

ENVIRONMENTAL, INC.
Environmental Engineers

January 4, 1999

Mr. Al Klauss
Environmental Engineer
New York State Department of
Environmental Conservation
21 South Putt Corners Road
New Paltz, New York 12561
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Re: IVI Project Number E8073510
Phase III Environmental Site Assessment
The Golden Horseshoe Shopping Center, Scarsdale, New York
NYSDEC Spill No. 9805623

Dear Mr. Klauss:

Per your request, attached is a copy of our Phase III Environmental Site Assessment Report for the Golden Horseshoe Shopping Center ("Subject") located in Scarsdale, New York.

The results of this investigation indicate that a contaminated groundwater plume is present beneath the Subject, in the vicinity of the former Sabrina Dry Cleaners. Elevated concentrations of chlorinated hydrocarbons were detected in the groundwater at levels approximately three orders of magnitude above their respective NYSDEC Ground Water Quality Criteria. Additionally, one of these compounds, vinyl chloride, is a Class A human carcinogen as defined by the U.S. Department of Health and Human Services National Toxicology Program. Based on our review of the laboratory results, the contaminated groundwater plume appears to be confined to an area of approximately 21,000 square feet. Additionally, the plume extends underneath the former dry cleaners, which has recently been occupied by United States Post Office (USPO). USPO representatives have not been informed of the presence of this plume.

Please do not hesitate to call me at (914) 694-9600 if you have any questions regarding this Report or if we can be of further assistance.

Sincerely,

IVI Environmental, Inc.


David R. Lent, CPG
Project Manager

Reviewed By:


Jerry F. Vorbach, P.E., C.H.M.M.
Senior Project Manager

**PHASE III
ENVIRONMENTAL INVESTIGATION**

**Golden Horseshoe Shopping Center
Wilmot Road
Scarsdale, New York 10583**

**Prepared for:
First Union National Bank
Charlotte, North Carolina**

**Prepared by:
IVI Environmental, Inc.
White Plains, New York**

**IVI Project Number: E8073510
October 12, 1998**

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1.0 INTRODUCTION

IVI Environmental, Inc. ("IVI") conducted a Phase III Environmental Investigation ("Investigation") of the Golden Horseshoe Shopping Center ("Subject"), in August and September of 1998.

The purpose of this Investigation was to address the areas of environmental uncertainty identified in our Phase II Environmental Site Assessment dated July 24, 1998. Specifically, the Phase II Environmental Site Assessment identified elevated concentrations of perchloroethene (PCE), trichloroethene (TCE), and 1,2 dichloroethene (1,2 DCE) in groundwater directly behind the former Sabrina Dry Cleaners facility. This Assessment was performed to delineate the vertical and horizontal extent of these chlorinated solvents in soil and groundwater at the Subject.

1.1 Project Background

The Subject is located on Wilmot Road, Scarsdale, New York. The property, which is situated in a suburban area characterized by commercial residential, and retail development, consists of a 8-acre parcel improved with a 41-year-old commercial shopping center. Prior to the construction of the existing improvements, the site was improved with a private estate and a horse stable.

The former Sabrina's Cleaners conducted dry-cleaning activities on-site between 1984 and 1997. A dry cleaning solvent, perchloroethene was stored in a 100-gallon aboveground storage tank (AST) formerly located in the rear exterior of the Sabrina Dry Cleaners. The perchloroethene was manually transferred from the AST to the dry cleaning machine. Waste perchloroethene was transferred, by hand, to ±15-gallon waste containers. Sabrina Dry Cleaners vacated the site in 1997 and the unit is currently occupied by the U.S. Post Office.

2.0 SITE GEOLOGY/HYDROGEOLOGY

2.1 Site Soils

According to the *Soil Survey of Putnam and Westchester Counties*, dated September 1994, issued by the United States Soil Conservation Service, the soils at the site are classified as Urban land-Ridgebury complex (UpB). Soils of the Ridgebury complex are characteristically very deep, somewhat poorly drained soils which form over glacial till material. Slopes range from 2% to 8%. The classification of Urban land is attributed to the continued urban development within the soils locality. Specifically, the general soils of the area are referred to as urban land complex because the soil's original structure and content have been so altered by human activities as to have lost their original characteristics and are thus unidentifiable.

2.2 Regional Geology

The Subject is situated atop the Manhattan formation of schist and gneiss. Typically this formation is moderately dense with variable permeability and low porosity. During the Wisconsin glaciation, ending about 12,000 to 15,000 years ago, a mantling of glacial drift was deposited over the bedrock. In places the glacial deposits are unsorted till characterized by boulder to pebble-sized rocks erratically intermixed with a clay matrix, but elsewhere the deposits are sorted and stratified sand and gravel, the result of glacial outwash.

2.3 Site Geology

Subsurface materials at the Subject are consistent with regional information. In general, subsurface soils above the water table consist of interbedded layers of sand and gravel, and silt and clay. A 3' to 5' layer of hard glacial till, comprised mainly of silt and clay, with abundant sand and gravel, was encountered above bedrock at Geoprobe boring B-6 and monitoring well MW-4 located on the north and south sides of the building, respectively. Bedrock was encountered in the borings at depths ranging between 4' and 17' below ground surface (bgs). The bedrock consists of black, Biotite-Muscovite Schist with granitic segregations. Directly behind the former Sabrina Dry Cleaner unit, bedrock was encountered at 4'bgs.

2.4 Site Hydrogeology

Groundwater was encountered at depths ranging from 7.5' to 9' bgs on the south side of the building and between 8' and 9' on the north side. The direction of groundwater flow is to the northeast towards the Sheldrake River, which is adjacent to the east and southeast sides of the site. Localized groundwater flow on-site may also be influenced by the undulating bedrock surface and by subsurface manmade features, such as storm drains and sewer lines. A

2.0 SITE GEOLOGY/HYDROGEOLOGY - continued

groundwater contour map is included in Appendix A. Water level elevations are summarized on Table 1 below:

Table 1
Summary of Well Installation Data

Well	PVC Casing Elevation	Installation Date	Total Well Depth	Screened Interval	Diameter	Groundwater Elevation*
MW-1	98.45	9/8/98	16.00'	6.0'-16.0'	2"	89.88
MW-2	98.87	9/8/98	16.00'	6.0'-16.0'	2"	91.15
MW-3	99.79	9/8/98	11.00'	5.0'-11.0'	2"	91.22
MW-4	96.56	9/9/98	16.00'	6.0'-16.0'	2"	89.46
MW-5	99.06	9/9/98	12.20	12.20'-12.0'	2"	91.08
MW-6	99.55	9/9/98	12.00'	2.0'-12.0'	2"	91.18

3.0 FIELD INVESTIGATION

The scope of the Phase III Investigation consisted of the following activities: 1) a comprehensive Geoprobe investigation, 2) installation of monitoring wells, 3) water level monitoring, and 4) groundwater sampling. These tasks are discussed in further detail below:

3.1 Geoprobe Investigation

On August 17, 1998, IVI advanced eight (8) Geoprobe soil borings, B-1 through B-8, around the western portion of the Subject Building. Borings B-1 through B-3 were advanced on the south side of the building, B-4 and B-5 were advanced on the west side, and B-6 through B-8 were advanced on the north side, behind the former Sabrina Dry Cleaners. Inasmuch as the former Sabrina Dry Cleaner space is currently occupied by the Post Office, IVI was not permitted to advance borings inside the building. A Sample Location Map indicating the locations of the borings is included in Appendix A. Boring logs are attached in Appendix B.

Prior to advancement of each boring, all probing equipment was decontaminated in accordance with EPA protocols and good commercial and customary practice. Continuous soil samples were collected with a macrocore sampler, inspected in the field for visual and olfactory evidence of contamination, and field screened for total VOCs using a photoionization detector ("PID"). Borings were advanced to a depth of 16' below ground surface (bgs) or until refusal was encountered.

One (1) soil sample from each boring was retained for laboratory analysis. No evidence of contamination was observed in the borings; therefore, representative samples from various depth intervals were retained for laboratory analysis. Soil samples obtained from borings advanced in the vicinity of the Sabrina Dry Cleaners were collected between 2' and 8' bgs and borings advanced further downgradient of the Sabrina Dry Cleaners were generally obtained at the water table depth (8' to 12' bgs).

The soil samples were placed in appropriate sample containers, packed on ice in a cooler and shipped under proper chain-of-custody to Matrix Analytical Laboratories (Matrix), of Hopkinton, Massachusetts. Samples obtained during this investigation were analyzed for chlorinated Volatile Organic Compounds (VOCs) commonly associated with dry cleaning operations, using EPA Method 8021.

A total of seven (7) groundwater samples were also obtained. No groundwater sample was obtained from boring B-5 due to refusal on presumed bedrock at 8' bgs. Groundwater samples were collected utilizing a hydropunch and a peristaltic pump equipped with polyethylene tubing and a check valve. Prior to collecting groundwater samples, IVI purged the hydropunch of approximately three (3) volumes. The groundwater samples were placed in appropriate sample containers,

3.0 FIELD INVESTIGATION - continued

packed on ice in a cooler and shipped under proper chain-of-custody to Matrix and analyzed for chlorinated VOCs using EPA Method 8021.

3.2 Monitoring Well Installation

IVI Environmental Inc. installed a total of six (6) monitoring wells, MW-1 through MW-6, on the Subject on September 8 and 9, 1998. The locations of the monitoring wells were selected based on the results of the Geoprobe investigation.

Monitoring well MW-1 was installed on the south side (front) of the former Sabrina Dry Cleaners, at the location of Geoprobe boring B-2, where elevated levels of chlorinated VOCs were detected in groundwater. Monitoring well MW-4 was also installed on the south side of the building, in the presumed downgradient direction of MW-1. However, inasmuch as shallow bedrock was encountered on the south side of the building, the location of MW-1 was moved several times in an effort to install the well below the watertable. Four monitoring wells, MW-2, MW-3, MW-5, and MW-6, were installed on the north side of the building behind the former Sabrina Dry Cleaners. Monitoring well MW-5 was installed at the location of Geoprobe boring B-8, where elevated levels of chlorinated VOCs were detected in groundwater. Monitoring well MW-3 was installed as an upgradient well in the vicinity of Geoprobe boring B-6. MW-6 was installed directly behind the former Sabrina Dry Cleaners, and MW-2 was installed in the presumed downgradient direction of MW-5. Locations of monitoring wells are shown on the Sample Location Plan given in Appendix A.

Monitoring wells were installed utilizing a truck-mounted drill rig. Prior to advancement of each boring, all down-hole drilling equipment was decontaminated in accordance with EPA protocols and good commercial and customary practice. At each boring location, a nominal 6" borehole was advanced via 4.25 I.D. hollow stem augers, from the ground surface until refusal was encountered. Split-spoon samples were collected at five foot intervals.

Refusal on bedrock was encountered at the site at depths ranging between 4' to 17' bgs on the north side (rear) of the building and 5' to 16' bgs on the south side (front). Inasmuch as the upper 1' to 2' of bedrock was highly weathered, the augers were advanced until competent bedrock was encountered. Shallow bedrock was found near monitoring well locations MW-4 and MW-6. As such, several boreholes were attempted before advancing the borings to depths below the watertable.

3.0 FIELD INVESTIGATION - continued

Following completion of each boring, a monitoring well was constructed through the augers. Generally, the monitoring wells were constructed of a ten foot length of 2" I.D. PVC screen and a PVC riser equipped with a locking cap. Due to shallow bedrock at monitoring well location MW-3, a six foot length of screen was utilized. A sandpack was placed around the well screen, extending 6" to 2' above the top of the screen. Above the sandpack, a 1' to 2' layer of bentonite was placed and hydrated with potable water. The monitoring wells were completed with flush-mounted roadbox casings which were cemented in-place. Monitoring well completion sheets are included in Appendix C.

The monitoring wells were developed to establish the hydraulic connection between the well and the formation. A minimum of seven (7) well volumes were purged from each well using dedicated bailers. Measurements for temperature, specific conductance, pH, and dissolved oxygen were taken following the removal of five (5) well volumes and then after each subsequent well volume. Well development was complete when these parameters stabilized to within ten percent.

3.3 Water Level Monitoring

Following the completion of the wells, the top of PVC casing and roadbox elevations were surveyed for elevation to the nearest hundredth of a foot using an arbitrary reference elevation. Water levels were recorded from each well to the nearest hundredth of a foot using an electronic water level indicator.

3.4 Groundwater Sampling

Groundwater samples were collected from the monitoring wells for laboratory analysis utilizing the following procedures: 1) the wells were inspected for integrity and identification; 2) the static water level in the well was measured to the nearest hundredth of a foot; 3) the volume of water in the well was calculated using a volume factor of 0.163 gal/ft for 2" diameter well casings; 4) monitoring wells were purged using polyethylene boilers connected to a nylon rope; 5) initial and periodic measurements for pH, dissolved oxygen, temperature, and specific conductance were recorded during purging activities; 6) the well was purged until the field readings stabilized or until the well had been completely evacuated and 7) VOC samples were collected in multiple bottles (a minimum of two (2) 40 ml vials) in such a way that no air bubbles or headspace was present in the container.

Groundwater samples were placed in appropriate sample containers, packed on ice in a cooler, and shipped under proper chain-of-custody to Matrix and analyzed for chlorinated VOCs using EPA Method 8021.

4.0 FINDINGS

4.1 Field Screening

No visible or olfactory evidence of contamination was observed during the field investigation. Furthermore, no PID readings above background levels were detected in any of the soil samples.

4.2 Analytical Results

4.2.1 Geoprobe Investigation

No detectable concentrations of contaminants were identified in any of the soil samples analyzed from the Geoprobe borings during the Phase III Investigation. However, chlorinated VOCs 1,2-DCE, PCE, and TCE were detected in soil samples obtained from Geoprobe borings SB-1 and SB-3, located on the north side of the building, during the Phase II Environmental Site Assessment. Boring SB-1 indicated 440 ppb 1,2-DCE, 120 ppb PCE, and 50 ppb TCE. Boring SB-3 indicated 72 ppb 1,2-DCE, 940 PCE, and 520 TCE. The New York State Department of Environmental Conservation (NYSDEC) Soil Cleanup Criteria for 1,2-DCE, PCE, and TCE are 300 ppb, 1,400ppb, and 700 ppb.

The presence of chlorinated VOCs in soils near the rear of the former Sabrina Cleaners suggests that poor management or sloppy handling of dry cleaning solvents occurred near the rear of the facility.

Seven (7) groundwater samples were analyzed. Chlorinated VOCs above New York State Department of Environmental Conservation (NYSDEC) Groundwater Quality Criteria (GWQC) were identified at two Geoprobe boring locations. Boring B-2 had levels of 24 parts per billion ("ppb") DCE and 19 ppb vinyl chloride. Boring B-8 indicated 740 ppb DCE, 350 ppb 1,3-dichloropropane, 120 ppb trichloroethene (TCE), and 110 ppb VC. The NYSDEC GWQC is 5 ppb for cis-1,2-DCE, 1,3-dichloropropane, and TCE, and 2 ppb for vinyl chloride.

