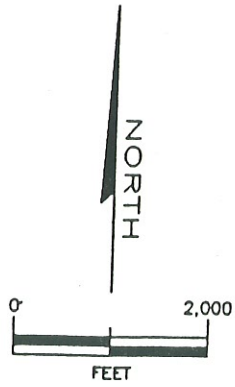




**FIGURE 1**  
**SITE LOCATION MAP**  
**MERIT GASOLINE STATION**  
**3904 NORTHERN BOULEVARD**  
**LONG ISLAND CITY, NEW YORK**



SOURCE: USGS 7.5 MINUTE SERIES  
 TOPOGRAPHIC QUADRANGLE 1979  
 CENTRAL PARK, N.Y. - N.J.  
 CONTOUR INTERVAL = 10 feet








QUADRANGLE LOCATION

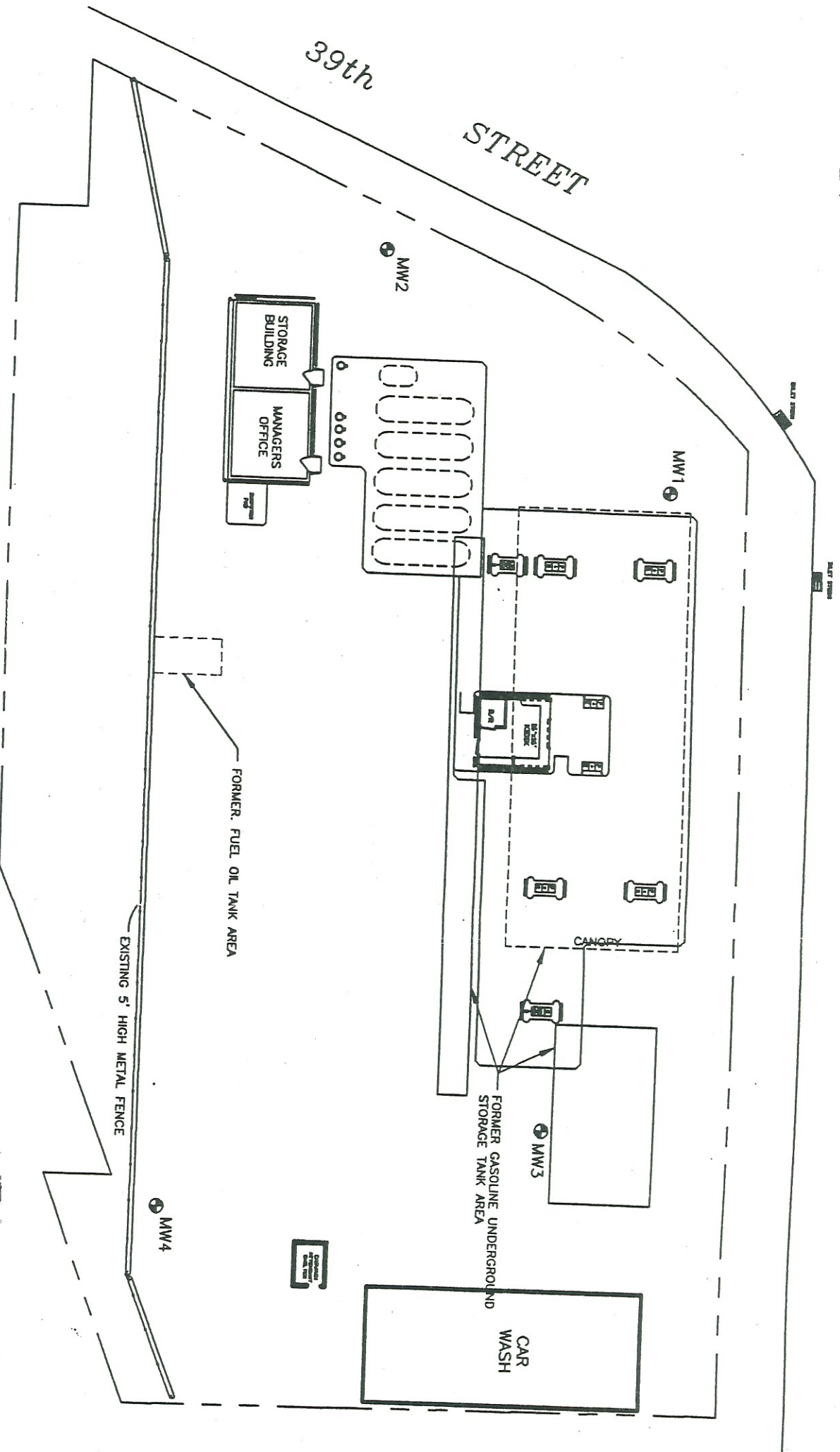


NORTHERN BOULEVARD

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.


