Nightingale Geologic Consultants, P.C.
Charlotte, North Carolina, U.S.A.

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October 26, 1998

Ms. Cindy Rintoul
NCDENR-DWM
Winston-Salem Regional Office
585 Waughtown Street, Suite 100
Winston-Salem, North Carolina 27107-2241

Subject: **Groundwater Monitoring Report**
Exxon RAS # 4-3998
4701 W. Market Street
Greensboro, North Carolina
Groundwater Incident #10001, Site Ranking: Intermediate

Dear Ms. Rintoul:

Nightingale Geologic Consultants, P.C. (NGC) and Griffith Enterprises, Inc., on behalf of Exxon Company, U.S.A., are submitting this report for the referenced site.

A soil vapor extraction and aquifer air sparge system are currently operational at the site.

Please contact Alan Griffith at (336) 712-0290 or Elliot J. Nightingale at (704) 643-9700 if you have questions or comments regarding this site. Frank Medlin, of Exxon, can be reached at 704-529-4263.

Sincerely,

Nightingale Geologic Consultants, P.C.

Elliot J. Nightingale, L.G.
North Carolina Licensed Geologist No. 1165

Griffith Enterprises, Inc.

For

M. Alan Griffith
Project Manager

enclosure

c: Frank Medlin, Exxon Company, U.S.A.
Alan Griffith, Griffith Enterprises, Inc.

Question sample temp at receipt + methodology (see TF pre-approval)

GROUNDWATER MONITORING REPORT
THIRD QUARTER 1998

EXXON RAS #4-3998
4701 WEST MARKET STREET
GREENSBORO, NORTH CAROLINA 27407

GROUNDWATER INCIDENT #10001
NCDENR SITE RANKING: ***INTERMEDIATE***

Prepared For
Exxon Company, U.S.A.
P.O. Box 30451
Charlotte, North Carolina 28230

For Submittal To
Department of Environment and Natural Resources
Division of Waste Management, UST Section
Winston-Salem Regional Office

Prepared By

Nightingale Geologic Consultants, P.C.
4736 Sharon Rd., Suite W-124
Charlotte, NC 28210

and

Griffith Enterprises, Inc.
353 Jonestown Rd., Suite 312
Winston-Salem, NC 27104

Prepared: October 10, 1998

Report Certification

The geological and hydrogeological evaluations contained within this groundwater monitoring report were prepared in accordance with generally accepted scientific practices, and are based on our understanding of the site and data provided to us by others.

NORTH CAROLINA
LICENSED
SEAL
1165
GEOLOGIST
ELLIOT J. NIGHTINGALE

Elliot J. Nightingale, L.G.
N.C. Licensed Geologist No. 1165
Nightingale Geologic Consultants, P.C.

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Introduction

The following is the groundwater monitoring report for Exxon RAS #4-3998, located at 4701 West Market Street., in Greensboro, North Carolina (Figure 1). The responsible party for this site is:

Exxon Company, U.S.A.
P.O. Box 30451
Charlotte, NC 28230

This report was prepared in accordance with the following document: The Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater published by the State of North Carolina Department of Environment and Natural Resources, Division of Water Quality, Groundwater Section, January 2, 1998. This report was prepared by Nightingale Geologic Consultants, P.C. (NGC), a licensed geological corporation, and Griffith Enterprises, Inc.

Groundwater monitoring wells were gauged and sampled during the third calendar quarter of 1998. The SVE/AAS remediation system off-gas was last sampled on 4/6/98. The SVE system was inoperative from 8/14/98 to 10/13/98 due to a faulty selenoid valve on the moisture knock-out unit. Remediation system operation and maintenance is performed monthly.

Discussion of Sampling Results

The groundwater monitoring wells associated with this site have been sampled (Table 1, Table 2) and gauged (Table 3, Table 4) periodically since wells were first installed in 1992. Select monitoring wells were most recently sampled in September 1998. Free product (NAPL) has not been present in monitoring wells on-site.

An aquifer air sparge/soil vapor extraction (AAS/SVE) system was installed and operated from the second quarter 1996 through the present. A table of SVE off-gas analytical results is presented as part of Table 5.

A site location map is presented in Figure 1. A site configuration map is presented as Figure 2. A map illustrating the direction of groundwater flow for water table conditions is presented as Figure 3 The dissolved phase hydrocarbon plume is presented as Figure 4. Cross sections from the CSA report are presented in Figures 5 and 6.

No potential receptors within 1,000 ft. were identified in the CSA developed by ERM-Southeast in February 1996. Private water supply and irrigation wells were found within 1,500 ft. A potential receptor map is attached is Figure 7.

The CAP was presented to the NCDENR in July 1994 and has been implemented.

Future remediation activities at this site include the operation of the remediation system to reduce dissolved hydrocarbon levels in the groundwater to the GCL (gross contaminant level).

ATTACHMENTS

TABLES

TABLE 1
SUMMARY OF MOST RECENT CHEMICAL ANALYSIS
EXXON RAS #4-3998
4701 WEST MARKET STREET
GREENSBORO, NORTH CAROLINA

SEPTEMBER 30, 1997

Well Designation	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Total BTEX	MTBE	IPE	EDB	Lead
MW-1	1750	715	1810	4850	9125	15.3	765	0.34	ND
MW-2	**17400**	74300	7130	17300	116130	ND	8750	**1.26**	ND
MW-3	**8320**	37800	3560	9850	59530	ND	2240	**68.6**	516
MW-4	8.8	1.2	2.4	53.5	65.9	ND	1	ND	ND
MW-9	8.2	69.6	45	307	429.8	ND	8	ND	ND
DW-8	ND	ND	ND	ND	ND	ND	ND	ND	ND
NC 2L	*1*	*1000*	*29*	*530*	*NA*	*200*	*70***	*0.0004*	*15*
"GROSS"	*5000*	*257500*	*29000*	*87500*	*NA*	*200000*	*70000*	*0.4*	*15,000*

*** INTERIM STANDARD*

BOLD INDICATES GREATER THAN DENR "GROSS" STANDARD, PER PAGE 60, SOIL AND GROUNDWATER GUIDELINES, 1/1998

TABLE 2
EPA METHOD 602 AND LEAD GROUND WATER ANALYTICAL RESULTS
EXXON RETAIL LOCATION 4-3998
4701 WEST MARKET STREET
GREENSBORO, NORTH CAROLINA

MONITOR WELL ID	DATE	EXPANDED EPA METHOD 602							METHOD 504.1	METHOD 3030C
		TOTAL BTEX	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE	IPE	EDB	LEAD
MW-1	8/20/92	65,900	5000	35000	3900	22000	<500	--	--	--
	3/25/93	44,600	3500	21000	3100	17000	<250	--	--	--
	6/22/93	44,600	4200	18000	3400	19000	<500	--	--	--
	6/9/94	62,450	6150	22500	5000	28800	96	900	<10	5
	6/14/95	<1	<1	<1	<1	<1	<10	465	--	--
	9/18/95	50,500	4,000	24,000	3,000	19,500	<5,000	<5,000	--	--
	12/6/95	47,700	4,500	18,000	3,600	21,600	<225	1,230	--	--
	3/27/96	15,350	2,340	3,420	1,350	8,240	<450	945	<0.503	<3.0
	6/26/96	32,280	3,420	7,980	2,640	18,240	<200	1,030	<20	<3.0
	6/17/97	25,730	3,000	4,800	2,430	15500	ND	950	ND	ND
	12/16/97	4,250	1,110	560	780	1800	90	130	0	ND
	9/30/98	**9,125**	**1,750**	**715**	**1,810**	**4850**	**15**	**765**	**0**	**ND**
MW-2	8/20/92	13,900	1400	4900	1600	6000	<250	--	--	--
	3/25/93	16,400	2000	7300	1200	5900	<250	--	--	--
	6/22/93	76,800	8100	40000	4700	24000	<2500	--	--	--
	6/9/94	70,520	7160	33500	4560	25300	390	280	<10	3
	6/14/95	234,900	14,000	112,000	17,100	91,800	<225	1,710	--	--
	9/18/95	56,000	4,500	25,000	4,000	22,500	<1,000	1,600	--	--
	12/6/95	5,553	788	2,900	315	1,550	<225	292	--	--
	3/27/96	136,800	22,000	72,000	7,200	35,600	<900	10,800	0.70	<3.0
	6/26/96	103,000	16,000	60,000	4,500	22,500	<10000	<10000	<1000	<3.0
	6/17/97	86,800	13,100	46,000	4,100	23,600	ND	6,000	ND	ND
	12/16/97	90,550	14,000	49,500	4,050	23,000	1,350	4,050	0.22	ND
	9/30/98	**116,130**	**17,400**	**74,300**	**7,130**	**17,300**	**ND**	**8,750**	**1.26**	**ND**
MW-3	8/20/92	84,800	11000	41000	4800	26000	<500	--	--	--
	3/25/93	67,300	9700	35000	3600	19000	<1000	--	--	--
	6/22/93	88,900	13000	50000	3900	22000	<2500	--	--	--
	6/9/94	114,700	12600	65400	4500	32200	<1000	2580	<50	678
	6/14/95	308,200	25,200	157,000	18,000	108,000	<225	2,740	--	390
	9/18/95	125,000	15,000	73,000	6,000	31,000	<5,000	<5,000	--	372
	12/6/95	156,600	19,800	94,500	6,300	36,000	<4500	7,650	--	147
	3/27/96	158,400	23,400	80,100	8,100	46,800	<900	11,200	59	1,400
	6/26/96	106,750	14,300	49,000	5,650	37,800	<5000	7,300	<500	1,010
	6/17/97	39,381	3,550	19,100	2,181	14,550	ND	1,140	ND	376
	12/16/97	97,200	16,400	49,300	4,500	27,000	450	4,720	35	956
	9/30/98	**59,530**	**8,320**	**37,800**	**3,560**	**9,850**	**ND**	**2,240**	**69**	**516**

