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HAZARDOUS WASTE REMEDIATION

#### PHASE II ENVIRONMENTAL SITE INVESTIGATION

**FOR** 

DEXTER CHEMICAL CORPORATION 845 EDGEWATER ROAD BRONX, NEW YORK

PREPARED BY:

THE WHITMAN COMPANIES, INC. EAST BRUNSWICK, NEW JERSEY

WHITMAN PROJECT #97-09-10

**JANUARY 1998** 

44 West Ferris Street, East Brunswick, New Jersey 08816

## PHASE II ENVIRONMENTAL SITE INVESTIGATION DEXTER CHEMICAL CORPORATION BRONX, NEW YORK

#### 1.0 INTRODUCTION

The Whitman Companies, Inc. (Whitman) performed a Phase I Environmental Site Assessment/
Preliminary Assessment at the Bronx, New York Dexter Chemical property in September 1997.

During the assessment, Whitman identified several areas of potential environmental concern and recommended further investigation and/or corrective action.

Phase II environmental site investigation activities were conducted at the site on November 18, 1997. Soil and grab ground water samples were collected to investigate three (3) areas of potential environmental concern (APECs).

The three (3) APECs included:

- 1. 819 Edgewater Road Plant Subsurface Contamination
- 2. 5,000 Gallon No. 4 Heating Oil Underground Storage Tank (UST)
- 3. Two (2) 3,500 Gallon Isopropyl Alcohol USTs

Following laboratory analysis, the ground water and soil sample results were compiled and compared to current New York State Department of Environmental Conservation (NYSDEC) cleanup objectives and standards/criteria. The result of this review indicates the presence of ground water and soil contaminants at concentrations above the baseline NYSDEC recommended Soil Cleanup Objectives and Ground Water Standards/Criteria.

#### 2.0 SITE DESCRIPTION

The site is located at 819-845 Edgewater Road and 810-842 Whittier Street, Bronx, New York. The facility consists of six (6) buildings owned by Dexter Chemical Corporation on approximately two (2) acres. The property is located in an industrial/manufacturing district of Hunts Point, Bronx, New York. Light industrial facilities are located north and south of the property. A scrap metal yard is located to the east and residential apartments are located west of the subject property.

The site location on the U.S.G.S. Central Park Quadrangle is indicated on Figure 1. A site map showing soil sample locations is included as Figure 2. The site is located on a flat coastal peninsula. The estimated elevation is between 20 and 25 feet above mean sea level. The nearest surface water



body is the Bronx River, located approximately 1,000 feet east of the site. Ground water was encountered at 4.3 to 5 feet below the 819 Edgewater Road plant floor.

The regional geology in the vicinity of the site is of Paleozoic Era, Ordovician System consisting of shale and limestone.

The soil encountered at the site through sampling activities generally consists of fill material including silty soil, some sand and clay, cinders, coal fragments, gravel and debris (concrete, glass, wood, and brick fragments). The soil profiles are presented in the soil boring logs included as Attachment I to this report.

#### 3.0 TECHNICAL OVERVIEW

The Phase II Site Investigation activities were conducted in accordance with generally accepted sampling practices. Throughout the investigation, all samples were collected with proper attention to quality assurance protocols and decontamination of sampling tools and implements.

Upon arrival on November 18, 1997, Whitman technical staff marked out the approximate locations of the 5,000 gallon UST in the 819 Edgewater Road court yard and the two (2) 3,500 gallon isopropyl alcohol tanks in the 842 Whittier Street yard using a Schonstedt MAC-51B Magnetic Locator.

Nine (9) soil borings were advanced by M&R Soil Investigations, Egg Harbor City, New Jersey using a GeoProbe device. Soil samples were collected from three (3) feet long steel spoons lined with a disposable plastic liner. Ground water samples were collected from temporary one (1) inch PVC well points which were sealed after sampling, using disposable bailers. Six (6) soil and three (3) grab ground water samples were collected for analysis at a NYS certified laboratory.

During the collection of each soil boring, Whitman's technical staff field screened the soil with a calibrated Photoionization Detector (PID) for volatile compounds. PID readings and visual observation were used to determine soil sample depths.

The sample analysis was performed by Envirotech Research, Inc., Edison, New Jersey a NYS Department of Health certified laboratory (ELAP#11452).

The NYSDEC recommended Soil Cleanup Objectives and Ground Water Standards/Criteria dated January 24,1994, were used as the basis for evaluating the analytical results for soil and ground water sampling on the subject site. Where values for metals in ground water were not available in the 1994 revision, the 1993 NYSDEC objectives and standards/criteria were used.



#### 4.0 AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

Through the information obtained from the Phase I Environmental Assessment/Preliminary Assessment, the following APECs with respect to soil contamination and ground water were identified.

- 1. 819 Edgewater Road Plant Subsurface Contamination
- 2. 5,000 Gallon No. 4 Heating Oil UST
- 3. Two (2) 3,500 Gallon Isopropyl Alcohol USTs

#### 5.0 RESULTS OF SOIL AND GROUND WATER INVESTIGATION

- 5.1 819 Edgewater Road Plant (APEC 1)
- 5.1.1 Background and Sampling

In the Phase I Environmental Assessment/Preliminary Assessment, Whitman reported a concern for discharges to the ground underlying broken portions of the concrete floor in the chemical batch processes area. There was also concern regarding the prior historical paint manufacturing operations at Building A (819 Edgewater Road) which may have resulted in subsurface contamination.

Three (3) borings were drilled through the concrete floor inside the 819 Edgewater Road plant. Six (6) samples (three (3) soil and three (3) ground water) were collected to test for USEPA Priority Pollutant Metals (PPMetals), PCBs, Volatile Organic Compounds +10 (VO+10) and Base/Neutral Extractable Organic Compounds +15 (BN+15). Soil sample ISB-1 was collected at a depth of 7 to 9 feet, ISB-2 at 1 to 1.5 feet and ISB-3 at 3 to 4 feet below the concrete floor based on field observations. (The sample intervals collected varied due to sample recovery). The samples for VO+10 analysis were collected at depths ranging from 7 to 9 feet. Ground water was encountered at a depth ranging from 4.3 to 5 feet below the building floor. The sample locations are indicated on Figure 2.



The PID field readings from the soils ranged from 0.0 ppm to 640 ppm. The highest readings for each boring were as follows:

Boring ISB-1, 178 ppm at a depth of 1.5 to 3.5 feet Boring ISB-2, 114 ppm at a depth of 0.5 to 3 feet Boring ISB-3, 640 ppm at a depth of 6 to 9 feet

#### 5.1.2 Analytical Results

#### 5.1.2.1 Introduction

The analytical results indicated the presence of VO+10, BN+15 and PPMetal contamination in soil and ground water samples in excess of the NYSDEC 1993 and 1994 Recommended Soil Cleanup Objectives and Ground Water Standards/Criteria. Analytical results are presented in Tables 1 through 8. Analytical data sheets are included as Attachment 2. The laboratory QA/QC documentation is included as Volume 2.

#### 5.1.2.2 Soil

The following soil contaminants were detected in ISB-1 and ISB-3 in the soil at concentrations exceeding the NYSDEC 1994 Recommended Soil Cleanup Objectives (NYRSCO). The contaminant concentrations are presented in parenthesis. The sample location is included in parenthesis if the contaminant was only detected in one (1) location. If the contaminant was found in more than one location, a range of concentrations is presented.

#### VO+10 BN+15

Ethylbenzene (ISB-3, 19,000 ppb) Naphthalene (ISB-1, 28,000 ppb)

Xylene (26,000-79,000 ppb) 1,2,4-Trichlorobenzene (6,100-18,000 ppb)

Chlorobenzene (ISB-3, 260,000 ppb)

No contaminants exceeding NYRSCO were detected in ISB-2 and PCBs were not detected in any sample.

A library search of TICs was conducted for the three (3) soil samples. The total estimated concentrations of the Volatile Organic TICs ranged from 1,809,000 ppb to 3,030,000 ppb, most of which were unknown alkanes and hydrocarbons. The total estimated concentrations of the Base/Neutral Extractable TICs ranged from 10,900 ppb to 2,130,000 ppb, most of which were alkanes and nonylphenol isomers.



#### 5.1.2.3 Ground Water

The following is a compilation of contaminants detected in the ground water samples ISB-1, ISB-2, and ISB-3, at concentrations exceeding the NYSDEC 1993 and 1994 Ground Water Standards/Criteria.

<u>VO+10</u>	<u>BN+15</u>	<b>PPMetals</b>		
1,2-Dichloropropane (6.1-19 ppb)	Diethylphthalate(ISB-1, 160 ppb)	Beryllium (ISB-3, 3.3 ppb)		
Toluene (17-52 ppb)	Naphthalene (66-140 ppb)	Lead (499-935 ppb)		
Ethylbenzene(34-100ppb)	1,2-Dichlorobenzene(28-320 ppb)	Zinc (501-1,210 ppb)		
Benzene (3.6-76 ppb)	1,3-Dichlorobenzene(ISB-3, 260 ppb)	Antimony(ISB-1,22.1 ppb)		
Chlorobenzene (17-5,200 ppb)	1,4-Dichlorobenzene (ISB-3, 2,000 ppb)	Chromium (54.7-66.1 ppb)		
Xylene (120-730 ppb)	1,2,4-Trichlorobenzene(32-1,300 ppb)	Mercury (ISB-1, 7.9)		
		Selenium (ISB-2, 11.2 ppb)		
		Copper (265-298 ppb)		

A library search of Tentatively Identified Compounds (TICs) was conducted for the three (3) ground water samples. The total estimated concentrations for the Volatile Organic TICs ranged from 1,033 ppb to 2,770 ppb, most of which were isomers of benzene compounds. The total estimated concentrations for the Base/Neutral Extractable TICs ranged from 2,770 ppb to 6,160 ppb, most of which were isomers of benzene compounds and unknown alkanes.

#### 5.1.3 Conclusions and Recommendations

The analytical results indicated the presence of several VO+10, BN+15, and PP Metal contaminants in the soil and the ground water in excess of the NYSDEC 1993 and 1994 Recommended Soil Cleanup Objectives and Ground Water Standards/Criteria. The PID field readings from the soils ranged from 0.0 ppm to 640 ppm at depths between 0 to 9 feet. The soil boring logs, in Attachment 1, indicate the presence of historic fill. The presence of BNs and PPMetals is common in historic fill while the VOs may be derived from past operations of the prior paint manufacturing operation. The results and observations from the other APECs indicate the potential presence of soil contamination across the site from historic fill.

Based on the analytical results and field observations, additional sampling of soil and ground water is needed to determine the extent of the contamination detected in this area. The further investigation of ground water quality should be conducted by installing and sampling ground water monitoring wells. Additional soil samples should be collected by means of soil borings around the Dexter facility to determine the extent of the soil contamination. The proposed soil and ground water sampling activities are detailed in Section 6, Recommended Sampling Plan.



#### 5.2 5,000 Gallon No. 4 Heating Oil UST (APEC 2)

#### 5.2.1 Background and Description of Sampling

The approximate location of the UST was marked out using a magnetic locator in a conductive trace mode. A metal plug was noted on the concrete surface in the vicinity of the heating oil tank. Plant personnel indicated that they believe the plug was installed as an access point to facilitate integrity testing of the UST. They also indicated that additional USTs were once located in the 819 Edgewater Road court yard.

Three (3) soil borings were drilled through the asphalt pavement around the 5,000 gallon No. 4 heating oil UST located in the northwest corner of the yard B, as shown on Figure 2. A soil sample was collected from each boring and tested for BN+15. Due to the presence of subsurface fill and concrete, several boring locations met refusal and were relocated to locations where the borings could be advanced. Samples were taken on the north, east, and south sides of the tank. Sample HO-1 was collected from a depth of 3 to 4 feet, HO-2 and HO-3 at a depth of 4 to 6 feet. The character of the fill material was consistent throughout each of the borings. The sample depths were based on field observations and screening of the borings to depths of 12 feet below grade. Water saturated soil was encountered at a depth of approximately 6 to 7 feet below grade. The sample locations are indicated on Figure 2.

The PID Field readings from the soils ranged from 0 ppm to 167 ppm. The highest readings for each boring were as follows:

Boring HO-1, 148 ppm at a depth of 3 to 4 feet Boring HO-2, 143 ppm at a depth of 3.5 to 5.5 feet

Boring HO-3, 167 ppm at a depth of 3 to 6 feet

#### 5.2.2 Analytical Results

The analytical results indicate the presence of the following Base Neutrals in soils at concentrations exceeding their respective NYRSCO: Benzo(a)anthracene (HO-3, 380 ppb), Chrysene (HO-3, 870 ppb) and Benzo(a)pyrene (HO-2, 100 ppb and HO-3, 180 ppb). These materials are indicative of historic fill. No BNs were detected in sample HO-1 above the NYRSCO.

A library search of TICs was conducted on the three (3) soil samples. The total estimated concentrations of the Base/Neutral Extractable TICs ranged from 226,000 ppb to 369,000 ppb, most of which were unknown alkanes.

The analytical results are presented in Tables 5 through 8. Analytical data sheets are included as Attachment 2. The laboratory QA/QC documentation is included as Volume 2.



#### 5.2.3 Conclusions and Recommendations

The analytical results indicate the presence of three (3) historic fill related BN+15 compounds (Benzo(a)anthracene, Chrysene, and Benzo(a)pyrene) in the soil in excess of the NYSDEC 1994 Recommended Soil Cleanup Objectives. The PID field readings from the soils ranged from 0.0 ppm to 167 ppm at depths between 0 to 9 feet. No free product (heating oil) was observed in the borings. The soil boring logs, in Attachment 1, indicate the presence of historic fill.

Analytical results of soil borings in the vicinity of the 5,000 gallon No. 4 heating oil tank, field observations, and PID readings provide evidence that there was no major leak or discharge from this tank. While borings cannot detect oil which may have discharged directly beneath the tank, the three samples taken from borings adjacent to the tank show no evidence of significant horizontal migration of heating oil. Therefore, if any discharge did occur, its effects are likely to have been very minor.

Due to the age of the 5,000 gallon No. 4 heating oil tank, and Dexter's desire to eliminate potential future environmental liabilities, it is recommended that this tank be removed in concert with the sampling program proposed in Section 6.0 of this report, and that appropriate soil sampling be performed to document the closure of the tank for regulatory purposes. It should be noted that the area where the tank is situated is in a paved, accessible yard.

The presence of BNs identified in the soil samples is common in historic fill while the Volatile Organics indicated by the high PID readings may be derived from historic operations. Based on the analytical results and field observations, additional soil sampling is recommended to confirm whether the VOs in this area are the same as found beneath building 819. The further investigation of the historic fill related contamination is also proposed. The proposed sampling activities are detailed in Section 6, Recommended Sampling Plan.

#### 5.3 Two (2) 3,500 Gallon Isopropyl Alcohol USTs

#### 5.3.1 Background and Description of Sampling

Two (2) 3,500 gallon isopropyl alcohol USTs are located in the 842 Whittier Street yard. Dexter is planning on replacing the two (2) tanks in the near future. Whitman suggested PID screening of the soil in the vicinity of these two (2) USTs to assess whether product leakage occurred.

Three (3) observation borings were drilled around the isopropyl alcohol tanks in the 842 Whittier Street yard. The soil borings were field screened with a PID for the presence of volatile compounds. The soil column from boring ITA-1 was screened from the surface to a depth of 9 feet,



and borings ITA-2 and ITA-3 were screened to a depth of 12 feet. Ground water saturated soil was encountered at a depth of approximately 6 to 7 feet below grade.

#### 5.3.2 Field Screening Results

The PID field readings from soil borings ITA-2 and ITA-3 were 0.0 ppm from 0 to 6 feet below grade and ranged from 6.8 ppm to 36 ppm at depths of 6 to 9 feet. The highest readings for each boring were as follows:

Boring ITA-1, 0.0 ppm at depths from 0 to 9 feet Boring ITA-2, 36 ppm at a depth of 7 to 9 feet Boring ITA-3, 16.1 ppm at a depth of 6 to 7.5 feet

#### 5.3.3 Conclusions and Recommendations

The PID field readings from two (2) of the three (3) soil borings ranged from 0 ppm to 36 ppm at depths between 0 to 9 feet. The soil boring logs, in Attachment 1, indicate the presence of historic fill. Ground water saturated soil was observed between 6 feet and 7 feet below grade. The presence of VOs indicated by the PID readings detected near the ground water level may be derived from several potential sources and therefore the sampling data are inconclusive. Such sources may include the isopropyl alcohol tanks but may also include migrating ground water contaminants or historic operations.

Whitman evaluated 1993 sample data collected by Enviro-Sciences, Inc., from a tank excavation (5,500 gallon Isopar UST and 3,500 gallon #2 fuel oil UST) in the 842 Whittier Street yard. Six (6) soil samples were collected in January 1993 around the excavation site and analyzed for BN+15. Several BNs were detected. The BNs detected were similar to the ones found in the 819 Edgewater yard and included Benzo(a)anthracene, Chrysene, and Benzo(a)pyrene.

Based on the PID readings and field observations by Whitman in November 1997, additional soil sampling is recommended to verify and/or identify the VOs in this area. The further investigation of the historic fill related contamination is also proposed. The proposed sampling activities are detailed in Section 6, Recommended Sampling Plan.



#### 6.0 RECOMMENDED SAMPLING PLAN

The results of the soil sampling activities conducted by Whitman at the Dexter Chemical, 819 Edgewater Road/842 Whittier Street facility indicated the presence of soil and ground water contamination above the NYDEC Soil and Ground Water Cleanup Objectives. Several contaminants including Volatile Organic Compounds, Base/Neutral Extractable Compounds, and PPMetals were detected. The analytical results and field observations for the 819 Edgewater Road plant, 819 Edgewater Road yard and 842 Whittier Street yard indicated the presence of contaminants which may have originated from one or more of the following sources: 1) historic operations, 2) historic fill, or 3) off site sources.

Whitman recommends further investigation of the Dexter facility to determine the extent of soil and ground water contamination across the site, assess the possibility of off site sources, determine the direction of ground water flow, and assess the potential need for cleanup. Due to the ubiquitous nature of the historic fill related contamination detected in the three (3) APECs, the entire site will be addressed as one APEC at this time. The recommended sampling activities are detailed below. The results of the recommended sampling activities will be presented in a sampling results report along with any recommended further actions. The report of the proposed sampling will be structured for eventual submittal to NYSDEC.

#### 6.1 Soil

A soil investigation will be conducted to delineate the presence of BN+15 and PPMetals in historic fill and potential presence of VO+10 contamination throughout the 819 Edgewater Road/842 Whittier Street plant areas. Seventeen (17) soil borings will be made using a Geoprobe sampling device. Monitoring well cuttings (soil) will also be sampled with stainless steel split spoons at perimeter and on site locations. One (1) soil sample will also be collected at each monitoring well. Two (2) soil samples will be collected at each boring, one (1) sample above and one (1) at the estimated ground water elevation. At four (4) selected locations, deeper soil samples will be collected of natural soil, where encountered. Each soil sample will be analyzed for VO+10, BN+15 and PPMetals by a NYS DOH certified laboratory. Eight (8) of the samples will also be analyzed for Total Organic Carbon (TOC). Two (2) soils in the Isopropyl Alcohol tank area will be analyzed for isopropyl alcohol. The proposed boring locations are indicated on Figure 3.

