erie Street. The higher velocities are evident in monitoring wells MW-1 and MW-5. However, no VOC contamination has been detected in either of these wells, and the significantly higher ground water velocities in this area appear to have had little effect on contaminant transport associated with a release from the former waste oil tank.

The location of the release associated with the former UST relative to site subsurface characteristics and ground water flow patterns has apparently constrained the migration of contaminants to a relatively small area, approximately 1/3 acre in total size.

## 4.3 Aquifer and Surface Water Relationships

The uppermost confined aquifer in the study area, interpreted as confined, is not believed to be hydraulically connected with surface waters in the unnamed stream that traverses the northern part of the property. Figure 4.4 shows the potentiometric surface in the aquifer sloping to the west and a surface water elevation that appears to correlate with that surface and gradient. However, a stream elevation of 683.2 feet above mean sea level was measured both at the upstream part of the site, near Walter Winter Drive, as well as at a location downstream, near the Quick Cut Rubber and Gasket building.

These elevation data indicate that there is no change in the gradient of the stream over the same distance where there is a significant change in the hydraulic gradient of the aquifer. The aquifer, therefore, is neither being recharged by the stream nor discharging into it. It is also evident that there can be no relationship between surface water and ground water in this vicinity because the stream is piped over this entire distance. The stream and the aquifer appear to be independent of one another; the aquifer is probably recharging at some upgradient location beyond the Scott Aviation property. The only potential contribution from the Scott site to base flow in the unnamed stream is that produced by runoff, but such a contribution is probably negligible because of the length and location of the culverted section of stream.

In the past, storm water run-off entering the drainage swale near the western property boundary flowed in a northerly direction into the wetland area

shown in Figure 3-3. Run-off from this ditch did not flow into the unnamed stream which runs through a culvert at this location.

At present, the drainage ditch no longer contributes surface water to the wetland area. Formerly, storm water was conveyed to the ditch from the Building No. 2 parking lot. In 1992, during the installation of the fiber optic telephone line, the piping which conveyed water to the drainage ditch was disconnected and allowed to drain to the current interception trench area. This continued for a period of about four to six months, until the storm water was again diverted and reconfigured to flow toward Walter Winter Drive.

#### 5.0 THE NATURE AND EXTENT OF CONTAMINATION

Versar conducted a site characterization investigation and an evaluation of the horizontal and vertical extent of contamination in soil, ground water, surface water, sediment, and air. This section provides a summary of the analytical results for each medium of concern and compares the analytical results to background concentrations in order to develop a list of contaminants of potential concern on a medium-specific basis. The analytical results were validated by Versar Laboratories, Inc. The data validation report is presented in Appendix F. Our findings are used to determine contaminant fate and transport, to assess risks based on specific contaminants, and to select appropriate remedies for consideration in the Feasibility Study. The Baseline Risk Assessment Report and the Standards, Criteria, and Guidances/Remedial Action Objectives (SCGs/RAOs) Report will more fully evaluate whether the contaminants of concern warrant remedial action.

#### 5.1 Contaminant Source

The former 3,000-gallon UST and waste storage area are believed to be the sources of the contamination detected in soil and ground water collected at the Scott Aviation Building No. 2 site. Metal cuttings and 55-gallon drums of cutting oils, lubricating oils, and solvents were at one time stored on a concrete waste storage pad located at the southwest corner of Building No. 2. The UST, located adjacent to the concrete pad, was used to store waste oil and spent chlorinated solvents used in the manufacturing process. In April 1991, the tank and concrete pad were excavated. Upon removal, it was apparent that some portion of the tank contents had been released. The date of any tank release is not known, but based on site findings (e.g., vinyl chloride, which is a degradation product of TCE, was detected downgradient of the source), it is believed the release occurred many years prior to the tank removal. Contaminated soil in the area west of Building No. 2 is restricted to the immediate vicinity of the former tank as indicated by subsurface sample data. The contaminant source area has apparently only impacted soil and ground water media over an area of less than 1/3 acre (Figures 3-4, 5-1, and Tables 5-3, 5-5 and 5-6).

#### 5.2 Soil Gas Investigation

The siting of off-site ground water monitoring wells and borings proposed in the approved Remedial Investigation work plan was finalized using the results of a soil gas survey to select optimum locations. The survey, conducted on October 26, 1992, covered the area west of the initial site monitoring well array consisting of wells MW-1 through MW-4. The survey limits were laid out in a east-west direction, beginning at the Scott/Quick Cut property line and extending west to the point where the unnamed, meandering stream cuts across Erie Street. Of the fifteen sampling points evaluated during the soil gas survey, nine measurements were taken off-site on the east side of the Quick Cut Building, and six measurements were made between the stream and the west side of the Quick Cut Building. Figure 3-1 indicates the final sampling grid configuration at the conclusion of soil gas sampling activities.

Soil gas probes were advanced to depths of 5-9 feet below grade in the surficial clay present in the study area. Probes were not advanced to ten feet or more below grade because this marks the top of the uppermost confined aquifer at the site. Soil gas samples were analyzed for vinyl chloride, 1,1 DCE, 1,1 DCA, total 1,2 DCE, 1,2 DCA and TCE via a truck-mounted gas chromatograph. Detailed sampling protocols and quality control requirements are described in the Shallow Soil Gas Investigation Report presented in Appendix D.

The soil gas survey was commenced near monitoring well MW-4 at the Scott/Quick Cut site boundary, an area of known VOC ground water contamination. Sample location No. 1 (SG-1), obtained at a depth of 8.5 feet below grade, detected toluene, TCE, total 1,2 DCA, and vinyl chloride at concentrations of 2 ppb, 0.3 ppb, 0.7 ppb and 0.4 ppb, respectively. SG-11, a second soil gas sample acquired at a sampling station approximately 75 feet south of SG-1, detected toluene at a concentration of 2 ppb.

Although real time data allowed the survey grid to be modified as needed, no additional soil gas was detected at the remaining sampling stations. Therefore, the siting of monitoring wells MW-5 and MW-6 was not significantly altered from the original work plan specifications. MW-5 was, however, moved slightly east to avoid exposing the wellhead to the constant truck traffic at the entrance to the Quick Cut Building. Soil gas data appear to confirm that

the low permeability of the surficial clay at the site limits the migration of gaseous phase contaminants in the unsaturated zone.

The lack of detectable soil gas concentrations west of the Scott Aviation property line, together with the limited area of contaminated soil near Building No. 2, and low hydraulic conductivities in the unsaturated and vadose zones preclude the likelihood of VOC migration to basements in nearby residences.

#### 5.3 Surface Soils

The surface soil investigation was conducted to determine the horizontal extent of surficial soil contamination. Analytical results for surface soil sampling are presented in Table 5-1 (VOCs) and Table 5-2 (Inorganics).

### 5.3.1 Volatile Organic Compounds in Surface Soil

Methylene chloride was detected in three of the five surface soil samples, including the background sample, at concentrations ranging from 5 to 6 ppb. However, methylene chloride was also detected in associated laboratory blanks and field blanks, indicating that its presence in surface soil at the site is suspect.

Acetone was detected in surface soil samples SS-1 (30 ppb), SS-4 (61 ppb), SS-5 (24 ppb), and SS-5D, the duplicate sample for SS-5 (250 ppb). However, acetone, a common laboratory contaminant, was also detected in associated laboratory blanks and field blanks, indicating that its presence in surface soil at the site is suspect. Neither methylene chloride, nor acetone was utilized in any of the machine shop operations conducted at Building No. 2.

#### 5.3.2 Inorganic Compounds in Surface Soil

The concentrations of inorganic compounds detected in surface soil samples SS-1 through SS-5 are compared with those detected in background sample SS-6. Inorganic concentrations in samples SS-1 through SS-5 were generally higher than in SS-6, ranging from 1.1 times as high (antimony) to 4.5 times as high (calcium). On the average, metal concentrations in samples SS-1 through SS-5 were twice as high as in SS-6. (Table 5-2).

It is believed that the trend towards higher metal concentrations in site surface soil samples is an apparent reflection of the limited basis upon which background ranges were established (i.e. a single sample). Additional

# TABLE 5-1

# **VOCs in Surface Soils** (Results in ppb)

Compound <sup>1</sup>	SS-1	SS-2	SS-3	SS-4	SS-5	SS-5D	SS-6 <sup>2</sup>
Methylene Chloride	U	5JB	5JB	U	ט	υ	6JB
Acetone	30B	U	U	61B	24B	250B	U

- Includes all compounds detected in at least one sample Indicates background sample Indicates an estimated value 1.
- 2.
- J
- Compound detected in blank В

TABLE 5-2 Inorganic Compounds in Surface Soils (Results in ppm)

Compound	<b>SS-1</b>	SS-2	SS-3	SS-4	SS-5	SS-5D (Dup)	SS-6 <sup>1</sup>
Aluminum	19800	19700	14700	15600	16200	16200	7150
Antimony	U	U	U	U	U	U	U
Arsenic	3.4	5.2	4.8	4.4	4.2	4.2	3.0
Barium	114	116	104	102	96.7	96.7	51.3
Beryllium	1.3B	1.4	1.0B	1.2B	1.1B	1.1B	0.66B
Cadmium	2.3	1.7	2.8	2.4	1.4B	1.4B	U
Calcium	3470	4030	14700	35000	29500	29500	7670
Chromium	25.8	25.5	21.6	23.2	19.7	19.7	19.1
Cobalt	20.3	37.6	13.2B	12.8B	11.9B	11.9B	5.6B
Copper	28.8	85.1	69.3	50.9	42.4	42.4	34.2
Iron	29100	34400	27000	28500	26500	26500	15600
Lead	35,2	27	46.9	41.5	23.7	23.7	21.4
Magnesium	5620	5730	9620	14900	13500	13500	3690
Manganese	849	1180	516	430	425	425	288
Mercury	U	U	U	U	U	U	U
Nickel	29.1	34	29.7	29.4	27.9	27.9	15.0
Potassium	1850	1270B	1030B	1920	1830	1830	514B
Selenium	U	U	υ	U	U	U	U
Silver	U	2.7B	2.3B	2.3B	U	U	U
Sodium	240B	370B	460B	368	333B	333B	291B
Thallium	U	U	υ	U	U	U	U
Vanadium	37	41.3	32.5	36.8	33.9	33.9	17.7
Zinc	102	112	205	123	99.5	99.5	141

1324TAB1.RI

Indicates background sample
 Reading was less than the Contract Required Detection Limit but greater than or equal to the Instrument Detection Limit

U Not detected

background samples may have demonstrated a broader range of metal concentrations as might typically be anticipated in the native near-surface silty and clayey soils of this area. EPA guidances (HRS,CFR Vol. 55. No. 241) for establishing a basis for the identification of soils impacted by site related activities call for the use of concentrations exceeding three times background. Only these values are considered significant in the following data comparisons.

Calcium (SS-4 and SS-5), magnesium (SS-4, and SS-5), manganese (SS-2), and potassium (SS-1, SS-4, and SS-5) were detected in at least one of the surface soil samples at a concentration in excess of three times background levels. Each of these compounds can be eliminated from further consideration because they are essential human nutrients and are not toxic to humans unless ingested at extremely high concentrations. Many natural soils and minerals contain these elements in the percent range found at this site.

#### 5.4 Subsurface Soils

The subsurface soil investigation was conducted to determine the vertical and horizontal extent of soil contamination. Analytical results for subsurface soils are presented in Table 5-3 (VOCs) and Table 5-4 (Inorganics).

#### 5.4.1 Volatile Organic Compounds in Subsurface Soils

The following is a summary of the volatile organic compounds detected in soil samples collected from test borings completed at the Scott Aviation site.

- SB-1: Methylene chloride (4 ppb estimated concentration) and acetone (21 ppb) were detected in soil sample SB-1. However, these compounds were also detected in the associated field and laboratory blanks, indicating probable laboratory contamination.
- SB-2: Methylene chloride (5 ppb estimated concentration) and acetone (17 ppb) were detected in soil sample SB-2. However, these compounds were also detected in the associated field and laboratory blanks, indicating probable laboratory contamination.
- SB-3: Acetone (13 ppb) was detected in soil sample SB-3. Acetone was also found in the associated field and laboratory blanks, indicating probable laboratory contamination.
- SB-4: Acetone (46 ppb) and trichloroethene (3 ppb estimated concentration) were detected in soil sample SB-4. Acetone was also found in the

TABLE 5-3

# **VOCs in Subsurface Soils** (Results in ppb)

Compound <sup>1</sup>	SB-1 20- 22'	SB-2 18- 20'	SB-3 18- 20'	SB-4 20- 22'	SB-5A 0-2'	SB-58 <sup>2</sup> 10-12'	SB-5C 14-16'	SB-5D 16-18'	SB-6 16- 18'	MW-6 18- 20'
Methylene Chloride	4JB	5JB	U	U	U	10J	860JB	3200JB	5J	5JB
Acetone	21B	17B	13B	46	170	46	3900B	4000JB	ט	U
1,1-DCA	U	U	U	υ	27J	U	3500	6700	U	U
1,2-DCE (total)	U	U	U	U	390	U	1500J	5100J	U	U
1,1,1-TCA	U	Ú	U	U	U	U	20000	2900J	J	U
TCE	U	U	U	3.J	υ	U	200000D	120000	٥	U
Toluene	U	U	U	U	48J	U	12000	5000J	U	U
Ethylbenzene	U	U	U	U	U	U	940J	U	J	U
Xylene	U	U	U	ť	U	U	4300	U	U	U
2-Butanone	U	U	U	U	υ	9J	U	U	U	U

- Includes all compounds detected in at least one sample See Data Validation comment 3 Chain-of-Custody (Appendix) 2.
  - Indicates an estimated value
- В Compound detected in blank
  - Undetected
- Diluted sample

TABLE 5-4
Inorganic Compounds in Subsurface Soils
(Results in ppm)

Compound	SB-1 20-22'	SB-2 18-20'	SB-3 18-20'	SB-4 20-22'	SB-5A 0-2'	SB-5B <sup>1</sup> 10-12'	SB-5C 14-16'	SB-5D 16-18'	SB-6 16-18'	MW-6 18-20'	Typical Metal Concentrations <sup>2</sup>
Aluminum	12400	14300	6500	2300	24400	20900	13300	13000	2420	2780	33000
Antimony	U	U	U	U	U	U	U	U	U	U	<1 <sup>3</sup>
Arsenic	4.2	3.3	3.8	U	6.4	2.7	2.6	6.0	1.5B	2.2B	3-12
Barium	91	97.7	45.8	15.4B	181	124	89.7	118	16.2B	24.7B	15-600
Beryllium	.84B	1.0B	.50B	U	1.4	1.3	.76B	0.89B	0.32B	U	0-1.75
Cadmium	1.2B	1.5	U	U	1.8	υ	1.4	U	U	U	0.1-1
Calcium	7170	78200	67500	160000	4770	3250	70300	61300	95400	120000	130-35000
Chromium	16.8	19.5	9.6	6.6	28.1	22.3	20.6	21.7	5.3	5.7	1.5-40
Cobalt	9.3	9.3B	6.4B	4.2B	11.5	8.1B	9.4B	11.8B	3.4B	2.7B	2.5-60
Copper	44.1	20.4	16.9	16.7	23.4	26.8	31.7	31.8	20.1	14.5	1-50
lron	21800	21800	13100	7790	31000	23400	20900	23400	7400	7210	2000-550,000
Lead	15.4	15.3	9.1	6.9	53.1	31.8	14.2	15.8	5.0	4.9	4-61
Magnesium	29800	34200	22900	18900	8730	4650	28300	25900	23300	36000	100-5000
Manganese	394	399	258	140	183	214	445	494	136	168	50-5000
Mercury	U	U	U	U	U	U	U	U	U	U	0.001-0.2
Nickel	19.4	19.9	12.9	16.9	31.3	19.8	23.4	25.8	13.0	10.1	0.5-25
Potassium	2260	2640	1260	429	2050	1200	2770	2320	387	510B	8500-43000
Selenium	U	U	U ·	U	U	U	U	U	U	U	0.1-3.9
Silver	U	U	U	1.5	U	2.8	U	U	U	U	-
Sodium	504B	462B	334B	240	322B	310B	347B	374B	306B	408B	6000-8000
Thallium	U	U	U	U	U	U	U	U	U	U	-
Vanadium	28.7	31.9	18.0	12.9	42.3	34.0	28.9	27.2	12.1	11.5	1-300
Zinc	74.0	72.5	55.2	47.4	97.3	95.1	71.7	75.5	29.7	64.2	9-50

<sup>1.</sup> See Data Validation comment 3 Chain-of-Custody (Appendix E).

<sup>2.</sup> Based on NYSDEC TAGM: "Determination of Soil Cleanup Objectives and Cleanup Levels," November 1992.

<sup>3.</sup> Based on "Element Concentrations in Soil and Other Surficial Materials of the Conterminous United States," 1984.

B Reading was less that the Contract Required Detection Limit but greater than or equal to the Instrument Detection Limit

Not detected

5-8 (T5-4) associated field and laboratory blanks, indicating that its presence in soil sample SB-4 is suspect. Test boring SB-4 is located hydraulically downgradient from the source area. The soil sample from SB-4 was collected at the soil/ground water interface.

SB-5: Test boring SB-5 was installed to provide information regarding contaminant migration in the vertical direction in the vicinity of the former UST/waste storage area. Soil samples were collected from the following depths: 0-2 feet (SB-5A); 10-12 feet (SB-5B); 14-16 feet (SB-5C); and 16-18 feet (SB-5D). Based on total VOC concentrations detected in the four soil samples collected from test boring SB-5, soil contamination appears to increase with depth (Table 5-3). Because acetone and methylene chloride were detected in associated field blanks and laboratory blanks, their presence was precluded from consideration in the following analysis.

Soil Sample	Depth	Total VOCs
SB-5A	0-2 feet	465 ppb
SB-5B	10-12 feet	9 ppb
SB-5C	14-16 feet	242,240 ppb
SB-5D	16-18 feet	139,700 ppb

SB-6: Methylene chloride (5 ppb) was detected in soil sample SB-6. Since this compound was also detected in the blanks, its presence is suspect.

MW-6: Methylene chloride (5 ppb estimated concentration) was detected in soil sample MW-6. However, this compound was also detected in the associated field and laboratory blank, indicating probable laboratory contamination.

The results of the subsurface soil sampling indicate that there are elevated concentrations of certain VOCs in the source area (Table 5-3). Some residual soil contamination was also detected downgradient of the source area, indicating that the contamination may be migrating through the uppermost confined aquifer, but not to any appreciable extent. In summary, the VOC contamination extends only a short distance from the source to MW-4, from the

surface to a depth of approximately 18 feet. Remediation of additional soil volumes in the immediate vicinity of the former underground storage tank should be carefully explored in the Feasibility Study as a potential way to provide both a substantial reduction in subsurface soil VOC concentrations, as well as an immediate and continuing improvement in ground water quality downgradient of the source area.

#### 5.4.2 Pesticides and PCBs in Subsurface Soil

Two soil samples (SB-5B and SB-5C) collected from test boring SB-5, installed in the center of the former waste storage area, were analyzed for pesticides and PCBs. No pesticides or PCBs were detected.

### 5.4.3 Semivolatile Compounds in Subsurface Soil

Two soil samples collected from test boring SB-5 (SB-5B and SB-5C) were analyzed for base neutral/acid extractable compounds (BNAs). No BNAs were detected in these samples.

# 5.4.4 Inorganic Compounds in Subsurface Soil

The concentrations of inorganic compounds found in subsurface soils were compared to typical metals concentrations in the eastern United States (NYSDEC 1992). Only those compounds detected at a concentration three times background levels were considered significant. Based on this comparison, magnesium and calcium were the only metals exceeding regional background levels. These compounds are essential human nutrients and many natural soil and minerals contain these elements in the percent range found at this site.

### 5.5 Ground Water

To investigate the horizontal extent of ground water contamination west of Building No. 2, two additional ground water monitoring wells were installed: monitoring well MW-5, located southwest of the former waste storage area, and monitoring well MW-6, located west of existing well MW-4 (see Figure 3-4 for all well locations.) Two rounds of ground water samples were collected from the six wells (four existing and two recently installed) and the interception trench and analyzed for TCL VOCs and TAL metals (total and dissolved). Analytical results are presented in Tables 5-5 through 5-8.

# TABLE 5-5

# **VOCs in Groundwater** (Results in ppb)

# Round I October 30, 1992

		,	Мо	nitoring We	olls		
Compound <sup>1</sup>	MW-1 <sup>2</sup>	MW-2	MW-3	MW-4	MW-5	MW-6	IT <sup>3</sup>
Chloroethane	U	U	28	U	U	U	6100
Methylene Chloride	4JB	4JB	3JB	270J	6JB	6JB	2400J
Acetone	19	21	16B	U	٦	U	3400J
1,1-DCA	U	U	U	250J	J	U	37000
1,2-DCE (total)	U	U	U	5900	J	47	32000
1,1,1-TCA	U	U	U	U	Ü	U	56000
TCE	U	U	U	1500	U	U	U
Toluene	U	U	U	υ	·	U	U
Vinyl chloride	U	U	U	U	U	U	υ

- Includes all compounds detected in at least one sample.
   Indicates background location.
- 3. Detection limits for interception trench (IT) samples differ from those for monitoring well (MW) samples.
- U Not detected
- J Indicates an estimated value
- B Compound detected in blank

# TABLE 5-6

# VOCs in Groundwater (Results in ppb)

# Round II November 17, 1992

				Monitori	ng Wells			
Compound <sup>1</sup>	MW-1 <sup>2</sup>	MW-2	MW-3	MW-4	MW-4A DUP.	MW-5	MW-6	IT <sup>3</sup>
Chloroethane	U	U	28	U	U	U	U	3900
Methylene Chloride	3JB	3JB	4JB	180JB	220JB	5JB	5JB	1600JB
Acetone	15	16	15	U	U	υ	7J	U
1,1-DCA	U	U	3J	270	340	υ	U	29000
1,2-DCE (total)	U	U	υ	5100	6100	U	U	21000
1,1,1-TCA	U	U	U	U	U	U	U	40000
TCE	U	U	U	2800	3400	U	υ	U
Toluene	U	U	U	U	U	U	U	1000J
Vinyl chloride	U	U	25	240J	280J	U	υ	U

# VOCs in Groundwater (Results in ppb)

# August 31, 1993

Compound <sup>1</sup>	MW-3	MW-4	MW-6	MW-6 (DUP)
Chloroethane	87	300J	U	U
Methylene Chloride	U	U .	U	U
Acetone	U	U	U	U
1,1-DCA	υ	U	U	U
1,2-DCE (total)	U	9400	, U	U
1,1,1-TCA	U	170J	U	U
TCE	U	6900	U	U
Toluene	U	U	υ	Ų
Vinyl Chloride	26	300J	U	U

- 1. Includes all compounds detected in at least one sample.
- 2. Indicates background location.
- 3. Detection limits for interception trench (IT) samples differ from those for monitoring well (MW) samples.
- U Not detected
- J Indicates an estimated value
- B Compound detected in blank

TABLE 5-7

# Inorganic Compounds in Groundwater Samples - Fittered and Unfiltered (Results in ppb)

Round I - October 30, 1992

	Hound 1 - October 30, 1992													
Compound	IT-U	IT-F	MW-1U1	MW-1F <sup>1</sup>	MW-2U	MW-2F	MW-3U	MW-3F	MW-4U	MW-4F	MW-5U	MW-5F	MW-6U	MW-6F
Aluminum	U	U	12700	U	2610	U	727	U	670	U	37100	U	447	U
Antimony	Ü	U	C	υ	Ü	υ	U	U	U	U	U	U	U	U
Arsenic	U	U	U	U	U	2.0B	3.9B	U	5.1B	U	U	2.1B	5.8B	U
Barium	309	286	422	220	290	337	101B	117B	219	215	715	144B	139B	169B
Beryllium	1.0B	U	Ų	1.6B	U	1.1B	1.0B	1.8B	1.0B	1.3B	3.4B	1.3B	1.6B	1.3B
Cadmium	U	U	U	U	4.8B	U	U	U	U	U	12.2	U	U	U
Calcium	261000	287000	514000	21400	152000	169000	44200	33600	51600	33200	1110000	31200	30200	25500
Chromium	U	U	20	U	U	U	U	U	U	U	109	U	U	U
Cobalt	U	U	21.5B	U	11.2B	U	U	U	U	U	51.6	U	U	U
Copper	57.8	U	161	υ	75.4	U	53.5	U	55.5	U	249	U	35.0	U
Iron	28300	3880	35200	20.7B	18400	12400	1690	77.7B	1640	35.0B	106000	23.3B	1130	184
Lead	25.9	U	U	U	U	U	U	U	U	U	U	U	U	U
Magnesium	61300	67200	152000	33900	87700	104000	43400	46500	62500	59500	299000	45700	44400	52700
Manganese	2070	2130	1210	5.6B	1380	1520	80.9	45.8	87.1	, 29.5	2950	35.7	33.7	13.5B
Mercury	U	U	U	υ	U	U	U	U	U	U	U	U	U	U
Nickel	37.1B	U	55.1	U	68.5	U	U	U	117	U	168	U	U	U
Potassium	2780B	5470	4980B	5560	1800B	2510B	1370B	1930B	2740B	4390B	5530	2630B	1490B	2330B
Selenium	Ū	U	U	U	U	U	U.	U	U	U	U	υ	U	U
Silver	U	12.6	U	U	U	U	U	8.1B	U	8.1B	U	U	U	8.0B
Sodium	51600	55700	27000	30300	43300	54100	37000	42100	35300	34600	35900	41100	30900	36900
Thallium	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Vanadium	U	U	43.1B	U	U	U	U	U	U	U	104	U	U	U
Zinc	98.9	104	292	U	232	U	71.1	U	70.8	U	473	U	73.9	U

1. Indicates background location.

B Reading was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the instrument Detection Limit (IDL)

U Not detected

# TABLE 5-8

# Inorganic Compounds in Groundwater Samples - Filtered and Unfiltered (Results in ppb)

Round II - November 17, 1992

							Houna II	- Mover	nber 17,	1992						
Compound	IT-U	IT-F	MW-1U <sup>1</sup>	MW-1F <sup>1</sup>	MW-2U	MW-2F	MW-3U	MW-3F	MW-4U	MW-4F	MW-4U Dup	MW-4F Dup	MW-5U	MW-5F	MW-6U	MW-6F
Aluminum	U	U	4130	U	9980	U	1230	U	3740	U	1990	U	21100	U	487	υ
Antimony	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Arsenic	8.3B	8.3B	10.6	8.2B	8.5B	6.7B	2.2B	3.6B	5.4B	U	5.0B	U	12.3	U	U	U
Barium	289	285	161B	107B	304	206	134B	152B	228	199B	207	207	392	148B	152B	157B
Beryllium	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Cadmium	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Calcium	259000	256000	60600	15100	200000	153000	48800	42600	102000	34700	81400	36500	597000	30700	31700	25300
Chromium	U	U	11.1	U	23.2	U	U	U	20.0	U	20.0	11.7	47.9	U	U	U
Cobalt	U	υ	U	U	11.8B	υ	U	U	U	U	U	U	20.5B	U	U	U
Copper	U	U	34.0	U	U	U <sub>.</sub>	U	U	U	U	U	U	40	U	37.8	U
Iron	30600	27100	7250	18.1B	34200	12700	2900	308	7050	U	3710	33.9B	44700	67.8B	940	108
Lead	11.5	3.3	8.7	U	12.1	U	2.6B	U	6.7	U	6.0	U	31.2	2.1B	8.7	U
Magnesium	59000	58300	23000	13700	96900	80200	44100	45700	74500	57400	68700	58400	170000	45200	47900	49200
Manganese	1870	1880	145	21.4	2010	1650	103	92.3	228	49.1	167	65.2	1340	31.7	30.4	18.2
Mercury	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Nickel	U	U	U	U	27.4B	U	U	U	U	U	U	U	61.0	U	U	U
Potassium	2070B	2070B	4700B	4190B	2310B	1120B	1640B	1340B	2800B	2050B	2760B	21008	3380B	1250B	1480B	1380B
Selenium	U	U	U	U	U	U	U.	U	U	U	U	U	U	U	U	U
Silver	U	7.1B	υ	U	U	· U	U	U	U	U	U	U	U	U	U	U
Sodium	48100	46700	18600	19400	42800	40600	37300	38800	33900	33900	33100	34100	32400	30800	31800	33400
Thallium	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Vanadium	U	U	U	U	20.9B	U	U	U	υ	U	U	U	58	U	U	U
Zinc	43.4	14.1B	79.6	16.4B	123	14.6B	49.4	6.5B	76.7	10.2B	50.8	9.8B	162	9.6B	43	6.8B

<sup>1.</sup> Indicates background location.

B Reading was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL).

U Not detected

# 5.5.1 Volatile Organic Compounds in Ground Water

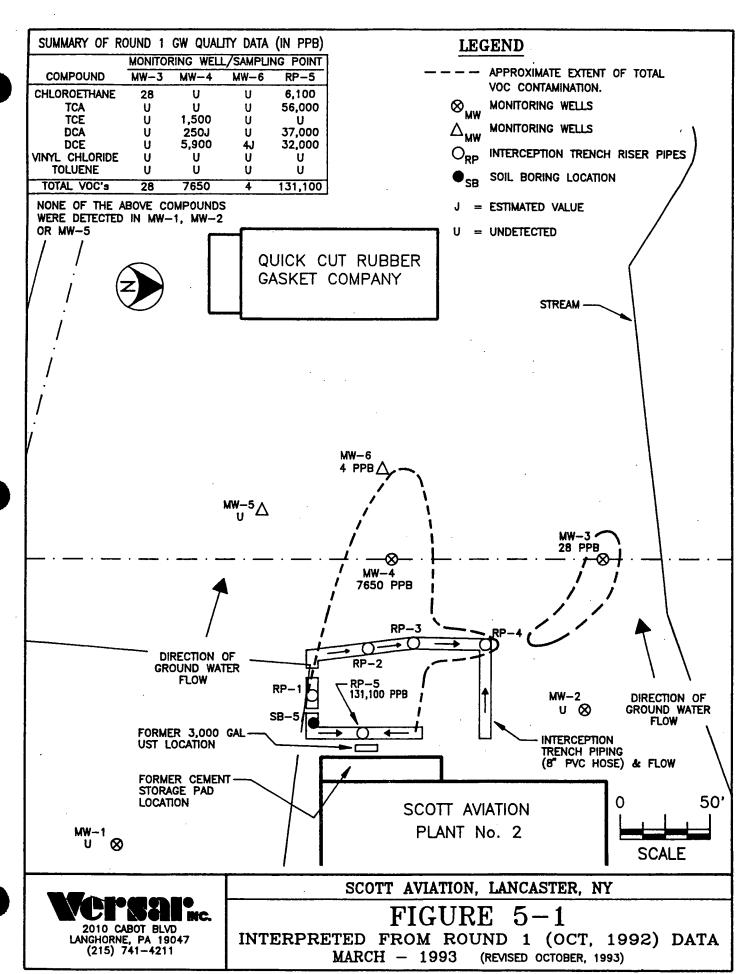
Methylene chloride was detected in each monitoring well, including the background well, and in the interception trench at estimated concentrations ranging from 3 to 2400 ppb. However, methylene chloride was also detected in the associated laboratory blank, trip blank, and field blank, indicating probable laboratory contamination.

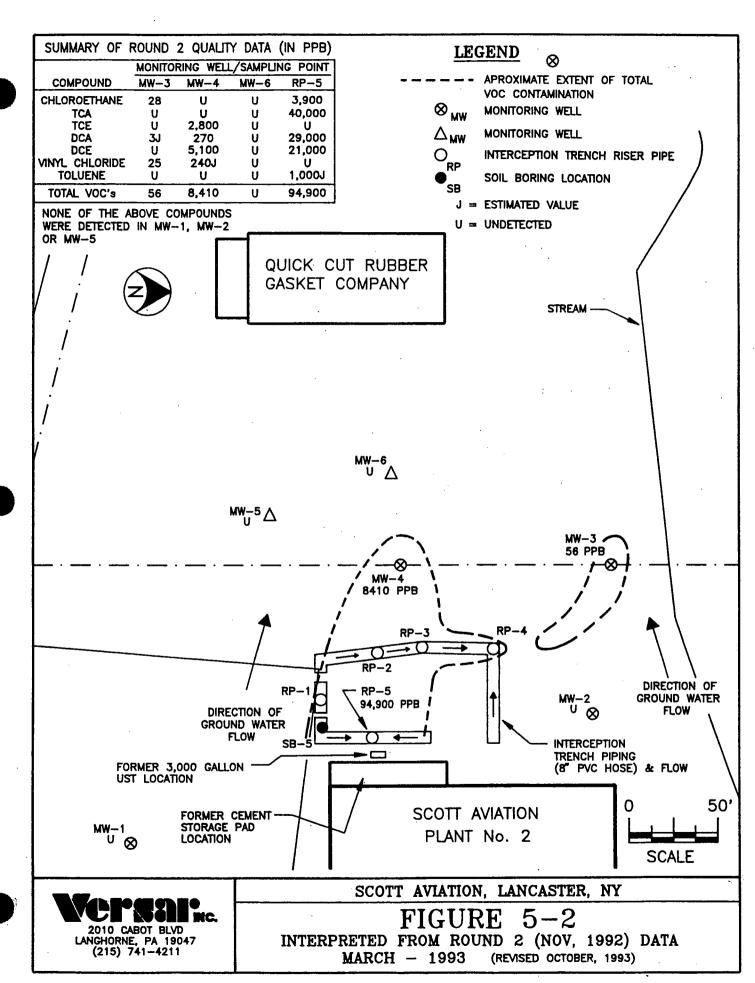
Similarly, in two rounds of sampling, acetone was detected at least once in ground water samples from MW-1 (background), MW-2, MW-3, MW-6, and the interception trench. However, because acetone was also detected in the associated laboratory blank, trip blank, and field blank, its presence as a contaminant of concern is suspect.

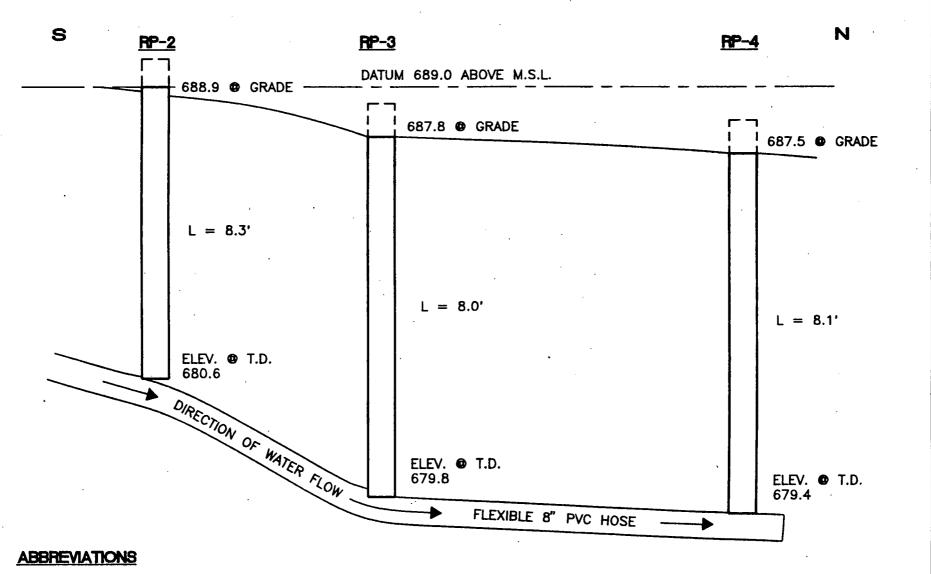
Chloroethane was detected in the Round I and Round II ground water samples collected from well MW-3 at a concentration of 28 ppb. This compound was also detected in both Round I and Round II interception trench samples at concentrations of 6100 ppb and 3900 ppb, respectively. Chloroethane was not detected in the background well. Since according to the Fall 1992 sampling, monitoring well MW-3 appeared to be located hydraulically downgradient of the interception trench, the presence of chloroethane at both locations tended to indicate that this compound could potentially be migrating in a northerly direction along the interception trench, then through the uppermost confined aquifer from the former waste storage area northwest towards well MW-3. Figure 5-4 demonstrates graphically how ground water within the interception trench flows toward RP-4.

Additional ground water sampling was conducted in August 1993 to further evaluate the west and north limits of the VOC plume. VOC concentrations shown in Table 5-6 were consistent with the results of previous Round 1 and 2 sampling; no VOCs were detected in MW-6; MW-4 continued to show the highest total VOC level, increasing by 8,190 ppb from November 1992 to August 1993; total VOC concentrations in MW-3 increased only slightly by 57 ppb.

Although MW-3 does not lie directly downgradient of the former UST and cement pad believed to be the source of the VOC release, the persistence of low levels of VOCs in ground water samples from MW-3 indicate that this is not a data outlier. However, the northwesterly component of ground water flow observed to occur during the Fall of 1992 appears to have been caused by the temporary and inadvertent







RP - RISER PIPE

TD - TOTAL DEPTH

# SCALE

HORIZ. 1'' = 10'

VERT. 1" = 2'

# VCF SQL MC.

2010 CABOT BLVD LANGHORNE, PA 19047 (215) 741-4211

# SCOTT AVIATION, LANCASTER, NY

# FIGURE 5-4

CONFIGURATION OF FLEXIBLE PVC PIPING ALONG THE WESTERN SEGMENT OF THE INTERCEPTION TRENCH discharge of stormwater into the interception trench, which in turn caused the migration of VOCs from the north limit of the interception trench to the vicinity of MW-3. Ground water contamination at this portion of the site has been interpreted as an isolated slug disconnected from the primary plume (Figures 5-1, 5-2 and 5-3). This previous transport pathway has been eliminated since the diversion of stormwater discharge from the interception trench at the end of the calendar year 1992.

Volatile organic compounds 1,1-DCA, total 1,2-DCE, TCE, and vinyl chloride were detected in monitoring well MW-4 during the ground water investigation conducted by Versar in June 1991. The presence of these compounds in well MW-4 was confirmed during three rounds of the RI ground water sampling events. In addition, 1,1-DCA (3 ppb estimated value) and vinyl chloride (25 ppb) were detected in well MW-3 during the Round II sampling event. With the exception of TCE and vinyl chloride, each of the compounds detected in the monitoring wells was detected at elevated levels in the interception trench. The presence of TCE in MW-4, but not in the interception trench, may be attributed to the high detection levels required to quantify the other VOCs detected in the interception trench thus masking those two compounds in the interception trench. Although vinyl chloride was not detected in the interception trench, this compound is a degradation product of TCE. Therefore, the presence of vinyl chloride in MW-3 and MW-4 indicates that TCE is being degraded to form vinyl chloride and the contaminant plume is moving slowly in a west-northwest direction. The results of the VOC sampling indicate that the majority of the ground water contamination is confined from the source area to MW-4, with some minor contamination extending to MW-6 and MW-3. The results of ground water sampling indicate that the contaminant plume has not impacted neighboring residences. Schematic diagrams of the extent of contamination are presented in Figures 5-1 (Round I) and 5-2 (Round II).

# 5.5.2 Inorganic Compounds in Ground Water

To investigate potential impacts to the uppermost confined aquifer from activities related to the storage of metal cuttings, ground water samples were analyzed for TAL metals (total and dissolved). The concentrations of inorganic compounds detected in downgradient wells will be compared to those detected in background well MW-1. Only those metals detected at a concentration three times the background level are considered significant. This criterion is applied

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based on its use by the USEPA in hazardous ranking scoring (HRS, CFR Vol. 55, No. 241).

### Round I, Unfiltered Samples:

Inorganic compounds detected in downgradient ground water samples at concentrations in excess of three times background levels include beryllium (MW-5), cadmium (MW-5 and interception trench), calcium (MW-5), chromium (MW-5), iron (MW-5), lead (interception trench), and nickel (MW-5).

### Round I, Filtered Samples:

Inorganic compounds detected in excess of three times background levels in downgradient filtered ground water samples include calcium (interception trench, MW-2), iron (interception trench, MW-2), magnesium (MW-2), and manganese (all wells and interception trench).

### Round II, Unfiltered samples:

Inorganic compounds detected at concentrations in excess of three times background levels include aluminum (MW-5), calcium (MW-2, MW-5, interception trench), chromium (MW-5), iron (MW-2, MW-5), nickel (MW-5), manganese (MW-2, MW-5, interception trench), and magnesium (MW-2, MW-4, and MW-5).

#### Round II, Filtered samples:

Inorganic compounds detected in excess of three times background levels in filtered ground water include calcium (MW-2 and interception trench), iron (MW-2, MW-3, MW-5, MW-6 and interception trench), magnesium (all wells and interception trench), and manganese (MW-2, MW-3 and interception trench).

The inorganic analysis revealed that metals concentrations in unfiltered samples were generally much higher in MW-5. However, this trend was not observed for filtered metals, indicating that ground water from this well contained high levels of suspended matter. This finding is consistent with field observations noting ground water from this well to be very silty (Appendix B).

The only dissolved metals that were consistently detected in ground water above background levels in both rounds of sampling are calcium, magnesium, manganese, and iron. Since calcium and magnesium were also detected at

relatively high concentrations during subsurface sampling, this finding is not unusual. These metals are all considered essential human nutrients and are not anticipated to be toxic to human health unless ingested at extremely high concentrations. They are also normal components of water hardness at these concentrations. Based on these findings, there does not appear to be any site-related inorganic groundwater contamination of concern.

### 5.6 Surface Water and Stream Sediment Sampling

Samples of surface water and stream sediment were collected from three locations along the unnamed stream located north of the site and analyzed for TCL VOCs and TAL metals. Filtered and unfiltered surface water samples were also analyzed for dissolved oxygen. The data are presented in Tables 5-9 through 5-11. Analytical results for these samples suggest that contaminants found in the former waste storage area have not impacted stream quality or stream sediment.

# 5.6.1 Volatile Organic Compounds in Surface Water

Methylene chloride was detected in surface water samples SW-1 and SW-2 at an estimated concentration of 4 ppb. Acetone was detected in surface water sample SW-2 at a concentration of 10 ppb and in SW-3 at an estimated concentration of 9 ppb. However, methylene chloride and acetone are common laboratory contaminants, indicating that their presence in surface water samples is suspect.

# 5.6.2 Dissolved Oxygen in Surface Water

Dissolved oxygen (DO) has been the single most frequently used indicator of water quality in streams and rivers (U.S. EPA 1985). Based on the Habitat Based Assessment conducted at the site, the unnamed tributary to Plum Bottom Creek is classified as a Class C stream. By definition, Class C surface waters are suitable for fish propagation and survival. In addition, the stream is suitable for primary and secondary contact recreation, although other factors may limit its use for these purposes.

TABLE 5-9

# VOCs and Dissolved Oxygen in Surface Water and Stream Sediment (Results in ppb)

# October 30, 1992

Compound	SW-1	SW-2	sw-3						
	Surface Water								
Methylene Chloride	4JB	4JB	U						
Acetone	· U	10	9J						
Dissolved Oxygen	11.6 ppm	11.0 ppm	12.1 ppm						
Stream Sediment									
Methylene Chloride	7J	U	6J						
Acetone	150	41	U						
C	Prainage Ditch Sedimer	nt							
Compound	DDS-1	DDS-2							
Methylene Chloride	35	U							
Acetone	7J	5JB							

U - Not detected

J - Indicates an estimated value

B - Compound detected in laboratory blank

**TABLE 5-10** 

# Inorganic Compounds in Surface Water (Filtered and Unfiltered) (Results in ppb)

October 30, 1992

Į.						
Compound	SW-1U <sup>1</sup>	SW-1F <sup>1</sup>	SW-2U	SW-2F	SW-3U	SW-3F
Aluminum	U	U	U	U	U	U
Antimony	U	U	U	U	υ	U
Arsenic	U	U	4.4B	U	4.1B	U
Barium	14.9B	22.2B	18.6B	29.6B	18.6B	34.2B
Beryllium	U	1.8B	U	1.1B	U	1.3B
Cadmium	υ	υ	IJ	U	U	U.
Calcium	37700	40400	38900	42300	40400	49600
Chromium	U	U	. U	U	υ	U
Cobalt	U	U	U	U	U	υ
Copper	U	Ü	U	U	Ú	U
Iron	345	145	349	192	346	183
Lead	U	· U	U	U	U	U
Magnesium	14300	15100	14400	15700	14800	17600
Manganese	51.3	44.2	68.4	62.4	51.3	46.2
Mercury	υ	U	U	0.93	υ	U
Nickel	U	U	U	U	U	U
Potassium	U	1430B	1450B	1610B	1450B	1360B
Selenium	U	U	U	U	U	Ų
Silver	U	U	U	υ	U	U
Sodium	12100	12700	12000	12900	12900	14400
Thallium	U	U	U	U	υ	U
Vanadium	19.1B	U	U	U	U	U
Zinc	U	U	7.3B	U	5.9B	U

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1324TAB2.RI

Reported value was obtained from a reading that was less than the CRDL but greater than or equal to the IDL.

**TABLE 5-11** 

# Inorganic Compounds in Stream and Drainage Ditch Sediments (Results in ppm)

# October 30, 1992

Compound	SC-1 <sup>1</sup>	SC-2	SC-3	DDS-1	DDS-21
Aluminum	21000	9400	17000	5990	13300
Antimony	U	. U	Ü	ت	· U
Arsenic	3.8B	3.8B	5.1	3.8	3.8
Barium	144	99.1	89.4	70.6	61.9
Beryllium	1.8B	0.65B	0.99B	0.68B	0.89B
Cadmium	3.7	3.6	1.6	1.7	U
Calcium	5030	246000	11500	23300	18600
Chromium	33.3	258	23.3	16.2	17.3
Cobalt	9.9B	7.3B	8.5B	5.3B	9.3B
Copper	49.0	152	24.6	60.5	33.9
Iron	28100	63700	24600	22600	211000
Lead	134	127	18.8	89.1	66.2
Magnesium	5820	14700	67100	4760	4110
Manganese	478	1770	768	910	298
Mercury	U	U	U	U	U
Nickel	32.1	62.2 .	27.1	20.2	16.6
Potassium :	2150	877B	1190B	779B	558B
Selenium	U	U	U	U	U
Silver	U	U	U	2.1B	U
Sodium	339B	586B	294B	335B	445B
Thallium	U	U	U	U	U
Vanadium	37.6	44.9	31.8	19.6	28.8
Zinc	292	153	83.5	282	108

5-24 1324TAB2.RI

Indicates background location.
 Reading was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL).

U Not detected

The NYSDEC standard for dissolved oxygen in Class C waters is 7.0 mg/L orgreater. Dissolved oxygen concentrations detected in surface water samples collected on October 30, 1992, are as follows:

Location	. DO		
SW-1	11.6 mg/L		
SW-2	11.0 mg/L		
SW-3	12.1 mg/L		

Based on the concentration of DO detected in these surface water samples from the unnamed tributary to Plum Bottom Creek, activities related to the former waste storage area do not appear to have impacted surface water quality in the area of the site.

#### 5.6.3 Inorganic Compounds in Surface Water

To investigate the potential impacts of the former waste/metal cuttings storage area on stream water quality, surface water samples were collected and analyzed for TAL metals (total and dissolved). Stream water samples collected at the western end of the culvert (approximately 200 feet west of the former waste storage area; SW-2) and at a point approximately 250 feet west of the culvert, are compared to background metal concentrations as detected in surface water sample SW-1 collected north of the Scott Aviation property (at the eastern end of the culvert). For this comparison, only the concentrations of inorganic compounds in downstream samples that are three times greater than background levels are considered significant.

#### Unfiltered samples:

The only inorganic compound found in surface water that exceeded background concentrations was mercury. Unfiltered samples taken from locations SW-2 and SW-3 contained concentrations below background for each inorganic compound. The concentration of mercury at sample location SW-2 was slightly greater than background for the filtered sample. However, the concentration for the filtered samples was greater than the unfiltered sample, indicating the results of the mercury analysis are suspect. In any case, at 0.93 ppb, the mercury concentration is not a cause for concern.

Mercury was not identified as a contaminant of concern at the site.

Therefore, any presence of this compound in the stream is not considered site-

related, and it can be concluded that the Scott Aviation site has not impacted surface water.

# 5.6.4 Volatile Organic Compounds in Stream Sediment

Methylene chloride was detected in stream sediment samples SC-1 and SC-3 at estimated concentrations of 7 ppb and 6 ppb, respectively. Acetone was detected in stream sediment sample SC-1 and SC-2 at concentrations of 150 ppb and 41 ppb, respectively. However, since methylene chloride and acetone were also detected in associated laboratory blanks, field blanks, and trip blanks, their presence in surface water samples is suspect.

#### 5.6.5 Inorganic Compounds in Stream Sediment

Stream sediment samples were collected at the same locations as surface water samples in order to investigate potential impacts of the former waste and metal cuttings storage area on stream sediments. The concentrations of inorganic compounds detected in downstream sediment samples SC-2 and SC-3 are compared to background levels as detected in upstream sample SC-1, and only concentrations greater than three times the background levels are considered significant.

Calcium, chromium, copper, and manganese were detected in downstream sediment sample SC-2 in concentrations in excess of three times the background concentration. In SC-3, only calcium and magnesium were detected at a concentration considered significant. Many natural soils and minerals contain these elements in the percent range found at this site. Since these compounds are essential human nutrients and are only toxic if ingested at extremely high concentrations, they can be eliminated from future consideration. Chromium and copper were not found in excess of background levels in drainage ditch sediments, subsurface soils, or ground water, indicating that they are not site-related, hence should not be of concern.

#### 5.7 Drainage Ditch Sediment Sampling

Two sediment samples, DDS-1 and DDS-2, were collected from the drainage ditch located west of the former waste storage area. Sediment sample DDS-1 was collected west of the former waste storage area to investigate potential impacts to the drainage ditch from former waste handling activities. Background

drainage ditch sediment sample DDS-2 was collected approximately 300 feet south of that location.

# 5.7.1 Volatile Organic Compounds in Drainage Ditch Sediment

Methylene chloride was detected in both drainage ditch sediment samples. (Table 5-9). Acetone was also detected in sample DDS-1 at a concentration of 35 ppb. However, both compounds were also detected in associated laboratory and/or field blanks, and indicating that their presence at the site is suspect.

## 5.7.2 Inorganic Compounds in Drainage Ditch Sediment

The concentrations of inorganic compounds detected in background drainage ditch sediment sample DDS-2 were compared to the concentrations of inorganic compounds detected in sample DDS-1. Only compounds found at concentrations greater than three times background levels are considered significant. For analytical results, see Table 5-11.

The only inorganic detected in drainage ditch sediments in excess of background levels was manganese. Many natural soils and minerals contain this element in the percent range found at this site. This compound is an essential human nutrients and not toxic to human health unless ingested in extremely high concentrations.

#### 5.8 Sediment Criteria Evaluation

A total of five sediment samples were collected during the remedial investigation to evaluate potential impacts to these areas associated with the release from the former UST. The locations and elevations for the two drainage ditch and three stream sediment samples are indicated in Figure 3-3. To give an accurate context for the comparison of analytical data from these samples to NYSDEC sediment criteria, the relationship between the former UST/cement pad location, drainage ditch and unnamed stream is first discussed to present a preliminary perspective of transport pathways.

The drainage ditch which occurs along the western site property boundary is a man-made feature. This swale was originally constructed to receive storm water piped from a catch basin in the parking lot area north of building number two. Use of the swale for this purpose was discontinued approximately May, 1991 due to construction of the interception trench. The swale is pitched towards the unnamed stream. However, storm water conveyed to the ditch bypasses the stream

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which is culverted (hard piped) across the entire site and discharges exclusively to a lowland area just to the northwest of building number two. The location of this low wet area is shown in figure 3-3. A breach initially detected in the culvert near the vicinity of the drainage ditch was confirmed to be only a slight separation at the top of two pipe joints. Field inspection of this breach confirmed that it did not create any pathway between the drainage ditch and the stream.

Flow in the ditch is intermittent and has decreased following the diversion of storm water run-off to another area. No benthic organisms were observed or documented at this location during the Habitat Based Assessment performed in October 1992. Inspection of a USGS topographic map quadrangle suggests that overland run-off from the former UST area travels directly downslope towards the culverted unnamed stream and not to the drainage ditch. This interpretation led to the siting of surface soil samples SS-1 through SS-5 to evaluate possible impacts associated with this potential transport pathway.

In this context, it is important to note that no discernible pathway exists between the former UST location and the unnamed stream which flows in a west-southwesterly direction across the site directly behind building number two. This stream flows through a culvert (pipe) from a point located upstream at Walter Winter Drive at the eastern site boundary to an off-site location directly behind the Quick Cut Rubber and Gasket Company. It is not known whether any activities at that company impacted the stream. There is no opportunity for surface water from the former UST area, or western part of the Scott Aviation site to enter the culverted segment of stream. Interpretation of ground water flow patterns in the uppermost confined aquifer do not indicate any hydraulic connection between the aquifer and surface water flow in the unnamed stream. Therefore, analytical data for downstream (off-site) sediment samples SC-2 and SC-3 are not expected to reflect impacts from any site related activities.

The NYSDEC Sediment Criteria Guidance document calls for the evaluation of ten specific metals including arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel and zinc. The guidance document states that analytical data from sediment samples is to be compared to both local background metal concentrations, as well as the sediment criteria listed in Table 4 of the document. The table also provides limit of tolerance concentrations (which

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represent threshold values which would be detrimental to the majority of species which come in contact with the sediment), and pre-industrial concentrations of Great Lake sediments (PICGLS) which serve to establish regional background levels of these compounds. For metals, the primary concern in sediments is toxicity to benthic (bottom dwelling) organisms. The sediment comparison is performed in five steps:

- 1. Compare sediment concentrations with sediment criteria.
- 2. Compare sediment criteria with unimpacted, local background concentrations; consider significance of criteria exceedances in light of background concentrations, in particular, for naturally occurring substances such as metals.
- 3. If sediment concentrations are less than criteria, remediation is not necessary to ensure compliance with standards.
- 4. If sediments exceed criteria, and especially if exceedance is widespread in the ecosystem of concern, a number of steps can be taken to verify the need for remediation.
- 5. When sediment concentrations and criteria are less than detection, ecological assessments are necessary to directly measure toxicity of sediments or residues in biota if it is suspected that sediments were contaminated by releases.

# 5.8.1 Drainage Ditch Sediment Sample Comparison

Although samples DDS-1 and DDS-2 exceeded sediment criteria for copper, cadmium and manganese, they were below background levels for pre-industrial concentrations in Great Lake sediments (PICGLS) used as a regional basis for comparison in the NYSDEC Sediment Criteria Evaluation Guidance Document. Lead and zinc also exceeded sediment criteria but were below three times PICGLS backgrounds and limit of tolerance levels. The Hazard Ranking System (HRS) indicates that compounds occurring at concentrations of less than three times background levels are not considered significant (EPA Hazard Ranking System, 40CFR300 Appendix A, Table 2-3, December 1, 1990).

The drainage ditch has an overall length of approximately 400 feet and is only a few feet wide. Water depth is less than a foot deep and flow is intermittent. No benthic organisms or fish were observed in the ditch during the Habitat Based Assessment conducted in October, 1992. As set forth in the RI

report, and previously herein, there is no hydraulic connection between the ditch and the unnamed stream toward which it flows. Metal concentrations exceeding sediment criteria at this location, therefore, should have no effect on any benthic ecosystem associated with the primary surface water feature flowing through the site.

# 5.8.2 Stream Sediment Sample Comparison

Stream sediment samples were collected and analyzed from locations upstream and downstream of the Scott Aviation site. All samples were collected from off-site areas due to the fact the stream flows through a culvert (pipe) across the entire Scott Aviation property. Samples SC-1, SC-2 and SC-3 were acquired over a distance of approximately one-quarter of a mile along the course of the stream. Sample SC-1 was collected immediately upstream of the culvert near Walter Winter Drive at an elevation of 682.1. Sample SC-2 was collected at a point immediately behind the Quick Cut Rubber and Gasket facility, where water exits the culvert. The elevation of this sample location is 683.2 feet. Sample SC-3 was collected at the Oaley Trucking site, west of Quick Cut Rubber and Gasket, where the stream turns and flows in a more southerly direction towards Erie Street. Due to the presence of the culvert at Scott Aviation, it was not possible to collect either surface water or sediment samples from the stream there.

Sediment criteria for nickel were exceeded in samples SC-1 and SC-2 but concentrations at both locations were below PICGLS background levels. Cadmium exceeded sediment criteria all three stream samples but only exceeded PICGLS background levels in SC-2. However, cadmium levels in SC-2 did not exceed the limit of tolerance or three times PICGLS background, thus are not considered significant. Lead and zinc exceeded sediment criteria and PICGLS background levels in SC-1 and SC-2 but neither sample had lead or zinc concentrations in excess of limit of tolerance levels or three times PICGLS background.

Copper, manganese, and chromium were also above sediment criteria in SC-1 and SC-2 but only SC-2 had copper, manganese and chromium concentrations in excess of PICGLS background and limit of tolerance levels. The copper concentration in SC-2 is not above three times PICGLS background levels and is, therefore, not considered to be significant. Chromium concentration in SC-2 is above three times PICGLS background and limit of tolerance levels but is limited

to an unhabitated portion of the stream between the west end of the culvert and sample SC-3. It is notable that this segment of the stream lies between the Quick Cut Rubber and Gasket/Oaley Trucking facilities and a very broadly disturbed area of surface soils which is plainly evident from aerial photo inspection. Chromium concentrations at this location are not believed to be associated with any Scott Aviation activities. For this reason, no further evaluation or actions with respect to the occurrence of chromium in the SC-2 sample are recommended. In the context of this investigation, any such future evaluations or actions which are determined to be necessary should be undertaken by the parties found to be responsible for any release of this compound into the stream.

All three stream sediment samples including SC-1, the upstream background sample had metal concentrations which exceeded the NYSDEC sediment criteria values. For this reason, a comparison to unimpacted local background concentrations is not possible. It is unknown what general water and sediment quality conditions exist in the unnamed stream throughout the Lancaster vicinity. It is possible that the metal concentrations observed in the RI sediment samples are typical to other upstream and downstream segments of this surface water body. However, no general water/sediment quality studies are known to have been performed on the stream over its entire course. To the east the stream flows through areas which are primarily rural, while west-southwest of the Scott Aviation site, it flows through areas of mixed residential development and light industry.

The highest metal concentrations, particularly those where limit of tolerances were exceeded occur in SC-2, the sample collected at the downstream end of the culvert, immediately behind the Quick Cut Rubber and Gasket Building. The waste oil release from the former UST at the Scott Aviation site does not correlate with metal impacted soils, nor do any transport pathways exist between the former tank location and the stream. Manufacturing processes and associated regulatory permit/compliance requirements at the adjacent Quick Cut Rubber and Gasket facility have not been researched. The presence of metal concentrations in off-site sediment samples, therefore, cannot be used as a guide to determine either ecological risks or remediation requirements associated with the waste oil/solvent release from the former UST at the Scott Aviation site.

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It is significant that the benthic ecosystem in the vicinity of Scott

Aviation and contiguous areas is either extremely limited or absent according to
the Habitat Based Assessment conducted in October, 1992. In that report, the
following observation was made: "Although no fish were observed at the time of
the site investigation, the stream is believed to provide suitable habitat for
indigenous fish species, especially upstream and downstream of the Scott
Aviation site. The quality of habitat on the subject site is limited by the fact
that the stream is enclosed within a conduit. There was no evidence of the
stream being used for recreation purposes such as fishing." Based on this
observation it seems evident that Scott Aviation has not impacted these or any
off-site sediments.

#### 5.9 Habitat Based Assessment

A Habitat Based Assessment (HBA) was conducted to evaluate potential impacts that activities at the Scott Aviation site may have had on fish and wildlife. A copy of the HBA is presented in Appendix F. A summary of significant findings is presented below.

The Scott Aviation site and surrounding area support a limited population of fish and wildlife. Site observations and records research did not reveal any evidence of stressed vegetation or fish kills in the area. The results of the site investigation did not indicate that site-related activities have had any adverse impacts on surface water, stream sediments, or the lowlands. Several potential pathways of contaminant migration exist, including (1) overland transport of contaminants to the lowlands, (2) overland transport of contaminant to surface water and stream sediments, and (3) discharge of ground water to the stream. However, there is no evidence to suggest that any of these pathways do, in fact, exist based on a comparison of analytical data for soil and water samples at the source and areas described above (see Section 6.1). No further action is recommended, in light of these findings.

#### 5.10 Air Pathways Analysis

An air pathways analysis was conducted for the Scott Aviation site in accordance with (1) Air Cleanup Criteria document and (2) Air Pathway Analysis Requirements in the Remedial Investigation document published by the New York State Environmental Conservation Department, Division of Air Resources. The objective was to evaluate potential effects on ambient air quality resulting

from the volatilization of organic compounds found near the surface of the site.

The concentrations obtained would assist in determining the future course for remediation at the site.

Ten volatile organic compounds (VOCs) were selected as indicator compounds based on the record of activities at the site. The VOCs were confirmed through surface soil samples taken at the Scott Aviation site. Those samples taken from monitoring wells and the interception trench were not considered in the air pathways analysis since they originated from samples taken significantly below the surface. Since the wells are capped and the trench is covered with gravel and soil, the compounds would not reach the surface and volatilize into the air. The measured near-surface soil concentrations of the indicator compounds are shown in Table 5-12.

Item 3 of the Air Pathway Analysis Requirements in the Remedial Investigation document states:

No air pathway investigation is required if the known concentration of each site contaminant is less than the Air Guide I Ambient Guideline Concentration (AGC) expressed in parts per billion.

Similarly, section II.B, Uncontrolled Sources of the Air Cleanup Criteria document states:

If the concentration of a chemical in the contaminated medium (expressed in parts per million) is less than the appropriate ambient air quality standard or ambient guideline concentration for that chemical (also expressed in parts per million), it is highly unlikely that volatilization would create air concerns.

The concentrations of the ten selected compounds were compared to the Ambient Guideline Concentration (AGC) for each respective compound. Of the ten compounds, six were found to be undetected in the first two feet of surface soil and therefore were excluded from further analysis. When the remaining four VOCs were compared to the AGC limit for each compound, they were found to be well below the respective AGC, as demonstrated in Table 5-12. No further action was required for the four compounds, since they were below their respective AGC levels and therefore did not pose a threat to air quality.

# 5.11 Summary of Site Investigation

The site characterization study was conducted at the Scott Aviation site to assess the horizontal and vertical extent of contamination in subsurface soil,

**TABLE 5-12** Air Pathway Analysis Summary of Maximum Concentrations of Near-Surface Compounds

			AGC	
Compound	Concentration <sup>1</sup> (ppb)	MW	(µg/m³)	(ppb)
Methylene chloride	Undetected	84.93	27.0	7.77
Acetone	170	58.09	14,000	5892.58
1,1-DCA	27	98.96	5000	1235.35
1,2-DCE	390	96.94	1900	479.21
1,1,1-TCA	Undetected	133.40	1000	183.28
TCE	Undetected	131.39	0.45	0.08
Toluene	48	92.14	2000	530.71
Ethylbenzene	Undetected	106.17	1000	230.29
Xylene	Undetected	106.17	300	69.09
Methyl ethyl ketone	9	72.11	300	101.72

1. Refer to Table 5-3
MW - Molecular weight of compound
ppb - (µg/m³)(24.45)/MW

ground water, surface soil, surface water, stream sediments and air. The analytical data collected during the investigation was compared to background levels for each medium (1) to determine if site-related activities have had an impact on the environment and (2) to develop a list of potential contaminants of concern on a media specific basis. The contaminants of potential concern identified will be more fully evaluated during the Baseline Risk Assessment and the SCGs/RAOs Report.

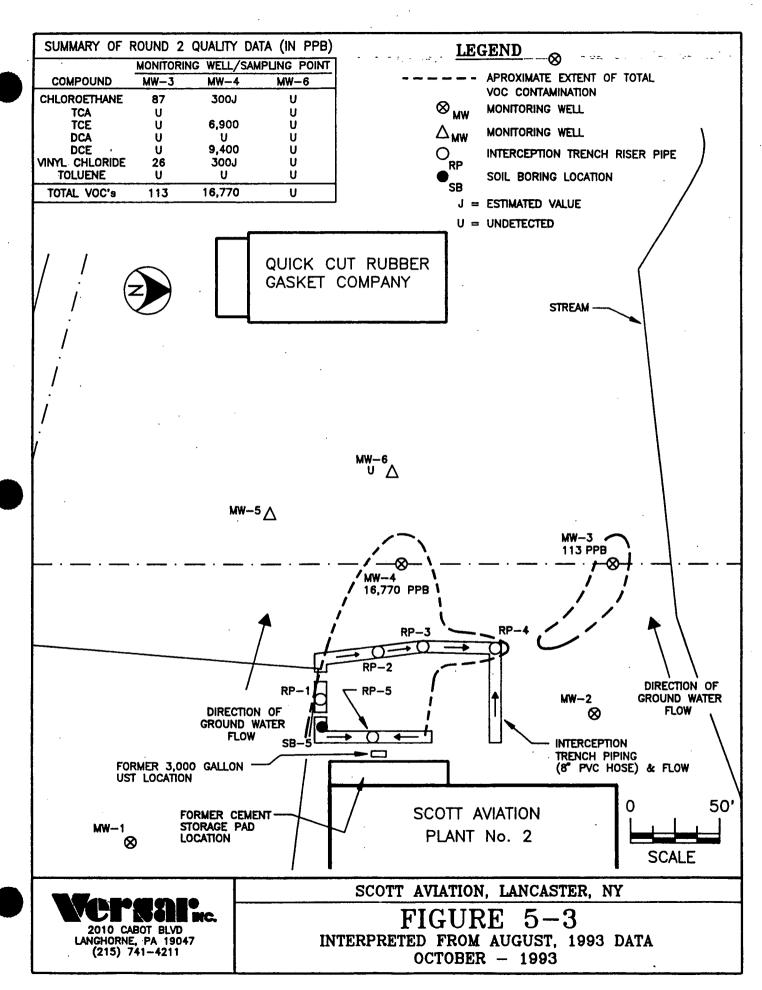
Based on the comparative evaluation of analytical data, the following conclusions can be drawn:

- No inorganic contamination of concern was confirmed in any of the media studied.
- No semi-volatile organic, PCB, or pesticide contamination was detected during the site investigation.
- Elevated levels of VOCs were detected in subsurface soil samples collected from the area of the former waste storage tank. The potential contaminants of concern include: 1,1-DCA, 1,2-DCE (total), 1,1,1-TCA, TCE, toluene, ethylbenzene, xylene, and 2-butanone. Contaminant concentrations were detected at various depths ranging from 0-2 feet to 16-18 feet below grade. Contaminant concentrations generally increased with depth bgs. It appears that the lateral extent of subsurface soil contamination extends from the source area to about MW-4.
- Elevated levels of VOCs in ground water were detected in the interception trench and the uppermost confined aquifer. Potential contaminants of concern include: chloroethane, 1,1-DCA, 1,2-DCE (total), TCE, and vinyl chloride. Contaminant concentrations were greatest in the interception trench and MW-4, respectively. Extremely low levels of contamination were detected in MW-6 and MW-3, which are located west and north-west of MW-4, respectively. These findings are consistent with the results of the hydrogeologic investigation, which found that ground water is flowing in a westerly direction and ground water flow velocities in the vicinity of MW-4 are very low (e.g., less than a tenth of a foot per day).
- Based on the results of the soil gas survey, ground water sampling, and soil sampling there is no evidence to suggest that the VOC contamination extends to the neighboring residences.
- No evidence was found during the site investigation to indicate that site-related activities have impacted the surface water and sediments of the unnamed stream.
- There is no evidence that site-related activities have impacted surface soils located in the lowlands north of the former waste storage area.

• The results of the air pathways analysis revealed that based on near-surface soil concentrations of VOCs detected at the site, there is no threat of impacts to air quality resulting from the volatilization of organic compounds.

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#### 6.0 CONTAMINANT FATE AND TRANSPORT

When a chemical is released to the environment, it may be transported, transformed (physically, chemically, or biologically), or accumulated in one or more media (e.g., soil, air, surface water, ground water). The purpose of fate and transport analysis is to identify the media impacted by site-related contaminants, determine the contaminant's transport pathway, and predict potential future exposures.

Contamination was found on the Scott Aviation site in the area of the former underground storage tank and its concrete pad; both were removed in early 1991. Contamination detected in on-site soil and ground water resulted from the release of waste oils and solvents from the former 3,000-gallon UST and waste handling activities in the area of the former waste storage pad. Contaminants have been detected in on-site soil and ground water samples, indicating that volatile organic compounds (VOCs) have migrated from the former UST/waste storage area. The mobility and fate of the compounds of concern at the Scott Aviation site are governed by site characteristics and the physical, chemical, and environmental properties of the contaminants. A study of potential routes of migration, contaminant persistence, and contaminant migration provides further indication of their impact.

#### 6.1 Potential Routes of Contaminant Migration

Based on the results of the site characterization the following potential pathways of contaminant migration were determined to be incomplete:

- The transport of contaminants from ground water to the surface water and sediments of the unnamed stream has been determined to be incomplete because no site-related contaminants were detected in the surface water or stream sediments and there does not appear to be a hydraulic relationship between ground water and the unnamed stream.
- The overland transport of contaminants to the surface water and sediments of the unnamed stream is not a transport pathway. The unnamed stream is culverted along the length of the site to a point approximately 200 feet west of the site. No site-related contamination was detected in the surface water or sediments of the unnamed stream. This conclusion is further supported by the results of the HBA.
- The overland transport of contaminants to the lowlands located north of the former waste storage area has been found to be an incomplete pathway. The results of surface soil sampling in the lowlands

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revealed that there is no site-related contamination of surface soils in the lowlands.

• The results of the air pathways analysis has determined that the volatilization of near surface contaminants to the air is an incomplete pathway, since the concentration of contaminants in the air at the site surface is well below the Ambient Guideline Concentration (AGC).

The following potential pathways of contaminant migration will be evaluated in this section:

- The leaching of contaminants from the soil into the uppermost confined aquifer.
- The migration of contaminants through subsurface soil.
- The migration of contaminants through the uppermost confined aquifer.

#### 6.2 Contaminant Persistence

The properties of the contaminants that are most likely to affect their mobility in the environment are water solubility, the propensity to bind to soil (organic carbon partition coefficient or  $K_{\rm oc}$ ), and vapor pressure. Compounds that volatilize can migrate upward through soil and in time escape to the atmosphere. However, due to the dense clay overburden at the Scott Aviation site, this transport pathway was not found to exist. Compounds that dissolve in water can be leached downward through the soil and be transported downgradient via ground water. Insoluble compounds are more likely to bind to soil particles and remain immobile.

Chemical and biological transformation processes (e.g., hydrolysis, oxidation, reduction, and biodegradation) affecting the fate and transport of contaminants in the environment must also be examined in relation to the contaminants of concern at the Scott Aviation site.

#### 6.2.1 Volatile Organic Compounds

The highest concentration of VOCs at the Scott Aviation site was detected in subsurface soil samples collected from the former waste storage area (test boring SB-5). The VOCs detected in this test boring include 1,1-DCA, 1,2-DCE, 1,1,1-TCA, TCE, toluene, ethylbenzene, xylene, and vinyl chloride. The physical and chemical properties of these compounds are presented in Table 6-1. In general, VOCs can partition into liquid and vapor phases in the subsurface

TABLE 6-1

Chemical and Physical Properties of Volatile Organic Compounds of Concern

Compounds	Density (g/cm²)	Solubility (mg/l)	Henry's Law Constant (atm-m³/mole)	Vapor Pressure (mm Hg @ 20-25°C)	K <sub>∞</sub> (I/mg)	
1,1-DCA	1.26	5.50E+03 <sup>1</sup>	5.87E-3	227	3.78E+1 <sup>1</sup>	
1,2-DCE	1.25	7.00E+02 <sup>2</sup>	6.72E-3	340	5.90E+01 <sup>2</sup>	
1,1,1-TCA	1.35	4.40E+03 <sup>2</sup>	8.0E-3	124	1.52E+02 <sup>2</sup>	
TCE	1.47	1.10E+03 <sup>2</sup>	1.03E-3	69	1.26E+02 <sup>2</sup>	
Toluene	0.86	5.35E+02 <sup>2</sup>	5.94E-3	28	2.50E+02 <sup>2</sup>	
Ethylbenzene	0.87	1.52E+02 <sup>2</sup>	8.44E-3	10	1.10E+03 <sup>2</sup>	
Xylene	0.88	1.60E+02 <sup>2</sup>	5.19E-3	7	2.68E+02 <sup>2</sup>	
Vinyl Chloride	0.91	2.70E+03 <sup>2</sup>	1.07E-2	2,660	8.20E+00 <sup>2</sup>	

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<sup>1.</sup> from EPA/600/6-85/002a, September 1985

<sup>2.</sup> from EPA/540/2-89/057, October 1989

environment. They may then dissolve in soil moisture, volatilize in air, adsorb to soil particles, or migrate towards ground water.

The extent of partitioning of a VOC between soil gas and soil moisture is measured by Henry's Law Constant, a ratio (expressed in units of atm-m³/mole) of a compound's concentration in soil gas and soil moisture at equilibrium and constant temperature. Larger Henry's Law Constant values indicate a greater likelihood that the compounds are most likely to partition into soil gas. Smaller Henry's Law Constant values indicate that compounds are more likely to be retained in soil moisture.

In general, the VOCs of concern at the Scott Aviation site have high Henry's Law Constants (>1E-3) and relatively high vapor pressures (>50mm Hg). Based on these physical properties, the VOCs are likely to evaporate rapidly from exposed soil, waste, and surface water and are less likely to be detected in surface water or shallow soil at the site. This hypothesis is supported by analysis of surface soil and surface water samples at the site. None of the VOCs of concern were found in either medium. These data, in conjunction with site specific geologic data, indicate that soil to air transport is not a significant migration pathway for VOCs at the site.

In addition to partitioning between vapor and liquid phases, VOCs may adsorb to the surface of soil particles and organic matter. To determine the extent of VOC adsorption to soil, an equation involving the soil-water partition coefficient  $(K_p)$  is used to establish the minimum concentration of a soil contaminant that would elevate ground water contaminant levels above ground water quality goals. Findings can be used to evaluate whether the presence of a particular VOC in soil at Scott Aviation will be a potentially contributing source of ground water degradation.

$$S = K_p C$$
 (a)

Where:  $S = concentration of the contaminant adsorbed to the soil in the saturated zone <math>(\mu g/kg)$ 

 $K_p$  = soil-water partition coefficient

C = NYSDEC water quality criteria for a contaminant of concern  $(\mu g/1)$ 

For example, it can be determined whether the concentration of 1,1,1-TCA detected in the soil within the former waste storage area will 1) elevate ground

water contaminant levels above NYSDEC ground water quality goals and 2) be a continuing source of ground water degradation within the interstratified aquifer. Knowing the organic carbon partition coefficient is 152 ml/g (Table 6-1) and assuming a 5% fraction of organic carbon ( $F_{oc}$ ) in the soil (Soil Survey of Erie County), the soil-water partition coefficient ( $K_p$ ) can be determined using the following relationships:

$$K_p = (K_{oc}) (F_{oc})$$
 (b)  
 $K_p = (152 \text{ ml/g}) (0.05)$   
 $K_p = 7.6 \text{ ml/g}$ 

Substituting the  $K_p$  value (7.6 ml/g) into equation (a) and using the NYSDEC water quality value for 1,1,1-TCA (5  $\mu$ g/l) yields a threshold value for 1,1,1,-TCA in soil of 38  $\mu$ g/Kg (ppb).

$$S = K_p C$$
  
 $S = (7.6 \text{ ml/g}) (5 \mu\text{g/l})$   
 $S = 38 \mu\text{g/kg}$ 

The value 38  $\mu$ g/kg represents the maximum allowable concentration of 1,1,1-TCA in soil that will not contribute to the degradation of ground water at Scott Aviation. The concentration of 1,1,1-TCA detected in sample SB-5C was 20,000  $\mu$ g/Kg, indicating that site soils may require some remedial action to reduce the threat of continued degradation of ground water at the site. A summary of allowable soil concentrations based on partition theory is presented in Table 6-2.

As illustrated above, at a high enough concentration a compound can partition from soil particles into ground water. Due to the relatively high concentrations of VOCs in site soils, it is not surprising that these compounds were detected in ground water samples collected from the interception trench and three of the downgradient wells (MW-3, MW-4, and MW-6).

The concentrations of VOCs in ground water decrease in the downgradient direction (west and northwest). In MW-4, located immediately west of the drainage ditch, VOCs were detected at a total concentration of about 8,410 ppb (Round II; sample MW-4). In MW-6, located approximately 50 feet west of MW-4,

TABLE 6-2

Allowable Soil Concentrations for Volatile Organic Compounds of Concern

Compound	Solubility (mg/l)	Partition Coefficient  K <sub>∞</sub> (ml/mg) <sup>2</sup>	Groundwater Standard (ppb)	Allowable Soil Concentration (ppb) (or ug/kg)
1,1-DCA	5500	38	5	9.5
1,2-DCE (total)	700	59	5	14.8
1,1,1-TCA	4400	152	5	38
TCE	1100	126	5	31.5
Toluene	535	250	5	62.5
Ethylbenzene	152	110	5	27.5
Xylene	160	268	5	67
2-Butanone	268000	4.5		

<sup>1.</sup>  $S = C K_{oc} f$ ; where f = 5% organic carbon, where S = allowable soil concentration, and C = ground water standard.

<sup>2.</sup> Calculated based on log  $K_{oc}$  = -.55 log L + 3.64, where L = solubility.

<sup>--</sup> No groundwater standard available.

total VOCs were detected at a much lower concentration (Round I; 4 ppb, estimated value). In MW-3, located northwest of the former waste storage area and adjacent to the unnamed stream, total VOCs (excluding acetone and methylene chloride) were detected at 56 ppb in Round II sampling. The attenuation of VOC concentrations in the downgradient direction is likely due to dilution and dispersion. Based on the above findings, the western-most extent of contamination is marked by monitoring well MW-6. The approximate extent of ground water contamination in the northwest direction is marked by MW-3. The analytical results obtained from the surface water and sediments of the stream provide no evidence that the stream has been impacted by site-related activities.

Vinyl chloride was detected in MW-3 and MW-4. Although this compound was not detected in the ground water sample collected from the interception trench, its presence in wells MW-3 and MW-4 can be attributed to the fact that vinyl chloride is a degradation product of TCE and 1,2-DCE. Given that the first order rate of vinyl chloride transformation from 1,2-DCE has been reported as very slow, the presence of vinyl chloride in ground water downgradient of the waste storage area indicates that the parent compounds have had considerable residence time.

The chlorinated aliphatics (i.e., TCE, 1,2-DCE) are not susceptible to hydrolysis (i.e., the degradation of contaminants by chemical reactions involving water or an aqueous solution). Oxidation reduction reactions involving chlorinated aliphatic compounds have not been extensively researched. The reduction of aromatic compounds (e.g., toluene and xylenes) has been reported.

Most VOCs ultimately biodegrade. Chlorinated aliphatics (e.g., TCE, 1,2-DCE) degrade more rapidly in an anaerobic environment, whereas aromatic VOCs (e.g., toluene, xylene) degrade more rapidly under aerobic conditions. Therefore, we may expect aromatic VOCs will degrade primarily in the unsaturated zone while degradation of the chlorinated aliphatics would be favored in the saturated zone. In addition, bacteria in soil play a significant role in degradation of aromatic and aliphatic solvents. These factors indicate that the bioremediation of soils at the former tank location at the Scott Aviation site is a potential remedial alternative to be considered during the Feasibility Study.

In general, VOCs are mobile in the environment. Therefore, they are good indicators of how far chemical constituents have migrated from the source area. Dispersion, dilution, and biodegradation appear to be primary fate processes of VOCs in the subsurface environment. The migration of VOCs of concern from soil to ground water has been demonstrated by the presence of VOCs in well. Migration of VOCs from ground water into the unnamed stream does not appear to have occurred. However, based on soil and water equilibrium estimates, the VOCs found in subsurface soils in the former waste storage area were detected at high enough concentrations to act as a possible continuing source of ground water degradation at the site.

#### 6.2.2 Inorganic Contaminants

The results of inorganic sampling conducted during the RI indicate that no inorganic contamination has resulted from site-related activities. Calcium, iron, magnesium, manganese, potassium, and zinc were detected at concentrations consistent the anticipated ranges for soil types found in western New York state and for ground/surface waters associated with that soils. Many natural soils and minerals contain these elements in the percent range found at this site. These compounds are all essential human minerals, and appear commonly in many soils and minerals at much higher concentrations than found here. These are not considered toxic unless ingested at extremely high concentrations.

#### 6.3 Summary of Contaminant Fate and Transport

The presence of elevated concentrations of VOCs in on-site and off-site ground water samples indicates that contaminants have been released from soil to ground water. The evaluation of the extent to which VOCs will adsorb to soil particles (i.e., soil partitioning theory), demonstrates that VOC concentrations detected in subsurface soil may be a continuing source of ground water degradation. Sampling results indicate that the vertical extent of subsurface soil contamination extends to a depth of approximately 18 feet and although there has been some lateral movement of soil contamination in a westerly direction, the subsurface soil contamination has not extended beyond the property boundary.

The VOC contamination in the uppermost confined aquifer is moving very slowly in a west-northwesterly direction. The data indicates that the plume extends from the former waste storage area in a westerly direction with the

approximate outer limits of the plume being marked by MW-6 and MW-3. The presence of vinyl chloride in ground water is an indication that the VOC contamination has been present for a long period of time and the chlorinated solvents are slowly degrading. There are no data to suggest that there is a hydraulic relationship between the uppermost confined aquifer and the unnamed stream. This conclusion is supported by the fact that no site-related contaminants were detected in the surface water and sediments of the unnamed stream.

Screens in the Scott Aviation site monitoring wells were positioned to extend either to or just above bedrock and would therefore detect any "sinking" contaminants migrating at or near the bedrock/aquifer interface. No such sinking contaminants were detected in site downgradient wells, so that it is highly unlikely that sinking contaminants are present downgradient.

#### 7.0 SUMMARY AND CONCLUSIONS

In accordance with the requirements of the Administrative Order on Consent entered into by Scott Aviation and the NYSDEC, Versar has completed a Remedial Investigation at the Scott Aviation site in Lancaster, New York. The RI was conducted to characterize the nature and extent of contamination and establish potential pathways of contaminant migration.

The RI field activities, conducted during October and November 1992, consisted of a soil gas survey, the sampling and analysis of the surface water and stream sediments of the unnamed stream, the installation of two additional ground water monitoring wells, the analysis of ground water samples from a total of six monitoring wells (two rounds), the installation of seven soil borings, the collection of ten subsurface soil samples, the collection of six surface soil samples, a residential well survey, a utilities survey, a habitat based assessment, and an air pathways analysis. Based on the results of the RI, the following conclusions regarding the nature and extent of contamination at the Scott Aviation site can be drawn:

- Field activities have confirmed the presence of VOC contamination in subsurface soils in the area of the former waste storage tank. The contaminants of concern include: 1,1-DCA, 1,2-DCE (total), 1,1,1-TCA, TCE, toluene, ethylbenzene, xylene, and 2-butanone. Subsurface soil contamination extends from an approximate depth of 2 feet to 18 feet. The subsurface soil contamination extends laterally to MW-4, located west of the former waste storage area near the property boundary. An evaluation of soil partitioning indicates that the subsurface soil contamination may be a continuing source of ground water degradation. Remediation of subsurface soils in the source area would help mitigate this ground water degradation.
- Elevated levels of VOCs have been detected in the ground water in onsite and off-site wells (i.e., MW-4, MW-6, and MW-3) and the interception trench. The contaminants detected in ground water are consistent with those found in subsurface soil and include: chloroethane, 1,1-DCA, 1,2-DCE (total), 1,1,1-TCA, TCE, toluene, and vinyl chloride. The ground water contaminant plume appears to be moving very slowly in a west-northwesterly direction (toward Quick Cut Gasket). The slow movement of the plume is supported by hydrogeologic data, which revealed that the hydraulic conductivity and ground water velocity in the vicinity of MW-4 is very low. The ground water plume extends from the former waste storage area and tapers off west of the site around MW-6 and MW-3. There are no data to indicate that there is a hydraulic relationship between ground water and surface water and analytical data did not reveal any evidence that the Scott Aviation site has impacted the unnamed stream.