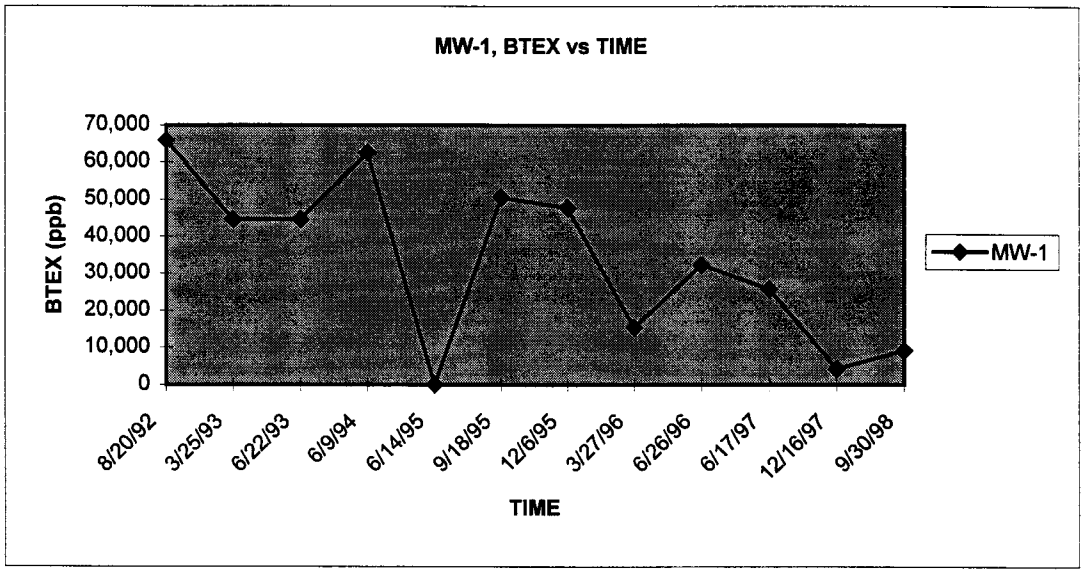
TABLE 2
EPA METHOD 602 AND LEAD GROUND WATER ANALYTICAL RESULTS
EXXON RETAIL LOCATION 4-3998
4701 WEST MARKET STREET
GREENSBORO, NORTH CAROLINA

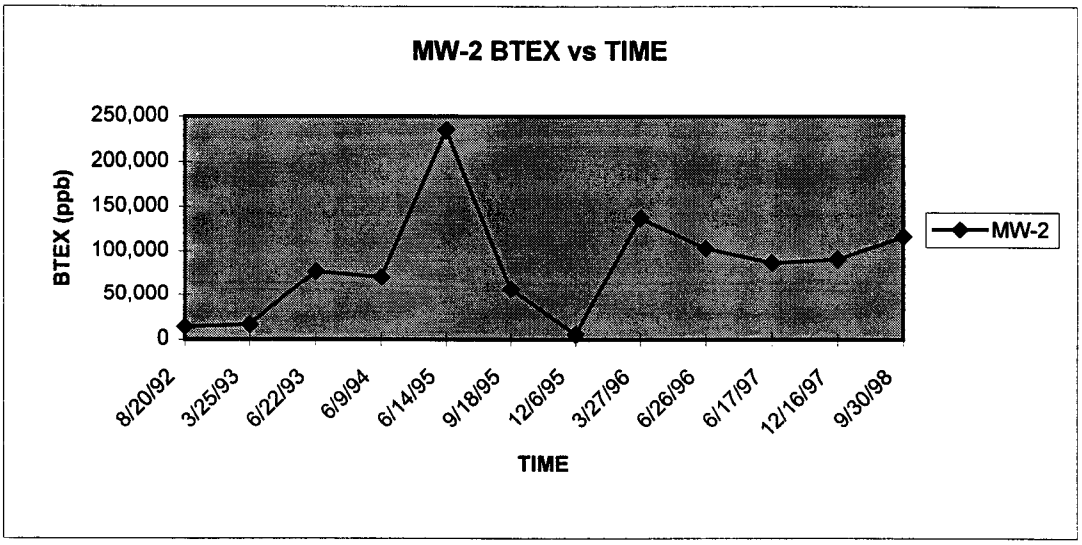
MONITOR WELL ID	DATE	EXPANDED EPA METHOD 602							METHOD 504.1	METHOD 3030C
		TOTAL BTEX	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE	IPE	EDB	LEAD
MW-4	8/20/92	4	<2.0	<2.0	<2.0	4	<10	--	--	--
	3/25/93	17.6	1.9	4.7	<1.0	11	<10	--	--	--
	6/22/93	17.5	1.5	<1.0	<1.0	16	<10	--	--	--
	6/9/94	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<1.0	4
	6/14/95	71	6	9	3	53	<10	<10	--	--
	9/18/95	33	4	<1.0	<1.0	29	<10	33	--	--
	6/17/97	112.2	11.4	ND	15.8	85.0	ND	ND	--	--
	12/16/97	175.0	22.0	2.0	14.0	137.0	ND	2	ND	ND
	9/30/98	**65.9**	**8.8**	**1.2**	**2.4**	**53.5**	**ND**	**1**	**ND**	**ND**
MW-5	3/25/93	<1.0	<1.0	<1.0	<1.0	<1.0	<10	--	--	--
	6/22/93	<1.0	<1.0	<1.0	<1.0	<1.0	<10	--	--	--
	6/9/94	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<1.0	13
	6/14/95	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	--	--
	9/18/95	2	<1.0	1	<1.0	1	<10	27	--	--
MW-6	3/25/93	<1.0	<1.0	<1.0	<1.0	<1.0	<10	--	--	--
	6/22/93	<1.0	<1.0	<1.0	<1.0	<1.0	<10	--	--	--
	6/9/94	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<1.0	13
	6/14/95	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	--	--
	9/18/95	<1.0	<1.0	<1.0	<1.0	<1.0	<10	14	--	--
MW-7	3/25/93	9.1	1.9	1.9	1.9	3.4	36.0	--	--	--
	6/22/93	<5.0	<5.0	<5.0	<5.0	<5.0	<50	--	--	--
	6/9/94	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<1.0	20
	6/14/95	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	--	26
	9/18/95	2	<1.0	1	<1.0	1	10	16	--	15
	12/16/97	**11**	**7**	**4**	**<1.0**	**<1.0**	**<1.0**	**<1.0**	**<0.02**	**7**
DW-8	3/25/93	<1.0	<1.0	<1.0	<1.0	<1.0	<10	--	--	--
	6/22/93	<1.0	<1.0	<1.0	<1.0	<1.0	<10	--	--	--
	6/9/94	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<1.0	4
	6/14/95	2	<1	1	<1	1	<10	<10	--	--
	9/18/95	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	--	--
	12/16/97	14	2	6	<1.0	6	<1.0	<1.0	<0.02	5
	9/30/98	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
MW-9	12/6/95	823	36	7	110	670	<10	38	--	--
	12/16/97	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.02	5
	9/30/98	**<1.0**	**8**	**70**	**45**	**307**	**ND**	**8**	**ND**	**ND**

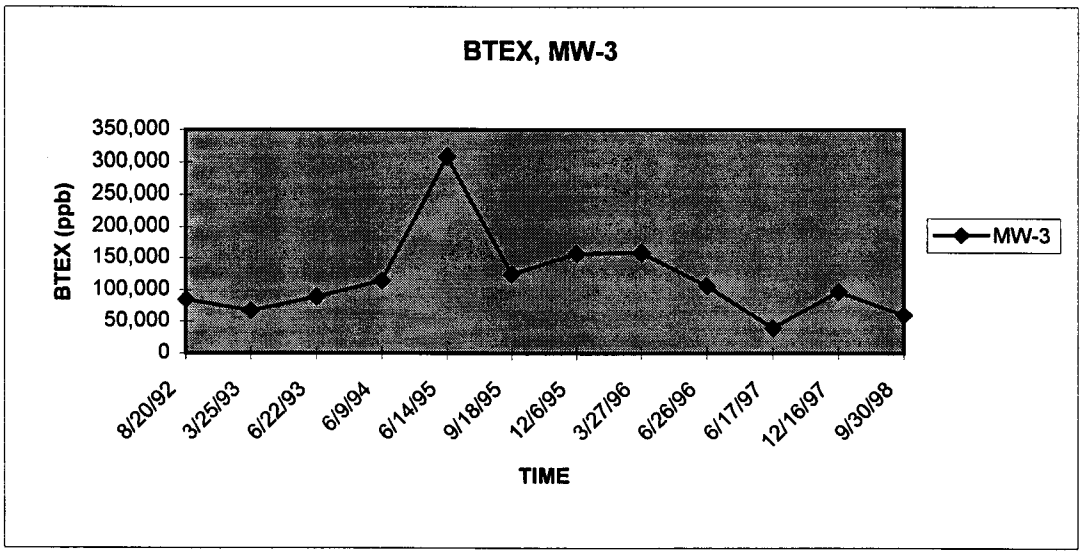
TABLE 2
EPA METHOD 602 AND LEAD GROUND WATER ANALYTICAL RESULTS
EXXON RETAIL LOCATION 4-3998
4701 WEST MARKET STREET
GREENSBORO, NORTH CAROLINA

MONITOR WELL ID	DATE	EXPANDED EPA METHOD 602							METHOD 504.1	METHOD 3030C
		TOTAL BTEX	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE	IPE	EDB	LEAD
OP-1	**12/16/97**	**561**	**320**	**10**	**57**	**174**	**45**	**10**	**<0.02**	**<3**
MW-1A*	11/20/92	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--
(MW-Moore)	11/13/95	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--
T15A NCAC 2L STANDARD			**1**	**1,000**	**29**	**530**	**200**	**NS**	**0.0004**	**15**

BTEX / Gross Levels Graphs







BTEX / Gross Levels Graphs

Gross Groundwater Levels (ppb)
From 1998 Guidelines (p.60)

Benzene	Toluene	E-Benz	Xylenes	MTBE	IPE	EDB	Lead
5000	257500	29000	87500	200000	70000	50	15