4.2.2 Monitoring Wells

A total of six (6) groundwater samples, MW-1 through MW-6, were analyzed. Elevated concentrations of chlorinated VOCs, including 1,2-DCE, PCE, TCE, and vinyl chloride were identified in MW-5. Monitoring wells MW-3, MW-4 and MW-6 also indicated chlorinated

4.0 FINDINGS - continued

VOCs at concentrations slightly above NYSDEC GWQC. In monitoring well MW-1, only 1,2-DCE was found at a concentration of 2.9 ppb, below its respective NYSDEC GWQC of 5 ppb. No detectable concentrations of contaminants were identified in MW-1. Groundwater sampling results with detectable concentrations of contaminants are summarized in Table 2 below.

Table 2
Summary of Groundwater Sampling Results

Analytical Parameter/ Constituent Detected	NYSDEC Groundwater Quality Criteria Ug/l	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
1,2 Dichloroethene	5	2.9	ND	3.5	ND	8,700	1.5
Perchloroethene	5	ND	ND	4.3	6.6	1,800	5.9
Trichloroethene	5	ND	ND	7.4	ND	9,000	1.7
Vinyl Chloride	2	ND	ND	ND	ND	1,100	ND
Total VOCs	---						

Notes:

Shaded cells indicate GWQC criteria exceedances

All concentrations reported in parts per billion (ppb)

ND – Not detected

--- = No NYSDEC GWQC has been established

Isopleth maps depicting concentration distributions for total VOCs, PCE, and vinyl chloride are included in Appendix A. The complete laboratory report is included in Appendix D.

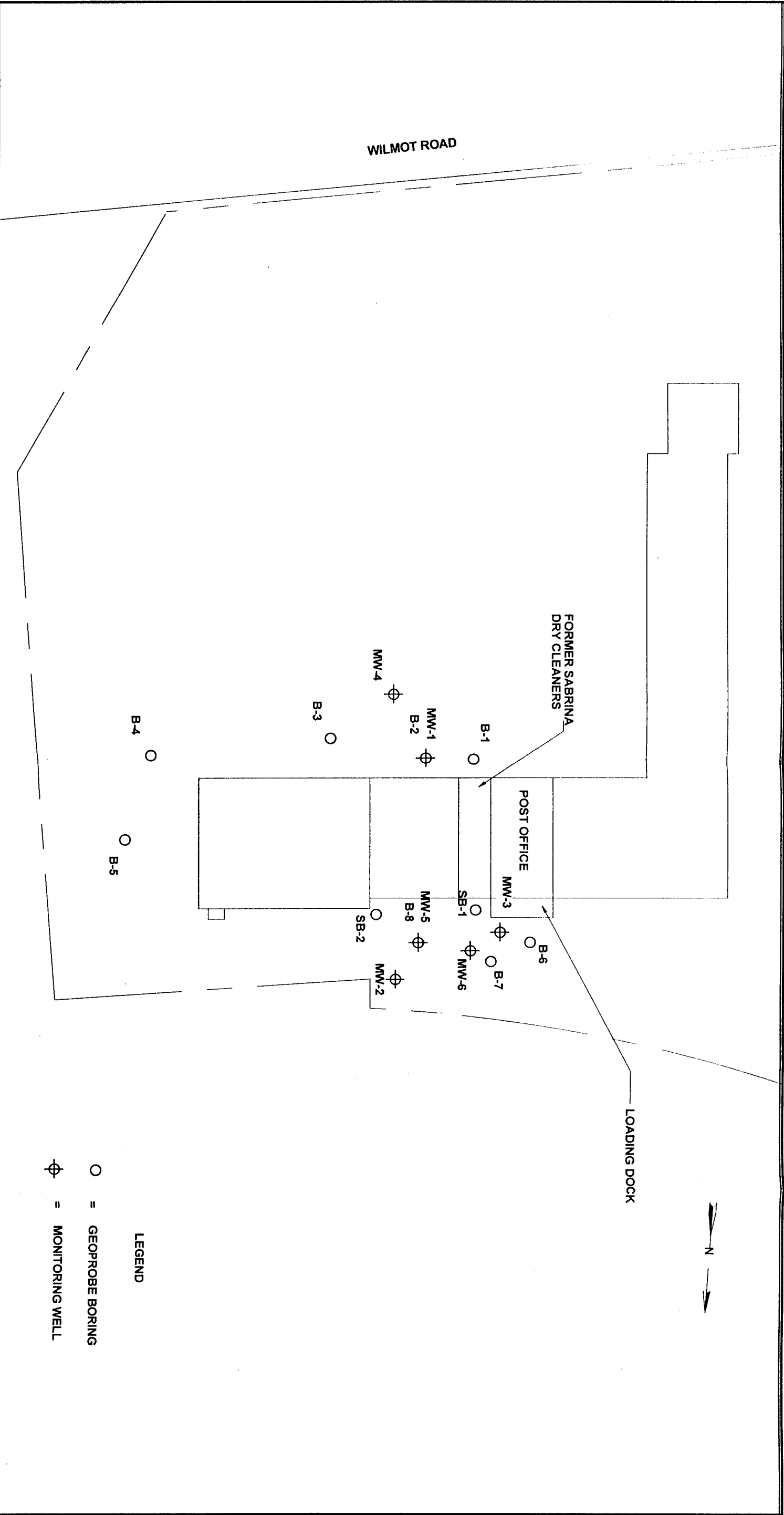
The area exhibiting concentrations of chlorinated VOCs above New York State Groundwater Quality Criteria appears to be limited to an approximate area of 21,000 square feet. As shown on the attached isopleth maps (Appendix A), the contaminated groundwater forms an approximate 115' x 175' irregular shaped plume. The migration of the plume is generally consistent with the groundwater flow direction; however, localized migration to the northeast has occurred on the north side of the former Sabrina Dry Cleaners due to shallow sloping bedrock.

5.0 CONCLUSIONS AND RECOMMENDATIONS

A contaminated chlorinated VOC groundwater plume is present beneath the Subject, in the vicinity of the former Sabrina Dry Cleaners. This contamination appears to be the result of poor management or sloppy handling of dry cleaning solvents near the rear of the facility. Elevated concentrations of chlorinated hydrocarbons typical of dry cleaning solvents were detected in the groundwater at concentrations approximately three orders of magnitude above their respective NYSDEC GWQC. Additionally, one of these compounds, vinyl chloride, is a Class A human carcinogen as defined by the U.S. Department of Health and Human Services National Toxicology Program.

The area of contaminated groundwater exceeding NYSDEC GWQC is approximately 21,000 square feet. As such, it is the opinion of IVI that the NYSDEC will require remediation of groundwater under the Subject. Given the limited extent of the contaminated groundwater plume and the shallow depth to bedrock at the site, the estimated cost for remediation using an innovative technology such as a dual phase extraction system with a horizontal well (s) would be approximately \$200,000.

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LEGEND

- = GEOPROBE BORING
- ⊕ = MONITORING WELL

Golden Horseshoe Shopping Center Site Plan

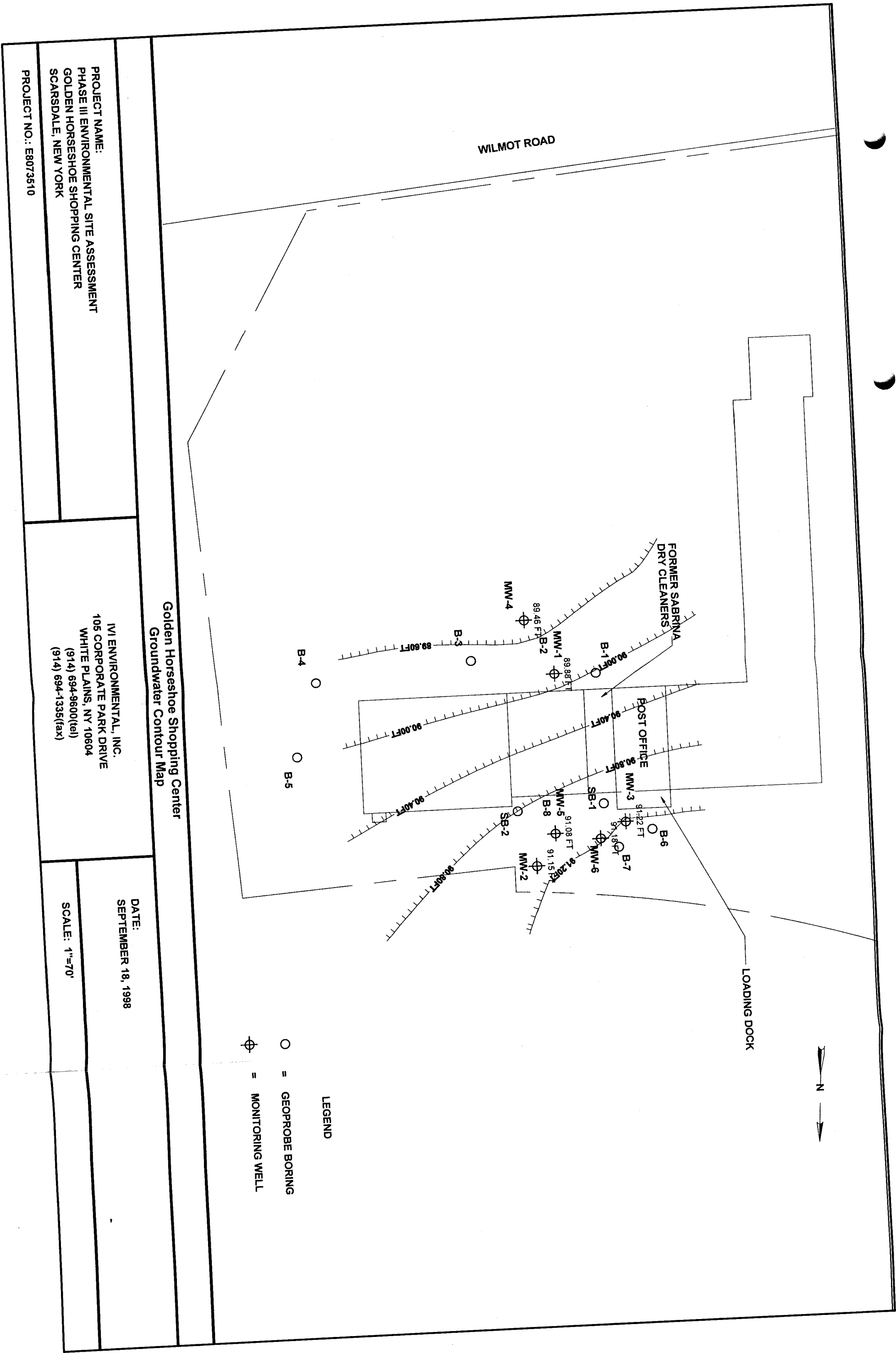
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PHASE III ENVIRONMENTAL SITE ASSESSMENT
GOLDEN HORSESHOE SHOPPING CENTER
SCARSDALE, NEW YORK

