GEOLOGIC SERVICES CORPORATION
Hydrogeologists and Environmental Scientists

July 22, 1999

Ms. Kerri-Ann O' Dowd
New York State Dept. of Environmental Conservation
Spill Management Division
Region 2
47-40 21st Street
Long Island City, New York 11101

RE: Environmental Site Assessment Report
Merit "Jerome"
2880 Atlantic Avenue
Brooklyn, New York
NYSDEC Case # 9830002

Dear Ms. O'Dowd:

Attached for your review is an Environmental Site Assessment Report, summarizing recently conducted soil and groundwater characterization activities at the above referenced site.

If you have any questions regarding this report, please contact Heather Oakes of Geologic Services Corporation (GSC) at (609) 259-0052, at your convenience.

Very Truly Yours,
Geologic Services Corporation

Heather A. Oakes
Senior Environmental Scientist

Craig A. Kunz, P.E.
Senior Project Manager

HAO/ck
Attachment
Ref: JB1/9805325a/LETTERS/ESA799.DOC
Copy: Angelo Fatiga – Merit

ENVIRONMENTAL SITE ASSESSMENT REPORT

Merit "Jerome"
2880 Atlantic Avenue
Brooklyn, NY

NYSDEC Case # 9830002

July 1999

Prepared By:
Geologic Services Corporation
330 Corporate Boulevard
Robbinsville, New Jersey 08691

Prepared For:
Merit Oil of New York, Inc.
551 West Lancaster Ave.
Haverford, PA 19041

GSC Project # 9805325A

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QUALITY ASSURANCE/QUALITY CONTROL

The following personnel have reviewed this report for accuracy, content, and quality of presentation:

Heather A. Oakes
Senior Environmental Scientist

7/22/99
Date

William L. Veltrie
Environmental Scientist

7/23/99
Date

Craig A. Kunz, P.E.
Senior Project Manager

July 23, 1999
Date

1.0 INTRODUCTION

Geologic Services Corporation (GSC) has conducted Environmental Site Assessment (ESA) activities at the Merit Oil of New York, Inc. (Merit) "Jerome" station, located at 2880 Atlantic Avenue in Brooklyn, New York. This site has a current New York State Department of Environmental Conservation (NYSDEC) Case # 9830002. The site location is depicted on **Figure 1** - Locus Plan, **Appendix A.**

1.1 Scope of Work

The key elements within the scope of work for this investigation included:

- Completion of a one mile radius well inventory search;
- Monitoring of accessible receptors for volatile organic compounds (VOCs) using an organic vapor analyzer (OVA);
- Qualitative screening of soils encountered during monitoring well installation with an OVA meter. A mini rae Photoionization Detector (PID) was utilized which operates using a bulb to ionize volatile organic compounds, and has a linear response between 0 and 1,999 ppm (parts per million). This instrument is calibrated to 100 ppm isobutylene.
- Review of local, state, and federal records regarding site history, geology/hydrogeology and groundwater quality;
- Installation of four monitoring wells as depicted on **Figure 2**-Site Plan, **Appendix A**;
- Water level gauging and groundwater sampling analysis from MW-1 through MW-4;
- Receptor evaluation;
- Development of site specific Quality Assurance/Quality Control and Health and Safety Plans;
- Preparation of a concise technical report of the findings.

All activities were conducted in accordance with the requirements of the NYSDEC. The work was completed concurrent and subsequent to the underground storage tank (UST) closure and upgrade activities. Details of the UST closure activities are presented in the Underground Storage Tank Closure/Upgrade Report submitted to NYSDEC in January 1999.

Project management and preparation of the technical report was completed by Ms.

Heather Oakes, Senior Environmental Scientist, and Mr. William Veltrie, Environmental Scientist for GSC. Mr. William Veltrie or Ms. Tracy Panner, Environmental Scientists at GSC, were on-site for installation of the monitoring wells during November 18, 20, and 22, 1998. Mr. Steve Roth, Environmental Scientist at GSC, was on-site for groundwater sampling activities on December 14, 1998.

A detailed description of the above referenced activities is summarized below.

2.0 BACKGROUND INFORMATION

Background information for the subject site pertaining to existing site features, land use, on-site activities completed to date, and regional geology/hydrogeology, was compiled by Mr. Veltrie and Ms. Oakes of GSC, and is detailed below.

2.1 Site Representation

Prior to station renovations, as detailed in the UST Closure Report, the general layout of the site consisted of a single story storage building, three unleaded gasoline dispenser islands (DI-1, DI-2 and DI-3), with a kiosk located adjacent to dispenser (DI-2), a canopy located above the kiosk/dispenser area, and 38 USTs. The USTs were comprised of 30 550-gallon UST's in one tankfield (herein referred to as the 550-gallon gasoline tankfield), with a second tankfield (herein referred to as the main tankfield) consisting of six gasoline/diesel tanks, and two wastewater tanks in a third area (herein referred to as the wastewater excavation) and remote fills to the main tankfield. UST closure/upgrade activities were conducted on August 6-7, 10-14, 17-21, and 24-25, September 8 and 15, and November 4, 1998.

Upgrade activities included the installation of double walled fiberglass product piping

connected to six new dispenser islands and five double walled fiberglass USTs, including double walled fiberglass remote fills and single walled fiberglass vapor recovery lines. The five double walled USTs consisted of one 600 gallon waste water tank, one 10,000 gallon regular unleaded gasoline tank, one 10,000 gallon plus unleaded gasoline tank, one 10,000 premium unleaded gasoline tank, and one 10,000 gallon diesel tank.

The entire site is paved with asphalt, with the exception of the concrete pads, located over the USTs, and the area immediately surrounding the dispenser islands. A current site plan depicting the pertinent site features is included as **Figure 2 (Appendix A)**.

As depicted on **Figure 3** - Area Plan **(Appendix A)**, the site is located on the south side of Atlantic Avenue between Jerome and Barbey Streets. To the west, across Barbey Street, Royal Plastics Corporation factory is present. Further west and sidegradient, a Mobil gasoline station is present. Residential properties are located along the southern property boundary. The remainder of the area surrounding the site is comprised of commercial buildings to the north and east of the station along Atlantic Avenue and across Jerome Street.

2.2 Summary of Activities to Date

Prior to the UST closure, Roux Associates, Inc. advanced four soil borings in February of 1998 for soil disposal pre-classification purposes. No other previous environmental investigation is documented at the site. A detailed UST Closure Report was submitted to the NYSDEC in January 1999, under separate cover. During closure activities, the soil samples from the remote fills, wastewater excavation, and 550 gallon gasoline tankfield exhibited BTEX, MTBE, and Base Neutrals above NYSDEC Stars Memo #1 Guidance Values, and lead above the recommended soil cleanup objective for lead in metropolitan areas from the NYSDEC Division of Hazardous Waste Remediation. Initial site characterization activities conducted concurrent

with the site upgrade/closure activities are detailed within this report.

2.3 Regional Geologic, Hydrologic, and Hydrogeologic Characteristics

The site is situated at an elevation of approximately 40 feet above mean sea level. The site is slightly sloping toward the southwest with an average gradient of 0.001 ft/ft. Unconsolidated material encountered on-site to approximately 34 feet consisted of brown medium to fine sand with coarse gravel. According to The Surficial Geologic Map of New York, the subsurface geology consists of proglacial fluvial deposited outwash sands and coarse to fine sands approximately two to 20 feet in thickness. Underlying the fluvial depositions are Upper Cretaceous coastal plain depositions of the Monmouth Group, Matawan Group, and Magothy formation. The Upper Cretaceous coastal plain deposits consist of silty clay, glaucontic sandy clay, sand, and gravel which is approximately 0 to 2,000 feet thick.

2.4 Potential Sensitive Receptors

Mr. Geary of GSC conducted a complete Sensitive Receptor Survey (SRS) on August 7, 1998 to determine potentially sensitive receptors in the area. A summary of the results is provided in the following sub-sections.

2.4.1 Potable Water Supplies

A search of available records was requested by Ms. Oakes of GSC, from the City of New York Department of Health, for potable water wells located within a one mile radius of the site. The search revealed three potable water wells within a one mile radius of the subject site. All three of the wells are located upgradient of the referenced site. The closest potable well is located at 570 Jamaica Avenue, which is approximately 3,500 feet northeast of the site.

Correspondence from the City of New York Department of Health detailing the vicinity well locations is included in **Appendix B.**

2.4.2 Surface Water Bodies

The closest surface water body is Ridgewood Reservoir, located approximately 4,000 feet upgradient of the site.

2.4.3 Subsurface Utilities

Public utilities servicing the site consist of underground water and storm sewer lines along Barbey Street and Jerome Street. An underground gas line runs along Atlantic Avenue. Overhead telephone and underground electric are located along Jerome Street. As part of the site assessment activities, Mr. Geary of GSC monitored vapors in three storm drains on-site and accessible catch basins (located approximately two to five fbg) along Barbey Street and Jerome Street in the direct vicinity of the Merit station on August 7, 1998, using an OVA meter. No volatile organic vapors were detected during this investigation. A map depicting the locations of the catch basins is included as **Figure 2** (Site Plan, **Appendix A**).

2.4.4 Residences, Schools and Commercial Buildings

As shown on **Figure 3** (Area Plan, **Appendix A**), the area directly surrounding the site is comprised of commercial buildings along the northern side of Atlantic Avenue. The nearest residential buildings are located adjacent to the southern property boundary. The nearest commercial buildings are located along the eastern, western and northern property boundaries of the site. As seen on **Figure 3**, no schools were observed in the direct vicinity of the station.

2.4.5 Basements

As shown on **Figure 3** (Area Plan, **Appendix A**), the residential and commercial buildings surrounding the site do not contain basements, with the exception of St. Michael's Church, located approximately 50 feet southeast of the Merit station.

3.0 SUBSURFACE INVESTIGATION

Subsurface investigation activities were conducted at the site to characterize the condition of soils and groundwater at the site. The investigation included the advancement of four soil borings (SB-1, SB-2, SB-3, and SB-4) that were completed as monitoring wells (MW-1, MW-2, MW-3, and MW-4).

3.1 Soil Boring Program

Mr. Veltrie or Ms. Panner of GSC supervised the advancement of four soil borings at the site on November 18, 20, and 22, 1998. The borings were advanced to depths approximately 45 feet below grade (fbg) utilizing a drill rig with 10-inch outside diameter hollow stem augers, and 2-inch diameter 24-inch split spoon samplers. B.L. Myers of Belchertown, New York, a New York State certified driller (NY Certification # 1638), conducted drilling operations under direct supervision of Mr. Veltrie or Ms. Tracy Panner. Split spoon sampling equipment was cleaned between each sample in accordance with GSC's standard operating procedure **(Appendix C)**. The four soil borings were advanced on the property in order to determine groundwater flow direction and monitor possible adsorbed and dissolved phase hydrocarbon impact.

Soil borings SB-1 through SB-4 were subsequently completed as monitoring wells: MW-1 through MW-4, respectively. The locations of the completed borings/wells are indicated

on **Figure 2 (Appendix A)**. Soil Boring Logs/Monitoring Well Construction Diagrams are included in **Appendix D**.

In accordance with Merit requirements, soil samples were collected continuously in SB-2 and at five foot intervals in SB-1, SB-3 through SB-4, utilizing a 24-inch split spoon, in order to evaluate the physical and chemical characteristics of the subsurface soils. Sample collection with the split spoon was conducted in accordance with American Standard Testing Method D1586 (ASTM), Penetration Test and Split Barrel Sampling of Soils. Immediately upon recovery, the samples were segregated into three parts: containerized for potential laboratory analysis, for field screening (using a portable Mini RAE PID capable of detecting hydrocarbon concentrations from 0 - 1,999 ppm), and to be visually inspected in the field by William Veltrie or Tracy Panner of GSC in accordance with the Burmister and Unified Soil Classification Systems (USCS).

3.1.1 Site Geology

Unconsolidated materials encountered consisted of brown medium to fine sand with coarse gravel. No confining layers were encountered during boring advancement. Soil borings were advanced by split spoon and hollow stem augers to approximately 45 feet below grade. A complete description of the materials encountered during boring activities is included on the soil boring logs/monitoring well construction diagrams in **Appendix D**.

3.1.2 Qualitative Soil Screening

Drill cuttings were field screened for total VOCs using an OVA meter. Soil screening was performed in accordance with GSC's standard operating procedures utilizing a jar headspace technique described in **Appendix C**. Discrete field screening results collected from each of the

split spoon samples are included in the Soil Boring Logs/Monitoring Well Construction Diagrams attached as **Appendix D**.

3.1.3 Soil Quality Analytical Data

One soil sample was obtained from each boring, and submitted to QC Incorporated of Southampton, Pennsylvania (QC), a New York State certified laboratory (NYSDEC Certification # 11223), for laboratory analysis. Samples submitted for analysis exhibited the highest field screening concentration above the water table, or from the 6-inch interval immediately above the water table, as encountered during drilling operations. Sample intervals are indicated on the boring logs presented in **Appendix D**. Specifically, laboratory samples from SB-1 were collected at 30 to 32 fbg, SB-2 was sampled at 32 to 34 fbg, SB-3 was sampled at 25 to 27 fbg, and SB-4 was sampled at 10 to 12 fbg. Each sample was analyzed for appropriate compounds, as determined by the location of the boring in comparison to the type of historical tank the boring was advanced near (i.e. gasoline, diesel, or wastewater). Each boring was analyzed as follows:

- MW-1/SS-6: STARS List Base Neutrals using EPA Method 8270, and lead using EPA Method 6010.
- MW-2/SS-15: STARS List VOCs using EPA Method 8021, STARS List Base Neutrals using EPA Method 8270, and lead using EPA Method 6010.
- MW-3/SS-6: STARS List Base Neutrals using EPA Method 8270, and lead using EPA Method 6010.
- MW-4/SS-2: STARS List VOCs using EPA Method 8021.

Immediately following collection, the samples were placed in storage/transportation coolers with a minimum of ten pounds of ice for pickup by a QC courier. **Table 1 (Appendix A)** summarizes the soil analytical results and compares them to the Stars Memo #1 TCLP Alternative Guidance Values as published in the NYSDEC Starts Memo #1 Petroleum Contaminated Soil Guidance Policy, dated August 1992 (reprinted July 1993). Complete soil

laboratory reports are presented in **Appendix E**. Soil quality analytical data (BTEX, MTBE, Base Neutrals and lead) are also presented on **Figure 4,** Hydrocarbon Distribution in Soil Map **(Appendix A)**.

Benzene, toluene, ethylbenzene, and xylene concentrations were below the NYSDEC Stars Memo #1 TCLP Alternative Guidance Values in SB-1 through SB-4. MTBE was detected at concentrations ranging from non-detect (ND) (MW-4/SS-2) to 2,190 ppb (MW-2/SS-15). Total lead was detected at concentrations ranging from 3,140 ppb (MW-3/SS-6) to 4,500 ppb (MW-1/SS-6). All analytical results were below the NYSDEC Stars Memo #1 TCLP Alternative Guidance Values, except for MW-2/SS-15, which contained 2,190 ppb MTBE. The Guidance Value for MTBE is 1,000 ppb.

3.2 Groundwater Investigation

Soil borings SB-1 through SB-4 were completed as monitoring wells MW-1 through MW-4 respectively, using 10-inch outside diameter hollow stem augers. The wells were installed through the augers, utilizing 15 feet of 4-inch diameter, 0.010-inch, machine slotted, schedule 40 polyvinyl chloride (PVC) well screen with flush threaded 4-inch solid PVC riser. MW-1 through MW-4 were completed at 45 fbg. The annular space of each well was filled with a washed sand filter pack to a level two feet above the screen interval, followed by a 2-foot thick bentonite seal. The remaining annular space was filled with bentonite cement grout. Each well was completed with a steel flush mounted street box with a bolt down manhole cover imbedded in a two by two foot by 18 inch reinforced concrete pad.

Following installation, each of the monitoring wells was developed for approximately 20 minutes until evacuated groundwater appeared free of sediment. Evacuated groundwater was treated on-site utilizing a portable granular activated carbon (GAC) unit and discharged on-site.

