

SCANNED

PHASE I - SITE INVESTIGATION

*881 Edgell Road
Framingham, Massachusetts*

January 11, 1993

Prepared For:

*Star Enterprise
520 Allens Avenue
Providence, RI 02905*

Prepared By:

*Handex of New England, Inc.
398 Cedar Hill Street
Marlboro, MA 01752*



TABLE OF CONTENTS

	Page
INTRODUCTION	1
SITE LOCATION AND DESCRIPTION	1
Site History	2
Abutting Properties	2
Potential Receptors	2
INVESTIGATIVE PROCEDURE	2
SITE HYDROGEOLOGY	3
SOIL QUALITY DATA	4
GROUND-WATER QUALITY DATA	5
POTENTIAL MIGRATION PATHWAYS AND EXPOSURE POINTS	6
SITE HEALTH AND SAFETY PLAN	6
SHORT TERM MEASURES	6
PRELIMINARY SITE ASSESSMENT REPORT AND INTERIM SITE CLASSIFICATION FORM	6
SUMMARY OF FINDINGS	6

FIGURES

Figure 1	Locus Map
Figure 2	Site Information Map

APPENDICES

Appendix A	Boring Logs/Well Construction Details
Appendix B	Laboratory Certificates - Soil Analyses
Appendix C	Laboratory Certificates - Ground-water Analyses

PHASE I - SITE INVESTIGATION
881 Edgell Road
Framingham, Massachusetts

INTRODUCTION

This report presents the results of a Phase I - Site Investigation conducted at the above location. The purpose of the assessment was to evaluate soil and ground-water quality across the property. The assessment included the installation of three ground-water monitoring wells and field screening of soil samples collected during drilling. Additionally, one soil sample from each boring was retained and submitted for laboratory analysis. Ground-water samples were collected from three newly-installed wells and one existing well, and were submitted for laboratory analysis.

SITE LOCATION AND DESCRIPTION

The site is located on the east side of Edgell Road, approximately 200 feet south of Edmands Road. Figure 1, a Locus Map developed from the Framingham 7.5 minute USGS quadrangle, illustrates the location of the former service station, surrounding topography and drainage. The Universal Transverse Mercator (UTM) Coordinates and the latitude and longitude for the site are as follows:

<u>UTM Coordinates</u>		<u>Latitude and Longitude</u>	
N	4688871	N	42° 19' 42"
E	299290	W	71° 26' 15"

A one story building is located on the southeast region of the property. The building contains two service bays and a cashier area. The concrete foundations for two pump islands, previously removed, are located directly west of the building.

On November 6 and 7, 1991, four 4,000 gallon underground gasoline storage tanks and one 6,000 gallon underground gasoline storage tank were removed from the area directly south of the former pump islands. Additionally, one 1,000 gallon underground fuel oil tank, formerly located behind the east side of the existing building, and one 550 gallon underground used oil tank, formerly located in front of the southernmost service bay, were also removed.

The property was maintained by overhead telephone and electric service entering from the southeast corner of the property. Underground water and sewer service enter the property from Edgell Road and connect to the north side of the building. Figure 2, a Site Information Map illustrates pertinent site features.

Site History

The property is located in an area of mixed residential and commercial zoning. According to information obtained from the Framingham Assessors Department and the Middlesex County Registry of Deeds, Marguerite DiGiacomantonio and Filomena Renzella purchased the property on November 2, 1960 from John Lynch, owner since September 18, 1953. Nobscot Realty purchased the property on December 1, 1960. On September 1, 1984, the property was sold to William B. DiGiacomantonio and Benny Renzella, owners of the 770 Water Street Trust. Presently, the location is unoccupied.

Abutting Properties

The property is abutted by commercial properties to the north, south, east and west. A Jiffy Lube automotive service center is located west of the site, across Edgell Road. A shopping plaza abuts the location to the south, and a shopping plaza parking lot lies to the east. The Nobscot professional building abuts to the north.

Residential property lies approximately 500 feet southwest of the site, across Edgell Road. Approximately 70 feet to the northwest, also on the west side of Edgell Road, lies an Exxon Service Station. A Mobil Service Station is located north of the Exxon Service Station, across Edmands Road.

Potential Receptors

According to the Framingham Water Department, water is supplied to the Town of Framingham by the Massachusetts Water Resource Authority (MWRA). The water supply source is the Quabbin Reservoir, located approximately 40 miles to the west. There are no public or private water supply wells located within one half-mile of the location.

The closest surface water bodies are Hop Brook, located approximately 800 feet to the north, and a small unnamed pond, located approximately 1,700 feet to the southeast.

INVESTIGATIVE PROCEDURE

On November 19 and 20, 1992, three soil borings were advanced using the hollow stem auger drilling method, and completed as two-inch diameter PVC monitoring wells. A fourth soil boring, advanced on October 3, 1991 using the air rotary drilling method, was completed as a typical 4-inch diameter PVC monitoring well. The wells were installed downgradient of the former pump islands (MW-2), north of the former western pump island (MW-3) and downgradient of the

former underground gasoline storage tankfield location (MW-4). MW-1 is located upgradient of the former tankfield. The locations of site monitoring wells are illustrated on Figure 2, a Site Information Map.

During drilling operations, soil from each boring was classified by a hydrogeologist and screened for volatile organic vapors with an HNu Model PI-101 photoionization detector, using the standard jar headspace technique. One soil sample from each boring which exhibited the highest HNu response was retained for laboratory analysis. The samples were transported to Accutest Laboratories of Marlboro, Massachusetts and analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) via EPA Method 8020, and for total petroleum hydrocarbons (TPH) using EPA Method 418.1. The soil sample collected during installation of MW-4 was analyzed for volatile organic compounds (VOCs) and MTBE using EPA Method 8240.

The screened interval of each monitoring well was installed to span the water table surface. The borehole annulus of each well was packed with Morie # 2 well sand, from the end of the screened interval to a point approximately 2 feet above the screen-riser contact. A one foot-thick bentonite seal was placed above the gravel pack. Each well was fitted with a water tight gripper plug and locking cap, and completed with a 10-inch diameter manhole and concrete pad, flush to grade. In addition, the elevations of MW-1 through MW-4 were surveyed to the nearest 0.01 foot, relative to a benchmark with assumed elevation of 100 feet. Boring logs and monitoring well construction details are attached as Appendix A.

Ground-water samples were obtained from wells MW-1 through MW-4 on November 30, 1992. To ensure the collection of representative samples, approximately three to five well volumes of ground-water were purged from each well prior to sampling, using clean acrylic bailers. Three 40 milliliter vials of ground water were obtained from each well using clean, dedicated teflon bailers. The samples were cooled to 4 degrees celsius and transported under Chain of Custody protocol to Accutest for analysis. The samples were analyzed for BTEX and MTBE using EPA Method 602.