#### 6.2 Ground Water

A full ground water investigation will be conducted by installing six (6) monitoring wells to accurately characterize ground water quality and flow across the site.



Six (6) monitoring wells will be installed by a subcontracted drilling company licensed in New York State. Four (4) wells will be installed on the perimeter of the 819 Edgewater Road/842 Whittier Street plant areas, two up-gradient and two down-gradient. Two (2) wells will be installed within the Dexter property, one (1) in the 819 Edgewater Road yard and one(1) in the 842 Whittier Street yard where evidence of potential ground water contamination was observed. The wells will be sampled two (2) weeks after installation using a micro-purge method of ground water recovery. Samples will be collected from each well and analyzed for VO+10, BN+15, and PPMetals by a NYS DOH certified laboratory. One (1) sample in the Isopropyl tank area will be analyzed for Isopropyl Alcohol. Field analysis will be conducted for ground water pH, temperature, conductivity and dissolved oxygen. Well cuttings (soil removed during well installation) will be drummed and sampled for disposal analysis. A survey of well elevations will be conducted to determine ground water flow direction. The recommended well locations are indicated on Figure 3.



#### 7.0 **COST**

The following is an estimate of the cost to conduct the Recommended Sampling Plan. The actual cost to conduct the site investigation will be dependent on actual site conditions.

		<u>Activity</u>	<b>Estimated Cost</b>
1.	Soil	Sampling (assume 2 days)	
	1.1	GeoProbe Contractor	\$ 3,400
	1.2	Sampling Personnel	2,400
	1.3	Field Equipment and Sample Supplies	900
	1.4	Sample Analysis (includes QA/QC samples)	23,600 <sup>1</sup>
		Subtotal-Soil Sampling	\$30,300
2.	Mon	itoring Well Installation (assume 2 days)	
	2.1	Well Installation(six wells)	\$ 8,400
	2.2	Hydrogeologist Oversight	1,200
	2.3	Field Equipment	600
	2.4	Survey Well-Elevations and Perform In-Well Testing	2,000
	2.5	Well Cuttings Analysis and Disposal	$3,000^2$
		Subtotal-Monitoring Well Installation	\$15,300
3.	Grou	and Water Sampling	
	3.1	Sampling Personnel	\$1,300
	3.2	Field Equipment & Sample Supplies	500
	3.3	Sample Analysis (includes QA/QC samples)	3,800¹
	3.4	Downgradient Receptors	<u>1,000</u>
		Subtotal-Ground Water Sampling	\$6,600
4.	Data	Evaluation/ReportPreparation	\$5,000
5.	Proje	ect Management (5%)	\$2,800
6.	Addi	tional Activities Approved by Dexter (i.e., meetings)	As Needed
		<b></b>	

#### Notes:

1 - Laboratory cost based on standard turnaround of 3 weeks. Laboratory turnaround can be expedited for the following surcharges: 2 weeks- 10%, 1 week- 25%, and 3-4 days- 50%.

**Total Estimated Cost** 

2 – Cost provided for budgeting purpose. Well cuttings disposal costs will depend on quantity of soil generated and disposal classification as non-hazardous according to the EPA RCRA regulations.



\$60,000

### 8.0 SCHEDULE

The following schedule is anticipated to conduct the Recommended Sampling Plan.

The logistics of conducting the on-site activities will be coordinated with Dexter Chemical Corp.

	<b>Activity</b>	Weeks from Authorization			
1.	Schedule Subcontractors and Apply for Permits	0			
2.	Monitoring Well Installation and Soil Sampling	2			
3.	Ground Water Sampling and Survey Well Elevations	4			
4.	Receive Soil Sample Results	6			
5.	Receive Ground Water Sample Results	8			
6.	Evaluate Data and Prepare Report	11-13			

This schedule can be expedited by 2-3 weeks by paying premium rates for sample analysis by the certified laboratory.





TABLE 1

## Dexter Chemical Corporation Summary of Volatile Organic Results For Ground Water

Sample ID	1994 NYSDEC	ISB-1-GW	ISB-2-GW	ISB-3-GW	FB-11-18	TB-11-18
Lab Sample Number	Ground Water	32219	32220	32221	32222	32223
Sampling Date	Standards/Criteria	11/18/97 - ug/l	Committee of the Commit	11/18/97	11/18/97	11/18/97
Units	ug/i	<u>i ugyr</u>	ug/l.	ug/l	ug/l	ug/l +
VOLATILE COMPOUNDS						
Chloromethane	NS	ND	ND	ND	ND	ND
Bromomethane	NS	ND	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND	ND
Chloroethane	50	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND
Trichlorofluoromethane	NS	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene VO79	NS	62	2.7	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	- 5	ND	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND	ND
Bromodichloromethane	NS	ND	ND	- ND	ND	ND
1,2-Dichloropropane しいもろ	5	19	6.1	ND	ND	ND
cis-1,3-Dichloropropene	NS	ND	ND	ND	ND	ND
Trichloroethene	5	ND	1.6	ND	ND	ND
Dibromochloromethane	50	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NS	ND	ND	ND	ND	ND
Benzene	0.7	76	3.6	31	ND	ND
trans-1,3-Dichloropropene	NS	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	NS	ND	ND	ND	ND	ND
Bromoform	NS	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	2	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND
Toluene	5	52	17	ND	ND	ND
Chlorobenzene U037	5	130	17	5200	ND	ND :
Ethylbenzene	5	94	• 34	100	ND	ND
Xylene (Total)	5	730	120	390	ND	ND :
Total Confident Conc. VOAs (s)		1163	204	5721	0	0
Total Estimated Conc. VOA TICs (s)		1939	1033	2770	0	0

- Results above 1994 NYSDEC Ground Water Standards/Criteria

ND - None Detected

NS - No Standard

ISB - Interior Soil Boring (819 Edgewater Road Plant)

FB - Field Blank

TB - Trip Blank



TABLE 2

### **Dexter Chemical Corporation** Summary of Base/Neutral Extractable Organics Results For Ground Water

Sample ID Lab Sample Number	1994 NYSDEC Ground Water	ISB-1-GW 32219	ISB-2-GW 32220	ISB-3-GW 32221	FB-11-1 32222
Sampling Date	Standards/Criteria	11/18/97	11/18/97	11/18/97	11/18/9
Jnits	→ ug/l		ugЛ	ug/l	ug/l
BASE NEUTRALS					
N-Nitrosodimethylamine	NS	ND	ND	ND	ND
bis(2-Chloroethyl) ether	NS NS	ND	ND	ND	ND
1,3-Dichlorobenzene ()07/	5	ND	ND	260	ND ND
1,3-Dichlorobanzono	5	ND	ND	2000	ND
1,4-Dichlorobenzene UO12	4.7	28	ND	320	ND
1,2-Dichlorobenzene 0070 bis(2-chloroisopropyl) ether	NS	ND ND	ND	ND	ND
N-Nitroso-di-n-propylamine	NS	ND	ND	ND ND	ND
Hexachloroethane	NS NS	ND	ND	ND	ND
Nitrobenzene	5	ND	ND ND	ND	ND
	50	ND	ND	ND ND	ND
Isophorone	NS	ND	ND ND	ND	ND
bis(2-Chloroethoxy)methane	5	32	AND AND CONTRACTOR SERVICES	1300	ND
1,2,4-Trichlorobenzene	10	140	32 ND	66	ND ND
Naphthalene	NS	ND	ND ND	ND	ND
Hexachlorobutadiene	NS NS	ND	ND ND	ND ND	ND ND
Hexachlorocyclopentadiene	NS NS	ND	ND ND	ND ND	ND ND
2-Chloronaphthalene	50	ND ND	ND ND	ND ND	ND ND
Dimethylphthalate		i	ND ND	ND ND	ND
Acenaphthylene	20	ND			i
2,6-Dinitrotoluene -	5	ND	ND	ND	ND
Acenaphthene	20	ND	ND	ND	ND
2,4-Dinitrotoluene Diethylphthalate — VO & &	NS	ND	ND	- ND	ND
Dietnylphthalate 20000	50	160	ND	33	ND
4-Chlorophenyl-phenylether	NS	ND I	ND	ND	ND
Fluorene	50	ND	ND	ND	ND
N-Nitrosodiphenylamine	NS NS	ND	ND	ND	ND
4-Bromophenyl-phenylether	NS	ND	ND	ND	ND
Hexachlorobenzene	0.35	ND	- ND	ND	ND
Phenanthrene	50	ND	ND	ND	ND
Anthracene	50	ND	ND	ND	ND
Di-n-butylphthalate	50	ND	ND	ND	ND
Fluoranthene	50 50	ND	ND	ND	ND
Pyrene Bonzidino	50	ND	ND	ND	ND
Benzidine	NS 50	ND	ND	ND	ND ND
Butylbenzylphthalate	50	ND 1	ND	ND	ND ND
3,3'-Dichlorobenzidine	NA 0.000	ND	ND	ND	
Benzo(a)anthracene	0.002 0.002	ND ND	ND ND	ND ND	ND ND
Chrysene	50	1	ND ND		ND ND
bis(2-Ethylhexyl)phthalate Di-n-octylphthalate	50 50	ND ND	ND	ND ND	ND ND
Benzo(b)fluoranthene	0.002	ND ND	ND ND	ND ND	ND
Benzo(k)fluoranthene	0.002	ND	ND	ND	ND
Benzo(a)pyrene	0.002	ND	ND	ND	ND ND
Indeno(1,2,3-cd)pyrene	0.002	ND	ND ND	ND ND	ND ND
	50	ND	ND	ND ND	ND
Dibenz(a,h)anthracene	5	ND ND	ND ND	ND ND	ND ND
Benzo(g,h,i)perylene Total Confident Conc. BN (s)	<u> </u>	360	32	3979	0
Total Estimated Conc. BN TICs (s)	<del>-                                    </del>	6160	8290	14530	0

- Results above 1994 NYSDEC Ground Water Standards/Criteria
ND - None Detected
NS - No Standard
NA - Standard not available for this constituent

J - Compounds present below laboratory quantitation limits ISB - Interior Soil Boring (879 Edgewater Road Plant)

FB - Field Blank



## **Dexter Chemical Corporation Summary of Total Polychlorinated Biphenyls (PCBs) Results For Ground Water**

Samole IID	1994(YYS)DEC	198-1-6W	(SB-2-GW	ISB:3-GW	FB=11-18
Itala Samale Manda	Signic Water	32219	62-2/0	322221	32222
Sampling izale	SignografyOnterig	11778997	(4)/(B/97	11/48/97 4:	41/18/97
Unite	egil	907	06/)	ug/l	ug/l
TOTAL PCBs	0.1	ND	ND	ND	ND

- Results above 1994 NYSDEC Ground Water Standards/Criteria
ND - None Detected

ISB - Interior Soil Boring

## **Dexter Chemical Corporation Summary of Priority Pollutant Metal Results For Ground Water**

Sample IID Lab Sample Number	Ölesiiliji Giilejis	<u>][618</u> -14@W \$92216	322220	32227	32222
Śamplingi⊡ate Bnits	For Greatie Water and	41/18/97 00/			
	29/	3.92	NEW SERVICE		09/
PRIORITY POLLUTANT METALS		66.4	ND	ND	ND
Antimony	3	22.1	ND	ND	ND
Arsenic	*NS	18	38.7	30.5	ND
Beryllium	3	0.38	2.4	3.3	ND
Cadmium	10	ND	1.1	ND	ND
Chromium	50	58.7	54.7	66.1	ND
Copper	200	298	265	176	ND
Lead	25	935	917	499	ND
. Mercury	2	7.9	1.3	0.91	ND
Nickel	NS	48.4	58.7	69.7	ND
Selenium	_ 10	ND	11.2	ND	ND
Silver	50	1.7	2.9	1.4	ND
Thallium	4	ND	ND	- ND	ND
Zinc	300	215	1210	501	ND

- Results above 1993 NYSDEC Cleanup Criteria for Ground Water

ND - None Detected

NS - No Standard

ISB - Interior Soil Boring (819 Edgewater Road Plant)

FΒ - Field Blank

- NYSDEC 1992 Cleanup Standards listed Arsenic at 25 ug/l



## **Dexter Chemical Corporation Summary of Volatile Organic Results For Soil**

Sample ID Lab Sample Number Sampling Date Sample Depth (reet)	1994 NYSDEC Rec: Soils Gleanup Objective	+ 11/18/97 - 7-93	ISB-2 32213 11/18/97 7-81	ISB-3 33215 11/18/97 7-8'
Units	ug/kg	ug/kg	ug/kg	ug/kg
VOLATILE COMPOUNDS				
Chloromethane	1900	ND	ND	ND
Bromomethane	ND	ND ND	ND	ND ND
Vinyl Chloride	200	ND	ND ND	ND ND
Chloroethane	1900	ND ND	ND	ND
Methylene Chloride	6000	ND ND	ND ND	ND ND
Trichlorofluoromethane	ND	ND ND	ND ND	ND ND
1,1-Dichloroethene	400	ND ND	ND ND	ND ND
1,1-Dichloroethane	200	ND ND	ND	ND ND
trans-1,2-Dichloroethene	ND	ND ND	ND	ND ND
cis-1,2-Dichloroethene	ND ND	ND ND	ND ND	ND ND
Chloroform	300	ND	ND	ND ND
1,2-Dichloroethane	100	ND ND	-ND	ND ND
1,1,1-Trichloroethane	800	ND ND	ND	ND ND
Carbon Tetrachloride	600	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND ND
1,2-Dichloropropane	ND ND	ND ND	ND ND	ND
cis-1,3-Dichloropropene	ND	ND	ND ND	ND
Trichloroethene	700	ND	ND	ND
Dibromochloromethane	NA	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND
Benzene	60	ND	ND	ND
trans-1,3-Dichtoropropene	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND
Tetrachloroethene	1400	ND	ND	ND
1,1,2,2-Tetrachloroethane	600	ND	ND	ND
Toluene	1500	ND	ND	ND
Chlorobenzene	1700	ND	ND	260000 —
Ethylbenzene	5500	3100	ND	19000
Xylene (Total)	1200	26000	ND	79000
Total Confident Conc.		29100	0	358000
Total Estimated Conc. VOA TICs (s)		1809000	1218000	3030000



- Detection Limits above 1994 NYSDEC Rec. Soil Cleanup Objective

- No Standard for Individual Contaminant

ND - None Detected

ISB - Interior Soil Boring (819 Edgewater Road Plant)



## Dexter Chemical Corporation Summary of Base/Neutral Extractable Organic Results For Soil

Sample ID	1994 NYSDEC	ISB-1	ISB-2	ISB-3	HO-1	HO-2	HO-3
Lab Sample Number	Rec. Soil.	32211	32212	33214	33216	32217	32218
Sampling Date	Cleanup	11/18/97	11/18/97	:11/18/97	11/18/97	11/18/97	11/18/97
Sampling Depth (feet)	Objective	7-9	1-1.5	3-4'	3434	4-6	4-6'
Units	ug/kg .	ug/kg	ug/kg	ug/kg:	ug/kg	ug/kg	ug/kg
BASE NEUTRALS				1			Ì
N-Nitrosodimethylamine	NS	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	NS	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1600	ND	30J	1300J	ND	ND	ND
1,4-Dichlorobenzene	8500	1200J	43J	2800J	ND	ND	ND
1.2-Dichlorobenzene	7900	4600	290J	4500	ND	ND	ND ND
bis(2-chloroisopropyl) ether	NS	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	NS	ND	ND	ND	ND	ND	ND
Hexachloroethane	NS	ND	ND	ND	ND	ND	ND
Nitrobenzene	200	ND	ND	ND	ND	ND	ND
	4400	ND	ND	ND	ND ND	ND	ND
Isophorone	NS	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	3400	ł.	; –		ND ND	ND ND	· ND
1,2,4-Trichlorobenzene Nachthalene	13000	18000 28000	320	6100	5600	510	620
Hexachlorobutadiene	NS	ND	ND	520 ND	ND	ND	ND
	NS NS	ND ND	ND ND	ND ND	ND	ND	ND
Hexachlorocyclopentadiene	i	1	i	1	ND	!	3
2-Chloronaphthalene	NS 2000	ND	ND ND	ND	ND	ND	ND
Dimethylphthalate	2000	ND		ND		ND	ND
Acenaphthylene	41000	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	1000	ND	ND	ND	_ND	ND	ND
Acenaphthene	50000	400	ND ND	ND	270 .	ND	90J
2,4-Dinitrotoluene	NS 7400	ND	ND	ND	ND	ND	ND
Diethylphthalate	7100	1800J	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND
Fluorene	50000	400	ND	ND	220	ND	190
N-Nitrosodiphenylamine	NS	ND	ND	_ND	ND	ND	ND
4-Bromophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	410	ND	ND	ND	ND	ND	ND ND
Phenanthrene	50000	1500	28J	ND	600	150	1100
Anthracene	50000	89J	ND	ND	ND	ND	81J
Di-n-butylphthalate	8100	ND	ND	ND	ND	ND	ND
Fluoranthene	50000	390	٥.	110J	110J	190	660
Pyrene	50000	360	45	130J	140J	220	520
Benzidine	: NS	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	50000	ND	110	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NA	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	224	210	40	ND	ND	160	380
Chrysene	400	110J	31J	ND	ND	120	870
bis(2-Ethylhexyl)phthalate	50000	1200J	530	ND	ND	ND	ND
Di-n-octylphthalate	50000	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	1100	: ND	40J	ND	ND	140	ND
Benzo(k)fluoranthene	1100	ND	18J	ND	ND	66J	ND
Benzo(a)pyrene	61	ND	ND	ND	ND	100	180
Indeno(1,2,3-cd)pyrene	3200	ND	ND	ND ,	ND	57J	150J
Dibenz(a,h)anthracene	14	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	50000	ND	ND	ND	ND	51J	150J
Total Confident Conc. BN (s)		53860	4286	11120	6690	1590	4520
Total Estimated Conc. BN TICs (s)		2130000	354500	10900	369000	226000	336000

- Results above 1994 NYSDEC Rec. Soil Cleanup Objective

ND - None Detected

NS - No Standard for Individual Contaminant

TIC - Tentatively Identified Compounds

- The result is less than detection limit, but greater than zero

ISB - Interior Soil Boring (879 Edgewater Road Plant)

HO - Heating Oil (819 Edgewater Road Court Yard)