3.2.1 Monitoring Well Surveying

In accordance with the requirements of Merit, Erlandsen-Crowell & Shaw, a New York registered professional surveyor from Massapequa, New York (NY State License # 35614), surveyed the top of casing elevations MW-1 through MW-4 on December 14, 1998. The well elevations were tied into datum established by the U.S. Coast and Geodetic Survey. The December 14, 1998 well elevations are recorded on **Table 2**, Monitoring Well Gauging and Analytical Data **(Appendix A)**. Additionally, the well elevations were utilized to construct the Groundwater Potentiometric Surface Map included as **Figure 5, (Appendix A).**

3.2.2 Site Hydrogeology

Prior to well evacuation, Mr.Roth gauged the four site monitoring wells with an electronic interface probe (EIP) on December 14, 1998 to determine depth to groundwater and potential presence of liquid phase hydrocarbon (LPH). Well gauging data is provided in **Table 2 (Appendix A)**. LPH was not detected in any of the monitoring wells on December 14, 1998.

Based on the December 14, 1998 monitoring data, groundwater elevations were plotted and contoured by William Veltrie of GSC, on **Figure 5 (Appendix A)**.

A groundwater gradient to the southwest, as determined using water level elevations from MW-1 through MW-4, was calculated to be approximately 0.001 ft/ft.

3.2.3 Groundwater Quality Analytical Data

The wells were purged of three well volumes and allowed to recharge to ensure that a representative sample of groundwater was obtained. Following well evacuation and recovery, Mr. Roth collected groundwater samples from wells MW-1 through MW-4 on December 14, 1998. The samples were obtained using dedicated disposable polyethylene bailers and then

transferred to laboratory supplied containers which were labeled, logged, and placed in storage/transportation coolers with a minimum of ten pounds to QC.

Groundwater samples collected from wells MW-1 through MW-4 were analyzed for BTEX and MTBE by EPA Method 8021, Lead by EPA Method 200.7, and Base Neutrals by EPA Method 8270. **Table 3 (Appendix A)** summarizes the groundwater analytical results and compares them to NYSDEC Groundwater Quality Standards, as published in the NYSDEC Water Quality Regulations. Complete laboratory reports are included in **Appendix F,** and detailed on **Figure 6**- Hydrocarbon Distribution in Groundwater Map, **Figure 7** - BTEX Isoconcentrations in Groundwater Map, and **Figure 8** - MTBE Isoconcentrations in Groundwater Map **(Appendix A).**

As can be seen from the results in **Table 3**, total BTEX concentrations were detected at concentrations ranging from non-detect (MW-3) to 9,572.3 ppb (MW-1). MTBE was detected at concentrations ranging from 70.3 ppb (MW-4) to 2,030 ppb (MW-2).

4.0 FREEDOM OF INFORMATION ACT (FOIA) REQUEST

Heather Oakes of GSC reviewed available UST information provided by the NYSDEC to determine the status of sites in the immediate vicinity of the Merit station. One reported Public Bulk Storage Report and one reported discharge was identified within the search at the following address:

- Mobil Service Station
  2816 AtlanticAvenue
  Brooklyn, New York

In review of the available data, the Mobil Service Station is located approximately 370 feet west of the Merit service station. According to the spill report, a spill occurred at the Mobil

Station in 1996. According to the NYSDEC, the spill was a result of gas leaking from a pump nozzle following the pump nozzle being sheared off by a car. However, it was noted that the pump was not on, and therefore only a minimal amount of residual gas leaked onto the asphalt prior to clean-up. According to personnel at the NYSDEC, no further environmental file exists for this site. A copy of the referenced information is included as **Appendix G**.

No other case files were found for this investigation.

5.0 MANAGEMENT OF GENERATED WASTES

Soil generated as a result of the drilling were temporarily placed in 55 gallon drums prior to removal. Following removal, 14 drums were disposed of at Posillico Brothers Asphalt Company of Farmingdale, New York. Water generated as a result of monitoring well development and purging activities was treated with a portable GAC unit and discharged on-site. A copy of the soil disposal bill of lading is included as **Appendix H**.

6.0 LIMITED QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) PLAN

Tasks performed as part of this Site Assessment Report were conducted in accordance with Geologic Services Corporation's Field Manual of Standard Operating Procedures and Document Quality Assurance Program. A Limited QA/QC Plan developed specifically for the subject site is included as **Appendix C**. GSC's Standard Operating Procedures, as referenced above, are attached to this QA/QC plan.

7.0 HEALTH & SAFETY PLAN

Site activities were conducted in accordance with the site Health and Safety Plan (HASP) developed by GSC. The HASP is retained in GSC's files and is available for review upon request. The HASP outlines the appropriate air monitoring equipment, air quality action levels, levels of protection, and emergency response procedures. Field work during this project was performed by OSHA trained personnel who have completed a 40-hour certification program in accordance with 29 CFR 1910.120. To date, excavation, monitoring, and sampling activities have been conducted in modified Level D protection.

8.0 INVESTIGATIVE SUMMARY AND CONCLUSIONS

Geologic Services Corporation conducted Environmental Site Assessment activities at the Merit service station, located at 2880 Atlantic Avenue, Brooklyn New York. The information collected during the course of this investigation is summarized as follows:

- The site is located on Atlantic Avenue in Brooklyn, New York. The western property boundary is adjacent to Barbey Street. Residential properties are located along the southern property boundary. The remainder of the area surrounding the site is comprised of commercial buildings along Atlantic Avenue. The closest active gasoline station in the direct vicinity of the site is an active Mobil Service Station located approximately 370 feet west of the site. Additional commercial properties located in the direct vicinity of the site include Diana Auto Sales, El' Nuevo Night Club, Atlas Plumbing, a heating and supply, Trans Atlantic Refrigeration, Family Grocery, and a vacant building.

- There are no known potential receptors within the direct vicinity of the station. Utilities are not considered a potential sensitive receptor due to the depth of water on-site being approximately 30 to 33 fbg. The nearest surface water body is located approximately 4,000 feet upgradient and north of the station. The closest known potable well is located approximately 3,500 feet northeast (upgradient) of the station.
- UST closure/upgrade activities were conducted in August/September/November 1998. Closure/upgrade activities included the removal of three dispenser islands, remote fills, remote fill piping, and 38 single walled steel USTs. A total of 1,006 tons of soil was excavated and transported off-site for thermal processing and recycled into hot mix asphalt. Soil sampling results obtained during closure/upgrade activities indicated concentrations were above the STARS Memo #1 Alternative Guidance Values. Analyses detected above guidance values included BTEX, MTBE, Lead and Base Neutrals. The maximum total BTEX concentration detected in the post excavation sample was 25,210.5 ppb in sample SSW-8.
- GSC personnel reviewed available underground storage tank site files provided by the NYSDEC, Long Island City, New York office. One reported discharge within the immediate vicinity of the Merit station was found, at the active Mobil Service Station. According to NYSDEC personnel, no current environmental file exists for this site.
- Upon completion of closure activities, five new double-walled USTs, six dispenser islands, double-walled fiberglass remote fill lines, double-walled fiberglass product piping, and single-walled fiberglass vapor recovery lines were installed on-site.
- Following completion of closure/upgrade activities, a comprehensive site investigation was conducted, as described in this report. As part of these activities, four soil borings were

advanced on-site and finished as monitoring wells: MW-1, MW-2, MW-3, and MW-4.

- Laboratory analysis of soil samples obtained from the above referenced borings indicated compounds below the NYSDEC Stars #1 Memo Guidance Values except MW-2, which contained 2,190 ppb of MTBE. The Guidance Value is 1,000 ppb. A detailed summary of the soil analytical data from the soil borings is included in **Table 1 (Appendix A).**
- Water level gauging data from December 14, 1998 indicates groundwater flow to the southwest. Groundwater depths, as measured during groundwater monitoring well sampling activities conducted on August 14, 1998, ranged from 30.43 fbg (MW-3) to 33.14 fbg (MW-1).
- Groundwater samples obtained during the site assessment exhibited constituents in excess of NYSDEC Groundwater Quality Standards in MW-1, MW-2, MW-3, and MW-4.

Based on the site specific data collected to date, Merit will determine the extent of dissolved and adsorbed phase hydrocarbon impact through additional on-site soil borings and/or monitoring wells.

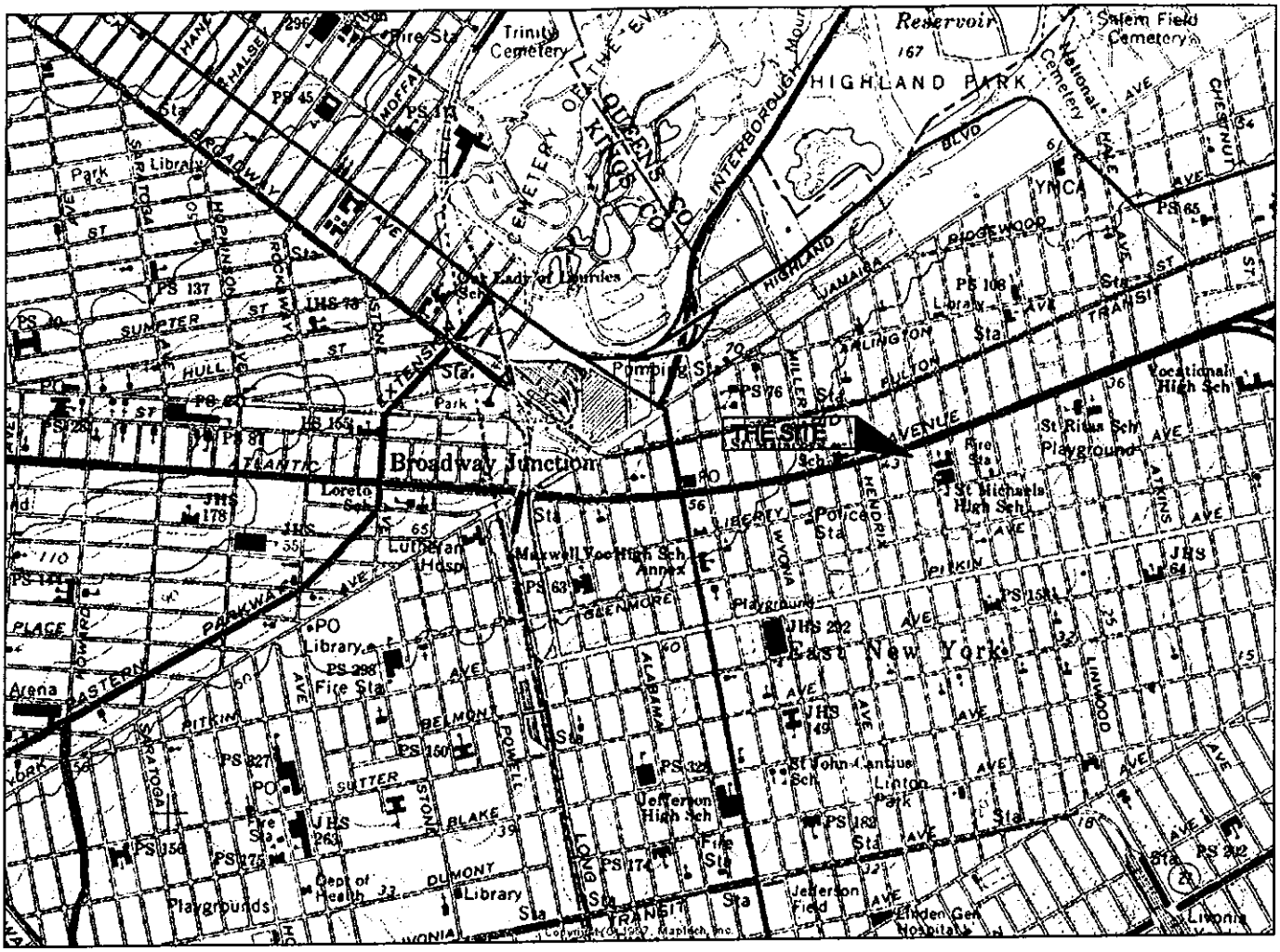
9.0 REFERENCES

New York State Department of Environmental Protection Guidance Document, Spill Technology and Remediation Series (STARS) Petroleum-Contaminated Soil Guidance Policy, August 1992, reprinted July 1993.

New York State Department of Environmental Protection, Water Quality Regulations, Surface Water and Groundwater Classifications and Standards.

University of the State of New York, The State Education Department Surficial Geologic Map of New York, 1989.

APPENDIX A: Figures and Tables



UTM COORDINATES: 4 503 371 N
593 974 E

ZONE 18

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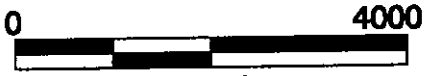
LONGITUDE: 73° 53' 17"



Scale in feet

FIGURE 1 LOCUS PLAN

Merit "Jerome"
2880 Atlantic Avenue
Brooklyn, New York

GSC REF.: 9805325\01LOCUS.DWG	
DRAFTED BY: cas	DATE: 11/98
REV BY:	CHECKED BY:
SOURCE: USGS 7.5' Topographic Map, Brooklyn , NY Quad.	

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330 Corporate Boulevard • Robbinsville, NJ • (609) 259-0052

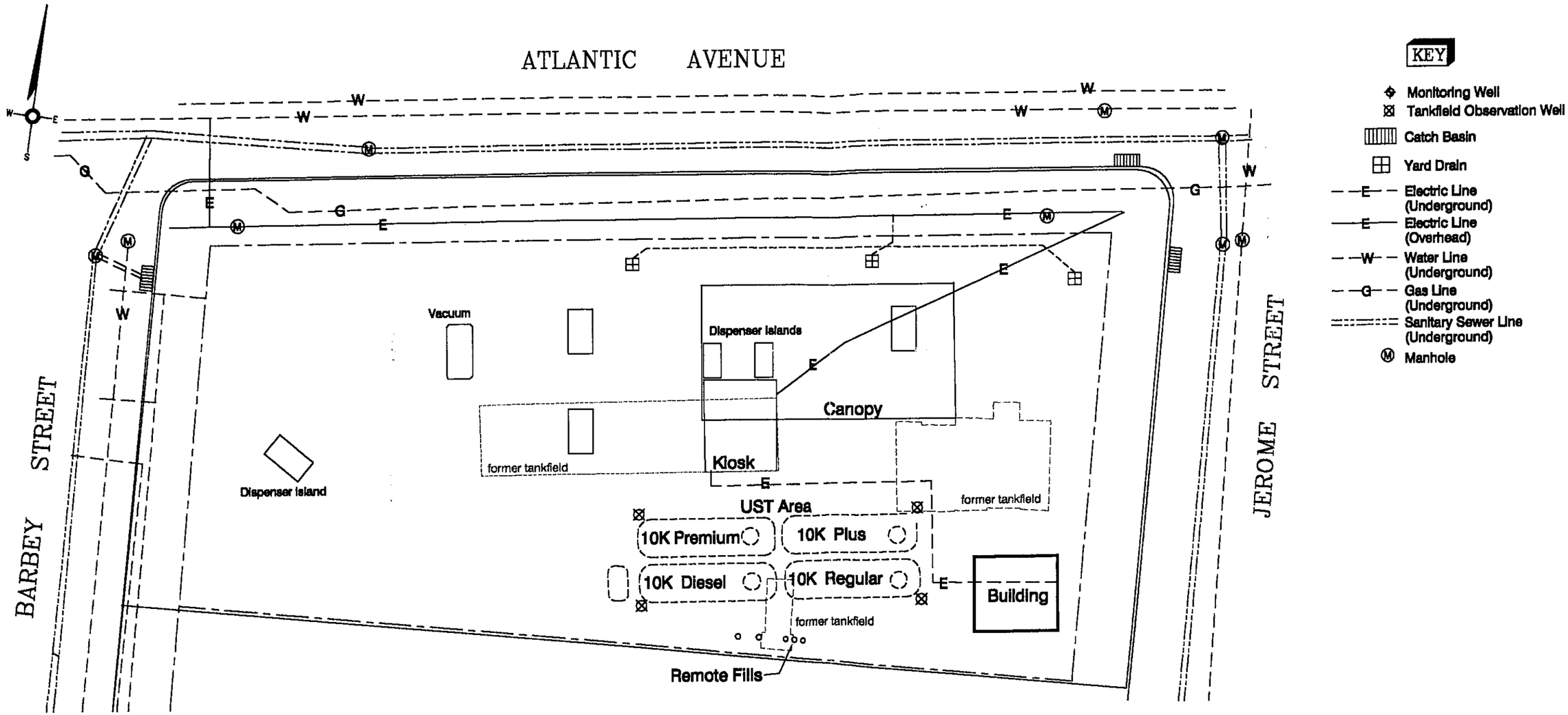

FIGURE 2 SITE PLAN

Merit "Jerome"
2880 Atlantic Avenue
Brooklyn, New York

GSC REF.: 9805325\07SITE.DWG	
DRAFTED BY: cas	DATE: 6/99
REVISED BY:	CHECKED BY:
SOURCE: Map provided by Merit and GSC Field Reconnaissance	

