

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville TN 37204 800-765-0980 Fax 615-726-3404

Client Conestoga Rovers & Assoc (BR) / Exxon (10318)
 4915 South Sherwood Forest Blvd.
 Baton Rouge LA 70816
 Attn Cindy Smith

Work Order NQG2815
 Project Name Exxon 5-0608 / 25881
 Project Number Exxon 5-0608/25881
 Received 07/27/07 07:50

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig Val	Duplicate	Q	Units	Spike Conc	% Rec	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Total Metals by EPA Method 6010B												
7075329-MSD1												
Lead	ND	0.0493		mg/L	0.0500	99%	75 125	4	20	7075329	NQG2815-02	07/31/07 14:22
Purgeable Petroleum Hydrocarbons												
7080336-MSD1												
>C6 to C8 Ah	ND	116		ug/L	100	116%	70 130	36	50	7080336	NQG2941-02	08/03/07 08:54
>C8 to C10 Ah	ND	331		ug/L	300	110%	70 130	30	50	7080336	NQG2941-02	08/03/07 08:54
>C8 to C10 Aro	1.11	235		ug/L	250	94%	70 130	35	50	7080336	NQG2941-02	08/03/07 08:54
<i>Surrogate 2,5 Dibromotoluene (FID)</i>		55.1	22	ug/L	40.0	138%	70 130			7080336	NQG2941-02	08/03/07 08:54
<i>Surrogate 2,5 Dibromotoluene (PID)</i>		45.6		ug/L	40.0	114%	70 130			7080336	NQG2941-02	08/03/07 08:54

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Client Conestoga Rovers & Assoc (BR) / Exxon (10318)
4915 South Sherwood Forest Blvd.
Baton Rouge, LA 70816
Attn: Cindy Smith

Work Order NQG2815
Project Name Exxon 5-0608 / 25881
Project Number Exxon 5 0608/25881
Received 07/27/07 07:50

CERTIFICATION SUMMARY

TestAmerica Nashville, TN

Method	Matrix	AIHA	Nelac	Louisiana
MADEP VPH	Water	N/A	X	X
SW846 6010B	Water	N/A	X	X
SW846 8015B	Water	N/A	X	X
SW846 8260B	Water	N/A	X	X
SW846 8270CSIM	Water	N/A	X	X

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Work Order NOG2815
Project Name Exxon 5-0608 / 25881
Project Number Exxon 5 0608/25881
Received 07/27/07 07:50

NELAC CERTIFICATION SUMMARY

TestAmerica Analytical Nashville does not hold NELAC certifications for the following analytes included in this report

<u>Method</u>	<u>Matrix</u>	<u>Analyte</u>
MADEP VPH	Water	>C6 to C8 Alk >C8 to C10 Alk >C8 to C10 Aro

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4915 South Sherwood Forest Blvd
Baton Rouge LA 70816
Attn Cindy Smith

Work Order NQG2815
Project Name Exxon 5-0608 / 25881
Project Number Exxon 5-0608/25881
Received 07/27/07 07:50

DATA QUALIFIERS AND DEFINITIONS

M2 The MS and/or MSD were below the acceptance limits due to sample matrix interference See Blank Spike (LCS)
MNR1 There was no MS/MSD analyzed with this batch due to insufficient sample volume See Blank Spike
Z2 Surrogate recovery was above the acceptance limits Data not impacted.
ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



COOLER RECEIPT FORM



NQG2815

Cooler Received/Opened On 07/27/07 @ 07:50

1 Tracking # 0542 (last 4 digits FedEx)

Courier FED-EX IR Gun ID A01124

2 Temperature of rep sample or temp blank when opened 4.7 Degrees Celsius

3 If item #2 temperature is 0 C or less was the representative sample or temp blank frozen? YES NO NA

4 Were custody seals on outside of cooler?

If yes how many and where FRONT, BACK NO DATE OR SIGNATURE

5 Were the seals intact signed and dated correctly? YES NO NA

6 Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (initial)

7 Were custody seals on containers YES NO and intact YES NO NA

Were these signed and dated correctly? YES NO NA

8 Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

8 Cooling process Ice Ice-pack Ice (direct contact) Dry Ice Other None

10 Did all containers arrive in good condition (unbroken)? YES NO NA

11 Were all container labels complete (# date signed pres etc)? YES NO NA

12 Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b Was there any observable headspace present in any VOA vial? YES NO NA

14 Was there a Trip Blank in this cooler? YES NO NA If multiple coolers sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres d bottles did pH test strips suggest preservation reached the correct pH level? YES NO NA

b Did the bottle labels indicate that the correct preservatives were used? YES NO NA

If preservation in-house was needed record standard ID of preservative used here _____

16 Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

17 Were custody papers properly filled out (ink, signed etc)? YES NO NA

18 Did you sign the custody papers in the appropriate place? YES NO NA

19 Were correct containers used for the analysis requested? YES NO NA

20 Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21 Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO # _____

RETURN RESULTS TO CRA OFFICE NOTED
 X Baton Rouge LA 225/282-9007
 Shreveport, LA 318/388-3003

**CONESTOGA-ROVERS & ASSOCIATES
 CHAIN-OF-CUSTODY RECORD**

Document No
 Purchase Order No Exxon Account # 10319
 Page 3 of 3

NOG2815
 08/10/07 23 59

Project Name
 Exxon Store No 5-0608

Samplers 1 Gustavo Douaihi
 (Print/ Signature) 2
 3

Sample ID	Date (mm/dd/yy)	Time (hh mm)	Matrix	No of Containers										Remarks								
				VOC	BTEX	MTBE	Other	SVOC	PAH	BNA	Other	TPH-GRO	TPH-DRO		TPH-ORO	TPH-FRACTIONS	VPH	EPH	METALS	LEAD	RCRA	Other
25881-072407 WR1	07/24/07	--	Soil	10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Preserved?
25881-072407 EB2	07/24/07	1130	Soil	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
25881 TB3	--	--	Water	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Relinquished by (Signature)
 Date 07/26/07 Time 1600
 Received by (Signature)
 Relinquished by (Signature)
 Date
 Time

TRANSPORTED BY
 FedEx
 LABORATORY
 Test America

ANALYSES TO BE COMPLETED:
 FAST TURNAROUND
 NORMAL TURNAROUND
 CALL CRA WITH RESULTS
 UPON COMPLETION

ALL SAMPLES USED IN THE FIELD
 AND OBTAINING TRANSPORT TO THE LAB
 X YES
 CRA Contact: Gustavo Douaihi

WHITE (REPORT)

YELLOW (PROJECT MANAGER/COPIE)

Note All analytical procedures
 and methods are described on
 the enclosed SSOW
 H Hold for possible analysis
 See SSOW for instructions

CRA Simplified Scope of Work (SSOW)

Project Name: Former Exxon Retail Store No 5-0808
 Project No./Phase/Task: 25281
 Project Location: 4535 Essen Lane, Baton Rouge, LA

Phase/Study Title: Additional Site Investigation
 Event Description: Additional Site Investigation

Item	Sample Matrix	Analytical Parameters	Analytical Method	EPA Method	Units	Aggregable Surcharge Multiplier (1)	Estimated Price	Estimated Sample Qty/Event	Field QC Samples					Total Sample Qty	Billable Samples	Estimated Cost/Event
									1	2	3	4	5			
1	Soil	BTEX and MTBE	6200B			1.00		3	1	1					5	5
2	Soil	PAHs	6270C			1.00		3	1	1					5	5
3	Soil	TPH-DHO	6018B			1.00		3	1	1					5	5
4	Soil	TPH Fractions (VPH)	MADEP VPH			1.00		3	1	1					5	5
5	Soil	Lead	6010B			1.00		3	1	1					5	5
6	Water	BTEX and MTBE	6200B			1.00		2	2	1	1				7	7
7	Water	PAHs	6270C			1.00		2	2	1	1				6	6
8	Water	TPH-DHO	6018B			1.00		2	2	1	1				6	6
9	Water	TPH Fractions (VPH)	MADEP VPH			1.00		2	2	1	1				6	6
10	Water	Lead	6010B			1.00		2	2	1	1				6	6
11		Turn Core Run						3							3	3

Explanation of Surcharges

Estimated Event Subtotal: \$0.00
 Laboratory Surcharge(s): N/A/LEI
 Estimated Event Total Costs: \$0.00

Lab Contracting Summary

Governing Terms and Conditions

- Master Agreement Number: _____
- Exhibit A Terms and Conditions
- Client Contract

CRA Purchase Order Number

Order Additional Details: _____
 Governing Law: _____
 Address: _____
 State: _____
 City: _____
 Zip: _____

CRA Simplified Scope of Work (SSOW)

Project Name		Former Exxon Retail Store No. 5-0608	
Project No./Phase/Task		25881	
Project Location		4555 Essen Lane Baton Rouge, LA	
Parameter	Analytes	Action Limits (soils mg/Kg)	Action Limits (waters mg/L)
Lab reporting limits must not exceed RECAP Screening Standards			
VOCs	Benzene	0.051	0.005
	Ethylbenzene	19	0.7
	Toluene	20	1
	Xylenes	18	10
	MtBE	0.077	0.02
PAHs	Acenaphthene	220	0.037
	Acenaphthylene	88	0.1
	Anthracene	120	0.043
	Benz(a)anthracene	0.62	0.0078
	Benz(b)fluoranthene	0.33	0.0002
	Benz(k)fluoranthene	0.62	0.0046
	Benzo(a)pyrene	6.2	0.0025
	Chrysene	62	0.0016
	Dibenz(a,h)anthracene	0.33	0.0025
	Fluoranthene	220	0.15
	Fluorene	230	0.024
	Indeno(1,2,3-cd)pyrene	0.62	0.00037
	Methylanthracene, 2-	1.7	0.00062
	Naphthalene	1.5	0.01
	Phenanthrene	660	0.18
	Pyrene	230	0.018
TPH Fractions (VPH)	Aliphatics C8-C8	1200	3.2
	Aliphatics >C8-C10	120	0.15
	Aromatics >C8-C10	65	0.15
Metals	Lead	100	0.015

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August 09 2007 2:46:49PM

Client	Conestoga Rovers & Assoc (BR) / Exxon (10318)	Work Order	NQG2941
	4915 South Sherwood Forest Blvd	Project Name	Exxon 5 0608 / 25881
	Baton Rouge LA 70816	Project Nbr	Exxon 5 0608/25881
Attn	Cindy Smith	P/O Nbr	4507120916
		Date Received	07/27/07

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
25581-072407 DPI	NQG2941-01	07/24/07 11:00
25581-072407 EB1	NQG2941 02	07/24/07 11:15
25881 TB2	NQG2941 03	07/24/07 00:01

An executed copy of the chain of custody the project quality control data and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1 800 765 0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed and may contain information that is privileged and confidential. If you are not the intended recipient or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615 726-0177.