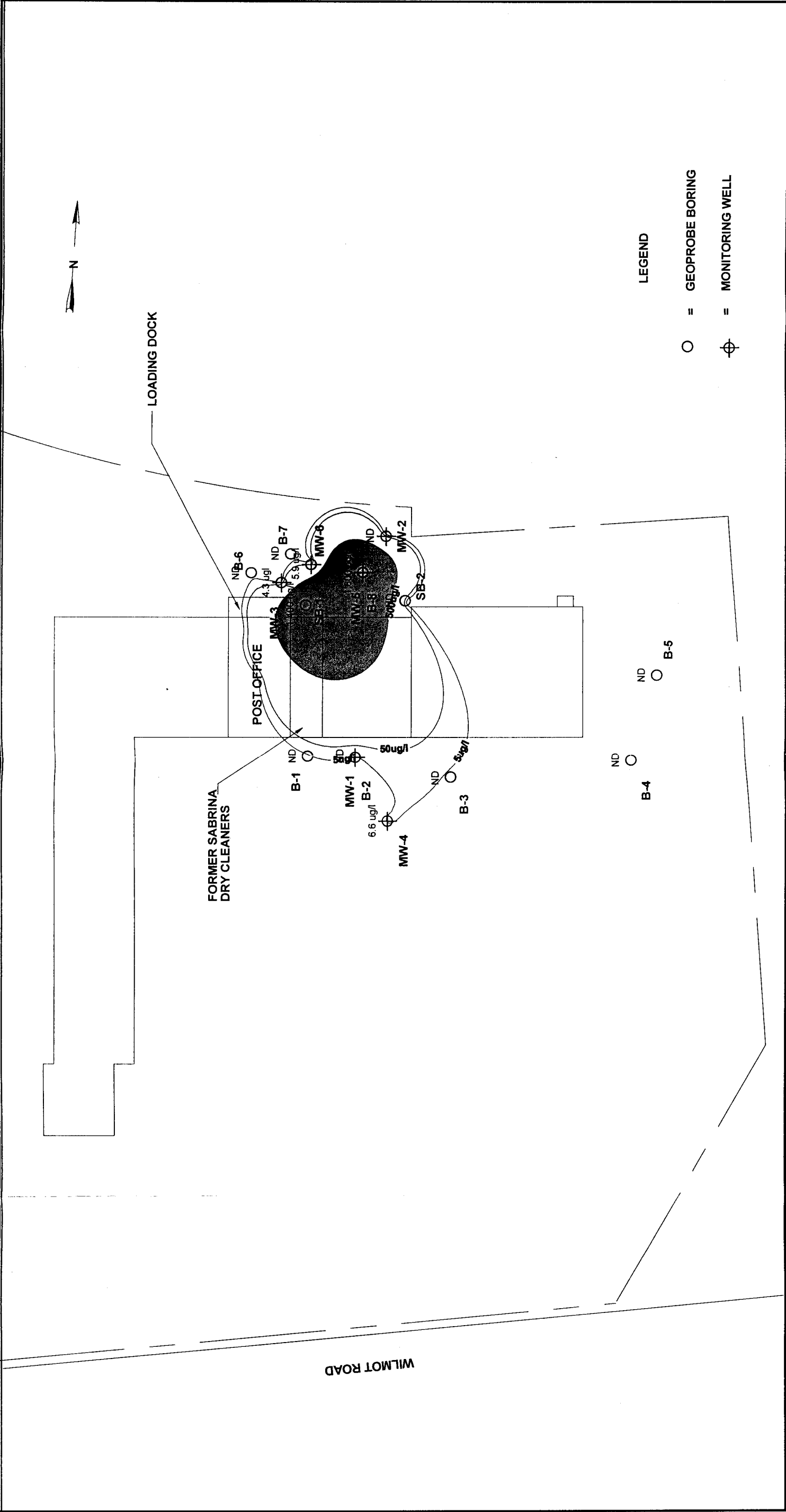
PROJECT NO.: E8073510

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DATE:
SEPTEMBER 18, 1998

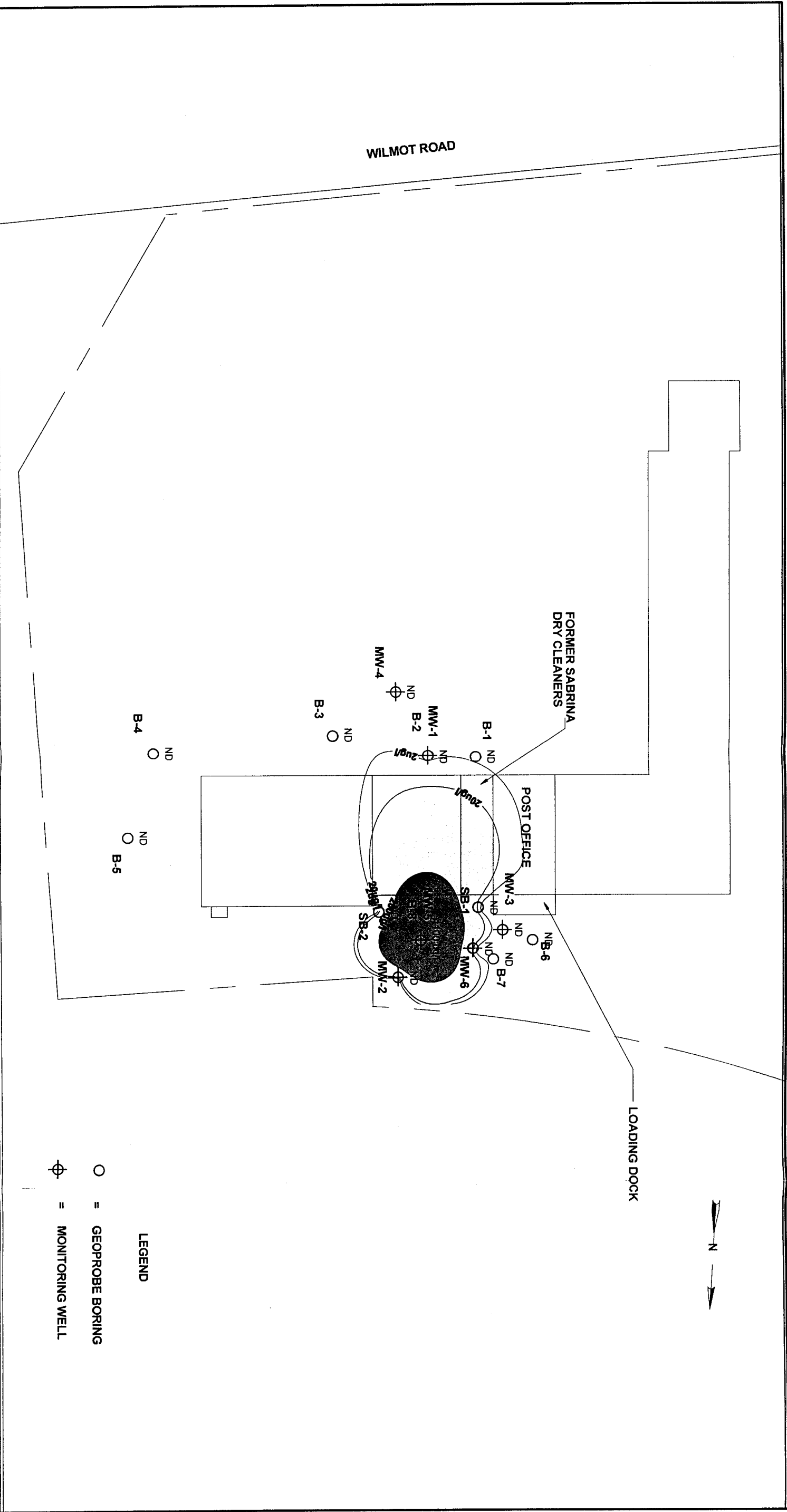
SCALE: 1"=70'





Golden Horseshoe Shopping Center
Tetrachloroethene Concentration Distribution Map

PROJECT NAME: PHASE III ENVIRONMENTAL SITE ASSESSMENT GOLDEN HORSESHOE SHOPPING CENTER SCARSDALE, NEW YORK	IVI ENVIRONMENTAL, INC. 105 CORPORATE PARK DRIVE WHITE PLAINS, NY 10604 (914) 694-9600(tel) (914) 694-1335(fax)		DATE: SEPTEMBER 18, 1998
	PROJECT NO.: E8073510		SCALE: 1"=70'



Golden Horseshoe Shopping Center
Vinyl Chloride Concentration Distribution Map

PROJECT NAME:
PHASE III ENVIRONMENTAL SITE ASSESSMENT
GOLDEN HORSESHOE SHOPPING CENTER
SCARSDALE, NEW YORK

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DATE:
SEPTEMBER 18, 1998

SCALE: 1"=70'

PROJECT NO.: E8073510

IVI Environmental, Inc.

105 Corporate Park Drive
White Plains, New York 10604
(914) 694-9600

Boring Log

Project No.: E8073510
Project Name: Golden Horseshoe Shopping Center
Project Manager: David R. Lent, CPE
Total Depth: 14'
Water Table Depth: 9'

Date: August 17, 1998
Location: Scarsdale, NY
Drilling Company: Zebra
Method Used: Geoprobe
Boring No.: B-1

Depth (feet)	Sample No.	Sample Interval	Recovered (feet)	Soil Identification and Remarks (include color, composition, moisture, visual and olfactory observations of contamination, and PID readings if any.)
	1	0'-4'	1.5	6" Asphalt & Stone Brown coarse to fine SAND, some fine to medium gravel. Moist
	2	4'-8'	4'	Brown and gray fine to coarse SAND, some f. gravel, trace silt @ 6' - Brown SILT & CLAY, some coarse to fine sand, little fine gravel. Moist
	3	8'-12'	4'	Brown SILT & CLAY, and fine to coarse sand. Interbedded with gray coarse to fine SAND, and fine gravel V = 9'
	4	12'-14'	2'	Gray fine to coarse SAND, some medium to fine gravel, little silt. Refusal on presumed bedrock @ 14' End of boring @ 14' • No PID Readings above background • No visible or olfactory evidence of contamination

Project No.: EB073510
Project Name: Golden Horseshoe Shopping Center
Project Manager: David R. Lent, CPE
Total Depth: 12'
Water Table Depth: 9'

Date: August 17, 1998
Location: Scarsdale, NY
Drilling Company: Zebra
Method Used: Geoprobe
Boring No.: B-2

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Project No.: E8073510 Date: August 17, 1998
Project Name: Golden Horseshoe Location: Scarsdale, NY
Shopping Center
Project Manager: David R. Lent, CPE Drilling Company: Zebra
Total Depth: 10' Method Used: Geoprobe
Water Table Depth: 8.5' Boring No.: B-3

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Boring Log

Project No.: E8073510
Project Name: Golden Horseshoe Shopping Center
Project Manager: David R. Lent, CPE
Total Depth: 15'
Water Table Depth: 8'

Date: August 17, 1998
Location: Scarsdale, NY
Drilling Company: Zebra
Method Used: Geoprobe
Boring No.: B-4

Depth (feet)	Sample No.	Sample Interval	Recovered (feet)	Soil Identification and Remarks (include color, composition, moisture, visual and olfactory observations of contamination, and PID readings if any.)
	1	0'-4'	3'	6" Top Soil & Grass Brown fine to medium SAND, some silt, some fine gravel
	2	4'-8'	3.5'	gray fine to medium SAND, and clayey silt, some fine to medium gravel. Mixed with debris (ie. brick, wood, rubber, misc.)
	3	8'-12'	4'	Brown and gray fine to medium SAND, and silt, little gravel, trace organics (ie. sticks, reeds) @ 11' Brown fine to medium SAND. (Abundant mica)
	4	12'-15'	3'	Brown micaceous SAND, and medium to fine gravel, little silt. @ 14' Weathered Bedrock - Biotite Schist. Refusal on bedrock @ 15' Below Ground Surface End of Boring @ 15'
				• No PID readings above background • No visible or olfactory evidence of Contamination.

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Project No.: E8073510 Date: August 17, 1998
Project Name: Golden Horseshoe
Shopping Center Location: Scarsdale, NY
Project Manager: David R. Lent, CPE Drilling Company: Zebra
Total Depth: 8' Method Used: Geoprobe
Water Table Depth: Not Encountered Boring No.: B-5

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Boring Log

Project No.: EB073510 Date: August 17, 1998
Project Name: Golden Horseshoe Shopping Center Location: Scarsdale, NY
Project Manager: David R. Lent, CPE Drilling Company: Zebra
Total Depth: 16' Method Used: Geoprobe
Water Table Depth: 8.5' Boring No.: B-6

Depth (feet)	Sample No.	Sample Interval	Recovered (feet)	Soil Identification and Remarks (include color, composition, moisture, visual and olfactory observations of contamination, and PID readings if any.)
	1	0'-4'	4'	6" Asphalt & Stone Brown fine to coarse SAND, and medium to fine gravel @ 2' Brown-gray SILT & CLAY, and fine sand, little fine to medium gravel
	2	4'-8'	4'	Brown-gray SILT & CLAY, and fine sand, little fine to medium gravel
	3	8'-12'	4'	Brown fine to coarse SAND, and SILT & CLAY, some fine to medium gravel @ 10' Dark gray SILT & CLAY, little fine to coarse sand, little medium to fine gravel
	4	12'-16'		Hard, gray, SILT & CLAY, little fine to coarse sand, little medium to fine gravel. End of Boring @ 16' Below ground surface • No PID readings above background • No visible or olfactory evidence of contamination.

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Boring Log

Project No.: E8073510 Date: August 17, 1998
Project Name: Golden Horseshoe Location: Scarsdale, NY
Project Manager: David R. Lent, CPE Drilling Company: Zebra
Total Depth: 16' Method Used: Geoprobe
Water Table Depth: 8.5' Boring No.: B-7

Depth (feet)	Sample No.	Sample Interval	Recovered (feet)	Soil Identification and Remarks (include color, composition, moisture, visual and olfactory observations of contamination, and PID readings if any.)
	1	0'-4'	3'	6" Asphalt & Stone Brown fine to coarse SAND, and medium to fine gravel e 2' Brown-gray SILT & CLAY, and fine sand, little fine to medium gravel
	2	4'-8'	4'	Brown coarse to fine SAND, and fine to medium gravel, trace silt. e 6' Gray fine to coarse SAND, some silt & clay, some fine gravel
	3	8'-12'	4'	Brown fine to coarse SAND, some silt & clay, some fine to medium gravel
	*	12'-16'	*	* Drove hydropunch to 16' without collecting soil samples End of boring e 16' below ground surface • No PID readings above background • No visible or olfactory evidence of contamination

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(914) 694-9600

Project No.: E8073510 Date: August 17, 1998
Project Name: Golden Horseshoe Location: Scarsdale, NY
Shopping Center
Project Manager: David R. Lent, CPE Drilling Company: Zebra
Total Depth: 12.5' Method Used: Geoprobe
Water Table Depth: 8.5' Boring No.: B-8

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Project No.: E8073510
Project Name: Golden Horseshoe
Sheeping Center
Project Manager: David R. Kent, CPE
Total Depth: 16'
Water Table Depth: 8.5'

Date: September 8, 1998
Location: Scarsdale, NY
Drilling Company: Reviter Drilling & Testing
Method Used: 4.25" ID Hollow-Stem Augers
Boring No.: MW-1

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105 Corporate Park Drive
White Plains, New York 10604
(914) 694-9600

Project No.: E8073510 Date: September 8, 1998
Project Name: Golden Horseshoe Location: Scarsdale, NY
Shopping Center
Project Manager: David R. Lent, CPE Drilling Company: Aquifer Drilling & Testing
Total Depth: 16.5' Method Used: 4.25" ID Hollow-Stem Augers
Water Table Depth: 8.5' Boring No.: MW-2

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105 Corporate Park Drive
White Plains, New York 10604
(914) 694-9600

Project No.: E8073510 Date: September 8, 1998
Project Name: Golden Horseshoe Location: Scarsdale, NY
Shopping Center
Project Manager: David R. Lent, CPE Drilling Company: Agviter Drilling & Testing
Total Depth: _____ Method Used: 4.25" ID Hollow-Stem Augers
Water Table Depth: _____ Boring No.: MW-3

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Project No.: E8073510 Date: September 9, 1998
Project Name: Golden Horseshoe Location: Scarsdale, NY
Shopping Center
Project Manager: David R. Lent, CPG Drilling Company: Aguiter Drilling & Testing
Total Depth: 16' Method Used: 4.25" ID Hollow Stem Augers
Water Table Depth: 8.5' Boring No.: MW-4

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105 Corporate Park Drive
White Plains, New York 10604
(914) 694-9600

Project No.: E8073510
Project Name: Golden Horseshoe
Project Manager: Shopping Center
Project Manager: David R. Lent, LP6
Total Depth: 12.2'
Water Table Depth: 8.5'

Date: September 9, 1998
Location: Scarsdale, NY
Drilling Company: Aguirre Drilling & Testing
Method Used: 4.25" ID Hollow-Stem Augers
Boring No.: MW-5

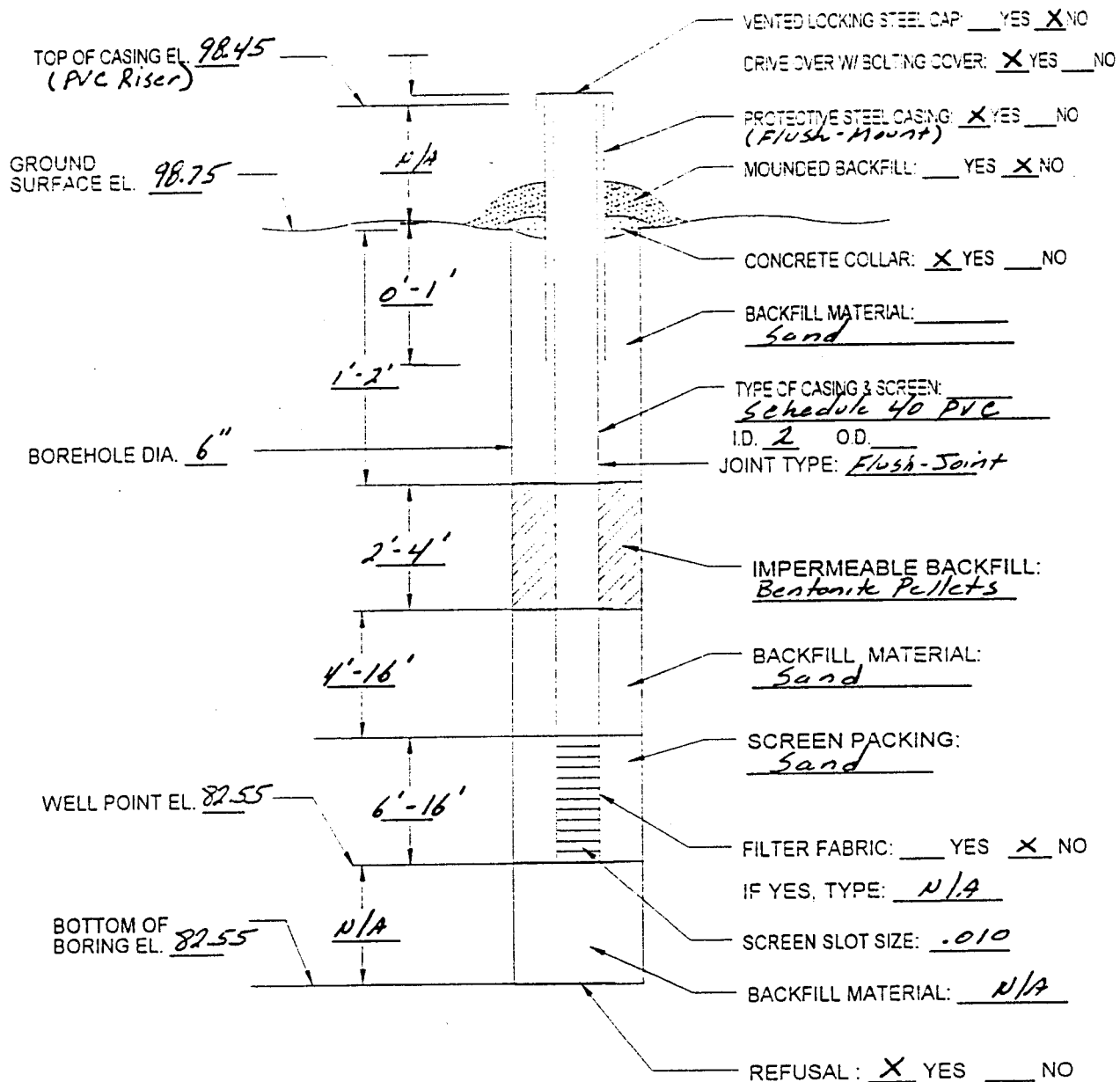
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105 Corporate Park Drive
White Plains, New York 10604
(914) 694-9600

Project No.: E8073510 Date: September 9, 1998
Project Name: Golden Horseshoe Location: Scarsdale, NY
Shopping Center
Project Manager: David R. Lent, CPG Drilling Company: Aguiler Drilling & Testing
Total Depth: 12.2' Method Used: 4.25" ID Hollow-Stem Augers
Water Table Depth: 8.5' Boring No.: MW-6

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MONITORING WELL NO.: MW-1



Note: Elevations are based on an arbitrary reference.