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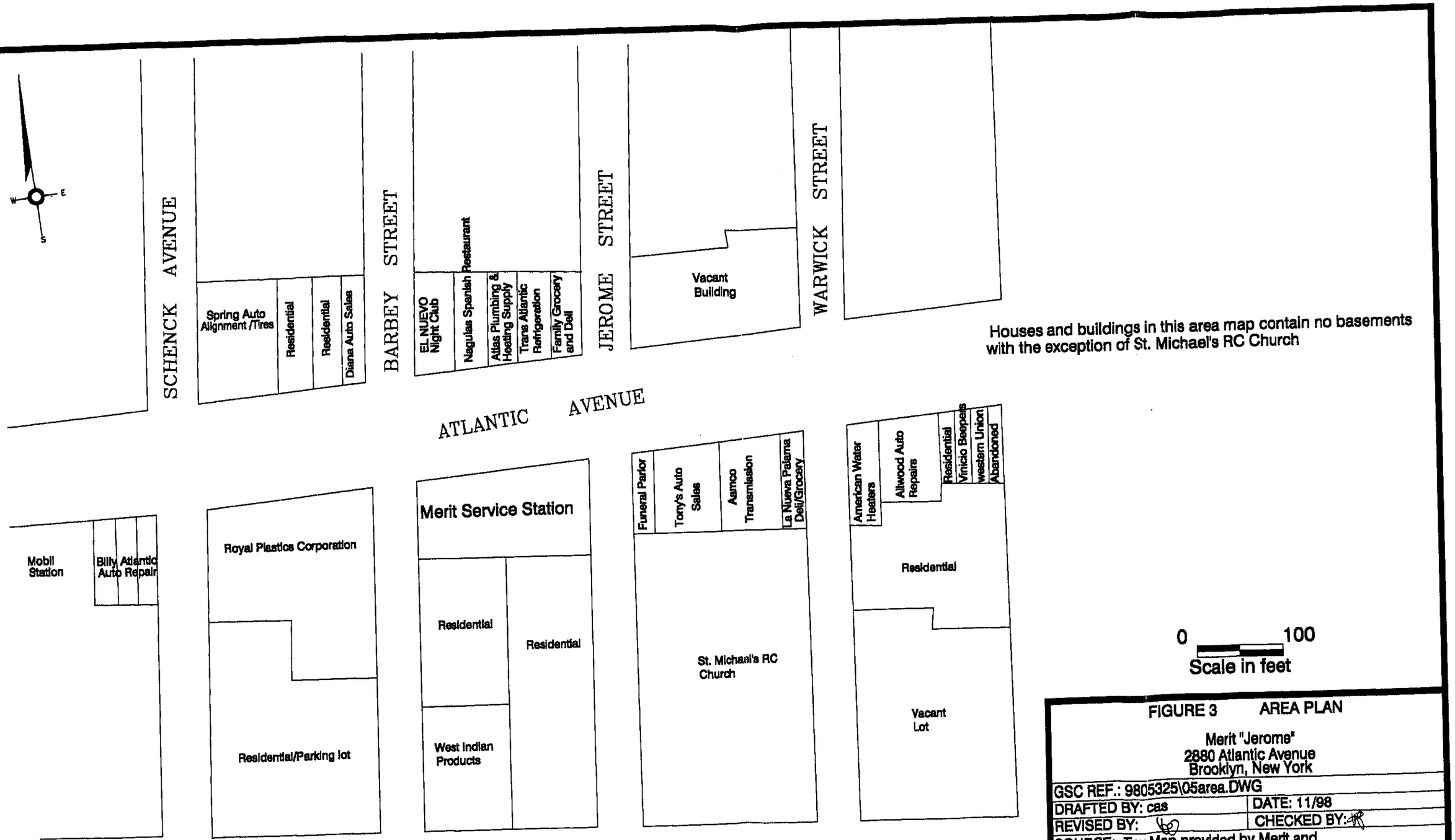

FIGURE 3 AREA PLAN

Merit "Jerome"
2880 Atlantic Avenue
Brooklyn, New York

GSC REF.: 9805325\05area.DWG	
DRAFTED BY: cas	DATE: 11/98
REVISED BY:	CHECKED BY:
SOURCE: Tax Map provided by Merit and Field Reconnaissance by GSC	

GEOLOGIC SERVICES CORPORATION
Hydrogeologists and Environmental Scientists
330 Corporate Boulevard • Robbinsville, NJ • (609) 259-0052

ATLANTIC AVENUE

BARBEY STREET

JEROME STREET

W E S

Vacuum

Dispenser Islands

Canopy

Kiosk

Dispenser Island

former tankfield

former tankfield

former tankfield

UST Area

10K Premium

10K Plus

10K Diesel

10K Regular

Building

MW-1

MW-2

MW-3

MW-4

Remote Fills

MW5

MW6

SB-4/10-12
ND (2.95)
ND (2.95)
ND (2.95)
ND (5.90)
ND (2.95)
NA
46.52

SB-3/SS-27
NA
NA
NA
NA
NA
NA
NA
3140
ND

SB-1/SS-6
NA
NA
NA
NA
NA
4,500
134.2

SB-2/SS-15
4.48
ND (2.87)
ND (2.87)
ND (5.74)
2,190
3,380
ND

0 30

Scale in feet

KEY

- Monitoring Well
- Tankfield Observation Well
- Catch Basin
- Yard Drain

SB-2/SS-15	Well identification
4.48	Benzene (ppb)
ND (2.87)	Toluene (ppb)
ND (2.87)	Ethylbenzene (ppb)
ND (5.74)	Total Xylenes (ppb)
2,190	MTBE (ppb)
3,380	Total Lead (ppb)
0	TBN (ppb)

MTBE = Methyl Tertiary Butyl Ether
TBN = Total Base Neutrals
ppb = parts per billion (ug/L)
Data Obtained 11/18-22/98
NA=Not Analyzed for referenced parameter

FIGUR T DISTRIBUTION
P
e"
enue
ork

GSC REF.: 98
DRAFTED BY:
REVISED BY: 6/99
SOURCE: Ma
GS
KED BY:

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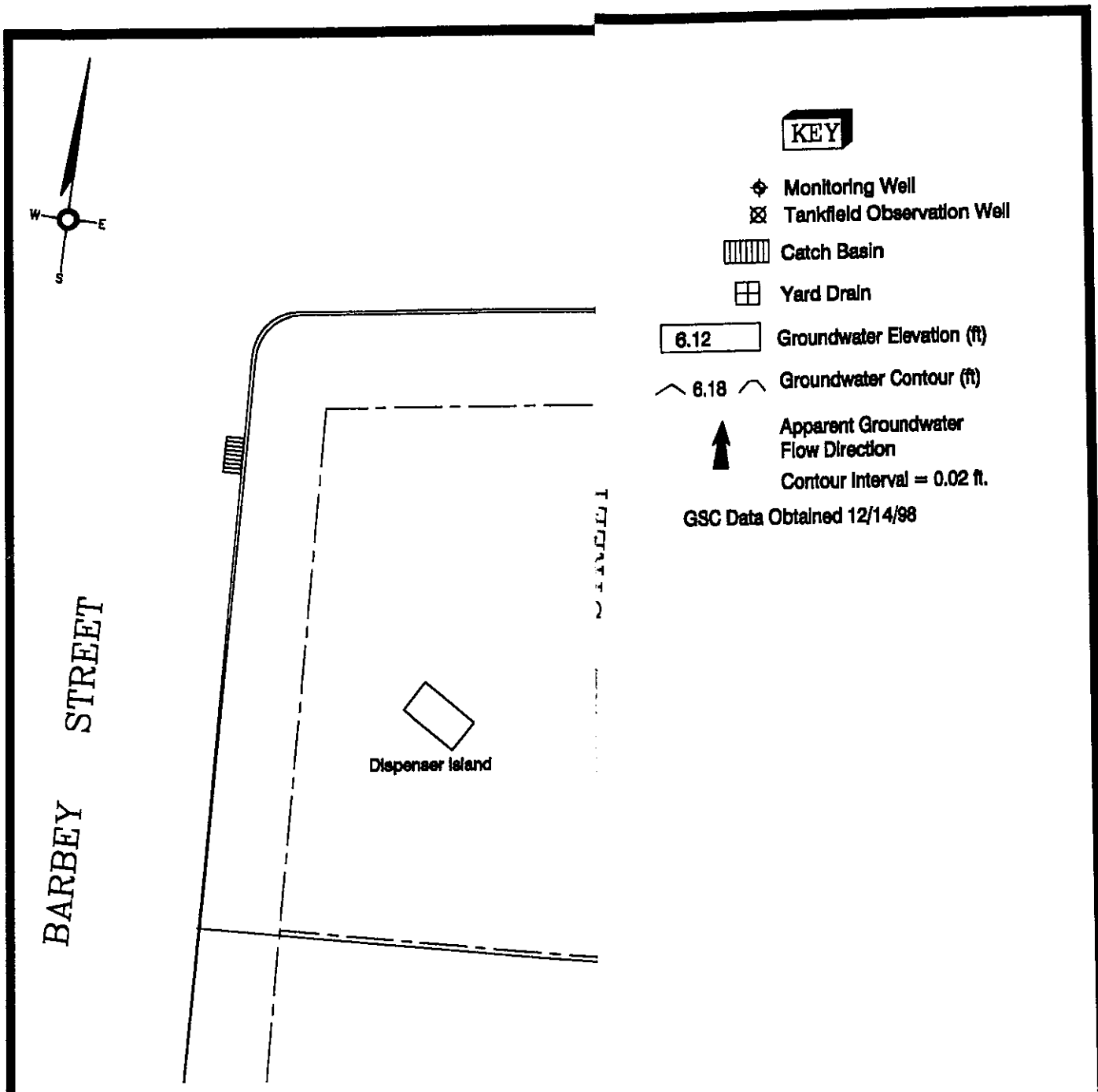

5 GROUNDWATER POTENTIOMETRIC SURFACE MAP
Merit "Jerome"
2880 Atlantic Avenue
Brooklyn, New York

05325\07SITE.DWG	
: cas	DATE: 6/99
	CHECKED BY:

p provided by Merit and
C Field Reconnaissance

GEOLOGIC SERVICES
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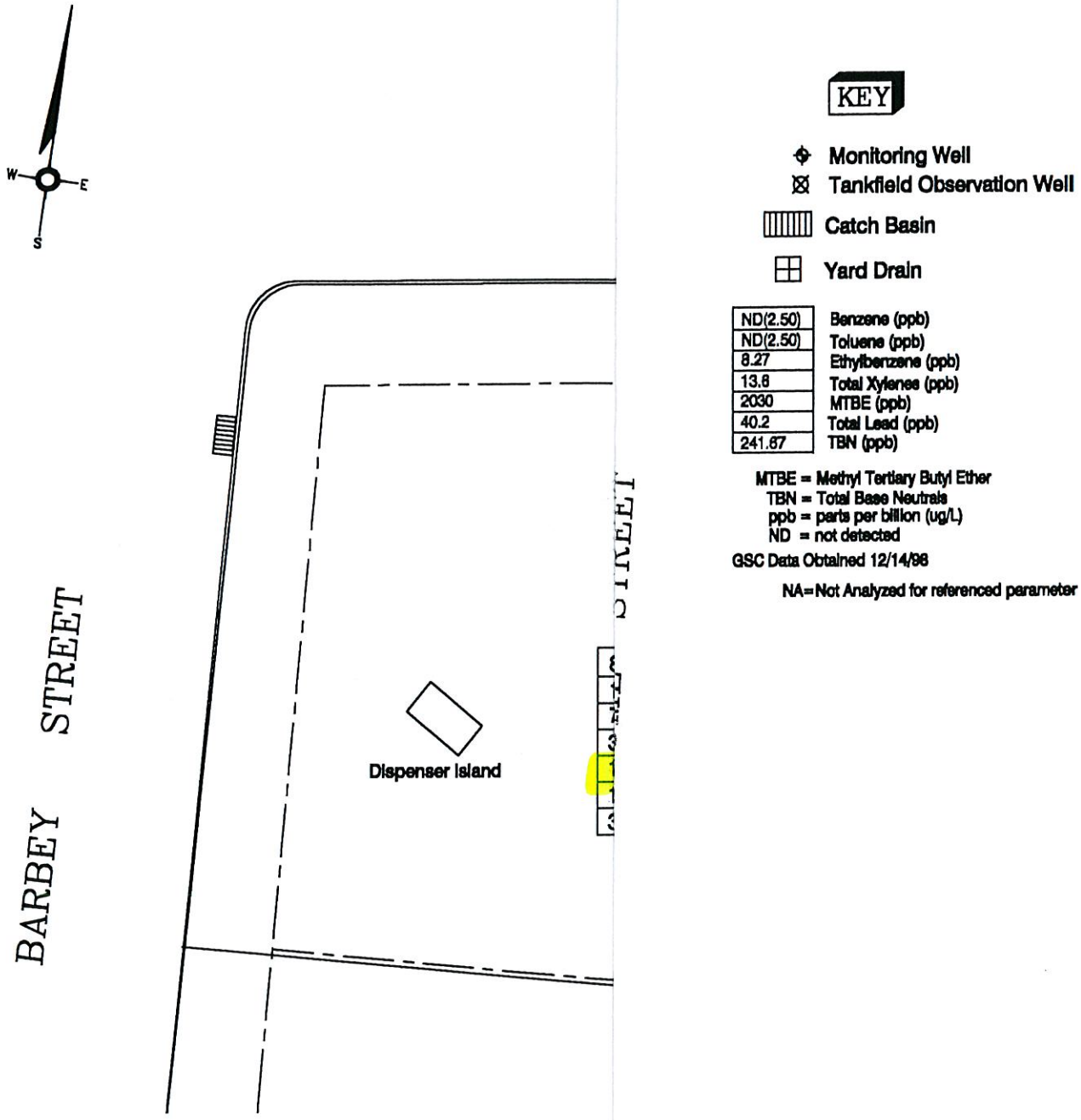

KEY

- Monitoring Well
- Tankfield Observation Well
- Catch Basin
- Yard Drain

ND(2.50)	Benzene (ppb)
ND(2.50)	Toluene (ppb)
8.27	Ethylbenzene (ppb)
13.8	Total Xylenes (ppb)
2030	MTBE (ppb)
40.2	Total Lead (ppb)
241.67	TBN (ppb)

MTBE = Methyl Tertiary Butyl Ether
TBN = Total Base Neutrals
ppb = parts per billion (ug/L)
ND = not detected

GSC Data Obtained 12/14/98

NA=Not Analyzed for referenced parameter

E 6 HYDROCARBON DISTRIBUTION IN GROUNDWATER
Merit "Jerome"
2880 Atlantic Avenue
Brooklyn, New York

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cas	DATE: 6/99
	CHECKED BY:

p provided by Merit and
C Field Reconnaissance

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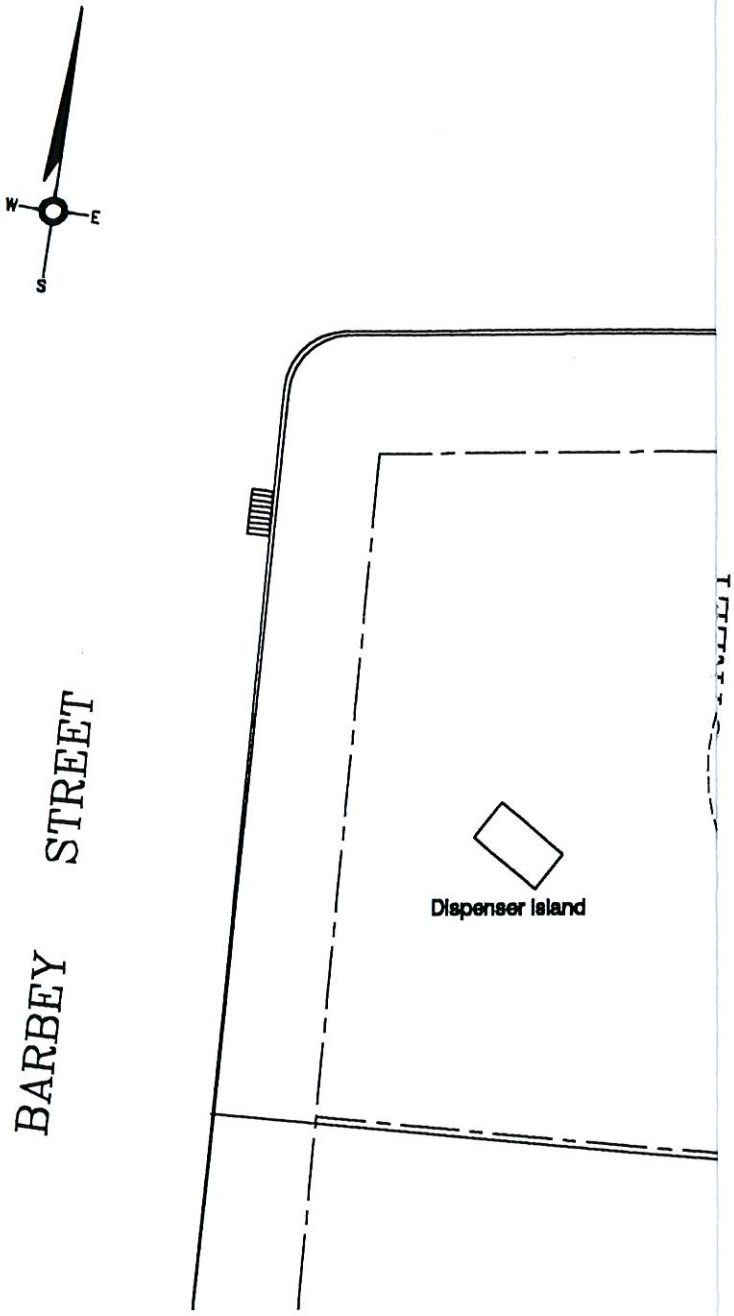

