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SITE INVESTIGATION REPORT
NORTHEAST PORTION
CHAMPION PRODUCTS COMPANY
PERRY, NEW YORK
DELTA PROJECT NO. S098-009

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SITE INVESTIGATION REPORT NORTHEAST PORTION CHAMPION PRODUCTS COMPANY PERRY, NEW YORK DELTA PROJECT NO. S098-009

1.0 INTRODUCTION

The purpose of this report is to provide a discussion of the various phases of site investigation activities performed, data obtained and recommendations for the Northeast Portion of the site. It is our understanding that the Northeast Portion of the site is currently under consideration for purchase from Mr. Sam Gullo, the current property owner. The potential purchaser is interested in constructing a gas station on the Northeast Portion of the site.

The Site Investigation Report for the entire former Champion Products Company (Champion) facility is in the process of being completed as part of a Voluntary Cleanup with the New York Department of Environmental Conservation (NY DEC). By March 1999, Champion plans to develop a Remediation Workplan for each area of concern, including the Northeast Portion of the facility. This Workplan will be submitted to the NY DEC for review and incorporation as part of the Voluntary Cleanup Agreement.

2.0 BACKGROUND

2.1 Site Location

The site is located immediately south of North Main Street in Perry, New York, as shown in Figures 1 and 2. The Northeast Portion of the site is bordered to the north and east by residential dwellings. The remainder of the site, which primarily produces print screen apparel for team sports and retail sale, borders the Northeast Portion of the site to the west and south. Champion currently leases a portion of the site.

Based on our review of the Mount Morris, New York USGS topographic map (Figure 1), surface elevation at the site is approximately 1,300 feet above mean sea level and the site is situated on a topographic high.

The site is currently serviced by municipal drinking water and sewer and has reportedly been serviced by these utilities since the property was purchased by Champion. All residences within the Village of Perry are connected to municipal water.

2.2 Site History - Northeast Portion of Site

Environmental due diligence activities were performed by Champion prior to the divestment of the entire site, including the Northeast Portion, from Champion to Mr. Sam Gullo. During these due diligence activities, it was determined that a petroleum storage/distribution facility and gasoline service station had operated at the Northeast Portion of the site in the 1950's and 1960's. This portion of the site was purchased by Champion in the late 1970's.

A site plan from 1974 was provided by Champion. This plan showed the storage/distribution facility and gasoline station. These locations were also confirmed by the following sources:

- 1. In July 1998, Mr. Ron Blythe, a former employee of the gas station, and a Delta representative walked through the Northeast Portion of the site. Mr. Blythe identified the locations of the former service station building, pump island and USTs. Mr. Blythe also identified the approximate location of the petroleum bulk storage/distribution facility, which included the use of above-ground storage tanks. The locations of these historical operations identified by Mr. Blythe are consistent with those locations referenced on the 1974 site plan.
- 2. Aerial photographs were reviewed at the Wyoming County Soil Conservation Service in Warsaw, New York. Photographs from 1954, 1968 and 1974 were available at scales ranging from 1 inch = 2,000 feet to 1 inch = 1,300 feet. The 1954 aerial photograph did not show the former petroleum operations on the site. The 1968 and 1974 photographs did show the facilities at locations that correspond to the locations on the site plan. A copy of the 1974 aerial photograph is attached as Appendix A.
- 3. Mr. Donald Butler, a local contractor, was interviewed by Delta personnel regarding the former USTs. Mr. Butler recalled removing the USTs from the Northeast Portion of the site. Mr. Butler believes the USTs from the Northeast Portion of the site were removed in the late 1970's, prior to the purchase of the property by Champion. Based on the above data, a site map was developed for the Northeast Portion of the site and is presented as Figure 3.

3.0 FIELD INVESTIGATIONS

Soil and ground water samples were collected during various investigative phases from the Northeast Portion of the site to define the nature and extent of impacted soils and ground water. The investigations were performed from May 1998 through November 1998 and included the advancing of nine soil borings and the installation of three ground water monitoring wells.

During the investigations, water level readings were obtained from monitoring wells MW-112 through MW-114 and the ground water elevation data are presented in Table 1. Monitoring well construction characteristics are presented as Appendix B. Ground water occurs at depths ranging from 2.95 feet below grade surface (bgs) at monitoring well MW-112 to 8.90 feet bgs at MW-113. Based on the water level readings, ground water in the surficial aquifer flows in a northeasterly direction.

Table 2 summarizes the sample location, depth and laboratory analysis performed on each sample obtained from the Northeast Portion of the site. Sample locations and evaluation of the data with respect to the NY DEC soil objectives or ground water standards are presented below.

Nine soil samples were obtained from soil borings SB-07 through SB-12 and monitoring wells MW-112 through MW-114. The samples were submitted to Upstate Laboratories, Inc. for analysis of volatile organic compounds (VOCs) by EPA method 8260, STARS (EPA Method 8021) and lead.

The soil analytical results, as summarized in Table 3, indicated the presence of gasoline-related VOCs above method detection limits, but below NY DEC soil objectives in three of the nine soil samples (SB-08, SB-11 and MW-113).

VOCs were not identified above method detection limits in the remaining six samples. Reported concentrations for lead ranged from less than 12,000 micrograms per kilogram (ug/kg) to 17,000 ug/kg. These values are believed to be indicative of the range of naturally occurring lead levels. A copy of the laboratory analytical report is attached as Appendix C.

Ground water samples were obtained from soil borings SB-07, SB-09 and SB-11 on July 15, 1998. The ground water analytical results, as summarized in Table 4, indicate the presence of toluene in the ground water at soil boring SB-07 and SB-09, but at concentrations equal to or below the NY DEC ground water quality standards. Benzene, ethylbenzene, toluene and xylenes were detected in the ground water at SB-11 above the NY DEC ground water quality standards at concentrations of 3 micrograms per liter (ug/l), 320 ug/l, 7 ug/l and 779 ug/l, respectively.

Three ground water monitoring wells (MW-112 through MW-114) were installed in August 1998 and ground water samples were obtained from these monitoring wells on two occasions. The ground water analytical results, as summarized in Table 4, revealed the presence of benzene (2 ug/l in August 1998 and 10.1 ug/l in November 1998) in excess of the NY DEC ground water standard of 1 ug/l at monitoring well MW-113. The remaining targeted VOCs are below their respective ground water standards.

4.0 CONCLUSIONS

Based on the results of the site investigation, Delta provides the following conclusions for the Northeast Portion of the site:

Historical

- A petroleum storage/distribution facility and gasoline service station had operated at the Northeast Portion of the site in the 1960's and 1970's.
- The USTs from the northeast potion of the site were removed in the late 1970's, prior to the purchase of the property by Champion.
- The Champion facility is currently serviced by municipal drinking water and sewer and has reportedly been serviced by these utilities since the property was purchased by Champion. All residences within the Village of Perry are also connected to municipal water.

Soil

- The analytical results of soil samples collected during the advancement of soil borings SB-07 through SB-12 and installation of monitoring wells MW-112 through MW-114 did not reveal the presence of targeted VOCs above DEC regulatory objectives.
- Detectable levels of lead were reported in three of the six soil samples at concentrations ranging from 12,000 ug/kg to 17,000 ug/kg. These detected values are considered to be within the range of naturally occurring lead levels.

Ground Water

- Ground water occurs at depths ranging from 2.95 feet bgs at monitoring well MW-112 to 8.90 feet bgs at MW-113. The ground water flow direction is to the northeast.
- The ground water analytical results did not indicate the presence of targeted VOCs above the NY DEC ground water standards at soil borings SB-07 and monitoring wells MW-112 and MW-114.
- The ground water analytical results indicate the presence of toluene (5 ug/l) at soil borings SB-09 at a concentration equal to the NY DEC ground water standard.
- Benzene, ethylbenzene, toluene and xylenes were detected at SB-11 at concentrations of 3 ug/l, 320 ug/l, 7 ug/l and 779 ug/l, respectively. Each of these concentration are above the NY DEC ground water standards.
- The analytical results obtained from the ground water at monitoring well MW-113 revealed the presence of benzene (2 ug/l and 10.1 ug/l) in excess of the NY DEC ground water standard of 1 ug/l. The remaining targeted VOCs are below their respective ground water standards at the locations of monitoring well MW-113.
- The potential for VOCs that have been identified in other areas of the site to impact the Northeast Portion is minimal due to the delineation of the dissolved phase plume, the low dissolved phase levels in the ground water and the distance from these areas to the Northeast Portion.

5.0 RECOMMENDATIONS

Based on the conclusions of the site investigations, the following recommendations are provided for the Northeast Portion of the site:

- Active remediation of the soil or ground water is not recommended due to the low levels of VOCs and the proposed continued use as non-residential.
- Quarterly monitoring of the ground water at the location of the three monitoring wells located on the Northeast Portion of the site should be performed for a minimum of 2 years. This monitoring would include obtaining quarterly ground water samples and submitting the samples for analysis of VOCs.
- A land use (deed) restriction should be established for the Northeast portion of the site. This restriction would
 prohibit the use of this portion of the site for residential use as long as soil and ground water exceedences are
 present.
- Concurrence of the proposed natural remediation plan and the need for a deed restriction should be obtained from the NY DEC as part of the Remediation Workplan for the entire site.