# Dexter Chemical Corporation Summary of Total Polychlorinated Biphenyls (PCBs) Results For Soil

Sample ID	1984 INNSDES	ISBA	(SB-2	ISB-3
Lais Sample Municer	Res Soli Glesnigs	3 <u>2</u> 244	62242	32214.7
Sampling Date	Objedine	44718897	41746997	11/18/97.
Sample Deptis	(Silòsiuse(S)	749	1-1-5	3-4!
Units	(Mil/16)	mg/Kg	119739	mg/kg
TOTAL PCBs	10	ND	ND	ND

- Results above 1994 NYSDEC Rec. Soil Cleanup Objective (Subsurface)

ND

- None Detected

ISB

- Interior Soil Boring (819 Edgewater Plant)

## **Dexter Chemical Corporation Summary of Priority Pollutant Metal Results For Soil**

Sample ID	1994 NYSDEC	to the transfer of the Principle of	ISB-2	ISB-3
Lab Sample Number : ***********************************	Rec. Soil	32211	32212	
Sampling Date 1. 1	Cleanup	11/18/97		11/18/97
Sample Depth Sample Depth	Objective	7-9	+ 1.1°1.5°	3-4'
Units	mg/kg	mg/kg	mg/kg	mg/kg
PRIORITY POLLUTANT METALS				
Antimony	SB	12.4	ND	ND
Arsenic	7.5 or SB	5.8	2	3.1
Beryllium	0.16 or SB	0.23	0.52	0.47
Cadmium	1 or SB	0.44	ND	ND
Chromium	10 or SB	18.6	19	16.1
Copper	25 or SB	194	17.7	26
Lead -	*SB	569	21.3	47.8
Mercury	0.1	0.64	0.06	0.19
Nickel	13 or SB	14.2	17.2	14.2
Selenium	2 or SB	ND	ND	ND
Silver	SB	0.46	ND	ND
Thallium	SB	ND	ND	ND
Zinc	20 or SB	111	49.3	72.9

- Results above 1994 NYSDEC Rec. Soil Cleanup Objective

ND - None Detected

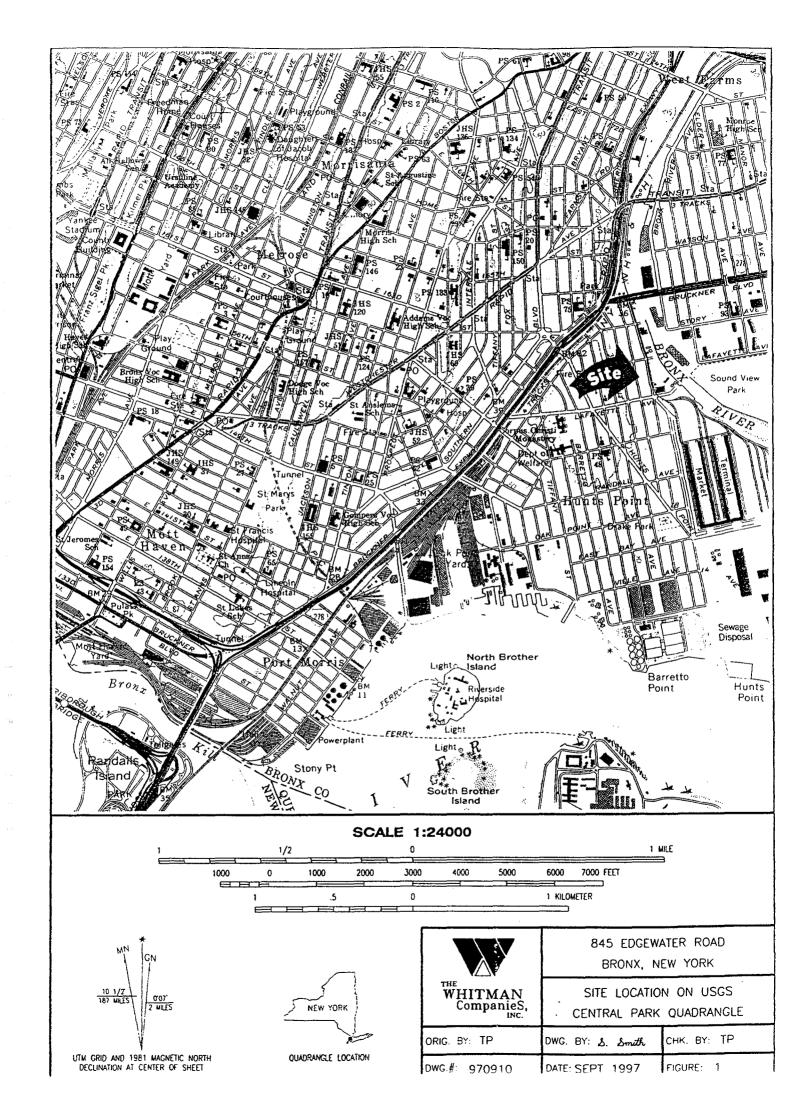
NS - No Standard

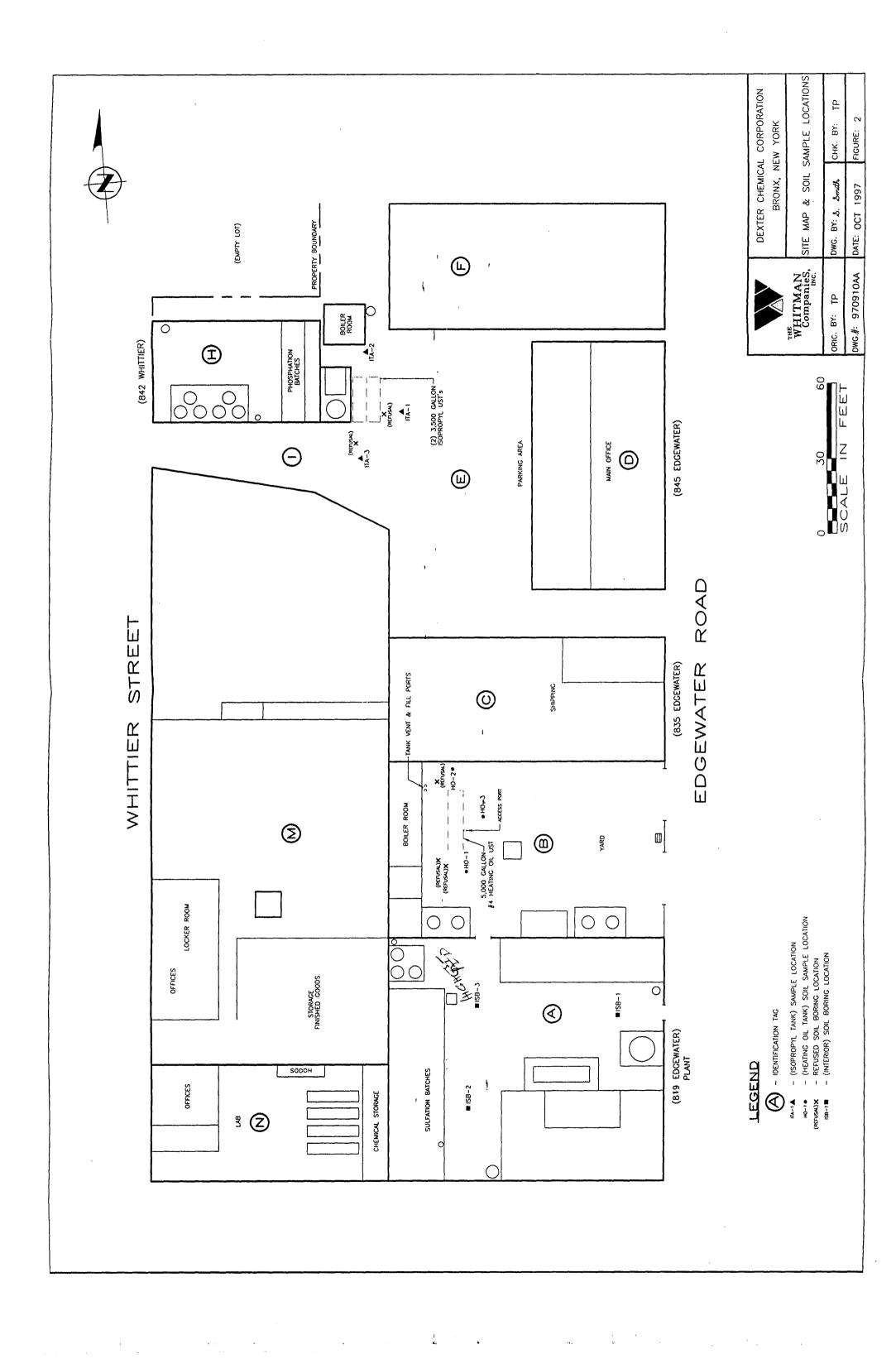
- Interior Soil Boring (819 Edgewater Road Plant) ISB

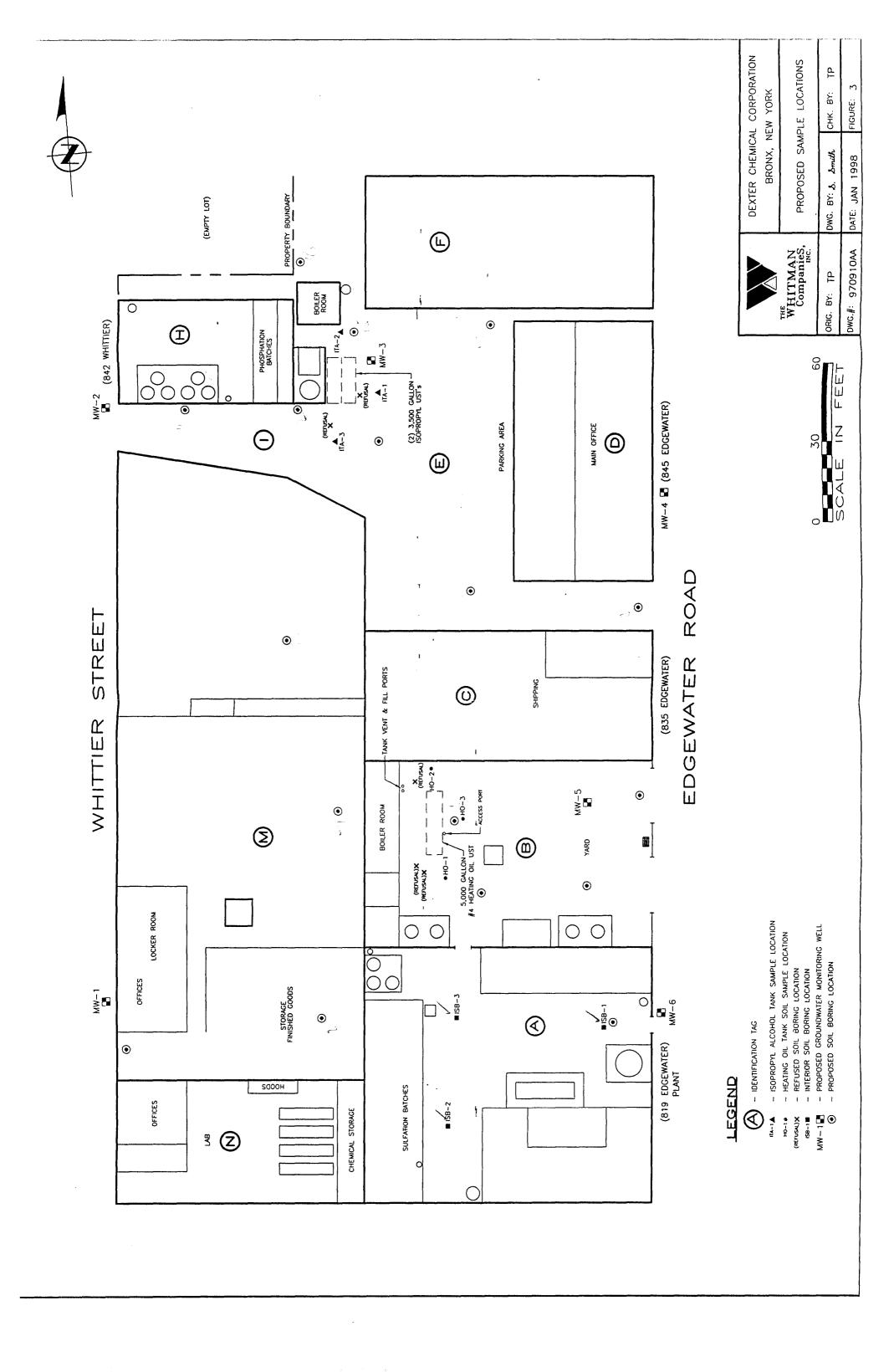
SB - Site Background

\*Lead - Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.









ATTACHMENT 1
SOIL BORING LOGS



CLIENT:	DE	XTER	СНЕМІ	CAL		LOG	OF	BOR	NG	No. ISB-1
PROJEC	CT Nº.	9709	10	SITE L	OCATION: BRONX, NY			SHEE	r 1 OF	1
DRILLING Co. M&R SOIL INVESTIGATION DRILLER BOB FORSHAW  DRILLING METHOD GEOPROBE  HOLE DIAMETER 3 INCHES  SAMPLER TYPE 2 INCH DIAMETER DIRECT PUSH SAMPLER  DATE DRILLED 11/18/97 GEOLOGIST GARY WEISSBERGER  TOTAL DEPTH 9 FEET DEPTH TO WATER 4.36 FEET					THE WHITMA Compani					
ОЕРТН (FEET)	LABORATORY SAMPLE INTERVAL	<u></u>	RECOVERY DA	GRAPHIC LOG		IL DESCRIPTIO	N			MAXIMUM PID READINGS (ppm)
_				4, 4, 4						
<u> </u>					0.5'-1.5' GREY SILT AND	) SAND				0.0
-2- -2- -3-					1.5'-6' BLACK SILT, CIN DEBRIS. MINOR RESIDUAL		RAGMEN	NTS AND		178
4 5 6				4	4.36' APPROXIMATE GROU	JNDWATER LEV	ÆL			
7 7 8	7'-9' VO+10 BN+15 PPM PCB				6'-9' BLACK GRAVEL AN	D SILT				172
_ 9 _	,				END OF BORING					89709104 DWC
<u> </u>										B970910A.DWG

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CLIENT:	DE	XTER	СНЕМІ	CAL		LOG OF BO	RING	No. ISB-2
PROJEC	CT NO.	9709	10	SITE L	OCATION: BRONX, NY	SHEET 1 OF 1		
DRILLING HOLE DIA	METHO AMETER	0D GI 3 2 INC	EOPROE _INCHE H DIAM	BE S ETER DII	ON DRILLER BOB FORSHAW  RECT PUSH SAMPLER  GIST GARY WEISSBERGER		THE WH	HITMAN companieS, inc.
TOTAL D	7				TO WATER 4.8 FEET			
DEPTH (FEET)	LABORATORY SAMPLE INTERVAL	SAMPLE No.	1.	GRAPHIC LOG	SOIL DESCRIPTION			MAXIMUM PID READINGS (ppm)
				4,44	0-0.5' CONCRETE			0.0
- 1 - - - 2 - -	1'-1.5' BN+15 PPM/PCB			d.	0.5'-3' BLACK SILT AND	CLAY WITH MINOR GRAVE	:L	114
-3- -4-					3'-5.5'_BLACK GRAVEL A		20.2	
				. • •	4.8' APPROXIMATE GROUP	NDWATER LEVEL		
- 6 - - 7 - - 8 - - 8 -	7'-8' VO+10				5.5'-6' GREY CINDERS 6'-9' GREY SAND, GRAVE	EL AND CINDERS		0.0
- 9 -	,				END OF BORING			B970910B.DWG

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			CHEMI			LOG	UF I	DUKIN	NG I	<b>vo.</b>	ISB-3
PROJEC	T Nº.	9709	10	SITE L	OCATION: BRONX, NY			SHEET	1 OF	1	
DRILLING HOLE DIA SAMPLER DATE DR	METHOR  METER  TYPE  ILLED	3 2 INC 11/18/	OPROB INCHE H DIAM	S ETER DII GEOLOG	DRILLER BOB FORSHAW  RECT PUSH SAMPLER  GIST GARY WEISSBERGER			W/// VI	тне <b>W F</b> С	HIT om	'MAN panieS, INC.
TOTAL DI		AMPLII			TO WATER 4.96 FEET		·				
ОЕРТН (FEET)	ABORATORY SAMPLE INTERVAL	SAMPLE No.	1	GRAPHIC	SO	IL DESCRIPTION	l			Ρ	MAXIMUM ID READINGS (ppm)
				4,4,4	0-0.5' CONCRETE					0.0	
-1 -2 -3 -4 -5	3'-4' BN+15 PPM PCB				4.96' APPROXIMATE GROU	JNDWATER LEVE				108	
<del>~</del>					5'-6' GREY SILT, GRAVEI	. AND CINDERS	>		1	ы	
- 6 - - 7 - - 8 - - 8 -	7'-8' VO+10				6'-9' BLACK CINDERS W	ITH SILT AND S	SAND			640	
- 9 -	,				END OF BORING						970910C.DWG

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CLIENT: DEXTER CHEMICAL						_OG OF	BORING	No. HO-1
PROJEC	T Nº.	9709	10	SITE L	OCATION: BRONX, NY		SHEET 1 OF	1
DRILLING HOLE DIA SAMPLER	METHO AMETER TYPE_	OD GE 3 2 INC 11/18/	EOPROB _INCHE H_DIAM	BE S ETER DI	N DRILLER BOB FORSHAW  RECT PUSH SAMPLER  SIST GARY WEISSBERGER		THE WI	HITMAN CompanieS, INC.
ОЕРТН (FEET)	ABORATORY SAMPLE INTERVAL	SAMPLE No.	1.	GRAPHIC LOG	SOIL DES	CRIPTION		MAXIMUM PID READINGS (ppm)
	2	<u> </u>		V : 4 . 4	0-0.5' CONCRETE	- <del></del>	<del></del>	0.0
- 1 - - 2 -					0.5'-3' BLACK CLAY, SILT AND	SAND		84
-3- -	3'-4' BN+15			, ,	3'-4' GREY SILT, GRAVEL AND	CINDERS		148
- 4					4'-9' GREY GRAVEL, SILTS AND OTHER DEBRIS  NOTE: SOIL WET AT APPROXIMATED OF BORING		CINDERS AND	33
								B970910D.DWG