MONITORING WELL INSTALLATION DETAIL

MONITORING WELL NO.: MW-1
PROJECT NAME: Golden Horseshoe Shopping Center - Phase II Environmental Site Assessment

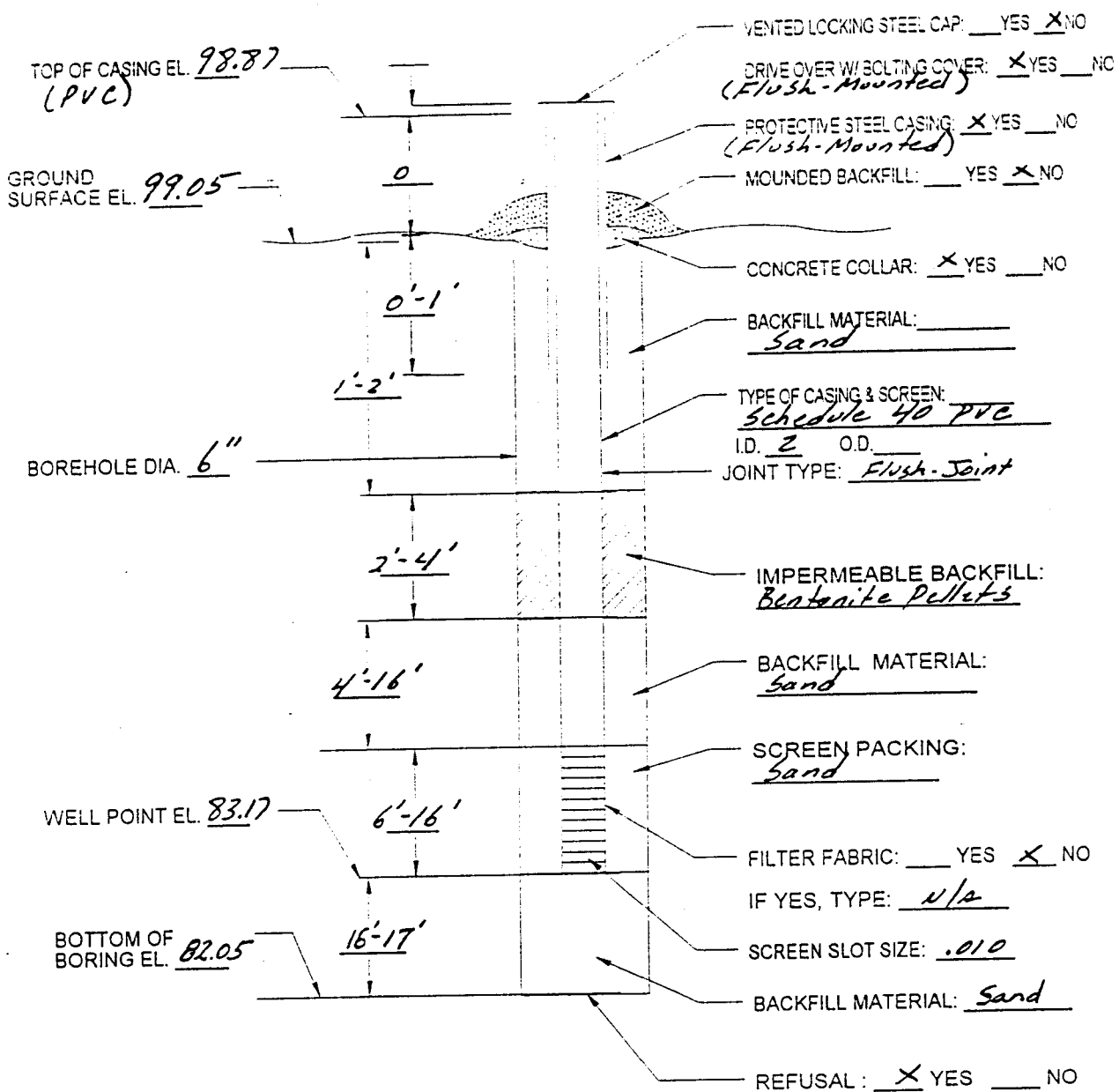
MI PROJECT MANAGER: David R. Lent
MI PROJECT NUMBER: 9073510

MI ENVIRONMENTAL, INC.
105 CORPORATE PARK DRIVE
WHITE PLAINS, NY 10604
(914) 694-9600(tel)
(914) 694-1335(fax)

DATE INSTALLED: September 8-9, 1998

DRIER: Aquifer Drilling And Testing, Inc.

MONITORING WELL NO.: MW-2



Note:

Elevations are based on an arbitrary reference.

MONITORING WELL INSTALLATION DETAIL

MONITORING WELL NO.: MW-2
PROJECT NAME: Golden Horseshoe Shopping Center - Phase II Environmental Site Assessment

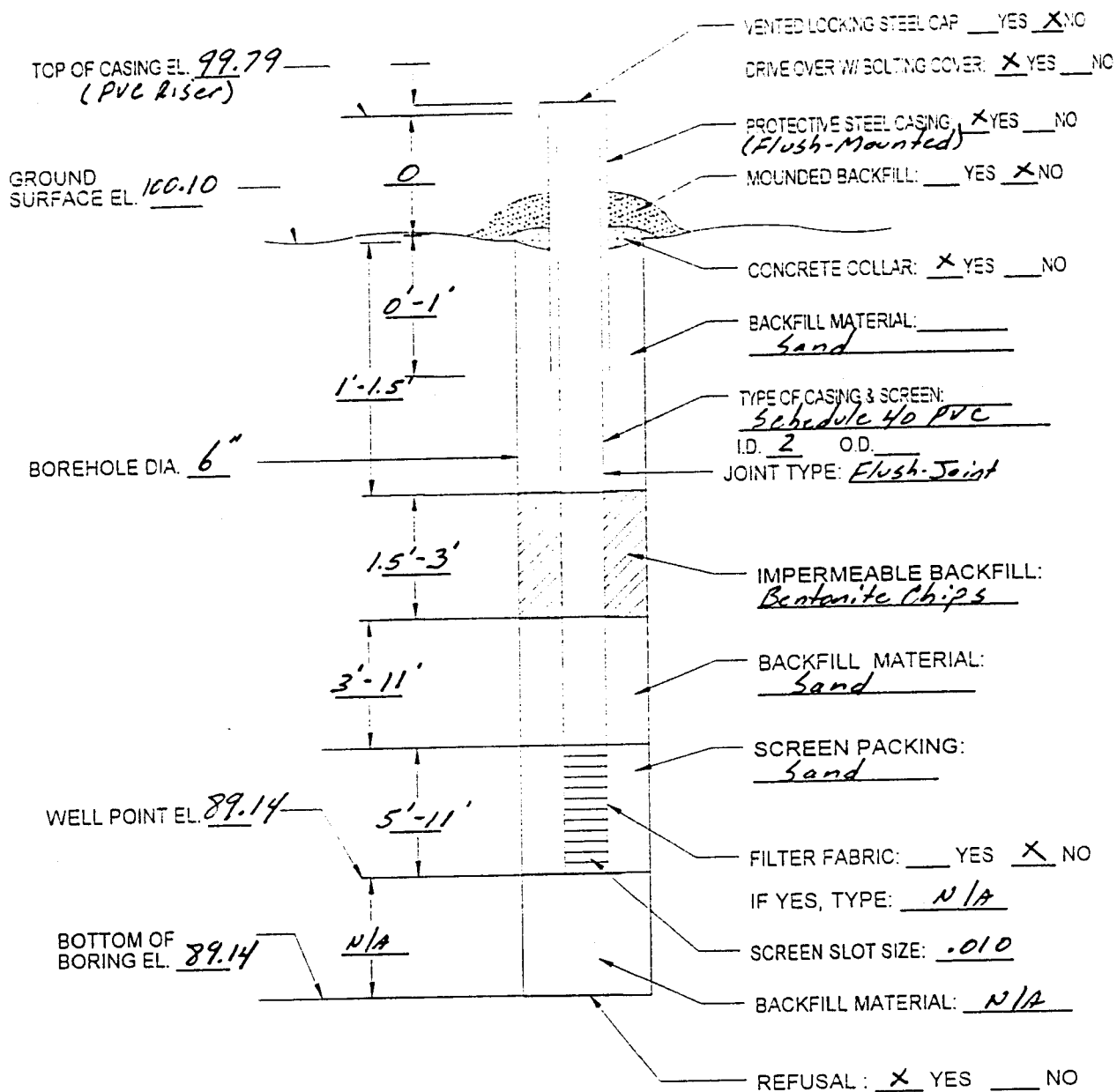
MI ENVIRONMENTAL, INC.
105 CORPORATE PARK DRIVE
WHITE PLAINS, NY 10604
(914) 694-9600 (tel)
(914) 694-1335 (fax)

DATE INSTALLED: September 3-9, 1998

MI PROJECT MANAGER: David R. Lent
MI PROJECT NUMBER: 8073510

DRILLER: Aquifer Drilling And Testing, Inc.

MONITORING WELL NO.: MW-3



Note: Elevations are based on an arbitrary reference.

MONITORING WELL INSTALLATION DETAIL

MONITORING WELL NO.: MW-3
PROJECT NAME: Golden Horseshoe Shopping Center - Phase III Environmental Site Assessment

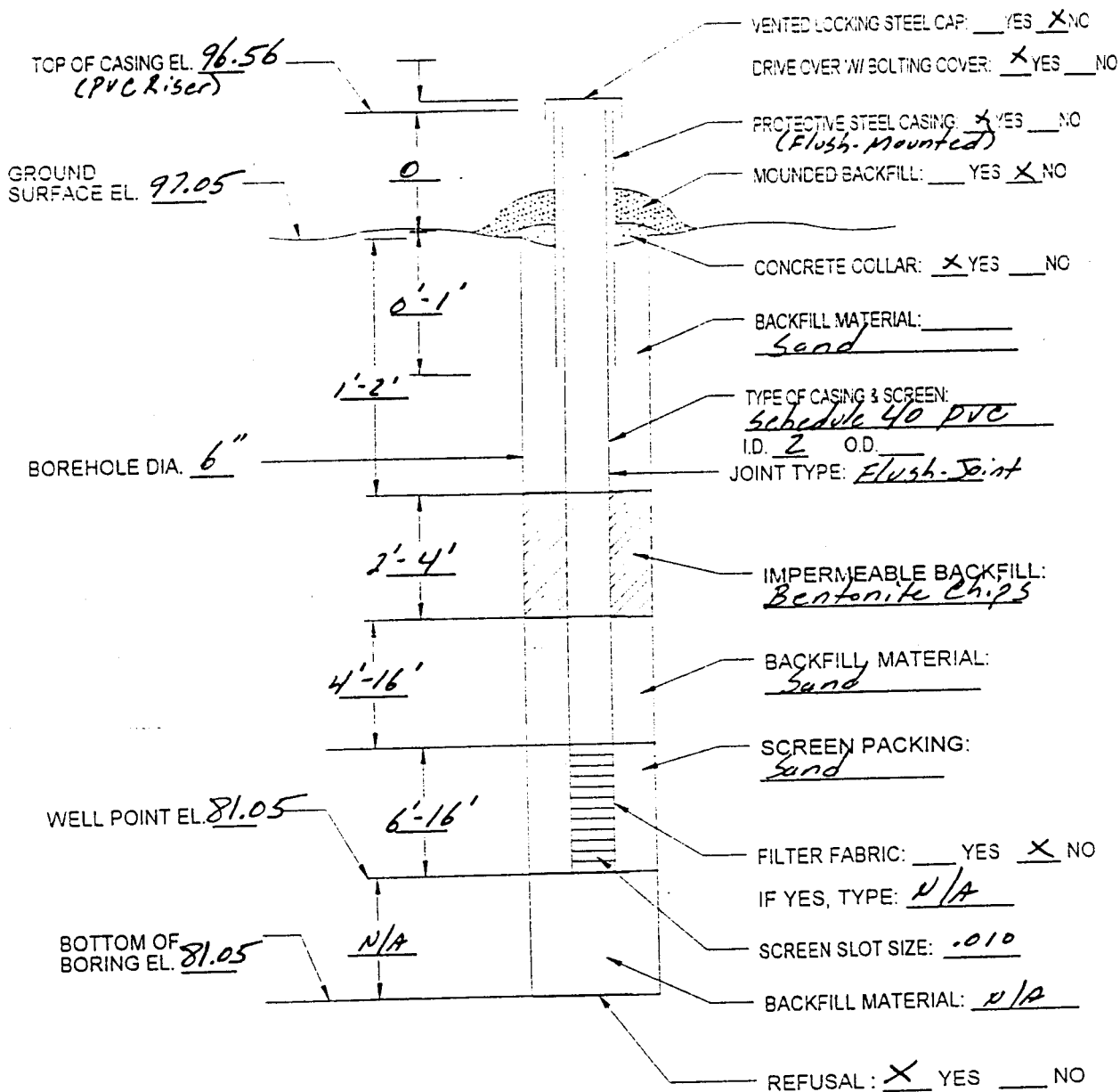
MI PROJECT MANAGER: David R. Lent
MI PROJECT NUMBER: 8073510

MI ENVIRONMENTAL, INC.
105 CORPORATE PARK DRIVE
WHITE PLAINS, NY 10604
(914) 694-9600 (tel)
(914) 694-1335 (fax)

DATE INSTALLED: September 9-9, 1998

DRILLER: Aquifer Drilling And Testing, Inc.