Louisiana Certification Number NELAP cert 01945 DW cert LA070020

The Chain(s) of Custody 2 pages are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By



Andi Jones

Project Management



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 4915 South Sherwood Forest Blvd
 Baton Rouge LA 70816
 Attn Cindy Smith

Work Order NQG2941
 Project Name Exxon 5-0608 / 25881
 Project Number Exxon 5-0608/25881
 Received 07/27/07 07 50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID NQG2941-01 (25581-072407 DP1 Water) Sampled 07/24/07 11 00									
Total Metals by EPA Method 6010B									
Lead	0.00780		mg/L	0.00300	1	07/31/07 14 40	SW846 6010B	CLO	7075321
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	1.00	1	08/03/07 07 16	SW846 8260B	EML	7080078
Ethylbenzene	7.94		ug/L	1.00	1	08/03/07 07 16	SW846 8260B	FML	7080078
Methyl tert Butyl Ether	7.10		ug/L	1.00	1	08/03/07 07 16	SW846 8260B	FML	7080078
Toluene	ND		ug/L	1.00	1	08/03/07 07 16	SW846 8260B	EML	7080078
Xylenes total	6.21		ug/L	3.00	1	08/03/07 07 16	SW846 8260B	EML	7080078
Surr 1,2-Dichloroethane-d4 (62-142%)	89 %					08/03/07 07 16	SW846 8260B	EML	7080078
Surr Dibromofluoromethane (78-123%)	91 %					08/03/07 07 16	SW846 8260B	EML	7080078
Surr Toluene-d8 (79-120%)	99 %					08/03/07 07 16	SW846 8260B	EML	7080078
Surr 4-Bromofluorobenzene (75-133%)	97 %					08/03/07 07 16	SW846 8260B	EML	7080078
Polyaromatic Hydrocarbons by EPA 8270C SIM									
Acenaphthene	ND		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Acenaphthylene	ND		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Anthracene	ND		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Benzo (a) anthracene	ND		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Benzo (a) pyrene	ND		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Benzo (b) fluoranthene	ND		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Benzo (k) fluoranthene	ND		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Chrysene	ND		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Dibenz (a,h) anthracene	ND		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Fluoranthene	ND		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Fluorene	0.152		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
2-Methylnaphthalene	0.419		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Naphthalene	1.57		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Phenanthrene	0.105		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Pyrene	ND		ug/L	0.0952	1	07/31/07 22 26	SW846 8270CSIM	DAH	7075261
S rr Nitrobenzene-d5 (24-125%)	63 %					07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Surr 2-Fluorobiphenyl (30-120%)	73 %					07/31/07 22 26	SW846 8270CSIM	DAH	7075261
S rr Terphenyl-d14 (29-149%)	8 %					07/31/07 22 26	SW846 8270CSIM	DAH	7075261
Extractable Petroleum Hydrocarbons									
Diesel	559		ug/L	98.0	1	08/01/07 18 25	SW846 8015B	bea	7075276
Surr o-Terphenyl (33-147%)	63 %					08/01/07 18 25	SW846 8015B	bea	7075276
Purgeable Petroleum Hydrocarbons									
>C6 to C8 Ali	ND		ug/L	100	1	08/02/07 13 33	MADEP VPII	JHC	7080336
>C8 to C10 Ali	ND		ug/L	100	1	08/02/07 13 33	MADEP VPII	JHC	7080336
>C8 to C10 Aro	ND		ug/L	100	1	08/02/07 13 33	MADEP VPII	JHC	7080336
Surr 2,5-Dibromotoluene (FID) (70-130%)	133 %	ZZ				08/02/07 13 33	MADEP VPH	JHC	7080336
Surr 5-Dibromotoluene (PID) (70-130%)	118 %					08/02/07 13 33	MADEP VPH	JHC	7080336



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 Baton Rouge LA 70816
 Attn Cmdy Smith

Work Order NQG2941
 Project Name Exxon 5-0608 / 25881
 Project Number Exxon 5-0608/25881
 Received 07/27/07 07 50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID NQG2941-02 (25581-072407 EB1 Water) Sampled 07/24/07 11 15									
Total Metals by EPA Method 6010B									
Lead	ND		mg/L	0.00500	1	07/31/07 14 45	SW846 6010B	CLO	7075329
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	1.00	1	08/03/07 07 41	SW846 8260B	EML	7080078
Ethylbenzene	ND		ug/L	1.00	1	08/03/07 07 41	SW846 8260B	EML	7080078
Methyl tert Butyl Ether	ND		ug/L	1.00	1	08/03/07 07 41	SW846 8260B	EML	7080078
Toluene	ND		ug/L	1.00	1	08/03/07 07 41	SW846 8260B	EML	7080078
Xylenes total	ND		ug/L	3.00	1	08/03/07 07 41	SW846 8260B	EML	7080078
Surr 1 2 Dichloroethane-d4 (62-142%)	91 %					08/03/07 07 41	SW846 8260B	EML	7080078
Surr Dibromofluoromethane (78-123%)	92 %					08/03/07 07 41	SW846 8260B	EML	7080078
Surr Toluene-d8 (79-120%)	100 %					08/03/07 07 41	SW846 8260B	EML	7080078
Surr 4 Bromofluorobenzene (73-133%)	97 %					08/03/07 07 41	SW846 8260B	EML	7080078
Polyaromatic Hydrocarbons by EPA 8270C SIM									
Acenaphthene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Acenaphthylene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Anthracene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Benzo (a) anthracene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Benzo (a) pyrene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Benzo (b) fluoranthene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Benzo (k) fluoranthene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Chrysene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Dibenz (a,h) anthracene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Fluoranthene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Fluorene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Indeno (1 2,3-cd) pyrene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
2-Methylnaphthalene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Naphthalene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Phenanthrene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Pyrene	ND		ug/L	0.0952	1	07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Surr Nitrobenzene-d3 (24-125%)	60 %					07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Surr 2 Fluorobiphenyl (30-120%)	72 %					07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Surr Terphenyl-d14 (29-149%)	90 %					07/31/07 22 47	SW846 8270CSIM	DAH	7075261
Extractable Petroleum Hydrocarbons									
Diesel	ND		ug/L	97.1	1	08/01/07 18 41	SW846 8015B	bea	7075276
Surr o-Terphenyl (33-147%)	92 %					08/01/07 18 41	SW846 8015B	bea	7075276
Purgeable Petroleum Hydrocarbons									
>C6 to C8 Alk	ND		ug/L	100	1	08/02/07 14-03	MADEP VPH	JHC	7080336
>C8 to C10 Alk	ND		ug/L	100	1	08/02/07 14-03	MADEP VPH	JHC	7080336
>C8 to C10 Aro	ND	M2	ug/L	100	1	08/02/07 14-03	MADEP VPH	JHC	7080336
Surr 2,5-Dibromotoluene (FID) (70-130%)	136 %	22				08/02/07 14-03	MADEP VPH	JHC	7080336
Surr 2,5-Dibromotoluene (PID) (70-130%)	116 %					08/02/07 14-03	MADEP VPH	JHC	7080336

TestAmerica

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Client Conestoga Rovers & Assoc (BR) / Exxon (10318)
 4915 South Sherwood Forest Blvd
 Baton Rouge LA 70816
 Attn Cindy Smith

Work Order NQG2941
 Project Name Exxon 5-0608 / 25881
 Project Number Exxon 5-0608/25881
 Received 07/27/07 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID NQG2941 03 (25881 TB2 Water) Sampled 07/24/07 00:01									
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	1.00	1	08/02/07 13:29	SW846 8260B	EML	708007
Ethylbenzene	ND		ug/L	1.00	1	08/02/07 13:29	SW846 8260B	EML	708007
Methyl tert Butyl Ether	ND		ug/L	1.00	1	08/02/07 13:29	SW846 8260B	EML	708007
Toluene	ND		ug/L	1.00	1	08/02/07 13:29	SW846 8260B	EML	708007
Xylenes total	ND		ug/L	3.00	1	08/02/07 13:29	SW846 8260B	EML	708007
Surr 1 2 Dichloroethane-d4 (62-142%)	98 %					08/02/07 13:29	SW846 8260B	EML	708007
Surr Dibromofluoromethane (78-123%)	96 %					08/02/07 13:29	SW846 8260B	EML	708007
Surr Toluene-d8 (79-120%)	99 %					08/02/07 13:29	SW846 8260B	EML	708007
Surr 4 Bromofluorobenzene (75-133%)	98 %					08/02/07 13:29	SW846 8260B	EML	708007

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THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville TN 37204 800-765-0980 Fax 615-726-3404

Client Conestoga Rovers & Assoc (BR) / Exxon (10318)
4915 South Sherwood Forest Blvd
Baton Rouge LA 70816
Attn Cindy Smith

Work Order NQG2941
Project Name Exxon 5-0608 / 25881
Project Number Exxon 5-0608/25881
Received 07/27/07 07:50

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Extractable Petroleum Hydrocarbons							
SW846 8015B	7075276	NQG2941-01	1020.00	1.00	07/30/07 11:36	LRW	EPA 3510C
SW846 8015B	7075276	NQG2941-02	1030.00	1.00	07/30/07 11:36	LRW	EPA 3510C
Polyaromatic Hydrocarbons by EPA 8270C SIM							
SW846 8270CSIM	7075261	NQG2941-01	1050.00	1.00	07/30/07 10:25	MJH	EPA 3510C
SW846 8270CSIM	7075261	NQG2941-02	1050.00	1.00	07/30/07 10:25	MJH	EPA 3510C
Purgeable Petroleum Hydrocarbons							
MADEP VPH	7080336	NQG2941-01	5.00	5.00	07/24/07 11:00	JHC	MADEP
MADEP VPH	7080336	NQG2941-02	5.00	5.00	07/24/07 11:15	JHC	MADEP
Total Metals by EPA Method 6010B							
SW846 6010B	7075329	NQG2941-01	50.00	50.00	07/31/07 10:00	AMB	EPA 3010A / 6010
SW846 6010B	7075329	NQG2941-02	50.00	50.00	07/31/07 10:00	AMB	EPA 3010A / 6010



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 Attn Cindy Smith

Work Order NQG2941
 Project Name Exxon 5-0608 / 25881
 Project Number Exxon 5-0608/25881
 Received 07/27/07 07:50

