NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

4/1/00

SITE INVESTIGATION INFORMATION

1. SITE NAME	2. SITE NUMBER	3. TOWN/CITY/VILLAGE	4. COUNTY
Farmingdale Plaza Cleaners		Farmingdale	Nassau

5. REGION	6. CLASSIFICATION
1	CURRENT [ ] PROPOSED [P] MODIFICATION

7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location)

a. Quadrangle- Amityville b. Site Latitude ___° ___' ___" Site Longitude ___° ___' ___"

c. Tax Map Number(s) d. Site Street Address- 480 Main St., Farmingdale, NY

8. BRIEFLY DESCRIBE THE SITE (Attach site map showing disposal/sampling locations)

The site is a dry cleaner located in the Waldbaum's Shopping Center on Main street, Farmingdale. This site is directly upgradient of the Liberty Industrial Finishing site, a Class 2 site on the Registry of Inactive Hazardous Waste Disposal Sites. Investigations conducted at the Liberty site indicate that there is a significant source of tetrachloroethene (PCE) upgradient which is contaminating the groundwater. The most highly contaminated monitoring well is located approximately 300 feet directly downgradient of Farmingdale Plaza Cleaners.

a. Area _____ acres b. Completed: ( ) Env. Property Assessment ( ) PSA ( ) SI ( ) ESI ( ) IRM ( )RI/FS ( ) Construction ( ) O&M ( )Other_____

9. HAZARDOUS WASTE DISPOSED (Include EPA Hazardous Waste Numbers)

Disposal of spent dry cleaning fluid (PCE- F001, F002) is suspected.

10. ANALYTICAL DATA AVAILABLE

a. ( )Air (X)Groundwater ( )Surface Water ( )Sediment ( )Soil ( )Waste ( )Leachate ( )EPTox ( )TCLP

b. Contravention of Standards or Guidance Values

The PCE level in MW-22A, 300 feet downgradient of the dry cleaner, was found to be 1100 ppb. The GA standard is 5 ppb.

11. CONCLUSION

Plume cross-sections of the PCE contamination in the groundwater at Farmingdale prepared in connection with the investigation of the Liberty Industrial Finishing site indicate that the source of the PCE contamination is upgradient of that site and close-by. They indicate that the likely source area is in the vicinity of Waldbaum's Shopping Center. On-site dry cleaning operations have been conducted at the Farmingdale Plaza Cleaners location in the shopping center for over 20 years. This site should be investigated as the potential source of the contamination.

a. Institutional Controls (IC) Required? ( )Y ( )N b. If yes, identify c. Are these ICs in place and verified? ( ) Y ( )N

12. SITE IMPACT DATA

a. Nearest Surface Water: Distance	Direction-	Class _____	
b. Groundwater: Depth- 5ft.	Flow Direction-south	(X)Sole Source	( )Primary ( )Other High-Yield Aquifer
c. Water Supply: Distance _____ft.	Direction _____	Active ( )Yes ( )No	
d. Nearest Building: Distance- 0ft.	Direction- on-site	Use- commercial	
e. Documented fish or wildlife mortality?	( )Y (X)N	h. Exposed hazardous waste?	( )Y (U)N
f. Impact on special status fish or wildlife resource?	( )Y (X)N	i. If proposed Classification is 2, Priority?	( ) 1 ( ) 2 ( ) 3
g. Controlled Site Access?	( )Y (X)N	j. EPA ID#_____	HRS Score _____

13. SITE OWNER'S NAME	14. ADDRESS	15. TELEPHONE NUMBER
Tim Huttleston, AMP Supermarkets	90 Delaware Ave., Patterson NJ 07503	

16. PREPARER	17. APPROVED
John B. Swartwout November 24, 2000	Walter J. Parish 12/12/00
Signature Date	Signature Date
John B. Swartwout, Chief, Eastern Investigation Section	WALTER J. PARISH, RHWRE Region 1
Name, Title, Organization	Name, Title, Organization

file
JG

DAMES & MOORE
A DAMES & MOORE GROUP COMPANY

2325 Maryland Road
Willow Grove, Pennsylvania 19090
215 657 5000 Tel
215 657 5454 Fax

August 23, 1999

Chief, NY Remediation Branch
United States Environmental Protection Agency
290 Broadway, 20th Floor
New York, New York 10007

5' — typical screen length

Attn: Mr. Lorenzo Thantu

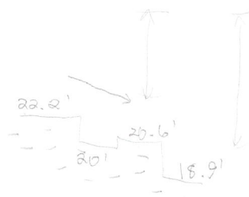
Re: Additional Groundwater Sampling Results
July 27, 1999 and August 17, 1999
Continued Remedial Investigation/Feasibility Study
Liberty Industrial Finishing Site
Farmingdale, Nassau County, New York

Dear Mr. Thantu:

The purpose of this letter is to report analytical results of groundwater sampling activities that were conducted on July 27 and August 17, 1999. Groundwater samples from five (5) monitoring wells were collected during both rounds of sampling and submitted to STL Envirotech Laboratories, Inc. of Edison, New Jersey. The groundwater samples were collected using low-flow, micro-purge methods, as described in the March 30, 1999 CRI Report. Personnel from Roy F. Weston, Inc. provided oversight on behalf of the EPA during both sampling events. Personnel from the Nassau County Department of Health collected analytical split samples during the August 17, 1999 sampling event. The locations of the sampled monitoring wells are shown in Figure 1. The location details and requested analyses are listed below:

July 27, 1999 Event:

Well ID	Location	Address	Depth (feet bgs)	Depth to Water (feet bgs)	Analysis
MW-22A	off-site, upgradient	Fulton St	29.0	21.6	TCL VOCs
MW-22B	off-site, upgradient	Fulton St	50.0	21.5	TCL VOCs
MW-33B	on-site	Liberty Site	50.0	19.6	TCL VOCs
MW-20	on-site	Liberty Site	29.0	20.1	TCL VOCs
MW-34B	off-site, downgradient	Vandewater St	45.0	18.2	TCL VOCs



August 17, 1999 Event:

Well ID	Location	Address	Depth (feet bgs)	Depth to Water (feet bgs)	Analysis
MW-22A	off-site, upgradient	Fulton St	29.0	22.2	TCL VOCs
MW-22B	off-site, upgradient	Fulton St	50.0	22.2	TCL VOCs
MW-33B	on-site	Liberty Site	50.0	20.0	TCL VOCs
MW-20	on-site	Liberty Site	29.0	20.6	TCL VOCs
MW-34B	off-site, downgradient	Vandewater St	45.0	18.9	TCL VOCs

Background

On July 16, 1999, the Liberty PRP Group notified the U.S. Environmental Protection Agency (EPA) of its intent to perform these additional groundwater sampling activities. According to Section 61 of the Administrative Order on Consent (Index No. II CERCLA-97-0203), the Liberty PRP Group presented a memorandum to the EPA to support these groundwater sampling activities.