MONITORING WELL NO.: MW-4



Note: Elevations are based on an arbitrary reference

MONITORING WELL INSTALLATION DETAIL

MONITORING WELL NO.: MW-4
PROJECT NAME: Golden Horseshoe Shopping Center - Phase II Environmental Site Assessment

MI ENVIRONMENTAL, INC.
105 CORPORATE PARK DRIVE
WHITE PLAINS, NY 10604
(914) 694-9600 (tel)
(914) 694-1335 (fax)

DATE INSTALLED: September 3-9, 1998

DRILLER: Aquifer Drilling And Testing, Inc.

MI PROJECT MANAGER: David R. Lent
MI PROJECT NUMBER: 8073510

TOP OF CASING EL. 99.06
(PVC Riser)

GROUND SURFACE EL. 99.50—

BOREHOLE DIA. 6"

WELL POINT EL. 86.84

BOTTOM OF BORING EL. 86.84

DRIVE OVER W/ BOLTING COVER: X YES ___ NO

PROTECTIVE STEEL CASING: X YES ___ NO

MOUNDED BACKFILL: YES ☒ NO

CONCRETE COLLAR: ☒ YES ☐ NO

BACKFILL MATERIAL: band N/A

TYPE OF CASING & SCREEN:
Schedule 40 PVC

I.D. 2 O.D.
JOINT TYPE: Flush-Joint

IMPERMEABLE BACKFILL:
Bentonite Chips

BACKFILL MATERIAL:
Sand

SCREEN PACKING:
Sand

FILTER FABRIC: YES X NO

IF YES, TYPE: N/A

SCREEN SLOT SIZE: •010

BACKFILL MATERIAL: N/A

REFUSAL: X YES NO

Note: Elevations are based on an arbitrary reference.

MONITORING WELL INSTALLATION DETAIL

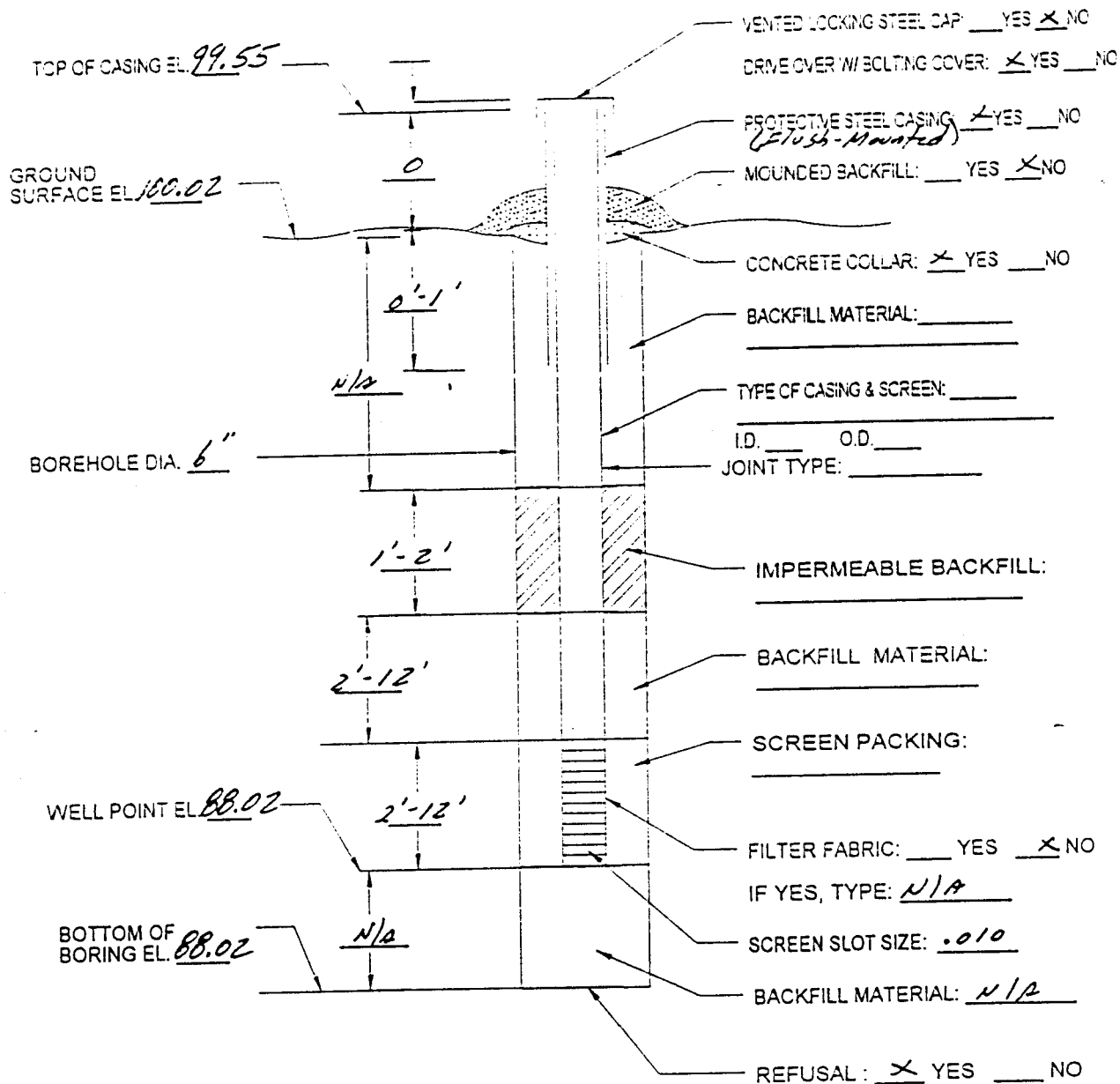
MI PROJECT MANAGER: David R. Lent
MI PROJECT NUMBER: 3073510

MI ENVIRONMENTAL, INC.
105 CORPORATE PARK DRIVE
WHITE PLAINS, NY 10604
(914) 694-9600 (tel)
(914) 694-1335 (fax)

DATE INSTALLED: September 8-9, 1998

DRILLER: Aquifer Drilling And Testing, Inc.

MONITORING WELL NO.: MW-6



Note: Elevations are based on an arbitrary reference.

MONITORING WELL INSTALLATION DETAIL

MONITORING WELL NO.: MW-6
PROJECT NAME: Golden Horseshoe Shopping Center - Phase II Environmental Site Assessment

MI ENVIRONMENTAL, INC.
105 CORPORATE PARK DRIVE
WHITE PLAINS, NY 10604
(914) 694-9600(tel)
(914) 694-1335(fax)

DATE INSTALLED: September 9-9, 1998

MI PROJECT MANAGER: David R. Lent
MI PROJECT NUMBER: 9073510

DRIER: Aquifer Drilling And Testing, Inc.



ANALYTICAL DATA

SUMMARY

Report Date: 08/28/98

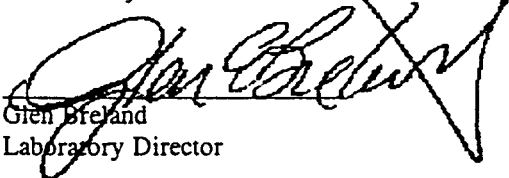
Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604
914-694-9600

Project Manager: David Lent
Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project No.: E8073510

Sample Information:

<u>Laboratory ID</u>	<u>Client/Field ID</u>	<u>Laboratory ID</u>	<u>Client/Field ID</u>
82314492-001	B1 (4-6')	82314492-010	B6 (GW)
82314492-002	B1 (GW)	82314492-011	B7 (2-4')
82314492-003	B2 (8-10')	82314492-012	B7 (4-6')
82314492-004	B2 (GW)	82314492-013	B7 (GW)
82314492-005	B3 (4-6')	82314492-014	B8 (4-6')
82314492-006	B3 (GW)	82314492-015	B8 (6-8')
82314492-007	B4 (12-14')	82314492-016	B8 (GW)
82314492-008	B4 (GW)	82314492-017	QC Report-Water
82314492-009	B6 (2-4')	82314492-018	QC Report-Soil

Reviewed by


Glen Breland
Laboratory Director

Lab Certifications

EPA ID: No. MA059
Massachusetts: No. M-MA059
Maine: Reciprocity
Rhode Island: No. 87
South Carolina: No. 88011

Florida(DEP): QA Plan No. 900437G
Florida(HRS): No. E87290
Connecticut: No. PH0515
New York: ELAP No. 11116
New Hampshire: No. 2041



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-001
Client ID: B1 (4-6')
Matrix: Soil

Date Sampled: / / 08:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
Bromobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Bromochloromethane	ND	ug/kg	5	8021B	mb	08/26/98
Bromodichloromethane	ND	ug/kg	5	8021B	mb	08/26/98
Bromoform	ND	ug/kg	5	8021B	mb	08/26/98
Bromomethane	ND	ug/kg	5	8021B	mb	08/26/98
Carbon Tetrachloride	ND	ug/kg	5	8021B	mb	08/26/98
Chlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Chloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Chloroform	ND	ug/kg	5	8021B	mb	08/26/98
Chloromethane	ND	ug/kg	5	8021B	mb	08/26/98
2-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/26/98
4-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dibromo-3-Chloropropane	ND	ug/kg	25	8021B	mb	08/26/98
Dibromochloromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dibromoethane	ND	ug/kg	5	8021B	mb	08/26/98
Dibromomethane	ND	ug/kg	5	8021B	mb	08/26/98
1,4-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,3-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Dichlorodifluoromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
cis-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
trans-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-001
Client ID: B1 (4-6')
Matrix: Soil

Date Sampled: / / 08:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
1,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
1,3-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
2,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloropropene	ND	ug/kg	5	8021B	mb	08/26/98
Hexachlorobutadiene	ND	ug/kg	5	8021B	mb	08/26/98
Methylene Chloride	ND	ug/kg	20	8021B	mb	08/26/98
1,1,1,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1,2,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Tetrachloroethene	ND	ug/kg	5	8021B	mb	08/26/98
1,2,3-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,2,4-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,1,1-Trichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1,2-Trichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Trichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
Trichlorofluoromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2,3-Trichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
Vinyl Chloride	ND	ug/kg	5	8021B	mb	08/26/98

The detection limit reported is based
on a X5 dilution of the sample.
Detection limit due to
matrix interference.

SURROGATE STUDIES - VOLATILES

4-Bromochlorobenzene	108	Percent	mb	08/26/98
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Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

F I N A L R E P O R T

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-001
Client ID: B1 (4-6')
Matrix: Soil

Date Sampled: / / 08:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>SURROGATE STUDIES - VOLATILES</u>						
1,4-Dichlorobutane	114	Percent			mb	08/26/98
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	9.0	Percent			jb	08/21/98



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-002
Client ID: B1 (GW)
Matrix: Water

Date Sampled: / / 09:45
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
Bromobenzene	ND	ug/l	1	8021B	mb	08/27/98
Bromochloromethane	ND	ug/l	1	8021B	mb	08/27/98
Bromodichloromethane	ND	ug/l	1	8021B	mb	08/27/98
Bromoform	ND	ug/l	1	8021B	mb	08/27/98
Bromomethane	ND	ug/l	1	8021B	mb	08/27/98
Carbon Tetrachloride	ND	ug/l	1	8021B	mb	08/27/98
Chlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
Chloroethane	ND	ug/l	1	8021B	mb	08/27/98
Chloroform	ND	ug/l	1	8021B	mb	08/27/98
Chloromethane	ND	ug/l	1	8021B	mb	08/27/98
2-Chlorotoluene	ND	ug/l	1	8021B	mb	08/27/98
4-Chlorotoluene	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dibromo-3-Chloropropane	ND	ug/l	5	8021B	mb	08/27/98
Dibromochloromethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dibromoethane	ND	ug/l	1	8021B	mb	08/27/98
Dibromomethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,3-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,4-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
Dichlorodifluoromethane	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dichloroethane	ND	ug/l	1	8021B	mb	08/27/98
cis-1,2-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98
trans-1,2-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-002
Client ID: B1 (GW)
Matrix: Water

Date Sampled: / / 09:45
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
1,2-Dichloropropane	ND	ug/l	1	8021B	mb	08/27/98
1,3-Dichloropropane	ND	ug/l	1	8021B	mb	08/27/98
2,2-Dichloropropane	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloropropene	ND	ug/l	1	8021B	mb	08/27/98
Hexachlorobutadiene	ND	ug/l	1	8021B	mb	08/27/98
Methylene Chloride	ND	ug/l	4	8021B	mb	08/27/98
1,1,1,2-Tetrachloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,1,2,2-Tetrachloroethane	ND	ug/l	1	8021B	mb	08/27/98
Tetrachloroethene	ND	ug/l	1	8021B	mb	08/27/98
1,2,3-Trichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,2,4-Trichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,1,1-Trichloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,1,2-Trichloroethane	ND	ug/l	1	8021B	mb	08/27/98
Trichloroethene	ND	ug/l	1	8021B	mb	08/27/98
Trichlorofluoromethane	ND	ug/l	1	8021B	mb	08/27/98
1,2,3-Trichloropropane	ND	ug/l	1	8021B	mb	08/27/98
Vinyl Chloride	ND	ug/l	1	8021B	mb	08/27/98
<u>SURROGATE STUDIES - VOLATILES</u>						
4-Bromochlorobenzene	87	Percent			mb	08/27/98
1,4-Dichlorobutane	120	Percent			mb	08/27/98



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-003
Client ID: B2 (8-10')
Matrix: Soil

Date Sampled: / / 09:00
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
Bromobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Bromochloromethane	ND	ug/kg	5	8021B	mb	08/26/98
Bromodichloromethane	ND	ug/kg	5	8021B	mb	08/26/98
Bromoform	ND	ug/kg	5	8021B	mb	08/26/98
Bromomethane	ND	ug/kg	5	8021B	mb	08/26/98
Carbon Tetrachloride	ND	ug/kg	5	8021B	mb	08/26/98
Chlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Chloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Chloroform	ND	ug/kg	5	8021B	mb	08/26/98
Chloromethane	ND	ug/kg	5	8021B	mb	08/26/98
2-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/26/98
4-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dibromo-3-Chloropropane	ND	ug/kg	25	8021B	mb	08/26/98
Dibromochloromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dibromoethane	ND	ug/kg	5	8021B	mb	08/26/98
Dibromomethane	ND	ug/kg	5	8021B	mb	08/26/98
1,4-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,3-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Dichlorodifluoromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
cis-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
trans-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-003
Client ID: B2 (8-10')
Matrix: Soil

Date Sampled: / / 09:00
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
1,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
1,3-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
2,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloropropene	ND	ug/kg	5	8021B	mb	08/26/98
Hexachlorobutadiene	ND	ug/kg	5	8021B	mb	08/26/98
Methylene Chloride	41	ug/kg	20	8021B	mb	08/26/98
1,1,1,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1,2,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Tetrachloroethene	ND	ug/kg	5	8021B	mb	08/26/98
1,2,3-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,2,4-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,1,1-Trichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1,2-Trichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Trichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
Trichlorofluoromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2,3-Trichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
Vinyl Chloride	ND	ug/kg	5	8021B	mb	08/26/98

The detection limit reported is based
on a X5 dilution of the sample.
Detection limit due to
matrix interference.