PROJECT QUALITY CONTROL DATA
 Blank

Analyte	Blank Value	Q	Units	Q C Batch	Lab Number	Analyzed Date/Time
Total Metals by EPA Method 6010B						
7075329-BLK1						
Lead	<0.00300		mg/L	7075329	7075329-BLK1	07/31/07 13:27
Selected Volatile Organic Compounds by EPA Method 8260B						
7080075-BLK1						
Benzene	<0.330		ug/L	7080075	7080075-BLK1	08/02/07 12:14
Ethylbenzene	<0.420		ug/L	7080075	7080075-BLK1	08/02/07 12:14
Methyl tert Butyl Ether	<0.310		ug/L	7080075	7080075-BLK1	08/02/07 12:14
Toluene	<0.420		ug/L	7080075	7080075-BLK1	08/02/07 12:14
Xylenes, total	<0.450		ug/L	7080075	7080075-BLK1	08/02/07 12:14
Surrogate 1 2 Dichloroethane-d4	96%			7080075	7080075-BLK1	08/02/07 12:14
Surrogate Dibromofluorane heptane	95%			7080075	7080075-BLK1	08/02/07 12:14
Surrogate Toluene-d8	98%			7080075	7080075-BLK1	08/02/07 12:14
Surrogate 4 Bromofluorobenzene	97%			7080075	7080075-BLK1	08/02/07 12:14
7080078-BLK1						
Benzene	<0.330		ug/L	7080078	7080078-BLK1	08/02/07 23:50
Ethylbenzene	<0.420		ug/L	7080078	7080078-BLK1	08/02/07 23:50
Methyl tert Butyl Ether	<0.310		g/L	7080078	7080078-BLK1	08/02/07 23:50
Toluene	<0.420		ug/L	7080078	7080078-BLK1	08/02/07 23:50
Xylenes total	<0.450		ug/L	7080078	7080078-BLK1	08/02/07 23:50
Surrogate 1 2 D chloroethane d4	91%			7080078	7080078-BLK1	08/02/07 23:50
Surrogate Dibromofluorobenzene	91%			7080078	7080078-BLK1	08/02/07 23:50
Surrogate Toluene-d8	99%			7080078	7080078-BLK1	08/02/07 23:50
Surrogate 4 Bromofluorobenzene	99%			7080078	7080078-BLK1	08/02/07 23:50
Polyaromatic Hydrocarbons by EPA 8270C SIM						
7075261-BLK1						
Acenaphthylene	<0.0420		ug/L	7075261	7075261-BLK1	07/31/07 20:22
Acenaphthylene	<0.0260		ug/L	7075261	7075261-BLK1	07/31/07 20:22
Anthracene	<0.0420		ug/L	7075261	7075261-BLK1	07/31/07 20:22
Benzo (a) anthracene	<0.0340		ug/L	7075261	7075261-BLK1	07/31/07 20:22
Benzo (a) pyrene	<0.0260		ug/L	7075261	7075261-BLK1	07/31/07 20:22
Benzo (b) fluoranthene	<0.0250		ug/L	7075261	7075261-BLK1	07/31/07 20:22
Benzo (g,h,i) perylene	<0.0250		g/L	7075261	7075261-BLK1	07/31/07 20:22
Benzo (k) fluoranthene	<0.0250		g/L	7075261	7075261-BLK1	07/31/07 20:22
Chrysene	<0.0350		ug/L	7075261	7075261-BLK1	07/31/07 20:22
Dibenz (a,h) anthracene	<0.0310		ug/L	7075261	7075261-BLK1	07/31/07 20:22
Fluoranthene	<0.0360		ug/L	7075261	7075261-BLK1	07/31/07 20:22
Fluorene	<0.0360		ug/L	7075261	7075261-BLK1	07/31/07 20:22
Indeno (1,2,3-cd) pyrene	<0.0250		ug/L	7075261	7075261-BLK1	07/31/07 20:22
1 Methylanthracene	<0.0430		ug/L	7075261	7075261-BLK1	07/31/07 20:22
2 Methylanthracene	<0.0810		ug/L	7075261	7075261-BLK1	07/31/07 20:22

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THE LEADER IN ENVIRONMENTAL TESTING

2980 Foster Creighton Road Nashville TN 37204 800 765-0880 Fax 615-726 3404

Client Conestoga Rovers & Assoc (BR) / Exxon (10318)
4915 South Sherwood Forest Blvd
Baton Rouge LA 70816
Attn Cindy Smith

Work Order NQG2941
Project Name Exxon 5-0608 / 25881
Project Number Exxon 5-0608/25881
Received 07/27/07 07:50

PROJECT QUALITY CONTROL DATA Blank Cont.

Analyte	Blank Value	Q	Units	Q C Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270C SIM						
7075261-BLK1						
Naphthalene	<0.0390		ug/L	7075261	7075261-BLK1	07/31/07 20:22
Phenanthrene	<0.0610		ug/L	7075261	7075261-BLK1	07/31/07 20:22
Pyrene	<0.0340		ug/L	7075261	7075261-BLK1	07/31/07 20:22
<i>S surrogate Nitrobenzene-d5</i>	66%			7075261	7075261-BLK1	07/31/07 20:22
<i>Surrogate 2 Fluorobiphenyl</i>	68%			7075261	7075261-BLK1	07/31/07 20:22
<i>Surrogate Terphenyl-d14</i>	90%			7075261	7075261-BLK1	07/31/07 20:22
Extractable Petroleum Hydrocarbons						
7075276-BLK1						
Diesel	<37.0		ug/L	7075276	7075276-BLK1	08/01/07 15:16
<i>Surrogate o-Terphenyl</i>	101%			7075276	7075276-BLK1	08/01/07 15:16
Purgeable Petroleum Hydrocarbons						
7080336-BLK1						
>C6 to C8 Ali	<50.0		ug/L	7080336	7080336-BLK1	08/02/07 12:33
>C8 to C10 Ali	<50.0		ug/L	7080336	7080336-BLK1	08/02/07 12:33
>C8 to C10 Aro	<50.0		ug/L	7080336	7080336-BLK1	08/02/07 12:33
<i>Surrogate 2 3-Dibromotoluene (FID)</i>	130%			7080336	7080336-BLK1	08/02/07 12:33
<i>Surrogate 2 5-Dibromotoluene (PID)</i>	110%			7080336	7080336-BLK1	08/02/07 12:33

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THE LEADER IN ENVIRONMENTAL TESTING

2860 Foster Creighton Road Nashville TN 37204 800-765-0880 Fax 615-728-3404

Client Conestoga Rovers & Assoc (BR) / Exxon (10318)
 4915 South Sherwood Forest Blvd
 Baton Rouge LA 70816
 Attn Cindy Smith

Work Order NQG2941
 Project Name Exxon 5-0608 / 25881
 Project Number Exxon 5-0608/25881
 Received 07/27/07 07:50

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val	Analyzed Val	Q	Units	% Rec	Target Range	Batch	Analyzed Date/Time
Total Metals by EPA Method 6010B								
7075329 BS1								
Lead	0.0500	0.0478		mg/L	96%	80-120	7075329	07/31/07 13:32

Selected Volatile Organic Compounds by EPA Method 8260B

7080075-BS1								
Benzene	50.0	48.7		ug/L	97%	78-125	7080075	08/02/07 10:34
Ethylbenzene	50.0	54.2		ug/L	108%	73-134	7080075	08/02/07 10:34
Methyl tert-Butyl Ether	50.0	42.6		ug/L	85%	69-122	7080075	08/02/07 10:34
Toluene	50.0	52.7		ug/L	105%	78-122	7080075	08/02/07 10:34
Xylenes, total	150	161		ug/L	108%	79-130	7080075	08/02/07 10:34
Surrogate 1,2-Dichloroethane-d4	25.0	21.4			86%	62-142	7080075	08/02/07 10:34
Surrogate 4-Dibromofluoromethane	25.0	21.8			87%	78-123	7080075	08/02/07 10:34
Surrogate Toluene-d8	25.0	24.7			99%	79-120	7080075	08/02/07 10:34
Surrogate 4-Bromofluorobenzene	25.0	25.2			101%	75-133	7080075	08/02/07 10:34

7080078 BS1								
Benzene	50.0	48.9		ug/L	98%	78-125	7080078	08/02/07 22:11
Ethylbenzene	50.0	52.1		ug/L	104%	73-134	7080078	08/02/07 22:11
Methyl tert-Butyl Ether	50.0	41.0		ug/L	82%	69-122	7080078	08/02/07 22:11
Toluene	50.0	51.3		ug/L	103%	78-122	7080078	08/02/07 22:11
Xylenes, total	150	156		ug/L	104%	79-130	7080078	08/02/07 22:11
Surrogate 1,2-Dichloroethane-d4	25.0	21.7			87%	62-142	7080078	08/02/07 22:11
Surrogate Dibromofluoromethane	25.0	21.4			85%	78-123	7080078	08/02/07 22:11
Surrogate Toluene-d8	25.0	25.2			101%	79-120	7080078	08/02/07 22:11
Surrogate 4-Bromofluorobenzene	25.0	25.1			100%	75-133	7080078	08/02/07 22:11

Polyaromatic Hydrocarbons by EPA 8270C SIM

7075261-BS1								
Acenaphthene	1.00	0.660	MNR1	ug/L	66%	48-133	7075261	07/31/07 20:43
Acenaphthylene	1.00	0.690	MNR1	ug/L	69%	49-139	7075261	07/31/07 20:43
Anthracene	1.00	0.760	MNR1	ug/L	76%	55-146	7075261	07/31/07 20:43
Benzo (a) anthracene	1.00	0.710	MNR1	ug/L	71%	54-143	7075261	07/31/07 20:43
Benzo (a) pyrene	1.00	0.670	MNR1	ug/L	67%	47-140	7075261	07/31/07 20:43
Benzo (b) fluoranthene	1.00	0.850	MNR1	ug/L	85%	56-142	7075261	07/31/07 20:43
Benzo (g,h,i) perylene	1.00	0.640	MNR1	ug/L	64%	39-142	7075261	07/31/07 20:43
Benzo (k) fluoranthene	1.00	0.740	MNR1	ug/L	74%	54-147	7075261	07/31/07 20:43
Chrysene	1.00	0.700	MNR1	ug/L	70%	60-145	7075261	07/31/07 20:43
Dibenz (e,h) anthracene	1.00	0.670	MNR1	ug/L	67%	35-146	7075261	07/31/07 20:43
Fluoranthene	1.00	0.740	MNR1	ug/L	74%	56-135	7075261	07/31/07 20:43
Fluorene	1.00	0.690	MNR1	ug/L	69%	52-141	7075261	07/31/07 20:43
Indeno (1,2,3-cd) pyrene	1.00	0.650	MNR1	ug/L	65%	41-139	7075261	07/31/07 20:43
1-Methylnaphthalene	1.01	0.640	MNR1	ug/L	63%	42-130	7075261	07/31/07 20:43
2-Methylnaphthalene	1.00	0.640	MNR1	ug/L	64%	46-136	7075261	07/31/07 20:43



THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville TN 37204 800-765-0980 Fax 615-726-3404

Client: Conestoga Rovers & Assoc (BR) / Exxon (10318)
 4915 South Sherwood Forest Blvd
 Baton Rouge LA 70816
 Attn: Cindy Smith

Work Order: NQG2941
 Project Name: Exxon 5-0608 / 25881
 Project Number: Exxon 5-0608/25881
 Received: 07/27/07 07:50

PROJECT QUALITY CONTROL DATA
 LCS Cont

Analyte	Known Val	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270C SIM								
7075261-BS1								
Naphthalene	100	0.630	MNR1	ug/L	63%	47-129	7075261	07/31/07 20:43
Phenanthrene	100	0.680	MNR1	ug/L	68%	50-133	7075261	07/31/07 20:43
Pyrene	100	0.730	MNR1	ug/L	73%	56-140	7075261	07/31/07 20:43
Surrogate Nitrobenzene-d5	100	0.580			58%	24-125	7075261	07/31/07 20:43
Surrogate 2-Fluorobiphenyl	100	0.660			66%	30-120	7075261	07/31/07 20:43
Surrogate Terphenyl-d14	100	0.830			83%	29-149	7075261	07/31/07 20:43
Extractable Petroleum Hydrocarbons								
7075276-BS1								
Diesel	1000	827		ug/L	83%	38-123	7075276	08/01/07 15:32
Surrogate o-Terphenyl	200	217			109%	33-147	7075276	08/01/07 15:32
Purgeable Petroleum Hydrocarbons								
7080336-BS1								
>C6 to C8 Ah	100	97.5		ug/L	98%	70-130	7080336	08/03/07 10:54
>C8 to C10 Ah	300	306		ug/L	102%	70-130	7080336	08/03/07 10:54
>C8 to C10 Aro	250	223		ug/L	89%	70-130	7080336	08/03/07 10:54
>C10 to C12 Aro	50.0	62.0		ug/L	124%	70-130	7080336	08/03/07 10:54
>C10 to C12 Ah	100	97.3		ug/L	97%	70-130	7080336	08/03/07 10:54
Surrogate 2,5-Dibromotoluene (FID)	40.0	55.3	Z2		138%	70-130	7080336	08/03/07 10:54
Surrogate 2,5-Dibromotoluene (PID)	40.0	47.3			118%	70-130	7080336	08/03/07 10:54

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THE LEADER IN ENVIRONMENTAL TESTING

2980 Foster Creighton Road Nashville TN 37204 800-765-0680 Fax 615-726-3404

Client Conestoga Rovers & Assoc (BR) / Exxon (10318)
 4915 South Sherwood Forest Blvd
 Baton Rouge LA 70816
 Attn Cindy Smith