SITE HYDROGEOLOGY

In general, soils observed beneath the site consist of brown fine to medium sand and fine to medium gravel, with varying percentages of cobbles to approximately 15 feet, overlying a one to three foot-thick layer of medium gravel and brown fine to medium sand to approximately 18 feet. Beneath the medium gravel lies a brown fine to medium sand and gravel to approximately 25 feet. Bedrock was encountered (auger refusal) in one boring (MW-4) at a depth of approximately 25 feet.

Wells MW-1 through MW-4 were gauged to the nearest 0.01 foot with an electronic oil/water interface probe on November 30, 1992. Ground water was encountered between 17 and 19 feet below ground. Ground-water elevations and water table contours, developed from the November 30, 1992 gauge data, are illustrated on Figure 2. Referring to Figure 2, apparent ground-water flow is to the east. Liquid phase hydrocarbons were not detected in any of the site monitoring wells.

SOIL QUALITY DATA

Field screening of soil samples indicated the presence of volatile organic vapors during the installation of wells MW-2 and MW-4. Organic vapors were not detected during the advancement of the MW-3 boring. The following table summarizes the results of organic vapor screening:

Organic Vapor Concentrations November 19 and 20, 1992				
Depth	Well			
	*MW-1	MW-2	MW-3	MW-4
0'-5'	-	ND	ND	1
5'-10'	ND	1	ND	0.5
10'-15'	ND	1	ND	130
15'-20'	25	8	1.5	200
Notes: Concentrations in parts per million (ppm). * MW-1 installed on 10-03-91.				

Volatile organic compounds, including BTEX, were not detected during laboratory analysis of soil samples collected from MW-3 and MW-4. Total xylenes were detected at a concentration of 1.1 parts per billion (ppb) in the MW-2 soil sample. TPH was not detected in MW-2 or MW-4. The soil sample from MW-3 contained TPH at concentration of 32 parts per million (ppm). The following table summarizes the results of laboratory analysis for soil samples:

Soil Quality - EPA Methods 602, 624 and 418.1 November 19 and 20, 1992				
PARAMETER	*MW-1	Well		**MW-4
		MW-2	MW-3	
Benzene	NA	ND	ND	ND
Toluene	NA	ND	ND	ND
E-Benzene	NA	ND	ND	ND
Xylenes	NA	1.1	ND	ND
BTEX(ppb)	NA	1.1	ND	ND
TPH (ppm)	130	<25	32	<25

Note: Concentrations are in parts per million (ppm)
 * Well installed on 10-03-91.
 NA - Parameter not analyzed, ND - not detected.
 ** No EPA Method 8240 analyte parameters detected above method detection limit.

- From any particular depth,
 - all samples composites of diff. depths.

Laboratory certificates for soil sample analyses are attached as Appendix B.

GROUND-WATER QUALITY DATA

The following table summarizes the results of ground-water sample analysis for the four monitoring wells:

SUMMARY - Ground-water Quality EPA Method 602 November 30, 1992				
PARAMETER	MW-1	Well		MW-4
		MW-2	MW-3	
Benzene	ND	1.2	2.9	130
Toluene	ND	ND	ND	560
E-Benzene	ND	40	ND	530
Xylenes	ND	7.1	ND	5,200
BTEX(ppb)	ND	48.3	2.9	6,420
MTBE(ppb)	2.9	7.5	370	47

Note: ND indicates not detected above the method detection limit.

Laboratory certificates for ground-water analyses are attached as Appendix C.

POTENTIAL MIGRATION PATHWAYS AND EXPOSURE POINTS

The primary pathway for soluble phase hydrocarbon migration is ground water. The water table was encountered between 17 and 19 feet below ground across the property, and does not intersect the surface in the immediate vicinity of the site.

The secondary pathway for soluble phase hydrocarbon migration is volatilization from ground water to the air. The majority of the site and surrounding area is asphalt paved, therefore the potential for soluble phase migration to air is minimal.

Due to the presence of asphalt on the site and in the immediate vicinity, and the depth to ground water, the potential for direct human contact with petroleum hydrocarbons at this location is minimal.

SITE HEALTH AND SAFETY PLAN

A site-specific Health and Safety Plan was prepared and implemented for on-site personnel involved with all stages of the Phase I - Site Investigation.

SHORT TERM MEASURES

Based on data collected during the Phase I - Site Investigation, it is Handex's opinion that a Short Term Measure is not warranted at the location.

PRELIMINARY ASSESSMENT REPORT AND INTERIM SITE CLASSIFICATION FORM

In order to classify the site, a Preliminary Assessment Report (PAR) and an Interim Site Classification Form (ISCF) have been included with this report.

SUMMARY OF FINDINGS

The Town of Framingham receives its water supply from the Quabbin Reservoir, located approximately 40 miles to the west. There are no public or private water supply wells located within one half-mile of the location.