SURROGATE STUDIES - VOLATILES

4-Bromochlorobenzene	101	Percent	mb	08/26/98
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Matrix Analytical, Inc.
106 South Street
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1 (800) 362-8749

FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-003
Client ID: B2 (8-10')
Matrix: Soil

Date Sampled: / / 09:00
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>SURROGATE STUDIES - VOLATILES</u>						
1,4-Dichlorobutane	113	Percent			mb	08.26.98
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	13.4	Percent			jb	08.21.98



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FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
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White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-004
Client ID: B2 (GW)
Matrix: Water

Date Sampled: / / 09:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
Bromobenzene	ND	ug/l	1	8021B	mb	08/27/98
Bromochloromethane	ND	ug/l	1	8021B	mb	08/27/98
Bromodichloromethane	ND	ug/l	1	8021B	mb	08/27/98
Bromoform	ND	ug/l	1	8021B	mb	08/27/98
Bromomethane	ND	ug/l	1	8021B	mb	08/27/98
Carbon Tetrachloride	ND	ug/l	1	8021B	mb	08/27/98
Chlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
Chloroethane	ND	ug/l	1	8021B	mb	08/27/98
Chloroform	ND	ug/l	1	8021B	mb	08/27/98
Chloromethane	ND	ug/l	1	8021B	mb	08/27/98
2-Chlorotoluene	ND	ug/l	1	8021B	mb	08/27/98
4-Chlorotoluene	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dibromo-3-Chloropropane	ND	ug/l	5	8021B	mb	08/27/98
Dibromochloromethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dibromoethane	ND	ug/l	1	8021B	mb	08/27/98
Dibromomethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,3-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,4-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
Dichlorodifluoromethane	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dichloroethane	ND	ug/l	1	8021B	mb	08/27/98
cis-1,2-Dichloroethene	24	ug/l	1	8021B	mb	08/27/98
1,1-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98
trans-1,2-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98



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FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-004
Client ID: B2 (GW)
Matrix: Water

Date Sampled: / / 09:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
1,2-Dichloropropane	ND	ug/l	1	8021B	mb	08/27/98
1,3-Dichloropropane	ND	ug/l	1	8021B	mb	08/27/98
2,2-Dichloropropane	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloropropene	ND	ug/l	1	8021B	mb	08/27/98
Hexachlorobutadiene	ND	ug/l	1	8021B	mb	08/27/98
Methylene Chloride	ND	ug/l	4	8021B	mb	08/27/98
1,1,1,2-Tetrachloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,1,2,2-Tetrachloroethane	ND	ug/l	1	8021B	mb	08/27/98
Tetrachloroethene	ND	ug/l	1	8021B	mb	08/27/98
1,2,3-Trichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,2,4-Trichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,1,1-Trichloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,1,2-Trichloroethane	ND	ug/l	1	8021B	mb	08/27/98
Trichloroethene	ND	ug/l	1	8021B	mb	08/27/98
Trichlorofluoromethane	ND	ug/l	1	8021B	mb	08/27/98
1,2,3-Trichloropropane	ND	ug/l	1	8021B	mb	08/27/98
Vinyl Chloride	19	ug/l	1	8021B	mb	08/27/98
<u>SURROGATE STUDIES - VOLATILES</u>						
4-Bromochlorobenzene	85	Percent			mb	08/27/98
1,4-Dichlorobutane	116	Percent			mb	08/27/98



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Client Information

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Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-005
Client ID: B3 (4-6')
Matrix: Soil

Date Sampled: / / 10:30
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
Bromobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Bromochloromethane	ND	ug/kg	5	8021B	mb	08/26/98
Bromodichloromethane	ND	ug/kg	5	8021B	mb	08/26/98
Bromoform	ND	ug/kg	5	8021B	mb	08/26/98
Bromomethane	ND	ug/kg	5	8021B	mb	08/26/98
Carbon Tetrachloride	ND	ug/kg	5	8021B	mb	08/26/98
Chlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Chloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Chloroform	ND	ug/kg	5	8021B	mb	08/26/98
Chloromethane	ND	ug/kg	5	8021B	mb	08/26/98
2-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/26/98
4-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dibromo-3-Chloropropane	ND	ug/kg	25	8021B	mb	08/26/98
Dibromochloromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dibromoethane	ND	ug/kg	5	8021B	mb	08/26/98
Dibromomethane	ND	ug/kg	5	8021B	mb	08/26/98
1,4-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,3-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Dichlorodifluoromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
cis-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
trans-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98



Matrix Analytical, Inc.
106 South Street
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FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-005
Client ID: B3 (4-6')
Matrix: Soil

Date Sampled: / / 10:30
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
1,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
1,3-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
2,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloropropene	ND	ug/kg	5	8021B	mb	08/26/98
Hexachlorobutadiene	ND	ug/kg	5	8021B	mb	08/26/98
Methylene Chloride	43	ug/kg	20	8021B	mb	08/26/98
1,1,1,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1,2,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Tetrachloroethene	ND	ug/kg	5	8021B	mb	08/26/98
1,2,3-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,2,4-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,1,1-Trichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1,2-Trichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Trichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
Trichlorofluoromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2,3-Trichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
Vinyl Chloride	ND	ug/kg	5	8021B	mb	08/26/98

The detection limit reported is based
on a X5 dilution of the sample.

Detection limit due to
matrix interference.

SURROGATE STUDIES - VOLATILES

4-Bromochlorobenzene	95	Percent	mb	08/26/98
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Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-005
Client ID: B3 (4-6')
Matrix: Soil

Date Sampled: / / 10:30
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>SURROGATE STUDIES - VOLATILES</u>						
1,4-Dichlorobutane	119	Percent			mb	08/26/98
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	13.7	Percent			jb	08/21/98



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FINAL REPORT

Client Information

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Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-006
Client ID: B3 (GW)
Matrix: Water

Date Sampled: / / 10:45
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
Bromobenzene	ND	ug/l	1	8021B	mb	08/27/98
Bromochloromethane	ND	ug/l	1	8021B	mb	08/27/98
Bromodichloromethane	ND	ug/l	1	8021B	mb	08/27/98
Bromoform	ND	ug/l	1	8021B	mb	08/27/98
Bromomethane	ND	ug/l	1	8021B	mb	08/27/98
Carbon Tetrachloride	ND	ug/l	1	8021B	mb	08/27/98
Chlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
Chloroethane	ND	ug/l	1	8021B	mb	08/27/98
Chloroform	ND	ug/l	1	8021B	mb	08/27/98
Chloromethane	ND	ug/l	1	8021B	mb	08/27/98
2-Chlorotoluene	ND	ug/l	1	8021B	mb	08/27/98
4-Chlorotoluene	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dibromo-3-Chloropropane	ND	ug/l	5	8021B	mb	08/27/98
Dibromochloromethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dibromoethane	ND	ug/l	1	8021B	mb	08/27/98
Dibromomethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,3-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,4-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
Dichlorodifluoromethane	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dichloroethane	ND	ug/l	1	8021B	mb	08/27/98
cis-1,2-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98
trans-1,2-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98



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White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-006
Client ID: B3 (GW)
Matrix: Water

Date Sampled: / / 10:45
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
1,2-Dichloropropane	ND	ug/l	1	8021B	mb	08/27/98
1,3-Dichloropropane	ND	ug/l	1	8021B	mb	08/27/98
2,2-Dichloropropane	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloropropene	ND	ug/l	1	8021B	mb	08/27/98
Hexachlorobutadiene	ND	ug/l	1	8021B	mb	08/27/98
Methylene Chloride	ND	ug/l	4	8021B	mb	08/27/98
1,1,1,2-Tetrachloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,1,1,2,2-Tetrachloroethane	ND	ug/l	1	8021B	mb	08/27/98
Tetrachloroethene	ND	ug/l	1	8021B	mb	08/27/98
1,2,3-Trichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,2,4-Trichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,1,1-Trichloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,1,2-Trichloroethane	ND	ug/l	1	8021B	mb	08/27/98
Trichloroethene	ND	ug/l	1	8021B	mb	08/27/98
Trichlorofluoromethane	ND	ug/l	1	8021B	mb	08/27/98
1,2,3-Trichloropropane	ND	ug/l	1	8021B	mb	08/27/98
Vinyl Chloride	ND	ug/l	1	8021B	mb	08/27/98
<u>SURROGATE STUDIES - VOLATILES</u>						
4-Bromochlorobenzene	79	Percent			mb	08/27/98
1,4-Dichlorobutane	118	Percent			mb	08/27/98



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FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-007
Client ID: B4 (12-14')
Matrix: Soil

Date Sampled: / / 11:00
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
Bromobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Bromochloromethane	ND	ug/kg	5	8021B	mb	08/26/98
Bromodichloromethane	ND	ug/kg	5	8021B	mb	08/26/98
Bromoform	ND	ug/kg	5	8021B	mb	08/26/98
Bromomethane	ND	ug/kg	5	8021B	mb	08/26/98
Carbon Tetrachloride	ND	ug/kg	5	8021B	mb	08/26/98
Chlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Chloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Chloroform	ND	ug/kg	5	8021B	mb	08/26/98
Chloromethane	ND	ug/kg	5	8021B	mb	08/26/98
2-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/26/98
4-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dibromo-3-Chloropropane	ND	ug/kg	25	8021B	mb	08/26/98
Dibromochloromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dibromoethane	ND	ug/kg	5	8021B	mb	08/26/98
Dibromomethane	ND	ug/kg	5	8021B	mb	08/26/98
1,4-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,3-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Dichlorodifluoromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
cis-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
trans-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98



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FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-007
Client ID: B4 (12-14')
Matrix: Soil

Date Sampled: / / 11:00
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
1,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
1,3-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
2,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloropropene	ND	ug/kg	5	8021B	mb	08/26/98
Hexachlorobutadiene	ND	ug/kg	5	8021B	mb	08/26/98
Methylene Chloride	45	ug/kg	20	8021B	mb	08/26/98
1,1,1,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1,1,2,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Tetrachloroethene	ND	ug/kg	5	8021B	mb	08/26/98
1,2,3-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,2,4-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,1,1-Trichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1,2-Trichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Trichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
Trichlorofluoromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2,3-Trichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
Vinyl Chloride	ND	ug/kg	5	8021B	mb	08/26/98

The detection limit reported is based
on a X5 dilution of the sample.
Detection limit due to
matrix interference.

SURROGATE STUDIES - VOLATILES

4-Bromochlorobenzene	114	Percent	mb	08/26/98
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Matrix Analytical, Inc.
106 South Street
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1 (800) 362-8749

FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-007
Client ID: B4 (12-14')
Matrix: Soil

Date Sampled: / / 11:00
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>SURROGATE STUDIES - VOLATILES</u>						
1,4-Dichlorobutane	113	Percent			mb	08/26/98
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	6.3	Percent			jb	08/21/98



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FINAL REPORT

Client Information

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White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-008
Client ID: B4 (GW)
Matrix: Water

Date Sampled: / / 11:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
Bromobenzene	ND	ug/l	1	8021B	mb	08/27/98
Bromochloromethane	ND	ug/l	1	8021B	mb	08/27/98
Bromodichloromethane	ND	ug/l	1	8021B	mb	08/27/98
Bromoform	ND	ug/l	1	8021B	mb	08/27/98
Bromomethane	ND	ug/l	1	8021B	mb	08/27/98
Carbon Tetrachloride	ND	ug/l	1	8021B	mb	08/27/98
Chlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
Chloroethane	ND	ug/l	1	8021B	mb	08/27/98
Chloroform	ND	ug/l	1	8021B	mb	08/27/98
Chloromethane	ND	ug/l	1	8021B	mb	08/27/98
2-Chlorotoluene	ND	ug/l	1	8021B	mb	08/27/98
4-Chlorotoluene	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dibromo-3-Chloropropane	ND	ug/l	5	8021B	mb	08/27/98
Dibromochloromethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dibromoethane	ND	ug/l	1	8021B	mb	08/27/98
Dibromomethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,3-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,4-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
Dichlorodifluoromethane	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dichloroethane	ND	ug/l	1	8021B	mb	08/27/98
cis-1,2-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98
trans-1,2-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98



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White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-008
Client ID: B4 (GW)
Matrix: Water

Date Sampled: / / 11:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
1,2-Dichloropropane	ND	ug/l	1	8021B	mb	08/27/98
1,3-Dichloropropane	ND	ug/l	1	8021B	mb	08/27/98
2,2-Dichloropropane	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloropropene	ND	ug/l	1	8021B	mb	08/27/98
Hexachlorobutadiene	ND	ug/l	1	8021B	mb	08/27/98
Methylene Chloride	ND	ug/l	4	8021B	mb	08/27/98
1,1,1,2-Tetrachloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,1,1,2-Tetrachloroethane	ND	ug/l	1	8021B	mb	08/27/98
Tetrachloroethene	ND	ug/l	1	8021B	mb	08/27/98
1,2,3-Trichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,2,4-Trichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,1,1-Trichloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,1,2-Trichloroethane	ND	ug/l	1	8021B	mb	08/27/98
Trichloroethene	ND	ug/l	1	8021B	mb	08/27/98
Trichlorofluoromethane	ND	ug/l	1	8021B	mb	08/27/98
1,2,3-Trichloropropane	ND	ug/l	1	8021B	mb	08/27/98
Vinyl Chloride	ND	ug/l	1	8021B	mb	08/27/98
<u>SURROGATE STUDIES - VOLATILES</u>						
4-Bromochlorobenzene	85	Percent			mb	08/27/98
1,4-Dichlorobutane	122	Percent			mb	08/27/98



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White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-009
Client ID: B6 (2-4')
Matrix: Soil

Date Sampled: / / 13:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
Bromobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Bromochloromethane	ND	ug/kg	5	8021B	mb	08/26/98
Bromodichloromethane	ND	ug/kg	5	8021B	mb	08/26/98
Bromoform	ND	ug/kg	5	8021B	mb	08/26/98
Bromomethane	ND	ug/kg	5	8021B	mb	08/26/98
Carbon Tetrachloride	ND	ug/kg	5	8021B	mb	08/26/98
Chlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Chloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Chloroform	ND	ug/kg	5	8021B	mb	08/26/98
Chloromethane	ND	ug/kg	5	8021B	mb	08/26/98
2-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/26/98
4-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dibromo-3-Chloropropane	ND	ug/kg	25	8021B	mb	08/26/98
Dibromochloromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dibromoethane	ND	ug/kg	5	8021B	mb	08/26/98
Dibromomethane	ND	ug/kg	5	8021B	mb	08/26/98
1,4-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,3-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
Dichlorodifluoromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2-Dichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
cis-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
trans-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/26/98



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FINAL REPORT

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Address: 105 Corporate Park
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White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-009
Client ID: B6 (2-4')
Matrix: Soil

Date Sampled: / / 13:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
1,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
1,3-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
2,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
1,1-Dichloropropene	ND	ug/kg	5	8021B	mb	08/26/98
Hexachlorobutadiene	ND	ug/kg	5	8021B	mb	08/26/98
Methylene Chloride	44	ug/kg	20	8021B	mb	08/26/98
1,1,1,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1,2,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Tetrachloroethene	ND	ug/kg	5	8021B	mb	08/26/98
1,2,3-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,2,4-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/26/98
1,1,1-Trichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
1,1,2-Trichloroethane	ND	ug/kg	5	8021B	mb	08/26/98
Trichloroethene	ND	ug/kg	5	8021B	mb	08/26/98
Trichlorofluoromethane	ND	ug/kg	5	8021B	mb	08/26/98
1,2,3-Trichloropropane	ND	ug/kg	5	8021B	mb	08/26/98
Vinyl Chloride	ND	ug/kg	5	8021B	mb	08/26/98

The detection limit reported is based
on a X5 dilution of the sample.
Detection limit due to
matrix interference.