KEY

- Monitoring Well
- Tankfield Observation Well
- Catch Basin
- Yard Drain
- 9572.33 BTEX Isoconcentrations (ppb)

BTEX = Benzene, Toluene, Ethylbenzene and Total Xylenes
ppb = Parts per billion (ug/L)
ND = None detected
GSC Data Obtained 12/14/98

: 7 BTEX ISOCONCENTRATIONS IN GROUNDWATER MAP
Merit "Jerome"
2880 Atlantic Avenue
Brooklyn, New York

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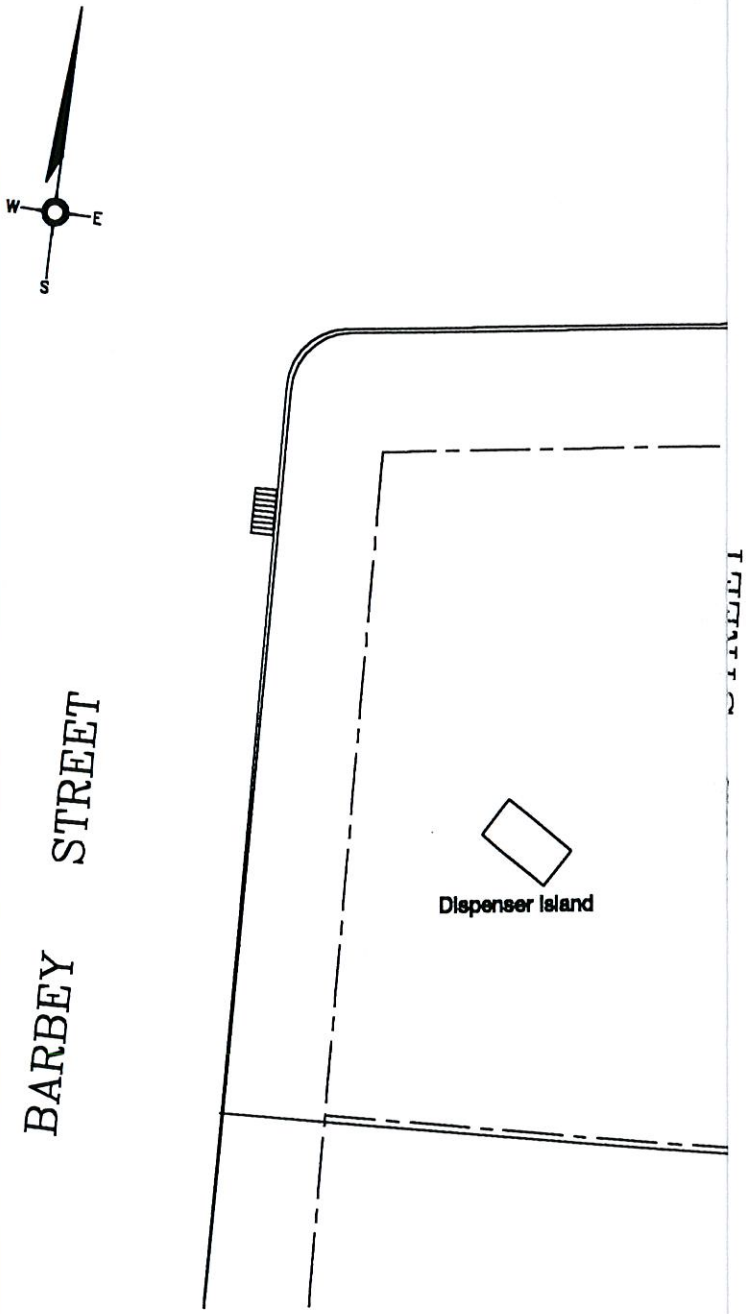

KEY

- Monitoring Well
- Tankfield Observation Well
- Catch Basin
- Yard Drain
- 75.9 MTBE Isoconcentrations (ppb)

MTBE = Methyl Tertiary Butyl Ether

ppb = Parts per billion (ug/L)

GSC Data Obtained 12/14/98

RE 8 MTBE ISOCONCENTRATIONS
IN GROUNDWATER MAP
Merit "Jerome"
2880 Atlantic Avenue
Brooklyn, New York

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TABLE 1

SOIL QUALITY ANALYTICAL DATA

Merit "Jerome"
2880 Atlantic Avenue
Brooklyn, New York

Sample I.D. (sample depth)	Benzene* (ppb)	Toluene* (ppb)	Ethyl-benzene* (ppb)	Total Xylenes* (ppb)	Total BTEX (ppb)	MTBE* (ppb)	Lead** (ppb)	Naphth-alene*** (ppb)	Phenan-threne*** (ppb)	Flouran-thene*** (ppb)	Pyrene*** (ppb)	N-Butyl beuzene* (ppb)	1,3,5 Trimethyl-benzene* (ppb)	1,2,4 Trimethyl-benzene* (ppb)	Date Sample Obtained
MW-1, SS-6 (30-32')	NS	NS	NS	NS	NS	NS	4,500	ND(71.1)	43.7J	42.3J	43.7J	NS	NS	NS	11/22/98
MW-2, SS-15 (32-34')	4.480	ND(2.87)	ND(2.87)	ND(5.74)	4.480	2,190	3,380	ND(76.6)	ND(76.6)	ND(192)	ND(192)	ND (2.87)	ND (2.87)	ND (2.87)	11/18/98
MW-3, SS-6 (25-27')	NS	NS	NS	NS	NS	NS	3,140	ND(75.4)	ND(75.4)	ND(188)	ND(188)	NS	NS	NS	11/18/98
MW-4, SS-2 (10-12')	ND(2.95)	ND(2.95)	ND(2.95)	ND(5.90)	ND	ND(2.95)	NS	14.9	NS	NS	NS	20.9	7.65	3.07	11/22/98
Stars Memo #1, TCLP Alternative Guidance Values (ug/kg)	14	100	100	100	NA	1,000	**** 500,000	200	1,000	1,000	1,000	100	100	100	NA

ND= None detected or below the practical quantification level
(limit of quantification in parentheses)
All laboratory values reported as ND are assumed to be zero when determining BTEX concentrations
NA= Not Applicable
NL= No Limit
NS= Not sampled for referenced parameter
J= Estimated Value
BTEX= Benzene,Toleune, Ethylbenzene, Total Xylenes
MTBE= MethylTertiary Butyl Ether
ppb= parts per billion (ug/kg)
- Napthalene in MW-2/SS-15 analyzed by both methods 8021 and 8270
*= Samples analyzed using EPA Method 8021
**= Samples analyzed using EPA Method 6010
***= Samples analyzed using EPA Method 8270
****= Recommended soil cleanup objectives for lead in metropolitan areas from NYSDEC Division of Hazardous Waste Remediation

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TABLE 2

MONITORING WELL GAUGING DATA

Merit "Jerome"

2880 Atlantic Avenue

Brooklyn, New York

Well	Date	Gauging Data					
		Top of Casing Elevation* (feet)	Depth to Water (feet)	Depth to Hydrocarbon (feet)	Hydrocarbon Surface Elevation (feet)	Hydrocarbon Thickness (feet)	Corrected Water Surface Elevation (feet)
[1]NYSDEC GWQS	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-1	12/14/98	39.26	33.14	ND	N/A	ND	6.12
MW-2	12/14/98	38.30	32.14	ND	N/A	ND	6.16
MW-3	12/14/98	36.69	30.43	ND	N/A	ND	6.26
MW-4	12/14/98	38.69	32.53	ND	N/A	ND	6.16

N/A= Not Applicable

NL= No limit

ND= None detected (for analytical data, the quantitation limit is in parentheses)

All laboratory values reported as ND are assumed to be zero when determining BTEX concentrations.

ppb= parts per billion (µg/L)

*= Elevations surveyed relative to an arbitrary local datum

[1] = NYSDEC Groundwater Quality Standards (ug/L)

BTEX= Benzene, Toluene, Ethylbenzene, Total Xylenes

MTBE= Methyl Tertiary Butyl Ether

BTEX compounds analyzed using EPA Method 602

Lead analyzed using EPA Method 200.7

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TABLE 3

MONITORING WELL ANALYTICAL DATA

Merit "Jerome"
2880 Atlantic Avenue
Brooklyn, New York

Well	Date	Analytical Data														
		Benzene (ppb)	Toluene (ppb)	Ethyl-Benzene (ppb)	Total Xylenes (ppb)	Total BTEX (ppb)	MTBE (ppb)	Total Lead (ppb)	Isopropyl-benzene (ppb)	1,3,5 Trimethyl-benzene (ppb)	1,2,4 Trimethyl-benzene (ppb)	Sec-Butyl benzene (ppb)	P-Isopropyl toluene (ppb)	N-Butyl benzene (ppb)	Napthalene (ppb)	N-Propyl benzene (ppb)
[1]NYSDEC GWQS	N/A	0.70	5	5	5	NL	50	NL	5	5	5	5	5	5	10	5
MW-1	12/14/98	7.33	955	1,110	7,500	9,572.33	75.9	239	117	1,020	4,620	36.6	60.4	942	553	313
MW-2	12/14/98	ND (2.5)	ND (2.5)	8.27	13.6	21.87	2,030	40.2	12.4	31.8	104	6.57	ND(2.5)	41.6	**17.2/9.7J	28.1
MW-3	12/14/98	ND (.5)	ND (.5)	ND (.5)	ND (1.0)	ND	70.3	18.3	ND (.5)	ND (.5)	ND (.5)	ND (.5)	ND(.5)	ND(.5)	ND(.5)/ND (2)	ND(.5)
MW-4	12/14/98	8.02	13	792	3,947	4,760.02	141	138	61	566	2,410	17.7	25.3	506	192/174	189

Notes:

N/A= Not Applicable
NL= No limit
ND= None detected (for analytical data, the quantitation limit is in parentheses)
All laboratory values reported as ND are assumed to be zero when determining BTEX concentrations.
ppb= parts per billion (mg/L)
*= Elevations surveyed relative to an arbitrary local datum
**= Napthalene analyzed by both methods 8021 and 8270
[1]= NYSDEC Groundwater Quality Standards (ug/L)
BTEX= Benzene Toluene Ethylbenzene Xylenes
MTBE= Methyl Tertiary Butyl Ether
J= Estimated value
Base neutrals analyzed using EPA Method 8270

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APPENDIX B: **NYSDEC Water Well Search**

THE CITY OF NEW YORK
DEPARTMENT OF HEALTH

Rudolph W. Giuliani
Mayor

Neal L. Cohen, M.D.
Commissioner

AUG 0 3 1998

Bureau of Public Health Engineering
2 Lafayette Street, 11th Floor
New York, N.Y. 10007
Tel: 212 676-1532
Fax: 212 676-1517

July 31, 1998

Heather A. Oakes
Geologic Services Corp.
330 Corporate Boulevard
Robbinsville, N.J. 08691

Dear Ms. Oakes: :

I am writing in response to your request for a listing of current potable or industrial supply wells located within a one mile radius of 2880 Atlantic Avenue in Brooklyn, New York. The information is enclosed in the envelope.

If you have any further questions, I may be reached at the number above.

Sincerely,

Mennell Grier, Jr.
Staff Analyst

Camis-ID	Code	Permit #	CL	Licensee Name	Premises Address			Expdate	Status
40421475	H33	0004713	ND	ACTION BAG & ENVELOPE	667 ATKINS AV	BKLYN	NY 11208	19981231	CRN
40421543	H33	0004879	ND	NICOLAS R. RICCIO	589 CRESENT	BKLYN	NY 11208	19981231	CRNT
40421547	H33	0004885	ND	Y.M.C.A. OF GREATER	570 JAMAICA AV	BKLYN	NY 11208	19981231	CRNT

APPENDIX C: Limited Quality Assurance/Quality Control Plan and Standard Operating Procedures

GEOLOGIC SERVICES CORPORATION

Limited QA/QC Plan - Environmental Investigation

Purpose: To provide to field personnel a source of information relevant to the work to be completed, as well as to initiate the planning and logistics required for UST, product piping, and Dispenser Island Closure and Phase II Environmental Site Assessment.

GSC Project Number/Name: 9805325/Merit, Brooklyn, NY

Project Location: Merit "Jerome"
2864-2880 Atlantic Avenue
Brooklyn, New York 11207-9997

GSC Project Manager: Heather A. Oakes

GSC Corp. Health & Safety Officer: Heather A. Oakes

GSC Corp. QA/QC Officer: Steven L. Dean

Client Contact: Mr. Angelo Fatiga
Merit Oil Corporation
551 W. Lancaster Avenue
Haverford, Pennsylvania 19041

Analytical Laboratory: QC, Inc.
1205 Industrial Highway
Southampton, PA 18966

Laboratory Contact: Mr. Ron Morrison

Project Description:

- Oversee the closure of two (2) 2,000 gallon gasoline, three (3) 4,000 gallon gasoline, 30 550 gallon gasoline, one (1) 4,000 diesel, one (1) 550 gallon wastewater, and one (1) 2,000 gallon wastewater UST, remote fills, underground storage tank (USTs), dispenser islands and associated product piping.
- Observe the excavation and removal of USTs, product piping, and dispenser islands to ensure proper practices in accordance with API Recommended Practice 1604 and the requirements of the New York State Department of Environmental Conservation (NYSDEC).
- Screen excavated soils removed from around the USTs, product piping and dispenser islands with a photoionization detector (PID) to determine if soils can be reused as backfill (less than 100 ppm) or must be taken off-site for disposition (greater than 100 ppm).
- Inspect, photograph and document the condition of the removed USTs, product piping, and dispenser islands.
- Observe and document the extent of soil and/or groundwater impact.
- Document on a site map, the vertical and horizontal extent of soil removal.
- Obtain and analyze post-excavation soil samples.

- A review of local, state and federal records regarding site background history and site geology/hydrogeology and background groundwater quality will be performed.
- During drilling, split spoon shall be taken in accordance with ASTM Method D1586, at five (5) foot intervals. Soils will be continuously logged based on auger spoils and shall be screened with a PID using FID/PID headspace techniques.
- One (1) soil sample per boring exhibiting the highest headspace vapor concentration shall be analyzed.
- Monitoring wells shall be installed in the borings in accordance with state and/or local regulations.
- Monitoring wells shall be developed until evacuated groundwater is free of sediment.
- Groundwater shall be characterized. An estimate of groundwater flow direction shall be made.
- Groundwater shall be sampled.
- Monitoring well top of casing elevations shall be surveyed to a common datum, by a New York State registered professional engineer or surveyor.
- Research NYSDEC spill files.
- Perform a well inventory search within a one (1) mile radius of the site.

Chain of Custody Procedures: Per GSC Standard Procedures

Parameters For Analysis: Per Client Workscope Requirements

Field QC Samples Required: Per Section 6.1-3, DEP Publication #WSC-310-91, Field QC Samples

Sampling and Preservation Procedures:

1. Soil:

Soil samples are to be obtained from the borings in accordance with Client requirements utilizing ASTM Method D-1586 for split sampling. Samples selected for laboratory analysis are to be placed in sample containers as provided by the laboratory, labeled and stored on ice in a transportation cooler for subsequent delivery.