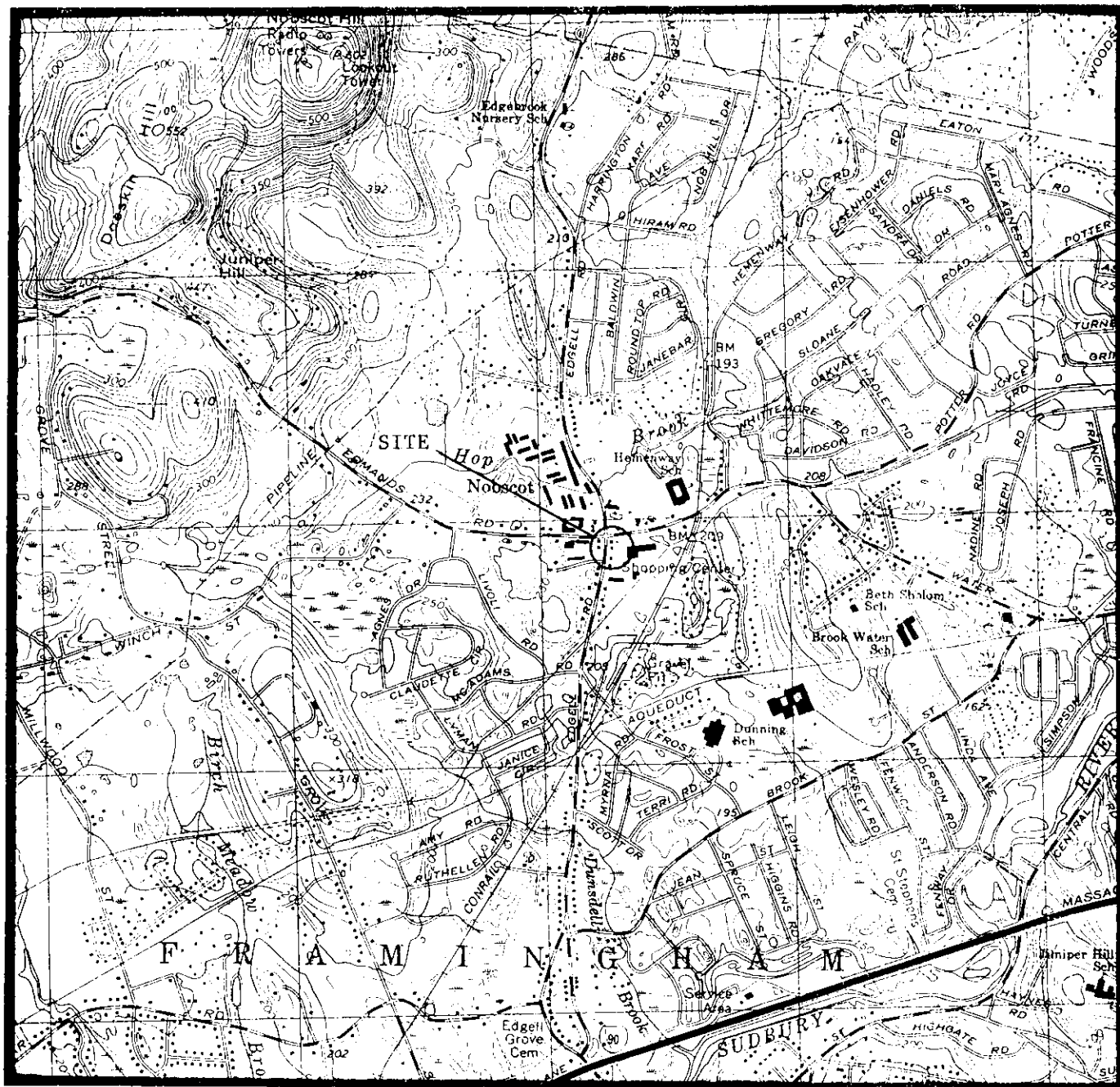
Soils consist of a brown fine to medium sand and fine to medium gravel, with varying percentages of cobbles.

Ground water was encountered between 17 and 19 feet below ground surface across the site. Apparent ground-water flow is to the east. Liquid phase hydrocarbons were not detected in any of the

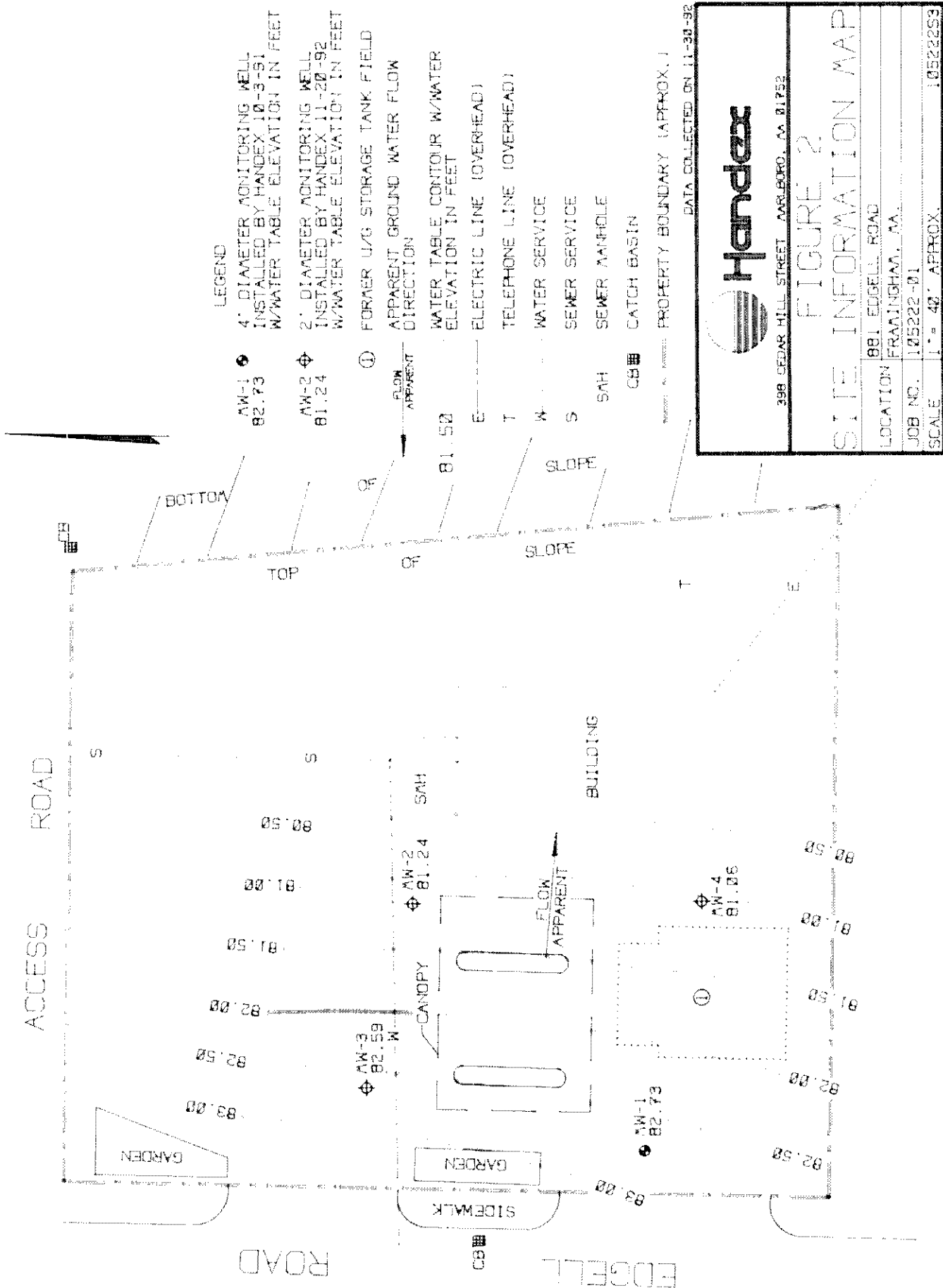
monitoring wells installed at the location.

Xylenes were detected in the soil sample obtained during the installation of well MW-2 at a concentration of 1.1 ppb. BTEX was not detected in soil samples obtained from MW-3 or MW-4. TPH was not detected in soils collected from MW-2 or MW-4. Soil samples collected from MW-3 contained TPH at a concentration of 32 ppm.

Laboratory analysis of ground-water samples obtained from site monitoring wells detected no BTEX compounds in MW-1. BTEX was detected in MW-2, MW-3 and MW-4 at concentrations of 48.3 ppb, 2.9 ppb and 6,420 ppb, respectively. MTBE was present in MW-1 through MW-4 at concentrations of 2.9 ppb, 7.5 ppb, 370 ppb and 47 ppb, respectively.