SURROGATE STUDIES - VOLATILES

4-Bromochlorobenzene

111

Percent

mb

08/26/98



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Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-009
Client ID: B6 (2-4')
Matrix: Soil

Date Sampled: / / 13:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>SURROGATE STUDIES - VOLATILES</u>						
1,4-Dichlorobutane	120	Percent			mb	08/26/98
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	15.0	Percent			jb	08/21/98



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FINAL REPORT

Client Information

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Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-010
Client ID: B6 (GW)
Matrix: Water

Date Sampled: / / 14:00
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
Bromobenzene	ND	ug/l	1	8021B	mb	08/27/98
Bromochloromethane	ND	ug/l	1	8021B	mb	08/27/98
Bromodichloromethane	ND	ug/l	1	8021B	mb	08/27/98
Bromoform	ND	ug/l	1	8021B	mb	08/27/98
Bromomethane	ND	ug/l	1	8021B	mb	08/27/98
Carbon Tetrachloride	ND	ug/l	1	8021B	mb	08/27/98
Chlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
Chloroethane	ND	ug/l	1	8021B	mb	08/27/98
Chloroform	ND	ug/l	1	8021B	mb	08/27/98
Chloromethane	ND	ug/l	1	8021B	mb	08/27/98
2-Chlorotoluene	ND	ug/l	1	8021B	mb	08/27/98
4-Chlorotoluene	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dibromo-3-Chloropropane	ND	ug/l	5	8021B	mb	08/27/98
Dibromochloromethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dibromoethane	ND	ug/l	1	8021B	mb	08/27/98
Dibromomethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,3-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
1,4-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/27/98
Dichlorodifluoromethane	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloroethane	ND	ug/l	1	8021B	mb	08/27/98
1,2-Dichloroethane	ND	ug/l	1	8021B	mb	08/27/98
cis-1,2-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98
1,1-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98
trans-1,2-Dichloroethene	ND	ug/l	1	8021B	mb	08/27/98



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FINAL REPORT

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White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-011
Client ID: B7 (2-4")
Matrix: Soil

Date Sampled: / / 14:30
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>SURROGATE STUDIES - VOLATILES</u>						
1,4-Dichlorobutane	111	Percent			mb	08/26/98
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	9.7	Percent			jb	08/21/98



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White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-012
Client ID: B7 (4-6')
Matrix: Soil

Date Sampled: / / 14:40
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
Bromobenzene	ND	ug/kg	5	8021B	mb	08/27/98
Bromochloromethane	ND	ug/kg	5	8021B	mb	08/27/98
Bromodichloromethane	ND	ug/kg	5	8021B	mb	08/27/98
Bromoform	ND	ug/kg	5	8021B	mb	08/27/98
Bromomethane	ND	ug/kg	5	8021B	mb	08/27/98
Carbon Tetrachloride	ND	ug/kg	5	8021B	mb	08/27/98
Chlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
Chloroethane	ND	ug/kg	5	8021B	mb	08/27/98
Chloroform	ND	ug/kg	5	8021B	mb	08/27/98
Chloromethane	ND	ug/kg	5	8021B	mb	08/27/98
2-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/27/98
4-Chlorotoluene	ND	ug/kg	25	8021B	mb	08/27/98
1,2-Dibromo-3-Chloropropane	ND	ug/kg	5	8021B	mb	08/27/98
Dibromochloromethane	ND	ug/kg	5	8021B	mb	08/27/98
1,2-Dibromoethane	ND	ug/kg	5	8021B	mb	08/27/98
Dibromomethane	ND	ug/kg	5	8021B	mb	08/27/98
1,4-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
1,2-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
1,3-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
Dichlorodifluoromethane	ND	ug/kg	5	8021B	mb	08/27/98
1,1-Dichloroethane	ND	ug/kg	5	8021B	mb	08/27/98
1,2-Dichloroethane	ND	ug/kg	5	8021B	mb	08/27/98
cis-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/27/98
1,1-Dichloroethene	ND	ug/kg	5	8021B	mb	08/27/98
trans-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/27/98



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FINAL REPORT

Client Information

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White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-012
Client ID: B7 (4-6')
Matrix: Soil

Date Sampled: / / 14:40
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
1,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/27/98
1,3-Dichloropropane	ND	ug/kg	5	8021B	mb	08/27/98
2,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/27/98
1,1-Dichloropropene	ND	ug/kg	5	8021B	mb	08/27/98
Hexachlorobutadiene	ND	ug/kg	5	8021B	mb	08/27/98
Methylene Chloride	41	ug/kg	20	8021B	nib	08/27/98
1,1,1,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/27/98
1,1,2,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/27/98
Tetrachloroethene	ND	ug/kg	5	8021B	mb	08/27/98
1,2,3-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
1,2,4-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
1,1,1-Trichloroethane	ND	ug/kg	5	8021B	mb	08/27/98
1,1,2-Trichloroethane	ND	ug/kg	5	8021B	mb	08/27/98
Trichloroethene	ND	ug/kg	5	8021B	mb	08/27/98
Trichlorofluoromethane	ND	ug/kg	5	8021B	mb	08/27/98
1,2,3-Trichloropropane	ND	ug/kg	5	8021B	mb	08/27/98
Vinyl Chloride	ND	ug/kg	5	8021B	mb	08/27/98

The detection limit reported is based
on a X5 dilution of the sample.
Detection limit due to
matrix interference.

SURROGATE STUDIES - VOLATILES

4-Bromochlorobenzene

87

Percent

mb

08/27/98



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Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-012
Client ID: B7 (4-6')
Matrix: Soil

Date Sampled: / / 14:40
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>SURROGATE STUDIES - VOLATILES</u>						
1,4-Dichlorobutane	121	Percent			mb	08/27/98
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	8.3	Percent			jb	08/21/98



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Client Information

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Address: 105 Corporate Park
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Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-013
Client ID: B7 (GW)
Matrix: Water

Date Sampled: / / 14:45
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
Bromobenzene	ND	ug/l	1	8021B	mb	08/28/98
Bromochloromethane	ND	ug/l	1	8021B	mb	08/28/98
Bromodichloromethane	ND	ug/l	1	8021B	mb	08/28/98
Bromoform	ND	ug/l	1	8021B	mb	08/28/98
Bromomethane	ND	ug/l	1	8021B	mb	08/28/98
Carbon Tetrachloride	ND	ug/l	1	8021B	mb	08/28/98
Chlorobenzene	ND	ug/l	1	8021B	mb	08/28/98
Chloroethane	ND	ug/l	1	8021B	mb	08/28/98
Chloroform	ND	ug/l	1	8021B	mb	08/28/98
Chloromethane	ND	ug/l	1	8021B	mb	08/28/98
2-Chlorotoluene	ND	ug/l	1	8021B	mb	08/28/98
4-Chlorotoluene	ND	ug/l	5	8021B	mb	08/28/98
1,2-Dibromo-3-Chloropropane	ND	ug/l	1	8021B	mb	08/28/98
Dibromochloromethane	ND	ug/l	1	8021B	mb	08/28/98
1,2-Dibromoethane	ND	ug/l	1	8021B	mb	08/28/98
Dibromomethane	ND	ug/l	1	8021B	mb	08/28/98
1,2-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/28/98
1,3-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/28/98
1,4-Dichlorobenzene	ND	ug/l	1	8021B	mb	08/28/98
Dichlorodifluoromethane	ND	ug/l	1	8021B	mb	08/28/98
1,1-Dichloroethane	ND	ug/l	1	8021B	mb	08/28/98
1,2-Dichloroethane	ND	ug/l	1	8021B	mb	08/28/98
cis-1,2-Dichloroethene	ND	ug/l	1	8021B	mb	08/28/98
1,1-Dichloroethene	ND	ug/l	1	8021B	mb	08/28/98
trans-1,2-Dichloroethene	ND	ug/l	1	8021B	mb	08/28/98



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: IVI Environmental, Inc.
Address: 105 Corporate Park
Suite 115
White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-013
Client ID: B7 (GW)
Matrix: Water

Date Sampled: / / 14:45
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
1,2-Dichloropropane	ND	ug/l	1	8021B	mb	08/28/98
1,3-Dichloropropane	ND	ug/l	1	8021B	mb	08/28/98
2,2-Dichloropropane	ND	ug/l	1	8021B	mb	08/28/98
1,1-Dichloropropene	ND	ug/l	1	8021B	mb	08/28/98
Hexachlorobutadiene	ND	ug/l	1	8021B	mb	08/28/98
Methylene Chloride	ND	ug/l	4	8021B	mb	08/28/98
1,1,1,2-Tetrachloroethane	ND	ug/l	1	8021B	mb	08/28/98
1,1,1,2-Tetrachloroethane	ND	ug/l	1	8021B	mb	08/28/98
Tetrachloroethene	ND	ug/l	1	8021B	mb	08/28/98
1,2,3-Trichlorobenzene	ND	ug/l	1	8021B	mb	08/28/98
1,2,4-Trichlorobenzene	ND	ug/l	1	8021B	mb	08/28/98
1,1,1-Trichloroethane	ND	ug/l	1	8021B	mb	08/28/98
1,1,2-Trichloroethane	ND	ug/l	1	8021B	mb	08/28/98
Trichloroethene	ND	ug/l	1	8021B	mb	08/28/98
Trichlorofluoromethane	ND	ug/l	1	8021B	mb	08/28/98
1,2,3-Trichloropropane	ND	ug/l	1	8021B	mb	08/28/98
Vinyl Chloride	ND	ug/l	1	8021B	mb	08/28/98
<u>SURROGATE STUDIES - VOLATILES</u>						
4-Bromochlorobenzene	87	Percent			mb	08/28/98
1,4-Dichlorobutane	104	Percent			mb	08/28/98



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White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-014
Client ID: B8 (4-6')
Matrix: Soil

Date Sampled: / / 15:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
Bromobenzene	ND	ug/kg	5	8021B	mb	08/27/98
Bromochloromethane	ND	ug/kg	5	8021B	mb	08/27/98
Bromodichloromethane	ND	ug/kg	5	8021B	mb	08/27/98
Bromoform	ND	ug/kg	5	8021B	mb	08/27/98
Bromomethane	ND	ug/kg	5	8021B	mb	08/27/98
Carbon Tetrachloride	ND	ug/kg	5	8021B	mb	08/27/98
Chlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
Chloroethane	ND	ug/kg	5	8021B	mb	08/27/98
Chloroform	ND	ug/kg	5	8021B	mb	08/27/98
Chloromethane	ND	ug/kg	5	8021B	mb	08/27/98
2-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/27/98
4-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/27/98
1,2-Dibromo-3-Chloropropane	ND	ug/kg	25	8021B	mb	08/27/98
Dibromochloromethane	ND	ug/kg	5	8021B	mb	08/27/98
1,2-Dibromoethane	ND	ug/kg	5	8021B	mb	08/27/98
Dibromomethane	ND	ug/kg	5	8021B	mb	08/27/98
1,4-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
1,2-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
1,3-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
Dichlorodifluoromethane	ND	ug/kg	5	8021B	mb	08/27/98
1,1-Dichloroethane	ND	ug/kg	5	8021B	mb	08/27/98
1,2-Dichloroethane	ND	ug/kg	5	8021B	mb	08/27/98
cis-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/27/98
1,1-Dichloroethene	ND	ug/kg	5	8021B	mb	08/27/98
trans-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/27/98



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White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-014
Client ID: B8 (4-6')
Matrix: Soil

Date Sampled: / / 15:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
1,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/27/98
1,3-Dichloropropane	ND	ug/kg	5	8021B	mb	08/27/98
2,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/27/98
1,1-Dichloropropene	ND	ug/kg	5	8021B	mb	08/27/98
Hexachlorobutadiene	ND	ug/kg	5	8021B	mb	08/27/98
Methylene Chloride	46	ug/kg	20	8021B	mb	08/27/98
1,1,1,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/27/98
1,1,2,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/27/98
Tetrachloroethene	ND	ug/kg	5	8021B	mb	08/27/98
1,2,3-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
1,2,4-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
1,1,1-Trichloroethane	ND	ug/kg	5	8021B	mb	08/27/98
1,1,2-Trichloroethane	ND	ug/kg	5	8021B	mb	08/27/98
Trichloroethene	ND	ug/kg	5	8021B	mb	08/27/98
Trichlorofluoromethane	ND	ug/kg	5	8021B	mb	08/27/98
1,2,3-Trichloropropane	ND	ug/kg	5	8021B	mb	08/27/98
Vinyl Chloride	ND	ug/kg	5	8021B	mb	08/27/98

The detection limit reported is based
on a X5 dilution of the sample.
Detection limit due to
matrix interference.