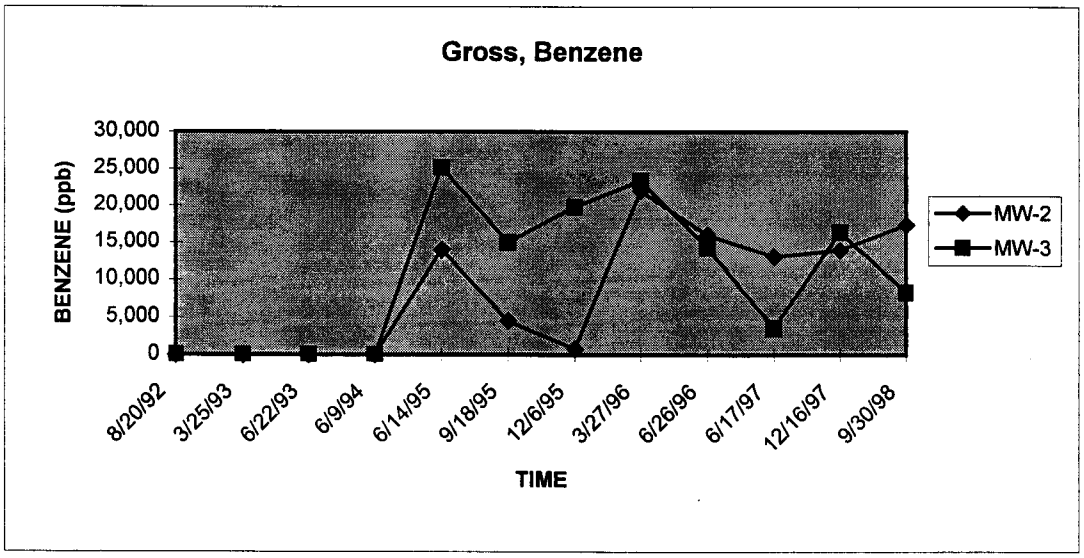


TABLE 3
SUMMARY OF MOST RECENT GAUGING AND WELL CONSTRUCTION DATA
EXXON RAS #4-3998
4701 WEST MARKET STREET
GREENSBORO, NORTH CAROLINA

MONITORING WELL	DATE GAUGED	DATE DRILLED	CASING ELEV. (ft.)	DEPTH TO WATER (ft.)	GROUNDWATER ELEV. (ft.)	SCREENED INTERVAL (ft.)
MW-1	9/30/98	8/13/92	96.50	22.65	73.85	15-30
MW-2	9/30/98	8/13/92	96.56	22.43	74.13	15-35
MW-3	9/30/98	8/14/92	96.92	23.41	73.51	15-30
MW-4	9/30/98	8/14/92	97.92	22.61	75.31	15-30
MW-5	9/30/98	3/29/93	97.24	PAVED OVR	PAVED OVR	17-32
MW-6	9/30/98	3/29/93	96.15	PAVED OVR	PAVED OVR	17-32
MW-7	9/30/98	3/29/93	98.64	NOT GAUGED	NOT GAUGED	17-32
MW-9	9/30/98	12/6/95	94.56	21.08	73.48	15-30
DW-8	9/30/98	NA	98.00	22.87	75.13	55-60
OP-1	12/16/97	3/9/94	96.79	24.22	72.57	8-25

TABLE 4
GROUND WATER ELEVATION DATA
EXXON RETAIL LOCATION 4-3998
4701 WEST MARKET STREET
GREENSBORO, NORTH CAROLINA

	MW-1 96.50		MW-2 96.56		MW-3 96.92		MW-4 97.92	
DATE	DEPTH TO GROUND WATER	GROUND WATER ELEVATIO	DEPTH TO GROUND WATER	GROUND WATER ELEVATIO	DEPTH TO GROUND WATER	GROUND WATER ELEVATIO	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
8/20/92	23.45	73.05	22.99	73.57	24.49	72.43	24.50	73.42
3/25/93	18.77	77.73	18.90	77.66	20.91	76.01	22.62	75.30
6/11/93	19.23	77.27	18.85	77.71	20.74	76.18	21.36	76.56
4/13/94	19.79	76.71	19.06	77.50	21.60	75.32	22.74	75.18
6/9/94	21.97	74.53	21.40	75.16	23.24	73.68	23.26	74.66
6/14/95	22.65	73.85	22.70*	73.86	23.96*	72.96	24.28	73.64
9/18/95	23.73	72.77	24.06*	72.50	25.22*	71.70	24.82	73.10
12/6/95	22.20	74.30	21.70	74.86	23.60	73.32	24.26	73.66
12/14/95	22.10	74.40	21.62	74.94	23.44*	96.92	24.22	73.70
3/27/96	19.56	76.94	19.25	77.31	21.16	75.76	n/a	n/a
6/26/96	20.39	76.11	20.15	76.41	21.70	75.22	n/a	n/a
6/17/97	18.28	78.22	18.08	78.48	19.7	77.22	20.26	77.66
12/16/97	21.84	74.66	21.05	75.51	23.02	73.90	22.92	75.00
9/30/98	22.65	73.85	22.43	74.13	23.41	73.51	22.61	75.31

	MW-5 97.24		MW-6 96.15		MW-7 98.64		DW-8 98.00	
DATE	DEPTH TO GROUND WATER	GROUND WATER ELEVATIO	DEPTH TO GROUND WATER	GROUND WATER ELEVATIO	DEPTH TO GROUND WATER	GROUND WATER ELEVATIO	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
3/25/93	22.05	75.19	21.10	75.05	26.60	72.04	9.50	88.50
6/11/93	21.88	75.36	20.71	75.44	25.61	73.03	22.41	75.59
4/13/94	22.74	74.50	21.62	74.53	--	--	--	--
6/9/94	24.19	73.05	23.08	73.07	27.30	71.34	25.31	72.69
6/14/95	25.02	72.22	23.90	72.25	27.78	70.86	25.40	72.60
9/18/95	25.82	71.42	24.86	71.29	27.35	71.29	25.57	72.43
12/6/95	24.77	72.47	23.73	72.42	27.60	71.04	25.18	72.82
12/14/95	24.68	72.56	23.66	72.49	27.47	71.17	25.11	72.89
3/27/96	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
6/26/96	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
12/16/97	n/a	n/a	n/a	n/a	n/a	n/a	24.25	73.75
9/30/98	n/a	n/a	n/a	n/a	n/a	n/a	22.87	75.13

	MW-9 94.56		MW -Moore 98.10		0P-1 96.79			
DATE	DEPTH TO GROUND WATER	GROUND WATER ELEVATIO	DEPTH TO GROUND WATER	GROUND WATER ELEVATIO	DEPTH TO GROUND WATER	GROUND WATER ELEVATION		
4/13/94	--	--	--	--	21.06	75.73		
6/9/94	--	--	--	--	23.04	73.75		
6/14/95	--	--	--	--	23.94	72.85		
11/13/95	--	--	23.90	74.20	--	--		
12/6/95	**20.64	73.92	23.12	74.98	--	--		
12/14/95	19.19	75.37	--	--	--	--		
3/27/96	n/a	n/a	--	--	--	--		
6/26/96	n/a	n/a	--	--	--	--		
12/16/97	18.45	76.11	--	--	24.22	72.57		
9/30/98	21.08	73.48	--	--	n/a	n/a		

TABLE 4
GROUND WATER ELEVATION DATA
EXXON RETAIL LOCATION 4-3998
4701 WEST MARKET STREET
GREENSBORO, NORTH CAROLINA

	AS-1 96.38		EP-1 96.31					
DATE	DEPTH TO GROUND WATER	GROUND WATER ELEVATIO	DEPTH TO GROUND WATER	GROUND WATER ELEVATION				
4/13/94	20.90	75.48	20.77	75.54				
6/9/94	22.65	73.73	22.56	73.75				
6/14/95	23.54	72.84	DRY	--				

Notes:
Depth to ground water measured in feet below top of casing.
Elevations are relative to an on-site reference point which has been assigned an elevation of 100.00 feet.
"--" = Gauging data not available
* = Free product film detected in monitor well (<0.01 feet thick)
** = Ground water not at static level
n/a = well not gauged

TABLE 5
SVE OFF-GAS ANALYTICAL RESULTS

SVES SAMPLING

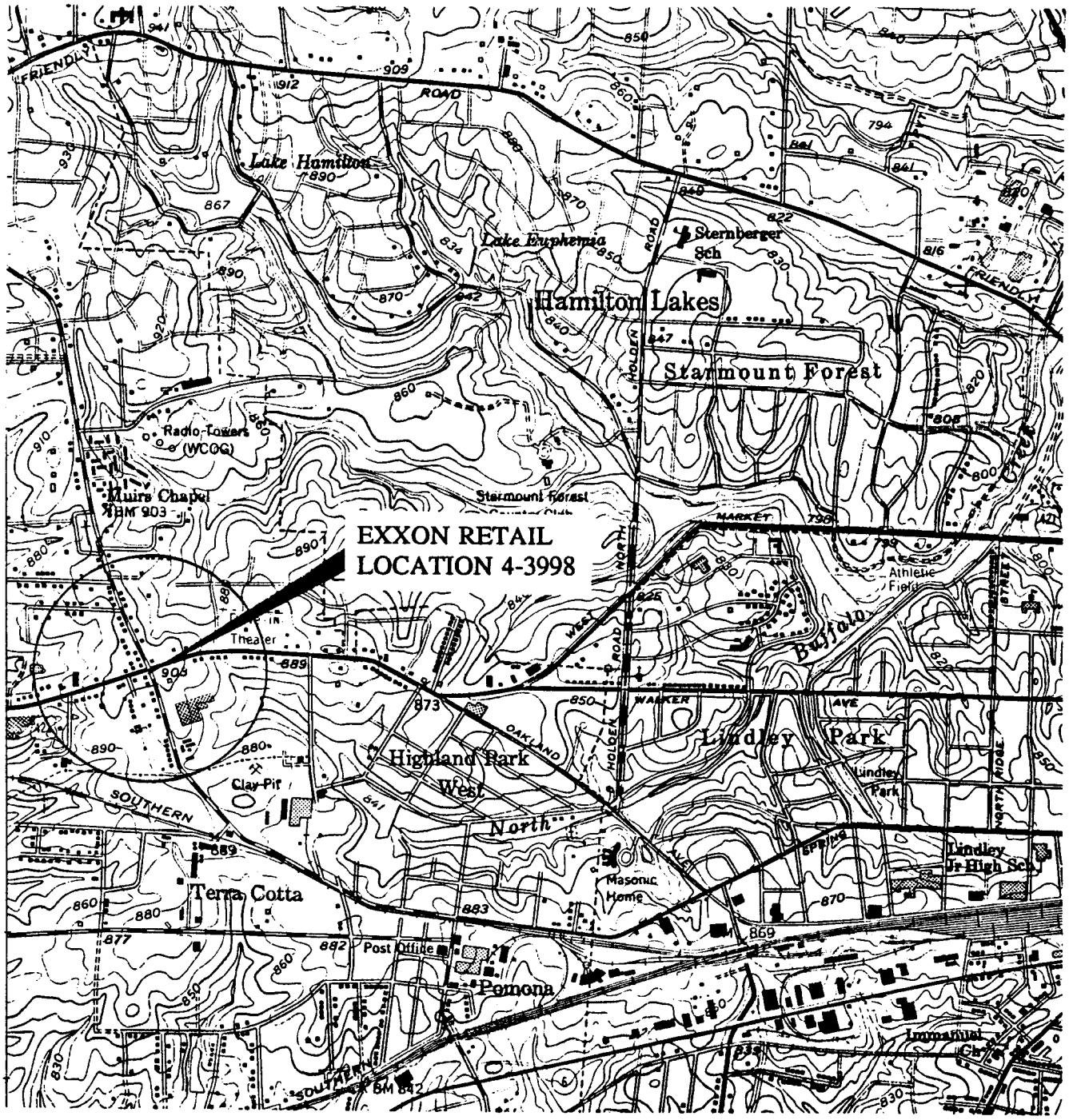
Date	Benzene (ppm)	Toluene (ppm)	Ethyl-benz (ppm)	Tot-Xylenes (ppm)	Total VOCs (TPH, ppm)	Air Velocity (fps)	Benzene (lbs/day)	VOCs (lbs/day)
6/12/96	*2.91*	*2.50*	*<0.5*	*1.07*	*44.50*	*38.26*	*0.03*	*0.52*
12/16/97	*--*	*--*	*--*	*--*	***3.60***	*--*	*--*	*--*
4/6/98	***<15***	***0.52***	***0.82***	***2.15***	***8.26***	***166.00***	***ND***	***0.42***