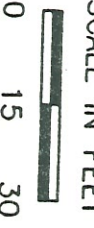
LEGEND

-  FENCE
-  DISPENSER ISLAND
-  MONITORING WELL
-  600 GALLON WASTE WATER DOUBLE WALL FIBERGLASS UNDERGROUND STORAGE TANK
-  4,000 GALLON GASOLINE DOUBLE WALL FIBERGLASS UNDERGROUND STORAGE TANK



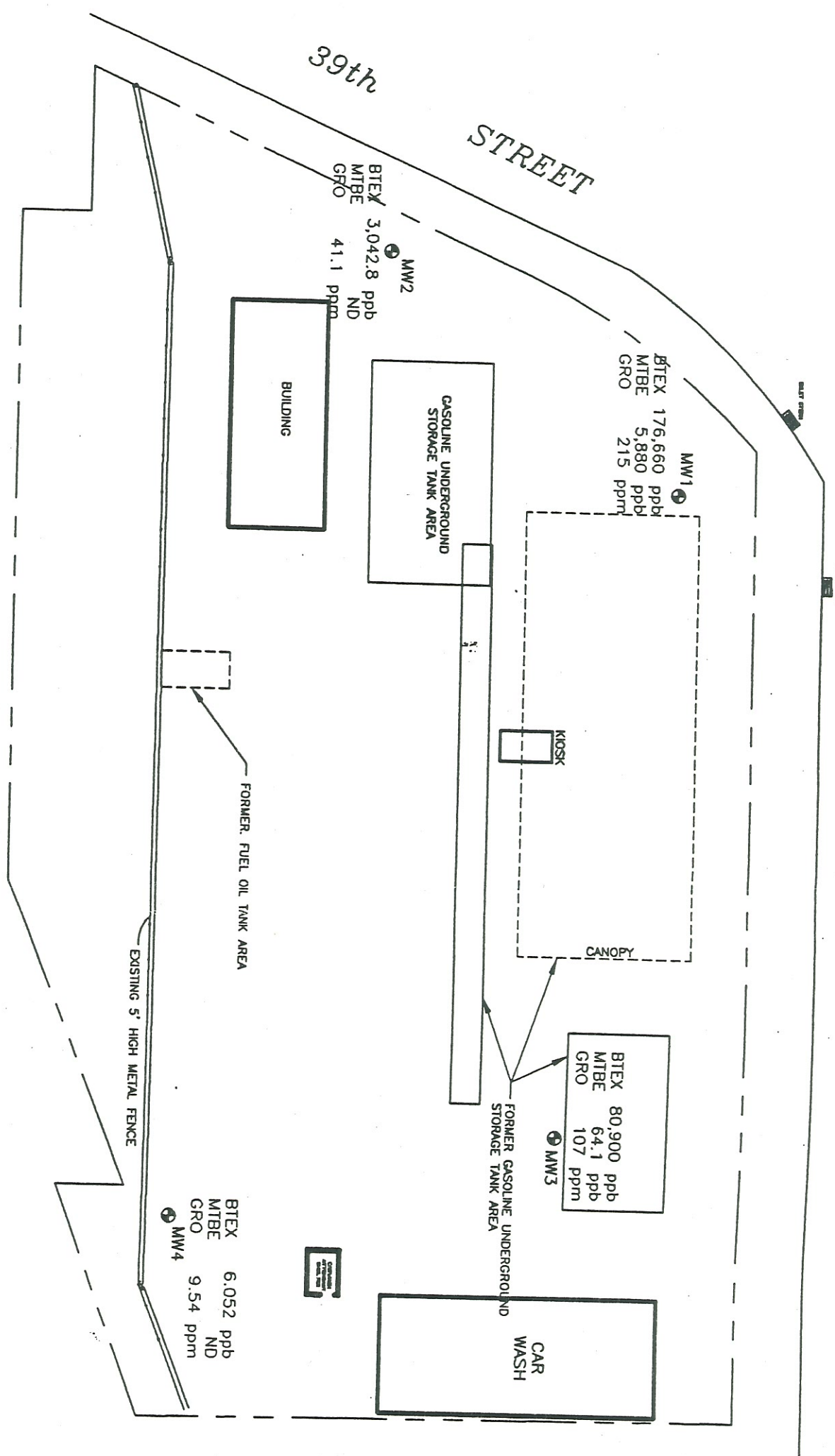
SITE PLAN

MERIT OIL OF NEW YORK, INC.  
 3904 NORTHERN BOULEVARD  
 LONG ISLAND CITY, QUEENS, NEW YORK

 NORTH	SCALE IN FEET	DATE	SOURCE
	 0 15 30	5-1-98	B
	DWG #	FIGURE	
	RS0024	2	



NORTHERN BOULEVARD

- LEGEND**