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- Based on the results of the soil gas survey, ground water sampling, and soil sampling there is no evidence to suggest that the VOC contamination extends to the neighboring residences or poses a threat to these potential receptors.
- No evidence was found that site-related activities have impacted the surface water and sediments of the unnamed stream during the site investigation.
- There is no evidence that site-related activities have impacted surface soils located in the lowlands north of the former waste storage area, indicating that this is not a contaminant transport pathway.
- The results of the air pathways analysis revealed that based on near-surface soil concentrations of VOCs detected at the site, there is no threat of impacts to air quality resulting from the volatilization of organic compounds. The volatilization of near surface organics from soil to the air is therefore not a contaminant transport pathway.
- No inorganic contamination that can be attributed to site-related activities was confirmed in any of the media sampled during the RI field investigation. Many natural soils and minerals contain these elements in the percent range found at this site.
- No semi-volatile organic, PCB, or pesticides were detected in any of the media sampled during the RI field investigation.

The results of the RI will be used to determine if the contaminants of potential concern identified pose an unacceptable risk to human health and the environment (Baseline Risk Assessment) and to develop a list of remedial action objectives (SCGs/RAOs Report), which will be evaluated during the Feasibility Study.

## 7.1 Evaluation of Additional Data Requirements

No additional data is required at this time.

#### 8.0 REFERENCES

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## APPENDIX: A

SOIL BORING LOGS AND WELL CONSTRUCTION DETAILS

Location Map QVICIC Cit	LANGHO	CABOT BLVD RNE, PA 19047 5) 741-4211
ZD	TEST HOLE/WELL LOG Test/Well Number:/SB-2 Project:	DOGINIVI (STOX)
SB-2/MW-5.	10/24/94	Number: 1324 07
Elevation: Detector:	Drilling Method: HSA 2"	Sampling Method: 55
Gravel Pack: Morey Sand *1	Seal: bentonute sellets Diameter: 2" Length: 10/	Grout:    Hole   Depth to
Screen Type: PVC Slot: . DIO	Diameter: 2" Length: 10'	Dia: Liquid: Total Depth to Water: 22.5
USCS lassification Calor Moisture Content %-Fines Capor (PID) Staining Staining Sample # Depth	Sample Recovery Penetration Resistence Resistence	WELL COMPLETION
104k   104k   125   1430   10   12   1430   10   10   10   10   10   10   10	11/10 C-6" Gravel, Lind fill  12" 11/11 G-2' brown, strofficial, a  14" 11/12 4-4' gravel + Land at top  13/12 4-15' Clay wi in the simple  14" 11/18 6-8' mastly red-brown a  14" 11/18 8-16' same as above wish  14" 11/18 8-16' same as above, few  10-12' same red brown clay  12-4' same red brown clay  13-15' last 6" shaved by land  14-16' last 6" shaved by land  14-16' last 6" shaved by land  15-17' 1/3  18-20' saturated @ 19' in an  2-4" Huck. rest of sa  2-21' clay at top to 21'. sith  below -saturated.  23-25' wet. powly sixted sa  13-25'	shift clay with the start of the sandlers appears appears of the sandlers appears appears of the sandl
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Elevation: Gravel Pac Casing Ty	~γ′ ) ck: γγ	nv noreu PVC PVC	1 50		1_	HN	(V)	Date	ged ng	olz /az by: K. Tro Method: f entonute er: 2"	DLE/WELL MW-6 WOWS SA 4" Plus SP Length: Length:	LOG Project: Project Drilled E	Page  HCGU SCO Number: 322  Sampling Meth Grout: UMU Hole Dia: Total Depth: 26	H And.	in to	on IG <sup>l</sup>
USCS Classification Color	Moisture Content	2 % Fines	Structure	Vapor (PID)	Staining	Sample #	Depth	Sample Recovery Penetration	Resistence		· · ·	LOGY/REM/			СОМР	ELL LETION
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#### DRILLING RECORD Oriller: <u>Buffalo Orilling</u> BORING NO. MW-1 Inspector: Mike Kanazawich Rig Type: Truck Mounted PROJECT NAME Scott Aviation SHEET NO. 1 Date/Time Start 05-22-91/0845 Drilling Method: H.S. Auger PROJECT LOCATION Lancaster, NY Date/Time Finish 05-22-91/1430 PROJECT NUMBER 7361.002.01 WELL SCHEMATIC COMMENTS Sample Sample SPT HNU FIELD IDENTIFICATION OF MATERIAL Depths No. Reading 0-2 10' of screen none 0-1 feet: Black too, sub-base (stone) set at 26', Brown clayey silt, little very fine sand to a depth of 14', sand, damp, medium stiff, slighty 2-4' MW1-24 6/12 0 plastic bentonite to a 17/19 depth of 11'. cement/ 4-6' Gray silty clay, trace very fine sand, MW1-46 8/10 0 bentonite damp, stiff to very stiff, few tan 18/20 slurry to a mottles at 4.5 feet increasing to many depth of 2', 6-8' MW1-68 8/12 0 at 5 feet cement collar, 13/15 flush mounted well cap, 2' 8-10' MW1-810 7/7 0\_ PVC wells, 9/12 screen - 0.020 slot 2/2 10-12' MW1-1012 ٥ 5/8 Soil moist at 11 feet, few black shale rock fragments at 12 feet 12-14 MW1-1214 6/8 0 Silt and fine sand, sand content 9/10 increasing with depth, very thin gray sand partings, moist 14-16' 0 MW1-1416 3/6 8/8 16-18' MW1-1618 5/6 0 6/7 18-20' MW1-1820 2/3 0 Gray silt and clay, moist to wet plastic with interbedded gray fine grained sand interbeds (= 1/32 to 1/10" thick), wet 5/4 20-22' MW1-2022 1/2 a 3/4 22-24' MW1-2224 2/3 ٥ 3/6 24-26' MW1-2426 WOH/2 0 10/12 Gray fine to medium grained sand and silt, little to some clay, wet, medium dense, grading to fine to coarse grained sand and fine to medium grained sub-26-28 MW1-2628 10/11 ۵ angular gravel (possibly decomposed 16/21 shale) SPT=STANDARD PENETRATION TEST Soil Stratigraphy Study \_ D=ORY W=WASHED U=UNDISTURBED C=CORED

P=PIT

A=AUGER CUTTING

SS=SPLIT SPOON

## DRILLING RECORD

Inspecto Rig Type	Buffalo Or or: Mike Kan : Truck Mo ; Method: H.	azawich unted		PROJECT NAME Scott Aviation  PROJECT LOCATION Lancaster. NY  PROJECT NUMBER 7361.002.01	of 1 05-23-91/1700 05-24-91/1000	
Sample Depths	Sample No.	SPT	HNU Reading	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
0-2'	MW2-02	2/3 4/4	3	Brown silt and very fine sand, little clay, trace medium grained gravel, dry, root zone (possibly fill material)  1.5-4.5 feet: Dark gray clayey silt and	2.5	10' screen set at 15', sand to a depth of 4'. bentonite to a depth of
2-4'	MW2-24	1/2 3/3	2	very fine sand, damp soft, plastic, root zone (top soil)	// A.d	2.5', bentonite/ cement slurry
4-6'	MW2-46	1/2 2/4	0	4.5-8 feet: Brown Clayey silt and very fine sand, trace medium to coarse		to 1', protective casing about
6-8′	MW2-68	3/5 6/8	g-'	grained gravel (sub-rounded), dry slightly plastic, tan/gray mottles (many)		3' above ground surface, wells
8-10'	MW2-810	10/20 30/28	0	Brown silty clay, little fine to medium grained gravel (rounded shale), some fine sand, wet, medium stiff (sticky), plastic  Same as above with interbedded gray very		constructed of 2" PVC, sceen - 0.020 slot
10-12	MW2-1012	4/6 17/23	0	fine to fine grained sand, trace coarse sand (partings = 1/16" thick)		
12-14	MW2-1214	9/17 13/11	0			
14-16'	MW2-1416	2/2 2/3	0	·	<u>  /5.0</u>	
16-18	MW2-1618	4/3 3/3	0		-	
SPT=STANDARD PENETRATION TEST D=ORY W=WASHED U=UNDISTURBED C=CORED P=PIT SS=SPLIT SPOON A=AUGER CUTTING				Soil Stratigraphy Study		

## DRILLING RECORD

Inspecto Rig Type	Buffalo Or or: Mike Kan : Truck Mo Method: H.	azawich unted		PROJECT NAME  Scott Aviation  PROJECT LOCATION Lancaster, NY  PROJECT NUMBER 7361.002.01  BORING NO. MW-3 SHEET NO. 1 of Date/Time Start 05-23-9 Date/Time Finish 05-23-9				
Sample Depths	Sample No.	SPT	HNU Reading	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS		
0-2'	MW3-02	7/10 5/3	1	Brown silt, fine to coarse grained sand, trace gravel, wood, brick (fill		15' of screen set at 26', sand to a		
2-4'	MW3-24	2/2 2/3	1	material)		depth of 9', bentonite to a		
4-6'	MW3-46	2/2 2/7	0	Greenish gray to black clayey silt, organic material, root zone, damp, slightly plastic		depth of 6', cement/ bentonite slurry to a		
6-8′	MW3-68	3/9 17/19	0	Brown silt and clay, trace very fine sand and fine to coarse grained gravel	6-0	depth of 3', outer protective		
8-10'	MW3-810	7/9 17/19	Ĩ.,	(rounded), dry (hard), sand partings (very thin, gray, damp)	11.0	casing, cement collar, well consists of 2"		
10-12'	MW3-1012	4/12 19/26	3 ′	, ,		PVC, screen - 0.020 slot		
12-14	MW3-1214	8/7 6/6	1	Interbedded gray sand layers (1/10" thick) at a depth of 13', sand wet				
14-16	MW3-1416	2/2 2/2	0	Brown silty clay, trace very fine sand, sand partings, moist to wet, soft,				
16-18'	MW3-1618	2/2 2/2	1	plastic				
18-20'	MW3-1820	6/8 10/12	NR	Gray silt, sand, and clay, wet, very soft, plastic (sticky), little shale fragments				
20-22′	MW3-2022	2/3 8/20	1	Gray silty sand and fine to medium		·		
22-24'	MW3-2224	13/17 17/19	NR	grained gravel, some clay, moist to wet, gravel consists of sub-angular shale rock fragments (possibly highly				
24-26'	MW3-2426	16/19 17/20	0	decomposed bedrock)	- 71.0			
SPT=STANDARD PENETRATION TEST D=DRY W=WASHED U=UNDISTURBED C=CORED P=PIT SS=SPLIT SPOON A=AUGER CUTTING				Soil Stratigraphy Study				

## DRILLING RECORD

Inspecto Rig Type	Buffalo Dr or: Mike Kang : Truck Mod Method: H.	azawich unted		PROJECT NAME Scott Aviation  PROJECT LOCATION Lancaster, NY  PROJECT NUMBER 7361.002.01	BORING NO. MW-4 SHEET NO. 1 of 1 Date/Time Start 05-22-91/1600 Date/Time Finish 05-23-91/1000			
Sample Depths	Sample No.	SPT	HNU Reading	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS		
0-2'	none	none	none	0-1 feet: 8lack top, sub-base (stone) Gray-black silt and clay, damp medium		10' of screen set at 26', sand to a		
2-4'	MW4-24	4/6 8/10	16	stiff, plastic, organic material, root zone, brick fragments (fill material), moisture content decreases with depth,		depth of 14', bentonite to a depth of 11',		
4-6'	MW4-46	2/3 5/8	3	organic vapors in 2-4 foot spoon		cement/ bentonite slurry to 2',		
6-8'	MW4-68	3/4 7/8	30	Gray silty clay, little very fine grained sand, dry, medium stiff,		cement collar, flush mounted well		
8-10'	MW4-810	3/8 13/16	50	plastic, few tan mottles, brown silty clay layer = 2' thick at 9' with trace rounded to sub-rounded fine grained	<u>и.о.</u>	constructed of PVC, well screen - 0.020		
10-12'	MW4-1012	6/12 17/18	60	quartz gravel	A.d	slot		
12-14	MW4-1214	5/8 11/11	110	Same as above, moisture content increases to "damp", fine sand content increases to "some", gray sand partings (very fine sand) and trace shale	76.0			
14-16'	MW4-1416	3/3 5/5	5	fragments at 16'				
16-18'	MW4-1618	3/4 5/7	0					
18-20'	MW4-1820	4/10 7/8	25	Gray clayey silt, some very fine sand				
20-22	MW4-2022	2/4 5/3	0	layers interbedded within the horizon (1/10" thick), sand is wet, trace fine grained gravel (shale, angular)				
22-24	MW4-2224	7/22 44/51	1	gramed graver (shello, angles or,		:		
24-26	MW4-2426	7/21 49/52	5					
26-28	MW4-2628	31/39 29/43	0	Highly decomposed gray-black shale, dry	26.0			
D=DRY U=UNDIST P=PIT	NDARD PENETR FURBED CUTTING	ATION TEST W=WASHED C=CORED SS=SPLIT		Soil Stratigraphy Study				

# APPENDIX B WELL DEVELOPMENT DATA

## SUMMARY OF WELL DEVELOPMENT/GROUNDWATER TESTING

Well #	MW-1				
Time	W.L.*	Temp.	рH	Conductivity (µS)	Remarks
1200	7.49	17. <u>1</u>	12.6		Sample from 1st bail removed from well - near water surface.
1218	-	15.0	9.6	508	Sample recovered after 5 gallons bailed from well.
1315	7.82				Total of 10 gal. bailed from well today. Approx. 30 gal. was pumped from well on 5/24/91.  Water sample for analytical testing recovered at 1315.

Wa	11	#	MW-	. 🤈

Time	W.L.*	Temp.	pH:	Conductivity (µS)	Remarks
0900	5.06	20.0	7.6	760	Sample from 1st bail removed from well - near water surface.
0925	-	12.2	8.1	828	Sample recovered after 5 gallons bailed from well.
1400	14.80			·	Total of 7 gal. bailed from well today.
o.				·	Water sample for analytical testing recovered at 1400.

## W.L. = Water Level. Weight Street Will = Water Level. Will = Water Level. Weight Street Will = Water Level. Wil

- 1) Depth to groundwater level measured from the top of PVC well pipe (north edge) using a electronic water level indicator.
- 2) Analytical samples were recovered by Buffalo Drilling Company, Inc. geologist Mr. David Frazier. The samples, trip blank and chain-ofcustody record were transferred to Ms. Karen Kromer of Creative Errands courier service for subsequent delivery to Huntington Laboratory.

Sheet No. 1 of 2

## SUMMARY OF WELL DEVELOPMENT/GROUNDWATER TESTING

Well #	MW-3				
Time	W.L.*	Temp.	рН	Conductivity (µS)	Remarks
1045	4.48	18.9	8.7	453	Sample from 1st bail removed from well - near water surface.
1135	-	11.6	8.2	553	Sample recovered after 5 gallons bailed from well.
1350	17.30				Total of 20 gal. bailed from well today.  Water sample for analytical testing recovered at 1350.

Well # MW-	-4	MW	#	.1	1	We
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Time	W.L.*	Temp.	pH	Conductivity (µS)	Remarks
1015	3.64	18.5	10.0	424	Sample from 1st bail removed from well - near water surface.
1035	-	11.9	9.9	353	Sample recovered after 6 gallons bailed from well.
1340	12.96				Total of 20 gal. bailed from well today.
					Water sample for analytical testing recovered at 1340.

### iEMARKS: \* W.L. = Water Level.

- 1) Depth to groundwater level measured from the top of PVC well pipe (north edge) using a electronic water level indicator.
- 2) Analytical samples were recovered by Buffalo Drilling Company, Inc. geologist Mr. David Frazier. The samples, trip blank and chain-of-custody record were transferred to Ms. Karen Kromer of Creative Errands courier service for subsequent delivery to Huntington Laboratory.

Sheet No. 2 of 2

WELL 1	DEVELOPMENT RECO	RD (10/29/92) -	MONITORING WELL	MW-1
Volume Purged (Gallons)	Conductivity (µ/SEC)	Temperature (Degrees F.)	рН	Time
2.5	720	56.2	10.55	1430
5	550	55.8	9.55	1437
8	510	54.4	9.21	1441
10	540	54.8	9.06	1445
12.5	520	54.4	8.9	1450
14	600	54.5	8.8	1453
16.5	630	54.0	8.73	1500
17.5	630	54.1	8.73	1505
WELL	DEVELOPMENT RECO	PRD (10/29/92) -	MONITORING WELL	MW-2
Volume Purged (Gallons)	Conductivity (µ/SEC)	Temperature (Degrees F.)	рН	Time
1	1132	56.1	7.24	1205
2	2004	55.9	7.06	1210
5	2011	55.3	6.82	1215
8	2001	55.1	6.83	1220
	1			

Removed 9 gallons of water and well went dry. Dedicated bailer black on outside, slight sheen on water.

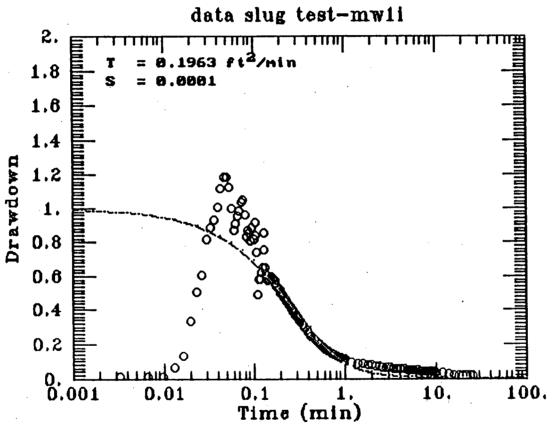
WELL DEVELOPMENT RECORD (10/29/92) - MONITORING WELL MW-3							
Volume Purged (Gallons)	Conductivity $(\mu/\text{SEC})$	Temperature (Degrees F.)	pH	Time			
1	1180	56.7	7.44	1240			
2	1120	55.4	7.47	1245			
5	1400	54.5	7.44	1250			
10	1040	53.4	7.49	1300			
15	1120	53.8	7.51	1305			
17	1040	53.4	7.49	1310			
	Removed 18 gallons of water and well went dry.						

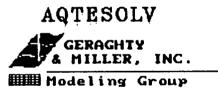
WELL	WELL DEVELOPMENT RECORD (10/29/92) - MONITORING WELL MW-4						
Volume Purged (Gallons)	Conductivity (µ/SEC)	Temperature (Degrees F.)	рН	Time			
3	1260	55.4	7.89	1330			
6	1050	54.2	7.83	1340			
10	1140	54.2	7.82	1345			
13	1000	53.6	7.82	1350			
	Removed 13 gall	ons of water and	well went dry.				
WELL	DEVELOPMENT RECO	ORD (10/29/92) -	MONITORING WELL	. MW-5			
Volume Purged (Gallons)	Conductivity (µ/SEC)	Temperature (Degrees F.)	рН	Time			
2	1040	52.2	8.5	1630			
4	870	51.2	8.4	1640			
9	790	50.6	8.38	1651			
12.5	770	50.9	8.31	1659			
16	750	50.4	8.3	1702			
21	800	49.9	8.38	1715			
27	740	48.3	8.27	1730			
Removed 2	27 gallons of ve	ry silty water -	well recharged	quickly.			
WELL	DEVELOPMENT RECO	ORD (10/29/92) -	MONITORING WELL	. MW-6			
Volume Purged (Gallons)	Conductivity (µ/SEC)	Temperature (Degrees F.)	рН	Time			
0.5	1310	61.8	8.86				
4.5	1070	55.3	8.72				
6.5	1240	54.2	8.50				
10	1040	52.9	8.43				
13	960	52.0	8.42				
15	950	52.8	8.44				
Rem	Removed 18 gallons of water - not too silty, no odor.						

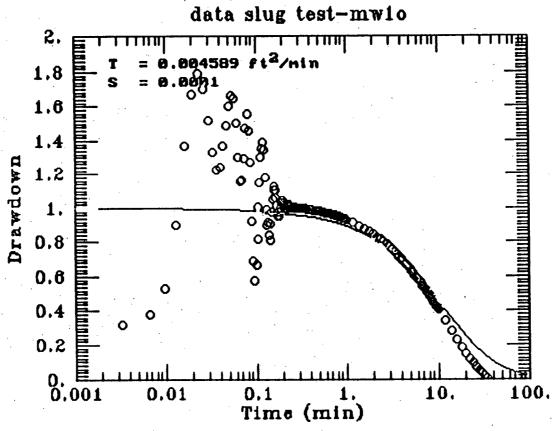
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APPENDIX C

AQTESOLV DRAWDOWN CURVES



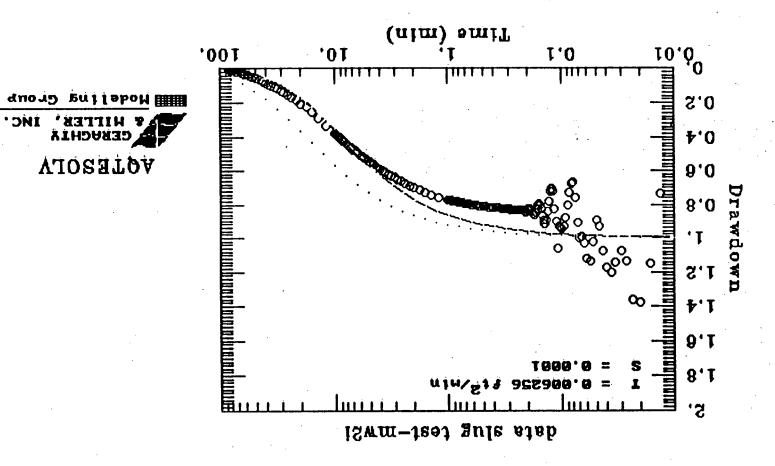


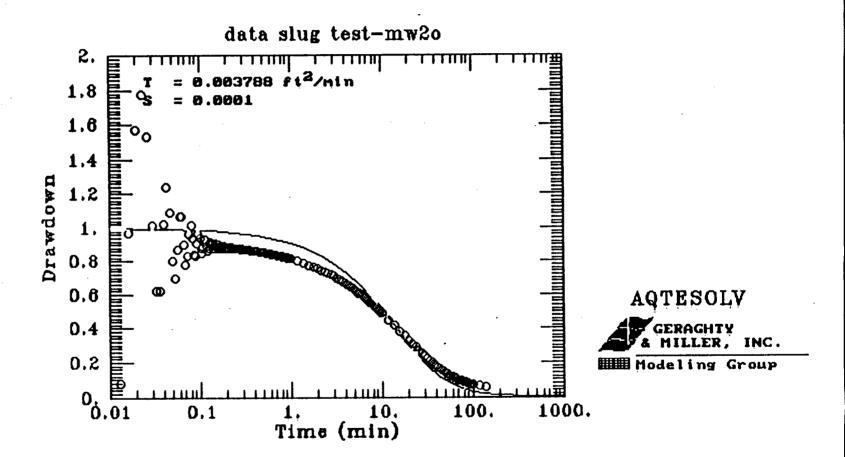


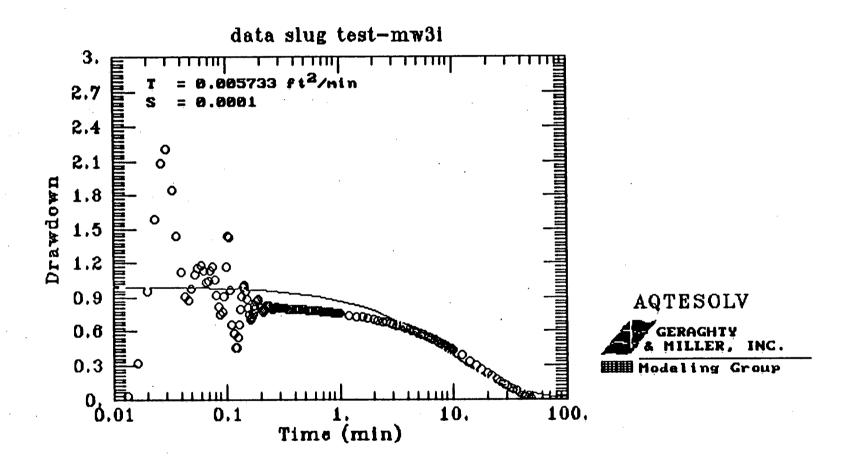
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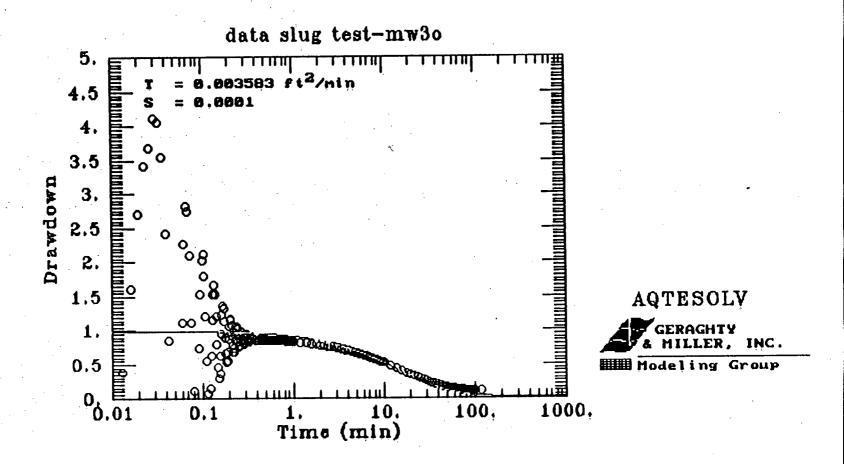
GERAGHTY

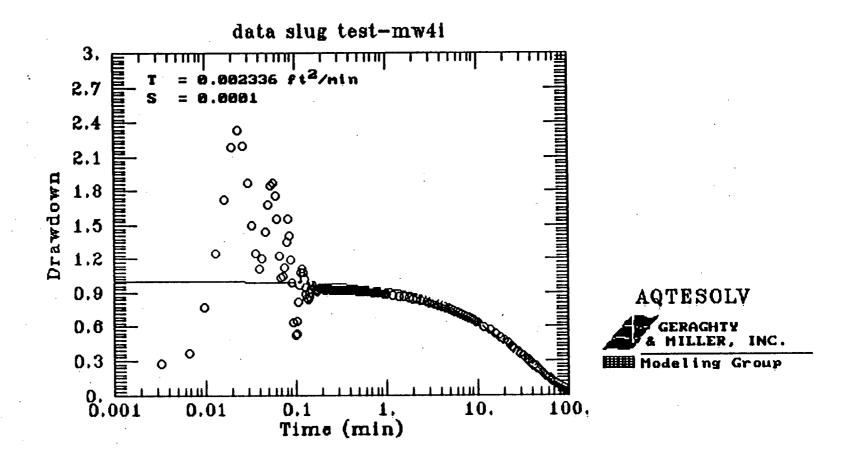
Modeling Group

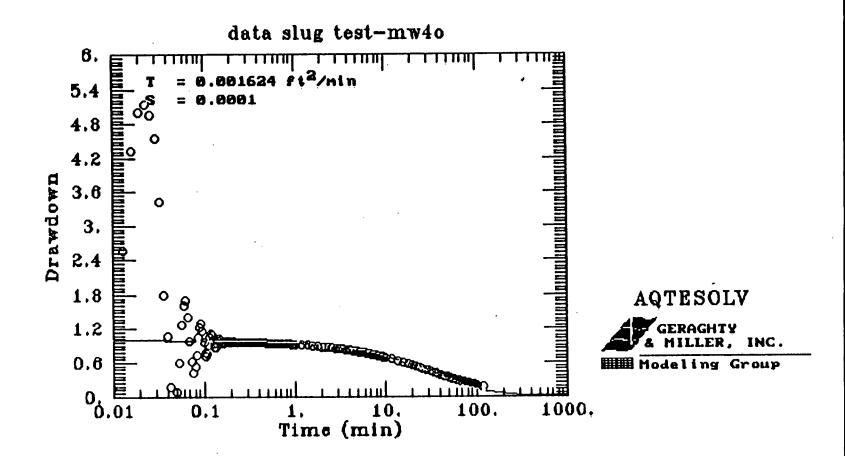


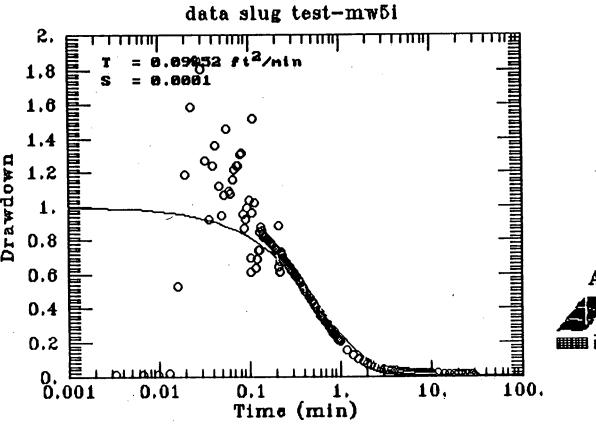








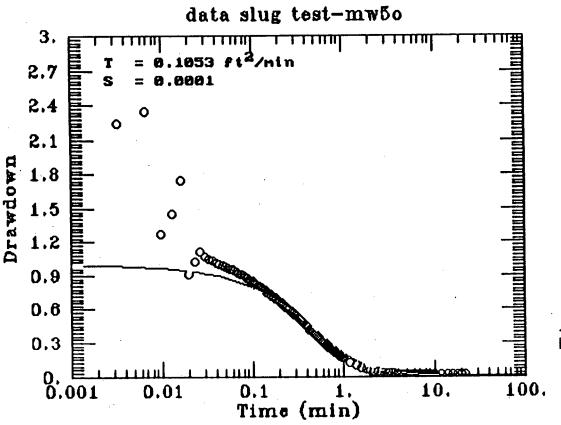




AQTESOLV

GERAGHTY A MILLER, INC.

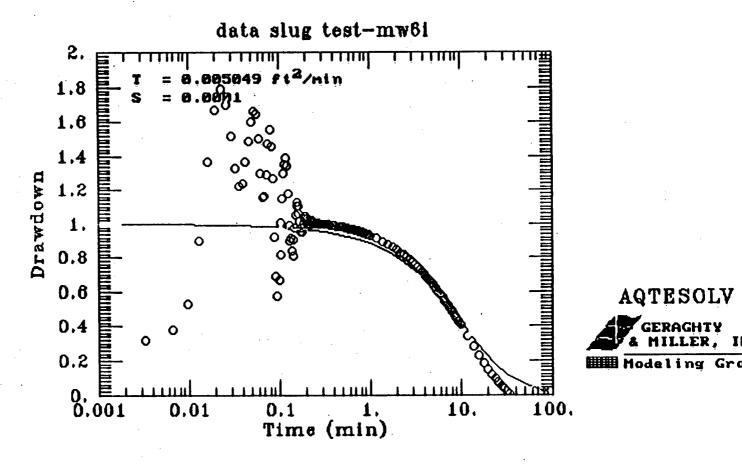
Modeling Group

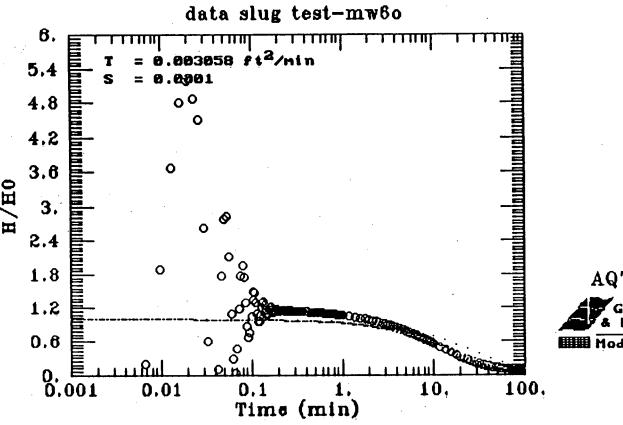


AQTESOLV

GERAGHTY & HILLER, INC

Modeling Group





AQTESOLV

GERAGHTY A MILLER, INC.

Modeling Group

APPENDIX D

SOIL GAS INVESTIGATION REPORT

Shallow Soil Gas Investigation

SCOTT AVIATION Lancaster, New York

October 26, 1992

## Propared for:

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Submitted by:

. Strus

2-92-561-S

Shallow Soil Gas Investigation

11...

SCOTT AVIATION Lancaster, New York

October 26, 1992

## 1.0 SCOTT AVIATION SITE INVESTIGATION

Tracer Research Corporation (Tracer Research) performed a shallow soil gas investigation at Scott Aviation in Lancaster, New York. The investigation was conducted October 26, 1992, for VERSAR.

## 1.1 Objective

The purpose of the investigation was to evaluate the site for possible soil and groundwater contamination by screening shallow soil gas for the presence of volatile organic chemicals (VOCs). The investigation was also used to determine locations for monitoring wells and soil borings. Samples collected were analyzed for the following halocarbons and hydrocarbons.

Vinyl Chloride

Toluene

1,1 dichloroethene (1,1 DCE)

1,1 dichloroethane (1,1 DCA)

1,2 dichloroethene (Total 1,2 DCE)

1,2 dichloroethane (1,2 DCA)

trichloroethene (TCE)

#### 1.2 Overview of Results

For this investigation, 16 soil gas samples were collected at depths of 5 to 9 feet below grade from 16 locations. A summary of the soil gas investigation is presented in the table on the following page.

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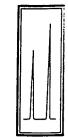


Table 1. Soil Gas Sample Summary

Compound	# of samples in which compound was detected	Low conc. ug/L	High conc. ug/L	Sample(s) with high conc.
Vinyl Chloride	. 1	NA	0.4	SG-1-8.5'
Toluene	2	1	2.	SG-11-5'
1,1 DCE	0	NA	ŇA	NA
1,1 DCA	0	NA	NA	NA
Total 1,2 DCE	1	NA	0.7	SG-1-8.5'
1,2 DCA	0	NA	NA	NA
TCE	1	NA	0.3	SG-1-8.5'

NA = Not Applicable

## 2.0 SITE DESCRIPTION

The investigation was conducted near the former Scott Aviation waste storage area. The subsurface at the site consisted of sand and clay mix. Depth to groundwater is approximately 8 to 14 feet below grade (bg) Groundwater flow is to the west.



#### 3.0 SAMPLING PARAMETERS

Soil gas sampling probes consisted of 7-and 14- foot lengths of 3/4-inch diameter hollow steel pipe. The probes were fitted with detachable drive tips and advanced to depths of 5 to 9 feet below ground surface (bgs). All probes were hydraulically pushed and or pounded to the desired depths.

The aboveground end of each probe was fitted with an aluminum reducer (manifold) and a length of polyethylene tubing leading to a vacuum pump. Soil gas was pulled by the vacuum pump into the probe. Samples were collected in a glass syringe by inserting a syringe needle through a silicone rubber segment in the evacuation line and down into the steel probe. The vacuum was monitored by a vacuum gauge to ensure an adequate gas flow from the vadose zone was maintained.

The volume of air within the probe was purged by evacuating 2 to 5 probe volumes of gas. The evacuation time in minutes versus the vacuum in inches of mercury (Hg) was used to calculate the necessary evacuation time. The vacuum in inches Hg was recorded at each sampling location.

Sample probe vacuums ranged from 9 to 20 inches Hg. The vacuum capacity of the pump was approximately 22 inches Hg.

#### 4.0 ANALYTICAL PARAMETERS

During this investigation, 3 to 5 milliliters (mL) of soil gas were collected for each sample and immediately analyzed in the Tracer Research analytical van. Subsamples (replicates) from these samples were injected into the gas chromatograph (GC) in volumes of 200 to 500 microliters (µL).



## 4.1 Analyte Class

The soil gas samples were analyzed for the following analyte classes and compounds:

Analyte Class: Hydrocarbon

Toluene

Analyte Class: Halocarbon

Vinyl Chloride

1,1 dichloroethene (1,1 DCE)

1,1 dichloroethane (1,1 DCA)

cis and trans 1,2 dichloroethene (total 1,2 DCE)

1,2 dichleroethane (1,2 DCA)

trichlorethene (TCE)

## 4.2 Chromatographic System

A Varian 3300 gas chromatograph, equipped with an electron capture detector (ECD), a flame ionization detector (FID), and two computing integrators, was used for the soil gas analyses. Compounds were separated in the GC on two 6 foot by 1/8 inch outer diameter (OD) packed analytical columns (1% SP1000 stationary phase bonded to 60/80 mesh Carbopack B support) in a temperature controlled oven. The halocarbons were detected on the ECD and vinyl chloride and toluene were detected on the FID. Nitrogen was used as the carrier gas.

The instrument calibrations were checked periodically throughout each day to monitor the response factor and retention time. The following paragraphs explain the GC, ECD, and FID processes.



#### GC Process

The soil gas vapor is injected into the GC where it is swept through the analytical column by the carrier gas. The detector senses the presence of a component different from the carrier gas and converts that information to an electrical signal. The components of the sample pass through the column at different rates, according to their individual properties, and are detected by the detector. Compounds are identified by the time it takes them to pass through the column (retention time).

#### **ECD Process**

The ECD captures low energy thermal electrons that have been ionized by beta particles. The flow of these captured electrons into an electrode produces a small current, which is collected and measured. When the halogen atoms (halocarbons) are introduced into the detector, electrons that would otherwise be collected at the electrode are captured by the sample, resulting in decreased current. The current causes the computing integrator to record a peak on a chromatogram. The area of the peak is compared to the peak generated by a known standard to determine the concentration of the analyte.

#### FID Process

The FID utilizes a flame produced by the combustion of hydrogen and air. When a component, which has been separated on the GC analytical column, is introduced into the flame, a large increase in ions occurs. A collector with a polarizing voltage is applied near the flame and the ions are attracted and produce a current, which is proportional to the amount of the sample compound in the flame. The electrical current causes the computing integrator to record a peak on a chromatogram. By measuring the area of the peak and comparing that area to the integrator response of a known aqueous standard, the concentration of the analyte in the sample is determined.



## 4.3 Analyses

The detection limits for target compounds depend on the sensitivity of the detector to the individual compound as well as the volume of the injection. The detection limits of the target compounds were calculated from the response factor, the sample size, and the calculated minimum peak size (area) observed under the conditions of the analyses. If any compound was not detected in an analysis, the detection limit is given as a "less than" value, e.g.,  $<0.1 \,\mu\text{g/L}$ . The approximate detection limits for the target compounds are presented in the table below.

Table 2. Detection Limits for Soil Gas Compounds

Compound	Detection Limits (ug/L)				
Vinyl Chloride	0.4				
Toluene	0.2				
1,1 DCE	0.08				
1,1 DCA	0.1				
Total 1,2 DCE	0.1				
1,2 DCA	0.07				
TCE	0.002				



## 5.0 QUALITY ASSURANCE AND QUALITY CONTROL

Tracer Research's Quality Assurance (QA) and Quality Control (QC) program was followed to maintain data that was reproducible through the investigation. An overview presenting the significant aspects of this program is presented in the following paragraphs.

## Soil Gas Sampling Quality Assurance

To ensure consistent collection of soil gas samples, the following procedures are performed:

## - Sampling Manifolds

Tracer Research's custom designed sampling manifold connects the sample probe to the vacuum line and pump. The manifold is designed to eliminate sample exposure to the polymeric (plastic) materials that connect the probe to the vacuum pump.

The sampling manifold is attached to the end of the probe, forming an air tight union between the probe and the silicone tubing septum. The septum connects the manifold to the pump vacuum line and permits syringe sampling.

This sampling system allows the sample to be taken upstream of the sampling pump, manifold, and septum. Since cross contamination of sampling equipment can be a major problem. Tracer Research replaces the materials (probe and syringe), between sampling points, that contact the soil gas before or during sampling.

#### -Sampling Probes

Steel probes are used only once each day. To eliminate the possibility of cross contamination, they are washed with high pressure soap and hot water spray, or steam-cleaned. Enough sampling probes are carried on each van to avoid the need to re-use any during the day.

## -Glass Syringes

Glass syringes are used for only one sample a day and are washed and baked out at night. If they must be used twice, they are purged with carrier gas (nitrogen) and baked out between probe samplings.



## -Sampling Efficiency

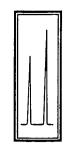
Soil gas pumping is monitored by a vacuum gauge to ensure that an adequate flow of gas from the soil is maintained. A reliable gas sample can be obtained if the sample vacuum gauge reading is at least 2 inches Hg less than the maximum measured vacuum of the vacuum pump.

## Analytical Quality Assurance Samples

Quality assurance samples are performed at the below listed, or greater, frequencies. The frequency depends on the number of soil gas samples analyzed and the length of time of the survey:

Table 3. Quality Assurance Samples

Sample type	Frequency
Ambient Air Samples	2 per day or per site
Analytical Method Blanks	5% (1 per 20 samples or 1 a day)
Continuing Calibration Check	10% (1 every 10 samples)
Field System Blank	10% (1 every 10 samples or 1 a day)
Reagent Blank	1 per set of working standards
Replicate Samples	10% of all soil gas samples



The ambient air samples are obtained on site by sampling the air immediately outside the mobile analytical van and directly injecting it into the GC. Analytical method blanks are taken to demonstrate that the analytical instrumentation is not contaminated. These are performed by injecting carrier gas (nitrogen) into the GC with the sampling syringe. Subsampling syringes are also checked in this fashion.

The injector port septa through which soil gas samples are injected into the GC are replaced daily to prevent possible gas leaks from the chromatographic column. All sampling and subsampling syringes are decontaminated after use and are not used again until they have been decontaminated by washing in anionic detergent and baking at 90°C.

Field system blanks are analyzed to check for contamination of the sampling apparatus, e.g., probe and sampling syringe. A sample is collected using standard soil gas sampling procedures, but without putting the probe into the ground. The results are compared to those obtained from a concurrently sampled ambient air analysis.

If the blanks detect compounds of interest at concentrations that indicate equipment contamination or concentrations that exceed normal background levels (ambient air analysis), corrective actions are performed. If the problem cannot be corrected, an out-of-control event is documented and reported.

A reagent blank is performed to ensure the solvent used to dilute the stock standards is not contaminated. Analytical instruments are calibrated daily using fresh working standards made from National Institute of Sciences and Technology traceable standards and reagent blanked solvents.

Quantitative precision is assured by replicating analysis of 10 percent of the soil gas samples. Replicate analyses are performed by subsampling vapors from the original sampling syringe.

5



## 6.0 RESULTS

The analytical results from this soil gas investigation are condensed in Appendix A. The data are presented by location and by analyte concentration. When the compound was not detected, the detection limit is presented as a "less than" value, e.g.,  $<0.002 \,\mu g/L$ .

Soil gas samples are identified by sample location and sampling depth. For example, SG-1-8.5' represents soil gas sample number 1, collected at a depth of 8.5 feet below the ground surface.

# TRACKR RESEARCH CORPORATION - ANALYTICAL RESULTS VERSAR/ SCOTT AVIATION/ LANCASTER, NEW YORK/ Job No. 2-92-561-S 10/26/92

SAMPLE	VINYL CHLORIDE µg/L	TOLUENE µg/L	1,1 DCE μg/L	i,i DCA μg/L	TOTAL 1,2 DCE µg/L	1,2 DCA µg/L	TCE µg/L
AIR	<0.2	<0.1	<0.04	<0.06	<0.06	<0.03	<0.0008
SG-1-8.5'	0.4	<0.2	<0.2	<0.3	0.7	<0.2	0.3
SG-2-6.5'	<0.4	<0.2	<0.1	<0.2	<0.2	<0.1	<0.003
SG-3-6°	<0.4	<0.2	<0.08	<0.1	<0.1	<0.07	<0.002
SG-3-9°	<0.4	<0.2	<0.08	<0.1	<0.1	<0.07	< 0.002
SG-4-5'	<6	<0.2	<0.08	<0.1	<0.1	<0.07	<0.002
SG-5-5'	1	<0.2	<0.08	<0.1	<0.1	<0.07	<0.002
SG-6-5'	<0.4	1	<0.08	<0.1	<0.1	< 0.07	< 0.002
AIR	<0.2	<0.1	<0.04	<0.06	<0.06	<0.03	<0.0008
SG-7-6'	<0.4	<0.2	<0.08	<0.1	<0.1	<0.07	<0.002
SG-8-5'	I	<0.2	<0.08	<0.1	<0.1	<0.07	< 0.002
SG-9-5'	<0.4	<0.2	<0.08	<0.1	<0.1	<0.07	<0.002
SG-10-6'	<0.4	<0.2	<0.08	<0.1	<0.1	<0.07	<0.002
SG-11-5'	<0.4	2	<0.08	<0.1	<0.1	<0.07	< 0.002
SG-12-6'	<0.4	<0.2	<0.08	<0.1	<0.1	<0.07	<0.002
SG-13-6'	<0.4	<0.2	<0.08	<0.1	<0.1	<0.07	<0.002
SG-14-6'	<0.4	<0.2	<0.08	<0.1	<0.1	<0.07	< 0.002
SG-15-6'	<0.4	<0.2	<0.08	<0.1	<0.1	<0.07	<0.002
AIR	<0.2	<0.1	<0.04	<0.06	<0.06	<0.03	<0.0008

I = Interference with adjacent peaks

Analyzed by: L. Schenmeyer Proofed by: M. Stills



APPENDIX E

DATA VALIDATION REPORT

## DATA VALIDATION FOR THE SCOTT AVIATION SITE

Prepared for:

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Prepared by:

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February, 1993

The analytical results reported by Laboratory Resources, Inc. were submitted to Versar Laboratories, Inc. for validation. The data validation was performed following the guidelines in the Quality Assurance Project Plan (QAPP) prepared for the Scott Aviation Site, Lancaster, NY., Sections 4.0, 8.0, and 12.0. In conjunction with the QAPP, Appendix A - Remedial Investigation Sampling Plan was referred to for additional information regarding the Sampling Plan (Table 1) and Quality Control Sample Analysis Summary (Table 2). The analytical results for metals, volatiles, pesticides/PCBs and BNAs were evaluated.

#### SAMPLING PLAN

The chain of custody (COC), which listed the samples collected was compared with the Sampling Plan (Table 1) to determine if the sampling plan was followed. Sampling occurred following the Sampling Plan with the following deviations:

- Samples were not collected from the utilities investigation. This site was listed as optional.
- Six surface soil samples (sampling plan specified five) were collected and analyzed for TCL volatiles and TAL metals.

The COC lists MW-6, collected on 10/28/92 as a solid sample. Since MW stands for monitoring well, it is unlikely that a soil sample was taken from a monitoring well. The field number may have been mislabeled and should most likely be listed as a soil boring (SB). This is further confirmed by the sampling plan which specifies the collection of ten soil borings and only nine soil borings were listed on the COC. In addition, if MW-6 is not counted as a monitoring well, than the total number of samples collected from monitoring wells is according to the sampling plan. For evaluation, MW-6 was assumed to be a soil boring, bring the total soil borings collected to ten.

#### CHAIN OF CUSTODY (COC)

The COC was compared with the data submitted from Laboratory Resources, Inc. to determine if all sample analysis were performed as specified. All samples submitted to the laboratory for analysis were completed with the following discrepancies:

- Dissolved oxygen analytical results were not submitted for validation.
- Arsenic was not reported for Field Blank 3 in the metals data package.

## CHAIN OF CUSTODY (COC) (continued)

- The COC for sample SB-5B MS/MSD was misinterpreted for the metals analysis. It appears that the laboratory did not see SB-5B specified as a sample. In addition, instead of reading the COC to mean, "do MS/MSD on SB-5B", the MS and MSD were interpreted as samples with MS/MSD required on the MSD. The result was an extra analysis of SB-5B labeled in the data package as MS and no analysis occurred on the sample SB-5B.
- 4. The COC for sample SS-5 duplicate was misinterpreted for the metals analysis. Instead of reading the COC to mean a "field duplicate to be handled as a sample", the sample was treated the field duplicate as a laboratory duplicate on SS-5. The results are found on Form VI under duplicate sample.

#### ANALYTICAL METHODS

The analytical results were evaluated under the methods specified in the QAPP, Table 3, pg 12. The QAPP specified the use of EPA Test Methods for Evaluating Solid Waste, SW 846 Third Edition methods for the analyses of the samples. The laboratory followed methods from the EPA Contract Laboratory Program (CLP) when performing the analyses on these samples. The samples submitted for the analysis of metals were determined following methods from EPA CLP version ILMO2.1. The specific EPA CLP version followed for the analyses of organics is not identified anywhere in the data package, but is believed to have been OLMO1.8. The differences, and their significance will be outlined where appropriate.

#### QUALITY CONTROL SAMPLE ANALYSIS SUMMARY

The Quality Control Sample Analysis Summary (Table 4) found on page 13 of the Quality Assurance Project Plan and the Quality Control Sample Analysis Summary (Table 2) found on page 8 of the Appendix A - Remedial Investigation Sampling Plan were used to evaluate adherence to the quality control plan.

The following definitions and field activities are provided for clarity:

#### **Definitions**

EVENT: An event is defined as one sampling round. Two sampling

events occurred for the collection of these samples.

LOT: A lot consists of twenty samples of the same matrix.

MS/MSD: A MS/MSD is defined as a matrix spike and matrix spike duplicate. A MS/MSD is the specified sample QC in SW846 Third Edition. The laboratory performed a MS/MSD for the organic analysis but duplicates (D) and spikes (S) were performed for the metals. The D/S for metals are

requirements of ILMO2.1 and are usually acceptable

substitutes for a MS/MSD.

#### Field Activities

#### WATER MATRIX:

Hydrogeological Investigation:

Consisted of ground water monitoring (MW) and interception trench (IT) samples.

Surface Water Investigation:

Consisted of surface water (SW) samples.

#### SOIL MATRIX:

Soil Investigation:

Consisted of soil boring (SB) and surface soil (SS) samples.

Sediment Investigation:

Consisted of drainage ditch sediment (DDS) and stream sediment (SC).

According to the Quality Control Sample Analysis Summary, each Field Activity should have a field blank, trip blank, field duplicate sample, MS/MSD, and blank/blank spike. Following these guidelines the following discrepancies exist:

## Field Blanks

A field blank was required per sampling event per field activity. During the first sampling event, samples were collected from each field activity. Therefore, the total number of field blanks required for the first round of sampling should be four. Only three field blanks were collected and analyzed. During the second sampling event, samples were collected from only one field activity. Therefore only one field blank was required for the second round of sampling. One field blank was collected and analyzed.

According to SW846 Third Edition, Volume II: Field Manual, Chapter 11, Section 1.2.2.1 General Requirements, the minimum frequency for field blanks is 1 field blank per 20 samples. The total number of field blanks meets the minimum frequency requirements of SW846 Third Edition.

## Trip Blanks (VOCs only)

A trip blank was required per sampling event per field activity. During the first sampling event, samples were collected from each field activity. Therefore, the total number of trip blanks required for the first round of sampling should be four. Only one field blank was collected and analyzed. During the second sampling event, samples were collected from only one field activity. Therefore only one field blank was required for the second round of sampling. Only field blank was collected and analyzed.

According to SW846 Third Edition, Volume II: Field Manual, Chapter 11, Section 1.2.2.1 General Requirements, the minimum frequency for trip blanks is 1 trip blank per 20 samples. The

total number of field blanks meets the minimum frequency requirements of SW846 Third Edition.

#### MS/MSD

A MS/MSD or D/S was required 1:20 samples per field activity. However, for SW846 Third Edition, an acceptable MS/MSD or D/S frequency is 1:20 samples of the same matrix. At this frequency, the proper amount of MS/MSD or D/S was performed on the water samples. An extra soil sample was collected for TAL and TCL analysis bringing the total number of soil samples to 21. The additional soil mandates the need for an additional MS/MSD or D/S. A total of two MS/MSD's or D/S's should have been done on the soil samples. Only one MS/MSD or D/S was preformed on the soil samples.

## Field Duplicates

A duplicate sample was required 1:20 samples per field activity. However, for SW846 Third Edition, an acceptable frequency is 1:20 samples of the same matrix. At this frequency, the proper amount of field duplicates were collected on the water samples. An extra soil sample was collected for TAL and TCL analysis bringing the total number of soil samples to 21. The additional soil mandates the need for an additional field duplicate. A total of two field duplicates should have been done on the soil samples. Only one field duplicate was performed on the soil samples.

A chart has been included that outlines the differences between the sampling and analyses' plan and the actual sampling and analyses. As the chart summarizes, adequate quality control samples were performed for these samples.

## SAMPLING PLAN AND FIELD QC Actual Versus Plan

#### Number of Samples Submitted for Metal and Volatile Analyses

Soil Matrix	Actual No. of Samples	Plan No. of Samples	Actual No. of Field Dup	Plan No. of Field Dup	Actual No. of MS/MSD	Plan No. of MS/MSD
SB	10	10		11	1	1
SS	6	5	11	11		1
sc	3	3		1		11
DDS	2	2		1		11
TOTAL	21	20	1	4	1	4

Water Matrix	Actual No. of Samples	Plan No. of Samples	Actual No. of Field Dup	Plan No. of Field Dup	Actual No. of MS/MSD	Plan No. of MS/MSD
MV	12	12	1	11	11	1
IT	_ 2	2		1		1
SW	3	3		1		11
TOTAL	17	17	1	4	1	4

For all water samples, a corresponding dissolved water sample was also submitted for metals analyses. A field duplicate and MS/MSD was also performed on the dissolved monitoring well samples.

## Number of Samples Submitted for Pesticide/PCBs and BNAs

Soil Matrix	Actual No. of Samples	Plan No. of Samples	Actual No. of Field Dup	Plan No. of Field Dup	Actual No. of MS/MSD	Plan No. of MS/MSD
S8	2	11	1	11	1	1
TOTAL	1	1	1	1	11	11

## KEY:

Soil

SB = Soil boring
SS = Surface soil
SC = Stream sediment

DDS = Drainage ditch sediment

Water

MW = Ground water monitoring

SW = Surface water

IT = Interception trench

#### METALS EVALUATION

Below is a list of quality control / quality assurance quidelines that were evaluated to determine protocol compliance:

- Holding times 1.
- Calibration verifications 3.
- Calibration verifications
  Interelement check samples 5.
- Reporting units 7.
- Precision (duplicate-D) 9.
- 2. Calibration
- 4. Calibration blank
- 6. Laboratory ctrl. samples
- 8. Accuracy (spike-S)

All analyses for metals were completed within specified holding times. All instruments were calibrated properly prior to analyses of samples. All calibration verifications were analyzed at the required frequency and were within specified control limits. All calibration blanks were analyzed at the required frequency and were within specified control limits. All interelement check samples were analyzed at the required frequency and were within specified control limits. Laboratory control samples were analyzed at the specified frequency. Although there is no criteria, all laboratory control samples were within 20% control limits. water sample results were reported in ug/L and all soil sample results were reported in MG/KG. All spikes reported were within the criteria identified in the QAPP, Section 4.2, page 14. METALS DISCREPANCIES, comment 6). All duplicates were within the criteria identified in the QAPP, Section 4.2, page 14. A duplicate and spike were done as specified by the chain of custody. appropriate raw data was included in the data package and was spot checked against the report for correctness.

#### METALS DISCREPANCIES

The following discrepancies were found with the metals analysis:

- According to the date on the COC, the first round of sampling 1. was received at the laboratory on 10/31/92, however the Metals reports indicate that the receipt date was 11/3/92.
- According to the date on the COC, the second round of sampling 2. was received at the laboratory on 11/17/92, however the Metals reports indicate that the receipt date was 11/18/92 or 11/19/92.
- The actual solid sample weight was not recorded on the 3. preparation logs for AA, ICP, and mercury. The sample weight used in calculating the analyte concentrations for ICP and AA was assumed to be exactly 1 gram and for mercury was assumed to be exactly 0.2 grams.

## METALS DISCREPANCIES (continued)

- 4. The digestion of the samples for mercury analysis followed an alternate procedure in ILMO2.1 which approves the use of an autoclave. This is not an acceptable preparation alternative for SW846 Third Edition. Analytically, the difference in the preparation of the samples should hot have a significant affect on the sample results.
- 5. The digestion of the samples for AA and ICP was not in accordance with EPA SW846 Third Edition. The preparation was in accordance with EPA CLP digestion procedures. Analytically, the differences in the preparation of the samples should not have a significant affect on the sample results.
- 6. All soil spiked samples were not spiked for aluminum, calcium, iron, magnesium, potassium, and sodium. All water spiked samples were not spiked for calcium, magnesium, potassium, and sodium. This is acceptable for CLP ILMO2.1, however, all analytes should have been spiked for evaluation under SW846 Third Edition. Since all analytes were not spiked, an indication of the accuracy and precision for these analytes can not be made.
- 7. According to the preparation logs in the Metals data package, the filtered samples (SW-1, SW-2, SW-3, MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, IT-1, and FB-4) sampled on 10/31/92 were not preserved prior to digestion and analysis. No further documentation is provided concerning the pH of these samples.

#### VOLATILE EVALUATION

Below is a list of quality control / quality assurance guidelines that were evaluated to determine protocol compliance:

Calibration 2. 1. Holding times Method blanks Calibration verifications 4. 3. BFB ion abundances 6. 5. Surrogates Internal std. area and RT 8. Reporting units 7. Precision (duplicate-MSD) Accuracy (spike-MS)

All analyses for volatiles were completed within specified holding times. The instruments were calibrated at the required frequency. All calibration verifications (continuing check compounds (CCC) and system performance check compounds (SPCC)) were analyzed at the required frequency and were within specified control limits with one exception. (see VOLATILE DISCREPANCIES, All method blanks were analyzed at the required comment 5). frequency and were within specified control limits. Every sample was spiked with surrogates and all surrogates were within specified control limits. (see VOLATILE DISCREPANCIES, comment 1). All BFB ion abundances were analyzed at the required frequency and were within specified criteria. All internal standards were within specified criteria for area and retention time with one exception. (see VOLATILE DISCREPANCIES, comment 6). All water sample results were reported in ug/L and all soil sample results were reported in UG/KG. All spikes reported were within the criteria identified in the QAPP, Section 4.2, page 14. All spike duplicates were within the criteria identified in the QAPP, Section 4.2, page 14. Spike and spike duplicate were done as specified by the chain of custody. All appropriate raw data was included in the data package and was spot checked against the report for correctness.

#### **VOLATILE DISCREPANCIES**

The following discrepancies were found with the volatile analysis:

1. The raw data indicates that the correct surrogates, toluene-  $d_8$ , 4-bromofluorobenzene, and 1,2-dichloroethane- $d_4$  were spiked into each sample. However, all Form 2s indicate that Nitrobenzene- $d_5$ , 2-Fluorobiphenyl, and 1,2-Dichloroethane- $d_4$  were used as internal standards. This appears to be a documentation problem associated with Form 2.

#### **VOLATILE DISCREPANCIES** (continued)

- 2. The volatile data package, Case: 10202, included sample 002-02 with MS/MSD. This samples, 002-02, was not listed on the COC as a sample from the Scott Aviation Site. According to the narrative, these results may have been included to provide an indication of the accuracy (MS) and precision (MSD) of the method associated with the soil matrix. However, the sample, 002-02, was not reported on a Form I, i.e. sample results page. Information regarding the MS/MSD results of 002-02 can be found on Form 2B. In all practicality, the results associated with sample 002-02 should be disregarded, and the results for SB-5B MS/MSD should be used to serve as an indication of the accuracy and precision of the method associated with the soil matrix.
- 3. According to methodology, the calibration for the analyses of water samples should be done without a heated purge. In addition, all associated water samples and calibration verifications (SPCCs and CCCs) should also be analyzed without a heated purge. However, for soil samples, the calibration and subsequent soil samples and calibration verifications (SPCCs and CCCs) should be analyzed with a heated purge. The quantitation reports indicate that all samples, waters and soils, were analyzed under a soil program which implies that all samples were analyzed against a heated purge. However, inconsistencies on the report forms indicate that calibrations and associated calibration verifications and/or samples, may or may not have been analyzed under similar instrument conditions.
- 4A. The samples SB-5C, SB-5C DL, and SB-5D were extracted and analyzed following medium level guidelines. An additional MS/MSD was done on the medium level samples to provide information regarding the accuracy and precision of the method. The raw data indicates that the MS/MSD was done on SB-5D but the narrative indicates MS/MSD was done on SB-5C.
- 4B. Medium level soil samples are extracted into an aqueous matrix and the aqueous matrix is then analyzed. Therefore, according to methodology, medium level soil samples should be analyzed without a heated purge under the same conditions as water samples. Again, inconsistencies in the raw data and report make in impossible to determine if the medium level soil samples and associated calibration and calibration verifications were analyzed under the same instrument conditions.

## **VOLATILE DISCREPANCIES** (continued)

- 5. The percent difference for the CCCs must be less than 25 percent. The percent difference for vinyl chloride (lab file ID >A0155) was 29.52 percent. The samples analyzed against this CCC were SB-5C DL and its blank. Since the sample was diluted for trichloroethene and 1,1,1-trichloroethane, the non-compliant CCC does not indicate that the sample and blank results would be significantly biased.
- 6. The internal standard area for IS2 (DFB) and IS3 (CBZ) were not within specified control limits for SB-5D MSD. The out of control internal standard may indicate that the MSD results are biased low. In addition, SW846 Third Edition requires a reanalysis anytime the internal standard is not within control limits. In this instance, the out of control internal standard for the MSD should have been reanalyzed. As per EPA CLP, no reanalysis was performed. Evaluation of the MSD versus the sample and the MS indicate the low recovery is due to poor purging/injection, not the sample matrix.

## SEMI-VOLATILE (BNA) EVALUATION

Below is a list of quality control / quality assurance guidelines that were evaluated to determine protocol compliance:

- Holding times
   Calibration
   Method blanks
   Surrogates
   DFTPP ion abundances
- Surrogates
   Internal std. area and RT
   Reporting units
- Accuracy (spike-MS)

  9. Precision (duplicate-MSD)

analyses for semi-volatiles were completed within specified holding times. (see SEMI-VOLATILE DISCREPANCIES, comment 3). The instruments were calibrated at the required frequency and were in accordance with SW 846 Third Edition. All initial calibration verifications (continuing check compounds (CCC) and system performance check compounds (SPCC)) were analyzed at the required frequency and were within specified control limits. continuing calibration verifications were analyzed at the required frequency but they did not meet all control limits. (see SEMI-All method blanks were **VOLATILE DISCREPANCIES**, comment 1). analyzed at the required frequency and were within specified control limits. Every sample was spiked with surrogates and all surrogates were within specified control limits with one exception. (see SEMI-VOLATILE DISCREPANCIES, comment 2). All DFTPP ion abundances were analyzed at the required frequency and were within specified criteria. All internal standards were within specified criteria for area and retention time. All water sample results were reported in ug/L and all soil sample results were reported in UG/KG. All spikes reported were within the criteria identified in the QAPP, Section 4.2, page 14. All spike duplicates were within the criteria identified in the QAPP, Section 4.2, page 14. spike/spike duplicate was done as specified by the chain of The raw data was spot checked against the report for custody. correctness.

## SEMI-VOLATILE (BNA) DISCREPANCIES

The following discrepancies were found with the semi-volatile analysis:

1. In all continuing calibration checks (CCCs), hexachlorocyclopentadiene was not within specified control limits. In addition, 2,4-dinitrophenol and pentachlorphenol were not within specified control limits for various CCCs. All BNA sample data is affected by the out of control CCCs. Due to scope of the non-compliant CCCs, all BNA detection limits and detected compounds should be considered estimated.

## SEMI-VOLATILE (BNA) DISCREPANCIES (continued)

- 2. According to methodology, surrogate recoveries should be within 20-100 percent. The surrogate, 2-fluorophenol, for the field blank was slightly outside of control limits at 101 percent recovery. The slightly high recovery should be considered insignificant. The slightly high recovery would have been acceptable for EPA CLP.
- 3. Extraction logs were not provided for the water samples and the extraction logs for the soil samples were ambiguous. No determination could be made as to the correctness of the extraction method. In addition, the lack of documentation made it impossible to verify that the water samples were extracted within specified holding times.
- 4. On the reporting forms, the blank and blank spike reported with the field blank were neither extracted nor run with the sample. Therefore, the results of the blank and blank spike are irrelevant.
- 5. On the reporting forms, the reagent blank extraction date associated with the soil samples was written 10/05/92. Since the soil samples were received on 10/31/92, this is most likely a documentation error. If the results reported are from a blank extracted on 10/5/92, than the results are also irrelevant.

#### PESTICIDE/PCB EVALUATION

Below is a list of quality control / quality assurance guidelines that were evaluated to determine protocol compliance:

- 1. Holding times
- 3. Calibration verifications
- 5. Surrogates
- 7. Internal std. area and RT
- 9. Precision (duplicate-MSD)
- 2. Calibration
- 4. Method blanks
- 6. Reporting units
- 8. Accuracy (spike-MS)

All analyses for pesticides were completed within specified holding times. (see PESTICIDE/PCB DISCREPANCIES, comment 3). instruments were calibrated at the required frequency but were not (see PESTICIDE/PCB in accordance with SW 846 Third Edition. DISCREPANCIES, comment 4). All calibration verification were analyzed at the required frequency but did not meet all criteria. (see PESTICIDE/PCB DISCREPANCIES, comment 1). All method blanks were analyzed at the required frequency and were within specified Every sample was spiked with surrogates but were control limits. (see PESTICIDE/PCB within specified control limits. DISCREPANCIES, comment 2). All internal standards were within specified criteria for area and retention time. All water sample results were reported in ug/L and all soil sample results were reported in UG/KG. All spikes reported were within the criteria identified in the QAPP, Section 4.2, page 14. All spike duplicates were within the criteria identified in the QAPP, Section 4.2, page 14. A spike/spike duplicate was done as specified by the chain of The raw data was spot checked against the report for correctness.

#### PESTICIDE/PCB DISCREPANCIES

- 1A. The initial calibration for decachlorobiphenyl was out of control for all pesticide/PCB analysis.
- 1B. The continuing calibration verification RPD in the PEM compound mixture for alpha-BHC was outside of control limits for all pesticide/PCB analysis.
- 2. The surrogates on the field blank and its associated reagent blank were not within advisory limits for TCX (the secondary surrogate). However, the primary surrogate was within advisory limits.

## PESTICIDE/PCB: DISCREPANCIES: (continued)

- Extraction: logs: were not: provided: for the water samples and the extraction logs for the soil samples were ambiguous. No determination could be made as to the correctness of the extraction method. In addition, the lack of documentation made it impossible to verify that the water samples were extracted within specified holding times.
- 4. SW 846 Third Edition requires a five point calibration before the analysis of any samples. The laboratory calibrated the instrument using only three points. Due to the scope of the non-compliant calibrations, all pesticide/PCB detection limits and detected compounds should be considered estimated.

#### SUMMARY

While some discrepancies exist which should be clarified, the types and quantity of quality control samples that were collected and analyzed in association with each sampling event and media meet the requirements for general use, such as risk assessment or site characterization. Samples were collected and analyzed from each field activity and the analytical results should provide sufficient data for evaluation of each media. Appropriate analytical techniques were used to quantitate the requested analytes.

The laboratory analytical results meet the minimum accuracy and precision requirements as outlined in the QAPP. As per scope of work, the completeness objective of 95 percent has been met.

# DATA VALIDATION FOR THE SCOTT AVIATION SITE

## Prepared for:

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# Prepared by:

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September 1993

The analytical results reported by Laboratory Resources, Inc. were submitted to Versar, Inc., Springfield, Virginia, for validation. The data validation was performed following the guidelines in the Quality Assurance Project Plan (QAPP) prepared for the Scott Aviation Site, Lancaster, NY, Sections 4.0, 8.0, and 12.0. In conjunction with the QAPP, the scope of work for Round 3 Ground Water Sampling and Analysis, Scott Aviation, was referred to for additional information regarding the sampling and Quality Control sample analysis. The analytical results for TCL volatiles were evaluated.

### SAMPLING PLAN

The chain of custody was compared to the Scope of Work for the Round 3 ground water sampling. No deviations were noted.

## CHAIN OF CUSTODY (COC)

The COC was compared with the data submitted from Laboratory Resources, Inc. to determine if all sample analysis were performed as specified. All samples submitted to the laboratory for analysis were completed with the following discrepancies:

1. The Field Blank was not analyzed as indicated in the Scope of Work. The Laboratory reported that the client canceled the analysis.

#### ANALYTICAL METHODS

The analytical results were evaluated under the methods specified in the QAPP, Table 3, page 12. The QAPP specified the use of EPA Test Methods for Chemical Analysis of Water and Wastes. The laboratory followed methods from the EPA Contract Laboratory Program (CLP) when performing the analyses on these samples. The specified EPA CLP version followed for the analyses of organics is not identified anywhere in the data package, but is believed to have been OLM01.8.

# QUALITY CONTROL SAMPLE ANALYSIS SUMMARY

The Quality Control Sample Analysis Summary (Table 4) found on page 13 of the Quality Assurance Project Plan was used to evaluate adherence to the quality control plan.

The following definitions and field activities are provided for clarity:

#### **Definitions**

EVENT:

An event is defined as one sampling round.

LOT:

A lot consists of twenty samples of the same matrix.

MS/MSD:

A MS/MSD is defined as a matrix spike and matrix spike duplicate. A MS/MSD is the specified sample QC in SW846 Third Edition. The laboratory performed a MS/MSD for the volatile organic analysis.

## Field Activities

#### WATER MATRIX:

Hydrogeological Investigation:

Consisted of ground water monitor well (MW) samples.

### Field Blanks

A field blank was required per sampling event per field activity. Only one field blank was required for the sampling. One field blank was collected but not analyzed.

According to SW846 Third Edition, Volume II: Field Manual, Chapter 11, Section 1.2.2.1 General Requirements, the minimum frequency for field blanks is 1 field blank per 20 samples. Since the field blank was not analyzed, the minimum frequency requirements of SW846 Third Edition were not met.

## Trip Blanks (VOCs only)

A trip blank was required per sampling event per field activity. According to SW846 Third Edition, Volume II: Field Manual, Chapter 11, Section 1.2.2.1 General Requirements, the minimum frequency for trip blanks is 1 trip blank per 20 samples. Since a trip blank was not collected, the minimum frequency requirements of SW846 Third Edition were not met.

#### MS/MSD

A MS/MSD or D/S was required 1:20 samples per field activity. However, for SW846 Third Edition, an acceptable MS/MSD or D/S frequency is 1:20 samples of the same matrix. At this frequency, the proper amount of MS/MSD or D/S was performed on the ground water samples.

## Field Duplicates

A duplicate sample was required 1:20 samples per field activity. However, for SW846 Third Edition, an acceptable frequency is 1:20 samples of the same matrix. At this frequency, the proper amount of field duplicates were collected on the ground water samples.

### **VOLATILE EVALUATION**

Below is a list of quality control/quality assurance guidelines that were evaluated to determine protocol compliance:

- 1. Holding times
- 3. Calibration verifications
- 5. Surrogates
- 7. Internal std. area and RT
- 9. Accuracy (spike-MS)

- 2. Calibration
- 4. Method blanks
- 6. BFB ion abundances
- 8. Reporting units
- 10. Precision (duplicate-MS)

All analyses for volatiles were completed within specified holding times. The instruments were calibrated at the required frequency. All calibration verifications (continuing check compounds (CCC) and system performance check compounds (SPCC)) were analyzed at the required frequency and were within specified control limits. All method blanks were analyzed at the required frequency and were within specified control limits with the exception noted below. Every sample was spiked with surrogates and all surrogates were within specified control limits. All BFB ion abundances were analyzed at the required frequency and were within specified criteria. All internal standards were within specified criteria for area and retention time. All water sample results were reported in  $\mu$ g/L. All spikes reported were within the criteria identified in the QAPP, Section 4.2, page 14, and all spike duplicates were within the criteria identified in the QAPP, Section 4.2, page 14 with the exception noted below. Spike and spike duplicate were done as specified by the chain of custody. All appropriate raw data was included in the data package and was spot checked against the report for correctness.

## **VOLATILE DISCREPANCIES**

The following discrepancies were found with the volatile analysis:

- 1. Methylene chloride and 4-methyl-2-pentanone were detected in the laboratory method blanks. However, the results were detected at less than 5 times the detection limit and these are common laboratory contaminants. Since these compounds were not detected in any of the samples, their presence in the blanks presents no problems.
- 2. In the MS/MSD sample, trichloroethene was outside of the QC limits for percent recovery in the first run and outside of the QC limits for RFP in the second run. Evaluation of this result and the actual sample results indicate that these results are matrix related.

## **SUMMARY**

While some main discrepancies exist, the types and quantity of quality control samples that were collected and analyzed in association with each sampling event and media meet the requirements for general use, such as risk assessment or site characterization. The analytical results for the ground water samples should provide sufficient data for evaluation. Appropriate analytical techniques were used to quantitate the requested analytes.

The laboratory analytical results meet the minimum accuracy and precision requirements as outlined in the QAPP. As per scope of work, the completeness objective of 95 percent has been met.

APPENDIX F
HABITAT BASED ASSESSMENT

## FISH AND WILDLIFE IMPACT ANALYSIS

SCOTT AVIATION 225 Erie Street Lancaster, New York

Prepared for

SCOTT AVIATION 225 Erie Street Lancaster, New York

Prepared by

VERSAR. INC. 2010 Cabot Boulevard West Langhorne, Pennsylvania 19047

March, 1993

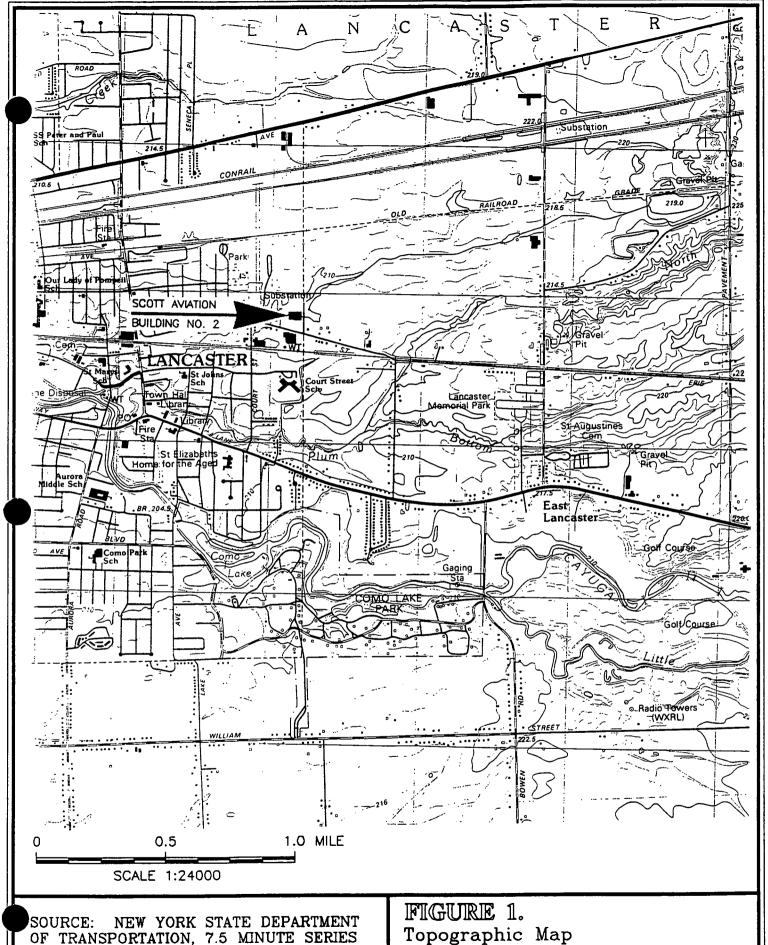
#### HABITAT BASED ASSESSMENT

## 1.0 GENERAL SITE DESCRIPTION

The Scott Aviation site is located at 225 Erie Street in the Village of Lancaster, Erie County, New York (Figure 1). The southern portion of the site is used for manufacturing, while the northernmost portion of the property is presently undeveloped. Two buildings are located on the property. One building (referred to as Building No. 1) is located on the south side of Erie Street and the second (referred to as Building No. 2) is located on the north side of Erie Street. Both buildings contain office and manufacturing space and have associated parking lots. Scott Aviation manufactures chemical oxygen generators in Building No. 2. The northernmost building also contains a machine shop used for machining parts for aviation equipment and air packs. A former underground storage tank area is located off the southwest corner of the Building No. 2. The tank, which has been removed, contained waste oils and solvents which leaked into the underlying soils and leached into ground water. The purpose of this Fish and Wildlife Impact Analysis is to provide an evaluation of the impacts of the former underground storage tank area on fish and wildlife resources on and within a half-mile radius of the Scott Aviation property.

The Scott Aviation property is bounded on the north by an abandoned railroad track; on the east by Walter Winter Drive (a dead-end street) and undeveloped property; on the south by an active railroad track and a water tower; and on the west by Quick Cut Gasket Company, residences, and undeveloped property. Additional undeveloped land is located north of the abandoned railroad track and to the southeast of the site. Two residences, one of which is presently unoccupied, are situated across Walter Winter Drive to the east. The eastern boundary of the Village of Lancaster is located along the eastern edge of Walter Winter Drive. The land in the site vicinity is used for a variety of uses: manufacturing, residential, public utility (substation and power lines), railroad and undeveloped.

The site is relatively level and is situated at elevations ranging from 700 feet above mean sea level (MSL) near the northern property boundary to 680 feet above MSL in the southwestern portion of the site where an unnamed stream exits the site (Figure 1). In general, surface drainage on the site and



SOURCE: NEW YORK STATE DEPARTMENT OF TRANSPORTATION, 7.5 MINUTE SERIES TOPOGRAPHIC MAP, LANCASTER, NEW YORK QUADRANGLE, DATED 1988

FIGURE 1.
Topographic Map
Scott Aviation, Lancaster, N.Y
Versar Project No. 1324.005

vicinity is towards the southwest. However, local drainage in the vicinity of Building No. 2 is to the west and north-northwest. A drainage ditch located west of Building No. 2 drains to the north towards the tributary located along the northern edge of Building No. 2 and immediately west of the former storage tank area. This unnamed tributary of Plum Bottom Creek has been enclosed in a pipe and runs underground from the eastern property boundary and resurfaces again approximately 200 feet west of the site and north of the Quick Cut Rubber Gasket Company building.

The site and vicinity are located in a soil map unit comprised of Odessa-Schoharie-Rhinebeck soils (USDA Soil Conversation Service 1986). These soils are defined as: lowland plain soils which are nearly level and gently sloping; deep; somewhat poorly drained to well drained; medium textured and moderately fine textured soils. According to the Erie County Soil Survey, most areas in this map unit were at one time cleared of forest cover and used for farming. To a great extent, these areas have subsequently become idle, and those areas which have not been developed are now covered with brushy or shrubland vegetation. This brushy cover predominates on the undeveloped portions of the Scott Aviation site and other undeveloped tracts of land in the site vicinity.

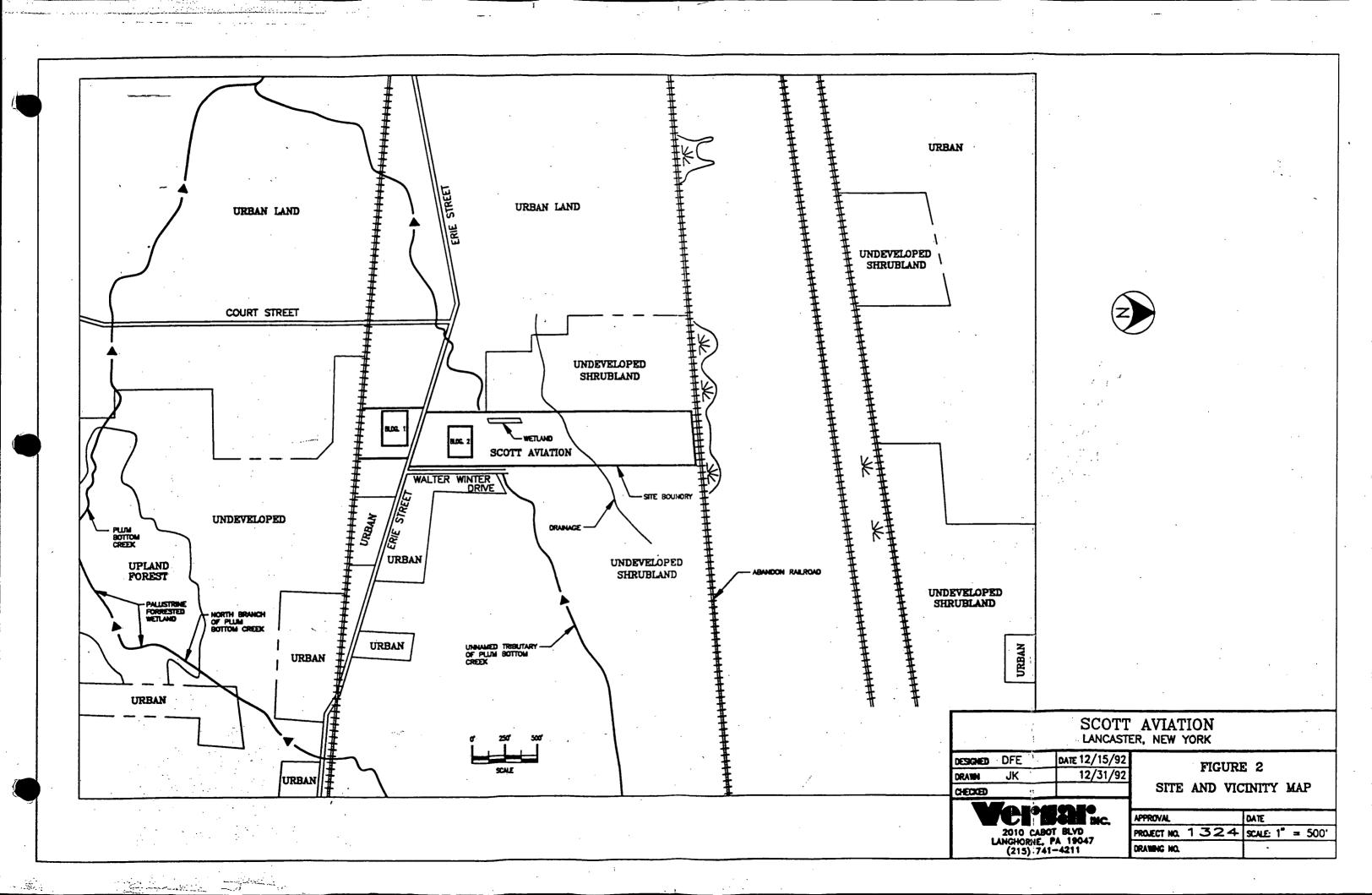
## 2.0 PLANT HABITATS AND FISH AND WILDLIFE RESOURCES

As previously mentioned, approximately two-thirds of the site is presently undeveloped, while the remaining third is used for manufacturing. The discussion of plant, fish, and wildlife resources is limited primarily to the undeveloped portion of the property. The majority of the undeveloped portion of the site is best described as an open upland area, containing herbaceous and brush cover with some trees, with the density of the cover varying with location. The character of the site has been determined by past human activities on the property. According to Scott Aviation personnel, surface soils were stripped from the site, although the time frame of this activity could not be pinpointed. This activity has impacted the vegetation on the subject site, creating an area in the middle third of the property where vegetative growth is apparently limited by nutrient-poor soils. In this area, which is best described as an old field, the ground cover is primarily herbaceous with a percent of ground cover less than fifty percent in some areas. Characteristic plant species include goldenrods and Queen-Anne's-lace and various grasses. The quality of the habitat in this portion of the

property is expected to be poor due to the limited vegetative growth. northernmost third of the property is much more densely vegetated with herbaceous and brush cover (one hundred percent cover) and is best described as a successional shrubland, with shrubs comprising approximately fifty percent of the vegetation. One common bush observed was arrowwood (Viburnum), a plant common in the diet of deer. A majority of the trees on the property were associated with the wetland area and a minor drainage that traverses the property in a west-southwest direction approximately 800 feet north of Building No. 2 (Figure 2). The predominant tree species are willows (Salix spp.) and Eastern cottonwood (Populus deltoides). This portion of the property is expected to provide decent foraging habitat for deer and other small mammals and birds. Other habitat types on the site consist of an emergent wetland area, which is described in more detail in the wetland section of this report, and small areas immediately behind Building No. 2 and on the north side of the culverted stream that are used for the deposition of construction/road maintenance spoils. Due to the recentness of the deposition, these areas contain no vegetation. The wetland area is best characterized as a small cattail marsh (approximately 10,000 square feet in size) and by nature of its small size provides only limited amount of habitat.