Work Order NQG2941
 Project Name Exxon S 0608 / 25881
 Project Number Exxon 5-0608/25881
 Received 07/27/07 07:50

PROJECT QUALITY CONTROL DATA LCS Dup

Analyte	Ong Val	Duplicate	Q	Units	Spike Conc	% Rec	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Total Metals by EPA Method 6010B												
7075329 BSD1												
Lead		0.0498		mg/L	0.0500	100%	80 120	4	20	7075329		07/31/07 13:37
Selected Volatile Organic Compounds by EPA Method 8260B												
7080075-BSD1												
Benzene		52.1		ug/L	50.0	104%	78 125	7	15	7080075		08/02/07 10:59
Ethylbenzene		54.8		ug/L	50.0	110%	73 134	1	15	7080075		08/02/07 10:59
Methyl tert Butyl Ether		47.4		ug/L	50.0	95%	69 122	11	16	7080075		08/02/07 10:59
Toluene		53.8		ug/L	50.0	108%	78 122	2	15	7080075		08/02/07 10:59
Xylenes total		165		ug/L	150	110%	79 130	2	16	7080075		08/02/07 10:59
Surrogate 1 2 Dichloroethane-d4		22.9		ug/L	25.0	92%	62 142			7080075		08/02/07 10:59
Surrogate Dibromofluoromethane		23.5		ug/L	25.0	94%	78 123			7080075		08/02/07 10:59
Surrogate Toluene-d8		24.9		ug/L	25.0	99%	79 120			7080075		08/02/07 10:59
Surrogate 4 Bromofluorobenzene		25.2		ug/L	25.0	101%	75 133			7080075		08/02/07 10:59
7080078-BSD1												
Benzene		48.9		ug/L	50.0	98%	78 125	0.04	15	7080078		08/02/07 22:36
Ethylbenzene		51.9		ug/L	50.0	104%	73 134	0.4	15	7080078		08/02/07 22:36
Methyl tert Butyl Ether		41.5		ug/L	50.0	83%	69 122	1	16	7080078		08/02/07 22:36
Toluene		51.2		ug/L	50.0	10 %	78 122	0.1	15	7080078		08/02/07 22:36
Xylenes total		157		ug/L	150	105%	79 130	0.3	16	7080078		08/02/07 22:36
Surrogate 1 2 Dichloroethane-d4		21.8		ug/L	25.0	87%	62 142			7080078		08/02/07 22:36
Surrogate Dibromofluoromethane		21.4		ug/L	25.0	86%	78 123			7080078		08/02/07 22:36
Surrogate Toluene-d8		25.0		ug/L	25.0	100%	79 120			7080078		08/02/07 22:36
Surrogate 4 Bromofluorobenzene		25.0		ug/L	25.0	100%	75 133			7080078		08/02/07 22:36
Polyaromatic Hydrocarbons by EPA 8270C SIM												
7075261 BSD1												
Acenaphthene		0.720		ug/L	1.00	72%	48 133	9	32	7075261		07/31/07 21:03
Acenaphthylene		0.740		ug/L	1.00	74%	49 139	7	34	7075261		07/31/07 21:03
Anthracene		0.830		ug/L	1.00	83%	55 146	9	50	7075261		07/31/07 21:03
Benzo (a) Anthracene		0.790		ug/L	1.00	79%	54 143	11	50	7075261		07/31/07 21:03
Benzo (a) pyrene		0.740		ug/L	1.00	74%	47 140	10	38	7075261		07/31/07 21:03
Benzo (b) fluoranthene		0.950		ug/L	1.00	95%	56 142	11	50	7075261		07/31/07 21:03
Benzo (g,h,i) perylene		0.700		ug/L	1.00	70%	39 142	9	50	7075261		07/31/07 21:03
Benzo (k) fluoranthene		0.830		ug/L	1.00	83%	54 147	11	50	7075261		07/31/07 21:03
Chrysene		0.790		ug/L	1.00	79%	60 145	12	50	7075261		07/31/07 21:03
Dibenz (a,h) anthracene		0.730		ug/L	1.00	73%	35 146	9	47	7075261		07/31/07 21:03
Fluoranthene		0.820		ug/L	1.00	82%	56 135	10	27	7075261		07/31/07 21:03
Fluorene		0.750		ug/L	1.00	75%	52 141	8	31	7075261		07/31/07 21:03
Indeno (1,2,3-cd) pyrene		0.710		ug/L	1.00	71%	41 139	9	50	7075261		07/31/07 21:03
1-Methylnaphthalene		0.680		ug/L	1.01	67%	42 130	6	50	7075261		07/31/07 21:03



THE LEADER IN ENVIRONMENTAL TESTING

2980 Foster Creighton Road Nashville TN 37204 800-765-0980 Fax 615-726-3404

Client **Conestoga Rovers & Assoc (BR) / Exxon (10318)**
 4915 South Sherwood Forest Blvd
 Baton Rouge LA 70816
 Attn **Cindy Smith**

Work Order **NQG2941**
 Project Name **Exxon 5-0608 / 25881**
 Project Number **Exxon 5-0608/25881**
 Received **07/27/07 07:50**

PROJECT QUALITY CONTROL DATA
LCS Dup Cont.

Analyte	Org Val	Duplicate	Q	Units	Spike Conc	% Rec	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polvaromatic Hydrocarbons by EPA 8270C SIM												
7075261-BSD1												
2 Methylnaphthalene		0.680		ug/L	1.00	68%	46 136	6	38	7075261		07/31/07 21:03
Naphthalene		0.670		ug/L	1.00	67%	47 129	6	39	7075261		07/31/07 21:03
Phenanthrene		0.770		ug/L	1.00	77%	50 133	12	37	7075261		07/31/07 21:03
Pyrene		0.830		ug/L	1.00	83%	56 140	13	50	7075261		07/31/07 21:03
<i>Surrogate Nitrobenzene-d3</i>		0.710		ug/L	1.00	71%	24 125			7075261		07/31/07 21:03
<i>Surrogate 2-Fluorobiphenyl</i>		0.700		ug/L	1.00	70%	30 120			7075261		07/31/07 21:03
<i>Surrogate Terphenyl-d14</i>		0.930		ug/L	1.00	93%	29 149			7075261		07/31/07 21:03
Extractable Petroleum Hydrocarbons												
7075276-BSD1												
Diesel		857		ug/L	1000	86%	38 123	4	50	7075276		08/01/07 15:48
<i>Surrogate o-Terphenyl</i>		19.9		ug/L	20.0	100%	33 147			7075276		08/01/07 15:48

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2880 Foster Creighton Road Nashville TN 37204 800-785-0880 Fax 615-726-3404

Client Conestoga Rovers & Assoc (BR) / Exxon (10318)
 4915 South Sherwood Forest Blvd
 Baton Rouge LA 70816
 Attn Cindy Smith

Work Order NQG2941
 Project Name Exxon 5-0608 / 25881
 Project Number Exxon 5 0608/25881
 Received 07/27/07 07 50

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Ong Val	MS Val	Q	Units	Spike Conc	% Rec	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Total Metals by EPA Method 6010B										
7075329 MS1										
Lead	ND	0.0475		mg/L	0.0500	95%	75-125	7075329	NQG2815-02	07/31/07 13:51
Purgeable Petroleum Hydrocarbons										
7080336-MS1										
>C6 to C8 Ali	ND	80.7		ug/L	100	81%	70-130	7080336	NQG2941-02	08/02/07 23:33
>C8 to C10 Ali	ND	243		ug/L	300	81%	70-130	7080336	NQG2941-02	08/02/07 23:33
>C8 to C10 Aro	1.11	166	M2	ug/L	250	66%	70-130	7080336	NQG2941-02	08/02/07 23:33
Surrogate 2,5-Dibromotoluene (FID)		59.6	Z1	ug/L	40.0	149%	70-130	7080336	NQG2941-02	08/02/07 23:33
Surrogate 2,5-Dibromotoluene (PID)		48.4		ug/L	40.0	121%	70-130	7080336	NQG2941-02	08/02/07 23:33

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2980 Foster Creighton Road Nashville TN 37204 600-765-0980 Fax 615-728-3404

Client **Conestoga Rovers & Assoc (BR) / Exxon (10318)**
 4915 South Sherwood Forest Blvd
 Baton Rouge LA 70816
 Attn **Cindy Smith**

Work Order **NQG2941**
 Project Name **Exxon 5-0608 / 25881**
 Project Number **Exxon 5-0608/25881**
 Received **07/27/07 07:50**

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup

Analyte	Orig Val	Duplicate	Q	Units	Spike Conc	% Rec	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Total Metals by EPA Method 6010B												
7075329-MSD1												
Lead	ND	0.0493		mg/L	0.0500	99%	75 125	4	20	7075329	NQG2815-02	07/31/07 14:22
Purgeable Petroleum Hydrocarbons												
7080336 MSD1												
>C6 to C8 Al	ND	116		ug/L	100	116%	70 130	36	50	7080336	NQG2941-02	08/03/07 08:54
>C8 to C10 Al	ND	331		ug/L	300	110%	70 130	30	50	7080336	NQG2941-02	08/03/07 08:54
>C8 to C10 Aro	1.11	235		ug/L	250	94%	70 130	35	50	7080336	NQG2941-02	08/03/07 08:54
Surrogate, 2,3-Dibromotoluene (FID)		55.1	Z1	ug/L	40.0	138%	70 130			7080336	NQG2941-02	08/03/07 08:54
Surrogate, 2,3-Dibromotoluene (PID)		45.6		ug/L	40.0	114%	70 130			7080336	NQG2941-02	08/03/07 08:54

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Craigton Road Nashville, TN 37204 800-755-0980 Fax 615-726-3404

Client Conestoga Rovers & Assoc (BR) / Exxon (10318)
4915 South Sherwood Forest Blvd
Baton Rouge LA 70816
Attn Cindy Smith

Work Order NQG2941
Project Name Exxon 5-0608 / 75881
Project Number Exxon 5-0608/25881
Received 07/27/07 07 50

CERTIFICATION SUMMARY

TestAmerica Nashville TN

Method	Matrix	AIHA	Nelac	Louisiana
MADEP VPH	Water	N/A	X	X
SW846 6010B	Water	N/A	X	X
SW846 8015B	Water	N/A	X	X
SW846 8260B	Water	N/A	X	X
SW846 8270CSIM	Water	N/A	X	X

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2860 Foster Creighton Road Nashville TN 37204 600-765-0980 Fax 615-726-3404

Client Conestoga Rovers & Assoc (BR) / Exxon (10318)
4915 South Sherwood Forest Blvd.
Baton Rouge LA 70816
Attn Cindy Smith

Work Order NQG2941
Project Name Exxon 5-0608 / 25881
Project Number Exxon 5-0608/25881
Received 07/27/07 07:50

NELAC CERTIFICATION SUMMARY

TestAmerica Analytical Nashville does not hold NELAC certifications for the following analytes included in this report

<u>Method</u>	<u>Matrix</u>	<u>Analyte</u>
MADEP VPH	Water	>C6 to C8 Ali >C8 to C10 Ali >C8 to C10 Aro

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville TN 37204 800-765-0980 Fax 615-726-3404

Client Conestoga Rovers & Assoc (BR) / Exxon (10318)
4915 South Sherwood Forest Blvd
Baton Rouge LA 70816
Attn Cindy Smith

Work Order NQG2941
Project Name Exxon 5-0608 / 25881
Project Number Exxon 5-0608/25881
Received 07/27/07 07:50