- FENCE
  - MONITORING WELL
  - BTEX BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
  - MTBE METHYL *tert*-BUTYL ETHER
  - ppb PARTS PER BILLION
  - ND NOT DETECTED
  - GRO GASOLINE RANGE ORGANICS
  - ppm PARTS PER MILLION



**SOIL SAMPLING PLAN**  
**JANUARY - FEBRUARY 1996**

MERIT OIL OF NEW YORK, INC.  
 3904 NORTHERN BOULEVARD  
 LONG ISLAND CITY, QUEENS, NEW YORK

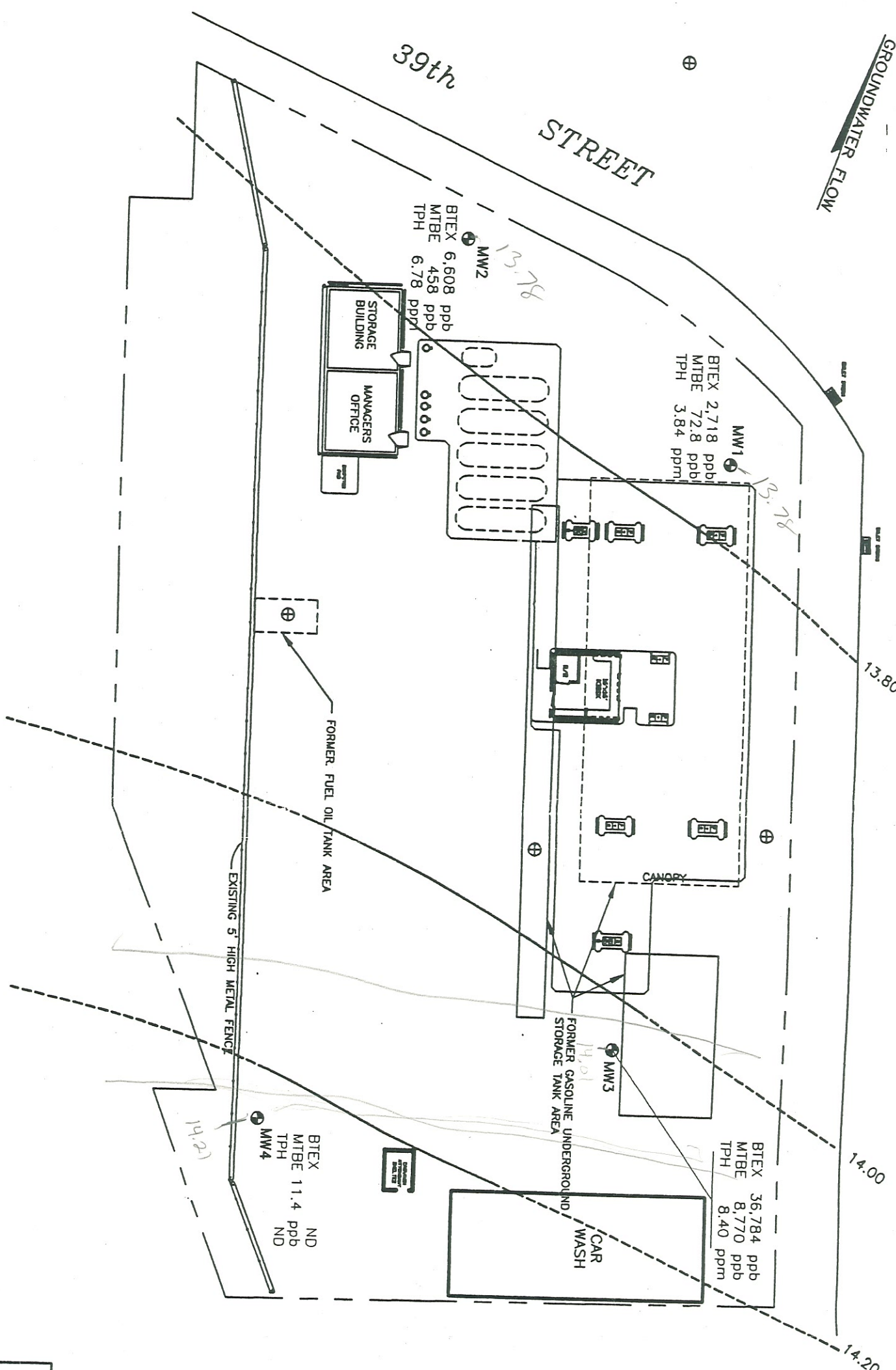
 NORTH	SCALE IN FEET	DATE	SOURCE
		2-19-98	B
	DWG #	RS0024	FIGURE
			4