6.0 REMARKS

The discussions contained in this summary represent our professional opinions. These opinions are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

This report was prepared by:

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Stephen A. Zbur, P.G

Senior Consultant

Date

TABLES

TABLE 1

HISTORICAL GROUND WATER ELEVATION DATA NORTHEAST PORTION OF SITE CHAMPION PRODUCTS FACILITY PERRY, NEW YORK

Delta Project No. S098-009

Page: 1 of 1 Date: 12/31/98

SITE	DATE	MP ELEVATION ⁽²⁾	TIME	DEPTH TO WATER	△ WATER ELEV ⁽¹⁾	WATER ELEV. ⁽²⁾
		(feet)	1	(feet)	(feet)	(feet)
MW-112	08/21/98	77.680	00:00	2.95	NA	74.73
MW-112	11/03/98	77.680	00:00	2.40	0.55	75.28
MW-113	08/21/98	75.250	00:00	8.90	NA	66.35
MW-113	11/03/98	75.250	00:00	1.90	7.00	73.35
MW-114	08/21/98	76.450	00:00	0.60	NA	75.85
MW-114	11/03/98	76.450	00:00	1.00	-0.40	75.45

⁽¹⁾ Change in Water Elevation since last reported measurement

TABLE 2 SAMPLING SUMMARY NORTHEAST PORTION OF SITE CHAMPION PRODUCTS COMPANY PERRY, NEW YORK Delta Project No. S098-009

SAMPLE ID	SAMPLE DATE	DEPTH (ft-bgs)	ANALY	TICAL PRO	OTOCOL
	SOIL		Α	В	С
SB-07	Jul-15-98	13-15		X	Х
SB-08	Jul-15-98	13-15		X	Х
SB-09	Jul-15-98	13-15		X	Х
SB-10	Jul-15-98	13-15		·X	Х
SB-11	Jul-15-98	6-8	-	X	Х
SB-12	Jul-15-98	13-15		X	Х
MW-112	Aug-19-98	8-10	Х		
MW-113	Aug-19-98	6-8	X		
MW-114	Aug-19-98	8-10	Х		
GRO	UND WATER		A	В	С
SB-07	Jul-15-98			Х	
SB-09	Jul-15-98			X	
SB-11	Jul-15-98			X	
MW-112	Aug-20-98		Х		
	Nov-05-98		X		
MVV-113	Aug-20-98		X		
	Nov-05-98		Х		
MW-114	Aug-20-98		X		
	Nov-05-98		X	_	

ft-bgs = feet below ground surface

Analytical Key

A: EPA Method 8021 (STARS)

B: EPA Method 8260 (VOCs)

C: Total Lead

CHAMPION PRODUCTS COMPANY NORTHEAST PORTION OF SITE SOIL ANALYTICAL RESULTS Delta Project No. S098-009 PERRY, NEW YORK TABLE 3

				NOF	VOLATILE ORGANICS	NICS		INORGANICS
Sample ID	Depth (feet)	Date	Вепхепе	Ethylbenzene	Toluene	Total Xylenes	Isopropylbenzene	Lead
SB- 7	13-15	7/15/98	4 > .	4 >	4 >	< 4	NA	< 13,000
SB-8	13-15	7/15/98	< 36	71	<36	300	NA	<12,000
SB-9	13-15	7/15/98	< ×	× ×	<3	<3	NA	17,000
SB-10	13-15	7/15/98	< 3	< 3	<3	<3	NA	12,000
SB-11	8-9	7/15/98	4 >	320	«	1,112	NA	13,000
SB-12	13-15	7/15/98	< 3	< 3	<3	<3	NA	< 11,000
MW-112	8-10	86/61/8	<u>^</u>	^	\$	^	^	NA
MW-113	8-9	8/16/8	7	45	10	91	13	ΥN
MW-114	8-10	8/16/8	<2	<2	<2	<2	<2	NA
SOIL	SOIL STANDARDS *	DS *	09	5,500	1,500	1,200	SN	SB

All values reported as micrograms per kilogram or parts per billion (ug/kg).

NA = Not analyzed.

NS = No Standard.

SB = Dependent on site background levels. * Soil standards from recommended soil clean-up objectives to protect ground water quality, NYDEC - TAGM.

TABLE 4
GROUND WATER ANALYTICAL RESULTS
NORTHEAST PORTION OF SITE
CHAMPION PRODUCTS COMPANY
PERRY, NEW YORK
Delta Project No. S098-009

Sample ID	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Įsobiopylbenzene	n-Propylbenzene	ənəznədlydtəmirT-4,2,1	ənəznədlydtəmirT-č,£,!	n-Butylbenzene	Naphthalene
SB-07	2/12/98	♡	4	\$	♡	NA	NA	NA	NA	NA	NA
SB-09	7/15/98	\$	5	ζ.	\Diamond	NA	NA	NA	NA	NA	NA
SB-11	7/15/98	3	7	320	779	NA	NA	NA	NA	NA	NA
MW-112	8/20/8	9.0	2	0.7	3.9	<0.5	<0.5	_	<0.5	<0.5	<0.5
MW-112	11/3/98	$\overline{\vee}$	$\overline{\vee}$	3.1	2.13	$\overline{\vee}$	$\overline{\vee}$	3.23	$\overline{\vee}$	$\overline{\vee}$	1.28
MW-113	8/20/8	2	0.5	<0.5	<0.5	<0.5	<0.5	_	<0.5	<0.5	<0.5
MW-113	11/3/98	10.1	$\overline{\vee}$	$\overline{\vee}$	$\overline{\vee}$	$\overline{\vee}$	$\overline{\vee}$	$\overline{\vee}$	$\overline{\vee}$	$\overline{\lor}$	~
MW-114	8/20/8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	4	<0.5
MW-114	11/3/98	$\overline{\lor}$	$\overline{\vee}$	$\overline{\vee}$	$\overline{\vee}$	$\overline{\vee}$	$\overline{\vee}$	~	~	<	<1
REGULATORY STANDARDS *	ATORY ARDS *	1	5	5	5	5	5	5	5	5	10

All values reported as micrograms per liter or parts per billion (ug/l).