DATA QUALIFIERS AND DEFINITIONS

M1 The MS and/or MSD were below the acceptance limits due to sample matrix interference See Blank Spike (LCS)
MNR1 There was no MS/MSD analyzed with this batch due to insufficient sample volume See Blank Spike
Z2 Surrogate recovery was above the acceptance limits Data not impacted
ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



COOLER RECEIPT FORM



NQG2941

Cooler Received/Opened On 7/27/07 @ 0750

1 Tracking # 6531 (last 4 digits FedEx)

Courier FED EX IR Gun ID 90942856

2 Temperature of rep sample or temp blank when opened 22 Degrees Celsius

3. If item #2 temperature is 0°C or less was the representative sample or temp blank frozen? YES NO NA

4 Were custody seals on outside of cooler? YES NO NA

If yes how many and where _____

5 Were the seals intact signed and dated correctly? YES NO NA

6 Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (initial) JR

7 Were custody seals on containers YES NO and intact YES NO NA

Were these signed and dated correctly? YES NO NA

8 Packing mat I used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9 Cooling process Ice Ice-pack Ice (direct contact) Dry Ice Other None

10 Did all containers arrive in good condition (unbroken)? YES NO NA

11 Were all container labels complete (# date signed, pres. etc)? YES NO NA

12 Did all container labels and tags agree with custody papers? YES NO NA

13a were VOA vials received? YES NO NA

b Was there any observable headspace present in any VOA vial? YES NO NA

14 Was there a Trip Blank in this cooler? YES NO NA If multiple coolers sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) _____

15a on pres'd bottles did pH test strips suggest preservation reached the correct pH level? YES NO NA

b Did the bottle labels indicate that the correct preservatives were used YES NO NA

If preservation in-house was needed record standard ID of preservative used here _____

16 Is residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) _____

17 Were custody papers properly filled out (ink signed, etc)? YES NO NA

18 Did you sign the custody papers in the appropriate place? YES NO NA

19 Were correct containers used for the analysis requested? YES NO NA

20 Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) _____

I certify that I attached a label with the unique LIMS number to each container (initial) _____

21 Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO # _____



AAI

TRANSMITTAL

Ardaman & Associates, Inc

(Formerly STE)

To CRA
4915 S Sherwood Forest Blvd
Baton Rouge, LA 70816

Date August 13, 2007

Job No 07-L7113

Project 25881 Former Exxon

Store #5-0608

Attention Gustavo Douaihi

From Karen D Allen, CET *KA*

COPIES	DESCRIPTION
1	Laboratory Test Results Table 1
1	Chain of Custody

THESE ARE TRANSMITTED

- FOR YOUR USE FOR REVIEW & COMMENT AS REQUESTED
- REVISE AS NOTED TO BE DISTRIBUTED

REMARKS

RETURN RESULTS TO CRA OFFICE NOTED

Baton Rouge LA 225/292 9007

Shreveport, LA 318/688-3003

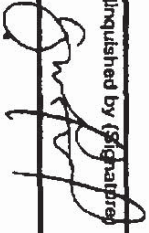


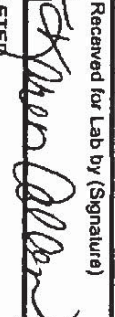
**CONESTOGA-ROVERS & ASSOCIATES
GEOTECHNICAL CHAIN-OF-CUSTODY RECORD**

07-27113

Document No 0154

Purchase Order No 40 4006119

Page 1 of 1

Project No 25881		Project Name Former Exxon Store No 5-0608	
Samplers 1 Gustavo Douaikh (Print) 2 _____ Signature) 3 _____		Date (mm/dd/yy) Time (hh mm)	
Sample ID GT-1 (8-10)		Date (mm/dd/yy) 7/24/07 Time (hh mm) 1005	
Requisitioned by (Signature) 		Received by (Signature) 	
Date 8/2/07 Time 1117		Requisitioned by (Signature) 	
TRANSPORTED BY CRA		LABORATORY ABA (STE)	
CRA Contact: Gustavo Douaikh		ANALYSES TO BE COMPLETED Date: 8/2/07 Time: 15:12 Received for Lab by (Signature) 	
FAST TURNAROUND DATE: _____		NORMAL TURNAROUND CALL CRA W/RESULTS ON COMPLETION	
No of Containers 1		FRACTIONAL ORGANIC CARBON (ASTM D2874) X	
DRY BULK DENSITY X		VOLUMETRIC MOISTURE CONTENT (ASTM D2218) X	
ATTERBERG LIMITS (LL, PL, PI) (ASTM D4318) X		TOTAL POROSITY X	
REMARKS			

WHITE REPORT COPY

YELLOW PROJECT MANAGER COPY

APPENDIX E
WELL YIELD CALCULATION

CLIENT	Exxon Mobil Corp	PROJECT	Former RAS # 5-0608
JOB No	25881 03		4555 Essen Lane
			Baton Rouge LA
CALCULATION BY	BLC	DATE	05/12/08

PURPOSE To determine Dependable Yield (unsteady/nonequilibrium state)
METHOD Cooper and Jacob (1946) modification of Theis equation

GENERAL ASSUMPTIONS/CONDITIONS

- 1 The water bearing formation is uniform in character and the hydraulic conductivity is the same in all directions
- 2 The formation is uniform in thickness and infinite in areal extent
- 3 The formation receives no recharge from any source
- 4 The pumped well penetrates and receives water from the full thickness of the water bearing formation
- 5 The water removed from storage is discharged instantaneously when the head is lowered
- 6 The pumping well is 100-percent efficient
- 7 All water removed from the well comes from aquifer storage
- 8 Laminar flow exists throughout the well and aquifer
- 9 The water table or potentiometric surface has no slope

Variables

s = 6.0 drawdown (ft) assumes 60 % drawdown of available water column in the well
K = 0.77 hydraulic conductivity (ft/day) see slug test results in the Appendix
b = 10 aquifer thickness (ft) typical measured water column in wells
T = 0.77 transmissivity of the aquifer (equals conductivity times aquifer thickness [K x b]) (ft²/day)
t = 365 time pumping (days) – Default 365 assumes long term drawdown conditions
r = 4.17 effective well diameter (ft) – Default 0.417 (default assumes gravel pack of 10 inches)
S = 0.05 storativity of the aquifer (dimensionless) – Default 0.05 assuming typical water table conditions

Dependable Yield (Q) Equation

$$Q = \frac{s T}{0.183 \log \left(\frac{2.25 T t}{r^2 S} \right)}$$

$$Q = 5.19 \quad \text{ft}^3/\text{day}$$

or in gallons (1 ft³ = 7.48 gallons)

$$\text{which} = 38.8 \quad \text{gallons/day}$$

AQTBSOLV for Windows

Data Set U\AQTBSOLV\MEXXON\25881 Exxon 0608 Essen BTR\25881 MW2 aqt
 Date 06/21/06
 Time 10.59.03

PROJECT INFORMATION

Client Exxon Mobil
 Project 25881-01
 Location FAS 5-0608

AQUIFER DATA

Saturated Thickness 9.65 ft
 Anisotropy Ratio (Kz/Kr) 1

SLUG TEST WELL DATA

Test Well MW 2

X Location 0 ft
 Y Location 0 ft

Initial Displacement 2 ft
 Static Water Column Height 9.65 ft
 Casing Radius 0.083 ft
 Wellbore Radius 0.343 ft
 Well Skin Radius 0.343 ft
 Screen Length 10 ft
 Total Well Penetration Depth 9.65 ft

No of Observations 104

Observation Data			
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.075	1.957	1.473	1.731
0.08	1.941	1.561	1.724
0.085	1.922	1.655	1.718
0.09	1.896	1.753	1.711
0.095	1.882	1.858	1.704
0.1	1.887	1.968	1.696
0.1058	1.881	2.085	1.689
0.112	1.877	2.21	1.68
0.1185	1.873	2.341	1.672
0.1255	1.871	2.481	1.663
0.1328	1.868	2.63	1.654
0.1407	1.855	2.786	1.644
0.149	1.862	2.953	1.632
0.1578	1.859	3.13	1.621
0.1672	1.859	3.316	1.61
0.177	1.856	3.515	1.597
0.1875	1.854	3.725	1.584
0.1985	1.853	3.948	1.571
0.2102	1.85	4.181	1.557
0.2227	1.849	4.43	1.542
0.2358	1.847	4.693	1.527
0.2498	1.845	4.973	1.511
0.2647	1.843	5.27	1.494
0.2803	1.84	5.583	1.476
0.297	1.837	5.915	1.459
0.3147	1.836	6.266	1.441
0.3333	1.833	6.64	1.421
0.3532	1.83	7.035	1.4
0.3742	1.829	7.453	1.38
0.3963	1.826	7.896	1.359
0.4198	1.823	8.366	1.338
0.4447	1.82	8.865	1.317
0.4697	1.817	9.391	1.293
0.4863	1.815	9.95	1.272

AQTESOLV for Windows

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0 5247	1 811	10 54	1.25
0 5547	1 809	11 17	1.226
0 5863	1 806	11 83	1.202
0 6213	1 803	12 53	1 178
0 658	1 799	13.28	1 154
0 6963	1 795	14 07	1 128
0 738	1 792	14.91	1 104
0 7813	1 788	15 79	1 08
0 828	1 783	16 73	1 053
0 8763	1 779	17 72	1 025
0 928	1 775	18 78	0 998
0 983	1 771	19 89	0 97
1 041	1 765	21 07	0 94
1 103	1 761	22 32	0 914
1 168	1 755	23 65	0 885
1.238	1 75	25 05	0 857
1 311	1 744	26 54	0 829
1 39	1 737	28 12	0 802

SOLUTION

Aquifer Model Unconfined
 Solution Method Bouwer-Rice
 Shape Factor 2.524

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	4 015E-5	ft/min
y0	1 883	ft

AQTESOLV for Windows

MW 3 SLUG OUT TEST

Data Set: U\AQTESOLV\MEXON\25881 Exxon 0608 Essen BTR\25881 MW3.aqt
 Title: MW-3 SLUG OUT TEST
 Date: 06/21/08
 Time: 10.59.10

PROJECT INFORMATION

Client: Exxon Mobil
 Project: 25881-01
 Location: RAS 5-0608

AQUIFER DATA

Saturated Thickness: 7.77 ft
 Anisotropy Ratio (Kz/Kr): 1

SLUG TEST WELL DATA

Test Well: MW-3

X Location: 0 ft
 Y Location: 0 ft

Initial Displacement: 1.8 ft
 Static Water Column Height: 7.77 ft
 Casing Radius: 0.083 ft
 Wellbore Radius: 0.343 ft
 Well Skin Radius: 0.343 ft
 Screen Length: 10 ft
 Total Well Penetration Depth: 7.77 ft

No of Observations: 105

<u>Observation Data</u>			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.08	1.788	1.655	0.436
0.085	1.781	1.753	0.418
0.09	1.764	1.858	0.402
0.095	1.744	1.968	0.387
0.1	1.733	2.085	0.373
0.1058	1.722	2.21	0.363
0.112	1.71	2.341	0.351
0.1185	1.699	2.481	0.342
0.1255	1.688	2.63	0.332
0.1328	1.674	2.788	0.325
0.1407	1.661	2.953	0.318
0.149	1.647	3.13	0.309
0.1578	1.634	3.316	0.302
0.1672	1.62	3.515	0.295
0.177	1.604	3.725	0.29
0.1875	1.59	3.946	0.284
0.1985	1.573	4.181	0.277
0.2102	1.558	4.43	0.273
0.2227	1.539	4.693	0.269
0.2358	1.521	4.973	0.264
0.2498	1.501	5.27	0.26
0.2647	1.48	5.583	0.254
0.2803	1.458	5.915	0.25
0.297	1.436	6.266	0.246
0.3147	1.411	6.64	0.242
0.3333	1.388	7.035	0.238
0.3532	1.363	7.453	0.233
0.3742	1.336	7.896	0.231
0.3963	1.31	8.366	0.228
0.4198	1.282	8.865	0.223
0.4447	1.252	9.391	0.22
0.4697	1.224	9.95	0.215
0.4963	1.193	10.54	0.213