 Handex	
398 CEDAR HILL STREET MARLBORO, MA 01752	
FIGURE 1 LOCUS MAP	
LOCATION	881 EDGELL ROAD FRAMINGHAM, MA
JOB NO.	105222-01
SCALE	1" = 2000' APPROX.



DATA COLLECTED ON 11-30-92

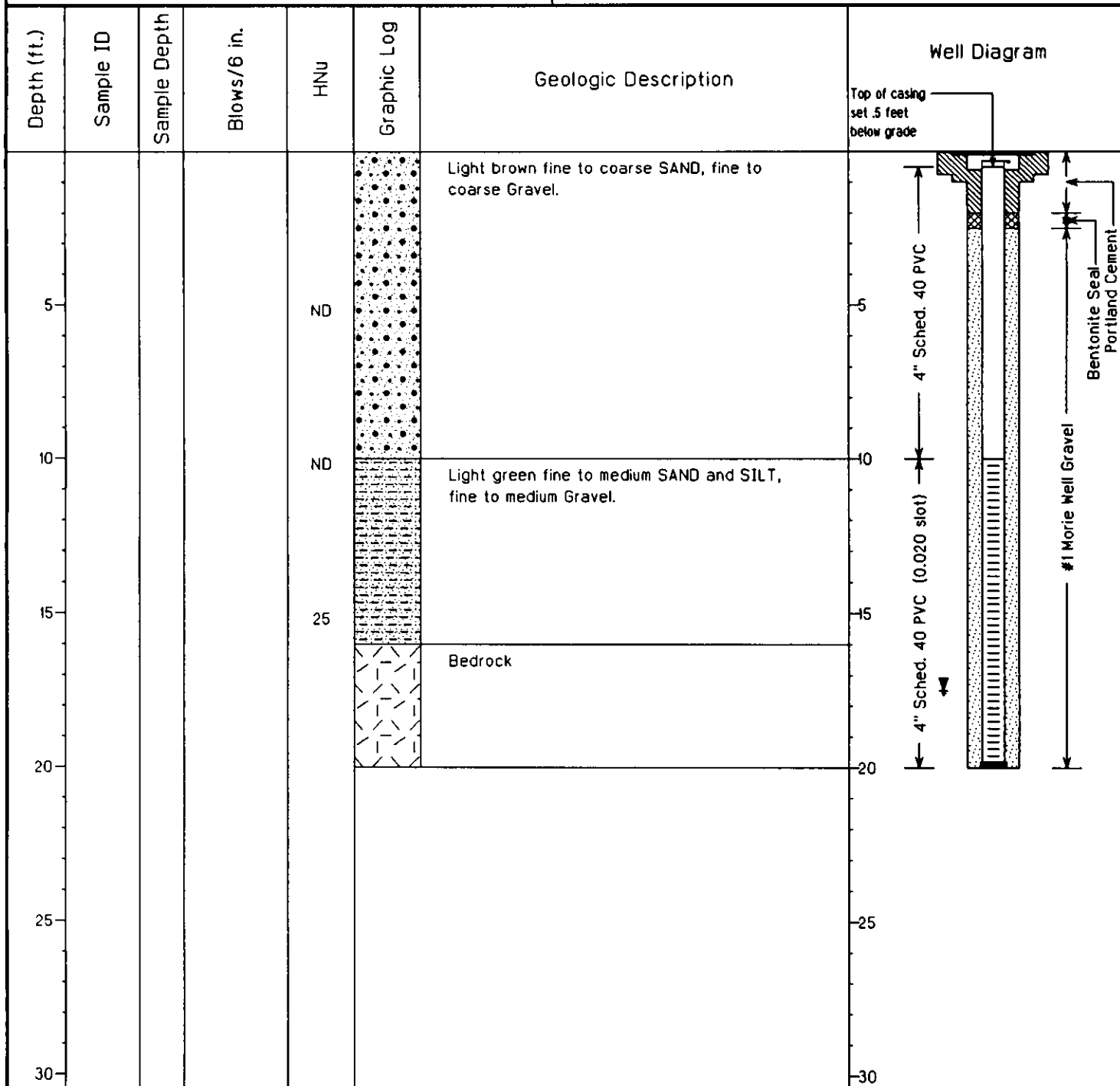
	
398 CEDAR HILL STREET WARREN, N.J. 07052	
FIGURE 2	
SITE INFORMATION MAP	
LOCATION	981 EDGELL ROAD FRAMINGHAM, MA.
JOB NO.	105222-01
SCALE	1" = 40' APPROX.
	10522253

Appendix A
BORING LOGS / MONITORING WELL CONSTRUCTION DETAILS

**Handex®**

Handex of New England

WELL LOG: MW-1

Permit #: *N/A*Drill Date: *10/3/91*Use: *Monitoring*Location: *881 Edgell Road - Framingham, MA*Owner Loc #: *11-143-175*Owner: *Star Enterprise*Handex Loc #: *105222*Owner Address: *Providence, RI*BORING - Depth: *20 ft.*Diameter: *10 in.*Drilling Method: *Air Rotary*CASING - Length: *10 ft.*Diameter: *4 in.*Sampling Method: *Drill Cuttings*SCREEN - Length: *10 ft.*Diameter: *4 in.*Static Water Level: *17 ft.*WELL - Depth: *20 ft.*

