EnviroTrac
Environmental Services

July 29, 2009

Ms. Sarah Carlson
New York State Department of Environmental Conservation
Division of Environmental Remediation – Region 2
Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407

Re: NYSDEC Spill #95-02757
Hess Station 32522
810 Metropolitan Avenue
Brooklyn, NY

Dear Ms. Carlson:

The following is presented in response to discussions regarding additional environmental investigations for the above referenced site between representatives of the New York State Department of Environmental Conservation (NYSDEC), Hess and EnviroTrac during a March 18, 2009 meeting.

HISTORICAL BACKGROUND

Former Merit Underground Storage Tank Upgrade Project

In reviewing the historical records for the subject property, it is noted that underground storage tanks (UST's) and associated piping and dispensers were removed as part of upgrade activities conducted by Merit Oil in June 1995. During this upgrade, three (3) 4,000-gallon single wall (SW) steel gasoline, two (2) 2,000-gallon SW steel gasoline, one (1) 4,000-gallon SW steel diesel and one (1) 550-gallon SW steel waste water UST's were removed. In addition, associated dispensers, piping and remote fills were removed. During this project, a total of 897 tons of petroleum impacted soil were removed from the site for disposal.

Subsequent to tank removals, endpoint soil samples were collected and analyzed for petroleum constituents. It is noted that residual petroleum impact existed from four (4) feet to thirteen (13) feet below grade at several locations, including the areas of the former remote fills, UST's and dispensers.

Remedial & Subsurface Investigations

- January 2006 – A Remedial Action Plan (RAP) proposing three (3) extended period soil vapor extraction (SVE)/air sparge (AS) events in vicinity of monitoring well (MW-4) and the installation of oxygen releasing material (ORM) socks in monitoring wells (MW-2 and MW-4) was approved by NYSDEC. Two (2) AS wells and one (1) SVE well were installed in the vicinity of MW-4 in preparation for the pilot test events.

- June 2006 – Two (2) extended-period SVE/AS events were conducted in the vicinity of MW-4.

- November 14, 2008 – Conducted three (3) soil borings in the vicinity of MW-2 and MW-4. The soil sample obtained at the 29'-30' interval for boring (SB-3) exceeded NYSDEC TAGM #4046 Cleanup Objectives for several VOC's. All other samples indicated concentrations below TAGM guidelines.

- October 31, 2008 – Groundwater samples collected from five (5) monitoring wells were analyzed for STARS 8260 compounds. Several compounds within MW-4 exceeded NYSDEC TAGM #4046 Cleanup Objectives for several compounds. In addition, the sample from MW-2 exceeded NYSDEC TAGM #4046 Cleanup Objectives for MTBE.

- March 4, 2009 – Attempted to install a soil boring/monitoring well in the sidewalk adjacent to Bushwick Avenue. Due to close proximity of subway location, this well could not be installed.

Refer to Appendix A for historical documentation regarding remedial and subsurface investigations.

Sensitive Receptor Information

- Surrounding properties are residential and commercial and appear to have basements.

- No public supply or private wells are located within 1/2-mile of the site.

- New York City Transit Authority subway system runs beneath Bushwick Avenue.

- Field screening of storm drains and utility accesses revealed no detections with a PID.

CONCLUSION/RECOMMENDATION

Soil Investigation

Based on the historical soil data, Hess is proposing to complete four (4) borings on the subject property to confirm the absence or presence of petroleum impacts (see Appendix B for proposed boring/well locations).

At each boring location, soil will be sampled continuously to five (5) feet into the groundwater table and will be screened using a photo-ionization detector (PID). Depth to groundwater in this area is approximately twenty (20) feet below grade.

The soil sample from directly above the water table and the most impacted soil sample (based on PID readings) will be submitted for volatile and semi-volatile organics plus MTBE analyses via EPA Methods 8260 & 8270 STARS Lists. Subsequent to boring completion, a four (4) inch PVC monitoring well will be installed to thirty (30) feet below grade at each location.

Reporting

Results of this investigation will be submitted with the following Update Report for this site.

If you have questions or comments, please do not hesitate to contact us at (631) 924-3001. Thank you for your time in this matter.

Sincerely,

Joseph Rennie
Project Manager

Appendices

EnviroTrac

APPENDIX A

HISTORICAL

DOCUMENTATION

UNDERGROUND STORAGE TANK CLOSURE REPORT

Merit Oil of New York, Inc.
Merit "Metropolitan"
810 Metropolitan Avenue
Brooklyn, New York
Spill #95-02757

May 20, 1998

Prepared For:

Merit Oil of New York, Inc.
551 West Lancaster Avenue
Haverford, Pennsylvania 19041-1494

Prepared by:
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Wayne Kempski
Sr. Hydrogeologist

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TABLE OF CONTENTS

1.0 INTRODUCTION

Groundwater & Environmental Services, Inc. (GES), was contracted by Merit Oil of New York, Inc. (Merit), to document the removal of three 4,000-gallon and two 2,000-gallon gasoline single-walled steel underground storage tanks (USTs), one 550-gallon waste water single-walled steel UST, one 4,000-gallon diesel single-walled steel UST, their associated single-walled steel piping, remote fills, and dispenser islands at their "Metropolitan" gasoline station. The Site is located at 810 Metropolitan Avenue, Brooklyn, New York. Figure 1 is an annotated 7.5-minute series United States Geological Survey quadrangle map (Brooklyn, NY) showing the Site location, surface topography, drainage patterns, and cultural features. Figure 2 is a Site Plan which illustrates the conditions at the Site during closure activities. Tank decommissioning and removal activities were conducted by Merit's general contractor, Arek Petro, Inc. (Arek) of Brooklyn, New York. The UST system that was removed was replaced with five 4,000-gallon, double-walled, fiberglass gasoline USTs and one 600-gallon, double-walled, fiberglass, waste water USTs as well as double-wall fiberglass piping.

The closure activities were in compliance with applicable federal and state requirements which included observing and documenting the removal of the seven USTs, screening the soil removed from the UST excavations for petroleum hydrocarbon impact with a photoionization detector (PID), and post-excavation soil sampling and analysis. The New York City Fire Department (NYCFD) and the New York State Department of Environmental Conservation (NYSDEC) were notified of the pending closure activities prior to site work. This Site has been assigned NYSDEC Spill #95-02757 as a result of contaminated soil encountered during the UST closure activities.

2.0 HEALTH AND SAFETY

A site-specific Health and Safety Plan was prepared for all GES field personnel involved in site activities. The plan outlines the required monitoring equipment, protective clothing, action levels, anticipated compounds, and emergency responses. All sampling and supervisory activities were conducted in Level D protection. GES personnel are equipped to upgrade to Level "C" if required. Air monitoring was conducted during sampling and excavation

of the USTs using a PID. All GES field personnel involved in field investigations are trained and certified according to the Federal Occupational Safety and Health Administration requirements.

3.0 CLOSURE ACTIVITIES

UST decommissioning and removal activities were performed by Arek between June 5 and June 13, 1996. Prior to the removal of the USTs, tank bottom sludges and residual product were cleaned from the USTs by Arek and stored in Department of Transportation approved 55-gallon drums for subsequent disposition by Merit. Seven drums (325 gallons) of tank bottom sludges were removed from the Site and transported by Freehold Cartage, Inc. on November 30, 1995 to Remtech Environmental Lewisberry, Inc. of Lewisberry, Pennsylvania for disposal via incineration and recycling. The cleaned USTs were removed from the Site and transported to the yard of Charles T. King, Inc. of Brooklyn, New York, where they were recycled as scrap metal. Waste disposal documentation is provided in Appendix A. Photographs documenting UST removal and their condition are presented in Appendix B.

During UST removal, excavated soil was screened for petroleum hydrocarbon impact with a photoionization detector (PID). The PID response is an indication of ionizable compounds that may be present, but the results are neither compound specific nor quantitative. Soils that registered a PID response in excess of 100 parts per million (ppm) were stockpiled on-site for off-site disposition. A total of 897 tons of petroleum contaminated soil was excavated and removed from the Site. The soil was transported by Keystone Block Transportation Company, to E.J. Breneman, Inc. of Sinking Spring, Pennsylvania, where it was thermally processed and recycled into hot asphalt mix. Petroleum hydrocarbon stained soils that were encountered were also excavated and stockpiled for proper disposition. Following soil removal, post-excavation soil samples were collected from all UST excavations and submitted for chemical analysis. Table 1 summarizes the soil sample locations, dates, sample I.D. numbers, sample depths, and corresponding PID field screening responses.

3.1 Gasoline UST Closure

A GES Environmental Scientist, Patrick S. McMahon, was on Site on June 5 and 6, 1995 to document the removal of the five (three 4,000-gallon and two 2,000-gallon) single-walled steel gasoline USTs. The concrete encasement was removed from the top and the sides of the USTs. The USTs were then removed from the gasoline UST field. A hole was cut in the shell of each tank and the tank interiors were cleaned. The gasoline USTs had no observable corrosion, pitting, holes, or perforations. An unrecoverable amount of standing water, with a visible sheen, was observed underneath each UST in the encasement. Excavated soil from on top of the concrete encasement exhibited PID responses ranging from 1,540 ppm to 1,888 ppm and was stockpiled and covered with plastic.

3.2 Diesel UST Closure

GES Environmental Scientist, Patrick S. McMahon, was on Site June 5, 1995 to document the removal of one 4,000-gallon diesel fuel UST. The UST was enclosed in the concrete encasement, and was located at the east end of the UST field. The UST had no observable corrosion, pitting, holes, or perforations.

3.3 Waste Water UST Closure

GES Environmental Scientist, Patrick S. McMahon, was on site June 7, 1995 to document the removal of one 550-gallon waste water UST from the southeast wall of the UST concrete encasement excavation. This UST was separate from the tanks enclosed in the concrete encasement and had noticeable perforations and pitting. When the UST was uncovered by the excavator, a small amount of fluid from the tank began leaking into the excavation. The UST was immediately removed and the fluid inside it was manually drained into two 55-gallon Department of Transportation approved drums. The soil impacted by the leak was immediately excavated and stockpiled and covered with plastic for off-site disposition. Two soil samples were collected and screened with a PID. The PID readings from the sample locations were 478 ppm and 595 ppm.

3.4 Gasoline Dispenser Islands, Piping and Remote Fill Closure

GES Environmental Scientist, Patrick S. McMahon, was on site June 6 and 13, 1995 to collect post-excavation soil samples beneath the five former dispenser islands and former remote fills. Prior to sampling, the concrete pads surrounding the dispensers were demolished and removed. Excavation of soil with a PID response exceeding 100 ppm was completed to a maximum depth of 3.5 to 7.0 feet below grade for the dispenser excavations. The dispenser island samples were obtained at the bottom of each dispenser excavation. Dispenser island soil sample PID responses ranged from 27 ppm to 1,991 ppm. Two remote fill samples were collected at 2.0 feet below grade. The PID responses for these samples were 1,460 ppm and 2,071 ppm.

4.0 SOIL SAMPLING AND ANALYSIS

The post-excavation soil samples that were collected for chemical analysis were submitted to Laboratory Resources, Inc., of Teterboro, New Jersey (NY certification #11321) on June 8, 1995. A chain-of-custody accompanied all samples from the time of collection to the time they were received by the laboratory. All post-excavation soil samples were analyzed for volatile organic compounds (VOC's) via U.S. EPA approved test method 8021. In addition to the above, post-excavation soil samples collected from the 4,000-gallon diesel tank and adjacent 2,000-gallon tank area of the excavation, and from beneath the diesel dispenser island, were also analyzed for base neutral organic compounds via U.S. EPA approved test method 8270. Table 1 summarizes the soil sample locations, dates, sample I.D. numbers, sample depths, and corresponding PID field screening responses. Sample locations are shown on Figure 3. The summary laboratory analytical package is included in Appendix C. Tune data, calibration data, and chromatographs are included in the laboratory report.

4.1 Analytical Results Gasoline UST Field

The analytical results of the eighteen post-excavation soil samples collected from the gasoline UST excavation did not detect benzene in any of the eighteen samples. Toluene was detected in three samples at concentrations of 3.4 ppb, 0.60 ppb and 540 ppb, respectively. Ethylbenzene was detected in one sample at a concentration of 510 ppb. Total xylenes were detected in three samples at concentrations of 15.2 ppb, 4.8

ppb and 13,200 ppb. MTBE was detected in all eighteen of the samples in concentrations ranging from 0.88 ppb to 11,000 ppb. Naphthalene was detected in twelve of the samples ranging from 0.98 ppb to 2,500 ppb. Table 2 summarizes the analytical data for the tank excavation. All post-excavation sampling locations are illustrated in Figure 2.

4.2 Analytical Results Diesel UST Excavation

The analytical results of the three post-excavation soil samples collected from beneath the diesel UST indicate that MTBE was detected at concentrations ranging from 10 ppb to 500 ppb. Naphthalene was detected at concentrations ranging from 20 ppb to 25 ppb. Concentrations of the remaining compounds in the VOC scan were not detected. All the base/neutral compounds were detected in one sample at concentrations ranging from 440 ppb of naphthalene to 3600 ppb of phenanthrene and fluoranthene. Table 2 summarizes the analytical results for the diesel UST excavation.

4.3 Analytical Results Waste Water UST Excavation

The results of the two post-excavation soil samples obtained from beneath the waste water UST indicate that benzene, toluene, ethylbenzene, isopropylbenzene, n-propylbenzene, p-isopropyltoluene, 1,2,4-trimethylbenzene, tert-butylbenzene and sec-butylbenzene were not detected. MTBE was detected in both samples at concentrations of 120 ppb and 240 ppb. Xylene was detected in one sample at a concentration of 4.8 ppb. 1,3,5-trimethylbenzene was detected in both samples at concentrations of 6.6 ppb and 15 ppb. N-butylbenzene was detected in both samples at concentrations of 19 ppb and 40 ppb. Naphthalene was detected in both samples at concentrations of 27 ppb and 84 ppb. Table 2 summarizes the analytical results for the diesel UST excavation.

4.4 Analytical Results Dispenser Islands/Remote Fills

The analytical results of the five post-excavation soil samples collected from beneath the dispenser islands detected benzene in one sample at a concentration of 540 ppb. Toluene was found in four samples at concentrations ranging from 2.3 ppb to 52,000 ppb. Ethylbenzene was detected in three samples in concentrations ranging from 2,900 ppb to 35,000 ppb. Total xylenes were detected in three samples at

concentrations ranging from 49,000 ppb to 650,000 ppb. MTBE was detected in two samples at 1.9 ppb and at 5,000 ppb. Naphthalene was detected in four of the samples at concentrations ranging from 4.1 ppb to 230,000 ppb.

The analytical results of the two post-excavation soil samples from the remote fill area did not detect benzene. Toluene was detected in both samples at concentrations of 3,600 ppb and 17,000 ppb. Ethylbenzene was detected in both samples at concentrations of 6,500 ppb and 6,700 ppb. Total xylenes were detected in both samples at concentrations of 222,000 ppb and 450,000 ppb. Naphthalene was detected in both samples at concentrations of 39,000 ppb and 60,000 ppb. A summary of the analytical results for the dispenser islands and remote fills is included in Table 3.

5.0 SUMMARY

In June, 1995, the following were removed from the Site:

- three 4,000-gallon and two 2,000-gallon single-walled steel gasoline USTs;
- one 4,000-gallon diesel single-walled steel UST;
- one 550-gallon single-walled steel wastewater UST;
- five dispenser islands;
- remote fills; and
- all associated piping.

The former UST system was replaced by:

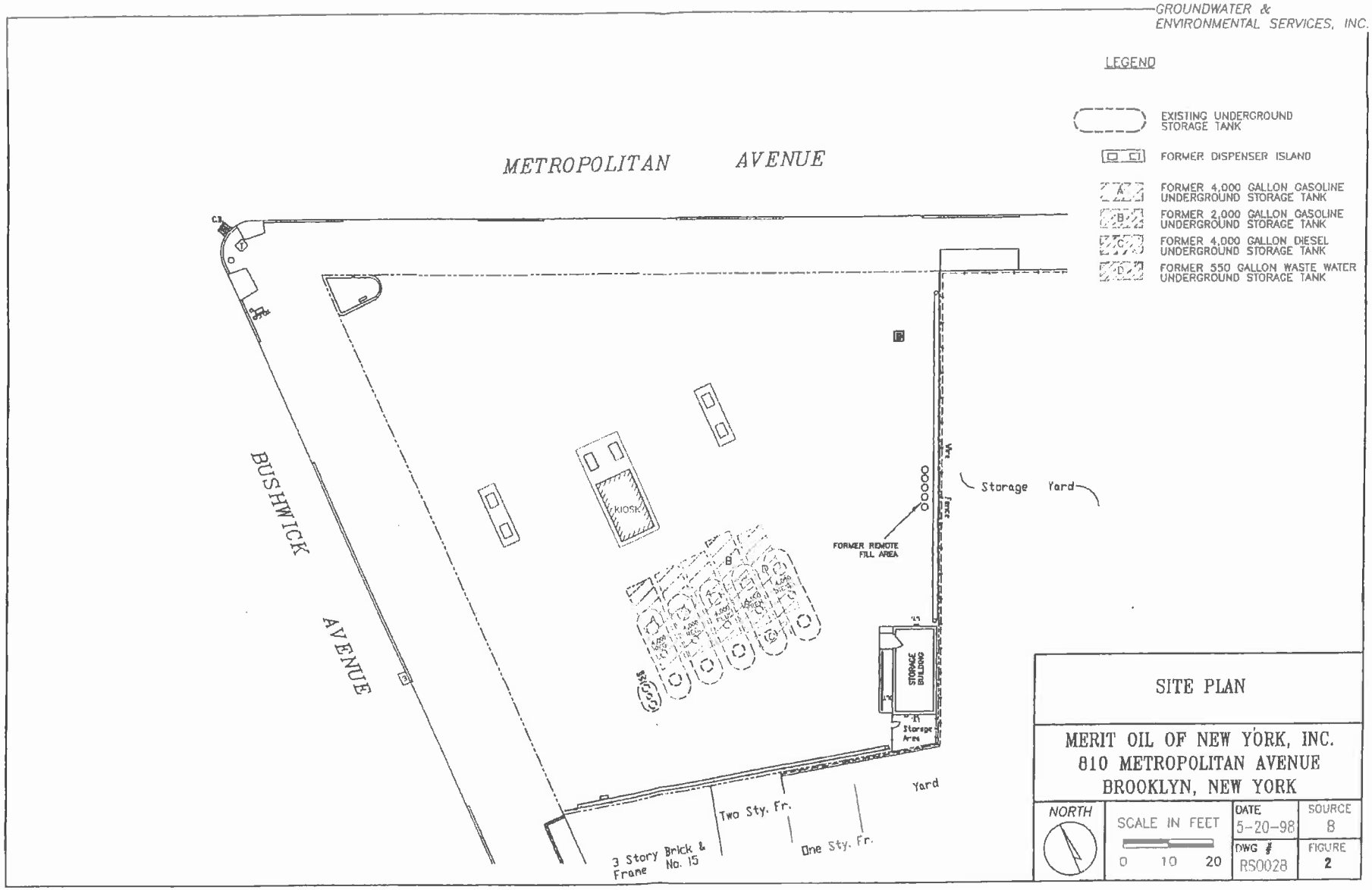
- four 4,000-gallon double-walled fiberglass gasoline USTs;
- one 4,000-gallon double-walled fiberglass diesel UST;
- one 600-gallon double-walled fiberglass wastewater UST

- four dispenser islands;
- new remote fills; and
- double-walled fiberglass piping.

Following removal of the USTs, dispensers, piping, remote fills and impacted soils, post-excavation soil samples were collected. In the UST excavation, 12 bottom samples and six sidewall samples were collected. One sample was collected from each dispenser island excavation (total of five). Two samples were collected from the remote fill excavation.

Applicable guidance values for the compounds which are present at the Merit "Metropolitan" site, referred to as TCLP Alternative Guidance Values, have been established by the NYSDEC and are included in their STARS Memo #1. They are as follows: benzene 14 ppb; toluene 100 ppb; ethylbenzene 100 ppb; xylenes 100 ppb; and MTBE 1,000 ppb. Two of the eighteen post-excavation soil samples collected from the former gasoline UST excavation exceeded the above-referenced guidance values. Three of the five post-excavation soil samples collected from beneath the dispenser islands exceeded the NYSDEC guidance values. Both of the post-excavation soil samples collected from the remote fill area exceeded the NYSDEC guidance values.

GROUNDWATER &
ENVIRONMENTAL SERVICES, INC.



SITE PLAN

MERIT OIL OF NEW YORK, INC.
810 METROPOLITAN AVENUE
BROOKLYN, NEW YORK

NORTH	SCALE IN FEET	DATE	SOURCE
	0 10 20	5-20-98	8
		DWG # RS0028	FIGURE 2

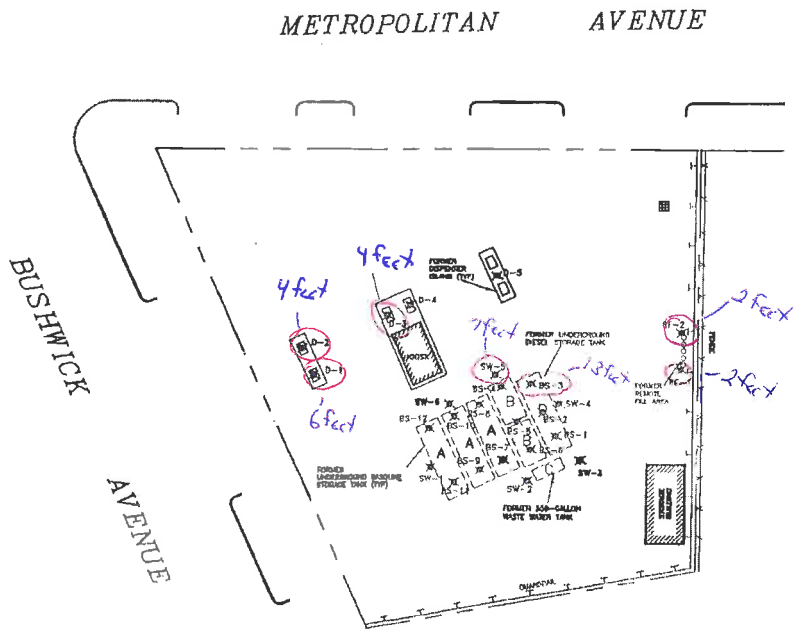
GROUNDWATER & ENVIRONMENTAL SERVICES, INC

LEGEND

DISPENSER ISLAND

UNDERGROUND STORAGE TANK

SAMPLE LOCATION



SITE INFORMATION PLAN
JUNE 1995

MERIT OIL OF NEW YORK, INC.
810 METROPOLITAN AVENUE
BROOKLYN, NEW YORK

NORTH	SCALE IN FEET	DATE	SOURCE
	0 15 30	3-23-98	B
		DWG # RS0028A	FIGURE 3

TABLE 1

SUMMARY OF POST-EXCAVATION SOIL SAMPLE
COLLECTION LOCATIONS AND PID RESPONSE

Merit Gasoline Station
810 Metropolitan Avenue
Brooklyn, New York

LOCATION	DEPTH	I.D.	DATE	PID
Diesel UST - South Bottom	13'	BS-1	6/13/95	84
Diesel UST - Center Bottom	13'	BS-2	6/13/95	54
Diesel UST - North Bottom	13'	BS-3	6/13/95	229
2,000-gal. USTs - South Bottom	13'	BS-4	6/13/95	402
2,000-gal. USTs - Center Bottom	13'	BS-5	6/13/95	263
2,000-gal. USTs - North Bottom	13'	BS-6	6/13/95	134
East 4,000-gal. Gasoline UST - South Bottom	13'	BS-7	6/13/95	69
East 4,000-gal. Gasoline UST - North Bottom	13'	BS-8	6/13/95	27
Center 4,000-gal. Gasoline UST - South Bottom	13'	BS-9	6/13/95	152
Center 4,000-gal. Gasoline UST - North Bottom	13'	BS-10	6/13/95	216
West 4,000-gal. Gasoline UST - South Bottom	13'	BS-11	6/13/95	50
West 4,000-gal. Gasoline UST - North Bottom	13'	BS-12	6/13/95	52
West Sidewall of Excavation	6'	SW-1	6/8/95	146
South Sidewall - West Side Waste Water Tank	8'	SW-2	6/8/95	595
South Sidewall - East Side Waste Water Tank	8'	SW-3	6/8/95	478
East Sidewall of Excavation	7'	SW-4	6/8/95	137
North Sidewall - East Side of Excavation	7'	SW-5	6/8/95	440
North Sidewall - West Side of Excavation	8'	SW-6	6/8/95	921
Diesel Dispenser	6'	D-1	6/8/95	744
West Gasoline Dispenser	4'	D-2	6/8/95	1,735
West Kiosk Gasoline Dispenser	4'	D-3	6/8/95	1,991
East Kiosk Gasoline Dispenser	4'	D-4	6/8/95	27
East Gasoline Dispenser	3.5'	D-5	6/8/95	1,677
Remote Fill - South	2'	RF-1	6/13/95	2,071
Remote Fill - North	2'	RF-2	6/13/95	1,460

TABLE 2

SUMMARY OF POST-EXCAVATION SOIL ANALYTICAL DATA
UST EXCAVATION

Merit Gasoline Station
810 Metropolitan Avenue
Brooklyn, New York

PARAMETERS		BS-1	BS-2	BS-3	BS-4	BS-5	BS-6
VOC (ug/kg)	AGV						
Benzene	**14**	<0.55	<2.80	<0.57	<0.56	<2.70	<2.90
Toluene	**100**	<0.55	<2.80	<0.57	<0.56	<2.70	3.4
Ethylbenzene	**100**	<0.55	<2.80	<0.57	<0.56	<2.70	<2.90
Xylenes	**100**	<1.65	<8.4	<1.67	<1.66	<8.2	15.2
Total BTEX	**NGV**	BDL	BDL	BDL	BDL	BDL	18.6
MTBE	**1,000**	120	500	10	4.0	330	100
Naphthalene	**200**	25	20	<0.57	1.3	3.6	<2.90
n-Propylbenzene	**100**	<0.55	<2.80	<0.57	<0.56	<2.70	3.2
1,3,5-Trimethylbenzene	**100**	<0.55	<2.80	<0.57	<0.56	<2.70	32
1,2,4-Trimethylbenzene	**100**	<0.55	<2.80	<0.57	<0.56	<2.70	7.3
Isopropylbenzene	**100**	<0.55	<2.80	<0.57	<0.56	<2.70	<2.90
P-Isopropyltoluene	**100**	<0.55	<2.80	<0.57	<0.56	<2.70	<2.90
sec-Butylbenzene	**100**	<0.55	<2.80	<0.57	<0.56	<2.70	<2.90
n-Butylbenzene	**100**	<0.55	<2.80	<0.57	<0.56	<2.70	<2.90
n-Propylbenzene	**100**	<0.55	<2.80	<0.57	<0.56	<2.70	3.2

AGV=NYSDEC STARS Alternative Guidance Value
J indicates that result is below method detection limit.
ug/kg is micrograms per kilogram.
BDL is below detection limits as identified in laboratory report.
NGV=no guidance value
MTBE=Methyl-tert-Butyl-Ether
exceedances are in bold

TABLE 2 - CONTINUED

SUMMARY OF POST-EXCAVATION SOIL ANALYTICAL DATA
UST EXCAVATION

Merit Gasoline Station
810 Metropolitan Avenue
Brooklyn, New York

PARAMETERS		BS-1	BS-2	BS-3	BS-4	BS-5	BS-6
BASE NEUTRALS (ug/kg)	**AGV**						
Naphthalene	**200**	<370	<370	**440**	**430**	53 J	130 J
Acenaphthene	**400**	<370	<370	**800**	79 J	<360	120 J
Fluorene	**1,000**	<370	<370	800	81 J	<360	120 J
Phenanthrene	**1,000**	<370	<370	**3,600**	530	230 J	**1,100**
Anthracene	**1,000**	<370	<370	**1,100**	110 J	57 J	270 J
Fluoranthene	**1,000**	<370	<370	**3,600**	660	300 J	**1,400**
Pyrene	**1,000**	<370	<370	**2,800**	590	300 J	**1,400**
Benzo(a)anthracene	**0.04**	<370	<370	**2,100**	**320 J**	170 J	**930**
Chrysene	**0.04**	<370	<370	**1,800**	**340 J**	180 J	**890**
Benzo(b)fluoranthene	**0.04**	<370	<370	**1,500**	**310 J**	160 J	**810**
Benzo(k)fluoranthene	**0.04**	<370	<370	**1,100**	**220 J**	110 J	**670**
Benzo(a)pyrene	**0.04**	<370	<370	**1,500**	**290 J**	140 J	**820**
Indeno(1,2,3-cd)pyrene	**0.04**	<370	<370	**730**	**170 J**	76 J	**470**
Dibenz(a,h)anthracene	**1,000**	<370	<370	450	56 J	<360	210 J
Benzo(g,h,i)perylene	**0.04**	<370	<370	**750**	**190 J**	88 J	**540**

AGV=NYSDEC STARS Alternative Guidance Value
J indicates that result is below method detection limit.
ug/kg is micrograms per kilogram.
BDL is below detection limits as identified in laboratory report.
NGV=no guidance value
MTBE=Methyl-tert-Butyl-Ether
exceedances are in bold

TABLE 2 - CONTINUED

SUMMARY OF POST-EXCAVATION SOIL ANALYTICAL DATA
UST EXCAVATION

Merit Gasoline Station
810 Metropolitan Avenue
Brooklyn, New York

PARAMETERS		BS-7	BS-8	BS-9	BS-10	BS-11	BS-12
VOC (ug/kg)	AGV						
Benzene	**14**	<0.53	<0.52	<2.80	<2.90	<0.53	<0.55
Toluene	**100**	<0.53	<0.52	<2.80	<2.90	<0.53	<0.55
Ethylbenzene	**100**	<0.53	<0.52	<2.80	<2.90	<0.53	<0.55
Xylenes	**100**	<1.63	<1.52	<8.40	<8.70	<1.63	<1.65
Total BTEX	NGV	BDL	BDL	BDL	BDL	BDL	BDL
MTBE	**1,000**	1.0	0.88	290	360	11	3.4
Naphthalene	**200**	0.98	<0.52	4.4	<2.90	2.1	1.2
1,3,5-Trimethylbenzene	**100**	<0.53	<0.52	<2.80	<2.90	<0.53	<0.55
1,2,4-Trimethylbenzene	**100**	<0.53	<0.52	6.9	<2.90	<0.53	0.79
Isopropylbenzene	**100**	<0.53	<0.52	<2.80	<2.90	<0.53	<0.55
P-Isopropyltoluene	**100**	<0.53	<0.52	<2.80	<2.90	<0.53	<0.55
sec-Butylbenzene	**100**	<0.53	<0.52	<2.80	<2.90	<0.53	<0.55
n-Butylbenzene	**100**	<0.53	<0.52	<2.80	<2.90	<0.53	<0.55
n-Propylbenzene	**100**	<0.53	<0.52	<2.80	<2.90	<0.53	0.76

AGV=STARS Alternative Guidance Value
ug/kg is micrograms per kilogram.
BDL is below detection limits as identified in laboratory report.
MTBE=Methyl-tert-Butyl-Ether
exceedances are in bold
NGV=no Guidance Value

TABLE 2 - CONTINUED

SUMMARY OF POST-EXCAVATION SOIL ANALYTICAL DATA
UST EXCAVATION

Merit Gasoline Station
810 Metropolitan Avenue
Brooklyn, New York

PARAMETERS		SW-1	SW-2	SW-3	SW-4	SW-5	SW-6
VOC (ug/kg)	AGV						
Benzene	**14**	<0.58	<2.90	<2.80	<15.0	<61.0	<5.70
Toluene	**100**	0.60	<2.90	<2.80	<15.0	**540**	<5.70
Ethylbenzene	**100**	<0.58	<2.90	<2.80	<15.0	**510**	<5.70
Xylenes	**100**	<1.78	4.8	<8.5	<46.0	**13,200**	<16.7
Total BTEX	NGV	0.60	4.8	BDL	BDL	14,250	BDL
MTBE	**1,000**	3.1	240	120	**3,700**	**11,000**	270
Isopropylbenzene	**100**	<0.58	<2.90	<2.80	<15.0	**140**	<5.70
n-Butylbenzene	**100**	2.0	40	19	<15.0	**3,000**	<5.70
Naphthalene	**200**	2.0	27	84	<15.0	**2,500**	<5.70
n-Propylbenzene	**100**	<0.58	<2.90	<2.80	<15.0	**440**	<5.70
1,3,5-Trimethylbenzene	**100**	1.2	15	6.6	<15.0	**5,100**	<5.70
1,2,4-Trimethylbenzene	**100**	<0.58	<2.90	<2.80	<15.0	**14,000**	14
p-Isopropyltoluene	**100**	<0.58	<2.90	<2.80	<15.0	**160**	<5.70
Tert-butylbenzene	**100**	<0.58	<2.90	<2.80	<15.0	75	<5.70
sec-Butylbenzene	**100**	<0.58	<2.90	<2.80	<15.0	<61.0	<5.70

AGV=STARS Alternative Guidance Value
ug/kg is micrograms per kilogram.
BDL is below detection limits as identified in laboratory report.
MTBE=Methyl-tert-Butyl-Ether
exceedances are in bold
NGV=no Guidance Value

TABLE 3

SUMMARY OF POST-EXCAVATION SOIL ANALYTICAL DATA
REMOTE FILL AND DISPENSER ISLAND EXCAVATIONS

Merit Gasoline Station
810 Metropolitan Avenue
Brooklyn, New York

PARAMETERS		D-1	D-2	D-3	D-4	D-5	RF-1	RF-2
VOC (ug/kg)	AGV							
Benzene	**14**	<1500	**540**	<6000	<0.70	<0.61	<1400	<3000
Toluene	**100**	**1,800**	**8,900**	**52,000**	2.3	<0.61	**17,000**	**3,600**
Ethylbenzene	**100**	**2,900**	**4,400**	**35,000**	<0.70	<0.61	**6,500**	**6,700**
Xylenes	**100**	**107,000**	**49,000**	**650,000**	<0.70	<1.81	**222,000**	**450,000**
Total BTEX	NGV	111,700	62,840	737,000	2.3	BDL	245,500	460,300
Isopropylbenzene	**100**	**2,200**	**1,600**	**14,000**	<0.70	<0.61	**3,900**	<3000
n-Propylbenzene	**100**	<1500	**2,900**	**39,000**	<0.70	<0.61	**7,600**	**4,400**
p-Isopropyltoluene	**100**	**18,000**	**3,000**	<6000	<0.70	<0.61	**4,400**	**8,300**
1,3,5-Trimethylbenzene	**100**	**120,000**	**21,000**	**270,000**	<0.70	<0.61	**59,000**	**120,000**
1,2,4-Trimethylbenzene	**100**	**320,000**	**53,000**	**870,000**	<0.70	<0.61	**190,000**	**390,000**
Tert-butylbenzene	**100**	<1500	<290	<6000	<0.70	<0.61	<1400	<3000
Methyl-tert-butyl ether (MTBE)	**1000**	**5,000**	<290	<6000	<0.70	1.9	<1400	<3000
sec-Butylbenzene	**100**	**13,000**	**4,400**	**32,000**	<0.70	<0.61	**6,500**	<3000
n-Butylbenzene	**100**	<1500	**19,000**	**120,000**	<0.70	<0.61	**24,000**	**86,000**
Naphthalene	**200**	**110,000**	**24,000**	**230,000**	4.1	<0.61	**39,000**	**60,000**

AGV=Alternative Guidance Value
E indicates that result exceeds calibration range.
J indicates that result is below the method detection limit.
- is not sampled for this parameter.
ug/kg is micrograms per kilogram.
BDL is below detection limits as identified in laboratory report.
NGV=No Guidance Value
ug/kg is micrograms per kilogram.
exceedances are in bold

TABLE 3 (continued)

SUMMARY OF POST-EXCAVATION SOIL ANALYTICAL DATA
REMOTE FILL AND DISPENSER ISLAND EXCAVATIONS

Merit Gasoline Station
810 Metropolitan Avenue
Brooklyn, New York

PARAMETERS		D-1	D-2	D-3	D-4	D-5	RF-1	RF-2
Naphthalene	200	9600 E	1,500	-	-	-	-	-
Acenaphthene	400	<390	<780	-	-	-	-	-
Fluorene	1,000	<390	<780	-	-	-	-	-
Phenanthrene	1,000	130 J	2,300	-	-	-	-	-
Anthracene	1,000	<390	430 J	-	-	-	-	-
Fluoranthene	1,000	45 J	1,800	-	-	-	-	-
Pyrene	1,000	60 J	910	-	-	-	-	-
Benzo(a)anthracene	0.04	<390	580 J	-	-	-	-	-
Chrysene	0.04	<390	580 J	-	-	-	-	-
Benzo(b)fluoranthene	0.04	<390	660 J	-	-	-	-	-
Benzo(k)fluoranthene	0.04	<390	460 J	-	-	-	-	-
Benzo(a)pyrene	0.04	<390	520 J	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.04	<390	310 J	-	-	-	-	-
Dibenz(a,h)anthracene	1,000	<390	<780	-	-	-	-	-
Benzo(g,h,i)perylene	0.04	<390	330 J	-	-	-	-	-

AGV=Alternative Guidance Value
E indicates that result exceeds calibration range.
J indicates that result is below the method detection limit.
- is not sampled for this parameter.
ug/kg is micrograms per kilogram.
BDL is below detection limits as identified in laboratory report.
NGV=No Guidance Value
ug/kg is micrograms per kilogram.
exceedances are in bold

Update Report
November 2005 through February 2006
Hess Station 32522 – Metropolitan

NYSDEC #: 95-02757 **810 Metropolitan Avenue**

STATION #: 32522 **Brooklyn, New York**

SUMMARY

In preparation for the extended-period soil vapor extraction (SVE)/air sparge (AS) events as referenced in the Remedial Action Plan (RAP), two (2) AS wells and one (1) SVE well were installed at the above-referenced Hess facility in Brooklyn, New York in January 2006. The locations of AS-1, AS-2 and SVE-1 are depicted in Figure 1. Summit Drilling Company, Inc. of Bridgewater, New Jersey installed the wells utilizing a hollow-stem auger drill rig. Soil samples were collected from five (5) feet below grade (ft. bg.) to approximately 36 ft. bg at each boring for soil characterization and field-screening utilizing a photo-ionization detector (PID) for the detection of volatile organic compounds (VOCs). Groundwater was encountered at approximately 23 ft. bg. at each boring. Geologic logs and well construction details are attached.

A soil sample from the location of AS-1 was submitted to Accutest Laboratories (Accutest) of Dayton, New Jersey and analyzed for VOCs via EPA Method 8260 (STARS List). Laboratory analytical results revealed four (4) target VOCs detected above New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) #4046 Recommended Soil Cleanup Objectives. A summary of soil sampling results and a copy of the laboratory analytical report are attached.

Three (3) extended-period SVE/AS events were conducted on wells MW-4, SVE-1, AS-1 and AS-2 on January 27, February 6 and February 21, 2006 using portable equipment. Air sparging was conducted using AS-1 and AS-2 and soil vapor extraction was conducted using MW-4 and SVE-1. SVE effluent air samples were collected from each injection/extraction scenario for analysis of VOCs using a photo-ionization detector (PID). PID readings from the three (3) events ranged from 136 to 280 parts per million (ppm). A summary of the extended-period SVE/AS events is attached.

All monitoring wells were gauged for depth to water, dissolved oxygen and temperature before and after each SVE/AS event. Oxygen releasing material (ORM) socks were installed in monitoring wells MW-2 and MW-4 following the first event on January 27, 2006. Current dissolved oxygen levels in MW-2 and MW-4 are high and should support aerobic degradation.

The quarterly groundwater sampling of three (3) monitoring wells was conducted on February 24, 2006. Prior to sampling, each monitoring well was gauged and checked for the presence of liquid-phase hydrocarbons (LPH), which were not encountered. Well gauging data is attached. The groundwater samples were submitted to Accutest and analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tertiary-butyl ether (MTBE) via EPA Method 624. A summary of groundwater analytical results is attached. Refer to Figure 1 for total dissolved BTEX and MTBE groundwater concentrations.

BTEX concentrations continue to show decreasing trends in MW-4 as compared to previous groundwater sampling results. MTBE concentrations increased slightly in MW-2 and MW-4. Three (3) additional extended-period SVE/AS events will be conducted prior to the next groundwater sampling event scheduled for June 2006. Additionally, new ORM socks will also be installed in MW-2 and MW-4 during the second quarter of 2006.

HYDROGEOLOGY

Depth To Water:	19.88 – 23.02 ft. below top of casing
Flow Direction:	South

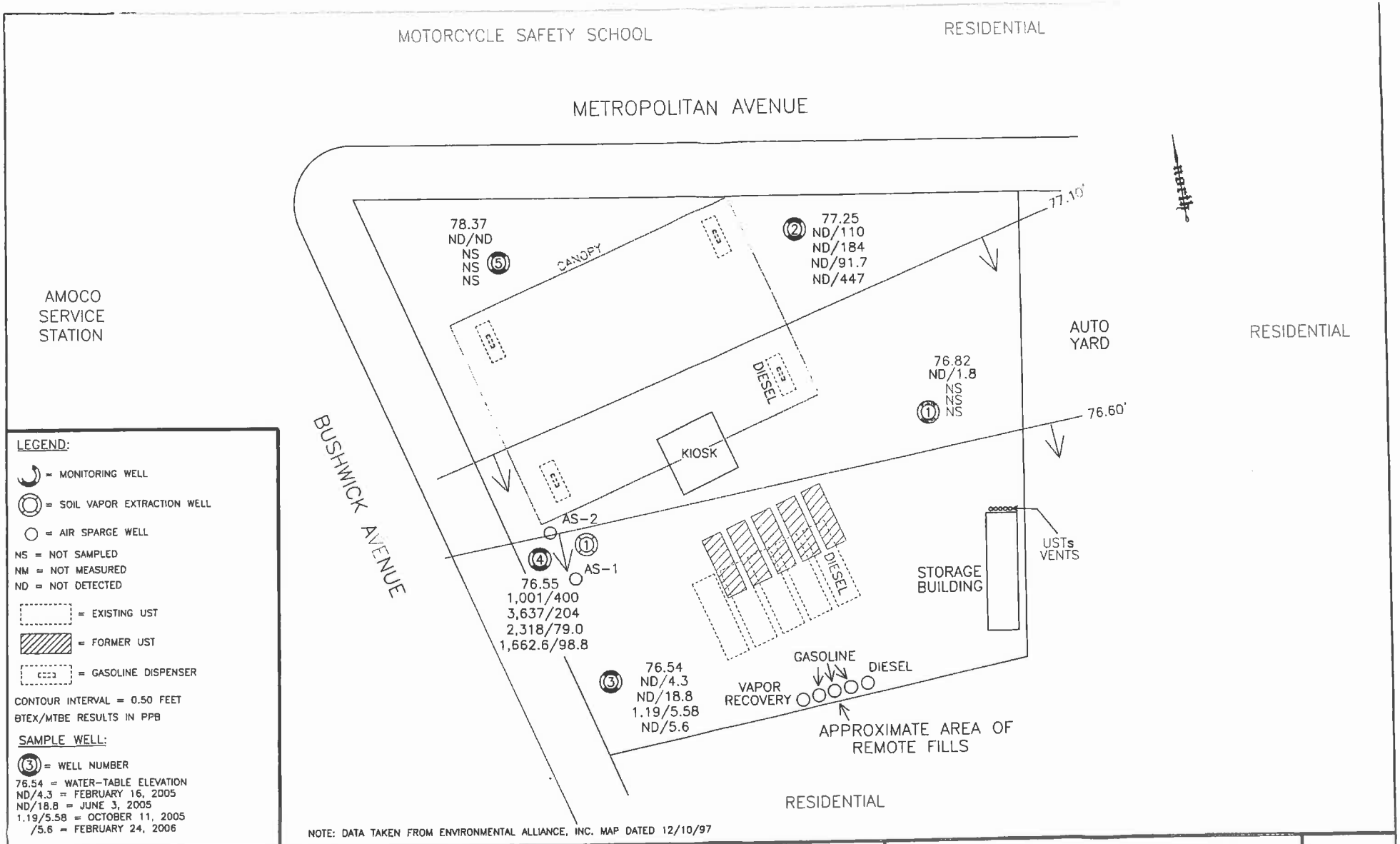
GROUNDWATER SAMPLING

Sample Frequency:	Tri-Annually

Monitoring Wells:	
BTEX (Max.):	1,662.6 ppb (MW-4)
MTBE (Max.):	447 ppb (MW-2)

ATTACHMENTS

Figure 1 – Water Table Elevation February 24, 2006 and Total Dissolved BTEX/MTBE Concentration Map
Figure 2 – Surrounding Properties Map
Figure 3 – Aerial Photograph
Geologic Logs and Well Construction Details
Summary of Soil Sampling Data
Summary of Extended-Period SVE/AS Events
Well Gauging Data
Summary of Groundwater Sampling Data
Laboratory Reports – Soil and Groundwater



EnviroTrac
ENVIRONMENTAL SERVICES
80 B. AIR PARK DRIVE, RONKONKOMA, NEW YORK 11779
PHONE: (631)471-1500 FAX: (631)471-6363

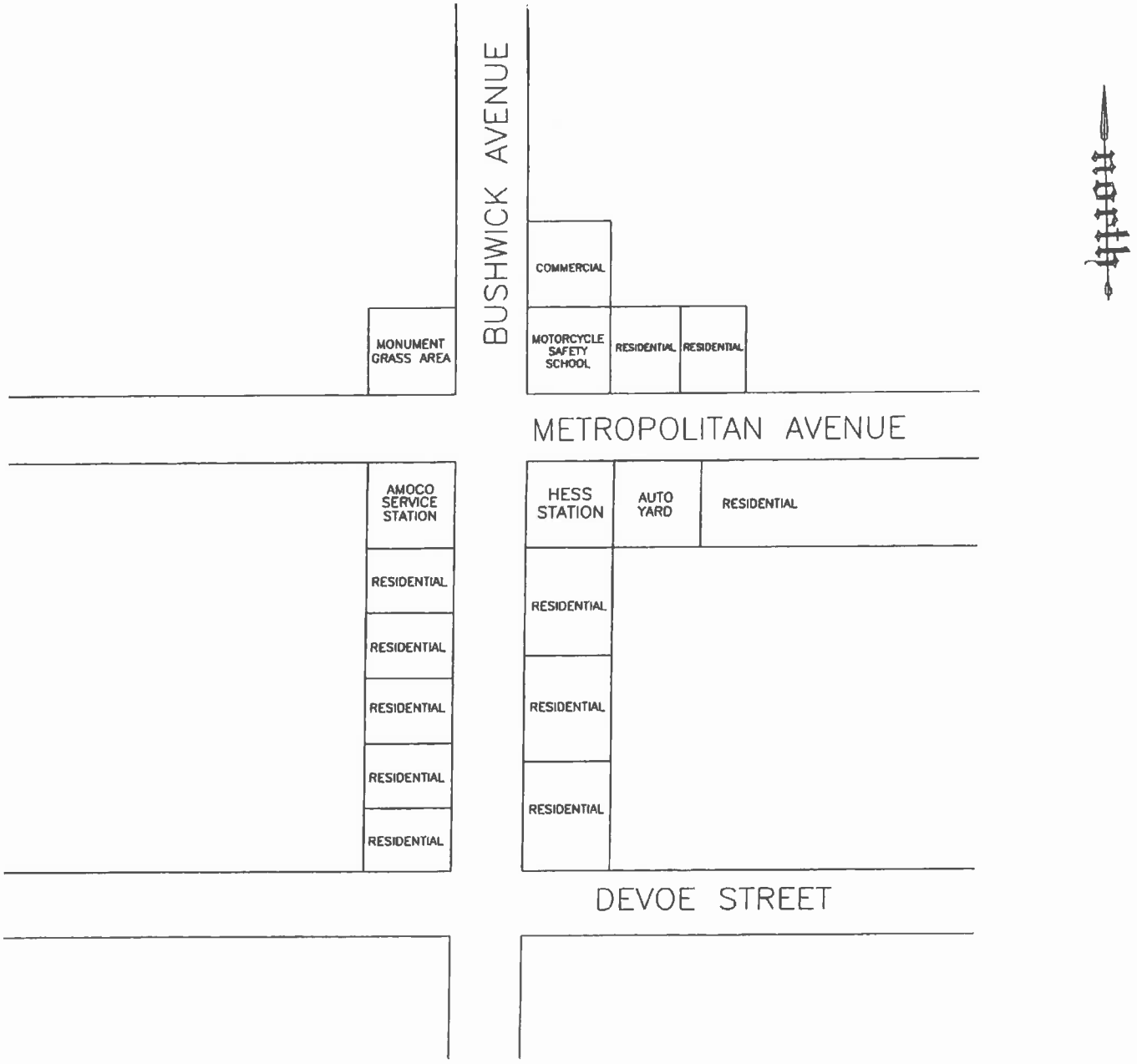
0 FT 20

REVISION DATE: APRIL 4, 2006 | SCALE: 1" = 20' | REVISED BY: TB

HESS STATION #32522 - METROPOLITAN
810 METROPOLITAN AVENUE
BROOKLYN, NEW YORK

WATER-TABLE ELEVATION ON FEBRUARY 24, 2006
AND TOTAL DISSOLVED BTEX/MTBE CONCENTRATION MAP

FIGURE # 1



EnviroTrac
ENVIRONMENTAL SERVICES
80 B. AIR PARK DRIVE, RONKONKOMA, NEW YORK 11779
PHONE: (631)471-1500 FAX: (831)471-8363

SCALE: NOT TO SCALE

REVISION DATE: APRIL 4, 2006

REVISED BY: TB

HESS STATION – METROPOLITAN
810 METROPOLITAN AVENUE
BROOKLYN, NEW YORK

SURROUNDING PROPERTIES MAP

FIGURE # 2

Geologic Log and Well Construction Details

Log of SVE-1

ENVIROTRAC LTD.

80 B Air Park Drive, Ronkonkoma, NY 11779

Client: Amerada Hess Corporation	NYSDEC #: 95-02757	Depth to Water (ft. from measuring pt.)		Site Elevation Datum: NM
Site Name: Hess Station 32522 - Metropolitan	Address: 810 Metropolitan Ave, Brooklyn, NY	Date: 01/04/06	DTW: ~23	
Drilling Company: Summit Drilling Co. Inc.	Method: Hollow Stem Augers			Measuring Point Elevation: NM
Date Started: 01/04/06	Date Completed: 01/04/06			
Completion Depth: 30'	*ENVIROTRAC* Geologist: Kathleen Czamogorski			

WELL CONSTRUCTION (NTS)	DEPTH (ft below grade)	SAMPLES: Recovery (in.)	SAMPLES: Blow per 6 in.	SAMPLES: OVM (ppm)	SOIL DESCRIPTION
SVE-1	0	NA	NA	NM	0'-5' (Cleared with air knife) Asphalt surface. Medium to fine grained brown **SAND** with some gravel and fill material (brick, rocks); dry, no odor.
	5	NM	NM	0	5'-10' Medium to fine grained brown **SAND** with some gravel and fill material (brick, rocks); dry, no odor.
	10	NM	NM	0	10'-15' Coarse to medium grained brown **SAND** with some cobbles; dry, no odor.
	15	NM	NM	0	15'-20' Coarse to medium grained brown **SAND** with some gravel and rock fragments; dry, no odor.
	20	NM	NM	331	20'-25' Coarse to medium grained light brown **SAND** with some gravel; wet at 23', odor.
	25	NM	NM	NM	25'-30' Coarse to medium grained brown **SAND** with some gravel; wet, odor.
	30				

LEGEND:

- Bentonite Seal
- Gravel Pack (mone #2)
- Screen
- End/Top Cap
- Cement
- Native Soil

Well Construction Details

Bottom of Well:	30'
Screen Zone:	15'-30'
Screen material:	20 slot 4" schedule 40 PVC
Casing material:	4" schedule 40 PVC
Gravel Pack:	13'-30'
Bentonite Seal:	10'-13'
Cement Surface:	9" manhole

NTS - Not to Scale ND - Not Detected NM - Not Measured NA - Not Applicable DTW - Depth to Water

Geologic Log and Well Construction Details

Log of AS-1

ENVIROTRAC LTD.

80 B Air Park Drive, Ronkonkoma, NY 11779

Client: Amerada Hess Corporation	NYSDEC #: 95-02757	Depth to Water (ft. from measuring pt.)	Site Elevation Datum
Site Name: Hess Station 32522 - Metropolitan	Address: 810 Metropolitan Ave, Brooklyn, NY	Date: 1/04/2006 / DTW: -23.5	NM
Drilling Company: Summit Drilling Co., Inc.	Method: Hollow Stem Augers		Measuring Point Elevation: NM
Date Started: 01/04/06	Date Completed: 01/04/06		
Completion Depth: 36'	*ENVIROTRAC* Geologist: Kathleen Czamogorski		

WELL CONSTRUCTION (NTS)	DEPTH (ft below grade)	SAMPLES Recovery (in.)	SAMPLES Blow per 6 in.	SAMPLES OVM (ppm)	SOIL DESCRIPTION
AS-1	0	NA	NA	ND	0'-5' (Cleared with air knife) Asphalt surface. Coarse grained brown SAND with some cobbles and gravel; dry, no odor.
	5	NM	NM	ND	5'-10' Coarse grained brown SAND with some cobbles and gravel; dry, no odor.
		30	6, 11, 14, 21	0	10'-12' Fine grained brown SAND with some cobbles and gravel; dry, no odor.
	10	18	21, 30, 47, 32	0	12'-14' Fine grained brown SAND with some cobbles and gravel; dry, no odor.
		18	10, 12, 16, 18	0	14'-16' Medium to fine grained brown SAND with some gravel and rock fragments; dry, no odor.
	15	12	50/4	0	16'-18' Medium to fine grained to silty brown SAND with some cobbles and gravel; dry, no odor.
	20	36	10, 10, 15, 21	0	18'-20' Coarse grained brown SAND with some cobbles and gravel; moist, no odor.
		42	15, 12, 12, 20	0	20'-22' Coarse grained brown SAND with some cobbles and gravel; moist, no odor.
	25	36	16, 12, 11, 12	302	22'-24' Coarse grained light brown SAND with some cobbles; wet at 23.5' odor.
	30	NM	NM	NM	24'-30' Coarse to medium grained brown SAND with some gravel; wet, odor.
		NM	NM	NM	30'-36' Coarse to medium grained brown to gray SAND with some gravel; wet, odor.
	35				

LEGEND:

- Bentonite Seal
- Gravel Pack (morie #2)
- Screen
- End/Top Cap
- Cement
- Native Soil

Well Construction Details

Bottom of Well:	36'
Screen Zone:	34'-36'
Screen material:	20 slot 2" schedule 40 PVC
Casing material:	2" schedule 40 PVC
Gravel Pack:	32'-36'
Bentonite Seal:	30'-32'
Cement Surface:	9" manhole

NTS - Not to Scale ND - Not Detected NM - Not Measured NA - Not Applicable DTW - Depth to Water

Geologic Log and Well Construction Details

Log of AS-2

ENVIROTRAC LTD.

80 B Air Park Drive, Ronkonkoma, NY 11779

Client: Amerada Hess Corporation	NYSDEC #: 95-02757	Depth to Water (ft. from measuring pt.)		Site Elevation Datum: NM
Site Name: Hess Station 32522 - Metropolitan	Address: 810 Metropolitan Ave, Brooklyn, NY	Date: 1/04/2006	DTW: ~22	
Drilling Company: Summit Drilling Co., Inc.	Method: Hollow Stem Augers			Measuring Point Elevation: NM
Date Started: 01/05/06	Date Completed: 01/05/06			
Completion Depth: 36'	*ENVIROTRAC* Geologist: Kathleen Czamogorski			

WELL CONSTRUCTION (NTS)	DEPTH (ft below grade)	SAMPLES Recovery (in.)	SAMPLES Blow per 6 in.	SAMPLES OVM (ppm)	SOIL DESCRIPTION
AS-2	0	NA	NA	ND	0'-5' (Cleared with air knife) Asphalt surface. Medium to fine grained brown **SAND** with some gravel and fill material; dry, no odor.
	5	NM	NM	0	5'-10' Medium to fine grained to silty brown **SAND** with trace gravel; dry, no odor.
	10	NM	NM	0	10'-15' Fine grained to silty brown **SAND** with trace gravel; dry, no odor.
	15	NM	NM	0	15'-20' Coarse to medium grained dark brown **SAND** with cobbles and gravel; dry, no odor.
	20	NM	NM	631	20'-25' Coarse to medium grained brown **SAND** with some cobbles and gravel; wet at 22', odor
	25	NM	NM	NM	25'-30' Coarse to medium grained brown to gray **SAND** with gravel; wet, odor.
	30	NM	NM	NM	30'-36' Coarse to medium grained brown to gray **SAND** with gravel; wet, odor.
	35				

LEGEND:

- Bentonite Seal
- Gravel Pack (morie #2)
- Screen
- End/Top Cap
- Cement
- Native Soil

Well Construction Details

Bottom of Well:	36'
Screen Zone:	34'-36'
Screen material:	20 slot 2" schedule 40 PVC
Casing material:	2" schedule 40 PVC
Gravel Pack:	32'-36'
Bentonite Seal:	30'-32'
Cement Surface:	9" manhole

NTS - Not to Scale ND - Not Detected NM - Not Measured NA - Not Applicable DTW - Depth to Water

Summary of Soil Sampling Results

Hess Station 32522 – Metropolitan

810 Metropolitan Ave
Brooklyn, NY

Compound	AS-1 (22'-24')	NYSDEC TAGM 4046 Soil Cleanup Objectives
Benzene	ND	60
n-Butylbenzene	3,890	18,000
sec-Butylbenzene	1,790	25,000
Ethylbenzene	3,400	5,500
Isopropylbenzene	2,160	2,300
Methyl Tertiary-Butyl Ether	ND	120
Naphthalene	5,270	13,000
n-Propylbenzene	**8,720**	3,700
Toluene	ND	1,500
1,2,4-Trimethylbenzene	**55,300**	13,000
1,3,5-Trimethylbenzene	**15,100**	3,300
m,p-Xylene	**11,300**	800
o-Xylene	1,240	600
tert-Butylbenzene	ND	11,000
4-Isopropyltoluene	1,250	11,000

Samples collected January 4, 2006
EPA Analytical Method 8260 plus MTBE (STARS Compounds Only)
Concentrations presented in parts per billion (ppb)
ND – Compound not detected above the method detection limit
Bold value indicates compound detected above NYSDEC TAGM 4046 Soil Cleanup Objective

Summary of Extended-Period SVE/AS Events

Hess Station 32522 - Metropolitan

810 Metropolitan Avenue

Brooklyn, NY

Date	SVE Well	AS Well	SVE Vacuum ("H_2O)	SVE Flow (cfm)	AS Pressure (psi)	AS Flow (cfm)	SVE Effluent PID (ppm)	SVE Stack Height (feet)	SVE Stack to Kiosk Distance (feet)	SVE Stack to Nearest Off-site Building Distance (feet)
01/27/06	SVE-1	AS-1	48	90	12.5	10	260	8.5	32	40
	MW-4	AS-2	53	63	15.5	8	190	8.5	32	40
02/06/06	MW-4	AS-1	52	62	12	8.5	170	8.5	32	40
	SVE-1	AS-2	48	85	14.5	6	280	8.5	32	40
02/21/06	MW-4	AS-1	52	65	12	8	136	8.5	32	40
	SVE-1	AS-2	33	112	11	15	230	8.5	32	40

Geologic Log of SB-1

ENVIROTRAC LTD.

5 Old Dock Road, Yaphank, NY 11980

Client: Hess Corporation	NYSDEC #'s: 95-02757
Site Name: Hess Station #32522 - Metropolitan	Address: 810 Metropolitan Avenue, Brooklyn, NY
Drilling Company: Associated Environmental Services	Method: Geoprobe 6620DT - Direct Push
Date Started: 11/14/2008	Date Completed: 11/14/2008
Completion Depth: 25'	*ENVIROTRAC* Geologist: Kathy Green

DEPTH (ft below grade)	SAMPLES			SOIL DESCRIPTION
	Recovery (ft.)	Blow per 6 in.	PID (ppm)	
0	NA	NA	NM	0-5' Hand cleared, asphalt surface, brown medium sand with some fill material (red brick, cobble, and gravel), dry, no odor
5	4	NA	0	5-10' Brown, medium sand with trace gravel and pebble, moist, no odor
10	5	NA	0	10-15' Top 3.5' - Brown medium to fine sand with trace pebble and gravel, moist, no odor Bottom 1.5' - Light greyish brown stained, medium to fine sand with trace gravel and pebble, moist, no odor
15	5	NA	0	15-20' Grey stained, medium to coarse sand, moist to wet, slight odor **Water at ~18.5'**
20	2	NA	0	20-25' Light greyish brown, medium to coarse sand with trace pebble, wet, no odor
25				

NM - Not Measured NA - Not Applicable

Geologic Log of SB-2

ENVIROTRAC LTD.

5 Old Dock Road, Yaphank, NY 11980

Client: Hess Corporation	NYSDEC #'s: 95-02757
Site Name: Hess Station #32522 - Metropolitan	Address: 810 Metropolitan Avenue, Brooklyn, NY
Drilling Company: Associated Environmental Services	Method: Geoprobe 6620DT - Direct Push
Date Started: 11/14/2008	Date Completed: 11/14/2008
Completion Depth: 25'	*ENVIROTRAC* Geologist: Kathy Green

DEPTH (ft below grade)	SAMPLES			SOIL DESCRIPTION
	Recovery (ft.)	Blow per 6 in.	PID (ppm)	
0	NA	NA	NM	0-5' Hand cleared, asphalt surface, bluestone gravel and brown medium sand, dry, no odor
5	5	NA	0	5-10' Brown, medium to fine sand with trace gravel, moist, no odor
10	5	NA	0	10-15' Orangish brown, medium to coarse sand with trace pebble, moist, no odor
15	5	NA	0	15-20' Orangish brown, medium to coarse sand with trace pebble, moist to wet, no odor **Water at ~18'**
20	5	NA	0 607	20-25' Top 3.5' - Orangish brown, medium to coarse sand, wet, no odor Bottom 1.5' - Greyish brown, medium to coarse sand with trace gravel, wet, odor
25				

NM - Not Measured NA - Not Applicable

Geologic Log of SB-3

ENVIROTRAC LTD.

5 Old Dock Road, Yaphank, NY 11980

Client: Hess Corporation	NYSDEC #'s: 95-02757
Site Name: Hess Station #32522 - Metropolitan	Address: 810 Metropolitan Avenue, Brooklyn, NY
Drilling Company: Associated Environmental Services	Method: Geoprobe 6620DT - Direct Push
Date Started: 11/14/2008	Date Completed: 11/14/2008
Completion Depth: 30'	*ENVIROTRAC* Geologist: Kathy Green

DEPTH (ft below grade)	SAMPLES Recovery (ft.)	Blow per 6 in.	PID (ppm)	SOIL DESCRIPTION
0	NA	NA	NM	0-5' Hand cleared, asphalt surface, brown, medium sand with some backfill material (brick, gravel and cobble), dry, no odor
5	5	NA	0	5-10' Top 4' - Orangish brown, medium sand with trace gravel, moist, no odor Bottom 1' - Greyish brown, mediuim sand with trace gravel, moist slight odor
10	5	NA	0	10-15' Brown, medium sand with trace gravel, moist, no odor
15	4	NA	0	15-20' Brown, medium sand with trace gravel and brick, moist to wet, no odor **Water at ~16'**
20	3.5	NA	17	20-25' Top 2.5' - Brown, medium sand with trace pebble and mica, wet, no odor
25			382	Bottom 1' - Grey stained, medium sand with trace pea gravel, wet odor
30	2.0	NA	0	25-30' Top 1' and bottom 0.5' - Brown, medium to coarse sand with trace pebble, wet, no odor
			607	Middle 1' - 1.5' - Grey stained, coarse sand with pebble, wet, odor

NM - Not Measured NA - Not Applicable

TABLE 1
Summary of Soil Quality Data for VOCs in Soil Borings
Hess Station #32522
810 Metropolitan Avenue,
Brooklyn, New York

Analytical Parameters	SB-1 15-18 fbg	SB-1 20-25 fbg	SB-2 15-18 fbg	SB-2 23.5-25 fbg	SB-3 12.5-15 fbg	SB-3 29-30 fbg	NYSDEC Recommended Soil Cleanup Objectives
Benzene	0.82 J	ND	ND	ND	ND	<130	**60**
Toluene	9.7	1.2	0.57 J	0.80 J	ND	ND	**1,500**
Ethylbenzene	2.7	0.62 J	0.67 J	6.2	ND	4,190	**5,500**
o-Xylene	2.8	0.63 J	0.55 J	8.7	ND	3,880	**600**
m,p-Xylene	8.1	2.0 J	2.0	34.8	ND	12,100	**1,200**
Total Xylene	10.9	2.6	2.5	43.5	ND	16,000	**1,200**
MTBE	16.7	9.8	ND	ND	ND	ND	**120**
Isopropylbenzene	ND	ND	ND	31.2	ND	3,950	**2,300**
n-Propylbenzene	0.79 J	ND	ND	188	ND	16,800	**3,700**
1,3,5-Trimethylbenzene	1.2 J	0.65 J	ND	181 J	ND	23,400	**3,300**
1,2,4-Trimethylbenzene	3.5 J	1.2 J	0.71 J	807	ND	72,900	**13,000**
sec-Butylbenzene	ND	ND	ND	52.5	ND	3,790	**25,000**
p-Isopropyltoluene	ND	ND	ND	44.6	ND	2,660	**11,000**
n-Butylbenzene	ND	ND	ND	154	ND	6,880	**18,000**
Naphthalene	5.6 J	ND	ND	303	ND	8,060	**13,000**
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	**11,000**

Notes:
1. Samples collected on November 14, 2008
2. Concentration units = ug/Kg (micrograms per kilogram)
3. Laboratory analysis via EPA Method 8260 STARS
4. J = Estimated Value
5. ND = Not Detected
6. fbg = Feet Below Grade

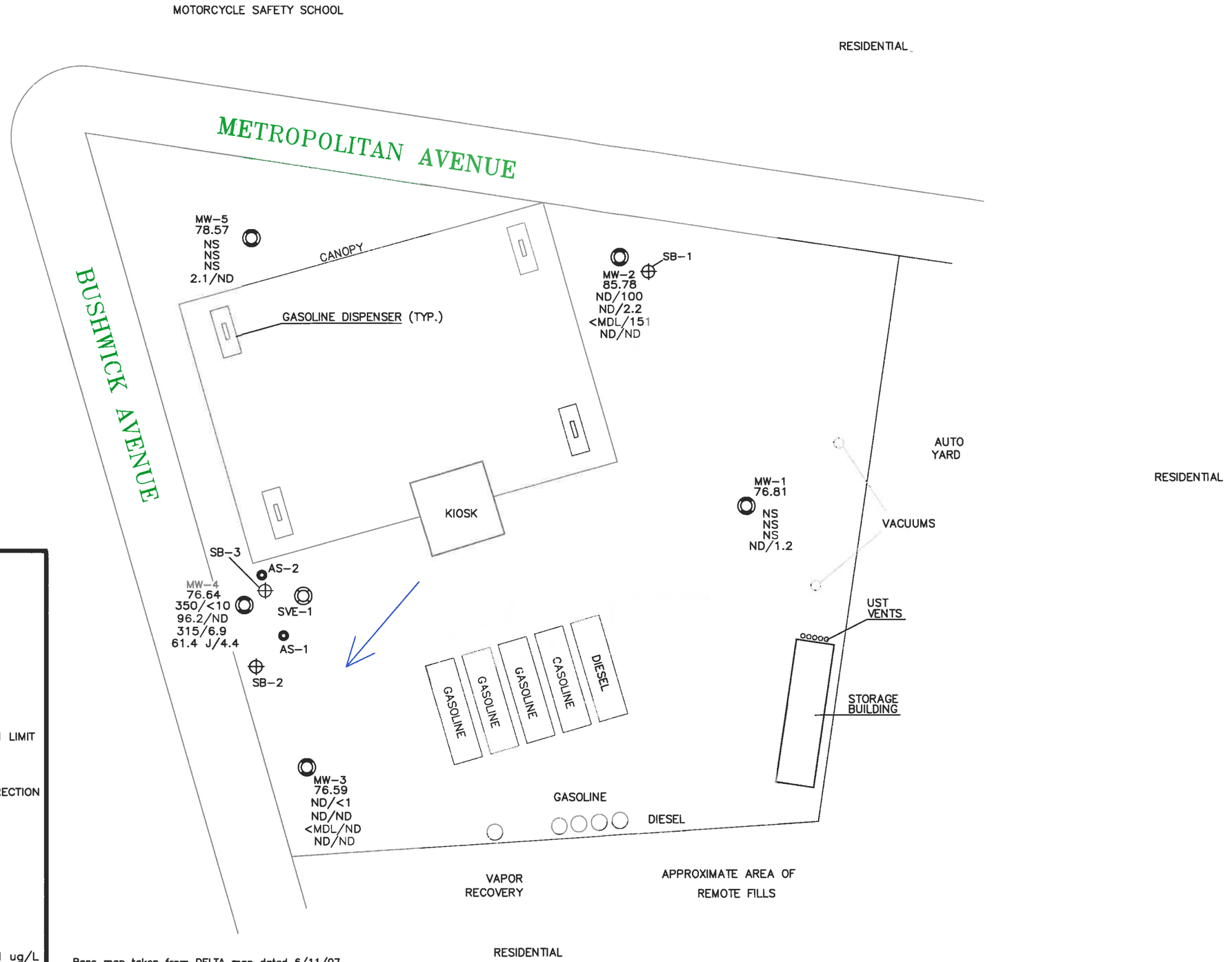
TABLE 2
Summary of Soil Quality Data for SVOCs in Soil Borings
Hess Station #32522
810 Metropolitan Avenue,
Brooklyn, New York

Analytical Parameters	SB-1 15-18 fbg	SB-1 20-25 fbg	SB-2 15-18 fbg	SB-2 23.5-25 fbg	SB-3 12.5-15 fbg	SB-3 29-30 fbg	NYSDEC Recommended Soil Cleanup Objectives
Acenaphthene	ND	ND	ND	ND	ND	ND	**50,000**
Anthracene	ND	ND	ND	ND	ND	ND	**50,000**
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	**224**
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	**61**
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	**1,100**
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	**50,000**
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	**1,100**
Chrysene	ND	ND	ND	ND	ND	ND	**400**
Dibenzo(a,h)anthracene	<18	<18	<17	<18	<18	<19	**14**
Fluoranthene	ND	ND	ND	ND	19.7 J	ND	**50,000**
Fluorene	ND	ND	ND	ND	ND	ND	**50,000**
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	**3,200**
Naphthalene	ND	ND	ND	35.9 J	ND	213	**13,000**
Phenanthrene	ND	ND	ND	ND	ND	20.1 J	**50,000**
Pyrene	ND	ND	ND	ND	ND	ND	**50,000**

Notes:
1. Samples collected on November 14, 2008
2. Concentration units = ug/Kg (micrograms per kilogram)
3. Laboratory analysis via EPA Method 8270 STARS
4. ND = Not Detected
5. J = Estimated Value
6. fbg = Feet Below Grade

north

SHELL SERVICE STATION
2 BUSHWICK AVE.
BROOKLYN, NY



LEGEND:

- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- AIR SPARGE WELL
- SOIL BORING LOCATION

NS = NOT SAMPLED
NM = NOT MEASURED
ND = NOT DETECTED
J = ESTIMATED VALUE
<MDL = LESS THAN METHOD DETECTION LIMIT
CONTOUR INTERVAL = 1.00 FEET

INFERRED GROUND WATER FLOW DIRECTION

SAMPLE WELL:

MW-2 = MONITORING WELL ID
85.78 = WATER-TABLE ELEVATION
ND/100 = OCTOBER 5, 2007
ND/2.2 = FEBRUARY 12, 2008
<MDL/151 = JUNE 13, 2008
ND/ND = OCTOBER 31, 2008

TOTAL BTEX/MTBE CONCENTRATIONS IN ug/L

Base map taken from DELTA map dated 6/11/07

EnviroTrac
ENVIRONMENTAL SERVICES
5 OLD DOCK ROAD, YAPHANK, NEW YORK 11980
PHONE: (631)924-3001 FAX: (631)924-5001

0 10 FT 20

REVISION DATE: NOVEMBER 17, 2008 | SCALE: 1" = 20 FEET | REVISED BY: TB

HESS STATION # 32522
810 METROPOLITAN AVENUE
BROOKLYN, NEW YORK

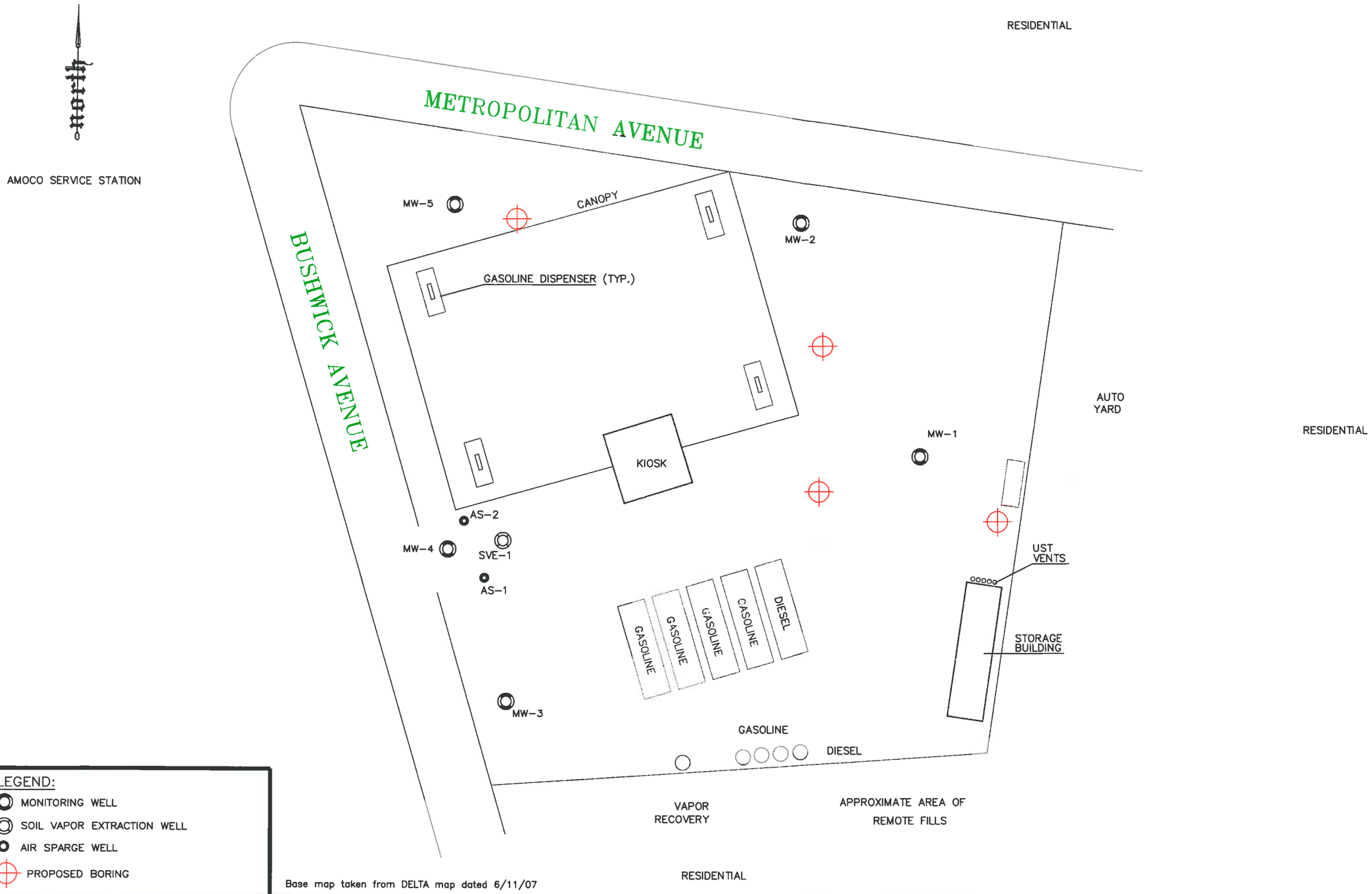
WATER-TABLE ELEVATION ON OCTOBER 31, 2008 AND TOTAL BTEX/MTBE CONCENTRATIONS MAP

FIGURE # 2

APPENDIX B

SITE PLAN

PROPOSED BORINGS



LEGEND:

- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- AIR SPARGE WELL
- PROPOSED BORING

Base map taken from DELTA map dated 6/11/07

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REVISION DATE: JULY 17, 2009 | SCALE: 1" = 20 FEET | REVISED BY: TB

HESS STATION # 32522
810 METROPOLITAN AVENUE
BROOKLYN, NEW YORK

PROPOSED BORING LOCATIONS

FIGURE # 1