						<u></u>		
CLIENT:	DE	XTER (	CHEMI	CAL	LO	G OF	BORING	No. HO-2
PROJEC	T Nº.	9709	10	SITE L	OCATION: BRONX, NY		SHEET 1 O	F 1
DRILLING HOLE DIA SAMPLER	METHO  METER  TYPE  LLED	D GE 3 2 INCI 11/18/	OPROE INCHE H DIAM	BE S ETER DIF	NDRILLER_BOB_FORSHAW  RECT_PUSH_SAMPLER  SISTGARY_WEISSBERGER		THE W	HITMAN CompanieS, INC.
		AMPLI		TΛ				
ОЕРТН (FEET)	ABORATORY SAMPLE INTERVAL		RECOVERY IN INCHES		SOIL DESCRIPTION		MAXIMUM PID READINGS (ppm)	
				4,4,4	0-0.5' CONCRETE			0.0
_ 1 _					0.5'-1' TAN SILT			0.0
				4 4 4	1'-1.5' CONCRETE FRAGMENTS			0.0
_ 2 _			<u> </u>		1.5'-2.5' WHITE AND GREEN CLAY			0.0
_					2.5'-3' METAL SLAG		<del></del>	0.0
<u> </u>					3'-3.5' BROWN SILT	0.0		
-					3.5'-5.5' BLACK CINDERS AND CO	ENTS	143	
- 4 - - - 5 -	- 4'~6'							
_	BN+15			D	5.5'-7.5' GREY GRAVEL, SILTS AND	CINDERS		114
- 6 - - - 7 -					NOTE: SOIL WET AT APPROXIMATLY	6'-7'		
— — 8 —					7.5'-8.5' GREY SILT AND CLAY			67
 9					8.5'-12' GREY SILT, CINDERS AND	GRAVEL V	WITH DEBRIS	23
-10-								
- 11 -	,	!						
<u> </u>					END OF BORING			
		-						
								B970910E.DWG

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CLIENT: DEXTER CHEMICAL						LOG OF BORING	No. HO-3	
PROJEC	CT NO.	9709	10	SITE L	OCATION: BRONX, NY	SHEET 1 OF 1		
DRILLING HOLE DIA SAMPLER	METHO  AMETER  TYPE  ILLED	DGI 3 2_INC 11/18/	EOPROE _INCHE H DIAM /97	BE S ETER DII	ON DRILLER BOB FORSHAW  RECT PUSH SAMPLER  GIST GARY WEISSBERGER	THE W ]	HITMAN CompanieS, INC.	
	S	AMPLII	NG DA	λTA				
DEPTH (FEET)	LABORATORY SAMPLE INTERVAL	SAMPLE No.	RECOVERY IN INCHES	GRAPHIC LOG	so	IL DESCRIPTION	MAXIMUM PID READINGS (ppm)	
				4,4,4			0.0	
- 1 2 3	4'-6' BN+15				3'-6' BLACK CINDERS W CHIPS	TITH COAL FRAGMENTS AND WOOD  SILT WITH GLASS AND WOOD  ROXIMATLY 6'-7'	167	
_ _ 9 _								
10 11					9'-12' GREY SILT AND C	GRAVEL	0.0	
- 12 -  					END OF BORING		B970910F.DWG	

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CLIENT:	DEXTER	СНЕМІ	CAL	LOG OF BORING	No. ITA-1	
PROJECT N	ıº. 9709	910	SITE L	OCATION: BRONX, NY SHEET 1 OF	1	
ORILLING ME HOLE DIAMET SAMPLER TYP	HOD <u>G</u> ER <u>3</u> PE <u>2 INC</u> 0 <u>11/18</u>	EOPROB INCHE CH_DIAM	BE S ETER DIF	THE WISSBERGER	HITMAN CompanieS, INC.	
	SAMPLI	ING DA	TA			
DEPTH (FEET)	SAMPLE No.	RECOVERY IN INCHES	GRAPHIC LOG	SOIL DESCRIPTION	MAXIMUM PID READINGS (ppm)	
			4,4,4	0-0.5' CONCRETE	0.0	
-1				0.5'-9' BROWN SILT WITH MINOR GRAVEL AND BRICK FRAGMENTS  NOTE: SOIL WET AT APPROXIMATLY 6'-7'	0.0	
9				END OF BORING	B970910G.DWG	

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CLIENT:	DE	XTER (	СНЕМІ	CAL		LOG OF BORING No. ITA-2			
PROJEC	CT Nº.	9709	10	SITE L	OCATION: BRONX, NY	SHE	EET 1 OF 1		
DRILLING HOLE DIA SAMPLER	METHO  AMETER  TYPE  HILLED	D GE 3 2 INCT	OPROB INCHE H DIAM	S ETER DIF	N DRILLER BOB FORSHAW  RECT PUSH SAMPLER  SIST GARY WEISSBERGER		THE WHITMAN CompanieS, INC.		
	S	AMPLII	NG DA	TA					
DEPTH (FEET)	ABORATORY SAMPLE INTERVAL	SAMPLE No.	RECOVERY IN INCHES	GRAPHIC LOG	SO	MAXIMUM PID READINGS (ppm)			
				4,4,4	0-0.5' CONCRETE		0.0		
1					0.5'-1.5' BLACK GRAVEL	WITH CONCRETE FRAGMENT	TS 0.0		
			· .	<b>3</b>	1.5'-2' FINE TAN SAND		0.0		
- 2 - -			-		2'-3' GREY SILT AND CLE FRAGMENTS	2'-3' GREY SILT AND CLAY WITH GRAVEL AND BRICK			
- 3 - 				000	3'-4' BLACK SILT WITH	0.0			
— 4 — — — 5 — —				, <b>6</b> •	4'-6' GREY SILT AND CL	0.0			
— 6 — —				; , , , , , , , , , , , , , , , , , , ,	6'-7' BLACK SILT WITH NOTE: SOIL WET AT APPR	GRAVEL COXIMATLY 6'-7'	28		
7  8 					7'-9' GREY SILT WITH M	INOR SAND AND GRAVEL	36		
<del></del> 9					9'-12' GREY SILT AND (	CLAY	18		
<del></del> 10									
<u> </u>									
-12-					END OF BORING				
<u> </u>							B970910H.DWG		

CLIENT:	DE.	XTER	CHEMI	CAL		LOC OF BODI	NC No ITA 3	
					OCATIONS DOONY NY	LOG OF BORING No. ITA-3		
				<del></del>	OCATION: BRONX, NY	SHEET	1 OF 1	
DRILLING HOLE DIA SAMPLER	METHO  AMETER  TYPE  ILLED	D GI 3 2 INC 11/18	EOPROE _INCHE H DIAM /97	S S ETER DI	DRILLER BOB FORSHAW  RECT PUSH SAMPLER  GIST GARY WEISSBERGER		THE WHITMAN CompanieS, INC.	
	S	AMPLII	NG DA	TΑ				
DEPTH (FEET)	ABORATORY SAMPLE INTERVAL	SAMPLE No.	RECOVERY IN INCHES	GRAPHIC LOG	SO	IL DESCRIPTION	MAXIMUM PID READINGS (ppm)	
				4,44,4			0.0	
<u> </u>	<u> </u>		<u> </u>		0.5'-3' GREY SILT		0.0	
- 2 - -								
— 3 —				2 2 2 0 0	3'-6' DARK GREY GRAVE	L, SAND AND SILT	0.0	
 _ 4				000	•			
<u> </u>					N.			
- 5 <del>-</del>				0 0 0				
 _ 6 _				200				
				0.	6'-7.5' BLACK SAND AN NOTE: SOIL WET AT APPI		16.1	
- 7 <del>-</del>			ļ <u>.</u>	0				
 - 8			ļ	o o	7.5'-9' GREY GRAVEL AN	ND SILT	15.8	
				0 0				
– 9 –					9'-12' BLACK SILT AND	GRAVEL	6.8	
- 10 -								
1 1								
<del>-</del> 11	,			. • *				
- 12 <del>-</del>				•	END OF BORING			
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			ļ	1			B970910J.DWG	

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79/89

5-4

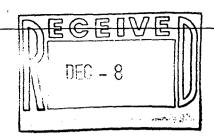
ATTACHMENT 2

LABORATORY DATA



# ENVIROTECH RESEARCH, INC.

777 New Durham Road Edison, New Jersey 08817 Tel: (732) 549-3900 Fax: (732) 549-3679



December 4, 1997

The Whitman Companies, Inc. 44 West Ferris Street
East Brunswick, NJ 08816

Attention: Dr. Ira Whitman

Re: Job No. Z339 - Dexter Chemical

Dear Dr. Whitman:

Enclosed are the results you requested for the following sample(s) received at our laboratory on November 19, 1997:

<u>Lab No.</u>	Client ID	Analysis Required
32211	ISB-1_7-9	PP VOA+10, PP BN+15
		PCBs, PP Metals
32212	ISB-2_1-1.5	PP BN+15, PCBs
		PP Metals
32213	ISB-2_7-8	PP VOA+10
32214	ISB-3_3-4	PP BN+15, PCBs
		PP Metals
32215	ISB-3_7-8	PP VOA+10
32216	HO-1	PP BN+15
32217	HO-2	PP BN+15
32218	HO-3	PP BN+15
32219	ISB-1-GW	PP VOA+10,PP BN+15
		PCBs, PP Metals
32220	ISB-2-GW	PP VOA+10, PP BN+15
		PCBs, PP Metals
32221	ISB-3-GW	PP VOA+10, PP BN+15
		PCBs, PP Metals
		,

# ENVIROTECH RESEARCH, INC.

<u>Lab No.</u>	Client ID	Analysis Required
32222	FB-11-18	PP VOA+10, PP BN+15
32223	TB-11-18	PCBs, PP Metals PP VOA+10

An invoice for our services is also enclosed. If you have any questions please contact your Project Manager, Robert McGrady, at (732) 549-3900.

Very truly yours,

Michael J. Urban Laboratory Manager

# Analytical Methodology Summary

#### Volatile Organics:

188

Water samples are analyzed for volatile organics by purge and trap GC/MS as specified in EPA Method 624. Drinking water samples are analyzed by EPA Methods 502.2 and 524.2. Solid samples are analyzed for priority pollutant volatile organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8240B. Water samples are analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by GC-PID as specified in EPA Methods 502.2 and 602. Solid samples are analyzed for BTEX as specified in EPA Method 8020A.

#### Acid and Base/Neutral Extractable Organics:

Water samples are analyzed for acid and/or base/neutral extractable organics by GC/MS in accordance with EPA Method 625. Solids are analyzed for acid and/or base/neutral extractable priority pollutants as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8270B.

#### GC/MS Nontarget Compound Analysis:

Analysis for nontarget compounds is conducted, upon request, in conjunction with GC/MS analyses by EPA Methods 624, 625, 8240B and 8270B. Nontarget compound analysis is conducted using a forward library search of the EPA/NIH/NBS mass spectral library of compounds at the greatest apparent concentration (10% or greater of the nearest internal standard) in each organic fraction (15 for volatile, 15 for base/neutrals and 10 for acid extractables).

#### Organochlorine Pesticides and PCBs:

Water samples are analyzed for organochlorine pesticides and PCBs by dual column gas chromatography with electron capture detectors as specified in EPA Method 608. Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8080A.

#### Total Petroleum Hydrocarbons:

Water samples are analyzed for petroleum hydrocarbons by I.R. using EPA Method 418.1. Solid samples are prepared for analysis by soxhlet extraction consistent with the March 1990 N.J. DEP "Remedial Investigation Guide" Appendix A, page 52, and analyzed by U.S. EPA Method 418.1

#### Metals Analysis:

648

9.14

Metals analyses are performed by any of four techniques specified by a Method Code provided on each data report page, as follows:

- P Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP)
- A Flame Atomic Absorption
- F Furnace Atomic Absorption
- CV Manual Cold Vapor (Mercury)

Water samples are digested and analyzed using EPA methods provided in "Methods for Chemical Analysis of Water and Wastewater" (EPA 600/4-79-020). Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition); samples are digested according to Method 3050 "Acid Digestion of Soil, Sediments and Sludges."

Specific method references for ICP analyses are water Method 200.7 and solid Method 6010. Mercury analyses are conducted by the manual cold vapor technique specified by water Method 245.1 and solid Method 7471. Other specific Atomic Absorption method references are as follows:

			st_Method	Solid Tes	
Element		Flame	Furnace	Flame	Furnace
Aluminum	* <del>-</del>	202.1	202.2	7020	
Antimony		204.1	204.2	7040	7041
Arsenic			206.2		7060
Barium		208.1		7080	
Beryllium		210.1	210.2	7090	7091
Cadmium		213.1	213.2	7130	7131
Calcium		215.1		7140	
Chromium,	Total	218.1	218.2	7190	7191
Chromium,	(+6)	218.4	218.5	7197	7195
Cobalt		219.1	219.2	7200	7201
Copper		220.1	220.2	7210	
Iron		236.1	236.2	7380	
Lead		239.1	239.2	7420	7421
Magnesium		242.1		7450	
Manganese		243.1	243.2	7460	
Nickel		249.1	249.2	7520	
Potassium		258.1		7610	
Selenium			270.2		7740
Silver		272.1	272.2	7760	
Sodium		273.1		7770	
Tin		283.1	283.2	7870	~ <b>-</b>
Thallium		279.1	279.2	7840	7841
Vanadium		286.1	286.2	7910	7911
Zinc		289.1	289.2	7950	7 7 1 1
2110		203.1	209.2	1330	

#### Cyanide:

Water samples are analyzed for cyanide using EPA Method 335.2. Cyanide is determined in solid samples as specified in the EPA Contract Laboratory Program IFB dated July 1988, revised February 1989.

#### Phenols:

Water samples are analyzed for total phenols using EPA Method 420.1. Total phenols are determined in solid samples by preparing the sample as outlined in the EPA Contract Laboratory Program IFB for cyanide, followed by a phenols determination using EPA Method 420.1.

Cleanup of Semivolatile Extracts:

Upon request Method 3611 Alumina Column Cleanup and/or Method 3650 Acid-Base Partition Cleanup are performed to improve detection limits by the removal of saturated hydrocarbon interferences.

Hazardous Waste Characteristics:

Samples for hazardous waste characteristics are analyzed as specified in the U.S. EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition). Specific method references are as follows:

Ignitability - Method 1020

Corrosivity - Water pH Method 9040 Soil pH Method 9045

Reactivity - Chapter 7, Section 7.3.3 and 7.3.4 respectively for hydrogen cyanide and Thydrogen sulfide release

Toxicity - TCLP Method 1311

#### Miscellaneous Parameters:

Additional analyses performed on both aqueous and solid samples are in accordance with methods published in the following references:

- Test Methods for Evaluating Solid Wastes, SW-846 3rd Edition, November 1986.
- Standard Methods for the Examination of Water and Wastewater, 17th Edition.
- Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, 1979.

#### ORGANIC DATA REPORTING QUALIFIERS

- ND The compound was not detected at the indicated concentration.
- J Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified quantitation limit but greater than zero. The concentration given is an approximate value.
- B The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

# INORGANIC DATA REPORTING QUALIFIERS (SW-846 METHODS ONLY)

- ND The compound was not detected at the indicated concentration.
- B Reported value is less than the Method Detection Limit but greater than or equal to the Instrument Detection Limit.
- E The reported value is estimated because of the presence of interference. See explanatory note in the Nonconformance Summary if the problem applies to all of the samples or on the individual Inorganic Analysis Data Sheet if the problem is isolated.
- M Duplicate injection precision not met on the Furnace Atomic Absorption analysis.
- N The spiked sample recovery is not within control limits.
- S The reported value was determined by the Method of Standard Additions (MSA).
- \* Duplicate Analysis is not within control limits.
- W Post digestion spike for Furnace Atomic Absorption analysis is out of control.
- + Correlation coefficient for MSA is less than 0.995.
- M Column Method Qualifiers
- P Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP).
- A Flame Atomic Absorption Spectroscopy (FAA).
- F Graphite Furnace Atomic Absorption Spectroscopy (GFAA).
- CV Cold Vapor Atomic Absorption Spectroscopy.

Client ID: ISB-1\_7-9 Lab Sample No: 32211 Site: Dexter Chemical Lab Job No: Z339

Matrix: SOIL Date Sampled: 11/18/97 → Date Received: 11/19/97 Level: HIGH

Date Analyzed: 11/20/97 Sample Weight: 4.0 g Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 500.0

GC Column: DB624
Instrument ID: VOAMS3.i
Lab File ID: c6287.d % Moisture: 22

- (MASA)	Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
198	Chloromethane	ND	1600
Takes:	Bromomethane	ND	1600
	Vinyl Chloride	ND	1600
weja	Chloroethane	ND	1600
	Methylene Chloride	ND	1600
1000	Trichlorofluoromethane	ND	1600
	1,1-Dichloroethene	ND	1600
isi	1,1-Dichloroethane	ND	1600
- 1160	trans-1,2-Dichloroethene	, ND	1600
	cis-1,2-Dichloroethene	ND	1600
Yold	Chloroform	ND	1600
	1,2-Dichloroethane	ND	1600
Pport.	1,1,1-Trichloroethane	ND	1600
i eriog	Carbon Tetrachloride	ND	1600
	Bromodichloromethane	ND	1600
-98	1,2-Dichloropropane	ND	1600
	cis-1,3-Dichloropropene	ND	1600
.a <sup>n</sup> ic	Trichloroethene	ND	1600
	Dibromochloromethane	ND	1600
195	1,1,2-Trichloroethane	ND	1600
- meta	Benzene	ND	1600
	trans-1,3-Dichloropropene	ND	1600
- AR	2-Chloroethyl Vinyl Ether	ND ND	1600
	Bromoform	ND	1600
:14	Tetrachloroethene	ND	1600 1600
100fm	1,1,2,2-Tetrachloroethane Toluene	ND	1600
	Chlorobenzene	ND	1600
1. 1.00.00	Ethylbenzene	3100	1600
	Xylene (Total)	26000	1600
- trin	11/20110 (10001)	20000	2000

Client ID: ISB-1\_7-9
Site: Dexter Chemical

Lab Sample No: 32211 Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97
Date Analyzed: 11/20/97

Matrix: SOIL Level: HIGH

GC Column: DB624

Sample Weight: 4.0 g

Instrument ID: VOAMS3.i

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 500.0

Lab File ID: c6287.d

% Moisture: 22.4

# VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 8240B

COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1. Unknown Alkane 2. Unknown Hydrocarbon 3. C8H140 Unknown 4. C10H22 Alkane 5. C10H22 Alkane 6. C11H24 Alkane 7. Trimethylbenzene isomer 8. C10H20 Hydrocarbon 9. C11H24 Alkane 10. Decahydronaphthalene isomer 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27.	13.39 14.40 14.73 14.91 15.40 15.71 15.89 16.14 16.62 16.76	60000 100000 200000 300000 530000 170000 120000	
28. 29. 30.			