Results in micrograms per liter (ug/l).
MTBE = Methy tert-butyl ether
IPE = Isopropyl ether
EDB = Ethylene dibromide
"--" = not analyzed
* - Source: Groundwater Investigation - Bath and Kitchen Menagerie, Greensboro, North Carolina, 11-27-92, Pyramid Environmental,Inc.

TABLE 6
SYSTEM OPERATING SCHEDULE
EXXON RETAIL LOCATION 4-3998
4701 WEST MARKET STREET
GREENSBORO, NORTH CAROLINA

Line	Date	Operation	SVE air vel. (f/m)	AAS press. psi	SVE vac. in H2O
1	4/29/96	system start-up	6059	9	30
2	5/25/96	shut system down; maint. on carbon drums			
3	6/14/96	system check	6090	5.5	25
4	6/20/96	installed carbon drums in parallel, relocated vacuum relief valve			
5		flow into carbon drums about 100 cfm each			
6	8/5/96	system check, hour meter 2135.11	10000+	7	25
7	8/26/96	system down, high level switch failed. Switch backordered			
8	10/29/96	system still down, awaiting delivery of high level switch			
9	11/7/96	installed new high-level switch.			
10	11/19/96	wired new high level switch moisture knock out tank.			
11		system still off.			
12	12/2/96	system test. Hour meter 2279.87. Lubricated blower impellers.	10000+	7	25
13	1/7/96	system re-start. Note to get new vac. rel valve set for 10 in-Hg.		9.5	20
14		Current valve set for 14 in-Hg.			
15	1/27/97	hour meter 2755.44	7904	7	22
16	2/31/97	hour meter 3549.23. Turned AS compressor off due to dirty filter	10000+	7.5	23
17	3/31/97	hour meter 4406.29	10000+	7.5	23
18	4/25/97	hour meter 4804.34	10000+	off	27
19		compressor off, filter needs to be replaced.			
20	5/16/97	hour meter 5293.04	10000+	off	24
21		compressor off, waiting on filter			
22	6/21/97	hour meter 6155.59	10000+	off	26
23		replaced compressor filter, compressor inoperable			
24		rebuilding kit for compressor ordered			
25	7/1/97	system restarted			
26	7/31/97	system check. Hour meter 7096.29	10000+	7	23
27	8/25/97	system check. Hour meter 7697.47	10000+	7	23
28	9/25/97	system check. Hour meter 8603.90	10000+	7	25
29		air filter on SVE needs to be replaced. Will order this week.			
30		Assembly model: CSL-850-200, element #850			
31	10/17/97	system check. Hour meter 8940.50	10000+	7	25
32		replaced SVE filter; system serviced			
33		one drum on site contains dirt and concrete debris from bollard instl.			
34		six unlabeled drums (empty) ...not Griffith's			
35	11/30/97	system check. Hour meter 10,087.31	10000+	7	25
36		checked SVE filter-OK; system serviced			
37		compressor filter needs to be replaced, Gast #3080 P-121-T338			
38	12/18/97	system check. Hour meter 10,421.38			25
39		shut down system due to faulty compressor impeller			
40	1/20/98	replaced cooling impeller on compressor.			25
41		SVE system running. Hour meter 111579.0			
42	2/25/98	system check. SVE operating, AAS still down. Awaiting filter for AAS		4	25
43		compressor.			
44		System serviced: oil change in blower motor and unit greased.			
45		Pressure relief valve on compressor failed critical device test.			
46	4/6/98	system check and air sample on SVE.	10000+		
47		Hour meter: 11895.78			
48	6/26/98	system check. SVE operating. Replaced Kunkle valve on AAS a	10000+	7	22
49		restarted system. Replaced SVE filter. Oil change in compressor and			
50		compressor greased. Hour meter 11895.92			
51	7/8/98	system check. Hour meter 12,184.55	10000+	7	22
52		checked SVE filter-OK; system serviced			
53		greased blower and changed oil			
54	8/14/98	system check. SVE selenoid valve on moisture knock-out faulty.	10000+	6.5	24
55		SVE down until replacement can be installed			
56	10/13/98	system check. SVE restarted. Hour meter 13,070.98	10000+	6.5	24
57		replaced selenoid valve w/elec. ball valve; installed new relay			

FIGURES



SOURCE: GREENSBORO, NC 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE, 1951 (PHOTOREVISED 1968)

N

SCALE IN FEET

0 2000

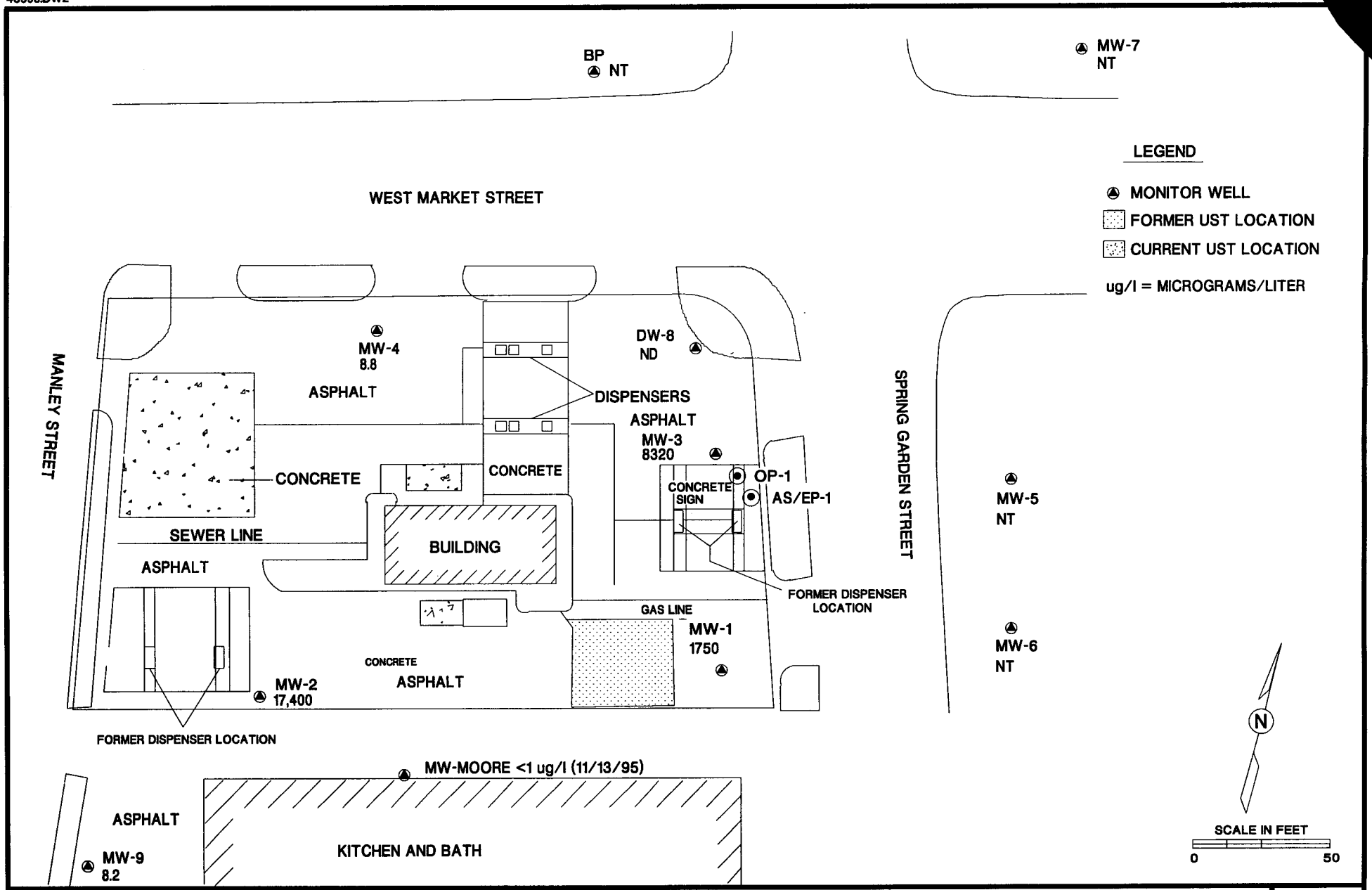
ERM-Southeast, Inc.
CHARLOTTE, NORTH CAROLINA