SURROGATE STUDIES - VOLATILES

4-Bromochlorobenzene	82	Percent	mb	08/27/98
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Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-014
Client ID: B8 (4-6')
Matrix: Soil

Date Sampled: / / 15:15
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>SURROGATE STUDIES - VOLATILES</u>						
1,4-Dichlorobutane	114	Percent			mb	08/27/98
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	16.7	Percent			jb	08/21/98



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Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-015
Client ID: B8 (6-8')
Matrix: Soil

Date Sampled: / / 15:30
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
Bromobenzene	ND	ug/kg	5	8021B	mb	08/27/98
Bromochloromethane	ND	ug/kg	5	8021B	mb	08/27/98
Bromodichloromethane	ND	ug/kg	5	8021B	mb	08/27/98
Bromoform	ND	ug/kg	5	8021B	mb	08/27/98
Bromomethane	ND	ug/kg	5	8021B	mb	08/27/98
Carbon Tetrachloride	ND	ug/kg	5	8021B	mb	08/27/98
Chlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
Chloroethane	ND	ug/kg	5	8021B	mb	08/27/98
Chloroform	ND	ug/kg	5	8021B	mb	08/27/98
Chloromethane	ND	ug/kg	5	8021B	mb	08/27/98
2-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/27/98
4-Chlorotoluene	ND	ug/kg	5	8021B	mb	08/27/98
1,2-Dibromo-3-Chloropropane	ND	ug/kg	25	8021B	mb	08/27/98
Dibromochloromethane	ND	ug/kg	5	8021B	mb	08/27/98
1,2-Dibromoethane	ND	ug/kg	5	8021B	mb	08/27/98
Dibromomethane	ND	ug/kg	5	8021B	mb	08/27/98
1,4-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
1,2-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
1,3-Dichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
Dichlorodifluoromethane	ND	ug/kg	5	8021B	mb	08/27/98
1,1-Dichloroethane	ND	ug/kg	5	8021B	mb	08/27/98
1,2-Dichloroethane	ND	ug/kg	5	8021B	mb	08/27/98
cis-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/27/98
1,1-Dichloroethene	ND	ug/kg	5	8021B	mb	08/27/98
trans-1,2-Dichloroethene	ND	ug/kg	5	8021B	mb	08/27/98



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Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-015
Client ID: B8 (6-8')
Matrix: Soil

Date Sampled: / / 15:30
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
1,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/27/98
1,3-Dichloropropane	ND	ug/kg	5	8021B	mb	08/27/98
2,2-Dichloropropane	ND	ug/kg	5	8021B	mb	08/27/98
1,1-Dichloropropene	ND	ug/kg	5	8021B	mb	08/27/98
Hexachlorobutadiene	ND	ug/kg	5	8021B	mb	08/27/98
Methylene Chloride	38	ug/kg	20	8021B	mb	08/27/98
1,1,1,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/27/98
1,1,2,2-Tetrachloroethane	ND	ug/kg	5	8021B	mb	08/27/98
Tetrachloroethene	ND	ug/kg	5	8021B	mb	08/27/98
1,2,3-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
1,2,4-Trichlorobenzene	ND	ug/kg	5	8021B	mb	08/27/98
1,1,1-Trichloroethane	ND	ug/kg	5	8021B	mb	08/27/98
1,1,2-Trichloroethane	ND	ug/kg	5	8021B	mb	08/27/98
Trichloroethene	ND	ug/kg	5	8021B	mb	08/27/98
Trichlorofluoromethane	ND	ug/kg	5	8021B	mb	08/27/98
1,2,3-Trichloropropane	ND	ug/kg	5	8021B	mb	08/27/98
Vinyl Chloride	ND	ug/kg	5	8021B	mb	08/27/98
The detection limit reported is based on a X5 dilution of the sample. Detection limit due to matrix interference.						

SURROGATE STUDIES - VOLATILES

4-Bromochlorobenzene

101

Percent

mb

08/27/98



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Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-015
Client ID: B8 (6-8')
Matrix: Soil

Date Sampled: / / 15:30
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>SURROGATE STUDIES - VOLATILES</u>						
1,4-Dichlorobutane	119	Percent			mb	08/27/98
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	16.8	Percent			jb	08/21/98



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White Plains, NY 10604

Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-016
Client ID: B8 (GW)
Matrix: Water

Date Sampled: / / 16:00
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
Bromobenzene	ND	ug/l	100	8021B	mb	08/28/98
Bromochloromethane	ND	ug/l	100	8021B	mb	08/28/98
Bromodichloromethane	ND	ug/l	100	8021B	mb	08/28/98
Bromoform	ND	ug/l	100	8021B	mb	08/28/98
Bromomethane	ND	ug/l	100	8021B	mb	08/28/98
Carbon Tetrachloride	ND	ug/l	100	8021B	mb	08/28/98
Chlorobenzene	ND	ug/l	100	8021B	mb	08/28/98
Chloroethane	ND	ug/l	100	8021B	mb	08/28/98
Chloroform	ND	ug/l	100	8021B	mb	08/28/98
Chloromethane	ND	ug/l	100	8021B	mb	08/28/98
2-Chlorotoluene	ND	ug/l	100	8021B	mb	08/28/98
4-Chlorotoluene	ND	ug/l	100	8021B	mb	08/28/98
1,2-Dibromo-3-Chloropropane	ND	ug/l	500	8021B	mb	08/28/98
Dibromochloromethane	ND	ug/l	100	8021B	mb	08/28/98
1,2-Dibromoethane	ND	ug/l	100	8021B	mb	08/28/98
Dibromomethane	ND	ug/l	100	8021B	mb	08/28/98
1,2-Dichlorobenzene	ND	ug/l	100	8021B	mb	08/28/98
1,3-Dichlorobenzene	ND	ug/l	100	8021B	mb	08/28/98
1,4-Dichlorobenzene	ND	ug/l	100	8021B	mb	08/28/98
Dichlorodifluoromethane	ND	ug/l	100	8021B	mb	08/28/98
1,1-Dichloroethane	ND	ug/l	100	8021B	mb	08/28/98
1,2-Dichloroethane	ND	ug/l	100	8021B	mb	08/28/98
cis-1,2-Dichloroethene	740	ug/l	100	8021B	mb	08/28/98
1,1-Dichloroethene	ND	ug/l	100	8021B	mb	08/28/98
trans-1,2-Dichloroethene	ND	ug/l	100	8021B	mb	08/28/98



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Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-016
Client ID: B8 (GW)
Matrix: Water

Date Sampled: / / 16:00
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
VOLATILE ORGANICS						
1,2-Dichloropropane	ND	ug/l	100	8021B	mb	08/28/98
1,3-Dichloropropane	350	ug/l	100	8021B	mb	08/28/98
2,2-Dichloropropane	ND	ug/l	100	8021B	mb	08/28/98
1,1-Dichloropropene	ND	ug/l	100	8021B	mb	08/28/98
Hexachlorobutadiene	ND	ug/l	100	8021B	mb	08/28/98
Methylene Chloride	ND	ug/l	400	8021B	mb	08/28/98
1,1,1,2-Tetrachloroethane	ND	ug/l	100	8021B	mb	08/28/98
1,1,2,2-Tetrachloroethane	ND	ug/l	100	8021B	mb	08/28/98
Tetrachloroethene	ND	ug/l	100	8021B	mb	08/28/98
1,2,3-Trichlorobenzene	ND	ug/l	100	8021B	mb	08/28/98
1,2,4-Trichlorobenzene	ND	ug/l	100	8021B	mb	08/28/98
1,1,1-Trichloroethane	ND	ug/l	100	8021B	mb	08/28/98
1,1,2-Trichloroethane	ND	ug/l	100	8021B	mb	08/28/98
Trichloroethene	120	ug/l	100	8021B	mb	08/28/98
Trichlorofluoromethane	ND	ug/l	100	8021B	mb	08/28/98
1,2,3-Trichloropropane	ND	ug/l	100	8021B	mb	08/28/98
Vinyl Chloride	110	ug/l	100	8021B	mb	08/28/98

The detection limit reported is based
on a X100 dilution of the sample.
Detection limit due to
matrix interference.

SURROGATE STUDIES - VOLATILES

4-Bromochlorobenzene

81

Percent

mb

08/28/98



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Project Number: E8073510
Project Manager: David Lent
Sampler Name: D Lent

Sample Information

Lab ID: 82314492-016
Client ID: B8 (GW)
Matrix: Water

Date Sampled: / / 16:00
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>SURROGATE STUDIES - VOLATILES</u>						
1,4-Dichlorobutane	121	Percent			mb	08.28/98



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Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name:

Sample Information

Lab ID: 82314492-017
Client ID: QC Report-Water
Matrix: Water

Date Sampled: / / :
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
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METHOD BLANKS

Method Blank - Volatile

ND

ug/l

8021B

MATRIX SPIKE STUDIES - VOLATILES

Sample ID:	4428-001	
Benzene	129	Percent
Chlorobenzene	100	Percent
1,1-Dichloroethene	78	Percent
Toluene	129	Percent
Trichloroethene	93	Percent

METHOD SUMMARIES

Volatile organic analysis is performed using Hewlett Packard 5890 GC's and 5970 and 5972 MSD's when requested. Chromatography incorporates megabore columns. Procedures follow EPA and SW846 guidelines for all analysis.

METHOD REFERENCES

1. Test Methods For Evaluating Solid Waste: Physical Chemical Methods. EPA SW 846. November 1986.
2. Methods For Chemical Analysis of Water and Wastes. EPA 600/4-79-200. Revised March 1983.
3. Standard Methods For Examination of Water and Wastewater. APHA-AWWA-WACF., 18th Edition. 1992.
4. EPA Methods For The Determination of Organic Compounds in Drinking Water.



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Project Name: Golden Horseshoe Shpg Ctr (8/19/98)
Project Number: E8073510
Project Manager: David Lent
Sampler Name:

Sample Information

Lab ID: 82314492-018
Client ID: QC Report-Soil
Matrix: Soil

Date Sampled: / / :
Date Received: 08/19/98 : 0
Date Reported: 08/28/98

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
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METHOD BLANKS

Method Blank - Volatile

ND

ug/l

8021B

MATRIX SPIKE STUDIES - VOLATILES

Sample ID:	4492-002	
Benzene	89	Percent
Chlorobenzene	84	Percent
1,1-Dichloroethene	68	Percent
Toluene	95	Percent
Trichloroethene	75	Percent

METHOD SUMMARIES

NOTE: Analytical results have been corrected and are reported on a dry weight basis. If required, detection limits can also be corrected to dry weight using the percent moisture data included in this report.

Volatile organic analysis is performed using Hewlett Packard 5890 GC's and 5970 and 5972 MSD's when requested. Chromatography incorporates megabore columns. Procedures follow EPA and SW846 guidelines for all analysis.

METHOD REFERENCES

1. Test Methods For Evaluating Solid Waste: Physical Chemical Methods. EPA SW 846. November 1986.
2. Methods For Chemical Analysis of Water and Wastes. EPA 600/4-79-200. Revised March 1983.
3. Standard Methods For Examination of Water and Wastewater. APHA-AWWA-WACF., 18th Edition. 1992.
4. EPA Methods For The Determination of Organic Compounds in Drinking Water.

YORK

ANALYTICAL-LABORATORIES, INC.

Technical Report

prepared for

IVI Environmental, Inc.
105 Corporate Park Dr.
White Plains, NY 10604
Attention: Mr. David Lent

Report Date: 09/14/98

Re: Client Project ID: E73510
York Project No.: 98090191

Report Date: 09/14/98
Client Project ID: E73510

York Project No: 98090191

IVI Environmental, Inc.
105 Corporate Park Dr.
White Plains, NY 10604
Attention: Mr. David Lent

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 09/11/98. The project was identified as your project E73510.

The analysis was conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

The results of the analysis are summarized in the following table(s).

Analysis Results

Client Sample ID			MW-4		MW-1	
York ID			98090191-01		98090191-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8010 List water	SW846-8010	ug/L	---	---	---	---
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	1	Not detected	1
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	10	Not detected	10
Bromomethane			Not detected	1	Not detected	1
Carbon tetrachloride			Not detected	10	Not detected	10
Chloroacetaldehyde			Not detected	1	Not detected	1
Chlorobenzene			Not detected	10	Not detected	10
Chloroethane			Not detected	1	Not detected	1
Chloroform			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	10	Not detected	10
Chloromethane			Not detected	1	Not detected	1
Chloromethyl methyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1

YORK

Client Sample ID			MW-4		MW-1	
York ID			98090191-01		98090191-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1,1,1-Trichloromethane			Not detected	1	Not detected	1
1,1,2-Trichloromethane			Not detected	1	Not detected	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1,1,1-Trifluoromethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethylene			Not detected	1	2.9	1
1,1,2,2-Tetrachloroethylene (Total)			Not detected	1	Not detected	1
1,1,2-Trichloropropane			Not detected	1	Not detected	1
cis-1,2-Dichloropropylene			Not detected	1	Not detected	1
trans-1,2-Dichloropropylene			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2,2-Tetrachloroethane			6.6	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
Trichloroethylene			Not detected	1	Not detected	1
1,1,1-Trifluoromethane			Not detected	1	Not detected	1
1,2-Dichloropropane			Not detected	10	Not detected	10
Vinyl chloride			1.0		1.0	
DILUTION FACTOR						

Client Sample ID			MW-2		MW-5	
York ID			98090191-03		98090191-04	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8010 List water	SW346-8010	ug/L	---	---	---	---
Benzyl chloride			Not detected	10	Not detected	10
Di(2-chloroethoxy)methane			Not detected	10	Not detected	10
Di(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	10	Not detected	10
Bromomethane			Not detected	1	Not detected	1
Carbon tetrachloride			Not detected	10	Not detected	10
Chloroacetaldehyde			Not detected	1	Not detected	1
Chlorobenzene			Not detected	10	Not detected	10
Chloroethane			Not detected	1	Not detected	1
Chloroform			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	10	Not detected	10
Chloromethane			Not detected	1	Not detected	1
Chloromethyl methyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1

YORK

Client Sample ID			MW-2		MW-5	
York ID			98090191-03		98090191-04	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
1-Chlorotoluene			Not detected	1	Not detected	1
1,1-Dichloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	Not detected	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
1,1-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethylene			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			Not detected	1	8,700	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichloropropylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	1	1,800	1
Tetrachloroethylene			Not detected	1	Not detected	1
1,1-Trichloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	9,000	1
Trichloroethylene			Not detected	1	Not detected	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	10	1,100	10
Vinyl chloride			10		25	
DILUTION FACTOR						

Client Sample ID			MW-3		MW-6	
York ID			98090191-05		98090191-06	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8010 List water	SW846-8010	ug/L	---	---	---	---
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	1	Not detected	1
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	10	Not detected	10
Bromomethane			Not detected	1	Not detected	1
Carbon tetrachloride			Not detected	10	Not detected	10
Chloroacetaldehyde			Not detected	1	Not detected	1
Chlorobenzene			Not detected	10	Not detected	10
Chloroethane			Not detected	1	Not detected	1
Chloroform			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	10	Not detected	10
Chloromethane			Not detected	1	Not detected	1
Chloromethyl methyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1

YORK

Client Sample ID			MW-3		MW-6	
York ID			98090191-05		98090191-06	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
1-Chlorotoluene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
1,1-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethylene			3.5	1	1.5	1
1,2-Dichloroethylene (Total)			Not detected	1	Not detected	1
1,2-Dichloropropane			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2,2-Tetrachloroethane			4.3	1	5.9	1
Tetrachloroethylene			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			7.4	1	1.7	1
Trichloroethylene			Not detected	1	Not detected	1
Trichlorodifluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	10	Not detected	10
Vinyl chloride			1.0		1.0	
DILUTION FACTOR						

Units Key:

For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes:

1. MDL (Minimum Detectable Limit) is reported for a dilution factor of 1.0 (no dilution); the MDLs for dilution factors in the above tables other than 1.0 are determined multiplying the MDL by this dilution factor. This applies to volatiles, semi-volatiles, pesticides/PCBs, and herbicides.

2. For volatiles in all matrices, methylene chloride and acetone are EPA method-accepted laboratory artifacts up to levels of 25 ppb times the listed dilution factor. Please use any methylene chloride or acetone data accordingly.

Approved By:

Robert Q. Bradley
Managing Director

Date: 09/14/98

YORK