TOTAL ESTIMATED CONCENTRATION 1809000

Client ID: ISB-1 7-9 Site: Dexter Chemical Lab Sample No: 32211 Lab Job No: Z339

Date Sampled: 11/18/97 ■ Date Received: 11/19/97 Date Extracted: 11/20/97
Date Analyzed: 11/24/97

Matrix: SOIL Level: LOW

Sample Weight: 30.0 g Extract Final Volume: 2.0 ml

GC Column: DB-5

Dilution Factor: 10.0

Instrument ID: BNAMS4.i Lab File ID: u8720.d

% Moisture: 22

Prop.	<u>Parameter</u>	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
September 1997	N-Nitrosodimethylamine bis (2-Chloroethyl) ether 1,3-Dichlorobenzene Uo7 1,4-Dichlorobenzene Uo7 1,2-Dichlorobenzene Uo7 bis (2-chloroisopropyl) ether		4200 4200 4200 4200 4200 4200 4200
1986 1199	N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone bis(2-Chloroethoxy)methane	ND ND ND ND ND	4200 4200 4200 4200 4200
****	1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene Hexachlorocyclopentadiene	18000 28000 ND ND	4200 210 4200 4200
ंडल	2-Chloronaphthalene Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	ND ND ND ND 400	4200 4200 210 4200 210
	Acenaphthene 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene	ND 1800 J ND 400	4200 4200 4200 4200 210
	N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Phenanthrene	ND ND ND	4200 4200 4200 210
- 1966 - 1966	Anthracene Di-n-butylphthalate Fluoranthene Pyrene Benzidine	89 J ND 390 360 ND	210 4200 210 210 8500
	Butylbenzylphthalate	ND	4200

Client ID: ISB-1\_7-9 Site: Dexter Chemical

Lab Sample No: 32211 Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97 Matrix: SOIL Level: LOW

Sample Weight: 30.0 g Extract Final Volume: 2.0 ml

Dilution Factor: 10.0

Date Received: 11/19/97
Date Extracted: 11/20/97
Date Analyzed: 11/24/97
GC Column: DB-5
Instrument ID: BNAMS4.i
Lab File ID: u8720.d % Moisture: 22

) (1966)	<u>Parameter</u>	Analytical Results Units: ug/kg <u>(Dry Weight)</u>	Quantitation Limit <u>Units: uq/k</u> g
. 1297	3,3'-Dichlorobenzidine	ND	8500
100	Benzo(a)anthracene	210 J	210
	Chrysene	110 J	210
10,57%	bis(2-Ethylhexyl)phthalate	1200 J	4200
	Di-n-octylphthalate	ND	4200
- Diego	Benzo(b)fluoranthene	ND	210
	Benzo(k)fluoranthene	ND	210
2	Benzo(a)pyrene	ND ND	210
:649	Indeno(1,2,3-cd)pyrene	, <b>N</b> D	210
	Dibenz(a,h)anthracene-	. ND	210
2008	Benzo(g,h,i)perylene	ND	210

Client ID: ISB-1 7-9 Site: Dexter Chemical

Lab Sample No: 32211 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97 Date Extracted: 11/20/97 Date Analyzed: 11/24/97

Level: LOW

Matrix: SOIL

Sample Weight: 30.0 g Extract Final Volume: 2.0 ml

GC Column: DB-5

Dilution Factor: 10.0

Instrument ID: BNAMS4.i Lab File ID: u8720.d

% Moisture: 22.4

# SEMI-VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 8270B

			_
COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1. C10H22 Alkane	11.79		
2. Unknown Alkane	12.29	l	
3. C10H22 Alkane	12.40	ı	
4. Unknown Alkane	12.83	,	
5. Ethylmethylbenzene isomer/Unknown alka	13.20		<del></del>
6. Unknown Cycloalkane	13.35		
7. Unknown Alkane	13.57	110000	
8. Ethyldimethylbenzene isomer	14.01	100000	
9. Unknown Alkane	14.12	140000	
10. Unknown	14.20	90000	
11. Tetradecanoic acid	20.14	160000	
12. Hexadecanoic acid	21.58	300000	
13. Octadecanoic acid	22.87	140000	
14. Unknown	23.31	220000	
15. Unknown	23.39	160000	
16.			
) <del>- / •</del>			
10			
1.7.			
20.			
21.			
22.			
1 24.			
25			
25. 26.			
27.			
20.			
25			
30			
l	l l		· }

TOTAL ESTIMATED CONCENTRATION

2130000

Client ID: ISB-1 7-9 Site: Dexter Chemical Lab Sample ID: 32211 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97 Date Extracted: 11/20/97

Level: LOW 30 g Sample Weight:

Date Analyzed: 11/24/97

10.0 ml Extract Final Volume:

GC Column: DB-608

Dilution Factor: 1.0

Instrument ID: PESTGC1.i

% Moisture: 22

Matrix: SOIL

Lab File ID: xr018351.d

# ORGANOCHLORINE PCBs - GC/ECD METHOD 8080

<u>Parameter</u>	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
Aroclor-1016	ND	86
Aroclor-1221	ND	86
Aroclor-1232	ND	86
Aroclor-1242	ND	86
Aroclor-1248	ND	86
Aroclor-1254	ND	86
* Aroclor-1260	ND "	86

Client ID: ISB-1 7-9 Lab Sample No: 32211

Site: Dexter Chemical Lab Job No: Z339

Date Sampled: 11/18/97 Matrix: SOLID
Date Received: 11/19/97 Level: LOW

Date Received: 11/19/97 Level: LOW % Moisture: 22.4

#### METALS ANALYSIS

	Analytical Result	Instrument		
•	Units: mg/kg	Detection		
<u>Analyte</u>	(Dry Weight)	Limit_	Qual	<u>M</u>
Antimony	12.4	1.4	N	P
Arsenic	5.8	0.88		P
Beryllium	0.23	0.077	В,	P
Cadmium	0.44	0.10	В	P
Chromium	18.6	0.44		P
Copper	194	1.0		P
Lead	569	0.57		P
Mercury	0.64	0.021		CV
Nickel	14.2	0.34		P
Selenium	ND	1.2		P
Silver	0.46	0.31	В	P
Thallium	ND	0.98		P
Zinc	111	0.98	*	P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report) M Column - Method Code (See Section 2 of Report)

Client ID: ISB-2 1-1.5 Site: Dexter Chemical

Lab Sample No: 32212

Lab Job No: Z339

Date Sampled: 11/18/97

Date Received: 11/19/97

Date Extracted: 11/20/97

Date Analyzed: 11/24/97

GC Column: DB-5

Level: LOW

Sample Weight: 30.0 g Extract Final Volume: 2.0 ml

Dilution Factor: 2.0

Instrument ID: BNAMS4.i \*\* Lab File ID: u8721.d

% Moisture: 20

Matrix: SOIL

ing i	Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
- - 1947 <b>%</b>	3,3'-Dichlorobenzidine	ND	1600
· ·	Benzo(a)anthracene	40 J	41
1,500,60	Chrysene	31 J	41
1900	bis(2-Ethylhexyl)phthalate	530 J	820
	Di-n-octylphthalate	ND	820
***	Benzo(b) fluoranthene	40 J	41
	Benzo(k) fluoranthene	18 J	41
	Benzo(a)pyrene	, ND	41
	Indeno(1,2,3-cd)pyrene	. ND	41
《演響》	Dibenz(a,h)anthracene-	ND	41
1968)	Benzo(g,h,i)perylene	ND	41

Client ID: ISB-2\_1-1.5 Site: Dexter Chemical Lab Sample No: 32212 Lab Job No: Z339

Date Sampled: 11/18/97 m Date Received: 11/19/97 Date Extracted: 11/20/97 ■ Date Analyzed: 11/24/97

Matrix: SOIL Level: LOW

Sample Weight: 30.0 g

GC Column: DB-5
Instrument ID: BNAMS4.i

Extract Final Volume: 2.0 ml

Lab File ID: u8721.d

Dilution Factor: 2.0 % Moisture: 19.9

# SEMI-VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 8270B

COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1. Octanoic acid 2. Unknown 3. Unknown 4. Nonylphenol isomer 5. Nonylphenol isomer 6. Nonylphenol isomer 7. Nonylphenol isomer 8. Nonylphenol isomer 9. Hexadecanoic acid 10. Octadecanoic acid 11. Unknown 12. Unknown 13. Unknown 14. Unknown 15. Unknown 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.	14.94 15.89 16.04 19.79 19.85 19.91 20.09 20.15 21.55 22.88 23.37 23.46 24.06 28.34 28.45	11000 7600 8000 11000	

TOTAL ESTIMATED CONCENTRATION

354500

Client ID: ISB-2\_1-1.5 Site: Dexter Chemical

Lab Sample ID: 32212 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97 Date Extracted: 11/20/97 - Date Analyzed: 11/23/97

Level: LOW Sample Weight: 30 g

10.0 ml Extract Final Volume:

Dilution Factor: 1.0

GC Column: DB-608

\*\*Instrument ID: PESTGC1.i Lab File ID: xr018313.d

% Moisture: 20

Matrix: SOIL

# ORGANOCHLORINE PCBs - GC/ECD METHOD 8080

44	<u>Parameter</u>	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
	Aroclor-1016 Aroclor-1221	ND ND	84 84
ne p	Aroclor-1232	ND	84
	Aroclor-1242 Aroclor-1248	- ND	84 84
	Aroclor-1254 Aroclor-1260	ND ND	84

Client ID: ISB-2 1-1.5 Lab Sample No: 32212

Site: Dexter Chemical Lab Job No: Z339

Date Sampled: 11/18/97 Matrix: SOLID
Date Received: 11/19/97 Level: LOW

% Moisture: 19.9

#### METALS ANALYSIS

<u>Analyte</u>	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection <u>Limit</u>	Qual	<u>M</u>
Antimony	-ND	1.3	N	P
Arsenic	2.0	0.85		P
Beryllium	0.52	0.075		P
Cadmium	. ND	0.100		P
Chromium	19.0	0.42		P
Copper	17.7	1.00		P
Lead	21.3	0.55		P
Mercury	0.06	0.021		CV
Nickel	17.2	0.32		P
Selenium	ND	1.2		P
Silver	ND	0.30		P
Thallium	ND	0.95		P
Zinc	49.3	0.95	*	P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report) M Column - Method Code (See Section 2 of Report)

- Client ID: ISB-2 7-8 Site: Dexter Chemical

Lab Sample No: 32213 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97 Matrix: SOIL Level: HIGH

Date Analyzed: 11/20/97
GC Column: DB624
Instrument ID: VOAMS3.i

Sample Weight: 4.0 g Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 250.0

Lab File ID: c6288.d

% Moisture: 29

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
Chloromethane	ND	880
Bromomethane	ND	880
Vinyl Chloride	ND	880
Chloroethane	ND	880
Methylene Chloride	ND	880
Trichlorofluoromethane -	ND	880
1,1-Dichloroethene	ND	880
1,1-Dichloroethane	ND	880
trans-1,2-Dichloroethene	ND	880
cis-1,2-Dichloroethene	ND	880
Chloroform	ND	880
1,2-Dichloroethane	ND	880
1,1,1-Trichloroethane	ND ND	880 880
Carbon Tetrachloride  Bromodichloromethane	ND ND	880
1,2-Dichloropropane	ND ND	880
cis-1,3-Dichloropropene	ND	880
musical constant	ND	880
Dibromochloromethane	ND	880
1,1,2-Trichloroethane	ND	880
Benzene	ND	880
trans-1,3-Dichloropropene	ND	880
2-Chloroethyl Vinyl Ether	ND	880
Bromoform	ND	880
Tetrachloroethene	ND	880
1,1,2,2-Tetrachloroethane	ND	880
Toluene	ND	880
Chlorobenzene	ND	880
Ethylbenzene	ND	880
Xylene (Total)	ND	880

Client ID: ISB-2 7-8 Site: Dexter Chemical

Lab Sample No: 32213 Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97
Date Analyzed: 11/20/97

Level: HIGH Sample Weight: 4.0 g

GC Column: DB624

Instrument ID: VOAMS3.i \*\* Lab File ID: c6288.d

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 250.0

% Moisture: 29.3

Matrix: SOIL

# VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 8240B

COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1. Unknown Hydrocarbon 2. C10H22 Alkane 3. Unknown Alkane 4. C10H20 Hydrocarbon 5. Unknown Hydrocarbon 6. Unknown 7. C10H20 Hydrocarbon 8. C10H18 Hydrocarbon 9. Unknown 10. Decahydronaphthalene isomer 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25.	14.42 14.52 14.69 14.85 15.47 15.71 16.15 16.77 16.95 17.46	79000 70000 160000 120000 200000 120000 80000	
27. 28. 29. 30.			

TOTAL ESTIMATED CONCENTRATION

1218000

Client ID: ISB-3 3-4 » Site: Dexter Chemical Lab Sample No: 32214 Lab Job No: Z339

Date Sampled: 11/18/97 \*\* Date Received: 11/19/97 Date Extracted: 11/20/97 Date Analyzed: 11/24/97

Level: LOW

Sample Weight: 30.0 g Extract Final Volume: 2.0 ml

Dilution Factor: 10.0

GC Column: DB-5
Instrument ID: BNAMS4.i

% Moisture: 15

Matrix: SOIL

Lab File ID: u8726.d

	<u>Parameter</u>	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
166	N-Nitrosodimethylamine bis(2-Chloroethyl)ether	ND ND	3900 3900
Torsen.	1,3-Dichlorobenzene	1300 J	3900
	1,4-Dichlorobenzene	2800 J	3900
(MO)	1,2-Dichlorobenzene	4500	3900
ev as	bis(2-chloroisopropyl)ether	ND	3900
	N-Nitroso-di-n-propylamine	ND	3900
34	Hexachloroethane	, <b>N</b> D	3900
	Nitrobenzene	ND	3900
1.094	Isophorone	ND	3900
400%	bis(2-Chloroethoxy)methane	ND	3900
	1,2,4-Trichlorobenzene	61000	3900
心悟	Naphthalene	520	190
	Hexachlorobutadiene	ND	3900
- 99el	Hexachlorocyclopentadiene	ND	3900
1999	2-Chloronaphthalene	ND ND	3900 3900
1000	Dimethylphthalate Acenaphthylene	ND	190
-35mi	2,6-Dinitrotoluene	ND	3900
	Acenaphthene	ND	190
2004	2,4-Dinitrotoluene	ND	3900
- Sept.	Diethylphthalate	ND	3900
	4-Chlorophenyl-phenylether	ND	3900
- No rights	Fluorene	ND	190
	N-Nitrosodiphenylamine	ND	3900
125.54	4-Bromophenyl-phenylether	ND	3900
1969	Hexachlorobenzene	ND	3900
	Phenanthrene	ND	190
2008	Anthracene	ND	190
	Di-n-butylphthalate	ND	3900
	Fluoranthene	110 J	190
15.869	Pyrene	130 J	190
>-95	Benzidine	ND	7800
	Butylbenzylphthalate	ND	3900

Lab Sample No: 32214 Client ID: ISB-3 3-4

Site: Dexter Chemical Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97
Date Extracted: 11/20/97
Date Analyzed: 11/24/97
GC Column: DB-5
Instrument ID: BNAMS4.i Matrix: SOIL Level: LOW

Sample Weight: 30.0 g Extract Final Volume: 2.0 ml

Dilution Factor: 10.0

% Moisture: 15

Lab File ID: u8726.d

<u>Parameter</u>	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
3,3%-Dichlorobenzidine	ND	7800
Benzo(a)anthracene	ND	190
Chrysene	ND	190
bis(2-Ethylhexyl)phthalate	ND	3900
Di-n-octylphthalate	ND	3900
Benzo(b)fluoranthene	ND	190
Benzo(k)fluoranthene	ND	190
Benzo(a)pyrene	ND	190
Indeno(1,2,3-cd)pyrene	ND	- 190
Dibenz(a,h)anthracene	ND	190
Benzo(g,h,i)perylene	ND	190

Client ID: ISB-3\_3-4 Site: Dexter Chemical

Date Sampled: 11/18/97 ■ Date Received: 11/19/97 Date Extracted: 11/20/97 Tate Analyzed: 11/24/97

GC Column: DB-5
Instrument ID: BNAMS4.i Lab File ID: u8726.d

Lab Sample No: 32214 Lab Job No: Z339

Matrix: SOIL Level: LOW

Sample Weight: 30.0 g

Extract Final Volume: 2.0 ml

Dilution Factor: 10.0

% Moisture: 14.9

# SEMI-VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 8270B

COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1. Unknown Alkane 2. Trichlorobenzene isomer 3.	14.10 15.53	3500 7400	
5			
7. 8. 9. 10.			
12. 13.			
15. 16.			
17. 18. 19. 20.			
22.			
24. 25. 26. 27.			
28. 29. 30.			

TOTAL ESTIMATED CONCENTRATION

10900

Client ID: ISB-3\_3-4 Site: Dexter Chemical

Lab Sample ID: 32214 Lab Job No: Z339

Date Sampled: 11/18/97 ■ Date Received: 11/19/97 Date Extracted: 11/20/97
Date Extracted: 11/20/97
GC Column: DB-608
Instrument ID: PESTGC1.i

Level: LOW Sample Weight: 30 g

Extract Final Volume: 10.0 ml

Dilution Factor: 1.0

Lab File ID: xr018314.d

% Moisture: 15

Matrix: SOIL

# ORGANOCHLORINE PCBs - GC/ECD METHOD 8080

ન લેક	Analytical Results Units: ug/kg	Quantitation Limit
<u>Parameter</u>	(Dry Weight)	<u>Units: ug/kg</u>
Aroclor-1016	ND	79
Aroclor-1221	ND	79
Aroclor-1232	ND	79
Aroclor-1242	ND	79
* Aroclor-1248	ND	79
Aroclor-1254	ND	79
** Aroclor-1260	ND	79

Client ID: ISB-3 3-4 Site: Dexter Chemical Lab Sample No: 32214

Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97

Matrix: SOLID Level: LOW

% Moisture: 14.9

# METALS ANALYSIS

<u>Analyte</u>	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	_Qual_	<u>M</u>
Antimony	ND	1.2	N	P
Arsenic	3.1	0.80		P
Beryllium	0.47	0.071	В	P
Cadmium	ND	0.094		.P
Chromium	16.1	0.40		P
Copper	26.0	0.94		Р
Lead	47.8	0.52		P
Mercury	0.19	0.020		CV
Nickel	14.2	0.31		P
Selenium	ND	1.1		P
Silver	ND	0.28		Р
Thallium	ND	0.89		P
Zinc	72.9	0.89	*	P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report) M Column - Method Code (See Section 2 of Report)

Client ID: ISB-3\_7-8
Site: Dexter Chemical

Lab Sample No: 32215 Lab Job No: Z339

Date Sampled: 11/18/97

Date Received: 11/19/97

Date Analyzed: 11/20/97

Matrix: SOIL Level: HIGH

Date Analyzed: 11/20/97
GC Column: DB624

Sample Weight: 4.0 g

Instrument ID: VOAMS3.i

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 1000.0

Lab File ID: c6289.d

% Moisture: 25

-	Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
1999	Chloromethane	ND	3300
i Salah	Bromomethane	ND	3300
	Vinyl Chloride	ND	3300
59904	Chloroethane	ND	3300
	Methylene Chloride	ND	3300
-444	Trichlorofluoromethane	ND	3300
5	1,1-Dichloroethene	ND	3300
婚惠	1,1-Dichloroethane	ND	3300
	trans-1,2-Dichloroethene	ND	3300
	cis-1,2-Dichloroethene	, ND	3300
-99( <b>a</b>	Chloroform	ND	3300
,	1,2-Dichloroethane	ND	3300
14.6	1,1,1-Trichloroethane	ND	3300
•	Carbon Tetrachloride	ND	3300
190	Bromodichloromethane	ND	3300
- 186	1,2-Dichloropropane	ND	3300
	cis-1,3-Dichloropropene	ND	3300
786	Trichloroethene	ND	3300
;	Dibromochloromethane	ND	3300
11/14	1,1,2-Trichloroethane	ND	3300
+	Benzene	ND	3300
THE STATE OF	trans-1,3-Dichloropropene	ND	3300
14	2-Chloroethyl Vinyl Ether	ND	3300
	Bromoform	ND	3300
vited	Tetrachloroethene	ND	3300
	1,1,2,2-Tetrachloroethane	ND	3300
150	Toluene	ND	3300
¥	Chlorobenzene V03	260000	3300
51 <b>6%</b>	Ethylbenzene /	19000	3300
1998	Xylene (Total)	79000	3300

Client ID: ISB-3\_7-8
Site: Dexter Chemical

Lab Sample No: 32215 Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97
Date Analyzed: 11/20/97

Matrix: SOIL Level: HIGH

GC Column: DB624

Sample Weight: 4.0 g

Instrument ID: VOAMS3.i

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 1000.0

Lab File ID: c6289.d

% Moisture: 25.0

# VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 8240B

COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1. C9H18 Hydrocarbon 2. C8H140 Unknown 3. Unknown 4. Unknown Hydrocarbon 5. C11H24 Alkane 6. C10H20 Hydrocarbon 7. Benzene, 1,4-dichloro- 8. Decahydronaphthalene isomer 9. C11H22 Hydrocarbon 10. Decahydromethylnaphthalene isomer 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25.	14.42 14.73 14.85 15.47 15.70 16.15 16.35 16.78 16.97 17.46	200000 420000 270000 360000 270000	
27. 28. 29. 30.			