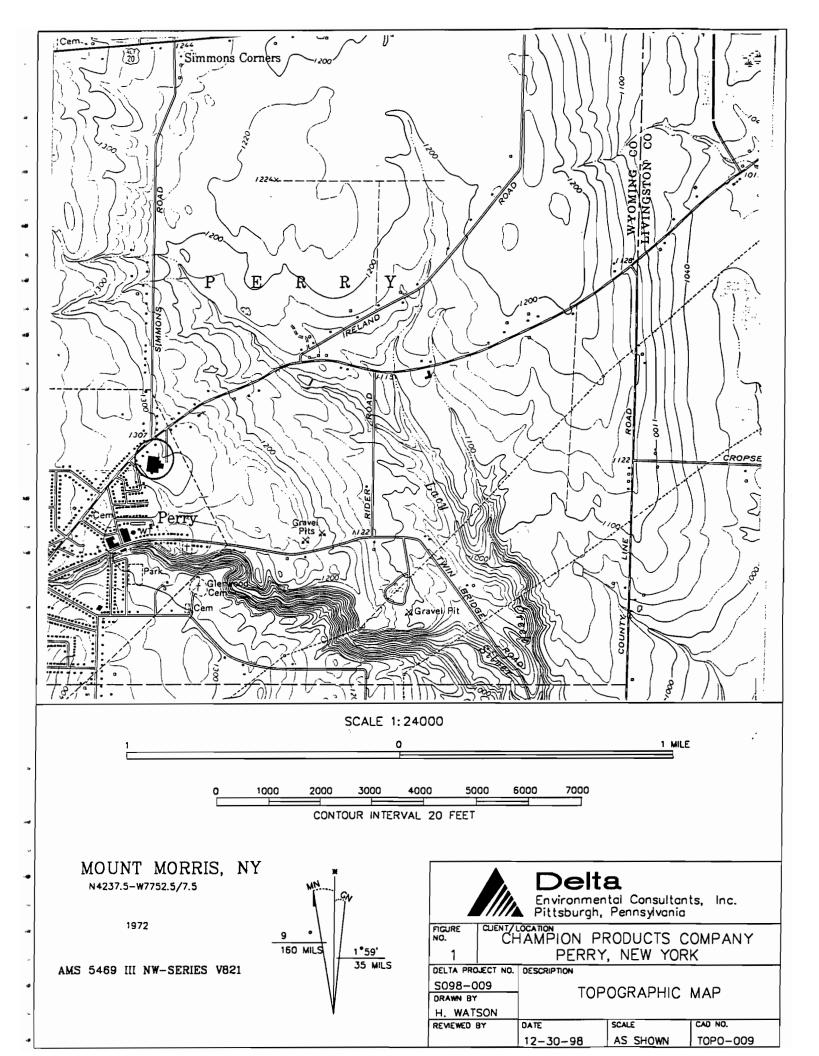
NA = Not analyzed

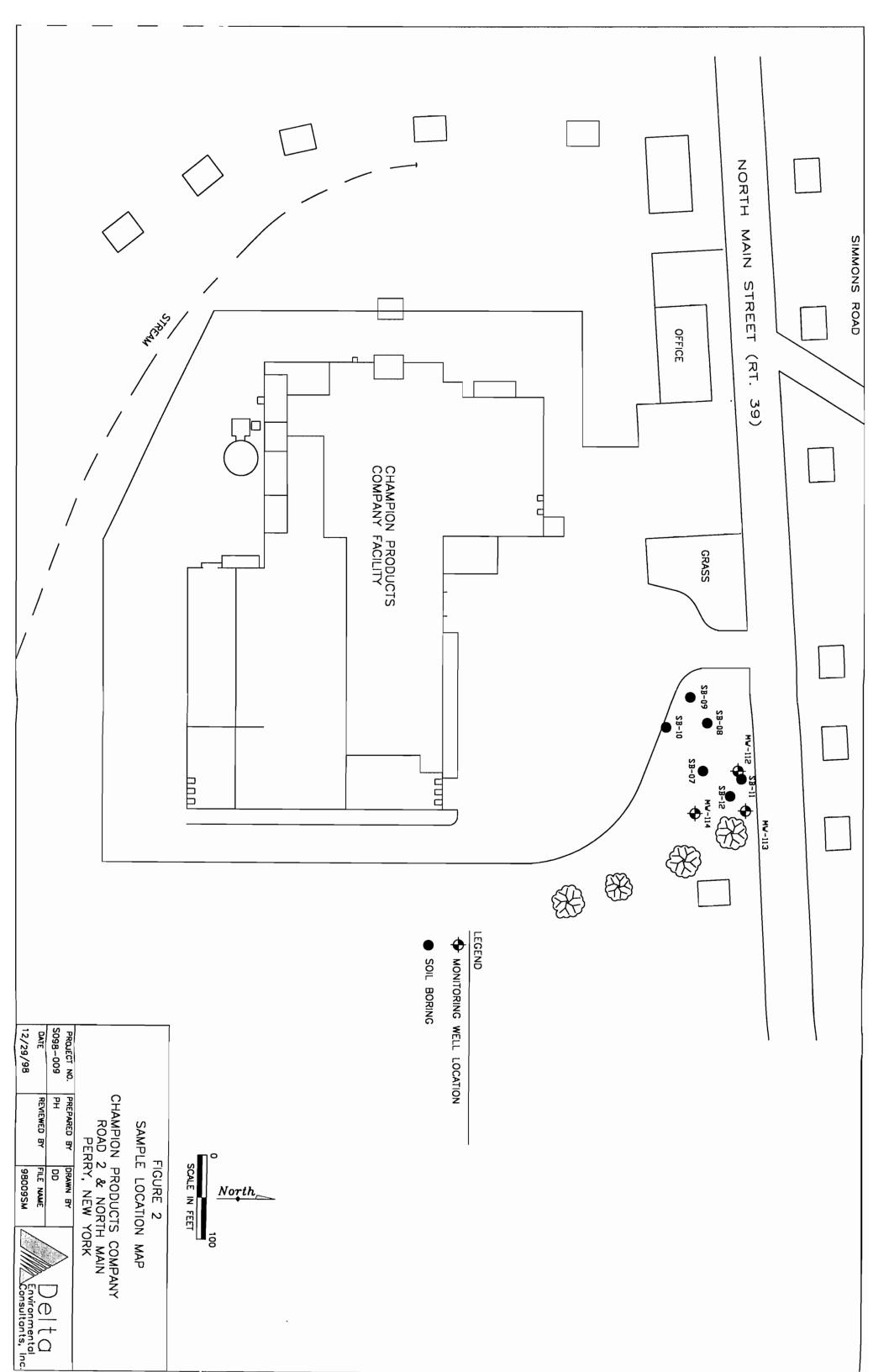
Regulatory Standards from NYDEC Water Quality Regulations.

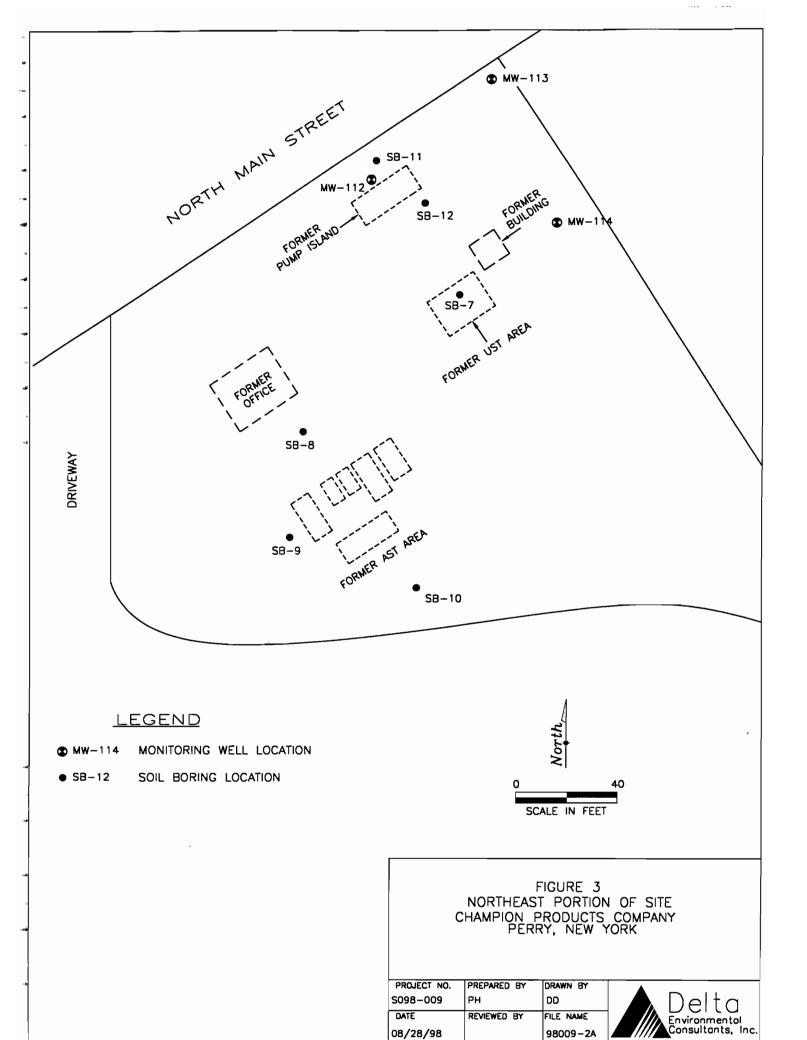
Concentration exceeds regulatory standard.