The July 27 and August 17 sampling events focused on off-site and on-site monitoring wells that had previous detections of tetrachloroethene (PCE). As reported in the March 30, 1999 Draft RI Report and based on then existing data, the Liberty PRP Group believed that PCE concentrations in certain wells (MW-20, MW-22A, MW-22B, MW-33B, MW-34B) are related to a potential off-site, upgradient source (one or more dry cleaning facilities along Main Street in Farmingdale, New York). The results of the current groundwater sampling events support this interpretation.

Analytical Results

The analytical data, as reported by the laboratory on an expedited turn-around, are attached to this letter as Attachment A. The results of three constituents, PCE, trichloroethene (TCE), and *cis*-1,2-dichloroethene (DCE) are summarized in Tables 1A, 1B, and 1C, respectively. Also shown in these tables are the results from previous CRI groundwater sampling events, as well as, concentration trends during this time period. The analytical results and inferred concentration contours are plotted (in plan view) in Figure 1. Cross sections showing the concentrations of PCE and its degradation products TCE and *cis*-1,2-DCE are shown as Figures 2 through 4.

As shown in Table 1A, the greatest PCE concentrations were detected off-site in upgradient monitoring well MW-22A, ranging from 810 to 1,100 µg/L. A previously detected PCE concentration of 18 µg/L (January 27, 1999) appears to be erroneous due to the short time lag from well completion (January 21, 1999). At the same location, monitoring well MW-22B had PCE concentrations ranging from 26 to 37 µg/L. The on-site monitoring wells MW-33B and MW-20 had PCE concentrations of 480 to 510 µg/L and 5.5 to 9.2 µg/L, respectively. The downgradient, off-site well MW-34B had PCE concentrations ranging from 130 to 220 µg/L.

As shown in Table 1B, the greatest TCE concentrations were detected off-site in upgradient monitoring well MW-22A, ranging from 510 to 840 µg/L. A previously detected TCE concentration of 3 µg/L (January 27, 1999) appears to be erroneous due to the short time lag from well completion (January 21, 1999). At the same location, monitoring well MW-22B had TCE concentrations ranging from 7.6 to 11 µg/L. The on-site monitoring wells MW-33B and MW-20 had TCE concentrations of 7.9 to 9.7 µg/L and 1.4 µg/L, respectively. The downgradient, off-site well MW-34B had TCE concentrations ranging from 39 to 60 µg/L.

As shown in Table 1C, the greatest *cis*-1,2-DCE concentrations were detected off-site in upgradient monitoring well MW-22A, ranging from 510 to 980 µg/L. A previously detected *cis*-1,2-DCE concentration of 18 µg/L (January 27, 1999) appears to be erroneous due to the short time lag from well completion (January 21, 1999). At the same location, monitoring well MW-22B had *cis*-1,2-DCE concentrations ranging from 18 to 21 µg/L. The on-site monitoring wells MW-33B and MW-20 had *cis*-1,2-DCE concentrations of 28 to 29 µg/L and 0.7 µg/L, respectively. The downgradient, off-site well MW-34B had *cis*-1,2-DCE concentrations ranging from 39 to 66 µg/L.

The current PCE results are presented as a concentration contour map in Figure 1. It is clear from these data that the greatest PCE concentrations exist upgradient of the Liberty site at relatively shallow depths. The PCE concentrations decrease progressively in the downgradient direction. The distribution of PCE, as shown in Figure 1, is consistent with the presence of a shallow (current or historic) source area north-northeast of Fulton Street toward Main Street. Several dry-cleaners are known to operate along Main Street in Farmingdale, and the addresses of these dry-cleaning operations were previously communicated to the EPA via e-mail.

The cross section views presented in Figures 2 through 4 are consistent with the presence of a PCE-dominated VOC plume that originates from a shallow source to the north-northeast of Fulton Street and gradually penetrates the deeper aquifer portion. The relative concentration distributions of PCE, TCE, and *cis*-1,2-DCE are very similar to one another, suggesting that TCE and *cis*-1,2-DCE are present as degradation products of primary PCE.

Summary

The results shown in Tables 1A through 1C indicate that upgradient, off-site monitoring well MW-22A had the greatest PCE (810 to 1,100 µg/L) and the greatest total VOC concentrations (1,860 to 2,930 µg/L) of the wells sampled. In fact, the total VOC concentrations detected in MW-22A are greater than any other on-site or off-site VOC concentrations detected during RI or CRI. The plan view and cross section concentration contour maps (Figures 1 through 4) are consistent with the presence of a PCE-dominated VOC plume that originates from a shallow source upgradient of the Liberty site and gradually penetrates the deeper aquifer portion beneath the site. This plume was referred to as "Plume B" in the draft RI Report (Dames & Moore, March 30, 1999) and refers to the non-site related VOC plume identified during the RI activities.

We have reviewed the on-site soil analytical data collected during the RI (1992), the CRI (1997), and the supplemental soil sampling program (1998-99). There were no detections of PCE in soil samples that were collected within the on-site footprint of this PCE groundwater plume ("Plume B"). Similarly, PCE was not detected in most of the subsurface feature solid samples collected within footprint of Plume B, with the exception of very low concentrations (between 1 and 17 µg/kg) in SF-19, SF-24, and SF-27. These PCE concentrations were at or below the default and site-specific NYSDEC soil TAGMs for protection of groundwater. Based on these data we argue that there is no PCE contribution from on-site soils to Plume B. Further, we believe that the detections of PCE in soil gas within the footprint of Plume B (1992 RI soil gas survey) were related to off-gassing from the shallow portion of Plume B. The PCE that is present in and off-gassing from Plume B, however, is derived from an off-site upgradient source north of the site.

In summary, the evidence presented in this letter report conclusively demonstrates that the PCE in Plume B is related to an upgradient, off-site source, and that no other on-site sources of PCE exist within the extent of Plume B.