At the time of the site investigation, no obviously contaminated areas were observed, although the site of the tank removal and remediation were recognizable by the presence of disturbed soils and ground water monitoring wells. No stressed vegetation of any kind was observed on the site either in association with the leaking underground storage tank, or for any other reason.

The undeveloped properties to the north, west, east, and southeast of the site contain habitats very similar to that of the northern portion of the Scott Aviation site, consisting of successional old field and shrubland areas with a herbaceous-brushy cover containing varying amounts of trees, primarily hardwoods. The developed lands to the west and south of the subject site are best described as urban land and include buildings, paved parking and road areas, railroad beds, mowed lawns, and mowed lawns with trees. Figure 2 provides a description of the various habitat types found within a half-mile radius of the subject site.



The undeveloped portion of the Scott Aviation site provides habitat for a number of animal species. Numerous deer tracks were observed on the subject site, indicating that the property is providing deer habitat, although the quality of the habitat varies: the sparsely vegetated central portion of the site is presumed to be poor deer habitat due to the limited food resources and cover it provides. Shell casings were found on the Scott Aviation property, although, according to Mr. Mark Kandel of the New York State Department of Environmental Conservation (NYSDEC), Bureau of Wildlife, hunting is illegal within the limits of the Village of Lancaster, within which the site resides. According to Scott Aviation personnel, other wildlife spotted on the site include racoons and skunks. No animals were spotted on the property at the time of the site investigation.

Like the northernmost portion of the property, the adjacent undeveloped sites have successional shrubland vegetation that is suitable habitat for deer and other animals. Hunting is allowed in the Town of Lancaster, and the village/town border is located along the eastern property boundary of the Scott Aviation property. A deer stand was observed on the property east of the site, indicating that hunting does take place. Other wildlife that have been sighted in the vicinity of the subject site include beaver. Beaver have been reported on Plum Bottom Creek and its tributaries within a one mile radius of the subject site.

According to Mr. Mark Kandel of the NYSDEC Bureau of Wildlife, no significant plant or wildlife habitat exists within a one-mile radius of the subject site. Significant habitat includes deer concentration areas and habitat types that are rare or unique or that contain threatened or endangered plants or animals.

A review of the files of the Natural Heritage Program available at the NYSDEC office in Buffalo, New York, revealed that only one rare species of plant or animal has ever been observed within a one mile radius of the subject site. The bigeye chub, Notropis amblops, is a rare but unprotected fish species within New York state, which was last observed in Cayuga Creek upstream of its confluence with Plum Bottom Creek, in 1921. Because the fish was last observed in 1921 and since it was spotted above the confluence of the two creeks, its potential presence will not be considered a factor in this fish and wildlife impact analysis.

Letters requesting information on threatened and endangered species and significant habitat were also submitted to the New York Natural Heritage Program in Latham, New York, and to the U.S. Department of the Interior Fish and Wildlife Service in Cortland, New York. The New York Natural Heritage Program has indicated that they have not identified "any potential impacts on endangered, threatened or special concern wildlife species, rare plant, animal or natural community occurrences, or other significant habitat." The Fish and Wildlife Service has indicated that no federally threatened or endangered species are known to exist on or in the vicinity of the subject site.

The NYSDEC was contacted for information pertaining to wildlife mortality that could potentially be attributed to contaminants at the Scott Aviation site. According to Mr. Mark Kandel and Mr. Bruce Wager, NYSDEC personnel, there are no reports of any fish or wildlife kills in the area.

#### 3.0 SURFACE WATERS

The unnamed tributary of Plum Bottom Creek flows in a west-southwest direction across the site approximately 100 to 200 feet north of the plant building. The tributary is piped underneath the site from the east side of Walter Winter Drive to a point approximately 200 feet west of the site on the adjacent Quick Cut Rubber Gasket Company property. The tributary empties into Plum Bottom Creek over six-tenths of a mile southwest of the subject site. Plum Bottom Creek in turn flows in a westerly direction for approximately one-quarter mile and empties into Cayuga Creek (Figure 1).

In general, the surface drainage on the subject site is to the southwest. However, a drainage ditch located along the western property boundary runs in a northerly direction from Erie Street towards the unnamed creek. The drainage ditch is located west of the former underground storage tank area. The conduit, which carries the creek offsite, is exposed at the point where the ditch and the creek intersect. A visual inspection of the pipe revealed a break in the pipe at this location. Two sections of pipe in the culvert had parted slightly in the vicinity of the drainage ditch. The breach, approximately 4 inches wide, occurs near the top of the piping and does not cause water from the drainage ditch to enter the stream. Therefore, surface water contaminants, if present in runoff from the former tank location, would not be released into the stream at this location. In addition, the drainage

ditch may be connected with a wetland area approximately 100 feet north of the western corner of the Scott Aviation building. Based upon site topography, water is expected to drain out of the wetland area towards the creek. It is possible, however, that surface water runoff could potentially be by-passing the stream and accumulating in the wetland area. This wetland area is described further in the wetland section of this report.

The upstream and downstream sections of the tributary are characteristically different. The upstream section of the tributary was observed to be wider, less channelized, and shallower than the downstream section. East (upstream) of the site, the tributary was estimated to be approximately 15.5 feet wide and up to a foot and a half deep at its deepest point near the culvert, although in most areas the stream was less than a foot deep. The stream bottom was comprised of silty soils with a large amount of organic material (dead leaves). The stream had a number of meanders around the roots of trees and shrubs growing in the stream bed. The predominant plant species were observed to be willows (Salix spp.) and Eastern cottonwood (Populus deltoides). At the time of the investigation in late October 1992, no floating aquatic vegetation was observed. Based upon the thick overhead canopy, it is believed that such floating aquatic growth is minimal. Available topographic maps indicate that stream flow becomes intermittent upstream of the Scott Aviation site.

West (downstream) of the site, the stream channel was observed to be more well defined. The stream was estimated to be approximately 5 feet wide and 1.35 feet deep at a point downstream of where it emerges behind the Quick Cut Rubber Gasket Company. The flow rate of the stream was estimated to be 2.5 feet per second at this point. The stream at this point had very little tree canopy, and the banks were lined with shrubs and grasses. There was only a limited quantity of emergent vegetation in the stream, primarily grasses along the edges of the stream bank. The stream bed was comprised of gravel and silt.

Although no fish were observed at the time of the site investigation, the stream is believed to provide suitable habitat for indigenous fish species, especially upstream and downstream of the Scott Aviation site. The quality of the habitat on the subject site is limited by the fact that the stream is

enclosed within a conduit. There was no evidence of the stream being used for recreational purposes such as fishing.

#### Water Quality Classifications

According to New York State Water Quality Regulations (1991), Plum Bottom Creek and all of its tributaries and Cayuga Creek below its confluence with Plum Bottom Creek are classified as Class C fresh surface waters. The regulations state that Class C waters are best suited for fishing and fish propagation and should be suitable for primary and secondary contact recreation, although the latter two uses may be limited by other factors. The shallow depth of the stream which ranges from 0.5 to 1.5 feet makes it unsuitable for swimming and there are few, if any, public access areas along the stream for fishing in this northeastern section of Lancaster. At the time of the site visit, no fish were observed upstream or downstream of the Scott Aviation site. However, there is no reason to believe that they are not present.

#### Flood Boundaries

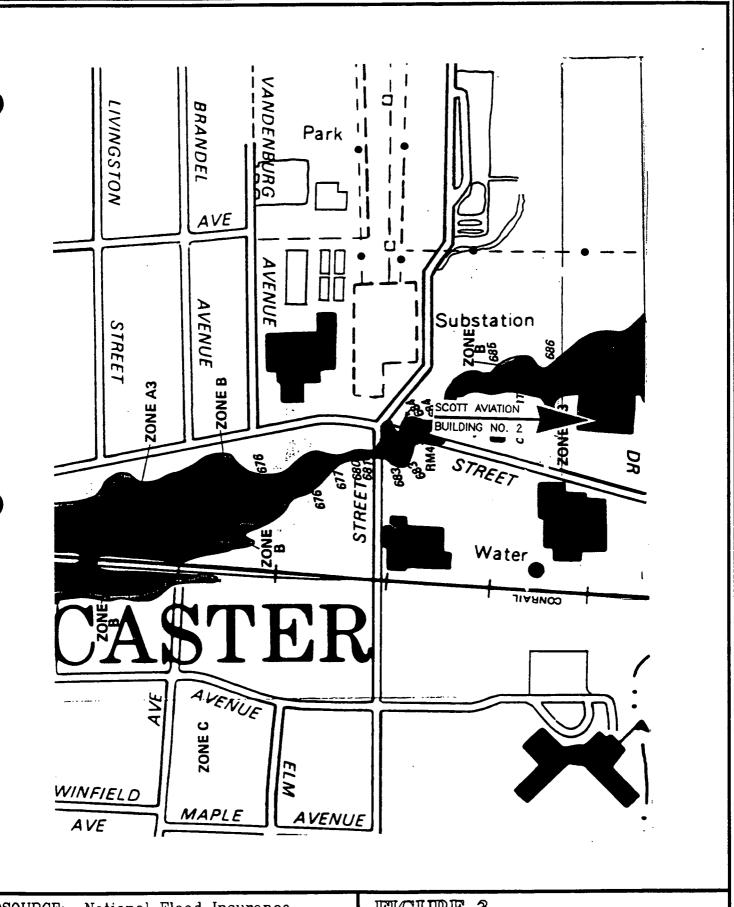
The land surrounding the stream on the site is located within the 100-year flood boundary (National Flood Insurance Program 1979), which indicates that during a 100-year storm, parts of the site would be expected to flood (Figure 3). At its widest point at the eastern property line, the 100-year flood boundary is approximately 375 feet wide. The 100-year flood boundary is approximately 140 feet wide at the western property line.

#### 4.0 WETLANDS

Wetlands are defined as those lands that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. The determination of wetlands requires positive evidence of three criteria:

- hydrophytic vegetation;
- hydric soils; and
- wetland hydrology.

Hydrophytic vegetation includes those plants that have adapted in one way or another to life in permanently or periodically inundated or saturated



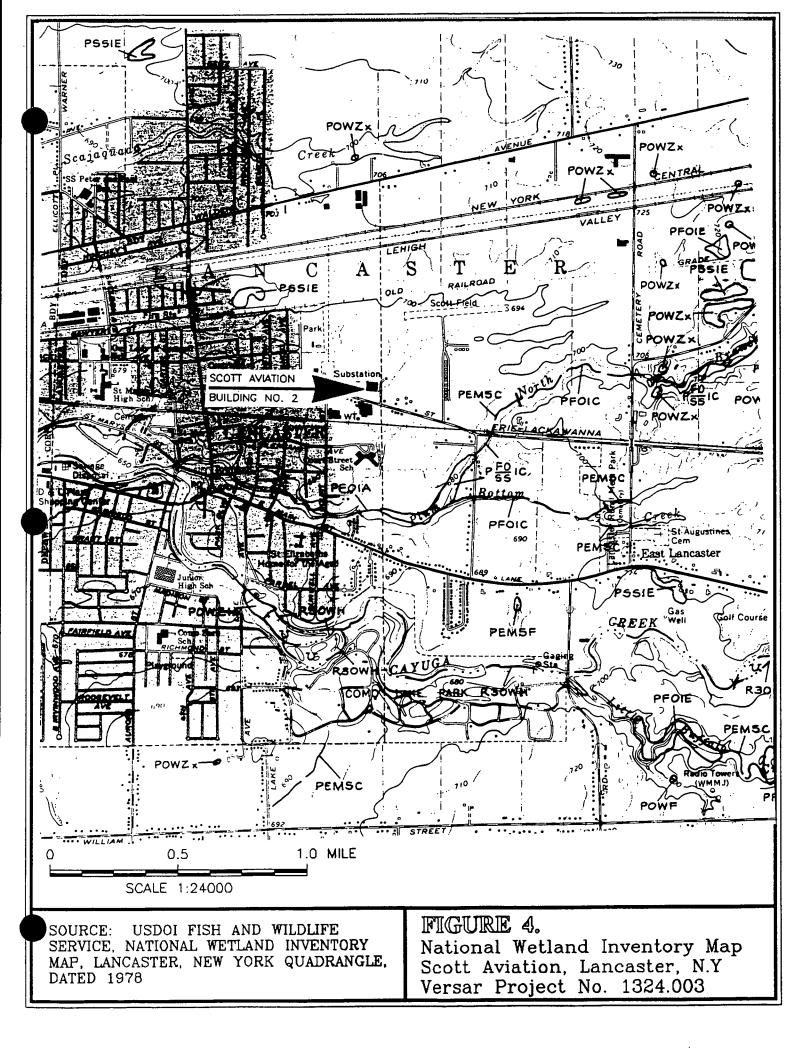
SOURCE: National Flood Insurance Program, Flood Insurance Rate Map, Village of Lancaster, New York, Erie County Community, Panel No. 360248 0001C, Dated July 2, 1979 FIGURE 3.

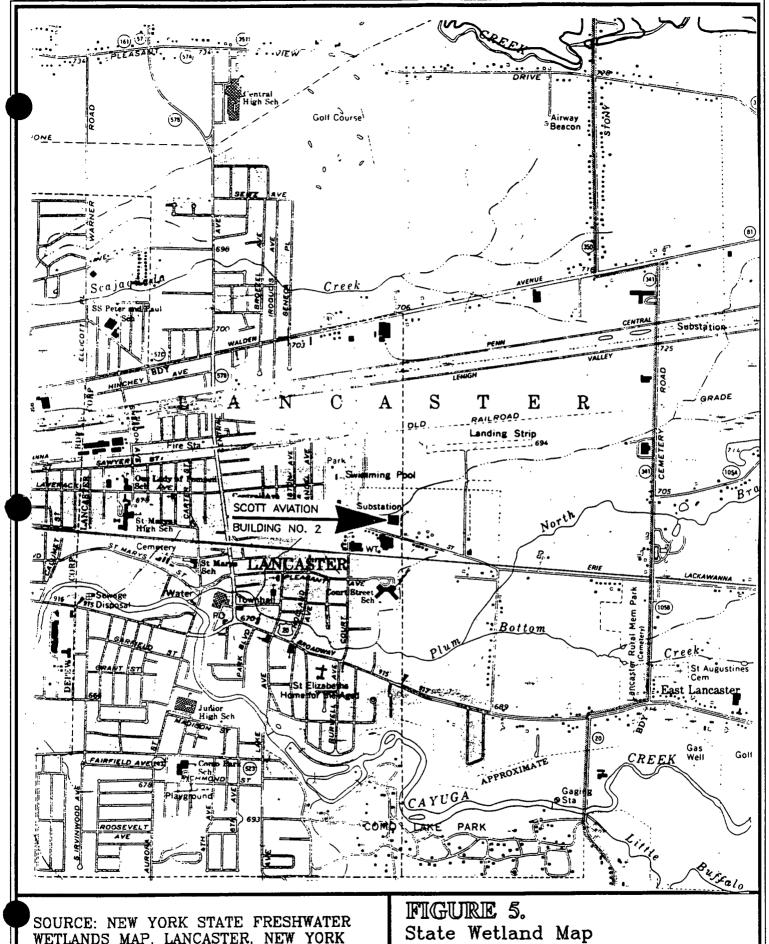
Flood Boundry Map Scott Aviation, Lancaster, N.Y Versar Project No. 1324.003 soils. Hydric soils are defined as soils that are saturated, flooded or ponded long enough during the growing season to develop anaerobic (oxygen depleted) conditions in the upper part. An inspection of the site soils was not conducted as part of this study, although available soil maps were reviewed for information pertaining to the classification of on-site soils. Wetland hydrology is considered to be the permanent or periodic inundation or saturation of the surface or near surface soils for a period of seven or more days during the growing season. The hydrological conditions observed at the time of the site investigation are likely to be different from those observed at the site during the growing season (spring and summer) and thus provide only limited information on the water regime at that time.

Two wetland maps have been prepared for the Lancaster area: one of federally regulated wetlands, prepared by the U.S Department of the Interior Fish and Wildlife Service, and one of state regulated wetlands, prepared by the New York State Department of Environmental Conservation. According to the National Wetland Inventory (NWI) Map (USDOI Fish and Wildlife Service 1978), no wetlands are present on the subject site or in its immediate vicinity. This is evident from Figure 4 which indicates only Palustine wetland development (bold areas with POWZ designations) approximately 1-1.5 miles east-northeast of the Scott Aviation site. This finding, however, does not preclude the presence of wetlands on the site. Based upon the NWI map, the closest wetlands to the subject site are the wetlands associated with Plum Bottom Creek and its North Branch.

A map of New York State regulated wetlands (NYSDEC 1975) indicates that no state regulated wetlands are present on or within a half-mile radius of the subject site (Figure 5). Under the New York State Freshwater Wetlands Act, the State has the authority to regulate wetlands that are 5 hectares (12.4 acres) or larger in size, although smaller wetlands may be included if they contain unusual or critical areas. Because of its limited size, the wetland area on the Scott Aviation property would not be regulated under the Freshwater Wetlands Act.

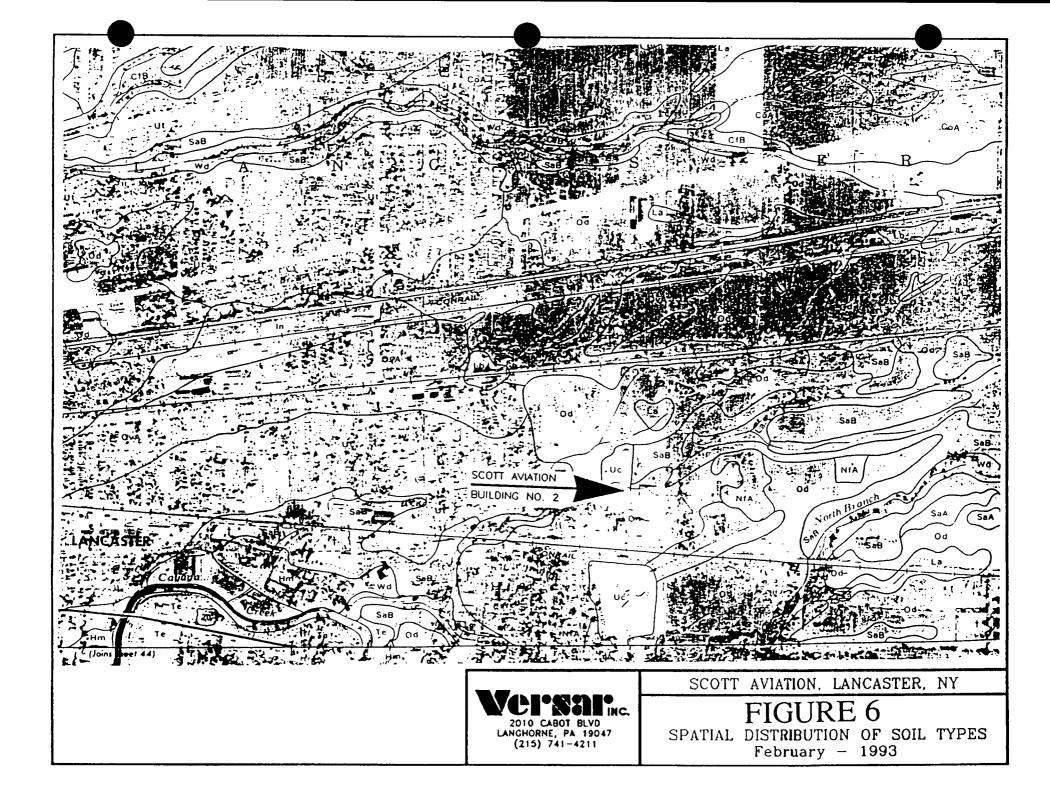
The presence of hydric soils can be used as an indicator of the potential presence of wetlands. According to the Soil Survey of Erie County, New York (USDA SCS, 1986), the soils on the subject site have been characterized as Odessa silt loam, Lakemont silt loam, and Schoharie silt loam (Figure 6).





WETLANDS MAP, LANCASTER, NEW YORK QUADRANGLE, DATED 1975

Scott Aviation, Lancaster, N.Y Versar Project No. 1324.003



According to information obtained from the Soil Conservation Service, the Lakemont silt loam series is considered a hydric soil series. Furthermore, the Odessa silt loam series was indicated to be likely to contain hydric inclusions, indicating that wetlands could be present in areas of this soil series. The Lakemont soils are present in the western-central portion of the site surrounding the intermittent drainage feature which cuts across the central portion of the site, draining areas from the northeast. This drainage feature and potential wetland area have no apparent hydrological connection with the drainage ditch in the southwestern portion of the site west of the former tank storage area.

Although a wetland delineation study was not conducted on the site to confirm the presence of the three wetland parameters, another potential wetland area was visually identified based upon the presence of hydrophytic vegetation. This wetland area is located approximately 200 feet north of the northwest corner of the plant building. The cattail-willow wetland was estimated to be approximately 200 feet long and 50 feet wide and apparently was created by soil excavation and stockpiling activities at the site.

According to Scott Aviation personnel, surface soils were stripped from the site and stockpiled. An embankment remains on the west side of the cattail-willow wetland and may be responsible for blocking drainage and creating the wetland area. This wetland area may receive drainage from east-northeast portions of the property and potentially from the drainage ditch adjacent to the former tank storage area.

#### 5.0 FISH AND WILDLIFE REGULATORY CRITERIA

No threatened or endangered plant, fish, or wildlife species or sensitive habitat was found to be present on or within a one mile radius of the subject site, and thus regulations pertaining to such protected species or habitat are not pertinent to the subject site. However, a stream and a freshwater wetland are present on the Scott Aviation site, and these areas are regulated under various regulations (Table 1). Any work in or on the banks of the tributary of Plum Bottom Creek or in wetland areas might be regulated by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. Section 404 governs the discharge of dredged or fill materials into waters of the United States, including wetlands.

Any discharge of treated waters into Plum Bottom Creek or its tributaries would be regulated by the State of New York under Section 302 of the Clean Water Act and would have to meet effluent limitations set forth by the State to maintain the water quality of the stream.

TABLE 1	
Pertinent Fish and Wildlife Regulatory Criteria	
Regulation	Impact
Federal/State endangered species regulations	Not pertinent. No known endangered species within a one-mile radius of the subject site.
Section 404 of the Clean Water Act	Regulates the placement of dredged and fill material in waters of the U.S. including wetlands.
New York State Water Quality Regulations, Surface Water and Ground water Classifications and Standards	Sets forth classifications of surface waters and ground waters and effluent standards.
New York State Freshwater Wetlands Act	Not pertinent. No state-regulated wetlands within a one-mile radius of the subject site.
National Flood Insurance Program	Limits construction within the flood zones.
New York State Protection of Waters Program	Not pertinent. Regulates disturbance of the bed or banks of protected streams (Classes AA, A, B, and C(trout)). Class C waters are not protected under this regulation.

#### SUMMARY

Based upon the findings of the fish and wildlife impact analysis, fish and wildlife resources exist on and in the vicinity of the subject site; potential migration pathways exist in both surface waters and ground water that could expose fish and wildlife to site-related contaminants. The habitat on the site was classified as successional old field and shrubland. quality of the plant habitat has been impacted by past surface soil mining on the site but has not been visibly impacted by the former underground storage tank area. In some areas of the site, plant cover is lower than fifty percent, more than likely due to soil nutrient limitations. associated with the site is typical of the wildlife associated with successional old field and scrubland habitats and includes such animals as deer, snakes, racoons, and skunks. No rare, threatened, or endangered plant or animal species were found to be present on or within a one-mile radius of the subject site. Thus, although the site does provide habitat for wildlife, the quality of the habitat is not high, and no unique species are present. A small emergent wetland area is present on the site, and another wetland area may be associated with the intermittent drainage feature that traverses the center of the undeveloped portion of the site in a west-southwest direction. A wetland delineation study would have to be conducted to determine the limits of the wetlands on the site. An unnamed tributary of Plum Bottom Creek flows across the site approximately 200 feet north of Building No. 2. This tributary is enclosed within a conduit on the Scott Aviation property and thus provides less than optimal fish habitat. There are no signs of vegetative stress or records of fish or wildlife kills to indicate that harmful levels of contaminants are present on the site or in its vicinity.

#### REFERENCES

National Flood Insurance Program, July 2, 1979, Flood Insurance Rate Map, Village of Lancaster, New York, Erie County Community, Panel No. 360248 001C.

New York Natural Heritage Program, March 1990, Ecological Communities of New York State, N.Y.S. Department of Environmental Conservation, Latham, New York.

New York State Codes, Rules and Regulations, Title 6, Chapter X, Parts 700-705, Revised September 1, 1991, Water Quality Regulations: Surface Water and Ground water Classifications and Standards.

New York State Department of Transportation, 1988, 7.5 Minute Series Topographic Map, Lancaster, New York Quadrangle.

New York State, 1975, Freshwater Wetlands Map; Lancaster, New York Quadrangle.

United States Department of Agriculture, Soil Conservation Service, December 1986, Soil Survey of Erie County, New York.

United States Department of the Interior, Fish and Wildlife Service, 1978, National Wetland Inventory Map, Lancaster, New York Quadrangle.

# New York State Department of Environmental Conservation

Wildlife Resources Center Information Services 700 Troy-Schenectady Road Latham, New York 12110-2400



December 8, 1992

Ms. Deborah A. Forbes-Emery Versar Inc. 2010 Cabot Boulevard West Langhorne, Pennsylvania 19047

Dear Ms. Forbes-Emery:

We have reviewed the New York Natural Heritage Program files with respect to your request for biological data concerning the Scott Aviation feasibility study site, Erie Street, as indicated on your map, located in the Town of Lancaster, Erie County, New York State.

We did not identify any potential impacts on endangered, threatened, or special concern wildlife species, rare plant, animal or natural community occurrences, or other significant habitats.

The absence of data does not necessarily mean that rare or endangered elements, natural communities or other significant habitats do not exist on or adjacent to the proposed site, but rather that our files currently do not contain any information which indicates the presence of these. Our files are continually growing as new habitats and occurrences of rare species and communities are discovered. In most cases, site-specific or comprehensive surveys for plant and animal occurrences have not been conducted. For these reasons, we cannot provide a definitive statement on the presence or absence of species, habitats or communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

This response applies only to known occurrences of rare animals, plants and natural communities and/or significant wildlife habitats. You should contact our regional office, Division of Regulatory Affairs, at the address on the enclosed list for information regarding any regulated areas or permits that may be required (e.g., regulated wetlands) under state law.

If this proposed project is still active one year from now we recommend that you contact us again so that we can update this response.

Sincerely,

Burrell Buffington

NY Natural Heratage Program

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Enc.

cc: Reg. 9, Wildlife Mgr.

Reg. 9, Fisheries Mgr.



# United States Department of the Interior



FISH AND WILDLIFE SERVICE 3817 Luker Road Cortland, New York 13045

December 3, 1992

Ms. Deborah A. Forbes-Emery Consultant Versar, Inc. 2010 Cabot Boulevard West Langhorne, PA 19047

Dear Ms. Forbes-Emery:

This responds to your letter of November 4, 1992, requesting information on the presence of Federally listed or proposed endangered or threatened species in the vicinity of the Scott Aviation site at 225 Erie Street in the Village of Lancaster, Erie County, New York.

Except for occasional transient individuals, no Federally listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project impact area. Therefore, no Biological Assessment or further Section 7 consultation under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) is required with the U.S. Fish and Wildlife Service (Service). Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered. A compilation of Federally listed and proposed endangered and threatened species in New York is enclosed for your information.

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the Endangered Species Act. This response does not preclude additional Service comments under the Fish and Wildlife Coordination Act or other legislation.

For additional information on fish and wildlife resources or State-listed species, we suggest you contact:

New York State Department of Environmental Conservation Region 9 128 South Street Olean, NY 14760 (716) 372-0645 New York State Department of Environmental Conservation Significant Habitat Unit Information Services 700 Troy-Schenectady Road Latham, NY 12110-2400 (518) 783-3932

The National Wetlands Inventory (NWI) map of the Lancaster Quadrangle indicates that there may be wetlands in the project vicinity. Copies of NWI maps may be obtained through:

CLEARS Cornell University 464 Hollister Hall Ithaca, NY 14853 (607) 255-6520

An order form listing the topographic quadrangles that have been mapped in New York State is enclosed for your information. The NWI maps are reasonably accurate but should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes.

Work in certain waters and wetlands of the United States may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act, the Service may concur, with or without stipulations, or recommend denial of the permit depending upon the potential adverse impacts on fish and wildlife resources associated with project implementation. The need for a Corps permit may be determined by contacting Mr. Paul Leuchner, Chief, Regulatory Branch, U.S. Army Corps of Engineers, 1776 Niagara Street, Buffalo, NY 14207 (telephone: (716) 879-4321).

If you have any questions regarding this letter, contact Tom McCartney at (607) 753-9334.

Mark W. Clough Sincerely,

Leonard P. Corin Field Supervisor

## Enclosures

NYSDEC, Albany & Olean, NY (Regulatory Affairs) NYSDEC, Latham, NY

EPA, Chief, Marine & Wetlands Protection Branch, New York, NY

Law Offices of
THEODORE HADZI-ANTICH
STATLER TOWERS

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> Privileged and Confidential Attorney-Client Communication Attorney Work Product

July 1, 1993

### VIA FAX AND U.S. MAIL

Lu Ann Lewis, Esq. Figgie International Scott Aviation 225 Erie Street Lancaster, New York 14086

Re: <u>DEC's response to comments regarding Draft</u>
<u>Remedial Investigation Report and related</u>
<u>documents.</u>

#### Dear Lu Ann:

Enclosed is DECs response to our latest submittal in connection with the above-referenced matter.

Although some of the statements in the letter are certainly positive, (note especially the statement regarding the Remedial Objectives Report), others are somewhat troublesome, especially the suggestion regarding quarterly groundwater monitoring (see Item No. 4 in the enclosed letter).

DEC indicates that a response is required by July 16, 1993.

Apparently, Dan Morganelli is on vacation until July 12, 1993. Therefore, I have placed a call to Greg Sutton of DEC to seek an extension of the July 16, 1993 deadline. When Dan returns, we will schedule a conference call. In light of DEC's suggestion for quarterly monitoring reports, we may wish to meet with DEC before finalizing the documents.

As always, please let me know if you have any questions.

Sincerely,

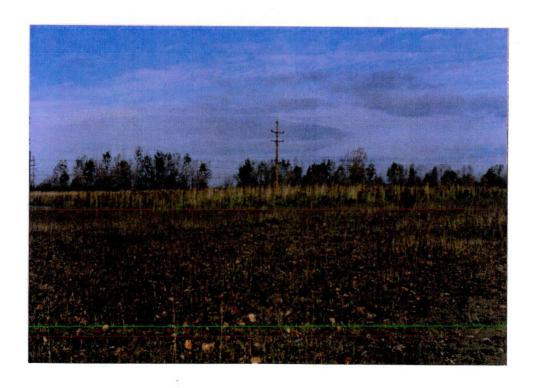
Theodore Hadzi-Antich

THA/smw Enclosure

cc: Mr. Dan Morganelli (with enclosure)
Robert Vilsack, Esq. (with enclosure)



VIEW LOOKING WEST TOWARDS THE POWER SUB STATION FROM THE CENTRAL PORTION OF THE SITE.



VIEW LOOKING WEST ACROSS THE NORTHERNMOST PORTION OF THE SCOTT AVIATION PROPERTY.



VIEW LOOKING EAST AT THE AREA NORTH OF THE PLANT BUILDING.



VIEW LOOKING SOUTH AT THE PLANT BUILDING FROM THE CENTRAL PORTION OF THE SITE. THE SOIL IN THE FOREGROUND WAS REMOVED FROM AN AREA WEST OF BUILDING #2 AND WAS REGRADED WITH NYSDEC AUTHORIZATION.



VIEW LOOKING WEST OF THE AREA LOCATED IMMEDIATELY BEHIND THE PLANT BUILDING WHERE STONE AND FILL HAS BEEN PLACED



VIEW LOOKING NORTH AT AN AREA NORTH OF THE PLANT BUILDING WHERE STONE AND SOIL HAS BEEN PLACED.

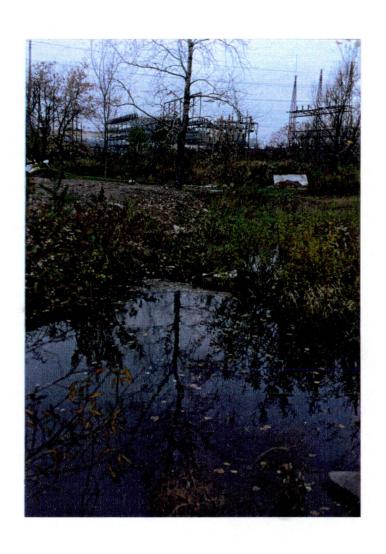


TWO VIEWS LOOKING SOUTH ACROSS THE PROPERTY FROM THE RAILROAD TRACKS

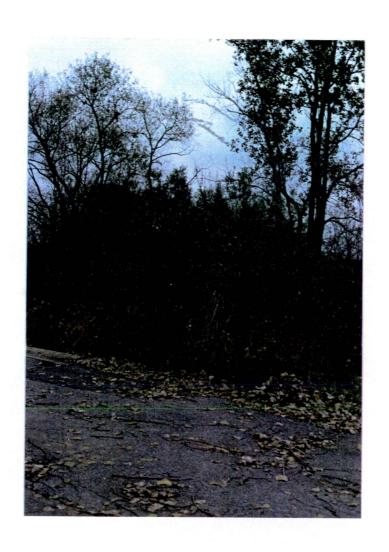




VIEW LOOKING EAST AT THE UNNAMED TRIBUTARY OF PLUM BOTTOM CREEK AT A POINT WEST OF THE SCOTT AVIATION PROPERTY WHERE IT RESURFACES THROUGH A CONDUIT



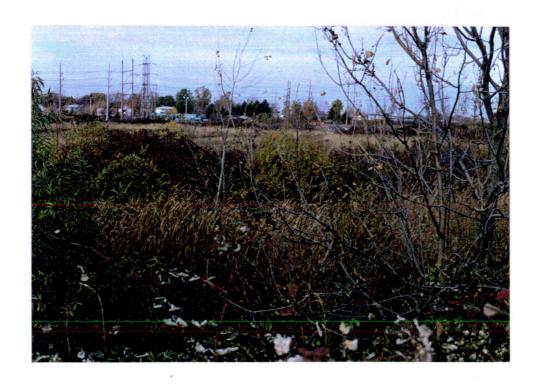
VIEW LOOKING WEST ALONG THE UNNAMED TRIBUTARY OF PLUM BOTTOM CREEK WEST OF THE SCOTT AVIATION PROPERTY. NOTE THE POWER SUBSTATION IN THE BACKGROUND.



VIEW LOOKING EAST ALONG THE UNNAMED TRIBUTARY OF PLUM BOTTOM CREEK AT A POINT IMMEDIATELY EAST OF THE SCOTT AVIATION PROPERTY. THE TREE AND SHRUB VEGETATION IS OBSCURING THE STREAM. THE STREAM IS PIPED FROM THE EAST SIDE OF THE ROAD, UNDERNEATH THE PROPERTY TO A POINT APPROXIMATELY 200 FEET WEST OF THE WESTERN PROPERTY BOUNDARY.



VIEW OF THE UNNAMED TRIBUTARY OF PLUM BOTTOM CREEK AT THE POINT IMMEDIATELY EAST OF THE SCOTT AVIATION PROPERTY.



VIEW LOOKING WEST OVER A SMALL CATTAIL-WILLOW WETLAND AREA LOCATED NORTH OF THE NORTHWEST CORNER OF THE PLANT BUILDING



VIEW LOOKING SOUTH AT THE SMALL CATTAIL-WILLOW WETLAND AREA LOCATED NORTH OF THE NORTHWEST CORNER OF THE PLANT BUILDING



VIEW LOOKING WEST TOWARDS THE SMALL CATTAIL-WILLOW WETLAND AREA, WHICH IS LOCATED ON THE EAST SIDE OF THE SMALL RIDGE



VIEW LOOKING SOUTHWEST FROM THE EASTERN EDGE OF THE PROPERTY ALONG A DRAINAGE AREA CROSSING THE CENTRAL PORTION OF THE PROPERTY



VIEW LOOKING WEST ACROSS NORTHERNMOST PORTION OF THE SCOTT AVIATION PROPERTY



VIEW LOOKING EAST ONTO THE ADJACENT PROPERTY. NOTE THE DEER STAND IN THE TREE



VIEW LOOKING NORTH FROM THE RAILROAD TRACKS ONTO THE ADJACENT PROPERTY



VIEW LOOKING NORTHWEST TOWARDS THE NORTH END OF THE SCOTT AVIATION PROPERTY

#### APPENDIX G

SAMPLE ANALYSIS SUMMARY SHEETS INDICATING METHOD DETECTION LIMITS

GROUNDWATER ANALYSIS (METALS) (ROUND I)

a Sistematika di Kalandaria di Kabadaria di

医二进位重复点

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#### CASE NARRATIVE FOR INORGANICS (NYASP)

ALL THE SAMPLES WERE SUBBED OUT TO CHEMTECH CONSULTING GROUP FOR ANALYSIS OF METALS (DISSOLVED). Lab Name: CHEMTECH

Client: VERSAR ENV. Project: Figgie-Scott Aviation

Job No.: I210202 CASE No.: 10202 SDG No.: MW-1(F)

The following samples are included in this Sample Delivery Group:

CHEMTECH ID	Client ID on forms
5671S	SW-1
5672 <b>S</b> 2	SW-1D
5673DS	SW-1S
5674S	SW-2
5675S	SW-3
56765	MW-1
5677S	MW-2
5678\$	MW-3
56798	MW-4
5680S	MW-5
5681S	MW-6
5682S	IT-1
5683S	FIELDBLANK3
Detailed Doc	umentation of Problems Encountered With These
<u>Samples</u>	
General:	
1. The abov	e liquid samples were analyzed for metals

- The above liquid samples were analyzed for metals dissolved.
- 2. Please note that the client sample number with the sample description (identification) is too many characters, therefore as per the software being used only limited characters can be used for EPA sample number. Never-the-less for the cross reference check the Lab sample ID. with Client ID. is listed above on this case narrative.
  - Please be advised that using the Software for data processing of CLP Inorganic Packages, the software is designed to accomodate one SDG at a time made of twenty samples or less of the same matrix.
  - The Inorganic CLP data package contains respectively in this order: Case Narrative followed by: forms, ICAP raw data, Furnace raw data, Mercury raw data, and finally the last part is General (samples preparation log, sample log in pages, Chain-of-Custody).

EPA SAMPLE NO.

ame: CHEMTECH CONSULTING GROUP Contract: 68D20041

FIELDBLANK3

ode: CHEM

Case No.: 10202

SAS No.:

SDG No.: MW-1(F)

x (soil/water): WATER

Lab Sample ID: 5683S

(low/med):

LOW

Date Received: 11/03/92

ids:

70.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

•	<u> </u>	<del> </del>	<del> </del>				
	CAS No.	Analyte	Concentration	С	Q	М	
	7429-90-5	Aluminum	100	Ū	<del></del>	P	I
	7440-36-0	Antimony	. 40.0	U	Ī	P	I
	7440-38-2	Arsenic	, 40.0	١	Í	NR	١
	7440-39-3	Barium	11.0	ָט		1	I
	7440-41-7	Beryllium	1.8	В		P P	I
	7440-43-9	Cadmium	4.0	บ		P	l
ı		Calcium	310	Ū		P	I
I	7440-47-3	Chromium	9.0	ប		P	ĺ
	7440-48-4	Cobalt	7.0	บ		P	l
١	7440-50-8	Copper	20.0	บ	4	P	İ
1	7439-89-6	Iron	25.9	В	•	P	Į
ı		Lead	2.0	Ū		F	l
ı	7439-95-4	Magnesium	185	Ū		P	l
1	7439-96-5	Manganese	4.0	Ū		P	l
ı	7439-97-6	Mercury	0.20	Ū		cv	ļ
ı	7440-02-0	Nickel	16.0	Ū		P	l
ł		Potassium	900	Ŭ		A	Į
ı	7782-49-2	Selenium	3.0	U		F	l
١	7440-22-4	Silver	7.0	Ü		P	ı
İ		Sodium	432	B		P	ĺ
I	7440-28-0	Thallium	4.0	บี		F	
ł	7440-62-2	Vanadium	16.0	ŭ		P	
ĺ	7440-66-6	Zinc	5.0	U		P	ĺ
ı		Cyanide		_		NR	
L						111	
•				_			

gerore:	COLORLESS
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Clarity Before: CLEAR

Texture:

After: COLORLESS

Clarity After: CLEAR

Artifacts:

ts:

FORM I - IN

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

IT-1

Code: CHEM

Case No.: |0202 SAS No.:

SDG No.: MW-1(F)

ix (soil/water): WATER

Lab Sample ID: 5682S

l (low/med):

Date Received: 11/03/92

lids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

						•
CAS No.	Analyte	Concentration	c	Q	М	7
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt	100 . 40.0 . 2.0	מם שם שם		PPFPPPP	
7439-89-6 7439-92-1 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-62-2 7440-66-6	Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	20.0 3880 2.0 67200 2130 0.20 16.0 5470 3.0 12.6 55700 4.0 16.0 104	ממ מ ממ מ מס		999599094599599	
l	l				NR	

Before: BROWN

Clarity Before: CLOUDY

Texture:

After:

COLORLESS

Clarity After: CLEAR

Artifacts:

ts:

FORM I - IN

ILM02.1

000003

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

MW-1

Code: CHEM

Case No.: 10202 SAS No.:

SDG No.: MW-1(F)

ix (soil/water): WATER

Lab Sample ID: 5676S

1 (low/med):

LOW

Date Received: 11/03/92

lids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

T	T			_		
CAS No.	Analyte	Concentration	c	Q	М	_
	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	30300 4.0 16.0	עטט טט שטט שטטט טטט טטט טטט טטט טטטט	W	PPFPPPPPPFPPVPAFPPFPPR	

Before: COLORLESS

Clarity Before: CLEAR

Texture:

After: COLORLESS

Clarity After: CLEAR

Artifacts:

ts:

FORM I - IN

EPA SAMPLE NO.

iame:	CHEMTECH	CONSULTING	GROUP	Contract:	68020041
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MW-2

ode: CHEM

Case No.: |0202

SAS No.:

SDG No.: MW-1(F)

x (soil/water): WATER

Lab Sample ID: 5677S

(low/med):

LOW

Date Received: 11/03/92

ids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

		Time to the second seco				
CAS No.	Analyte	Concentration	c	Q	M	
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-09-7 7782-49-2 7440-23-5 7440-28-0 7440-62-2 7440-66-6	Antimony Arsenic Barium Beryllium Cadmium Calcium	100 40.0 2.0 337 1.1 4.0 169000 9.0 7.0 20.0 12400 2.0 104000 1520 0.20 16.0 2510 3.0 7.0 54100 4.0 16.0 5.0	ממט מטשטט ט טטט טש שטט		PPFPPPPPPPPPPPR	
	·		_1.		II	

}efore:	BROWN
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Clarity Before: CLEAR

Texture:

fter:

COLORLESS

Clarity After: CLEAR

Artifacts:

s:

FORM I - IN

EPA SAMPLE NO.

Tame: CHEMTECH CONSULTING GROUP Contract: 68D20041

MW-3

ode: CHEM

Case No.: 10202

SAS No.:

SDG No.: MW-1(F)

x (soil/water): WATER

Lab Sample ID: 5678S

(low/med):

LOW

Date Received: 11/03/92

ids:

70.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

	T	T	<del></del>			
CAS No.	Analyte	Concentration	c	Q	M	1
CAS No.  7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7	Analyte  Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium	Concentration  100 . 40.0 2.0 117 1.8 4.0 33600 9.0 7.0 20.0 77.7 2.0 46500 45.8 0.20 16.0 1930		Q		
7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-62-2 7440-66-6	Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	3.0 8.1 42100 4.0 16.0 5.0	B U B U U U U	<b>W</b>	A F P P F P R NR	

Before: COLORLESS

Clarity Before: CLEAR

Texture:

After: COLORLESS

Clarity After: CLEAR

Artifacts:

ts:

FORM I - IN

EPA SAMPLE NO.

Name:	CHEMTECH	CONSULTING	GROUP
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Contract: 68D20041

MW-4

Code: CHEM

Case No.: 10202 SAS No.:

SDG No.: MW-1(F)

ix (soil/water): WATER

Lab Sample ID: 5679S

l (low/med):

LOW

Date Received: 11/03/92

lids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

•		<del>                                     </del>				
	CAS No.	Analyte	Concentration	С	Q	М
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-02-4	Analyte  Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver	100 40.0 2.0 215	C UUU BU UUUBU UUBUB		
	7440-28-0 7440-62-2 7440-66-6	Sodium Thallium Vanadium Zinc Cyanide	34600 4.0 16.0 5.0	ט ט ט	W	P P F P NR

Before: COLORLESS

Clarity Before: CLEAR

Texture:

After: COLORLESS

Clarity After: CLEAR

Artifacts:

:s:

FORM I - IN

EPA SAMPLE NO.

lame: CHEMTECH CONSULTING GROUP

Contract: 68D20041

MW-5

lode: CHEM

Case No.: |d2d2 SAS No.:

SDG No.: MW-1(F)

x (soil/water): WATER

Lab Sample ID: 5680S

(low/med):

LOW

Date Received: 11/03/92

ids:

**/**0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

	CAS No.	Analyte	Concentration	c	. Q	M	
777777777777777777777777777777777777777	440-22-4 440-23-5 440-28-0 440-62-2 440-66-6	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	31200 9.0 7.0 20.0 23.3 2.0 45700 35.7 0.20 16.0 2630 3.0 7.0 41100 4.0 16.0		1	PAFAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	

efore: COLORLESS

Clarity Before: CLEAR

Texture:

iter: COLORLESS

Clarity After: CLEAR

Artifacts:

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FORM I - IN

EPA SAMPLE NO.

ame: CHEMTECH CONSULTING GROUP Contract: 68D20041

MW-6

ode: CHEM

Case No.: 10202 SAS No.:

SDG No.: MW-1(F)

(soil/water): WATER

Lab Sample ID: 5681S

(low/med):

LOW

Date Received: 11/03/92

ds:

**/0.0** 

Concentration Units (ug/L or mg/Kg dry weight): UG/L

				- ,	•	og,
CAS No.	Analyte	Concentration	c	Q	N	 1
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-95-4 7439-95-6 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-62-2 7440-66-6	Antimony Arsenic Barium Beryllium Cadmium	52700 13.5 0.20 16.0 2330 3.0	1	W	HHEHHHHHHHHHHHHHHHHHHHH	

fore: COLORLESS

Clarity Before: CLEAR

Texture:

:er: COLORLESS

Clarity After: CLEAR

Artifacts:

FORM I - IN

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Name:	СНЕМТЕСН	CONSULTING	GROUP	Contract:	68D20041	SW-1
_						

Code: CHEM Case No.: )0 20 2 SAS No.: SDG

SDG No.: MW-1(F)

ix (soil/water): WATER

Lab Sample ID: 5671S

1 (low/med): LOW Date Received: 11/03/92

lids: /0.0

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

						T
CAS N	0.	Analyte	Concentration	С	Q	M
7429-	90-5	Aluminum	100	ប៊		P
7440-		Antimony	. 40.0	บั		P
7440-	38-2	Arsenic	2.0	Ū		F
7440-		Barium	22.2	В		P
7440-	41-7	Beryllium		В		P
7440-		Cadmium	4.0	Ū		$ \hat{\mathbf{p}} $
7440-	70-2	Calcium	40400	ľ		P
7440-	47-3	Chromium	9.0	ן ט		P
7440-	48-4	Cobalt	7.0	U		P
7440-	50-8	Copper	20.0	יט		P
7439-	89-6	Iron	145			P
7439-	92-1	Lead.	2.0	ט		F
7439-	95-4	Magnesium	15100			P
7439-		Manganese	44.2			P
7439-		Mercury	0.20	U		CV
7440-	1	Nickel	16.0	U		P
7440-	09-7	Potassium	1430	В		A
7782 <b>-</b> -		Selenium	3.0	U		F
7440-	1	Silver	7.0	U		P
7440-		Sodium	12700			P
7440-		Thallium	4.0	U		F
7440-	62-2	Vanadium	16.0	U		P
7440-	66-6	Zinc	5.0	U		P
		Cyanide				NR

Belore:	COLORLESS	Clarity	Before:	CLEAR	Texture:
After:	COLORLESS	Clarity	After:	CLEAR	Artifacts:
ents:	:				
	<del></del>			<del></del>	

FORM I - IN

ILM02.1

000010

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP SW-2 Contract: 68D20041

Case No.: 10202 SAS No.: Code: CHEM

SDG No.: MW-1(F)

ix (soil/water): WATER

Lab Sample ID: 5674S

l (low/med):

Date Received: 11/03/92

lids:

**/**0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

	T	T	<del></del>			
CAS No.	Analyte	Concentration	С	Q	М	T
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6	Aluminum Antimony Arsenic Barium Beryllium Cadmium	Concentration  100		Q		
7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-22-4	Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium	13700 62.4 0.93 16.0 1610 3.0 7.0 12900 4.0 16.0 5.0	מעט טטפט		PPCVPAFPPFPNR	

Before:	COLORLESS	Clarity	Before:	CLEAR
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Texture:

After: COLORLESS

Clarity After: CLEAR

Artifacts:

its:

FORM I - IN

EPA SAMPLE NO.

			•		
Name:	CHEMTECH	CONSULTING GROUP	Contract:	68D20041	SW-3
Code:	CHEM	Case No.: 10202	SAC No	•	

Case No.: | V202 SAS No.: SDG No.: MW-1(F)

ix (soil/water): WATER

Lab Sample ID: 5675S

Date Received: 11/03/92

lids:

l (low/med):

**/**0.0

LOW

Concentration Units (ug/L or mg/Kg dry weight): UG/L

•		T					
	CAS No.	Analyte	Concentration	c	Q	М	
	7429-90-5	Aluminum	100	ਹ		P	1
	7440-36-0	Antimony	. 40.0	ט			ı
	7440-38-2	Arsenic	2.0	U		P	ı
	7440-39-3	Barium	34.2	В	}	F	١
	7440-41-7	Beryllium	1.3	B		P	ı
	7440-43-9	Cadmium	4.0	U	İ	P	ı
	7440-70-2	Calcium	49600	١٣		P P	ı
	7440-47-3	Chromium	9.0	U		P	l
	7440-48-4	Cobalt	7.0	Ū		P	ı
	7440-50-8	Copper	20.0	Ū		P	l
	7439-89-6	Iron	183	•		P	ļ
1	7439-92-1	Lead	2.0	U		F	l
١	7439-95-4	Magnesium	. 17600		,	P	ĺ
1	7439-96-5	Manganese	46.2		ll .	P	ı
1	7439-97-6	Mercury	0.20	ט		cv	l
۱	7440-02-0	Nickel	16.0	Ū		P	ı
1		Potassium	1360	В		A	
ı	7782-49-2	Selenium	3.0	U		F	
1	7440-22-4	Silver	7.0	Ū		P	ĺ
ı	7440-23-5	Sodium	14400			P	ĺ
ı	7440-28-0	Thallium	4.0	ט	•	F	ĺ
l	7440-62-2	Vanadium	16.0	U		P	
İ	7440-66-6	Zinc	5.0	U		P	
1		Cyanide	ļ	ł	•	NR	
1.					:		

					' <del></del> '
Before:	COLORLESS	Clarity 1	Before:	CLEAR	Texture:
After:	COLORLESS	Clarity 1	After:	CLEAR	Artifacts:

its:

<u> </u>

FORM I - IN

## SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

SW-1S

Code: CHEM

Case No.: |0202 SAS No.:

SDG No.: MW-1(F)

ix: WATER

Level (low/med): Low

lids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

			T						
alyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR)	ć	Spike Added (SA)	%R	Q	M	
ninum imony enic ium /llium nium ium er esium anese ury el ssium nium er um lium lium lium	75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125	2057.4000 540.5300 40.1000 2066.7000 52.3400 50.5800 201.4700 539.9000 244.1700 1263.0000 21.8000 536.5000 0.9300 534.9500 10.7000 44.1600 50.3000 490.5500 514.4800	44.2000 0.2000 16.0000 3.0000 7.0000 4.0000 16.0000	UUBBU UUU U	2000.00 500.00 40.00 2000.00 50.00 200.00 200.00 250.00 1000.00 20.00 500.00 500.00 500.00 500.00 500.00	102.9 108.1 100.2 102.2 101.1 101.2 100.7 108.0 97.7		PPFPPPRPPFRPVPRFPRFPP	
l.				_ _				NR	

	•		
<u> </u>			
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		<del></del>	

FORM V (Part 1) - IN

# **DUPLICATES**

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

SW-1D

Code: CHEM

Case No.: 10202 SAS No.: SDG No.: MW-1(F)

ix (soil/water): WATER

Level (low/med): LOW

lids for Sample: 0.0

% Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	С	Duplicate (D)	С	RPD	Q	м
Aluminum		100.000017	ו ל	100.0000	ប៊	<del></del>	-	P
Antimony		40.0000 t	U	40.0000	U			P
Arsenic		2.0000 1	וט	2.0000	U			F
Barium	İ	22.2200 E	в	28.7000	В	25.5		P
Beryllium		1.7900 E	в	1.7900	В	0.0		P
Cadmium		4.0000   1	וט	4.0000	ַ ט			P
Calcium		40409.0000	1	40854.0000		1.1	ļ	P
Chromium			וט	9.0000	U			P
Cobalt		7.0000 t	- I	7.0000	U			P-
Copper		20.0000 1	ן ע	20.0000	U			P
Iron	100.0	145.0800		187.8300		25.7		P
Lead			וט	2.0000	U	1		F
Magnesium	5000.0	15123.0000		15231.0000		0.7		P
Manganese	15.0	44.2000		38.1400		14.7	İ	P
Mercury	Į	1	וט	0.2000	וט	1	İ	CV
Nickel	İ		וט	16.0000	U			P
Potassium		1430.0000 E		1430.0000	В	0.0		A
Selenium		3.0000 t	- 1	3.0000	ע			F
Silver	_	7.0000 t	וט	7.0000	U	ľ	İ	P
Sodium	5000.0	12705.0000	.   ,	12688.0000	l	0.1		P
Thallium		4.0000 t	~	4.0000	וט		1	F
Vanadium		16.0000	- 1	16.0000	U		1	P
Zinc		5.0000	ا ا ت	5.0000	U			P
Cyanide					- 1	]		NR
		I l _	_1	·	_1	1	1_	II

## ICP SERIAL DILUTIONS

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

SW-1L

Code: CHEM Case No.: | 22/2 SAS No.:

SDG No.: MW-1(F)

rix (soil/water): WATER

Level (low/med): Low

Concentration Units: ug/L

			Serial		<del></del>		
	Initial Sample		Dilution	Ì	Differ-		
Analyte	Result (I)	С	Result (S)	c	ence		
77			(2)	٦	ence	Q	M
Aluminum	100.00		500.00	וטו			P-
Antimony Arsenic	40.00	ען	200.00				P
Barium		_	•		1 1		NR
Beryllium	22.22		55.00	U	100.0		P
Cadmium	1.79	,	6.70		274.3		P
Calcium	4.00		20.00	ט	1	1 1	P
Chromium	40409.00	ט	40291.00		0.3		P
Cobalt	7.00	ם ט	45.00		i i		P
Copper	20.00	u	35.00	וט	1	11	P
Iron	145.08	١٦	100.00	U		1 1	P
Lead	1		174.85	В	20.5		P
Magnesium	15123.00		14921.50	- I			NR
Manganese	44.20		30.05		1.3		P
Mercury			30.05	P	32.0		P
Nickel	16.00	ט	80.00	וט		1 1	NR
Potassium			1	١		1 1	P NR
Selenium			1				NR NR
Silver Sodium		ט	38.30	В			P
Thallium	12705.00		12654.50	В	0.4		P
Vanadium			]		3.1	1 1	NR
Zinc	= -	ט	80.00	וט			P
2110	5.00	וט	25.00	וט			P
·		_		_[]			_
				' '		· — I ·	1

GROUNDWATER ANALYSIS (VOCs)
(ROUND I)

158 Tices Lane East Brunswick, New Jersey 08816 (908) 257-1050 . Fax (908) 257-2790

· - iser, Inc. DEC 18 199%

#### CASE NARRATIVE FOR ORGANICS (NYASP)

Client: VERSAR INC. Lab Name: INTECH

JOB No.: I210202 Project: Figgie-Scott Aviation

SW-1 SDG No. : 10202 CASE No. :

The following samples are included in this Sample Delivery

Group: LAB ID #	Client ID #	LAB ID #	CLIENT ID #
		1210202-10	MW-4
I210202-01	SW-1	1210202-11	MW-5
I210202-02 I210202-03	SC-1 SW-2	I210202-12	MW-6
1210202-03	SC-2	I210202-13 I210202-14	IT-1 FB-1
I210202-05	SW-3	1210202-14	FB-2
I210202-06	SC-3 MW-1	1210202-16	FB-3
I210202-07 I210202-08	MW-2	I210202-17	TB-1 SS-1
T210202-09	MM-3	I210202-18	

Detailed Documentation of Problems Encountered With These Samples

General:

- Please note that the client sample number with the sample description (identification) is too many characters, therefore as per the software being used for Organics data processing only limited characters can be used for EPA sample number. Never-the-less for the cross with Client ID. is reference check the Lab sample ID. listed above on this case narrative.
- The EPA sample number in all the forms is the Client identification from the Chain-of-Custody, the last 6 characters (include dashes). as an example: VERSAR ID: SW-1 61537,68187,61507 for this sample on forms SAMPLE ID: SW-1
- On the run logs use the following lab identifications:
   last 3 digits of the Intech job number followed by the sample number: an example Job No. I210202 sample identification to be used on the run logs becomes 20215, etc. and also on some run logs as I210202-01, -02, -03 etc.

Volatile Fraction:

Please note that the concentrations of trans-1,3-Dichloropropene and cis-1,3-Dichloropropene are 92 and 106 percent respectively from the theoretical value in the standard solution mix which is purchased from Supelco.

## UOLATILE ORGANICS ANALYSIS DATA SHEET

MISUEC SAMPLE NO. I SW-1

SDG No.:SW-1

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

Matrix: [soil/water] WATER

Lab Sample ID: I210202-01

Sample wt/vol: 5.0

[g/mL] ML

Lab File ID: >A0107

Level: [low/mæd] LOW

Date Received: 10/31/92

% Moisture:

decanted: (Y/N) N

Date Analyzed : 11/04/92

GC Column : PACK ID: 2.0

(mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume: (uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS: [ug/L or ug/Kg] UG/L

	ig kg i obit	, . <b></b>	
1 74-87-3Chloromethane		1	ı
' /4~&J-y	10	10	Ιţ
/ /7-Ul-4Uinul Chionida	! 10	IU	13
/ /7-00-2	10	IU	1.
75-09-2Methylene Chloride	10	IU	1.
67-64-1Acetone	1 4	1 JB	I
75-15-0Carbon Disulfide	10	I U	ı
75-35-41,1-Dichloroethene	10	IU I	1
75-34-3 1 1 D	1 10	lu i	F
75-34-31,1-Dichloroethane	10	IU i	
540-59-01,2-Dichloroethene (total)	1 10	10 1	į
	1 10	iu i	, I
107-06-21,2-Dichloroethane	1 10	iu	ı
-	1 10	iu i	i I
71-55-61,1,1-Trichloroethane	1 10	10 1	l
・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	1 10	i Ui	
// / ~/ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	1 10	10 1	
· / U=U/=J======	1 10	10 1	
	1 10	10 1	
· // 'VATUTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	10	10 1	
- 144-40-1Dibromoobless	1 10		
	10	IU I	
· / 4=7/-/	10	="	
10061-02-6trans-1,3-Dichloropropene	10	IU I	
		IU I	
108-10-14-Methul-2-Dankan	10	IU I	
// LT/UTUTETTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	10	IU I	
12/-18-4Tetrachia	10	IU I	
//-24-71.1.7.7-Te+neek1	10	IU I	
	! 10	IU I	
108-90-7Chloroban	10	IU I	
100-41-4Ethulbenzene	10	IU I	
100-42-5	10	IU I	
1330-20-7Xylene (total)	10	IU I	
, ,	10	10 1	

#### 1E UOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYS	SDEC	SAMPLE	NO.
1 5	₩-1		

ھ ا	Ь	Name	• 1	NT	ECH
ᆫᅋ	U	rame	i I	NI	ᄆᄔᅖ

Contract:

Lab Code: INTECH Case No. 10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) WATER -

Lab Sample ID: I210202-01

Sample wt/vol: 5.0

(g/mL) ML

Lab File ID: >A0107

Level: (low/med) LOW

Date Received: 10/31/92

% Moisture: NA not dec.

Date Analyzed: 11/04/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL

Number TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

CAS NUMBER	COMPOUND NAME	l RT	EST. CONC.	Q
		_		====
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## UDLATILE ORGANICS ANALYSIS DATA SHEET

I SC-1

(ul

Soil Aliquot Volume:

MISULL SAMPLE NO.

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10202 SAS No.: SDG No.:SW-1

Matrix: [soil/water] SOIL Lab Sample ID: I210202-02

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3730

Level: [low/med] LOW Date Received: 10/31/92

% Moisture: 49.0 decanted (Y/N) Y Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: Soil Extract Volume: (uL)

CONCENTRATION UNITS: CAS NO. COMPOUND

		lug/L or	nd\kd1	UG/KG	Q	
			1		<del></del>	- ,
	74-87-3Chloromethane		i	20	, 	1
	/4-83-9		i	20	10	1 #
	! /b-U1-4			20	יו	17
	/// // // // // // // // // // // // //		ĺ	20	10	1
	/b-09-2Methulene Chlorid	e	i	7	IJ	1
	' 0/-04-1Ωcetone .		i	150	1 3	
	75-15-0Carbon Disulfide	•	i	20	וֹט	1
•	' /7-27-41.1-Dichlorosthan	•	t	20	IU	,
	' />-/-/4-/	_	i	20	10	-
	' /7U=>/=U========1.V=Dichloros+bas	e (total)	ı İ	20	וט	i
	'		į	20	10	1
	1.07-06-21,2-Dichloroethand	8	1	20	ίŪ	1
- (			l	20	iu	i
	71-55-61,1,1-Trichloroet	hane		20	iu	i
	プローインニンニニニニニー・ おとりのの しゃとゅうらいしょう	: -4 -	1	20	10	i
'	/7-4/-4Browndichlonomash.		<b>E</b> 1	20	ίŪ	i
1	/0-0/-0		ŧ	20	IU	i
1	+0004-04-7	ropene	F	20	เบ	i
!	//=ul=p===== r1chloroe+bene		ı	20	ĪŪ	i
	124-48-1Dibromochlorometha	ne	1	20	ΙÜ	ì
;	//	ane	1	20	ίŪ	i
ï	/ 1 = 4		ŀ	20	ΙÜ	i
1	10061-02-6trans-1,3-Dichloro	propene	1	20	ĬÜ	i
i	/ / ~ ~ / ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		T .	20	ΙŪ	1
ï	108-10-14-Methyl-2-Pentano	ne	I	20	IU	i
i	591-78-62-Hexanone		ŀ	20	IU	Ì
;	127-18-4Tetrachloroethene		. 1	20	IU	1
į	79-34-51,1,2,2-Tetrachlor 108-88-3Toluene	oethane	t	20	10	1
i		•	ł	20	IU	1
i	108-90-7Chlorobenzene		1	20	IU	1.
	100-41-4Ethylbenzene		1	20	IU	1
•	100-42-5Styrene		1	20	IU	1 -
· }	1330-20-7Xylene (total)		1	20	IU	1.
٠.			1		_	•

#### 1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

N,	YSDEC	SAMPLE	NO.
1	SC-1		

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) SOIL

Lab Sample ID: I210202-02

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: >C3730

Level: (low/med) LOW

Date Received: 10/31/92

% Moisture: 49 not dec.

Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL

Number TICs found:

CONCENTRATION UNITS: (ua/L or ua/Ka) HG/KG

		L or ug/Kg	) UG/KG	
CAS NUMBER	COMPOUND NAME	l RT I	EST. CONC.	Q
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# VOLATILE ORGANICS ANALYSIS DATA SHEET

[g/mL] ML

NYSDEC SAMPLE NO.

1 SW-2 Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] WATER -

Lab Sample ID: I210202-03

Sample wt/vol: 5.0

Lab Name: INTECH

Lab File ID: >A0119

Level: [low/med] LOW

Date Received: 10/31/92

% Moisture: decanted: (Y/N) N

Date Analyzed : 11/05/92

GC Column : PACK

ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: CAS NO. COMPOUND [ug/L or ug/Kg] UG/L

1	[ug/L or	ug⁄Kg] [	JG/L	Q
74-87-3	Chloromethane	ı		
		ł	10	iu
		f	10	10
75-00-3	Chloroethane	1	10	וט
	Make: 1	1	10	
67-64-1	Chloroethane Methylene Chloride Acetone	1	4	10
75-15-n	-ncatone	1	•	i jb
75-35-4-	Larbon Disulfide 1,1-Dichloroethene	i	10	1
75-34-3	1,1-Dichloroethene	i	10	IU
540-50 0	1,1-Dichloroethene 1,1-Dichloroethene	•	10	IU
67-44 7	1,1-Dichloroethane 1,2-Dichloroethene (total: Chloroform	\		IU ·
107 0/ 0	Chloroform	, ;	10	IU
* U/ TUD=/*=	1 0 6	!	10	10 ;
78-93-3	1,2-Dichloroethane 2-Butanone	!	10	lu i
/ A T / / T D S S S S	1 1 1		10	lu i
56-23-5	Carbon Tetrachloride	1	10	i i
/5-27-4	Bromodichloromethane	1	10	i Ü
78-87-5	Bromodichloromethane 1,2-Dichloropropane	1		Ü
0061-01-5	1,2-Dichloropropane cis-1,3-Dichloropropane	1		Ü
79-01-6	Cis-1,3-Dichloropropene	1		
124-48-1	C:-	1		U i
79-00-5	1,1,2-Trichloromethane	1		-
71-43-2		i		U I
0061-02-6	Benzene trans-1,3-Dichloropropene Bromoform	i		U I
75-25-2	trans-1,3-Dichloropropene	i		U I
108-10-1	Bromoform	i	10	_
591_70 4	bromoform 4-Methyl-2-Pentanone	1	10	-
19710 /	4-nethyl-2-Pentanone 2-Hexanone	1	10 (	J 1
/	- T-4	1	10	۱ ا
		l'	10 [[	۱ ا
108-88-3	Toluene	i	10 10	j į
エリローアリー ノーーー		I	10 1	j
		I	10 1	•
100-42-5	Sturene	i	10 1	•
<i>530-20-7</i>	Xylene (total)	1	10 10	•
	Aroug ((O(91)	1	10 10	•
		1	- 0 10	ľ

#### 1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC	SAMPLE	NO.
1 1 SW-2		

Lab Name: INTECH	Lab	Name:	INTECH
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Lab Code: INTECH

Contract:

Case No. 10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) WATER .

Lab Sample ID: I210202-03

Sample wt/vol: 5.0

(g/mL) ML

Lab File ID: >A0119

Level: (low/med) LOW

Date Received: 10/31/92

% Moisture: NA not dec.

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(ut

Number TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) IIG/ I

	L or ug/Kg	or ug/Kg) UG/ L			
CAS NUMBER	COMPOUND NAME	l RT	EST. CONC.	i Q	
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#### VOLATILE ORGANICS ANALYSIS DATA SHEET

I SC-2

MISUEL SHIPLE NO. .

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10202 SAS No.: SDG No.:SW-1

Matrix: [soil/water] SOIL

Lab Sample ID: I210202-04

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3731

Level: [low/med] LOW Date Received: 10/31/92

% Moisture: 53.0 decanted (Y/N) Y Date Analyzed : 11/07/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND		ATION UNITS ug/Kg] UG/		Q	
!			1	<del></del>	1	<b>-</b> ,
1 74-87-3	Chloromethane		1	21	ΙÜ	l 🖁
74-83-9	Bromomethane	•	1 .	21	IU	13
/5-01-4	Vinyl Chloride	•	F.	21	ΙÜ	T.
1 /フーリリーシーーー	Chloroethane		1	21	IU	1
75-09-2	Methylene Chlo	pride	1	21	IU	I
1 6/-64-1	Acetone		1	41	1	I
/5-15-0	Carbon Disulfi	ide	I	21	ΙÜ	1
/5-35-4	1,1-Dichloroe	thene	1	21	IU	1
/7-24-2	1,1-Dichloroet	hane	l	21	ΙU	1
1 540-59-0	1,2-Dichloroet	hene (total)	l	21	IU	1
1 6/-66-3	Chloroform		1	21	IU	1
10/-06-2	1,2-Dichloroet	:hane	1	21	ľU	1
78-93-3	2-Butanone		1	21	ΙU	• 1
/1-55-6	1,1,1-Trichlor	oethane	1	21	ΙU	1
フローイノーフーーー	Larbon Tetrach	loride	1	21	ΙU	ļ
ノラー2フー4ー	Bromodichlorom	re thane	l	21	1 U	t
/8-87-5	1,2-Dichloropr	opane	1	21	IU	I
10061-01-5	cis-1,3-Dichlo	ropropene	ı	21	1U	I
/9-01-6	Trichloroethen	8	1	21	IU	1
124-48-1	Dibromochlorom	ethane	1	21	10	ı
79-00-5	1,1,2-Trichlor	oethane	1	21	IU	1
71-43-2	Benzene		1 .	21	IU	t
10061-02-6	trans-1,3-Dich	loropropene	i	21	IU	1
/7-27-2	Bromoform		ŀ	21	IU	ı
108-10-1	4-Methy1-2-Pen	tanone	1	21	IU	1
591-78-6	2-Hexanone		1	21	IU	1
127-18-4	Tetrachloroeth	ene	I	21	IU	1
79-34-5	1,1,2,2-Tetrac	hloroethane	1	21	ΙU	1
エリローロローフーニー	Toluene		1	21	1 U	1
108-90-7	Chlorobenzene		· 1	21	ΙU	1
100-41-4	Ethylbenzene		f	21	IU	1
100-42-5	Styrene		1	21	IU	۱,
1330-20-7	Xyĺene (total)	•	1	21	10	10/43
			1		1	043

#### 1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC	SAMPLE	NO.
I SC-2		

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) SOIL -

GC Column: PACK ID: 2.0 (mm)

Lab Sample ID: 1210202-04

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: >C3731

Level: (low/med) LOW

Date Received: 10/31/92

% Moisture: 53 not dec.

Date Analyzed: 11/07/92

Soil Extract Volume:

(uL)

Dilution Factor: 1.0

Soil Aliquot Volume:

(ul

Number TICs found: 0.

CONCENTRATION UNITS: (ug/L or ug/Kq) UG/KG

CAS NUMBER	COMPOUND NAME	I I RT		
			1 EST. CONC.	(
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#### VOLATILE ORGANICS ANALYSIS DATA SHEET

1 SW-3

Lab Name: INTECH Contract:

SDG No.: SW-1

Lab Code: INTECH Case No.: 10202 SAS No.:

Lab Sample ID: I210202-05

Matrix: [soil/water] WATER .

Sample wt/vol: 5.0

[g/mL] ML Lab File ID: >A0132

[low/med] LOW Level:

Date Received: 10/31/92

% Moisture:

decanted: (Y/N) N

Date Analyzed: 11/06/92

GC Column :

PACK ID:

2.0 (mm) Dilution Factor:

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

CAS NO.	COMPOUND		RATION UN r ug/Kg]		. Q	•
1			1		i	_ ,
1 74-87-3	Chloromethane		1	10	IU .	14
74-83-9	Bromomethane		1	10	IU	15
75-01-4	Vinyl Chloride		1	10	ΙŲ	۱
75-00-3	Chloroethane		t	10	IU	ı
1 75-09-2	Methylene Chlor	i de	1	10	IU	1
67-64-1	Acetone		l	9	ΙJ	1
75-15-0	Carbon Disulfid	8	1	10	ΙU	ı
75-35-4	1,1-Dichloroeth	ene	1	10	ΙU	.
75-34-3	1,1-Dichloroetha	ene	1	10	IU	1
540-59-0	1,2-Dichloroeth	ene (tota	1)	10	ΙÜ	1
67-66-3	Chloroform		1	10	ΙU	1
1 107-06-2	1,2-Dichloroeth	ane	1	10	IU	1
TB-93-3	2-Butanone	•	i	10	10	i
71-55-6	1,1,1-Trichloro	thane	1	10	ΙÜ	i
1 56-23-5	Carbon Tetrachlo	oride	Ì	10	ίŪ	i
75-27-4	Bromodichlorome	thane	1	10	ΊÜ	i
78-87-5	1,2-Dichloropro	oane	Í	10	iu	i
110061-01-5	cis-1.3-Dichlard	propene	1	10	IU	i
79-01-6	Trichloroethene		i	10	ΙÜ	i
124-48-1	Dibromachlarame	thane	i	10	IU	i
79-00-5	F1.1.2-Trichloroe	thane	Í	10	ίŪ	i
/1-43-2	<del>2-</del> Benzene		i	10	IU	i
110061-02-6	trans-1,3-Dichlo	ropropens		10	iu	i
75-25-2	Bromoform		i	10	iu	i
108-10-1	4-Methul-2-Penta	none	Ì	10	iŭ	i
591-78-6	2-Hexanone		i	10	เน	i
1 127-18-4	Tetrachloroether	ne	i i	10	יטו	i
1 79-34-5	1,1,2,2-Tetrach	loroethane	, i	10	iu	i
108-88-3	Toluene		i	10	10	i
1 108-90-7	Chlorobenzene		i	10	IU	i
1 100 44 4			•	10	1 0	ı

IU

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10

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100-41-4----Ethylbenzene

1330-20-7-----Xylene (total)

100-42-5----Styrene

# UDLATILE ORGANICS ANALYSIS DATA SHEET

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TENTATIVELY	IDENTIFIED	COMP	DUNDS

(uL)

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Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10202 SAS No.: SDG No.: SW-1

Matrix: (soil/water) WATER

Lab Sample ID: I210202-05

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >A0132

Level: (low/megl) LOW

Date Received: 10/31/92

% Moisture: NA not dec.

Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

Soil Aliquot Volume:

(uL

mber TICs found:

CONCENTRATION UNITS: (ug/L or ug/kg) UG/ L

CAS NUMBER	COMPOUND NAME	I RT	EST. CONC.	Q	
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# VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

I SC-3

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] SOIL . Lab Sample ID: I210202-06

Sample wt/vol: 5.0 [g/mL] G

Lab File ID: >C3732

Level: [low/med] LOW

Date Received: 10/31/92

% Moisture: 28.0 decanted (Y/N) Y

Date Analyzed : 11/07/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS:

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL

	COMPOUND	P 41	HITON O			
CAS NO.		[ug/L or	ug/Kg]	UG/KG	Q	
74-87-3	Chloromethane		!		ı	
74-83-9	Bromomethane		i .	14	וט	
75-01-4	Vinyl Chloride		l .	14	IU	
75-00 3	Vinyl Unioride		ļ.	. 14	IU	
· 75 00 0	Chloroethane	•	1	14	IU	
/7-U7-Z	Methylene Chlorid		1	6	١J	
75 15 0	Acetone	••	1	14	IU	
/7-17-U	Carbon Disulfide		ı	. 14	10	
/7-/7-4	1,1-Dichloroethen	9	1.	14	ΙÜ	
/7-34-3	1,1-Dichloroethan	3	1	14	110	
940-59- <b>0</b>	1,2-Dichloroethen	e (total)	1 (	14	IU	
0/-66-3	Chloroform		1	14	ΙŪ	
107-06-2	1,2-Dichloroethane	•	1	14	IU	
/8-93-3	2-Butanone		ı	14	iù	
71-55-6	1,1,1-Trichloroeth	nane	1	14	ıu	
フロームノーフーーー	Larbon Tetrachlori	de	i	14	וט	
/フー2/-4	Bromodichlorome+h.		i	14	10	
/ピーピノーラーー	1.2-Dichloroproper		i	14	10	
ノひロエーリエーツーーー	cis-1.3-Dichloron,	CODEDE	i	14		
79-01-6	Trichloroethene	opene	' 1		10	
124-48-1	Dibromochlorometha		1	14	ΙU	
79-00-5	1,1,2-Trichloroeth	ine		14	ΙÜ	
71-43-2		ane		14	IU	
1061-02-6	trans-1,3-Dichloro		ļ	14	IU	
75-25-2	Bromoform	propene	ŧ.	14	IU	
108-10-1	4-Methyl-2-Pentano	_	!	14	IU	
591-78-6	4-Hethyl-2-Pentano 2-Hexanone	пе	ļ.	14	10	
127-18-4-	Takaasi 1		1	14	IU	
79_3/_5	Tetrachloroethene	_	į.	14	IU	
100 00 7	1,1,2,2-Tetrachlor	oethane	1	14	IU	
100-00-3	101uene		l	14	IU	
100 /4 /	Chlorobenzene		1	14	IU	
100-41-4	Ethylbenzene		. 1	14	IU	
100-42-5	Sturene		ŀ	14	ΙÜ	
330-20-7	Xylene (total)		1	14	iu -	

#### 1E UOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC	SAMPLE	NO.
   SC-3		!

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10202 SAS No.:

(uL)

SDG No.: SW-1

Matrix: (soil/water) SOIL

Lab Sample ID: I210202-06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: >C3732

Level: (low/med) LOW

Date Received: 10/31/92

Date Analyzed: 11/07/92

% Moisture: 28 not dec. GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

Number TICs found:

Soil Aliquot Volume:

(uL

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

1 MW-1

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] WATER -

Lab Sample ID: I210202-07

Sample wt/vol: 5.0 [g/mL] ML. Lab File ID: >A0121

Level: [low/med] LOW

Date Received: 10/31/92

% Moisture:

decanted: (Y/N) N

Date Analyzed : 11/05/92

GC Column : PACK ID: 2.0

(mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.

CONCENTRATION UNITS:

74-87-3	LHS NU.	COMPOUND	[ug/L or ug/Kg] UG/	-	Q	
75-01-4	74-87-3	Chloromethane	.	4.5	ı	- 
75-00-3Chloroethane	/4-82-9	Bromoma +				ا عَ
75-09-2	<b>' /</b> 7-01-4	Uipul Chiamida	1			1 🕴
1	・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	[h]oros+bass	i •			1.
75-15-0	1 /2-09-2	Methulene Chiesia	  -			ı
75-15-0	· U/~04-1			-	i JB	ı
75-34-31,1-Dichloroethane	· /5-15-0	Carbon Diautria-	1 •		ı	ı
540-59-01,2-Dichloroethene (total)   10   10   10   10   10   10   10   1	, />-/7-/7-4				. –	1
67-66-3	. , , , , , , , , , , , , , ,	~~~~! ! _!!!! @b   & k L				1
107-06-21,2-Dichloroethane	. , , , , , , , , , , , , , , , , , , ,		G (4-4-1)			ı
78-93-32-Butanone 71-55-61,1,1-Trichloroethane 71-55-61,1,1-Trichloroethane 75-27-4Bromodichloromethane 78-93-3					· <del>-</del>	ı
71-55-61,1,1-Trichloroethane  71-55-61,1,1-Trichloroethane  75-23-5Carbon Tetrachloride  78-87-5Bromodichloromethane  78-87-51,2-Dichloropropane  10 IU    10061-01-5Trichloroethane  79-01-6Trichloroethane  10 IU    124-48-1Dibromochloromethane  79-00-51,1,2-Trichloroethane  71-43-2Benzene  10061-02-6trans-1,3-Dichloropropene  75-25-2Bromoform  108-10-14-Methyl-2-Pentanone  10 IU    127-18-4Tetrachloroethane  10 IU    108-88-3Toluene  108-90-7Chlorobenzene  100-41-4Ethylbenzene  100-42-5Styrene  100 IU    1330-20-7	1 10/-06-2	1.2-Dichlosocaba-				ı
10	· / ローナノーノーー					I .
75-27-4Bromodichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 10061-02-6	' /↓ーララー6ーーー・	1 1 1_Taiabla	h !	_		ı
78-87-51,2-Dichloropropane   10   U   10061-01-5cis-1,3-Dichloropropene   10   U   79-01-6Trichloroethene   10   U   124-48-1Dibromochloromethane   10   U   79-00-51,1,2-Trichloroethane   10   U   71-43-2Benzene   10   U   10061-02-6trans-1,3-Dichloropropene   10   U   75-25-2Bromoform   10   U   108-10-14-Methyl-2-Pentanone   10   U   127-18-4Tetrachloroethene   10   U   127-18-4Tetrachloroethene   10   U   108-88-3Toluene   10   U   108-90-7Chlorobenzene   10   U   100-41-4Ethylbenzene   10   U   1330-20-7					10	1
10061-01-5cis-1,3-Dichloropropene   79-01-6Trichloroethene   10   U     124-48-1Dibromochloromethane   10   U     79-00-51,1,2-Trichloroethane   10   U     71-43-2Benzene   10   U     75-25-2Bromoform   10   U     108-10-14-Methyl-2-Pentanone   10   U     591-78-62-Hexanone   10   U     127-18-4Tetrachloroethene   10   U     108-88-3Toluene   10   U     108-90-7Chlorobenzene   10   U     100-41-4Ethylbenzene   10   U     1330-20-7	/ / = 4/ = 4 =		_		IU	i
79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 10061-02-6Benzene 10061-02-6	/ 0~0/-7	7-0:46			IU	ł
124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene 10061-02-6trans-1,3-Dichloropropene 75-25-2Bromoform 108-10-14-Methyl-2-Pentanone 1091-78-62-Hexanone 108-4Tetrachloroethane 108-88-31,1,2,2-Tetrachloroethane 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5			ne i		10	. 1
124-48-1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		_			. 1
71-43-2	124-48-1	Dibromochlosometh			IU	Ī
10061-02-6trans-1,3-Dichloropropene   10   U	//-UU-7 <del>-</del>	1.1 7-Teichleseal	ane j		ıu	1
10061-02-6trans-1,3-Dichloropropene   75-25-2Bromoform   108-10-14-Methyl-2-Pentanone   10  U	/ 1 7 7 7 7 7 7 7 7 7 7 7				ıu	F .
108-10-14-Methyl-2-Pentanone	10061-02-6	trans-1 3-Diski			IU	1
108-10-14-Methyl-2-Pentanone 591-78-62-Hexanone 127-18-4Tetrachloroethene 79-34-51,1,2,2-Tetrachloroethane 108-88-3Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7Xylene (total)						I
127-18-4Tetrachloroethene	108-10-1	4-Ma+hil-2 Basks			IU	I
127-18-4Tetrachloroethene 79-34-51,1,2,2-Tetrachloroethane 108-88-3Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7Xylene (total)	* * * * * * * * * * * * * * * * * * * *	/	ine !		IU	1
108-88-3Toluene   10   U   108-90-7Chlorobenzene   10   U   100-41-4Ethylbenzene   10   U   100-42-5Styrene   10   U   U   10   U   U   10   U   U   10   U   U   10   U   U   U   U   U   U   U   U   U	12/-18-4	Tetesoblessak			IU	1
108-90-7Chlorobenzene	/ アーノ4ーフーーー	1.1.2 2-Takasahia.	!			1 -
108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7			Toethane !		ľ	I
100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7	108-90-7	Chlosoboo	!	_	IU	1
1330-20-7	100-41-4	Fthulhan-a	!		IU	1
123U-2U-7Xulene (+a+=1)	エリリー4/- ツーーーー	5turana			IU	1
Ayrene (total)	1330-20-7	Xulene (***-1)	1	10	IU	1
		Yrana ((O(al)		10	IU	

### 1E UDLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

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NYSDEC SAMPLE NO.