Ą

FIGURES

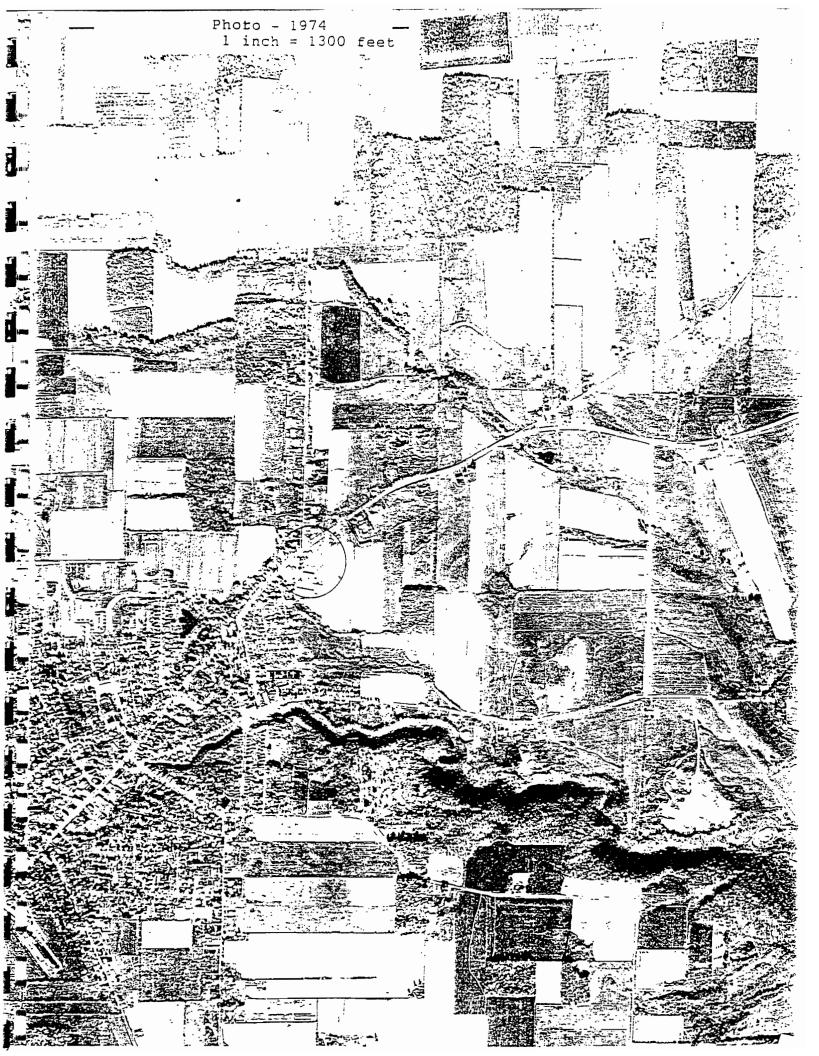






APPENDIX A

1974 AERIAL PHOTOGRAPH



APPENDIX B

MONITORING WELL CONSTRUCTION DETAILS

APPENDIX B

MONITORING WELL CONSTRUCTION CHARACTERISTICS

Page: 1 of 1 Date: 12/31/98

NORTHEAST PORTION OF SITE CHAMPION PRODUCTS COMPANY

Delta Project No. S098-009 PERRY, NEW YORK

SITE	WELL DEPTH	TOTAL DEPTH	GROUND SURFACE ELEVATION	MP	CASING DIAMETER	8	SCREENS (feet bgs)	ANI F (fee	ANNULAR FILLS (feet bgs)
	(feet bgs) (feet bgs)	(feet bgs)	(feet)	(feet)	(inches)	INTERVAL	DESCRIPTION	INTERVAL	TYPE
MW-112	15.00	15.00	77.68	77.68	2.00	5.0-15.0	Slotted	0.0-3.0	Backfill
							PVC	3.0-4.0	Seal
								4.0-15.0	Filter
MW-113	14.00	14.00	75.25	75.25	2.00	4.0-14.0	Slotted	0.0-2.0	Backfill
							PVC	2.0-3.0	Seal
								3.0-14.0	Filter
MW-114	15.00	15.00	76.45	76.45	2.00	5.0-15.0	Slotted	0.0-3.0	Backfill
							PVC	3,0-4,0	Seal
								4.0-15.0	Filter

APPENDIX C

LABORATORY ANALYTICAL REPORTS

... Upstate Laboratories, Inc.

Analysis Results

Report Number: 19698140

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT PERRY NY

Sampled by: Client
SB-7 1245H 07/15/98 G

ULI I.D.: 19698140 Matrix: Soil

PA	RAMETERS	RESULTS	KEY	FILE#
	Percent Solids	82%		WC244
Total	Lead	<13mg/kg dw		MB013
,	TCL Volatiles by EPA Method 8260			
	Chloromethane	<4ug/kg dw		VM197
	Bromomethane	<4ug/kg dw		VM197
	Vinyl Chloride	<2ug/kg dw		VM197
	Chloroethane	<4ug/kg dw		VM197
	Methylene Chloride	13ug/kg dw	44	VM197
	Acetone	23ug/kg dw	44	VM197
	Carbon Disulfide	<4ug/kg dw		VM197
	1,1-Dichloroethene	<4ug/kg dw		VM197
	1,1-Dichloroethane	<4ug/kg dw		VM197
	trans-1,2-Dichloroethene	<4ug/kg dw		VM197
	cis-1,2-Dichloroethene	<4ug/kg dw		VM197
	Chloroform	<4ug/kg dw		VM197
	1,2-Dichloroethane	<4ug/kg dw		VM197
	2-Butanone	<12ug/kg dw		VM197
	1,1,1-Trichloroethane	<4ug/kg dw		VM197
	Carbon Tetrachloride	<4ug/kg dw		VM197
	Bromodichloromethane	<4ug/kg dw		VM197
	1,2-Dichloropropane	<4ug/kg dw		VM197
	cis-1,3-Dichloropropene	<4ug/kg dw		VM197
	Trichloroethene	<4ug/kg dw		VM197
	Dibromochloromethane	<4ug/kg dw		VM197
	1,1,2-Trichloroethane	<4ug/kg dw		VM197
	Benzene	<4ug/kg dw		VM197
	trans-1,3-Dichloropropene	<4ug/kg dw		VM197
	Bromoform	<4ug/kg dw		VM197
	4-Methyl-2-pentanone	<12ug/kg dw		VM197
	2-Hexanone	<12ug/kg dw		VM197
	Tetrachloroethene	<4ug/kg dw		VM197
	1,1,2,2-Tetrachloroethane	<4ug/kg dw		VM197
	Toluene	<4ug/kg dw		VM197
	Chlorobenzene	<4ug/kg dw		VM197
	Ethylbenzene	<4ug/kg dw		VM197
	Styrene	<4ug/kg dw		VM197
	m-Xylene and p-Xylene	<4ug/kg dw		VM197
	o-Xylene	<4ug/kg dw		VM197

APPROVAL:

Lab I.D.: 10170

Upstate Laboratories, Inc.

Analysis Results

Report Number: 19698140

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT PERRY NY

SB-8 1015H 07/15/98 G Sampled by: Client

UL.	I I.D.: 19698141	Matrix: Soil		
PA	RAMETERS	RESULTS	KEY	FILE#
				WC244
	Percent Solids	84%		MB013
otal	Lead	<12mg/kg dw		MBUI
•	TCL Volatiles by EPA Method 8260			
		.2 C /lam. das	05	VM19
	Chloromethane	<36ug/kg dw	05	VM19
	Bromomethane	<36ug/kg dw	05	VM19
	Vinyl Chloride	<24ug/kg dw	05	VM19
	Chloroethane	<36ug/kg dw	44	VM19
	Methylene Chloride	160ug/kg dw	44	VM19
	Acetone	210ug/kg dw	05	VM19
	Carbon Disulfide	<36ug/kg dw	• -	VM19
	1,1-Dichloroethene	<36ug/kg dw	05	
	1,1-Dichloroethane	<36ug/kg dw	05	VM19
	trans-1,2-Dichloroethene	<36ug/kg dw	05	VM19
	cis-1,2-Dichloroethene	<36ug/kg dw	05	VM19
	Chloroform	<36ug/kg dw	05	VM19
	1,2-Dichloroethane	<36ug/kg dw	05	VM19
	2-Butanone	<120ug/kg dw	05	VM19
	1,1,1-Trichloroethane	<36ug/kg dw	05	VM1
	Carbon Tetrachloride	<36ug/kg dw	05	VM1
	Bromodichloromethane	<36ug/kg dw	05	VM19
	1,2-Dichloropropane	<36ug/kg dw	05	VM19
	cis-1,3-Dichloropropene	<36ug/kg dw	05	VM19
	Trichloroethene	<36ug/kg dw	05	VM19
	Dibromochloromethane	<36ug/kg dw	05	VM19
	1,1,2-Trichloroethane	<36ug/kg dw	05	VM19
	Benzene	<36ug/kg dw	05	VM19
	trans-1,3-Dichloropropene	<36ug/kg dw	05	VM19
	Bromoform	<36ug/kg dw	05	VM19
	4-Methyl-2-pentanone	<120ug/kg dw	05	VM19
	2-Hexanone	<120ug/kg dw	05	VM19
	Tetrachloroethene	<36ug/kg dw	05	VM19
	1,1,2,2-Tetrachloroethane	<36ug/kg dw	05	VM19
	Toluene	<36ug/kg dw	05	VM19
	Chlorobenzene	<36ug/kg dw	05	VM19
	Ethylbenzene	7lug/kg dw	٥٠	VM19
	Styrene	<36ug/kg dw	05	VM19
	m-Xylene and p-Xylene	300ug/kg dw	0.5	VM19
	o - Virlana	<36ug/kg dw	05	VM19

<36ug/kg dw

APPROVAL:

Lab I.D.: 10170

dw = Dry weight

o-Xylene

Upstate Laboratories, Inc.