TOTAL ESTIMATED CONCENTRATION

3030000

Site: Dexter Chemical

Date Sampled: 11/18/97

Date Received: 11/19/97

Date Extracted: 11/20/97
Date Analyzed: 11/24/97

GC Column: DB-5
Instrument ID: BNAMS4.i

Lab File ID: u8723.d

Lab Sample No: 32216 Lab Job No: Z339

Matrix: SOIL Level: LOW

Sample Weight: 30.0 g Extract Final Volume: 2.0 ml

Dilution Factor: 10.0

% Moisture: 13

	<u>Parameter</u>	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
series Series	N-Nitrosodimethylamine bis(2-Chloroethyl)ether	ND ND	3800 3800
e rep	1,3-Dichlorobenzene 1,4-Dichlorobenzene	ND ND	3800 3800
- 66	1,2-Dichlorobenzene	ND	3800
	bis(2-chloroisopropyl)ether	ND	3800
: 	N-Nitroso-di-n-propylamine	ND	. 3800
: N	Hexachloroethane Nitrobenzene	ND ; ND	3800 3800
,	Isophorone	ND	3800
. PM	bis(2-Chloroethoxy)methane	ND ND	3800
V4809	1,2,4-Trichlorobenzene	ND	3800
	Naphthalene	5600	190
:	Hexachlorobutadiene	ND	3800
a destin	Hexachlorocyclopentadiene	ND	3800
	2-Chloronaphthalene Dimethylphthalate	ND ND	3800 3800
· 1000	Acenaphthylene	ND	190
-cyclet	2,6-Dinitrotoluene	ND	3800
. gener	Acenaphthene	270	190
799)	2,4-Dinitrotoluene	ND	3800
: 1/4/6	Diethylphthalate	ND ND	3800 3800
. 2005	4-Chlorophenyl-phenylether Fluorene	220	190
**************************************	N-Nitrosodiphenylamine	ND	3800
- 64	4-Bromophenyl-phenylether	ND	3800
	Hexachlorobenzene	ND	3800
Suga	Phenanthrene	600	190
1	Anthracene	ND ND	190 3800
***	Di-n-butylphthalate Fluoranthene	110 J	190
.57 <b>30</b> 0	Pyrene	140 J	190
	Benzidine	ND	7600
( <b>143</b>	Butylbenzylphthalate	ND	3800

Site: Dexter Chemical

Lab Sample No: 32216

Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97
Date Extracted: 11/20/97
Date Analyzed: 11/24/97
GC Column: DB-5
Instrument ID: BNAMS4.i

Lab File ID: u8723.d

Matrix: SOIL

Level: LOW
Sample Weight: 30.0 g
Extract Final Volume: 2.0 ml

Dilution Factor: 10.0

% Moisture: 13

· · · · · · · · · · · · · · · · · · ·	<u>Parameter</u>	Analytical Results Units: ug/kg <u>(Dry Weight)</u>	Quantitation Limit <u>Units: ug/kg</u>
.0	3,3'-Dichlorobenzidine	ND	7600
548	Benzo(a) anthracene	ND	190
	Chrysene	ND	190
98 <b>98</b>	bis(2-Ethylhexyl)phthalate	ND	3800
- 2-04	Di-n-octylphthalate	ND	3800
**(0.454	Benzo(b)fluoranthene	ND	190
- +1/100	Benzo(k)fluoranthene	ND	190
	Benzo(a)pyrene	, ND	190
श्र <b>ंबं</b>	Indeno(1,2,3-cd)pyrene	, ND	190
	Dibenz(a,h)anthracene	ND	190
+64	Benzo(g,h,i)perylene	ND	190

Site: Dexter Chemical

Lab Sample No: 32216 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97 Date Extracted: 11/20/97

Date Analyzed: 11/24/97

GC Column: DB-5 Instrument ID: BNAMS4.i Lab File ID: u8723.d

Matrix: SOIL Level: LOW

Sample Weight: 30.0 g
Extract Final Volume: 2.0 ml

Dilution Factor: 10.0

% Moisture: 13.2

# SEMI-VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 8270B

COMPOUND NAME	RT	EST. CONC. ug/kg	~
1. C10H22 Alkane 2. Unknown Cycloalkane 3. C11H24 Alkane 4. C11H24 Alkane 5. C11H24 Alkane 6. C12H26 Alkane 7. C13H28 Alkane 8. Unknown Alkane 9. C13H28 Alkane 10. Unknown Alkane 11. Unknown Alkane 12. Unknown Alkane 13. Unknown Alkane 14. Unknown Alkane 15. Unknown Alkane 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.	12.81	36000 27000 40000 31000 66000 22000 19000 15000 15000 15000 19000 18000	

TOTAL ESTIMATED CONCENTRATION

369000

v 459

Site: Dexter Chemical

Lab Sample No: 32217

Lab Job No: Z339

Date Sampled: 11/18/97 Matrix: SOIL Date Received: 11/19/97

Level: LOW Sample Weight: 30.0 g

Date Extracted: 11/20/97
Date Analyzed: 11/24/97 Extract Final Volume: 2.0 ml

Dilution Factor: 5.0

GC Column: DB-5

\*\* Instrument ID: BNAMS4.i % Moisture: 21

Lab File ID: u8724.d

oniji oniji	<u>Parameter</u>	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
・ (水)	N-Nitrosodimethylamine bis(2-Chloroethyl)ether 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene bis(2-chloroisopropyl)ether N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone bis(2-Chloroethoxy)methane 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene Hexachlorocyclopentadiene 2-Chloronaphthalene Dimethylphthalate Acenaphthylene	Units: ug/kg	Limit
· · · · · · · · · · · · · · · · · · ·	Hexachlorobenzene Phenanthrene Anthracene Di-n-butylphthalate Fluoranthene Pyrene Benzidine Butylbenzylphthalate	ND ND 150 ND ND 190 220 ND ND	2100 100 100 2100 100 100 4200 2100

Site: Dexter Chemical

Lab Sample No: 32217

Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97

Date Extracted: 11/20/97

Date Analyzed: 11/24/97
GC Column: DB-5

Instrument ID: BNAMS4.i

Lab File ID: u8724.d

Matrix: SOIL Level: LOW

Sample Weight: 30.0 g

Extract Final Volume: 2.0 ml

Dilution Factor: 5.0

% Moisture: 21

्र व्याप्त क्षेत्र क्ष	Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
	<u>Falametel</u>	(DIY WEIGHT)	onico: ug/ kg
- 170%	3,3'-Dichlorobenzidine	ND	4200
×4king.	Benzo(a)anthracene	160	100
	Chrysene	120	100
1550	bis(2-Ethylhexyl)phthalate	ND	2100
	Di-n-octylphthalate	ND	2100
	Benzo(b)fluoranthene	140	100
	Benzo(k)fluoranthene	66 J	100
. Street	Benzo(a)pyrene	100 J	100
	Indeno(1,2,3-cd)pyrene	57 J	100
CENTRAL SPACE	Dibenz(a,h)anthracene-	` <b>N</b> D	100
	Benzo(g,h,i)perylene	51 J	100

Site: Dexter Chemical

Lab Sample No: 32217 Lab Job No: Z339

Matrix: SOIL Date Sampled: 11/18/97 Date Received: 11/19/97 Level: LOW

Sample Weight: 30.0 g
Extract Final Volume: 2.0 ml Date Extracted: 11/20/97

Date Analyzed: 11/24/97 Dilution Factor: 5.0

GC Column: DB-5 Instrument ID: BNAMS4.i % Moisture: 20.6

Lab File ID: u8724.d

# SEMI-VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 8270B

COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1. C10H22 Alkane 2. C10H22 Alkane 3. Unknown 4. Unknown Cycloalkane 5. Unknown Alkane 6. Unknown Alkane 7. Unknown Cycloalkane 8. Unknown Cycloalkane 9. Decahydronaphthalene isomer- 10. Unknown Cycloalkane 11. Unknown Cycloalkane 12. Unknown 13. Unknown 14. Decahydromethylnaphthalene isomer 15. C14H30 Alkane 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.	11.76 12.10 12.26 12.64 12.97 13.19 13.33 13.54 13.76 13.82 14.00 14.19 14.27 14.66 15.95	19000 14000 14000 21000 13000 12000 22000	

TOTAL ESTIMATED CONCENTRATION

226000

Site: Dexter Chemical

Lab Sample No: 32218

Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97

Date Extracted: 11/20/97
Date Analyzed: 11/24/97
GC Column: DB-5

Instrument ID: BNAMS4.i

Lab File ID: u8725.d

Matrix: SOIL Level: LOW

Sample Weight: 30.0 g Extract Final Volume: 2.0 ml

Dilution Factor: 10.0

% Moisture: 10

-76 -28	<u>Parameter</u>	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
	N-Nitrosodimethylamine	ND	3700
が発	bis(2-Chloroethyl)ether	ND	3700
	1,3-Dichlorobenzene	ND	3700
Corgin	1,4-Dichlorobenzene	ND	3700
ro-kiji	1,2-Dichlorobenzene -	ND	3700
	bis(2-chloroisopropyl)ether	ND	3700
· · · /94	N-Nitroso-di-n-propylamine	ND	. 3700
	Hexachloroethane	ND	3700
De <del>joji</del>	Nitrobenzene	ND	3700
	Isophorone	ND	3700
nikrs.	bis(2-Chloroethoxy)methane	ND	3700
	1,2,4-Trichlorobenzene	ND	3700
	Naphthalene	620	180
1799	Hexachlorobutadiene	ND	3700
	Hexachlorocyclopentadiene	ND	3700
-58	2-Chloronaphthalene	ND	3700
	Dimethylphthalate	ND	3700
49	Acenaphthylene	ND	180
-96	2,6-Dinitrotoluene	ND	3700
	Acenaphthene	90 J	180
11766	2,4-Dinitrotoluene	ND	3700
	Diethylphthalate	ND	3700
-75 <b>9#</b>	4-Chlorophenyl-phenylether	ND	3700
	Fluorene	190	180 3700
~0.098	N-Nitrosodiphenylamine	ND ND	3700
- 19g	4-Bromophenyl-phenylether Hexachlorobenzene	ND	3700
	Phenanthrene	1100	180
. less	Anthracene	81 J	180
	Di-n-butylphthalate	ND	3700
ગર્લ	Fluoranthene	660	180
.∵⁄ga	Pyrene	520	180
	Benzidine	ND	7400
(~ <del>10</del> )	Butylbenzylphthalate	ND	3700

Site: Dexter Chemical

Lab Sample No: 32218

Lab Job No: Z339

Date Sampled: 11/18/97

Date Received: 11/19/97

Date Extracted: 11/20/97
Date Analyzed: 11/24/97

GC Column: DB-5 Instrument ID: BNAMS4.i

\* Lab File ID: u8725.d

Matrix: SOIL Level: LOW

Sample Weight: 30.0 g

Extract Final Volume: 2.0 ml

Dilution Factor: 10.0

% Moisture: 10

- 945		Analytical Results Units: ug/kg	Quantitation Limit
A P	<u>Parameter</u>	(Dry Weight)	Units: ug/kg
194	3,3'-Dichlorobenzidine	ND	7400
	Benzo(a)anthracene	380	180
1	Chrysene	870	180
10	h: -/7 P+k1	ND	3700
***	Di-n-octylphthalate	ND	3700
ig	Benzo(b)fluoranthene	ND	180
	Benzo(k) fluoranthene	ND	180
74 <b>9</b>	Benzo(a)pyrene	, 180 Ј	180
	Indeno(1,2,3-cd)pyrene	150 J	180
49	Dibenz(a,h)anthracene-	ND	180
	Benzo(g,h,i)perylene	150 J	180
or the			

Site: Dexter Chemical

Lab Sample No: 32218 Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97 Date Extracted: 11/20/97

Sample Weight: 30.0 g

Extract Final Volume: 2.0 ml

Date Analyzed: 11/24/97 GC Column: DB-5

Dilution Factor: 10.0

Instrument ID: BNAMS4.i

% Moisture: 10.3

Matrix: SOIL

Level: LOW

Lab File ID: u8725.d

# SEMI-VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 8270B

COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1. C10H22 Alkane 2. Unknown Alkane 3. Unknown Alkane 4. Unknown Alkane 5. Unknown Alkane 6. Unknown Cycloalkane 7. C11H24 Alkane 8. Naphthalene, decahydro- 9. Unknown Cycloalkane 10. Ethyldimethylbenzene isomer 11. Unknown 12. Unknown Alkane 13. Ethyldimethylbenzene isomer/Unknown al 14. Decahydromethylnaphthalene 15. Unknown Alkane 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.	11.78 12.12 13.03 13.19 13.29 13.34 13.54 13.77 13.81 14.00 14.19 14.27 14.40 14.66 15.95	32000 21000 18000 23000 25000	

TOTAL ESTIMATED CONCENTRATION 336000 - Client ID: ISB-1-GW Lab Sample No: 32219 Lab Job No: Z339 Site: Dexter Chemical

Date Sampled: 11/18/97
Date Received: 11/19/97
Date Analyzed: 11/24/97
GC Column: DB624
Instrument ID: VOAMS7.i Matrix: WATER

Level: LOW
Purge Volume: 5.0 ml Dilution Factor: 5.0

Lab File ID: v5677.d

# VOLATILE ORGANICS - GC/MS METHOD 624

- cusy		Analytical Result	Method Detection Limit
***	<u>Parameter</u>	Units: ug/l	Units: ug/l
P/06	Chloromethane	ND	4.6
1.48 <b>4</b>	Bromomethane	ND	1.4
	Vinyl Chloride Chloroethane	ND ND	2.0 5.2
, e (# <b>***</b>	Methylene Chloride	ND	5.2
<b>VOIGH</b>	Trichlorofluoromethane	ND	1.2
;	1,1-Dichloroethene	ND	2.8
77578	1,1-Dichloroethane	ND	1.6
-19 <b>11</b>	trans-1,2-Dichloroethene cis-1,2-Dichloroethene	ND 62	1.5 5.0
	Chloroform	ND	1.0
i gle <b>in</b>	1,2-Dichloroethane	ND	1.1
4份礦	1,1,1-Trichloroethane	ND	1.0
	Carbon Tetrachloride	ND	0.8
2-55 <b>9</b>	Bromodichloromethane	ND	0.9
r:y-keld	1,2-Dichloropropane	19	2.3
	cis-1,3-Dichloropropene	ND	1.6
7070	Trichloroethene Dibromochloromethane	ND ND	2.0 1.2
;si	1,1,2-Trichloroethane	ND ND	2.2
	Benzene	76	1.2
· 50 W	trans-1,3-Dichloropropene	ND	1.6
1106475	2-Chloroethyl Vinyl Ether	ND	2.3
- A	Bromoform	ND	1.5
.944	Tetrachloroethene	ND	0.5
	1,1,2,2-Tetrachloroethane	ND	1.6
- 100	Toluene Chlorobenzene	52 130	0.9 0.7
: :/6598	Ethylbenzene Ethylbenzene	94	1.2
	Xylene (Total)	730	5.0
n. Aj	/ (10001)	, 5 0	

Lab Sample No: 32219 Lab Job No: Z339

Date Sampled: 11/18/97

Date Received: 11/19/97

Date Analyzed: 11/24/97

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 5.0

Instrument ID: VOAMS7.i
Lab File ID: v5677.d

# VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC.	Q
1. Ethylmethylbenzene isomer 2. Trimethylbenzene isomer 3. Ethylmethylbenzene isomer 4. Trimethylbenzene isomer 5. Isocineole/ with Ethylmethylbenzene 6. C10H14 Aromatic 7. Trimethylbenzene isomer 8. Diethylbenzene isomer 9. C10H160 Isomer 10. Camphor 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28.	15.28 15.35 15.60 15.77 15.93 16.08 16.24 16.48 17.40 18.32	ug/l ====================================	=====
29. 30.			