Sincerely,
DAMES & MOORE

Matthias Ohr
Senior Geologist

MO:mo
C:\My Documents\Liberty\AGENCY\08-23-99 epa pce.doc

cc: Liberty PRP Group
Mr. Michael Mintzer (EPA)
Mr. Victor Cardona (NYSDEC)
Mr. Ted Toskos (Roy F. Weston)
Mr. Gary Loesch (H2M Group)
Mr. Tom Maher (Dvirka and Bartilucci)

ATTACHMENT A

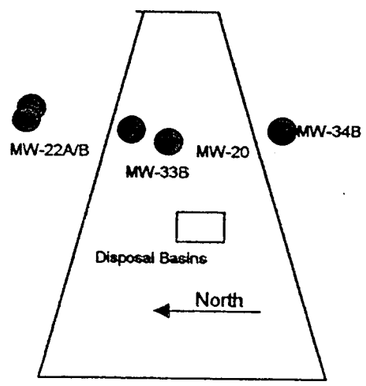
LABOARTORY DATA

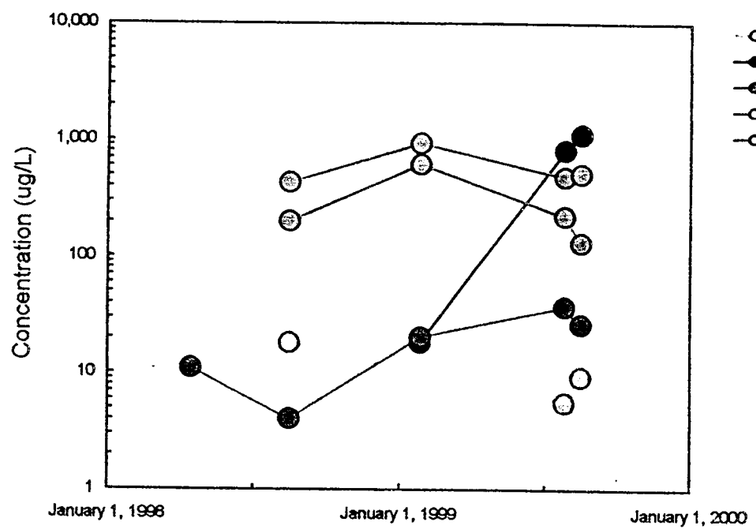
July 27, 1999 Sampling Event: SDG # R852
August 17, 1999 Sampling Event: SDG # S505

TABLE 1A
Summary of Groundwater Analytical Results (PCE)
July 27 and August 17, 1999 Sampling Events
Liberty Industrial Finishing Site
Farmingdale, New York

	MW-20	MW-22A	MW-22B	MW-33B	MW-34B
Location	on-site	upgradient		on-site	downgradient
Depth	25 ft	30 ft	50 ft	50 ft	45 ft
4/15/98			11		
8/17/98	18		4	430	200
1/27/99		18	20	930	610
4/22/99					
7/27/99	5.5	810	37	480	220
8/17/99	9.2	1100	26	510	130

Notes: Concentrations are in ug/L
PCE = tetrachloroethene





selected VOCs 08/23/1999

Dames & Moore

TABLE 1B
Summary of Groundwater Analytical Results (TCE)
July 27 and August 17, 1999 Sampling Events
Liberty Industrial Finishing Site
Farmingdale, New York

	MW-20	MW-22A	MW-22B	MW-33B	MW-34B
Location	on-site	upgradient		on-site	downgradient
Depth	25 ft	30 ft	50 ft	50 ft	45 ft
4/15/98			4		
8/17/98	0.6		1	13	30
1/27/99		3	8	21	110
4/22/99					
7/27/99	1.4	510	11	7.9	60
8/17/99	1.4	840	7.6	9.7	39

Notes: Concentrations are in ug/L
TCE = trichloroethene

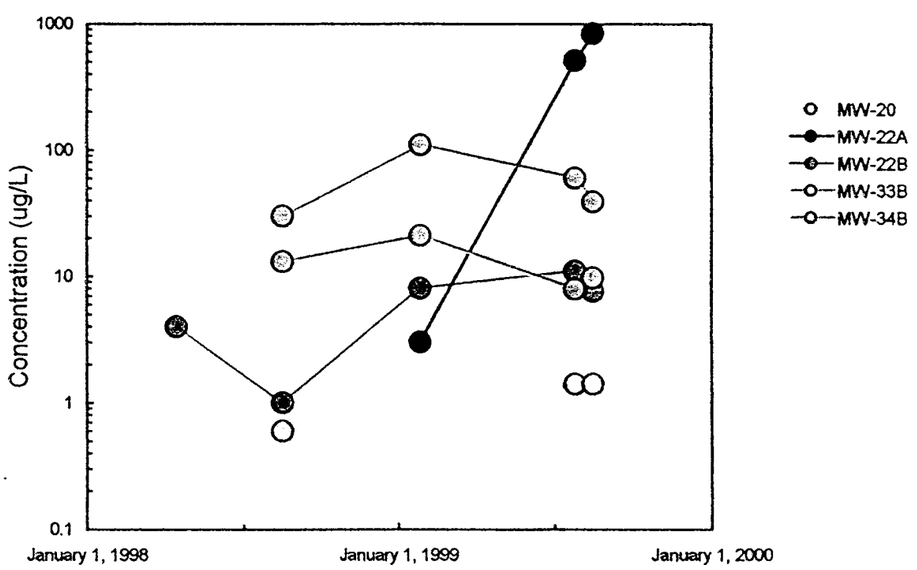
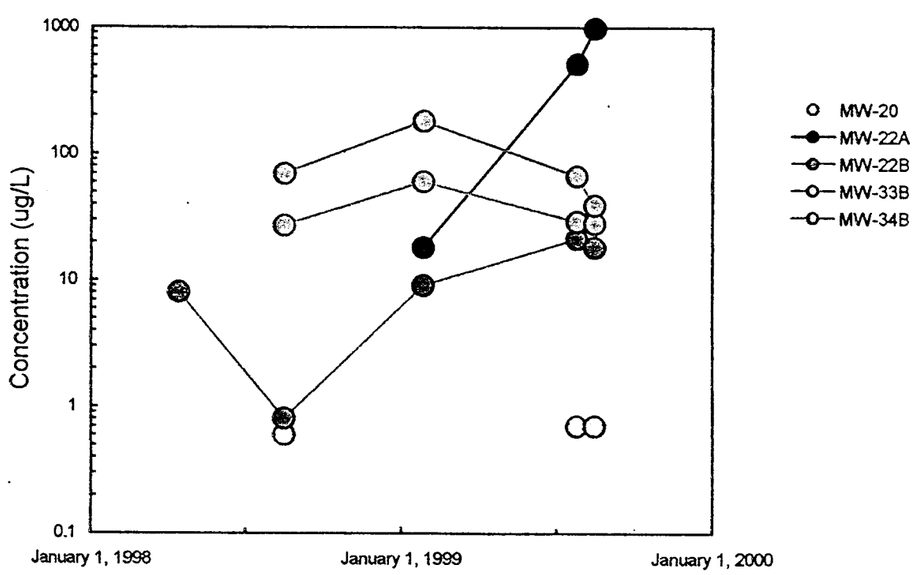