ERM

SITE LOCATION MAP
EXXON COMPANY, U.S.A.
RETAIL LOCATION 4-3998
GREENSBORO, NORTH CAROLINA

FIGURE 1

43998.DW2

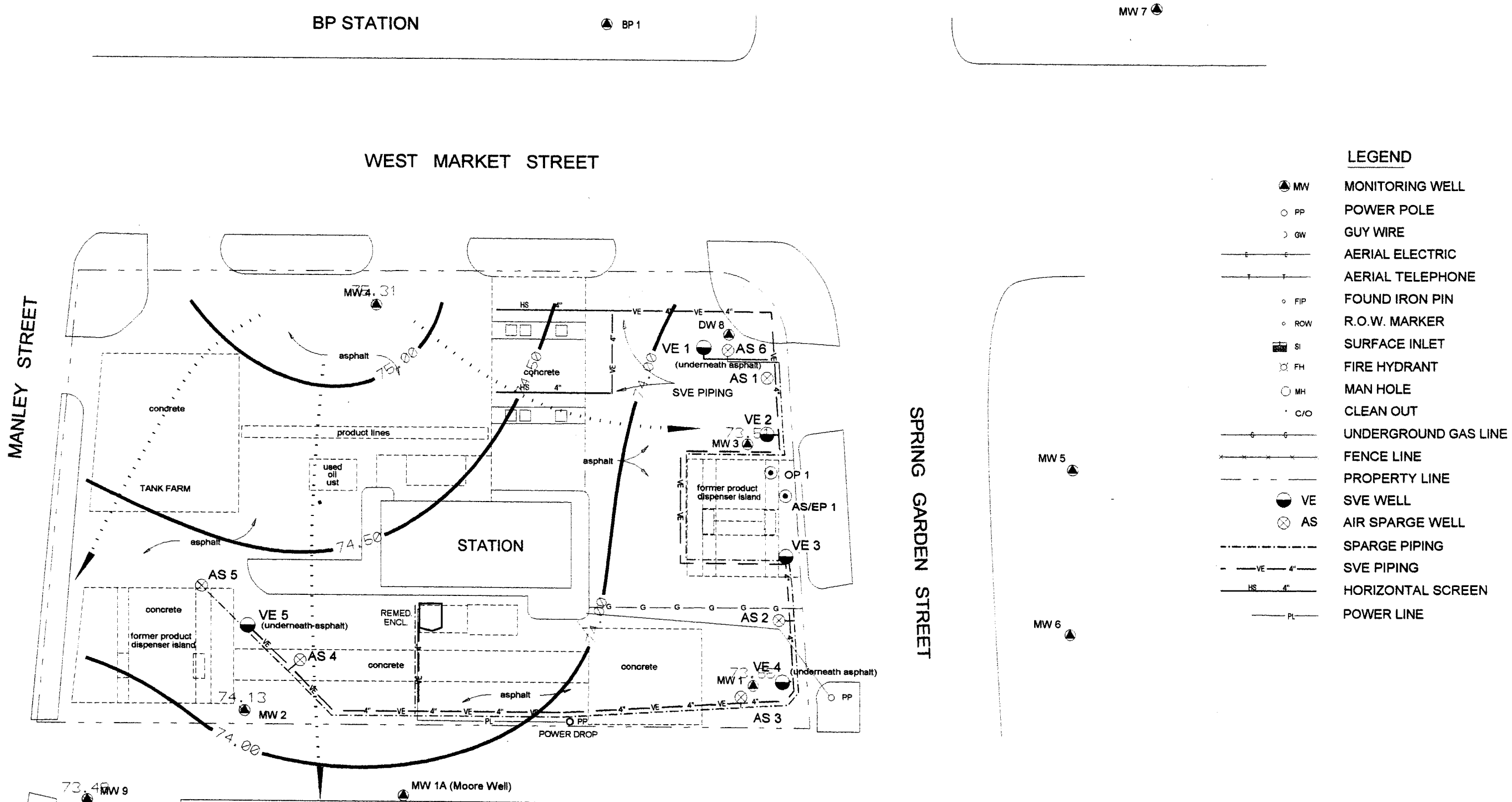


Nightingale Geologic Consultants, P.C.
Charlotte, North Carolina

from base map developed by
ERM Southeast, Inc.

SITE CONFIGURATION MAP
EXXON COMPANY, U.S.A.
RETAIL LOCATION 4-3998
4701 W. MARKET STREET
GREENSBORO, NORTH CAROLINA

FIGURE
2



NOTE: AIR SPARGE WELL AS/EP 1 WAS INSTALLED FOR THE PILOT TEST AND WAS CONNECTED TO THE SYSTEM.

FIGURE 3
GROUNDWATER FLOW MAP
EXXON RAS #4-3998
4701 WEST MARKET ST., GREENSBORO, NC

Reference map by EA Engineering, Science, and Technology

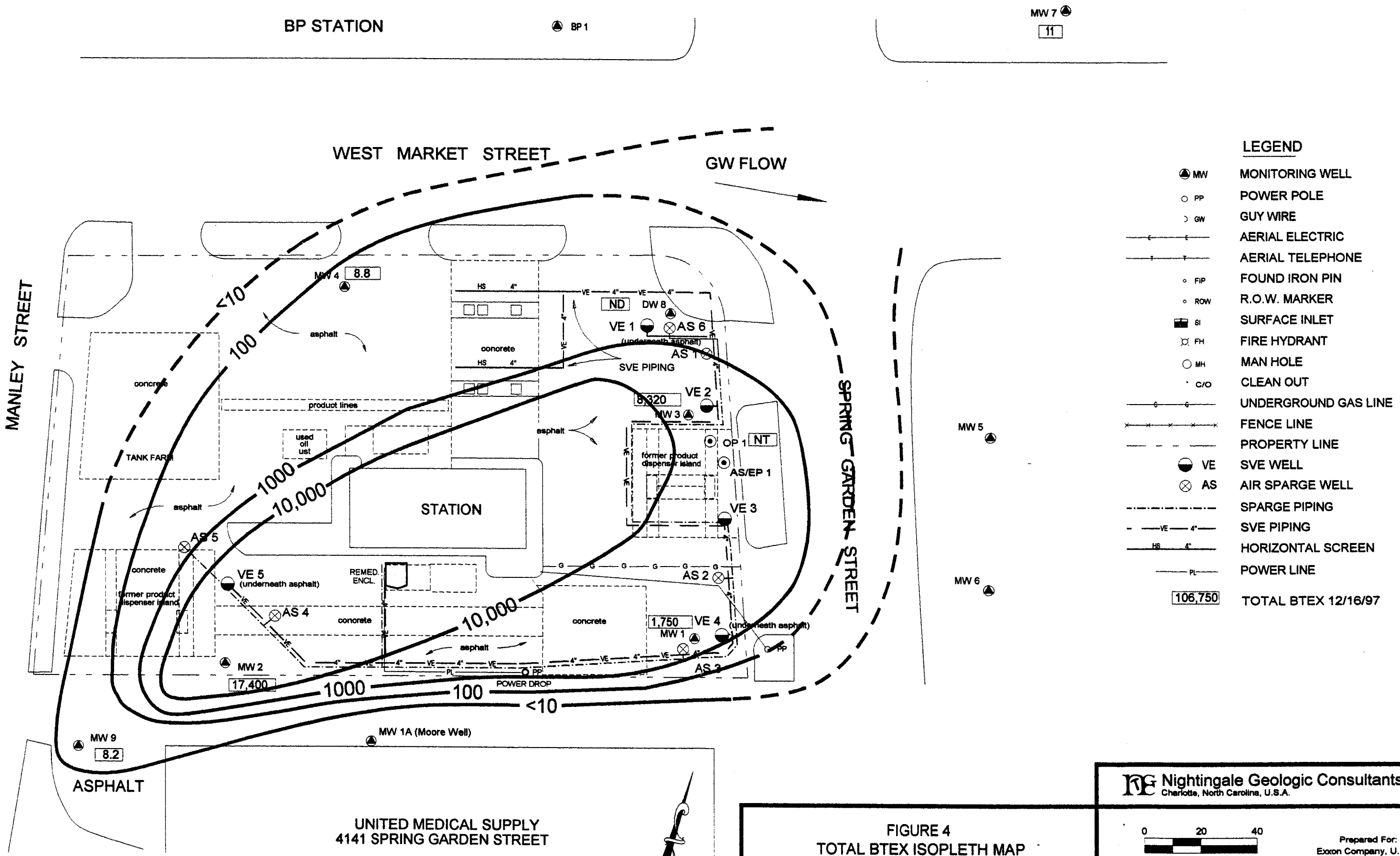
Nightingale Geologic Consultants, P.C.
Charlotte, North Carolina, U.S.A.

0 20 40
(IN FEET)
1 inch = 40 feet

Prepared For:
Exxon Company, U.S.A.
Charlotte, North Carolina, U.S.A.

File Name: 43998sm4.dw2 Date: 9/1998

Approved: Scale: 1 in. = 40 ft.



NOTE: AIR SPARGE WELL AS/EP 1 WAS INSTALLED FOR THE PILOT TEST AND WAS CONNECTED TO THE SYSTEM.

Nightingale Geologic Consultants, P.C.
Charlotte, North Carolina, U.S.A.

FIGURE 4
TOTAL BTEX ISOPLETH MAP
EXXON RAS #4-3998
4701 WEST MARKET ST., GREENSBORO, NC

Reference map by EA Engineering, Science, and Technology

0 20 40
(IN FEET)
1 inch = 40 feet

Prepared For:
Exxon Company, U.S.A.
Charlotte, North Carolina, U.S.A.

File Name: 43998sm4.dw2
Date: 9/1998
Approved:
Scale: 1 in. = 40 ft.