Analysis Results

Report Number: 19698140

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT PERRY NY

SB-9 1155H 07/15/98 G Sampled by: Client

PAI	RAMETERS	RESULTS	KEY	FIL
	Percent Solids	86%		WC2
otal	Lead	17mg/kg dw		MB0
7	TCL Volatiles by EPA Method 8260			
	Chloromethane	<3ug/kg dw		VM1
	Bromomethane	<3ug/kg dw		VM1
	Vinyl Chloride	<2ug/kg dw		VM1
	Chloroethane	<3ug/kg dw		VM1
	Methylene Chloride	llug/kg dw	44	VM1
	Acetone	29ug/kg dw	44	VM1
	Carbon Disulfide	<3ug/kg dw		VM1
	1,1-Dichloroethene	<3ug/kg dw		VM1
	1,1-Dichloroethane	<3ug/kg dw		VM1
	trans-1,2-Dichloroethene	<3ug/kg dw		VM1
	cis-1,2-Dichloroethene	<3ug/kg dw		VM1
	Chloroform	<3ug/kg dw		VM1
	1,2-Dichloroethane	<3ug/kg dw		VM1
	2-Butanone	<12ug/kg dw		VM1
	1,1,1-Trichloroethane	<3ug/kg dw		VM1
	Carbon Tetrachloride	<3ug/kg dw		VM1
	Bromodichloromethane	<3ug/kg dw		VM1
	1,2-Dichloropropane	<3ug/kg dw		VM1
	cis-1,3-Dichloropropene	<3ug/kg dw		VM1
	Trichloroethene	<3ug/kg dw		VM1
	Dibromochloromethane	<3ug/kg dw		VM1
	1,1,2-Trichloroethane	<3ug/kg dw		VM1
	Benzene	<3ug/kg dw		VM1
	trans-1,3-Dichloropropene	<3ug/kg dw		VM1
	Bromoform	<3ug/kg dw		VM1
	4-Methyl-2-pentanone	<12ug/kg dw		VM1
	2-Hexanone	<12ug/kg dw		VM1
	-Tetrachloroethene	<3ug/kg dw		VM1
	1,1,2,2-Tetrachloroethane	<3ug/kg dw		VM1
	Toluene	<3ug/kg dw		VM1
	Chlorobenzene	<3ug/kg dw		VM19
	Ethylbenzene	<3ug/kg dw		VM1
	Styrene	<3ug/kg dw		VM19
	m-Xylene and p-Xylene	<3ug/kg dw		VM19
	o-Xylene	<3ug/kg dw		VM1

APPROVAL:

Lab I.D.: 10170

Upstate Laboratories, Inc.

Analysis Results

Report Number: 19698140

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT PERRY NY

- Sampled by: Client SB-10 1115H 07/15/98 G

-	ULI I.D.: 19698143	Matrix: Soil		
	PARAMETERS	RESULTS	KEY	FILE#
	Percent Solids	89%		WC2449

APPROVAL: OS

	Percent Solids	89%		WC2449
Total	Lead	12mg/kg dw		MB0135
	TCL Volatiles by EPA Method 826	0		
	Chloromethane	<3ug/kg dw		VM1975
	Bromomethane	<3ug/kg dw		VM1975
	Vinyl Chloride	<2ug/kg dw		VM1975
	Chloroethane	<3ug/kg dw		VM1975
	Methylene Chloride	22ug/kg dw	44	VM1975
	Acetone	40ug/kg dw	44	VM1975
	Carbon Disulfide	<3ug/kg dw		VM1975
	1,1-Dichloroethene	<3ug/kg dw		VM1975
	1,1-Dichloroethane	<3ug/kg dw		VM1975
	trans-1,2-Dichloroethene	<3ug/kg dw		VM1975
	cis-1,2-Dichloroethene	<3ug/kg dw		VM1975
	Chloroform	<3ug/kg dw		VM1975
	1,2-Dichloroethane	<3ug/kg dw		VM1975
	2-Butanone	<11ug/kg dw		VM1975
	1,1,1-Trichloroethane	<3ug/kg dw		VM1975
	Carbon Tetrachloride	<3ug/kg dw		VM1975
	Bromodichloromethane	<3ug/kg dw		VM1975
	1,2-Dichloropropane	<3ug/kg dw		VM1975
	cis-1,3-Dichloropropene	<3ug/kg dw		VM1975
	Trichloroethene	<3ug/kg dw		VM1975
	Dibromochloromethane	<3ug/kg dw		VM1975
	1,1,2-Trichloroethane	<3ug/kg dw		VM1975
	Benzene	<3ug/kg dw		VM1975
	trans-1,3-Dichloropropene	<3ug/kg dw		VM1975
	Bromoform	<3ug/kg dw		VM1975
	4-Methyl-2-pentanone	<1lug/kg dw		VM1975
	2-Hexanone	<11ug/kg dw		VM1975
	Tetrachloroethene	<3ug/kg dw		VM1975
	1,1,2,2-Tetrachloroethane	<3ug/kg dw		VM1975
	Toluene	<3ug/kg dw		VM1975
	Chlorobenzene	<3ug/kg dw		VM1975
	Ethylbenzene	<3ug/kg dw		VM1975
	Styrene	<3ug/kg dw		VM1975
	m-Xylene and p-Xylene	<3ug/kg dw		VM1975
	o-Xylene	<3ug/kg dw		VM1975

Upstate Laboratories, Inc.

Analysis Results

Report Number: 19698140

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT PERRY NY

Sampled by: Client SB-7 1245H 07/15/98 G

Sampled by. Cilent	3B-7 1243N 07/13/30 G		
ULI I.D.: 19698144	Matrix: Water		
PARAMETERS	RESULTS	KEY	FILE#
TCL Volatiles by EPA Method 82	60		
Chloromethane	<3ug/1		VM1979
Bromomethane	<3ug/1		VM1979
Vinyl Chloride	<2ug/1		VM1979
Chloroethane	<3ug/1		VM1979
Methylene Chloride	17ug/1	44	VM1979
Acetone	<10ug/1		VM1979
Carbon Disulfide	<3ug/1		VM1979
1,1-Dichloroethene	<3ug/l		VM1979
1,1-Dichloroethane	<3ug/l		VM1979
trans-1,2-Dichloroethene	<3ug/l		VM1979
cis-1,2-Dichloroethene	<3ug/l		VM1979
Chloroform	<3ug/l		VM1979
1,2-Dichloroethane	<3ug/1		VM1979
2-Butanone	<10ug/l		VM1979
1,1,1-Trichloroethane	<3ug/l		VM1979
Carbon Tetrachloride	<3ug/l		VM1979
Bromodichloromethane	<3ug/l		VM1979
1,2-Dichloropropane	<3ug/1		VM1979
cis-1,3-Dichloropropene	<3ug/1		VM1979
Trichloroethene	<3ug/1		VM1979
Dibromochloromethane	<3ug/1		VM1979
1,1,2-Trichloroethane	<3ug/1		VM1979
Benzene	<3ug/1		VM1979
trans-1,3-Dichloropropene	<3ug/1		VM1979
Bromoform	<3ug/1		VM1979
4-Methyl-2-pentanone	<10ug/1		VM1979
2-Hexanone	<10ug/1		VM1979
Tetrachloroethene	<3ug/1		VM1979
1,1,2,2-Tetrachloroethane	<3ug/1		VM1979
Toluene	4ug/1		VM1979
Chlorobenzene	<3ug/1		VM1979
Ethylbenzene	<3ug/1		VM1979
Styrene	<3ug/l		VM1979
m-Xylene and p-Xylene	<3ug/1		VM1979
o-Xylene	<3ug/1		VM1979

APPROVAL:

Upstate Laboratories, Inc.

Analysis Results

Report Number: 19698140

Styrene

o-Xylene

m-Xylene and p-Xylene

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT PERRY NY

Sampled by: Client	SB-9 1155H 07/15/98 G		
ULI I.D.: 19698145	Matrix: Water		
PARAMETERS	RESULTS	KEY	FILE#

TCL Volatiles by EPA Method 826	50		
Chloromethane	<3ug/1		VM1979
Bromomethane	<3ug/1		VM1979
Vinyl Chloride	<2ug/1		VM1979
Chloroethane	<3ug/1		VM1979
Methylene Chloride	14ug/1	44	VM1979
Acetone	<10ug/l		VM1979
Carbon Disulfide	<3ug/1		VM1979
1,1-Dichloroethene	<3ug/1		VM1979
1,1-Dichloroethane	<3ug/1		VM1979
trans-1,2-Dichloroethene	<3ug/1		VM1979
cis-1,2-Dichloroethene	<3ug/1		VM1979
Chloroform	<3ug/l		VM1979
1,2-Dichloroethane	<3ug/1		VM1979
2-Butanone	<10ug/1		VM1979
1,1,1-Trichloroethane	<3ug/l		VM1979
Carbon Tetrachloride	<3ug/l		VM1979
Bromodichloromethane	<3ug/l	•	VM1979
1,2-Dichloropropane	<3ug/1		VM1979
cis-1,3-Dichloropropene	<3ug/l		VM1979
Trichloroethene	<3ug/l		VM1979
Dibromochloromethane	<3ug/l		VM1979
1,1,2-Trichloroethane	<3ug/l		VM1979
Benzene	<3ug/l		VM1979
trans-1,3-Dichloropropene	<3ug/l		VM1979
Bromoform	<3ug/1		VM1979
4-Methyl-2-pentanone	<10ug/l		VM1979
2-Hexanone	<10ug/l		VM1979
Tetrachloroethene	<3ug/1		VM1979
1,1,2,2-Tetrachloroethane	<3ug/1		VM1979
Toluene	5ug/1		VM1979
Chlorobenzene	<3ug/1		VM1979
Ethylbenzene	<3ug/1		VM1979

<3ug/1

3ug/1

<3ug/1

VM1979

VM1979

VM1979

APPROVAL:

Lab I.D.: 10170

QC:JI

DATE: 07/30/98

Upstate Laboratories, Inc.