All sample handling will be kept at a minimum and be conducted utilizing gloves and sampling equipment which has been properly decontaminated in accordance with GSC's decontamination operating procedure.

Container size, type and sample volume, preservation methods and holding times as specified in EPA Publication SW-846, will be closely followed.

2. Groundwater:

Groundwater samples and appropriate equipment and duplicate blanks as specified by the Client workscope, are to be collected in accordance with GSC Standard Operating Procedure (SOP) "Monitoring Well Sampling With a Bucket-Type Bailer."

Container size, type and sample volume, preservation methods and holding times as specified in EPA Publication SW-846, will be closely followed.

Equipment Needed:

1. GSC Field Logbook, Former and Site Plan
2. GSC Health & Safety Plan, SOPs and Client Workscopes
3. GSC Standard Decontamination Kit
4. Disposal Teflon Bailers (1 liter)
5. Sample Labels, Containers and Transport Cooler as Provided by the Laboratory
6. GSC Standard Tool Kit
7. Electronic Interface Probe and Manual

Equipment Decontamination Procedures: Per Section 6.5, DEP Publication #WSC-310-41, Decontamination Procedures

Calibration of Field Equipment: In accordance with Manufactures Instructions in Field Manual and GSC Standard Procedures

Data Validation: Per GSC Document Quality Assurance Program

Signatures:

Craig A. Kunz, P.E.
Senior Project Manager

Heather A. Oakes
Senior Environmental Scientist

GEOLOGIC SERVICES CORPORATION

STANDARD OPERATING PROCEDURE

Equipment Decontamination

I Purpose

The purpose of this SOP is to standardize the process by which equipment is decontaminated prior to its re-use. Decontamination of sampling, gauging and other equipment is a critical step to prevent cross-contamination between sampling or gauging points. Cross-contamination must be prevented in order to collect accurate date that reflect a true representation of site conditions and allows the consultant to make correct decisions concerning a site.

II Equipment

- Personal Protective Equipment (PPE)
- Alconox
- Methanol
- Distilled or deionized water
- Paper towels
- Clean aluminum foil

III Process

Decontamination of the equipment is generally performed immediately prior to use. If equipment is decontaminated and will not be used immediately, the item should be wrapped in clean aluminum foil and stored until used. Any portion of the sampling device or equipment that has contact with water (including between wells when gauging) or soil must be cleaned, or disposed of and replaced, prior to re-use. The following four-step procedure is followed for cleaning all sampling devices and related equipment:

1. The item is washed with a mixture of Alconox and water.
2. The item is rinsed thoroughly with clean water.
3. The item is rinsed with reagent grade methanol.
4. The item is given a final rinse with distilled or dionized water.

Steam cleaning may be substituted for Steps 1 and 2.

IV References

No technical references were used or cited in preparation of this SOP.

APPENDIX 1
Collecting and Preserving VPH Soil Samples
Page 1 of 2

OPTION 1: In-Field Methanol Preservation Technique

PERFORMANCE STANDARD: Obtain undisturbed soil sample and preserved with methanol at a ratio of 1 mL methanol per 1 gram soil.

Step 1: Choose appropriate sampling container:

60 mL wide mouth packer bottle; or
60 mL straight sided wide mouth bottle; or
60 mL VOA vial; or
40 mL VOA vial

All sampling containers should have an open-top screw cap with Teflon-coated silicone rubber septa or equivalent.

Step 2: Label each container with a unique alpha/numerical designation. Obtain and record tare (empty) weight of each container to nearest 0.1 gram. *This information must be available to the laboratory performing the analyses.*

Step 3: Add 25 mLs of purge and trap grade methanol to 60 mL containers, or 15 mL to 40 mL containers. *It is essential that the methanol be purge and trap grade or equivalent quality.* Immediately cap the container. Make a mark on the 60 mL containers approximately 15 mL above the level of methanol, or a mark on the 40 mL container approximately 10 mL above the level of methanol. The objective is to obtain 25 grams of soil in the 60 mL container, or 15 grams of soil in the 40 mL container, which is approximately 15 and 10 mL of soil volume, respectively, depending upon soil type and moisture content. Store at 4°C. *The use of a methanol trip blank prepared in this manner is recommended.*

Step 4: In the field, carefully add soil to the sample container, until the level of methanol in the vial reaches the designated volumetric mark. For wet soil, add slightly beyond the mark. IN NO CASE, HOWEVER, MAY THE LEVEL OF SOIL IN THE CONTAINER RISE ABOVE THE LEVEL OF METHANOL. The use of a 10-30 mL disposable syringe with the end cut off is recommended to obtain an undisturbed soil sample from freshly exposed soils. In such cases, obtain and extrude the soil into sample container, avoiding splashing methanol out of the container.

Optional: use a field electronic balance to ensure addition of desired mass of soil (25 grams to 60 mL containers, 15 grams to 40 mL containers).

Step 5: Use a clean brush or paper towel to remove soil particles from the threads of the sample container and screw cap. Tightly apply and secure screw cap. Gently swirl sample to break up soil aggregate, if necessary, until soil is covered with methanol. DO NOT SHAKE. Duplicate samples obtained in this manner are recommended. A split-sample must also be obtained for a determination of soil moisture content. This sample must NOT be preserved in methanol. HINT: fill this container 1/2 full, to allow screening of the sample headspace by the field investigator or the laboratory.

Step 6: Immediately place containers in cooler for storage in an upright position. Sample containers can be placed in separate zip-lock bags to protect containers in case of leakage during transport. Transport to analytical laboratory using appropriate chain-of-custody procedures and forms.

OPTION 2: Use of a Sealed-Tube Sampling/Storage Device

PERFORMANCE STANDARD: **Obtain undisturbed soil sample and immediately seal in air-tight container, for shipment to laboratory and immersion in methanol within 48 hours.**

Step 1: Obtain pre-cleaned and/or disposable samplers/containers that allow the collection and air-tight storage of at least 15 grams of soil.

Step 2: In the field, obtain an undisturbed sample from a freshly exposed soil. Immediately seal container, and place in a cooler. Obtain a duplicate sample to enable the determination of soil moisture content (this does not need to be in a sealed sampler/container). Transport to analytical laboratory using appropriate chain-of-custody procedures and forms.

Step 3: Samples must be extruded and immersed in purge and trap (or equivalent) grade methanol at the laboratory within 48 hours of sampling, at a ratio of 1 mL methanol to 1 gram soil. In no case, however, shall the level of soil in the laboratory container exceed the level of methanol (i.e., the soil must be completely immersed in methanol).

NOTE: Documentation MUST be provided/available on the ability of the sampler/container to provide an air-tight seal in a manner that results in no statistically significant loss of volatile hydrocarbons for at least 48 hours. To date, only one commercially available product, the En Core Sampler, has provided this level of demonstration.

OPTION 3: Use of Alternative Collection/Storage/Preservation Techniques

PERFORMANCE STANDARD: **Obtain and store an undisturbed soil sample in a manner that ensures the chemical integrity of the sample by (1) preventing the volatilization of petroleum hydrocarbons heavier than C5, and (2) preventing the biological degradation of petroleum hydrocarbons.**

NOTE: The onus is on the user of such techniques to demonstrate the validity of the procedures used, via reference to published literature and/or other pertinent data.

SAFETY

Methanol is a toxic and flammable liquid, and must be handled with appropriate care. Use in a well-vented area, and avoid inhaling methanol vapors. The use of protective gloves is recommended when handling or transferring methanol. Vials of methanol should always be stored in a cooler with ice at all times, away from sources of ignition such as extreme heat or open flames.

GEOLOGIC SERVICES CORPORATION

STANDARD OPERATING PROCEDURE

Jar Headspace Screening Procedure

I Purpose

The following procedures will be utilized when conducting analytical screening of petroleum hydrocarbon impacted soils utilizing a portable Photoionization Detector (PID) or Flame Ionization Detector (FID). Refer to the GSC SOP for Soil Sample Classification and Soil Sample Collection which precede the Jar Headspace Screening Procedures.

II Equipment

- Soil screening jars;
- Aluminum foil;
- PID; and/or
- FID

III Procedure

1. Half-fill clean glass 16 oz. jars with the sample to be analyzed. Quickly cover each open top with one or two sheets of clean aluminum foil and subsequently apply screw caps to tightly seal the jars.
2. Allow headspace development for at least 10 minutes. Vigorously shake jars for 10 seconds both at the beginning and end of the headspace development period. Where ambient temperatures are below 32° F (O C) headspace development will be done within a heated vehicle or building.
3. Subsequent to headspace development, remove screw lid/expose foil seal. Quickly puncture foil seal with instrument sampling probe, to a point about one-half of the headspace depth. Exercise care to avoid uptake of water droplets or soil particulates.
4. Following probe insertion through foil seal and/or sample injection to probe, record highest meter response as the jar headspace concentration. Using foil seal/probe insertion method, maximum response may occur at high organic vapor concentration or conditions of elevated headspace moisture, in which case headspace data will be discounted.
5. The headspace screening data from both jar samples will be recorded and compared; generally, replicate values should be consistent to plus or minus 20 percent.
6. Field instruments will be operated and calibrated to yield "total organic vapors" in ppm (v/v) as benzene. PID instruments will be operated with a 10.0 eV (+/-) lamp source. Operation, maintenance and calibration will be performed in accordance with the manufacturer's specifications. For jar headspace analysis, instrument calibration will be checked/adjusted no less than once every 10 analyses, or daily, whichever is greater.
7. Sample screening results are to be recorded in the field book.

IV References

Massachusetts Department of Environmental Protection Policy #WSC 400-89, June 30, 1989.

APPENDIX D: **Soil Boring Logs/Monitoring Well Construction Diagrams**

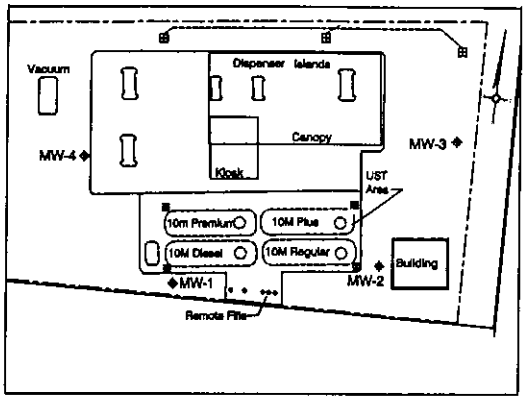
GEOLOGIC SERVICES CORPORATION
Hydrogeologists and Environmental Scientists
330 Corporate Boulevard • Robbinsville, NJ • (609) 259-0052

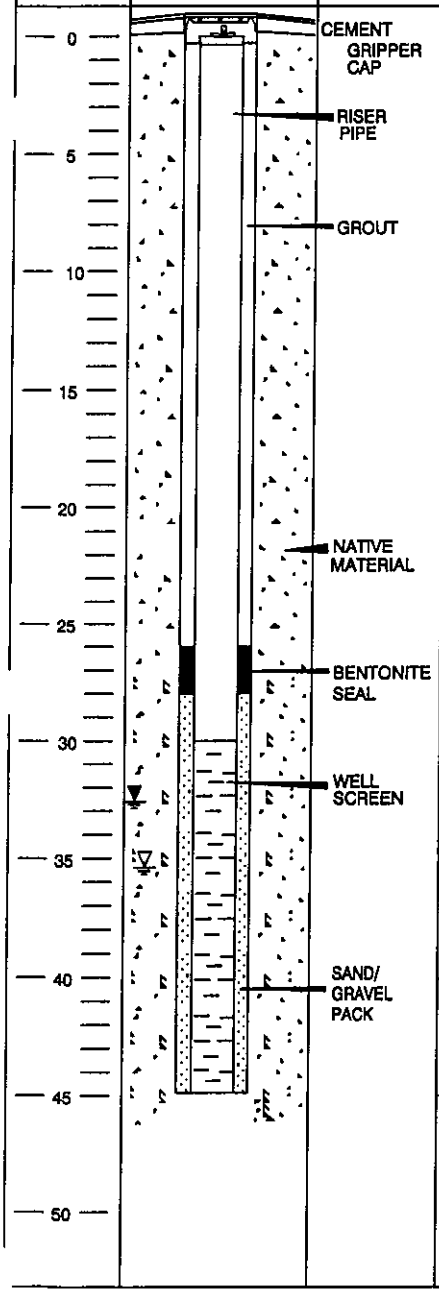
WELL LOG
MW-1/SB-1

PROJECT: 9805325A/MERIT "JEROME"
LOCATION: 2880 ATLANTIC AVENUE
BROOKLYN, NY
WELL ID: MW-1/SB-1
WATER LEVEL INITIAL: 35.0' REF: (BELOW GRADE)
STATIC: 32.8' REF: (TOC)
SCREEN LENGTH: 15'
TYPE: PVC
CASING LENGTH: 30'
TOC ELEV.: GRADE ELEV.: —

CLIENT: MERIT OIL CO.
TOTAL DEPTH: 45'
SCREEN DIAM.: 4"
SLOT SIZE: 0.010"
CASING DIAM: 4"
TYPE: PVC
DRILLER: STEVE
DRILLING CO.: BL MYERS, INC.

METHOD: HOLLOW STEM AUGER/24" SPLIT SPOONS
DATE START: 11/22/98 DATE END: 11/22/98
NOTES: TESTING CONSISTS OF PID HEADSPACE READINGS (PPM)





DEPTH BELOW GRADE (feet)	SAMPLE ID	SAMPLE PEN/REC (Inches)	SAMPLE DEPTH (feet)	SAMPLE BLOWS/ 6"	SAMPLE DESCRIPTION (BURMISTER SYSTEM)	TESTING	USCS CODES
	Hand Augered	N/A	0.0'-5.0'	Hand Augered	0"-1.0" Gravel 1'-5' Brown medium SAND, with coarse gravel	133	—
	SS-1	24/12	5.0'-10.0'	9/16/16/18	Brown medium SAND, coarse gravel	NR	—
	SS-2 *	24/15	10.0'-15.0'	5/10/15/17	as above	NR	—
	SS-3	24/17	15.0'-20.0'	6/11/11/15	Orange brown medium SAND, with gravel	NR	—
	SS-4	24/15	20.0'-25.0'	9/11/14/19	as above	NR	—
	SS-5	24/21	25.0'-30.0'	12/17/21/27	as above	NR	—
	SS-6 *	23/23	30.0'-35.0'	26/31/32/35	as above	NR	—
	SS-7	24/24	35.0'-40.0'	13/17/23/90	as above, wet, hydrocarbon odor	NR	—
	N/A	N/A	40.0'-45.0'	N/A	Black brown medium SAND, wet	N/A	—

NR= No reading obtained due to meter malfunction
* = Laboratory Sample
N/A= Not applicable

LOG BY: TP CHECKED BY: PAGE 1 OF 1

GEOLOGIC SERVICES CORPORATION
Hydrogeologists and Environmental Scientists
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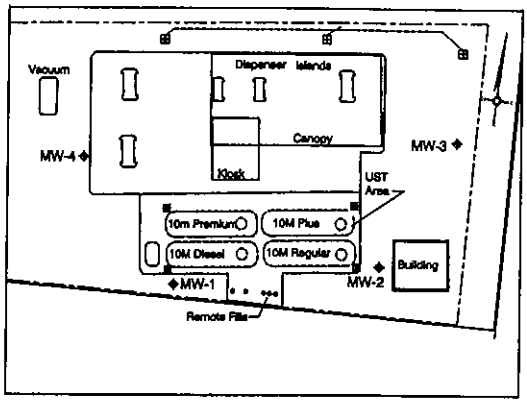
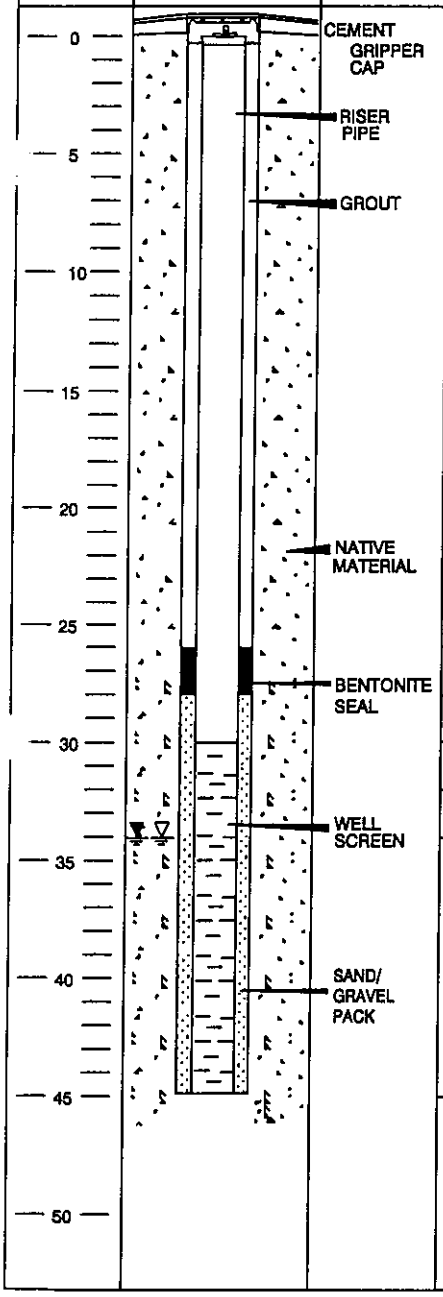
WELL LOG
MW-2/SB-2

PROJECT: 9805325A/MERIT "JEROME"
LOCATION: 2880 ATLANTIC AVENUE
BROOKLYN, NY
WELL ID: MW-2/SB-2
WATER LEVEL INITIAL: 34'.5 ▽ REF: (BELOW GRADE)
STATIC: 34.5' ▼ REF: (TOC)
SCREEN LENGTH: 15'
TYPE: PVC
CASING LENGTH: 30'
TOC ELEV.: GRADE ELEV.: —
METHOD: HOLLOW STEM AUGER/24" SPLIT SPOONS
DATE START: 11/18/98 DATE END: 11/18/98
NOTES: TESTING CONSISTS OF PID HEADSPACE READINGS (PPM)

CLIENT: MERIT OIL CO.
TOTAL DEPTH: 45'
SCREEN DIAM.: 4"
SLOT SIZE: 0.010"
CASING DIAM: 4"
TYPE: PVC
DRILLER: STEVE
DRILLING CO.: BL MYERS, INC.