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10202 SAS No.: SDG No.: SW-1

Matrix: (soil/water) WATER Lab Sample ID: I210202-07

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >A0121

Level: (low/med) LDW Date Received: 10/31/92

% Moisture: NA not dec. Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL

CONCENTRATION UNITS: ber TICs found: 0 (ug/L or ug/Kg) UG/ L

CAS NUMBER	COMPOUND NAME	l RT	I EST. CONC. I	<b>}</b> . □
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### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

I MW-2

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] WATER -

Lab Sample ID: I210202-08

Sample wt/vol: 5.0

[g/mL] ML

Lab File ID: >A0122

Level: [low/med] LOW

Date Received: 10/31/92

% Moisture:

decanted: (Y/N) N

Date Analyzed : 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: CAS NO. COMPOUND [ua/L or ua/Ka] HG/L

74-87-3		CONFOUND	lug/L.or	ug/Kg]	UG/L	Q	}
75-01-4	74-87-3	Chloromethane		ı		t	- را.
79-01-4	・・・・/サーロフーソーニー・	Bromometh				_	- 1 <u>\$</u>
75-09-2Methylene Chloride	/7-01-4	Uinul Chlasids		:		· · · -	1;
1	/ //	bloroath		l .	_ <del>-</del>		1.
75-15-0Carbon Disulfide   21	/7-07-2	Methulana Chiasia.	_	1	10	IU	i
75-15-0	. 0, -0, -1,		<b>3</b> 	!	. 4	1 JB	1
75-34-31,1-Dichloroethene	/ /5-15-0	Carbon Discutois	•		21	1	ī
540-59-01,2-Dichloroethene (total)	· / / / / / / / / / / /	1 1-Dichles-At-		ı	10	1U	1
67-66-3Chloroform	1 75-34-3	1 1-Dichioroginene	3	J	10	IU	1
107-06-21,2-Dichloroethane	1 540-59-0	1,1-Dichiorostnans	•	ı	10	10	i
107-06-21,2-Dichloroethane	1 67-66-3	Chloroethene	(total)	. 1	10	ΙU	1
71-55-61,1,1-Trichloroethane	1 107-06-2	12 D:1		. 1	. 10	ΙU	i
71-57-61,1,1-Trichloroethane   10	78-93-3	2 Put	•	l	10	10	1
75-27-4Bromodichloromethane   10	71-55-6	2-outanone		1.	10	111	i
75-27-4Bromodichloromethane   10	1 56-23-5	1,1,1-Irichloroeth	ane	1	10		i
10061-01-5cis-1,3-Dichloropropene				1	10	. –	i
10061-01-5cis-1,3-Dichloropropene	1 78-87-5	promodich lorometha	ne	I			1
79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 10061-02-6trans-1,3-Dichloropropene 75-25-2Bromoform 108-10-14-Methyl-2-Pentanone 127-18-4Tetrachloroethene 79-34-51,1,2,2-Tetrachloroethane 108-90-7Chlorobenzene 100-41-4Ethylbenzene 110   U				1			- ;
124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene 10061-02-6trans-1,3-Dichloropropene 75-25-2Bromoform 108-10-14-Methyl-2-Pentanone 127-18-4Tetrachloroethene 79-34-51,1,2,2-Tetrachloroethane 108-88-3Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7Xylene (total)			opene	ı			- 1
79-00-5				1			1
71-43-2Benzene 10061-02-6trans-1,3-Dichloropropene 75-25-2Bromoform 108-10-14-Methyl-2-Pentanone 127-18-62-Hexanone 127-18-4Tetrachloroethene 79-34-51,1,2,2-Tetrachloroethane 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5	' 444-40-1	Dibsosski	ne	İ		· <del>-</del>	- !
10061-02-6trans-1,3-Dichloropropene 75-25-2Bromoform 108-10-14-Methyl-2-Pentanone 591-78-62-Hexanone 127-18-4Tetrachloroethene 79-34-51,1,2,2-Tetrachloroethane 108-90-7	//	!	ane	ì		. –	!
108-10-14-Methyl-2-Pentanone 591-78-62-Hexanone 127-18-4Tetrachloroethene 79-34-51,1,2,2-Tetrachloroethane 108-88-3Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7Xylene (total)				i			ı.
108-10-14-Methyl-2-Pentanone 591-78-62-Hexanone 127-18-4Tetrachloroethene 79-34-51,1,2,2-Tetrachloroethane 108-88-3Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7Xylene (total)	10061-02-6	trans-1,3-Dichloro	Dronene	i			
108-10-14-Methyl-2-Pentanone 591-78-62-Hexanone 127-18-4Tetrachloroethene 79-34-51,1,2,2-Tetrachloroethane 108-88-3Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7Xylene (total)				i			1
127-18-4Tetrachloroethene 79-34-51,1,2,2-Tetrachloroethane 108-88-3Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7	108-10-1	4-Mathul 3 D	20	1 .			1
127-18-4Tetrachloroethene	* * * / U = U = = = = =	/		. 1		- <del>-</del>	ı
108-88-3Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7	14/-18-4	Tetrachi		i			1
108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7	//~/~~~~~	1.1.9 9-Takasaki				_	ı
100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7			secuane				1
100-42-5Styrene 10 IU   1330-20-7Xylene (total)	108-90-7			1			1
1330-20-7Xylene (total)	100-41-4	E+h::1h	•		<del>-</del>	IU .	1
1990-20-7XVIene (total)	440 <u>-4</u> 4-7			l .	10	IU	1
10 10	1330-20-7	Xulene (total)		1	10	IU	1
				1	10	IU	1

#### 15 VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

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ı	MW-2	
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NYSDEC SAMPLE NO.

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) WATER .

Lab Sample ID: I210202-08

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: →A0122

Level: (low/med) LOW

Date Received: 10/31/92

% Moisture: NA not dec.

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.8 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(υ

Number TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

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CAS NUMBER	COMPOUND NAME	i RT	EST. CONC.	Q
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# VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

Lab Name: INTECH Contract:

1 MW-3

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] WATER .

Lab Sample ID: [210202-09

Sample wt/vol: 5.0 [g/mL] ML Lab File ID: >A0161

Level: [low/med] LOW

Date Received: 10/31/92

% Moisture: decanted: (Y/N) N

Date Analyzed : 11/09/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

		•	dage opini	ne: (u
CAS NO.	COMPOUND	CONCENTRATION UNI [ug/L or ug/Kg] L	TS: JG/L	Q
74-87-3 74-83-9 75-01-4 75-09-2 67-64-1 75-35-4 75-36-3 75-34-3 75-36-3 107-06-2 78-93-3 75-27-4 78-87-5 124-48-1 79-01-6 79-01-6 124-48-1 79-00-5 10061-02-6 75-25-2 108-10-1 591-78-6 127-18-4	ChloromethaneBromomethaneBromomethaneUinyl ChlorideChloroethaneChloroethaneCarbon Disulfid1,1-Dichloroeth1,2-DichloroethChloroform2-Butanone1,1,1-TrichloromethCarbon TetrachloromethI,2-DichloromethI,2-DichloromethI,2-DichloromethI,2-Dichloromethor	e ene	10 IU IU 10 IU IU 10 IU IU 10 IU IU 10 IU IU 10 IU IU 10 IU IU 10 IU IU 10 IU IU 10 IU IU 10 IU IU 10 IU IU 10 IU IU 10 IU IU 10 IU IU IU 10 IU IU 10 IU IU 10 IU IU IU IU IU IU IU IU IU IU IU IU IU	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
108-88-3 108-90-7 100-41-4 100-42-5	Toluene Chlorobenzene	proethane   	10 IU 10 IU 10 IU 10 IU 10 IU 10 IU 10 IU	 

### 1E UDLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

И,	YSDEC	SAMPLE	NO.
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1	MW-3		i

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) WATER .

Lab Sample ID: I210202-09

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: >A0161

Level: (low/med) LOW

Date Received: 10/31/92

% Moisture: NA not dec.

Date Analyzed: 11/09/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL) Soil Aliquot Volume:

(uL

Number TICs found:

CONCENTRATION UNITS: (uq/L or uq/Kq) UG/ L

<u> </u>		- ug/kg					
CAS NUMBER	COMPOUND NAME	I RT	EST. CONC.	Q			
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# UOLATILE ORGANICS ANALYSIS DATA SHEET

[g/mL]

ML

NYSDEC SAMPLE NO.

Lab Name: INTECH Contract:

\_\_\_\_

MW-4

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] WATER

Lab Sample ID: .1210202-10

Sample wt/vol: 0.10

Lab File ID: >A0139

Level: [low/med] LOW

% Moisture:

Date Received: 10/31/92

decanted: (Y/N) N

Date Analyzed : 11/06/92

GC Column : PACK

ID: 2.0 (mm)

Dilution Factor:

50.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:

Q 74-87-3-----Chloromethane 74-83-9-----Bromomethane 75-01-4-----Vinyl Chloride 500 IU 75-00-3-----Chloroethane 500 IU 75-09-2----Methylene Chloride 500 IU 67-64-1----Acetone 500 IU 75-15-0----Carbon Disulfide 270 1 J 75-35-4----1,1-Dichloroethene 500 IU 75-34-3----1,1-Dichloroethane 500 IU 540-59-0----1,2-Dichloroethene (total) 500 111 67-66-3-----Chloroform 250 IJ 107-06-2----1,2-Dichloroethane 5900 1 78-93-3----2-Butanone 500 IU 71-55-6----1,1,1-Trichloroethane 500 IU 56-23-5-----Carbon Tetrachloride 500 IU 75-27-4----Bromodichloromethane 500 111 78-87-5-----1,2-Dichloropropane 500 10 0061-01-5----cis-1,3-Dichloropropene 500 IU 79-01-6----Trichloroethene 500 IU 124-48-1-----Dibromochloromethane 500 IU 79-00-5----1,1,2-Trichloroethane 1500 1 71-43-2----Benzene 500 IU 1061-02-6----trans-1,3-Dichloropropene 500 10 75-25-2----Bromoform 500 IU 108-10-1-----4-Methyl-2-Pentanone 500 IU 591-78-6----2-Hexanone 500 IU 127-18-4----Tetrachloroethene 500 IU 79-34-5----1,1,2,2-Tetrachloroethane 500 IU 108-88-3----Toluene 500 IU. 108-90-7-----Chlorobenzane 500 IU 100-41-4----Ethylbenzene 500 IU 100-42-5-----Styrene 500 IU 530-20-7-----Xylene (total) 500 IU 500 IU 500 IU

### VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYSDI	EC	SAMPLE	NO.
1			<del></del> .
I MW-	-4		I

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.

10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) WATER

Lab Sample ID: 1210202-10

Sample wt/vol: 0.10

(g/mL) ML .

Lab File ID: >A0139

Level: (low/med) LOW

Date Received: 10/31/92

% Moisture: NA not dec.

Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 50.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

er TICs found:

CONCENTRATION UNITS:

CAR Annua	· · · · · · · · · · · · · · · · · · ·	(ug/L or ug/Kg) UG/ L						
CAS NUMBER	COMPOUND NAME	   RT   	EST. CONC.	ig O				
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### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

Contract:

Lab Code: INTECH Case No.: 10202 SAS No.: SDG No.:SW-1

Matrix: [soil/water] WATER Lab Sample ID: I210202-11

1 MW-5

Sample wt/vol: 5.0 [g/mL] ML Lab File ID: >A0125

Lab Name: INTECH

Level: [low/med] LOW

Date Received: 10/31/92

% Moisture: decanted: (Y/N) N Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO	COMPOUND	CONCENTR [ug/L or	ATION UNITS: ug/Kg] UG/L	<u>.</u>	Q	
1 74-87	-3Chloromethane		1		ŀ	- 1,
.1 74-83	-9Bromomethane		!	10	ΙU	Ιį
1 75-01	-4Vinyl Chloride		l	10	IU	13
1 75-00	-3Chloroethane		!	10	IU	1.
1 75-09	-2Methylene Chlori		İ	10	IU	1
1 67-64	-1Acetone	de	1	6	I JB	i
J 75-15	-OCarbon Disulfide		1	10	IU	ı
1 75-35	-41,1-Dichloroethe		ŀ	10	IU	1
1 25-34	-3 1 1 Diction of the	ne	I	10	ΙU	1
1 540-59	-31,1-Dichloroetha	ne	1	10	IU	1
1 67-44	-01,2-Dichloroether	ne (total)	)	10	ΙU	1
1 107-06	-2Unloroform		.1	10	IU	i
1 78-93	-21,2-Dichloroetha -32-Butanone	10	1	10	IU	i
1 71-55	-6 1 1 1 T		1	10	IU	1
1 56-23	-61,1,1-Trichloroe	thane	1	10	IU	1
75-27	-5Carbon Tetrachlor	ide	1	10	IU	1
78-87	-4Bromodichlorometh	nane	t	10	IU	1
110061-01	-51,2-Dichloroprope	ine	l	10	IU	1
79-01	-5cis-1,3-Dichlorop	ropene	1	10	IU	1
1 124-48	1Dibromochlorometh		1 ·	10	IU	i
79-00	5	ane	1	10	IU	ł
1 71-43	·2Benzene	hane	l	10	ΙU	1
110061-02	A Asset 4 7 5		1	10	IU	I
75-25	6trans-1,3-Dichlor 2Bromoform	opropene	1	10	IU	1
1 108-10-	14-Methyl-2-Pentan			10	ΙU	1
J 591-78.	62-Hexanone	one	1	10	IU	ı
1 127-18-	4Tetrachloroethene		l	10	IU	1
1 79-34-	51 1 2 2 7 7		1	10	IU	1
1 108-88-	51,1,2,2-Tetrachlo 3Toluene	roethane	1	10	ΙU	1
1 108-90-	7Chlorobenzene		ı	10	IU	1
100-41-	4Ethylbenzene		l l	10	IU	ŧ
1 100-42-	5Styrene		1	10	IU	1
1 1330-20-	7Xylene (total)		1	10	IU	1.
1	Ohrana (total)		ł	10	IU	1
			1			

### 1E UC

OLATILE O	RGANICS	ANALY	SIS	DATA	SHEE"
TENTAT	I VELY I	DENTIF	IED	COMPO	UNDS

		=	
ьb	Name:	INTECH	Contract:

Lab	Code:	INTECH	Case No.	10202	SAS No.:	SDG No.: SW-
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Lab Sample ID: 1210202-11 Matrix: (soil/water) WATER

Sample wt/vol: 5.0 Lab File ID: >A0125 (g/mL) ML

Level: (low/med) LOW Date Received: 10/31/92

% Moisture: NA not dec. Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (u

CONCENTRATION UNITS: Number TICs found: 0 (ug/L or ug/Kg) UG/ L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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NYSDEC SAMPLE NO.

1 MW-5

# VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

I MW-6

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] WATER · Lab Sample ID: I210202-12

Sample wt/vol: 5.0 [g/mL] ML Lab File ID: >A0126

Level: [low/med] LOW Date Received: 10/31/92

% Moisture: decanted: (Y/N) N Date Analyzed : 11/05/92

GC Column : PACK ID: 2.0 (mm) Dilution Factor:

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	[ug/L or ug/Kg] UG/L	•	Q	
i	74-87-3	Chloromethane			1	- I
1	/4-83-9	Bromome+base	!	. 10	IU	- 1≨
١	/ケーリ1-4	Uinul Chlosida	!	10	IU	िर्दे
1	/フーリリーラー~	Chloroethane	<u> </u>	10	10	1
1	/ラーリター2	Methulene Chlorid	<u>'</u>	10	IU	1
١	0/-04-1	·		6	l JB	i
I	<b>フ</b> ラー15-0	Carbon Disulsida		10	1	1
1	/7-/7-4	l.l-Dichlornethen	1	10	IU	1
١	/ / - / 4 - /	!-l-Dicbloseskb		10	IU	- 1
ı	ノサリーファーリーー	1.2-Dichloroether	- (4-4-1) 1	10	ΙU	1
1	U/ UU-/		•	4	1 J	ı
ł	10/-06-2	1.2-Dichloroethan	_	10	IU	ı
I	/ ローァノーノーー			10	IU	ı
ł	/1-55-6	1.1.1-Trichloses	 	10	IU	1
İ	70 - 47-7	~~~~~ .arbox  a+xaak ~~	ial = 1	10	IU	f
1	/ / - 4/ - 4	Hromodichlana		10	IU	ı
1	/0-0/-7	1 7-Diablasassas		10	IU	ı
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1	, , - 01-0		•	10	IU	I
l	144-48-1	Dibromochlosome+b	I .	10	IU	1
1	79-00-5	-1,1,2-Trichloroet		10	ΙU	ł
ı	/ 1 - 42 - 2	Americani		10	IU	1
11	0061-02-6	trans-1 3-Dichles	1	10	IU	1
ı				10	ΙU	1
1	108-10-1	4-Methul-2-Pankas	nne i	10	IU	1
İ	, , , , , , , , , , , , , , , , , , ,	/	one (	10	IU	1
l	12/-18-4	Tetrachlonooth	<u>:</u>	10	IU	I
1	//-/4-7	1.1.7.2.Tátasakia.		10	IU	1
ı				10	IU	1
ı	108-90-7	Chloroben		10	IU	I
l	100-41-4	Fthulben-en	<u> </u>	10	IU	i
	エリリー42ーラー		•	10	IU	1
	1330-20-7	Xylënë (total)	•	10	IU	1
_		- Coldin	· ·	10	IU	1

### 1E UOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

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NYSDEC SAMPLE NO.

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Contract:

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MM-6	ı
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Lab Code: INTECH

Case No.

10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) WATER

Lab Sample ID: I210202-12

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: >A0126

Lével: (low/med) LOW

Date Received: 10/31/92

% Moisture: NA not dec.

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume:

(uL

Numbér TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

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CAS NUMBER	COMPOUND NAME	l RT	EST. CONC.	Q				
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### VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] WATER :

Lab Name: INTECH

Lab Sample ID: 1210202-13

5000

IT-1

Sample wt/vol: 0.01 [q/mL] ML Lab File ID: >A0133

Level: [low/med] LOW Date Received: 10/31/92

% Moisture: decanted: (Y/N) N Date Analyzed : 11/06/92

GC Column : PACK ID: 2.0 (mm) Dilution Factor: 500.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL

CAS NO.	COMPOUND	CÓNCEN Lug/L	NTRATION U or ug/Kg]	NITS: UG/L	Q	
1 74-87-3-	Chl	<del></del>	1 ·		1	- 1
1 74-07-7	-Chloromethane		1	5000	IU	14
79-03-7 1 75-01 4	-Bromomethane		-1	5000	IU	1 \$
1 75 00 7	-Vinyl Chloride		1	5000	IU	13
1 75 00 0	-Chloroethane		l	6100	1	1
1 47 44 1	-Methylene Chlorid	8	•	2400	ΙJ	i
0/-04-1	-Acetone .		1	3400	IJ	i
/2-12-U	-Carbon Disulfide		t	5000	10	i
/V-JV-4	-1,1-Dichloroethen	8	1	5000	IU	1
· />-/4-)	-1.1-Dichloroethan	_	1	37000	1	i
·	-1.2-Dichlornethen	e (tot	al) (	32000	İ	i
. 0/~00-/	-LDIOroform		1	5000	ίυ	i
1 70 07 7	-1,2-Dichloroethan	8	1	5000	ΙŪ	i
78-93-3	-2-Butanone		1	5000	IU	i
/1-77-0	-1,1,1-Trichloroet	nane	I	56000	1	i
·	-Carbon Tetrachlor	. da	1	5000	ΙU	i
1 79 07 E	-Bromodichlorometh	ene i	I	5000	ΙU	1
110041 01 5	-1,2-Dichloroproper	18	1	5000	ίŪ	i ·
' + O O O I - O I - O	-C15-1.3-Dichloson	opene	1.	5000	ΙÜ	i
· //	-   - 1		1	5000	· IU	i
1 124-48-1	-Dibromochlorometha	ne	ŧ	5000	iu	i
' //~UU~~~~~~~~~	-1.1.2-Trichloros++	ane	1	5000	ίŪ	i
· / * * * / * / * * * * * * * * * * * *	- 4807866		1	5000	IU	i
75 05 0	trans-1,3-Dichlore	proper	ne l	5000	ίŪ	i
. / / ~ ~ / ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	- Mromo form		l l	5000	IU	1
1 501 70 /	-4-Methyl-2-Pentano	ne	1	5000	IU	i
' //ユニ/ローローー	-7-Hevanona		1	5000	ĪŪ	i
70 74 5	Tetrachloroethene		1	5000	ĺŪ	i
· />~>4~>~~~~~	-1.1.2.2-Tetrachlor	oethar	ne l	5000	ίŪ	i
	-   0       8 8 8		4	5000	ίŪ	i
108-90-7	Chlorobenzene		1	5000	iŭ	i
100-41-4	Ethylbenzene		· 1	5000	ĬŬ	i
100-42-5	Styrene		i	5000	IU	i
· •//U~/  -/	V I / A . A . I .			_	-	

FORM 1-CLF=VON-1

1330-20-7-----Xylene (total)

### 1E UDLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE	NO
IT-1	

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Contract:

Lab Code: INTECH

Case No.

10202 SAS No.:

SDG No .: SW-1

Matrix: (soil/water) WATER

Lab Sample ID: I210202-13

Sample wt/vol: \_0.01

(g/mL) ML

Lab File ID: >A0133

Level: (low/med) LOW

Date Received: 10/31/92

% Moisture: NA not dec. GC Column: PACK ID: 2.0

Date Analyzed: 11/06/92 Dilution Factor:

500.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL

Number TICs found:

CONCENTRATION UNITS: (ua/L or ua/Ka) UG/ I

CAS NUMBER	COMPOUND NAME	1		
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# UOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

| FB-1

Lab Name: INTECH Contract:

SDG No.: SW-1

Lab Code: INTECH Case No.: 10202 SAS No.:

Matrix: [soil/water] WATER

Lab Sample ID: I210202-14

Sample wt/vol: 5.0 [g/mL] ML Lab File ID: >A0162

Level: [low/med] LOW

Date Received: 10/31/92

% Moisture: decanted: (Y/N) N

Date Analyzed : 11/09/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor:

1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRA [ug/L or	ATION UNITS: ug/Kg] UG/L	-	Q	
74-87-3   74-83-9   75-01-4   75-00-3   75-09-2   67-64-1   75-35-4   75-34-3   75-34-3   67-66-3   107-06-2   78-93-3   71-55-6   78-87-5   79-01-6   79-01-6   124-48-1   79-00-5   75-25-2   108-10-1   591-78-6   79-34-5   108-88-3	ChloromethaneBromomethaneBromomethaneVinyl ChlorideChloroethaneMethylene ChlorAcetoneCarbon Disulfid1,1-Dichloroeth1,2-DichloroethChloroform1,2-DichloroethCarbon TetrachlBromodichlorome1,2-Dichloropropcis-1,3-DichloroTrichloroethene1,2-Trichloroe1,1,2-Trichloroe1,1,2-TrichloroeBromoformBromoform	ide  e ene ene (total)  ane ethane oride thane orpropene thane ethane	ug/Kg] UG/L	10 10 10 10 10 10 10 10 10 10 10 10 10 1	  U  U	
100-41-4	Chlorobenzene		1	10 10 10	U   U   U	1
1330-20-7	Xylené (totál)	,	:	10 10	10 10	 

### VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO. I FB-1

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) WATER

Lab Sample ID: 1210202-14

Sample wt/vol: 5.0

(g/mL) ML

Lab File ID: >A0162

Level: (low/med) LOW

Date Received: 10/31/92

% Moisture: NA not dec.

Date Analyzed: 11/09/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL) Soil Aliquot Volume:

(uL)

Number TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kq) UG/ L

1		- or dg/Kg		
CAS NUMBER	COMPOUND NAME	l RT	I EST. CONC.	1 0
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### VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO. I FB-2

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10202 SAS No.: SDG No.:SW-1

Matrix: [soil/water] WATER . Lab Sample ID: [210202-15

Sample wt/vol: 5.0 [g/mL] ML

Lab File ID: >A0160

Level: [low/med] LOW

Date Received: 10/31/92

% Moisture: decanted: (Y/N) N Date Analyzed: 11/09/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

### 1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

I FB-2

Lab Name: INTECH

Contract:

Lab Code: INTECH

Case No.

10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) WATER

Lab Sample ID: I210202-15

Sample wt/vol: 5.0

(g/mL) ML

Lab File ID: >A0160

Level: (low/med) LOW

Date Received: 10/31/92

% Moisture: NA not dec.

Date Analyzed: 11/09/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume:

(uL)

Number TICs found: 0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

LOC 111110000	(ug/L or ug/Kg) UG/ L						
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	   Q			
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# VOLATILE ORGANICS ANALYSIS DATA SHEET

Contract:

NYSDEC SAMPLE NO.

1 FB-3

Lab Name: INTECH

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] WATER

Lab Sample ID: 1210202-16

Sample wt/vol: 5.0 [g/mL] ML Lab File ID: >A0163

Level: [low/med] LOW

Date Received: 10/31/92

% Moisture: decanted: (Y/N) N

Date Analyzed : 11/09/92

GC Column: PACK, ID: 2.0 (mm)

Dilution Factor:

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	lug/L or ug/Kg] UG/L	Q
74-87-3	Chloromethane	1 10	I IU

ì	74-87-3Chloromethane	1	ı	i
i	74-83-9Bromomethane	10	ΙU	1.
ı	75-01-4	10	ΙU	t.
1	75-00-3Chloroethane	10	ľŪ	1:
i	75-09-2Methylene Chloride	10	IU	1
i	67-64-1Acetone	1 4	1 JB	1
ì	75-15-0Carbon Disulfide	10	1 8	I
1	75-35-41,1-Dichloroethene	10.	ľŰ	1
1	75-34-31,1-Dichloroethane	! 10	IU	1
1	540-59-0	10	ΙU	1
1	540-59-01,2-Dichloroethene (total) 67-66-3Chloroform	10	1 U	1
1	107-06-21,2-Dichloroethane	10	IU	1
1	78-93-32-Butanone	10	IU	1.
i	71-55-6 1 1 1 T	. 10	. IU	1
i	71-55-61,1,1-Trichloroethane	10	IU	1
i	56-23-5Carbon Tetrachloride	10	IU	ı
i	75-27-4Bromodichloromethane	10	ΙU	1
i	78-87-51,2-Dichloropropane	10	IU	1
i	10061-01-5cis-1,3-Dichloropropene	10	IU	1
i	79-01-6Trichloroethene	10	IU	ĺ
i	124-48-1Dibromochloromethane	10	IU	Ī
i	79-00-51,1,2-Trichloroethane 71-43-2Benzene	10	IU	i
11	10061-02-4- Denzene	10	IU	1
1	10061-02-6trans-1,3-Dichloropropene	10	IU	i
ĺ	108-10-1	10	IU	1
1	108-10-14-Methyl-2-Pentanone   591-78-62-Hexanone	10	ΙU	1
1	127-18-4- T-4-15-15-15-15-15-15-15-15-15-15-15-15-15-	10	10	1
ĺ	127-18-4Tetrachloroethene	10	IU	ı
ĺ	79-34-51,1,2,2-Tetrachloroethane   108-88-3Toluene	. 10	ΙÜ	1
ŀ		10	ΙÜ	Í
ı	108-90-7Chlorobenzene	10	IÜ	i
Į	100-41-4Ethylbenzene	10	IU	i
	**************************************	10	ΙÜ	i
•	1330-20-7Xylene (total)	10	ίŪ	i

### 1E UDLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC	SAMPLE	NC
1		
1 FB-3		

Lab Name: INTE	$\Gamma$
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Contract:

Lab Code: INTECH Case No. 10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) WATER

Lab Sample ID: 1210202-16

Sample wt/vol: 5.0

(g/mL) ML

Lab File ID: >A0163

Level: (low/med) LOW

Date Received: 10/31/92

% Moisture: NA not dec.

Date Analyzed: 11/09/92

GC Column: PACK · ID: 2.0 (mm)

Dilution Factor:

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(ı

Number TICs found:

CONCENTRATION UNITS: (uq/L or ua/Ka) UG/ I

(ug/L or ug/Kg) UG/ L						
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	1 0		
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TB-1

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] WATER

Lab Sample ID: 1210202-17

Sample wt/vol: 5.0

[g/mL] ML

Lab File ID: >A0164

Lêvël: [low/med] LOW

Date Received: 10/31/92

% Moisture:

decanted: (Y/N) N

Date Analyzed : 11/09/92

GC Column :

PACK ID: 2.0 (mm)

Dilution Factor:

1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

CAS NO. COMPOUND CONCENTRATION UNITS:	
[ug/L or ug/Kg] UG/L	ก
74-87-3Chloromethane 74-83-9Bromomethane 1 75-01-4Vinyl Chloride 1 75-00-3Chloroethane 1 75-09-2Methylene Chloride 1 75-64-1	3   BB

108-90-7-----Chlorobenzene 100-41-4----Ethylbenzene

108-10-1-----4-Methyl-2-Pentanone

75-27-4----Bromodichloromethane

78-87-5----1,2-Dichloropropane

124-48-1----Dibromochloromethane

79-00-5----1,1,2-Trichloroethane

.0061-02-6----trans-1,3-Dichloropropene

79-01-6----Trichloroethene

10061-01-5----cis-1,3-Dichloropropene

100-42-5-----Styrene 330-20-7-----Xylana (total)

71-43-2----Benzene

75-25-2----Bromoform

591-78-6----2-Hexanone

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IU

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### VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

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1	TB-1	i
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NYSDEC SAMPLE NO.

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) WATER

Lab Sample ID: 1210202-17

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >A0164

Level: (low/med) LOW

Date Received: 10/31/92

% Moisture: NA not dec.

Date Analyzed: 11/09/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(u

Number TICs found:

CONCENTRATION UNITS: '(ug/L or ug/Kg) UG/ L

CAS NUMBER	COMPOUND NAME	I RT	I EST. CONC.	l Q	
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# VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

I SS-1

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] SOIL Lab Sample ID: I210202-18

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3733

Level: [low/med] LOW

Date Received: 10/31/92

% Moisture: 25.0 decanted (Y/N) Y

Date Analyzed : 11/07/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

CONCENTRATION HALTE.

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

	CAS NO.		CONCENTRATION UNIT		ı	Q
1	74-87-3-	Chloromethane	1			
1	/4-83-9-		l •	13	IU	1 -
- !	/7-U1-4-	Uinul Chlomida	1	13	IU	1 -
- !	/ / - 0 0 - 2 -	blossatha	f •	13	IU	1-
1	ノフーロソービー	Methulene Chlasid.	. :	13	IU	ľ
ł	0/-04-1-			13	IU	ł
١	<b>/</b> クー15-0	Carbon Dieulside		30	1	ı
1	ノンーフフー4ー・	1.1-Dichlanae+b		13	IU	ı
1	/ / - / 4 - /			13	IU	1
-	/ - 0 - 7 / - 0	1.2-Dichloroe+bene	. (4-4-1)	13	IU	1
+				13	10	f
1	107-06-2	1,2-Dichloroethane		13	ΙU	1
1	78-93-3	2-Butanone		13	IU	l l
1	71-55-6	1.1 1-Trichlansek		13	ΙU	1
İ	ノロームノーツーニ	'		13	IU	1
1	/ / ~ ~ / ~ 4	'Hromodiah	_	13	IU	I
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1	79-01-6	Trichloroethene	opene i	13	ΙU	ı
1		Dibbassell		13	IU	1
!	79-00-5	1,1,2-Trichloroeth	ne I	13	IU	1
ı				13	10	Ι.
11	0061-02-6	trans-1,3-Dichloro	l	13	ΙU	1
1	75-25-2	Bromoform	propene I	13	ΙU	1
l l	108-10-1	4-Methyl-2-Pentano	1	13	ΙU	1
1	591-78-6	2-Hexanonè	ne (	13	ΙU	ĺ
1	127-18-4	Tetrachloroethene	1	13	IU	i
I	79-34-5	1 1 0 0 T	I	13	IU	i
ı	108-88-3	1,1,2,2-Tetrachlor Toluene	pethane	13	IU	i
ı		Chlorobenzene	1	13	ΙŪ	i
1	100-41-4	Chiorobenzene	l	13	ΙŪ	i
1	100-42-5	Ethylbenzene Styrene	1	13	ΙÜ	i
1	.330-20-7	styrene ,	1	13	10	i
•		Xylene (total)	<b>t</b>	13	iu	ì
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### 1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC	SAMPLE	NO.
   SS-1		

Lab Nai	ne: 1	NTFCH
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Contract:

Lab Code: INTECH Case No. 10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) SOIL

Lab Sample ID: [210202-18

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: →C3733

Lêvel: (low/med) LOW

Date Received: 10/31/92

% Moisture: 25 not dec.

Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Number TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

<u> </u>		(ag/c ar ag/kg) DG/kG				
CAS NUMBER	COMPOUND NAME	I RT	I EST. CONC.	1 0		
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#### VOLATILE ORGANICS ANALYSIS DATA SHEET

I UBLK QA1104

Lab Name: INTECH

Contract:

SDG No.:SW-1

Matrix: [soil/water] WATER.

Lab Sample ID: UBLK QA1104

Sample wt/vol: 5.0 [g/mL] ML

Lab File ID: >A0100

Level: [low/med] LOW

Date Received:

% Moisture: decanted: (Y/N) N

Date Analyzed : 11/04/92

CAS NO.

Lab Code: INTECH Case No.: 10202 SAS No.:

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Q

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

	CONCENTRATION UNITS:
COMPOUND	[ug/L or ug/Kg] UG/L

CHS NO.	Edili ddilib tagve di di	g/kg1 00/L	
74-97-3	Chloromethane	1 10	
74-83-9	Bromomethane	1 10	iu i
75-01-4	Vinyl Chloride	1 10	iŭ i
75-00-3	Chloroethane	1 10	iŭ i
	Methylene Chloride	, 5	i j
67-64-1	Acetone	1 10	וֹט וֹ
	Carbon Disulfide	1 10	iu i
	1,1-Dichloroethene	1 10	IU I
	1,1-Dichloroethane	1 10	์ וֹטֿ וֹ
	1,2-Dichloroethene (total)	1 10	iu i
	Chloroform	1 10	iu i
	1,2-Dichloroëthane	1 10	10 1
	2-Butanone	F 10	10 1
	1,1,1-Trichloroethane	1 10	IU I
	Carbon Tetrachloride	1 10	iu i
	Bromodichloromethane	1 10	10 1
	1,2-Dichloropropane	1 10	10 1
0061-01-5	cis-1,3-Dichloropropene	1 10	IU I
79-01-6	Trichĺoroethene	I 10	IU I
124-48-1	Dibromochloromethane	1 10	10 1
79-00-5- <b></b>	1,1,2-Trichloroethane	1 10	IU I
71-43-2	Benzene	1 10	IU I
0061-02-6	trans-1,3-Dichloropropene	1 10	IU I
	Bromoform	i 10	וט ו
108-10-1	4-Methy1-2-Pentanone	1 10	10 1
591-78-6	2-Hexanone	1 10	IU I
127-18-4	Tetrachloroethene	1 10	IU I
79-34-5	1,1,2,2-Tetrachloroethane	1 10	וט ו
108-88-3	Toluene	1 10	וט ו
108-90-7	Chlorobenzene	1 10	IU I
100-41-4	Ethylbenzene	1 10	IU I
100-42-5	Styrene	1 10	IU I
1330-20-7	Xylene (total)	1 10	IU I

#### VULHILLE UKGHNICS ANHLISIS UHIH SHEET TENTATIVELY IDENTIFIED COMPOUNDS

I _ L	Mana .	INTECH
Lab	Name:	INIELH

Contract:

VBLK QA1104	VB	LK	QA1	1	04
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Lab Code: INTECH Case No.

SAS No.:

SDG No.:

Matrix: (soil/water) WATER

Lab Sample ID: UBLK QA1104

Sample wt/vol: 5.0 (g/mL) ML

Lab 'File ID: >A0100

Level: (low/med)\_LOW

Date Received:

% Moisture: NA not dec.

Date Analyzed: 11/04/92

GC Column: PACK ID: 2.0

(mm)

Dilution Factor:

1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

ber TICs found:

CAS NUMBER	COMPOUND NAME	RT:	EST. CONC.	<u> </u>
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FORM I-CLP-VOA-TIC

### UDLATILE ORGANICS ANALYSIS DATA SHEET

I VBLK QA1105

NYSDEC SAMPLE NO.

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] WATER

Lab Sample ID: UBLK QA1105

Sample wt/vol: 5.0 [g/mL] ML

Lab File ID: >A0115

Level: [low/med] LOW

Date Received:

% Moisture:

decanted: (Y/N) N

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	[ug/L or ug/Kg] UG/L	Q

74-87-3Chloromethane l	10	 	1
74-83-9Bromomethane	10	IU	i ·
75-01-4Uinyl Chloride	10	ίŪ	1.7
75-00-3Chloroethane	10	IU	i
75-09-2Methylene Chloride	3	ijJ	i
67-64-1Acetone	10	IU	i
75-15-0Carbon Disulfide	10		' i
75-35-41,1-Dichloroethene	10	ίŪ	i
75-34-31,1-Dichloroethane	10	ίŪ	i
540-59-01,2-Dichloroethene (total)	10	ίŪ	i
67-66-3Chloroform	10	ΙŪ	i
107-06-21,2-Dichloroethane	10	10	i
78-93-32-Butanone	10	ĺŪ	i
71-55-61,1,1-Trichloroethane	10	iu	i
56-23-5Carbon Tetrachloride	10	ίŪ	i
75-27-4Bromodichloromethane	10	.10	1
	10	IU	i
78-87-51,2-Dichloropropane	10	ίÜ	i
10061-01-5cis-1,3-Dichloropropene	10	10	,
79-01-6Trichloroethene	10	10	
124-48-1Dibromochloromethane	10	IU	ì
79-00-51,1,2-Trichloroethane   71-43-2Benzene	10	10	
	10	ΙÜ	i
10061-02-6trans-1,3-Dichloropropene   75-25-2Bromoform	10	וט	1
	10	iU	ì
108-10-14-Methyl-2-Pentanone	10	iU	i
127-18-4Tetrachloroethene	10	ΙÜ	i
	10	ίŪ	i
79-34-51,1,2,2-Teträchloroethane	10	iU	i
108-88-3Toluene	10	IU	1
108-90-7Chlorobenzene	-		i
100-41-4Ethylbenzene	10	IU	1
100-42-5Styrene	10	IU	!
1330-20-7Xylene (total)	10	יו	200

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INTECH

Contract: -

VBLK QA1105

Lab Code: INTECH Case No. (0202 SAS No.:

SDG No .: SW-

Mátrix: (soil/water) WATER

Lab Sample ID: VBLK QA1105

Sample wt/vol: 5.0

(g/mL) ML\_

Lab File ID: >A0115

Level: (low/med) LOW

Date Received:

% Moisture: NA not dec.

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL

ber TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

CAS NUMBER	COMPOUND NAME	l RT	I EST. CONC.	i I <u>a</u>
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		1	 	! <u></u>
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		.		

I VBLK QC1105

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: UBLK QC1105

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3699

Level: [low/med] LOW Date Received:

% Moisture: NA decanted (Y/N) N Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: CAS NO. COMPOUND [ug/L or ug/Kg] UG/KG Q 74-87-3----Chloromethane 10 IU 74-83-9-----Bromomethane 10 IU 75-01-4-----Uinyl Chloride 10 IU 75-00-3----Chloroethane 10 IU 75-09-2----Methylene Chloride 14. 10 67-64-1-----Acetone 10 14 : 75-15-0-----Carbon Disulfide ... 10 IU 75-35-4-------1,1-Dichloroethene 10 10 75-34-3----1,1-Dichloroethane 10 ıu 540-59-0-----1,2-Dichloroethene (total) 10 IU 67-66-3-----Chloroform 10 IU 107-06-2----1,2-Dichloroethane 10 IU 78-93-3----2-Butanone 10 IU 71-55-6----1,1,1-Trichloroethane IU 10 56-23-5-----Carbon Tetrachloride IU 10 75-27-4----Bromodichloromethane 10 IU 78-87-5----1,2-Dichloropropane 10 IU |10061-01-5----cis-1,3-Dichloropropene 10 IU 79-01-6----Trichloroethene IU 10 124-48-1----Dibromochloromethane 10 10 79-00-5----1,1,2-Trichloroethane IU 10 71-43-2----Benzene 10 IU 110061-02-6-----trans-1,3-Dichloropropene 10 10 75-25-2----Bromoform 10 IU 108-10-1----4-Methyl-2-Pentanone 10 10 591-78-6----2-Hexanone IU 10 127-18-4----Tetrachloroethene 10 IU 79-34-5----1,1,2,2-Tetrachloroethane IU 10 108-88-3----Toluene 10 IU 108-90-7----Chlorobenzene 10 IU 100-41-4----Ethylbenzene 10 IU 100-42-5-----Styrene 10 IU 1330-20-7-----Xylene (total) IU 10

## \_ UOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:

TENTAT LUELY	IDENTIFIED COMPOUNDS	
		VBLK QC1105
INTECH	Contract:	, APEK MCIIAA

Lab Code: INTECH Case No. SAS No.: SDG No.:

Matrix: (soil/water) SDIL — Lab Sample ID: UBLK QC1105

Sample wt/vol: 5.0 (g/mL) G Lab File ID: >C3699

Level: (low/med) LOW \_\_\_ Date Received:

% Moisture: NA not dec. Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume:

CONCENTRATION UNITS:

ser TICs found: 0 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	l RT	I EST. CONC.	Q
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#### 1 H VOLATILE ORGANICS ANALYSIS DATA SHEET

Contract: Lab Name: INTECH

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

UBLK QA1106

Matrix: [soil/water] WATER

5.0

Lab Sample ID: VBLK QA1106

Lab File ID: >A0131 ML [q/mL]

[low/med] LOW Level:

Date Received:

% Moisture:

Sample wt/vol:

decanted: (Y/N) N

Date Analyzed : 11/06/92

GC Column :

ID: PACK

2.0 (mm) Dilution Factor:

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

CONCENTRATION UNITS: [ug/L or ug/Kg] UG/L

a

CAS NO.

COMPOUND

IU 10 IU 10

74-87-3-----Chloromethane 74-83-9-----Bromomethane 10 10 75-01-4----- Vinyl Chloride 10 IU 75-00-3----Chloroethane 10 . 10 75-09-2----Methylene Chloride 10 IU 67-64-1-----Acetone IU 10 75-15-0-----Carbon Disulfide ΙÜ 10 75-35-4----1,1-Dichloroethene ΙU 10 75-34-3----1,1-Dichloroethane 10 IU 540-59-0----1,2-Dichloroethene (total) 10 10 67-66-3-----Chloroform 10 IU 107-06-2----1,2-Dichloroethane 10 10 78-93-3----2-Butanone IU 10 71-55-6----1,1,1-Trichloroethane 10 IU 56-23-5-----Carbon Tetrachloride IU 10 75-27-4----Bromodichloromethane IU 10 78-87-5----1,2-Dichloropropane 10 IU |10061-01-5----cis-1,3-Dichloropropene 10 10 79-01-6----Trichloroethene 10 10 124-48-1-----Dibromochloromethane 10 IU 79-00-5----1,1,2-Trichloroethane 10 10 71-43-2----Benzene 10 IU 110061-02-6----trans-1,3-Dichloropropene IU 10 75-25-2----Bromoform IU 10 108-10-1----4-Methyl-2-Pentanone IU 10 591-78-6----2-Hexanone 10 11 127-18-4----Tetrachloroethene 10 79-34-5----1,1,2,2-Tetrachloroethane 10 10 IU 108-88-3----Toluene IU 10 108-90-7-----Chlorobenzene 10 10 100-41-4----Ethylbenzene IU 10 100-42-5----Styrene 10 IU 1330-20-7-----Xylene (total) /

#### VOLATILE URGANILS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INTECH

Contract:

VBLK QA1106

Lab Code: INTECH Case No. 10202 SAS No.:

SDG No.: SW-1

Matrix: (soil/water) WATER

Lab Sample ID: VBLK QA1106

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: >A0131

Level: (low/med) LOW

Date Received:

% Moisture: NA not dec.

Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0

Dilution Factor: (mm)

1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

mber TICs found:

CAS NUMBER	COMPOUND NAME	l RT	EST. CONC.	Q
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### UDLATILE ORGANICS ANALYSIS DATA SHEET

VBLK QC1106

HIDDLE DHILLE HO.

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] SOIL . Lab Sample ID: UBLK QC1106

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3725

Level: [low/med] LOW Date Received:

% Moisture: NA decanted (Y/N) N Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (

CONCENTRATION UNITS:

CAS NO. COMPOUND [ug/L or ug/Kg] UG/KG Q IU 74-87-3----Chloromethane 10 10 74-83-9----Bromomethane IU 75-01-4-----Uinyl Chloride 10 IU 75-00-3-----Chloroethane 10 IU 75-09-2----Methylene Chloride 10 IU 10 67-64-1----Acetone IU 75-15-0----Carbon Disulfide 10 IU IU 75-35-4----1,1-Dichloroethene 10 10 IU 75-34-3----1,1-Dichloroethane 540-59-0----1,2-Dichloroethene (total) IU 10 10 I U 67-66-3----Chloroform 107-06-2----1,2-Dichloroethane 10 IU 78-93-3----2-Butanone 10 IU 10 IU 71-55-6----1,1,1-Trichloroethane 56-23-5----Carbon Tetrachloride 10 IU IU 75-27-4----Bromodichloromethane 10 10 IU 78-87-5----1,2-Dichloropropane 10 IU 110061-01-5----cis-1,3-Dichloropropene 79-01-6----Trichloroethene 10 10 10 TU 124-48-1----Dibromochloromethane 79-00-5----1,1,2-Trichloroethane 10 IU 111 71-43-2----Benzene 10 |10061-02-6-----trans-1,3-Dichloropropene 10 IU IU 75-25-2----Bromoform 10 108-10-1----4-Methyl-2-Pentanone 10 IU 591-78-6----2-Hexanone 10 IU 127-18-4----Tetrachloroethene 10 IU 79-34-5----1,1,2,2-Tetrachloroethane IU 10 108-88-3----Toluene 10 IU 108-90-7----Chlorobenzene 10 IU 100-41-4----Ethylbenzene 10 IU 100-42-5----Styrene IU 10 1330-20-7-----Xylene (total) · 10 IU

2.

### VULATILE URGANICS ANALYSIS UNITH SHEET TENTATIVELY IDENTIFIED COMPOUNDS

I UBLK QC1106

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. (0207 SAS No.:

SDG No .: SW-

Matrix: (soil/water) SOIL

Lab Sample ID: VBLK QC1106

Sample wt/vol: 5.0 (g/mL) G

Date Received:

Level: (low/med) LOW

% Moisture: NA not dec.

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

Date Analyzed: 11/06/92

Lab File ID: >C3725

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CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found:

CAS NUMBER	1 MAS 12 - 8-91 COMPOUND NAME	l RT I	EST. CONC.	⊦ ⊦ Q !====
1 2. //o - 54 - 3	Unknown   <del>Unknown Alkans</del>   H <i>eyyne</i>	15.21	8. 61.	1 X 1 X
	12.9-42			
				<u> </u>
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			1	

VBLK QC1107

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Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: (0202 SAS No.: SDG No.:

Matrix: [soil/water] SOIL Lab Sample ID: VBLK QC1107

Sample wt/vol: 5.0 [q/mL] G Lab File ID: >C3742

Level: [low/med] LOW Date Received:

% Moisture: NA decanted (Y/N) N Date Analyzed: 11/07/92

GC Column: PACK ID: (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume:

CONCENTRATION UNITS: CAS NO. COMPOUND [ug/L or ug/Kg] UG/KG Q 74-87-3-----Chloromethane IU 10 74-83-9----Bromomethane 10 IU 75-01-4-----Uinyl Chloride 10 IU 75-00-3----Chloroethane 10 111 75-09-2----Methylene Chloride 10 IU 67-64-1----Acetone 10 IU 75-15-0-----Carbon Disulfide 10 10 75-35-4----1,1-Dichloroethene 10 IU 75-34-3----1,1-Dichloroethane 10 IU 540-59-0----1,2-Dichloroethene (total) 10 ΙU 67-66-3----Chloroform 10 IU 107-06-2----1,2-Dichloroethane 10 10 78-93-3----2-Butanone 10 IU 71-55-6----1,1,1-Trichloroethane 10 10 56-23-5-----Carbon Tetrachloride 10 10 75-27-4----Bromodichloromethane 10 IU 78-87-5----1,2-Dichloropropane 10 IU 110061-01-5----cis-1,3-Dichloropropene 10 IU 79-01-6----Trichloroethene 10 10 124-48-1-----Dibromochloromethane 10 IU 79-00-5----1,1,2-Trichloroethane 10 IU 71-43-2----Benzene 10 11 110061-02-6----trans-1,3-Dichloropropene 10 IU 75-25-2----Bromoform 10 IU 108-10-1----4-Methyl-2-Pentanone 10 IU 591-78-6----2-Hexanone 10 10 127-18-4----Tetrachloroethene 10 IU 79-34-5----1,1,2,2-Tetrachloroethane 10 IU 108-88-3----Toluene 10 IU 108-90-7----Chlorobenzene 10 IU 100-41-4----Ethylbenzene 10 IU 100-42-5----Styrene 10 10 1330-20-7-----Xylene (total) 10

### VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Code: INTECH Case No. 10002 SAS No.:

I VBLK QC1107

HISUEL SAMPLE NU.

Lab Name: INTECH

Contract:

SDG No.: SW-

Matrix: (soil/water) SOIL

Lab Sample ID: VBLK QC1107

Lab File ID: >C3742

Sample wt/vol: 5.0 (g/mL) G

Level: (low/med) LOW

Date Received:

% Moisture: NA not dec.

Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume:

(u

Number TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	i RT	EST. CONC.	l: I. <b>Q</b>
1   2. 110-54-3	Unknown Cycloalkane Hexane	15.19	6. 53.	N   N
		!! !!		
		!!		
		!!		
		!!	I	
			·	
1			I	

# UDLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

I UBLK QA1109

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] WATER .

Lab Sample ID: UBLK QA1109

Sample wt/vol: 5.0

[g/mL] ML

Lab File ID: >A0156

Level: [low/med] LOW

Date Received:

% Moisture: decanted: (Y/N) N

Date Analyzed : 11/09/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS: [ug/L or ug/Ka] UG/L

74-87-3		rug/c or ug/kg; UG.	<b>/</b> L	Q	
74-83-9Bromomethane	!			1	
74-83-9Bromomethane	74-87-3Chloromethane	i	1.0	in	
75-01-4	1 /4-83-9	1		_	
10   IU   75-09-2Methylene Chloride	/ /5-01-4Vinul Chloride	i			
75-09-2	' /7-88-2	İ			
75-15-0Carbon Disulfide 75-35-41,1-Dichloroethene 75-34-31,1-Dichloroethene 75-34-31,1-Dichloroethene 75-34-31,1-Dichloroethene 75-35-41,1-Dichloroethene 75-36-3	75-09-2Methulene Chinrie	de i			
75-17-0	' 0/-04-1Acetona	1	•	_	
75-35-41,1-Dichloroethene 75-34-31,1-Dichloroethane 75-34-31,1-Dichloroethane 75-01,2-Dichloroethene (total) 76-66-3Chloroform 107-06-21,2-Dichloroethane 10	75-15-0Carbon Disulfide	į.	_	_	
77-34-31,1-Dichloroethane 540-59-01,2-Dichloroethene (total) 67-66-3Chloroform 107-06-21,2-Dichloroethane 10	/5-35-41.1-Dichloroether	ne i			
67-66-3	/ /7-24-21.1-Dichloroether	n			
107-06-21,2-Dichloroethane   10   IU   107-06-21,1-Trichloroethane   10   IU   10   IU   10   10   IU   10   10   IU   10   10   IU   10   IU   10   IU   10   IU   10   IU   10   IU   10   IU   10   IU   10   IU   10   IU   10   IU   10   IU   10   IU   IU   IU   IU   IU   IU   IU   I	' 740~77~U~~~~~1.2~Dichlorgethe	ne (total)			
107-06-21,2-Dichloroethane   10   U   78-93-32-Butanone   10   U   71-55-61,1,1-Trichloroethane   10   U   56-23-5Carbon Tetrachloride   10   U   75-27-4Bromodichloromethane   10   U   78-87-51,2-Dichloropropane   10   U   10061-01-5	U/TODTJTTTTTTTLD10roform				
78-93-32-Butanone 71-55-61;1,1-Trichloroethane 71-55-61;1,1-Trichloroethane 75-23-5Carbon Tetrachloride 75-27-4Bromodichloromethane 78-87-51,2-Dichloropropane 10 IU 10061-01-5Trichloroethane 11 IU 124-48-1Dibromochloromethane 124-48-1Dibromochloromethane 124-48-1Benzene 10061-02-6	107-06-21.2-Dichloroether	ne İ			
71-55-61;1,1-Trichloroethane 56-23-5Carbon Tetrachloride 75-27-4Bromodichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene 10061-02-6trans-1,3-Dichloropropene 75-25-2Bromoform 108-10-14-Methyl-2-Pentanone 179-34-5Tetrachloroethene 79-34-5Tetrachloroethene 79-34-5Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 1100-42-5Styrene 11330-20-7	/8-73-32-Rutanone ·	•		. —	
75-27-4Bromodichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropane 110   U	71-55-61.1.1-Trichloroei	thane i			
79-27-4Bromodichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 110	Joseph Larbon Tatrachle	المامن		-	
10   10   10   10   10   10   10   10	/7-4/-4Bromodichlorome++	ane I			
79-01-6Trichloroethene 124-48-1Dibromochloromethane 179-00-51,1,2-Trichloroethane 10061-02-6	/8-8/-91.2-Dichlarannan-	· m m m m m m m m m m m m m m m m m m m			
124-48-1Dibromochloromethane 124-48-1Dibromochloromethane 179-00-51,1,2-Trichloroethane 10061-02-6Benzene 10061-02-6Bromoform 108-10-1Bromoform 108-10-14-Methyl-2-Pentanone 127-18-4Tetrachloroethane 127-18-4Tetrachloroethane 127-18-4Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7	10001-01-7	ropene			1
124-48-1	/ / - Ul-0	1			
77-00-71,1,2-Trichloroethane 71-43-2Benzene 10061-02-6trans-1,3-Dichloropropene 75-25-2Bromoform 108-10-14-Methyl-2-Pentanone 1091-78-62-Hexanone 127-18-4Tetrachloroethane 109-88-31,1,2,2-Tetrachloroethane 108-90-7Chlorobenzene 100-41-4Ethylbenzene 11330-20-7	124-48-1Dibromachlarameth	nane I			
10061-02-6trans-1,3-Dichloropropene	//~UU~~~~~~~1.1.2~Trichloros+	hane i			
10061-02-6trans-1,3-Dichloropropene	/ 1 T T Z T T T T T T T T T T T T T T T T	•			
108-10-14-Methyl-2-Pentanone 108-10-14-Methyl-2-Pentanone 1091-78-62-Hexanone 127-18-4Tetrachloroethene 109-34-51,1,2,2-Tetrachloroethane 108-88-3Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7	10061-02-6trans-1 3-Dichlor	opropene i			
108-10-14-Methyl-2-Pentanone   10   U   591-78-62-Hexanone   10   U   127-18-4Tetrachloroethene   10   U   127-18-4Tetrachloroethene   10   U   127-18-4Tetrachloroethene   10   U   127-18-4Tetrachloroethene   10   U   127-18-4Tetrachloroethene   10   U   128-18-18-18-18-18-18-18-18-18-18-18-18-18	/ / ~ 4 / ~ 4 T = ~ = ~ = ~ Hromo Fosm			-	!
127-18-4Tetrachloroethene   10   U   1   1   1   1   1   1   1   1   1	108-10-14-Methul-2-Pentan	onė i			1
127-18-4Tetrachloroethene 79-34-51,1,2,2-Tetrachloroethane 108-88-3Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7	// 4 <sup>-</sup> / 0 <sup>-</sup> 0 <sup>-</sup>				. !
108-88-3Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 1330-20-7Yulene (Actal)	127-18-4Tetrachlonoethana	i		. –	
108-90-7Chlorobenzene	//	roethane		_	
108-90-7Chlorobenzene 100-41-4Ethylbenzene 1100-42-5Styrene 1100-1000 11000 11000 11000 110000 110000 110000 1100000 1100000 11000000		1			!
100-41-4Ethylbenzene   10   U   1   1   1   1   1   1   1   1   1	108-90-7Chlorober	i	_		!
1330-20-7Yulana (AcA-1)	100-41-4	1			!
1/2U-ZU-Z	~ UU-42-7	1		_	!
10 10 1	1330-20-7Xulene (total)				
		1	10	iu	ı

## UDLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYSUEL SAMPLE NO.

UBLK QA1109

Lab Name: INTECH

Contract:

SDG No.: SS-2

Lab Code: INTECH Case No. 10201 SAS No.:

- Lab Sample ID: UBLK QA1109

Matrix: (soil/water) SOIL

Sample wt/vol: 0.04 (g/mL) G

Lab File ID: >A0156

Level: (low/med/ MED

Date Received:

% Moisture: NA not dec.

Date Analyzed: 11/09/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 125.0

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 100 (ul

Number TICs found: 1

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	l RT I	EST. CONC.	1 0
1. <del>-96-14-8</del> 110-54-3	Pentane, 3-methyl (8CI9CI)	19.53	750.	N
	mpt 12-8-72	    		   
				<del></del>
		!		

#### 1A UOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

I SW-1 MS

\*\*Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10202 SAS No.: SDG No.:SW-1

Matrix: [soil/water] WATER Lab Sample ID: I210202-01MS

Sample wt/vol: 5.0 [g/mL] ML Lab File ID: >A0135

Level: [low/med] LOW Date Received: 10/31/92

% Moisture: decanted: (Y/N) N Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

[ug/L or ug/Kg] UG/L Q

74-87-3----Chloromethane 10 IU 74-83-9----Bromomethane 10 111 75-01-4-----Uinyl Chloride 10  $\mathbf{I}\mathbf{U}$ 75-00-3-----Chloroethane 10 10 75-09-2----Methylene Chloride 3 1 J 67-64-1----Acetone 13 75-15-0----Carbon Disulfide 10 IU 75-35-4----1,1-Dichloroethene 78 75-34-3----1,1-Dichloroethane ΉП, 10 540-59-0----1,2-Dichloroethene (total) 10 10 67-66-3----Chloroform 10 1U 107-06-2----1,2-Dichloroethane 10 10 78-93-3----2-Butanone 10 IU 71-55-6----1,1,1-Trichloroethane 10 111 56-23-5----Carbon Tetrachloride 10 IU 75-27-4----Bromodichloromethane 10 IU 78-87-5----1,2-Dichloropropane 10 IU |10061-01-5----cis-1,3-Dichloropropene 10 IU 79-01-6----Trichloroethene 55 1 124-48-1----Dibromochloromethane 10 10 79-00-5----1,1,2-Trichloroethane 10 IU 71-43-2----Benzene 57 1 110061-02-6----trans-1,3-Dichloropropene 10 IU 75-25-2----Bromoform 10 IU 108-10-1----4-Methyl-2-Pentanone 10 IU 591-78-6----2-Hexanone 10 IU 127-18-4----Tetrachloroethene 10 IU 79-34-5----1,1,2,2-Tetrachloroethane 10 IU 108-88-3----Toluene 55 108-90-7----Chlorobenzene 52 100-41-4----Ethylbenzene 100-42-5-----Styrene 10 IU 10 IU 10 111

F:

#### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

I SW-1 MSD

NYSDEC SAMPLE NO.

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No.:SW-1

Matrix: [soil/water] WATER Lab Sample ID: 1210202-01MSD

Sample wt/vol: 5.0 [g/mL] ML Lab File ID: >A0136

Level: [low/med] LOW - Date Received: 10/31/92

% Moisture: decanted: (Y/N) N Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS	NO.	COMPOUND		TRATION UNITS		Q	
7.	4 97 3	-Chloromethane				ı	1.
1 7	4-0/- <u>-</u>	-Chioromethane -Bromomethane		l 4	. 10	IU	! .
1 75	4-0 <i>J</i> -7	-promomethane		1	10	IU	1 -
1 75	, oo 3	-Vinyl Chloride		!	10	IU	1
1 75	2-00-3 5 00 0	-Chloroethane			10	וּט	1
1 /2	7-U7-Z 7 // 1	-Methylene Chlorid	10	!	5	IJ	1
1 75	7-64-1	-Acetone		1	17	1	ı
1 75	?-17-U	-Carbon Disulfide		1 .	10	IU	1
1 7:	?- <i>?</i> ?-4	-1,1-Dichloroether	18	1	75	1	ı
/5   = /6	7-34-3	-1,1-Dichloroethan	10	ĺ	10	IU	1
1 741	J-57-U	-1,2-Dichloroether	e (tot	al)	10	IU	1
6/	7-66-3	-Chloroform		l	10	IU	1
1 102	7-06-2	-1,2-Dichloroethar	18	, I	10	IU	1
/ / / /	3-93-3	-2-Butanone		1	10	IU	ı
! 71	l -55 -6	-1,1,1-Trichloroet	hane	ł	10	ıu	1 .
56	5-23-5	-Carbon Tetrachlor	ide	1	10	IU	I
75	5-27-4	-Bromodichlorometh	ane	!	10	IU	ţ
78	3-87-5	-1,2-Dichloropropa	ne	1	10	IU	1
1 1 0 0 6 1	1-01-5	-cis-1.3-Dichlorop	ropene	1	10	IU	1
1 7 <del>9</del>	7-01-6	-Trichloroethene		1	53	1	1
1 124	4-48-1	-Dibromochlorometh	ane	I	10	IU	1
79	'-00-5- <b></b> -	-1.1.2-Trichloroet	hane	1	10	IU	İ
· /1	43-2	-Benzene		I	5 <i>7</i>	1	1
10061	02-6	-trans-1,3-Dichlor	oprope	ne l	10	IU	1 -
/ 7	<b>)-25-2</b>	-Bromoform		i	10	ΙÜ	1
108	1-10-1	-4-Methyl-2-Pentan	one	1	10	IU	i
771	78-6	-2-Hexanone		1	10	ĪŪ	1
127	'-18-4	-Tetrachloroethene		1	10	ίŪ	i
79	'-34-5	-1.1.2.2-Tetrachlo	roetha	ne i	10	IU	i
TOB		-Toluene		i	57	1	i
108	1-90-7	-Chlorobenzene		1	53	İ	i
100	-41-4	-Ethulbenzene		· 	10	เบ	i
100	-42-5	-Sturene		i	10	เบ	i
1330	-20-7	-Xylèné (total)		i	10	iu	i
				·		1	ingr

[q/mL] G

(mm)

EPA SAMPLE NO.

002-02 MS

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10202 SAS No.:

SDG No .: SW-

Matrix: [soil/water] SOIL

Lab Sample ID: 1210181-04()

Sample wt/vol: 5.0

Lab File ID: >C3729

Level: [low/med] LOW

Date Received: 10/27/92

18.0 % Moisture: decanted (Y/N) Y

Date Analyzed: 11/07/92

GC Column:

PACK ID: 2.0

Dilution Factor:

1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

CONCENTRATION UNITS: [ug/L or ug/Kq] UG/KG (ι

CAS NO. COMPOUND 1 74-87-3-----Chloromethane 12 IU 74-83-9-----Bromomethane 12 IU 75-01-4------ Vinyl Chloride 12 IU 75-00-3-----Chloroethane 12 IU 75-09-2----Methylene Chloride 6 ıJ 67-64-1----Acetone 12 IU 75-15-0-----Carbon Disulfide 12 IU 75-35-4----1,1-Dichloroethene 74 1 75-34-3----1,1-Dichloroethane 12 IU 540-59-0-----1,2-Dichloroethene (total) 12 IU 67-66-3----Chloroform 12 10 107-06-2----1,2-Dichloroethane 12 IU 78-93-3----2-Butanone 12 10 71-55-6-----1,1,1-Trichloroethane 12 IU 56-23-5-----Carbon Tetrachloride 12 IU 75-27-4----Bromodichloromethane 12 IU 78-87-5----1,2-Dichloropropane 12 10 110061-01-5----cis-1,3-Dichloropropene 12 IП 79-01-6----Trichloroethene 63 1 124-48-1----Dibromochloromethane 12 10 79-00-5----1,1,2-Trichloroethane 50 1 71-43-2----Benzene 69 |10061-02-6----trans-1,3-Dichloropropene 12 IU 75-25-2----Bromoform 12 IU 108-10-1----4-Methyl-2-Pentanone 12 IU 591-78-6----2-Hexanone 12 1 U 127-18-4----Tetrachloroethene 12 10 79-34-5----1,1,2,2-Tetrachloroethane 12 IU 108-88-3----Toluene 70 108-90-7----Chlorobenzene 68 100-41-4----Ethylbenzene 12 IU 100-42-5----Styrene 12 111 1330-20-7-----Xylene (total) 12 IU

IDF:

1.22

FORM I VOA-1

UOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1 002-02 MSD

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: (0302 SAS No.: SDG No.: SW-

Matrix: [soil/water] SOIL

Lab Sample ID: [210181-04(M

Sample wt/vol: 5.0 [g/mL] G

Lab File ID: >C3701

Level: [low/med] LOW

Date Received: 10/27/92

% Moisture: 18.0 decanted (Y/N) Y Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (ul

CONCENTRATION UNITS:

CAS NO.	COMPOUND [	ug/L or ug/Kg]		C	a a
74-87-3	Chloromethane	I	. 10	1	_  -
74-83-9	Bromomethane	1	12	ΙU	1.
<b>75-01-4</b>	Vinul Chloride	;	12	IU	!
ノフーリリーシーー	Chlornethàne		12	ΙU	ŀ
75-09-2	Methylene Chloride	!	12	IU	ţ
67-64-1	Acetone	ļ .	12	IU	ı
75-15-0	Carbon Disulfide		12	10	1
75_35_4-	Carbon Disulfide	1	12	IU	1
フロースノーローニュ	1,1-Dichloroethene	1	· 58	1	1
/7-74-3	1,1-Dichloroethane	f	12	IU	i
740-79-0	1,2-Dichloroethene	(total)	12	IU	i
0/-00-)	D   Oroform	1	12	ίÜ	i
107-06-2	1,2-Dichloroethane	1	12	iυ	- 1
/ ローァフーフーーー	7-841+20000	i	12	ίÜ	- !
71-55-6	1.1.1-Trichlossek	ne i	12		1
, , , , , , , , , , , , , ,		4_ 1		10	!
/2-4/-4	Bromodichloromether		12	ΙU	!
/ 0 = 0 / = 7 = = = .	1 7-Diablass		12	IU	1
,,,,,,,,,,,,			12	ıu	1
· / - / 1	!p10b!		12	IU	ı
124-48-1	Dibromochloromethar	1	5 <i>7</i>	1	1
79-00-5	1 1 2 T	ie l	12	IU	1
71-43-2-	1,1,2-Trichloroetha	ine (	41	i	1
			56	1	i
75-25-2	trans-1,3-Dichlorop	ropene i	12	ΙU	i
			12	IU	i
E01 70 .	4-Methyl-2-Pentanon	e I	12	ίŪ	i
		1	12	10	- ;
-4/-10-4	Toesochlassak	í	12	iU	
		ethane !	12		!
108-98-3	Toluene	s thene		1 U	!
	- C. 1 .	:	61	!	ſ
		1	56	i	1
		!	12.	IU	1
330-20-7	Xylene (total)	!	12	ייו	. 1
	. Frame ((O(91)	. 1	12	10	1

I FB-2

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10202 SAS No.: SDG No.: SW-

Matrix: [soil/water] WATER Lab Sample ID: 1210202-15

Sample wt/vol: 1000 {g/mL] ML Lab File ID: >B1987

Level: [low/med] LOW Date Received: 10/30/92

% Moisture: decanted: (Y/N) N Date Extracted: 11/05/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/12/92

Dilution Factor: 1 Injection Volume: 2 uL

GPC Cleanup: [Y/N] N pH:

CONCENTRATION UNITS: CAS NO. COMPOUND [ua/L or ua/Ka] UG/L

LAS NU.	CUMPOUND (ug/L or	ug/kg; UG/L	u
100_05_2	Phenol	1 10	1
	bis(2-chloroethyl)ether	1 10	เบ
95_57_0	2-Chlorophenol	1 10	เบ
	1,3-Dichlorobenzene	1 10	IU
	1,4-Dichlorobenzene	10	iu
	1,2-Dichlorobenzene	1 10	iU
	2-Methylphenol	1 10	10
	2,2'-oxybis(1-Chloropropan		ΙÜ
	4-Methylphenol	10	ΙÜ
621-64-7	N-Nitroso-di-n-propylamine	1 10	ΙŪ
	Hexachloroethane	1 10	IU
	Nitrobenzene	10	iŭ
78-59-1	Isophorone	1 10	IU
88-75-5	2-Nitrophenol	1 10	ίŪ
	2,4-Dimethylphenol	1 10	ίŪ
111-91-1	bis(2-Chloroethoxy)methane	1 10	ÍŪ
120-83-2	2,4-Dichlorophenol	1 10	ĬÜ
	1,2,4-Trichlorobenzene	1 10	ίÜ
91-20-3	Naphthalene	1 10	ΙÜ
106-47-8	4-Chloroaniline	1 10	ΙÜ
87-68-3	Hexachlorobutadiene	1 10	ΙŪ
59-50-7	4-Chloro-3-methylphenol	1 10	ίŪ
91-57-6	2-Methylnaphthalene	10	IU
77-47-8	Hexachlorocyclopentadiene	1 10	IU
88-06-2	2,4,6-Trichlorophenol	1 10	1 U
75-95-4	2.4.5-Trichlorophenol	1 25	ΙU
91-58-7	2-Chloronaphthalene	1 10	IU
88-74-4	2-Nitroaniline	1 25	ΙU
121-11-3	Dimethulphthalate	1 10	ΙŪ
Z 08-76-8	Acenaphthulene	1 10	ίŪ
000-20-2	2.6-Dinitrataluene	1 10	IÜ
//-U/-Z		1 - 25	١Ü
83-32-9	Acenaphthene	1 10	ΙŪ
•	•		

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: | DLOZ SAS No.: SDG No.: SW-1

Matrix: [soil/water] WATER Lab Sample ID: I210202-15

Sample wt/vol: 1000 [g/mL] ML Lab File ID: >B1987

Level: [low/med] LOW Date Received: 10/30/92

% Moisture: decanted: (Y/N) N Date Extracted: 11/05/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/12/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] N pH:

CONCENTRATION UNITS:

CAS NO. COMPOUND [ug/L or ug/Kg] UG/L

	. Lgr Ng 1 OG/ E	•
E1 00 F	l	1
51-28-52,4-Dinitrophenol	1 25	IU
100-02-74-Nitrophenol	1 25	IU
132-64-9Dibenzofuran	10	ΙU
121-14-22,4-Dinitrotoluene	1 10	ΙU
84-/3-/Diethulphthalate	1 10	IÜ
7005-72-34-Chlorophenyl-phenylethe	er I. 10	ΙÜ
BD-/J-/Fluorene	l 10	ΙÜ
100-01-64-Nitroaniline	1 25	ำเบ
534-52-14,6-Dinitro-2-methylpheno	ol ! 25	iυ
80-30-6N-Nitrosodiphenulamine	l 1n	ΙÜ
101-55-34-Bromophenul-phenulether	10	10
118-/4-lHexachlorobenzene	10	ΙU
87-86-5Pentachlorophenol	1 25	10
<sup>はラーリ1ー8ーーーー</sup> ーPhenanthrene	10	I U
120-12-7Anthracene	10	וו
86-74-8Carbazole	10	ΙÜ
84-74-2Di-n-butulnhthalata	10	
200-44-UFluoranthene	10	IU
129-00-0Purene		IU
85-68-7Butulbenzulnhthalata	10	IU
91-94-13,3'-Dichlorobenzidine	10	IU
56-55-3Benzo(a)anthracene	10	IU
218-81-9Chrusana	10	IU
117-81-7bis(2-Ethylhexyl)phthalat	10	IU
117-84-0Di-n-octylphthalate		10
205-99-2Benzo(b)fluoranthene	1 10	IU
207-08-9Benzo(k)fluoranthene	10	IU
50-32-8Benzo(a)pyrene	! 10	IU
193-39-5Indeno(1,2,3-cd)pyrene	10	IU
53-70-3 Dibarria Liver de la computation della computation della computation della computation della computation della computation della computation della computation della computation della computation della computation della computation della computation della computation della computation della computation della computation della computation della computation della computation del	! 10	IU
53-70-3Dibenz(a,h)anthracene	10	IU
191-24-2Benzo(g,h,i)perylene	10	IU

# TENTATIVELY IDENTIFIED COMPOUNDS

Name: INTECH

Contract:

I FB-2

Code: INTECH Case No. 10 WZ SAS No.: SDG No.: SW-

rix: (soil/water) WATER

Lab Sample ID: I210202-15

ple wt/vol: 1000 (g/mL) ML

Lab File ID: >B1987

el: (low/med) LOW

Date Received: 10/30/92

pisture: decanted. (Y/N) N

Date Extracted: 11/05/92

centrated Extract Volume: 1000 (ul)

Date Analyzed: 11/12/92

ection Volume: 2 (ul)

Diluton Factor: 1

Cleanup: (Y/N) N

pH:

ber TİCs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

AS NUMBER	COMPOUND NAME	l I RT	I EST. CONC.	   Q
14376-81-9 24955-63-3	Cyclopentane, 1,2-dichloro-, Cyclohexane, 1,3-dichloro-,	7.85 11.48	10.	INF
				!—
				<u> </u>
				<u>: —</u>
				!
1				
!			 	
	1.			
		·		

FORM I-CLP-SV-TIC

NYSDEC SAMPLE NO

I SBLK 01

Lab Name: INTECH

Contract:

SDG No .: SW-1

Matrix: [soil/water] WATER.

Lab Sample ID: SBLK-QM7691

Lab File ID: >81965

Sample wt/vol: 1000

Level: [low/med] LOW

Date Received:

% Moisture:

decanted: (Y/N) N

Lab Code: INTECH Case No.: 1020 SAS No.:

Date Extracted: 11/02/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/11/92

Injection Volume: 2 uL

Dilution Factor:

CONCENTRATION UNITS:

GPC Cleanup: [Y/N] N

pH:

[g/mL] ML

* · -	CONCENTRALI	011 0111 12:			
CAS NO. COMPOUND	{ug/L or ug	/Kg] UG/L		Q	
100 05 0		1		1	_
108-95-2Phenol		1	10	1 U	
111-44-4bis(2-chloroe	thyl)ether	1	10	IU	
95-57-82-Chloropheno	1	1	10	IU	
541-73-11,3-Dichlorob	enzene		10	IU	
106-46-71,4-Dichlorob	enzene	I ,	10	ΙU	
95-50-11,2-Dichlorob	enzene	I	10	IU	
77-48-/2-Methulpheno	1	i	10	IU	
108-60-12,2'-oxybis(1	-Chloropropane)	l	10	ŧυ	
106-44-54-Methulphano	1	1 ·	10	IU	
621-64-7N-Nitroso-di-	n-propylamine	ł	10	ĪŪ	
- P/-/2-1Hexachloroeth:	ene .	l	10	ĺŪ	
98-95-3Nitrobenzene	•	l	10	ίŪ	
78-59-1Isophorone	1	1	10	IU	
88-75-52-Nitrophenol	1	l	10	ĺΰ	
105-67-92.4-Dimethuln	neno l		10	ίŪ	
111-71-1bis(2-Chloroe	thoxy)methane	]	1.0	iŭ	
120-83-22.4-Dichloroph	nenol I	· 	10	iu	
120-82-11,2,4-Trichlo	robenzene	1	10	IU	
91-20-3Naphthalane	4		10	IU	
106-47-84-Chloroanilir	ne i		10	IU .	
87-68-3Hexachlorobuts	diene l	•	10	IU	
- >ソー>U-フ4-Chloro-3-me!	hulphenol :		10	16	
	nalene i	· 	10	10	
//-47-8Hexachlorocuci	opentadiene l		10	10	
00-00-22.4.6-Trichlor	ophenoi i		10	iŭ	
- 77-77-42.4.5-Trichlor	ophenni i		25	iU	
91-58-72-Chloronaphth	la lene l		10	iŭ	
88-/4-42-Nitroaniline			25	iu	
<sup>131-11-3Dimethulphthal</sup>	ate I		10	10	
(UB-96-8Acenaphthulana	· · · · · · · · · · · · · · · · · · ·		10	10	
506-20-22.6-Dinitratal	uene i		10	וט	
- プワーリワー23-Nitroaniline			25	10	
83-32-9Acenaphthene			10	10	

#### SEMIUDLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: INTECH Contract: | SBLK 01

Lab Code: INTECH Case No.: 1000 SAS No.: SDG No.: 5W-

Matrix: [soil/water] WATER Lab Sample ID: SBLK-QM769T1

Sample wt/vol: 1000 [g/mL] ML Lab File ID: >B1965

Level: [low/med] LOW \_ Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 11/02/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/11/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] N pH:

CONCENTRATION UNITS:

CAS NQ. COMPOUND [ug/L or ug/Kg] UG/L Q

	•	-		
<del></del>		1	ı	_ t
51-28-5	2,4-Dinitrophenol	1 25	IU	Ì
	4-Nitrophenol	1 25	IU	1
	Dibenzofuran	1 10	ΙU	H
121-14-2	2,4-Dinitrotoluene	1 10	ΙU	1
	Diethylphthalate	1 10	IU	- [
	4-Chlorophenyl-phenylether	1 10	1U	1
	Fluorene	10	IU	- 1
	4-Nitroaniline	1 25	IU	1
	4,6-Dinitro-2-methylphenol	1 25	IU	1
	N-Nitrosodiphenylamine	1 10	IU	1
	4-Bromophenyl-phenylether	1 10	IU	1
	Hexachlorobenzene	1 10	١U	1
	Pentachlorophenol	1 25	IU	- 1
	Phenanthrene	1 10	ΙÜ	1
120-12-7	Anthracene	1 10	ΙU	- 1
	Carbazole	1 10	ΙU	1
84-74-2	Di-n-butylphthalate	1 10	IU	- 1
	Fluoranthene	1 10	10	1
129-00-0		1 10	10	ı
	Butylbenzylphthalate	1 10	ΙU	1
	3,3'-Dichlorobenzidine	1 10	ΙU	1
	Benzo(a)anthracene	1 10	ΙÜ	1
	Chrysene	1 10	IU	1
	bis(2-Ethylhexyl)phthalate	1	ΙJ	1
117-84-0	Di-n-octylphthalate	1 10	IU	1
205-99-2	Benzo(b)fluoranthene	1 10	ΙU	- 1
207-08-9	Benzo(k)fluoranthene	1 10	IU	. 1
50-32-8	Benzo(a)pyrene	1 10	IU	i
193-39-5	Indeno(1,2,3-cd)pyrene	1 10	ΙÜ	1
53-70-3	Dibenz(a,h)anthracene	1 10	ίŪ	i
191-24-2	Benzo(g,h,i)perylene	1 10	ΙÜ	i

## SEMIUDLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

IN I SUEC	SHITEE	170.	
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1			ļ
I SRIM	( N1		1

NUCDEC CAMBLE NO

1			_		_	_	_	
h	Nan	•	U	N	T	F	Γ.	н

Contract:

b Code: INTECH Case No.