TABLE 1C
Summary of Groundwater Analytical Results (cis-1,2-DCE)
July 27 and August 17, 1999 Sampling Events
Liberty Industrial Finishing Site
Farmingdale, New York

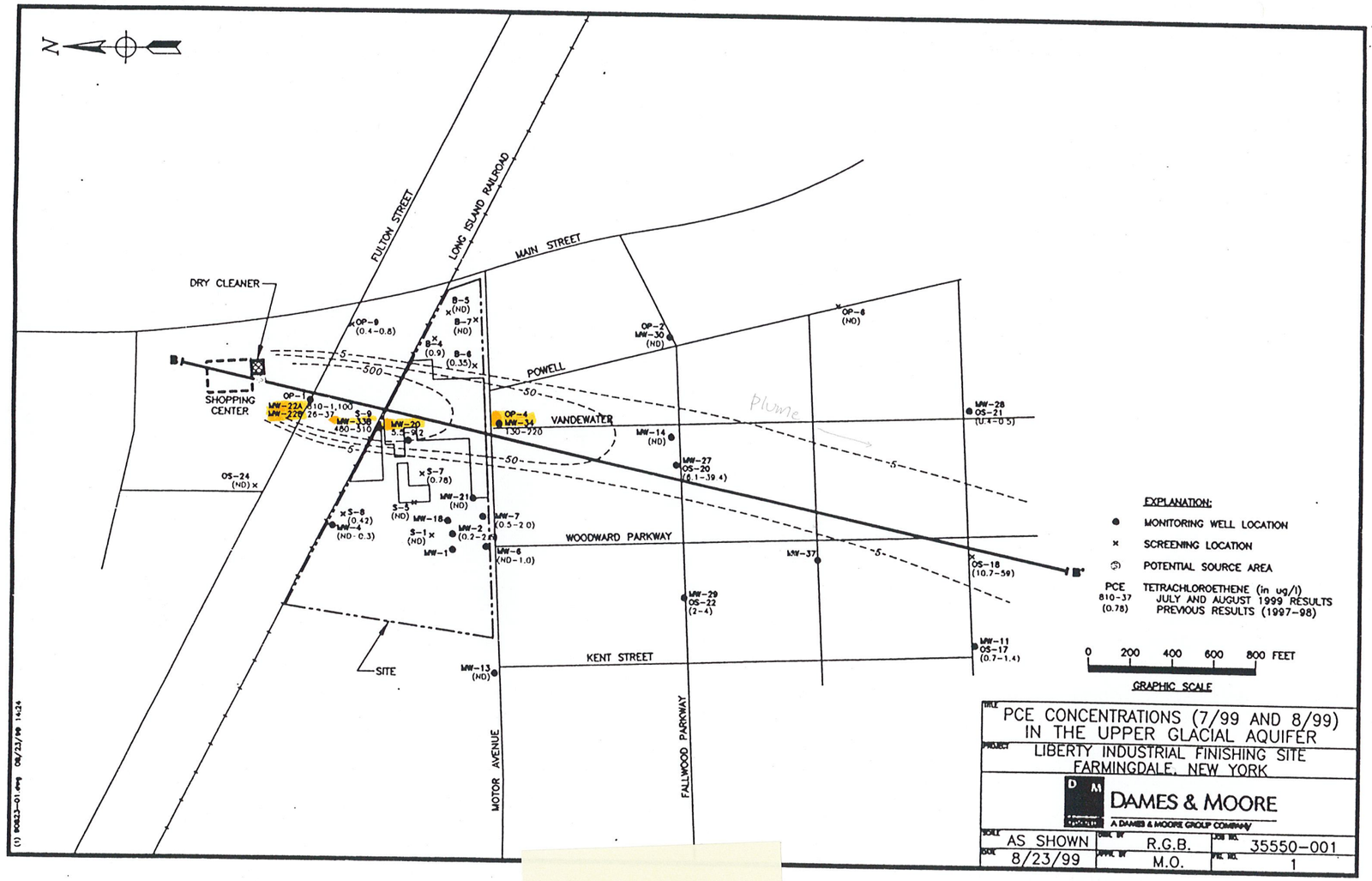
	MW-20	MW-22A	MW-22B	MW-33B	MW-34B
Location	on-site	upgradient		on-site	downgradient
Depth	25 ft	30 ft	50 ft	50 ft	45 ft
4/15/98			8		
8/17/98	0.6		0.8	27	69
1/27/99		18	9	60	180
4/22/99					
7/27/99	0.7	510	21	29	66
8/17/99	0.7	980	18	28	39