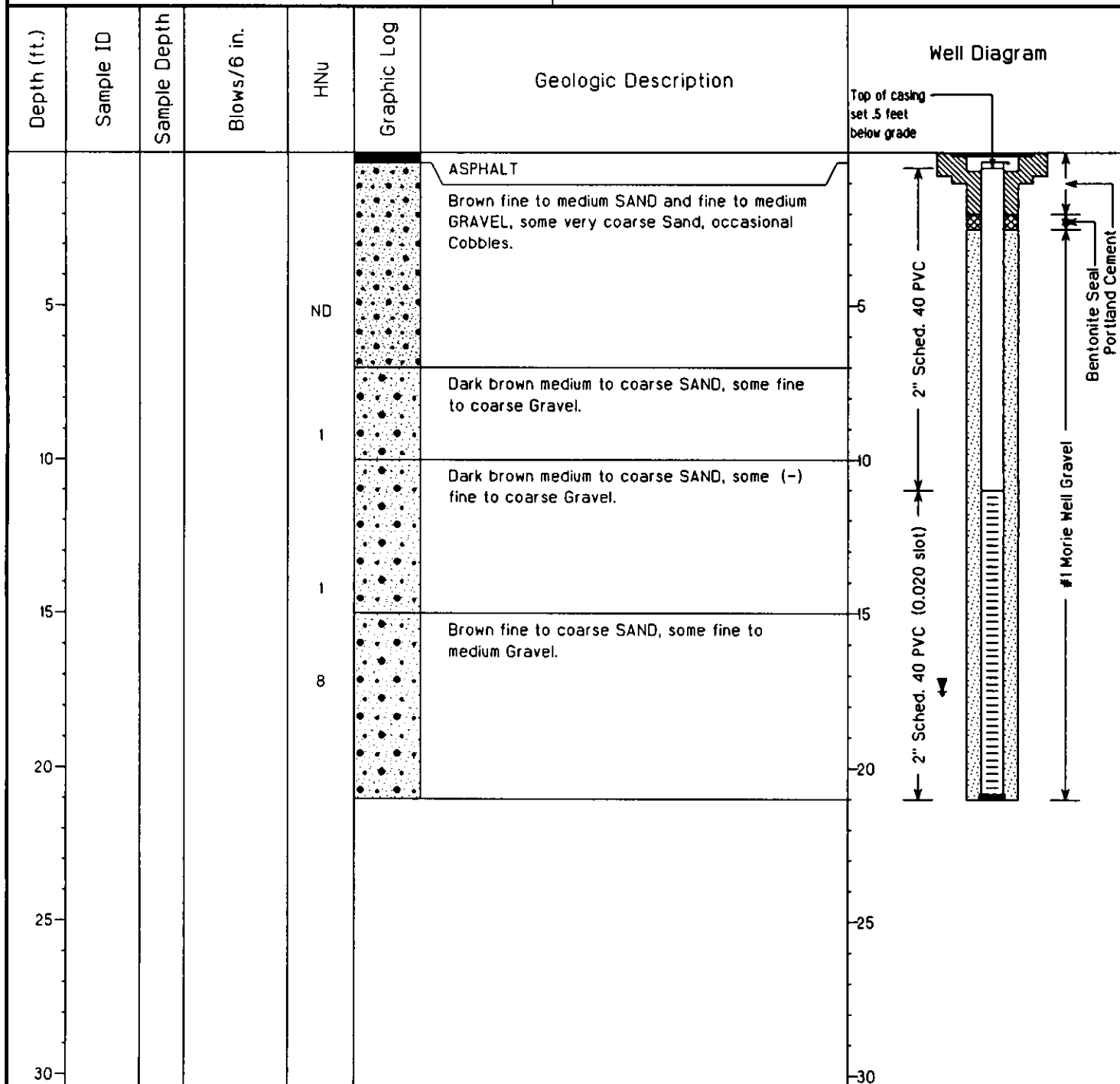
NOTES: ▾ = Static Water Level (from TOC)

Geologist: *Scott VanderSea*Driller: *Paul Schimke*

**Handex®**

Handex of New England

WELL LOG: MW-2

Permit #: *N/A*Drill Date: *11/19/92*Use: *Monitoring*Location: *881 Edgell Road - Framingham, MA*Owner Loc #: *11-143-175*Owner: *Star Enterprise*Handex Loc #: *105222*Owner Address: *Providence, RI*BORING - Depth: *21 ft.*Diameter: *8 in.*Drilling Method: *Hollow Stem Auger*CASING - Length: *11 ft.*Diameter: *2 in.*Sampling Method: *Drill Cuttings*SCREEN - Length: *10 ft.*Diameter: *2 in.*Static Water Level: *17 ft.*WELL - Depth: *21 ft.*

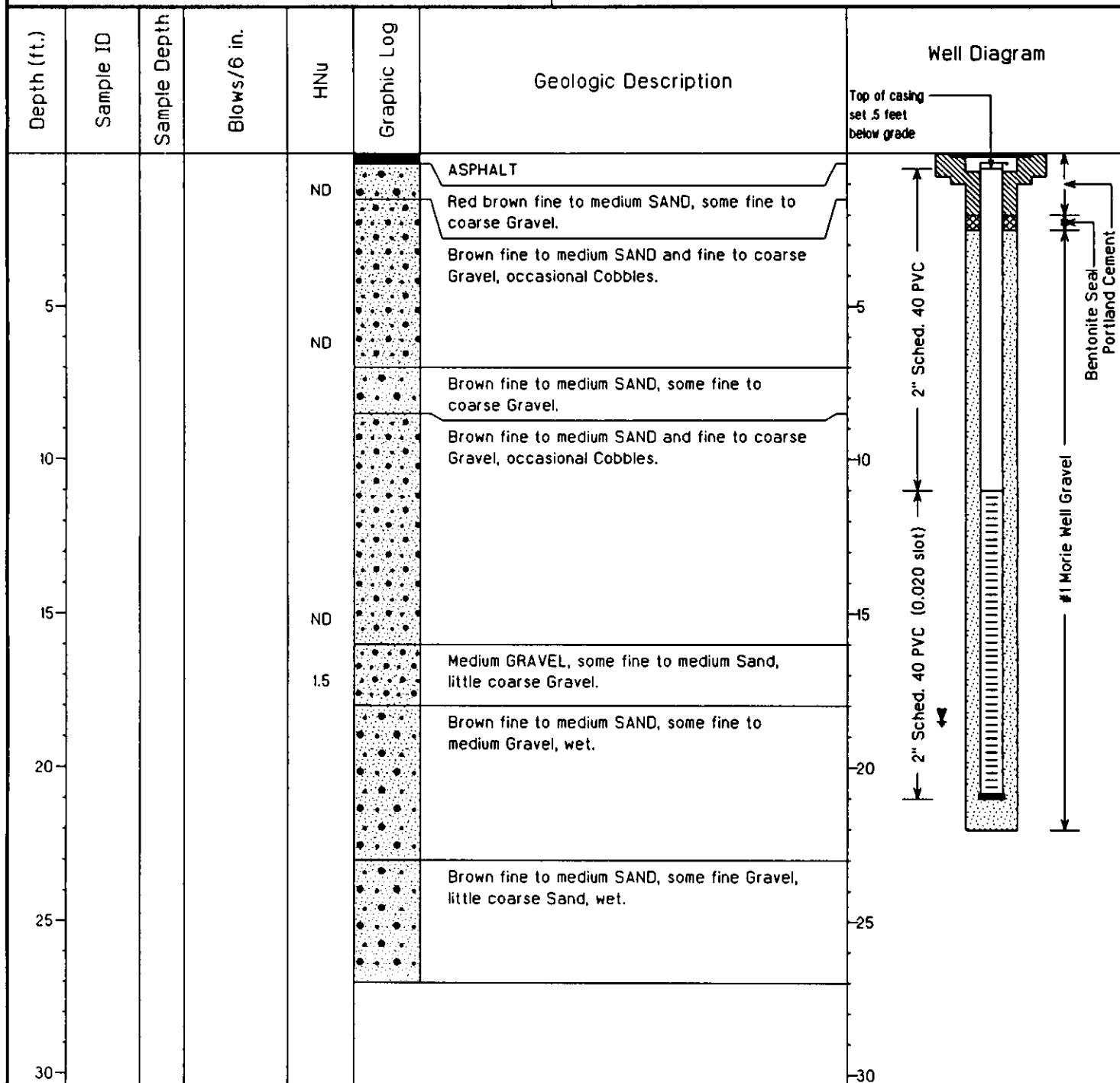
NOTES: ↓ = Static Water Level (from TOC)