NORTHERN BOULEVARD

GROUNDWATER FLOW

39th STREET



LEGEND

- FENCE
- DISPOSAL ISLAND
- MONITORING WELL
- 600 GALLON WASTE WATER DOUBLE WALL FIBERGLASS UNDERGROUND STORAGE TANK
- 4,000 GALLON GASOLINE DOUBLE WALL FIBERGLASS UNDERGROUND STORAGE TANK
- PROPOSED MONITORING WELL
- BTEX  
BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
- MTBE  
METHYL TERT-BUTYL ETHER
- PPH PARTS PER HILLION
- ND NOT DETECTED
- GW EL GROUNDWATER ELEVATION (feet)
- TPH TOTAL PETROLEUM HYDROCARBONS PARTS PER MILLION

MW	GW EL
1	13.78
2	13.78
3	14.01
4	14.21

NOTE:  
GROUNDWATER ELEVATION CONTOURS IN FEET

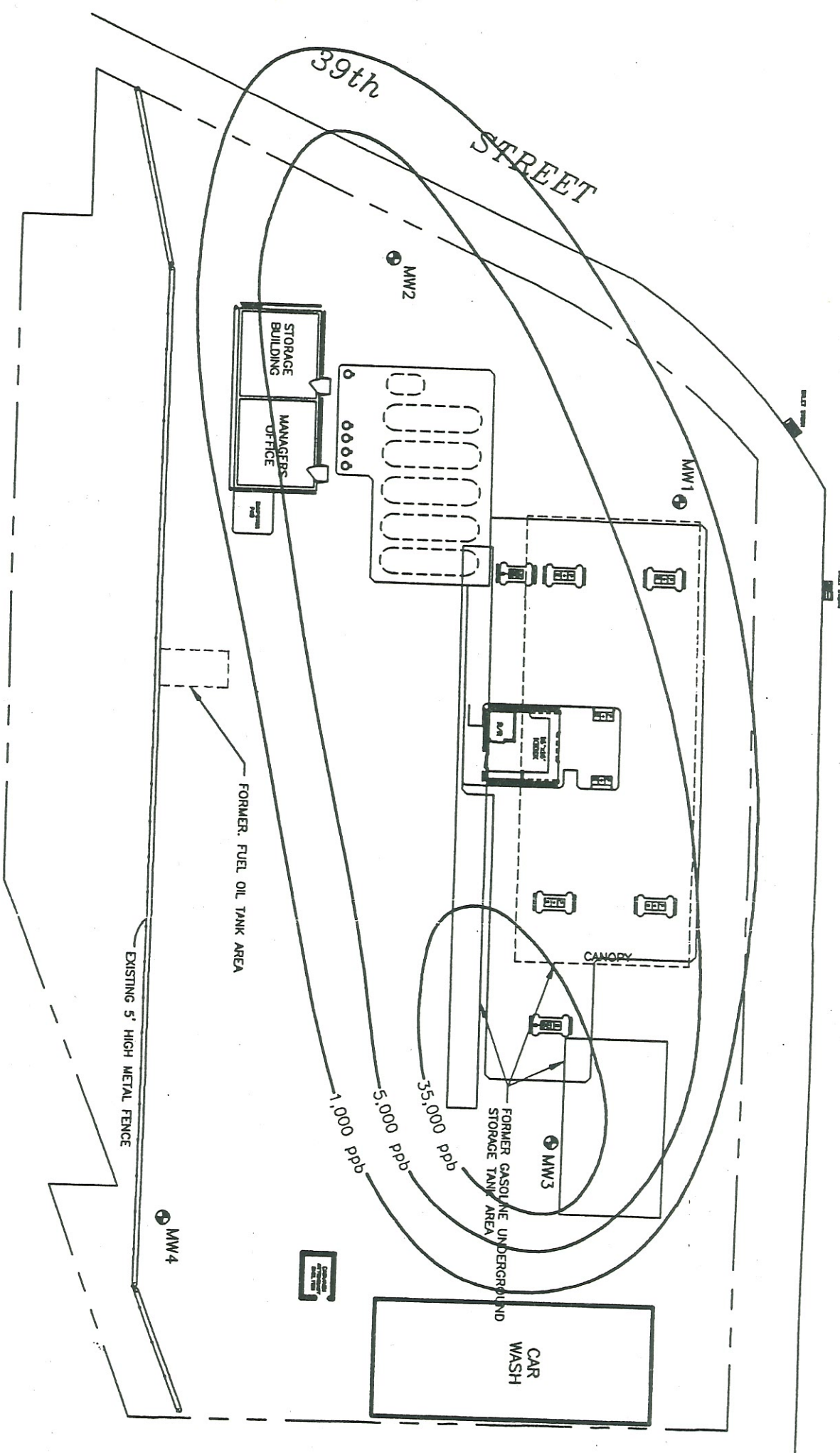
SITE INFORMATION PLAN  
13 MARCH 1996

MERIT GASOLINE STATION  
3904 NORTHERN BOULEVARD  
LONG ISLAND CITY, QUEENS, NEW YORK

NORTH SCALE IN FEET 0 15 30	DATE	SOURCE
	2-19-98	B
DWG #	FIGURE	
RS0024	5	



NORTHERN BOULEVARD



GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

- LEGEND**
- FENCE
  - DISPENSER ISLAND
  - MONITORING WELL
  - 600 GALLON WASTE WATER DOUBLE WALL FIBERGLASS UNDERGROUND STORAGE TANK
  - 4,000 GALLON GASOLINE DOUBLE WALL FIBERGLASS UNDERGROUND STORAGE TANK
  - BTEx
  - ppb
  - ND
- BENZENE, TOLUENE, ETHYLBENZENE, XYLENES PARTS PER BILLION  
NOT DETECTED