Notes: Concentrations are in ug/L
cis-1,2-DCE = cis-1,2-dichloroethene



selected VOCs 08/23/1999

Dames & Moore

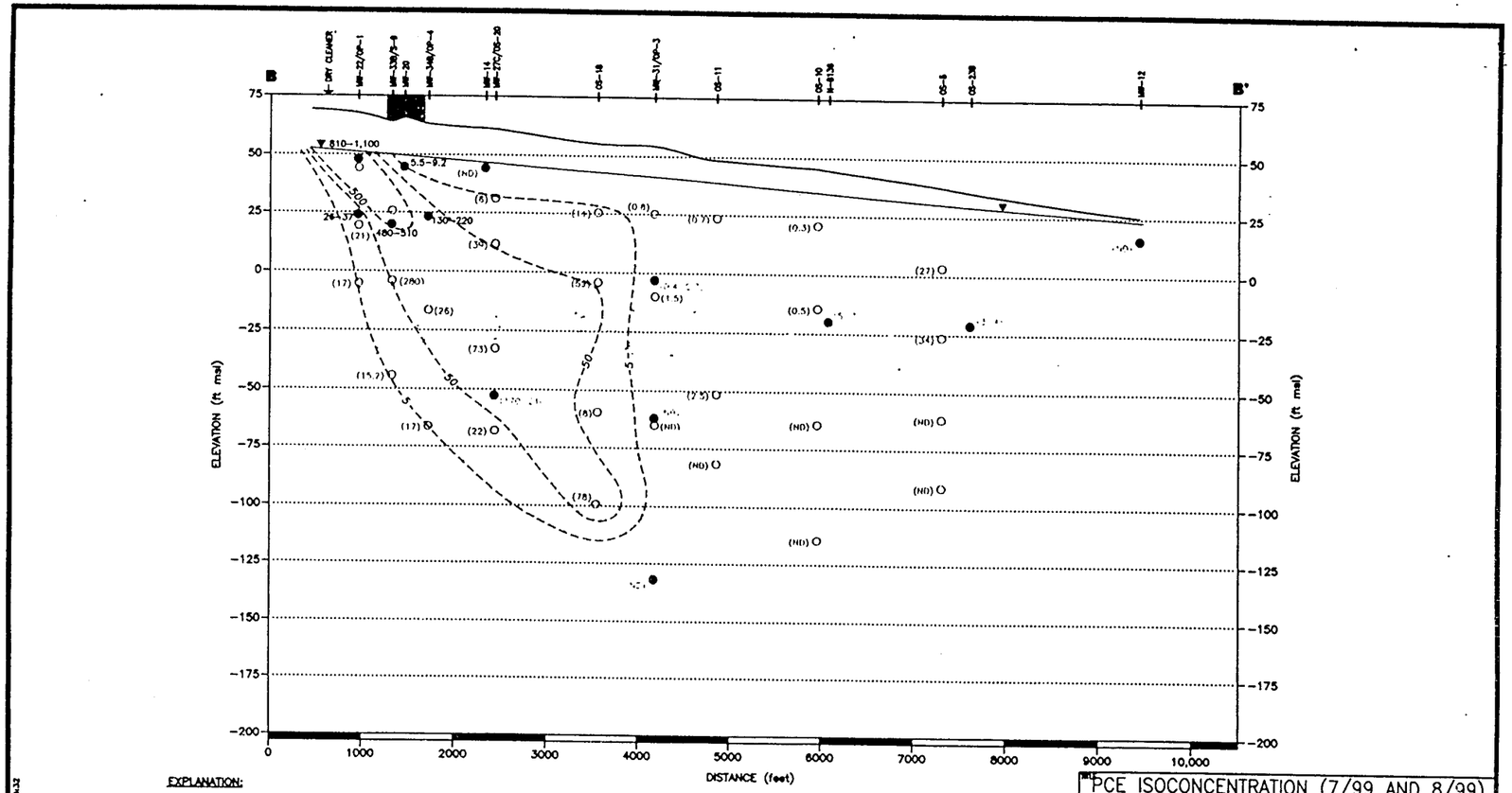


TITLE: PCE CONCENTRATIONS (7/99 AND 8/99) IN THE UPPER GLACIAL AQUIFER

PROJECT: LIBERTY INDUSTRIAL FINISHING SITE
FARMINGDALE, NEW YORK

DAMES & MOORE
A DAMES & MOORE GROUP COMPANY

SCALE	DRWN. BY	JOB NO.
AS SHOWN	R.G.B.	35550-001
DATE	APPR. BY	FIG. NO.
8/23/99	M.O.	1



EXPLANATION:

EXTENT OF TRANSITIONAL UNIT BETWEEN UPPER GLACIAL AND MAGOTHY AQUIFER (BASED ON NATURAL GAMMA LOGS)

GROUNDWATER TABLE (AUGUST 17, 1998)

480 MONITORING WELL SAMPLING (JULY AND AUGUST 1999)
MONITORING WELL SAMPLING (APRIL, AUGUST, 1998 OR EARLIER)

(17) SCREENING RESULT (1997)