DEPTH BELOW GRADE (feet)	WELL CONSTRUCTION	SAMPLE ID	SAMPLE PEN/REC (inches)	SAMPLE DEPTH (feet)	SAMPLE BLOWS/ 6"	SAMPLE DESCRIPTION (BURMISTER SYSTEM)	TESTING	USCS CODES
		Hand Augered	N/A	0.0'-2.0'	Hand Augered	Brown medium SAND	N/A	—
		Hand Augered	N/A	2.0'-4.0'	Hand Augered	Brown medium SAND, coarse gravel	N/A	—
		SS-1	24/17	4.0'-6.0'	9/13/15/13	as above	13.0	—
		SS-2	24/6	6.0'-8.0'	9/10/12/13	Light brown medium to coarse SAND	12.9	—
		SS-3	24/20	8.0'-10.0'	12/14/14/13	as above	13.2	—
		SS-4	24/18	10.0'-12.0'	16/12/13/12	as above	13.4	—
		SS-5	24/13	12.0'-14.0'	8/15/12/13	as above	NR	—
		SS-6	24/16	14.0'-16.0'	8/11/13/16	Dark brown to orange medium SAND	NR	—
		SS-7	24/18	16.0'-18.0'	8/11/13/16	as above	NR	—
		SS-8	24/20	18.0'-20.0'	14/11/12/15	as above	NR	—
		SS-9	24/14	20.0'-22.0'	20/22/22/22	as above	NR	—
		SS-10	24/10	22.0'-24.0'	14/22/28/30	as above	NR	—
		SS-11	24/13	24.0'-26.0'	7/15/22/22	Grey brown medium SAND	NR	—
		SS-12	24/23	26.0'-28.0'	21/10/9	as above	NR	—
		SS-13	24/16	28.0'-30.0'	16/21/26/26	as above	NR	—
		SS-14	24/18	30.0'-32.0'	8/14/18/20	as above	NR	—
		SS-15 *	24/12	32.0'-34.0'	28/23/18/25	Brown black medium SAND	NR	—
		N/A	N/A	34.0'-45.0'	N/A	as above	N/A	—

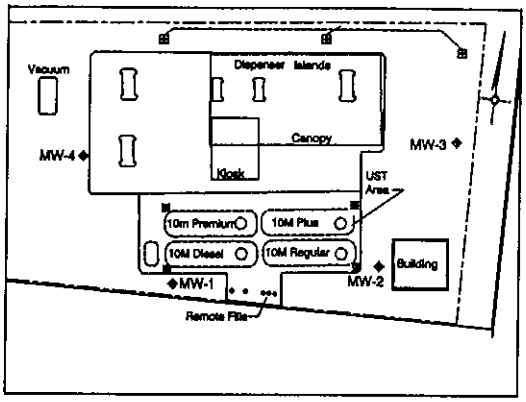
NR= No reading obtained due to meter malfunction.
* = Laboratory Sample
N/A= Not applicable

LOG BY: BV CHECKED BY: PAGE 1 OF 1

GEOLOGIC SERVICES CORPORATION
Hydrogeologists and Environmental Scientists
330 Corporate Boulevard • Robbinsville, NJ • (609) 259-0052

WELL LOG
MW-3/SB-3

PROJECT: 9805325A/MERIT "JEROME"
CLIENT: MERIT OIL CO.
LOCATION: 2880 ATLANTIC AVENUE
BROOKLYN, NY
TOTAL DEPTH: 45'
WELL ID: MW-3/SB-3
SCREEN DIAM.: 4"
WATER LEVEL INITIAL: 34.5' ▽ REF: (BELOW GRADE)
STATIC: 31.0' ▼ REF: (TOC)
SCREEN LENGTH: 15'
SLOT SIZE: 0.010"
CASING DIAM: 4"
TYPE: PVC
TYPE: PVC
CASING LENGTH: 30'
DRILLER: STEVE
TOC ELEV.:
GRADE ELEV.: —
DRILLING CO.: BL MYERS, INC.
METHOD: HOLLOW STEM AUGER/24" SPLIT SPOONS
DATE START: 11/18/98
DATE END: 11/18/98
NOTES: TESTING CONSISTS OF PID HEADSPACE READINGS (PPM)



DEPTH BELOW GRADE (feet)	WELL CONSTRUCTION	SAMPLE ID	SAMPLE PEN/REC (Inches)	SAMPLE DEPTH (feet)	SAMPLE BLOWS/ 6"	SAMPLE DESCRIPTION (BURMISTER SYSTEM)	TESTING	USCS CODES
0	CEMENT GRIPPER CAP							
	RISER PIPE	Hand Augered	N/A	0.0'-4.0'	Hand Augered	Brown SAND, trace of Clay	NR	—
5		SS-1	24/10	4.0'-5.0'	6/13/24/21	Medium brown SAND, with coarse gravel	NR	—
		SS-2	24/8	5.0'-10.0'	7/14/20/21	as above	NR	—
10	GROUT	SS-3	24/22	10.0'-15.0'	8/15/19/20	Medium brown SAND, with medium gravel	NR	—
15		SS-4	24/21	15.0'-20.0'	9/11/13/18	as above	NR	—
20		SS-5	24/18	20.0'-25.0'	11/16/16/18	as above	NR	—
	NATIVE MATERIAL	SS-6 *	24/17	25.0'-27.0'	14/14/15/18	Brown to black medium SAND	N/A	—
25	BENTONITE SEAL	SS-7	24/17	27.0'-30.0'	26/23/30/33	Brown to black SAND, wet	N/A	—
30		N/A	N/A	30.0'-45.0'	N/A	as above	N/A	—
	WELL SCREEN							
35								
40	SAND/ GRAVEL PACK							
45								
50						NR= No reading obtained due to meter malfunction. * = Laboratory Sample N/A= Not applicable		

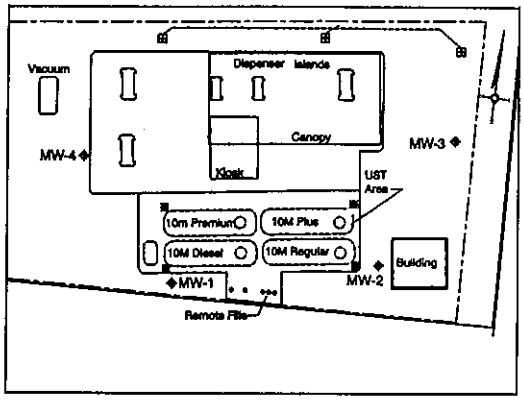
LOG BY: BV
CHECKED BY:

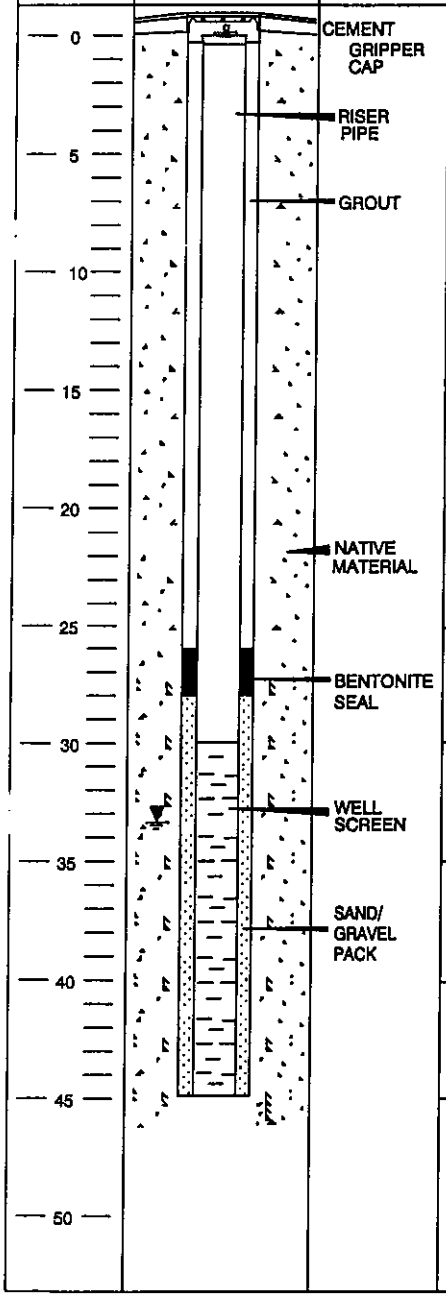
GEOLOGIC SERVICES CORPORATION
Hydrogeologists and Environmental Scientists
330 Corporate Boulevard • Robbinsville, NJ • (609) 259-0052

WELL LOG
MW-4/SB-4

PROJECT: 9805325A/MERIT "JEROME"
LOCATION: 2880 ATLANTIC AVENUE
BROOKLYN, NY
WELL ID: MW-4/SB-4
WATER LEVEL INITIAL: NA
STATIC: 32.9'
REF: (BELOW GRADE)
REF: (TOC)
SCREEN LENGTH: 15'
TYPE: PVC
CASING LENGTH: 30'
TOC ELEV.:
GRADE ELEV.: ---
METHOD: HOLLOW STEM AUGER/24" SPLIT SPOONS
DATE START: 11/22/98 DATE END: 11/22/98
NOTES: TESTING CONSISTS OF PID HEADSPACE READINGS (PPM)

CLIENT: MERIT OIL CO.
TOTAL DEPTH: 45'
SCREEN DIAM.: 4"
SLOT SIZE: 0.010"
CASING DIAM: 4"
TYPE: PVC
DRILLER: STEVE
DRILLING CO.: BL MYERS, INC.





DEPTH BELOW GRADE (feet)	WELL CONSTRUCTION	SAMPLE ID	SAMPLE PEN/REC (inches)	SAMPLE DEPTH (feet)	SAMPLE BLOWS/ 6"	SAMPLE DESCRIPTION (BURMISTER SYSTEM)	TESTING	USCS CODES
		Hand Augered	N/A	0.0'-5.0'	Hand Augered	Brown medium SAND, with gravel	12.7	—
		SS-1	24/17	5.0'-10.0'	11/7/7/9	Orange brown medium SAND, hydrocarbon odor	796.1	—
		SS-2 *	24/22	10.0'-15.0'	10/22/19/22	as above, little gravel	1183	—
		SS-3	24/17	15.0'-20.0'	7/14/17/19	as above	124.2	—
		SS-4	24/18	20.0'-25.0'	8/10/12/19	Light brown medium SAND	169.1	—
		SS-5	24/16	25.0'-30.0'	14/15/18/20	Orange brown medium SAND	533.3	—
		SS-6	24/21	30.0'-35.0'	19/23/15/23	Black brown medium SAND, hydrocarbon odor	161.5	—
		SS-7	24/18	35.0'-40.0'	15/25/35/33	Black grey medium SAND, hydrocarbon odor, wet	>1999	—
		N/A	N/A	40.0'-45.0'	N/A	as above, wet	N/A	—
						* = Laboratory Sample N/A= Not applicable		

LOG BY: TP

CHECKED BY:

APPENDIX E: Soil Laboratory Analytical Data

Analytical Results

01/29/99 11:23am

HEATHER OAKES
GEOLOGIC SERVICES CORPORATION
MERCER CORPORATE PARK
330 CORPORATE BOULEVARD
ROBBINSVILLE, NJ 08691

Regarding:

ANGELO FATIGA
MERIT OIL CORPORATION
551 WEST LANCASTER AVENUE
HAVERFORD, PA 19041

Account No: C00368, MERIT OIL CORPORATION
Project No: C00368 GSC, GEOLOGIC SERVICES CORPORATION

P.O. No:
PWSID No:

Inv. No: 194867

Sample Number: L372615-1
Sample Description: 3542 MERIT-JEROME BROOKLYN MW-1/SS-6
Samp. Date/Time/Temp: 11/22/98 09:57am NA°F
Sampled by: Customer Sampled

Parameter	Method	Result	PQL	Test Date
LEAD	SW846 Method 6010	4.50 mg/kg DRY	2.13 mg/kg	11/30/98
NAPHTHALENE	EPA Method 8270	ND ug/kg DRY	71.1 ug/kg	12/02/98
ACENAPHTHENE	EPA Method 8270	ND ug/kg DRY	71.1 ug/kg	12/02/98
FLUORENE	EPA Method 8270	ND ug/kg DRY	71.1 ug/kg	12/02/98
PHENANTHRENE	EPA Method 8270	43.7 J ug/kg DRY	71.1 ug/kg	12/02/98
ANTHRACENE	EPA Method 8270	ND ug/kg DRY	71.1 ug/kg	12/02/98
FLUORANTHENE	EPA Method 8270	42.3 J ug/kg DRY	178. ug/kg	12/02/98
PYRENE	EPA Method 8270	43.7 J ug/kg DRY	178. ug/kg	12/02/98
BENZO(A)ANTHRACENE	EPA Method 8270	ND ug/kg DRY	71.1 ug/kg	12/02/98
CHRYSENE	EPA Method 8270	ND ug/kg DRY	71.1 ug/kg	12/02/98
BENZO(B)FLUORANTHENE	EPA Method 8270	ND ug/kg DRY	71.1 ug/kg	12/02/98
BENZO(K)FLUORANTHENE	EPA Method 8270	ND ug/kg DRY	71.1 ug/kg	12/02/98
BENZO(A)PYRENE	EPA Method 8270	ND ug/kg DRY	71.1 ug/kg	12/02/98
INDENO(1,2,3-CD)PYRENE	EPA Method 8270	ND ug/kg DRY	71.1 ug/kg	12/02/98
DIBENZ(A,H)ANTHRACENE	EPA Method 8270	ND ug/kg DRY	71.1 ug/kg	12/02/98
BENZO(G,H,I)PERYLENE	EPA Method 8270	ND ug/kg DRY	71.1 ug/kg	12/02/98
TOTAL SOLIDS PERCENT	STD Methods 18th Ed. 2540	93.75 %	0.01000 %	11/25/98

Sample Number: L372615-2
Sample Description: MW-4/SS-2
Samp. Date/Time/Temp: 11/22/98 11:25am NA°F
Sampled by: Customer Sampled

Parameter	Method	Result	PQL	Test Date
BENZENE	EPA Method 8021	ND ug/kg DRY	2.95 ug/kg	12/01/98
TOLUENE	EPA Method 8021	ND ug/kg DRY	2.95 ug/kg	12/01/98
ETHYL BENZENE	EPA Method 8021	ND ug/kg DRY	2.95 ug/kg	12/01/98
M&P-XYLENES	EPA Method 8021	ND ug/kg DRY	2.95 ug/kg	12/01/98
O-XYLENE	EPA Method 8021	ND ug/kg DRY	2.95 ug/kg	12/01/98
ISOPROPYLBENZENE	EPA Method 8021	ND ug/kg DRY	2.95 ug/kg	12/01/98
N-PROPYLBENZENE	EPA Method 8021	ND ug/kg DRY	2.95 ug/kg	12/01/98
1,3,5-TRIMETHYLBENZENE	EPA Method 8021	7.65 ug/kg DRY	2.95 ug/kg	12/01/98
1,2,4-TRIMETHYLBENZENE	EPA Method 8021	ND ug/kg DRY	2.95 ug/kg	12/01/98
SEC-BUTYLBENZENE	EPA Method 8021	ND ug/kg DRY	2.95 ug/kg	12/01/98
P-ISOPROPYLTOLUENE	EPA Method 8021	ND ug/kg DRY	2.95 ug/kg	12/01/98
N-BUTYLBENZENE	EPA Method 8021	20.9 ug/kg DRY	2.95 ug/kg	12/01/98
NAPHTHALENE	EPA Method 8021	14.9 ug/kg DRY	2.95 ug/kg	12/01/98
METHYL TERTIARY BUTYL ETHER	EPA Method 8021	ND ug/kg DRY	2.95 ug/kg	12/01/98
TOTAL SOLIDS PERCENT	STD Methods 18th Ed. 2540	84.77 %	0.01000 %	11/25/98

A result of "ND" indicates the concentration of the analyte tested was either not detected or below the PQL.
QC INC's laboratory certification numbers are; PADER 09-131; NJDEP 77166; NC 488; NY,CT,DE and MD UPON REQUEST.
Definitions: ND=not detected; NEG=negative; POS=positive; COL=colonies; PQL=practical quanitation level; L/A=laboratory accident; TNTC=too numerous to count
A result marked with "DRY" indicates that the result was calculated and reported on a dry weight basis.