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch
Benzene	mg/l	< 0.0010	0.0188	0.0200	94.00	59. - 138.	9301
Toluene	mg/l	< 0.0010	0.0189	0.0200	94.50	59. - 135.	9301
Ethylbenzene	mg/l	< 0.0010	0.0187	0.0200	93.50	47. - 144.	9301
Xylenes, total	mg/l	< 0.0010	0.0387	0.0400	96.75	58. - 136.	9301
Methyl-t-butylether	mg/l	< 0.0010	0.0199	0.0200	99.50	62. - 133.	9301
Isopropyl ether	mg/l	< 0.001	0.018	0.020	90.00	74. - 132.	9301
Ethylene Dibromide	mg/l	< 0.00002	0.00023	0.00029	79.31#	84. - 114.	8522

Matrix Spike Duplicate

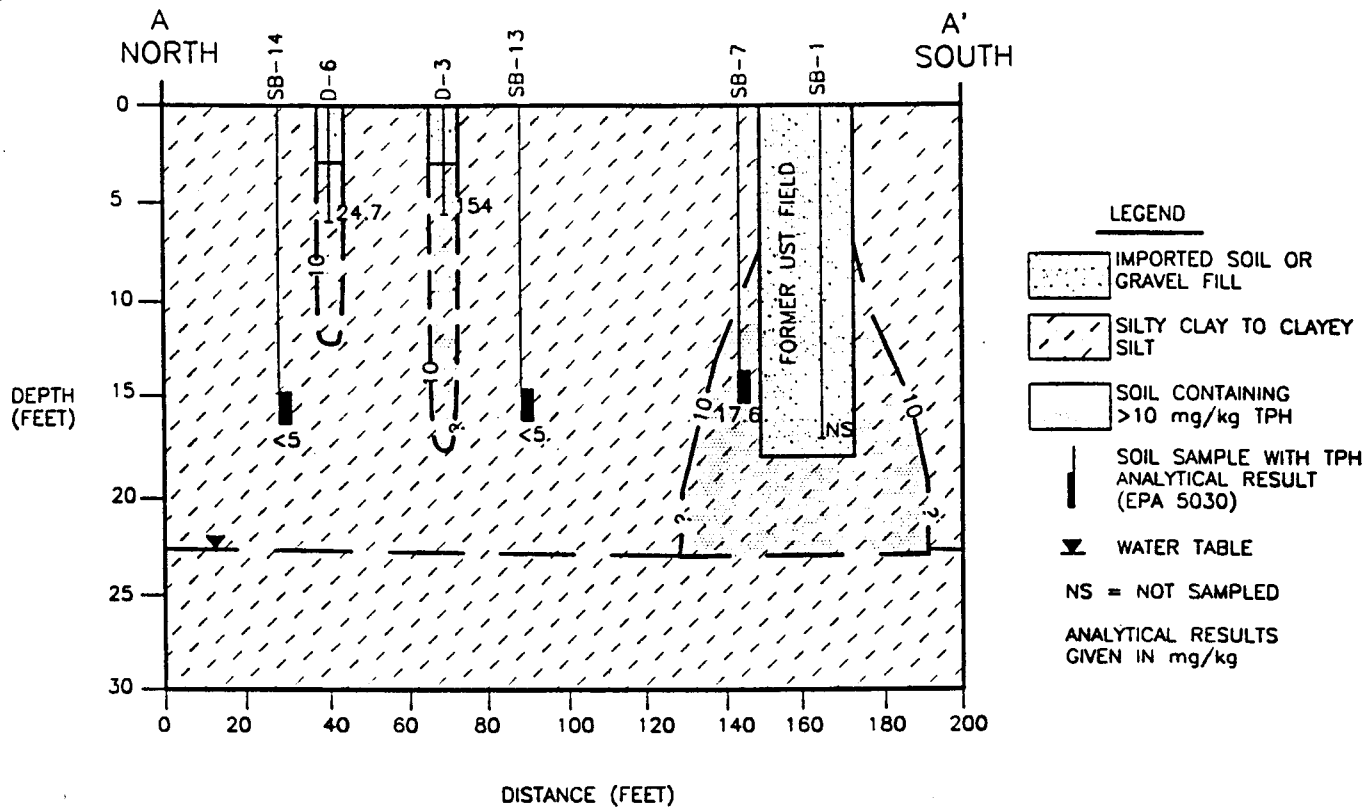
Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Ethylene Dibromide	mg/l	0.00023	0.00023	0.00	16.	8522

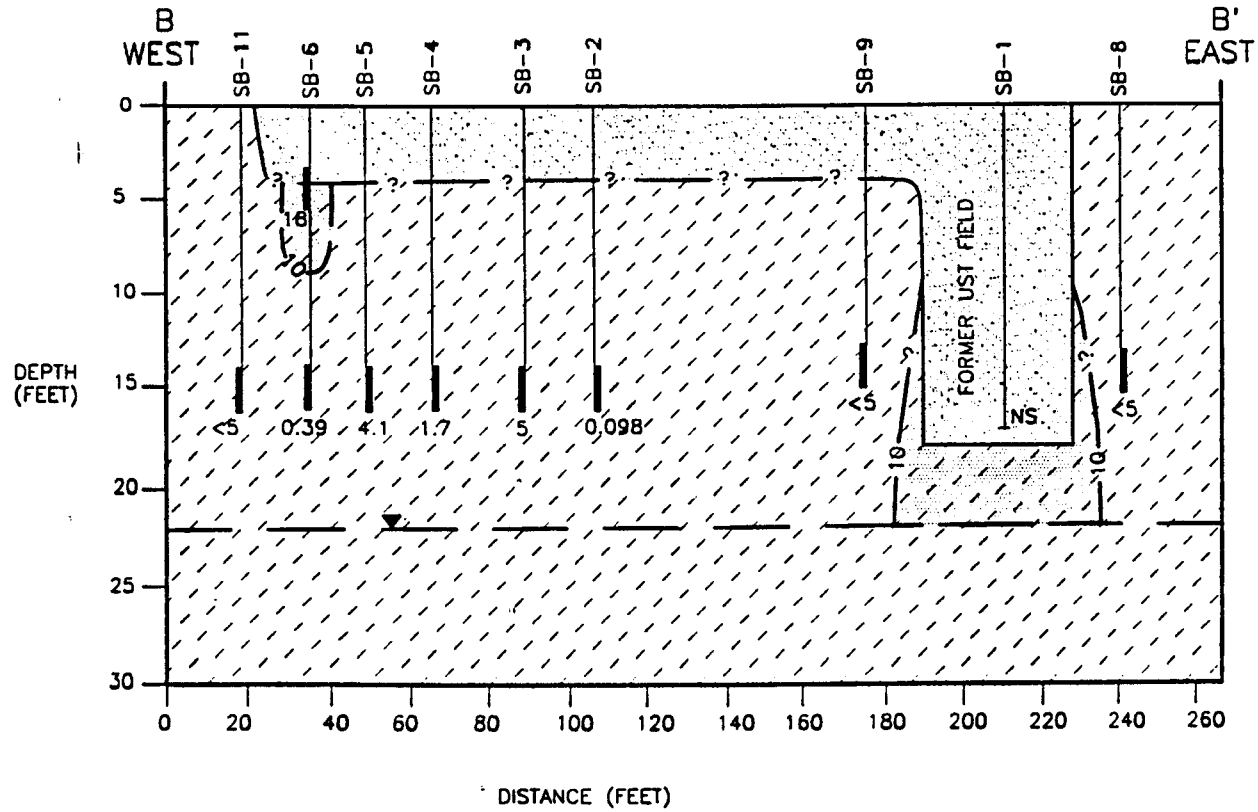
Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Benzene	mg/l	0.0200	0.0196	98.	70 - 130	9301
Toluene	mg/l	0.0200	0.0201	100.	70 - 130	9301
Ethylbenzene	mg/l	0.0200	0.0197	98.	70 - 130	9301
Xylenes, total	mg/l	0.0400	0.0407	102.	70 - 130	9301
Methyl-t-butylether	mg/l	0.0200	0.0208	104.	70 - 130	9301
Isopropyl ether	mg/l	0.020	0.019	95.	60 - 140	9301

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
Benzene	< 0.0010	mg/l	9301
Toluene	< 0.0010	mg/l	9301
Ethylbenzene	< 0.0010	mg/l	9301
Xylenes, total	< 0.0010	mg/l	9301
Methyl-t-butylether	< 0.0010	mg/l	9301
Isopropyl ether	< 0.001	mg/l	9301
Ethylene Dibromide	< 0.00002	mg/l	8522