50 ISOCONCENTRATION LINE (ug/l)

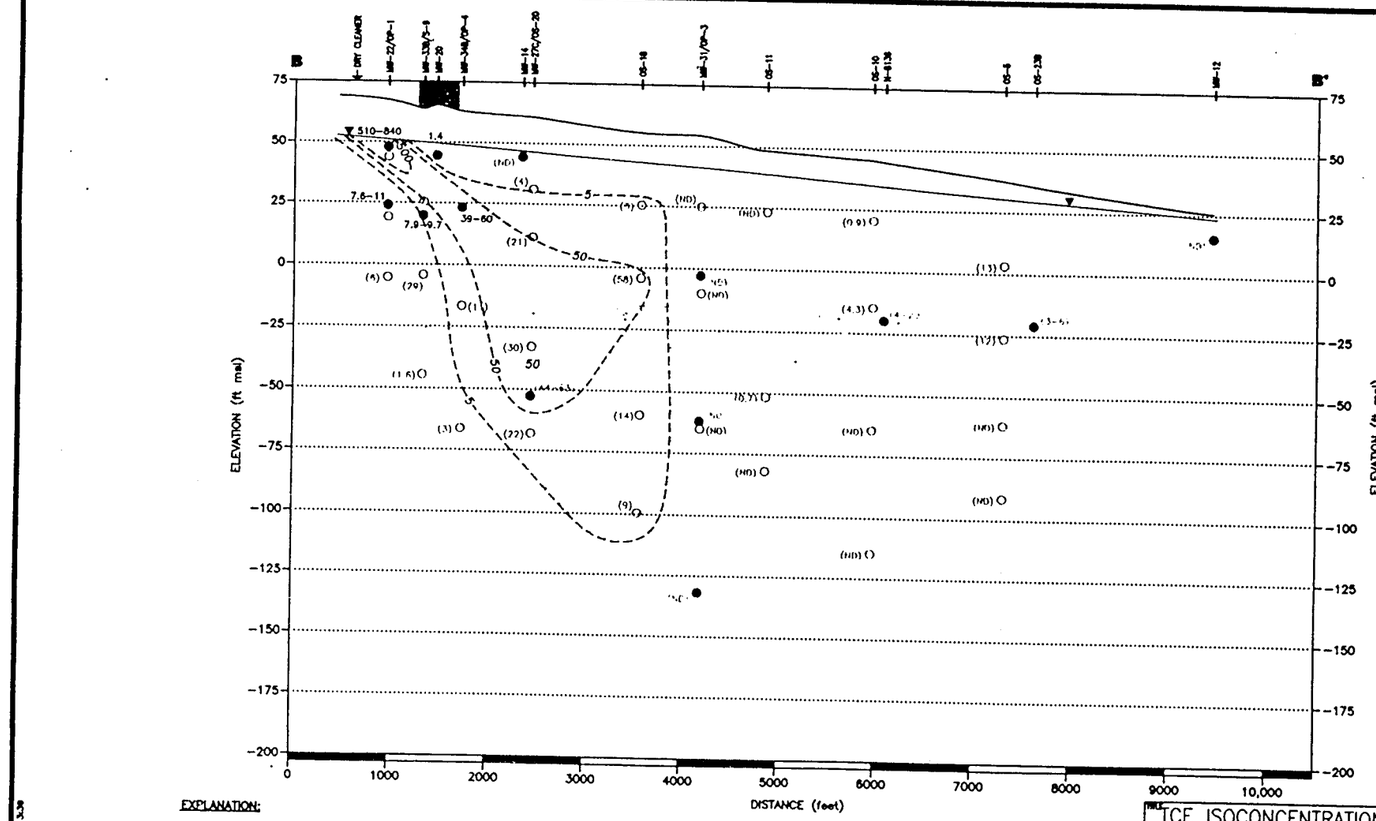
(1) 35550-02.dwg 08/23/99 14:32

FIG. PCE ISOCONCENTRATION (7/99 AND 8/99)
CROSS SECTION B – B'

PROJECT LIBERTY INDUSTRIAL FINISHING SITE
FARMINGDALE, NEW YORK

DAMES & MOORE
A DAMES & MOORE GROUP COMPANY

SCALE	DRWN. BY	JOB NO.
AS SHOWN	R.G.B.	35550-001
DATE	APPR. BY	REV. NO.
8/23/99	M.O.	2



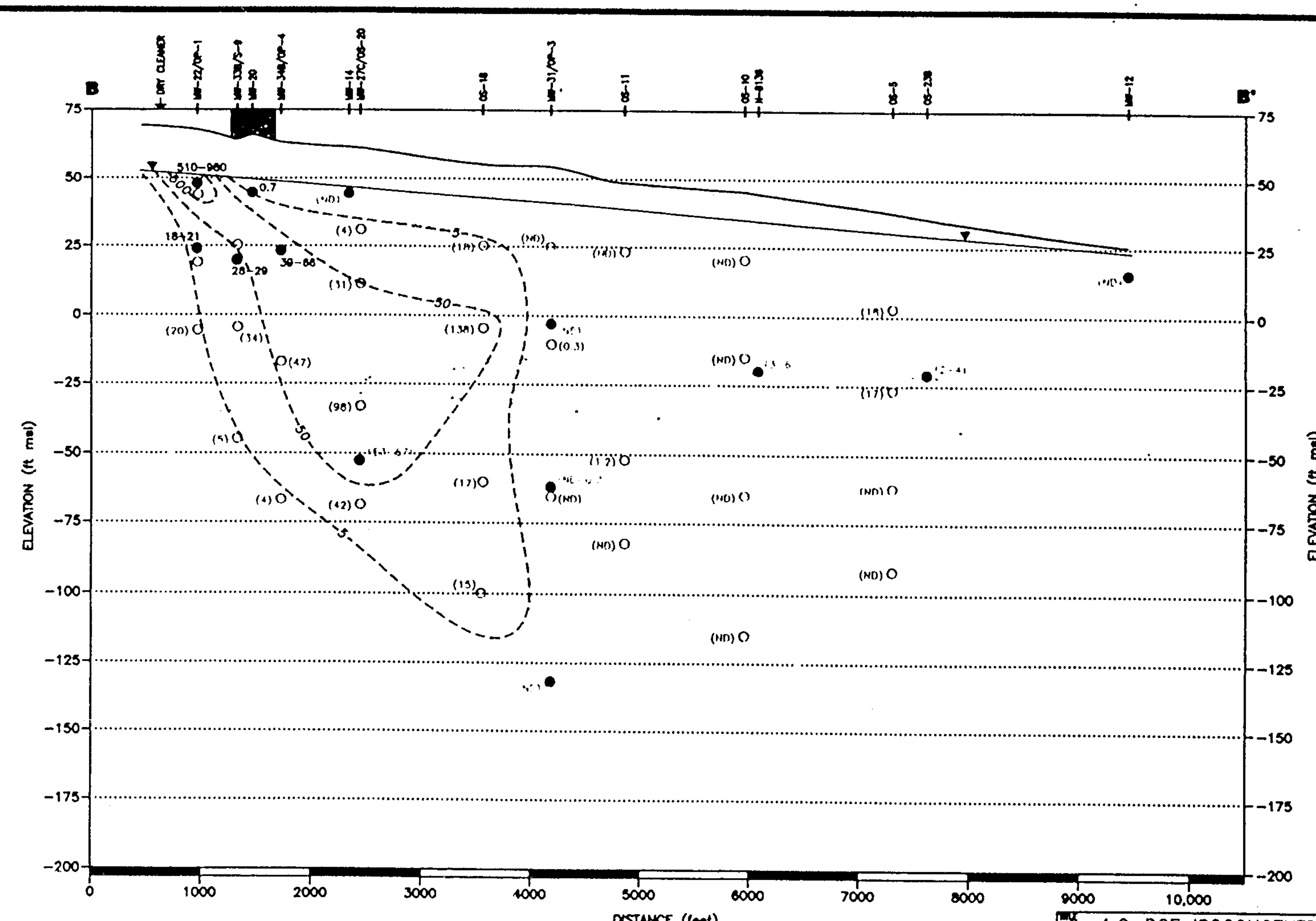
TCE ISOCONCENTRATION (7/99 AND 8/99)
CROSS SECTION B – B'

LIBERTY INDUSTRIAL FINISHING SITE
FARMINGDALE, NEW YORK

DAMES & MOORE
A DAMES & MOORE GROUP COMPANY

SCALE	DRAWN BY	JOB NO.
AS SHOWN	R.G.B.	35550-001
DATE	APPR. BY	FIG. NO.
8/23/99	M.O.	3

(D:\0810-04.dwg 08/23/99 13:38)