AQTESOLV for Windows

MW-3 SLUG OUT TEST

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.5247	1.162	11.17	0.21
0.5547	1.13	11.83	0.207
0.5863	1.096	12.53	0.204
0.6213	1.059	13.28	0.201
0.658	1.023	14.07	0.199
0.6963	0.986	14.91	0.196
0.738	0.947	15.79	0.193
0.7813	0.908	16.73	0.19
0.828	0.864	17.72	0.187
0.8763	0.821	18.78	0.185
0.928	0.778	19.89	0.182
0.983	0.734	21.07	0.18
1.041	0.691	22.32	0.179
1.103	0.648	23.65	0.178
1.168	0.608	25.05	0.173
1.238	0.571	26.54	0.172
1.311	0.537	28.12	0.17
1.39	0.508	28.79	0.168
1.473	0.481	31.55	0.164
1.561	0.457		

SOLUTION

Aquifer Model Unconfined
 Solution Method Bouwer Rice
 Shape Factor 2.386

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	7.125E-5	ft/min
y0	0.4045	ft

MW 3 SLUG OUT TEST

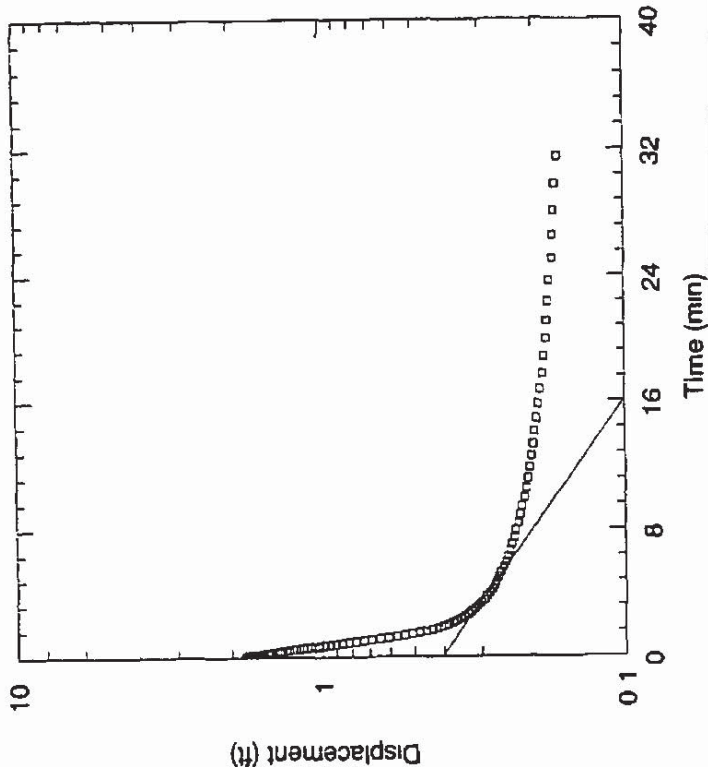
Data Set U\ 25881 MW3 aqt
 Date 06/21/06 Time 10 59 20

PROJECT INFORMATION

Client Exxon Mobil
 Project 25881 01
 Location RA5 5-0608

SOLUTION

Aquifer Model Unconfined
 Solution Method Bouwer Rice
 $K = 7.125E 5$ ft/min
 $Y0 = 0.4045$ ft



AQUIFER DATA

Anisotropy Ratio (Kz/Kr) 1

Saturated Thickness 7.77 ft

WELL DATA (MW 3)

Static Water Column Height 7.77 ft
 Screen Length 10 ft
 Wellbore Radius 0.343 ft

Initial Displacement 1.8 ft
 Total Well Penetration Depth 7.77 ft
 Casing Radius 0.083 ft

WELL TEST ANALYSIS

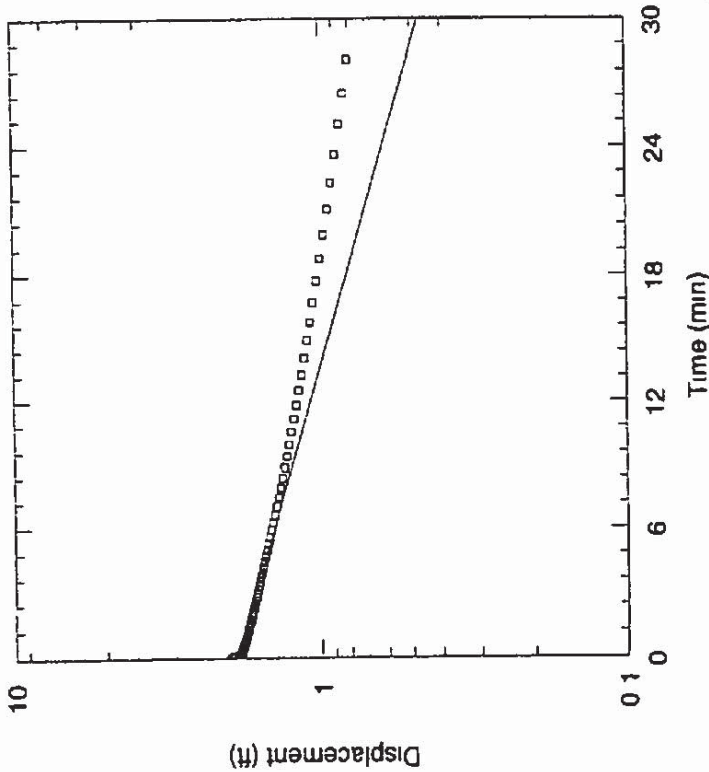
Data Set U \ 25881 MW2 aqt
 Date 06/21/06 Time 10 59 27

PROJECT INFORMATION

Client Exxon Mobil
 Project 25881-01
 Location RAS 5-0608

SOLUTION

Aquifer Model Unconfined
 Solution Method Bouwer Rice
 $K = 4.015E-5$ ft/min
 $y0 = 1.883$ ft



AQUIFER DATA

Saturated Thickness 9.65 ft
 Anisotropy Ratio (Kz/Kr) 1

WELL DATA (MW 2)

Initial Displacement 2 ft
 Total Well Penetration Depth 9.65 ft
 Casing Radius 0.083 ft
 Static Water Column Height 9.65 ft
 Screen Length 10 ft
 Wellbore Radius 0.343 ft

APPENDIX F
ANALYTICAL DATA EVALUATION
RECAP FORM 3

**RECAP FORM 3
ANALYTICAL DATA EVALUATION**

Date October 9, 2008

Facility Name Former Exxon Retail Station No 5-0608

Agency Interest (AI #) 13366

Physical Site Location 4555 Essen Lane, Baton Rouge LA

Operation Address N/A

Property Owner Drury Inn & Suites

Property Owner Address 721 Emerson Road, Suite 200, St Louis, Missouri 63141

Responsible Party Exxon Mobil Refining & Supply Company

Responsible Party Address 16945 Northchase Drive, Room 527, Houston, Texas 77060

1 Data Generation

- 1 A All sample collection was done in accordance to applicable RECAP collection guidelines [X] Yes [] No
- 1 B All generated data was obtained using EPA Methodology, RECAP approved methodology (as found in text), or methodology pre-approved by the Department Any modifications to methodology have been noted, explained and pre approved by the Department [X] Yes [] No
- 1 C All Data are analyte-specific and the identity and concentration are confirmed [X] Yes [] No
- 1 D All data were generated by a LDEQ certified laboratory [X] Yes [] No

2 Data Evaluation and Usability

- 2 A Methods used are appropriate for analyzed constituents
 - 1 Analysis used is specific for COCs [X] Yes [] No
 - 2 Results are produced with the most appropriate sensitive method (e g not using portable field analytical instruments) [X] Yes [] No

2 B Sample Quantitation Limits (SQL)

Note The SQL is not synonymous with the IDL (instrument detection limit) or the MDL (minimum detection limit) The SQL is derived after considering the effects of dilutions, loss of instrument sensitivity, matrix interferences, and other interferences effecting the lower-end accuracy of analysis, and therefore resulting in the elevation of the method detection limit The SQL will be the only detection limit considered for comparison to limiting standards

- 1 All SQLs are less than reference concentrations (RS or SS)
 Yes No (If yes, proceed to Section 2C, Qualifiers and Codes)
- 2 Samples with SQLs greater than the limiting standard are not being reported as non-detected (If yes, proceed to Item # 3 of this section)
 Yes No

If the SQL is higher than the limiting standard, and a non-detect is being reported, data may still be considered by the Department if all the below conditions are met

- (a) The non-detect results make up less than 5-10 percent of a sample set for a considered individual COC
- (b) The ND is not classified as being from a key sampling location (e.g. drinking water well)
- (c) Documentation provided by a LDEQ accredited laboratory (with supporting evidence) is included in the document demonstrating that a practical quantitation limit was not achievable due to site or sample specific conditions

Have the above three conditions been met? Yes No

Note If one or more of the above conditions cannot be met, the total (100%) value of the PQL may be reported as a positive detected result

Will this option be used and annotated in the Report? Yes No

Note If all answers in this item are "no," analytical results will be rejected and re-sampling will be required

- 3 Are sample results higher than both the PQL and the limiting standard?
[] Yes [X] No (If so, results may be used despite elevated PQL)

2 C Qualifiers and Codes

- 1 All qualifiers and codes for flagged data have been noted on form 3 and supporting documentation has been included in the laboratory information package [X] Yes [] No
- 2 All data with a qualifier of "R" (unusable data) do not come from critical sample points (if so, resample will be required) [] Yes [] No [X] N/A
- 3 All data with a qualifier of "J" (estimated concentrations) have been included as positive results [] Yes [] No [X] N/A

2 D Blank Samples

- 1 Field and laboratory blanks showed no signs of contamination, and no constituents were detected in blanks (If no constituents or contaminants were detected, proceed to 2E, Tentatively Identified Compounds)
[X] Yes [] No
- 2 Contaminants or constituents found in blanks can be considered common laboratory contaminants as defined by EPA (acetone, 2-butanone, methylene chloride, toluene, or phthalates), and the same contaminants found in site samples are present at quantities less than 10 times the levels found in blanks (If no, constituents are to be reported as detected COCs)
[] Yes [] No
- 3 Contaminants or constituents found in blanks are not considered common laboratory contaminants as defined by EPA, and the same contaminants found in site samples are present at quantities less than 5 times the levels found in blanks (If no, constituents are to be reported as detected COCs)
[] Yes [] No

2 E Tentatively Identified Compounds (TIC)

All possible TIC have been identified, evaluation is supported with documentation in the text, and information conforms to the requirements as listed in Section 2.5 of the RECAP [X] Yes [] No

2 F Historical Data

- 1 All quantitative historical data has been reviewed by current QA/QC guidelines, and all applicable supporting information is justified and included in the report Yes No N/A
- 2 All qualitative historical data is verifiable, has not been used quantitatively, and has only been used in the development of a conceptual model Yes No N/A

3 Documentation

3 A Laboratory information package assembled as follows Yes No

- 1 Sample documentation (chains of custody, preparation time, time of analysis)
- 2 Sample and analyte identification and quantification
- 3 Determination and documentation of sample quantitation limits (SQLs)
- 4 Initial and continuing calibration
- 5 Performance evaluation samples (external QA or laboratory control samples)
- 6 Matrix spike recoveries
- 7 Analytical error determination (determined with replicate samples)
- 8 Total measurement error determination summary (Evaluates overall precision of measurement system from sample acquisition through analysis Determined with field duplicate and matrix spike with matrix spike duplicate)
- 9 Explanation and supporting documentation for flagged data

3 B All methods used in all analysis have produced tangible raw data (e.g. chromatograms, spectra, digital values), and are available to the Department upon request Yes No

- 1 Representative data is included in documentation as examples of method procedures Yes No
- 2 All flagged data is supported with complete associated tangible raw data (e.g. depiction of matrix interferences, spiked recoveries reported outside of control limits, evidence for need for dilution etc.) Yes No

Note Any "no" answer must be explained at the conclusion of this form. Items not applicable should be left unmarked.