SAS No. -SDG No.:

trix: (soil/water) WATER

Lab Sample ID: SBLK-QM769T1

mplé wt/vol:

1000 (g/mL)\_ML

Lab File ID: >B1965

vel: (low/med) LOW

Date Received:

Moisture:

decanted. (Y/N) N

Date Extracted: 11/02/92

ncentrated Extract Volume: 1000 (ul)

Date Analyzed: 11/11/92

jection Volume: 2 (ul)

Diluton Factor: 1

C Cléanup: (Y/N) N

pH:

umber TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

CAS NUMBER !	COMPOUND NAME	I RT I	EST. CONC.	Q
1. – - lUr	iknown	7.45	5.	N
! <u></u>		<u> </u>		<u> </u>
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ll		<u>'</u> '		¦
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		!!		!
<u>-</u>		'		¦
<u> </u>		!!		!
		'		¦
				i
		!!		!
I				١

I SBLK 02

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: (0202 SAS No.:

5DG No.: SW-1

Matrix: [soil/water] WATER Lab Sample ID: SBLK-QM769T2

Sample wt/vol: 1000 [g/mL] ML Lab File ID: >B1986

Level: [low/med] LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 11/05/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/12/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] N pH:

CONCENTRATION UNITS:

CAS NO. COMPOUND [ug/L or ug/Kg] UG/L [

CAS NO.	COMPOUND	(ug/L o	r ug/Kg]	U6/L	ч
<del> </del>			ı		1
108-95-2	Phenol		Ĭ.	10	IU
111-44-4	bis(2-chloros	thyl)ether	1	10	IU
111-44-4	2-Chloropheno	il i	I	10	IU
F/1 77 1	1,3-Dichlorob	enzene	1	10	IU
741-/3-1	1,4-Dichlorob	enzene	· 1	10	IU
106-46-/	1,2-Dichlorob	enzene	1	10	IU
75-50-1	2 Makeulahan	.1	1	10	IU
95-48-/	2-Methylpheno	l-Chlaranran	ane)	10	IU
108-60-1	2,2'-oxybis(1	_1	1	10	ΙU
106-44-5	4-Methylpheno		ne i	10	ΙÜ
621-64-7	N-Nitroso-di-	-u-brobàramı	1	10	1U
67-72-1	Hexachloroeth	nane	i	10	ΙU
	Nitrobenzene	•	ì	10	ΙŪ
	Isophorone	•	i	10	ίŪ
88-75-5	2-Nitropheno	1	•	10	ΙŪ
105-67-9	2,4-Dimethyl	pneno:	ana i	10	ΙU
111-91-1	bis(2-Chloro	etnoxy)methe	1	.10	IU
120-83-2	2,4-Dichloro	pnenoi	i	10	ĬŪ
120-82-1	1,2,4-Trichl	orobenzene	i	10	ΙÜ
91-20-3	Naphthalene	•	i	10	ĬŪ
106-47-8	4-Chloroanil	ine	- 1	10	
87-68-3 <b></b>	Hexachlorobu	tadiene	1	10	
59-50- <i>7</i>	4-Chloro-3-m	ethylphenol	1	10	
91-57-6	2-Methylnaph	thalene	•	10	
77-47-8	Hexachlorocy	clopentadie	ne !	10	
88-06-2	2,4,6-Trichl	oropheno!		25	
95-95-4	2,4,5-Trichl	orophenol	1	10	
91-58-7	2-Chloronaph	thalene	!		
88-74-4	2-Nitroanili	ne	1	25	. –
131-11-3	Dimethylphth	alate	1	10	
208-96-8	Acenaphthyle	ene	1	10	
606-20-2	2,6-Dinitrot	oluene	1	10	
99-09-2	3-Nitroanili	ine	ı	25	
	Acenaphthene		1	10	I IU

I SBLK 02

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: (0202 SAS No.:

SDG No.: SJ-1

Matrix: [soil/water] WATER Lab Sample ID: SBLK-QM769T2

Sample wt/vol: 1000 [g/mL] ML Lab File ID: >B1986

Level: [low/med] LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 11/05/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/12/92

Injection Volume: 2 ul. Dilution Factor: 1

GPC Cleanup: [Y/N] N pH:

CONCENTRATION UNITS:

Cas No. Compound [ug/L or ug/Kg] UG/L Q

CHS NO.			
		25	1
51-28-5	2,4-Dinitrophenol	25	10
100-02-7	4-Nitrophenol		• –
132-64-9	Dibenzofuran	10	IU
121-14-2	2,4-Dinitrotoluene	10	IU
84-73-7	Diethylphthalate	10	IU
7005-72-3	4-Chlorophenyl-phenylether	10	IU
94-73-7	Fluorene	10	IU
100-01-4	4-Nitroaniline	1 25	IU
E34 E2 1	4,6-Dinitro-2-methylphenol	1 25	IU
774-74-1	Nitrosodiphenylamine	10	ıu
101 55 7	4-Bromophenyl-phenylether	10	IU
110 74 1	Hexachlorobenzene	1 10	IU
	Pentachlorophenol	1 25	IU
	Phenanthrene	10	IU
		10	IU
	Anthracene	10	IU
	Carbazole	10	IU
	Di-n-butylphthalate	10	IU
	Fluoranthene	10	IU
129-00-0	Pyrene	10	ίŪ
85-68-7	Butylbenzylphthalate	10	ίŪ
91-94-1	3,3'-Dichlorobenzidine	10	IU
	Benzo(a)anthracene	10	iŪ
218-01-9	Chrysene	10	iŭ
117-81-7	bis(2-Ethylhexyl)phthalate	10	ίŪ
117-84-0	Di-n-octylphthalate	1 10	
	Benzo(b)fluoranthene	10	
207-08-9	Benzo(k)fluoranthene	10	
50-32-8	Benzo(a)pyrene	1 10	· -
193-39-5	Indeno(1,2,3-cd)pyrene	,	
53-70-3-	Dibenz(a,h)anthracene	1 10	· -
	Benzo(g,h,i)perylene	1 10	١U
_	, , , , , , , , , , , , , , , , , ,	1	!

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#### TENTALIVELY IDENTIFIED COMPOUNDS

Name: INTECH Contract:

Code: INTECH Case No. (0202 SAS No.: SDG No.: SW-

rix: (soil/water) WATER Lab Sample ID: SBLK-QM769T2

tole wt/vol: 1000 (g/mL) ML Lab File ID: >B1986

el: (low/med) LOW Date Received:

loisture: decanted. (Y/N) N Date Extracted: 11/05/92

centrated Extract Volume: 1000 (ul) Date Analyzed: 11/12/92

ection Volume: 2 (ul) Diluton Factor: 1

Cleanup: (Y/N) N pH:

mber TICs found: 4 CONCENTRATION UNITS:

(ug/L or ug/Kq) UG/ L

CAS	NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 2. 3. 4.	14376-81-9 24955-63-3	Cyclohexanone (ACN) (8CI9CI)   Cyclopentane, 1,2-dichloro-,   Cyclohexane, 1,3-dichloro-,    Unknown	7.86	4. 9. 10. 4.	Z Z Z Z

I SBLK 02

# SEMIVOLATILE ORGANICS ANALYSIS UNITH SHEET

Contract: Lab Name: INTECH

I SBLK MS

SDG No .: 560-1

Lab Code: INTECH Case No.: 10202 SAS No.:

Lab Sample ID: SBLK-QM769MS Matrix: [soil/water] WATER -

Lab File ID: >B2023 Sample wt/vol: 1000 [g/mL] ML

Date Received: 10/30/92 Level: [low/med] LOW

Date Extracted: 11/02/92 % Moisture: decanted: (Y/N) N

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/92

Dilution Factor: 1 Injection Volume: 2 uL

pH: GPC Cleanup: [Y/N] N

CONCENTRATION UNITS:

C	AS NO.	COMPOUND	ug/L or ug/Kg1 UG	5. 	<u> </u>		
!	108-95-2	Phenol	1	60	1	İ	
	111 44-4	bis(2-chloroethyl	ether !	10	IU		
1	05 57-9	2-Chlorophenol	<u> </u>	57	ใบ	1	,
1	E 41 - 73 - 1	1,3-Dichlorobenze	ne !	10		12.7-7	
	104 /4-7	1,4-Dichlorobenze	ne !	32	3	1	
!	100-40-/	1,2-Dichlorobenze	ne <sup>1</sup>	10	IU	i	
!	40 7		•	10	IU		
1	95-48-/	2,2'-oxybis(1-Chl	oropropane)	10	IU		
t	108-60-1	4 Makhulphanol	1	10	IU	1	
l	106-44-5	4-Methylphenol N-Nitroso-di-n-pr	opulamine 1	34	ı	1	
1	621-64-/	Laurah laraethané	1	10	10	1	
1	67-72-1	Hexachloroethane	1	10	IU	ļ	
1	98-95-3	Nitrobenzene	1	10	IU	1	
1	78-59-1	Isophorone	1	10	IU	1	
1	88-75-5	2-Nitrophenol	.1	10	IU	1	
1	105-67-9	2,4-Dimethylpheno	u)methane	10	IU	1	
1	111-91-1	2 4 Dieblorophens	1	10	IU	!	
1	120-83-2	2,4-Dichloropheno	inzene l	31	1	1	
i	120-82-1	1,2,4-Trichlorobe	1	10	IU	ı	
1	91-20-3	Naphthalene	1	10	١U	ı	
1	106-47-8	4-Chloroaniline	ne l	10	IU	1	
ł	87-68-3	Hexachlorobutadio	Inhangi I	. 61	1	1	
١	59-50-7	4-Chloro-3-methy	ne l	10	IU	1	
1	91-57-6	2-Methylnaphthal	entadiene	10	IU	ŀ	
1	77-47-8	Hexachlorocyclop	nanol I	10	IU	i	
1	88-06-2	2,4,6-Trichlorop		25	IU	1	
- 1	95-95-4	2,4,5-Trichlorop	neno:	10	IU	1	
1	91-58-7-	2-Chloronaphthal	ene ;	25	IU	1	
1	88-74-4-	2-Nitroaniline	_ i	10	IU	1	
1	131-11-3-	Dimethylphthalat	5 1	1	١J	·1	
1	208-96-8-	Acenaphthylene	;	10	IU	I	
1	606-20-2-	2,6-Dinitrotolue	ne '	25	ΙŪ	t	
1	99-09-2-	3-Nitroaniline	j	33	ı	1 5.6	2
1	83-32-9-	Acenaphthene	i	, ,	i		J

SEMIUOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: INTECH Contract:

I SBLK MS

Lab Code: INTECH Case No.: [[202 SAS No.: SDG No.: SDG No.:

Matrix: [soil/water] WATER Lab Sample ID: SBLK-QM769MS

Sample wt/vol: 1000 [q/mL] ML Lab File ID: >82023

Level: [low/med] LOW Date Received: 10/30/92

% Moisture: decanted: (Y/N) N Date Extracted: 11/02/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] N pH:

CONCENTRATION UNITS:

CAS NO. COMPOUND [ug/L or ug/Kg] UG/L (

LAS NU.	COMPOUND (u	g/L or i	ug/Kg] (	JG/L	(	1
			1		ı	
51-28-5	2,4-Dinitrophenol		I	25	ΙU	1
100-02-7	4-Nitrophenol		1	76	1	1
132-64-9	Dibenzofuran		1	10	IU	1
121-14-2	2,4-Dinitrotoluene		l	. 39	ı	1
84-73-7	Diethylphthalate		I	10	ΙU	1
7005-72-3	4-Chlorophenyl-phen	ylether	1	10	ΙU	(
86-73-7	Fluorene		I	10	IU	{
	4-Nitroaniline	•	1	25	IU	1
534-52-1	4,6-Dinitro-2-methy	lphenol	1	25	IU	1
86-30-6	N-Nitrosodiphenylam	ine	i	10	IU	(
101-55-3	4-Bromophenyl-pheny	lether	1	10	ΙU	1
118-74-1	Hexachlorobenzene	·	1	10	IU	1
87-86-5	Pentachlorophenol		1.	84	1	ΕI
85-01-8	Phenanthrene	•	l	10	ΙU	1
120-12-7	Anthracene		1	10	10	1
	Carbazole		f	. 10	IU	1
84-74-2	Di-n-butylphthalate		ı	10	IU	
206-44-0	Fluoranthene	•	1	10	IU	ı
129-00-0	Pyrene		1	33	1	i
85-68- <i>7</i> -	Butylbenzylphthalati	9	1	10	ΙU	ı
91-94-1	3,3'-Dichlorobenzid	ine	1	10	IU	ı
56-55-3	Benzo(a)anthracene		i	10	ΙU	1
218-01-9	Chrysene		1	10	IU	1
117-81-7	bis(2-Ethylhexyl)ph	thalate	1	10	ΙU	1
117-84-0	Di-n-octvlphthalate		1	10	ΙU	1
205-99-2	Benzo(b)fluoranthen	9	1	10	IU	1
207-08-9	Benzo(k)fluoranthan	9	1	10	ΙU	1
フリー32-8	Benzo(a)purene		1	10	ΙŪ	Ì
172-39-5	Indeno (1.2.3-cd) puri	ene	1	10	ΙŪ	į
フノー/Uークーーー	Dibenz(a.h)anthrace:	20	1	10	iù	i
191-24-2	Benzo(g,h,i)perylen	8	1	10	ίŪ	i
	<u> </u>		1		. —	:

GROUNDWATER ANALYSIS (TOTAL METALS)
(ROUND I)

#### CASE NARRATIVE FOR INORGANICS (NYASP)

ALL THE SAMPLES WERE SUBBED OUT TO CHEMTECH CONSULTING GROUP FOR ANALYSIS OF METALS-TOTAL Lab Name: CHEMTECH

Client: VERSAR ENV. Project: Figgie-Scott Aviation

Job No.: I210202 CASE No.: 10202 SDG No.: MW-1(UF)

The following samples are included in this Sample Delivery Group:

CHEMTECH ID Client ID on forms SW-1 SW-1D 5685**S2** SW-1S 5686DS SW-2 5687S SW-3 5688S 5689S MW-1 MW-2 5690S MW-3 5691S MW-4 5692S MW-5 5693S

5695S IT-1 5696S FIELDBLANK1 5697S FIELDBLANK2 5698S FIELDBLANK3

5694S

MW-6

Detailed Documentation of Problems Encountered With These Samples

- General:
  1. The above liquid samples were analyzed for METALS-TPTAL.
- 2. Please note that the client sample number with the sample description (identification) is too many characters, therefore as per the software being used only limited characters can be used for EPA sample number. Never-the-less for the cross reference check the Lab sample ID. with Client ID. is listed above on this case narrative.
  - Please be advised that using the Software for data processing of CLP Inorganic Packages, the software is designed to accomodate one SDG at a time made of twenty samples or less of the same matrix.
  - The Inorganic CLP data package contains respectively in this order: Case Narrative followed by: forms, ICAP raw data, Furnace raw data, Mercury raw data, and finally the last part is General (samples preparation log, Chain-of-Custody, sample log-in sheet).

EPA SAMPLE NO.

FIELDBLANK1

Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Code: CHEM

Case No.: 10202

SAS No.:

SDG No.: MW-1(UF)

trix (soil/water): WATER

Lab Sample ID: 5696S

/el (low/med):

LOW

Date Received: 11/03/92

Solids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

-							_
	CAS No.	Analyte	Concentration	C	Q	М	Ī
•	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2	Analyte  Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium	100 40.0 2.0 11.0 1.0 4.0 310 9.0 7.0 20.0 18.0 2.0 18.0 0.20 16.0 900 3.0 7.0 330 4.0	מממממממממממממממממ. ט	Q		
	7440-62-2 7440-66-6	Vanadium Zinc	16.0 5.0	משט	₩ .	FPF	
		Cyanide	5.0	U		P NR	

or Before: COLORLESS

Clarity Before: CLEAR

Texture:

or After: COLORLESS

Clarity After: CLEAR

Artifacts:

ments:

FORM I - IN

「中央の大型に対象性を表現している。
「中央の大型を表現を表現している。
「中央の大型を表現している。

ILM02.1

EPA SAMPLE NO.

FIELDBLANK2

EMTECH CONSULTING GROUP Contract: 68D20041

EM

Case No.: 10202 SAS No.:

SDG No.: MW-1(UF)

/water): WATER

Lab Sample ID: 5697S

ed): LOW

Date Received: 11/03/92

/0.0

oncentration Units (ug/L or mg/Kg dry weight): UG/L

7440-02-0 Nickel 16.0 U A POTANTIAL 16.0 U A POTANT	-							
7440-36-0		CAS No.	Analyte	Concentration	С	Q	М	
7439-96-5 Manganese Mercury 0.20 U CV P Oxider Nickel 16.0 U P Oxider Nickel 900 U A F Oxider Nickel 7440-09-7 Potassium Selenium 3.0 U F Oxider Nickel 740-22-4 Silver 7.0 U P Oxider Nickel 740-23-5 Sodium 7440-68-6 Thallium Vanadium 7440-66-6 Zinc 16.0 U P P P P Oxider Nickel 16.0 U P P P P P P P P P P P P P P P P P P		7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead	100 40.0 2.0 11.0 1.6 4.0 310 9.0 7.0 20.0 18.0 2.0	ם מעטעמעמעטעט מ	Q	P P F P P P P P P F	
Cyanide		7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-62-2	Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium	4.0 0.20 16.0 900 3.0 7.0 388 4.0 16.0	UUUUUUBUU BUU	w	P CV P A F P P F P	

	•	C	n	T.	$\overline{}$	D	T.	r	C	C	
•	Ξ.	<b>L</b> _I	u	L	u	ĸ	Ŀ	Ŀ	3	0	

Clarity Before: CLEAR

Texture:

COLORLESS

Clarity After: CLEAR

Artifacts:

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000003

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EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

FIELDBLANK3

Code: CHEM

Case No.: |0202

SAS No.:

SDG No.: MW-1(UF)

rix (soil/water): WATER

Lab Sample ID: 5698S

rel (low/med):

LOW

Date Received: 11/03/92

olids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

•							
	CAS No.	Analyte	Concentration	С	C Q		1
	7429-90-5	Aluminum	100	ប	l	-  <del>p</del> -	۱.
	7440-36-0	Antimony	40.0	Ŭ	ļ	P	Į
	7440-38-2	Arsenic	2.0	υ		F	ı
	7440-39-3	Barium	11.0	Ü		P	ı
Ì	7440-41-7	Beryllium	1.0	U	ľ	P	Į
	7440-43-9	Cadmium	4.0	Ŭ	٠.,	P	1
ļ	7440-70-2	Calcium	310	Ü	}	P	ı
ļ	7440-47-3	Chromium	9.0	Ŭ	·	P	1
1	7440-48-4	Cobalt	7.0	บ		P	I
ı	7440-50-8	Copper	20.0	Ū		P	l
١	7439-89-6	Iron	18.0	บ		P	I
1	7439-92-1	Lead	2.0	Ü		F	l
ł	7439-95-4	Magnesium	185	Ū		P	ı
ı	7439-96-5	Manganese	4.0	U		P	I
1	7439-97-6	Mercury	0.20	U		CV	ı
ł	7440-02-0	Nickel	16.0	U		P	l
ı		Potassium	900	U		Ā	l
١	7782-49-2	Selenium	3.0	U		F	l
ı	7440-22-4	Silver	7.0	U	ı	P	ŀ
١	7440-23-5	Sodium	330	U		P	l
I	7440-28-0	Thallium	4.0	U	W	F	ı
I	7440-62-2	Vanadium	16.0	บ		P	
۱	7440-66-6	Zinc	5.0	U		P	l
١		Cyanide				NR	
l							

r	ser	ore	: C	OLO	RLESS
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Clarity Before: CLEAR

or After: COLORLESS

Clarity After: CLEAR

Artifacts:

ents:

FORM I - IN

ILM02.1

EPA SAMPLE NO.

IT-1
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Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

b Code: CHEM

Case No.:  $|^{\sigma 2^{\sigma 2}}$  SAS No.:

SDG No.: MW-1(UF)

trix (soil/water): WATER

Lab Sample ID: 5695S

vel (low/med):

LOW

Date Received: 11/03/92

Solids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

<del></del>	<del></del>				
CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	100	ប		P
7440-36-0	Antimony	40.0	บ		P
7440-38-2	Arsenic	20.0	U	w	F
7440-39-3	Barium	309	اٽا	**	P
7440-41-7	Beryllium	1.0	В		P
7440-43-9	Cadmium	4.0	บ		P
7440-70-2	Calcium	261000	۱۱		P
7440-47-3	Chromium	9.0	ט		P
7440-48-4	Cobalt	7.0	Ū		$ \hat{\mathbf{p}} $
7440-50-8	Copper	57.8	Ĭ		P
7439-89-6	Iron	28300		·	P
7439-92-1	Lead	25.9		s	F
7439-95-4	Magnesium	61300	H		P
7439-96-5	Manganese	2070			P
7439-97-6	Mercury	0.20	บ		cv
7440-02-0	Nickel	37.1	В		P
7440-09-7	Potassium	· 2780	В		A
7782-49-2	Selenium	30.0	Ū	W	F
7440-22-4	Silver	7.0	Ū		P
7440-23-5	Sodium	51600			P
7440-28-0	Thallium	4.0	บ	W	F
7440-62-2	Vanadium	16.0	U		$ \mathbf{P} $
7440-66-6	Zinc	98.9	Ī		P
	Cyanide				NR
	_				`
. ————	1				1 I

.or	Before:	YELLOW	Clarity	Before:	CLEAR	Texture:
.or	After:	COLORLESS	Clarity	After:	CLEAR	Artifacts:
mei	nts:		•	•		•

FORM I - IN

ILM02.1

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

ab Code: CHEM

Case No.: 10202

SAS No.:

SDG No.: MW-1(UF)

atrix (soil/water): WATER

Lab Sample ID: 5689S

evel (low/med):

LOW

Date Received: 11/03/92

Solids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

-	<del></del>					
	CAS No.	Analyte	Concentration	С	Q	М
	7429-90-5	Aluminum	12700	-	<del></del>	P
	7440-36-0	Antimony	40.0	וז	1	P
	7440-38-2	Arsenic	. 20.0	Ü	W	F
	7440-39-3	Barium	422	١	''	P
i	7440-41-7	Beryllium	1.0	บ		P
	7440-43-9	Cadmium	4.0	ŭ		P
	7440-70-2	Calcium	514000			P
	7440-47-3	Chromium	20.0			P
	7440-48-4	Cobalt	21.5	В		P
	7440-50-8	Copper	161			P
	7439-89-6	Iron	35200			P
	7439-92-1	Lead	20.0	U		F
ļ	7439-95-4	Magnesium	152000			P
i	7439-96-5	Manganese	1210			P
	7439-97-6	Mercury	0.20	U		cv
1	7440-02-0	Nickel	55.1			P
	7440-09-7	Potassium	4980	В		À
١	7782-49-2	Selenium	30.0	Ū	Ε .	F
ı	7440-22-4	Silver	7.0	Ū	_	P
ı	7440-23-5	Sodium	27000	Ĭ		P
ı	7440-28-0	Thallium	40.0	U		F
1	7440-62-2	Vanadium	43.1	В		P
١	7440-66-6	Zinc	292			p
ı		Cyanide		Į		NR
1				l		***
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nme	nts:		·		•		
	•				CDIIII	ALCITACES:	
lor	After:	COLORLESS	Clarity	After:	CLEAR	Artifacts:	
ror	Before:	GRAY	Clarity	Before:	CLOUDY	Texture:	

ILM02.1

EPA SAMPLE NO.

MW-2		
	•	

mme: CHEMTECH CONSULTING GROUP Contract: 68D20041

lode: CHEM

Case No.: | V2V2 SAS No.: SDG No.: MW-1(UF)

ix (soil/water): WATER

Lab Sample ID: 5690S

l (low/med):

LOW

Date Received: 11/03/92

lids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	2610	-		P
7440-36-0	Antimony	40.0	U		P
7440-38-2	Arsenic	' 2.0	U	W	F
7440-39-3	Barium	. 290			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	4.8	В		P
7440-70-2	Calcium	152000			P
7440-47-3	Chromium	9.0	U		P
7440-48-4	Cobalt	11.2	В		P
7440-50-8	Copper	75.4			P
7439-89-6	Iron	18400			P
7439-92-1	Lead	2.0	U	s	F
7439-95-4	Magnesium	87700		1	P
7439-96-5	Manganese	1380	l	}	P
7439-97-6	Mercury	0.20	U	1	CV
7440-02-0	Nickel	68.5			P
7440-09-7	Potassium	1800	В	1	Α
7782-49-2	Selenium	3.0	U	W	F
7440-22-4	Silver	7.0	U	ļ	P
7440-23-5	Sodium	43300			P
7440-28-0	Thallium	4.0	U		F
7440-62-2	Vanadium	16.0	U	1	P
7440-62-2	Zinc	232		1	P
1,440	Cyanide		1	}	NR
	7 42	1	1	1	1

r	Berore:	GRAY		Claricy	perore.	CHOODI	2011011201	
·r	After:	COLORLESS		Clarity	After:	CLEAR	Artifacts:	
le:	nts:		:	•				
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FORM I - IN

ILM02.1

						MM-3
Name:	CHEMTECH	CONSULTING	GROUP	Contract:	68D20041	l

b Code: CHEM Case No.: \dlv2 SAS No.: SDG No.: MW-1(UF)

trix (soil/water): WATER Lab Sample ID: 5691S

vel (low/med): LOW Date Received: 11/03/92

Solids: \( \sqrt{0.0} \)

Concentration Units (ug/L or mg/Kg dry weight): UG/L

···	,				1
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	727	-		P
7440-36-0	Antimony	40.0	U		P
7440-38-2	Arsenic	. 3.9	В	W	F
7440-39-3	Barium	101	В		P
7440-41-7	Beryllium	1.0	В		P
7440-43-9	Cadmium	4.0	บ		P
7440-70-2	Calcium	44200		١.	P
7440-47-3	Chromium	9.0	U		P
7440-48-4	Cobalt	7.0	U		P
7440-50-8	Copper	53.5			P
7439-89-6	Iron	1690			P
7439-92-1	Lead	2.0	U		F
7439-95-4	Magnesium	43400			P
7439-96-5	Manganese	80.9			P
7439-97-6	Mercury	0.20	U	1	CV
7440-02-0	Nickel	16.0	U		P
7440-09-7	Potassium	1370	В	ł	A
7782-49-2	Selenium	30.0	U	W	F
7440-22-4	Silver	7.0	U	Ì	P
7440-23-5	Sodium	37000			P
7440-28-0	Thallium	. 4.0	U		F
7440-62-2	Vanadium	16.0	U		P
7440-66-6	Zinc	71.1			P
	Cyanide				NR
	-		_		.1
		·			

olor	Before:	COLORLESS	Clarity	Before:	CLEAR	Texture:	
lor	After:	COLORLESS	_	After:	CLEAR	Artifacts:	
mmer	nts:		• <i>•</i>				
	·						•

FORM I - IN

ILM02.1

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

MW-4

b Code: CHEM

Case No.: | v202 SAS No.:

SDG No.: MW-1(UF)

trix (soil/water): WATER

Lab Sample ID: 5692S

vel (low/med): LOW

Date Received: 11/03/92

Solids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

	1		,		
CAS No.	Analyte	Concentration	c	Q	М
7429-90-5 7440-36-0 7440-38-2	Aluminum Antimony Arsenic	670 40.0 5.1	U B		P P
7440-39-3 7440-41-7 7440-43-9	Barium Beryllium Cadmium	219 . 1.0 4.0	B		F P P
7440-47-3 7440-48-4	Calcium Chromium Cobalt	51600 9.0 7.0	U		P P P
7440-50-8 7439-89-6 7439-92-1	Copper Iron Lead	55.5 1640 2.0	U	S	PPF
7439-95-4 7439-96-5 7439-97-6	Magnesium Manganese Mercury	62500 87.1 0.20	U		P P CV
	Nickel Potassium Selenium	117 2740 30.0	B U	Ŵ	P A F
7440-23-5 7440-28-0	Silver Sodium Thallium	7.0 35300 · 4.0	ט ט		P P F
7440-66-6	Vanadium Zinc Cyanide	16.0 70.8	U		P P NR
li	l.		_1		

r Before: COLORLESS

Clarity Before: CLEAR

Texture:

r After: COLORLESS

Clarity After: CLEAR

Artifacts:

ents:

FORM I - IN

ILM02.1

EPA SAMPLE NO.

SW-2

Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

b Code: CHEM Case No.: | 0202 SAS No.:

SDG No.: MW-1(UF)

trix (soil/water): WATER

or Before: COLORLESS

Lab Sample ID: 5687S

vel (low/med):

LOW

Date Received: 11/03/92

Solids:

**\_0.0** 

Concentration Units (ug/L or mg/Kg dry weight): UG/L

	<del></del>				 
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	100	Ū		 P
7440-36-0	Antimony	40.0	Ū		P
7440-38-2	Arsenic	4.4	В	W	F
7440-39-3	Barium	18.6	В	••	P
7440-41-7	Beryllium	1.0	Ū		P
7440-43-9	Cadmium	4.0	Ü		P
7440-70-2	Calcium	38900			P
7440-47-3	Chromium	9.0	U		P
7440-48-4	Cobalt	7.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	349			P
7439-92-1	Lead	2.0	บ	W	F
7439-95-4	Magnesium	14400			P
7439-96-5	Manganese	68.4			P
7439-97-6	Mercury	0.20	บ		CV
7440-02-0	Nickel	16.0	U		P
7440-09-7	Potassium	1450	В		Α
7782-49-2	Selenium	3.0	U	W	F
7440-22-4	Silver	7.0	บ		P
7440-23-5	Sodium	12000			P
7440-28-0	Thallium	. 4.0	บ	W	F
7440-62-2	Vanadium	16.0	บ		P
7440-66-6	Zinc	7.3	В		P
	Cyanide				NR
1	l	l <u></u>	ا ـــ ا		 

Clarity Before: CLEAR Texture: or After: COLORLESS Clarity After: CLEAR Artifacts: ments:

FORM I - IN

ILM02.1

EPA SAMPLE NO.

SW-3
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b Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

b Code: CHEM

Case No.: ) 202 SAS No.: SDG No.: MW-1(UF)

trix (soil/water): WATER

Lab Sample ID: 5688S

:vel (low/med):

Date Received: 11/03/92

Solids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	100	Ū		P
7440-36-0	Antimony	40.0	Ū		P
7440-38-2	Arsenic	4.1	В	W	F
7440-39-3	Barium	18.6	В	**	P
7440-41-7	Beryllium	1.0	Ū		P
7440-43-9	Cadmium	4.0	U		P
7440-70-2	Calcium	40400			P
7440-47-3	Chromium	9.0	บ		P
7440-48-4	Cobalt	7.0	ប		P
7440-50-8	Copper	20.0	บ		P
7439-89-6	Iron	346			P
7439-92-1	Lead	2.0	U	W	F
7439-95-4	Magnesium	14800			P
7439-96-5	Manganese	51.3			P
7439-97-6	Mercury	0.20	U	ļ	CV
7440-02-0	Nickel	16.0	U	ł	P
7440-09-7	Potassium	1450	В	ł	A
7782-49-2	Selenium	30.0	U	W	F
7440-22-4	Silver	7.0	U		P
7440-23-5	Sodium	12100	ļ		P
7440-28-0	Thallium	4.0	U	W	F
7440-62-2	Vanadium	16.0	U		P
7440-66-6	Zinc	5.9	В		P
	Cyanide	<u> </u> '			NR
	l	l	<b> </b> _		.

Clarity Before: CLEAR

Texture:

lor After: COLORLESS

Clarity After: CLEAR

Artifacts:

mments:

FORM I - IN

ILM02.1

## SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

SW-1S

b Code: CHEM

Case No.: |0202

SAS No.:

SDG No.: MW-1(UF)

trix: WATER

Level (low/med): Low

Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

nalyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	М
uminum	75-125	2123.2000	100.0000	١ij	2000.00	105-0	_	
senic	75-125	531.2800	.40.0000		500.00	106.2	l	P
rium	75-125	36.9000	2.0000		40.00	106.3		P
	75-125	2065.9000	14.9000		2000.00	92.2		F
ryllium dmium	75-125	54.3300	1.0000	บี	50.00	102.6	1	P
lcium	75-125	55.4100	4.0000		50.00	108.7	[	P
romium	75 105		•		30.00	110.8		P
balt	75-125	201.3400	9.0000	וטו	200.00	100.7		NR
pper	75-125	516.9400		U	500.00	103.4		P
on	75-125	285.8500	20.0000	U	250.00	114.3		P
ad .	75-125	1340.0000	344.9300		1000.00	99.5		P P
nesium	75-125	21.5000		טו	20.00	107.5		F
nganese	75-125			- 1	20.00	107.5		NR
ccury	75-125	555.1100	51.2700	- 1	500.00	100.8		NK P
kel	75-125	0.9300	0.2000		1.00	93.0		CV
assium	75-125	503.2900	16.0000	וט	500.00	100.7		P
lenium	75-125			ı	333,00	100.7		NR
lver	75-125	9.4000	3.0000	U	10.00	94.0		F
lium	/3-125	42.5300	7.0000	U	50.00	85.1		P
illium	75-125					83.1		NR
adium	75-125	51.2000		U	50.00	102.4	- 1	F
1C	75-125	512.1300		В	500.00	98.6		P
inide	73-125	577.5500	5.0000	U	500.00	115.5		P
		1	i					NR

ıе	n	t	S	:

FORM V (Part 1) - IN

ILM02.1

# **DUPLICATES**

EPA SAMPLE NO.

ab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

SW-1D

Case No.: 10 202

SAS No.:

SDG No.: MW-1(UF)

atrix (soil/water): WATER

Level (low/med): LOW

Solids for Sample:

ab Code: CHEM

0.0

% Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S) C		Duplicate (D)		RPD	Q	M
Aluminum		100.0000 U	{		<u></u>		1	P
Antimony	i i	40.0000 U	П		U		1	P
Arsenic	i i	2.0000 U			U		1	F
Barium	1	14.9000 B	Н	<b></b>	В	17.1		P
Beryllium		1.0000 U	Ш		U	1	1	P
Cadmium		4.0000 U	П		U		1	P
Calcium		37708.0000	Н	37843.0000		0.4	1	P
Chromium		9.0000 0			U	1	1	P
Cobalt		7.0000 0		, , , , , ,	U	1	1	P.
Copper		20.0000 U	П	20.0000	וט	1		P
Iron	100.0	344.9300	Н	307.7500	- 1	11.4	1	P
Lead		2.0000 U	П	2.0000	U		i	F
Magnesium	5000.0	14285.0000	11	14321.0000	- 1	0.3	1	P
Manganese	15.0	51.2700	П	51.2700		0.0		P
Mercury		0.2000 U		0.2000			1	CV
Nickel		16.0000 U		16.0000	- 1			P
Potassium	}	900.0000 U		900.0000			1	A
Selenium	ł	3.0000 U		3.0000		1	1	F
Silver		7.0000 U	11	7.0000	U		1	P
Sodium	5000.0	12061.0000	П	12129.0000	ı	0.6	1	P
Thallium	1 ,	4.0000 U		4.0000		1	į	F
Vanadium		19.1400 B		16.0000		200.0		P
Zinc		5.0000 U		5.0000	U			P
Cyanide		· ·					l	NR
<u> </u>	ll	<u> </u>	.11		_	ll	_	.

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#### ICP SERIAL DILUTIONS

EPA SAMPLE NO.

SW-1L

ab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

ab Code: CHEM

Case No.: SAS No.:

SDG No.: MW-1(UF)

atrix (soil/water): WATER

Level (low/med): LOW

Concentration Units: ug/L

<del></del>			Serial		1 1		
	Twitiel Comple	1	Dilution	- 1	Differ-	1 1	
3	Initial Sample Result (I)	cl	Result (S)	cl	ence	Q	M
Analyte	Result (1)	٦,	Result (s)			~	
Aluminum	100.00	┰╽.	500.00	וטו		1-	P
		บ่	200.00	υl	1	1	P
Antimony Arsenic	40.00	٦I			1		NR
Barium	14.90	в	55.00	บไ	100.0	1	P
		וט	5.00	וטו		1	P
Beryllium		U	20.00	บไ		1	P
Cadmium	37708.00	٦,	36613.00		2.9	1	P
Calcium		וט	45.00	וטו		1	P
Chromium	, , , , , , , , , , , , , , , , , , , ,	υl	35.00	υl		ł	P
Cobalt		ŭΙ	100.00	U	] ]		P
Copper	344.93	۲l	230.80	В	33.1		P
Iron	344.93	1				1	NR
Lead	14285.00	- 1	13592.00	В	4.9	1	P
Magnesium	51.27	- 1	53.40		4.2		P
Manganese	51.2/				1	. 1	NR
Mercury	16.00	ט	80.00	וטו		1	P
Nickel Potassium	10.00	٦				1	NR
Selenium	j	ı	i	1 1			NR
Silver	7.00	ul	35.00	U			P
	12061.00		11521.00		4.5		P
Sodium	12061.00			-		Ш	NR
Thallium	19.14	В	80.00	บ	100.0	Ш	P
Vanadium	5.00	<del> </del>	25.00			11	P
Zinc	5.00	۱۲۱	1	ľ		H	
l		I I		. 1	1 1	1 1	. 1

WATER PESTICIDE ORGANIC ANALYSIS (ROUND I)

Name: INTECH

Contract:

Code: INTECH

Case No.: 10202

SAS No.

SDG No. SW-1

Column(1):RTX1701 ID:0.53

(mm)

GC Column(2):RTX5

ID: 0.53

											·
NYSDEC	ITCX	1	TCX	2	DCB	1	LDCB	2		IOTHER	TOTI
	1%REC	# 1	%REC	#!	%REC	#	1%REC	#	(1)	(2)	TUUTT
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BLK02	63	- 1	57	*	76	1	l 73	ļ	İ	1	1 1 1
BLK02MSB1	1 73	1	71		89		1 89			1	1 0 1
BLK02MSB2	1 67	(	63		1 8,7		I 87			1	1 0 1
B-2	1 59	*	56	*	104		1 110		i	1	1 2 1
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	·		<u>'</u>		<u> </u>		;		1	·	-

ADVISORY

QC LIMITS

TCX = Tetrachloro-m-xylene

(60-150)

DCB = Decachlorobiphenyl

(60-150)

# Column to be used to flag recovery values
\* Values outside of QC limits

D Surrogate diluted out

IFB-2

## 1D

### PESTICIDE ORGANIC ANALYSIS DATA SHEET

Contract: INTECH 5DG No .: SW-1 SAS No.: INTECH CASE No .: 10202 . ode: Lab Sample ID: 20215 x: (soil/water) WATER e wt/vol: 1000 /(g/ml) ML Lab File ID: >C5873 Date Received: 10/31/92 decanted: (Y/N) N sture: 11/05/92 Date Extracted: (SepF/Cont/Sonc) SEPF ction: Date Analyzed: 11/20/92 ntrated Extract Volume: 10000 (uL) Dilution Factor: tion Volume: 2 (uL) Sulfur Cleanup: (Y/N) N pH: leanup: (Y/N) NCONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q COMPOUND CAS NO. .0501U 19-84-6-----alpha-BHC .05010 19-85-7-----beta-BHC .050 IU 19-86-8-----delta-BHC .050IU  $^{\prime}\!\!\!B$  – 89 – 9 – – – – – – gamma – BHC (Lindane) .050 IU .6-44-8------Heptachlor .0501U 09-00-2----Aldrin .0501U 024-57-3----Heptachlor epoxide .050 IU 59-98-8-----Endosulfan I .101U 0-57-1-----Dieldrin .1010 '2-55-9-----4,4'-DDE .10 IU 2-20-8-----Endrin .10IU ·3213-65-9----Endosulfan II .1010 2-54-8-----4,4'-DDD .1010 031-07-8----Endosulfan sulfate .101U 0-29-3----4,4'-DDT .50IU '2-43-5-----Methoxychlor .10IU 3494-70-5----Endrin ketone .10 IU '421-36-3----Endrin aldehyde .05010 103-71-9----alpha-Chlordane .0501U 103-74-2----gamma-Chlordane 5.01U 001-35-2----Toxaphene 1.0 IU 2674-11-2----Aroclor 1016 2.01U .1104-28-2----Araclar 1221 1141-16-5----Araclar 1232 3469-21-9----Araclar 1242 1.010 1.010 1.010 2672-29-6----Aroclor 1248 1.0IU 2097-69-1----Araclar 1254 1.0IU 1096-82-5----Araclar 1260

# 1D -

#### PESTICIDE ORGANIC ANALYSIS DATA SHEET

IPBLK02 Contract: Name: INTECH SDG No.: SW-1 SAS No.: INTECH CASE No .: 10202 Code: Lab Sample ID: 208-BLK ix: (soil/water) WATER le wt/vol: 1000 /g/ml) ML Lab File ID: >C5867 Date Received: decanted: (Y/N) N isture: Date Extracted: 11/05/92 action: (SepF/Cont/Sonc) SEPF entrated Extract Volume: 10000 (uL) Date Analyzed: 11/20/92 Dilution Factor: 1 2 (uL) ction Volume: Sulfur Cleanup: (Y/N) N pH: Cleanup: (Y/N) N CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q CAS NO. COMPOUND .050 IU 319-84-6----alpha-BHC .050 IU 319-85-7-----beta-BHC .0501U 319-86-8-----delta-BHC .0501U 58-89-9-----gamma-BHC (Lindane) 76-44-8-----Heptachlor .0501U .0501U 309-00-2----Aldrin .050 IU 1024-57-3----Heptachlor epoxide .0501U 959-98-8-----Endosulfan I .10 IU 60-57-1-----Dieldrin .1010 72-55-9-----4,4'-DDE . 10 IU 72-20-8-----Endrin .10 IU 33213-65-9----Endosulfan II 72-54-8-----4,4'-DDD .1010 .1010 1031-07-8----Endosulfan sulfate .10 IU 50-29-3----4,4'-DDT .50 IU 72-43-5-----Methoxychlor .10 IU 53494-70-5----Endrin ketoné .1010 7421-36-3-----Endrin aldehyde .05010 5103-71-9-----alpha-Chlordane .050IU 5103-74-2----gamma-Chlordane 5.0IU 8001-35-2----Toxaphene 1 1.0IU 12674-11-2----Aroclar 1016. 2.010 11104-28-2----Aroclor 1221 1.010 11141-16-5----Aroclar 1232 1.010 53469-21-9----Aroclor 1242 12672-29-6----Aroclor 1248 1.010 1.010 12097-69-1----Aroclor 1254 1.0IU 11096-82-5----Araclar 1260

10 -

#### PESTICIDE ORGANIC ANALYSIS DATA SHEET

IPBLK02MSB1 Contract: INTECH Name: SAS No.: SDG No.: SW-1 INTECH CASE No .: 10202 . Code: Lab Sample ID: 208-BLKMSB1 -ix: (soil/water) WATER le wt/vol: 1000 /g/ml) ML Lab File ID: >C5868 decanted: (Y/N) N Date Received: isture: Date Extracted: 11/05/92 action: (SepF/Cont/Sonc) SEPF 11/20/92 entrated Extract Volume: Date Analyzed: 10000 (uL) .Dilution Factor: ction Volume: 2 (uL) Sulfur Cleanup: (Y/N) N Cleanup: (Y/N) N pH: CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q COMPOUND CAS NO. .050 IU 319-84-6----alpha-BHC .05010 319-85-7-----beta-BHC .0501U 319-86-8-----delta-BHC .411 58-89-9-----gamma-BHC (Lindane) .0481 J 76-44-8-----Heptachlor .411 309-00-2----Aldrin .0501U 1024-57-3-----Heptachlor epoxide .05010 959-98-8-----Endosulfan I .871 60-57-1-----Dieldrin .10IU 72-55-9-----4,4'-DDE 72-20-8-----Endrin .841 33213-65-9----Endosulfan II .1010 .1010 72-54-8-----4,4'-DDD .10 IU 1031-07-8----Endosulfan sulfate 50-29-3-----4,4'-DDT .761 .5010 72-43-5-----Methoxychlor 53494-70-5----Endrin ketone .1010 7421-36-3----Endrin aldehyde .10IU 5103-71-9----alpha-Chlordane .050 IU 5103-74-2----gamma-Chlordane .05010 5.01U 8001-35-2----Toxaphene 1 12674-11-2----Araclar 1016 1.0IU 11104-28-2----Aroclor 1221 2.0IU 11141-16-5----Aroclor 1232 1.0 IU 53469-21-9----Aroclar 1242 1.0 IU 12672-29-6----Aroclor 1248 1.0IU 3 12097-69-1----Aroclar 1254 1.0 IU 1.0IU 1096-82-5----Aroclor 1260

# 1D. PESTICIDE ORGANIC ANALYSIS DATA SHEET

IPBLK02MSB2 INTECH Contract: Name: SAS No.: Code: INTECH CASE No . : 10202 SDG No.:SW-1 ix: (soil/water) WATER Lab Sample ID: 208-BLKMSB2 le wt/vol: 1000 /g/ml) ML Lab File ID: >C5869 isture: decanted: (Y/N) N Date Received: action: (SepF/Cont/Sonc) SEPF Date Extracted: 11/05/92 entrated Extract Volume: 10000 (uL) Date Analyzed: 11/20/92 ction Volume: 2 (uL) Dilution Factor: 1 Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q .050 IU 319-84-6-----alpha-BHC 319-85-7-----beta-BHC . 050 10 319-86-8-----delta-BHC .050IU 58-89-9-----gamma-BHC (Lindane) .381 76-44-8-----Heptachlor .0371 J 309-00-2----Aldrin .3911024-57-3-----Heptachlor epoxide .050 IU 959-98-8-----Endosulfan [ .050 IU 60-57-1-----Dieldrin .841 72-55-9----4,4'-DDE .1010 72-20-8-----Endrin .811 33213-65-9----Endosulfan II .1010 72-54-8-----4,4'-DDD .10IU 1031-07-8----Endosulfan sulfate .10 IU 50-29-3-----4,4'-DDT .721 72-43-5-----Methoxychlor .50IU 53494-70-5----Endrin ketone .10 IU 7421-36-3-----Endrin aldehyde .10 IU 5103-71-9-----alpha-Chlordane .050 IU 5103-74-2----gamma-Chlordane .0501U 8001-35-2----Toxaphene 5.0IU 1 -12674-11-2----Aroclor 1016 1.010 11104-28-2----Aroclor 1221 2.01U 11141-16-5----Aroclor 1232 1.010 53469-21-9----Aroclor 1242 1.010 12672-29-6----Aroclor 1248 1.010 12097-69-1----Aroclor 1254 1.010 11096-82-5----Aroclor 1260 1.0 IU

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

b Code: CHEM

Case No.: | 0202 SAS No.:

SDG No.: MW-1(UF)

trix (soil/water): WATER

Lab Sample ID: 5693S

vel (low/med):

LOW

Date Received: 11/03/92

Solids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

-	<del></del>	<del>,</del>	· · · · · · · · · · · · · · · · · · ·			
	CAS No.	Analyte	Concentration	С	Q	М
	7429-90-5	Aluminum	37100	-		$\left  \frac{1}{P} \right $
	7440-36-0	Antimony	40.0	ti		P
	7440-38-2	Arsenic	2.0	Ū		F
	7440-39-3	Barium	715			P
	7440-41-7	Beryllium	3.4	В		P
	7440-43-9	Cadmium	12.2	~	·	P
	7440-70-2	Calcium	1110000			P
į	7440-47-3	Chromium	109			P
	7440-48-4	Cobalt	51.6			P
	7440-50-8	Copper	249			P
	7439-89-6	Iron	106000			P
	7439-92-1	Lead	20.0	U	м	F
ĺ	7439-95-4	Magnesium	299000			P
	7439-96-5	Manganese	2950			P
	7439-97-6	Mercury	0.20	U		cv
	7440-02-0	Nickel	168			P
	7440-09-7	Potassium	5530			A
	7782-49-2	Selenium	30.0	U	MW	F
	7440-22-4	Silver	7.0	Ū		P
1	7440-23-5	Sodium	35900	_		P
	7440-28-0	Thallium	40.0	U		F
ı	7440-62-2	Vanadium	104			P
	7440-66-6	Zinc	473			P
1		Cyanide	-			NR
		-				`
•						

.OL	perore:	GRAI		Clarity	Reiore:	CLOUDY	Texture:
or	After:	COLORLESS		Clarity	After:	CLEAR	Artifacts:
mei	nts:		:	•			
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FORM I - IN

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#### INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6

b Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

ab Code: CHEM

Case No.: 1022 SAS No.:

SDG No.: MW-1(UF)

atrix (soil/water): WATER

Lab Sample ID: 5694S

evel (low/med):

LOW

Date Received: 11/03/92

Solids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

	CAS No.	Analyte	Concentration	С	Q	M
	7429-90-5	Aluminum	447	-		P
	7440-36-0	Antimony	40.0	U		P
	7440-38-2	Arsenic	. 5.8	В	S	F
	7440-39-3	Barium	139	В		P
	7440-41-7	Beryllium	1.6	В		P
	7440-43-9	Cadmium	4.0	U		P
	7440-70-2	Calcium	30200			P
	7440-47-3	Chromium	9.0	U		P
	7440-48-4	Cobalt	7.0	U		P
	7440-50-8	Copper	35.0		·	P
	7439-89-6	Iron	1130			P
	7439-92-1	Lead	2.0	บ	S	F
	7439-95-4	Magnesium	44400			P
	7439-96-5	Manganese	33.7			P
	7439-97-6	Mercury	0.20	U		CV
	7440-02-0	Nickel	16.0	U		P
	7440-09-7	Potassium	1490	В		A
	7782-49-2	Selenium	30.0	U	W	F
	7440-22-4	Silver	7.0	U		P
	7440-23-5	Sodium	30900			P
	7440-28-0	Thallium	4.0	U	W	F
	7440-62-2	Vanadium	16.0	U	ļ	P
	7440-66-6	Zinc	73.9		1	P
	1	Cyanide				NR
		Ţ.			<b>!</b>	<b>I</b>
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olor Before: COLORLESS		•	SS	F.S	15	OF	T	C:C	C	e :	2	O	f	6	B	lor	O
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Clarity Before: CLEAR Texture:

olor After: COLORLESS

Clarity After: CLEAR

Artifacts:

omments:

FORM I - IN

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## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

SW-1

b Code: CHEM

Case No.: /22/2

SAS No.:

SDG No.: MW-1(UF)

trix (soil/water): WATER

Lab Sample ID: 5684S

vel (low/med):

Date Received: 11/03/92

Solids:

/0.0

Concentration Units (ug/L or mg/Kg dry weight) ! UG/L

٠		T					
	CAS No.	Analyte	Concentration	c	Q	М	Ī
	7429-90-5	Aluminum	100	Ū	ļ <del></del> -	P	l
	7440-36-0	Antimony	40.0	U	<u> </u>	P	ĺ
	7440-38-2	Arsenic	2.0	lΰ	W	F	l
	7440-39-3	Barium	14.9	B	<b>''</b>	P	l
	7440-41-7	Beryllium		บ		P	ŀ
	7440-43-9	Cadmium	4.0	U		P	
Ĭ	7440-70-2	Calcium	37700	ا ۱		P	L
	7440-47-3	Chromium	9.0	บ		P	l
Ì	7440-48-4	Cobalt	7.0	Ū		P	ĺ
	7440-50-8	Copper	20.0	ŭ	'	P	l
	7439-89-6	Iron	345	۱۲		P	l
1	7439-92-1	Lead	2.0	וטו	W	F	
ı	7439-95-4	Magnesium	14300	۱۲	**	P	ı
	7439-96-5	Manganese	51.3	i i	l	P	İ
1	7439-97-6	Mercury	0.20	וט		CV	l
I	7440-02-0	Nickel	16.0	U		P	
I	7440-09-7	Potassium	900	U		A	
	7782-49-2	Selenium	3.0	Ü	W	F	ĺ
ĺ	7440-22-4	Silver	7.0	Ū	••	P	
I	7440-23-5	Sodium	12100	١		P	
I	7440-28-0	Thallium	4.0	U	w ·	F	
ı	7440-62-2	Vanadium	19.1	В	••	P	i
ı	7440-66-6	Zinc	5.0	υl		P	
I		Cyanide	2.0	٦		NR	
-		-		- 1		INK	
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or Before:	COLORLESS
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Clarity Before: CLEAR

Texture:

or After: COLORLESS

Clarity After: CLEAR

Artifacts:

ments:

FORM I - IN

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000012

SOIL ANALYSIS (VOCs)
(ROUND I)



INTECH BIOLABS DIVISION

DEC 16 1992

158 Tices Lane East Brunswick, New Jersey 08816 (908) 257-1050 Fax (908) 257-2790

#### CASE NARRATIVE FOR ORGANICS (NYASP)

Lab Name: INTECH

:

Client: VERSAR INC.

Project: Figgie-Scott Aviation

JOB No.: I210201

CASE No.

10201

SDG No. : SS-2

The following samples are included in this Sample Delivery

Group: LAB ID #	Client ID #	LAB ID #	CLIENT ID #
1210201-01 1210201-02 1210201-03 1210201-04 1210201-05 1210201-06 1210201-07 1210201-08 1210201-09 1210201-10	SS-2 SS-3 SS-4 SS-5 SS5 DUP SS-6 DDS-1 DDS-2 SB-1 SB-5B MS	1210201-12 1210201-13 1210201-14 1210201-15 1210201-16 1210201-17 1210201-18 1210201-19 1210201-20 1210201-21	SB-2 SB-3 SB-4 SB-5A SB-6 MW-6 SB-5C SB-5D SB5C DUP SB-5B
T21A2A1-11	SR→58 M5D		

Detailed Documentation of Problems Encountered With These

Samples General:

- Please note that the client sample number with the sample description (identification) is too many characters, therefore as per the software being used for Organics data processing only limited characters can be used for EPA sample number. Never-the-less for the cross reference check the Lab sample ID. with Client ID. is listed above on this case narrative.
- The EPA sample number in all the forms is the Client identification from the Chain-of-Custody, the last 6 characters (include dashes).

for this 59075 VERSAR ID : SS-2 as an example: SAMPLE ID : SS-2 sample on forms

On the run logs use the following lab identifications: - last 3 digits of the Intech job number followed by the sample number: an example Job No. 1210201 sample identification to be used on the run logs becomes 20118, 20120, 20121, etc. and also on some run logs as I210201-01, -02, -03 etc.

#### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

a

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-01

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3684

Level: [low/med] LOW Date Received: 10/30/92

% Moisture: 28.0 decanted (Y/N) Y Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	[ug/L or ug/Kg]	UGZKG	ч
	<del> </del>	I		1
74-87-3	Chloromethane	1	. 14	IU
74-83-9	Bromomethane	1	14	IU
	Vinyl Chloride	1	14	IU
	Chloroethane	l	14	IU
	Methylene Chlorid	e t	5	l JB
67-64-1		**	14.	IU
	Carbon Disulfide	· I	14	IU
	1,1-Dichloroethen	e I	14	١U
	1,1-Dichloroethan		14	IU
	1,2-Dichloraethen		14	IU
	Chloroform	1	14	ΙU
	1,2-Dichloroethan	e i	14	IU
	2-Butanone	l	14	IU
71-55-6	1,1,1-Trichloroet	hane I	14	IU
	Carbon Tetrachlor		14	IU
	Bromodichlorometh		14	IU
78-87-5	1,2-Dichloropropa	ine I	14	ΙU
	cis-1,3-Dichlorop		14	IU
	Trichĺoroethene	1	14	IU
	Dibromochlorometh	iane I	14	IU
	1,1,2-Trichloroet		14	IU
71-43-2		1	14	IU
	trans-1,3-Dichlor	opropene !	14	IU
	Bromoform	· ' ' !	. 14	IU
	4-Methyl-2-Pentar	ione I	14	IU
	2-Hexanone		14	IU
	Tetrachloroethene	1	14	IU
	1,1,2,2-Tetrachlo		14	IU
108-88-3		1	14	IU
	Chlorobenzene	1	14	IU
	Ethylbenzene	1	14	IU
100-42-5		. 1	14	IU
	Xylene (total)	1	14	IU

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i	SS-2	i
ı		-

NYSDEC SAMPLE NO.

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: I210201-01

Sample wt/vol: 5.0 (q/mL) G

Lab File ID: >C3684

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 28 not dec.

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

CONCENTRATION UNITS: Number TICs found: (ug/L or ug/Kg) UG/KG

	COMPOUND NAME		I EST. CONC. I	
		<del></del>		
	1	1	11	
	1	   		
		<u> </u>		
		I	 	
		1	II	

#### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

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•	1	SS-3	1

NYSDEC SAMPLE NO.

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL

Lab Sample ID: 1210201-02

Sample wt/vol: 5.0 [g/mL] G

Lab File ID: >C3685

Level: [low/med] LOW

Date Received: 10/30/92

% Moisture: 28.0 decanted (Y/N) Y Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor:

1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (ul

040 410	COMPOUND	CONCENTRA			. 0
CAS NO.	COMPOUND	[ug/L or (	ug/kgi u		<u> </u>
74 07 3	Chloromethane		1	14	1 1U
	Bromomethane		1	14	IU
	Vinyl Chlorid		i	14	
	Chloroethane	<b>C</b>	i	14	ĺÜ
	Methylene Chl	oride	i	5	i JB
	Acetone	01100	i	14	iu
	Carbon Disulf	ida	i	14	iŭ
	1,1-Dichloroe		1	14	iÜ
	1,1-Dichloroe		i	14	10
	1,2-Dichloroe		i	14	10
	Chloroform	thene (total)	i	14	ίŬ
	1,2-Dichloroe	thana	i	14	ίÜ
	1,2-bichiorde 2-Butanone	Clique	i	14	าเบ
	1,1,1-Trichlo		i	14	iu
	Carbon Tetrac		i	14	ίÜ
	Bromodichloro		i	14	10
	1,2-Dichlarap		i	14	IU
	cis-1,3-Dichl	•	i	14	10
	Trichloroethe		i	14	iU
	Dibromochloro		i	14	IU
	1,1,2-Trichlo		i	14	10
	Benzene	ruethane	i	14	IU
	trans-1,3-Dic	blanannanene	i	14	iU
	Bromoform	uro opropene	ì	14	ΙÜ
			i	14	ίŪ
	4-Methy1-2-Pe	ntanone	1	14	10
	2-Hexanone	hana	1	14	IU
	Tetrachloroet		1	14	IU
	1,1,2,2-Tetra Toluene	icu to Los tuans	1	14	10
	toluene Chlorobenzene		i i	14	10
	Ethylbenzene	•	i	14	10
	Styrene		i	14	10
	Styrene Xylene (total	`	i	14	10
1770-20-7	Valeue (fotal			17	

_		 	
1			
١	SS-3		
1			

NYSDEC SAMPLE NI

Lab Name: INTECH

Contract:

SDG	No.	:	SS-	2

Lab Code: INTECH Case No. 10201 SAS No.:

Lab Sample ID: I210201-02

Matrix: (soil/water) SOIL

Lab File ID: >C3685

Sample wt/vol: 5.0

(q/mL) G

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 28 not dec.

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Number TICs found:

CAS NUMBER	COMPOUND NAME	, ,, ,	   EST. CONC.    =======
			.   .
		l	
		!	
		! !	 
		1	!! !!
		!	11
		.	1
			1
1		1	

#### - 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO. 1 55-4

Lab Name: INTECH Contract:

SDG No.:SS-2

Lab Code: INTECH Case No.: 10201 SAS No.:

Matrix: [soil/water] SOIL

Lab Sample ID: I210201-03

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3720

Level: [low/med] LOW

Date Received: 10/30/92

% Moisture: 33.0 decanted (Y/N) Y

Date Analyzed: 11/06/92

GC Column:

PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (u

CONCENTRATION UNITS: [ug/L or ug/Kg] UG/KG

		CONCENTRALIC		
CAS NO.	COMPOUND	[ug/L or ug/	/Kg] UG/KG	Q
7.47			1	1
/4-8/-3	Chloromethane		15	IU
74-83-9	Bromomethane		1 15	IU
75-01-4	Vinyl Chloride		15	IU
	Chloroethane		l 15	IU
75-09-2	Methylene Chlorid	e	15	IU
	Acetone	••	1 61	1
75-15-0	Carbon Disulfide		1 15	IU
<i>7</i> 5-35-4	1,1-Dichloroether	ne .	l 15	IU
75-34-3	1,1-Dichloroethar	e	l 15	IU
540-59-0	1,2-Dichloroether	e (total)	1 15	ΙÜ
67-66-3	Chloroform		l 15	IU
107-06-2	1,2-Dichloroethar	ne .	l 15	. 1U
78-93-3	2-Butanone		l 15	IU
	1,1,1-Trichloroet	hane	l 15	ΙŪ
56-23-5	Carbon Tetrachlor	ide	1 15	ίŪ
75-27-4	Bromodichlorometh	ane	I 15	ΙÜ
78-87-5	1,2-Dichloropropa	ne.	I 15	ΙÜ
0061-01-5	cis-1,3-Dichlorop	ronene	I 15	IU
79-01-6	Trichloroethene	, opene	I 15	ΙÜ
124-48-1	Dibromochlorometh	200	1 15	เบ
79-00-5	1,1,2-Trichloraet	hane	15	10
71-43-2	Benzene	110116	l 15	10
0061-02-6	trans-1,3-Dichlor		1 15	10
75252	Bromoform	obrobene		. –
100-10-1	4-Methyl-2-Pentar		l 15 l 15	10
591_704	2-Hexanone	ione	·	IU
197_10	2-Hexanone Tetrachloroethene		15	IU
70_3 <i>/</i> _E	1 1 2 2 Take - Li	} <b></b>	15	IU
100.00 %	1,1,2,2-Tetrachlo	roethane	15	IU
100-00-2	Toluene		15	IU
100-70-/	Chlorobenzene		15	IU
100-41-4	Ethylbenzene		15	IU
1770 00 7	Styrene		15	IU
1770-20-/	Xyĺene (total)		l 15	IU
		•	I	1

ı.	
- 1	SS-4

NYSDEC SAMPLE NO.

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.

10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: I210201-03

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: →C3720

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 33, not dec.

Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor:

Soil Extract Volume: (uL) .

Soil Aliquot Volume:

(u

Number TICs found:

	(ug/L or ug/Kg) UG/KG			
CAS NUMBER	COMPOUND NAME	   RT = =======	I EST. CONC.	
		_		
		 		'       
		'   '   '		<u> </u>
				!
			·	

1A UOLATILE ORGANICS ANALYSIS DATA SHEET NYSDEC SAMPLE NO.

I SS-5

Lab Name: INTECH Contract:

SDG No.: SS-2

Lab Code: INTECH Case No.: 10201 SAS No.:

Lab Sample ID: 1210201-04

Matrix: [soil/water] SOIL

Sample wt/vol: 5.0 [g/mL] G

Lab File ID: >C3721

Level: [low/med] LOW

Date Received: 10/30/92

% Moisture: 31.0 decanted (Y/N) Y

Date Analyzed: 11/06/92

GC Column: PACK ID:

2.0 (mm)

Dilution Factor:

1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (ul

CAS NO.	COMPOUND	[ug/L or ug/Kg] UG/	∕KG	Q
		<u> </u>		1
	Chloromethane	l l	15	IU
	Bromomethane		15	IU
75-01-4	Vinyl Chloride	1	15	IU
75-00-3	Chloroethane	i	15	IU
75-09-2	Methylene Chloride	• I	15	IU
67-64-1		<u> </u>	24	ŀ
	Carbon Disulfide	1	15	IU
	1,1-Dichloroethen		15	IU
	1,1-Dichloroethane		15	IU
540-59-0	1,2-Dichloroethen	e (total)	15	IU
67-66-3		l	15	IU
107-06-2	1,2-Dichloroethan	e 1	15	IU
78-93-3		1	15	. IU
71-55-6	1,1,1-Trichloroet	nane I	15	10
56-23-5	Carbon Tetrachlor	ide I	15	IU
75-27-4	Bromodichlorometh	ane i	15	IU
78-87-5	1,2-Dichloropropa	ne l	15	IU
	cis-1,3-Dichlorop	ropene l	15	IU
79-01-6	Trichloroethene	t	15	IU
124-48-1	Dibromochlorometh	ane I	15	IU
79-00-5	1,1,2-Trichloroet	nane l	15	IU
71-43-2	Benzene	l	15	ΙU
0061-02-6	trans-1,3-Dichlore	opropene !	15	IU
75-25-2		1	15	IU
	4-Methyl-2-Pentano	one I	15	IU
591-78-6	2-Hexanone	1	15	IU
	Tetrachloroethene	1	15	IU
	1,1,2,2-Tetrachlo	roethane l	15	IU
108-88-3		i	15	ΙŪ
	Chlorobenzene	i	15	ÍŪ
	Ethylbenzene	i	15	iŭ
100-42-5	Sturené	i	15	iŭ
1330-20-7	Xylene (total)	i	15	ίÜ
,	,	i	• •	i

NYSDEC SAMPLE NO.

1 SS-5

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: I210201-04

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: >C3721

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 31 not dec.

Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume:

Cul

Number TICs found: 0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	(ug.	/L or ug/Kg	) UG/KG
CAS NUMBER		l RT	I EST. CONC. I D
		.   _	
	1.		

#### 1A UDLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

I SS-5 DUP

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL

Lab Sample ID: 1210201-05

Sample wt/vol: 5.0 [g/mL] G

Lab File ID: >C3722

Lével: [low/med] LOW

Date Received: 10/30/92

% Moisture: 23.0 decanted (Y/N) Y

Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (ul

CAS NO.		J/L or ug/Kg] UG/KG	Q
·			
74-87-3	Chloromethane	1 13	iu
	Bromomethane	1 13	
	Vinyl Chloride	1 13	
	Chloroethane	l 13	10
	Methylene Chloride	ı 13	IU
	Acetone	l 250	1
	Carbon Disulfide	l 13	10
•	1,1-Dichloroethene	l 13	i lu
	1,1-Dichloroethane	1 13	IU
	1,2-Dichloroethene	(total) 1 13	i i U
	Chloroform	1 13	i IU
	1,2-Dichloroethane	l 13	10
	2-Butanone	l 13	- 1U
	1,1,1-Trichloroetham	ne I 13	10
	Cárbon Tetrachloride		i IU
	Bromodichloromethan		10
	1,2-Dichloropropane	l 13	: 10
10061-01-5	cís-1,3-Dichloroprop	pene I 13	1 U
79-01-6	Trichĺoroethene	l 13	10
	Dibromochloromethan	e i 13	3 IU
79-00-5	1,1,2-Trichloroetha	ne I 13	i iu
	Benzene	1 13	5 IU
10061-02-6	trans-1,3-Dichlorop	ropene l 13	ו ו
	Bromoform	i 13	3 IU
108-10-1	4-Methyl-2-Pentanon	e I 13	i IU
591 <i>-7</i> 8-6	2-Hexanone	1 13	, IU
127-18-4	Tetrachloroethene	13	
	1,1,2,2-Tetrachloro	ethane I 13	
108-88-3	Toluene	1 13	3 IU
108-90-7	Chlorobenzene	1 13	3 IU
100-41-4	Ethylbenzene	1 13	5 IU
100-42-5	Styrene	1 13	3 IU
1330-20-7	Xyĺene (totaĺ)	1 13	5 IU
	•		1

NYSDEC SAMPLE NO.

I SS-5 DUP

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: 1210201-05

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: >C3722

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 23 not dec.

Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor:

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(ul

Number TICs found:

	(ug/L	- or ug∕Kg	) UG/KG	
CAS NUMBER 1. 4889-83-21	COMPOUND NAME	l DT	I I EST. CONC.	1 0
	Bicyclo[3.1.1]hept-2-ene, 3,	26.25	46.	N N
1				
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#### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

1 SS-6

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10201 SAS No.:

COMPOUND

SDG No.: SS-2

Matrix: [soil/water] SOIL

Lab Sample ID: 1210201-06

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3692

Level: [low/med] LOW

Date Received: 10/30/92

% Moisture: 21.0 decanted (Y/N) Y

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

CAS NO.

Dilution Factor:

1.0

Q

Soil Extract Volume: (uL)

Soil Aliquot Volume:

(u

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	103.12	9 Ng - 55 No	•
		l	1
74-87-3	Chloromethane	1 13	ΙU
74-83-9	Bromomethane	l 13	IU
75-01-4	Vinyl Chloride	1 13	IU
	Chloroethane	1 13	IU
75-09-2	Methylene Chloride	1 6	I JB
67-64-1	Acetone	1 13	١U
75-15-0	Carbon Disulfide	l 13	ΙU
75-35-4	1,1-Dichloroethene	l 13	ΙU
75-34-3	1,1-Dichloroethane	l 13	ΙU
	1,2-Dichloroethene (total)	1 13	ΙU
67-66-3	Chloroform	1 13	ΙU
	1,2-Dichloroethane	1 13	ΙÜ
78-93-3	2-Butanone	1 13	ĬŪ
	1,1,1-Trichloroethane	1 13	ίŪ
56-23-5	Carbon Tetrachloride	1 13	ίŪ
75-27-4	Bromodichloromethane	l 13	ίŪ
	1,2-Dichloropropane	1 13	ίŪ
10061-01-5	cis-1,3-Dichloropropene	1 13	IU
79-01-6	Trichloroethene	1 13	iU
124-48-1	Dibromochloromethane	1 13	IU
79-00-5	1,1,2-Trichloroethane	1 13	10
71-43-2	Benzene	1 13	IU
	trans-1,3-Dichloropropene	1 13	เบ
75-25-2	Bromoform	1 13	IU
108-10-1	4-Methyl-2-Pentanone	1 13	iu
591-78-6	2-Hexanone	1 13	10
	Tetrachloroethene	1 13	10
79-34-5	1,1,2,2-Tetrachloroethane	1 13	10
108-88-3	Toluene	1 13	IU
	Chlorobenzene		
100-70-/	Ethylbenzene	1 13	IU
100-41-4	Styrene	1 13	IU
	Xulene (total)	1 13	IU
- エノノローノロー/ーーー	AUIPRA ITOTALI	1 13	111

1			
ı	SS-6		

L	ab	Nam	e:	IN.	TECH
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Contract:

NYSDEC SAMPLE NI

Lab Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: 1210201-06

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: >C3692

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 21 not dec.

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor:

1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume:

CONCENTRATION UNITS: Number TICs found: (ug/L or ug/Kg) UG/KG

I I CAS NUMBER	I COMPOUND NAME	I I RT	I EST. CONC. I	     (
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		1		
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		i	' '	
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## 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

I DDS-1

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10201 SAS No.:

SDG No.:SS-2

Matrix: [soil/water] SOIL

Lab Sample ID: I210201-07

Sample wt/vol: 5.0

[g/mL]

Lab File ID: >C3738

Level: [low/med] LOW

Date Received: 10/30/92

% Moisture: 23.0 decanted (Y/N) Y

Date Analyzed : 11/07/92

GC Column:

PACK ID:

2.0 (mm)

Dilution Factor:

1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

CAS NO.	COMPOUND	CONCENTRAT	ION UNITS: g/Kg] UG/Ki	G	Q
74-87-3	Chloromethane		1		1
74-83-9	Bromomethane		I	13	ΙU
75-01-4	Vinyl Chloride		I	13	ΙU
75-00-3	Chloroethane		1	13	Ш
75-09-2	Mark		1	13	10
67-64-1-	Methylene Chlorid	e	1	7	IJ
75_15_0	Hoetone .		1	35	i
75-35-4	Carbon Disulfide		1	13	in
75-34-3	1,1-Dichloroethen	e	1	13	111
540-59-0	1,1-Dichloroethan	B	1	13	111
67-66-3	Chlorofan	e (total)	1	13	10

107-06-2----1,2-Dichloroethane 78-93-3----2-Butanone 71-55-6----1,1,1-Trichloroethane 56-23-5----Carbon Tetrachloride 75-27-4----Bromodichloromethane 78-87-5----1,2-Dichloropropane

67-66-3-----Chloroform

110061-01-5----cis-1,3-Dichloropropene 79-01-6----Trichloroethene

124-48-1----Dibromochloromethane 79-00-5----1,1,2-Trichloroethane

71-43-2----Benzene |10061-02-6----trans-1,3-Dichloropropene

75-25-2----Bromoform 108-10-1-----4-Methyl-2-Pentanone

591-78-6----2-Hexanone 127-18-4----Tetrachloroethene

79-34-5----1,1,2,2-Tetrachloroethane

108-88-3----Toluene

108-90-7----Chlorobenzene 100-41-4----Ethylbenzene

100-42-5----Styrene

1330-20-7-----Xylene (total)

13 IU 13 IU 13 IU 13 IU

13 10 13 IU 13 IU 13 ΙU

13 ΙU 13 10 13 10

13 ΙU 13 IU 13 IU

13 10 13 IU 13 IU

13 ΙU 13 IU 13 IU

13 IU 13 11 13 IU 13

13

IU

IU

DDS-	1	

NYSDEC SAMPLE NO

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: 1210201-07

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: >C3738

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 23 not dec.

Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0

(mm)

Dilution Factor:

Soil Extract Volume:

Number TICs found:

(uL)

Soil Aliquot Volume:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT I	EST. CONC. I	( ===
		!	1	_
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		!		
		'		
		1	1	<u> </u>
		\ 	 	 
		\	1	
<u> </u>		١	11	ا

#### .1A UOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC	SAMPLE	NO.
I DOS-2	······································	— !

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-08

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3693

Level: [low/med] LOW Date Received: 10/30/92

% Moisture: 23.0 decanted (Y/N) Y Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (ul

	ÇC	1140-1411/6	TITOIT O	4110.	
CAS NO.	COMPOUND [L	ig∕L or	ug/Kg ]	UG/KG	Q
		· · ·	ı		1
74-87-3	Chloromethane		ι	13	IU
74-83-9	Bromomethane		• 1	13	10
75-01-4	Vinyl Chloride		1	13	IÜ
	Chloroethane		l	13	IU
75-09-2	Methylene Chloride		1	5	I JB
67-64-1	Acetone		1	13	IU
75-15-0	Carbon Disulfide		1	13	IU
75-35-4	1,1-Dichloroethene	•	1	13	IU
75-34-3	1,1-Dichloroethane		1	13	ΙÜ
	1,2-Dichloroethene	(total	)	13	IU
	Chloroform		Į	13	-1U
107-06-2	1,2-Dichloroethane		1	13	IU
	2-Butanone		1	13	IU
71-55-6	1,1,1-Trichloroetha	ne	ı	13	IU
	Cárbon Tetrachloric		1	13	IU
	Bromodichloromethar		ı	13	IU
	1,2-Dichloropropane		1	13	IU
0061-01-5	cís-1,3-Dichloropro	pene	1	13	IU
79-01-6	Trichĺoroethene	•	1	13	IU
124-48-1	Dibromochloromethar	ne	1	13	ΙU
	1,1,2-Trichloroetha		1	13	IU
71-43-2	Benzene		1	13	IU
	trans-1,3-Dichlorop	ropene	ı	13	ΙU
75-25-2	Bromoform	• •	1	13	ΙU
108-10-1	4-Methyl-2-Pentanor	ie	ĺ	13	ΙŪ
591-78-6	2-Hexanone		1	13	ΙÜ
	Tetrachloroethene		1	13	ΙÜ
79-34-5	1,1,2,2-Tetrachlore	ethane	i	13	ΙU
108-88-3	Toluene	<del>-</del>	ĺ	13	ΙŪ
108-90-7	Chlorobenzene		İ	13	ΙŪ
100-41-4	Ethylbenzene		ĺ	13	ΙÜ
100-42-5	Styrene		1	13	ΙŪ
1330-20-7	Xylene (total)		i	13	ίŪ
	,		1	3.	i —

DDS-2	

NYSDEC SAMPLE NO

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10201 SAS No.: SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: 1210201-08

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: >C3693

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 23 not dec.

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Number TICs found:

Soil Aliquot Volume:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

-				<del></del>
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	\ \
		 		<u> </u>
		l l	1	<u>:</u> _
		l l	1	!-
		l l		<u>:</u>  _
		l	1	.\_ .\_
		1		:\_ -\_
		1	. I	.¦_ _¦_
			l	-\ _\
				-1 <u>-</u> -1 <u>-</u>
		·		-\- -\-
		·		-\- -\-
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11_		-\		_ _
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#### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

1 SB-1

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10201 SAS No.:

SDG No.:SS-2

Matrix: [soil/water] SOIL

Lab Sample ID: [210201-09

Sample wt/vol: 5.0 [g/mL] G

Lab File ID: >C3688

Level: [low/med] LOW

Date Received: 10/30/92

% Moisture: 21.0 decanted (Y/N) Y

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

CAS NO.

COMPOUND

Dilution Factor:

Soil Extract Volume: (uL)

Soil Aliquot Volume: (ul

CONCENTRATION UNITS: [ua/L or ua/Ka] UG/KG

	COMPOUND ( u)	J C 01	ng/Kg I	00, 40	щ
74-97-3	Chloromethane		1	4.7	1
74-07-7	Bromomethane			13	IU
75-01-4	Uinyl Chloride		!	13	IU
79-01-4	Vinyl Unioride		1	13	IU
77-00-7	Chloroethane		!	13	IU
/7-U7-Z	Methylene Chloride		i	4	I JB
75 15 0	Acetone		!	21	1 8
77-17-0	Carbon Disulfide		1	13	IU
/5-35-4	1,1-Dichloroethene		1	13	IU
/5-34-3	1,1-Dichloroethane		1	13	IU
540-59-0	1,2-Dichloroethene (	total	)	13	łU
67-66-3	Chloroform		1	13	ΙU
107-06-2	1,2-Dichloroethane		ı	13	ſU
78-93-3	2-Butanone		1	13	ΙU
71-55-6	1,1,1-Trichloroethar	e	1	13	ΙU
76-23-5	Carbon Tetrachloride		ŀ	13	ΙU
75-27-4	Bromodichloromethane		1	13	IU
78-87-5	1.2-Dichloropropage		Ì	13	ĬÜ
.0061-01-5	cis-1.3-Dichloroprop	ene	1	13	iŪ
/9-01-6	Trichloroethene		i	13	IU
124-48-1	Dibromochloromethane		i	13	iu
79-00-5	1,1,2-Trichloroethan	_	i	13	iυ
71-43-2	Benzene	•	i	13	IU
0061-02-6	trans-1,3-Dichloropr	onene	i	13	IU
75-25-2	Bromoform	opene	i	13	10
108-10-1	4-Methyl-2-Pentanone		i	13	10
591-78-6	2-Hexanone		i	13	
127-18-4	Teţrachloroethene		1		IU
79-34-5	1,1,2,2-Tetrachloroe	<b>.</b>		13	IU
108-88-3		tnane	!	13	10
108_90_7_	Chlorobenzene		l h	13	IU
100-70-/	uniorobenzene		!	13	IU
100-41-4	Ethylbenzene		1	13	IU
100-42-5	Styrene		1	13	IU
エフフリーとリーノーーー・	Xylene (total)		1	13	1U

NYSDEC	SAMPLE	NO
   SB-1		

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: 1210201-09

Sample wt/vol: 5.0

(g/mL) G

Lab File ID: >C3688

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: ,21 not dec.

Date Analyzed: 11/05/92

PACK ID: 2.0 (mm) GC Column:

Dilution Factor:

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found	1: 0 (ug/L	or ug/Kg)	UG/KG
CAS NUMBER	COMPOUND NAME	RT	   EST. CONC.      #################################
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#### 1A UOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC	SAMPLE	NO.
1   SB-2		

Lab Name: INTECH

Contract:

(mm)

Lab Code: INTECH Case No.: 10201 SAS No.:

SDG No.:SS-2

Matrix: [soil/water] SOIL

Lab Sample ID: [210201-12

Sample wt/vol: 5.0 [g/mL] G

Lab File ID: >C3689

Level: [low/med] LOW

Date Received: 10/30/92

% Moisture: 20.0 decanted (Y/N) Y

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	[ug∕L or	ug/Kg]	UG/KG	ų
			1		1
	Chloromethane	٠	!	13	1U
	Bromomethane		!	13	IU
	Vinyl Chlorid	e	1	13	IU
	Chloroethane		1	13	IU
	Methylene Chl	oride.	1	5	JB
	Acetone	•	1	17	I B
<b>-</b>	Carbon Disulf	ide	1	13	IU
	1,1-Dichloroe		I	13	IU
	1,1-Dichloroe		ŀ	13	IU
540-59-0	1,2-Dichloroe	thene (total	)	13	IU
	Chloroform		1	13	IU
	1,2-Dichloroe	thane	1	13	IU
	2-Butanone		ŧ	13	IU
	1,1,1-Trichle	roethane	1	13	IU
/1-77-0	Carbon Tetrac	hloride	1	13	IU
	Bromodichlor		i	13	ΙU
	1,2-Dichlorop		İ	13	IU
			i	13	IU
	cis-1,3-Dich		i	13	
	Trichloroethe		i	13	
	Dibromochlore		i	13	
	1,1,2-Trichle	or de thane	ï	13	ΙŪ
	Benzene	. L l	1	13	
	trans-1,3-Die	surarabraheue	1	13	iŭ
	Bromoform		1	13	iŭ
	4-Methy1-2-Po	entanone	1	13	iu
	2-Hexanone	<b>.</b>	i	13	iu
	Tetrachloroe		1	13	เบ
79-34-5	<u>1</u> ,1,2,2-Tetr	achiorostnane	1	13	iu
	Toluene		l I	13	10
	Chlorobenzen	e	1	13	10
	Ethylbenzene		1		וט
	Styrene	• •	Į.	13 13	10
1330 20 7	Xylene (tota	1 )		1.3	111

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ł	SB-2	

NYSDEC SAMPLE NO

Lab Name:	INTECH
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Contract:

SB-2	

Lab Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: I210201-12

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: >C3689

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 20 not dec.

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor:

Soil Extract Volume: (uL)

Soil Aliquot Volume:

CONCENTRATION UNITS: Number TICs found: 0 (ug/L or ug/Kg) UG/KG

CAS NUMBER I	COMPOUND NAME	I I RT	I I EST. CONC.	   []
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#### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

I SB-3

Lab Name: INTECH Contract:

SDG No.:SS-2

Lab Code: INTECH Case No.: 10201 SAS No.:

Matrix: [soil/water] SOIL

Lab Sample ID: [210201-13

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3690

Level: [low/med] LOW

Date Received: 10/30/92

% Moisture: 6.0 decanted (Y/N) Y

Date Analyzed : 11/05/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (ul

CAS NO.	COMPOUND	CUNCENTRATION UNIT	<b>-</b> ·	Q	1
74-87-3	Chloromethane		1 1	1	-

1 74 07 7 01 1	1	1
1 74-87-3Chloromethane	1 11	IU
1 74-83-9Bromomethane	1 11	IU
75-01-4Vinyl Chloride	11	IU -
75-00-3Chloroethane	1 11	10
75-09-2Methylene Chloride	1 11	IU
1 67-64-1Acetone	l 13	iВ
75-15-0Carbon Disulfide	1 11	iu
75-35-41,1-Dichloroethene	11	IU
75-34-31,1-Dichloroethane	111	10
540-59-01,2-Dichloroethene (total)	11	10
1 67-66-3Chloroform	<del></del>	. –
107-06-21,2-Dichloroethane	11	IU
78-93-32-Butanone	11	IU
71-55-61,1,1-Trichloroethane	11	IU
56-23-5Carbon Tetrachloride	11	IU
75-27-4Bromodichloromethane	! 11	IU
TO TO THE TOTAL TO THE TOTAL TO THE TOTAL	11	IU
78-87-51,2-Dichloropropane	11	IU i
110061-01-5cis-1,3-Dichloropropene	11	IU
79-01-6Trichloroethene	1 11	IU (
124-48-1Dibromochloromethane	11	10
79-00-51,1,2-Trichloroethane	11	10 1
/ /1-43-2Benzene	1 11	10 1
10061-02-6trans-1,3-Dichloropropene	1 11	iu i
//////////////////////////////////////	1 11	IU i
108-10-14-Methyl-2-Pentanone	1 11	iù i
	1 11	וֹט וֹ
127-18-4Tetrachlorgethene	i 11	IU i
79-34-51,1,2,2-Tetrachloroethane	11	וט ו
108-88-3Toluene	1 11	10 1
108-90-7Chlorobenzene	1 11	IU I
100-41-4Ethylbenzene	11 11	10 1
100-42-5Styrene	11 11	• -
1330-20-7Xÿlene (total)	· · · · · · · · · · · · · · · · · · ·	IU !
	11	iu i

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١	SB-3	
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NYSDEC SAMPLE NO

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: I210201-13

Sample wit/vol: 5.0 (q/mL) G

Lab File ID: >C3690

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 6 not dec.

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor:

1.0

Soil Extract Volume: (uL)

Number TICs found:

Soil Aliquot Volume:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

# CAS NUMBER COMPOUND NAME RT EST. CONC. I

1A

#### UDLATILE ORGANICS ANALYSIS DATA SHEET

I SB-4

NYSDEC SAMPLE NO.