EXPLANATION:

EXTENT OF TRANSITIONAL UNIT BETWEEN UPPER GLACIAL AND MAGOTHY AQUIFER (BASED ON NATURAL GAMMA LOGS)

GROUNDWATER TABLE (AUGUST 17, 1998)

510 ● MONITORING WELL SAMPLING (JULY AND AUGUST 1999)
MONITORING WELL SAMPLING (APRIL, AUGUST, 1998 OR EARLIER)

○ SCREENING RESULT (1997)

50 - - - ISOCONCENTRATION LINE (ug/l)

TITLE	CIS-1,2-DCE ISOCONCENTRATION (7/99 AND 8/99) CROSS SECTION B – B'		
PROJECT	LIBERTY INDUSTRIAL FINISHING SITE FARMINGDALE, NEW YORK		
	DAMES & MOORE A DAMES & MOORE GROUP COMPANY		
SCALE AS SHOWN	DWN. BY R.G.B.	JOB NO. 35550-001	
DATE 8/23/99	APPR. BY M.O.	FIG. NO. 4	

(2) 90810-05.dwg 08/23/99 13:48

The New Jersey DEP Standards listed reflect current Envirotech Research Inc. knowledge of the standards and are intended as general guidance for the user. Please consult appropriate NJDEP regulations and cleanup standards for your specific application.

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New Jersey Residential Direct Contact Soil Cleanup Criteria (ug/kg)	New Jersey Non-Residential Direct Contact Soil Cleanup Criteria (ug/kg)	New Jersey Impact to Ground Water Soil Cleanup Criteria (ug/kg)	New Jersey Higher of PQLs and Ground Water Quality Criteria (ug/l)	MW-22B 146403 07/27/09 WATER 1.0 ug/L
VOLATILE COMPOUNDS (GC/MS)					
Chloromethane	520,000	1,000,000	10,000	30	0.4 U
Bromomethane	79,000	1,000,000	1,000	10	0.6 U
VinylChloride	2,000	7,000	10,000	5	0.5 U
Chloroethane	NA	NA	NA	NA	0.4 U
MethyleneChloride	49,000	210,000	1,000	3^	1.0 U
Acetone	1,000,000	1,000,000	100,000	700	2.4 U
CarbonDisulfide	NA	NA	NA	NA	1.0 U
1,1-Dichloroethene	8,000	150,000	10,000	2	0.5 U
1,1-Dichloroethane	570,000	1,000,000	10,000	50^	0.3 U
trans-1,2-Dichloroethene	1,000,000	1,000,000	50,000	100	0.5 U
cis-1,2-Dichloroethene	79,000	1,000,000	1,000	70^	21
Chloroform	19,000	28,000	1,000	8	0.4 U
1,2-Dichloroethane	8,000	24,000	1,000	2	0.3 U
2-Butanone	1,000,000	1,000,000	50,000	300	2.3 U
1,1,1-Trichloroethane	210,000	1,000,000	50,000	30	0.3 U
CarbonTetrachloride	2,000	4,000	1,000	2	0.4 U
Bromodichloromethane	11,000	48,000	1,000	1	0.2 U
1,2-Dichloropropane	10,000	43,000	NA	1	0.1 U
(1) cis-1,3-Dichloropropene	4,000	5,000	1,000	NA	0.3 U
Trichloroethene	23,000	54,000	1,000	1	11
Dibromochloromethane	110,000	1,000,000	1,000	10	0.3 U
1,1,2-Trichloroethane	22,000	420,000	1,000	3	0.3 U
Benzene	3,000	13,000	1,000	1	0.3 U
(1) trans-1,3-Dichloropropene	4,000	5,000	1,000	NA	0.3 U
Bromoform	86,000	370,000	1,000	4	0.3 U
4-Methyl-2-Pentanone	1,000,000	1,000,000	50,000	400	0.6 U
2-Hexanone	NA	NA	NA	NA	0.3 U
Tetrachloroethene	4,000	6,000	1,000	1	37
1,1,2,2-Tetrachloroethane	34,000	70,000	1,000	1^	0.3 U
Toluene	1,000,000	1,000,000	500,000	1,000	0.3 U
Chlorobenzene	37,000	680,000	1,000	50^	0.2 U
Ethylbenzene	1,000,000	1,000,000	100,000	700	0.2 U
Styrene	23,000	97,000	100,000	100	0.3 U
Xylene(Total)	NA	NA	NA	NA	0.3 U
Total Confident Conc. VOAs (s)					69