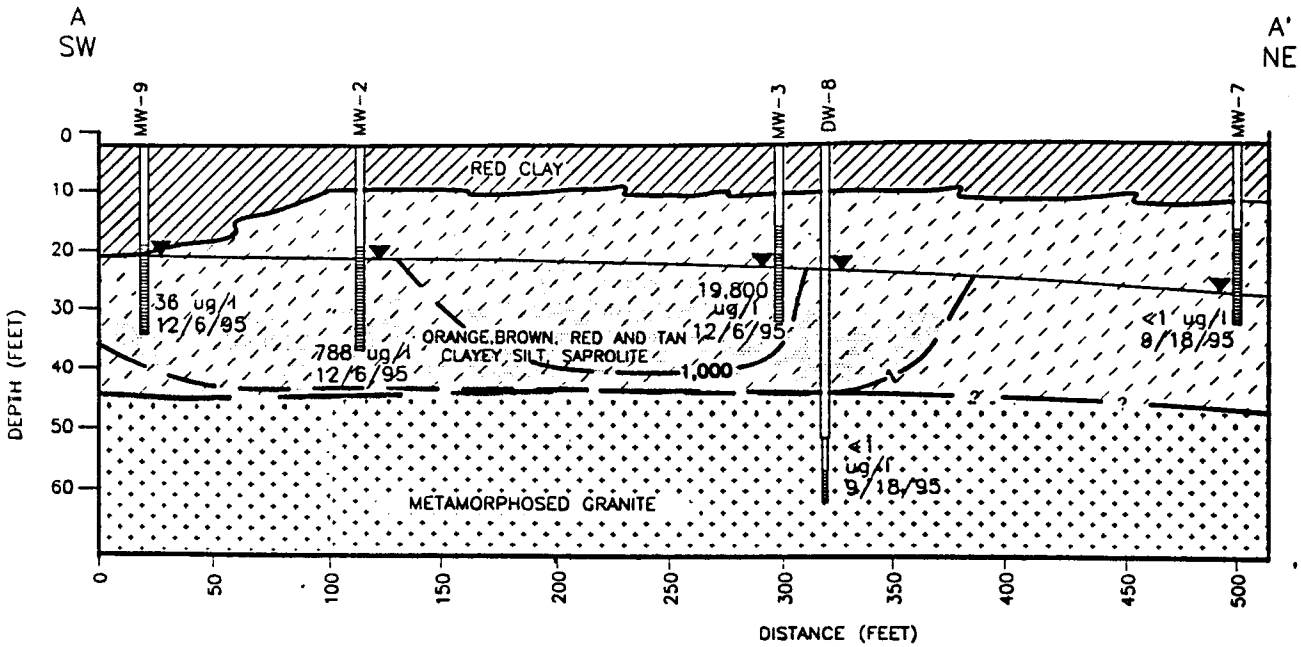


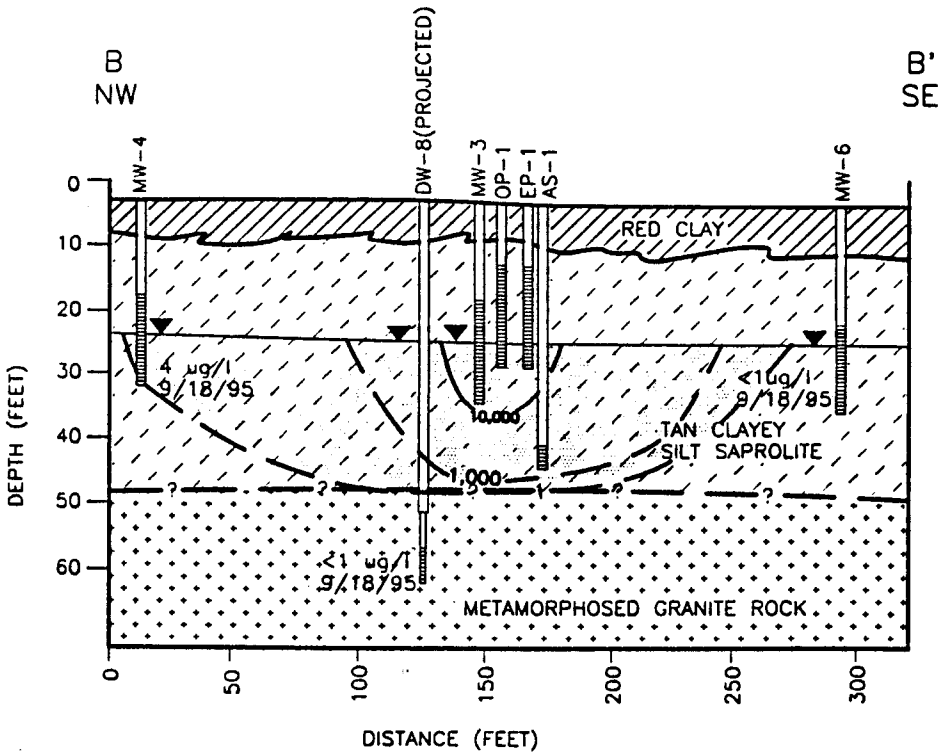
4106CRS2.DWG 1-29-96 AM 1=1 KH/JP

ERM-Southeast, Inc.
CHARLOTTE, NORTH CAROLINA
ERM

GEOLOGIC GROSS-SECTIONS WITH LOW BOILING POINT TPH ANALYTICAL RESULTS
EXXON RETAIL LOCATIONN 4-3998
GREENSBORO, NORTH CAROLINA

FIGURE
5





>1 ug/l BENZENE IN GROUND WATER

ug/l = MICROGRAMS/LITER

LEGEND

WATER TABLE

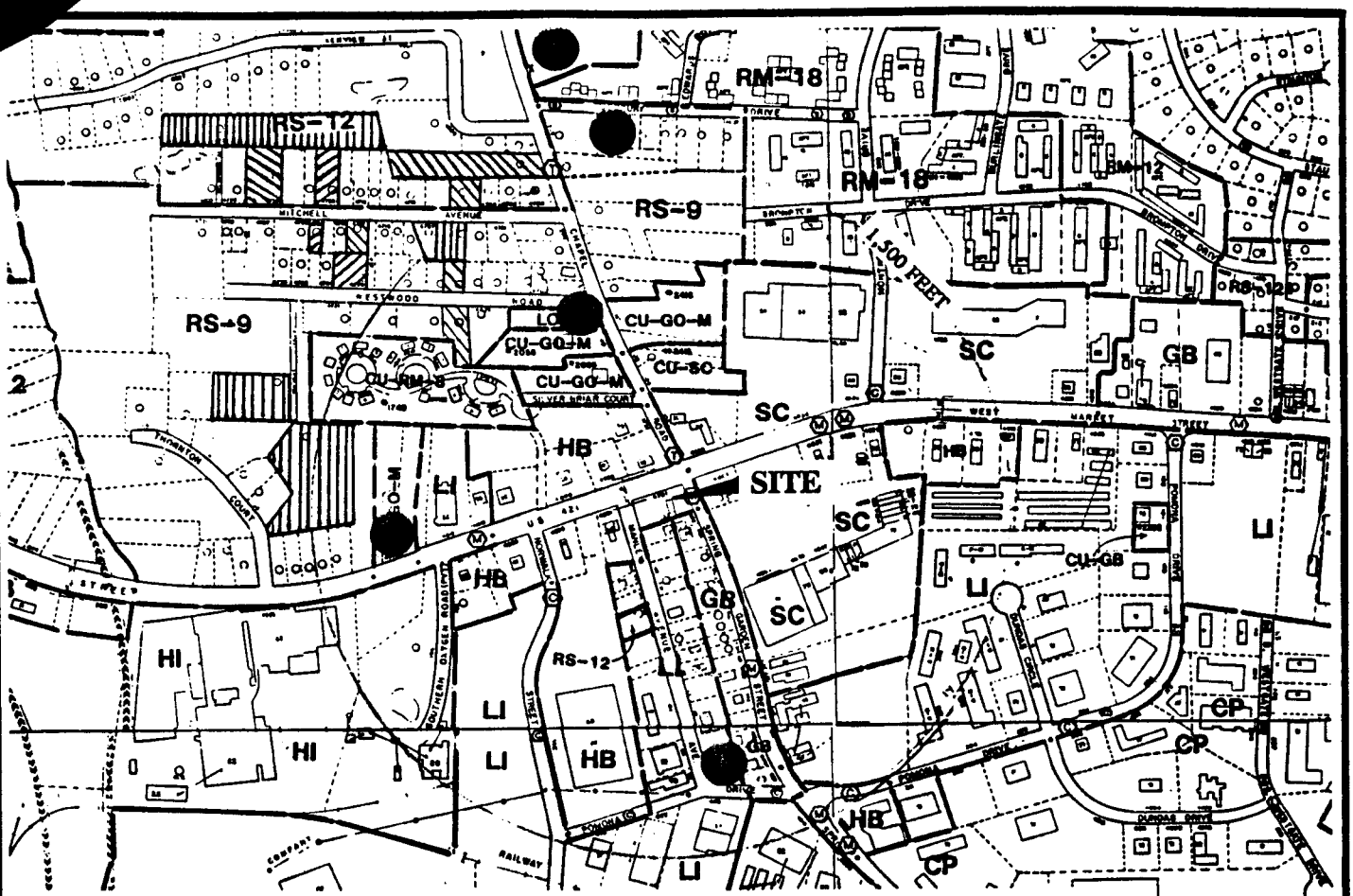
BENZENE ISOCONCENTRATION CONTOUR LINE (MICROGRAMS/LITER)

ERM-Southeast, Inc.
CHARLOTTE, NORTH CAROLINA
ERM

GROUNDWATER BENZENE ISOCONCENTRATION CONTOUR CROSS SECTIONS
EXXON, U.S.A. LOCATION # 4-3998
GREENSBORO, NORTH CAROLINA

FIGURE 6

4106ISOC.DWG 6-15-94 AM 1=1 KH/AN



ZONING DESCRIPTIONS

CU	Corporate park district (office, warehouse, assembly, research and development uses)
GB	General business district (retail, service, office uses)
GO	Geral Office district (M indicates moderate density)
HB	Highway business district (reatil, service, and distrubution purposes)
HI	Heavy industrial district
LI	Light industrial district
LO	Limited Office District
RM	Multifamily residential dwellings
RS	Single family detached residential dwellings
SC	Shopping center district

LEGEND

- Residential water supply well
- Residential irrigation well
- Out-of-service water supply well
- Child day care center, church, or school

SOURCE: GREENSBORO ZONING MAP, AUGUST 1995

N

SCALE IN FEET
0 800

ERM-Southeast, Inc.
CHARLOTTE, NORTH CAROLINA
ERM

LAND USE AND WATER SUPPLY WELL LOCATION MAP
EXXON COMPANY, U.S.A.
RETAIL LOCATION 4-3998
GREENSBORO, NORTH CAROLINA

FIGURE
7

85X11VER.DWG MM-DD-YY AM 1=1 TIWK

APPENDIX

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

GRIFFITH ENTERPRISES 5930
ELLIOT NIGHTINGALE
4722 SHARON RD, STE E12
CHARLOTTE, NC 28210

Lab Number: 98-A120630
Sample ID: MW-1
Sample Type: Water
Site ID:

Date Collected: 9/30/98
Time Collected: 8:00
Date Received: 10/ 5/98
Time Received: 9:00

Project: 4-3998
Project Name: EXXON 4-3998
Sampler: R. BARKO

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	1750	ug/l	20.0	1.0	20	10/ 7/98	19:05	D.Raney	602	9301
Toluene	715.	ug/l	20.0	1.0	20	10/ 7/98	19:05	D.Raney	602	9301
Ethylbenzene	1810	ug/l	20.0	1.0	20	10/ 7/98	19:05	D.Raney	602	9301
Xylenes, total	4850	ug/l	20.0	1.0	20	10/ 7/98	19:05	D.Raney	602	9301
Methyl-t-butylether	15.3	ug/l	1.0	1.0	1	10/ 6/98	20:25	D.Raney	602	9301
Isopropyl ether	765.	ug/l	20.0	1.0	20	10/ 7/98	19:05	D.Raney	602	9301
Ethylene Dibromide	0.34	ug/l	0.02	0.02	1	10/ 7/98	13:02	K.Helson	504.1	8522
METALS										
Lead	ND	mg/l	0.003	0.003	1	10/ 9/98	7:06	R.Street	3030c	58

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	95.	50. - 150.

Report Approved By: JJ Mitchell Report Date: 10/ 9/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director
Johnny A. Mitchell, Dir. Technical Services

Laboratory Certification Number: 387

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

GRIFFITH ENTERPRISES 5930
ELLIOT NIGHTINGALE
4722 SHARON RD, STE E12
CHARLOTTE, NC 28210

Lab Number: 98-A120631
Sample ID: MW-2
Sample Type: Water
Site ID:

Date Collected: 9/30/98
Time Collected: 9:00
Date Received: 10/ 5/98
Time Received: 9:00

Project: 4-3998
Project Name: EXXON 4-3998
Sampler: R. BARKO

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	17400	ug/l	500.	1.0	500	10/ 7/98	19:37	D.Raney	602	9301
Toluene	74300	ug/l	500.	1.0	500	10/ 7/98	19:37	D.Raney	602	9301
Ethylbenzene	7130	ug/l	50.0	1.0	50	10/ 6/98	20:56	D.Raney	602	9301
Xylenes, total	17300	ug/l	50.0	1.0	50	10/ 6/98	20:56	D.Raney	602	9301
Methyl-t-butylether	ND	ug/l	50.0	1.0	50	10/ 6/98	20:56	D.Raney	602	9301
Isopropyl ether	8750	ug/l	50.0	1.0	50	10/ 6/98	20:56	D.Raney	602	9301
Ethylene Dibromide	1.26	ug/l	0.10	0.02	5	10/ 7/98	13:02	K.Helson	504.1	8522
METALS										
Lead	ND	mg/l	0.003	0.003	1	10/ 9/98	7:06	R.Street	3030c	58

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	103.	50. - 150.