Geologist: *Scott VanderSea*Driller: *Paul Schimke*



Handex of New England

WELL LOG: MW-3

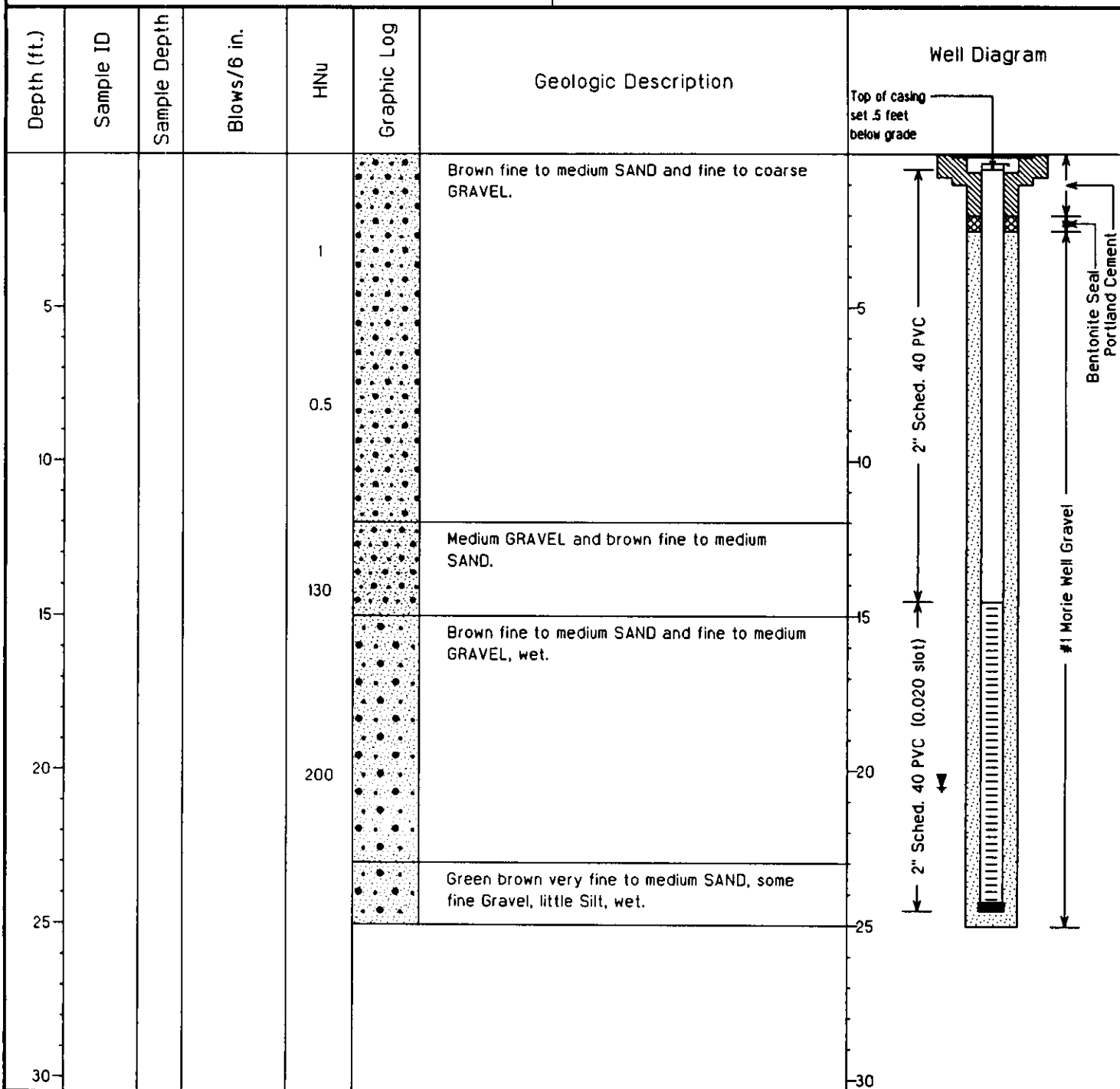
Permit #: *N/A*Drill Date: *11/20/92*Use: *Monitoring*Location: *881 Edgell Road - Framingham, MA*Owner Loc #: *11-143-175*Owner: *Star Enterprise*Handex Loc #: *105222*Owner Address: *Providence, RI*BORING - Depth: *27 ft.*Diameter: *8 in.*Drilling Method: *Hollow Stem Auger*CASING - Length: *11 ft.*Diameter: *2 in.*Sampling Method: *Drill Cuttings*SCREEN - Length: *10 ft.*Diameter: *2 in.*Static Water Level: *18 ft.*WELL - Depth: *21 ft.*

NOTES: ▼ = Static Water Level (from TOC)

Geologist: *Scott VanderSea*Driller: *Paul Schimke*

**Handex®**

Handex of New England

WELL LOG: MW-4Permit #: *N/A*Drill Date: *11/20/92*Use: *Monitoring*Location: *881 Edgell Road - Framingham, MA*Owner Loc #: *11-143-175*Owner: *Star Enterprise*Handex Loc #: *105222*Owner Address: *Providence, RI*BORING - Depth: *25 ft.*Diameter: *8 in.*Drilling Method: *Hollow Stem Auger*CASING - Length: *14.5 ft.*Diameter: *2 in.*Sampling Method: *Drill Cuttings*SCREEN - Length: *10 ft.*Diameter: *2 in.*Static Water Level: *20 ft.*WELL - Depth: *24.5 ft.*

NOTES: ↓ = Static Water Level (from TOC)

Geologist: *Scott VanderSea*Driller: *Paul Schimke*

Appendix B
LABORATORY CERTIFICATES - SOIL ANALYSES



ANALYSIS REPORT

SAMPLE No	COLLECTED			POINT OF COLLECTION
	DATE	TIME	BY	
E102297N	10/03/91	12:00	JM	SOIL - W-1, 15'; TEXACO S/S, 881 EDGEHLL ROAD, FRAMINGHAM, MA

TEST DESCRIPTION	RESULT	MDL	UNITS	DATE	INITS
PETROLEUM HYDROCARBONS	130	25	MG/KG	10/11/91	BPG
SOLIDS, TOTAL PERCENT	96	2.0	%	10/10/91	HBM