Checked By: _____
___ OK
___ Make Corrections

The New Jersey DEP Standards lister
guidance for the user. Please consult

Sample ID	MW-22A	MW-33B	MW-20	MW-34B	Trip_Blank
Lab Sample Number	146404	146405	146406	146407	146408
Sampling Date	07/27/99	07/27/99	07/27/99	07/27/99	07/18/99
Matrix	WATER	WATER	WATER	WATER	WATER
Dilution Factor	5.0	5.0	1.0	2.0	1.0
Units	ug/L	ug/L	ug/L	ug/L	ug/L
VOLATILE COMPOUNDS (GC/MS)					
Chloromethane	2.1 U	2.1 U	0.4 U	0.8 U	0.4 U
Bromomethane	2.8 U	2.8 U	0.6 U	1.1 U	0.8 U
VinylChloride	2.2 U	2.2 U	0.5 U	0.9 U	0.5 U
Chloroethane	2.0 U	2.0 U	0.4 U	0.8 U	0.4 U
MethyleneChloride	5.0 U	5.0 U	1.0 U	2.0 U	1.0 U
Acetone	12 U	12 U	2.4 U	4.9 U	2.4 U
CarbonDisulfide	5.0 U	5.0 U	1.0 U	2.0 U	1.0 U
1,1-Dichloroethene	2.4 U	2.4 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethane	1.4 U	1.4 U	0.3 U	0.8 U	0.3 U
trans-1,2-Dichloroethene	31	2.2 U	0.5 U	1.6	0.5 U
cis-1,2-Dichloroethene	510	28	0.7	66	0.4 U
Chloroform	1.8 U	1.8 U	0.4 U	0.7 U	0.4 U
1,2-Dichloroethane	1.4 U	1.4 U	0.3 U	0.6 U	0.3 U
2-Butanone	12 U	12 U	2.3 U	4.8 U	2.3 U
1,1,1-Trichloroethane	1.6 U	1.5 U	0.3 U	0.8 U	0.3 U
CarbonTetrachloride	2.2 U	2.2 U	0.4 U	0.9 U	0.4 U
Bromodichloromethane	1.2 U	1.2 U	0.2 U	0.5 U	0.2 U
1,2-Dichloropropane	0.7 U	0.7 U	0.1 U	0.3 U	0.1 U
(1) cis-1,3-Dichloropropene	1.4 U	1.4 U	0.3 U	0.5 U	0.3 U
Trichloroethene	510	7.9	1.4	60	0.3 U
Dibromochloromethane	1.6 U	1.6 U	0.3 U	0.6 U	0.3 U
1,1,2-Trichloroethane	1.8 U	1.8 U	0.3 U	0.7 U	0.3 U
Benzene	1.6 U	1.6 U	0.3 U	0.7 U	0.3 U
(1) trans-1,3-Dichloropropene	1.6 U	1.6 U	0.3 U	0.6 U	0.3 U
Bromoform	1.6 U	1.6 U	0.3 U	0.7 U	0.3 U
4-Methyl-2-Pentanone	2.8 U	2.8 U	0.6 U	1.1 U	0.3 U
2-Hexanone	1.4 U	1.4 U	0.3 U	0.6 U	0.6 U
Tetrachloroethene	810	480	5.5	220	0.3 U
1,1,2,2-Tetrachloroethane	1.6 U	1.6 U	0.3 U	0.6 U	0.1 U
Toluene	1.3 U	1.3 U	0.3 U	0.5 U	0.3 U
Chlorobenzene	0.9 U	0.9 U	0.2 U	0.4 U	0.3 U
Ethylbenzene	1.2 U	1.2 U	0.2 U	0.5 U	0.2 U
Styrene	1.7 U	1.7 U	0.3 U	0.7 U	0.2 U
Xylene(Total)	1.8 U	1.8 U	0.3 U	0.7 U	0.3 U
Total Confident Conc. VOAs (s)	1861	517	7.6	348	0

Checked By: ______
___ OK
___ Make Corrections

Total Estimated Conc. VOA TICs (s)	0	0	0	0	0

(1) Values listed reflect the combined
^ Value is a revision to the Class IIA g997 policy memo issued by Assistant Commissioner R. Gimello.

Qualifiers
U - The compound was not detected at the indicate
J - Data indicates the presence of a compound tha
The concentration given is an approximate value.
B - The analyte was found in the laboratory blank a
NR - Not analyzed.

Checked By: _____
___ OK
___ Make Corrections

SUMMARY OF AN ICAL RESULTS

XLS

Sample ID	MW-22B	MW-22A	MW-33B	MW-20	MW-34B	Trip_Blank
Lab Sample Number	150872	150873	150874	150875	150876	150877
Sampling Date	08/17/99	08/17/99	08/17/99	08/17/99	08/17/99	08/16/99
Matrix	WATER	WATER	WATER	WATER	WATER	WATER
Dilution Factor	1.0	10.0	5.0	1.0	1.0	1.0
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
VOLATILE COMPOUNDS (GC/MS)						
Chloromethane	0.4 U	4.2 U	2.1 U	0.4 U	0.4 U	0.4 U
Bromomethane	0.6 U	5.5 U	2.8 U	0.6 U	0.6 U	0.6 U
VinylChloride	0.5 U	4.5 U	2.2 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.4 U	4.1 U	2.0 U	0.4 U	0.4 U	0.4 U
MethyleneChloride	1.0 U	9.9 U	5.0 U	1.0 U	1.0 U	1.0 U
Acetone	2.4 U	24 U	12 U	2.4 U	2.4 U	2.4 U
CarbonDisulfide	1.0 U	10 U	5.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	0.5 U	4.9 U	2.4 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.3 U	2.9 U	1.4 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.5	11	2.2 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	18	980	28	0.7	39	0.4 U
Chloroform	0.4 U	3.7 U	1.8 U	0.4 U	0.4 U	0.4 U
1,2-Dichloroethane	0.3 U	2.9 U	1.4 U	0.3 U	0.3 U	0.3 U
2-Butanone	2.3 U	23 U	12 U	2.3 U	2.3 U	2.3 U
1,1,1-Trichloroethane	0.3 U	3.0 U	1.5 U	0.3 U	0.3 U	0.3 U
CarbonTetrachloride	0.4 U	4.4 U	2.2 U	0.4 U	0.4 U	0.4 U
Bromodichloromethane	0.2 U	2.3 U	1.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.1 U	1.4 U	0.7 U	0.1 U	0.1 U	0.1 U
(1) cis-1,3-Dichloropropene	0.3 U	2.7 U	1.4 U	0.3 U	0.3 U	0.3 U
Trichloroethene	7.8	840	9.7	1.4	37	0.3 U
Dibromochloromethane	0.3 U	3.2 U	1.6 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichloroethane	0.3 U	3.5 U	1.8 U	0.3 U	0.3 U	0.3 U
Benzene	0.3 U	3.3 U	1.6 U	0.3 U	0.3 U	0.3 U
(1) trans-1,3-Dichloropropene	0.3 U	3.1 U	1.6 U	0.3 U	0.3 U	0.3 U
Bromoform	0.3 U	3.3 U	1.6 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-Pentanone	0.8 U	5.6 U	2.8 U	0.6 U	0.8 U	0.6 U
2-Hexanone	0.3 U	2.8 U	1.4 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	26	1100	510	9.2	130	0.1 U
1,1,2,2-Tetrachloroethane	0.3 U	3.2 U	1.6 U	0.3 U	0.3 U	0.3 U
Toluene	0.3 U	2.6 U	1.3 U	0.3 U	0.3 U	0.3 U
Chlorobenzene	0.2 U	1.9 U	0.9 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	2.5 U	1.2 U	0.2 U	0.2 U	0.2 U
Styrene	0.3 U	3.4 U	1.7 U	0.3 U	0.3 U	0.3 U
Xylene(Total)	0.3 U	3.5 U	1.8 U	0.3 U	0.3 U	0.3 U
Total Confident Conc. VOAs (s)	52	2931	548	11	206	0
Total Est	0	0	0	0	0	0

Checked By: _____
___ OK
___ Make Corrections

8/20/99 3:59 PM