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10201 SAS No.:

SDG No.: SS-2

Matrix: [soil/water] SOIL

Lab Sample ID: I210201-14

Sample wt/vol: 5.0 [g/mL] G

Lab File ID: >C3719

Level: [low/med] LOW

Date Received: 10/30/92

% Moisture: 5.0 decanted (Y/N) Y

Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	[ug/L or	ug/Kg] U	S/KG	Q
			1		1
	Chloromethane		1	11	IU
	Bromomethane		1	11	10
75-01-4	Vinyl Chloride		1	11	IU
75-00-3	Chloroethane		1	11	IU
75-09-2	Methylene Chlor	ide	1	11	IU
67-64-1	Acetone		1	46	1
75-15-0	Carbon Disulfid	e	1	11	1U
75-35-4	1,1-Dichloraeth	ene	. 1	11	IU
	1,1-Dichloroeth		1	11	1U
	1,2-Dichloroeth		) 1	11	IU
	Chloroform		ĺ	11	10
	1,2-Dichloroeth	iane	1	11	ΙU
78-93-3	2-Butanone	,	i	11	ΙŪ
	1,1,1-Trichloro	ethane	i	11	IŪ
	Carbon Tetrachi		ì	11	IU
	Bromodichlorome		i	11	IU
	1,2-Dichloropro		i	11	ΙÜ
0061-01-5	·cis-1,3-Dichlor	onronene	1 .	11	ίŪ
79-01-6	Trichloroethene	,	i	3	ij
	Dibromochlorome		1	11	iU
	1,1,2-Trichloro		i	11	ίŪ
71-43-2	Benzene	· ·	i	11	IU
	trans-1,3-Dichl	oropropene	ì	11	IU
75-25-2	Bromoform	or obt obene	· ·	11	10
109-10-1	4-Methy1-2-Pent			11	IU
501 70 4	4-Netny1-2-rent 2-Hexanone	anone	1	11	10
	Z-mexanone Tetrachloroethe		1	11	IU
			1	11	
100 00 7	1,1,2,2-Tetrach	itoroethane	1		IU
100 00 7	Toluene		I I	11	IU
100-70-/	Chlorobenzene		!	11	IU
100-41-4	Ethylbenzene		!	11	IU
100-42-5	Styrene		!	11	IU
1220-20-2	Xylene (total)		1	11	10

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١	SB-4	t
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Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: 1210201-14

Sample wt/vol: 5.0

(g/mL) G

Lab File ID: >C3719

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 5 not dec.

Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor:

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

()

## CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found:

Number 11cs 10cm	THE LINE	RT I	EST. CONC. I	Q
CAS NUMBER	COMPOUND NAME		******	====
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#### VOLATILE ORGANICS ANALYSIS DATA SHEET

1 SB-5A

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.: SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-15

Sample wt/vol: 1.0 [g/mL] G Lab File ID: >C3752

Level: [low/med] LOW Date Received: 10/30/92

% Moisture: 13.0 decanted (Y/N) Y Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 5.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND (	ug/L or ug/Kg]	UG/KG	Q
1		1 .		1 1
1 74-87-3	Chloromethane	1	58	IU I
74-83-9	Bromomethane	1	58	IU I
75-01-4	Vinyl Chloride	!	58	IU I
	Chloroethane	! .	58	IU I
	Methylene Chloride	!	58	IU I
	Acetone	1	170	1 1
	Carbon Disulfide -		58	IU I
	1,1-Dichloroethene	1	58	10 1
	1,1-Dichloroethane	1	27	IJ I
	1,2-Dichloroethene	(total)   .	390	1 1
	Chloroform	1	58	IU I
	1,2-Dichloroethane	1	58	וט ו
l 78-93-3	2-Butanone	· •	58	IU I
71-55-6	1,1,1-Trichloroeth	ane I	58	10 1
	Carbon Tetrachlori		58	IU I
75-27-4	Bromodichlorometha	ne l	58	10 1
78-87-5	1,2-Dichloropropan	e l	58	10 1
110061-01-5	cis-1,3-Dichloropr	opene l	58	1U 1
79-01-6	Trichĺoroethene 🗀	1	• 58	IU I
124-48-1	Dibromochlorometha	ne l	58	10 1
79-00-5	1,1,2-Trichloroeth		58	10 1
71-43-2	Bénžene	1	58	10 1
110061-02-6	trans-1,3-Dichloro	propene l	58	10 1
75-25-2	Bromoform	1	58	10 1
108-10-1	4-Methy1-2-Pentano	ne l	58	ו ט' ו
591 <i>-7</i> 8-6	2-Hexanone	•	· 58	10 1
127-18-4	Tetrachloroethene	1	58	10 1
79-34-5	1,1,2,2-Tetrachlor	oethane I	58	IÜ I
108-88-3	Toluene		48	IJ I
108-90-7	Chlorobenzene	•	58	iu i
100-41-4	Ethylbenzene	i	58	iu i
100-42-5	Sturene	ì	58	וט ו
1330-20-7	Xylene (total)	i	58	10 1
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# 1E UDLATILE ORGANICS ANALYSIS DATA SHEET

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TENTATIVEL	Y IDENTIFIED	COMPOUNDS

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ab N	lame:	INTECH	Contract:	1

NYSDEC SAMPLE NO.

Lab Code: INTECH Case No. 10201 SAS No.: SDG No.: SS-2

Lab Sample ID: I210201-15 Matrix: (soil/water) SOIL

Sample wt/vol: 1.0 (g/mL) G Lab File ID: >C3752

Level: (low/med) LOW Date Received: 10/30/92

% Moisture: 13 not dec. Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor:

Soil Extract Volume: (uL) Soil Aliquot Volume: (ul

CONCENTRATION UNITS: Number TICs found: (ug/L or ug/Kg) UG/KG

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# VOLATILE ORGANICS ANALYSIS DATA SHEET

[g/mL] G

(mm)

NYSDEC SAMPLE NO.

1 SB-6

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10201 SAS No.:

SDG No.:55-2

Matrix: [soil/water] SOIL

Lab Sample ID: I210201-16

Sample wt/vol: 5.0

Lab File ID: >C3737

Lavel: [low/med] LOW

Date Received: 10/30/92

% Moisture:

1.0 decanted (Y/N) Y Date Analyzed: 11/07/92

10

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10

10

IU

IU

IU

IU

10

IU

IU

IU

GC Column:

PACK ID: 2.0

Dilution Factor:

1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

CONCENTRATION UNITS: CAS NO. COMPOUND [ug/L or ug/Kg] UG/KG Q 1 74-87-3----Chloromethane 10 IU 74-83-9-----Bromomethane 10 10 75-01-4-----Uinyl Chloride 10 10 75-00-3----Chloroethane 10 IU 75-09-2----Methylene Chloride 5 IJ 67-64-1-----Acetone 10 10 75-15-0----Carbon Disulfide 10 10 75-35-4----1,1-Dichloroethene 10 IU 75-34-3----1,1-Dichloroethane 10 10 540-59-0----1,2-Dichloroethene (total) 10 ΙU 67-66-3-----Chloroform 10 IU 107-06-2----1,2-Dichloroethane 10 IU 78-93-3----2-But anone 10 10 71-55-6----1,1,1-Trichloroethane 10 TU 56-23-5----Carbon Tetrachloride 10 IU 75-27-4-----Bromodichloromethane 10 IU 78-87-5----1,2-Dichloropropane 10 IU 110061-01-5----cis-1,3-Dichloropropene 10 10 79-01-6----Trichloroethene 10 IU 124-48-1-----Dibromochloromethane 10 IU 79-00-5----1,1,2-Trichloroethane 10 IU 71-43-2----Benzene 10 IU |10061-02-6----trans-1,3-Dichloropropene 10 IU 75-25-2----Bromoform 10 IU 108-10-1----4-Methyl-2-Pentanone 10 IU 591-78-6----2-Hexanone

127-18-4----Tetrachloroethene

108-90-7-----Chlorobenzene

100-41-4----Ethylbenzene

1330-20-7-----Xylene (total)

108-88-3----Toluene

100-42-5----Styrene

79-34-5----1,1,2,2-Tetrachloroethane

Lab Code: INTECH Case No. 10201 SAS No.:

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	SB-6	
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NYSDEC SAMPLE NO.

Lab Name: INTECH

Contract:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: I210201-16

Lab File ID: >C3737

Sample wt/vol: 5.0 (g/mL) G

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 1 not dec.

Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Number TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

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CAS NUMBER	COMPOUND NAME	I I RT	I EST. CONC.	[ Q
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### VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-6

Lab Name: INTECH Contract:

SDG No.:SS-2

Lab Code: INTECH Case No.: 10201 SAS No.:

Matrix: [soil/water] SOIL

Lab Sample ID: 1210201-17

Sample wt/vol: 5.0 [g/mL] G

Lab File ID: >C3695

Level: - [low/med] LOW

Date Received: 10/30/92

% Moisture: 9.0 decanted (Y/N) Y

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL

CONCENTRATION UNITS: CAS NO. COMPOUND [ug/L or ug/Kg] UG/KG Q

		·
74.07.7	!	1
74-87-3Chloromethane 74-83-9Bromomethane	11	IU
74-07-7Bromomethane 75-01-4Vinyl Chloride	11	IU
75-00-3Chloroethane	11	10
75-19-2 Makkulasa Chlasida	11	IU
75-09-2Methylene Chloride 67-64-1Acetone	1 5	I JB
75-15-0Carbon Disulfide	! 11	IU
77-17-0Larbon Visuitide	11	IU I
75-35-41,1-Dichloroethene	1 11	IU
75-34-31,1-Dichloroethane	11	10 1
540-59-01,2-Dichloroethene (total)	11	IU
67-66-3Chloroform	11	IU I
107-06-21,2-Dichloroethane	1 11	10
78-93-32-Butanone	11	IU I
71-55-61,1,1-Trichloroethane	11	IU
56-23-5Carbon Tetrachloride	11	IU !
75-27-4Bromodichloromethane	1 11	10
78-87-51,2-Dichloropropane	1 11	10 1
10061-01-5cis-1.3-Dichloropropene	1 11	IU I
/9-01-6Trichloroethene	1 11	ו וו
124-48-1Dibromochloromethane	1 11	10 1
79-00-51,1,2-Trichloroethane	1 11	IU I
71-43-2Benzene	1 11	1.0
10061-02-6trans-1,3-Dichloropropene	1 11.	וט ו
/>-2>-2Bromoform	11	IU i
108-10-14-Methyl-2-Pentanone	1 11	iù i
571-78-62-Hexanone	1 11	10 1
127-18-4Tetrachloroethene	1 11	iŭ i
79-34-51,1,2,2-Tetrachloroethane	1 11	10
108-88-3Toluene .	1 11	iu i
108-90-7Chlorobenzene	11	IU I
100-41-4Ethylbenzene	i 11	10
100-42-5Sturene	1 11	10 1
1330-20-7Xylene (total)	1 11	10 1
		1 1

### 1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC	SAMPLE	ΝО.
   MW-6		! !

	A1	INTECH
מאו	Name:	TIALECLI

Contract:

Lab Code: INTECH Case No. 10201 SAS No.: SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: 1210201-17

Sample wt/vol: 5.0 (g/mL) G Lab File ID: >C3695

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 9 not dec.

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Number TICs found: 0

Soil Aliquot Volume:

(u

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

# RT EST. CONC. 1 COMPOUND NAME CAS NUMBER

S8-5C

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: [210201-18

Sample wt/vol: 4.0 [g/mL] G Lab File ID: >A0145

Level: [low/med] MED Date Received: 10/3/8/92

% Moisture: 20.0 decanted (Y/N) Y Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 125.0

Soil Extract Volume: | 1000 (uL) Soil Aliquot Volume: | CO (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	[ug/L or ug/Kg]		Q
		!	1/00	1 1
	Chloromethane		1600	10 1
	Bromomethane	,	1600	10 1
75-01-4	Vinyl Chloride	. !	1600	10 1
	Chloroethane	<b>,</b>	1600	10 1
	Methylene Chlorid	le !	860	I JB I
	Acetone	1	3900	1 B !
	Carbon Disulfide		1600	IU I
	1,1-Dichloroether		1600	וט ו
	1,1-Dichloroethan		3500	! !
	1,2-Dichloroether	ne (total)	1500	IJ I
	Chloroform	1	1600	ו ו
107-06-2	1,2-Dichloroether	ne l	1600	10 1
78-93-3	2-Butanone	1	1600	IU I
71-55-6	1,1,1-Trichlorost	thane 1	20000	- 1 1
	Carbon Tetrachlor		1600	וט ו
75-27-4	Bromodichlorometh	nane I	1600	IU I
78-87-5	1,2-Dichloropropa	ne i	1600	IU I
	cis-1,3-Dichlorop		1600	10 1
79-01-6	Trichloroethene	· .	180000	1 1
	Dibromochlorometh	nane I	1600	10 1
79-00-5	1,1,2-Trichloraet	hane I	1600	וט ו
71-43-2	Benzene	<b>I</b>	1600	10 1
	trans-1,3-Dichlor	opropene 1	1600	IU I
75-25-2	Bromoform	· · · · · · · · · · · · · · · · · · ·	1600	10 1
	4-Methyl-2-Pentar	none I	1600	1U 1
591-78-6	2-Hexanone	1	1600	14 1
	Tetrachloroethens		1600	TÜ I
	1,1,2,2-Tetrachlo		1600	IU I
108-88-3	Toluene	ţ	12000	1 1
	Chlorobenzene	1	1600	IU I
	Ethylbenzene	1	940	13 1
100-42-5	Styrene	1	1600	IU I
1330-20-7	Xylene (total)	i	4300	1
		i		i

# UOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

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	SB-5C	•	

NYSDEC SAMPLE NO.

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.

10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: [210201-18

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: >AUIY\$

Level: (low/med) MED

Date Received: 10/31/92

% Moisture: 200 not dec.

Date Analyzed: 11/07/92

.

GC Column: PACK . ID: 2.0 (mm)

Dilution Factor: 125 .0

(1

Soil Extract Volume: - 10000 (uL)

Soil Aliquot Volume: 100

Number TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER I	COMPOUND MAKE	!		1
	COMPOUND NAME	I RT I	EST. CONC.	1 0
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'		-!	I	

| SB-5C PL\_\_\_

ab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: [210201-18 DL

Sample wt/vol: 4.0 [g/mL] G Lab File ID: >A0157

Level: [low/med] MED Date Received: 10/3-6/92

% Moisture: 20.0 decanted (Y/N) Y Date Analyzed: 11/09/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1250.0

Soil Extract Volume: 0000 (uL) Soil Aliquot Volume: 0 (ul

CONCENTRATION UNITS:

CAS NO. COMPOUND [ug/L or ug/Kg] UG/KG Q

16000 10 74-87-3-----Chloromethane IU 16000 74-83-9----Bromomethane 16000 1U 75-01-4-----Vinyl Chloride IU 16000 75-00-3-----Chloroethane 16000 IU 75-09-2----Methylene Chloride 13000 I JBD 67-64-1----Acetone 16000 IU 75-15-0----Carbon Disulfide 16000 IU 75-35-4----1,1-Dichloroethene 16000 IU 75-34-3----1,1-Dichloroethane 10 16000 540-59-0----1,2-Dichloroethene (total) 16000 IU 67-66-3----Chloroform 16000 IU 107-06-2----1,2-Dichloroethane IU 16000 78-93-3----2-Butanone 20000 1 71-55-6----1,1,1-Trichloroethane 56-23-5-----Carbon Tetrachloride 16000 IU 16000 IU 75-27-4----Bromodichloromethane 16000 IU 78-87-5----1,2-Dichloropropane 16000 IU 110061-01-5----cis-1,3-Dichloropropens 1 200000 79-01-6----Trichloroethene 16000 IU 124-48-1----Dibromochloromethane 16000 ıu 79-00-5----1,1,2-Trichloroethane 16000 10 71-43-2----Benzene IU 110061-02-6-----trans-1,3-Dichloropropene 16000 10 16000 75-25-2----Bromoform IU 108-10-1----4-Methyl-2-Pentanone 16000 IU 16000 591-78-6----2-Hexanone 16000 ıu 127-18-4----Tetrachloroethene 16000 79-34-5----1,1,2,2-Tetrachloroethane 1 J.D 13000 108-88-3----Toluene IU 16000 108-90-7-----Chlorobenzene IU 16000 100-41-4----Ethylbenzene IU 16000 100-42-5----Styrene 16000 10 1330-20-7-----Xylene (total)

11-	•	VOLATILE	ORGANICS	1E ANALYS	SIS DAT	A SHE	ΕΤ	NYSDEC SAMPLE	E NO.
		TENT	ATIVELY II	DENTIFI	ED COM	POUND	S	1 SB-5C <b>PL</b>	1 
i	Lab Nam	ne: INTECI	4		Contr	act:		1	1
		de: INTEC	H Case	No.	10201	SAS	No.:	SDG No.: SS	-2
11:	Matrix:	(soil/w	ater) SOII	_			Lab Sample	ID: 1210201-	18
91	Sample	wt∕vol:	4.0	(g/mL	.) G		Lab File ID	: >A0157	
1.05	Level:	(low/m	ed) MED				Date Receive	ed: 10/31/92	<b>کر۔۔۔</b>
*	* Moist	ure:	not o	dec.			Date Analyz	ed: 11/09/92	
			< 1D: 2	. 0 (mm	1)		Dilution Fac	ctor: 1250.	0
-	Soil E>	ctract Vo	lume: 1	0000 (u	ıL)		Soil Aliquo	t Volume: 10	. (

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	COMPOUND NAME		   EST. CONC.	
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Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water]\_SOIL Lab Sample ID: I210201-19

Sample wt/vol: 4.0 [g/mL] G Lab File ID: >A0146

Level: [low/med] MED Date Received: 10/30/92

% Moisture: 20.0 decanted (Y/N) Y Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 625.0

Soil Extract Volume: (uL) 10000.0 Soil Aliquot Volume: 25 (uL

CAS NO. COMPOUND CONCENTRATION UNITS:
[ug/L or ug/Kg] UG/KG Q

74-87-3-----Chloromethane | 6300 | U

- 1				
	74-97-3 Chlanson	!	ŀ	- ا
1	74-87-3Chloromethane 74-83-9Bromomethane	6300	IU	
i	75-01 4 It's a man	6300	IU	1
i	75-01-4	1 6300	10	1
ï	75-00-3Chloroethane	1 6300	IU	(
i	75-09-2Methylene Chloride 67-64-1Acetone	l 3200	l JB	
i	7F 1F 0	1 4000	I JB	1
ï	75-15-0Carbon Disulfide	6300	IU	
	75-35-41,1-Dichloroethene	6300	IU	1
,	75-34-31,1-Dichloroethane	l 6708	1 .	ı
1	540-59-01,2-Dichloroethene (total)	5100 Figure 1	١J	i
1	67-66-3Chloroform	6300	ĺυ	i
!	107-06-21,2-Dichloroethane	6300	10	i
!	78-93-32-Butanone	6300	ΙU	i
1	71-55-61,1,1-Trichloroethane	2900	ij	i
,	79-4/-7	6300	IU	i
•	75-27-4Bromodichloromethane	6300	ΙŪ	i
ï	78-87-51,2-Dichloropropane	6300	ΙU	i
1	10061-01-5cis-1,3-Dichloropropene	6300	ΙÜ	i
	/?-Ul-6Trichlargethene	120000	1	i
ï	124-48-1Dibromochloromethane	6300	ÍU	i
, I	79-00-51,1,2-Trichloroethane	6300	ΙÜ	i
1	/ LT4JTZTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	6300	IU	i
! . !	10061-02-6trans-1,3-Dichloropropene	6300	IÜ	i
;	//T47T4TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	6300	ÍÜ	i
i	108-10-14-Methyl-2-Pentanone	6300	lu	i
	//im/grgy-Hevanona	6300	iu	i
•	127-18-4Tetrachloroethene	6300	iŭ	i
1	/>	6300	10	i
' 1	100-00-2	5000	ij	i
† 	108-90-7Chlorobenzene	6300	iu	1
' 	100-41-4Ethylbenzene	<del>-</del>	10	ì
,	100-42-5Sturenä	6300	ΙÜ	i
•	1330-20-7Xylene (total)	6300	iu	i
_			. •	•

# VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INTECH

Contract:

Lab Code: INTECH

Case No. 10201 SAS No.:

SDG No.: SS-Z

Matrix: (soil/water) SOIL

-\_ Lab Sample ID: I210201-19

Samp[e wt/vol: 40 (g/mL) G -

Lab File ID: >A0146

Date Received: 10/30/92

Level: (low/med) MED

% Moisture: 20 not dec.

Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 625.0

Soil Extract Volume: [0000,0 (uL)

Soil Aliquot Volume: 25

(u

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Number TICs found:

CAS NUMBER	COMPOUND NAME	l RT	: EST. CONC. I	   Q
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		'		
		!		!

I SB-5B

Lab Name: INTECH

Contract:

SDG No.:SS-2

Lab Sample ID: I210201-21

Matrix: [soil/water] SOIL

Sample wt/vol: 5.0 [g/mL] G

Lab File ID: >C3744

Level: [low/med] LOW

Date Received: 10/30/92

% Moisture: 15.0 decanted (Y/N) Y

Date Analyzed : 11/07/92

GC Column: PACK ID:

Lab Code: INTECH Case No.: 10201 SAS No.:

2.0 (mm) Dilution Factor:

1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

CONCENTRATION UNITS:

		t		ug/Kg]	UCZKC	Ω
CAS NO.	COMPOUND	tug/L	or	ug/kg;	067 110	_

CAS NU.	COMPOSIND 103-2-0-0	3		_
			1	- 1
74 97 3	Chloromethane	1 12	IU	1
	Bromomethane	1 12	IU	ı
	Vinyl Chloride	1 12	IU	I
	Chloroethane	1 12	١U	1
/5-00-3	Methylene Chloride	1 10	ΙJ	- {
/5-09-2	Acetone	1 46	1	1
6/-64-1	Carbon Disulfide	12	IU	1
/5-15-0	1 1 Disblorgethers	1 12	IU	
/5-35-4	1,1-Dichloroethene	12	IU	
/5-34-3	1,1-Dichloroethane	1 12	IU	
540-59-0	1,2-Dichloroethene (total)	12	IU	
67-66-3	Chloroform	1 12	10	
107-06-2	1,2-Dichloroethane	1 9	١J	
	2-Butanone	12	เบ	•
71-55-6	1,1,1-Trichloroethane	12	ίŪ	
	Carbon Tetrachloride	1 12	iŭ	
	Bromodichloromethane	12	10	
78-87-5	1,2-Dichloropropane	1 12	ΙÜ	
10061-01-5	cis-1,3-Dichloropropene	1 12	10	
	Trichloroethene	,	. —	
	Dibromochloromethane	1 12		
79-00-5	1,1,2-Trichloroethane	1 12		
	Benzene	1 12		
10061-02-6	trans-1,3-Dichloropropene	1 12		
75-25-2	Bromoform	12		
108-10-1	4-Methyl-2-Pentanone	1 12		
591-78-6	2-Hexanone	1 12		
127-18-4	Tetrachloroethene	1 12		
79-34-5	1,1,2,2-Tetrachloroethane	1 12		
	Toluene	1 12		
	Chlorobenzene	12		
	Ethylbenzene	1 12		
	Styrene	1 12	10	
	Xylene (total)	1 12	10	
	VATEUE (COCOL)		1	

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# VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

		 <del></del>
SB-	58	

NYSDEC SAMPLE NO.

Lab Name:	INTECH
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Contract:

		INTECH	C = 6	No	10201	SAS No.:	SDG No.:	SS-2
ab	Code:	INTECH	Lase	NO.	10201	3H3 NU	300 110	JJ 2

Matrix: (soil/water) SOIL

Lab Sample ID: 1210201-21

Sample wt/vol: 5.0 (g/mL) G Lab File ID: >C3744

Level: (low/med) LOW

Date Received: 10/30/92

% Moisture: 15 not dec.

Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (u

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs foun	d: 0 (ug	g/L or ug/Kg	UG/KG	
CAS NUMBER	COMPOUND NAME	   RT === =====	EST. CONC.	   Q  ====
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### VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: INTECH Contract:

I UBLK QC1105

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: UBLK QC1105

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3683

Level: [low/med] LOW Date Received:

% Moisture: NA decanted (Y/N) N Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (

CONCENTRATION UNITS:
One compound [ug/L or ug/Kg] UG/KG

CAS NO. IU 10 74-87-3----Chloromethane IU 10 74-83-9----Bromomethane 10 IU 75-01-4-----Uinyl Chloride 10 IU 75-00-3-----Chloroethane 4 1 J 75-09-2----Methylene Chloride 7 1 J 67-64-1----Acetone 10 10 75-15-0----Carbon Disulfide 10 10 75-35-4----1,1-Dichloroethene 10 IU 75-34-3----1,1-Dichloroethane 111 10 540-59-0----1,2-Dichloroethene (total) 10 IU 67-66-3-----Chloroform 10 IU 107-06-2----1,2-Dichloroethane 10 IU 78-93-3----2-Butanone 10 IU 71-55-6----1,1,1-Trichloroethane IU 10 56-23-5----Carbon Tetrachloride IU 10 75-27-4----Bromodichloromethane 10 IU 78-87-5----1,2-Dichloropropane IU 10 |110061-01-5----cis-1,3-Dichloropropene 10 IU 79-01-6----Trichloroethene 10 10 124-48-1-----Dibromochloromethane 10 IU 79-00-5----1,1,2-Trichloroethane 10 ΙU 71-43-2----Benzene 10 10 110061-02-6-----trans-1,3-Dichloropropene 10 10 75-25-2----Bromoform 10 IU 108-10-1----4-Methyl-2-Pentanone IU 10 591-78-6----2-Hexanone 10 IU 127-18-4----Tetrachloroethene IU 10 79-34-5----1,1,2,2-Tetrachloroethane IU 10 108-88-3----Toluene 10 111 108-90-7----Chlorobenzene 10 IU 100-41-4----Ethylbenzene IU 10 100-42-5----Styrene IU 10 1330-20-7-----Xylene (total)

SADF:

1.00

FORM I-CLP-VOA-1

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INTECH

Contract:

I VBLK QC1105

Lab Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

\_ Lab Sample ID: UBLK QC1105

Level: (low/med) LOW

Sample wt/vol: 5.0 (g/mL) G - Lab File ID: >C3683

Date Received: 11/05/92

% Moisture: NA not dec.

Date Analyzed: 11/05/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

ber TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	1 Q
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Lab Name: INTECH Contract: | UBLK QC1106 (1) |

Lab Code: INTECH Case No.: (020) SAS No.: SDG No.: SS- 2

Matrix: [soil/water] SOIL - Lab Sample ID: VBLK QC1106

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3715

Level: (low/med) LOW - Date Received:

% Moisture: NA decanted (Y/N) N Date Analyzed: 11/06/92

GC Column: PAUK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

. 10 IU 75-01-4-----Vinyl Chloride 10 IU 75-00-3-----Chloroethane 2 1 J 75-09-2----Methylene Chloride IU 67-64-1----Acetone 10 10 1U 75-15-0-----Carbon Disulfide 10 111 75-35-4----1,1-Dichloroethene IU 10 75-34-3----1,1-Dichloroethane IU 10 540-59-0----1,2-Dichloroethene (total) 67-66-3-----Chloroform 10 IU 10 IU 107-06-2----1,2-Dichloroethane 10 IU 78-93-3----2-Butanone 10 IU 71-55-6----1,1,1-Trichloroethane TU 10 56-23-5-----Carbon Tetrachloride 10 IU 75-27-4----Bromodichloromethane 10 IU 78-87-5----1,2-Dichloropropane 10 10 110061-01-5----cis-1,3-Dichloropropene 10 IU 79-01-6----Trichloroethene 124-48-1----Dibromochloromethane 10 10 10 IU 79-00-5----1,1,2-Trichloroethane 71-43-2----Benzene 10 10 110061-02-6----trans-1,3-Dichloropropene 10 10 75-25-2----Bromoform 10 IU 11 198-10-1----4-Methyl-2-Pentanone 10 10 IU 591-78-6----2-Hexanone 127-18-4----Tetrachloroethene 10 IU 79-34-5----1,1,2,2-Tetrachloroethane 10 IU 108-88-3----Toluene 10 IU 198-90-7-----Chlorobenzene 10 111 100-41-4----Ethylbenzene IU 10. :00-42-5-----Styrene ΙU 10 1330-20-7-----Xylene (total) IU 10

### VULATILE UKBANILS HNALISIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INTECH

Contract:

I VBLK QC1106 ()) I

Lab Code: INTECH Case No. (020) SAS No.:

SDG No.: ≤≤-2

Matrix: (soil/water) SOIL

Lab Sample ID: VBLK QC1106

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: >C3715

Level: (low/med) LDW

Date Received:

% Moisture: NA not dec.

Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume:

(uL

ibër TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	I RT I	EST. CONC.	
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		1	1	! !
				!
				!

UBLK QC1106 (2)

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: | DZO | SAS No.: SDG No.: SS-2

Matrix: [soil/water] SOIL

Lab Sample ID: VBLK QC1106

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3725

Level: [low/med] LOW -

Date Received:

% Moisture: NA decanted (Y/N) N

Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

		CONCENTRA	INU NOITE	TS:	_	
CAS NO.	COMPOUND	(ug/L or	ug/Kg1 U	G/KG 	Q ·	
1				10	1 1U	i
74-87-3	Chloromethane			. 10	ΙÜ	1 .
74-83-9	Bromomethane		•	10	IU	1 -
75-01-4	Vinyl Chloride		•	10	IU	1
75-00-3	Chloroethane	·	i	10	IU	1
75-09-2	Methylene Chlo	ride	i	10	ΙU	1
67-64-1	Acetone			10	IU	1
75-15-0	Carbon Disulfi	de	i	10	١U	1
75-35-4	1,1-Dichloroet	hene	i	10	IU	1
JE 74 7	1 1-Dichloroet	nane	, i	10	١U	1
1 540-59-0	1,2-Dichloroe	nene (tota:	<i>'</i> i	10	ΙU	1
47-44-3	Chloroform		i	10	IU	1
1 107-06-2	1,2-Dichloroe	Cueue	i	10	IU	1
1 79-93-3	2-Butanone		i	10	IU	1
1 71-55-6	1,1,1-Trichlo	roetnane -lesida	i	10	IU	1
1 56-23-5	Carbon Tetracl	Jioriae	i	10	IU	ļ
1 75-27-4	Bromodichloro	methane	,	10	ΙU	1
1 78-87-5	1,2-Dichlorop	ropane	i	10	١U	1
110061-01-5	cis-1,3-Dichl	oropropene	i	10	ΙU	1
1 79-01-6	Trichloroethe	ne	· ;	10	ΙU	.1
1 124-48-1	Dibromochloro	methane	ì	10	IU	1
1 79-00-5	1,1,2-Trichlo	roethane	i	10	١U	1
1 71-43-2	Benzene		_ ;	10	ΙU	i
110061-02-6	trans-1,3-Dic	V To Lob Lobe	- ' 	10	IU	· 1
1 75-25-2	Bromoform		i	10	IU	1
	4-Methy1-2-Pe	ntanone	i	10	١U	1
	2-Hexanone	1	i	10	IU	1
1 127-18-4	Tetrachloroet	nene	<u>          i                          </u>	10	١U	1
1 79-34-5-	<u>1</u> ,1,2,2-Tetra	Cutorostuan	i i	10	IU	ı
	Toluene		i	10	١U	1
<del>-</del> · -	Chlorobenzene		i	10	IU	1
	Ethylbenzene		i	10	IU	ı
	Styrené		i	10	IÜ	1
1 1330-20-7-	Xylene (tota	1)	ì		!	
1						

711

# 1E UDLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NIBUEL SHITELE NU.

UBLK QC1106 (2)

Lab Name: INTECH

Contract:

SDG No .: 55-2

Lab Code: INTECH

Case No. | 020

SAS No.:

Lab Sample ID: VBLK QC1106

Matrix: (soil/water) SOIL

(g∕mL) G

Lab File ID: >C3725

Level: (low/med) LOW

Sample wt/vol: 5.0

Date Received:

% Moisture: NA not dec.

Date Analyzed: 11/06/92

GC Column: PACK ID: 2.0

Dilution Factor:

1.0

Soil Extract Volume:

(uL)

(mm)

Soil Aliquot Volume:

(uL

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 2 (ug/L or ug

CAS NUMBER	COMPOUND NAME	l RT	EST. CONC.	· Q
1 2	lUnknown  Unknown Alkane	1 15.21	8. 61.	N N
		1		
		1		
		1		! ! !
		1	 	! !
				! !
				<u> </u>
				<u></u>
			1	

I VBLK QA1107

Contract: Lab Name: INTECH

SDG No.: SS-1

Lab Code: INTECH Case No.: 10201 SAS No.:

Lab Sample ID: UBLK QA1107

Matrix: [soil/water] SOIL Lab File ID: >A0144 Sample wt/vol: 4.0 [g/mL] G

Date Received: Level: [low/med] MED

Date Analyzed: 11/07/92 % Moisture: NA decanted (Y/N) N

Dilution Factor: 125.0 GC Column: PACK ID: 2.0 (mm)

Soil Aliquot Volume: 100 (ul Soil Extract Volume: 10000(uL)

CONCENTRATION UNITS:

[ug/L or ug/Kg] UG/KG COMPOUND

CAS NO.	COMPOUND	E or against a			
CHS TIST				1	!
	ou to anothers	1	1300	IU	!
74-87-3	Chloromethane	1	1300	IÜ	
74-83-9	Bromomethane	1	1300	IU	1
75-01-4	Vinyl Chloride	1	1300	IU	
75-00-3	Chloroethane	1	560	1 3	1
75-09-2	Methylene Chloride	1	780	l J	1
17 14-1	Acetone	i	1300	IU	
그는 1등 0	Carbon Disulting	i	1300	IU	
75 75 /	1.1-Dichloroethene	i	1300	IU	
	1 1_11.6610606(110116		1300	IU	
540-59-0	1,2-Dichlorde (Helle \	total) !	1300	IU	
17 24-3	Chloroform	,	1300	IU	
107-06-2	1,2-Dichloroetname	ì	1300	IU	
70 07 7	2-Butanone	1	1300	IU	
34 EE /	1 1.1-Trichloroethan		1300	IU	
世人 ウオーデニー	Carbon letrachiolide	•	1300	١U	
フロークフームー・	Bromodichioromethane	! !	1300	ΙU	
70 07 E	1 2-Dichloropropane	•	1300	١U	
00-07	cis-1,3-Dichloroprop	ene !	1300	ίŪ	
70~01-6-	Trichlorgethene		1300	iU	
124 49-1-	Dibromochloromethane	<u> </u>	1300	ίŪ	
70-00-5-	1,1,2-Trichloroethar	ne !	1300	iŪ	
74 /7 7	Benzenê		13.00	iŪ	
10041-02-6-	trans-1,3-Dichlorop	ropene	1300	iÜ	
フロークロークー	Bromotorm	_	1300	iŭ	
109-10-1-	4-Methy1-2-Pentanon	<b>e</b>	1300	iŪ	
591-78-6-	2-Hexanone	1	1300	iŪ	
107 10-4-	Tetrachloroethene	1	1300		
79-34-5-	1,1,2,2-Tetrachloro	ethane !	1300		
109-88-3-	Toluene	. !	1300		
108-90-7-	Chlorobenzene	!	1300		
	Ethylbenzene	1	1300		
	Styrene	1			
	Xylene (total)	1	1300	10	
	My 10110	11		'	

# VOLATILE URGANILS HINE TOTAL TENTATIVELY IDENTIFIED COMPOUNDS

I UBLK QA1107

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 10201 SAS No.:

Lab Sample ID: VBLK QA1107

SDG No.: SS-2

· Matrix: (soil/water) SOIL

Lab File ID: >A0144

Sample wt/vol: 4.0 (g/mL) G

Level: (low/med) MED

Date Received:

% Moisture: NA not dec.

Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 125.0

Soil Extract Volume: . 10000 (uL)

Soil Aliquot Volume: 100

CONCENTRATION UNITS:

# (ug/L or ug/Kg) UG/KG Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT   	EST. CONC.        1100.	. N
1. 110-54-3	Hexane (DOT)(8CI9CI)			   
			 	\ <u></u>
		_		
		_		-i- -i-
		_		
				-\- -\- -\-
				- - - - - -
				١_

VULHITEL UND....

Contract: Lab Name: INTECH

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Lab Sample ID: UBLK QC1107 Matrix: [soil/water] SOIL

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3742

Date Received: Level: [low/med] LOW

% Moisture: NA decanted (Y/N) N Date Analyzed: 11/07/92

Dilution Factor: 1.0 GC Column: PACK ID: 2.0 (mm)

Soil Aliquot Volume: (uL) Soil Extract Volume: (uL)

CONCENTRATION UNITS:

I UBLK QC1107

CAS NO. COMPOUND tag/L of ag/kg = 1	10 10 1
7/ 07 3Chloromethane	10 10 1
7/ 07 3Chloromethane	
/A-B/-/	10 10 1
-/ oz.oBromomethane	10 IU I
75_01-4Vinyl Chloride	10 IU I
me oo zChloroethane .	10 10 1
75-09-2Methylene Chloride	10 IU I
	10 10 1
ne is nCarbon Disultion	10 10
me te /1.1-Dichloroethene	10 10 1
	10 10 1
75-34-31,1-Dichloroethene (total)	ו וו ו
67-66-3Chloroform	10 10 1
107-06-21,2-Dichloroethane	10 10
78-93-32-Butanone	
78-93-3	
71-55-6	
75-27-4Bromodichloromethane	
75-27-4Bromodichloropropane 78-87-51,2-Dichloropropane	
78-87-51,2-Dichloropropene	
110061-01-5Cis-1,5-015http://	10 10
79-01-6Trichloroethene	10 10
1 124-48-1Dibromochloromethane	10 10
79-00-51,1,2-Trichloroethane	10 [U
71-43-2Benzene	10 10
110061-02-6trans-1,3-Dichloropropene	10 10
75-25-2Bromoform	10 10
1 108-10-14-Methyl-2-Pentanone	10 IU
1 591-78-62-Hexanone	10 IU
1 127-18-4Tetrachloroethene	10 10
1 79-34-51,1,2,2-Tetrachloroethane	10 10
1 108-88-3Toluene	10 10
1 108-90-7Chlorobenzene	10 IU
100-41-4Ethylbenzene	10 IU
100-42-5Styrene	10 10
1 1330-20-7Xylene (total)	ا

# VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INTECH

Contract:

I VBLK QC1107

Lab Code: INTECH Case No.

SAS No.: SDG No.:

Matrix: (soil/water) SOIL

· - Lab Sample ID: VBLK QC1107

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: >C3742

Level: (low/med) LOW

Date Received:

% Moisture: NA not dec.

Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

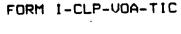
Soil Extract Volume: (uL)

Soil Aliquot Volume: (u

Number TICs found: 2

CONCENTRATION UNITS: (uq/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	   RT	EST. CONC.	   Q 
1 2. 110-54-3	Unknown Cycloalkane  Hexane	15.19 19.18		N   N 
		1		
				! !
				! !



# UDLATILE ORGANICS ANALYSIS DATA SHEET

Contract: Lab Name: INTECH

I UBLK QA1109

Lab Code: INTECH Case No.: 10201 SAS No.:

SDG No.: SS-1

Matrix: [soil/water] SOIL

Lab Sample ID: UBLK QA1109

Lab File ID: >A0156

Sample wt/vol: 4.0 [g/mL] G

Date Received:

Level: [low/med] MED

% Moisture: NA decanted (Y/N) N

Date Analyzed: 11/09/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor:

125.0

Soil Extract Volume: [0000 (uL)

Soil Aliquot Volume: (00 (ul

CONCENTRATION UNITS:

CAS NO.	COMPOUND	[ug/L or	ug/Kg 1	UG/KG	Q	
			1		1	
7 07 7	Chloromethane		1	1300	IU	1
74-8/-3	Bromomethane		1	1300	IU	1
74-83-9	Vinyl Chloride		1	1300	IU	1
/5-01-4	Chloroethane		1	1300	וט	1
75-00-3	Methylene Chlori	de	1	510	1 J	1
/5-09-2	Actors		1	780	1 J	ŀ
6/-64-1	Acetone Carbon Disulfide	- <del>-</del> -	1	1300	IU	1
75-15-0	4 i Distinct	ne	1	1300	IU	- 1
75-35-4	1,1-Dichloroethe	ne.	1	1300	IU	1
75-34-3	1,1-Dichloroethe	nne (total	1 i	1300	IU	1
540-59-0	1,2-Dichloroethe	ene (tota:	í	1300	IU	- 1
67-66-3	Chloroform		i	1300	IU	1
107-06-2	1,2-Dichloroetha	ane	i	1300	IU	1
78-93-3	2-Butanone		i	1300	ΙŪ	1
71-55-6	1,1,1-Trichloro	tnane :d-	i	1300	ĬŪ	
56-23-5	Cárbon Tetrachlo	oriae	,	1300	ΙŪ	1
75-27-4	Bromodichlorome	thane	1 E	1300	ίŪ	1
l 78-87-5	1,2-Dichloropro	pane		1300	iU	
110061-01-5	cis-1,3-Dichlor	opropene	1	1300	iu	
	Trichloroethene		,	1300	ίŪ	
124-48-1	Dibromochlorome	thane	1	1300	ίŪ	
	1,1,2-Trichloro	ethane		1300	ıÜ	
	Benzene			1300	iŭ	
10061-02-6	trans-1,3-Dichl	oropropen	1	1300	iÜ	
	Bromoform		1	1300	iŭ	
	4-Methy1-2-Pent	anone	1	1300	iU	
	2-Hexanone		!	1300	10	
	Tetrachloroethe		1	1300	10	
1 79-34-5	1,1,2,2-Tetrach	loroethan	e !		10	
1 108-88-3	Toluene	•	!	1300	10	
1 108-90-7	Chlorobenzene		1	1300		
1 100-41-4	Ethylbenzene		1	1300	IU	
1 100-42-5-	Styrene		1	1300	IU	
1 1330-20-7	Xylene (total)		l l	1300	ΙU	
,1			1		!	

# VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INTECH Contract:

Lab Code: INTECH Case No. 10201 SAS No.: SDG No.: SS-2

Mâtrix: (soil/water) SOIL — Lab Sample ID: UBLK QA1109

Sample wt/vol: 4.0 (g/mL) G Lab File ID: >A0156

Level: (low/med) MED \_\_\_\_ Date Received:

% Moisture: NA not dec. Date Analyzed: 11/09/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 125.0

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100 (u

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

UBLK QA1109

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	   RT  ======	EST. CONC.	   Q  ***==
1. 96-14-0 10-54-3	Pentane, 3-mathyl (861961)    Hexane (DOTX 861961)	19.53	750.	N 
	max			
	12-7-47	   	 	 
		1	1	!
		1		!
				!
1		\		
		1		!

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MISUEL SAMPLE NU.

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-10(MS)

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3734

Level: [low/med] LOW Date Received: 10/30/92

% Moisture: 15.0 decanted (Y/N) Y Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	[ug/L or	ug∕Kg] Ų(	3/KG	Q
			1		<u></u>
	Chloromethane		1	12	IU
	Bromomethane		1	12	IU
75-01-4	Vinyl Chloride	4		12	IU
75-00-3	Chloroethane		1	36	l
75-09-2	Methylene Chlorid	le	1	26	1
67-64-1	Acetone		ł	61	1
75-15-0	Carbon Disulfide		1	12	IU
75-35-4	1,1-Dichloroether	ne	1	<b>71</b> -	ł
	1,1-Dichloroethar		1	12	IU
	1,2-Dichloroether		)	12	IU
	Chloroform		I	12	IU
107-06-2	1,2-Dichloroetha	10	l	12	IU
	2-Butanone		1	12	IU
71-55-6	1,1,1-Trichloroe	thane	1	12	IU
	Carbon Tetrachlo		ı	12	IU
75-27-4	Bromodichlorometi	nane	1	12	IU
	1,2-Dichloropropa		1	12	ΙU
0061-01-5	cis-1,3-Dichloro	oropene	1	12	IU
79-01-6	Trichloroethene		i	61	1
124-48-1	Dibromochlorometl	nane	l	12	IU
79-00-5	1,1,2-Trichloroe	thane	l	48	1
71-43-2	Benzene		1	73	1
.0061-02-6	trans-1,3-Dichlo	ropropene	1	12	IU
フラー25-2	Bromoform		1	12	IU
108-10-1	4-Methy1-2-Pentai	none	į.	12	IU
591-78-6- <b>-</b> -	2-Hexanone		1	12	IU
127-18-4	Tetrachloroethen	•	1	12	IU
79-34-5	1.1.2.2-Tetrachl	proethane	1	12	IU
108-88-3	Taluene	•	ţ	<i>7</i> 5	1
108-90-7	Chlorobenzene		1	68	1
100-41-4	Ethylbenzene		ŧ	12	IU
100-42-5	Sturene		1	12	10
1330-20-7	Xylene (total)	,	1	12	١U

SB-5B MSD

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-11(MSE

Sample wt/vol: 5.0 [g/mL] G Lab File ID: >C3735

Level: [low/med] LOW \_ Date Received: 10/30/92

% Moisture: 15.0 decanted (Y/N) Y Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL

CONCENTRATION UNITS:

COS NO COMPOUND [ug/L or ug/Kg] UG/KG Q

CAS NO. IU 12 74-87-3----Chloromethane IU 12 74-83-9----Bromomethane 12 IU 75-01-4------Vinyl Chloride 57 75-00-3-----Chloroethane 32 1 75-09-2----Methylene Chloride 100 67-64-1----Acetone 10 12 75-15-0-----Carbon Disulfide 70 1 75-35-4----1,1-Dichloroethene 12 IU 75-34-3----1,1-Dichloroethane IU 12 540-59-0----1,2-Dichloroethene (total) IU 12 67-66-3-----Chloroform 12 1U 107-06-2----1,2-Dichloroethane 26 ı 78-93-3----2-Butanone IU 12 71-55-6----1,1,1-Trichloroethane 11 12 56-23-5----Carbon Tetrachloride IU 12 75-27-4----Bromodichloromethane IU 12 78-87-5----1,2-Dichloropropane ١U 12 110061-01-5----cis-1,3-Dichloropropene 58 1 79-01-6----Trichloroethene IU . 12 124-48-1-----Dibromochloromethane 1 46 79-00-5----1,1,2-Trichloroethane 68 71-43-2----Benzene IU 12 110061-02-6----trans-1,3-Dichloropropene IU 12 75-25-2----Bromoform IU 12 108-10-1----4-Methyl-2-Pentanone IU 12 591-78-6----2-Hexanone IU 12 127-18-4----Tetrachloroethene 10 12 79-34-5----1,1,2,2-Tetrachloroethane 72 1 108-88-3----Toluene 64 108-90-7----Chlorobenzene 111 12 100-41-4----Ethylbenzene 12 10 100-42-5----Styrene 12 IU 1330-20-7-----Xylene (total)

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-19MS

Sample wt/vol: 4.0 [g/mL] G Lab File ID: >A0148

Level: [low/med] MED Date Received: 10/30/92

% Moisture: 20.0 decanted (Y/N) Y Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 625.0

Soil Extract Volume: | cooo(uL) | Soil Aliquot Volume: 25 (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND [ug/L or ug/Kg] UG/KG

CHS NO.	Conrodno tagaz or a	.gg	_
		1	1
74-87-3	-Chloromethane	1 6300	IU
	-Bromomethane	6300	IU
	-Vinyl Chloride	1 6300	IU
	-Chloroethane	6300	IU
	-Methylene Chloride	4100	1 JB
67-64-1		1 6300	IU B
	-Carbon Disulfide	6300	IU
	-1,1-Dichloroethene.	1 38000	1
	-1,1-Dichloroethane	6600	I
	-1,2-Dichloroethene (total)	1 5200	ΙJ
67-66-3		6300	IU
	-1.2-Dichloroethane	6300	IU
78-93-3		6300	ΙU
	-1,1,1-Trichloroethane	1 2200	i J
	-Carbon Tetrachloride	6300	IU
	-Bromodichloromethane	6300	IU
— .	-1,2-Dichloropropane	6300	ίŪ
	cis-1,3-Dichloropropene	1 6300	IU
	-Trichloroethene	160000	i
	Dibromochloromethane	6300	เบ
		1 6300	เบ
71-43-2	-1,1,2-Trichloroethane	1 33000	i
		1 6300	iυ
75-25-2		1 6300	ίŪ
		1 6300	iŭ
591-78-6	-2-Hernone	1 6300	ίŪ
	Tetrachloroethene	6300	ίŪ
	1,1,2,2-Tetrachloroethane	1 6300	iU
108-98-3		37000	i
108-90-7		30000	i
100-41-4		1 6300	iu
100-41-4	China	1 6300	iu
100-42-5	styrene	1 6300	10
**/U-/	Xylene (total)	1 6200	Ü

I SB-5D MSD

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-19MSD

Sample wt/vol: 40 [g/mL] G Lab File ID: >A0149

Level: [low/med] MED Date Received: 10/30/92

% Moisture: 20.0 decanted (Y/N) Y Date Analyzed: 11/07/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 625.0

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 25 (uL)

CAS NO. COMPOUND [ug/	ENTRATION UNITS: /L or ug/Kg] UG/KG Q
	1
74-87-3Chloromethane	1 6300 IU
74-83-9Bromomethane	1 6300 IU
75-01-4Uinyl Chloride	I 6300 IU
75-00-3Chloroethane	l 6300 IU
75-09-2Methylene Chloride	1 4700 I JB
67-64-1Acetone	1 6300 IU B
75-15-0Carbon Disulfide	ı 6300 IU
75-15-U	32000
75-35-41,1-Dichloroethene	1 5600 I J
75-34-31,1-Dichloroethane	total) 1 4500 I J
540-59-01,2-Dichloroethene (	6300 IU
67-66-3Chloroform	1 6300 IU
107-06-21,2-Dichloroethane	i 6300 IU
78-93-32-Butanone	0400   1
71-55-61,1,1-Trichloroethan	1 6300 IU
56-23-5Carbon Tetrachloride	i 6300 IU
75-27-4Bromodichloromethane	1 6300 IU
78-87-51,2-Dichloropropane	4700 111
10061-01-5cis-1,3-Dichloroprop	150000
79-01-6Trichloroethene	4700 111
124-48-1Dibromochloromethane	4700 111
79-00-51,1,2-Trichloroethan	33000
71-43-2Benzene	
10061-02-6trans-1,3-Dichloropr	i 6300 IU
75-25-2Bromoform	4700 111
108-10-14-Methyl-2-Pentanone	1 6300 IU
591-78-62-Hexanone	1 6300 IU
127-18-4Tetrachloroethene	4700 111
79-34-51,1,2,2-Tetrachloroe	thane 1 35000 1
108-88-3Toluene	1 30000
108-90-7Chlorobenzene	6300 IU
100-41-4Ethylbenzene	1 6300 10
100-42-5Styrene	1 6300 IU
1330-20-7Xylene (total)	1 0,500 10

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-18

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1993

Level: [low/med] LOW Date Received: 10/31/92

% Moisture: 20.0 decanted (Y/N) Y Date Extracted: 11/05/92

Concentrated Extract Volume: 500 uL Date Analyzed: 11/13/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] Y pH: 9.60

CAS NO. COMPOUND CONCENTRATION UNITS:
[ug/L or ug/Kg] UG/KG Q

108-95-2-----Phenol

1				,
Ì	108-95-2Pheno1	!	<u> </u>	
1	111-44-4his(2-chlanashi)	420	١U	- 1
ŧ		420	IU	l
1	291-22-1	420	ΙU	ı
ı	106-46-71,4-Dichlorobenzene	420	ΙU	i
ı	95-50-11,2-Dichlorobenzene	420	۱U	i
ı	95-48-72-Methylphenol	420	ΙŪ	i
1	108-60-1	420	ΙU	i
ı	108-60-12,2'-oxybis(1-Chloropropane)	1 420	ΙŪ	i
1		420	ΙŪ	i
ı	621-64-7N-Nitroso-di-n-propylamine 67-72-1Hexachloroethane	420	ΙŪ	i
ı	98-95-3Nitrobenzene	420	ΙŪ	i
ı	78-59-1Isophorone	420	ΙÜ	i
i	88-75-52-Nitrophenol	420	ÍŪ	i
١	105-67-9	420	ίŪ	i
ı	105-67-92,4-Dimethylphenol	420	ĺŪ	i
İ	111-91-1bis(2-Chloroethoxy)methane.	420	ίŪ	i
ĺ		420	ĺŪ	i
1	120-82-11,2,4-Trichlorobenzene	420	ίŪ	i
	106-47-84-Chloroaniline	420	iυ	i
	87-48-3	420	ίŪ	i
	87-68-3Hexachlorobutadiene	420	iu	i
	59-50-74-Chloro-3-methylphenol	420	iu	i
		420	ĺΰ	i
	77-47-8Hexachlorocyclopentadiene   88-06-2	420	ίŪ	i
		420	ίŰ	i
	95-95-42,4,5-Trichlorophenol   91-58-7	1000	ίŪ	i
	91-58-72-Chloronaphthalene 88-74-42-Nitroaniline	420	ΙÜ	i
	131-11-3Dimethylphthalate	1000	iu '	i
	208-96-8Acenaphthylene	420	ΙÜ	i
	- 000-20-2	420	ΙÜ	i
	99-09-23-Nitroaniline	420	iŭ	i
	83-32-9Acenaphthene	1000	iŭ	i
	ncenaphtnene ,	420	111	i

1 58-56 Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: 1210201-18

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1993

Level: [low/med] LOW Date Received: 10/31/92

% Moisture: 20.0 decanted (Y/N) Y Date Extracted: 11/05/92

Concentrated Extract Volume: 500 uL Date Analyzed: 11/13/92

Dilution Factor: 1 Injection Volume: 2 uL

GPC Cleanup: [Y/N] Y pH: 9.60

# CONCENTRATION UNITS:

		CAS NO.	COMPOUND	[ug/L or	ug/Kg] UG	KG	Q	
100-02-74-Nitrophenol   1000	ľ				1		1	١
132-64-9Dibenzofuran	ŀ			eno l	1	1000	ΙU	1
121-14-22,4-Dinitrotoluene	1				ı	1000	IU	1
84-73-7Diethylphthalate	1				1	420	IU	ł
7005-72-34-Chlorophenyl-phenylether	ı	121-14-2	2,4-Dinitroto	luene	1	420	IU	<b>-</b>
86-73-7Fluorene	ļ	84-73-7	Diethylphthal	ate	1	420	IU	1
100-01-64-Nitroaniline	١	7005-72-3	4-Chloropheny	l-phenylether	r 1	420	IU	- 1
534-52-14,6-Dinitro-2-methylphenol   1000   U   86-30-6N-Nitrosodiphenylamine   420   U   101-55-34-Bromophenyl-phenylether   420   U   118-74-1Hexachlorobenzene   420   U   87-86-5Pentachlorophenol   1000   U   85-01-8Phenanthrene   420   U   120-12-7Anthracene   420   U   120-12-7Anthracene   420   U   120-4-8Carbazole   420   U   120-4-8Di-n-butylphthalate   420   U   129-00-0Pyrene   420   U   129-00-0Pyrene   420   U   129-00-0	1				1	420	IU	1
86-30-6N-Nitrosodiphenylamine	١	100-01-6	4-Nitroanilin	e	1 .	1000	IU	1
101-55-34-Bromophenyl-phenylether	١	534-52-1	4,6-Dinitro-2	-methylphenol	1 1	1000	IU	1
101-55-34-Bromophenyl-phenylether	١	86-30-6	N-Nitrosodiph	enylamine	1	420	เบ	1
118-74-1	١				ı	420	IU	- 1
87-86-5Pentachlorophenol	1				ı	420	1U	1
85-01-8Phenanthrene	i				. 1	1000	IU	- 1
120-12-7Anthracene	ı	85-01-8	Phenanthrenė		1	420	10	1
84-74-2Di-n-butylphthalate	ı				1 .	420	ΙU	. 1
206-44-0Fluoranthene	ı	86-74-8	Carbazole		1	420	ΙU	1
206-44-0Fluoranthene	١	84-74-2	Di-n-butvlpht	halate	1	420	ΙU	- 1
129-00-0	1	206-44-0	Fluoranthene		i i			1
85-68-7Butylbenzylphthalate   420   U   91-94-13,3'-Dichlorobenzidine   420   U   56-55-3Benzo(a)anthracene   420   U   1218-01-9Chrysene   420   U   1217-81-7bis(2-Ethylhexyl)phthalate   420   U   127-84-0Benzo(b)fluoranthene   420   U   1207-08-9Benzo(b)fluoranthene   420   U   1207-08-9Benzo(k)fluoranthene   420   U   1207-08-9Benzo(a)pyrene   420   U   1207-08-9Benzo(a)pyrene   420   U   1207-08-9Benzo(a)pyrene   420   U   1207-08-9Benzo(a)pyrene   420   U   1207-08-9Benzo(a)pyrene   420   U   1207-08-9Benzo(a)pyrene   420   U   1207-08-9Benzo(a)pyrene   420   U   1207-08-9Benzo(a)pyrene   420   U   1207-08-9	1				1	420	IU	1
91-94-13,3'-Dichlorobenzidine   420   U   56-55-3Benzo(a)anthracene   420   U   218-01-9Chrysene   420   U   117-81-7bis(2-Ethylhexyl)phthalate   420   U   117-84-0Benzo(b)fluoranthene   420   U   205-99-2Benzo(b)fluoranthene   420   U   207-08-9Benzo(k)fluoranthene   420   U   50-32-8Benzo(a)pyrene   420   U   193-39-5Indeno(1,2,3-cd)pyrene   420   U   53-70-3Dibenz(a,h)anthracene   420   U	١	85-68-7	Butvlbenzvlah	thalate	1	420	ΙÜ	i
56-55-3Benzo(a)anthracene	1	91-94-1	3.3 <sup>1</sup> -Dichloro	benzidine	į			i
218-01-9Chrysene	ı	56-55-3	Bénzo(a)anthr	acene	1			i
117-81-7bis(2-Ethylhexyl)phthalate	١	218-01-9	Chrysene		İ			i
117-84-0Di-n-octylphthalate	l	117-81-7	bis(2-Ethulhe	xvl)phthalate				ì
205-99-2Benzo(b)fluoranthene	ı	117-84-0	Di-n-octulpht	halate	İ			i
207-08-9Benzo(k)fluoranthene	١	205-99-2	Benzo(b)fluor	anthene	i			i
50-32-8Benzo(a)pyrene   420  U     193-39-5Indeno(1,2,3-cd)pyrene   420  U     53-70-3Dibenz(a,h)anthracene   420  U	1	207-08-9	Benzo(k)fluor	anthene	i		· <del></del>	i
193-39-5Indeno(1,2,3-cd)pyrene	١	50-32-8	Benzo(a)nuren	e	i			i
י ל של של 1 אל בDibenz(a,h)anthracene ו אל 1 420 של 1 ל	١	193-39-5	Indeno(1.2 3-	cd)nurene	i			i
191-24-2Benzo(g,h,i)perylene 420 IU I	١	53-70-3	Dibenz(a b)an	thracene.	i			i
	ł	191-24-2	Benzola h ila	erulene	1			i
	١		2020 (9,11,17)	or yrone.	1	720	1	i



### 1F SEMIUOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NT:	SUEL	SHITCE	110.
ι.			
i	SB-5	5C	
- 1			*

ab Name: INTECH

Contract:

\_ab Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

Matrix: (soil/water) SOIL

Lab Sample ID: 1210201-18

Sample wt/vol: 30.00 (g/mL) G

Lab File ID: >B1993

\_evel: (low/med) LOW

Date Received: 10/31/92

% Moisture: 20.0 decanted. (Y/N) Y

Date Extracted: 11/05/92

Concentrated Extract Volume:

Date Analyzed: 11/13/92 500 (ul)

Injection Volume: 2 (ul)

Diluton Factor: 1

GPC Cleanup:

(Y/N) Y

pH: 9.6

Number TICs found: 16

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

			1
I CAS NUMBER   COMPOUND NAME	RT I	EST. CONC.	
1. 108-94-1 Cyclohexanone (ACN)(8CI9CI) 2. 53966-57-7 3-Buten-2-one, 3,4(or 4,4)-d 3  Unknown 4. 822-86-6 Cyclohexane, 1,2-dichloro-, 5  Unknown Alkane 6  Unknown Alkane 7  Unknown Alkane 17  Unknown Alkane 19  Unknown Alkane 10  Unknown Alkane 11  Unknown Alkane 11  Unknown Alkane 11  Unknown Alkane 11  Unknown Alkane 11  Unknown Alkane 11  Unknown Alkane 11  Unknown Alkane 11  Unknown Alkane 11  Unknown Alkane 11  Unknown Alkane 11  Unknown Alkane	7.60   7.87   10.50   11.49   20.99   21.73   22.49   22.57   23.93   25.28   26.57   27.81   28.99   30.13   32.26   33.25	290. 1600. 460. 230. 210. 230. 270. 190. 250. 310. 270. 1 90. 1 190. 1 190. 1 170. 1 170. 1 170. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 8

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-20

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1994

Level: [low/med] LOW Date Received: 10/31/92

% Moisture: 19.0 decanted (Y/N) Y Date Extracted: 11/05/92

Concentrated Extract Volume: 500 uL Date Analyzed: 11/13/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] Y pH: 9.70

CONCENTRATION UNITS:

CAS NO. COMPOUND [ug/L or ug/Kg] UG/KG (

88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol 120-82-11,2,4-Trichlorobenzene 91-20-3Naphthalene 106-47-84-Chloroaniline 87-68-3Hexachlorobutadiene 59-50-74-Chloro-3-methylphenol 91-57-62-Methylnaphthalene 77-47-8Hexachlorocyclopentadiene 88-06-22,4,6-Trichlorophenol 95-95-42,4,5-Trichlorophenol 91-58-72-Chloronaphthalene 88-74-42-Nitroaniline 131-11-3			
108-95-2Phenol 111-44-4bis(2-chloroethyl)ether 95-57-82-Chlorophenol 41-73-11,3-Dichlorobenzene 106-46-71,4-Dichlorobenzene 95-50-11,2-Dichlorobenzene 95-48-72-Methylphenol 108-60-12,2'-oxybis(1-Chloropropane) 106-44-5		1 1U	
111-44-4bis(2-chloroethyl)ether 95-57-82-Chlorophenol 41-73-11,3-Dichlorobenzene 106-46-71,4-Dichlorobenzene 95-50-11,2-Dichlorobenzene 95-48-72-Methylphenol 108-60-12,2'-oxybis(1-Chloropropane) 106-44-5		10	
95-57-82-Chlorophenol 541-73-11,3-Dichlorobenzene 106-46-71,4-Dichlorobenzene 95-50-11,2-Dichlorobenzene 95-48-72-Methylphenol 108-60-12,2'-oxybis(1-Chloropropane) 106-44-54-Methylphenol 621-64-7N-Nitroso-di-n-propylamine 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol 120-82-11,2,4-Trichlorobenzene 91-20-3Naphthalene 106-47-84-Chloroaniline 87-68-3Hexachlorobutadiene 59-50-74-Chloro-3-methylphenol 91-57-62-Methylnaphthalene 77-47-8Hexachlorocyclopentadiene 88-06-22,4,6-Trichlorophenol 95-95-42,4,5-Trichlorophenol 91-58-72-Chloronaphthalene 88-74-42-Nitroaniline			
541-73-11,3-Dichlorobenzene       41         106-46-71,4-Dichlorobenzene       42         95-50-11,2-Dichlorobenzene       43         95-48-71,2-Dichlorobenzene       41         108-60-12,2'-oxybis(1-Chloropropane)       42         108-60-12,2'-oxybis(1-Chloropropane)       43         106-44-54-Methylphenol       43         621-64-74-Methylphenol       44         621-64-7		IU	
106-46-71,4-Dichlorobenzene 95-50-11,2-Dichlorobenzene 95-48-72,Methylphenol 108-60-12,2'-oxybis(1-Chloropropane)  1106-44-54-Methylphenol 621-64-7N-Nitroso-di-n-propylamine 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-11sophorone 88-75-52-Nitrophenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol 120-82-11,2,4-Trichlorobenzene 91-20-3Naphthalene 106-47-84-Chloroaniline 87-68-3		IU	
95-50-11,2-Dichlorobenzene 95-48-72-Methylphenol 108-60-12,2'-oxybis(1-Chloropropane) 106-44-54-Methylphenol 621-64-7Nitroso-di-n-propylamine 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol 120-82-11,2,4-Trichlorobenzene 91-20-3Naphthalene 106-47-84-Chloroaniline 87-68-3		IU	
95-48-72-Methylphenol 108-60-12,2'-oxybis(1-Chloropropane) 106-44-54-Methylphenol 621-64-7Nhitroso-di-n-propylamine 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol 120-82-11,2,4-Trichlorobenzene 91-20-3Naphthalene 106-47-8		IU	
108-60-12,2'-oxybis(1-chibroproposition) 106-44-54-Methylphenol 621-64-7Nitroso-di-n-propylamine 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol 120-82-11,2,4-Trichlorobenzene 91-20-3Naphthalene 106-47-8Naphthalene 106-47-8		IU	
106-44-54-Methylphenol 621-64-7N-Nitroso-di-n-propylamine 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol 120-82-11,2,4-Trichlorobenzene 91-20-3Naphthalene 106-47-8		10	
621-64-7N-Nitroso-di-n-propylamino 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol 120-82-11,2,4-Trichlorobenzene 91-20-3Naphthalene 106-47-84-Chloroaniline 87-68-3Hexachlorobutadiene 59-50-74-Chloro-3-methylphenol 91-57-62-Methylnaphthalene 77-47-8Hexachlorocyclopentadiene 88-06-22,4,6-Trichlorophenol 95-95-42,4,5-Trichlorophenol 91-58-72-Chloronaphthalene 88-74-42-Nitroaniline 131-11-3		IU	
67-72-1		IU	
98-95-3Nitrobenzene       4         78-59-1Isophorone       4         88-75-52-Nitrophenol       4         105-67-92,4-Dimethylphenol       4         111-91-1bis(2-Chloroethoxy)methane       4         120-83-22,4-Dichlorophenol       4         120-82-11,2,4-Trichlorobenzene       4         91-20-3Naphthalene       4         106-47-8Naphthalene       4         87-68-3Hexachlorobutadiene       4         87-50-74-Chloro-3-methylphenol       4         91-57-62-Methylnaphthalene       4         77-47-8Hexachlorocyclopentadiene       4         88-06-22,4,6-Trichlorophenol       4         91-58-72-Chloronaphthalene       1         88-74-42-Nitroaniline       1         131-11-3	0	IU	
78-59-1	0	IU	
88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol 120-82-11,2,4-Trichlorobenzene 91-20-3Naphthalene 106-47-84-Chloroaniline 87-68-3Hexachlorobutadiene 59-50-74-Chloro-3-methylphenol 91-57-62-Methylnaphthalene 77-47-8Hexachlorocyclopentadiene 88-06-22,4,6-Trichlorophenol 95-95-42,4,5-Trichlorophenol 91-58-72-Chloronaphthalene 88-74-42-Nitroaniline 131-11-3	0	IU	
105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol 120-82-11,2,4-Trichlorobenzene 91-20-3Naphthalene 106-47-84-Chloroaniline 87-68-3Hexachlorobutadiene 59-50-74-Chloro-3-methylphenol 91-57-62-Methylnaphthalene 77-47-8Hexachlorocyclopentadiene 88-06-22,4,6-Trichlorophenol 95-95-42,4,5-Trichlorophenol 91-58-72-Chloronaphthalene 88-74-42-Nitroaniline 131-11-3	0	IU	
111-91-1	0	IU	
120-83-22,4-Dichlorophenol 120-82-11,2,4-Trichlorobenzene 91-20-3Naphthalene 106-47-84-Chloroaniline 87-68-3Hexachlorobutadiene 59-50-74-Chloro-3-methylphenol 91-57-62-Methylnaphthalene 77-47-8Hexachlorocyclopentadiene 88-06-22,4,6-Trichlorophenol 95-95-42,4,5-Trichlorophenol 91-58-72-Chloronaphthalene 88-74-42-Nitroaniline 131-11-3Dimethylphthalate	0	IU	
120-82-11,2,4-Trichlorobenzene 91-20-3Naphthalene 106-47-84-Chloroaniline 87-68-3Hexachlorobutadiene 59-50-74-Chloro-3-methylphenol 91-57-62-Methylnaphthalene 77-47-8Hexachlorocyclopentadiene 88-06-22,4,6-Trichlorophenol 95-95-42,4,5-Trichlorophenol 91-58-72-Chloronaphthalene 88-74-42-Nitroaniline 131-11-3Dimethylphthalate	0	IU	
91-20-3Naphthalene 106-47-84-Chloroaniline 87-68-3Hexachlorobutadiene 59-50-74-Chloro-3-methylphenol 91-57-62-Methylnaphthalene 77-47-8Hexachlorocyclopentadiene 88-06-22,4,6-Trichlorophenol 95-95-42,4,5-Trichlorophenol 91-58-72-Chloronaphthalene 88-74-42-Nitroaniline 131-11-3	0	IU	
106-47-84-Chloroaniline  87-68-3Hexachlorobutadiene  59-50-74-Chloro-3-methylphenol  91-57-62-Methylnaphthalene  77-47-8Hexachlorocyclopentadiene  88-06-22,4,6-Trichlorophenol  95-95-42,4,5-Trichlorophenol  91-58-72-Chloronaphthalene  88-74-42-Nitroaniline  131-11-3Dimethylphthalate	0	IU	l
106-47-84-Chloroaniline  87-68-3Hexachlorobutadiene  59-50-74-Chloro-3-methylphenol  91-57-62-Methylnaphthalene  77-47-8Hexachlorocyclopentadiene  88-06-22,4,6-Trichlorophenol  95-95-42,4,5-Trichlorophenol  91-58-72-Chloronaphthalene  88-74-42-Nitroaniline  131-11-3Dimethylphthalate	. 0	IU	l
87-68-3	0	ΙU	ļ
59-50-74-Chloro-3-methylphenol 91-57-62-Methylnaphthalene 77-47-8Hexachlorocyclopentadiene 88-06-22,4,6-Trichlorophenol 95-95-42,4,5-Trichlorophenol 91-58-72-Chloronaphthalene 88-74-42-Nitroaniline 131-11-3Dimethylphthalate	0	IU	j
91-57-62-Methylnaphthalene 77-47-8Hexachlorocyclopentadiene 88-06-22,4,6-Trichlorophenol 95-95-42,4,5-Trichlorophenol 91-58-72-Chloronaphthalene 88-74-42-Nitroaniline 131-11-3Dimethylphthalate	10	İL	
77-47-8Hexachlorocyclopentadiene  88-06-22,4,6-Trichlorophenol  95-95-42,4,5-Trichlorophenol  91-58-72-Chloronaphthalene  88-74-42-Nitroaniline  131-11-3Dimethylphthalate	10	il	
88-06-22,4,6-Trichlorophenol 95-95-42,4,5-Trichlorophenol 91-58-72-Chloronaphthalene 88-74-42-Nitroaniline 131-11-3Dimethylphthalate	10	il	
95-95-42,4,5-Trichlorophenol 91-58-72-Chloronaphthalene 88-74-42-Nitroaniline 131-11-3Dimethylphthalate		11	
91-58-72-Chloronaphthalene 88-74-42-Nitroaniline 131-11-3Dimethylphthalate	10	11	
88-74-42-Nitroaniline 131-11-3Dimethylphthalate		11	
131-11-3Dimethylphthalate			_
	10		
208-96-8Acenaphthylene	10	•	_
606-20-22.6-Dinitrotoluene	10		
99-09-23-Nitroaniline	00	•	_
83-32-9Acenaphthene	10		U

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-20

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1994

Level: [low/med] LOW Date Received: 10/31/92

% Moisture: 19.0 decanted (Y/N) Y Date Extracted: 11/05/92

Concentrated Extract Volume: 500 uL Date Analyzed: 11/13/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: /[Y/N] Y pH: 9.70

		CONCENTRA				
CAS NO.	COMPOUND	[ug/L or	ug/Kg]	UG/KG	Q	
			ŀ		ı	_
51-28-5	2,4-Dinitroph	eno l	ı	1000	IU	
100-02-7	4-Nitrophenol		ł	1000	IU	
132-64-9	Dibenzofuran		1	410	IU	
	2,4-Dinitroto	luene	l ·	410	IU	
	Diethylphthal		1.	410	IU	
7005-72-3	4-Chloropheny	l-phenylethe	r I	410	IU	
86-73-7	Fluorene	•	. 1	410	IU	
100-01-6	4-Nitroanilir	18	1	1000	IU	
534-52-1	4,6-Dinitro-2	2-methylpheno	1 1 1	1000	IU	
94-30-4	N-Nitrosodiph	nenvlamine	1	410	IU	
101 55 3	4-Bromopheny	-phenulether	1	410	ıu	
110 74 1	Hexachlorober	rene	1	410	IU	
	Pentachloroph		ı	1000	١U	
	Phenanthrene	101101	ı	410	ΙU	
	Anthracene		1	410	IU	
	Carbazole		1	410	ΙU	
	Di-n-butylph	thalatá	i	410	IU	
	Fluoranthene	(1101010	i	410	ΙU	
			i	410	ΙU	
129-00-0	Pyrene	h+hnln+n	i	410	ΙŪ	
87-68-/	Butylbenzylpl 3,3'-Dichlor	nthorate	i	410	ΙŪ	
	Benzo(a)anth		i	410	ΙU	
	Chrysene	racena	ì	410	ΙŪ	
	bis(2-Ethylh	evul lohthalat	- i	410	ΙU	
	Di-n-octylph		ĭ	410	IU	
	Benzo(b)fluo		i	410	ΙU	
	Benzo(k)fluo		I	410	ΙU	
50-700-7			i	410	ΙÜ	
103 30 5	Benzo(a)pyre	115 115	i	410	ΙŪ	
	Indeno (1,2,3		1	410	iU	
77-/U-3	Dibenz(a,h)a	nthracene	1	410	เบ	
171-24-2	Benzo(g,ĥ,i)	perylene		710	, 0	



### "SEMIVULATILE URGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

b Name: INTECH

Contract:

Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

trix: (soil/water) SOIL

Lab Sample ID: 1210201-20

mple wt/vol: 30.00 (g/mL) G

- Lab File ID: >B1994

vel: (low/med) LOW

Date Received: 10/31/92

Moisture: 19.0 decanted. (Y/N) Y

Date Extracted: 11/05/92

ncentrated Extract Volume: 500 (ul)

Date Analyzed: 11/13/92

jection Volume: 2 (ul)

Diluton Factor: 1

Cleanup: (Y/N) Y pH: 9.7

umber TICs found: 4

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	I COMPOUND NAME I	RT I	EST. CONC.	Q 1
2. 53966-57-7 3 4. 821-86-6	Cyclohexanone (ACN)(8C19C1)  3-Buten-2-one, 3,4(or 4,4)-d  Unknown   <del>Unknown</del> Cyclokewne, 1,1-diclose-	10 50	350. 1600. 540. 230.	N
7.5				
XXXX				;

ンローソ

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.:

SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-21

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1990

Level: [low/med] LOW Date Received: 10/31/92

% Moisture: 15.0 decanted (Y/N) Y Date Extracted: 11/05/92

Concentrated Extract Volume: \_ 500 uL Date Analyzed: 11/13/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] Y pH: 9.70

	CAS NO.	COMPOUND	CONCENTRA			C	a a
1	100 05 0			1	***************************************	1	_ ,
!	108-95-2	-Phenol		1	390	ΙŲ	1
!	111-44-4	-bis(2-chloroethyl	ether)	1	390	ΙU	1
1	77-7/-8	-2-Chlorophenol		1	390	1U	ľ
1	741-/3-1	-1,3-Dichlorobenze	ne	1	390	IU	<b>l</b>
!	106-46-/	-1,4-Dichlorobenze	ne	ŧ.	390	IU	1
1	75-50-1	-1,2-Dichlorobenze	ne	1	390	IJ	1
!	99-48-7	-2-Methylphenol		l l	390	ΙU	1
!	108-60-1	-2,2'-oxybis(1-Chl	oropropan	e)	390	IU	t
!	106-44-5	-4-Methylphenol		i	390	IU	ı
!	621-64-/	-N-Nitroso-di-n-pr	opylamine	. 1	390	IU	i
!	6/-/2-1	-Hexachloroethane		i	390	ΙU	ı
!	98-95-3	-Nitrobenzene		1	390	ΙU	ı
!	78-59-1	-Isophorone		1	390	ΙU	1
i	88-75-5	-2-Nitrophenol		1	390	ΙU	1
!	105-67-9	-2,4-Dimethylpheno	1	1	390	IU	ı
)	111-71-1	-bis(2-Chloroethov	u ) me t h a n e	1	390	ΙU	1
•	120-83-2	-2.4-Dichloropheno	1	1	390	١U	1
!	120-82-1	-1.2.4-Trichlarobe	nzene		390	ΙU	i
	フェーノリーシーーーーー	-Naphthalene		F	390	ΙÜ	1
	106-47-8	-4-Chloroaniline		1	390	ĪŪ	i
l	87-68-3	-Hexachlorobutadie	ne	ı	390	10	i
!	<b>クタークローフーーーー</b>	-4-Chloro-3-methul	nheno i	1	390	ΙŪ	i
!	フェーツノー6ーーーーー	-2-Methulnanhthale	ne	1	390	ΙŪ	i
İ	//-4/-8	-Hexachinrocucione	ntadiene	I	390	ΙU	ĺ
ļ	00-00-2	-2.4.6-Trichloroph	eno l	ı	390	ΙU	1
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-2.4.5-Irichloroph	1	1	980	10	1
	71-70-/	·2-Chloronachthale	ne	l l	390	ΙÜ	1
	00-/4-4	-2-Nitropoilios		1	980	ΙU	•
		·Dima+hlah+hala+a		1	390	ΙU	1
	200-70-0	-Acenanhthulana		1	390	ΙU	1
		·/ 6-Disitsstal	<b>.</b>	1	390	IU	i
				ŀ	980	ĬÜ	i
	83-32-9	Acenaphthene		f	390	IU	i
_	**************************************				_	_	•

I 58-58

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-21

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1990

Level: [low/med] LOW Date Received: 18/31/92

% Moisture: 15.0 decanted (Y/N) Y // Date Extracted: 11/05/92

Concentrated Extract Volume: 500 uL Date Analyzed: 11/13/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] Y pH: 9.70

CONCENTRATION UNITS:

CAS NO.	COMPOUND [	ug/L or	ug/Kg]	UG/KG	Q	
			į.		1	- !
	2,4-Dinitrophenol		!	980	10	
	4-Nitrophenol		1	980	IU	1.
	Dibenzofuran			390	IU	
	2,4-Dinitrotoluene			390	IU	l.
	Diethylphthalate		1	390	IU	ı
7005-72-3	4-Chlorophenyl-phe	nylether	- 1	390	IU	I
86-73-7	Fluorene	•	1	390	IU	1
100-01-6	4-Nitroaniline		1	980	1U	1
534-52-1	4,6-Dinitro-2-meth	ylphenol	1 1	980	IU	ı
	N-Nitrosodiphenyla		1	390	10	1
	4-Bromophenyl-phen		1	390	ΙU	- 1
	Hexachlorobenzene		1	390	IU	- 1
	Pentachlorophenol		i	980	ΙŪ	i
	Phenanthrene		i	390	iŪ	i
	Anthracene		i	390	ΙŪ	i
	Carbazole		i	390	ίŬ	i
	Di-n-butylphthalat	_	i	390	ΙŪ	i
	Fluoranthene	G	i	390	ΙÜ	i
129-00-0			i	390	เบ	- ;
			- !	390	10	
07-68-/	Butylbenzylphthala	ιτ <b>ε</b>		=		!
71-74-1	3,3'-Dichlorobenzi	dine	1	390	10	!
76-77-3	Benzo(a)anthracene		!	390	10	ŀ
218-01-9	Chrysene		l .	390	וַּע	1
11/-81-/	bis(2-Ethylhexyl)p	hthalate	<b>9</b> 1	26	IJ	
11/-84-0	Di-n-octylphthalat	•	!	390	IU	1
205-99-2	Benzo(b)fluoranthe	ne		390	IU	1
20/-08-9	Benzo(k)fluoranthe	ne	1	390	IU	1
7U-32-8	Benzo(a)pyrene		l l	390	IU	1
193-39-5	Indeno(1,2,3-cd)py	rene	1	390	IU	- 1
53-70-3	Dibenz(a,h)anthrac	ene	i	390	IU	1
191-24-2	Benzo(g,ĥ,i)peryle	ene	1	390	וט	1
		<del> </del>	'		_ '	— '

# SEMIUDLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

	1
SB-5B	1
	1

b Name: INTECH

Contract:

b Code: INTECH Case No. 10201 SAS No.:

SDG No.: SS-2

itrix: (soil/water) SOIL

Lab Sample ID: I210201-21

imple wt/vol:

30.00 (g/mL) G

Lab File ID: >B1990

(low/med) LOW

Date Received: 10/31/92

Moisture: 15.0 decanted. (Y/N) Y

Date Extracted: 11/05/92

incentrated Extract Volume:

500 (ul)

Date Analyzed: 11/13/92

ijection Volume: 2 (ul)

Diluton Factor:

°C Cleanup:

(Y/N) Y

pH: 9.7

lumber TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 10201 SAS No.:

SDG No.:SS-2

Matrix: [soil/water] SOIL

Lab Sample ID: SBLK-QM771T1

Sample wt/vol: 30.00 [g/mL] G

Lab File ID: >81988

Level: [low/med] LOW

Date Received:

% Moisture: decanted (Y/N) N

Date Extracted: 11/05/92

Concentrated Extract Volume: - 500 uL Date Analyzed: 11/12/92

Injection Volume: 2 uL

Dilution Factor: 1

GPC Cleanup: -[Y/N] Y pH: 5.00

	CONCENTRATION UNITS:				
CAS NO.	COMPOUND [ag	[ug/L or ug/Kg] UG/KG			_
		1		ı	- 1
400 05 0	Phenol	1	330	IU	1
108-95-2	bis(2-chloroethyl)et	her I	330	IU	1
111-44-4	2-Chlorophenol	1	. 330	IU	- 1
95-5/-8	1,3-Dichlorobenzene	. 1	330	IU	1
541-/3-1	1 4 Dieblorobenzene	1.	330	IU	ı
106-46-/	1,4-Dichlorobenzene	<b>I</b> .	330	IU	1
95-50-1	1,2-Dichlorobenzene	İ	330	IU	1
95-48-/	2-Methylphenol 2,2'-oxybis(1-Chloro	nropane)	330	IU	1
108-60-1		1	330	IU	1
106-44-5	4-Methylphenol Nitroso-di-n-propy	lamine (	330	1U	ı
621-64-/	Hexachloroethane	1	330	IU	I
67-72-1	Nitrobenzene	1	330	IU	١
		į '	330	IU	1
78-59-1	Isophorone	i	330	IU	1
88-/5-5	2-Nitrophenol	1	330	ΙU	1
105-6/-9	2,4-Dimethylphenol	methane	330	IU	!
111-91-1	bis(2-Chloroethoxy)	1	330	IU	
120-83-2	2,4-Dichlorophenol	ene i	330	ΙU	1
120-82-1	1,2,4-Trichlorobenz		330	IU	
	Naphthalene	i	330	١U	1
	4-Chloroaniline	i	330	١U	
87-68-3	Hexachlorobutadiene	enal İ	330	- 10	
59-50-7	4-Chloro-3-methylph	1	330	10	
91-5/-6	2-Methylnaphthalene	adiene i	330	ΙU	
77-47-8	Hexachlorocyclopent	autene	330	IU	
88-06-2	2,4,6-Trichlorophen		830	١U	
	2,4,5-Trichlorophen		330	IU	
	2-Chloronaphthalene	i	830	ΙU	
	2-Nitroaniline	į	330	IU	
	Dimethylphthalate	i	330	١U	
	Acenaphthylene	i	330	ΙU	
900-20-2-   90_na.a	2,6-Dinitrotoluene 3-Nitroaniline	i	830	١U	
93_30.0	>-NITroaniline	·	330	ΙU	
リー・ロン・フェーテー	Acenaphthene	•	2.2.0	1	