Allen D. Schopbach, President

QC INC. • 1205 INDUSTRIAL BLVD. • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900
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QC Inc.

Analytical Results

01/29/99 11:23am

Account No: C00368, MERIT OIL CORPORATION
Project No: C00368 GSC, GEOLOGIC SERVICES CORPORATION

P.O. No:
PWSID No:

Inv. No: 194867

Sample Number: L372615-3
Sample Description: MW-2/SS-15
Samp. Date/Time/Temp: 11/18/98 01:30pm NA°F
Sampled by: Customer Sampled

Parameter	Method	Result	PQL	Test Date
LEAD	SW846 Method 6010	3.38 mg/kg DRY	2.30 mg/kg	11/30/98
NAPHTHALENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
ACENAPHTHENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
FLUORENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
PHENANTHRENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
ANTHRACENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
FLUORANTHENE	EPA Method 8270	ND ug/kg DRY	192. ug/kg	12/02/98
PYRENE	EPA Method 8270	ND ug/kg DRY	192. ug/kg	12/02/98
BENZO(A)ANTHRACENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
CHRYSENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
BENZO(B)FLUORANTHENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
BENZO(K)FLUORANTHENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
BENZO(A)PYRENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
INDENO(1,2,3-CD)PYRENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
DIBENZ(A,H)ANTHRACENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
BENZO(G,H,I)PERYLENE	EPA Method 8270	ND ug/kg DRY	76.6 ug/kg	12/02/98
BENZENE	EPA Method 8021	4.48 ug/kg DRY	2.87 ug/kg	12/01/98
TOLUENE	EPA Method 8021	ND ug/kg DRY	2.87 ug/kg	12/01/98
ETHYL BENZENE	EPA Method 8021	ND ug/kg DRY	2.87 ug/kg	12/01/98
M&P-XYLENES	EPA Method 8021	ND ug/kg DRY	2.87 ug/kg	12/01/98
O-XYLENE	EPA Method 8021	ND ug/kg DRY	2.87 ug/kg	12/01/98
ISOPROPYLBENZENE	EPA Method 8021	ND ug/kg DRY	2.87 ug/kg	12/01/98
N-PROPYLBENZENE	EPA Method 8021	ND ug/kg DRY	2.87 ug/kg	12/01/98
1,3,5-TRIMETHYLBENZENE	EPA Method 8021	ND ug/kg DRY	2.87 ug/kg	12/01/98
1,2,4-TRIMETHYLBENZENE	EPA Method 8021	ND ug/kg DRY	2.87 ug/kg	12/01/98
SEC-BUTYLBENZENE	EPA Method 8021	ND ug/kg DRY	2.87 ug/kg	12/01/98
P-ISOPROPYLTOLUENE	EPA Method 8021	ND ug/kg DRY	2.87 ug/kg	12/01/98
N-BUTYLBENZENE	EPA Method 8021	ND ug/kg DRY	2.87 ug/kg	12/01/98
NAPHTHALENE	EPA Method 8021	ND ug/kg DRY	2.87 ug/kg	12/01/98
METHYL TERTIARY BUTYL ETHER	EPA Method 8021	2190 ug/kg DRY	28.7 ug/kg	12/03/98
TOTAL SOLIDS PERCENT	STD Methods 18th Ed. 2540	87.00 %	0.01000 %	11/25/98

Sample Number: L372615-4
Sample Description: MW-3/SS-6
Samp. Date/Time/Temp: 11/18/98 04:45pm NA°F
Sampled by: Customer Sampled

Parameter	Method	Result	PQL	Test Date
LEAD	SW846 Method 6010	3.14 mg/kg DRY	2.26 mg/kg	11/30/98
NAPHTHALENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98
ACENAPHTHENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98
FLUORENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98
PHENANTHRENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98
ANTHRACENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98
FLUORANTHENE	EPA Method 8270	ND ug/kg DRY	188. ug/kg	12/02/98
PYRENE	EPA Method 8270	ND ug/kg DRY	188. ug/kg	12/02/98
BENZO(A)ANTHRACENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98
CHRYSENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98
BENZO(B)FLUORANTHENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98
BENZO(K)FLUORANTHENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98
BENZO(A)PYRENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98
INDENO(1,2,3-CD)PYRENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98
DIBENZ(A,H)ANTHRACENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98
BENZO(G,H,I)PERYLENE	EPA Method 8270	ND ug/kg DRY	75.4 ug/kg	12/02/98

A result of "ND" indicates the concentration of the analyte tested was either not detected or below the PQL.
QC INC's laboratory certification numbers are; PADER 09-131; NJDEP 77166; NC 488; NY,CT,DE and MD UPON REQUEST.
Definitions: ND=not detected; NEG=negative; POS=positive; COL=colonies; PQL=practical quanitation level; L/A=laboratory accident; TNTC=too numerous to count
A result marked with "DRY" indicates that the result was calculated and reported on a dry weight basis.

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MAE MALLOY DIVISION WILDWOOD, NJ (609) 522-9000
RITCHESON DIVISION PITMAN, NJ (609) 582-1919
AMBLER DIVISION AMBLER, PA (215) 646-1057

QC Inc.

Analytical Results

01/29/99 11:23am

Account No: C00368, MERIT OIL CORPORATION
Project No: C00368 GSC, GEOLOGIC SERVICES CORPORATION

P.O. No:
PWSID No:

Inv. No: 194867

Sample Number	Sample Description	Samp. Date/Time/Temp	Sampled by
L372615-4	MW-3/SS-6	11/18/98 04:45pm NA°F	Customer Sampled

Parameter	Method	Result	PQL	Test Date
TOTAL SOLIDS PERCENT	STD Methods 18th Ed. 2540	88.44 %	0.01000 %	11/25/98

L372615-3:
1. MTBE was initially analyzed within hold time but exceeded highest calibration level. It was re analyzed outside of hold time.

A result of "ND" indicates the concentration of the analyte tested was either not detected or below the PQL.
QC INC's laboratory certification numbers are; PADER 09-131; NJDEP 77166; NC 488; NY,CT,DE and MD UPON REQUEST.
Definitions: ND=not detected; NEG=negative; POS=positive; COL=colonies; PQL=practical quanitation level; L/A=laboratory accident; TNTC=too numerous to count
A result marked with "DRY" indicates that the result was calculated and reported on a dry weight basis.

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VINELAND DIVISION VINELAND, NJ (609) 563-0101
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RITCHESON DIVISION PITMAN, NJ (609) 582-1919
AMBLER DIVISION AMBLER, PA (215) 646-1057

APPENDIX F: Groundwater Laboratory Analytical Data

Analytical Results

03/05/99 03:51pm

HEATHER OAKES
GEOLOGIC SERVICES CORPORATION
MERCER CORPORATE PARK
330 CORPORATE BOULEVARD
ROBBINSVILLE, NJ 08691

Regarding:

ANGELO FATIGA
MERIT OIL CORPORATION
551 WEST LANCASTER AVENUE
HAVERFORD, PA 19041

Account No: C00368, MERIT OIL CORPORATION
Project No: C00368 GSC, GEOLOGIC SERVICES CORPORATION

P.O. No:
PWSID No:

Inv. No: 197574

Sample Number: L378304-1
Sample Description: MERIT JEROME MW-1
Samp. Date/Time/Temp: 12/14/98 01:30pm NA°F
Sampled by: Customer Sampled

Parameter	Method	Result	PQL	Test Date
LEAD	EPA 600 Method 200.7	0.239 mg/l	0.00500 mg/l	12/18/98
NAPHTHALENE	EPA Method 8270	323. ug/l	20.0 ug/l	12/23/98
ACENAPHTHENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
FLUORENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
PHENANTHRENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
ANTHRACENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
FLUORANTHENE	EPA Method 8270	ND ug/l	50.0 ug/l	12/23/98
PYRENE	EPA Method 8270	ND ug/l	50.0 ug/l	12/23/98
BENZO(A)ANTHRACENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
CHRYSENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
BENZO(B)FLUORANTHENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
BENZO(K)FLUORANTHENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
BENZO(A)PYRENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
INDENO(1,2,3-CD)PYRENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
DIBENZ(A,H)ANTHRACENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
BENZO(G,H,I)PERYLENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
BENZENE	EPA Method 8021	7.33 ug/l	5.00 ug/l	12/21/98
TOLUENE	EPA Method 8021	955. ug/l	100. ug/l	12/21/98
ETHYL BENZENE	EPA Method 8021	1110 ug/l	100. ug/l	12/21/98
M&P-XYLENES	EPA Method 8021	5340 ug/l	100. ug/l	12/21/98
O-XYLENE	EPA Method 8021	2160 ug/l	100. ug/l	12/21/98
ISOPROPYLBENZENE	EPA Method 8021	117. ug/l	5.00 ug/l	12/21/98
N-PROPYLBENZENE	EPA Method 8021	313. ug/l	5.00 ug/l	12/21/98
1,3,5-TRIMETHYLBENZENE	EPA Method 8021	1020 ug/l	100. ug/l	12/21/98
1,2,4-TRIMETHYLBENZENE	EPA Method 8021	4620 ug/l	100. ug/l	12/21/98
SEC-BUTYLBENZENE	EPA Method 8021	36.6 ug/l	5.00 ug/l	12/21/98
P-ISOPROPYLTOLUENE	EPA Method 8021	60.4 ug/l	5.00 ug/l	12/21/98
N-BUTYLBENZENE	EPA Method 8021	942. ug/l	100. ug/l	12/21/98
NAPHTHALENE	EPA Method 8021	553. ug/l	100. ug/l	12/21/98
METHYL TERTIARY BUTYL ETHER	EPA Method 8021	75.9 ug/l	5.00 ug/l	12/18/98

Sample Number: L378304-2
Sample Description: MW-2
Samp. Date/Time/Temp: 12/14/98 01:15pm NA°F
Sampled by: Customer Sampled

Parameter	Method	Result	PQL	Test Date
LEAD	EPA 600 Method 200.7	0.0402 mg/l	0.00500 mg/l	12/18/98
NAPHTHALENE	EPA Method 8270	9.70 J ug/l	10.0 ug/l	12/23/98
ACENAPHTHENE	EPA Method 8270	ND ug/l	10.0 ug/l	12/23/98
FLUORENE	EPA Method 8270	ND ug/l	10.0 ug/l	12/23/98
PHENANTHRENE	EPA Method 8270	ND ug/l	10.0 ug/l	12/23/98

A result of "ND" indicates the concentration of the analyte tested was either not detected or below the PQL.
QC INC's laboratory certification numbers are; PADER 09-131; NJDEP 77166; NC 488; NY,CT,DE and MD UPON REQUEST.
Definitions: ND=not detected; NEG=negative; POS=positive; COL=colonies; PQL=practical quanitation level; L/A=laboratory accident; TNTC=too numerous to count
A result marked with "DRY" indicates that the result was calculated and reported on a dry weight basis.

Allen D. Schopbach, President

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Analytical Results

03/05/99 03:51pm

Account No: C00368, MERIT OIL CORPORATION
Project No: C00368 GSC, GEOLOGIC SERVICES CORPORATION

P.O. No:
PWSID No:

Inv. No: 197574

Sample Number: L378304-2
Sample Description: MW-2
Samp. Date/Time/Temp: 12/14/98 01:15pm NA°F
Sampled by: Customer Sampled

Parameter	Method	Result	PQL	Test Date
ANTHRACENE	EPA Method 8270	ND ug/l	10.0 ug/l	12/23/98
FLUORANTHENE	EPA Method 8270	ND ug/l	25.0 ug/l	12/23/98
PYRENE	EPA Method 8270	ND ug/l	25.0 ug/l	12/23/98
BENZO(A)ANTHRACENE	EPA Method 8270	ND ug/l	10.0 ug/l	12/23/98
CHRYSENE	EPA Method 8270	ND ug/l	10.0 ug/l	12/23/98
BENZO(B)FLUORANTHENE	EPA Method 8270	ND ug/l	10.0 ug/l	12/23/98
BENZO(K)FLUORANTHENE	EPA Method 8270	ND ug/l	10.0 ug/l	12/23/98
BENZO(A)PYRENE	EPA Method 8270	ND ug/l	10.0 ug/l	12/23/98
INDENO(1,2,3-CD)PYRENE	EPA Method 8270	ND ug/l	10.0 ug/l	12/23/98
DIBENZ(A,H)ANTHRACENE	EPA Method 8270	ND ug/l	10.0 ug/l	12/23/98
BENZO(G,H,I)PERYLENE	EPA Method 8270	ND ug/l	10.0 ug/l	12/23/98
BENZENE	EPA Method 8021	ND ug/l	2.50 ug/l	12/21/98
TOLUENE	EPA Method 8021	ND ug/l	2.50 ug/l	12/21/98
ETHYL BENZENE	EPA Method 8021	8.27 ug/l	2.50 ug/l	12/21/98
M&P-XYLENES	EPA Method 8021	13.6 ug/l	2.50 ug/l	12/21/98
O-XYLENE	EPA Method 8021	ND ug/l	2.50 ug/l	12/21/98
ISOPROPYLBENZENE	EPA Method 8021	12.4 ug/l	2.50 ug/l	12/21/98
N-PROPYLBENZENE	EPA Method 8021	28.1 ug/l	2.50 ug/l	12/21/98
1,3,5-TRIMETHYLBENZENE	EPA Method 8021	31.8 ug/l	2.50 ug/l	12/21/98
1,2,4-TRIMETHYLBENZENE	EPA Method 8021	104. ug/l	2.50 ug/l	12/21/98
SEC-BUTYLBENZENE	EPA Method 8021	6.57 ug/l	2.50 ug/l	12/21/98
P-ISOPROPYLTOLUENE	EPA Method 8021	ND ug/l	2.50 ug/l	12/21/98
N-BUTYLBENZENE	EPA Method 8021	41.6 ug/l	2.50 ug/l	12/21/98
NAPHTHALENE	EPA Method 8021	17.2 ug/l	2.50 ug/l	12/21/98
METHYL TERTIARY BUTYL ETHER	EPA Method 8021	2030 ug/l	25.0 ug/l	12/18/98

Sample Number: L378304-3
Sample Description: MW-3
Samp. Date/Time/Temp: 12/14/98 02:00pm NA°F
Sampled by: Customer Sampled

Parameter	Method	Result	PQL	Test Date
LEAD	EPA 600 Method 200.7	0.0183 mg/l	0.00500 mg/l	12/18/98
NAPHTHALENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
ACENAPHTHENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
FLUORENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
PHENANTHRENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
ANTHRACENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
FLUORANTHENE	EPA Method 8270	ND ug/l	5.00 ug/l	12/23/98
PYRENE	EPA Method 8270	ND ug/l	5.00 ug/l	12/23/98
BENZO(A)ANTHRACENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
CHRYSENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
BENZO(B)FLUORANTHENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
BENZO(K)FLUORANTHENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
BENZO(A)PYRENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
INDENO(1,2,3-CD)PYRENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
DIBENZ(A,H)ANTHRACENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
BENZO(G,H,I)PERYLENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/23/98
BENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
TOLUENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
ETHYL BENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
M&P-XYLENES	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
O-XYLENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98