UG/KG = PPB MG/KG = PPM
MDL = METHOD DETECTION LIMIT
ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

MASSACHUSETTS CERTIFICATION: MA136

JOHN HAMILTON
LAB DIRECTOR

ANALYSIS REPORT

SAMPLE No	COLLECTED			POINT OF COLLECTION
	DATE	TIME	BY	
B203025N	11/19/92	14:15	GV	SOIL - MW-2, 16'-18'; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA

TEST DESCRIPTION	RESULT	MDL	UNITS	DATE	INITS
PURGEABLE AROMATICS					
BENZENE	ND	1.1	UG/KG	11/23/92	SDB
ETHYLBENZENE	ND	1.1	UG/KG	11/23/92	SDB
TOLUENE	ND	1.1	UG/KG	11/23/92	SDB
XYLENE TOTAL	ND	1.1	UG/KG	11/23/92	SDB

ND = NOT DETECTED
UG/KG = PPB UG/KG = PPB
MDL = METHOD DETECTION LIMIT
ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

JOHN HAMILTON
LAE DIRECTOR

ANALYSIS REPORT

SAMPLE No	COLLECTED			POINT OF COLLECTION
	DATE	TIME	BY	
E203025N	11/19/92	14:15	SV	SOIL - MW-2, 15'-18'; FORMER STAR S/S, 881 EDGEHILL RD., FRAMINGHAM, MA

TEST DESCRIPTION	RESULT	MDL	UNITS	DATE	INITS
PETROLEUM HYDROCARBONS	<25	25	MG/KG	11/19/92	SV
SOLIDS, TOTAL PERCENT	90	2.0	%	11/19/92	SAP

UG/KG = PPM MG/KG = PPM
MDL = METHOD DETECTION LIMIT
ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

MASSACHUSETTS CERTIFICATION: MA186

JOHN HAMILTON
LAB DIRECTOR

ANALYSIS REPORT

SAMPLE No	COLLECTED		BY	POINT OF COLLECTION
	DATE	TIME		
BEOB026N	11/20/92	09:00	SV	SOIL - MW-3, 17'-19'; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA

TEST DESCRIPTION	RESULT	MDL	UNITS	DATE	INITS
PURGEABLE AROMATICS					
BENZENE	ND	1.1	UG/KG	11/23/92	SDE
ETHYLENE	ND	1.1	UG/KG	11/23/92	SDE
TOLUENE	ND	1.1	UG/KG	11/23/92	SDE
XYLENES, TOTAL	ND	1.1	UG/KG	11/23/92	SDE

ND = NOT DETECTED
UG/KG = PPB MG/KG = PPM
MDL = METHOD DETECTION LIMIT
ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

MASSACHUSETTS CERTIFICATION, WALKER

JOHN HAMILTON
LAB DIRECTOR



HANDEX OF NEW ENGLAND INC.
398 CEDAR HILL STREET
MARLBOROUGH, MA 01752

ATTN: J. ITALIANO

DATE: 12/01/92
JOB No: 920975N
PROJECT No: 105922-01
SAMPLE RECEIVED: 11/23/92

SAMPLE SUMMARY

SAMPLE No	COLLECTED		BY	POINT OF COLLECTION
	DATE	TIME		
E203025N	11/19/92	14:15	SV	SOIL - MW-2, 16'-18'; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA
E203026N	11/20/92	09:00	SV	SOIL - MW-3, 17'-19'; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA
E203027N	11/20/92	11:30	SV	SOIL - MW-4, 17'-19'; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA


JOHN F. HAMILTON
LAB DIRECTOR

ANALYSIS REPORT

SAMPLE No	COLLECTED			POINT OF COLLECTION
	DATE	TIME	BY	
E203026N	11/20/92	09:00	SV	SOIL - MW-3, 17'-19'; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA

TEST DESCRIPTION	RESULT	MDL	UNITS	DATE	INITS
PETROLEUM HYDROCARBONS	93	93	MG/KG	11/20/92	SVL
SOLIDS, TOTAL PERCENT	93	93	%	11/20/92	SAP

UG/KG = PPB MG/KG = PPM
MDL = METHOD DETECTION LIMIT
ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

MASSACHUSETTS CERTIFICATION: MA195

JOHN HAMILTON
LAB DIRECTOR



ANALYSIS REPORT FOR VOLATILE ORGANICS BY GC/MS

CLIENT	:	H.N.E.	Initial	:	>A7195	ANALYSIS	:	11/24/92
LAB SAMPLE #	:	E203027N	Dilution #1	:		DATE	:	
MATRIX	:	SOIL	Dilution #2	:				
METHOD	:	SW846 8240						

COMPOUND	RESULT (ug/kg) *	MDL (ug/kg) *	Q
1) ACROLEIN	ND	120	
2) ACRYLONITRILE	ND	120	
3) BENZENE	ND	5.8	
4) BROMOFORM	ND	5.8	
5) BROMODICHLOROMETHANE	ND	5.8	
6) BROMOMETHANE	ND	12	
7) CARBON TETRACHLORIDE	ND	5.8	
8) CHLOROBENZENE	ND	5.8	
9) CHLOROETHANE	ND	12	
10) 2-CHLOROETHYL VINYL ETHER	ND	12	
11) CHLOROFORM	ND	5.8	
12) CHLOROMETHANE	ND	12	
13) cis-1,3-DICHLOROPROPENE	ND	5.8	
14) DIBROMOCHLOROMETHANE	ND	5.8	
15) 1,2-DICHLOROBENZENE	ND	5.8	
16) 1,3-DICHLOROBENZENE	ND	5.8	
17) 1,4-DICHLOROBENZENE	ND	5.8	
18) 1,1-DICHLOROETHANE	ND	5.8	
19) 1,2-DICHLOROETHANE	ND	5.8	
20) 1,1-DICHLOROETHYLENE	ND	5.8	
21) trans-1,2-DICHLOROETHYLENE	ND	5.8	
22) trans-1,3-DICHLOROPROPENE	ND	5.8	
23) 1,2-DICHLOROPROPANE	ND	5.8	
24) ETHYLBENZENE	ND	5.8	
25) METHYLENE CHLORIDE	ND	5.8	
26) 1,1,2,2-TETRACHLOROETHANE	ND	5.8	
27) TETRACHLOROETHYLENE	ND	5.8	
28) TOLUENE	ND	5.8	
29) 1,1,1-TRICHLOROETHANE	ND	5.8	
30) 1,1,2-TRICHLOROETHANE	ND	5.8	
31) TRICHLOROETHYLENE	ND	5.8	
32) TRICHLOROFLUOROMETHANE	ND	5.8	
33) VINYL CHLORIDE	ND	12	
34) XYLENES, TOTAL	ND	5.8	