4 Submitter Information

Date October 9, 2008

Name of Person submitting this evaluation Jennifer Sepulvado

Affiliation Groundwater & Environmental Services, Inc

Signature Jennifer Sepulvado Date 10/9/08

Additional Preparers _____

APPENDIX G
DATA USABILITY SUMMARY



**CONESTOGA-ROVERS
& ASSOCIATES**

2371 George Urban Blvd
Depew New York 14043
Telephone (716) 206 0202 Fax (716) 206 0201
www CRAworld com

MEMORANDUM

TO Gustavo Douaihi (Baton Rouge) REF NO 025881

FROM Karen Bevilacqua/jbh/1 DATE October 16 2007
E Mail and U.S. Mail

RE QA/QC Review of Analytical Data
Former Exxon Retail Store No 5-0608
Baton Rouge, Louisiana
July 2007

INTRODUCTION

Soil and groundwater samples were collected during July 2007, in support of the Additional Site Investigation for the Former Exxon Retail Store No 5-0608 Analytical services were provided by TestAmerica Inc in Nashville Tennessee

The analytical methods and holding time criteria are summarized in Table 1 The analytical results are presented in Tables 2A-2C Copies of the Chain of Custody forms are attached

The evaluation of the data was based on information obtained from the Chain of Custody forms finished report forms, blank data duplicate data and recovery data for matrix blank, and surrogate spikes

Data were assessed using the methods and the following documents

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" United States Environmental Protection Agency (USEPA) 540/R-99-008 October 1999, and
- ii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" USEPA 540/R-94-013 February 1994

QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) REVIEW

All samples were properly preserved and stored at 4°C (±2°C)

Sample analyses were performed within the method-specified holding times

Method blanks were prepared and analyzed at the required frequency for all parameters The blank results were non-detect for all target analytes indicating laboratory contamination was not an issue

Surrogates were added to all samples blanks, and QC samples prior to organic analysis All surrogate recoveries were acceptable, indicating good analytical efficiency, with the exception of a high recovery for volatile petroleum hydrocarbons (VPH) All associated positive sample results were qualified as estimated based on the implied high bias (see Table 3)

Blank spike (BS) and/or blank spike duplicate (BSD) were prepared and analyzed with the samples for all parameters All recoveries were within laboratory control limits indicating good laboratory accuracy and/or precision

A matrix spike/matrix spike duplicate (MS/MSD) analyses was performed on sample #25881-072407-DP1 (14-15) All recoveries were within the required control limits indicating good analytical accuracy and precision with the exception of a low recovery for benzo(a)pyrene All associated sample results were qualified as estimated based on the implied low bias (see Table 4)

Sample #25881-072407-DP1 was collected in duplicate and submitted "blind" to the laboratory for analysis All data outside of the estimated region of detection were comparable indicating good field sampling and analytical precision

Equipment rinse blanks field blanks, and trip blanks were collected and submitted with the investigative samples All blank results were non-detect for the analytes of interest

CONCLUSION

Based on the assessment and validation of the analytical data provided these data are acceptable for their intended use with the qualifications noted

APPENDIX H
ECOLOGICAL CHECKLIST
RECAP FORM 18

RECAP FORM 18 ECOLOGICAL CHECKLIST

Section 1 Facility Information

- 1 Name of facility Former Exxon Retail Station No. 5 0608
- 2 Location of facility 4555 Essen Lane,
Baton Rouge, LA

Parish East Baton Rouge Parish
- 3 Mailing address 16945 Northchase Drive, Room 537
Houston, TX 77060
- 4 Type of facility and/or operations associated with AOC Retail Gasoline and Convenience Store
- 5 Name of AOC or AOI AOC 1 and AOC 2
- 6 If available attach a USGS topographic map of the facility and/or aerial or other photographs of the release site and surrounding areas See Figures 1 and 2, Appendix A

Section 2 Land Use Information

- 1 Describe land use at and in the vicinity of the AOC/AOI The Areas of Concern are located in a commercial area
- 2 Describe land use adjacent to the facility Land use surrounding the facility is primarily commercial
- 3 Provide the following information regarding the nearest surface water body which has been impacted or has the potential to be impacted by COC migrating from the AOC/AOC
 - a) Name of the surface water body Ward Creek
 - b) Type of surface water body
 freshwater river or stream
 freshwater swamp/marsh/wetland
 saltwater or brackish swamp/marsh/wetland
 lake or pond
 bayou or estuary
 drainage ditch
 other Canal
 - c) Designated use of the segment/subsegment of the surface water body (LAC 33 IX) (040201) Primary and Secondary Contact Recreation and Propagation of Fish and Wildlife
 - d) Distance from the AOC/AOI to nearest surface water body 565 feet
- 4 Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site e.g. federal and state parks, national and state monuments, wetlands, etc? Yes No

If yes explain

Section 3 Release Information

- 1 Nature of the release Gasoline from an underground storage tank system
- 2 Location of the release (within the facility) Petroleum hydrocarbon impact detected in the vicinity of the UST system
- 3 Location of the release with respect to the facility property boundaries Release occurred from the UST system which is located in the central portion of the site
- 4 Constituents known or suspected have been released Gasoline
- 5 Indicate which media are known or suspected to be impacted and if sampling data are available
 - soil 0 - 3 feet bgs yes no
 - soil 0 - 15 feet bgs yes no
 - soil >15 feet bgs yes no
 - groundwater yes no
 - surface water/sediment yes no
- 6 Has migration occurred outside the facility property boundaries? yes no
If yes, describe the designated use of the offsite land impacted N/A

Section 4 Criteria for Further Assessment

If the AOI meets **all** of the criteria presented below then typically no further ecological evaluation shall be required. If the AOI **does not** meet **all** of the criteria then a screening level ecological risk shall be conducted. The Submitter should make the initial decision regarding whether or not a screening level ecological risk assessment is warranted based on compliance of the AOI with criteria listed below. After review of the ecological checklist and other available site information the Department will make a final determination on the need for a screening level ecological risk assessment. If site conditions at the AOI change such that one or more of the criteria are not met then a screening level ecological risk assessment shall be conducted. Answers shall be based on current site conditions (i.e. shall not consider future remedial actions or institutional or engineering controls).

Indicate if the AOI meets the following criteria

- (1) The area of impacted soil is approximately 5 acres or less in size (based on the AOI identified for the human health assessment) and it is not expected that the COC will migrate such that the soil AOI becomes greater than 5 acres in size yes no
- (2) There is no current release or demonstrable long term threat of release (via runoff or groundwater discharge) of COC from the AOI to a surface water body yes no
- (3) Recreational species, commercial species, threatened or endangered species and/or their habitats are not currently being exposed or expected to be exposed to COC present at or migrating from the AOI yes no
- (4) There are no obvious impacts to ecological receptors or their habitats and none are expected in the future yes no

Is further ecological evaluation required at this AOI? yes no
This determination is subject to Department concurrence

Section 5 Site Summary

The ecological checklist submittal shall include a site summary that presents sufficient information to verify that the AOI meets or does not meet the criteria for further assessment.

Section 6 - Submitter Information

Date October 9, 2008

Name of person submitting this checklist Jennifer Guelfo

Affiliation Groundwater & Environmental Services, Inc.

Signature Jennifer Sepulvado

Date 10/9/08

Additional Preparers N/A

**OFFICE OF ENVIRONMENTAL ASSESSMENT
UNDERGROUND STORAGE TANKS DIVISION**

SECTION: USTD PROJECT: Grandy 52008 ORIGINATOR: CRM
 DATE: 8/31/09 A#: 13366 OTHER #:

	Req'd.	Signature	Date	Comments
Section Mgr./Supvr.	<input checked="" type="checkbox"/>	<i>[Signature]</i>	8/31/09	
Adm. Assistant	<input type="checkbox"/>			
Administrator	<input checked="" type="checkbox"/>	<i>[Signature]</i>	8/31/09	
Legal	<input type="checkbox"/>			
Other ()	<input type="checkbox"/>			
Assistant Secretary	<input type="checkbox"/>			
Deputy Secretary	<input type="checkbox"/>			
Secretary	<input type="checkbox"/>			
Additional Comments				

7004 2510 0005 5770 8863

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OFFICIAL USE

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Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	

Postmark
Here

Total P: Mr. Dale Gomm

Send To	Exxon Mobil Corp.
Street, Apt. or PO Box	16825 Northchase Dr., Rm. 928C
City, State	Houston, TX 77060

PS Form 3800, June 2002

See Reverse for Instructions

BOBBY JINDAL
GOVERNOR



HAROLD LEGGETT, Ph.D.
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL ASSESSMENT

AUG 31 2009

CERTIFIED – RETURN RECEIPT REQUESTED (7004 2510 0005 5770 8863)

Mr. Dale Gomm
Exxon Mobil Corp.
16825 Northchase Dr., Rm. 928C
Houston, TX 77060

RE: No Further Action Notification
Former Exxon Store No. 5-0608; **AI No. 13366**
UST FID No. 17-004224; UST Incident Nos. 78436, 83584
4555 Essen Lane, Baton Rouge; East Baton Rouge Parish

Dear Mr. Gomm:

The Louisiana Department of Environmental Quality – Underground Storage Tank Division (LDEQ-USTD) has completed its review of your plugging and abandonment report dated July 23, 2009, for the above referenced area of investigation located at 4555 Essen Lane in East Baton Rouge Parish. Based on our review of this document and all previously submitted information, we have determined that no further action is necessary at this time. The Basis of Decision for this notification is attached.

No soils may be removed from this site without prior approval from LDEQ unless they are removed and disposed at a permitted disposal facility. Prior to the construction of enclosed structures over any portion of the impacted area, further evaluation and approval from LDEQ is warranted.

Mr. Dale Gomm

Page 2

If you have any questions or need further information, please call Chris Means at (225) 219-3430.
Thank you for your cooperation in addressing this area.

Sincerely,

A handwritten signature in black ink, appearing to read "Tim B. Knight". The signature is fluid and cursive, with a large initial "T" and "K".

Tim B. Knight, Administrator
Underground Storage Tank Division

crm

Attachment

c: Imaging Operations – UST
 Terri Gibson – RSD
 Melissa Vizinat – MFTF
 Don Haydel – MFTF
 Ryan Francis, Groundwater & Environmental Services, Inc.

BASIS OF DECISION FOR NO FURTHER ACTION

Former Exxon Store No. 5-0608

AI No. 13366

The Louisiana Department of Environmental Quality – Underground Storage Tank Division—Remediation Process (LDEQ-USTD-RP) has determined that Former Exxon Store No. 5-0608 requires No Further Action At This Time.