Analysis Results

Report Number: 20198158

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT PERRY NY

Sampled by: Client SB-11 1320H 07/15/98 G

<u></u>	Ī Ī.D.: 20198158	Matrix: Soil		
PAI	RAMETERS	RESULTS	KEY	FILE#
	Percent Solids	84%		WC2521
Total	Lead	13mg/kg dw		MB0176
מ	CCL Volatiles by EPA Method 8260			

APPROVAL:

Chloromethane	<4ug/kg dw	VM1995
Bromomethane	<4ug/kg dw	VM1995
Vinyl Chloride	<2ug/kg dw	VM1995
Chloroethane	<4ug/kg dw	VM1995
Methylene Chloride	<4ug/kg dw	VM1995
Acetone	<12ug/kg dw	VM1995
Carbon Disulfide	<4ug/kg dw	VM1995
1,1-Dichloroethene	<4ug/kg dw	VM1995
1,1-Dichloroethane	<4ug/kg dw	VM1995
trans-1,2-Dichloroethene	<4ug/kg dw	VM1995
cis-1,2-Dichloroethene	<4ug/kg dw	VM1995
Chloroform	<4ug/kg dw	VM1995
1,2-Dichloroethane	<4ug/kg dw	VM1995
2-Butanone	<12ug/kg dw	VM1995
1,1,1-Trichloroethane	<4ug/kg dw	VM1995
Carbon Tetrachloride	<4ug/kg dw	VM1995
Bromodichloromethane	<4ug/kg dw	VM1995
1,2-Dichloropropane	<4ug/kg dw	VM1995
cis-1,3-Dichloropropene	<4ug/kg dw	VM1995
Trichloroethene	<4ug/kg dw	VM1995
Dibromochloromethane	<4ug/kg dw	VM1995
1,1,2-Trichloroethane	<4ug/kg dw	VM1995
Benzene	<4ug/kg dw	VM1995
trans-1,3-Dichloropropene	<4ug/kg dw	VM1995
Bromoform	<4ug/kg dw	VM1995
4-Methyl-2-pentanone	<12ug/kg dw	VM1995
2-Hexanone	<12ug/kg dw	VM1995
Tetrachloroethene	<4ug/kg dw	VM1995
1,1,2,2-Tetrachloroethane	<4ug/kg dw	VM1995
Toluene	8ug/kg dw	VM1995
Chlorobenzene	<4ug/kg dw	VM1995
Ethylbenzene	320ug/kg dw	VM1995
Styrene	<4ug/kg dw	VM1995
m-Xylene and p-Xylene	1100ug/kg dw	VM1995
o-Xylene	12ug/kg dw	VM1995

DATE: 07/30/98

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Upstate Laboratories, Inc.

Styrene

o-Xylene

m-Xylene and p-Xylene

Analysis Results

Report Number: 20198158

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT PERRY NY

Sampled by

by: Client	SB-11 1320H 07/15/98 G		
ULI I.D.: 20198159	Matrix: Water		
PARAMETERS	RESULTS	KEY	FILE#
TCL Volatiles by EPA Method 8260			
Chloromethane	<3ug/l		VM1992
Bromomethane	<3ug/1		VM1992
Vinyl Chloride	<2ug/1		VM1992
Chloroethane	<3ug/1		VM1992
Methylene Chloride	<3ug/1		VM1992
Acetone	<10ug/l		VM1992
Carbon Disulfide	<3ug/l		VM1992
1,1-Dichloroethene	<3ug/l		VM1992
1,1-Dichloroethane	<3ug/l		VM1992
trans-1,2-Dichloroethene	<3ug/l		VM1992
cis-1,2-Dichloroethene	<3ug/1		VM1992
Chloroform	<3ug/l		VM1992
1,2-Dichloroethane	<3ug/l		VM1992
2-Butanone	<10ug/l		VM1992
1,1,1-Trichloroethane	<3ug/l		VM1992
Carbon Tetrachloride	<3ug/1		VM1992
Bromodichloromethane	<3ug/l		VM1992
1,2-Dichloropropane	<3ug/l		VM1992
cis-1,3-Dichloropropene	<3ug/l		VM1992
Trichloroethene	<3ug/l		VM1992
Dibromochloromethane	<3ug/l		VM1992
1,1,2-Trichloroethane	<3ug/l		VM1992
Benzene	3ug/1		VM1992
trans-1,3-Dichloropropene	<3ug/l		VM1992
Bromoform	<3ug/l		VM1992
4-Methyl-2-pentanone	<10ug/l		VM1992
2-Hexanone	<10ug/l		VM1992
Tetrachloroethene	<3ug/l		VM1992
1,1,2,2-Tetrachloroethane	<3ug/1		VM1992
Toluene	7ug/1		VM1992
Chlorobenzene	<3ug/1		VM1992
Ethylbenzene	320ug/1		VM1992

<3ug/1

770ug/1

9ug/1

VM1992

VM1992

VM1992

APPROVAL:

DATE: 07/30/98

Upstate Laboratories, Inc.

Analysis Results

Report Number: 20198158

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT PERRY NY

SB-12 1515H 07/15/98 G Sampled by: Client

-	Ī Ī.D. = 20	0198160	Matrix: Soil		
PA	RAMETERS		RESULTS	KEY	FILE#
Total	Percent Lead	Solids	88% <11mg/kg dw		WC2520 MB0176

APPROVAL: () \

Lab I.D.: 10170

QC:_IT

Lead	<11mg/kg dw		MB0176
TCL Volatiles by EPA Method 8260			
Chloromethane	<3ug/kg dw		VM1995
Bromomethane	<3ug/kg dw		VM1995
Vinyl Chloride	<2ug/kg dw		VM1995
Chloroethane	<3ug/kg dw		VM1995
Methylene Chloride	6ug/kg dw	44	VM1995
Acetone	<11ug/kg dw		VM1995
Carbon Disulfide	<3ug/kg dw		VM1995
1,1-Dichloroethene	<3ug/kg dw		VM1995
1,1-Dichloroethane	<3ug/kg dw		VM1995
trans-1,2-Dichloroethene	<3ug/kg dw		VM1995
cis-1,2-Dichloroethene	<3ug/kg dw		VM1995
Chloroform	<3ug/kg dw		VM1995
1,2-Dichloroethane	<3ug/kg dw		VM1995
2-Butanone	<llug dw<="" kg="" td=""><td></td><td>VM1995</td></llug>		VM1995
1,1,1-Trichloroethane	<3ug/kg dw		VM1995
Carbon Tetrachloride	<3ug/kg dw		VM1995
Bromodichloromethane	<3ug/kg dw		VM1995
1,2-Dichloropropane	<3ug/kg dw		VM1995
cis-1,3-Dichloropropene	<3ug/kg dw		VM1995
Trichloroethene	<3ug/kg dw		VM1995
Dibromochloromethane	<3ug/kg dw		VM1995
1,1,2-Trichloroethane	<3ug/kg dw		VM1995
Benzene	<3ug/kg dw		VM1995
trans-1,3-Dichloropropene	<3ug/kg dw		VM1995
Bromoform	<3ug/kg dw		VM1995
4-Methy1-2-pentanone	<11ug/kg dw		VM1995
2-Hexanone	<11ug/kg dw		VM1995
Tetrachloroethene	<3ug/kg dw		VM1995
1,1,2,2-Tetrachloroethane	<3ug/kg dw		VM1995
Toluene	<3ug/kg dw		VM1995
Chlorobenzene	<3ug/kg dw		VM1995
Ethylbenzene	<3ug/kg dw		VM1995
Styrene	<3ug/kg dw		VM1995
m-Xylene and p-Xylene	<3ug/kg dw		VM1995
o-Xylene	<3ug/kg dw		VM1995

Upstate Laboratories, Inc.

Analysis Results

Report Number: 23198043

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT 98009 PERRY

Sampled by: Client MW-112 8-10 0740H 08/19/98 G

 		. 	
ULI I.D.:	23698093	Matr	ix: Soil

PARAMETERS	RESULTS	KEY	FILE#
Percent Solids	82%		WC2940
Petroleum, EPA Method 8021			
Benzene	<4ug/kg dw	01	VA3851
Ethylbenzene	<4ug/kg dw	01	VA3851
Toluene	<4ug/kg dw	01	VA3851
m-Xylene and p-Xylene	<4ug/kg dw	01	VA3851
o-Xylene	<4ug/kg dw	01	VA3851
Isopropylbenzene	<4ug/kg dw	01	VA3851
n-Propylbenzene	<4ug/kg dw	01	VA3851
p-Isopropyltoluene	<4ug/kg dw	01	VA3851
1,2,4-Trimethylbenzene	<4ug/kg dw	01	VA3851
1,3,5-Trimethylbenzene	<4ug/kg dw	01	VA3851
n-Butylbenzene	<4ug/kg dw	01	VA3851
sec-Butylbenzene	<4ug/kg dw	01	VA3851
t-Butylbenzene	<4ug/kg dw	01	VA3851
Naphthalene	<4ug/kg dw	01	VA3851
MTBE	<61ug/kg dw	01	VA3851
TOC	1766mg/kg		SC0001

APPROVAL: 05

Upstate Laboratories, Inc.