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RITCHESON DIVISION PITMAN, NJ (609) 582-1919
AMBLER DIVISION AMBLER, PA (215) 646-1057

Analytical Results

03/05/99 03:51pm

Account No: C00368, MERIT OIL CORPORATION
Project No: C00368 GSC, GEOLOGIC SERVICES CORPORATION

P.O. No:
PWSID No:

Inv. No: 197574

Sample Number: L378304-3
Sample Description: MW-3
Samp. Date/Time/Temp: 12/14/98 02:00pm NA°F
Sampled by: Customer Sampled

Parameter	Method	Result	PQL	Test Date
ISOPROPYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
N-PROPYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
1,3,5-TRIMETHYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
1,2,4-TRIMETHYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
SEC-BUTYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
P-ISOPROPYLTOLUENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
N-BUTYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
NAPHTHALENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
METHYL TERTIARY BUTYL ETHER	EPA Method 8021	70.3 ug/l	0.500 ug/l	12/16/98

Sample Number: L378304-4
Sample Description: MW-4
Samp. Date/Time/Temp: 12/14/98 02:30pm NA°F
Sampled by: Customer Sampled

Parameter	Method	Result	PQL	Test Date
LEAD	EPA 600 Method 200.7	0.138 mg/l	0.00500 mg/l	12/18/98
NAPHTHALENE	EPA Method 8270	174. ug/l	20.0 ug/l	12/23/98
ACENAPHTHENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
FLUORENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
PHENANTHRENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
ANTHRACENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
FLUORANTHENE	EPA Method 8270	ND ug/l	50.0 ug/l	12/23/98
PYRENE	EPA Method 8270	ND ug/l	50.0 ug/l	12/23/98
BENZO(A)ANTHRACENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
CHRYSENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
BENZO(B)FLUORANTHENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
BENZO(K)FLUORANTHENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
BENZO(A)PYRENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
INDENO(1,2,3-CD)PYRENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
DIBENZ(A,H)ANTHRACENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
BENZO(G,H,I)PERYLENE	EPA Method 8270	ND ug/l	20.0 ug/l	12/23/98
BENZENE	EPA Method 8021	8.02 ug/l	5.00 ug/l	12/21/98
TOLUENE	EPA Method 8021	13.0 ug/l	5.00 ug/l	12/21/98
ETHYL BENZENE	EPA Method 8021	792. ug/l	50.0 ug/l	12/21/98
M&P-XYLENES	EPA Method 8021	3090 ug/l	50.0 ug/l	12/21/98
O-XYLENE	EPA Method 8021	857. ug/l	50.0 ug/l	12/21/98
ISOPROPYLBENZENE	EPA Method 8021	61.0 ug/l	5.00 ug/l	12/21/98
N-PROPYLBENZENE	EPA Method 8021	189. ug/l	5.00 ug/l	12/21/98
1,3,5-TRIMETHYLBENZENE	EPA Method 8021	566. ug/l	50.0 ug/l	12/21/98
1,2,4-TRIMETHYLBENZENE	EPA Method 8021	2410 ug/l	50.0 ug/l	12/21/98
SEC-BUTYLBENZENE	EPA Method 8021	17.7 ug/l	5.00 ug/l	12/21/98
P-ISOPROPYLTOLUENE	EPA Method 8021	25.3 ug/l	5.00 ug/l	12/21/98
N-BUTYLBENZENE	EPA Method 8021	506. ug/l	50.0 ug/l	12/21/98
NAPHTHALENE	EPA Method 8021	192. ug/l	5.00 ug/l	12/21/98
METHYL TERTIARY BUTYL ETHER	EPA Method 8021	141. ug/l	5.00 ug/l	12/18/98

Sample Number: L378304-5
Sample Description: FB-1
Samp. Date/Time/Temp: 12/14/98 02:30pm NA°F
Sampled by: Customer Sampled

Parameter	Method	Result	PQL	Test Date
LEAD	EPA 600 Method 200.7	ND mg/l	0.00500 mg/l	12/18/98
NAPHTHALENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98

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Definitions: ND=not detected; NEG=negative; POS=positive; COL=colonies; PQL=practical quanitation level; L/A=laboratory accident; TNTC=too numerous to count
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RITCHESON DIVISION PITMAN, NJ (609) 582-1919
AMBLER DIVISION AMBLER, PA (215) 646-1057

Analytical Results

03/05/99 03:51pm

Account No: C00368, MERIT OIL CORPORATION — P.O. No: — Inv. No: 197574
Project No: C00368 GSC, GEOLOGIC SERVICES CORPORATION — PWSID No:

Sample Number	Sample Description	Samp. Date/Time/Temp	Sampled by
L378304-5	FB-1	12/14/98 02:30pm NA°F	Customer Sampled

Parameter	Method	Result	PQL	Test Date
ACENAPHTHENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98
FLUORENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98
PHENANTHRENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98
ANTHRACENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98
FLUORANTHENE	EPA Method 8270	ND ug/l	5.00 ug/l	12/24/98
PYRENE	EPA Method 8270	ND ug/l	5.00 ug/l	12/24/98
BENZO(A)ANTHRACENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98
CHRYSENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98
BENZO(B)FLUORANTHENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98
BENZO(K)FLUORANTHENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98
BENZO(A)PYRENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98
INDENO(1,2,3-CD)PYRENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98
DIBENZ(A,H)ANTHRACENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98
BENZO(G,H,I)PERYLENE	EPA Method 8270	ND ug/l	2.00 ug/l	12/24/98
BENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
TOLUENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
ETHYL BENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
M&P-XYLENES	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
O-XYLENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
ISOPROPYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
N-PROPYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
1,3,5-TRIMETHYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
1,2,4-TRIMETHYLBENZENE	EPA Method 8021	0.812 ug/l	0.500 ug/l	12/21/98
SEC-BUTYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
P-ISOPROPYLTOLUENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
N-BUTYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
NAPHTHALENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
METHYL TERTIARY BUTYL ETHER	EPA Method 8021	ND ug/l	0.500 ug/l	12/16/98

Sample Number	Sample Description	Samp. Date/Time/Temp	Sampled by
L378304-6	TRIP BLANK	12/14/98 00:00am NA°F	Customer Sampled

Parameter	Method	Result	PQL	Test Date
BENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
TOLUENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
ETHYL BENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
M&P-XYLENES	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
O-XYLENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
ISOPROPYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
N-PROPYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
1,3,5-TRIMETHYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
1,2,4-TRIMETHYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
SEC-BUTYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
P-ISOPROPYLTOLUENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
N-BUTYLBENZENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
NAPHTHALENE	EPA Method 8021	ND ug/l	0.500 ug/l	12/21/98
METHYL TERTIARY BUTYL ETHER	EPA Method 8021	ND ug/l	0.500 ug/l	12/16/98

A result of "ND" indicates the concentration of the analyte tested was either not detected or below the PQL.
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APPENDIX G: **NYSDEC UST File Review**

New York State Department of Environmental Conservation
47-40 21st Street, Long Island City, New York 11101
Region 2 - Freedom of Information Law Office
(718) 482-4949; fax (718) 482-4954

OCT 26 1998

John P. Cahill
Commissioner

October 21, 1998

Ms Heather A Oakes
GSC
330 Corporate Boulevard
Robbinsville, NJ 08691

RE: NYSDEC FOIL Request # 2 - 537 - 98

Dear FOIL Applicant:

We have processed your recent FOIL request and have found the enclosed information: one PBS facility report and onespill fact sheet.

Thank you.

Sincerely,

William F. Hewitt
Director of Public Affairs
Region 2

File Searched:
See your letter attached

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Petroleum Bulk Storage Program
Facility Information Report

Printed : 09/25/98

PBS # : 2-602236

Site : MOBIL SERVICE STATION # 17-VB4
2816-2828 ATLANTIC AVENUE
BROOKLYN, NY 11207

County : KINGS Town : NEW YORK CITY
Latitude : N Longitude : W
SPDES# : CBS# :
Site Type : Info Not Given.

Operator : SIMMONS VALERIS (000) 000-0000
Emergency : ENV. HELP DESK (800) 662-4567

Site status : Active
Total Active Tanks : 5
Active Capacity : 20,000 gals.

Reg Expires : 05/23/00
Last Inspection : / /
Cert Printed : 10/29/96

Site Errors : Complete
Owner Error : Complete
Tank Errors : Minor Data Missing

Owner : MOBIL OIL CORPORATION/EARTH
3225 GALLOWS ROAD, 6W307
FAIRFAX, VA 22037

Phone : (703) 849-6252
Owner Type : Corporate/Commercial

Mail : MOBIL OIL C/O NDE ENV.
P.O.BOX 142667
AUSTIN, TX 78714-2667

Att : NORMA HILL (800) 800-4633

TankNo	TankLoc	Stat	DateIn	Capac (g)	Product	TankType	TankInt	TankExt	PipeLoc	PipeType	PipeInt	PipeExt	SecCont	Leak	OverFil	Disp	LastTest	NextTest	TStat
020	4	1	09/95	4,000	6	5	0		2	3	0	04	02	04	02	1			2
021	4	1	09/95	4,000	2	5	0		2	3	0	04	02	04	02	1			2
022	4	1	09/95	4,000	2	5	0		2	3	0	04	02	04	02	1			2
023	4	1	09/95	4,000	2	5	0		2	3	0	04	02	04	02	1			2
024	4	1	09/95	4,000	2	5	0		2	3	0	04	02	04	02	1			2
001	4	3	00/00	550	2	1	0	00	2	1	0	00	00	00	00	2		REMOVED : 05/95	
002	4	3	00/00	550	2	1	0	00	2	1	0	00	00	00	00	2		REMOVED : 05/95	
003	4	3	00/00	550	2	1	0	00	2	1	0	00	00	00	00	2		REMOVED : 05/95	
004	4	3	00/00	550	2	1	0	00	2	1	0	00	00	00	00	2		REMOVED : 05/95	
005	4	3	00/00	550	2	1	0	00	2	1	0	00	00	00	00	2		REMOVED : 05/95	
006	4	3	00/00	550	2	1	0	00	2	1	0	00	00	00	00	2		REMOVED : 05/95	
007	4	3	00/00	550	2	1	0	00	2	1	0	00	00	00	00	2		REMOVED : 05/95	
008	4	3	00/00	550	2	1	0	00	2	1	0	00	00	00	00	2		REMOVED : 05/95	
009	4	3	00/00	550	2	1	0	00	2	1	0	00	00	00	00	2		REMOVED : 05/95	
010	4	3	00/00	550	2	1	0	02	1	0	0	00	00	00	00	2		REMOVED : 05/95	
011	4	3	00/00	550	2	1	0	00	2	1	0	00	00	00	00	2		REMOVED : 05/95	
012	4	3	00/00	550	2	1	0	00	2	1	0	00	00	00	00	2		REMOVED : 05/95	

NYSDEC SPILL REPORT FORM

DEC REGION# 2 (Long Island City) SPILL NUMBER 9603129

SPILL NAME: MOBIL GAS STATION DEC LEAD: O'DOWD

CALLER'S NAME: JIM GREY NOTIFIER'S NAME: JOE

CALLER'S AGENCY: MOBIL; OIL CORP NOTIFIER'S AGENCY: DEALER

CALLER'S PHONE: (512) 451-6334 EXT. NOTIFIER'S PHONE: (718) 827-2817 EXT.

SPILL DATE: 06/05/96 TIME: 14:30

CALL RECEIVED DATE: 06/05/96 TIME: 14:59 RECEIVED BY CID #: 270

	Material Spilled	Mat. Class	Am't Spilled	Units	Am't Recovered
1)	GASOLINE	(Pet)-Haz-Other-Unk.	Unknown	(Gal) - Lbs	Unknown
2)		Pet-Haz-Other-Unk.		Gal - Lbs	
3)		Pet-Haz-Other-Unk.		Gal - Lbs	
4)		Pet-Haz-Other-Unk.		Gal - Lbs	

SPILL LOCATION

PLACE: MOBIL GAS STATION

STREET: 2816 ATLANTIC AVE

T/C/V: BROOKLYN CO: KINGS

CONTACT: JOE

PHONE: (718) 827-2817 EXT.

POTENTIAL SPILLER

NAME: MOBIL OIL CORP

STREET: 3225 GALLOWS RD

CITY: FAIRFAX

STATE: VA ZIP:

CONTACT: JIM GREY

PHONE: (512) 451-6334 EXT.

SPILL CAUSE

Human Error	Tank Test Failure	*Tank Failure
(Traffic Accident)	Housekeeping	Tank Overfill
Equipment Failure	Deliberate	Other
Vandalism	Abandoned Drums	Unknown

SPILL SOURCE

(Gas Station)	Private Dwelling	Non-Maj Facility
Passenger Vehicle	Vessel	Comm/Indust
Comm. Vehicle	Railroad Car	Non-Comm/Instit
Tank Truck	Major Facility	Unknown

RESOURCE AFFECTED

(On Land)	Groundwater	Air
In Sewer	Surface Water **	

**WATERBODY:

SPILL REPORTED BY

Responsible Party	Tank Tester	Local Agency
(Affected Persons)	DEC	Federal Gov't
Police Department	Citizen	Other
Fire Department	Health Dept.	

CALLER REMARKS: vehicle struck pump

PBS Number	Tank Number	Tank Size	Test Method	Leak Rate

PRIMARY CONTACT CALLED DATE: TIME: REACHED DATE: TIME:

SECONDARY CONT. CALLED DATE: TIME: FAXED BY CID#:

PIN #	T & A	Cost Center	ISR to Central Office
Cleanup Ceased	Meets St'ds NO	Last Inspection	Penalty NO
RP-CUI	ENF-INIT	INVES-COM	CAP
UST Trust Eligible NO	Site: A B (C) D E	Resp. Party 1 2 3 4 (5) 6	Reg Close Date 06/06/96

Created on 06/05/96 Last Updated on 06/28/96 Is Updated? NO EDO DATA INPUT [ ]

Date Printed: 09/29/98

Print Rev 10/99/96 AAA

Spill Number: 9603129 Spill Name: MOBIL GAS STATION Printed on: 09/29/98

DEC REMARKS

06/06/96 -12:15pm, SPOKE TO JOE, HE SAID IT WAS A VEHICLE ACCIDENT WHEN GUY WAS REVISING DOOR OPEN & SHEARED PUMP NOZZLE. PUMP WAS NOT ON YET - RESIDUAL GAS IN LINE LEAKED ONTO ASPHALT & CLEANED UP MINIMAL AMOUNT.

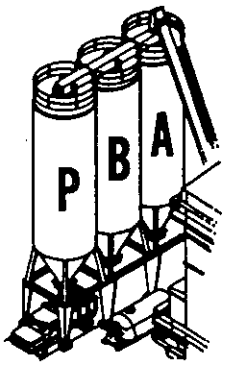
APPENDIX H: **Soil Disposal Bill of Lading**

Posillico Bros. Asphalt Co.

1610 New Highway, Farmingdale, NY 11735-1534

Plant Tel.: (516) 293-2620, 2621

Office Tel.: (516) 249-1872



January 25, 1999

MERIT OIL OF NEW YORK, INC.
551 West Lancaster Ave.
Haverford, PA 19041-1494

Attention: Andrew Ford

RE: DISPOSAL OF:	**Gasoline Contaminated Soil**
LOCATION:	**2864-2880 Atlantic Ave. Brooklyn, NY**
SPILL NO:	**98-30002**
PROJECT NO:	**98229**
DATE OF DISPOSAL:	**December 10, 1998**
PROCESS DATE:	**December 12, 1998**
QUANTITY REMOVED:	**(14) Drums**

Dear Mr. Ford:

Attached please find the copies of the corresponding manifests, tickets and load amounts, in reference to the captioned project. All contaminants have been **thermally destroyed** and **residual soils** have been **recycled** into hot mix asphalt.

If you require any additional information, please feel free to contact me.

Sincerely, yours,
POSILLICO BROS. ASPHALT, CO.

Michael J. Posillico

Michael J. Posillico

MJP/kp

enclosure