MW	BTEx (ppb)
1	2,718
2	6,608
3	36,784
4	ND

**NOTE:**  
THIS MAP USES A STAGGERED CONTOUR INTERVAL.

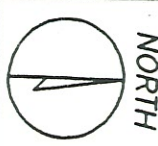
**BTEx PLUME MAP**  
13 MARCH 1996

MERIT OIL OF NEW YORK, INC.  
3904 NORTHERN BOULEVARD  
LONG ISLAND CITY, QUEENS, NEW YORK

**SCALE IN FEET**  
0 15 30

**DATE** 2-19-98  
**DWG #** RS0024

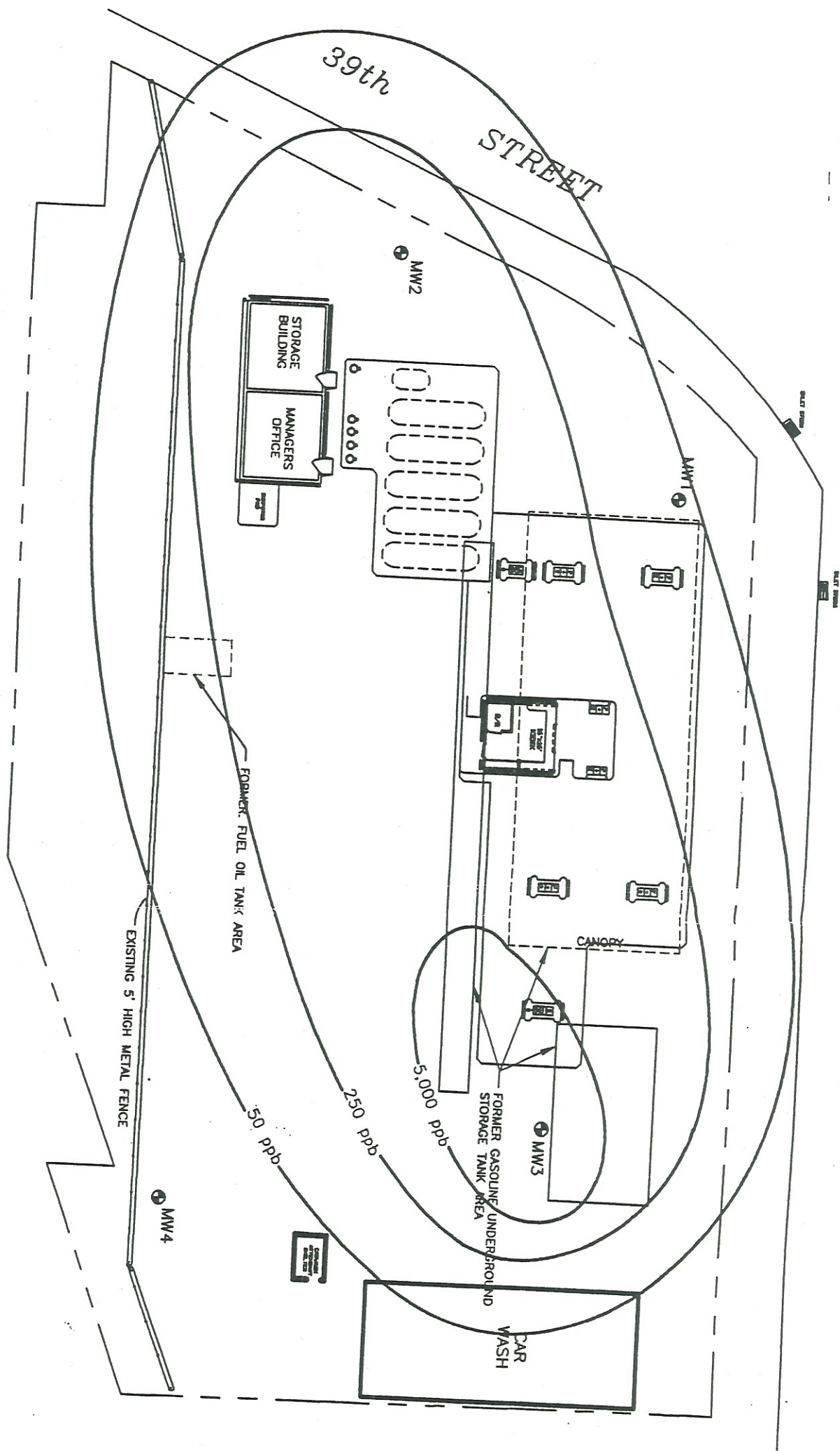
**SOURCE** B  
**FIGURE** 6





NORTHERN BOULEVARD

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.



LEGEND

- FENCE
- DISPENSER ISLAND
- MONITORING WELL
- 600 GALLON WASTE WATER DOUBLE WALL FIBERGLASS UNDERGROUND STORAGE TANK
- 4,000 GALLON GASOLINE DOUBLE WALL FIBERGLASS UNDERGROUND STORAGE TANK
- MTBE
- ppb
- ND
- PARTS PER BILLION NOT DETECTED

MW	MTBE (ppb)
1	72.8
2	458
3	8,770
4	11.4

NOTE:

THIS MAP USES A STAGGERED CONTOUR INTERVAL.