TOTAL ESTIMATED CONCENTRATION

1939

Lab Sample No: 32219 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97 Date Extracted: 11/20/97

Level: LOW

Matrix: (WATER

→ Date Analyzed: 11/21/97

Sample Volume: 480 ml Extract Final Volume: 1.0 ml

GC Column: DB-5

Instrument ID: BNAMS3.i Lab File ID: t4497.d

Dilution Factor: 5.0

. 364	<u>Parameter</u>	Analytical Result Units: ug/l	Method Detection Limit <u>Units: ug/l</u>
	N-Nitrosodimethylamine	ND	3.6
- 1/500	bis(2-Chloroethyl)ether	ND	6.4
1150	1,3-Dichlorobenzene	ND	18
	1,4-Dichlorobenzene	ND	18
-711	1,2-Dichlorobenzene	28	18
ī	bis(2-chloroisopropyl)ether	ND	7.2
APSE	N-Nitroso-di-n-propylamine	ND	7.7
cilcula	Hexachloroethane	. ND	12
5, 15 code.	Nitrobenzene -	, ND	7.7
** *)%	Isophorone	ND	8.8
	bis(2-Chloroethoxy)methane	ND	8.5
·14#	1,2,4-Trichlorobenzene	32	19
,	Naphthalene	140	13
100	Hexachlorobutadiene	ND	11
2 PA	Hexachlorocyclopentadiene	ND	8.4
	2-Chloronaphthalene	ND	16
199	Dimethylphthalate	ND	6.6
	Acenaphthylene	ND	10
in gill	2,6-Dinitrotoluene	ND	7.7
,	Acenaphthene	ND	14
一个种	2,4-Dinitrotoluene	ND	7.7
- <b>1</b>	Diethylphthalate 0028	160	6.0
	4-Chlorophenyl-phenylether	ND	15
r chang	Fluorene	ND	10
	N-Nitrosodiphenylamine	ND	5.7
が雑	4-Bromophenyl-phenylether	ND	10
4000	Hexachlorobenzene	ND ND	6.4
	Phenanthrene	ND	5.4
ring	Anthracene		5.7
	Di-n-butylphthalate Fluoranthene	ND ND	5.0 5.7
176		ND	3.1
v dit	Pyrene Benzidine	ND	2.6
v-09		ND	3.4
	Butylbenzylphthalate	ND	3.4

Client ID: ISB-1-GW Lab Sample No: 32219

Lab Job No: Z339 Site: Dexter Chemical

Date Sampled: 11/18/97 Matrix: WATER Level: LOW \*\* Date Received: 11/19/97

Sample Volume: 480 ml

Date Extracted: 11/20/97
Date Analyzed: 11/21/97 Extract Final Volume: 1.0 ml

Dilution Factor: 5.0

GC Column: DB-5
Instrument ID: BNAMS3.i \*\* Lab File ID: t4497.d

Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
ND	7.5
ND	4.4
ND	4.5
ND	5.9
ND	5.1
ND	3.8
ND	4.8
ND	4.2
ND	3.6
ND	4.4
ND	3.8
	Units: ug/l  ND

Lab Sample No: 32219 Lab Job No: Z339

\* Date Sampled: 11/18/97 Date Received: 11/19/97 Date Extracted: 11/20/97

Level: LOW Sample Volume: 480 ml

Matrix: WATER

Date Analyzed: 11/21/97

Extract Final Volume: 1.0 ml

Dilution Factor: 5.0

GC Column: DB-5
Instrument ID: BNAMS3.i Lab File ID: t4497.d

#### SEMI-VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 625

	<del></del>		Τ
COMPOUND NAME	RT	EST. CONC. ug/l	Q
1. Xylene isomer	10.30	220	
2. Unknown Alkane	11.53		
3. Ethylmethylbenzene isomer	12.03	180	l
4. Trimethylbenzene isomer	12.16	-	l
5. Trimethylbenzene isomer	12.55		
6. Ethylmethylbenzene isomer	12.96	330	
7. Unknown Cycloalkane	13.10	140	
8. Methylpropylbenzene isomer	13.33	200	1
9. Diethylbenzene isomer	13.40	140	
10. Unknown	13.88	300	
11. Tetramethylbenzene isomer	14.22	150	
12. Dimethylnaphthalene isomer	14.46	310	
13. Unknown	14.62	2100	l ——
14. Dimethylnaphthalene isomer	14.69	230	
14. Dimethymaphthalene isomer		-	
15. 1,1'-Biphenyl-ol isomer	18.20	930	
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TOTAL ESTIMATED CONCENTRATION

6160

Lab Sample ID: 32219 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97

Date Extracted: 11/20/97 Date Analyzed: 11/24/97

GC Column: DB-608

Instrument ID: PESTGC1.i

Matrix: WATER

Sample Volume: 500 ml Extract Final Volume:

2.5 ml

Dilution Factor: 1.0 Lab File ID: xr018350.d

#### ORGANOCHLORINE PCBs - GC/ECD METHOD 608

in it	Parameter	Analytical Results <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
O PA	Aroclor-1016	ND	0.20
نعدت	Aroclor-1221	ND	0.40
7249	Aroclor-1232	ND	0.10
gri <b>ilg</b>	Aroclor-1242	ND	0.40
	Aroclor-1248	ND	0.30
50 <b>%</b>	Aroclor-1254	ND	0.40
	Aroclor-1260	ND	0.10

Client ID: ISB-1-GW Lab Sample No: 32219

Site: Dexter Chemical Lab Job No: Z339

Date Sampled: 11/18/97 Matrix: WATER Date Received: 11/19/97 Level: LOW

### METALS ANALYSIS

<u>Analyte</u>	Analytical Result <u>Units: ug/l</u>	Instrument Detection <u>Limit</u>	<u>M</u>
Antimony	22.1	5.3	P
Arsenic	- 18.0	3.4	P
Beryllium	0.38	0.30	P
Cadmium	ЙD	0.40	P
Chromium	58.7	1.7	P
Copper _	298	4.0	P
Lead	935	2.2	P
Mercury	7.9	0.10	CV
Nickel	48.4	1.3	P
Selenium	ND	4.8	P
Silver	1.7	1.2	P
Thallium	ND	3.8	P
Zinc	215	3.8	P

M Column - Method Code (See Section 2 of Report)

Lab Sample No: 32220 Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97
Date Analyzed: 11/24/97
GC Column: DB624
Instrument ID: VOAMS7.i

Level: LOW Purge Volume: 5.0 ml

Matrix: WATER

Dilution Factor: 2.0

Lab File ID: v5678.d

- Marie	<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
-74	Chloromethane	ND	1.9
	Bromomethane	ND	0.5
- C-28	Vinyl Chloride	ND	0.8
	Chloroethane	ND	2.1
	Methylene Chloride	ND	2.1
isa.	Trichlorofluoromethane -	ND	0.5
	1,1-Dichloroethene	ND	1.1
(Appendix	1,1-Dichloroethane	ND	0.6
	trans-1,2-Dichloroethene	ND	0.6
ંત્ર	cis-1,2-Dichloroethene	. 2.7	2.0
	Chloroform	ND	0.4
-014k	1,2-Dichloroethane	ND	0.4
	1,1,1-Trichloroethane	ND	0.4
	Carbon Tetrachloride	ND	0.3
C1998	Bromodichloromethane	ND	0.4
	1,2-Dichloropropane	6.1	0.9
1984	cis-1,3-Dichloropropene	ND	0.7
:	Trichloroethene	1.6	0.8
1089	Dibromochloromethane	ND	0.5
11/4	1,1,2-Trichloroethane	ND	0.9
	Benzene	3.6	0.5
1798	trans-1,3-Dichloropropene	ND	0.6
	2-Chloroethyl Vinyl Ether	ND	0.9
- COM	Bromoform	ND	0.6
	Tetrachloroethene	2.0	0.2
্নক	1,1,2,2-Tetrachloroethane	ND	0.7
i di	Toluene	17	0.4
	Chlorobenzene	17	0.3
um <del>e</del> n	Ethylbenzene	34	0.5
	Xylene (Total)	120	2.0

Lab Sample No: 32220 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97 Date Analyzed: 11/24/97 Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 2.0

GC Column: DB624 Instrument ID: VOAMS7.i Mab File ID: v5678.d

#### VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

	T		
COMPOUND NAME	RT	EST. CONC.	Q
	ł	ug/l	
=======================================	=======	==========	====
1. Unknown	14.61	69	
2. Ethylmethylbenzene isomer	14.76	65	
3. Benzene, propyl-	15.19	61	
4. Trimethylbenzene isomer	15.35	180	
5. Ethylmethylbenzene isomer 6. Trimethylbenzene isomer	15.60	68	
6. Trimethylbenzene isomer	15.77	. 270	
7. C10H14 Aromatic	15.94	110	
8. Trimethylbenzene isomer	16.24	92	
9. ClOH14 Aromatic	16.90	52	
10. ClOH14 Aromatic	17.33	66	
11.	)		
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1 23.			
26. 27.			
27			
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TOTAL ESTIMATED CONCENTRATION

1033

Lab Sample No: 32220 Lab Job No: Z339

Matrix: WATER Date Sampled: 11/18/97 Date Received: 11/19/97
Date Extracted: 11/20/97
Date Analyzed: 11/21/97 Level: LOW

Sample Volume: 480 ml Extract Final Volume: 1.0 ml

GC Column: DB-5 Dilution Factor: 5.0

■ Instrument ID: BNAMS3.i Lab File ID: t4498.d

- 316		Analytical Result	Method Detection Limit
74100	<u>Parameter</u>	<u>Units: ug/l</u>	<u>Units: ug/l</u>
	N-Nitrosodimethylamine	ND	3.6
268	bis(2-Chloroethyl)ether	ND	6.4
e	1,3-Dichlorobenzene	ND	18
	1,4-Dichlorobenzene	ND	18
100	1,2-Dichlorobenzene	ND	18
ŧ	bis(2-chloroisopropyl)ether	ND	7.2
:199 <b>8</b>	N-Nitroso-di-n-propylamine	, ND	7.7
e Market	Hexachloroethane .	ND	12
1900	Nitrobenzene	ND	7.7
· · · · · · · · · · · · · · · · · · ·	Isophorone	ND	8.8
	bis(2-Chloroethoxy)methane	ND	8.5
K-580	1,2,4-Trichlorobenzene	32	19
	Naphthalene	ND	13
1988	Hexachlorobutadiene	ND	11
ા <b>ા</b>	Hexachlorocyclopentadiene	ND	8.4
	2-Chloronaphthalene	ND ND	16 6.6
:100	Dimethylphthalate Acenaphthylene	ND	10
7	2,6-Dinitrotoluene	ND ND	7.7
-12/6	Acenaphthene	ND	14
mini	2,4-Dinitrotoluene	ND	7.7
	Diethylphthalate	ND	6.0
: 1844	4-Chlorophenyl-phenylether	ND	15
	Fluorene	ND	10
(Miles	N-Nitrosodiphenylamine	ND	5.7
100	4-Bromophenyl-phenylether	ND	10
	Hexachlorobenzene	ND	6.4
: 91 <b>0988</b>	Phenanthrene	ND	5.4
į.	Anthracene	ND	5.7
199	Di-n-butylphthalate	ND	5.0
	Fluoranthene	ND	5.7
(100g)	Pyrene	ND	3.1
- 346	Benzidine	ND	2.6
	Butylbenzylphthalate	ND	3.4

Client ID: ISB-2-GW Lab Sample No: 32220

Site: Dexter Chemical Lab Job No: Z339

Date Sampled: 11/18/97 Matrix: WATER Date Received: 11/19/97 Level: LOW

Date Extracted: 11/20/97 Sample Volume: 480 ml

Date Analyzed: 11/21/97 Extract Final Volume: 1.0 ml

GC Column: DB-5 Dilution Factor: 5.0

Date Extracted: 11/20/97
Date Extracted: 11/20/97
Date Analyzed: 11/21/97

GC Column: DB-5
Instrument ID: BNAMS3.i

Lab File ID: t4498.d

i <sub>line</sub>		Analytical Result	Method Detection Limit
neli	Parameter	Units: ug/l	Units: ug/l
reig	3,3'-Dichlorobenzidine	ND	7.5
4969	Benżo(a)anthracene	ND	4.4
4909	Chrysene	ND	4.5
Suite.	bis(2-Ethylhexyl)phthalate	ND	5.9
	Di-n-octylphthalate	ND	5.1
ries	Benzo(b)fluoranthene	ND	3.8
	Benzo(k)fluoranthene	ND	4.8
rapp.	Benzo(a)pyrene	, ND	4.2
	Indeno(1,2,3-cd)pyrene	ND	3.6
-94	Dibenz(a,h)anthracene-	ND	4.4
1654	Benzo(g,h,i)perylene	ND	3.8

Lab Sample No: 32220 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97 Date Extracted: 11/19/97
Date Extracted: 11/20/97
Date Analyzed: 11/21/97
GC Column: DB-5
Instrument ID: BNAMS3.i Matrix: WATER Level: LOW

Sample Volume: 480 ml

Extract Final Volume: 1.0 ml

Lab File ID: t4498.d

Dilution Factor: 5.0

#### SEMI-VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 625

1. Unknown Alkane 2. Unknown Alkane 3. Unknown 4. Unknown Cycloalkane 5. Unknown 6. Unknown Alkane 7. Unknown 8. Unknown Alkane 7. Unknown 8. Unknown Alkane 7. Unknown 7.	COMPOUND NAME	RT	EST. CONC.	Q
28. 29. 30.	1. Unknown Alkane 2. Unknown 3. Unknown 4. Unknown Cycloalkane 5. Unknown 6. Unknown Alkane 7. Unknown 8. Unknown Alkane 9. Unknown Alkane 10. Unknown Alkane 11. Unknown Cycloalkane 12. Unknown 13. Decahydronapthalene isomer 14. Unknown 15. Unknown 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28.	11.87 12.03 12.40 12.47 12.75 12.80 12.88 12.96 13.06 13.10 13.32 13.53 13.84	1000 490 490 700 400 420 380 1000 450 430 680 450 490 430	

TOTAL ESTIMATED CONCENTRATION

8290

Lab Sample ID: 32220 Lab Job No: Z339

Date Sampled: 11/18/97

Date Received: 11/19/97
Date Extracted: 11/20/97
Date Analyzed: 11/23/97

GC Column: DB-608
Instrument ID: PESTGC1.i

Matrix: WATER

2.5 ml

Sample Volume: 500 ml Extract Final Volume: Dilution Factor: 1.0 Lab File ID: xr018309.d

#### ORGANOCHLORINE PCBs - GC/ECD METHOD 608

<u>Parameter</u>	Analytical Results <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
Aroclor-1016	ND	0.20
Aroclor-1221	ND	0.40
Aroclor-1232	ND	0.10
Aroclor-1242	ND	0.40
Aroclor-1248	ND	0.30
Aroclor-1254	ND	0.40
Aroclor-1260	ND	0.10

Client ID: ISB-2-GW Lab Sample No: 32220 Site: Dexter Chemical Lab Job No: Z339

Date Sampled: 11/18/97 Matrix: WATER Date Received: 11/19/97 Level: LOW

#### METALS ANALYSIS

<u>Analyte</u>	Analytical Result <u>Units: ug/l</u>	Instrument Detection <u>Limit</u>	<u>M</u>
Antimony	ND	5.3	P
Arsenic	38.7	3.4	P
Beryllium	2.4	0.30	P
Cadmium	1.1	0.40	P
Chromium	54.7	1.7	P P
Copper	265	4.0	Ρ.
Lead	917	2.2	P
Mercury	1.3	0.10	CV
Nickel	58.7	1.3	P
Selenium	11.2	4.8	P
Silver	2.9	1.2	P
Thallium	ND	3.8	Р
Zinc	1210	3.8	P

M Column - Method Code (See Section 2 of Report)

Lab Sample No: 32221 Lab Job No: Z339

Date Sampled: 11/18/97 \*\* Date Received: 11/19/97 Date Analyzed: 11/24/97 Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 50.0

GC Column: DB624
Instrument ID: VOAMS7.i Lab File ID: v5681.d

	<u>Parameter</u>	Analytical Result Units: ug/l	Method Detection Limit <u>Units: ug/l</u>
199	Chloromethane	ND	46
44億	Bromomethane	ND	14
	Vinyl Chloride	ND	20
re-e	Chloroethane	ND	52
	Methylene Chloride	ND	52
2 <b>60</b>	Trichlorofluoromethane	ND	12
THE	1,1-Dichloroethene	ND	28
	1,1-Dichloroethane	ND	16
35 <b>33</b>	trans-1,2-Dichloroethene	ND	15
	cis-1,2-Dichloroethene	ND	50
7996	Chloroform	ND	10
- 1929	1,2-Dichloroethane	ND	11
1000	1,1,1-Trichloroethane	ND	10
- 1000	Carbon Tetrachloride	ND ND	8.0
	Bromodichloromethane	ND	9.5 23
1	1,2-Dichloropropane cis-1,3-Dichloropropene	ND	16
: - 2186	Trichloroethene	ND	20
YME	Dibromochloromethane	ND	12
1	1,1,2-Trichloroethane	ND	22
,	Benzene	31	12
<20%g	trans-1,3-Dichloropropene	ND	16
1966	2-Chloroethyl Vinyl Ether	ND	23
- 346	Bromoform	ND	15
	Tetrachloroethene	ND	5.0
	1,1,2,2-Tetrachloroethane	ND	16
-	10146116	ND	9.0
Ť	Chlorobenzene	5200	7.0
***	Ethylbenzene	100	12
Y Y	Xylene (Total)	390	50

Lab Sample No: 32221 Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97
Date Analyzed: 11/24/97

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 50.0

Instrument ID: VOAMS7.i

Lab File ID: v5681.d

# VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC.	Q
		ug/l	
	=======	==========	=====
1. Unknown Alkane	14.37		
2. Unknown Alkane	15.56	190	
3. Benzene, 1,4-dichloro-	16.20	1700	
4. Benzene, 1,2-dichloro-	16.60	360	
5. Trichlorobenzene isomer	18.40	260	
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TOTAL ESTIMATED CONCENTRATION

2770

Lab Sample No: 32221 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97

Level: LOW

Matrix: WATER

Sample Volume: 480 ml Extract Final Volume: 1.0 ml

Dilution Factor: 10.0

Date Extracted: 11/20/97
Date Extracted: 11/20/97
Date Analyzed: 11/24/97
GC Column: DB-5
Instrument ID: BNAMS3.i Lab File ID: t4551.d

- 944		Analytical Result	Method Detection Limit
i ya in	Parameter	<u>Units: ug/l</u>	<u>Units: ug/l</u>
ंगेल्ड्रे	N-Nitrosodimethylamine	ND	7.3
	bis(2-Chloroethyl)ether	ND	13
1986	1,3-Dichlorobenzene	260	36
	1,4-Dichlorobenzene	2000	36
2009	1,2-Dichlorobenzene	320	35
	bis(2-chloroisopropyl)ether	ND	14
744	N-Nitroso-di-n-propylamine	ND	<sup></sup> 15
£160	Hexachloroethane	ND	25
	Nitrobenzene	, ND	15
1909	Isophorone	ND	18
	bis(2-Chloroethoxy)methane	ND	17
Links	1,2,4-Trichlorobenzene	1300	38
	Naphthalene	66	26
- 965	Hexachlorobutadiene	ND	22
-44 <b>6</b>	Hexachlorocyclopentadiene	ND	17
	2-Chloronaphthalene	ND	32
÷	Dimethylphthalate	ND	13
	Acenaphthylene	ND	21
-98 <b>4</b>	2,6-Dinitrotoluene	ND	15
	Acenaphthene	ND	29
495	2,4-Dinitrotoluene	ND	15
. 10 M	Diethylphthalate	33	12
	4-Chlorophenyl-phenylether	ND	30
-214	Fluorene	ND	20
	N-Nitrosodiphenylamine	ND	11
Part.	4-Bromophenyl-phenylether	ND	21
	Hexachlorobenzene ,	ND	13
249	Phenanthrene	ND	11
र <b>ांक्री</b>	Anthracene	ND	11 10
	Di-n-butylphthalate	ND ND	10
344	Fluoranthene Pyrene	ND	6.2
-	Benzidine	ND	5.2
(4700)	Butylbenzylphthalate	ND	6.9