ND = NOT DETECTED (1) - RESULTS REPORTED FROM DILUTION #1
MDL= METHOD DETECTION LIMIT (2) - RESULTS REPORTED FROM DILUTION #2
* - REPORTED ON A DRY WEIGHT BASIS

QUALIFIERS (Q)

J =INDICATES AN ESTIMATED VALUE BELOW MDL
B =INDICATES COMPOUND FOUND IN THE ASSOCIATED BLANK AS WELL AS IN SAMPLE
E =ESTIMATED VALUE; EXCEEDS INSTRUMENT CALIBRATION RANGE

ANALYSIS REPORT

SAMPLE No	COLLECTED			POINT OF COLLECTION
	DATE	TIME	BY	
EC03027N	11/20/92	11:30	SV	SOIL - MW-4, 17'19'; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA

TEST DESCRIPTION	RESULT	MDL	UNITS	DATE	INITS
PETROLEUM HYDROCARBONS	<25	25	MG/KG	11-22-92	RLS
SOLIDS, TOTAL PERCENT	87	2.0	%	11-22-92	SAS

ND = NOT DETECTED
 UG/KG = PPB MG/KG = PPM
 MDL = METHOD DETECTION LIMIT
 ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

JOHN HAMILTON
 LIA DIRECTOR

Appendix C
LABORATORY CERTIFICATES - GROUND-WATER ANALYSES

HANDEX OF NEW ENGLAND INC.
398 CEDAR HILL STREET
MARLBOROUGH, MA 01752

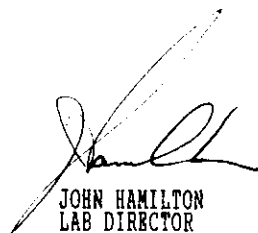
ATTN: J. ITALIANO

DATE: 12/04/92
JOB No: 920979N
PROJECT No: 105222-01
SAMPLE RECEIVED: 12/01/92

SAMPLE SUMMARY

SAMPLE No	COLLECTED			POINT OF COLLECTION
	DATE	TIME	BY	
E203035N	11/30/92	14:10	SH	GROUND WATER - MW-1; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA
E203036N	11/30/92	14:20	SH	GROUND WATER - MW-2; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA
E203037N	11/30/92	14:15	SH	GROUND WATER - MW-3; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA
E203038N	11/30/92	14:25	SH	GROUND WATER - MW-4; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA

CERTIFICATIONS: MASSACHUSETTS (MA136)



JOHN HAMILTON
LAB DIRECTOR

ANALYSIS REPORT

SAMPLE No	COLLECTED			POINT OF COLLECTION
	DATE	TIME	BY	
E203035N	11/30/92	14:10	SH	GROUND WATER - MW-1; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA

TEST DESCRIPTION	RESULT	MDL	UNITS	DATE	INITS
PURGEABLE AROMATICS, MTBE					
BENZENE	ND	1.0	UG/L	12/01/92	SDR
ETHYLBENZENE	ND	1.0	UG/L	12/01/92	SDR
TOLUENE	ND	1.0	UG/L	12/01/92	SDR
XYLENES, TOTAL	ND	1.0	UG/L	12/01/92	SDR
METHYL TERTIARY BUTYL ETHER	2.9	1.0	UG/L	12/01/92	SDR

ND = NOT DETECTED
UG/L = PPB MG/L = PPM
MDL = METHOD DETECTION LIMIT

JOHN HAMILTON
LAB DIRECTOR

MASSACHUSETTS CERTIFICATION: MA136

ANALYSIS REPORT

SAMPLE No	COLLECTED			POINT OF COLLECTION
	DATE	TIME	BY	
E203036N	11/30/92	14:20	SH	GROUND WATER - MW-2; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA

TEST DESCRIPTION	RESULT	MDL	UNITS	DATE	INITS
PURGEABLE AROMATICS, NTBE					
BENZENE	1.2	1.0	UG/L	12/01/92	SDR
ETHYLBENZENE	40	1.0	UG/L	12/01/92	SDR
TOLUENE	ND	1.0	UG/L	12/01/92	SDR
XYLENES, TOTAL	7.1	1.0	UG/L	12/01/92	SDR
METHYL TERTIARY BUTYL ETHER	7.5	1.0	UG/L	12/01/92	SDR

ND = NOT DETECTED
UG/L = PPB MG/L = PPM
MDL = METHOD DETECTION LIMIT

MASSACHUSETTS CERTIFICATION: MA136

JOHN HAMILTON
LAB DIRECTOR

ANALYSIS REPORT

SAMPLE No	COLLECTED			POINT OF COLLECTION
	DATE	TIME	BY	
E203037N	11/30/92	14:15	SH	GROUND WATER - MW-3; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA

TEST DESCRIPTION	RESULT	MDL	UNITS	DATE	INITS
PURGEABLE AROMATICS, MTBE					
BENZENE	2.9	1.0	UG/L	12/01/92	SDB
ETHYLBENZENE	ND	1.0	UG/L	12/01/92	SDB
TOLUENE	ND	1.0	UG/L	12/01/92	SDB
XYLENES, TOTAL	ND	1.0	UG/L	12/01/92	SDB
METHYL TERTIARY BUTYL ETHER ¹	370	2.0	UG/L	12/01/92	SDB

¹ MDL ELEVATED DUE TO DILUTION FACTOR

ND = NOT DETECTED
UG/L = PPB MG/L = PPM
MDL = METHOD DETECTION LIMIT

JOHN HAMILTON
LAB DIRECTOR

MASSACHUSETTS CERTIFICATION: MA136

ANALYSIS REPORT

SAMPLE No	COLLECTED			POINT OF COLLECTION
	DATE	TIME	BY	
E203038N	11/30/92	14:25	SH	GROUND WATER - MW-4; FORMER STAR S/S, 881 EDGELL RD., FRAMINGHAM, MA

TEST DESCRIPTION	RESULT	MDL	UNITS	DATE	INITS
PURGEABLE AROMATICS, MTBE					
BENZENE	130	1.0	UG/L	12/01/92	SDR
ETHYLBENZENE ¹	530	10	UG/L	12/01/92	SDR
TOLUENE ¹	560	10	UG/L	12/01/92	SDR
XYLENES, TOTAL ¹	5200	10	UG/L	12/01/92	SDR
METHYL TERTIARY BUTYL ETHER	47	1.0	UG/L	12/01/92	SDR

¹ MDL ELEVATED DUE TO DILUTION FACTOR

ND = NOT DETECTED
UG/L = PPB MG/L = PPM
MDL = METHOD DETECTION LIMIT

MASSACHUSETTS CERTIFICATION: NA136

JOHN HAMILTON
LAB DIRECTOR