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: SBLK-QM771T1

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1988

Level: [low/med] LOW Date Received:

% Moisture: decanted (Y/N) N Date Extracted: 11/05/92

Concentrated Extract Volume: 500 uL Date Analyzed: 11/12/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] Y pH: 5.00

CONCENTRATION UNITS:

CAS NO.	COMPOUND	[ug/L or	ug/Kg ]	UG/KG	Q	
		· · · · · · · · · · · · · · · · · · ·	ı	· · · · · · · · · · · · · · · · · · ·	ı	-
	2,4-Dinitroph		1	830	10	
	4-Nitropheno	l		830	IU	
	Dibenzofuran		1	. 330	IU	
	2,4-Dinitroto		ı	330	IU	
84-73-7	Diethylphthal	late	1	330	IU	
7005-72-3	4-Chloropheny	yl-phenylether	• 1	330	IU	
86- <i>73-7</i>	Fluorene		1	330	IU	
100-01-6	4-Nitroanilir	18	1	830	IU	
534-52-1	4,6-Dinitro-2	2-methylphenol	. 1	830	IU	
	N-Nitrosodiph		1	330	IU	
	4-Bromophenyl		. 1	330	ΙU	
118-74-1	Hexachlorober	nzene	1	330	IU	
	Pentachloroph		t	830	IU	
	Phenanthrene		1	330	1U	
120-12-7	Anthracene			330	IU	
	Carbazole		1	330	IU	
84-74-2	Di-n-butylph	thalate	1	330	IU	
206-44-0	Fluoranthene		ł	330	IU	
129-00-0			1	330	10	
	Bútylbenzylph	nthalate	i	330	ΙÜ	
91-94-1	3,3'-Dichlord	benzidine	i	330	ÍÜ	
56-55-3	Benzo(a)anthi	racene	i	330	ίŪ	
218-01-9	Chrusene	<del>_</del>	i	330	10	
117-81-7	bis(2-Ethulhe	exul)phthalate	· 1	330	iυ	
117-84-0	Di-n-octylph	thalate	1	330	10	
205-99-2	Benzo(b)fluor	ranthene	i	330	iŭ	
207-08-9	Benzo(k)fluoi	ranthene	i	330	IU	
50-32-8	Benzo(a)pyrer	18	i	330	iU	
193-39-5	Indeno(1,2,3-	-cd)nurene	i	330	iu	
53-70-3	Dibenz(a,h)ar	thracene	i	330	10	
191-24-2	Benzo(g,h,i);	nerulene	i	330	10	
- <b>-</b> · <b>-</b>	501120 (9)11,17	o. yrene	,	,,,	: -	

ADF:

33.33

## TENTATIVELY IDENTIFIED CUMPUUNUS

I SBLK 01

b Name: INTECH

Contract:

b Code: INTECH Case No. 10201 SAS No.: SDG No.: SS-2

trix: (soil/water) SOIL

Lab Sample ID: SBLK-QM771T1

mple wt/vol:

30.00 (g/mL) G

Lab File ID: >B1988

:vel: (low/med) LOW

Date Received:

Moisture: decanted. (Y/N) Y \_

Date Extracted: 11/05/92

incentrated Extract Volume: 500 (ul)

Date Analyzed: 11/12/92

ijection Volume: 2/(ul)

Diluton Factor: 1

°C Cleanup: (Y/N) Y pH: 5.0

Number TICs found: 1

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	l RT I	EST. CONC.	;   Q  ====
1. 822-86-6	Cyclohexane, 1,2-dichloro-,	11.48	130.	i N I
				!
		!!		
				` <u> </u>
		1		
				1
			1	-! -!
		!		-¦
			1	-
		1		-
		\		-! -!
<del></del>		_	1	_'

! SBLK MS

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: SBLK-QM>>1MS

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1989

Level: [low/med] LOW Date Received:

% Moisture: 0.0 decanted (Y/N) Y Date Extracted: 11/05/92

Concentrated Extract Volume: \_ 500 uL Date Analyzed: 11/12/92

Injection Volume: 2 uL Dilution Factor:

GPC Cleanup: [Y/N] Y pH: 5.00

CONCENTRATION UNITS:

CAS NO. COMPOUND [ug/L or ug/kg] UG/kG [ug/L or ug/kg] UG/kG [ug/kg]

108-95-2Phenol	CAS NU.	COMPOUND (úg	/L or u	ig/Kg]	UG/KG		Q
111-44-4	108-95-2	Dhana I		ı		1	
95-97-82-Chlorophenol   1500   141-73-11,3-Dichlorobenzene   1200   106-46-71,4-Dichlorobenzene   1200   159-50-11,2-Dichlorobenzene   330   10   108-60-12,2'-oxybis(1-Chloropropane)  330   10   108-60-12,2'-oxybis(1-Chloropropane)  330   10   106-44-54-Methylphenol   330   10   106-44-54-Methylphenol   330   10   100   67-72-1Hexachloroethane   330   10   100   67-72-1Hexachloroethane   330   10   100   67-72-1	111-44-4	bis(2oblososb1)-A	<b>L</b>	1		ı	
106-46-71,4-Dichlorobenzene   1200   106-46-71,4-Dichlorobenzene   1200   195-50-11,2-Dichlorobenzene   330   10   108-60-12,2'-oxybis(1-Chloropropane)   330   10   108-60-12,2'-oxybis(1-Chloropropane)   330   10   106-44-54-Methylphenol   330   10   100   106-44-54-Methylphenol   330   10   100   106-44-5	95-57-8	2-Chlanaba1	ner	i .		ΙU	
1200	541-73-1	1 3 Diables-bessel				1	
95-50-11,2-Dichlorobenzene   330 IU   95-48-72-Methylphenol   330 IU   108-60-12,2'-oxybis(1-Chloropropane)   330 IU   106-44-54-Methylphenol   330 IU   106-44-54-Methylphenol   100 I   330 IU   621-64-7Nhitroso-di-n-propylamine   1100 I   67-72-1Hexachloroethane   330 IU   98-95-3Nitrobenzene   330 IU   98-95-3Nitrobenzene   330 IU   105-67-92,4-Dimethylphenol   330 IU   105-67-92,4-Dimethylphenol   330 IU   111-91-1	106-46-7	1,5-Dichioropenzene		1		1	
95-48-72-Methylphenol   330 IU   108-60-12,2'-oxybis(1-Ch   Ioropropane)   330 IU   106-44-54-Methylphenol   330 IU   106-44-54-Methylphenol   330 IU   106-44-54-Methylphenol   1100   67-72-1Hexachloroethane   330 IU   98-95-3Nitrobenzene   330 IU   78-59-1Isophorone   330 IU   78-59-1Isophorone   330 IU   105-67-92,4-Dimethylphenol   330 IU   105-67-92,4-Dimethylphenol   330 IU   111-91-1	95-50-1	1,4-Dichioropenzene		!	_	ı	
108-60-12,2'-oxybis(1-Ch[oropropane)  330   U   106-44-54-Methylphenol   330   U   106-44-54-Methylphenol   330   U   621-64-7N-Nitroso-di-n-propylamine   1100   67-72-1Hexachloroethane   330   U   98-95-3Nitrobenzene   330   U   78-59-1Isophorone   330   U   105-67-92,4-Dimethylphenol   330   U   105-67-92,4-Dimethylphenol   330   U   111-91-1bis(2-Chloroethoxy)methane   330   U   120-83-22,4-Dichlorophenol   330   U   120-82-11,2,4-Trichlorobenzene   1300   91-20-3Naphthalene   330   U   106-47-8	95-48-7	2 Makkalaka 1		1		IU	
100-44-74-Methylphenol   330   U   100-44-7Nitroso-di-n-propylamine   1100   17-72-1Hexachloroethane   330   U   100-47-8Nitrobenzene   330   U   105-67-92,4-Dimethylphenol   330   U   111-91-1	109-40-1	2 21 months (4 CL TZ		1		IU	
621-64-7N-Nitroso-di-n-propylamine   1100   67-72-1Hexachloroethane   330   IU   98-95-3Nitrobenzene   330   IU   78-59-1Isophorone   330   IU   105-67-92,4-Dimethylphenol   330   IU   111-91-1	104-86-5	2,2 -oxybis(1-Chloro	propane	) [	330	ΙU	
98-95-3Nitrobenzene 98-95-3Nitrobenzene 188-75-5Isophorone 198-75-5Isophorone 198-75-5	401 // 7	4-Methylphenol		1	330	ΙU	
98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1	47 70 1	N-Nitroso-di-n-propy	lamine	1	1100	ı	
78-59-1	0/-/2-1	Hexachloroethane		1	330	ΙU	
88-75-52-Nitrophenol   330   U   105-67-92,4-Dimethylphenol   330   U   111-91-1bis(2-Chloroethoxy)methane   330   U   120-83-22,4-Dichlorophenol   330   U   120-82-11,2,4-Trichlorobenzene   1300   91-20-3Naphthalene   330   U   106-47-8	70-77-3	Nitrobenzene		1	330	ΙU	
105-67-92,4-Dimethylphenol   330   U   111-91-1bis(2-Chloroethoxy)methane   330   U   120-83-22,4-Dichlorophenol   330   U   120-82-11,2,4-Trichlorobenzene   1300   91-20-3Naphthalene   330   U   106-47-8	/0-77-1	Isophorone		1	330	ΙU	
111-71-1	105 /7 0	2-Nitrophenol		1	330	ΙU	
120-83-22,4-Dichlorophenol   330   U   120-82-11,2,4-Trichlorobenzene   1300   91-20-3Naphthalene   330   U   106-47-84-Chloroaniline   330   U   87-68-3Hexachlorobutadiene   330   U   59-50-74-Chloro-3-methylphenol   1800   91-57-62-Methylnaphthalene   330   U   77-47-8	111 01 4	2,4-Dimethylphenol		1 .	330	IU	
1300	120 07 0	bis(2-Chloroethoxy)me	thane	1	330	ΙU	
106-47-8	120-83-2	2,4-Dichlorophenol		1	330	ΙU	
106-47-8	01 00 7	1,2,4-Trichlorobenzer	re	ŀ	1300	1	
87-68-3	71-20-3	Naphthalene		1	330	ΙU	
87-68-3Hexachlorobutadiene       1       330   U         59-50-74-Chloro-3-methylphenol       1       1800   I         91-57-62-Methylnaphthalene       330   U         77-47-8Hexachlorocyclopentadiene       330   U         88-06-22,4,6-Trichlorophenol       330   U         95-95-42,4,5-Trichlorophenol       830   U         91-58-72-Chloronaphthalene       330   U         88-74-42-Nitroaniline       830   U         131-11-3Dimethylphthalate       330   U         208-96-8Acenaphthylene       330   U         606-20-22,6-Dinitrotoluene       330   U         83-32-9	106-4/-8	4-Chloroaniline		1	330	ΙÜ	
91-57-62-Methylnaphthalene   330   U 77-47-8Hexachlorocyclopentadiene   330   U 88-06-22,4,6-Trichlorophenol   330   U 95-95-42,4,5-Trichlorophenol   830   U 91-58-72-Chloronaphthalene   330   U 88-74-42-Nitroaniline   830   U 131-11-3Dimethylphthalate   330   U 208-96-8Acenaphthylene   330   U 99-09-23-Nitroaniline   830   U 83-32-9	8/-68-3	Hexachlorobutadiene		1	330		
77-47-8	フソーフリーノーー	4-Chloro-3-methuloher	no l	1	1800		
330   U   88-06-22,4,6-Trichlorophenol   330   U   95-95-42,4,5-Trichlorophenol   830   U   91-58-72-Chloronaphthalene   330   U   88-74-42-Nitroaniline   830   U   131-11-3Dimethylphthalate   330   U   208-96-8Acenaphthylene   330   U   99-09-23-Nitroaniline   830   U   83-32-9	71-7/-6	2-Methulnanhthalene		1	330	III	
95-95-42,4,5-Trichlorophenol   330   U 91-58-72-Chloronaphthalene   330   U 88-74-42-Nitroaniline   830   U 131-11-3Dimethylphthalate   330   U 208-96-8Acenaphthylene   330   U 606-20-22,6-Dinitrotoluene   330   U 99-09-23-Nitroaniline   830   U	//-4/-8	Hexachlorocuclopantae	liene	1	330		
91-58-72-Chloronaphthalene   330   U 88-74-42-Nitroaniline   830   U 131-11-3Dimethylphthalate   330   U 208-96-8Acenaphthylene   330   U 606-20-22,6-Dinitrotoluene   330   U 99-09-23-Nitroaniline   830   U	00-00-2	2.4.6-Trichlorophenol	1	1			
88-74-42-Nitroaniline   330   U   131-11-3Dimethylphthalate   330   U   208-96-8Acenaphthylene   330   U   606-20-22,6-Dinitrotoluene   330   U   99-09-23-Nitroaniline   830   U   83-32-9	/ /- / / - 4	2.4.5-Irichlorophenol		1			
131-11-3Dimethylphthalate   330  U 208-96-8Acenaphthylene   330  U 606-20-22,6-Dinitrotoluene   330  U 99-09-23-Nitroaniline   830  U 83-32-9	フェーフローノーーー	·2-Chloronanhthalana		1			
131-11-3Dimethylphthalate   330   U 208-96-8Acenaphthylene   330   U 606-20-22,6-Dinitrotoluene   330   U 99-09-23-Nitroaniline   830   U 83-32-9	00-/4-4			1			
200-76-8Acenaphthylene   330   U 606-20-22,6-Dinitrotoluene   330   U 99-09-23-Nitroaniline   830   U 83-32-9	121-11-3	Dimethulphthalata		i			
99-09-23-Nitroaniline   330   U   83-32-9	200-70-6	·Acenaphthulana		i			
83-32-9	000-20-2	2.6-Dinitrataluana		i			
02-37-9	////-	· 2-Nitrosoilios		İ			
	83-32-9	Acenaphthene		1	1300	10	

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: SBLK-QM771M5

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1989

Level: [low/med] LOW Date Received:

% Moisture: 0.0 decanted (Y/N) Y Date Extracted: 11/05/92

Concentrated Extract Volume: \_ 500 uL Date Analyzed: 11/12/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] Y pH: 5.00

CAS NO.	COMPOUND	CONCENTRATION CO		Q	)
			 I	1	_
51-28-5	2,4-Dinitrophe	no l	1 830	IU	
100-02-7	4-Nitrophenol		1 2100	1	
132-64-9	Dibenzofuran		1 330	IU	
121-14-2	2,4-Dinitrotol	uene	1300	i	
84-73-7	Diethylphthala	te	1 330	ΙU	
7005-72-3	4-Chlorophenyl	-phenylether	330	ΙU	
	Fluorene	•	1 330	IU	
100-01-6	4-Nitroaniline		I 830	ΙU	
534-52-1	4,6-Dinitro-2-	methylphenol	1 830	ΙU	
86-30-6	N-Nitrosodiphe	nylamine	330	ΙU	
	4-Bromophenyl-		1 330	เบ	
118-74-1	Hexachlorobenz	ene .	1 330	ΙU	
87-86-5	Pentachlorophe	no l	2300	1	
85-01-8	Phenanthrena		1 330	ΙU	
120-12-7	Anthracene	•	330	ΙU	
86-74-8	Carbazole		1 330	1 U	
84-74-2	Di-n-butylphth	alate	1 330	ΙU	
	Fluoranthane		330	١U	
129-00-0	Pyrene		1 1300	1	
	Butylbenzylpht	halate	1 330	ΙU	
91-94-1	3,3 <sup>'</sup> -Dichĺorob	enzidine	1 330	10	
56-55-3	Bénzo(a)anthra	cene	1 330	ΙU	
	Chrysene		1 330	ΙU	
	bis(2-Ethylhex	yl)phthalate	1 330	ΙU	
117-84-0	Di-n-octyĺphth	alate	1 330	ΙU	
205-99-2	Benzo(b)fluora	nthene	330	ΙU	
207-08-9	Benzo(k)fluora		1 330	ΙU	
50-32-8	Benzo(a)pyrene		1 330	ΙU	
	Indeno(1,2,3-c	d)pyrene	330	IU	
	Dibenz(a,h)ant		1 330	IU	
	Benzo(g,ĥ,i)pe		1 330	łU	
	2. , ,	-	1	1	

ADF:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-10MS

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1991

Level: [low/med] LOW Date Received: 10/31/92

% Moisture: 15.0 decanted (Y/N) Y Date Extracted: 11/05/92

Concentrated Extract Volume: \_ 500 uL Date Analyzed: 11/13/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] Y pH: 9.70

CONCENTRATION UNITS:

CAS NO. COMPOUND [ug/L or ug/kg] UG/KG Q

CAS NO.	COMPOUND	[ug/L or u	g/Kg]	UG/KG	Q	
400.05.0			1		ı	_
108-95-2			ļ	1700	1	
111-44-4	bis(2-chloroethyl)	ether)	1.	390	IU	
95-57-8	2-Chlorophenol		1	1700	1	
	1,3-Dichlorobenzer		ŀ	390	IU	
106-46-7	1,4-Dichlorobenzer	ne	1	1100	1	
	1,2-Dichlorobenzer	18	1	390	. IU	
	2-Methylphenol		1	390	IU	
108-60-1	2,2'-oxybis(1-Chlo	propropane	) [	390	IU	
106-44-5	4-Methylphenol		1	390	IU	
621-64-7	N-Nitroso-di-n-pro	pylamine	1	1200	1	
	Hexachloroethane	-	1	390	IU	
	Nitrobenzene		1	390	IU	
78-59-1	Isophorone		1	390	ΙU	
88-75-5	2-Nitrophenol		1.	390	ĪŪ	
105-67-9	2,4-Dimethylpheno	1	i	390	ίŪ	
111-91-1	bis(2-Chloroethoxy	J)methane	i	390	iŭ	
120-83-2	2,4-Dichloropheno	1	i	390	10	
120-82-1	1,2,4-Trichlorober	Szene	i	1200	i	
91-20-3	Naphthalene		i	390	iu	
106-47-8	4-Chloroaniline		i	390	iu	
87-68-3	Hexachlorobutadier	n.e.	i .	390	iÜ	
59-50-7	4-Chloro-3-methylp	benol	i	2400	i	
91-57-6	2-Methylnaphthaler	ne	i	390	iu	
77-47-8	Hexachlorocycloper	 .tadiene	i	390	iU	
88-06-2	2,4,6-Trichlorophe	enn l	i	390	iu	
95-95-4	2,4,5-Trichlorophe	eno i	i	980	iu	
91-58-7	2-Chloronaphthaler		•	390	iu	
88-74-4	2-Nitroaniline	16	i	980	iU	
131-11-3	Dimethylphthalate		ì	390	iυ	
208-96-8	Acenaphthylene		1	390 390	10	
606-20-2	2,6-Dinitrotoluene	<b>-</b> .		390	-	
99-119-2	3-Nitroaniline	<b>3</b> ·	1		10	
83-32-9	Acenaphthene		1	980	ĮU	
UJ = JZ - J	mconaphtnene		l .	1500	ı	

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-10MS

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1991

Level: [low/med] LOW Date Received: 10/31/92

% Moisture: 15.0 decanted (Y/N) Y Date Extracted: 11/05/92

Concentrated Extract Volume: 500 uL Date Analyzed: 11/13/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] Y pH: 9.70

CONCENTRATION UNITS:

Cas No. Compound [ug/L or ug/Kg] UG/KG Q

CAS NO. COMPOUND LUGAL OF Ugan	.9.
	1
n a A Dinitrophenol	980 IU
51-28-52,4-Dinitrophenol	2600 l
100-02-74-Nitrophenol	390 IU
132-64-9Dibenzofuran	1400 l
121-14-22,4-Dinitrotoluene	390 IU
84-73-7Diethylphthalate	390 IU
7005-72-34-Chlorophenyl-phenylether	390 IU
86-73-7Fluorene	980 IU
100-01-64-Nitroaniline	980 IU
534-52-14,6-Dinitro-2-methylphenol	390 IU
o/ zn_4N_Nitrosodiphenylemine '	390 IU
101-55-34-Bromophenyl-phenylether	390 IU
118-74-1Hexachlorobenzene :	2700 I
87-86-5Pentachlorophenol	390 IU
85-01-8Phenanthrene	390 IU
128-12-7Anthracene	390 IU
86-74-8Carbazole	390 IU
84-74-2Di-n-butylphthalate	390 IU
206-44-0Fluoranthene	1500
129-00-0Pyrene	390 IU
85_68-7Butylbenzylphthalate	390 IU
91-94-13,3'-Dichlorobenziaine	390 IU
56-55-3Benzo(a)anthracene	390 IU
218_01_9Chrysene	47 I J
117-81-7bis(2-Ethylhexyl)phthalate	390 IU
117_84_NDi-n-octylphthalate	390 IU
205-99-2Benzo(b)fluoranthene	1 390 IU
207-08-9Benzo(k)fluoranthene	1 390 IU
50-32-8Benzo(a)pyrene	390 IU
193-39-5Indeno(1,2,3-cd)pyrene	390 IU
53-70-3Dibenz(a,h)anthracene	390 IU
191-24-2Benzo(g,h,i)perylene	

1 20-20 1120

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Lab Sample ID: I210201-11MSD Matrix: [soil/water] SOIL

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1992

Date Received: 10/31/92 Level: [low/med] LOW

Date Extracted: 11/05/92 % Moisture: 15.0 decanted (Y/N) Y

Concentrated Extract Volume: \_ 500 uL Date Analyzed: 11/13/92

Dilution Factor: 1 Injection Volume: 2 uL

GPC Cleanup: [Y/N] Y pH: 9.70

CONCENTRATION UNITS:

CAS NO.	COMPOUND [úg/L or ug/kg	] UG/KG	Q
	1	······································	1
108-95-2	Phenol	1700	1
	bis(2-chloroethyl)ether	390	IU
	2-Chlorophenol	1800	1
	1,3-Dichlorobenzene	390	١U
	1,4-Dichlorobenzene	1300	1
	1,2-Dichlorobenzene	390	IU
	2-Methylphenol	390	ΙU
108-60-1	2,2'-oxybis(1-Chloropropane)	390	IU
	4-Methylphenol	390	IU
621-64-7	N-Nitroso-di-n-propylamine	1200	1
	Hexachloroethane	390	IU
	Nitrobenzene	390	IU
	Isophorone	390	IU
	2-Nitrophenol	390	ΙU
	2,4-Dimethylphenol	390	١U
111-01-1	bis(2-Chloroethoxy)methane	390	IU
	2,4-Dichlorophenol	390	IU
	1,2,4-Trichlorobenzene	1300	1
	Naphthalene	390	ΙU
	4-Chloroaniline	390	ΙÜ
	Hexachlorobutadiene	390	ΙU
	4-Chloro-3-methylphenol	2300	1
91-57-6	2-Methylnaphthalene	390	ΙU
77-47-8	Hexachlorocyclopentadiene	390	IU
88-06-2	2,4,6-Trichlorophenol	390	IU
95-95-4	2,4,5-Trichlorophenol	980	IU
91-58-7	2-Chloronaphthalene	390	IU
88-74-4	2-Nitroaniline	980	IU
131-11-3	Dimethulphthalate	390	IU
208-96-8	Acenaphthulene	390	IU
000-20-2-	2 4-Dinitrataluana	390	IU
Min to アメーロアースーー	3-Nitroaniline	980	IU
<b>藤。 B3-32-9</b>	Acenaphthene	1500	1

I SB-5B MSD

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 10201 SAS No.: SDG No.:SS-2

Matrix: [soil/water] SOIL Lab Sample ID: I210201-11M

Sample wt/vol: 30.00 [g/mL] G Lab File ID: >B1992

Level:. [low/med] LOW Date Received: 10/31/92

% Moisture: 15.0 decanted (Y/N) Y Date Extracted: 11/05/92

Concentrated Extract Volume: 500 uL Date Analyzed: 11/13/92

Injection Volume: 2 uL Dilution Factor: 1

GPC Cleanup: [Y/N] Y pH: 9.70

CONCENTRATION UNITS:

CAS NO.	COMPOUND (lig/L or u	g/Kg] UG/KG	Q
1		ı	1 1
	2,4-Dinitrophenol	1 980	IU I
	4-Nitrophenol	1 2600	1 1
	Dibenzofuran	1 390	IU I
121-14-2	2,4-Dinitrotoluene	1400	I F
	Diethylphthalate	1 390	10 1
7005-72-3	4-Chlorophenyl-phenylether	1 390	10 1
86-73-7	Fluorene	1 390	וט ו
100-01-6	4-Nitroaniline	I 980	IU I
534-52-1	4,6-Dinitro-2-methylphenol	1 980	IU I
	N-Nitrosodiphenylamine	1 390	10 1
	4-Bromophenyl-phenylether	1 390	10 1
	Hexachlorobenzene	1 390	មេ ម
87-86-5	Pentachlorophenol	1 2200	1 1
	Phenanthrene	1 390	10 1
120-12-7	Anthracene	1 390	IU I
86-74-8	Carbazole	1 390	10 1
84-74-2	Di-n-butylphthalate	1 390	IU I
	Fluoranthene	I 390	1U I
129-00-0	Pyrene	1 1400	1
	Butylbenzylphthalate	1 390	IU I
91-94-1	3,3 <sup>1</sup> -Dichlorobenzidine	1 390	10 1
56-55-3	Benzo(a)anthracens	1 390	IU I
	Chrysene	1 390	IU I
117-81-7	bis(2-Ethylhexyl)phthalate	1 32	13 1
117-84-0	Di-n-octylphthalate	1 390	IU I
205-99-2	Benzo(b)fluoranthene	1 390	10 1
207-08-9	Benzo(k)fluoranthene	1 390	וט ו
50-32-8	Benzo(a)pyrene	390	IU I
193-39-5	Indeno(1,2,3-cd)pyrene	390	IŪ I
53-70-3	Dibenz(a,h)anthracene	390	IÜ i
191-24-2	Benzo(g,h,i)perylene	1 390	IU I
_ <del>_</del>	==,,,	1	1 i

SADF:

39.22

SOIL ANALYSIS (INORGANICS)
(ROUND I)

#### CASE NARRATIVE FOR INORGANICS (NYASP)

) CONCILI MING GROUD

ALL THE SAMPLES WERE SUBBED OUT TO CHEMTECH CONSULTING GROUP FOR ANALYSIS OF METALS

Lab Name: CHEMTECH

Client: VERSAR ENV. Project: Figgie-Scott Aviation

Job No.: I210201 & I210202 CASE No.: 10201 SDG No.: SB-1

The following samples are included in this Sample Delivery

1110 200	
Group: CHEMTECH I	D Client ID on forms
CHEMTECH	
5455S	SS-2
5456S	SS-3
5457S	SS-4
5458S	SS-5
5459S	SS-5D for (SS-5 DUP)
5460S	SS-6
5461S	DDS-1
5462S	DDS-2
5463S	SB-1 MS for (SB-5B MS)
5464S	
5465S	••••
5466S2	MSDD MSDS
5467DS	SB-2
5468S	SB-3
5469S	SB-4
5470S	SB-5A
5471S	SB-6
5472S	MM-6
5473S	SB-5C
5474S 5475S	SB-5D
5478S	SC-1
5478S	SC-2
EAROR	SC-3
5481S	SS-1 Frequentered With These
Detailed	SS-1 Documentation of Problems Encountered With These
Samples	
General:	Jan word analyzed for METALS.

- 1. The above soil samples were analyzed for METALS.
- 2. Please note that the client sample number with the sample description (identification) is too many characters, therefore as per the software being used only limited characters can be used for EPA sample number. Never-the-less for the cross reference check the Lab sample ID. with Client ID. is listed above on this case narrative.

EPA SAMPLE NO.

DDG	-	
11115-		
	_	

b Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM

Case No.: |020| SAS No.:

SDG No.: SB-1

trix (soil/water): SOIL

Lab Sample ID: 5461S

evel (low/med):

LOW

Date Received: 11/03/92

Solids:

77.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

_						
	CAS No.	Analyte	Concentration	С	Q	М
	7429-90-5	Aliminim	5990	-		P
	7440-36-0	Antimony	10.4	IJ		P
	7440-38-2	Arsenic .	3.8	۱۲	N	F
		Barium	70.6	.	14	P
	7440-39-3	Beryllium	0.68	В		P
	7440-41-7	Cadmium	1.7	Р		P
	7440-43-9	Cadmium	23300	l Ì		
		Chromium	16.2			P
		Cobalt	5.3	В	'	P P
	7440-48-4		60.5	미	·	
	7440-50-8	Copper				P
	7439-89-6	Iron	22600			P
	7439-92-1	Lead	89.1			F
	7439-95-4	Magnesium	4760			P
	7439-96-5	Manganese	910			P
	7439-97-6	Mercury	0.13	U		CV
	7440-02-0	Nickel	20.2	_		P
	7440-09-7	Potassium	779	В		A
	7782-49-2		0.78	U		F
	7440-22-4	Silver	2.1	В		P
	7440-23-5		335	В		P
	7440-28-0		0.78	U		F
	7440-62-2	Vanadium	19.6	1		P
	7440-66-6	Zinc	282	1		P
		Cyanide				NR
		l				

clor	Before:	BLACK	Clarity Before:	Texture:	MEDIUM
7-1	3.64		03 11 366	- 110 1	

Clarity After: olor After: YELLOW Artifacts:

comments:

FORM I - IN

ILM02.1

EPA SAMPLE NO.

DDS-2

CHEMTECH CONSULTING GROUP Contract: 68D20041

Case No.: 1020

SDG No.: SB-1

Fode: CHEM "[soil/water): SOIL Lab Sample ID: 5462S

LOW 1 (low/med):

Date Received: 11/03/92

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

UCEILET					\	cl	Q	- 1	M		
CAS No.	Ana	alyte	cond	centrat		- -	<u>*</u>		P		
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9	Alu Ant Ars Bar Ber Cac	minum imony senic ium cyllium dmium lcium romium		1860	0.4 3.8 1.9 0.89 1.0	שׁוְשׁ	N		PFPPPP		
7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-	CO CO Li Le 4 M	balt ppper con ead agnesiv anganes	um se	211 41	33.9	13	ט		· / F	\v:	
7439-97- 7440-02- 7440-09- 7782-49- 7440-22- 7440-23- 7440-68- 7440-68-	0 N -7 -2 -4 -5 -0 -2	ickel potassi Seleniv Silver Sodium Thalli Vanadi	um im um um		558 0. 1. 445	78 8 .78	B U B U	<b>w</b> .		F P P F P NR	
7440-00		Cyanic	ie				_1_	١		me	٠

lor Before:	BLACK
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Clarity Before:

MEDIUM Texture:

Color After:

**AETTOM** 

Clarity After:

Artifacts:

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MM	ents	•

FORM I - IN

ILM02.1

EPA SAMPLE NO.

MS

ab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM

Case No.: |020| SAS No.:

SDG No.: SB-1

atrix (soil/water): SOIL

Lab Sample ID: 5464S

Level (low/med):

Date Received: 11/03/92

Solids:

85.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	20900	-		P
7440-36-0	Antimony	9.4	ונו		P
7440-38-2	Arsenic	2.7		WN	F
7440-39-3	Barium	124		****	P
7440-41-7	Beryllium	1.3			P
7440-43-9	Cadmium	0.94	וטו		P
7440-70-2	Calcium	3250			P
7440-47-3	Chromium	22.3			P
7440-48-4		8.1	В		P
7440-50-8	Copper	26.8	1		P
7439-89-6	Iron	23400		•	P
7439-92-1	Lead	31.8			F
7439-95-4	Magnesium	4650			P
7439-96-5	Manganese	214			P
7439-97-6	Mercury	0.12	บ		cv
7440-02-0	Nickel	19.8			P
7440-09-7	Potassium				A
7782-49-2	Selenium	0.71	U	W	F
7440-22-4	Silver	2.8			P
7440-23-5		310	В		P
7440-28-0	Thallium	0.71	U		F
1	Vanadium	34.0			P
7440-66-6	Zinc	95.1	1		P
l	Cyanide	i			NR
			l_		1

.:0	lo:	r B	efo	ore	<b>:</b>	BL	ACK
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Clarity Before:

Texture: MEDIUM

Color After:

YELLOW

Clarity After:

Artifacts:

comments:

FORM I - IN

ILM02.1

EPA SAMPLE NO.

#### INORGANIC ANALYSIS DATA SHEET

					MSD
,b Name:	CHEMTECH CO	NSULTING GRO	UP Contract:	68D20041	

Lab Code: CHEM Case No.: | O20 | SAS No.: SDG No.: SB-1

trix (soil/water): SOIL Lab Sample ID: 5465S

Level (low/med): LOW Date Received: 11/03/92

\_\_\_ Solids: 85.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-96-5	Aluminum Antimony Arsenic Barium Beryllium	13200 9.4 4.3 87.6 0.78 0.94 67600 19.0 9.1 26.2 21700 12.0 26400 409	B U B	SN	PPFPPPPPPFPP	
7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-28-0 7440-62-2 7440-66-6	Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	0.12 23.6 2520 0.71 2.1 336 0.71 29.3 69.9	B B		CV P A F P P F P NR	

_olo	r Before:	BROWN	Clarity	Before:	Texture:	MEDIUN
colo	r After:	YELLOW	Clarity	After:	Artifacts:	
comm	ents:		•		•	
						<u> </u>
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FORM I - IN

ILM02.1

EPA SAMPLE NO.

MW-6

ab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM Case No.: |020| SAS No.:

SDG No.: SB-1

atrix (soil/water): SOIL

Lab Sample ID: 5473S

Level (low/med):

Date Received: 11/03/92

\_ Solids:

91.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

	CAS No.	Analyte	Concentration	С	Q	М
	7429-90-5	Aluminum	2780	-		P
	7440-36-0	Antimony	8.8	ַ ט		P
į	7440-38-2	Arsenic	2.2	В	N	F
	7440-39-3	Barium	24.7	В		P
	7440-41-7	Beryllium	0.22	U		P
	7440-43-9	Cadmium	0.88	U		P
	7440-70-2	Calcium	120000		·	P
	7440-47-3	Chromium	5.7			P
	7440-48-4	Cobalt	2.7	В		P
	7440-50-8	Copper	14.5			P
į	7439-89-6	Iron	7210			P
	7439-92-1	Lead	4.9		S	F
	7439-95-4	Magnesium	36000			P
	7439-96-5	Manganese	168			P
	7439-97-6	Mercury	0.11	U		CV
	7440-02-0	Nickel	10.1			P
	7440-09-7	Potassium	510	В		A
	7782-49-2	Selenium	0.66	U		F
	7440-22-4	Silver	1.5	U		P
	7440-23-5	Sodium	408	В		P
	7440-28-0	Thallium	0.66	U		F
	7440-62-2	Vanadium	11.5	ŀ		P
	7440-66-6	Zinc	64.2		ł	P
		Cyanide		1		NR
				_	<u> </u>	

Color Before: BROWN	ľ	
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Clarity Before:

Texture: MEDIUM

Tolor After: YELLOW

Clarity After:

Artifacts:

Comments:

FORM I - IN

ILM02.1

EPA SAMPLE NO.

SB-1

ab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM

Case No.: |020|

SAS No.:

SDG No.: SB-1

itrix (soil/water): SOIL

Lab Sample ID: 5463S

Level (low/med):

LOW

Date Received: 11/03/92

Solids:

79.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel	12400 10.1 4.2 91.0 0.84 1.2 71700 16.8 9.3 44.1 21800 15.4 29800 394 0.13 19.4	C U BB B	Q SN	M PPFPPPPPPPPCPA
7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-62-2 7440-66-6	Selenium Silver Sodium Thallium	0.76 1.8 504 0.76 28.7 74.0	U B U	W	F P P P NR

pror	Bef	ore:	BROWN
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Clarity Before:

MEDIUM Texture:

Color After:

YELLOW

Clarity After:

Artifacts:

Jomments:

FORM I - IN

ILM02.1

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

SB-2

Lab Code: CHEM Case No.: |020 SAS No.:

SDG No.: SB-1

trix (soil/water): SOIL

revel (low/med): Low

Lab Sample ID: 5468S

Date Received: 11/03/92

ा र Solids:

80.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

		Ţ''				
CAS No.	Analyte	Concentration	С	Q	M	
7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-95-4 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-28-0 7440-66-6	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	14300 10.0 3.3 97.7 1.0 1.5 78200 19.5 9.3 20.4 21800 15.3 34200 399 0.12 19.9 2640 0.75 1.8 462 0.75 31.9 72.5	B B U U B U U B U	SN W	PPFPPPPPPPPVPAFPPFPNR	

Jolor Before: BROWN

Clarity Before:

Texture: MEDIUM

olor After: YELLOW

Clarity After:

Artifacts:

Comments:

FORM I - IN

ILM02.1

b Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

SB-3

Trab Code: CHEM Case No.: | OZO | SAS No.:

SDG No.: SB-1

rmatrix (soil/water): SOIL

Lab Sample ID: 5469S

! :\vel (low/med):

Date Received: 11/03/92

LOW

Solids:

94.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron	6500 8.5 3.8 45.8 0.50 0.85 67500 9.6 6.4 16.9	B U B	SN	PPFPPPPPF	
7439-92-1 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-66-6	Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	258 0.11 12.9	U	W	P P CV P A F P P P NF	

Clarity Before: Color Before: GRAY

Texture: MEDIUM

blor After: YELLOW

Clarity After:

Artifacts:

Comments:

ILM02.1

EPA SAMPLE NO.

b Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

Lab Code: CHEM Case No.: |020|

SAS No.:

SDG No.: SB-1

\_itrix (soil/water): SOIL

Lab Sample ID: 5470S

Level (low/med):

LOW

Date Received: 11/03/92

₹ Solids:

95.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	c	Q	M	
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-28-0 7440-66-6	Thallium	0.84 160000 6.6 4.2 16.7 7790 6.9 18900 140 0.11	B U U B	W	PPFPPPPPPPVPAFPPFPPN	

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 7 ~~	- D	チへコ	-0.	BROWN
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Clarity Before:

Texture: MEDIUM

-olor After:

YELLOW

Clarity After:

Artifacts:

Comments:

FORM I - IN

ILM02.1

EPA SAMPLE NO.

SB-5A

b Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

Lab Code: CHEM

Case No.: |020|

SAS No.:

SDG No.: SB-1

atrix (soil/water): SOIL

Lab Sample ID: 5471S

Level (low/med):

LOW

Date Received: 11/03/92

Solids:

87.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

7		3 3 la -	Gangantration	c	•	м	
	CAS No.	Analyte	Concentration	۲I	Q	141	
	7429-90-5	Aluminum	24400	-		P	
	7440-36-0	Antimony	9.2	U		P	ĺ
	7440-38-2	Arsenic	6.4		SN	F	ĺ
	7440-39-3	Barium	181		•	P	
	7440-41-7	Beryllium	1.4	. 1		P	
	7440-43-9	Cadmium	1.8	ļ		P	
		Calcium	4770	l		P	
	7440-47-3	Chromium	28.1			P	ĺ
	7440-48-4	Cobalt	11.5	1		P	ı
	7440-50-8	Copper	23.4			P	
	7439-89-6	Iron	31000			P	Į
	7439-92-1	Lead	53.1			F	l
	7439-95-4	Magnesium		i 1		P	l
	7439-96-5	Manganese	183			P	l
	7439-97-6	Mercury	0.11	U		CV	
	7440-02-0	Nickel	31.3			P	ĺ
	7440-09-7	Potassium		i i		A	l
	7782-49-2	Selenium	0.69		W	F	1
	7440-22-4	Silver	1.6	U	Į	P	١
	7440-23-5	Sodium	322	В	ĺ	P	l
	7440-28-0	Thallium	0.69	U		F	۱
	7440-62-2	Vanadium	42.3			P	l
	7440-66-6	Zinc	97.3	1	1	P	1
		Cyanide				NR	Į
		. ]	l	<b>I</b> _	l		-

5	<b>o</b> :	lo	r	В	e	f	o	r	e	:	В	R	O	W	N	
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Clarity Before:

Texture: **MEDIUM** 

olor After:

YELLOW

· Clarity After:

Artifacts:

comments:

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FORM I - IN

ILM02.1

EPA SAMPLE NO.

b Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

SB-5C

Lab Code: CHEM

Case No.: |020|

SAS No.:

SDG No.: SB-1

trix (soil/water): SOIL

Lab Sample ID: 5474S

Level (low/med): LOW

Date Received: 11/03/92

Solids:

80.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

<del>1</del>	1				
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	13300			P
7440-36-0	Antimony	10.0	ט		P
7440-38-2	Arsenic	2.6	اٽا	SN	F
7440-39-3	Barium	89.7			P
7440-41-7	Beryllium	0.76	В		P
7440-43-9	Cadmium	1.4	-		P
7440-70-2	Calcium	70300			P
7440-47-3	Chromium	20.6			P
7440-48-4	Cobalt	9.4	В		P
7440-50-8	Copper	31.7			P
7439-89-6	Iron	20900			P
7439-92-1	Lead	14.2			F
7439-95-4	Magnesium	28300			P
7439-96-5	Manganese	. 445			P
7439-97-6	Mercury	0.12	ט		CV
7440-02-0	Nickel	23.4			P
7440-09-7	Potassium	2770			Α
	Selenium	7.5	U	W	F
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	347	В		P
7440-28-0		0.75	U		F
7440-62-2	Vanadium	28.9			P
7440-66-6	Zinc	71.7	- 1		P
	Cyanide		Į		NR
l	l		_		

olor	Before:	BROWN
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Clarity Before:

Texture: **MEDIUM** 

Color After: YELLOW

Clarity After:

Artifacts:

\_omments:

FORM I - IN

ILM02.1

EPA	SAMPLE	NO.
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SB-5D

b Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

Lab Code: CHEM Case No.: |020|

SAS No.:

SDG No.: SB-1

\_itrix (soil/water): SOIL

Lab Sample ID: 5475S

tevel (low/med): LOW

Date Received: 11/03/92

ਾਫ਼ਾ Solids:

80.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

_		T				
	CAS No.	Analyte	Concentration	С	Q	М
	7429-90-5	Aluminum	13000	-	<del></del>	P
	7440-36-0	Antimony	10.0	וט		P
1	7440-38-2	Arsenic	6.0	١٧	SN	F
	7440-39-3	Barium	118		SIN	P
1	7440-41-7	Beryllium	0.89	в		P
	7440-43-9	Cadmium	1.0	u		P
	7440-70-2	Calcium	61300	٦		P
		Chromium	21.7			P
1	7440-48-4	Cobalt	11.8	в		P
	7440-50-8	Copper	31.8	اما		P
	7439-89-6	Iron	23400			P
	7439-92-1	Lead	15.8			F
	7439-95-4	Magnesium	25900			P
	7439-96-5	Manganese	494			P
	7439-97-6	Mercury	0.12	11		cv
-	7440-02-0	Nickel	25.8			P
	7440-09-7		2320		٠.	A
-	7782-49-2		0.75	บ	W	F
1		Silver	1.8	บ	•	P
Į		Sodium	374	В		P
1		Thallium	0.75	บ		F
-		Vanadium	27.2			P
ı	7440-66-6	Zinc	75.5			P
1	-	Cyanide	, 5.5			NR
-		•				""
•				I		I l

Color Before: BROWN

Clarity Before:

Texture: MEDIUM

-olor After: YELLOW

Clarity After:

Artifacts:

Comments:

FORM I - IN

ILM02.1

EPA SAMPLE NO.

1biName: CHEMTECH CONSULTING GROUP Contract: 68D20041

SB-6

Lab Code: CHEM

Case No.: | 0.20 |

SAS No.:

SDG No.: SB-1

atrix (soil/water): SOIL

Lab Sample ID: 5472S

Level (low/med):

LOW

Date Received: 11/03/92

Solids:

90.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

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CAS No.	Analyte	Concentration	С	Q	М	7
7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-96-5 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-28-0 7440-62-2 7440-66-6	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	2420 8.9 1.5 16.2 0.32 0.89 95400 5.3 3.4 20.1 7400 5.0 23300 136 0.67 1.6 306 0.67 12.1 29.7	UBBBU B U BUUBU	N	PPFPPPPPPPPPVPAFPPFPNR	

dolor Before: GRAY

Clarity Before:

Texture:

MEDIUM

-olor After: YELLOW

Clarity After:

Artifacts:

Comments:

FORM I - IN

ILM02.1

EPA SAMPLE NO.

S	C	_	1	
$\boldsymbol{-}$	·		4	

b Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Liab Code: CHEM Case No.: |U20| SAS No.:

SDG No.: SB-1

htrix (soil/water): SOIL

Lab Sample ID: 5478S

Lievel (low/med): LOW

Date Received: 11/03/92

हर्ड Solids:

51.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

	L					_	
	CAS No.	Analyte	Concentration	С	Q	М	
	7429-90-5	Aluminum	21000	-		P	l
	7440-36-0	Antimony	15.7	บ		P	l
	7440-38-2	Arsenic	3.8	В	N	F	l
	7440-39-3	Barium	144		41	P	ı
	7440-41-7		1.8	В		P	ı
	7440-43-9	Cadmium	3.7			P	
	7440-70-2	Calcium	5030			P	ı
	7440-47-3	Chromium	33.3			P	ı
	7440-48-4	Cobalt	9.9	В		P	ı
	7440-50-8	Copper	49.0			P	
	7439-89-6	Iron	28100			P	
		Lead	134			F	ĺ
	7439-95-4	Magnesium	5820			P	ĺ
	7439-96-5	Manganese	478			P	ĺ
	7439-97-6	Mercury	0.20	U		cv	ĺ
	7440-02-0	Nickel	32.1			P	
		Potassium	2150			A	l
		Selenium	1.2	U	W	F	l
	7440-22-4	Silver	2.7	U		P	
į	7440-23-5	Sodium	339	В		P	
	7440-28-0	Thallium	1.2	U		F	
	7440-62-2	Vanadium	37.6	l		P	ļ
i	7440-66-6	Zinc	292	Į		P	
		Cyanide		ľ		NR	
ĺ							
				'			

Color Before: BLACK

Clarity Before:

Texture: MEDIUM

olor After: YELLOW

Clarity After:

Artifacts:

Comments:

FORM I - IN

ILM02.1

EPA SAMPLE NO.

Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM

Case No.: 10201

SAS No.:

SDG No.: SB-1

atrix (soil/water): SOIL

Lab Sample ID: 5479S

Level (low/med):

Date Received: 11/03/92

\_ Solids:

47.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

-							
	CAS No.	Analyte	Concentration	С	Q	M	
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-28-0 7440-66-6	Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel	1770 0.21 62.2	UBBBBBUUBU	N	PPFPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	

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Clarity Before:

Texture: MEDIUM

Color After:

YELLOW

Clarity After:

Artifacts:

Cor	nments:
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FORM I - IN

ILM02.1

EPA SAMPLE NO.

SC-3 ab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM Case No.: | SAS No.:

SDG No.: SB-1

atrix (soil/water): SOIL

Lab Sample ID: 5480S

Level (low/med): LOW

Date Received: 11/03/92

Solids:

72.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum	17000	-		P
7440-36-0	Antimony	11.1	u	·	P
7440-38-2	Arsenic	5.1	$ $	SN	F
7440-39-3	Barium	89.4		511	P
7440-41-7	Beryllium	0.99	В		P
7440-43-9	Cadmium	1.6	ادا		P
	Calcium	11500			P
7440-47-3		23.3			P
7440-48-4	Cobalt	8.5	В		P
7440-50-8	Copper	24.6			P
7439-89-6	Iron	24600		i I	P
7439-92-1	Lead	18.8			F
7439-95-4	Magnesium	6710			P
7439-96-5	Manganese	768			P
7439-97-6	Mercury	0.14	17		cv
7440-02-0	Nickel	27.1			P
7440-09-7	Potassium	1190	В		A
7782-49-2		0.83	Ū	W	F
7440-22-4	Silver	1.9	U	.,	P
7440-23-5		294	В		P
7440-28-0	Thallium	0.83	וֹט		F
7440-62-2	Vanadium	31.8	_		P
7440-66-6	Zinc	83.5	<b> </b>		P
	Cyanide	10			NR
	-				'''

cotor Refore: BROWN	ı
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Clarity Before:

Texture:

**MEDIUM** 

Color After: YELLOW

Clarity After:

Artifacts:

Comments:

FORM I - IN

ILM02.1

EPA SAMPLE NO.

SS-1

hab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM

Case No.: |020| SAS No.:

SDG No.: SB-1

ntrix (soil/water): SOIL

Lab Sample ID: 5481S

Level (low/med): LOW

Date Received: 11/03/92

Solids:

75.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

7440-36-0 Antimony 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 3470 P P P R P P P P P P P P P P P P P P P	CAS No.	Analyte	Concentration	С	Q	M	
7440-48-4   Cobalt   20.3   28.8   7439-89-6   Iron   29100   35.2   S   F   7439-95-4   Magnesium   7440-02-0   Nickel   7440-02-0   Nickel   7782-49-2   Selenium   Selenium   5620   F   7440-23-5   Selenium   7440-23-5   Sodium   7440-62-2   7440-66-6   Zinc   Too   102   F   7440-66-6   Zinc   Too   To	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-95-4 7439-95-4 7439-95-4 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-28-0 7440-62-2	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc	19800 10.7 3.4 114 1.3 2.3 3470 25.8 20.3 28.8 29100 35.2 5620 849 0.13 29.1 1850 0.80 1.9 240 0.80 37.0	U UUB	N S	PPFPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	

-olor Before: BROWN

Clarity Before:

Texture: MEDIUM

Color After: YELLOW

Clarity After:

Artifacts:

domments:

FORM I - IN

ILM02.1

## U.S. EPA - CLP

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

b Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

SS-2

Lab Code: CHEM

Case No.: | 201

SAS No.:

SDG No.: SB-1

trix (soil/water): SOIL

Lab Sample ID: 5455S

Level (low/med): Solids:

LOW

Date Received: 11/03/92

72.0

"ر'دُ؛ د<sub>ِن</sub>ِ Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.  Analyte Concentration C Q M M  7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 740-50-8 7439-92-1 7439-95-1 7439-95-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-28-0 7440-66-6			weight): MG/KG
7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 7439-97-6 7440-02-0 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-28-0 7440-28-0 7440-66-6	CAS No.		
Cyanide 112 PP NR	7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-28-0 7440-66-6	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	116 1.4 1.7 4030 25.5 37.6 85.1 34400 27.0 5730 1180 0.14 34.0 1270 0.83 2.7 370 0.83 41.3 112

or Before: BROWN

Clarity Before:

or After: YELLOW

Clarity After:

Texture:

MEDIUM

Artifacts:

ments:

FORM I - IN

ILM02.1

EPA	SAM	PLE	NO.
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b Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

SS-3

Lab Code: CHEM Case No.: |020| SAS No.:

SDG No.: SB-1

trix (soil/water): SOIL

Lab Sample ID: 5456S

Level (low/med): LOW

Date Received: 11/03/92

s Solids:

72.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

			-,			
CAS No.	Analyte	Concentration	c	Q	М	
7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0	Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium	2.8 14700 21.6 13.2 69.3 27000 46.9 9620 516 0.14 29.7 1030 0.83 2.3 460	U B B B U B B B U	N	PPFPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	

color Before: BROWN

Clarity Before:

Texture:

MEDIUM

olor After: YELLOW

Clarity After:

Artifacts:

comments:

FORM I - IN

ILM02.1

EPA	SAMPLE	NO.
r.r.a	DUIL III	110.

SS-4

ib Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM

Case No.: | 1020 | SAS No.:

SDG No.: SB-1

atrix (soil/water): SOIL

Lab Sample ID: 5457S

Level (low/med):

LOW

Date Received: 11/03/92

Solids:

67.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

T429-90-5	CAS No.	Analyte	Concentration	С	Q	M	
Cyanide NR	7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-98-6 7439-95-4 7439-95-4 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-28-0	Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc	11.9 4.4 102 1.2 2.4 35000 23.2 12.8 50.9 28500 41.5 14900 430 0.15 29.4 1920 0.90 2.3 368 0.90 36.8	B B U U B B	S	PFPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	

≼olor Before: BROWN

Clarity Before:

Texture: MEDIUM

Rolor After:

YELLOW

Clarity After:

Artifacts:

cic	mm	on	ts	•

ILM02.1

FORM I - IN

## U.S. EPA - CLP

EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

SS-5

b Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM

Case No.: 1020

SAS No.:

SDG No.: SB-1

\_itrix (soil/water): SOIL

Lab Sample ID: 5458S

Level (low/med): LOW

Date Received: 11/03/92

-:Solids:

69.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

∹olor Before: BROWN

Clarity Before:

Texture: MEDIUM

Polor After:

YELLOW

Clarity After:

Artifacts:

omments:	

FORM I - IN

ILM02.1

EPA SAMPLE NO.

SS-6

b Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

SAS No.:

SDG No.: SB-1

trix (soil/water): SOIL

Lab Code: CHEM Case No.: 1020

Lab Sample ID: 5460S

Level (low/med):

LOW

Date Received: 11/03/92

|solids:

79.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS N	0.	Analyte	Concentration	С	Q	М	
7429- 7440- 7440- 7440- 7440- 7440- 7440- 7440- 7439- 7439- 7439- 7439- 7440- 7440- 7440- 7440- 7440- 7440- 7440- 7440- 7440- 7440-	90-5	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	0.13 15.0	B U U B	W	PPFPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	

_	lor	Befor	re:	BLACK
·J	TOT	Dero.	LE.	DITUCK

Clarity Before:

Texture:

MEDIUM

plor After:

YELLOW

Clarity After:

Artifacts:

comments:

FORM I - IN

ILM02.1

5A

#### SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MSDS

ab Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

Lab Code: CHEM Case No.: 14201

SAS No.:

SDG No.: SB-1

atrix: SOIL

Level (low/med): LOW

§ Solids for Sample: 85.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

<del>-</del> -, .							
Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) (	Spike Added (SA)	%R	Q —	
Aluminum Antimony Arsenic Barium Beryllium Cadmium	75-125 75-125 75-125 75-125 75-125	112.9859 10.1176 545.9294 12.4235 12.9341	9.4118 4.2588 87.6212 0.7788 0.9412	9.41 470.59 11.76	99.0	N	NR P F P P NR
Calcium Chromium Cobalt Copper Iron Lead	75-125 75-125 75-125	64.4329 120.9365 83.0188	18.9671 9.0682 26.1812 12.0235	47.06 117.65 58.82 4.71	95.1 96.6		P P P NR F
Magnesium Manganese Mercury Nickel Potassium	75-125 75-125 75-125	500.9412 0.5529 132.9553	408.6118 0.1176 23.5647	117.65	93.7 93.0		NR P CV P NR
Selenium Silver Sodium Thallium Vanadium	75-125 75-125 75-125 75-125 75-125		0.7059 2.1271 0.7059 29.2635 69.8871	B 11.76	97.4 96.2		F P NR F P
Cyanide						. _	NR 

Comments:

FORM V (Part 1) - IN

ILM02.1

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and and the control of the control o

## **DUPLICATES**

EPA SAMPLE NO.

MSDD

hab Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

-ab Code: CHEM

Case No.: | d 20/

SAS No.:

SDG No.: SB-1

- Matrix (soil/water): SOIL

Level (low/med): LOW

- Solids for Sample:

% Solids for Duplicate: 85.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	1
Analyte   Limit   Sample (S) C   Dupiled (b) C   112   2	M
Table   Tabl	PP FP PP PP PP PP PP PP PP PP PP PP PP P

ILM02.1

TO CONTROL OF THE PROPERTY OF

## **DUPLICATES**

EPA SAMPLE NO.

SS-5D

-ab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

나ab Code: CHEM

Case No.: |020|

SAS No.:

SDG No.: SB-1

Matrix (soil/water): SOIL

Level (low/med): LOW

~ Solids for Sample: 69.0

% Solids for Duplicate: 77.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

-				- 1 1	•	- 1	i I	1 1		
<b>,</b>	Analyte	Control Limit	Sample (S)	с	Duplicate (D)	С	RPD	Q	М	
	Aluminum		16157.3913	-	15618.5507	-	3.4	-	$\overline{P}$	
	Antimony	-		וט		וט	1	1	P	
	Arsenic	2.9	4.2029	_	4.2609	1	1.4		F	
	Barium	58.0	96.6522	1	91.7942		5.2		P	
	Beryllium		1.0667	В	1.0667	в	0.0		P	
į	Cadmium	1.4	1.4145	В	1.8145	- 1	24.8	ì	P	
	Calcium		29524.6377		25230.1449		15.7		P	
	Chromium		19.7478	- [	20.9710	- 1	6.0	1	P	
	Cobalt		11.8841	В	10.7913	В	9.6		P	
•	Copper	. [	42.4116	- 1	39.5246		7.0		P	
	Iron		26539.7101		25297.3913	1	4.8		P	
	Lead		23.6812		25.7391		8.3		F	
11	Magnesium		13501.7391	- }	12352.7536		8.9	.	P	
	Manganese		424.6667		383.6812	[	10.1	1	P	
	Mercury		0.1449	U	0.1449	וט			CV	
<b>L</b> , .*	Nickel	11.6	27.9130	- 1	26.1623	- I	6.5		P	
L	Potassium	1449.3	1831.8841	1	1794.2029	1	2.1		A	
	Selenium		0.8696		0.8696				F	
	Silver		2.0290		2.0290			11	P	ļ
ii '	Sodium	}	332.7246		296.0290		11.7	l I	P F	l
	Thallium	]	0.8696	וט	0.8696	ע		11		l
<del>-</del> .	Vanadium	14.5	33.9391		33.8261		0.3		P .	l
	Zinc		99.4812		92.5652		7.2	11	P	į
11.1	Cyanide	1	1						NR	
_			l	_	l	I	l	I I	I	ļ

#### ICP SERIAL DILUTIONS

EPA SAMPLE NO.

MSDL

b Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM

Case No.: |020|

SAS No.:

SDG No.: SB-1

trix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

<del></del>		7.1	Serial	- 1	*	ļ		1
1	Initial Sample		Dilution	- [	Differ-	l		
	Result (I)	٠Į٠'		cl	ence	Q	M	ļ
Analyte	Result (1)	[	1			1		
	56262.00	-  '	57425.00	-1	2.1	-	P	
Aluminum	40.00	٠,		υl	l ' l	l	P	1
Antimony	40.00	1			l l	1	NR	1
Arsenic	272 20	ł	378.75	в	1.7	1	P	1
Barium	372.39	,		В	114.5	1	P	1
Beryllium		B		וט		1	P	1
Cadmium		١,	297740.00	Ĭ	3.7	ļ	P	1
Calcium	287190.00	-	75.15		6.8	1	P	1
Chromium	80.61	_	50.30	ъ	30.5	1	P	1
Cobalt		В	115.10		3.4	ł	P	1
Copper	111.27	- 1	96705.00		4.8	ì	P	1
Iron	92247.00	- [	96705.00	lì	1	ì	NR	ı I
Lead		-	112600 00		1.3	1	P	1
Magnesium	112210.00	ł	113680.00	1 1	4.8	i I	P	1
Manganese	1736.60	- 1	1820.15	1 1	4.0	1	NE	,
Mercury	1	l		١١	1000	11	P	`
Nickel	100.15	- [	80.00	ען	100.0	l 1	I -	٠l
Potassium	] [ ]	ı		ΙI	1	11	NF	
Selenium	1 1			11		11	NF	4
Silver	9.04	В	35.00		100.0	11	P	- 1
Sodium	1426.40	В	1650.00	ען	100.0	11	P	
Thallium				i	<b> </b>	П	NI	٦١
Vanadium	124.37		148.20	B	19.2	11	P	١
	297.02		327.45	1	10.2	11	P	
Zinc	[]		l 1	1	]	11.	_ _	_1
l				'				

### ICP SERIAL DILUTIONS

EPA SAMPLE NO.

SS-5L

ab Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

Lab Code: CHEM

. Har.

Case No.: |020 |

SAS No.:

SDG No.: SB-1

atrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

Initial Sample		Serial Dilution		% Differ-		
	c	<del>-</del> -		ence	Q	М
55743.00	-	56375.00	-	1.1		P
	ט	200.00	וע	1		P
1	ł	1				NR
333.45			- 1	1 1		P
1			_	1 1		P
	В		٧Į			P P
. —	1		.,		İ	P
4		.,	-	1	1	P
3	В	•			1	P
		1 200.00	ᅦ		1	P
91562.00	ļ	94370.00		3.1	ì	NE
		47062 50	- 1	1 5	ì	P
				1.3	1	P
1465.10	1	1499.40	-	2.3	1	N
		00.00	.,	1000		P
96.30		80.00	ᅦ	100.0	1	N
		1	ŀ	1	1	N
	١.,	35 00	,,	1 1		P
			- 1	100.0	1	P
1147.90	В	1650.00	۲	100.0		N
117.00		117 85	В	0.6	П	P
			-		11	P
343.21		11			П	-
	55743.00 40.00 333.45 3.68 4.88 101860.00 68.13 41.00 146.32 91562.00 46581.00 1465.10 96.30	Result (I) C  55743.00	Initial Sample Result (I) C	Initial Sample Result (I) C	Initial Sample Result (I) C Dilution Result (S) C Difference    55743.00	Initial Sample Result (I) C Dilution Result (S) C Difference Q Q Q T T T T T T T T T T T T T T T T

ILM02.1

SOIL PESTICIDE ORGANIC ANALYSIS (ROUND I)

Name: INTECH

Contract:

o Code: INTECH

Case No.: 1020/

SAS No.

SDG No. SS-2

Column(1):RTX1701 ID:0.53 (mm) GC Column(2):RTX5

ID:0.53

(mm)

NYSDEC SAMPLE NO.			%REC #!	%REC #!	. – .	TOT   OUT   ===   0
PBLK01 PBLK01MSB SB-5BMSD SB-5C(dup) SB-5C SB-5B	106   101   113   102   105   83   91	126   117   115   90   91   121   101	104   102   104   95   83   94	104 105 100 106 96 85 84		

ADVISORY QC LIMITS

TCX = Tetrachloro-m-xylena

(60-150)

DCB = Decachlorobiphenyl

(60-150)

# Column to be used to flag recovery values

\* Values outside of QC limits

D Surrogate diluted out

NYSDEC SAMPLE NO.

10

PESTICIDE ORGANIC ANALYSIS DATA SHEET

1		
ISB-5C		

Name: INTECH Contract:

SDG No.: SS-2

rix: (soil/water) SOIL Lab Sample ID: 20118

ple wt/vol: 30

(g/m1)

Code: INTECH CASE No.: 10201 SAS No.:

Lab File ID: >C5923

oisture:

20 decanted: (Y/N) N

Date Received: 10/31/92

raction: (SepF/Cont/Sonc) SONC Date Extracted: 11/05/92

centrated Extract Volume: 5000 (uL)

Date Analyzed: 11/23/92

action Volume: 2 (uL)

Dilution Factor:

Cleanup: (Y/N) Y

CAS NO.

pH: 9.60 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: COMPOUND (ug/L or ug/Kg) UG/KG

719 94 / DUC	1 1 1
319-84-6alpha-BHC	1 2.110 1
319-85-7beta-BHC	1 2.110 !
319-86-9delta-BHC	1 2.110 1
59-39-9gamma-BHC (Lindane)	1 2.110 1
76-44-8Heptachlor	ו ע 1.1 עו
309-00-2Aldrin	l 2.11U 1
1024-57-3Heptachlor epoxide	1 2.11U 1
959-98-8Endosulfan I	1 2.1IU 1
60-57-1Dieldrin	I 4.21U I
72-55-94,4'-DDE	1 4.210 1
72-20-8Endrin	1 4.210 1
33213-65-9Endosulfan II	1 4.21U I
72-54-84,4'-DDD	1 4.210 1
1031-07-8Endosulfan sulfate	1 4.210 1
50-29-34,4'-DDT	1 4.210 1
72-43-5Methoxychlor	1 2110 1
53494-70-5Endrin ketone	1 4.210 1
7421-36-3Endrin aldehyde	1 4.210 1
5103-71-9alpha-Chlordane	1 2.110 1
5103-74-2gamma-Chlordane	1 2.110 1
8001-35-2Toxaphene	1 21010 1
12674-11-2Aroclor 1016	1
11104-28-2Aroclor 1221	1 8310 1
11141-16-5Aroclor 1232	1 4210 1
53469-21-9Aroclor 1242	1 4210 1
12672-29-6Aroclor 1248	1 4210 1
12097-69-1Aroclor 1254	1 4210 1
11096-82-5Aroclor 1260	1 4210 1
	4210 1

4.1IU

4.110

4.1 IU

4.1IU

2.110

2.1IU

210 IU 1

41 I U

821U

41 I U

41 I U

41 I U

41 I U

41 I U

21 I U

1D

#### PESTICIDE ORGANIC ANALYSIS DATA SHEET

ISB-50(dup) Mame: INTECH Contract: INTECH CASE No .: 10201 . Code: SAS No.: 50G No.:55-2 Lab Sample ID: 20120 :rix: (soil/water) SOIL Lab File ID: >C5922 iple wt/vol: 30 (a/m1)decanted: (Y/N) N Date Received: 10/31/92 loisture: 19 Date Extracted: 11/05/92 raction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/23/92 icentrated Extract Volume: 5000 (uL) rection Volume: 2 Dilution Factor: 1 (uL) 9.70 Sulfur Cleanup: (Y/N) N Cleanup: (Y/N) Y pH: CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG 2.11 319-84-6----alpha-BHC 2.1IU 319-85-7----beta-BHC 319-86-8-----delta-BHC 2.1102.110 58-89-9----gamma-BHC (Lindane) 76-44-8-----Heptachlor 2.110 2.110 309-00-2----Aldrin 1024-57-3----Heptachlor epoxide 2.110 959-98-8-----Endosulfan I 2.110 60-57-1-----Dieldrin 4.110 72-55-9-----4,4'-DDE ·4.1 IU 72-20-8-----Endrin 4.1IU 33213-65-9----Endosulfan II 4.1 IU 72-54-8-----4,4'-DDD 4.110

1031-07-8-----Endosulfan sulfate

50-29-3-----4,4'-DDT

8001-35-2----Toxaphene

12674-11-2----Aroclar 1016

11104-28-2----Aroclor 1221

11141-16-5----Aroclor 1232

53469-21-9----Aroclor 1242

12672-29-6----Aroclor 1248

12097-69-1----Aroclar 1254

11096-82-5----Aroclor 1260

72-43-5-----Methoxychlor

53494-70-5----Endrin ketone

7421-36-3----Endrin aldehyde

5103-71-9----alpha-Chlordane

5103-74-2----gamma-Chlordane

NYSDEC SAMPLE NO.

| |SB-5B |\_\_\_\_\_\_\_\_

Name: INTECH

Contract:

SAS No.:

SDG No.:33-2

rix: (soil/water) SOIL

INTECH CASE No .: /C20/

Lab Sample ID: 20121

Lab File ID: >C5924

ple wt/vol: 30 (g/ml)

loisture: 15 decanted: (Y/N) N

. Code:

Date Received: 10/31/92

:raction: (SepF/Cont/Sonc) SONC

Date Extracted: 11/05/92

scentrated Extract Volume: 5000 (uL)

319-84-6----alpha-BHC

319-85-7-----beta-BHC

1 319-86-8-----delta-BHC

Date Analyzed: 11/23/92

jection Volume: 2 (uL)

Dilution Factor:

rection volume: 2 to2

Bildi.o.

Cleanup: (YZN) Y

pH: 9.70

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/KG Q

2.0IU 2.010 2.010 2.010 2.010 2.010 2.010 2.010 3.910 3.9 IU 3.91U 3.910 3.91U 3.911 3.91U 20 I U 3.91U 3.91U 2.010 2.010 200 IU 1

1 58-89-9-----qamma-BHC (Lindane) 1 76-44-8-----Heptachlor 1 309-00-2----Aldrin 1024-57-3-----Heptachlor epoxide | 959-98-8-----Endosulfan | | -. 1 60-57-1-----Dieldrin 72-55-9-----4,4'-DDE 72-20-8-----Endrin | 33213-65-9----Endosulfan | I 1 72-54-8-----4,4'-DDD 1 1031-07-8-----Endosulfan sulfate 50-29-3-----4,4'-DDT 1 72-43-5-----Methoxychlor 1 53494-70-5----Endrin ketone I 7421-36-3----Endrin aldehyde | 5103-71-9----alpha-Chlordane 5103-74-2----gamma-Chlordane | 8001-35-2----Toxaphene 12674-11-2----Aroclor 1016 | 11104-28-2----Aroclor 1221 11141-16-5----Aroclar 1232

53469-21-9----Aroclar 1242

12097-69-1----Aroclor 1254

1 12672-29-6----Aroclor 1248

l 11096-82-5----Aroclor 1260

1 391U 781U 391U 391U 391U 391U

359

### PESTICIDE ORGANIC ANALYSIS DATA SHEET

IPBLK01

o Name: INTECH

Contract:

Code: INTECH CASE No.: 10201

SAS No.:

SDG No.: \$5-8

trix: (soil/water) SOIL

Lab Sample ID: 207-BLK

•

mple wt/vol: 30

(q/m1) G

.

Lab File ID: >C5918

loisture:

decanted: (Y/N) Y

Date Received:

traction:

(SepF/Conf/Sono) SONC

Date Extracted: 11/05/92

scentrated Extract Volume:

5000 (uL)

Date Analyzed: 11/23/92

jection Volume: 2 (uL)

Dilution Factor:

Cleanup: (Y/N) Y

pH: 5.00

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L

(ug/L or ug/Kg) UG/KG

1.710 319-84-6----alpha-BHC 1.710 319-85-7-----beta-BHC | 319-86-8-----delta-BHC 1.710 | 58-89-9----gamma-BHC (Lindane) 1.710 1.710 76-44-8-----Heptachlor 309-00-2----Aldrin 1.710 1024-57-3----Heptachlor epoxide 1.710 1 959-98-8-----Endosulfan I 1.210 60-57-1-----Dieldrin 3.310 1 72-55-9-----4,4'-DDE 3.310 : 72-20-8-----Endrin 3.310 | 33213-65-9----Endosulfan | 1 3.310 3.310 72-54-8-----4,4'-DDD 1 1031-07-8-----Endosulfan sulfate 3.310 50-29-3-----4,4'-DDT 3.3 IU 1 72-43-5-----Methoxychlor 17 IU 53494-70-5----Endrin ketone 3.3 IU | 7421-36-3----Endrin aldehyde 3.310 1.710 5103-71-9----alpha-Chlordane | 5103-74-2----gamma-Chlordane 1.710 8001-35-2----Toxaphene 170 IU 1 12674-11-2----Aroclor 1016 33 I U 11104-28-2----Aroclor 1221 67 I U 11141-16-5----Araclar 1232 33 I U 53469-21-9----Aroclor 1242 33 I U 12672-29-6----Aroclor 1248 33 IU 12097-69-1----Aroclor 1254 33 I U 11096-82-5----Aroclor 1260 33 I U

#### 1D PESTICIDE ORGANIC ANALYSIS DATA SHEET

IPBLK01MSB

NYSDEC SAMPLE NO.

Name: INTECH

Contract:

SDG No.: SS-2

:rix: (soil/water) SOIL

Lab Sample ID: 207-BLK MSB

ple wt/vol: 30 (q/ml)

Lab File ID: >C5919

foisture: decanted: (Y/N) Y

Date Received:

raction: (SepF/Cont/Sonc) SONC

, Code: INTECH CASE No.: 10201 SAS No.:

Date Extracted: 11/05/92

centrated Extract Volume: 5000 (uL)

Date Analyzed: 11/23/92

jection Volume: 2 (uL)

Dilution Factor:

Cleanup: (Y/N) Y pH: 5.00

. Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND

(ug/L or ug/Kg) UG/KG Q

1	1 1
319-84-6alpha-BHC	1.7IU I
319-85-7beta-BHC	1.710
319-86-8delta-BHC	1.710
58-89-9qamma-BHC (Lindane)	191
76-44-8Heptachlor	18
309-00-2Aldrin	18 I
1024-57-3Heptachlor epoxide	1.710
959-98-8Endosulfan I	1.710
60-57-1Dieldrin	371
72-55-94,4'-DDE	3.31U I
72-20-8Endrin	361 I
33213-65-9Endosulfan II	3.310
72-54-84,4'-DDD	3.310
1031-07-8Endosulfan sulfate	3.310 1
50-29-34,4'-DDT	371 1
72-43-5Methoxychlor	1710
53494-70-5Endrin ketone	3.310
7421-36-3Endrin aldehyde	3.310
5103-71-9alpha-Chlordane	1.710
5103-74-2gamma-Chlordane	1.710
8001-35-2Toxaphene	1701U
I	1 1
12674-11-2Aroclor 1016	33 IU I
11104-28-2Aroclor 1221	671U I
11141-16-5Aroclor 1232	3310 1
53469-21-9Aroclor 1242	33 IU I
12672-29-6Aroclar 1248	. 331U I
12097-69-1Aroclor 1254	331U I
11096-82-5Aroclar 1260	331U I
· · · · · · · · · · · · · · · · · · ·	1 1

PESTICIDE ORGANIC ANALYSIS DATA SHEET

1D

Name: INTECH Contract: | \_\_\_\_\_

Code: INTECH CASE No.: ICAOI SAS No.: SDG No.:55-a

rix: (soil/water) SOIL Lab Sample ID: 20110MS

ple wt/vol: 30 (q/ml) G Lab File ID: >C5920

oisture: 15 decanted: (Y/N) N Date Received: 10/31/92

raction: (SepF/Cont/Sonc) SONC Date Extracted: 11/05/92

centrated Extract Volume: 5000 (uL) Date Analyzed: 11/23/92

ection Volume: 2 (uL) Dilution Factor: 1

Cleanup: (Y/N) Y pH: 9.70 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (uq/L or ug/Kg) UG/KG

Ü 319-84-6----alpha-BHC 2.01U 319-85-7----beta-BHC 2.010 319-86-8-----delta-BHC 2.010 58-89-9----gamma-BHC (Lindane) 211 76-44-8-----Heptachlor 201 309-00-2----Aldrin 191 1024-57-3-----Heptachlor epoxide 2.010 959-98-8-----Endosulfan I 2.010 60-57-1-----Dieldrin 40 L 72-55-9-----4,4'-DDE 3.91U 72-20-8-----Endrin 411 33213-65-9----Endosulfan II 3.910 72-54-8-----4,4'-DDD 3.910 1031-07-8-----Endosulfan sulfate 3.910 50-29-3----4,4'-DDT 411 72-43-5-------Methoxychlor 20 I U 53494-70-5---- Endrin ketone 3.91U 7421-36-3---- Endrin aldehyde 3.91U 5103-71-9-----alpha-Chlordane 2.010 5103-74-2----gamma-Chlordane 2.010 8001-35-2-----Toxaphene 200 IU 12674-11-2----Aroclor 1016 39 I U 11104-28-2----Aroclor 1221 78 I U 11141-16-5----Aroclor 1232 39 I U 53469-21-9----Aroclor 1242 39 I U 12672-29-6----Aroclor 1248 39 I U 12097-69-1----Aroclor 1254 39 I U 11096-82-5----Aroclor 1260 39 I U

1D

PESTICIDE ORGANIC ANALYSIS DATA SHEET

ISB-5BMSD -16 Contract: INTECH Name: SDG No.: 55-2 INTECH CASE No.: 10201 SAS No.: Code: Lab Sample ID: 20111MSD trix: (soil/water) 501L Lab File ID: >C5921 (q/m1)aple wt/vol: 30 10/31/92 Date Received: decanted: (Y/N) N loisture: 15 11/05/92 Date Extracted: traction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/23/92 centrated Extract Volume: 5000 (uL) Dilution Factor: 2 (uL) rection Volume: Sulfur Cleanup: (Y/N) N 9.70 pH: Y (HNY) C Cleanup: CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q COMPOUND CAS NO. 2.010 319-84-6----alpha-BHC 2.010 319-85-7-----beta-BHC 2.010 | 319-86-8-----delta-BHC 231 1 58-89-9-----gamma-BHC (Lindane) 211 76-44-9-----Heptachlor 21.1 309-00-2----Aldrin 2.010 1024-57-3----Heptachlor epoxide 2.010 | 959-98-8-----Endosulfan | 451 1 60-57-1-----Dieldrin 3.910 1 72-55-9-----4,4'-DDE 451 1 72-20-8-----Endrin 3.91U | 33213-65-9----Endosulfan | I 3.910 1 72-54-8-----4,4'-DDD 3.910 | 1031-07-8----Endosulfan sulfate 471 1 50-29-3-----4,4'-DDT 2010 1 72-43-5-----Methoxychlor 3.910 1 53494-70-5----Endrin ketone 3.91U 1 7421-36-3----Endrin aldehyde 2.010 1 5103-71-9----alpha-Chlordane 2.010 1 5103-74-2----gamma-Chlordane 200 IU 1 8001-35-2----Toxaphene 1 39 I U | 12674-11-2----Aroclor 1016 78 I U | 11104-28-2----Aroclor 1221 l 11141-16-5----Aroclar 1232 39 I U | 53469-21-9----Aroclor 1242 39 I U 12672-29-6----Aroclor 1248 39 I U 39 IU 12097-69-1----Aroclor 1254 39 I U | 11096-82-5----Aroclor 1260

GROUNDWATER ANALYSIS (TOTAL INORGANICS)
(ROUND II)

### CASE NARRATIVE FOR INORGANICS (NYASP)

ALL THE SAMPLES WERE SUBBED OUT TO CHEMTECH CONSULTING GROUP FOR ANALYSIS OF METALS

Client: VERSAR ENV.

Project:Scott Aviation

Job No.: I211107

CASE No.: 11107

SDG No.: MW-1 TAL

The following samples are included in this Sample Delivery

The follow	ing samples a
Group:	the to on forms
CHEMTECH	
	MW-1
6465S	MM-3
64665	MW-3 (for duplicate)
64675	MM-3D (for duplicate)
6468DS	MW-3D (for spike)
646952	MM-4
6470S	MW-4A DUP
6471S	MM-5
64725	MM-6
64735	
64745	INTER. TRENCH FIELD BLANK Documentation of Problems Encountered With These
54755	FIELD Blanch Problems Encountered
Dotailed	Documentation of assessment
Samples	Total
General:	tor samples were analyzed for METALS Total
CANGLAL	Law campies work

- The above water samples were analyzed for METALS Total. General:
- Please note that the client sample number with the sample description (identification) is too many characters, therefore as per the software being used only limited 2. characters can be used for EPA sample number. Never-the-less for the cross reference check the Lab sample ID. with Client ID. is listed above on this case narrative.
  - Please be advised that using the Software for data processing of CLP Inorganic Packages, the software is designed to accomodate one SDG at a time at the same
  - The Inorganic CLP data package contains respectively in this order: Case Narrative followed by: forms, ICAP raw data, Furnace raw data, Mercury raw data, and finally the last part is General (samples preparation log, Chain-of-Custody, sample log-in sheet).

NYDEC SAMPLE NO

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

FIELD BLANK

Lab Code CHEM

Case No.: ||67 SAS No.: LAB.RES. SDG No.: MW-1 TAL

Matrix (soil/water): WATER

Lab Sample ID: 6475S

Level (low/med): Low

Date Received: 11/19/92

% Solids;

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

•	T						
	CAS No.	Analyte	Concentration	c	Q	М	
	7429-90-5	Aluminum	100	Ū	·	l <u>-</u>	_
i	7440-36-0	Antimony	40.0	U	1	P	
i	7440-38-2	Arsenic	2.0	U	1	P	
٠.	7440-39-3	Barium	14.9	B	1	F	
	7440-41-7	Beryllium	1.0	U		P	1
ı	7440-43-9	Cadmium	4.0	טו	· ·	P	
-	7440-70-2	Calcium	1540	, -		P	ı
-	7440-47-3	Chromium	9.0	B	<b>,</b> ,	P	١
Į	7440-48-4	Cobalt	7.0	U	1	P	1
1	7440-50-8	Copper	20.0	_		P	l
I	7439-89-6	Iron	153	U		P	ļ
1	7439-92-1	Lead	2.0	ប	1	P	1
1	7439-95-4	Magnesium	373	1 - 1	ĺ	F	1
1	7439-96-5	Manganese	4.0	В		P	ł
	7439-97-6	Mercury		В		P	1
1	7440-02-0	Nickel	0.20 16.0	U		CV	I
ı	7440-09-7	Potassium	900	U		P	l
ı	7782-49-2	Selenium		U		A	ł
ľ	7440-22-4	Silver	3.0 7.0	U	W	F	ı
ľ	7440-23-5	Sodium	1250	U		P	ı
	7440-28-0	Thallium		В		P	ŀ
	7440-62-2	Vanadium	3.0 16.0	U		F	1
	7440-66-6	Zinc	34.7	U	•	P	
1_		Cyanide	34./	- 1		P	ı
			1	- 1		NR	ı
				- 1		1 1	ı

000002

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

FORM I - IN .