Lab Sample No: 32221 Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97

Matrix: WATER Level: LOW

■ Date Extracted: 11/20/97

Sample Volume: 480 ml

Extract Final Volume: 1.0 ml

Dilution Factor: 10.0

Date Analyzed: 11/24/97 GC Column: DB-5 Instrument ID: BNAMS3.i Lab File ID: t4551.d

-9100				Method Detection
-644	<u>Parameter</u>		lytical Result <u>Units: ug/l</u>	Limit <u>Units: ug/l</u>
1756	3,3'Dichlorobenzidine		ND	15
e de	Benzo(a)anthracene		ND	8.8
	Chrysene		ND	9.0
cese	bis(2-Ethylhexyl)phthalate		ND	12
, jag	Di-n-octylphthalate	~	ND	10
1,000	Benzo(b) fluoranthene		ND	7.7
Toritte	Benzo(k)fluoranthene		ND	9.6
OPPE.	Benzo(a)pyrene	ari u	ND	8.3
100	Indeno(1,2,3-cd)pyrene		, ND	7.3
	Dibenz(a,h)anthracene		ND	8.8
- ejanj	Benzo(g,h,i)perylene		ND	7.7

Lab Sample No: 32221 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97 Date Extracted: 11/20/97 Date Analyzed: 11/24/97 GC Column: DB-5 Instrument ID: BNAMS3.i

Level: LOW

Matrix: WATER

Sample Volume: 480 ml Extract Final Volume: 1.0 ml

Dilution Factor: 10.0

Lab File ID: t4551.d

#### SEMI-VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 625

COMPOUND NAME	RT	EST. CONC. ug/l	Q
1. Benzene, chloro- 2. Unknown Alkane 3. Unknown Alkane 4. Unknown 5. Unknown Cycloalkane 6. Unknown Cycloalkane 7. Unknown Alkane 8. Unknown Cycloalkane 9. Unknown 10. Unknown 11. Naphthalene, decahydro-, trans- 12. Unknown 13. Unknown 14. Unknown 15. Unknown 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.	9.73 11.52 11.86 12.02 12.39 12.59 12.95 13.09 13.15 13.31 13.53 17.87 19.48 20.93	2200	

TOTAL ESTIMATED CONCENTRATION

14530

Lab Sample ID: 32221 Lab Job No: Z339

Date Sampled: 11/18/97 ■ Date Received: 11/19/97

Sample Volume: 500 ml

Matrix: WATER

Date Extracted: 11/20/97

Extract Final Volume:

Date Analyzed: 11/23/97

Dilution Factor: 1.0 Lab File ID: xr018310.d

GC Column: DB-608 Instrument ID: PESTGC1.i

### ORGANOCHLORINE PCBs - GC/ECD METHOD 608

1964			Method Detection
** Para	<u>meter</u>	alytical Results <u>Units: ug/l</u>	Limit <u>Units: ug/l</u>
Aroc	lor-1016	ND	0.20
	lor-1221	ND	0.40
Aroc	lor-1232	ND	0.10
Aroc.	lor-1242	ND	0.40
	lor-1248	ND	0.30
* Aroc	lor-1254	ND	0.40
Aroc	lor-1260	ND	0.10

Lab Sample No: 32221 Lab Job No: Z339 Client ID: ISB-3-GW

Site: Dexter Chemical

Date Sampled: 11/18/97 Date Received: 11/19/97 Matrix: WATER

Level: LOW

### METALS ANALYSIS

<u>Analyte</u>	Analytical Result <u>Units: ug/l</u>	Instrument Detection <u>Limit</u>	<u>M</u>
Antimony	ND	5.3	P
Arsenic	- 30.5	3.4	P
Beryllium	3.3	0.30	P
Cadmium	ND	0.40	P
Chromium	66.1	1.7	P
Copper -	176	4.0	P
Lead	499	2.2	P
Mercury	0.91	0.10	CV
Nickel	69.7	1.3	Р
Selenium	ND	4.8	P
Silver	1.4	1.2	P
Thallium	ND	3.8	Ρ
Zinc	501	3.8	Ρ

M Column - Method Code (See Section 2 of Report)

Lab Sample No: 32222 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97
Date Analyzed: 11/24/97
GC Column: DB624
Instrument ID: VOAMS7.i

Level: LOW Purge Volume: 5.0 ml

Matrix: WATER

Dilution Factor: 1.0

Lab File ID: v5675.d

(W)	<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
	Chloromethane	ND	0.9
nak.	Bromomethane	ND	0.3
rose.	Vinyl Chloride	ND	0.4
0.68	Chloroethane	ND	1.0
	Methylene Chloride	ND	1.0
iji i	Trichlorofluoromethane	ND	0.2
	1,1-Dichloroethene	ND	0.6
58	1,1 Dieniolocchane	, ND	0.3
n'sér	trans-1,2-Dichloroethene	ND	0.3
	cis-1,2-Dichloroethene	, ND	1.0
mag	Chloroform	ND	0.2
	1,2-Dichloroethane	ND	0.2
5 F#	1,1,1-Trichloroethane	ND	0.2
	Carbon Tetrachloride	ND	0.2
intj	Bromodichloromethane	ND	0.2
Poser	1,2-Dichloropropane	ND	0.5
	cis-1,3-Dichloropropene	ND	0.3
478	Trichloroethene	ND	0.4
	Dibromochloromethane	ND	0.2
is al	1,1,2-Trichloroethane	ND	0.4
	Benzene	ND ND	0.2 0.3
9-3W	trans-1,3-Dichloropropene	ND	0.5
ne.	2-Chloroethyl Vinyl Ether Bromoform	ND	0.3
	Tetrachloroethene	ND	0.1
:the	1,1,2,2-Tetrachloroethane	ND	0.3
	Toluene	ND	0.2
	Chlorobenzene	ND	0.1
eq.	Ethylbenzene	ND	0.2
	Xylene (Total)	ND	1.0
W.	11/10110 (10001)	1,2	<b></b>

Lab Sample No: 32222 Lab Job No: Z339

Date Sampled: 11/18/97
Date Received: 11/19/97
Date Analyzed: 11/24/97

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v5675.d

# VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC.	Q
1NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.			
3. 4.			
5.			
1 7.			
1 0.			
9			
		· · · · · · · · · · · · · · · · · · ·	
12.			
13.			
14. 15.			
16			
1 1.			
1 20.			
1 12.			
20.			
<del>2 + •</del>			
<i>LL</i> •	\ <del></del>		
<b>2</b> 3.			
21.			
25. 26.			
26. 27. 28			
28.			
29.			
30.			

TOTAL ESTIMATED CONCENTRATION

0.0

Lab Sample No: 32222 Lab Job No: Z339

Date Sampled: 11/18/97 Matrix: WATER Level: LOW Date Received: 11/19/97

Date Extracted: 11/20/97
Date Analyzed: 11/21/97 Sample Volume: 990 ml Extract Final Volume: 2.0 ml

GC Column: DB-5
Instrument ID: BNAMS3.i Dilution Factor: 1.0

Lab File ID: t4495.d

Parameter	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
N-Nitrosodimethylamine	ND	0.7
bis(2-Chloroethyl)ether	ND	1.2
1,3-Dichlorobenzene	ND	3.4
1,4-Dichlorobenzene	ND	3.5
1,2-Dichlorobenzene	ND	3.4
bis(2-chloroisopropyl)ether	ND	1.4
N-Nitroso-di-n-propylamine	ND ND	1.5
Hexachloroethane	ND	2.4
Nitrobenzene -	, <b>N</b> D	1.5
Isophorone	ND	1.7
bis(2-Chloroethoxy)methane	ND	1.6
1,2,4-Trichlorobenzene	ND	3.7
Naphthalene	ND	2.5
* Hexachlorobutadiene	ND	2.2
Hexachlorocyclopentadiene	ND	1.6
2-Chloronaphthalene	ND	3.2
Dimethylphthalate	ND	1.3
Acenaphthylene	ND	2.0
2,6-Dinitrotoluene	ND	1.5
. Acenaphthene	ND	2.8
2,4-Dinitrotoluene	ND	1.5
Diethylphthalate	ND	1.2
4-Chlorophenyl-phenylether	ND	2.9
Fluorene	ND	2.0
N-Nitrosodiphenylamine	ND	1.1
4-Bromophenyl-phenylether	ND	2.0
Hexachlorobenzene	ND	1.2 1.0
Phenanthrene	ND ND	1.1
Anthracene	ND	1.0
Di-n-butylphthalate	ND	1.1
Fluoranthene	ND ND	0.6
Pyrene Benzidine	ND ND	0.5
	ND	0.3
Butylbenzylphthalate	IND	0.7

Client ID: FB-11-18 Lab Sample No: 32222

Site: Dexter Chemical Lab Job No: Z339

Date Sampled: 11/18/97 Matrix: WATER Date Received: 11/19/97 Level: LOW

Date Extracted: 11/20/97 Sample Volume: 990 ml
Date Analyzed: 11/21/97 Extract Final Volume: 2.0 ml

GC Column: DB-5 Dilution Factor: 1.0

Date Analyzed: 11/21/97
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t4495.d

N)	Analytical Result	Method Detection Limit
Parameter	Units: ug/l	Units: ug/l
3,3'-Dichlorobenzidine	ND	1.4
Benzo(a)anthracene	ND	0.8
Chrysene	ND	0.9
<pre>bis(2-Ethylhexyl)phthalate</pre>	ND	1.2
Di-n-octylphthalate	ND	1.0
Benzo(b)fluoranthene	ND	0.7
Benzo(k)fluoranthene	ND	0.9
™ Benzo(a)pyrene	ND	0.8
Indeno(1,2,3-cd)pyrene	- ND	0.7
Dibenz(a,h)anthracene-	ND	0.8
Benzo(g,h,i)perylene	ND	0.7

Lab Sample No: 32222 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97 Date Extracted: 11/20/97 Matrix: WATER Level: LOW

Date Analyzed: 11/21/97

Sample Volume: 990 ml

Extract Final Volume: 2.0 ml

GC Column: DB-5
Instrument ID: BNAMS3.i Lab File ID: t4495.d

Dilution Factor: 1.0

#### SEMI-VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 625

ÇOMPOUND NAME	RT	EST. CONC. ug/l	]
1. NO SEMI-VOLATILE ORGANIC COMPOUNDS FOUND 2. 3.			
5 ·			
7. 8. 9. 10.			
12.			
14. 15. 16. 17.			
19. 20.			
21. 22. 23. 24.			
25. 26. 27.			
28. 29. 30.			

0.0

Lab Sample ID: 32222 Lab Job No: Z339

Matrix: WATER

Date Sampled: 11/18/97
Date Received: 11/19/97
Date Extracted: 11/20/97

Sample Volume: 1000 ml Extract Final Volume: 5.0 ml

Date Extracted: 11/20/97
Date Analyzed: 11/23/97

Dilution Factor: 1.0 Lab File ID: xr018311.d

GC Column: DB-608

\*\* Instrument ID: PESTGC1.i

# ORGANOCHLORINE PCBs - GC/ECD METHOD 608

- 19 <sup>1</sup> / <sub>2</sub> (1)		Analytical Results	Method Detection Limit
const.	Parameter	<u>Units: ug/l</u>	Units: ug/l
	Aroclor-1016	ND	0.20
:8454	Aroclor-1221	ND	0.40
438049	Aroclor-1232	ND	0.10
estate	Aroclor-1242	ND	0.40
	Aroclor-1248	ND	0.30
	Aroclor-1254	ND	0.40
	Aroclor-1260	ND	0.10

Lab Sample No: 32222 Lab Job No: Z339 Client ID: FB-11-18

Site: Dexter Chemical

Date Sampled: 11/18/97 Matrix: WATER Date Received: 11/19/97 Level: LOW

#### METALS ANALYSIS

	Analytical Result	Instrument Detection	
<u>Analyte</u>	<u>Units: ug/l</u>	Limit	<u>M</u>
Antimony	ND	5.3	P
Arsenic	ND	3.4	Ρ
Beryllium	ND	0.30	P
Cadmium	ND	0.40	P
Chromium	ND	1.7	P
Copper	ND	4.0	P
Lead	ND	2.2	P
Mercury	ND	0.10	CV
Nickel	ND	1.3	P
Selenium	ND	4.8	P
Silver	ND	1.2	P
Thallium	ND	3.8	P
Zinc	ND	3.8	P

Lab Sample No: 32223 Lab Job No: Z339

Date Sampled: 11/18/97 → Date Received: 11/19/97 Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

Date Received: 11/19/97
Date Analyzed: 11/24/97
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v5676.d

Parameter	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
** Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3 -
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND ND	0.4 0.2
Benzene trans-1,3-Dichloropropene	ND	0.2
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND ·	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Lab Sample No: 32223 Lab Job No: Z339

Date Sampled: 11/18/97 Date Received: 11/19/97 Date Analyzed: 11/24/97
GC Column: DB624 Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v5676.d

#### VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC.	Q
1. NO VOLATILE ORGANIC COMPOUNDS FOUND			
2			
6.			
8			
10			
12. 13. 14.			
16.			
17. 18. 19.			
21.			
22. 23. 24.			
25. 26. 27.			
29.			
30.			

TOTAL ESTIMATED CONCENTRATION

0.0

SITE ADDRESS: Bronx, NY

OF

PAGE

SAMPLE DATE: 11 - 18 - 97

SAMPLER(S): G.Weissberger / L.Westcott / T.Peters

LABORATORY: Envirotech Research

PROJECT NAME: Dexter Chemical

PROJECT NO: 97-09-10

SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	ANALYSIS	PRESER-	NO. OF	SPECIAL
TIME	LOCATION	ID#	DEPTH	MATRIX	REQUESTED	VATIVE	CONT.	INSTRUCTIONS
0925	Interior Soil Boring	ISB - 1	7 - 9'	soil	VO+10, BN+15, PPM, PCB 3221	ice	2	RUSH
1002	Interior Soil Boring	ISB - 2	1 - 1.5'	soil	BN+15, PPM, PCB 3.23.12	ice	-	3 DAY T.A.T.
1005	Interior Soil Boring	ISB - 2	7 - 8'	soil	81256 01+0V	ice	-	NYS / NYC Analysis
1027	Interior Soil Boring	ISB - 3	3 - 4'	soil	BN+15, PPM, PCB 32314	ار اce	-	
1029	Interior Soil Boring	ISB - 3	. 7 - 8'	soil	33215 VO+10	)S ice		es e proprieta de la constanta del constanta d
1137	Heating Oil Tank Area-borings	H0 - 1	3 - 4'	soil	BN+15 32216	(s ice	-	
1216	Heating Oil Tank Area-borings	H0 - 2	4 - 6	soil	「(なな)」 (スタ)フ	ice	-	
1239	Heating Oil Tank Area-borings	H0 - 3	4 - 6	soil	BN+15 322 18	S ice	-	
1350	Isopropyl Tank Area borings	TA - 4	0 6	1000	lsopropy! Atcorrol			
1409	Isopropyl Lank Area-borings	TIA - 2	9-6-	lio3		ice	4	
1453	Isopropyl Lank Area-borings	11A-3	7 - 9	soil	Isopropyl Alcahal	je		
1028	ISB - 1 Boring	ISB - 1 - GW	n/a	h20	VO+10, BN+15, PPM, PCB 32319 ice/hcl/hno3	g ice/hcl/hn	3 6	
1151	ISB - 2 Boring	ISB, 2- GW		h20	VO+10, BN+15, PPM, PCB 3220 ce/hcl/hno3	2dice/hcl/hn	53 6	
RELINQU	RELINQUISHED BY:	K		DATE:	7/17 TIME: 8:30 RECEIVED BY: A JUGGE	Chro		DATE://./98711ME //@
RELINQU	RELINQUISHED BY: WOUDL (30)	V		$\neg$	477IME:/.53CRECEIVED BY: 1 S			DATE: 11/2/2 TIME 153
				-		7		1 4/1

ANALYTICAL PARAMETER IDENTIFICATION KEY:

PHC: PETROLEUM HYDROCARBONS

VOC: VOLATILE ORGANICS BY GCMS WITH LIBRARY SEARCH

PAH: POLYCYCLIC AROMATIC HYDROCARBONS IN BASE NEUTRAL SCAN WITH LIBRARY SEARCH

BN: ACID EXTRACTABLES WITH LIBRARY SEARCH

PPM: PRIORITY POLLUTANT METALS

PP+40: PRIORITY POLLUTANT PELUS FORTY PEAKS

THE WHITMAN COMPANIES INC 44 WEST FERRIS STREET EAST BRUNSWICK, NJ 08816

TSI - THERMAL SYSTEM INSULATION

CT - CEILING TILE FT - FLOOR TILE

TOTAL NO. CONTAINERS\_



PROJECT NAME: Deater Chemical PROJECT NO: 97-09-10 LABORATORY: Envirotech Research

SITE ADDRESS: Bronx, NY
SAMPLE DATE: 11 - 18 - 97
SAMPLER(S): G.Weissberger / L.Westcott / T.Peters

Chaurachecoatooy

:

1 1789 1

OF PAGE

TIME	SAMPLE LOCATION	SAMPLE TD#	SAMPLE DEPTH	SAMPLE MATRIX	ANALYSIS REQUESTED		PRESER- VATIVE	NO. OF CONT.	SPECIAL INSTRUCTIONS
1220	ISB - 3 Boring	ISB - 3 - GW	n/a	h20	VO+10, BN+15, PPM, PCB 3222) ice/hcl/hno3	12728 BD	ice/hcl/hno3	9	RUSH
1455	Field Blank	FB - 11/18	n/a	h20	ンととろ VO+10, BN+15, PPM, PCB, Isopropyl-Alcohol	32222 2911 Alcohol	ice/hcl/hno3	7	3 DAY T.A.T.
	Trip Blank	TB - 11/18	n/a	h20	VO+10	3223	ice/hcl	2	NYS / NYC Analysis
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				:					
RELINQUISHED BY	D BY: C			DATE: W	DATE: #/#/57 TIME: 8730 RECEIVED BY: (4	Varu L	Les		DATE: (1/6 & 7 TIME (100)
RELINQUISHE	RELINQUISHED BY: WEYL LEAR			DATE:///	1994 TIME: / 33 CRECEIVED BY:			, -	DATE:11/9/97TIME 153
ANALYTICAL	ANALYTICAL PARAMETER IDENTIFICATION KEY:	ATION KEY.				<b>)</b>	0		7

TOTAL NO. CONTAINERS

PHC: PETROLEUM HYDROCARBONS

VOC: VOLATILE ORGANICS BY GCMS WITH LIBRARY SEARCH

PAH: POLYCYCLIC AROMATIC HYDROCARBONS IN BASE NEUTRAL SCAN WITH LIBRARY SEARCH

ACID EXTRACTABLES WITH LIBRARY SEARCH BN: BASE NEUTRALS WITH LIBRARY SEARCH
AE: ACID EXTRACTABLES WITH LIBRARY SEARPHE: PRORITY POLLUTANT METALS
PP+40: PRIORITY POLLUTANT PLUS FORTY PEAKS