Report Approved By: JA Mitchell Report Date: 10/ 9/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director
Johnny A. Mitchell, Dir. Technical Services

Laboratory Certification Number: 387

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

GRIFFITH ENTERPRISES 5930
ELLIOT NIGHTINGALE
4722 SHARON RD, STE E12
CHARLOTTE, NC 28210

Lab Number: 98-A120632
Sample ID: MW-3
Sample Type: Water
Site ID:

Date Collected: 9/30/98
Time Collected: 10:00
Date Received: 10/ 5/98
Time Received: 9:00

Project: 4-3998
Project Name: EXXON 4-3998
Sampler: R. BARKO

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	8320	ug/l	50.0	1.0	50	10/ 6/98	22:32	D.Raney	602	9301
Toluene	37800	ug/l	200.	1.0	200	10/ 7/98	20:09	D.Raney	602	9301
Ethylbenzene	3560	ug/l	50.0	1.0	50	10/ 6/98	22:32	D.Raney	602	9301
Xylenes, total	9850	ug/l	50.0	1.0	50	10/ 6/98	22:32	D.Raney	602	9301
Methyl-t-butylether	ND	ug/l	50.0	1.0	50	10/ 6/98	22:32	D.Raney	602	9301
Isopropyl ether	2240	ug/l	50.0	1.0	50	10/ 6/98	22:32	D.Raney	602	9301
Ethylene Dibromide	68.6	ug/l	4.00	0.02	200	10/ 7/98	13:02	K.Helson	504.1	8522
METALS										
Lead	0.516	mg/l	0.003	0.003	1	10/ 9/98	7:06	R.Street	3030c	58

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	94.	50. - 150.

Report Approved By: JAMitchell Report Date: 10/ 9/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director
Johnny A. Mitchell, Dir. Technical Services

Laboratory Certification Number: 387

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

GRIFFITH ENTERPRISES 5930
ELLIOT NIGHTINGALE
4722 SHARON RD, STE E12
CHARLOTTE, NC 28210

Lab Number: 98-A120633
Sample ID: MW-4
Sample Type: Water
Site ID:

Date Collected: 9/30/98
Time Collected: 11:00
Date Received: 10/ 5/98
Time Received: 9:00

Project: 4-3998
Project Name: EXXON 4-3998
Sampler: R. BARKO

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	8.8	ug/l	1.0	1.0	1	10/ 6/98	23:04	D.Raney	602	9301
Toluene	1.2	ug/l	1.0	1.0	1	10/ 6/98	23:04	D.Raney	602	9301
Ethylbenzene	2.4	ug/l	1.0	1.0	1	10/ 6/98	23:04	D.Raney	602	9301
Xylenes, total	53.5	ug/l	1.0	1.0	1	10/ 6/98	23:04	D.Raney	602	9301
Methyl-t-butylether	ND	ug/l	1.0	1.0	1	10/ 6/98	23:04	D.Raney	602	9301
Isopropyl ether	1.0	ug/l	1.0	1.0	1	10/ 6/98	23:04	D.Raney	602	9301
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	10/ 7/98	13:02	K.Helson	504.1	8522
METALS										
Lead	ND	mg/l	0.003	0.003	1	10/ 9/98	7:06	R.Street	3030c	58

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	119.	50. - 150.

Report Approved By: JAMitchell Report Date: 10/ 9/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director
Johnny A. Mitchell, Dir. Technical Services

Laboratory Certification Number: 387

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

GRIFFITH ENTERPRISES 5930
ELLIOT NIGHTINGALE
4722 SHARON RD, STE E12
CHARLOTTE, NC 28210

Lab Number: 98-A120634
Sample ID: DW-8
Sample Type: Water
Site ID:

Date Collected: 9/30/98
Time Collected: 12:30
Date Received: 10/ 5/98
Time Received: 9:00

Project: 4-3998
Project Name: EXXON 4-3998
Sampler: R. BARKO

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	ND	ug/l	1.0	1.0	1	10/ 6/98	23:36	D.Raney	602	9301
Toluene	ND	ug/l	1.0	1.0	1	10/ 6/98	23:36	D.Raney	602	9301
Ethylbenzene	ND	ug/l	1.0	1.0	1	10/ 6/98	23:36	D.Raney	602	9301
Xylenes, total	ND	ug/l	1.0	1.0	1	10/ 6/98	23:36	D.Raney	602	9301
Methyl-t-butylether	ND	ug/l	1.0	1.0	1	10/ 6/98	23:36	D.Raney	602	9301
Isopropyl ether	ND	ug/l	1.0	1.0	1	10/ 6/98	23:36	D.Raney	602	9301
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	10/ 7/98	13:02	K.Helson	504.1	8522
METALS										
Lead	ND	mg/l	0.003	0.003	1	10/ 9/98	7:06	R.Street	3030c	58

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	106.	50. - 150.

Report Approved By: JAMitchell Report Date: 10/ 9/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director
Johnny A. Mitchell, Dir. Technical Services

Laboratory Certification Number: 387

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

GRIFFITH ENTERPRISES 5930
ELLIOT NIGHTINGALE
4722 SHARON RD, STE E12
CHARLOTTE, NC 28210

Lab Number: 98-A120635
Sample ID: MW-9
Sample Type: Water
Site ID:

Date Collected: 9/30/98
Time Collected: 13:00
Date Received: 10/ 5/98
Time Received: 9:00

Project: 4-3998
Project Name: EXXON 4-3998
Sampler: R. BARKO

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	8.2	ug/l	1.0	1.0	1	10/ 7/98	21:44	D.Raney	602	9301
Toluene	69.6	ug/l	1.0	1.0	1	10/ 7/98	21:44	D.Raney	602	9301
Ethylbenzene	45.0	ug/l	1.0	1.0	1	10/ 7/98	21:44	D.Raney	602	9301
Xylenes, total	307.	ug/l	1.0	1.0	1	10/ 7/98	21:44	D.Raney	602	9301
Methyl-t-butylether	ND	ug/l	1.0	1.0	1	10/ 7/98	21:44	D.Raney	602	9301
Isopropyl ether	8.0	ug/l	1.0	1.0	1	10/ 7/98	21:44	D.Raney	602	9301
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	10/ 7/98	13:02	K.Helson	504.1	8522
METALS										
Lead	ND	mg/l	0.003	0.003	1	10/ 9/98	7:06	R.Street	3030c	58

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	100.	50. - 150.

Report Approved By: JA Mitchell Report Date: 10/ 9/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director
Johnny A. Mitchell, Dir. Technical Services

Laboratory Certification Number: 387

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SPECIALIZED ASSAYS ENVIRONMENTAL
2960 Foster Creighton Dr.
Nashville, Tennessee 37204 115715

1-800-765-0980
615-726-0177
Fax: 615-726-3404

EXXON COMPANY USA

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUESTED

LWR #: _____

Name: Griffith Enterprises, Inc. Elliot Nightingal5930
Phone: 704-643-9700
Fax: 704-643-9701

Address: 4722 Sharon Road Suite E-124 Charlotte, NC 28210
Client Project # 4-3998
Name: 4-3998

Project Mgr: Elliot Nightingale
Exxon Env. Work Release: 1966 1704

Exxon Contact: Frank Medlan
[circle one] EB or C&M Phone:

RAS #: 4-3998
Site Address: 4701 W. Market ST.
State ID #:

Cooler Seal
Seal Intact
Consultant Receipt: yes no Initial
Laboratory Receipt: yes no Initial

Air Bill #8083189092 1 # of coolers
Sample Temperature 4 [*C] upon receipt

Sampled by [please print] R. BARKO
Sampler Signature: R. Barko

Ship Date: 10-2-98

TAT REQUESTED 24hr 48hr 72hr other _____ day Exxon Std TAT

FIELD SAMPLE ID	SAE LAB # [for lab use only]	# CONT	Matrix: WATER	SOIL	AIR	SLUDGE	PRODUCT	OTHER	Method Preserved: HCL	HNO3	H2SO4	ICE	NON-PRES	OTHER SPECIFY	Sampling: DATE	TIME
MW-1	120630	5	X						X	X		X			9-30	800
MW-2	631															900
MW-3	632															1000
MW-4	633															1100
DW-8	634															1230
MW-9	120635															100

ANALYSIS REQUEST

FIELD SAMPLE ID	BTEX 602 ☒ 8020 ☐	MTBE ☒ - IPE ☒	EDB 504 ☒	PETROLEUM HYDROCARBONS, GC, 8015 GAS ☐ DIESEL ☐	TRPH/OIL AND GREASE 418.1 ☐ 9070 ☐ 9071 ☐ 413.1 ☐ 413.2 ☐	PURGEABLE HALOCARBONS 601 ☐ 8010 ☐ 8021 ☐	PURGEABLE AROMATICS 602 ☐ 8020 ☐ 8021 ☐	PCB's ☐	VOLATILE ORGANICS 624 ☐ 8240 TCL ☐ 8260 ☐	EXTRACTABLE ORGANICS 625 ☐ 8270 TCL ☐	PAH's 610 ☐ 8310 ☐ 8100 ☐ 8270 ☐	TCLP METALS ☐ VOA's ☐ BNA's ☐ P/H ☐ TOTAL ☐	METALS RCRA ☐ PP ☐ TAL ☐	LEAD 238.2 ☐ 200.7 ☐ 6010 ☐ 7421 ☐ 3030c ☒	CORROSIVITY ☐ REACTIVITY ☐	FP OPEN CUP ☐ CLOSED CUP ☐
MW-1	X	X	X											X		
MW-2	X	X	X											X		
MW-3	X	X	X											X		
MW-4	X	X	X											X		
DW-8	X	X	X											X		
MW-9	X	X	X											X		

OTHER

SPECIAL DETECTION LIMITS:

REPORTING LIMITS:

CLIENT REMARKS:

STORAGE LOCATION:

	DATE	TIME
Relinquished by Sampler: R. Barko Company / Affiliation: [signature]	10-2-98	300
Relinquished by: Company / Affiliation:		

	DATE	TIME
Received by: [signature]	10598	900
Received by:		