Analysis Results

Report Number: 23198043

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT 98009 PERRY

Sampled by: Client MW-113 6-8 0930H 08/19/98 G

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			\mathbf{n}	I	I.	D.	:	2:	365	86	94	4										1	Ma	tr:	ix:	: :	So	il					

PARAMETERS	RESULTS	KEY	FILE#
Percent Solids	84%		WC2940
Petroleum, EPA Method 8021			
Benzene	7ug/kg dw		VA3848
Ethylbenzene	45ug/kg dw		VA3848
Toluene	10ug/kg dw		VA3848
m-Xylene and p-Xylene	13ug/kg dw		VA3848
o-Xylene	3ug/kg dw		VA3848
Isopropylbenzene	13ug/kg dw		VA3848
n-Propylbenzene	37ug/kg dw		VA3848
p-Isopropyltoluene	<2ug/kg dw		VA3848
1,2,4-Trimethylbenzene	13ug/kg dw		VA3848
1,3,5-Trimethylbenzene	28ug/kg dw		VA3848
n-Butylbenzene	51ug/kg dw		VA3848
sec-Butylbenzene	7ug/kg dw		VA3848
t-Butylbenzene	<2ug/kg dw		VA3848
Naphthalene	<2ug/kg dw		VA3848
MTBE	<24ug/kg dw		VA3848

APPROVAL:

Upstate Laboratories, Inc.

Analysis Results

Report Number: 23198043

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT 98009 PERRY

Sampled by: Client MW-114 8-10 1148H 08/19/98 G

	ULI I.D.: 23698095	Matrix: Soil		
	PARAMETERS	RESULTS	KEY	FILE#
= 39s.	Percent Solids	88%		WC2940
v ap	Petroleum, EPA Method 8021			
	Benzene	<2ug/kg dw		VA3848
**	Ethylbenzene	<2ug/kg dw		VA3848
	Toluene	<2ug/kg dw		VA3848
	m-Xylene and p-Xylene	<2ug/kg dw		VA3848
	o-Xylene	<2ug/kg dw		VA3848
	Isopropylbenzene	<2ug/kg dw		VA3848
	n-Propylbenzene	<2ug/kg dw		VA3848
	p-Isopropyltoluene	<2ug/kg dw		VA3848
	1,2,4-Trimethylbenzene	<2ug/kg dw		VA3848
	1,3,5-Trimethylbenzene	<2ug/kg dw		VA3848
	n-Butylbenzene	4ug/kg dw		VA3848
	sec-Butylbenzene	<2ug/kg dw		VA3848
	t-Butylbenzene	<2ug/kg dw		VA3848
	Naphthalene	<2ug/kg dw		VA3848
	MTBE	<23ug/kg dw		VA3848

APPROVAL: OS

Upstate Laboratories, Inc.