The property was previously used as a fueling station. A Phase II site investigation was conducted in March of 2005, as part of a site divestment. The investigation included the installation of three monitoring wells (MW-1 through MW-3) and the collection of three soil samples and three groundwater samples for laboratory analyses. Investigation results indicated levels of MTBE in soils and benzene, MTBE, TPH-G, TPH-D, naphthalene, and 2-methylnaphthalene in groundwater above RECAP Screening Standards (SS).

Four USTs were removed from the property on April 13, 2005. Following the excavation, 16 sidewall and backfill soil samples (S-1 through S-16) were collected for laboratory analyses. Investigation results indicated levels of benzene, MTBE, and TPH-G in soils above RECAP SS.

Additional investigation activities were conducted on July 24, 2007. The investigation included the installation of two soil borings (DP-1 and GT-1) and the collection of three soil samples and one groundwater sample for laboratory analyses. Investigation results indicated levels of TPH-D in groundwater above RECAP SS.

Soils contained levels of benzene, MTBE, and TPH-G above RECAP SS. Groundwater was classified as Groundwater 3 Non-Drinking Water (GW_{3NDW}). The fractional organic content (foc) of the impacted soils was determined to be 0.0138 and the source length was determined to be 30 feet. Using figure I-1 in Appendix I, the site was evaluated as a Category 8. The distance between the Point of Compliance (POC) and Ward Creek, which is the Point of Exposure (POE), is 565 feet. Using Figure I-2 in Appendix I, a dilution factor (DF) of 476 was derived. The Category 8 Soil GW_{3NDW} value for benzene and MTBE was multiplied by this DF to account for attenuation from the POC to the POE. The Soil GW_{3NDW} values for benzene, MTBE, and TPH-G were compared to the Soil_{NI} and Soil_{SAT} values with the lowest value taken as the RECAP clean-up standard. The impacted media, COCs, maximum concentration remaining on site and limiting Appendix I RECAP standards established for this AOC are listed in the following table:

Constituents of Concern (Soil)	Maximum Remaining Concentration	Limiting App. I RECAP Standard
Benzene	0.101 ppm	3.1 ppm ¹
MTBE	0.149 ppm	12,000 ppm ¹
TPH-G*	369 ppm	1,200 ppm ¹

¹Soil_{NI}

Groundwater contained levels of benzene, MTBE, TPH-G, TPH-D, 2-methylnaphthalene, and naphthalene above RECAP SS. The Category 8 GW_{3NDW} values for all COCs were multiplied by a DF of 476 to account for attenuation from the POC to the POE. These GW_{3NDW} values were compared to the Water_{SOL} and GW_{AIR} values where appropriate with the lowest value taken as the RECAP clean-up standard. The impacted media, COCs, maximum concentration remaining on site and limiting Appendix I RECAP standards established for this AOC are listed in the following table:

Constituents of Concern (Groundwater)	Maximum Remaining Concentration	Limiting App. I RECAP Standard
Benzene	0.159 ppm	6.2 ppm ¹
MTBE	0.199 ppm	51,000 ppm ²
TPH-G*	19.3 ppm	250 ppm ³
TPH-D*	8.36 ppm	11,424 ppm ¹
2-Methylnaphthalene	0.398 ppm	12.9 ppm ¹
Naphthalene	0.4 ppm	31 ppm ²

¹GW_{3NDW}; ²Water_{Sol}; ³GW_{AirNI}

An enclosed space evaluation for soil was conducted, where levels of MTBE, aliphatics>C₆-C₈, and aliphatics>C₈-C₁₀ were detected. These COCs were compared to the Soil Non-Industrial Enclosed Space (Soil_{ESNI}) values. The impacted media, COCs, maximum concentration remaining on site and limiting Enclosed Space standards established for this AOC are listed in the following table:

Constituents of Concern (Soil)	Maximum Remaining Concentration	Limiting Enclosed Space RECAP Standard
MTBE	0.005 ppm	133 ppm ¹
Aliphatics>C ₆ -C ₈ *	16.9 ppm	120 ppm ¹
Aliphatics>C ₈ -C ₁₀ *	6.01 ppm	29 ppm ¹

¹GW_{ESNI}

An enclosed space evaluation for groundwater was conducted, where levels of ethyl benzene, xylene, MTBE, fluorene, 2-methylnaphthalene, naphthalene, and phenanthrene were detected. These COCs were compared to the Groundwater Non-Industrial Enclosed Space (GW_{ESNI}) values. The impacted media, COCs, maximum concentration remaining on site and limiting Enclosed Space standards established for this AOC are listed in the following table:

Constituents of Concern (Groundwater)	Maximum Remaining Concentration	Limiting Enclosed Space RECAP Standard
Ethyl benzene	0.00794 ppm	767 ppm ¹
Xylene	0.00621 ppm	9 ppm ¹
MTBE	0.0071 ppm	800 ppm ¹
Fluorene	0.000152 ppm	2,250 ppm ¹
2-Methylnaphthalene	0.000419 ppm	28 ppm ¹
Naphthalene	0.00157 ppm	3.3 ppm ¹
Phenanthrene	0.000105 ppm	73,000 ppm ¹

¹GW_{ESNI}

*The total concentration of petroleum hydrocarbons present in each impacted medium at an AOI shall be less than or equal to 10,000 ppm. The total petroleum hydrocarbon concentration shall be determined by summing the AOIC or compliance concentration for each aliphatic and aromatic hydrocarbon fraction detected in the medium of concern at the AOI or by summing the AOIC or compliance concentration for each hydrocarbon mixture detected in the medium of concern at the AOI.

Soil and groundwater sampling has confirmed that constituents of concern concentrations do not exceed the established site-specific remediation standards, so no remedial action was required. No Further Action At This Time is granted when contamination is confirmed to exist at concentrations that do not exceed the established standards. There are no institutional controls on this property.

An inspection of the site was performed on August 27, 2009, confirming that no investigation derived waste remains on site and that all monitoring wells were plugged and abandoned. No soils may be moved from this location without written authorization from the LDEQ unless they are removed and disposed at a permitted disposal facility.

Additional information on the details of the investigation and evaluation of this site may be obtained from LDEQ's Public Records Center located in the Galvez Building, Room 127, 602 N. Fifth Street, Baton Rouge, LA 70802. Additional information regarding the Public Records may be obtained by calling (225) 219-3168 or by emailing publicrecords@la.gov.

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
FIELD INTERVIEW FORM**

AGENCY INTEREST#: 13366 INSPECTION DATE: 8/27/09 TIME OF ARRIVAL: 12:24 PM

ALTERNATE ID#: _____ DEPARTURE DATE: 8/27/09 TIME OF DEPARTURE: 12:30 PM

FACILITY NAME: ^(ID Type/Number) Former Exxon No. 5-2608 PH #: _____

LOCATION: 4555 Essen Lane, Baton Rouge

RECEIVING STREAM (BASIN/SUBSEGMENT): _____ PARISH NAME: EBA

MAILING ADDRESS: _____
(Street/P.O. Box) (City) (State) (ZIP)

FACILITY REPRESENTATIVE: _____ TITLE: _____

FACILITY REPRESENTATIVE PHONE NUMBER: _____

NAME, TITLE, ADDRESS and TELEPHONE of RESPONSIBLE OFFICIAL (if different from above): _____

INSPECTION TYPE: NFA-ATT PROGRAM INVOLVED: AIR WASTE WATER OTHER UST

INSPECTOR'S OBSERVATIONS: (e.g. AREAS AND EQUIPMENT INSPECTED, PROBLEMS, DEFICIENCIES, REMARKS, VERBAL COMMITMENTS FROM FACILITY REPRESENTATIVES)

NFA-ATT Inspection: All monitoring wells Pt. Aged. No investigation deemed waste observed on-site.

AREAS OF CONCERN:

REGULATION	EXPLANATION	CORRECTED?	
_____	_____	YES	NO
_____	_____	YES	NO
_____	_____		

PHOTOS TAKEN: YES NO SAMPLES TAKEN: YES NO (Attach Chain-of-custody)

RECEIVED BY: SIGNATURE: _____

PRINT NAME: _____

(NOTE: SIGNATURE DOES NOT NECESSARILY INDICATE AGREEMENT WITH INSPECTOR'S STATED OBSERVATIONS)

INSPECTOR(S): Chris Meon

CROSS REFERENCE: _____

ATTACHMENTS: _____

REVIEWER: _____

NOTE: The Information contained on this form reflects only the preliminary observations of the inspector(s). It should not be interpreted as a final determination by the Department of Environmental Quality or any of its officers or personnel as to any matter, including, but not limited to, a determination of compliance or lack thereof by the facility operator with any requirements of statutes regulations or permits. Each day of non-compliance constitutes a separate violation of the regulations and/or the Louisiana Environmental Quality Act.



State of Louisiana
Department of Environmental Quality



BUDDY ROEMER
Governor

PAUL TEMPLET
Secretary

April 25, 1990

Roger Barielle
3235 Perkins Road
Baton Rouge, LA 70808

RE: Spur Service Station, Perkins Rd., B.R., LA
Four Tank Closures - Tanks Not Registered

Dear Sir:

We acknowledge receipt of your "Underground Storage Tank (UST) Closure Notification Form" dated April 18, 1990 for the above referenced facility.

Guidelines for permanent closure of USTs may be found in the American Petroleum Institute Publication #1604, or the National Fire Protection Association Handbook #30. The State Fire Marshal's Office must be contacted prior to tank closure; however, in cases where the USTs are located within a city's corporate limits, the local fire department is the appropriate body to contact.

After UST closure, we require the completion of the following forms to be submitted in duplicate: 1) UST Removal Information (form attached); 2) an amended copy of the UST Registration Form; 3) results of soil or groundwater analyses; and 4) a sketch of the site depicting UST and sampling locations. Failure to submit this information could result in the continuation of annual invoicing to the owner for the underground storage tank(s) that have not been properly removed from our inventory data base.

If you have any questions, please contact Mr. Dennis Strickland of our Capital Regional Office at (504) 342-7808. Please call him the week prior to the anticipated tank(s) closure. Thank you for your assistance in this matter.

Sincerely,

Frank L. Dautriell, Program Manager
Underground Storage Tank Division

FLD/DS/tb
Attachment

UNDERGROUND STORAGE TANK DIVISION P.O. BOX 44274 BATON ROUGE, LOUISIANA 70804

AN EQUAL OPPORTUNITY EMPLOYER

State FILE C

Return to: State of Louisiana

Department of Environmental Quality
Office of Solid and Hazardous Waste
Underground Storage Tank Division
P.O. Box 44274 Baton Rouge, LA 70804-4274

I.D. Number _____

Date Received _____

Regional Office _____

RECEIVED

Please complete and return thirty (30) days prior to permanent tank(s) closure.

1. Ownership of Tank(s) _____ Location _____

Owner Name (Corporation, Individual, Partnership, or other Entity) Facility Name or Company Site Identifier

Roger Barrielle TANK DIVISION Spur Service Station, Perkins Rd.

Street Address Street Address or State Road

3235 Perkins Road East Baton Rouge

Parish East Baton Rouge

City State Zip Code City (Nearest) State Zip Code

70808 509 387-3454

2. Type of closure: (check one) Removal Close in Place

3. Number of tank(s) to be permanently closed: 4

4. If the tank(s) are to be closed in place, indicate cleaning method and type of fill material to be used:

5. Name and contractor number of contractor/individual performing tank closure and the scheduled date:

Petrocher Maintenance, Inc., P. O. