

Spill Closure Report

December 2002

Hess Station # 32528 – Former Merit Ralph

NYSDEC #'s 93-03355

1885 Atlantic Avenue

00-00590, 01-05801

Brooklyn, New York

SITE HISTORY

November 1992 – Spill # 92-09626 was assigned following a tank test failure.

March 1993 – Five soil borings were completed by Groundwater & Environmental Services, Inc. of Wall, New Jersey (GES) in response to Spill # 92-09626. The soil borings were advanced to 25 feet below grade utilizing the air rotary drilling method. Each boring location was within 15 feet of the tank field. A soil sample from each of the five borings was collected and analyzed for total petroleum hydrocarbons (TPH). Sampling results indicated concentrations ranging from 35.8 to 71.0 parts per million (ppm). Figures, tables and boring logs from a Site Investigation Report prepared by GES dated 21 April 1993 are attached.

June 1993 - Spill # 93-03355 was assigned following a tank test failure. Four 4,000-gallon gasoline single-wall steel underground storage tanks (USTs), two 2,000-gallon gasoline single-wall steel USTs, one 550-gallon wastewater single-wall steel UST, ten 550-gallon unknown gasoline single-wall steel USTs, all associated product piping and dispenser islands were removed from the site. One 550-gallon unknown gasoline single-wall steel UST was abandoned in place with concrete slurry. Approximately 980 tons of impacted soil were removed during construction activities. A total of sixteen soil samples were collected by GES. Volatile organic compounds (VOCs) were not detected above New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) 4046 Soil Cleanup Objectives in any of the soil samples. Figures and tables from a Site Investigation Report/Underground Storage Tank Closure report prepared by GES dated June 27, 1994 are attached.

October 1993 – One soil boring was completed by GES. The soil boring was advanced to 53 feet below grade and groundwater was not encountered. One soil sample was collected from the boring and submitted for laboratory analysis. VOCs were not detected above NYSDEC TAGM 4046 Soil Cleanup Objectives in the soil sample.

March 1994 – Nine soil borings were completed by GES. The borings were advanced around the former locations of the known and unknown tank fields and groundwater was not encountered. Two soil samples were collected from each boring and submitted for laboratory analysis. Of the 18 soil samples collected, VOCs were detected above NYSDEC TAGM 4046 Soil Cleanup Objectives in only the shallow sample of boring SB1. Boring SB1 is vertically delineated by the deep sample, which did not indicate VOCs above NYSDEC TAGM 4046 Soil Cleanup Objectives. Figures, tables and boring logs from a Site Assessment Report prepared by GES dated November 2, 1994 are attached.

July 1994 – Spill # 92-09626 was closed by the NYSDEC based on its review of the Site Investigation Report.

March 1995 – Four soil borings were completed by GES for the purpose of installing soil vapor extraction (SVE) points. Groundwater was not encountered in any of the four borings. Soil samples collected were submitted for laboratory analysis. VOCs were not detected above NYSDEC TAGM 4046 Soil Cleanup Objectives in any of the soil samples. A map depicting the locations of the installed SVE points and a table summarizing results of the soil sampling are attached.

April 2000 – Spill # 00-00590 was assigned. The cause of the spill is listed as "Other" on the NYSDEC Spills Database.

March 2001 – EnviroTrac Ltd. (ET) conducted a site visit to screen the Kiosk, the storage room and any utility manhole accesses with a photoionization detector (PID). A total of two catch basins were observed on the site. VOCs were not detected by the PID in either catch basin. Screening of the ambient air in the Kiosk and the storage room indicated not-detectable concentrations of VOCs. Surrounding properties were identified and placed on a surrounding properties map. In addition, a computerized environmental report (CER) was reviewed for surrounding properties and sensitive receptors within a quarter mile of the site. Findings from the site visit as well as the CER are summarized in a Summary of Site Inspection and Computerized Environmental Report prepared by ET dated October 5, 2001.

August 2001 – Spill # 01-05801 was assigned. The cause of the spill is listed as “Unknown” on the NYSDEC Spills Database.

SENSITIVE RECEPTORS

According to a Well Report prepared by Toxics Targeting dated July 26, 2001, nine churches, three schools and one park/playground exist within a 1/4-mile radius of the site. No wells, waterbodies or wetlands were identified within a 1/4-mile radius of the site.

ACTION PLAN

Limited VOC contamination exists at the site. The extent of the contamination has been delineated. Groundwater was not encountered in borings installed to a depth of 55 feet. A clean soil horizon has been established from 22 feet to 55 feet.

On August 29, 2002 Amerada Hess Corporation (Hess) and the NYSDEC met to review site history. Following review of available site data, the NYSDEC determined that the site was a candidate for closure and requested the submittal of this Spill Closure Report. Based on soil and groundwater sampling data, Hess requests closure of Spill #'s 93-03355, 00-00590 and 01-05801.

ATTACHMENTS

Site Photo-documentation

Figures, tables and boring logs from Site Investigation Report dated 21 April 1993

Figures and tables from Site Investigation Report/Underground Storage Tank Closure Report dated June 27, 1994

Figures, tables and boring logs from Site Assessment Report dated November 2, 1994

Site Information Plan March 1995

Soil Vapor Extraction Point Installation Table

Summary of Site Inspection and Computerized Environmental Report

Toxics Targeting Well Report

Spill Information Sheets from NYSDEC Database

Site Photo-documentation

Hess Station 32528

1885 Atlantic Avenue

Brooklyn, NY



Looking northeast at Station



Looking northwest at Station



Looking west at Station and Commercial buildings



Looking southeast at rear of Station



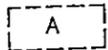
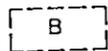
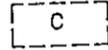
Looking east from Station at Church

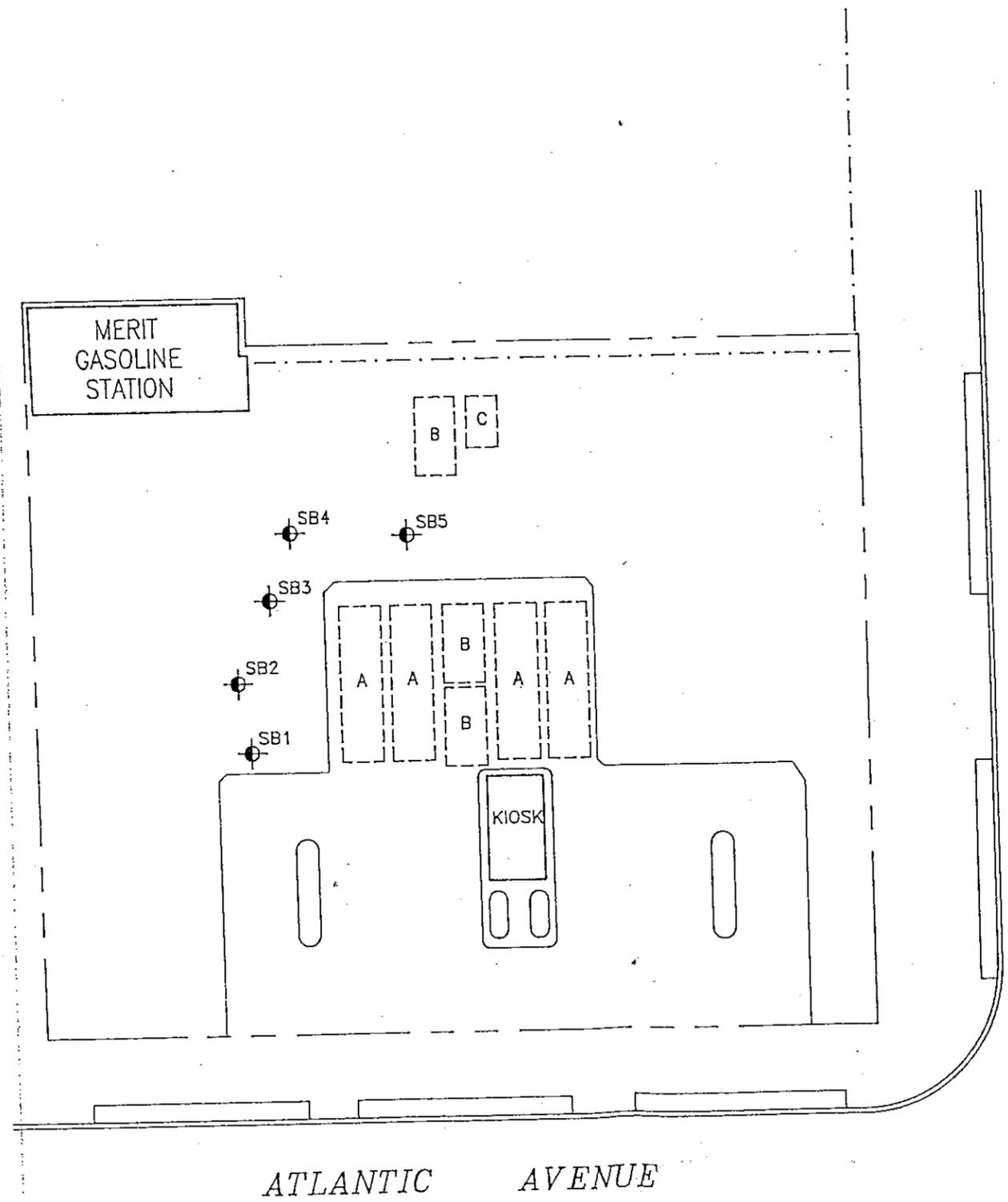


Looking southeast from Station at GP Petro Gasoline Station

**Figures, Tables and Boring Logs from Site Investigation Report
dated 21 April 1993**

LEGEND

-  PUMP ISLAND
-  FENCE
-  SOIL BORING LOCATION
-  4,000 GAL UNDERGROUND STORAGE TANK
-  2,000 GAL UNDERGROUND STORAGE TANK
-  550 GAL UNDERGROUND STORAGE TANK



SITE PLAN			
SERVICE STATION # RALPH			
MERIT GASOLINE STATION 1885 ATLANTIC AVENUE BROOKLYN, NEW YORK			
NORTH 	SCALE IN FEET	DATE	SOURCE
		7-1-93	B
		DWG #	FIGURE
		RS0011	



TABLE 1
SOIL BORING ANALYTICAL DATA
MERIT SERVICE STATION RALPH
1885 ATLANTIC AVENUE
BROOKLYN, NEW YORK

(All results in parts per million)

23 March 1993

Location	TPH	Depth Below Grade
SB-1	71.0	14.5-15 feet
SB-2	53.6	16-16.5 feet
SB-3	48.6	15.5-16 feet
SB-4	47.8	15.5-16 feet
SB-5	114	11-11.5 feet

TPH = Total Petroleum Hydrocarbons

Groundwater & Environmental Services, Inc.

Project: Merit Ralph

Owner: Merit Oil of New York, Inc.

Boring: SB-1

Total Depth: 25' Diameter: 6"

Location: 1885 Atlantic Avenue
Brooklyn, NY

Water Level Initial: N/A

Drilling Method: Air Rotary

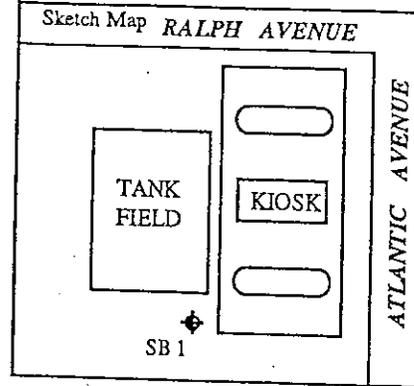
Sample Method: Split Spoon

Driller: Summit Drilling Co.

Log By: Donald Griffin

Date: 3/23/93

BORING LOG



Depth (feet)	PID (units)	Blow Count	Lithology
1	1.2		0-1' ASPHALT and STONE
2			1'-7' Light brown fine to medium SAND, with trace Silt, trace rounded and angular coarse gravel.
3			
4			
5			
6	1.5	7,13,13,17	5'-17' Light brown fine to medium SAND, with trace Silt, trace rounded and angular coarse gravel.
7			
8	2.5	14,19,23,24	
9			
10	58	19,21,50/4"	
11			
12	210	14,17,16,16	
13			
14	135	22,25,27,29	14.5'-15' SOIL SAMPLE OBTAINED AT THIS DEPTH
15			
16	45	27,24,32,23	
17			
18	25	13,19,23,23	17'-25' Brown fine to medium SAND with some Silt, trace angular gravel.
19			
20	15	21,21,23,22	
21			
22	15	24,27,26,26	
23			
24	10	26,26,17,21	
25			
26			END BOREHOLE AT 25'
27			
28			
29			

Groundwater & Environmental Services, Inc.

Project: Merit Ralph

Owner: Merit Oil of New York, Inc.

Boring: SB-2

Total Depth: 25' Diameter: 6"

Location: 1885 Atlantic Avenue
Brooklyn, NY

Water Level Initial: N/A

Drilling Method: Air Rotary

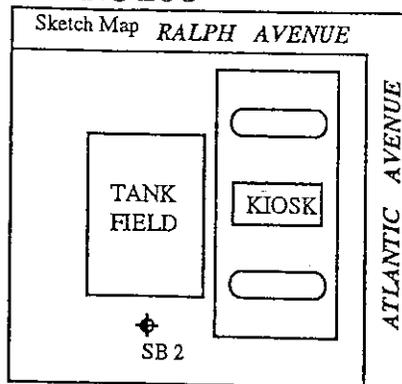
Sample Method: Split Spoon

Driller: Summit Drilling Co.

Log By: Donald Griffin

Date: 3/23/93

BORING LOG



Depth (feet)	PID (units)	Blow Count	Lithology
0-1'			ASPHALT and STONE
1-5'			Brown fine to medium SAND, with some Silt, trace rounded and angular small gravel.
6	0	15,21,23,21	5'-25' Brown fine to medium SAND, with some Silt, trace rounded and angular small gravel.
7			
8			
9			
10			
11	0	10,32,27,21	
12			
13	0	23,27,33,35	
14			
15	0	22,22,24,24	
16			
17	3	41,39,34,50/3"	16'-16.5' SOIL SAMPLE OBTAINED AT THIS DEPTH
18			
19	0	21,23,23,23	
20			
21	0	19,21,27,34	
22			
23			
24	0	17,20,22,24	
25			
26			END BOREHOLE AT 25'
27			
28			
29			



Groundwater & Environmental Services, Inc.

Project: Merit Ralph

Owner: Merit Oil of New York, Inc.

Boring: SB-3

Total Depth: 25' Diameter: 6"

Location: 1885 Atlantic Avenue
Brooklyn, NY

Water Level Initial: N/A

Drilling Method: Air Rotary

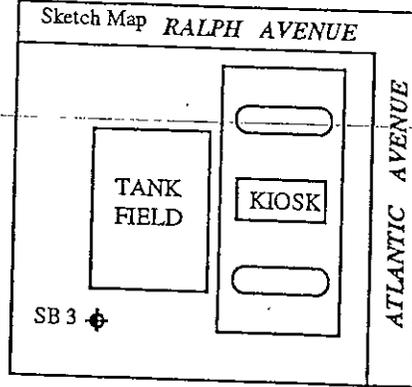
Sample Method: Split Spoon

Driller: Summit Drilling Co.

Log By: Donald Griffin

Date: 3/23/93

BORING LOG



Depth (feet)	PID (units)	Blow Count	Lithology
1			0-1' ASPHALT and STONE
2			1'-10' Brown fine to medium SAND, with some Silt, trace rounded and angular small gravel.
3			
4			
5			
6	0	19,17,24,28	
7			
8			
9			
10			
11	0	14,19,23,21	10'-25' Brown fine to medium SAND, with some Silt, trace rounded and angular small gravel.
12			
13	0	16,22,19,24	
14			
15	0	24,29,27,28	
16			
17	0	23,21,19,27	15.5'-16' SOIL SAMPLE OBTAINED AT THIS DEPTH
18			
19	0	31,32,27,34	
20			
21	0	23,37,48,41	
22			
23			
24	0	30,33,29,36	
25			
26			END BOREHOLE AT 25'
27			
28			
29			

Groundwater & Environmental Services, Inc.

BORING LOG

Project: Merit Ralph

Owner: Merit Oil of New York, Inc.

Boring: SB-4

Total Depth: 25' Diameter: 6"

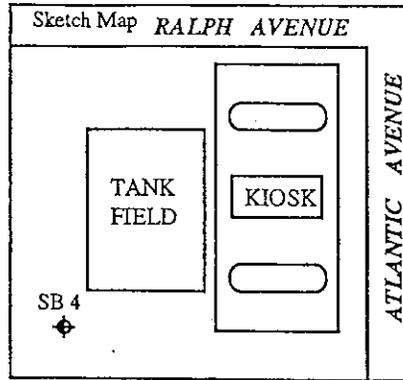
Location: 1885 Atlantic Avenue
Brooklyn, NY

Water Level Initial: N/A

Drilling Method: Air Rotary

Sample Method: Split Spoon

Driller: Summit Drilling Co.



Log By: Donald Griffin

Date: 3/23/93

Depth (feet)	PID (units)	Blow Count	Lithology
0-1'			ASPHALT and STONE
1-5'			Brown fine to medium SAND, with some Silt, trace rounded and angular small gravel.
5'-25'	0	27,31,50/1"	Brown fine to medium SAND, with some Silt, trace rounded and angular small gravel.
11'	0	17,23,26,26	
13'	0	21,24,27,27	
15'	0	18,41,37,34	
15.5'-16'	0	22,27,31,34	SOIL SAMPLE OBTAINED AT THIS DEPTH
19'	0	23,27,31,32	
24'	0	29,34,31,29	
25'			END BOREHOLE AT 25'
26'			
27'			
28'			
29'			



Groundwater & Environmental Services, Inc.

Project: Merit Ralph

Owner: Merit Oil of New York, Inc.

Boring: SB-5

Total Depth: 25' Diameter: 6"

Location: 1885 Atlantic Avenue
Brooklyn, NY

Water Level Initial: N/A

Drilling Method: Air Rotary

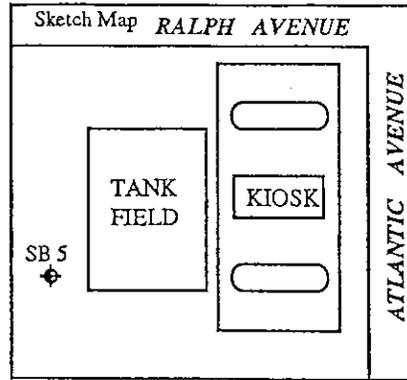
Sample Method: Split Spoon

Driller: Summit Drilling Co.

Log By: Donald Griffin

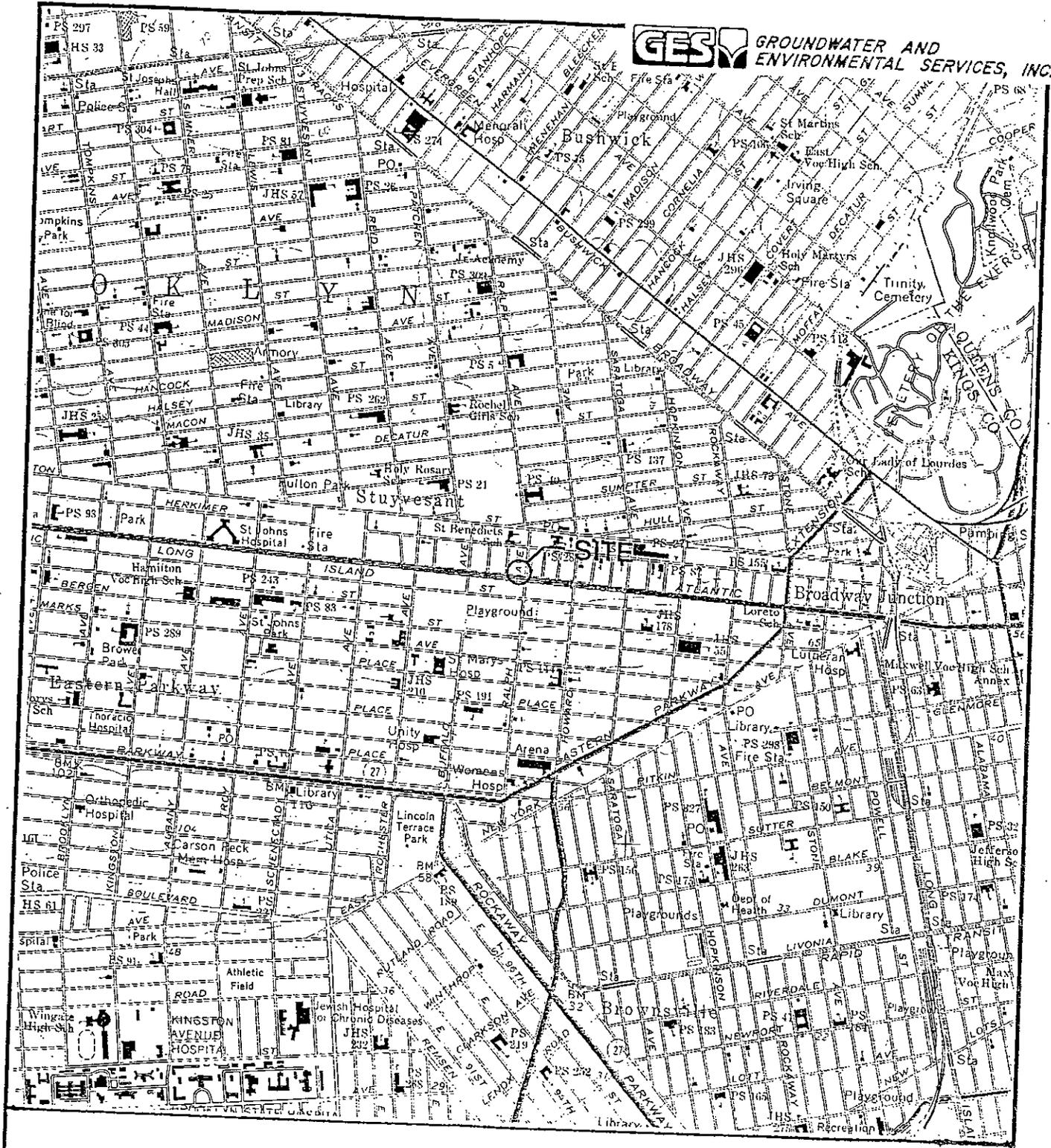
Date: 3/23/93

BORING LOG

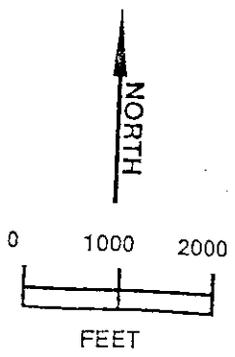


Depth (feet)	PID (units)	Blow Count	Lithology
0-1'			ASPHALT and STONE
1'-5'			Brown fine to medium SAND, with some Silt, trace rounded and angular small gravel.
5'-25'	20	9,14,21,16	Brown fine to medium SAND, with some Silt, trace rounded and angular small gravel.
11'-11.5'	22	10,13,21,20	SOIL SAMPLE OBTAINED AT THIS DEPTH
		17,23,50/1"	
		19,23,50/3"	
	0	36,50/2"	
	0	27,24,50/1"	
	0	27,37,50/2"	
			END BOREHOLE AT 25'

**Figures and Tables from Site Investigation/Underground Storage
Tank Closure Report dated June 27, 1994**



SITE LOCATION MAP
MERIT RALPH
1885 ATLANTIC AVENUE & RALPH AVENUE
BROOKLYN, NEW YORK

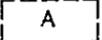
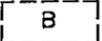
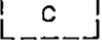
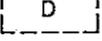
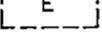


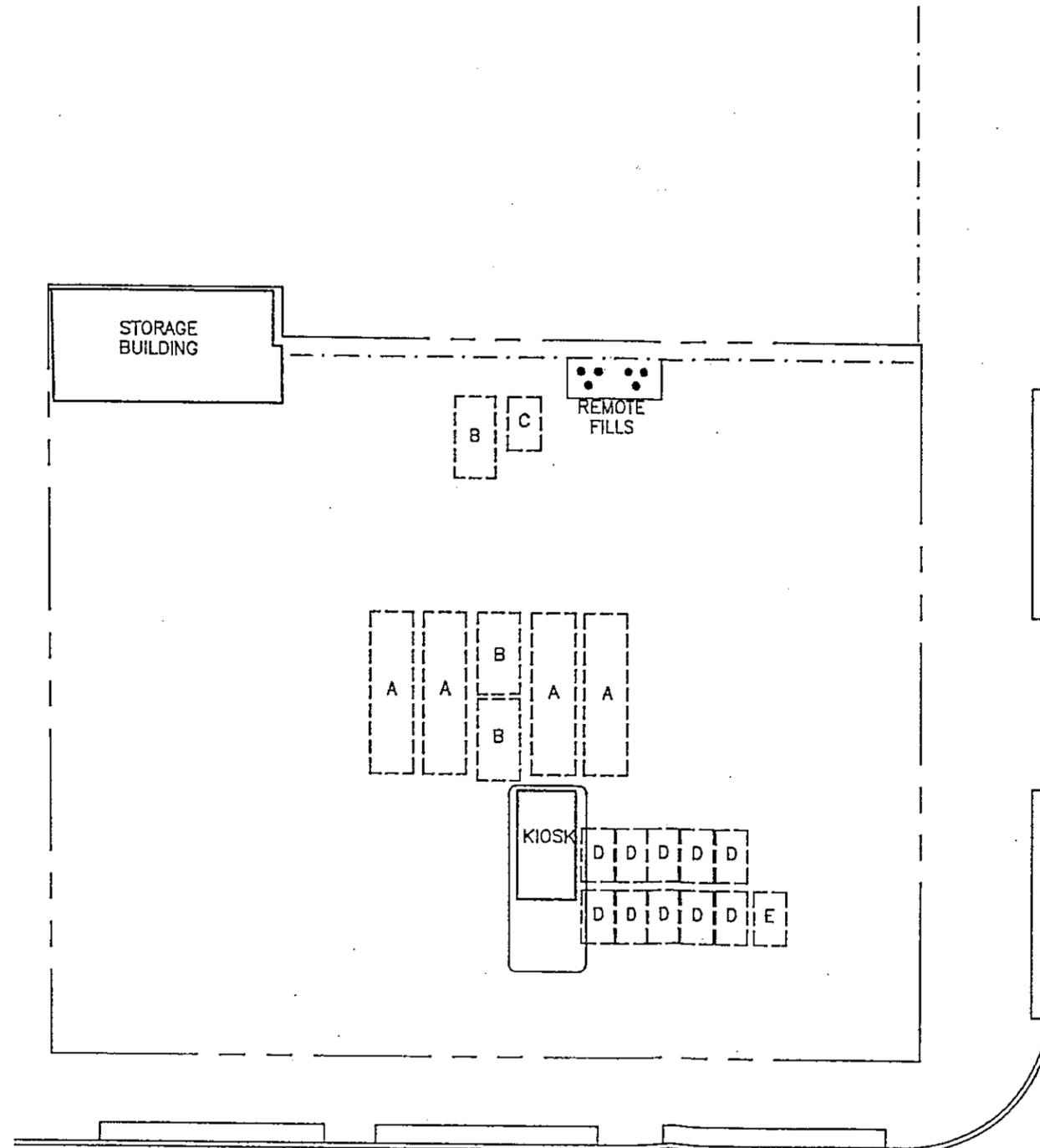
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TOPOGRAPHIC QUADRANGLE 1979
BROOKLYN, NEW YORK
CONTOUR INTERVAL = 10'



QUADRANGLE LOCATION

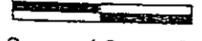
LEGEND

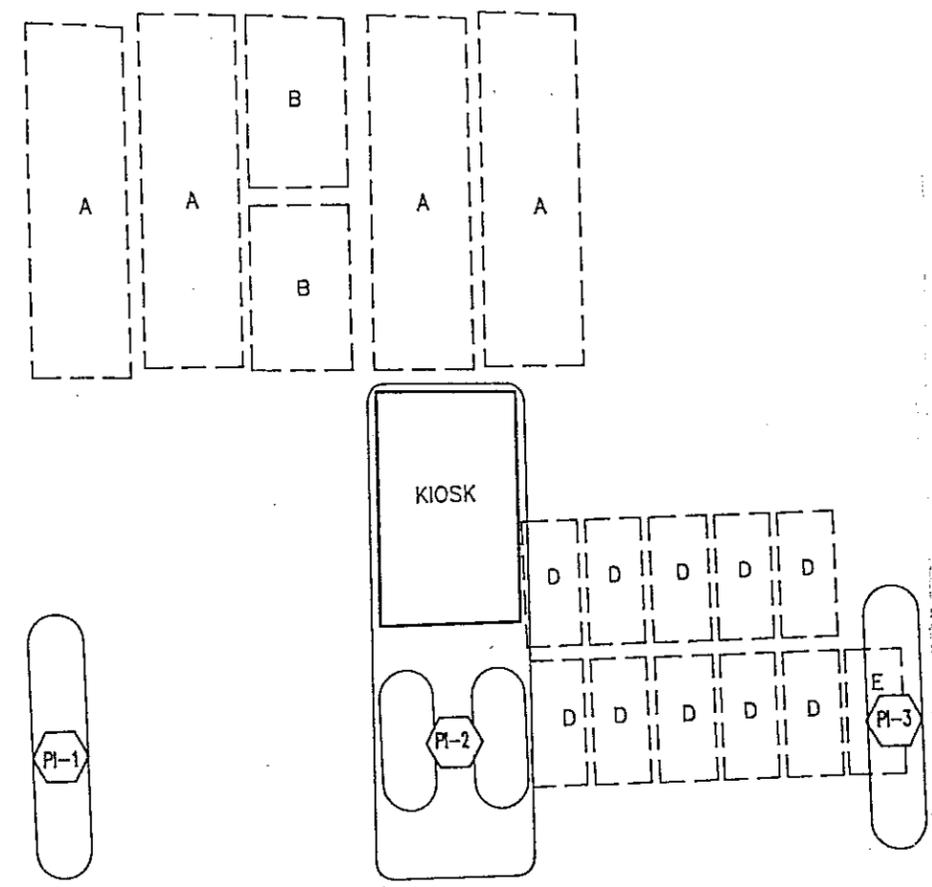
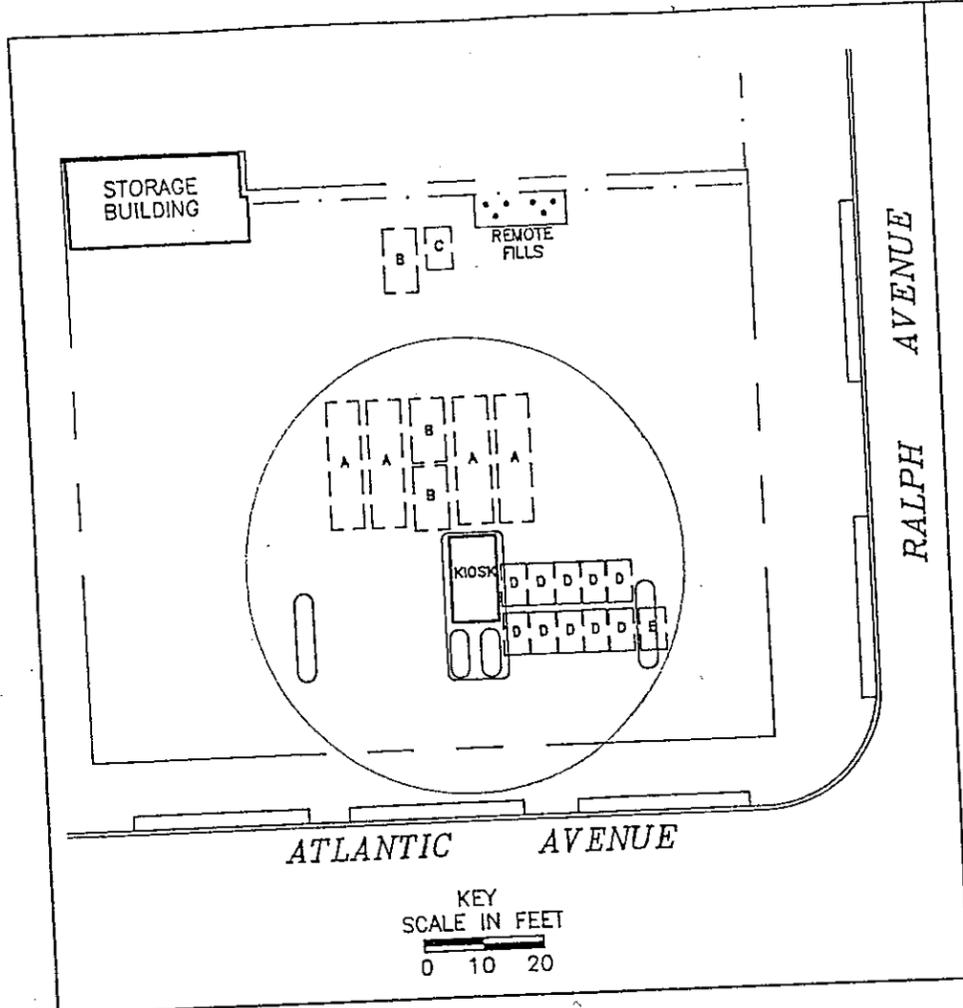
-  FORMER DISPENSER ISLAND
-  FENCE
-  FORMER 4,000 GAL UNDERGROUND STORAGE TANK
-  FORMER 2,000 GAL UNDERGROUND STORAGE TANK
-  FORMER 550 GAL UNDERGROUND STORAGE TANK
-  FORMER 550 GAL GASOLINE UNDERGROUND STORAGE TANK
-  ABANDONED 550 GAL GASOLINE UNDERGROUND STORAGE TANK
-  PROPERTY BOUNDARY



ATLANTIC AVENUE

RALPH AVENUE

SITE PLAN			
MERIT RALPH			
1885 ATLANTIC AVENUE & RALPH AVENUE BROOKLYN, NEW YORK			
NORTH 	SCALE IN FEET 	DATE 7-1-93	SOURCE B
		DWG # DC0011	FIGURE



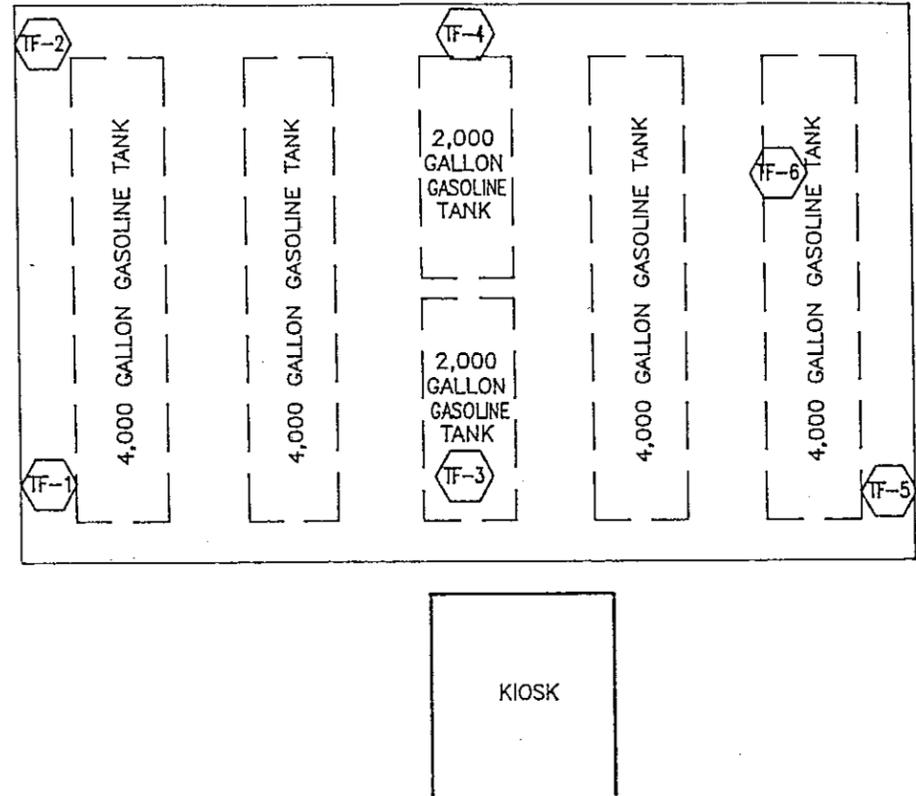
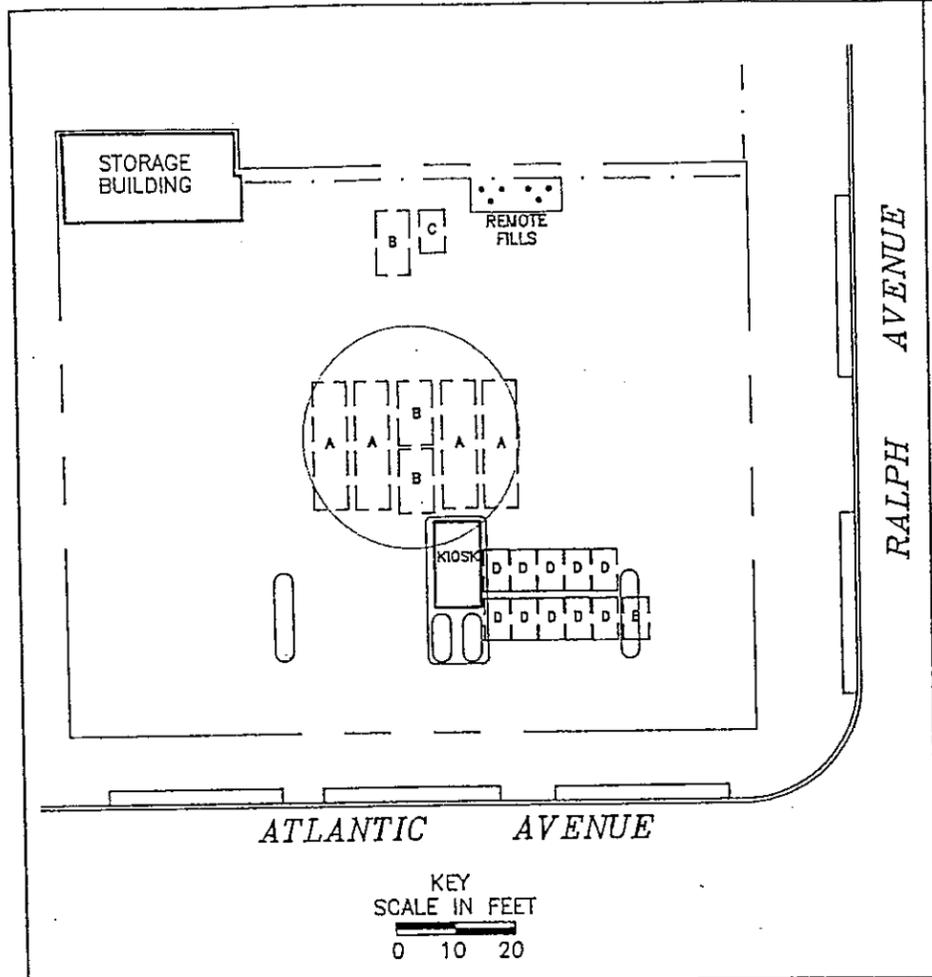
- LEGEND**
- DENOTES LOCATION OF SAMPLING
 - ⬡ POST EXCAVATION SOIL SAMPLE
 - ⬢ FORMER DISPENSER ISLAND
 - ⬠ A FORMER 4,000 GAL UNDERGROUND STORAGE TANK
 - ⬠ B FORMER 2,000 GAL UNDERGROUND STORAGE TANK
 - ⬠ C FORMER 550 GAL UNDERGROUND STORAGE TANK
 - ⬠ D FORMER 550 GAL GASOLINE UNDERGROUND STORAGE TANK
 - ⬠ E ABANDONED 550 GAL GASOLINE UNDERGROUND STORAGE TANK
 - PROPERTY BOUNDARY
 - TPH TOTAL PETROLEUM HYDROCARBONS
 - ppm PARTS PER MILLION
 - ND NOT DETECTED
 - DETECTION LIMIT OF 0.005 ppm
 - BTEX BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
 - J ESTIMATED CONCENTRATION

SAMPLE	TPH	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOTAL BTEX
PI-1	143	ND	ND	ND	ND	ND
PI-2	164	ND	0.00452J	ND	0.00490J	0.00942J
PI-3	151	ND	ND	ND	ND	ND

DISPENSER ISLAND SAMPLING PLAN
15 JUNE 1993

MERIT RALPH
1885 ATLANTIC AVENUE & RALPH AVENUE
BROOKLYN, NEW YORK

NORTH 	SCALE IN FEET (APPROXIMATE)	DATE 8-11-93	SOURCE B
		DWG # RX0011	FIGURE



LEGEND

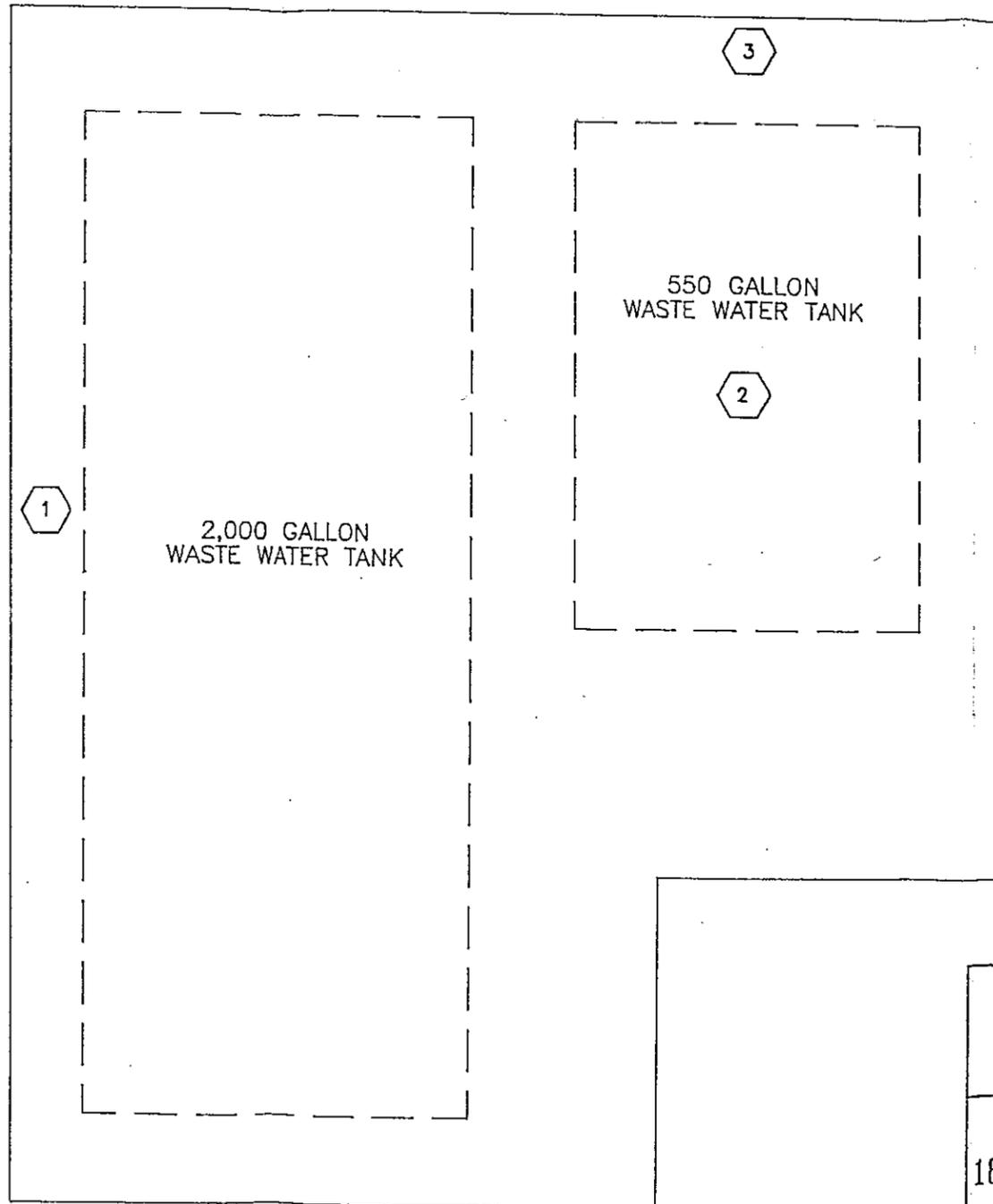
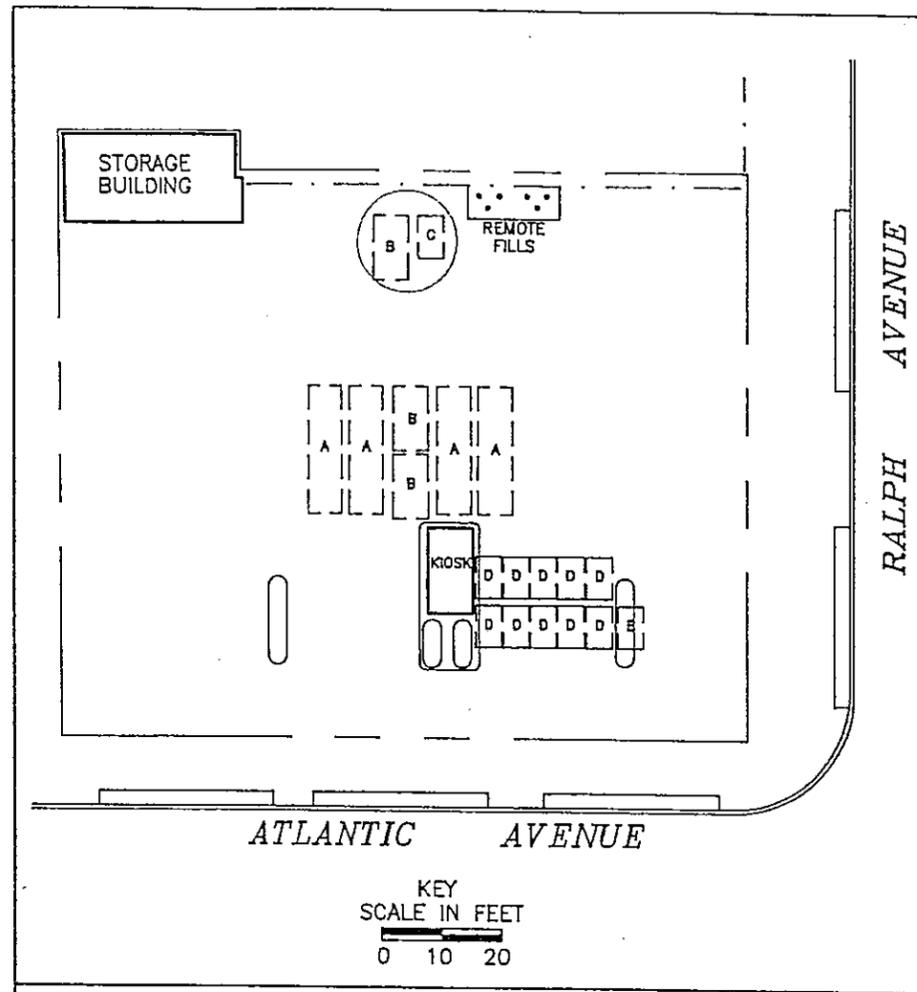
- DENOTES LOCATION OF EXCAVATION
- POST EXCAVATION SOIL SAMPLE
- FORMER DISPENSER ISLAND
- FORMER 4,000 GAL UNDERGROUND STORAGE TANK
- FORMER 2,000 GAL UNDERGROUND STORAGE TANK
- FORMER 550 GAL UNDERGROUND STORAGE TANK
- FORMER 550 GAL GASOLINE UNDERGROUND STORAGE TANK
- ABANDONED 550 GAL GASOLINE UNDERGROUND STORAGE TANK
- PROPERTY BOUNDARY
- TPH TOTAL PETROLEUM HYDROCARBONS
- PARTS PER MILLION
- ND NOT DETECTED
DETECTION LIMIT OF 0.005 ppm
- BTEX BENZENE, TOLUENE,
ETHYLBENZENE, XYLENES
- UST UNDERGROUND STORAGE TANK
- J ESTIMATED CONCENTRATION

SAMPLE	TPH	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOTAL BTEX
	ppm					
TF-1	ND	0.00567	0.00331J	ND	ND	0.00898
TF-2	428	0.105	0.842	2.350	11.70	14.997
TF-3	44.8	ND	ND	ND	ND	ND
TF-4	413	ND	0.0516	ND	0.580	0.6316
TF-5	ND	ND	0.00882	ND	0.0298	0.03862
TF-6	ND	0.00552	0.00306J	ND	ND	0.00858

GASOLINE TANK EXCAVATION MAP
14 & 15 JUNE 1993

MERIT RALPH
1885 ATLANTIC AVENUE & RALPH AVENUE
BROOKLYN, NEW YORK

	SCALE IN FEET	DATE	SOURCE
	0 5' 10' (APPROXIMATE)	8-11-93	B
		DWG #	FIGURE
		RX0011	



LEGEND

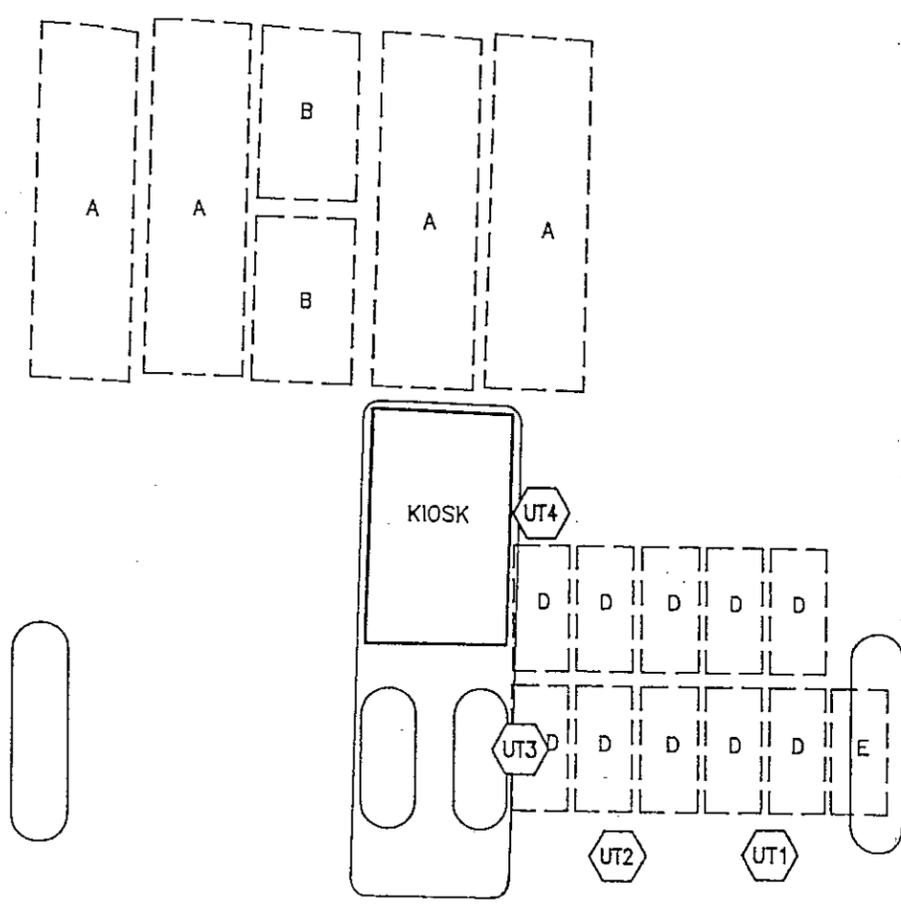
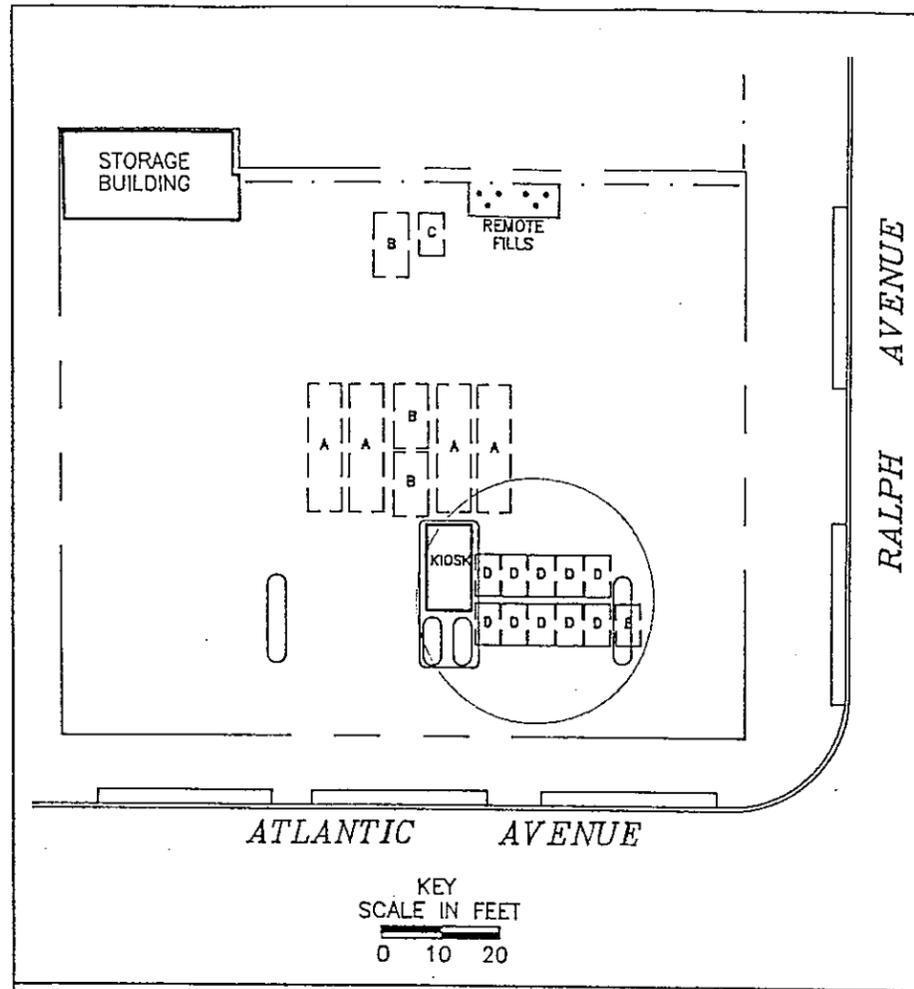
- DENOTES LOCATION OF EXCAVATION
- POST EXCAVATION SOIL SAMPLE
- FORMER DISPENSER ISLAND
- FORMER 4,000 GAL UNDERGROUND STORAGE TANK
- FORMER 2,000 GAL UNDERGROUND STORAGE TANK
- FORMER 550 GAL UNDERGROUND STORAGE TANK
- FORMER 550 GAL GASOLINE UNDERGROUND STORAGE TANK
- ABANDONED 550 GAL GASOLINE UNDERGROUND STORAGE TANK
- PROPERTY BOUNDARY
- TPH TOTAL PETROLEUM HYDROCARBONS
- ppm PARTS PER MILLION
- ND NOT DETECTED
DETECTION LIMIT OF 0.005 ppm
- BTEX BENZENE, TOLUENE,
ETHYLBENZENE, XYLENES

SAMPLE	TPH	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	TOTAL BTEX
WW1	24,200	ND	0.0952	ND	ND	0.0952
WW2	4,960	ND	0.00386J	ND	ND	0.00386J
WW3	9,000	ND	0.00901	ND	ND	0.00901

WASTE WATER TANK EXCAVATION MAP
22 JUNE 1993

MERIT RALPH
1885 ATLANTIC AVENUE & RALPH AVENUE
BROOKLYN, NEW YORK

	SCALE IN FEET	DATE	SOURCE
	 (APPROXIMATE)	8-11-93	B
		DWG #	FIGURE
		RX0011	



LEGEND

- DENOTES LOCATION OF EXCAVATION
- POST EXCAVATION SOIL SAMPLE
- FORMER DISPENSER ISLAND
- FORMER 4,000 GAL UNDERGROUND STORAGE TANK
- FORMER 2,000 GAL UNDERGROUND STORAGE TANK
- FORMER 550 GAL UNDERGROUND STORAGE TANK
- FORMER 550 GAL GASOLINE UNDERGROUND STORAGE TANK
- ABANDONED 550 GAL GASOLINE UNDERGROUND STORAGE TANK
- PROPERTY BOUNDARY
- TPH TOTAL PETROLEUM HYDROCARBONS
- ppm PARTS PER MILLION
- ND NOT DETECTED
DETECTION LIMIT OF 0.005 ppm
- BTEX BENZENE, TOLUENE,
ETHYLBENZENE, XYLENES

SAMPLE	TPH	ppm					TOTAL BTEX
		BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES		
UT1	44.8	ND	ND	ND	ND	ND	ND
UT2	82.1	ND	2.34	1.72	9.06	13.12	
UT3	882	ND	10.4	ND	338	348.4	
UT4	151	ND	ND	ND	ND	ND	

UNKNOWN TANK EXCAVATION MAP
25 & 28 JUNE 1993

MERIT RALPH
1885 ATLANTIC AVENUE & RALPH AVENUE
BROOKLYN, NEW YORK

	SCALE IN FEET	DATE	SOURCE
		8-11-93	B
		DWG #	FIGURE
		RY0011	

TABLE 1
 PID FIELD SCREENING ANALYSIS
 MERIT RALPH
 1885 ATLANTIC AVENUE & RALPH AVENUE
 BROOKLYN, NEW YORK

June 14, 1993 through June 28, 1993

<u>Location</u>		<u>PID (ppm)</u>
DISPENSER ISLANDS		
	FIGURE 3	
North Dispenser Island (2 fbg)	PI-1	24
West Dispenser Island (2 fbg)	PI-2	4.2
South Dispenser Island (2 fbg)	PI-3	6.5
GASOLINE TANK FIELD		
	FIGURE 4	
Above USTs (1-4 fbg)		36-500
South Bottom (10 fbg)	TF-1	58
Southwest Bottom (10 fbg)	TF-2	>260
East Center Bottom (10 fbg)	TF-3	84
West Center Bottom (10 fbg)	TF-4	>210
Northeast Bottom (10 fbg)	TF-5	84
North Bottom (10 fbg)	TF-6	166
(2) WASTE WATER USTs		
	FIGURE 5	
South Wall (6 fbg)	WW-1	40
Center Bottom (10 fbg)	WW-2	30
West Wall (6 fbg)	WW-3	12
UNKNOWN TANK FIELD		
	FIGURE 6	
Canopy Area, Below Concrete Pad (1 fbg)		30-360
Above USTs (1-4 fbg)		250-500
Northeast Wall (5 fbg)	UT-1	20
East Wall (5 fbg)	UT-2	28
South Wall (5 fbg)	UT-3	56
Southwest Wall (5 fbg)	UT-4	114

PID = Photoionization Detector
 ppm = parts per million
 fbg = feet below grade



TABLE 2
SOIL SAMPLE COLLECTION SUMMARY DATA
FOR UNDERGROUND STORAGE TANK
AND DISPENSER ISLAND CLOSURE
MERIT RALPH
1885 ATLANTIC AVENUE & RALPH AVENUE
BROOKLYN, NEW YORK

June 15, 22 and 28, 1993

<u>Location</u>	<u>Sample Number</u>	<u>Sample Date</u>
DISPENSER ISLANDS (Figure 3)		15 June 1993
North Dispenser Island (2 fbg)	PI-1	
West Dispenser Island (2 fbg)	PI-2	
South Dispenser Island (2 fbg)	PI-3	
GASOLINE TANK FIELD (Figure 4)		15 June 1993
South Bottom (10 fbg)	TF-1	
Southwest Bottom (10 fbg)	TF-2	
East Center Bottom (10 fbg)	TF-3	
West Center Bottom (10 fbg)	TF-4	
Northeast Bottom (10 fbg)	TF-5	
North Bottom (10 fbg)	TF-6	
(2) WASTE WATER USTs (Figure 5)		22 June 1993
South Wall (6 fbg)	WW-1	
Center Bottom (10 fbg)	WW-2	
West Wall (6 fbg)	WW-3	
UNKNOWN TANK FIELD (Figure 6)		28 June 1993
Northeast Wall (5 fbg)	UT-1	
East Wall (5 fbg)	UT-2	
South Wall (5 fbg)	UT-3	
Southwest Wall (5 fbg)	UT-4	

fbg = feet below grade

TABLE 3
SOIL ANALYTICAL SUMMARY DATA
MERIT RALPH
1885 ATLANTIC AVENUE & RALPH AVENUE
BROOKLYN, NEW YORK

June 14, 15, 22, 25, and 28, 1993

(All results in parts per million)

Sample #	TPH	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Total BTEX
PI-1	143	ND	ND	ND	ND	ND
PI-2	164	ND	0.00452J	ND	0.00490J	0.00942J
PI-3	151	ND	ND	ND	ND	ND
TF-1	ND	0.00567	0.00331J	ND	ND	0.00898
TF-2	428	0.105	0.842	2.350	11.70	14.997
TF-3	44.8	ND	ND	ND	ND	ND
TF-4	413	ND	0.0516	ND	0.580	0.6316
TF-5	ND	ND	0.00882	ND	0.0298	0.03862
TF-6	ND	0.00552	0.00306J	ND	ND	0.00858
WW-1	24,200	ND	0.0952	ND	ND	0.0952
WW-2	4,960	ND	0.00386J	ND	ND	0.00386J
WW-3	9,000	ND	0.00901	ND	ND	0.00901
UT-1	44.8	ND	ND	ND	ND	ND
UT-2	82.1	ND	2.340	1.720	9.060	13.120
UT-3	882	ND	10.40	ND	338	348.40
UT-4	151	ND	ND	ND	ND	ND

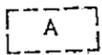
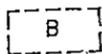
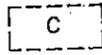
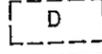
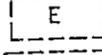
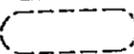
BTEX = Benzene, Toluene, Ethylbenzene, Total Xylenes
 TPH = Total Petroleum Hydrocarbons
 ppm = parts per million

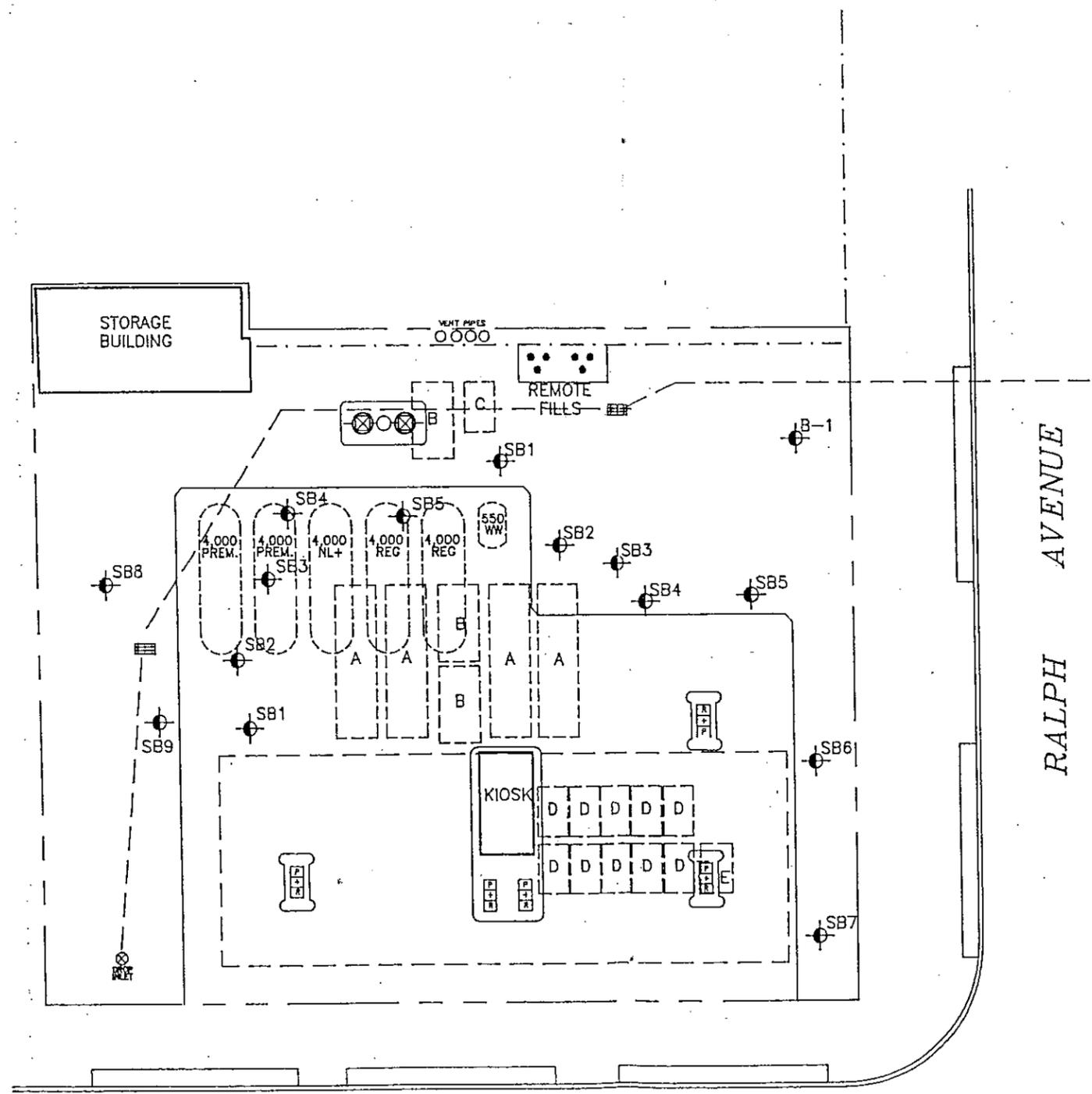
J. = Estimated Concentration
 ND = Not Detected



**Figures, Tables and Boring Logs from Site Assessment Report
dated November 2, 1994**

LEGEND

-  FORMER DISPENSER ISLAND
-  FENCE
-  FORMER 4,000 GAL UNDERGROUND STORAGE TANK
-  FORMER 2,000 GAL UNDERGROUND STORAGE TANK
-  FORMER 550 GAL UNDERGROUND STORAGE TANK
-  FORMER 550 GAL UNDERGROUND STORAGE TANK
-  ABANDONED 550 GAL UNDERGROUND STORAGE TANK
-  EXISTING UNDERGROUND STORAGE TANK
-  PROPERTY BOUNDARY
-  SOIL BORING LOCATION



SITE PLAN			
EXISTING CONDITIONS			
MERIT RALPH			
1885 ATLANTIC AVENUE & RALPH AVENUE			
BROOKLYN, NEW YORK			
 NORTH	SCALE IN FEET	DATE	SOURCE
	 0 10 20	11-9-94	3
	DWG #	FIGURE	
	RS0011		

ATLANTIC AVENUE

RALPH AVENUE

TABLE 1

KNOWN TANK FIELD
 SUMMARY OF ANALYTICAL RESULTS OF SUBSURFACE SOIL SAMPLES
 MERIT "RALPH"
 1885 ATLANTIC AVENUE, BROOKLYN, NEW YORK
 (All results reported in parts per billion)

GES Sample Identification	TPH	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	1,2,4-tri methylbenzene	n-butyl benzene	MTBE	Napthalene
B1-2	35,700	ND	4.3 J	5.75	15.7	25,75 J	NA	NA	NA	NA
SB1-S	NA	ND	44,000	18,300	80,000	142,300	33,700	46,000	ND	41,900
SB1-D	NA	ND	79.5	ND	332	411.5	434	220	ND	459
FB (3/21/94)	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB2-S	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB2-D	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB3-S	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB3-D	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB4-S	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB4-D	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
FB (3/22/94)	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB8-S	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB8-D	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB9-S	NA	ND	ND	ND	27.1	27.1	69.2	83.7	ND	ND
SB9-D	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND

HUMAN

HEALTH GUIDANCE	NG	24,000	20,000,000	8,000,000	200,000,000	NG	NG	NG	NG	300,000
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TCLP

ALTERNATIVE GUIDANCE VALUES	NG	14	100	100	100	NG	100	100	1,000	200
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BTEX: Benzene, Toluene, Ethylbenzene, Xylenes

ND: Not Detected, MDL 5 ppb for all constituents in all samples except SB2-S, MDL 500 ppb

Sample B1-2 was collected on 10/14/93. All others were collected on 3/21 & 3/22/94.

NYSDEC Guidance are from NYSDEC Bureau of Spill Prevention and Response Spill Technology and Remediation

Series Memo #1: Petroleum Contaminated Soil Guidance Policy, 8/92

NG: No guidance given
 NA: Not analyzed



TABLE 2
UNKNOWN TANK FIELD
SUMMARY OF ANALYTICAL RESULTS OF SUBSURFACE SOIL SAMPLES BY METHOD 8020
MARCH 21 AND 22, 1994
MERIT "RALPH"
1885 ATLANTIC AVENUE, BROOKLYN, NEW YORK
 (All results reported in parts per billion)

GES Sample Identification	Benzene	Chloro benzene	Total Dichloro benzene	Toluene	Ethyl benzene	Total Xylenes
SB5-S	ND	ND	ND	ND	ND	ND
SB5-D	ND	ND	ND	ND	ND	ND
SB6-S	ND	ND	ND	10.4	10.8	37.9
SB6-D	ND	ND	ND	ND	ND	ND
SB7-S	ND	ND	ND	8.24	ND	ND
SB7-D	ND	ND	ND	ND	ND	ND
<hr/>						
HUMAN HEALTH NYDEC GUIDELINE	24,000	NG	NG	20,000,000	8,000,000	200,000,000
<hr/>						
TCLP ALTERNATIVE GUIDANCE VALUES	14	NG	NG	100	100	100

ND= Not detected, MDL 5 ppb for all constituents in all samples
 NG= No guidance given

NYSDEC Guidelines are TCLP Alternative Guidance Values, from NYSDEC Bureau of Spill Prevention and Response Spill Technology and Remediation Series Memo #1: Petroleum Contaminated Soil Guidance Policy 8/92





Groundwater & Environmental Services, Inc.

Boring Log

Project: Merit Ralph

Owner: Merit

Location: 1885 Atlantic & Ralph Aves. Permit No.:
Brooklyn, NY

Total Depth: 53' Diameter: 6"

Sample Method: Split spoon

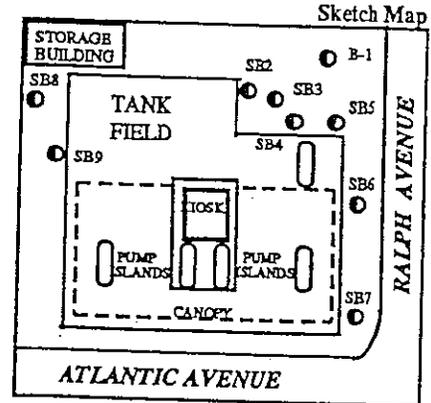
Soil Boring #: B-1

Log By: Don Griffin

Drilling Method: Air Rotary

Date: 10/14/93

Driller: Summit Drilling, Inc.



Depth (feet)	Sample No.	PID (units)	Blow Count	Lithology
2				0' - 6" Asphalt
4				6" - 1' Brown fine to coarse sand and silt with some rounded gravel.
6				
8		0		1' - 15' Brown fine to coarse sand and silt with some rounded gravel.
10				
12				
14				
16	B1-1	0	23-20-24-19	15' - 17' Brown fine to coarse sand and silt. Trace fine gravel.
18				17' - 21' Brown fine to coarse sand and silt with some rounded gravel.
20				
22	B1-2	270	20-28-30-31	21' - 23' Brown fine to coarse sand and silt with some rounded gravel. Sample collected from 22.5' to 23'.
24				
26				
28				23' - 30' Same.
30				
32				
34				30' - 35' Brown fine to coarse sand. Some fine to medium subangular gravel.
36				
38				
40				
42				35' - 47' Brown fine to medium sand. Some silt and some fine subangular gravel.
44				
46				
48				
50				
52				47' - 53' Brown fine to coarse sand. Dry. Hole collapsing.
54				
56				End boring @ 53'. Groundwater not encountered.
58				



Groundwater & Environmental Services, Inc.

Boring Log

Project: Merit Ralph

Owner: Merit

Location: 1885 Atlantic & Ralph Aves. Permit No.:
Brooklyn, NY

Total Depth: 32' Diameter: 6"

Soil Boring #: SB-1

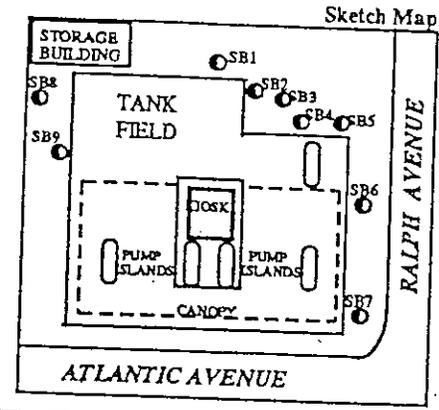
Sample Method: Split spoon

Drilling Method: Air Rotary

Log By: Jeff Campbell

Driller: Summit Drilling Co.

Date: 3/21/94



Depth (feet)	Sample No.	PID (units)	Blow Count	Lithology
1				0'-6" Asphalt
2				
3				6"-3' Sand size angular fill.
4		25		
5				15' Brown gravelly fmc SAND. Some subrounded gravel.
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21	SB1-S	1200+	14-25-30-50	20'-22' Brown cmF SAND, little to some Silt. Micaceous. Dry.
22				
23				
24		20		20'-30' Silty, gravelly SAND.
25				
30	SB1-D	160	45-54-67-59	30'-32' Very resistant reddish brown stratified sandy gravelly SILT and CLAY. Moist.
35				End boring @ 32'

Groundwater & Environmental Services, Inc.



Boring Log

Project: Merit Ralph

Owner: Merit

Location: 1885 Atlantic & Ralph Aves. Permit No.:
Brooklyn, NY

Total Depth: 37' Diameter: 6"

Sample Method: Split spoon

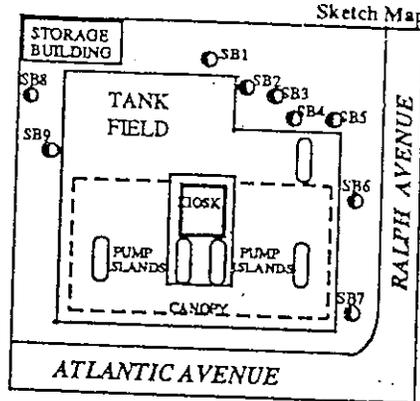
Soil Boring #: SB-2

Drilling Method: Air Rotary

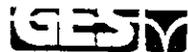
Log By: Jeff Campbell

Driller: Summit Drilling Co.

Date: 3/21/94



Depth (feet)	Sample No.	PID (units)	Blow Count	Lithology
1				0'-6" Asphalt
2				
3				6"-3' Dark brown fine sand and silt. Moist.
4				
5				3'-8' Dark brown fine sand and silt. Moist.
6				
7				
8				
9				
10				
11				8'-20' Brown cmF sand, little to some silt. Micaceous. Dry, little f subrounded gravel.
12				
13				
14				
15				
16				
17				
18				
19				
20				20'-22' Brown cmF sand, little to some silt. Micaceous. Dry, little f subrounded gravel. Wet.
21	SB2-S	2000+		
22				20'-30' Sand size angular fill.
23				29' Cobbles and boulders.
24		20		30'-32' Very dense reddish brown SILT and CLAY, little Fine sand and gravel. Appears to be stratified. Moist to wet.
25				
30	SB2-I	160		33'-34.5' Boulder.
35	SB2-D	800	44-100/3"	35'-37' Brown very dense, silty, gravelly, fmc SAND. Little silt. Little to some subangular gravel. Moist.
40				
45				End boring @ 37'



Groundwater & Environmental Services, Inc.

Boring Log

Project: Merit Ralph

Owner: Merit

Location: 1885 Atlantic & Ralph Aves. Permit No.:
Brooklyn, NY

Total Depth: 42' Diameter: 6"

Soil Boring #: SB-3

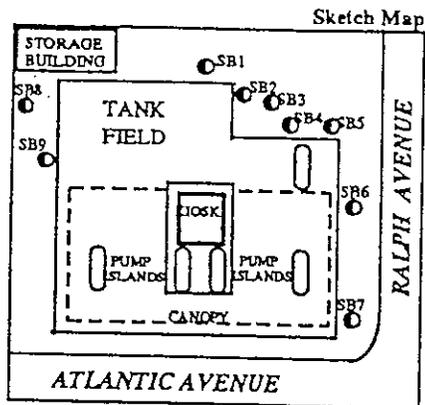
Sample Method: Split spoon

Drilling Method: Air Rotary

Log By: Jeff Campbell

Driller: Summit Drilling Co.

Date: 3/21/94



Depth (feet)	Sample No.	PID (units)	Blow Count	Lithology
1				0'-6" Asphalt
2				6"-9' Brown fine SAND and SILT. Little angular gravel. Dry.
3				
4				9'-10.5' Boulder.
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				Cuttings. Brown fine SAND, little silt. Little subrounded f gravel
15				
16				
17				
18				
19				
20				
21	SB3-S	380+	20-23-38-46	20'-22' Brown silty, gravelly, fine SAND. Little silt. Little to some subrounded gravel. Stratified. Dry.
22				
23				
24				
25				
30				
35				
40	SB3-D	1000	65-85-Refusal	35'-37' Brown SAND and GRAVEL.
45				End boring @ 42'



Groundwater & Environmental Services, Inc.

Boring Log

Project: Merit Ralph

Owner: Merit

Location: 1885 Atlantic & Ralph Aves. Permit No.:
Brooklyn, NY

Total Depth: 30' Diameter: 6"

Soil Boring #: SB-4

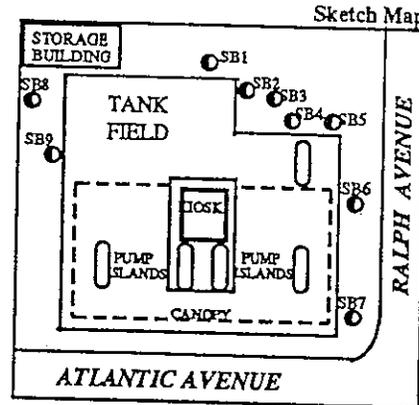
Sample Method: Split spoon

Drilling Method: Air Rotary

Log By: Jeff Campbell

Driller: Summit Drilling Co.

Date: 3/21/94



Depth (feet)	Sample No.	PID (units)	Blow Count	Lithology
1				0'-6" Asphalt
2				
3				
4				
5				
6				6"-9" Brown fine SAND and SILT. Little angular gravel. Dry.
7				
8				
9				
10				
11				
12				Cuttings Brown fine SAND and SILT. Little angular gravel. Dry.
13				
14				
15				
16				
17				
18				
19				
20				
21	SB4-S	250	20-26-32-30	20'-22' Reddish-brown stratified silty, gravelly, fine SAND. Little silt. Some subrounded gravel. Moist. Very dense.
22				
23				
24				
25				
30	SB4-D	0.0	29-26-14-22	28'-30' Reddish-brown fine SAND. Some subrounded gravel.
35				End boring @ 30'
40				
45				



Groundwater & Environmental Services, Inc.

Boring Log

Project: Merit Ralph

Owner: Merit

Location: 1885 Atlantic & Ralph Aves. Permit No.:
Brooklyn, NY

Total Depth: 30' Diameter: 6"

Soil Boring #: SB-5

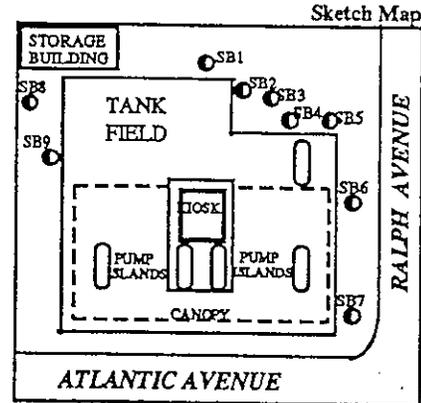
Sample Method: Split spoon

Drilling Method: Air Rotary

Log By: Jeff Campbell

Driller: Summit Drilling Co.

Date: 3/21/94



Depth (feet)	Sample No.	PID (units)	Blow Count	Lithology
1				0'-6" Asphalt
2				6" - 5' Orange-brown silty gravelly SAND. Fill.
3				
4				
5				
6				
7				Cuttings. Brown silty gravelly SAND. Little silt. Some fm subrounded gravel.
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21	SB5-S	0.0	38-55-45-47	20'-22' Reddish-brown stratified silty, gravelly, fine SAND. Little silt. Some subrounded gravel. Moist.
22				
23				
24				
25				
30	SB5-D	0.0	63-100/5"	28'-30' Reddish-brown cg GRAVEL and fine SAND. Little silt and clay. Stratified. Dry.
35				End boring @ 30'
40				
45				



Groundwater & Environmental Services, Inc.

Boring Log

Project: Merit Ralph

Owner: Merit

Location: 1885 Atlantic & Ralph Aves. Permit No.:
Brooklyn, NY

Total Depth: 30' Diameter: 6"

Soil Boring #: SB-6

Sample Method: Split spoon

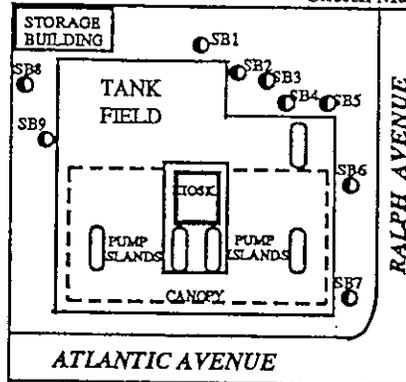
Drilling Method: Air Rotary

Log By: Jeff Campbell

Driller: Summit Drilling Co.

Date: 3/21/94

Sketch Map



Depth (feet)	Sample No.	PID (units)	Blow Count	Lithology
1				0'-6" Asphalt
2				
3				
4				
5				
6				
7				
8				6"-9' Fill. Coarse gravel, bricks, little concrete. Water trapped in fill.
9				
10				
11				
12				
13				
14				
15				
16				
17				
21	SB6-S	1000	14-41-33-40	20'-22' Reddish-brown stratified silty, gravelly, fine SAND. Little silt. Some subrounded gravel. Moist.
22				
23				
30	SB6-D	0.0	52-47-60-51	28'-9' Light brown mC SAND. Some subangular to subrounded fine gravel. Little silt. Moist. Very dense.
35				
40				
45				



Groundwater & Environmental Services, Inc.

Boring Log

Project: Merit Ralph

Owner: Merit

Location: 1885 Atlantic & Ralph Aves. Permit No.:
Brooklyn, NY

Total Depth: 30' Diameter: 6"

Soil Boring #: SB-7

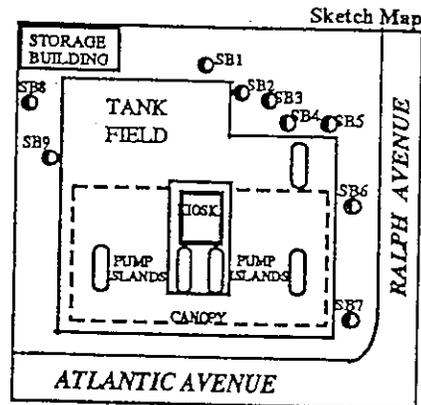
Sample Method: Split spoon

Drilling Method: Air Rotary

Log By: Jeff Campbell

Driller: Summit Drilling Co.

Date: 3/21/94



Depth (feet)	Sample No.	PID (units)	Blow Count	Lithology
1				0'-6" Asphalt
2				
3				
4				
5				
6				
7				
8				6"-9' Brown fine SAND and SILT. Little angular gravel. Dry.
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21	SB7-S	0.0	33-27-38-41	20'-22' Reddish-brown stratified silty, gravelly, fine SAND. Little silt. Some subrounded gravel. Moist.
22				
23				
24				
25				
30	SB7-D	0.0	26-21-20-30	28'-30' Brown silty, gravelly, fine SAND. Little angular to subangular 1/8 gravel. Dry. Very dense.
35				End boring @ 30'
40				
45				



Groundwater & Environmental Services, Inc.

Boring Log

Project: Merit Ralph

Owner: Merit

Location: 1885 Atlantic & Ralph Aves. Permit No.:
Brooklyn, NY

Total Depth: 30' Diameter: 6"

Soil Boring #: SB-8

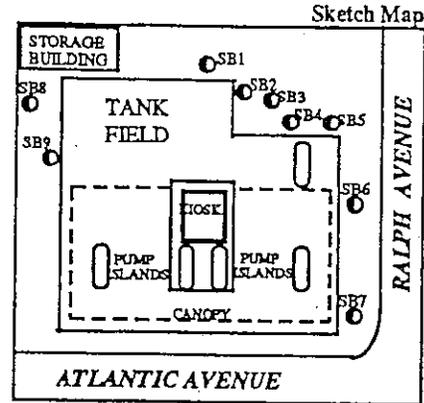
Sample Method: Split spoon

Drilling Method: Air Rotary

Log By: Jeff Campbell

Driller: Summit Drilling Co.

Date: 3/21/94



Depth (feet)	Sample No.	PID (units)	Blow Count	Lithology
1				0'-6" Asphalt
2				
3				
4				
5				
6				
7				
8				6"-8' Fill material, concrete, bricks, soil, etc.
9				Water trapped in fill at contact.
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21	SB8-S	0.0	54-63-75-	20'-22' Reddish-brown stratified silty, gravelly, fine SAND. Little silt. Some subrounded gravel. Moist.
22				
23				
24				
25				
30	SB8-D	0.0	36-41-35-37	28'-30' Reddish-brown stratified silty, gravelly, fine SAND. Little silt. Some subrounded gravel. Moist.
35				End boring @ 30'
40				
45				



Groundwater & Environmental Services, Inc.

Boring Log

Project: Merit Ralph

Owner: Merit

Location: 1885 Atlantic & Ralph Aves. Permit No.:
Brooklyn, NY

Total Depth: 30' Diameter: 6"

Soil Boring #: SB-9

Sample Method: Split spoon

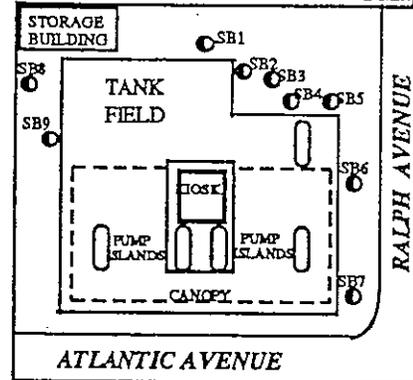
Drilling Method: Air Rotary

Log By: Jeff Campbell

Driller: Summit Drilling Co.

Date: 3/21/94

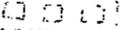
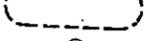
Sketch Map

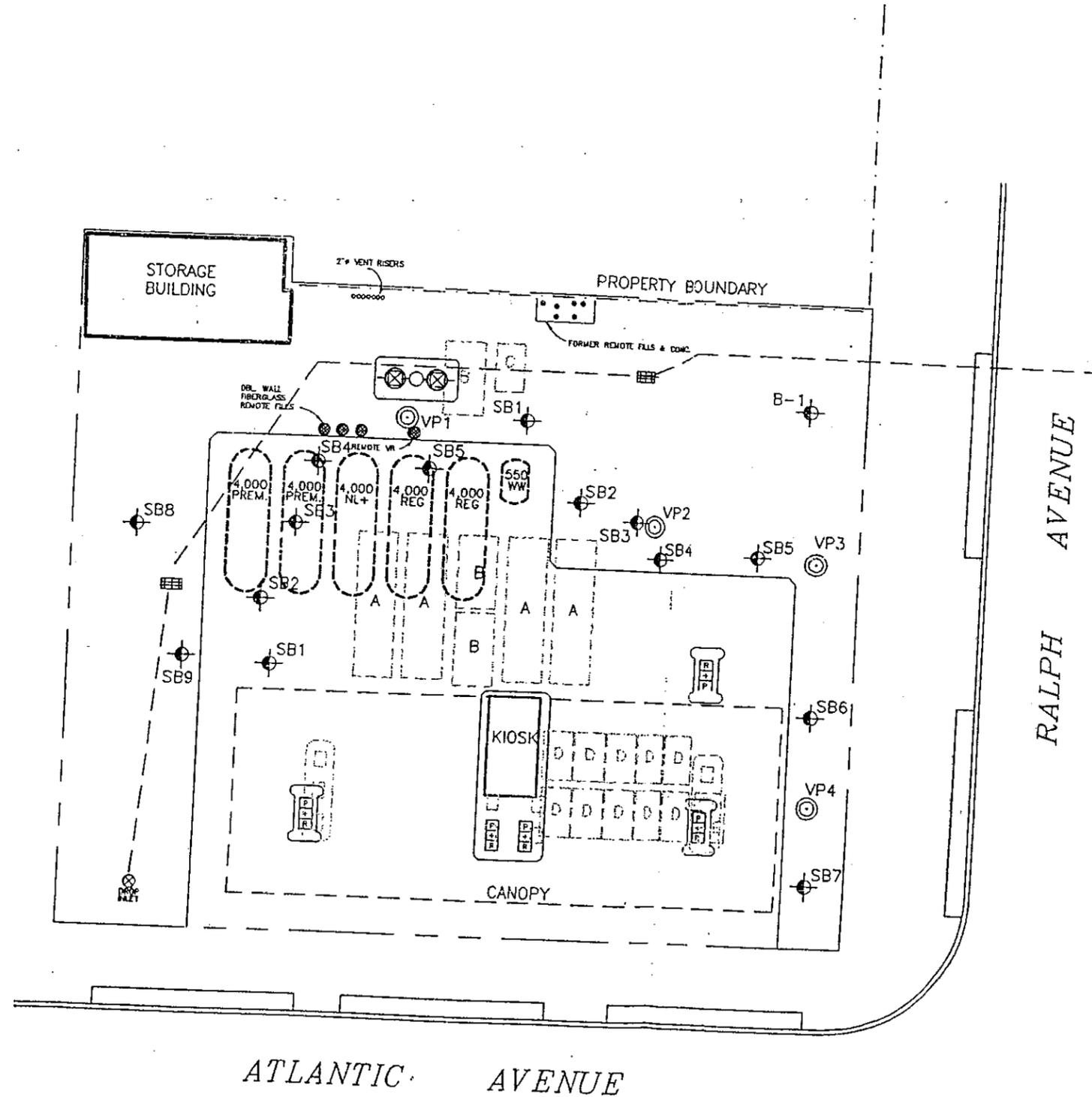


Depth (feet)	Sample No.	PID (units)	Blow Count	Lithology
1				0'-6" Asphalt
2				
3				
4				
5				
6				
7				
8				6"-2' Fill material.
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				20'-22' Reddish-brown stratified silty, gravelly, fine SAND. Little silt. Some subrounded gravel. Moist.
21	SB9-S	0.0	30-25-42-35	
22				
23				28'-30' Reddish-brown stratified silty, gravelly, fine SAND. Little silt. Some subrounded gravel. Moist.
24				
25				
30	SB9-D	0.0	30-25-42-35	
35				End boring @ 30'
40				
45				

Figure and Table Summarizing SVE Point Installation

LEGEND

-  FENCE
-  FORMER DISPENSER ISLAND
-  FORMER 4,000 GAL UNDERGROUND STORAGE TANK
-  FORMER 2,000 GAL UNDERGROUND STORAGE TANK
-  FORMER 550 GAL UNDERGROUND STORAGE TANK
-  FORMER 550 GAL UNDERGROUND STORAGE TANK
-  CONCRETE ABANDONED 550 GAL UNDERGROUND STORAGE TANK
-  CATCH BASIN
-  EXISTING UNDERGROUND STORAGE TANK
-  SOIL VAPOR POINT
-  SOIL BORING LOCATION



SITE INFORMATION PLAN
MARCH 1995

MERIT OIL OF NEW YORK, INC.
1885 ATLANTIC AVENUE & RALPH AVENUE
BROOKLYN, NEW YORK

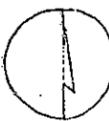
 NORTH	SCALE IN FEET	DATE	SOURCE
	 0 10 20	4-13-98	B
		DWG #	FIGURE
		RS0011	

Table 1
 SOIL VAPOR EXTRACTION SYSTEM INSTALLATION
 SUMMARY OF ANALYTICAL RESULTS FOR SUBSURFACE SOIL SAMPLES
 MERIT "H"
 1885 ATLANTIC AVENUE, BROOKLYN, NEW YORK
 TCLP Analysis
 (All results reported in parts per billion)

Sample #	Date	Depth (Ft.)	Benzene	Toluene	Ethyl-Benzene	Xylenes	Total BTEX	MTBE	Isopropyl-benzene
VP1S	3/30/95	21	< 2.50	34	11	94	139	< 2.50	3.2
VP1D	3/30/95	40	< 2.50	85	12	84	181	< 2.50	< 2.50
VP2S	3/31/95	23	< 2.50	3.5	3.8	19.8	27.1	< 2.50	< 2.50
VP3S	3/31/95	15	< 2.50	< 2.50	< 2.50	< 7.50	< 7.50	< 2.50	< 2.50
VP3D	3/31/95	28	< 2.50	93	83	356	532	< 2.50	< 2.50
TCLPEGV			0.7	5	5	5	NA	50	5

Sample #	Date	Depth (Ft.)	n-Propyl benzene	p-Isopropyl-toluene	Naphthalene	1,2,4-trimethyl-benzene	1,3,5-trimethyl-benzene	n-Butyl-benzene	sec-Butyl-benzene
VP1S	3/30/95	21	13	3.8	49	120	30	22	5.2
VP1D	3/30/95	40	< 2.50	< 2.50	6.7	2.8	< 2.50	< 2.50	< 2.50
VP2S	3/31/95	23	< 2.50	< 2.50	5.5	2.6	< 2.50	< 2.50	< 2.50
VP3S	3/31/95	15	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50
VP3D	3/31/95	28	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50
TCLPEGV			5	5	10	5	5	5	5

TCLPEGV = NYSDEC STARS Memo #1 TCLP Extraction Guidance Value
 BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
 NGV = No Guidance Value
 MTBE = Methyl tert-Butyl Ether
 <= less than stated method detection limit
 VP = Vapor Point
 S = Shallow sample
 D = Deep sample
 exceedences are in bold



EnviroTrac

Environmental Services

October 5, 2001

Valerie A. Stoltzfus
Amerada Hess Corp.
One Hess Plaza
Woodbridge, NJ 07095

Re: Summary of Site Inspection and Computerized Environmental Report
Hess Station # 32528
1885 Atlantic Avenue
Brooklyn, New York

Dear Ms. Stoltzfus:

EnviroTrac conducted a site visit on March 15, 2001 to screen the Kiosk, the storage room, and any manholes with a photoionization detector (PID). Surrounding properties were identified and placed on a surrounding properties map. In addition, a computerized environmental report was reviewed for surrounding properties and sensitive receptors within a quarter mile radius of the site. Findings from the site visit as well as the computerized environmental report are summarized below. A site map is included as Figure 1 and a surrounding properties map is attached as Figure 2.

A total of two (2) catch basins were observed on the site. Volatile organic compounds (VOCs) were not detected by the PID in catch basin 1 or catch basin 2. Screening of the ambient air in the Kiosk and the storage room revealed no detection of any VOCs.

The properties surrounding the station were canvassed. To the north there is a parking lot, an empty lot and a residential building. To the south across Atlantic Avenue are several commercial buildings, including a GP Petro Station, as well as residential buildings with basements. To the east across Ralph Avenue there are two (2) churches, commercial buildings, one (1) residential building and an empty lot. To the west is an abandoned commercial building. According to the Remedial Investigation Report submitted to the NYSDEC in June 1998, the regional ground-water flow direction is to the south. Site specific groundwater flow has not been established.

Source information and any other reasonably ascertainable records, which were obtained from local, state, and federal information databases, were compiled into a Computerized Environmental Report (CER).

The following databases were reviewed:

- *National Priority List (NPL)*: sites nominated for the federal Superfund cleanup.
- *CERCLIS*: sites included in the federal CERCLA Information System.
- *Inactive Hazardous Waste Disposal Facilities*: dumps, landfills and other sites listed by the New York State Department of Environmental Conservation (NYSDEC) and Health Department authorities.
- *Solid Waste Facilities*: Landfills, incinerators, transfer stations and other sites that manage solid wastes.
- *Major Oil Storage Facilities*: sites storing more than 400,000 gallons of petroleum products.
- *New York and Federal Hazardous Waste Treatment, Storage or Disposal Facilities*: sites regulated under the Resource Conservation and Recovery Act (RCRA) that treat, store or dispose of wastes that can be toxic, flammable, corrosive, explosive or otherwise hazardous.

- *New York and Federal Hazardous Waste Generators and Transporters*: sites regulated under RCRA that generate or transport wastes that can be hazardous.
- *Toxic Release Inventory Sites*: toxic chemical releases into air, land, or water reported pursuant to Section 313 of the Emergency Planning and Community Right-To-Know Act.
- *New York Air Discharges*: selected sites releasing air pollutants.
- *Chemical Bulk Storage Facilities*: sites storing bulk chemicals.
- *Petroleum Bulk Storage Facilities*: aboveground/underground petroleum storage sites.
- *Spills*: Active (unremediated) stationary source spills reported to state and federal agencies, including unremediated leaking underground storage tank systems.
- *Spills*: Inactive (remediated) stationary and non-stationary source spills reported to state and federal agencies, including remediated leaking underground storage tank systems.
- *Toxic Wastewater Discharges - Federal Permit Compliance System*: NYS and Federal database of wastewater discharges to surface waters and ground waters.
- *Emergency Response Notification System (ERNS)*: Federal database compilation of spills.
- *USEPA Civil Enforcement Docket*: Database for tracking civil judiciary cases filed on behalf of the EPA by the Department of Justice.
- *New York Hazardous Substance Disposal Site Draft Study*: state listing of sites contaminated with toxic substances that can pose environmental or public health hazards. These sites are not eligible for state clean up funding programs.
- *Historic New York City Utility Sites (1890's to 1940's)*: power generating stations, manufactured gas plants, gas storage facilities, maintenance yards and other gas and electric utility sites
- *Federal Civil Enforcement Docket*: civil judiciary cases filed on behalf of the U.S. Environmental Protection Agency by the Department of Justice.

The search indicated that there were several potential source locations located within a quarter mile radius of the site.

Potential source locations identified:

1994 Atlantic Avenue, Brooklyn, NY – This property is identified as a former gasoline station. The site was under construction when contaminated soil was discovered around the 275-gallon waste oil tank. Five (5) other tanks with no reported information were found on-site. The NYSDEC spill number 99-07632 was assigned to the site.

1998 Atlantic Avenue, Brooklyn, NY - This facility is currently occupied by a GP Petro Station and is located 99 feet to the southeast of the site. The property has an active spill number (97-12517) assigned to it associated with a former station. The former station is believed to have been a Citgo branded station.

1866 Atlantic Avenue, Brooklyn, NY – This facility is occupied by an Exxon Station and is located 1518 feet to the west of the site. The station was assigned NYSDEC spill number 96-01503 in 1996. Contaminated soil was discovered during excavation activities.

Sensitive Receptors identified within a quarter mile radius:

A total of nine (9) churches were identified in the computerized report as being within a quarter mile radius of the site. The closest church is located less than 100 feet to the east-northeast of the site. There are seven (7) churches located between 700 feet and 1,300 feet to the northeast of the site. The final church is located approximately 1,000 feet to the south of the site. An additional church was identified during the site visit as being located across Ralph Avenue on the corner of Atlantic Avenue. The church is less than 100 feet from the site and was not identified in the computerized report.

Three (3) schools were identified. Saint Benedict School is located approximately 500 feet to the north-northwest of the site. Public School 28 is located approximately 650 feet to the northeast of the site. Public School 40 is located approximately 1,200 feet to the north of the site.

A park/playground is located approximately 650 feet to the southeast of the site.

No wells, waterbodies, or wetlands were identified within a quarter mile radius of the site.

If you have any questions or comments, please do not hesitate to contact me.

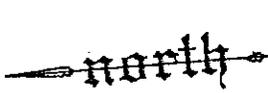
Sincerely,
EnviroTrac Ltd.



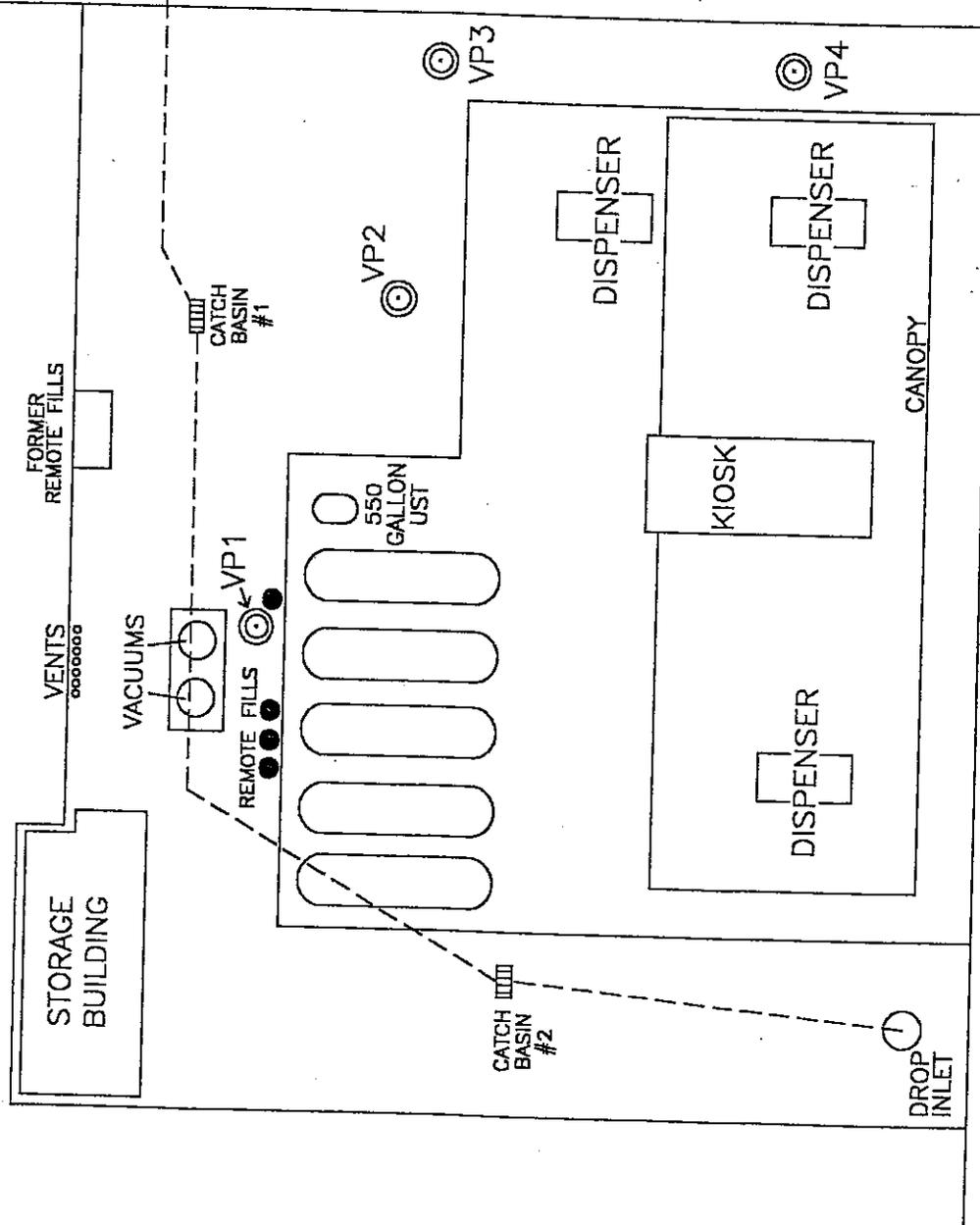
Dave Lorthoir
Project Manager

RESIDENTIAL

EMPTY LOTS



RALPH AVENUE / CHURCHES / COMMERCIAL



ATLANTIC AVENUE
COMMERCIAL

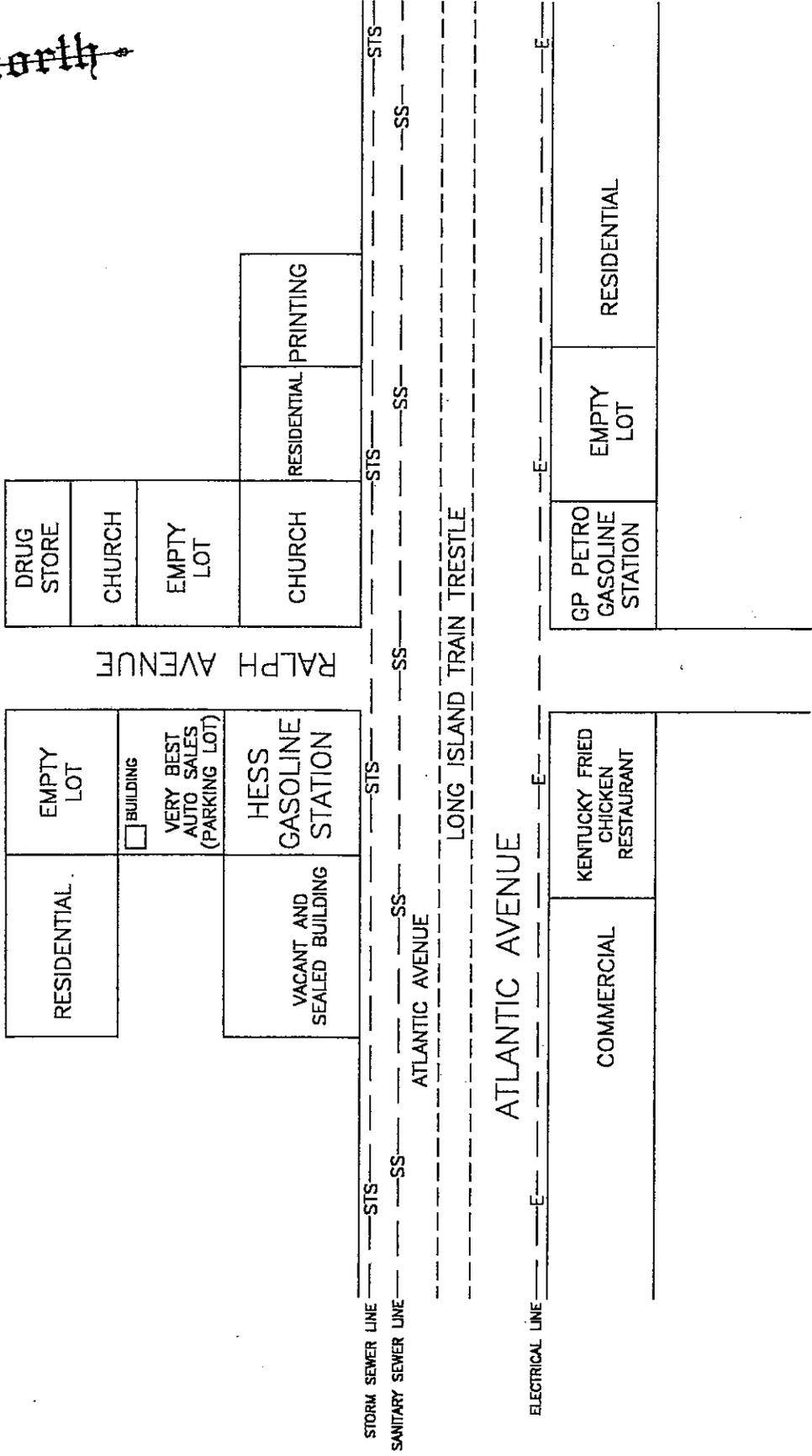
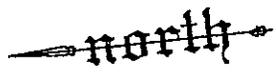
GP PETRO

END:
 SOIL BORING LOCATION
 SOIL VAPOR POINT
 REMOTE FILL

REVISION DATE:
 SCALE:
 REVISION BY: DR

HESS STATION - RALPH
 1885 ATLANTIC AVENUE
 BROOKLYN, N.Y.

EnviroTrac
 80 B. AIR PARK DRIVE, FORT KINGS, NEW YORK 11778



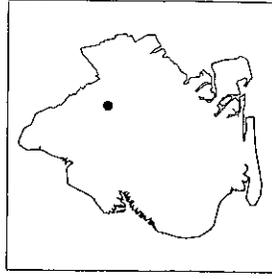
SURE # 2	SURROUNDING PROPERTIES MAP		HESS STATION - RALPH 1885 ATLANTIC AVENUE BROOKLYN, NEW YORK		 80 B AIR PARK DRIVE, ROINOKOMA, NEW YORK 11778 PHONE: (85)471-1500 FAX: (85)471-8383
	REVISION DATE: JULY 26, 2001	SCALE: NOT TO SCALE	REVISED BY: DR		

*Toxics Targeting
Well Report*

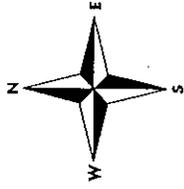
**1885 Atlantic Ave
Brooklyn, NY 11233**

July 26, 2001

Toxics Targeting
1/2 Mile Well & Sensitive Receptor Map
 1885 Atlantic Ave
 Brooklyn, NY 11233

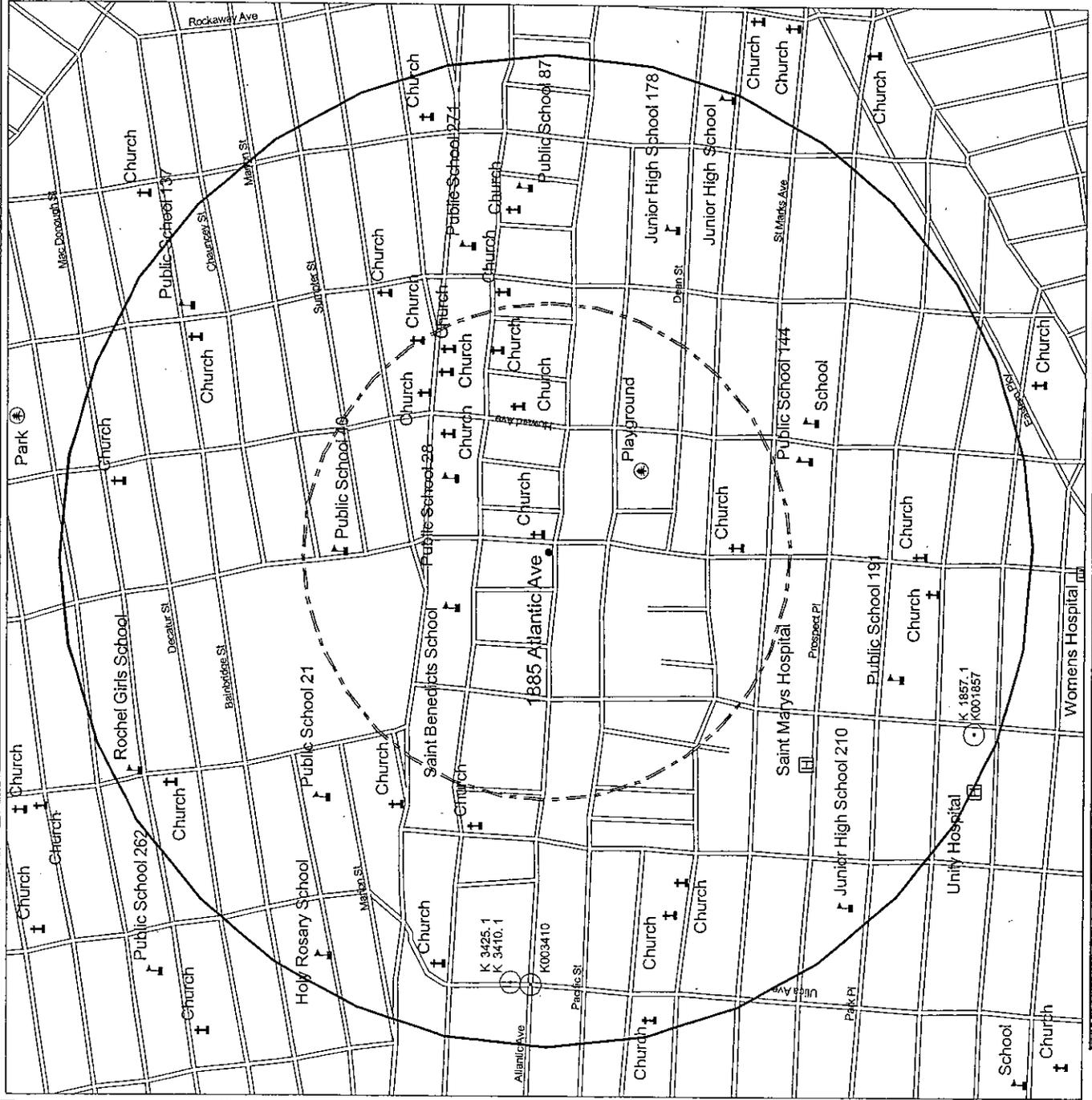


Kings County



- Wells
- School
- Hospital
- Church
- Park
- Beach

- Site Location
- Minor Roads
- Major Roads
- Expressways
- 1/2 Mile Radius
- 1/4 Mile Radius
- Waterbody
- NYSDEC Wetland
- County Border
- Railroad Tracks



Well Report
1885 Atlantic Ave
Brooklyn, NY 11233

Please note the same well may be tracked by different agencies with slightly varied well identification numbers. Wells can be mapped in multiple locations due to variations in the accuracy of map coordinates and addresses.

USGS Ground Water Site Inventory (GWSI) Wells:

Local Well Number: K 3410.1
Site location mapped by: Map coordinate
USGS Site ID: 404039073555002

Source Agency: USGS
Source Map Name: KF1328
County: KINGS
Aquifer Type: Well Construction Date: 19941018
Map Scale: 211111YD
Hole Depth: 395 ft
Date Established: 360 ft
Altitude Land Surface: 61.8 ft
Well Depth: .1 ft
Topographic Setting: Accuracy: .1 ft
Depth Data Source: Hydrologic Unit:
Station Type: GROUND WATER OTHER THAN SPRING
Significant Remark: 5002

Ground-water Site Type:

WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Data Reliability:

DATA HAVE NOT BEEN FIELD CHECKED BY THE REPORTING AGENCY, BUT THE REPORTING AGENCY CONSIDERS THE DATA RELIABLE

Primary: OBSERVATION
Secondary:
Tertiary:

Site Use
Water Use
UNUSED

Type(s) of Data Collected:
None identified

Instruments at Site:

CONSTRUCTION INFORMATION:

Lift and Major Pump: No information provided

Construction:
Construction Date: 19941018
Contractor/Driller Name: 1419
Type of Finish:
Depth to Bottom of Seal:
Method of Construction: HYDRAULIC ROTARY
Type of Surface Seal:
Method of Development:

Construction Data Source:

Hole: No information provided

Openings:

Depth to Top of Interval: 330 ft Depth to Bottom of Interval: 350 ft
Diameter of Interval: 4.00 in Type of Opening: SCREEN, TYPE NOT KNOWN
Screen or Open Section Material: PVC, FIBERGLASS, OR OTHER PLASTIC

DISCHARGE INFORMATION:

No information provided

MISCELLANEOUS INFORMATION:

Owner: Owner: U.S. GEOLOGICAL SURVEY
Date of Ownership:

Other Identifier: No information provided

Other Data Available: No information provided

Site Visits: No information provided

Field Water-quality: No information provided

Geophysical Logs:

Type of Log: DRILLERS Depth to Top of Interval:
Data Source: Depth to Bottom of Interval:

Networks: No information provided

Remarks: No information provided

GEOHYDROLOGIC LOGS INFORMATION:

Geohydrologic Unit: No information provided

Aquifers: No information provided

Local Well Number: K 3425. 1
Site location mapped by: Map coordinate

Source Agency: USGS
Source Map Name: KF1328
Aquifer Type:
Well Construction Date:
Hole Depth: 80 ft
Altitude Land Surface: 61.9 ft
Topographic Setting:
Depth Data Source:

USGS Site ID: 404039073555001

County: KINGS
Map Scale:
Primary Aquifer: 112GLCLU
Date Established:
Well Depth: 80 ft
Accuracy: .1 ft
Hydrologic Unit:

Station Type: GROUND WATER OTHER THAN SPRING
Significant Remark: 5001

Ground-water Site Type:
WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Data Reliability:
DATA HAVE NOT BEEN FIELD CHECKED BY THE REPORTING AGENCY, BUT THE REPORTING AGENCY CONSIDERS THE DATA RELIABLE

Primary: OBSERVATION
Secondary:
Tertiary:
Site Use: Water Use
UNUSED

Type(s) of Data Collected:
None identified

Instruments at Site:

CONSTRUCTION INFORMATION:

Lift and Major Pump: No information provided

Construction: No information provided

Hole: No information provided

Openings:

Depth to Top of Interval: 70 ft

Diameter of Interval:

Screen or Open Section Material:

Depth to Bottom of Interval: 75 ft
Type of Opening: SCREEN, TYPE NOT KNOWN

DISCHARGE INFORMATION:

No information provided

MISCELLANEOUS INFORMATION:

Owner: No information provided

Other Identifier: No information provided

Other Data Available: No information provided

Site Visits: No information provided

Field Water-quality: No information provided

Geophysical Logs: No information provided

Networks: No information provided

Remarks: No information provided

GEOHYDROLOGIC LOGS INFORMATION:

Geohydrologic Unit: No information provided

Aquifers: No information provided

Local Well Number: K 1857. 1
Site location mapped by: Map coordinate

USGS Site ID: 404014073553301

Source Agency: USGS
Source Map Name: KFL441
Aquifer Type:
Well Construction Date:
Hole Depth: 218 ft
Altitude Land Surface: 100.0 ft
Topographic Setting:
Depth Data Source:
Station Type:
Significant Remark: GROUND WATER OTHER THAN SPRING 3301

County: KINGS
Map Scale:
Primary Aquifer:
Date Established:
Well Depth: 218 ft
Accuracy: .1 ft
Hydrologic Unit: 02030201

Ground-water Site Type:
WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Data Reliability:
DATA HAVE NOT BEEN FIELD CHECKED BY THE REPORTING AGENCY, BUT THE REPORTING AGENCY CONSIDERS THE DATA RELIABLE

Primary: WITHDRAWAL OF WATER
Secondary:
Tertiary:
Site Use: Water Use
AIR CONDITIONING

Type(s) of Data Collected:
None identified

Instruments at Site:

CONSTRUCTION INFORMATION:

Lift and Major Pump: No information provided

Construction: No information provided

Hole: No information provided

Openings:
Depth to Top of Interval: 193 ft
Diameter of Interval: 12.0 in
Screen or Open Section Material: SCREEN, TYPE NOT KNOWN

Depth to Bottom of Interval: 207 ft
Type of Opening:

DISCHARGE INFORMATION:

No information provided

MISCELLANEOUS INFORMATION:

Owner: No information provided
Other Identifier: No information provided
Other Data Available: No information provided
Site Visits: No information provided
Field Water-quality: No information provided
Geophysical Logs: No information provided
Networks: No information provided
Remarks: No information provided

GEOHYDROLOGIC LOGS INFORMATION:

Geohydrologic Unit:
Depth to Top of Interval: 112GLCLU Depth to Bottom of Interval:
Aquifer Code: 112GRDR Lithology Code:
Contributing Unit: UNKNOWN CONTRIBUTION
Lithologic Modifier:
Depth to Top of Interval: 208 ft Depth to Bottom of Interval:
Aquifer Code: 112GRDR Lithology Code:
Contributing Unit: UNKNOWN CONTRIBUTION
Lithologic Modifier:

Aquifers: No information provided

Long Island Wells over 45 gal/min:
Source: NYS DEC

Located by: MANUAL MAPPING
Well Number: K001857
Owner: RANDFORCE AMUSEMENT
Permit: 1079
Aquifer:
1993 Pumpage: None Reported
1994 Pumpage: None Reported
1995 Pumpage: None Reported
1996 Pumpage: None Reported

Abandoned: No
Street: 1515 BEDFORD AVENUE
Expiration Date:
Capacity: 600 gal/min
Depth: 207 ft
Purpose: AC
Remarks: 40D
Uniform Procedures Number:
Name: RANDFORCE AMUSEMENT
City: BROOKLYN, NEW YORK
Zip: 11216

There were 279 wells with no coordinate information in Kings County.

Public Supply Wells:
Source: NYS DEC

Located by: LATITUDE/LONGITUDE COORDINATE

No mapped wells were identified

Wells with no address or valid coordinate information, in Kings County (not mapped):

None identified

Well Registration:
Source: NYS DEC

Located by: ADDRESS
This well is mapped:

Well Number: K003410
MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)

Well Location: UTICA AVENUE AND ATLANTIC AVENUE, BROOKLYN
ADDRESS CHANGE INFORMATION
Revised Street: UTICA AVENUE / ATLANTIC AVENUE
Revised Zip Code:

Owner: USGS
Permit Number:
Depth: 285 ft

Mail Address: 1220 SUNRISE HIGHWAY, RESTON VA.
Driller Registration Number: 1684
Purpose: MONITOR

Approval Date for Drilling: 10/06/1994
Remarks:

NYC Health Department:

Located by: ADDRESS

None Identified

NYS Department of Environmental Conservation - Home - Site Map - Search

[Home] [Spills] [IHWDS]

Spill Information

[Back To Results](#)

[First Site](#)

[Previous Site](#)

[Next Site](#)

[Last Site](#)

Region:2

Spill Number:9303355

Spill Date:06/14/1993

Spill Time:03:00 PM

Call Received Date:06/14/1993

**Time of Call
Received:**03:35 PM

Material Spilled

Spilled Units

GASOLINE

0 lbs.

Spill Name:HESS-1885 ATLANTIC AVE

Address:1885 ATLANTIC AVE

City:BROOKLYN

County:Queens

[View Map](#)

Cause:Tank Failure

Source:Gasoline Station

Resource:On Land

Waterbody:

Region Close Date:

[New Search](#)

[Return to Spills Database Home Page](#)

NYS Department of Environmental Conservation - Home - Site Map - Search

[\[Home\]](#) [\[Spills\]](#) [\[IHWDS\]](#)

Spill Information

[Back To Results](#)

[First Site](#)

[Previous Site](#)

[Next Site](#)

[Last Site](#)

Region:2

Spill Number:0000590

Spill Date:04/14/2000

Spill Time:12:00 PM

Call Received Date:04/14/2000

**Time of Call
Received:**04:36 PM

Material Spilled

GASOLINE

Spilled Units

Unknown Gal.

Spill Name:MERIT GAS STATION

Address:ATLANTIC AVE+RALPH AVE

City:BROOKLYN

County:Brooklyn

[View Map](#)

Cause:Other

Source:Gasoline Station

Resource:On Land

Waterbody:

Region Close Date:

[New Search](#)

[Return to Spills Database Home Page](#)

NYS Department of Environmental Conservation - Home - Site Map - Search

[Home] [Spills] [IHWDS]

Spill Information

[Back To Results](#)

Region:2 **Spill Number:**0105801

Spill Date:08/30/2001 **Spill Time:**08:25 AM
Call Received Date:08/30/2001 **Time of Call Received:**09:07 AM

Material Spilled	Spilled Units
UNKNOWN PETROLEUM	1 Gal.

Spill Name:TM304
Address:RALPH AVE & ATLANTIC AVE
City:BROOKLYN
County:Brooklyn
[View Map](#)

Cause: Unknown	Source: Unknown
Resource: In Sewer	
Waterbody:	

Region Close Date:

[New Search](#)

[Return to Spills Database Home Page](#)