MTBE

Analysis Results

Report Number: 23198043

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT 98009 PERRY

Sampled by: Client MW-114 1445H 08/20/98 G

 ULI I.D.: 23698100	Matrix: Water		
PARAMETERS	RESULTS	KEY	FILE#
	~~~~		
Petroleum, EPA Method 8021			
	/-		
Benzene	<0.5ug/1		VA3848
Ethylbenzene	<0.5ug/l		VA3848
Toluene	<0.5ug/l		VA3848
m-Xylene and p-Xylene	<0.5ug/l		VA3848
o-Xylene	<0.5ug/l		VA3848
Isopropylbenzene	<0.5ug/l		VA3848
n-Propylbenzene	<0.5ug/l		VA3848
p-Isopropyltoluene	lug/l		VA3848
1,2,4-Trimethylbenzene	<0.5ug/l		VA3848
1,3,5-Trimethylbenzene	<0.5ug/l		VA3848
n-Butylbenzene	4ug/1		VA3848
sec-Butylbenzene	0.9ug/l		VA3848
t-Butylbenzene	<0.5ug/l		VA3848
Naphthalene	<0.5ug/1		VA3848

<10ug/l

APPROVAL: 015

QC: 1.D.: 10170

VA3848

Jupstate Laboratories, Inc.

Analysis Results

Report Number: 23198043

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT 98009 PERRY

- Sampled by: Client MW-112 1427H 08/20/98 G

ULI I.D.: 23698098 Matrix: Water

ULI I.D.: 23698098	I.D.: 23698098 Matrix: Water				
PARAMETERS	RESULTS	KEY	FILE#		
Petroleum, EPA Method 8021					
Benzene	0.6ug/l		VA3848		
Ethylbenzene	0.7ug/l		VA3848		
Toluene	2ug/1		VA3848		
m-Xylene and p-Xylene	3ug/l		VA3848		
o-Xylene	0.9ug/l		VA3848		
Isopropylbenzene	<0.5ug/l		VA3848		
n-Propylbenzene	<0.5ug/l		VA3848		
p-Isopropyltoluene	<0.5ug/l		VA3848		
1,2,4-Trimethylbenzene	lug/l		VA3848		
1,3,5-Trimethylbenzene	<0.5ug/l		VA3848		
n-Butylbenzene	<0.5ug/l		VA3848		
sec-Butylbenzene	<0.5ug/l		VA3848		
t-Butylbenzene	<0.5ug/l		VA3848		
Naphthalene	<0.5ug/l		VA3848		
MTBE	<10ug/l		VA3848		

APPROVAL: US

Upstate Laboratories, Inc.

Analysis Results

Report Number: 23198043

Client I.D.: DELTA ENVIRONMENTAL CONSULTANT 98009 PERRY

Sampled by: Client MW-113 1435H 08/20/98 G

ULI I.D.: 23698099	Matrix: Water		
PARAMETERS	RESULTS	KEY	FILE#
Petroleum, EPA Method 8021			
Benzene	2ug/1		VA3848
Ethylbenzene	<0.5ug/l		VA3848
Toluene	0.5ug/l		VA3848
m-Xylene and p-Xylene	<0.5ug/l		VA3848
o-Xylene	<0.5ug/l		VA3848
Isopropylbenzene	<0.5ug/l		VA3848
n-Propylbenzene	<0.5ug/l		VA3848
p-Isopropyltoluene	2ug/1		VA3848
1,2,4-Trimethylbenzene	<0.5ug/l		VA3848
1,3,5-Trimethylbenzene	<0.5ug/l		VA3848
n-Butylbenzene	<0.5ug/1		VA3848
sec-Butylbenzene	<0.5ug/l		VA3848
t-Butylbenzene	<0.5ug/l		VA3848
Naphthalene	<0.5ug/1		VA3848
MTBE	<10ug/1		VA3848

APPROVAL:_ OS

### KEY PAGE

- 1 MATRIX INTERFERENCE PRECLUDES LOWER DETECTION LIMITS
- 2 MATRIX INTERFERENCE
- 3 PRESENT IN BLANK
- 4 ANALYSIS NOT PERFORMED BECAUSE OF INSUFFICIENT SAMPLE
- 5 THE PRESENCE OF OTHER TARGET ANALYTE(S) PRECLUDES LOWER DETECTION LIMITS
- 6 BLANK CORRECTED
- 7 HEAD SPACE PRESENT IN SAMPLE
- 8 QUANTITATION LIMIT IS GREATER THAN THE CALCULATED REGULATORY LEVEL. THE QUANTITATION LIMIT THEREFORE BECOMES THE REGULATORY LEVEL.
- 9 THE OIL WAS TREATED AS A SOLID AND LEACHED WITH EXTRACTION FLUID
- 10 ADL(AVERAGE DETECTION LIMITS)
- 11 PQL (PRACTICAL QUANTITATION LIMITS)
- 12 SAMPLE ANALYZED OVER HOLDING TIME
- 13 DISSOLVED VALUE MAY BE HIGHER THAN TOTAL DUE TO CONTAMINATION FROM THE FILTERING PROCEDURE
- 14 SAMPLED BY ULI
- 15 DISSOLVED VALUE MAY BE HIGHER THAN TOTAL; HOWEVER, THE VALUES ARE WITHIN EXPERIMENTAL ERROR
- 16 AN INHIBITORY FACTOR WAS OBSERVED IN THIS ANALYSIS
- 17 PARAMETER NOT ANALYZED WITHIN 15 MINUTES OF SAMPLING
- 18 THE SERIAL DILUTION OF THIS SAMPLE SUGGESTS A POSSIBLE PHYSICAL AND/OR CHEMICAL INTERFERENT IN THIS DETERMINATION. THE DATA MAY BE BIASED EITHER HIGH OR LOW.
- 19 CALCULATION BASED ON DRY WEIGHT
- 20 INDICATES AN ESTIMATED VALUE, DETECTED BUT BELOW THE PRACTICAL QUANTITATION LIMITS
- 21 UG/KG AS REC.D / UG/KG DRY WT
- 22 MG/KG AS REC.D / MG/KG DRY WT
- 23 INSUFFICIENT SAMPLE PRECLUDES LOWER DETECTION LIMITS
- 24 SAMPLE DILUTED/BLANK CORRECTED
- 25 ND (NON-DETECTED)
- 26 MATRIX INTERFERENCE PRECLUDES LOWER DETECTION LIMITS/BLANK CORRECTED
- 27 SPIKE RECOVERY ABNORMALLY HIGH/LOW DUE TO MATRIX INTERFERENCE
- 28 POST-DIGESTION SPIKE FOR FURNACE AA ANALYSIS IS OUTSIDE OF THE CONTROL LIMITS (85-115%); HOWEVER, THE SAMPLE CONCENTRATION IS BELOW THE PQL
- 29 ANALYZED BY METHOD OF STANDARD ADDITIONS
- 30 METHOD PERFORMANCE STUDY HAS NOT BEEN COMPLETED/ND(NON-DETECTED)
- 31 FIELD MEASURED PARAMETER TAKEN BY CLIENT
- 32 TARGET ANALYTE IS BIODEGRADED AND/OR ENVIRONMENTALLY WEATHERED
- 33 NON-POTABLE WATER SOURCE
- 34 THE QUALITY CONTROL RESULTS FOR THIS ANALYSIS INDICATE A POSITIVE BIAS OF 1-5 MG/L. THE POSITIVE BIAS FALLS BELOW THE PUBLISHED EPA REGULATORY DETECTION LIMIT OF 5 MG/L BUT ABOVE 1 MG/L.
- 35 THE HYDROCARBONS DETECTED IN THE SAMPLE DID NOT CROSS-MATCH WITH COMMON PETROLEUM DISTILLATES
- 36 MATRIX INTERFERENCE CAUSING SPIKES TO RESULT IN LESS THAN 50.0% RECOVERY
- 37 MILLIGRAMS PER LITER (MG/L) / POUNDS (LBS) PER DAY
- 38 MILLIGRAMS PER LITER (MG/L) OF RESIDUAL CHLORINE (CL2) / POUNDS (LBS) PER DAY OF CL2
- 39 MICROGRAMS PER LITER (UG/L) / POUNDS (LBS) PER DAY
- 40 MILLIGRAMS PER LITER (MG/L) LINEAR ALKYL SULFONATE (LAS) / POUNDS (LBS) PER DAY LAS
- 41 RESULTS ARE REPORTED ON AN AS REC.D BASIS
- 42 THE SAMPLE WAS ANALYZED ON A TOTAL BASIS; THE TEST RESULT CAN BE COMPARED TO THE TCLP REGULATORY CRITERIA BY DIVIDING THE TEST RESULT BY 20, CREATING A THEORETICAL TCLP VALUE
- 43 METAL BY CONCENTRATION PROCEDURE
- 44 POSSIBLE CONTAMINATION FROM FIELD/LABORATORY



Group No. C310091 Account No. 37809210 Report Date: 11/17/98

ZBUR ENVIRONMENTAL CONSULTANTS INC

MT. ROYAL BLVD SUITE 225-GAMMA LISON PARK, PA 15101

Final Report

pate Received: 11/06/98 17:03

sample Type: 2 - Soil Sample(s); 20 - Water Sample(s)
Project: 98009 CHAMPION PERRY PO Number: SPECIAL PRICES

டab ID	Parameter	Concentration	PQL	Analysis Analyst Date/Time	
.01	MW-112 Sample Date: 11/	05/98 10:30			
	Volatile Organics in Water by 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene	3.23 ug/L < 1 ug/L	1	CM CM CM	11/12/98 11:00 11/12/98 11:00 11/12/98 11:00
	Benzene Ethylbenzene Isopropylbenzene	< 1 ug/L 3.10 ug/L < 1 ug/L	1 1 1	CM CM	11/12/98 11:00 11/12/98 11:00 11/12/98 11:00
	M, P-Xylene Methyl-t-butyl ether	2.13 ug/L < 1 ug/L	1 1	CM CM	11/12/98 11:00 11/12/98 11:00
	N-Butylbenzene N-Propylbenzene Naphthalene	< 1 ug/L < 1 ug/L 1.28 ug/L	1 1 1	CM CM CM	11/12/98 11:00 11/12/98 11:00 11/12/98 11:00
	O-Xylene Sec-Butylbenzene	< 1 ug/L < 1 ug/L	1	CM CM	11/12/98 11:00 11/12/98 11:00
	Toluene	< 1 ug/L	1	CM	11/12/98 11:00
014	MW-113 Sample Date: 11/	05/98 10:40			
. We	Volatile Organics in Water by 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Benzene Ethylbenzene Isopropylbenzene	GC < 1 ug/L < 1 ug/L 10.1 ug/L < 1 ug/L < 1 ug/L	1 1 1 1	CM CM CM CM CM	11/12/98 11:00 11/12/98 11:00 11/12/98 11:00 11/12/98 11:00 11/12/98 11:00

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## Analytics Division

Laboratory Corporation of America® Holdings PO Box 25249 Richmond, Virginia 23260

Telephone: 800-888-8061

Group No. C310091 Account No. 37809210 Report Date: 11/17/98

STEVE ZBUR DELTA ENVIRONMENTAL CONSULTANTS INC

4068 MT. ROYAL BLVD SUITE 225-GAMMA ALLISON PARK, PA 15101

Final Report

Date Received: 11/06/98 17:03

Sample Type: 2 - Soil Sample(s); 20 - Water Sample(s)
Project: 98009 CHAMPION PERRY PO Number: SPECIAL PRICES Project:

Lab ID Parameter	Concentration	PQL	Analysis PQL Analyst Date/Time	
-014 MW-113 Sample Date:	11/05/98 10:40	_		
M,P-Xylene Methyl-t-butyl ether N-Butylbenzene N-Propylbenzene Naphthalene O-Xylene Sec-Butylbenzene Toluene  -015 MW-114 Sample Date:	<pre>&lt; 1 ug/L &lt; 1 ug/L</pre>	1 1 1 1 1 1	CM CM CM CM CM CM CM	11/12/98 11:00 11/12/98 11:00 11/12/98 11:00 11/12/98 11:00 11/12/98 11:00 11/12/98 11:00 11/12/98 11:00 11/12/98 11:00
Volatile Organics in Water 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Benzene Ethylbenzene Ethylbenzene Isopropylbenzene M,P-Xylene Methyl-t-butyl ether N-Butylbenzene N-Propylbenzene Naphthalene O-Xylene Sec-Butylbenzene	er by GC  < 1 ug/L  < 1 ug/L	1 1 1 1 1 1 1 1 1		11/12/98 11:00 11/12/98 11:00



Group No. C310091 Account No. 37809210 Report Date: 11/17/98

STEVE ZBUR DELTA ENVIRONMENTAL CONSULTANTS INC

4068 MT. ROYAL BLVD SUITE 225-GAMMA ALLISON PARK, PA 15101

Final Report

Date Received: 11/06/98 17:03

Sample Type: 2 - Soil Sample(s); 20 - Water Sample(s)
Project: 98009 CHAMPION PERRY PO Number: SPECIAL PRICES

Lab ID Parameter		Con	centration	PQL	Analysis Analyst Date/Time		
-015 MW-114	Sample Date:	11/05/98	11:05				
Toluene		< 1	ug/L	1	CM	11/12/98 11:00	
-016 MW-115	Sample Date:	11/05/98	12:30				
	rganics in Wate						
	ethylbenzene		ug/L	1	CM	11/12/98 11:00	
	ethylbenzene		ug/L	1	CM	11/12/98 11:00	
Benzene			ug/L	1	CM	11/12/98 11:00	
Ethylbenze			ug/L	1	CM	11/12/98 11:00	
Isopropylb			ug/L	1	CM	11/12/98 11:00	
M, P-Xylene			ug/L	1	CM	11/12/98 11:00	
Methyl-t-b			ug/L	1	CM	11/12/98 11:00	
N-Butylben N-Propylbe			ug/L	1	CM	11/12/98 11:00	
Naphthalen			ug/L ug/L	1 1	CM CM	11/12/98 11:00 11/12/98 11:00	
0-Xylene	<b>-</b>		ug/L	1	CM	11/12/98 11:00	
Sec-Butylb	enzene		ug/L	1	CM	11/12/98 11:00	
Toluene			ug/L	ī	CM	11/12/98 11:00	
-017 MW-201	Sample Date:	11/05/98	10:15				
8260 Volat: 1,1 Dichlo	ile Organics roethane	< 1	ug/L	1	RAP	11/11/98 13:15	

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