NYDEC SAMPLE NO

INTER. TRENCH

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM

Case No.: 1/167 SAS No.: LAB.RES. SDG No.: MW-1 TAL

Matrix (soil/water): WATER

Lab Sample ID: 6474S

Level (low/med): LOW

Date Received: 11/19/92

% Solids:

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	100	ī.	<del></del>	P
7440-36-0	Antimony	40.0	บ		P
7440-38-2	Arsenic	8.3	В		F
7440-39-3	Barium	289	-	i	P
7440-41-7	Beryllium	1.0	บ		P
7440-43-9	Cadmium	4.0	U		P
7440-70-2	Calcium	259000			P
7440-47-3	Chromium	9.0	บ		P
7440-48-4	Cobalt	7.0	บ		P
7440-50-8	Copper	20.0	Ū		P
7439-89-6	Iron	30600			P
7439-92-1	Lead	11.5			F
7439-95-4	Magnesium	59000			P
7439-96-5	Manganese	1870			P
7439-97-6	Mercury	0.20	บ		CV
7440-02-0	Nickel	16.0	U		P
7440-09-7	Potassium	2070	В	•	A
	Selenium	30.0	U		F
7440-22-4	Silver	7.0	U		P
	Sodium	48100			P
	Thallium	3.0	υl	W	F
7440-62-2	Vanadium	16.0	U		P
7440-66-6	Zinc	43.4			P
· · · · · · · · · · · · · · · · · · ·	Cyanide				NR
			_		

000003

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW . Clarity After: CLEAR

Artifacts:

Comments

FORM I - IN

NYDEC SAMPLE NO

Lab Name CHEMTECH CONSULTING GROUP Contract: 68D20041

MW-1

Lab Code CHEM

Case No.: ///o 7 SAS No.: LAB.RES. SDG No.: MW-1 TAL

Matrix (soil/water): WATER

Level (low/med): Low

Lab Sample ID: 6465S

Date Received: 11/19/92

% Solids;

Concentration Units (ug/L or mg/Kg dry weight): UG/L

Q	Analyte	CAS No.
W	Antimony Arsenic Barium Beryllium Cadmium Calcium	440-23-5 440-28-0 440-62-2 440-66-6
C		Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc

000004

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

omments

FORM I - IN

1997 P. 1

# NYSDEC-ASP

# INORGANIC ANALYSIS DATA SHEET

NYDEC SAMPLE NO

Lab Name

CHEMTECH CONSULTING GROUP

Contract: 68D20041

MW-2

Lab Code CHEM

Case No.: 11/07 SAS No.: LAB.RES. SDG No.: MW-1 TAL

Matrix (soil/water): WATER

Lab Sample ID: 6466S

Level (low/med):

LOW

Date Received: 11/19/92

% Solids:

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-47-3 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-95-4 7439-96-5 7439-97-6 740-02-0 740-02-0 740-22-4 740-23-5 740-66-6

000005

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After:

COLORLESS

Clarity After: CLEAR

Artifacts:

Comments

FORM I - IN

1000

NYDEC SAMPLE NO

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

K-WM

Lab Code: CHEM

Case No.: 1107 SAS No.: LAB.RES. SDG No.: MW-1 TAL

Matrix (soil/water): WATER

Lab Sample ID: 6467S

Level (low/med): Low

Date Received: 11/19/92

% Solids:

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

7440-02-0 Nickel 16.0 U B 1640 Selenium Selenium 3.0 U W F 7.440-22-4 Sodium 7.0 U Thallium 7440-62-2 Vanadium Zinc 2inc Cupride 16.0 U P A F P P A F P P P P P P P P P P P P P		(	1		_		
7440-36-0			Analyte	Concentration	c	Q	М
7440-36-0       Antimony       40.0       U       P         7440-38-2       Arsenic       2.2       B       W       F         7440-39-3       Barium       134       B       P       P         7440-41-7       Beryllium       1.0       U       P       P         7440-43-9       Cadmium       4.0       U       P       P         7440-47-3       Chromium       9.0       U       P       P         7440-48-4       Cobalt       7.0       U       P       P         7439-89-6       Iron       2900       P<	ļ		Aluminum	1230	-		·  <del></del> -
7440-38-2       Arsenic       2.2       B       W       F         7440-39-3       Barium       134       B       P         7440-41-7       Beryllium       1.0       U       P         7440-43-9       Cadmium       4.0       U       P         7440-43-9       Calcium       48800       P       P         7440-47-3       Chromium       9.0       U       P         7440-48-4       Cobalt       7.0       U       P         7439-89-6       Copper       20.0       U       P         7439-92-1       Lead       2.6       B       W       F         7439-95-4       Magnesium       44100       B       P         7440-02-0       Nickel       16.0       U       P         7440-02-0       Nickel       3.0       U       W       F         7440-22-4       Selenium       3.0       U       W       F         7440-28-0       Thallium       3.0       U       F         7440-62-2       Vanadium       16.0       U       P         7440-66-6       Zinc       49.4       P	ı				1,		•
7440-39-3       Barium       134       B       P         7440-41-7       Beryllium       1.0       U       P         7440-43-9       Cadmium       4.0       U       P         7440-47-3       Chromium       9.0       U       P         7440-48-4       Cobalt       7.0       U       P         7439-89-6       Iron       2900       P       P         7439-92-1       Lead       2.6       B       W       F         7439-95-4       Magnesium       44100       P       P         7440-02-0       Nickel       16.0       U       P         7440-09-7       Potassium       3.0       W       F         7440-22-4       Silver       7.0       W       F         7440-28-0       Thallium       3.0       U       F         7440-66-6       Zinc       37300       P       F         7440-66-6       Zinc       49.4       P	ł			1	1 - 1	lw:	-
7440-41-7			Barium		1 – 1	"	
7440-43-9       Cadmium       4.0       U       P         7440-70-2       Calcium       48800       U       P         7440-47-3       Chromium       9.0       U       P         7440-48-4       Cobalt       7.0       U       P         7440-50-8       Copper       20.0       U       P         7439-89-6       Iron       2900       P       P         7439-95-4       Magnesium       44100       P       P         7439-97-6       Manganese       103       P       P         7440-02-0       Nickel       16.0       U       P         7782-49-2       Selenium       3.0       U       W       F         7440-22-4       Silver       7.0       U       P         7440-28-0       Thallium       3.0       U       F         7440-66-6       Zinc       3.0       U       P         7440-66-6       Zinc       49.4       P	١			· ·	1 - 1	İ	
7440-70-2   Calcium	-			·- · ·	1 - 1	1	
7440-47-3   Chromium   9.0   U   7440-48-4   Cobalt   7.0   U   7.			Calcium			1	
7440-48-4   Cobalt   7.0   U   7440-50-8   Copper   20.0   U   7439-89-6   Iron   2900   B   W   F   7439-95-4   Magnesium   Manganese   103   Marcury   103   Marcury   1040-02-0   Nickel   16.0   U   P   7782-49-2   Selenium   3.0   U   7440-23-5   7440-28-0   Thallium   3.0   U   7440-62-2   7440-66-6   Cupide   The Computation   Thallium   3.0   U   F   7440-66-6   Cupide   The Computation   Thallium   3.0   U   F   7440-66-6   Cupide   Thallium   3.0   U   F   7440-66-6   Cupide   Thallium   3.0   U   Th	١		Chromium	9.0	וטו	1	
7440-50-8 7439-89-6 1ron 1ron 2900 2-6 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-66-6  Copper 1ron 2900 2-6 8 W F P P P P P P P P P P P P P P P P P P	1		Cobalt		, · ,		
T439-89-6	-		Copper		1 - 1	ĺ	
7439-92-1 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-66-6  7440-66-6  Thallium 7440-66-6  Cuanida  2.6  44100 44100 103  70.20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1		Iron	1	1	l	
7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-66-6 Zinc  Magnesium Manganese 103 103 0 U P P CV P CV P P CV P P CV P P CV P P CV P P P P	1		Lead	2.6	В	W	
7439-96-5 7439-97-6 Mercury Nickel 7440-02-0 Potassium Selenium Selenium Sodium 7440-23-5 7440-28-0 Thallium 7440-66-6 Zinc CV P CV P CV P CV P CV P CV P CV P CV	1		Magnesium	44100			
7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-62-2 7440-66-6  7440-66-6	1	· · · · · · · · · · · · · · · · · · ·		I			
7440-02-0 Nickel 16.0 U A F 1640 Selenium 3.0 U W F 7440-22-4 Silver 7.0 U 7440-23-5 Sodium 7440-62-2 Vanadium 7440-66-6 Zinc 749.4 U P P P P P P P P P P P P P P P P P P	1		Mercury	0.20	ט		cv
7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-62-2 7440-66-6	-		Nickel		1 - 1	İ	1
7782-49-2   Selenium   3.0   U   W   F   7440-22-4   Sodium   37300   Thallium   3.0   U   F   7440-62-2   7440-66-6   Zinc   749.4   F	1			· ·	~		_
7440-22-4 Silver 7.0 U P P Sodium 37300 Thallium 3.0 U F P P P P P P P P P P P P P P P P P P	1			3.0	1 – I	W	
7440-23-5 Sodium 37300 P F T T T T T T T T T T T T T T T T T T				7.0	1 - F	i	
7440-28-0 Thallium 3.0 U F P Thallium 16.0 U P P Thallium 16.0 U P P Thallium 16.0 U P P Thallium 16.0 U P P Thallium 16.0 U P P P Thallium 16.0 U P P P Thallium 16.0 U P P P Thallium 16.0 U P P P Thallium 16.0 U P P P P Thallium 16.0 U P P P P P P P P Thallium 16.0 U P P P P P P P P P P P P P P P P P P				1	1		
7440-62-2   Vanadium   16.0   U   P   P   P   P   P   P   P   P   P			Thallium		U		
/440-66-6   Zinc   .49.4   P					-		
1 Cranida I I I		7440-66-6		.49.4	.	İ	4
<u>                  </u>	1		Cyanide				NR
	1.						

000006

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments

FORM I - IN

NYDEC SAMPLE NO

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM Case No.: 11/0 7 SAS No.: LAB.RES. SDG No.: MW-1 TAL Matrix (soil/water): WATER

Lab Sample ID: 6470S

Level (low/med):

Date Received: 11/19/92

% Solids!

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

000007

olor Before: COLORLESS

Clarity Before: CLEAR

lor After: COLORLESS

Clarity After: CLEAR

Artifacts:

mments

FORM I - IN

12/9-

NYDEC SAMPLE NO

MW-4A DUP

CHEMTECH CONSULTING GROUP

Contract: 68D20041

Lab Code: CHEM

Case No.: 1107

SAS No.: LAB.RES. SDG No.: MW-1 TAL

Matrix (soil/water): WATER

Lab Sample ID: 6471S

Level (low/med):

LOW

Date Received: 12/11/92

% Solids

Concentration Units (ug/L or mg/Kg dry weight): UG/L

	CAS No.	Analyte	Concentration		Q	M	í
	7429-90-5	Aluminum	1990			<sub>Ē</sub>	<del>,</del> -
	7440-36-0	Antimony	40.0	u		F	- 1
	7440-38-2	Arsenic	5.0	В	W	F	
	7440-39-3	Barium	207		••	F	- 1
i	7440-41-7	Beryllium	1.0	u		ļ	- 1
1	7440-43-9	Cadmium	4.0	บ		F	- 1
	7440-70-2	Calcium	81400			F	- 1
	7440-47-3	Chromium	20.0			F	- 1
	7440-48-4	Cobalt	7.0	ט		F	- 1
	7440-50-8	Copper	20.0			F	- 1
	7439-89-6	Iron	3710			F	,
	7439-92-1	Lead	6.0		S	F	
	7439-95-4	Magnesium	68700		_	F	
	7439-96-5	Manganese	167			F	
	7439-97-6	Mercury	0.20	וט			v!
	7440-02-0	Nickel	16.0	ט		F	
	7440-09-7	Potassium	2760	В	•	. A	
i	7782-49-2	Selenium	3.0	ט	W	F	,
	7440-22-4	Silver	7.0	U		F	
	7440-23-5	Sodium	33100			P	
i	7440-28-0	Thallium	3.0	U		F	,
	7440-62-2	Vanadium	16.0	บ		P	,
	7440-66-6	Zinc	50.8			P	
ı		Cyanide				N	IR
						_ '	_ '

000008

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

FORM I - IN

W.S.

NYDEC SAMPLE NO

MW-5

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code CHEM Case No.: | 1/07 SAS No.: LAB.RES. SDG No.: MW-1 TAL

Matrix (soil/water): WATER

Lab Sample ID: 6472S

Level (low/med): LOW

Date Received: 11/19/92

% Solids:

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	21100	-		$\overline{P}$
7440-36-0	Antimony	40.0	บ		P
7440-38-2	Arsenic	12.3			F
7440-39-3	Barium	392			P
7440-41-7	Beryllium	1.0	บ		P
7440-43-9	Cadmium	4.0	U		P
7440-70-2	Calcium	597000			P
7440-47-3	Chromium	47.9			P
7440-48-4	Cobalt	20.5	В		P
7440-50-8	Copper	40.0			P
7439-89-6	Iron	44700			P
7439-92-1	Lead	31.2			F
7439-95-4	Magnesium	170000			P
7439-96-5	Manganese	1340			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	. 61.0			P
7440-09-7	Potassium	3380	В		Α
7782-49-2	Selenium	30.0	U		F
7440-22-4	Silver	7.0	บ		P
7440-23-5	Sodium	32400			P
7440-28-0	Thallium	3.0	U	W	F
7440-62-2	Vanadium	58.0			P
7440-66-6	Zinc	162	1		P
	Cyanide				NR
	I	l	<b> </b> _	l	l

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Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

FORM I - IN

NYDEC SAMPLE NO

Lab Name CHEMTECH CONSULTING GROUP Contract: 68D20041

MW-6

Lab Code: CHEM Case No.: 1//07 SAS No.: LAB.RES. SDG No.: MW-1 TAL

Matrix (soil/water): WATER

Lab Sample ID: 6473S

Level (low/med): Low

Date Received: 11/19/92

% Solids;

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

			T	<del></del>		
	CAS No.	Analyte	Concentration	С	Q	м
١	7429-90-5	Aluminum	487	-		-
-	7440-36-0	Antimony	40.0	U		P
1	7440-38-2	Arsenic	2.0	U	w	P
1	7440-39-3	Barium	152	В	W	F
1	7440-41-7	Beryllium	1.0	U	•	P
I	7440-43-9	Cadmium	4.0	U		P
1	7440-70-2	Calcium	31700	۱۱	1	P P
1	7440-47-3	Chromium	9.0	บ		P
1	7440-48-4	Cobalt	7.0	U		P
I	7440-50-8	Copper	37.8	۱۱		P
1	7439-89-6	Iron	940			P
1	7439-92-1	Lead	8.7		S	F
ı	7439-95-4	Magnesium	47900		J	P
1	7439-96-5	Manganese	30.4			P
	7439-97-6	Mercury	0.20	U		cv
		Nickel	16.0	Ū		P
		Potassium	1480	В		A
		Selenium	30.0	υl		F
ı	7440-22-4	Silver	7.0	υl		P
		Sodium	31800	1		P
		Thallium	3.0	บ		F
		Vanadium	16.0	υl		P
1	7440-66-6	Zinc	43.0			p
l.		Cyanide		-		NR
١.				- 1		WK
		1		<b>—</b> L		_ [

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Color Before: COLORLESS Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments

FORM I - IN

5A

#### SPIKE SAMPLE RECOVERY

NYDEC SAMPLE NO

MW-3S

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM

Case No.: 1//07 SAS No.: LAB.RES.

SDG No.: MW-1 TAL

Matrix: WATER

Level (low/med): LOW

% Solids for Sample:

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR)	Spike C Added (SA)	%R	Q	м
Aluminum	75-125	3154.3000	1230.4000	2000.00	96.2	-	P
Antimony	75-125	517.4400	40.0000	U 500.00	103.5		P
Arsenic	75-125	44.4000	1	B 40.00	1		F
Barium	75-125	2102.3000	133.5900	B 2000.00	98.4		P
Beryllium		54.1900	1.0000	U 50.00			P
Cadmium	75-125	52.1100	4.0000	U 50.00			P
Calcium		<b>i</b> i		İ			N
Chromium	75-125	200.5900	9.0000	200.00	100.3		P
Cobalt	75-125	494.2500	7.0000	500.00			P
Copper	75-125	253.8300		ע 250.00			P
Iron	75-125	3883.6000	2899.3000	1000.00			P
Lead	75-125	24.3000	2.6000		1		F
Magnesium				20.00	100.5		NI L
Manganese	75-125	570.0700	103.0600	500.00	93.4		P
Mercury	75-125	0.8800	0.2000				C
Nickel	75-125	485.9100	16.0000				P
Potassium	-		20.000	300.00	97.2		I -
Selenium	75-125	11.2000	3.0000	10.00	112.0		N)
Silver	75-125	44.2600	ľ	U 50.00	88.5		F
Sodium			7.0000	50.00	00.5		_
Thallium	75-125	46.7000	3.0000	50.00	93.4		NI
Vanadium	75-125	511.9500		500.00	1		F
Zinc	75-125	580.2800	49.4400	500.00	• •	ı	P
Cyanide			43.4400	500.00	106.2	Ιl	P
-						i l	NF

Comments

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FORM V (Part 1) - IN

# **DUPLICATES**

NYDEC SAMPLE NO

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

MW-3D

Lab Code CHEM

Case No.: 11/0 7 SAS No.: LAB.RES. SDG No.: MW-1 TAL

Matrix (soil/water): WATER

Level (low/med): LOW

%\_Solids for Sample: 0.0

% Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

	:	1 1	1	i i			7		
.		Control			:	l	1.		
	Analyte	Limit	Sample (S)	С	Duplicate (D)	С	RPD	Q	м
	Aluminum		1230.4000	<sub>1</sub> -	1207.9000	,-		-	
	Antimony		40.0000		40.0000		1.8		P
.	Arsenic	İ	2.2000	1 1	2.0000	1 - 1	200.0		P
	Barium		133.5900		133.5900		1 1		F
	Beryllium		1.0000		1.0000		0.0		P
	Cadmium		4.0000		4.0000	וט	·		P P
4	Calcium		48821.0000		48928.0000		0.2	1 1	P
	Chromium	}	9.0000	ט	9.0000		0.2	1 1	P
	Cobalt	ĺ	7.0000	וט	7.0000	1 - 1	1	1	P
	Copper	i	20.0000	ט	20.0000		}	1 1	P
	Iron	ļ	2899.3000	l   '	2915.1000		0.5		P
- 1	Lead	ĺ	2.6000	В	2.2000	в	16.7		F
	Magnesium	j	44068.0000		44060.0000		0.0	1 1	P
	Manganese	•	103.0600		104.4100		1.3	1 1	P
	Mercury	1	0.2000	ט	0.2000	11	1.3	1 1	cv
	Nickel		16.0000	U	16.0000	- 1		1 1	P
	Potassium	j	1640.0000	В	1640.0000	-	0.0	1 1	A
	Selenium	ľ	3.0000	ט	3.0000		""	1	F
	Silver		7.0000	ט	7.0000	- 1	1	1 1	P
	Sodium		37273.0000		37507.0000	Ĭ	0.6		P
	[hallium	ŀ	3.0000	וט	3.0000	11	0.0	1 1	F
	Zanadium		16.0000	וט	16.0000			1 1	P
	Zinc	20.0	49.4400		48.6800		1.5		P
19	Cyanide					- }	1.3		NR
1_	<u></u> l,			_  1					***
	;	-				!	· ——— ·	'-'	!

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# ICP SERIAL DILUTIONS

NYDEC SAMPLE NO

MW-3L

CHEMTECH CONSULTING GROUP Contract: 68D20041

CHEM

Furne

Case No.: 1/10 7 SAS No.: LAB.RES. SDG No.: MW-1 TAL

Matrix (soil/water): WATER

Level (low/med): LOW

Concentration Units: ug/L

+		Т		-		Serial	- 1	8	Ţ	- 1	l	Ĺ
	1	١	Initial Sample		Н	Dilution	ł	Differ-	1	- {		ĺ
13		1		c	11	Result (S)	c	ence	١	Q	M	
12	nalyte	١	Result (1)	•	П				1	_		
		1	1230.40	-	H	1439.15	-1	17.0	Į	_	P	
	luminum	١		U	П	200.00	บ	1	1		P	
	antimony	١	40.00	U	Н	200100	-	1	1		NR	١
	Arsenic	١		_	П	136.20	В	2.0			P	١
	Barium		133.59	В	П	5.00	טו.				P	
1	Beryllium		1.00		1 1	20.00	U		Н		P	1
-1	Cadmium		4.00	U	U	51145.00	١٧١	4.8	П		P	١
- 1	calcium	١١	48821.00			45.00	١,,	1 4.0		l	P	
- 1	chromium		9.00						ŀ		P	
	Cobalt		7.00			35.00		,	١	1	P	1
	copper		20.00	U		100.00	1 4 1	5.0	l	ļ	P	1
	Iron		2899.30	1	1	3044.40	1 1	3.0	١	1	NR	, [
	Lead	١		1	١		1 1	5.6	l	1	P	.
	Magnesium		44068.00	l	1	46520.50				1	P	١
	Manganese		103.06	١	ŀ	120.50	1 1	16.9	١	1	1 -	
- 1	Mercury		· ·	l	١		1	. ]	١	1	NR	4
1	Nickel		16.00	Įτ	<b>7</b>	80.00	טן		1	Ì	P	$\rfloor$
- 1	Potassium	١		l	1		1	i i	l		NF	
- 1	Selenium	1	ļ	1	1	1	ł	l ł	١	1	NF	۲
	f .	Ì	7.00	lt	ار	35.00	U	<b>[</b> ]	١	1	P	1
ı	Silver	١	37273.00			39232.50		5.3	1	1	P	١
1	sodium	١	3/2/3.00	1	١		1	† <b>!</b>	١	1	NI	R
	Thallium	١	16.00	١,	,	80.00	טו	11	1	1	P	
	Vanadium	l			٦	52.00		5.2	۱:		P	1
ļ	Zinc	1	49.44		Į	32.00			١	1	1	
	<u> </u>	_		.1.	_		- ' —	I I	- '	'-	_ '	_ '

000025

GROUNDWATER ANALYSIS (VOCs)
(ROUND II)

# LABORATORY HESOURCES, 1110.

# INTECH BIOLABS DIVISION

158 Tices Lane East Brunswick, New Jersey 08816 (908) 257-1050 Fax (908) 257-2790

### CASE NARRATIVE FOR ORGANICS (NYASP)

Client: VERSAR INC. Lab Name: INTECH

JOB No.: I211107 Project: Scott Aviation

SDG No. : MW-1 11107

The following samples are included in this Sample Delivery

Group: Client ID # LAB ID # MW-1I211107-01 MW-2I211107-02 K-WM I211107-03 MW-4I211107-04 MW-4A I211107-05 MW-5 I211107-06 MW-6 I211107-07 IT I211107-08 FB-4

Detailed Documentation of Problems Encountered With These Samples

- Please note that the client sample number with the sample description (identification) is too many characters, General: therefore as per the software being used for Organics data processing only limited characters can be used for EPA sample number. Never-the-less for the cross reference check the Lab sample ID. with Client ID. is listed above on this case narrative.
  - The EPA sample number in all the forms is the Client identification from the Chain-of-Custody, the last 6 characters (include dashes).

as an example: VERSAR ID: MW-1 Monitoring Well-One for this sample on forms

On the run logs use the following lab identifications: - last 3 digits of the Intech job number followed by the sample number: an example Job No. I211107 sample identification to be used on the run logs becomes 1211107-01, -02, -03, etc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

Lab Name: INTECH

Contract:

1 MW-1

Lab Code: INTECH Case No.: /// SAS No.: SDG No.: MW-(

Matrix: [soil/water] WATER

Lab Sample ID: I211107-01

Sample wt/vol: 5.0 [g/mL] ML

Lab File ID: >A0247

Level: [low/medTLOW

Date Received: 11/18/92

% Moisture:

decanted: (Y/N) N

Date Analyzed : 11/19/92

GC Column : PACK ID: 2.0

(mm)

Dilution Factor:

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCEN	ITRA or	ATION UN ug/Kg]	NITS: UG/L		Q	
75-01-4 75-09-2 75-09-2 75-09-2 75-09-2 75-35-4 75-35-4 75-35-4 75-36-3 107-06-2 78-93-3 107-06-2 78-87-5 10061-01-5 79-01-6 124-48-1 179-00-5 171-43-2 10061-02-6 175-25-2 108-10-1 179-34-5 108-88-3 108-88-3 108-90-7 100-41-4 100-42-5	Chlorobenzene	ne ne (tota ne hane ropene ane hane ppropene	e		1 1 1 1 1	0		
			· ·		. 1	0	1 1 U	1 1

1.00

FORM I-CLP-VOA-1

1E VOLATILE ORGANICS ANALYSIS DA TENTATIVELY IDENTIFIED CO	IMPOUNDS I
Contr	ract:   MW-1
Lab Code: INTECH Case No. 11/07	SAS No.: SDG No.: MW-
Matrix: (soil/water) WATER	Lab Sample ID: [211107-01
Sample wt/vol: 5.0 (g/mL) ML	
Level: (low/med) LOW	Data Parati Li a
% Moisture: NA not dec.	Date Received: 11/18/92  Date Analyzed: 11/19/92
GC Column: PACK ID: 2.0 (mm)	Dilution C.
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL
Number TICs found: 0	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L
SAC III	

	CAS NUMBER	COMPOUND NAME	   RT = =====	EST. CONC.	   Q
1			_		===== 
1			-		
1					
1					
!. !. !					'
_   					
 					!
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_			! !		
			<u>!</u>	I_	1

### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET NYSDEC SAMPLE NO. Lab Name: INTECH 1 MW-2 Contract: Lab Code: INTECH Case No.: 11/07 SAS No.: SDG No .: MW-Matrix: [soil/water] WATER Lab Sample ID: 1211107-02 Sample wt/vol: 5.0 [g/mL] ML Lab File ID: >A0248 Level: [low/med] LOW Date Received: 11/18/92 % Moisture: decanted: (Y/N) N Date Analyzed : 11/19/92 GC Column: PACK ID: 2.0 (mm) Dilution Factor: Soil Extract Volume: (uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: COMPOUND [ua/L or ua/Ka] UG/L

OF:

1E UDLATILE ORGANICS ANALYSIS DATENTATIVELY IDENTIFIED CON	「A SHEET 1POUNDS	NYSDEC SAME	PLE NO
Lab Name: INTECH Contr	act:	I MW-2	
Lab Code: INTECH Case No. 11167	SAS No.:	SDG No.: A	1w-1
Matrix: (soil/water) WATER	Lab Samp	le ID: 1211107	-02
Sample wt/vol: 5.0 (g/mL) ML	Lab File	ID: >A0248	
Level: (low/med) LOW	Date Rec	eived: 11/18/92	
% Moisture: NA not dec.	Date Ana	lyzed: 11/19/92	
GC Column: PACK ID: 2.0 (mm)			. 0
Soil Extract Volume: (uL)	Soil Ali	quot Volume:	
Number TICs found: 1	CONCENTRATION (ug/L or ug/	ON UNITS: Kg) UG/ L	
CAS NUMBER   COMPOUND NAME	l I RT	I I EST. CONC.	   . 0
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### 1 🗚 UDLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

1 MW-3

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 11107 SAS No.:

SDG No .: MW-

Matrix: [soil/water] WATER

Lab Sample ID: I211107-03

Sample wt/vol: 5.0

[g/mL] ML Lab File ID: >A0249

Level: [low/med] LOW

Date Received: 11/18/92

% Moisture:

decanted: (Y/N) N

2.0

(mm)

Date Analyzed : 11/19/92

GC Column :

PACK ' ID:

Dilution Factor:

1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

CONCENTRATION UNITS: CAS NO. COMPOUND [ug/L or ug/Kg] UG/L Q 74-87-3-----Chloromethane 74-83-9----Bromomethane 10 ΙU 75-01-4------ Vinyl Chloride 10 IU 75-00-3-----Chloroethane 25 75-09-2----Methylene Chloride 28 67-64-1----Acetone 4 I JB 75-15-0-----Carbon Disulfide 15 75-35-4----1,1-Dichloroethene 10 IU 75-34-3----1,1-Dichloroethane 10 IU 540-59-0----1,2-Dichloroethene (total) 3 1 J 67-66-3-----Chloroform 10 IU 107-06-2----1,2-Dichloroethane 10 IU 78-93-3----2-Butanone 10 ΙU 71-55-6----1,1,1-Trichloroethane 10 IU 56-23-5----Carbon Tetrachloride 10 IU 75-27-4----Bromodichloromethane 10 IU 78-87-5-----1,2-Dichloropropane 10 ΙU | 10061-01-5----cis-1,3-Dichloropropene 10 10 79-01-6----Trichloroethene 10 IU 124-48-1-----Dibromochloromethane 10 10 79-00-5----1,1,2-Trichloroethane 10 IU 71-43-2----Benzene 10 ΙU |10061-02-6----trans-1,3-Dichloropropene 10 IU 75-25-2----Bromoform 10 IU 108-10-1----4-Methyl-2-Pentanone 10 IU 591-78-6----2-Hexanone 10 IU 127-18-4-----Tetrachloroethene 10 IU 79-34-5----1,1,2,2-Tetrachloroethane 10 ΙU 10 IU 108-88-3----Toluene 108-90-7-----Chlorobenzene 10 IU 100-41-4----Ethylbenzene 10 ΙU 100-42-5----Styrene 10 IU 1330-20-7-----Xylene (total) 10 IU 10 IU

ADF:

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i T	UOLATILE TENT	1E E ORGANICS ANALYSIS TATIVELY IDENTIFIED	DATA SHEET		NYSDEC SAMPLE NO.
	Lab Name: INTEC		ntract:		I MW-3
	Lab Code: INTEC	•		· . :	SDG No .: MW-1
Į.	Matrix: (soil/w	water) WATER	<b>⁴</b>	ab Sample	ID: 1211107-03
	Sample wt/vol:	5.0 (g/mL)	ML L	ab File ID	: >A0249
	. Level: (low/m	ned) LOW	D	ate Receive	ed: 11/18/92
•	% Moisture: NA	not dec.	D	ate Analyze	ed: 11/19/92
	GC Column: PAC	CK ID: 2.0 (mm)	D	ilution Fac	tor: 1.0
I	Soil Extract Vo	lume: (uL)	. S	oil Aliquot	: Volume: (uL
! !	Number TICs fou	nd: 0		ENTRATION ( or ug/Kg)	
; ! !	CAS NUMBER	COMPOUND NA			EST. CONC.   Q
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FORM I-CLP-VOA-TIC

#### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

I MW-4

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: III. SAS No.: SDG No.: MW-

Matrix: [soil/water] WATER

Lab Sample ID: 1211107-04

Sample wt/vol: 0.20 [g/mL] ML Lab File ID: >A0304

Level: [low/med] LOW

Date Received: 11/18/92

% Moisture: decanted: (Y/N) N Date Analyzed: 11/24/92

CAS NO.

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 25.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

COMPOUND	[ug/L or ug/Kg] UG/L	$\cap$
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		1	- I
74-87-3Chloromethane	1 250	Ìυ	i
74-83-9Bromomethane	1 250	ΙŪ	i
75-01-4Uinyl Chloride	1 240	ΙJ	i
75-00-3Chloroethane、	1 250	IU	i
75-09-2Methylene Chloride	1 180	i JB	i
// 6/-64-1Acetone	250	IU	i
75-15-0Carbon Disulfide	250	10	i
75-35-41.1-Dichloroethene	1 250	IU	i
/b-j4-jl,1-Dichloroethane	1 270	ı	i
1 740-57-01,2-Dichloroethene (total)	5100	i	i
0/-66-3Chloroform	1 250	i IU	i
107-06-21,2-Dichloroethane	1 250	10	
/8-73-32-Butanone	1 250	IU	- ;
71-55-61.1.1-Trichloroethane	1 250	IU	' i
1 70-43-9Carbon Tetrachloride	1 250	10	,
/2-2/-4Bromodichloromethane	250	10	i.
1 78-87-51.2-Dichloropropens	1 250	10	;
110001-01-bcis-1.3-Dichlorogropene	1 250	10	i
' /Y-U1-6Trichlorgethene	1 2800	i	i
124-48-1Dibromochloromethene	1 250	iu	i
/ /9-00-51.1.2-Trichlorgethane	250	lu	1
' /1-42-2Benzene	1 250	IU	-
110061-02-6trans-1.3-Dichloropropens	1 250	10	ì
/ /?-4>-2Bromoform	1 250	10	1
108-10-14-Methul-2-Pentanone	1 250	10	-
1 771-/8-62-Hexanone	1 250	10	1.
127-18-4Tetrachlornethene	1 250	10	1
//-34-51.1.2.2-Tetrachloroethane	1 250	10	<u> </u>
' 100-88-3(oluene	1 250	10	1.
! 108-90-7Chlorobenzene	1 250	10	1.
100-41-4Ethylbenzene	1 250	10	1
7 100-42-5Styrene	1 250	10	1
1330-20-7Xylene (total)	1 250	10	-
1	1 270	10	1

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L	#* VOI #*;			ANALYSIS DENTIFIED		
l	Lab Name:	INTECH		Co	ontrac	: <b>t:</b>
Ţ	Lab Code:	INTECH	Case	No. 11107	5	SAS No
1	Matrix: (s	soil/wat	er) WATE	ER		L
_1	Sample wt.	/vol:	0.20	(g/mL)	ML	L

NYSDEC	SAMPLE	ΝΟ.
   11W-4		 

SDG No .: MW-1

. 10. 1211107 04

Lab Sample ID: I211107-04

Lab File ID: >A0304

Date Received: 11/18/92

Date Analyzed: 11/24/92

Dilution Factor: 25

Soil Aliquot Volume:

(uL)

Soil Extract Volume:

Number TICs found:

GC Column: PACK ID: 2.0

% Moisture: NA not dec.

Level: (low/med) LOW

(uL)

(mm)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

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#### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

1 MW-4A

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No.: 11107

SAS No.:

SDG No .: MW-

Matrix: [soil/water] WATER

Lab Sample ID: 1211107-05

Sample wt/vol:

0.15

[q/mL] ML

Lab File ID: >A0303

Level:

[low/med] LOW

Date Received: 11/18/92

% Moisture:

decanted: (Y/N) N

Date Analyzed: 11/24/92

GC Column :

PACK'

2.0 (mm)

Dilution Factor:

33.3

Soil Extract Volume:

(uL) 1

IĎ:

Soil Aliquot Volume:

(uL)

CONCENTRATION UNITS: CAS NO. COMPOUND [ug/L or ug/Kg] UG/L Q 74-87-3----Chloromethane 330 ΙU 74-83-9-----Bromomethane 330 IU 75-01-4-----Vinyl Chloride 280 l J 75-00-3-----Chloroethane 330 IU 75-09-2----Methylene Chloride 220 I JB 67-64-1----Acetone 330 IU 75-15-0-----Carbon Disulfide 330 IU 75-35-4----1,1-Dichloroethene 330 IU 75-34-3-----1,1-Dichloroethane 340 ١ 540-59-0----1,2-Dichloroethene (total) 6100 1 67-66-3-----Chloroform 33 D IU 107-06-2----1,2-Dichloroethane 330 IU 78-93-3----2-Butanone **33**0 IU 71-55-6----1,1,1-Trichloroethane 330 IU 56-23-5-----Carbon Tetrachloride 330 IU 75-27-4----Bromodichloromethane 330 IU 78-87-5-----1,2-Dichloropropane 330 ΙU 110061-01-5----cis-1,3-Dichloropropene 330 IU 79-01-6----Trichloroethene 3400 1 124-48-1-----Dibromochloromethane 330 IU 79-00-5----1,1,2-Trichloroethane 330 IU 71-43-2----Benzene 330 111 |10061-02-6----trans-1,3-Dichloropropene 330 10 75-25-2----Bromoform 330 IU 108-10-1----4-Methyl-2-Pentanone 330 IU 591-78-6----2-Hexanone 330 IU 127-18-4----Tetrachloroethene 330 IU 79-34-5----1,1,2,2-Tetrachloroethane 330 IU 108-88-3----Toluene 330 IU 108-90-7-----Chlorobenzene 330 IU 100-41-4----Ethylbenzene 330 IU 100-42-5-----Styrene 330 10 330 ΙU

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	1E ORGANICS ANALYSIS DA' ATIVELY IDENTIFIED COM			NYSDEC SAM	PLE NO.
<pre>ab Name: INTEC!</pre>	H Conti	ract:		MW-4A 	I
Lab Code: INTEC	H Case No. 11/07	SAS No.:		SDG No.:	MW-1
Matrix: (soil/wa	ater) WATER	Lab	Sample	ID: 121110	7-05
Sample wt/vol:	0.15 (g/mL) ML	Lab	File ID	: >A0303	
Level: (low/me	ed) LOW	Date	Receiv	ed: 11/18/9	2
% Moisture: NA	not dec.	Date	Analyz	ed: 11/24/9	2
GC Column: PAC	K ID: 2.0 (mm)	Dilu	tion Fa	ctor: 3	3.3
Soil Extract Vo	lume: (uL)	So i l	Aliquo	t Volume:	(uL)
Number TICs four	nd: 0	CONCENT (ug/L or			
I I CAS NUMBER	I COMPOUND NAME		RT I	EST. CONÇ	•
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## 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

Lab Name: INTECH 1 MW-5 Contract:

Lab Code: INTECH Case No.: | SDG No.: MW-

Matrix: [soil/water] WATER Lab Sample ID: 1211107-06

Sample wt/vol: 5.0 [g/mL] ML Lab File ID: >A0302

Level: [low/med] LOW Date Received: 11/18/92

% Moisture: decanted: (Y/N) N Date Analyzed : 11/24/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor:

Soil Extract Volume: (uL)

Soil Aliquot Volume:. (uL)

CAS NO.	СОМРОИНО	CONCENTRATION UNITS: [ug/L or ug/Kg] UG/L		Q	
75-01-4 75-00-3 75-09-2 75-09-2 75-09-2 75-15-0 75-35-4 75-35-4 75-34-3 75-34-3 75-66-3 76-66-3 78-93-3 71-55-6 75-27-4 75-27-4 79-01-6 79-01-6 79-01-6 79-01-6 79-01-6 79-01-6 79-01-6 79-01-6 79-01-6 79-01-6 79-01-6 79-01-6 79-01-6 79-01-6 79-01-6 79-01-6 124-48-1 79-01-6 124-48-1 79-01-6 124-48-1 79-01-6 124-48-1 79-01-6 124-48-1 79-01-6 124-48-1 10061-02-6 127-18-4 108-88-3 108-90-7 100-41-4 100-42-5	trans-1,3-DichlorBromoform4-Methyl-2-Pentan2-HexanoneTetrachloroethene1,1,2,2-TetrachloTolueneChlorobenzene	ne	. 0 0 0		
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#### 1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

1	MW-	5		

NYSDEC SAMPLE NO.

Lab Name:	INTECH
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Contract:

Lab Cod	e: I	NTE	CH
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Case No. 1107 SAS No.:

SDG No .: MW-

Matrix: (soil/water) WATER

Lab Sample ID: [211107-06

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >A0302

Level: (low/med) LOW

Date Received: 11/18/92

% Moisture: NA not dec.

Soil Extract Volume:

Date Analyzed: 11/24/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

(uL)

Soil Aliquot Volume:

(uL)

Number TICs found: 0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

	3	- 01 ag/kg		
CAS NUMBER	COMPOUND NAME	   RT    ======	EST. CONC.	Q
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## VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

r Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 11107 SAS No.: SDG No.: MW-

Matrix: [soil/water] WATER

Lab Sample ID: 1211107-07

Sample wt/vol: 5.0 [g/mL] ML

Lab File ID: >A0306

Level: [low/med] LOW

Date Received: 11/18/92

% Moisture: decanted: (Y/N) N Date Analyzed: 11/24/92

1 MW-6

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRA	ATION UNITS: ug∕Kg] UG∕L	-	Q	
74-87-3 74-83-9 75-01-4 75-09-2 75-35-4 75-34-3 75-34-3 75-27-4 75-27-48-1 79-01-6 79-01-78-6 100-01-4 100-42-5 100-42-5 100-42-5 100-42-5 100-42-5	ChloromethaneBromomethaneUinyl ChlorideChloroethaneMethylene ChloriAcetoneCarbon Disulfide1,1-Dichloroethe1,2-Dichloroethe1,2-Dichloroetha2-Butanone1,1-TrichloroeCarbon TetrachloroethaneCarbon TetrachloroethaneCarbon TetrachloroethaneCarbon TetrachloroethaneCarbon TetrachloroethaneCarbon TetrachloroethaneCarbon TetrachloroethaneCarbon TetrachloroethaneCarbon TetrachloroethaneCarbon TetrachloroethaneChloromethaneChlorobenzeneChlorobenzeneChlorobenzene	de ne ne ne (total) ne thane ride nane ane oropene hane	 	10 10 10 10 10 10 10 10 10 10 10 10 10 1		
+>>U-ZU-Y	Xylene (total)		1	10	lu	i

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#### 1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

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ı	MW-6

NYSDEC SAMPLE NO.

Lab Name: INTECH

Contract:

Matrix: (soil/water) WATER

Lab Code: INTECH Case No. 1107 SAS No.:

SDG No .: MW-

Lab Sample ID: 1211107-07

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: >A0306

Level: (low/med) LOW

Date Received: 11/18/92

% Moisture: NA not dec.

Date Analyzed: 11/24/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

Number TICs found: 0

(uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

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,   CAS NUMBER   	COMPOUND NAME	l l RT	I EST. CONC.	l L Q
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1A VOLATILE ORGANICS ANALYSIS DATA SHEET

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NYSDEC SAMPLE NO.

Lab Name: INTECH Contract:

Lab Code: INTECH Case No.: 11167 SAS No.:

SDG No .: MW-

Matrix: [soil/water] WATER

Lab Sample ID: 1211107-08

Sample wt/vol: 0.02 [q/mL] ML Lab File ID: >A0305

Level: [low/med] LOW

Date Received: 11/18/92

% Moisture: decanted: (Y/N) N

Date Analyzed : 11/24/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 250.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

	CO	NCENTRA	IU NOITÄ	11TS:		
CAS NŪ.	COMPOUND [u	g/L or	ug/Kg]	UG/L	Q	
			i	<del></del>	1	-
74-87-3	Chloromethane		1	2500	IU	
	Bromomethane		1	2500	10	
75-01-4	Vinyl Chloride		1	2500	IU	
	Chloroethane		1	3900	1	
	Methylene Chloride		i	1600	I JB	
	Acetone		1	2500	١U	
75-15-0	Carbon Disulfide		1	2500	IU	
75-35-4	1,1-Dichloroethene		1	2500	ΙU	
75-34-3	1,1-Dichloroethane		1	29000	ł	
540-59-0	1,2-Dichloroethene	(total)	)	21000	1	
67-66-3	Chloroform		ŧ	2500	ΙU	
	1,2-Dichloroethane		t	2500	IU	
	2-Butanone		i	2500	10	
71-55-6	1,1,1-Trichloroetha	ne	1	40000	1	
56-23-5	Cárbon Tetrachlorid	е	l	2500	IU	
75-27-4	Bromodichloromethan	e	1	2500	ΙU	
78-87-5	1,2-Dichloropropane		1	2500	IU	•
10061-01-5	cis-1,3-Dichloropro	pene	1	2500	ΙU	
79-01-6	Trichloroethene		1	2500	IU	
124-48-1	Dibromochloromethan	е	ı	2500	IU	
79-00-5	1,1,2-Trichloroetha	ne	i	2500	ΙÜ	
71-43-2	Benzene		1	2500	IU	
10061-02-6	trans-1,3-Dichlorop	ropene	1	2500	ΙU	
75-25-2	Bromoform		1	2500	10	
108-10-1	4-Methyl-2-Pentanon	е	1	2500	ΙÜ	
591-78-6	2-Hexanone		1	2500	١U	
127-18-4	Tetrachloroethene		1	2500	ΙU	
79-34-5	1,1,2,2-Tetrachloro	ethane	1	2500	ΙÜ	
108-88-3	Toluene		1	1000	IJ	
108-90-7	Chlorobenzene		F	2500	IU	
100-41-4	Ethylbenzene		ſ	2500	ΙU	
100-42-5	Styrene		1	2500	ΙÜ	
1330-20-7	Xyĺene (total)		1	2500	ΙŪ	
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#### 1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVE

LY	IDENTIFIED	COMPOUND

Lab Name:	INTECH
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Contract:

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NYSDEC SAMPLE NO.

Lab Code: INTECH Case No. 1107 SAS No.:

SDG No .: MM-1

Matrix: (soil/water) WATER

Lab Sample ID: 1211107-08

Sample wt/vol: 0.02

(g/mL) ML

Lab File ID: >A0305

Level: (low/med) LOW

Date Received: 11/18/92

% Moisture: NA not dec.

Date Analyzed: 11/24/92

GC Column: PACK .ID: 2.0

(mm)

Dilution Factor:

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L Number TICs found:

CAS NUMBER	COMPOUND NAME		EST. CONC.	====-
	Unknown Alkane	8.99	13.	N   
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1 🛆 NYSDEC SAMPLE NO. VOLATILE ORGANICS ANALYSIS DATA SHEET 1 FB-4 Lab Name: INTECH Contract: Lab Code: INTECH Case No.: 1107 SAS No.: SDG No.: MW-1 Matrix: [soil/water] WATER Lab Sample ID: 1211107-09 Sample wt/vol: 5.0 [g/mL] ML Lab File ID: >A0300 Level: [low/med] LOW Date Received: 11/18/92 % Moisture: decanted: (Y/N) N Date Analyzed: 11/24/92 GC Column : PACK ID: 2.0 (mm) Dilution Factor: Soil Extract Volume: (uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: CAS NO. COMPOUND [ug/L or ug/Kg] UG/L 74-87-3----Chloromethane 10 10 74-83-9-----Bromomethane 10 IU 75-01-4------ Uinyl Chloride 10 IU 75-00-3-----Chloroethane 10 IU 75-09-2----Methylene Chloride 4 I JB 67-64-1-----Acetone 7 1 3 75-15-0-----Carbon Disulfide 10 IU 75-35-4----1,1-Dichloroethene 10 TU 75-34-3-----1,1-Dichloroethane 10 IU 540-59-0----1,2-Dichloroethene (total) 10 10 67-66-3-----Chloroform 10 IU 107-06-2----1,2-Dichloroethane 10 IU 78-93-3----2-Butanone 10 IU 71-55-6----1,1,1-Trichloroethane 10 10 56-23-5----Carbon Tetrachloride 10 ш 75-27-4----Bromodichloromethane 10 IU78-87-5----1,2-Dichloropropane 10 ΙU | 10061-01-5----cis-1,3-Dichloropropene 10 IU 79-01-6----Trichloroethene 10 IU 124-48-1-----Dibromochloromethane 10 ΙU 79-00-5----1,1,2-Trichloroethane 10 10 71-43-2----Benzene Ш 10 110061-02-6----trans-1,3-Dichloropropene 10 111 75-25-2----Bromoform 10 IU 108-10-1----4-Methyl-2-Pentanone 10 IU 591-78-6----2-Hexanone 10 IU 127-18-4----Tetrachloroethene 10 IU 79-34-5----1,1,2,2-Tetrachloroethane 10 10 108-88-3----Toluene 10 IU 108-90-7----Chlorobenzene 10 IU 100-41-4----Ethylbenzene 10 IU 100-42-5----Styrene 10 10 1330-20-7-----Xylene (total) 10 IU

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#### UDLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

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NYSDEC SAMPLE NO.

_ab Name:	I	N	T	E	CH	1
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Contract:

FB-4		

Lab Code: INTECH Case No. 1107 SAS No.: . SDG No.: MM-(

Matrix: (soil/water) WATER

Lab Sample ID: I211107-09

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: >A0300

Level: (low/med) LOW

Date Received: 11/18/92

% Maisture: NA not dec.

Date Analyzed: 11/24/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L Number TICs found: 0

CAS NUMBER	I COMPOUND NAME		EST. CONC.	
	1			!
	1	<u> </u>		'!  !
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TB-2   TB-2	Lab Name: INTECH  Lab Code: INTECH Case No.: //o 7 SAS No.:  Matrix: [soil/water] WATER  Lab Sample wt/vol: 5.0 [g/mL] ML Lab F  Level: [low/med] LOW  Moisture: decanted: (Y/N) N Date  GC Column: PACK ID: 2.0 (mm)  CONCENTRATION  CAS NO.  COMPOUND  CONCENTRATION  [ug/L or ug/Kg]  74-87-3	Τ
Lab Name: INTECH  Lab Code: INTECH Case No.:	Lab Code: INTECH Case No.: 1167 SAS No.:  Matrix: [soil/water] WATER Lab S  Sample wt/vol: 5.0 [g/mL] ML Lab F  Level: [low/med] LOW Date  % Moisture: decanted: (Y/N) N Date  GC Column: PACK ID: 2.0 (mm) Dilut  Soil Extract Volume: (uL) Soil  CAS NO. COMPOUND [ug/L or ug/Kg]  74-87-3Chloromethane 74-83-9Bromomethane 75-01-4Vinyl Chloride 75-00-3Chloroethane 75-09-2Methylene Chloride 67-64-1Acetone	TB-2
Matrix: [soil/water] WATER	Matrix: [soil/water] WATER  Sample wt/vol: 5.0 [g/mL] ML Lab F  Level: [low/med] LOW  Moisture: decanted: (Y/N) N Date  GC Column: PACK ID: 2.0 (mm) Dilut  Soil Extract Volume: (uL) Soil  CAS NO. COMPOUND [ug/L or ug/Kg]  74-87-3Chloromethane 74-83-9Bromomethane 75-01-4Vinyl Chloride 75-00-3Chloroethane 75-09-2Methylene Chloride 67-64-1Acetone	
Sample wt/vol: 5.0	Sample wt/vol: 5.0 [g/mL] ML Lab F  Level: [low/med] LOW Date  % Moisture: decanted: (Y/N) N Date  GC Column: PACK ID: 2.0 (mm) Dilut  Soil Extract Volume: (uL) Soil  CAS NO. COMPOUND CONCENTRATION  [ug/L or ug/Kg]  74-87-3Chloromethane 74-83-9Bromomethane 75-01-4Vinyl Chloride 75-00-3Chloroethane 75-09-2Methylene Chloride 67-64-1Acetone	SDG No.: MW-1
Date Received: 11/18/92   % Moisture:   decanted: (Y/N) N   Date Analyzed: 11/24/92   GC Column:   PACK   ID:   2.0 (mm)   Dilution Factor:   1.0   Soil Extract Volume: (uL)   Soil Aliquot Volume: (uL)   CONCENTRATION UNITS:   CAS NO.   COMPOUND   CONCENTRATION UNITS:   CAS NO.   COMPOUND   CONCENTRATION UNITS:	Level: [low/med] LOW Date  % Moisture: decanted: (Y/N) N Date  GC Column: PACK ID: 2.0 (mm) Dilut  Soil Extract Volume: (uL) Soil  CAS NO. COMPOUND CONCENTRATION [ug/L or ug/Kg]  74-87-3Chloromethane 74-83-9Bromomethane 75-01-4Vinyl Chloride 75-00-3Chloroethane 75-09-2Methylene Chloride 67-64-1Acetone	Sample ID: 1211107-10
Date Received: 11/18/92	Level: [low/med] LOW Date  % Moisture: decanted: (Y/N) N Date  GC Column: PACK ID: 2.0 (mm) Dilut  Soil Extract Volume: (uL) Soil  CAS NO. COMPOUND CONCENTRATION  [ug/L or ug/Kg]  74-87-3Chloromethane  74-83-9Bromomethane  75-01-4Vinyl Chloride  75-00-3Chloroethane  75-09-2Methylene Chloride  67-64-1Acetone	File ID: >A0301
# Moisture: decanted: (Y/N) N	% Moisture: decanted: (Y/N) N Date  GC Column: PACK ID: 2.0 (mm) Dilut  Soil Extract Volume: (uL) Soil  CAS NO. COMPOUND CONCENTRATION  [ug/L or ug/Kg]  74-87-3Chloromethane 74-83-9Bromomethane 75-01-4Vinyl Chloride 75-00-3Chloroethane 75-09-2Methylene Chloride 67-64-1Acetone	
GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0  Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  CAS NO. COMPOUND CONCENTRATION UNITS: [ug/L or ug/kg] UG/L Q  74-87-3Chloromethane   10   U   74-83-9Bromomethane   10   U   75-01-4Uinyl Chloride   10   U   75-00-3Chloroethane   10   U   75-09-2Methylene Chloride   5   JB   67-64-1Acetone   13   1   75-15-0Carbon Disulfide   10   U   75-35-41,1-Dichloroethene   10   U   75-36-31,1-Dichloroethene   10   U   75-36-3Chloroform   10   U   76-66-3Chloroform   10   U   78-93-3	GC Column: PACK ID: 2.0 (mm) Dilut  Soil Extract Volume: (uL) Soil  CAS NO. COMPOUND CONCENTRATION  GUYL or ug/Kg  74-87-3Chloromethane  74-83-9Bromomethane  75-01-4Vinyl Chloride  75-00-3Chloroethane  75-09-2Methylene Chloride  67-64-1Acetone	
CAS NO.   COMPOUND   CONCENTRATION UNITS:   CURPOUND   CONCENTRATION UNITS:   CURPOUND   CONCENTRATION UNITS:   CURPOUND   CONCENTRATION UNITS:   CURPOUND   CONCENTRATION UNITS:   CURPOUND   CURPOUND   CURPOUND   CONCENTRATION UNITS:   CURPOUND   CURP	CONCENTRATION CAS NO.  COMPOUND  CONCENTRATION Fug/L or ug/Kg  74-87-3Chloromethane 74-83-9Bromomethane 75-01-4Vinyl Chloride 75-00-3Chloroethane 75-09-2Methylene Chloride 67-64-1Acetone	
CAS NO. COMPOUND CUY/Kg] UG/L Q  74-87-3Chloromethane   10   IU   74-83-9Bromomethane   10   IU   75-01-4Vinyl Chloride   10   IU   75-00-3Chloroethane   10   IU   75-09-2Methylene Chloride   5   I JB   67-64-1Acetone   13   75-35-41,1-Dichloroethene   10   IU   75-35-41,1-Dichloroethene   10   IU   75-34-31,1-Dichloroethene   10   IU   75-34-31,1-Dichloroethene   10   IU   75-34-31,1-Dichloroethene (total)   10   IU   78-93-32-Butanone   10   IU   78-93-32-Butanone   10   IU   75-27-4Bromodichloromethane   10   IU   75-27-4Bromodichloromethane   10   IU   78-97-51,2-Dichloropropane   10   IU   79-01-6	CONCENTRATION  [ug/L or ug/Kg]  74-87-3Chloromethane  74-83-9Bromomethane  75-01-4Vinyl Chloride  75-00-3Chloroethane  75-09-2Methylene Chloride  67-64-1Acetone	
	74-87-3Chloromethane 74-83-9Bromomethane 75-01-4	UNITS:
100-42-5Styrene   10   U   1330-20-7Xylene (total)   10   U	75-35-41,1-Dichloroethene 75-34-31,1-Dichloroethane 540-59-01,2-Dichloroethene (total) 67-66-3	10   U

80

ADF:

Ja.

#### 1E

## VO

LATILE ORGANICS	ANALYSIS DATA SHEET		
TENTATIVELY I	DENTIFIED COMPOUNDS	1	
		1	TB-2
INTECH	Contract:	1	

Lab Name: INTECH

SDG No .: MW-1 Case No. 1167 SAS No.: Lab Code: INTECH

Lab Sample ID: 1211107-10 Matrix: (soil/water) MATER

Lab File ID: >A0301 Sample wt/vol: 5.0 (g/mL) ML

Date Received: 11/18/92 (low/med) LOW Level:

Date Analyzed: 11/24/92 % Moisture: NA not dec.

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Aliquot Volume: (uL) Soil Extract Volume: (uL)

NYSDEC SAMPLE NO.

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L Number TICs found:

I CAS NUMBER	COMPOUND NAME	   RT    ======	EST. CONC.	
,	Unknown	6.66	7.	N
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1A VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

I VBLK QA1119

Lab Name: INTECH Contract:

.4.

Lab Code: INTECH Case No.: 1107 SAS No.: . SDG No.: MW-(

Lab Sample ID: VBLK QA1119 Matrix: [soil/water] WATER

Sample wt/vol: 5.0 [g/mL] ML Lab File ID: >A0241

Level: [low/med] LOW Date Received:

% Moisture: decanted: (Y/N) N Date Analyzed: 11/19/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: CAS NO. COMPOUND

CHS NU.	COMPOUND (ug/L)	or ug/Kg]	UG/L	. Q
		ı		1
/4-8/-3	Chloromethane	1	10	IU
74-83-9	Bromomethane	1	10	IU
75-01-4	Vinyl Chloride	1	10	IU
75-00-3	Chloroethane	I	10	IU
75-09-2	Methylene Chloride	ŀ	6	١J
	Acetone	1	10	IU
75-15-0	Carbon Disulfide	I	10	IU
75-35-4	1,1-Dichloroethene		10	IU
75-34-3	1,1-Dichloroethane	1	10	IU ·
540-59-0	1,2-Dichloroethene (tota	al)	10	IU ·
67-66-3	Chloroform	1	10	ΙU
107-06-2	1,2-Dichloroethane	1	10	IU
78-93-3	2-Butanone	1	10	ΙU
71-55-6	1,1,1-Trichloroethane	1	10	IU
56-23-5	Carbon Tetrachloride	1	10	ΙU
75-27-4	Bromodichloromethane	1	10	IU
78-87-5	1,2-Dichloropropane	ŧ	10	IU
UU61-01-5	cis-1.3-Dichloropropene	1	10	IU
79-01-6	Trichloroethene	1	10	IU
124-48-1	Dibromochloromethane	ł	10	ΙU
79-00-5	1,1,2-Trichloroethane	1	10	IU
71-43-2	Benzene	1	10	ΙU
0061-02-6	trans-1,3-Dichloroproper	ne i	10	IU
75-25-2	Bromoform	1	10	ΙÜ
108-10-1	4-Methyl-2-Pentanone	i	10	łU
591-78-6	2-Hexanone	1	10	ΙŪ
127-18-4	Tetrachloroethene	1	10	IU
79-34-5	1,1,2,2-Tetrachloroethar	ne İ	10	IU
108-88-3	Toluene	1	10	IU
108-90-7	Chlorobenzene	Ì	10	ίŪ
100-41-4	Ethylbenzene	İ	10	iÜ
100-42-5	Styrene	ì	10	10
1330-20-7	Xylene (total)	İ	10	ΙÜ
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#### 1E . UDLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

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ı	UBLK	QA1119	I
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NYSDEC SAMPLE NO.

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a h	NAME	: 1	N		_	7

Contract:

Lab Code: INTECH Case No. 1107 SAS No.: SDG No.: MW-1

Matrix: (soil/water) WATER

Lab Sample ID: VBLK QA1119

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: >A0241

Level: (low/med/LOW

Date Received:

% Moisture: NA not dec.

Date Analyzed: 11/19/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

CONCENTRATION UNITS: (un/L or us/Kg) UG/ L

CAS NUMBER	COMPOUND NAME	RT 	I :EST. CONC.	Q
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# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: INTECH

Contract:

VBLK QA1124

SDG No .: MW-

Matrix: [soil/water] WATER

Lab Sample ID: UBLK QA1124

Sample wt/vol: 5.0 [g/mL] ML

Lab File ID: >A0299

Level: [low/med] LOW

Date Received:

% Moisture: decanted: (Y/N) N

Date Analyzed : 11/24/92

GC Column : PACK ID: 2.0 (mm)

. Lab Code: INTECH Case No.: 1107 SAS No.:

Dilution Factor:

Soil Extract Volume: (uL)

Soil Aliquot Volume:

(uL)

CAS NO.	COMPOUND		ATION UNIT		Q	
   74-87-3	Chloromethane		!	1.0	1	- !
74-83-9	Bromomethane		!	10	IU	1.
75-01-4	Vinyl Chloride		l a	10	IU	!
1 75-00-3	Chloroethane		i	10	IU	ı
1 75-09-2	Methylene Chlor	i da	3	10	וְט	!
1 67-64-1		106		5	IJ	
1 75-15-0	Carbon Disulfid	_	1	10	ΙU	ļ
1 75-35-4	1,1-Dichloroeth	5 5		10	IU	1
75-34-3	1,1-Dichloroeth	ene Do		10	1U	ļ.
1 540-59-0	1,2-Dichloroeth	one (tetel)		10	IU	1
1 67-66-3	Chloroform	ane ((Ofal)	, i	10 10	IU	!
1 107-06-2	1,2-Dichloroeth	nn e				
1 78-93-3	2-Butanone	3116	i	10 10	U   U	!
71-55-6	1,1,1-Trichloro	athana	1			!
1 70-23-5	Larbon Tetrachl	aride	i	10 10	1U	} a
- フラー2フー4	Bromodichlorome	thana	i	10	10	
· /8-8/-5	1.2-Dichlaranra	1226	,	10	10	ļ.
110001-01-2	C15-1.3-Dichlar	propena	i	10	10	1
<b>  /7-U1-6</b>	Irichloroethene			10	10	1
124-48-1	Dibromochlorome	hane		10	IU	
・ /アーリリーワーーーー	1.1.2-Trichloro	thane	i	10	10	. ! !
1 /1-42-2	Benzene		i	10		
110061-02-6	trans-1.3-Dichle	ropropene	i	10	1U 1U	
・ ノフームフーとーーー	Bromoform		i	10	IU	1
1 108-10-1	4-Methul-2-Penta	none	ĭ	10	10	1
<b>リーファルー/ひー6ー…ーー</b>	2-Hexanone		i	10	10	
l 127-18-4	Tetrachloroether	e	i	10	10	i
l 79-34-5	1.1.2.2-Tetrach	oroethane	1	10	IU	i
1 100-00-3-~	loluene		Í	10	ίŭ	i .
108-90-7	Chlorobenzene		1	10	IU	ļ
100-41-4	Ethylbenzene		1	10	IU	1
100-42-5	Styrene		!	10	IU	!
1 1220-20-/	Xylene (total)		1	10	IU	1
			i	_	1	1 4 4 4

## VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

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ı		
ı	UBLK	QA1124

EPA SAMPLE NO.

Lab Name: INTECH

Contract:

Lab Code: INTECH Case No. 1167 SAS No.:

SDG No .: MW-

Matrix: (soil/water) WATER

Lab Sample ID: UBLK QA1124

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: >A0299

Level: (low/med)

Date Received: PACK

% Moisture: NA, not dec.

Date Analyzed: 11/24/92

GC Column:

ID: 0.53 (mm)

Dilution Factor:

Soil Extract Volume: (uL)

Soil Aliquot Volume:

(uL)

Number TICs found: 0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/ L

CAS NUMBER	COMPOUND NAME	l RT	EST. CONC.	-   Q    ====
		   		!
		! !		 
		1		 

# VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

1 MW-3 MS

Lab Name: INTECH

Contract:

SDG No .: MW-

Lab Code: INTECH Case No.: 11107 SAS No.:

Matrix: [soil/water] WATER

Lab Sample ID: I211107-03MS

Sample wt/vol: 5.0

[g/mL] ML

Lab File ID: >A0308

Level: [low/med/LOW

Date Received: 11/18/92

% Moisture: decanted: (Y/N) N

Date Analyzed: 11/24/92

GC Column: PACK ID: 2.0 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

a [ug/L or ug/Kg] UG/L

CAS NO.	COMPOUND	[ug/L o	r ug/Kg]	UG/L		
			1	,	10	I I
74-87-3	Chloromethane			•	10	10 1
74-83-9	Bromomethane		1		20	1
75-01-4	Vinyl Chloride				25	i I
75-00-3	Chloroethane		,		4	i JB I
75-09-2	Methylene Chlor	ide	1		13	1 1
47-64-1	Acetone		1		10	10 1
75-15-0	Carbon Disulfic	de	ì		52	1
75_35_4	1,1-Dichloroet	nene			4	13 1
7/ T	1 1-Dichloroett	nane	. 1		10	10 1
540-59-0	1,2-Dichloroet	hene (tota	117		10	iu l
ニースラーススニスニニー	Chlorotorm		1		10	10 !
107-06-2	1,2-Dichloroet	hane	, t			10 1
70 07 7	2-Hutanone		!			יוט ו
71 55 4	1.1.1-Trichlor	oethane			10	iu
E4235	Carbon letrach	101 100	1		10	iU
75-27-4	Bromodichlorom	ethane	1		10	iÜ
70 07 5	1 2-Dichloropr	opane	1		10	iŪ
0061-01-5	cis-1,3-Dichlo	ropropene			50	1
79-01-6	Trichloroetnen	E	1		10	iu
124-48-1	Dibromochlorom	ethane	1		46	i
79-00-5	1,1,2-Trichlor	oethane			52	i
74 47 7	Benzene		1		10	iu
0061-02-6	trans-1,3-Dich	loroprope	ne !		10	1U
フローフローク	Bromotorm		1		10	iŪ
108-10-1	4-Methyl-2-Per	ntanone	!		10	IU
591-79-6	2-Hexanone		1		10	iŭ
107 10 4	Tetrachloroet	nene	1		10	ίŪ
79-34-5	1,1,2,2-Tetra	chloroetha	ine !		53	1
108-88-3	Toluene		1		50	i
108-90-7	Chlorobenzene		!		10	เ่น
100-41-4	Ethylbenzene		!		10	10
100-42-5	Styrene		1		10	10
1770 20 7	Xylene (total	)	1		1.0	10

# VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO. I MW-3 MSD

Lab Name: INTECH

Contract:

Lab Sample ID: I211107-03MSD

Lab Code: INTECH Case No.: 11107 SAS No.: SDG No.: MW-1

Matrix: [soil/water] WATER

Sample wt/vol: 5.0 [g/mL] ML

Lab File ID: >A0309

Level: [low/med] LOW

Date Received: 11/18/92

% Moisture: decanted: (Y/N) N Date Analyzed: 11/24/92

GC Column: PACK ID: 2.0 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

		CONCENTRATION UNITS:	
	COMPOUND	[ug/L or ug/Kg] UG/L	Q
CAS NO.	COMPOUND		

	1		ı	1
74-87-3Chloromethane	1 .	10	IU	1
74-83-9Bromomethane	1	·10	IU	١
75-01-4Uinyl Chloride	1	22	1	١
75-00-3Chloroethane	t	25	1	١
75-09-2Methylene Chloride	1 .	5	l JB	1
75-19-2	1	12	1	1
67-64-1Acetone	1	10	IU	1
75-15-0Carbon Disulfide	ĺ	50	1	I
75-35-41,1-Dichloroethene	1	10	IU	ı
75-34-31,1-Dichloroethane	1	10	IU	ļ
540-59-01,2-Dichloroethene (total)	i	10	IU	İ
67-66-3Chloroform	i	10	١U	1
107-06-21,2-Dichloraethane	i	10	ΙU	ł
78_93_32-Butanone	ì	10	IU	١
71-55-61,1,1-Trichloroethane	i	10	ΙU	- 1
56-23-5Carbon Tetrachloride	Ì	10	IU	
75-27-4Bromodichloromethane	i	10	ΙU	١
78-87-51,2-Dichloropropane	i	10	IU	
0061-01-5cis-1,3-Dichloropropene	i	49	1	!
79-01-6Trichloroethene	i	10	IU	
124-48-1Dibromochloromethane	i	44	l .	
79-00-51,1,2-Trichloroethane	i	51	1	
71-43-2Benzene	i	10	IU	
0061-02-6trans-1,3-Dichloropropene	i	10	IU	
75-25-2Bromoform	•	10	IU	
108-10-14-Methyl-2-Pentanone	ì	10	ΙÜ	
591-78-62-Hexanone		10	ΙÜ	
127-18-4Tetrachloroethene		10	ΙŪ	
79-34-51,1,2,2-Tetrachloroethane	1	51	1	
108-88-3Toluene	1	51	i	
108-90-7Chlorobenzene	1	10	iu	
100-41-4Ethylbenzene		10	١U	
100-42-5Styrene 1330-20-7Xylene (total)	1	10	10	
	1			

GROUNDWATER ANALYSIS (DISSOLVED INORGANICS) (ROUND II)

#### <u>CASE NARRATIVE</u> FOR INORGANICS (NYASP)

ALL THE SAMPLES WERE SUBBED OUT TO CHEMTECH CONSULTING GROUP FOR ANALYSIS OF METALS. Lab Name: CHEMTECH

Client: VERSAR ENV.

Project:Scott Aviation

Job No.: I211107

CASE No.: 11107

SDG No.: MW-1 DIS

The following samples are included in this Sample Delivery

Group: CHEMTECH ID Client ID on forms

```
MW-1
6477S
              MW-2
6478S
              MW-3
                       (for duplicate)
6479S
              MW-3D
6480DS
                       (for splke)
              MW-3S
6481S2
              MW-4
6482S
              MW-4A DUP
6483S
               MW-5
6484S
               MW-6
6485S
               INTER. TRENCH
6486S
Detailed Documentation of Problems Encountered With These
Samples
```

- General:
  1. The above water samples were analyzed for METALS DISSOLVED
- 2. Please note that the client sample number with the sample description (identification) is too many characters, therefore as per the software being used only limited characters can be used for EPA sample number. Never-the-less for the cross reference check the Lab sample ID. with Client ID. is listed above on this case narrative.
- Please be advised that using the Software for data processing of CLP Inorganic Packages, the software is designed to accomodate one SDG at a time at the same matrix.
- 4. The Inorganic CLP data package contains respectively in this order: Case Narrative followed by: forms, ICAP raw data, Furnace raw data, Mercury raw data, and finally the last part is General (samples preparation log, sample log-in sheet, Chain-of-Custody).

NYDEC SAMPLE NO

Lab Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

FIELD BLANK

Lab Code: CHEM

Case No.: 11/0 7

SAS No.: LAB.RES SDG No.: MW-1 DIS

Matrix (soil/water): WATER

Lab Sample ID: 6487S

Level (low/med):

LOW

Date Received: 11/19/92

% Solids:

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	ı c		Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-96-5 7439-96-5 7439-97-6 7439-97-6 740-02-0 740-02-0 740-02-0 740-02-0 740-02-0 740-02-0 740-02-0 740-02-0 740-02-0 740-02-0 740-02-0 740-02-0	Antimony Arsenic Barium Bervllium	16.0	מטטפטטטטטטטטטטטטטטטטטט	W	- 1	PPFPPPPPPPPVPAFPPFPPR

000002

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After:

COLORLESS

Clarity After:

CLEAR

Artifacts:

Comments:

FORM I - IN

1.50

# INORGANIC ANALYSIS DATA SHEET

Lab Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

INTER. TRENCH

Lab Code: CHEM

Case No.: 11/07

SAS No.: LAB.RES SDG No.: MW-1 DIS

Matrix (soil/water): WATER

Lab Sample ID: 6486S

Level (low/med): Low

Date Received: 11/19/92

% Solids:

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS	onics (ug	/L or mg/Kg dry weight	) : ,, UG
CAS NO.	Analyte	Concentration	
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-28-0 7440-62-2 7440-62-2 7440-62-2	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Iagnesium Ianganese ercury ickel otassium elenium ilver odium Iallium Inadium	1.0 4.0 256000 9.0 7.0 20.0 27100 3.3 58300 1880 0.20 16.0 2070 30.0 7.1 46700 4.0 U W	M PPFPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP
,	anide	14.1  B   F	R

000003

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

THORCANIC	AMATVETS	DATA	SHEET
T NICHO (CC ) NI I (CC )	ANALYSIS	DAID	

NYDEC SAMPLE NO

MW-1

Lab Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

Lab Code: CHEM

Case No.: 1107 SAS No.: LAB.RES SDG No.: MW-1 DIS

Matrix (soil/water): WATER

Lab Sample ID: 6477S

Level (low/med):

LOW

Date Received: 11/19/92

% Solids:

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

				_		
T	CAS No.	Analyte	Concentration	С	Q	М
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium	100 40.0 8.2 107 1.0 4.0 15100 9.0 7.0 20.0 18.1 2.0 13700 21.4 0.20 16.0		W	PPFPPPPPPPPCPAFPPFPNR
		_		_   _		_1

000004

Color	Before:	COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

CLEAR Clarity After:

Artifacts:

NYDEC SAMPLE NO	NYD	EC	SAMP	7.5	λic
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MW-2

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Level (low/med):

Lab Code: CHEM Case No.: |//d 7 SAS No.: LAB.RES SDG No.: MW-1 DIS

Matrix (soil/water): WATER

Lab Sample ID: 6478S

Date Received: 11/19/92

% Solids:

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No. Analyte Concentration C Q  7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 Analyte Concentration C Q  100 U 40.0 U 6.7 B 206 Barium Beryllium 1.0 U	MPPFPPF
7440-36-0 Antimony 40.0 U 7440-38-2 Arsenic 6.7 B 7440-39-3 Barium 206 7440-41-7 Beryllium 1.0 U	<b>PFPP</b>
7440-36-0 Antimony 40.0 U 7440-38-2 Arsenic 6.7 B 7440-39-3 Barium 206 7440-41-7 Beryllium 1.0 U	<b>PFPP</b>
7440-38-2 Arsenic 6.7 B 7440-39-3 Barium 206 7440-41-7 Beryllium 1.0 U	F P P
7440-41-7 Beryllium 1.0 U	P P P
1 ". 1	P P
1 ". 1	I – I
7440-43-9   Cadmium   4.0   U	
7440-70-2   Calcium   153000	P
7440-47-3   Chromium   9.0   U	P
7440-48-4   Cobalt   7.0   U	P
7440-50-8 Copper 20.0 U	P
7439-89-6   Iron   12700	P
7439-92-1 Lead 2.0 U	F
7439-95-4 Magnesium 80200	P
7439-96-5   Manganese   1650	P
7439-97-6   Mercury   0.20 U	cv
7440-02-0 Nickel   16.0 U	P
7440-09-7   Potassium   1120   B	A
7782-49-2   Selenium   30.0   U	F
7440-22-4   Silver   7.0   U	P
7440-23-5 Sodium 40600	P
7440-28-0   Thallium   4.0   U   W	F
7440-62-2   Vanadium   16.0   U	P
7440-66-6   Zinc   14.6   B	P
Cyanide	NR
	1 1

000005

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

FODM	T	_	TI

NYDEC SAMPLE NO

MW-3

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM

Case No.: 1/107

SAS No.: LAB.RES SDG No.: MW-1 DIS

Matrix (soil/water): WATER

Lab Sample ID: 6479S

Level (low/med):

Date Received: 11/19/92

% Solids:

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	100	ប		$ \overline{\mathbf{p}} $
7440-36-0	Antimony	40.0	บ		P
7440-38-2	Arsenic	3.6	В	,	F
7440-39-3	Barium	152	В		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	4.0	ט		P
7440-70-2	Calcium	42600			P
7440-47-3	Chromium	9.0	บ		P
7440-48-4	Cobalt	7.0	U		P
7440-50-8	Copper	20.0	บ		P
7439-89-6	Iron	308			P
7439-92-1	Lead	2.0	ט	W	F
7439-95-4	Magnesium	45700	ŀ		P
7439-96-5	Manganese	92.3		•	P ·
7439-97-6	Mercury	0.20	บ	,	CV
7440-02-0	Nickel	16.0	ប		P
7440-09-7	Potassium	1340	В		A
7782-49-2	Selenium	3.0	U	W	F
7440-22-4	Silver	7.0	U	,	P
7440-23-5	Sodium	38800			P
7440-28-0	Thallium	4.0	U	W	F
7440-62-2	Vanadium	16.0	U		P
7440-66-6	Zinc	6.5	В		P
	Cyanide				NR
l			_		

000006

Color Before: COLORLESS Clarity Before: CLEAR

Texture:

Color After:

COLORLESS

Clarity After: CLEAR Artifacts:

<del></del>		 
<del></del>	 	 <del></del>

NYDEC SAMPLE NO

MW-4

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM

Case No.: 1167

SAS No.: LAB.RES SDG No.: MW-1 DIS

Matrix (soil/water): WATER

Lab Sample ID: 6482S

Level (low/med): LOW

Date Received: 11/19/92

% Solids:

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	100	ប៊		P
7440-36-0	Antimony	40.0	U		P
7440-38-2	Arsenic	2.0	U	·W	F
7440-39-3	Barium	199	В		P
7440-41-7	Beryllium	1.0	ប		P
7440-43-9	Cadmium	4.0	บ		P
7440-70-2	Calcium	34700			P
7440-47-3	Chromium	9.0	ט		P
7440-48-4	Cobalt	7.0	บ		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	18.0	U		P
7439-92-1	Lead	2.0	U	W	F
7439-95-4	Magnesium	57400			P
7439-96-5	Manganese	49.1			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	. 16.0	U		P
	Potassium	2050	В		A
7782-49-2	Selenium	30.0	U	W	F
7440-22-4	Silver	7.0	U		P
7440-23-5	Sodium	33900			P
7440-28-0	Thallium	4.0	U		F
7440-62-2	Vanadium	16.0	บ		P
7440-66-6	Zinc	10.2	В		P
	Cyanide				NR
			<b> </b> _	l	

000007

Color Before: COLORLESS Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments;

FORM	I	- II	1		

NYDEC SAMPLE NO

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

MW-4A DUP

Lab Code; CHEM

Case No.: || || 37 SAS No.: LAB.RES SDG No.: MW-1 DIS

Matrix (soil/water): WATER

Lab Sample ID: 6483S

Level (low/med): Low

Date Received: 11/19/92

% Solids:

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

T		T	-	5.10	,	G
CAS No.	Analyte	Concentration	n c	Q	М	_
7440-66-6	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	100 40.0 2.0 207 1.0 4.0 36500 11.7 7.0 20.0 33.9 2.0 58400 65.2 0.20 16.0 2100 30.0 7.0 34100 4.0 16.0 9.8	מטע טטאטט טטאטט טטאטט טטאסט טטאסט	W	M PORTORO	
			1		1""	

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Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

NYDEC	SAMPLE	NC
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Lab Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

MW-5

Lab Code: CHEM

Case No.: 1107

SAS No.: LAB.RES SDG No.: MW-1 DIS

Matrix (soil/water): WATER

Lab Sample ID: 6484S

Level (low/med):

LOW

Date Received: 11/19/92

% Solids:

0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

T	<del></del>		•	· crgiic)	. 00	3
CAS No.	Analyte	Concentration	1 0	Q	М	
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-95-4 7439-95-4 7439-95-6 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-28-0 7440-62-2	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium	100 40.0 2.0 148 1.0 4.0 30700 9.0 7.0 20.0 67.8 2.1 45200 31.7 0.20 16.0 1250 30.0 7.0 30800 4.0 16.0		W	M PPFPPPPPPPPPCPAFPPFP	
1	Zinc Cyanide	9.6	В		P NR	

000009

Color Before: COLOLRESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After:

CLEAR

Artifacts:

NYDEC SAMPLE NO

MW-6

Lab Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

Lab Code: CHEM

Case No.: 11/07

SAS No.: LAB.RES SDG No.: MW-1 DIS

Matrix (soil/water): WATER

Lab Sample ID: 6485S

Level (low/med):

Date Received: 11/19/92

% Solids:

Concentration Units (ug/L or mg/Kg dry weight): UG/L

<del></del>	<del>,</del>	<del></del>			
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	100	ប៊		P
7440-36-0	Antimony	40.0	บ		P
7440-38-2	Arsenic	2.0	บ	W	F
7440-39-3	Barium	157	В		$ \mathbf{p} $
7440-41-7	Beryllium	1.0	ט		$ \bar{\mathbf{p}} $
7440-43-9	Cadmium	4.0	ט		P
7440-70-2	Calcium	25300			P
7440-47-3	Chromium	9.0	ט		P
7440-48-4	Cobalt	7.0	ט		P
7440-50-8	Copper	20.0	ט		P
7439-89-6	Iron	· 108			P
7439-92-1	Lead	2.0	ប	W	F
7439-95-4	Magnesium	49200			P
7439-96-5	Manganese	18.2			P
7439-97-6	Mercury	0.20	ט		cv
7440-02-0	Nickel	· 16.0	บ		P
7440-09-7	Potassium	1380	В	,	A
7782-49-2	Selenium	30.0	U	W	F
7440-22-4	Silver	7.0	U		P
7440-23-5	Sodium	33400			P
7440-28-0	Thallium	4.0	U		F
7440-62-2	Vanadium	16.0	บ		P
7440-66-6	Zinc	6.8	В		P
	Cyanide				NR]
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Color Before: COLORLESS Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

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#### SPIKE SAMPLE RECOVERY

NYDEC SAMPLE NO

MW-3S

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

SDG No.: MW-1 DIS

Matrix: WATER

Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

	]		·	- [				1			
		Control									
		Limit	Spiked Sample	1	Sample		Spike				
	Analyte	%R	Result (SSR) (	-	Result (SR)	С	Added (SA)	%R	Q	M	İ
	Aluminum	75-125	2065.5000	-	100.0000	<del></del>	2000.00	103.3	_	P-	l
	. –	1 1		- }	40.0000		i i				ĺ
	Antimony	75-125	543.3700	1				108.7		P	
	Arsenic	75-125	41.1000	ļ	3.6000			93.8		F	l
	Barium	75-125	2167.3000	١	152.0400	1		100,8		P	
	Beryllium		51.3500	ļ	1.0000					P	l
	Cadmium	75-125	51.6200	-	4.0000	U	50.00	103.2		P	l
	Calcium			١					l	NR	l
N	Chromium	75-125	207.2600	ı	9.0000	U	200.00	103.6		P	ļ
小	Cobalt	75-125	514.6800		7.0000	U	500.00	102.9	l	P	١
	Copper	75-125	235.7300		20.0000	U	250.00	94.3		P	
	Iron	75-125	1376.3000		307.5900		1000.00	106.9		P	ı
	Lead	75-125	23.0000	١	2.0000	U	20.00	115.0		F	l
	Magnesium		·	1						NR	
	Manganese		553.9200	-	92.2900		500.00	92.3		P	
	Mercury	75-125	1.0300		. 0.2000	U	1.00	103.0		CV	١
	Nickel	75-125	511.6300		16.0000	U	500.00	102.3	1	P	
	Potassium			- [						NR	
	Selenium	75-125	12.1000		3.0000	U	10.00	121.0	1	F	l
	Silver	75-125	45.5200	ŀ	7.0000	U	50.00	91.0	l	P	ı
	Sodium					1			l	NR	l
	Thallium	75-125	52.5000	١	4.0000	U	50.00	105.0		F	١
	Vanadium	75-125	534.1800	- 1	16.0000	U	500.00	106.8	١	P	١
	Zinc	75-125			6.5100	B	500.00	101.5		P	1
	Cyanide							]		NR	
			· .							1	١
	· ———		! <del></del>	'		. —	1	•	. —		•

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FORM V (Part 1) - IN

12/91

## DUPLICATES

NYDEC SAMPLE NO

Lab Name: CHEMTECH CONSULTING GROUP

Contract: 68D20041

MW-3D

Lab Code: CHEM

Cyanide

Case No.: 11107

SAS No.: LAB.RES

SDG No.: MW-1 DIS

Matrix (soil/water): WATER

Level (low/med): Low

% Solids for Sample:

% Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	Dumlinate		
Analyte  Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc		Sample (S) C  100.0000 U 40.0000 B 152.0400 B 1.0000 U 4.0000 U 4.0000 U 7.0000 U 7.0000 U 20.0000 U 20.0000 U 20.0000 U 45714.0000 U 45714.0000 U 16.0000 U 1340.0000 B 3.0000 U 7.0000 U 38819.0000 U 16.0000 U	Duplicate (D) C  100.0000   U 40.0000   U 2.8000   B 154.6800   B 1.0000   U 4.0000   U 4.0000   U 4.0000   U 7.0000   U 20.0000   U 20.0000   U 20.0000   U 16.0000   U 1290.0000   U 16.0000   U 39044.0000   U 16.0000   U	25.0 1.7 0.4 0.5 0.2 1.5	M PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP

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#### ICP SERIAL DILUTIONS

NYDEC SAMPLE NO

MW-3L

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D20041

Lab Code: CHEM Case No.: 11167 SAS No.: LAB.RES SEDG No.: NAW-1 DIS

Matrix (soil/water): WATER

Level (low/med): LLOW

Concentration Units: ug/L

			Serial		8		
	Initial Sample		Dilution		Differ-		
Analyte	Result (I)	디	Result (S)	C	ence	Q	М
Aluminum	100.00	υ	500.00	ប		-	P
Antimony		וט	200.00	U			P
Arsenic			]				NR
Barium	152.04	В	153.80	В	1.2		P
Beryllium		U	5.00	U	1		P
Cadmium	4.00	וט	20.00	U			P
Calcium	42592.00	_	43118.50	- 1	1.2	1	P
Chromium	9.00	וט	45.00	U		139	P
Cobalt	7.00	ט	35.00	U	63		P
Copper	20.00	ט	100.00	U	1		$\mathbf{P}_{j}$
Iron	307.59		327.30	В	6.4	1	P
Lead					1 1	$\int_{\mathcal{A}} dt$	NR
Magnesium	45714.00		46416.50		1.5		P :
Manganese	92.29		86.90		5.8.	1.	P
Mercury	1.						NR
Nickel	16.00	ן ט	80.00	ן ט	;		P
Potassium							NR
Selenium				1 1			NR
Silver	7.00	บ	35.00	ן ט			P
Sodium	38819.00		40535.50		4.4	.	P
Thallium				ŀ			NR
Vanadium	16.00	บ	80.00	ប			P
Zinc	6.51		25.00	ט	100.0	ļ	P
						_	نــ ا.

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RECEIVED

NOVU 3 1993

ENVIRONMENTAL CONSERVATION