MTBE PLUME MAP  
13 MARCH 1996

MERIT OIL OF NEW YORK, INC.  
3904 NORTHERN BOULEVARD  
LONG ISLAND CITY, QUEENS, NEW YORK

NORTH

SCALE IN FEET  
0 15 30

DATE	2-19-98	SOURCE	B
DWG #	RS0024	FIGURE	7

**Table 1**  
**Summary of Soil Sampling Analytical Results**  
**Merit Northern**  
**3904 Northern Boulevard**  
**Long Island City, New York**

Analysis by Methods EPA 8020 (modified to include MTBE) and API REV 5

All results in parts per billion unless otherwise noted

Sample #	Date	Depth (Feet)	PID (ppm)	Benzene	Toluene	Ethyl-benzene	Total Xylenes
<b>Boring #1</b>							
(MW-1)	1/31/96	22-24	200	<b>4,060</b>	<b>27,600</b>	<b>30,000</b>	<b>115,000</b>
MW-2	2/22/96	22-25	188	ND	73.8	369	2,600
MW-3	2/23/96	18-20	280	ND	<b>1,600</b>	<b>12,300</b>	<b>67,000</b>
MW-4	2/23/96	18-20	1.2	ND	ND	0.892	5.16
<b>NYSAGV</b>				<b>14</b>	<b>100</b>	<b>100</b>	<b>100</b>

Sample #	Date	Depth (Feet)	PID (ppm)	BTEX	MTBE	GRO (ppm)
<b>Boring #1</b>						
(MW-1)	1/31/96	22-24	200	176,660	<b>5,880</b>	215
MW-2	2/22/96	22-25	188	3,042.80	ND	41.1
MW-3	2/23/96	18-20	280	80,900	64.1	107
MW-4	2/23/96	18-20	1.2	6.052	ND	9.54
<b>NYSAGV</b>				<b>nvg</b>	<b>1000</b>	<b>nvg</b>

NYSAGV=New York State

Alternative Guidance Values

Concentrations exceeding Alternative Guidance Values are in bold type

MTBE=Methyl Tert Butyl Ether

ND=Not detected

GRO=Gasoline Range Organics

ppm=parts per million

nvg=no value given

**Table 2**  
**Summary of Groundwater Monitoring Data**  
**Merit Northern**  
**3904 Northern Boulevard**  
**Long Island City, New York**

All measurements are in feet

Well #	Date	Casing Elevation	Depth to Water	Depth to LPH	Groundwater Elevation
MW-1	3/13/96	31.79	18.01	*	13.78
MW-2	3/13/96	32.88	19.12	*	13.76
MW-3	3/13/96	31.61	17.60	*	14.01
MW-4	3/13/96	32.12	17.91	*	14.21

LPH= Liquid Phase Hydrocarbons  
 \*= LPH not detected by monitoring





**Table 3**  
**Summary of Groundwater Sampling Analytical Results**  
Merit Northern  
3904 Northern Boulevard  
Long Island City, New York

Analysis by EPA Method 602 (modified to include MTBE) and NJDEPE 418.1

All results in parts per billion unless otherwise noted

Well #	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total BTEX	MTBE	TPH (ppm)
MW-1	3/13/96	<b>249</b>	<b>635</b>	<b>304</b>	<b>1,530</b>	2,718	<b>72.8</b>	3.84
MW-2	3/13/96	<b>1,110</b>	<b>348</b>	<b>2,370</b>	<b>2,780</b>	6,608	<b>458</b>	6.78
MW-3	3/13/96	<b>434</b>	<b>11,600</b>	<b>4,250</b>	<b>20,500</b>	36,784	<b>8,770</b>	8.4
MW-4	3/13/96	ND	ND	ND	ND	ND	11.4	ND
<b>NYSWQR</b>		<b>0.7</b>	<b>5</b>	<b>5</b>	<b>5*</b>	nvg	<b>50</b>	nvg

NYSWQR=New York State  
Water Quality Regulations  
MTBE=Methyl Tert Butyl Ether  
ND=Not detected

TPH=Total Petroleum Hydrocarbons  
ppm=parts per million  
nvg=no value given  
\*=for each isomer

Concentrations exceeding NYSWQR standards are in bold type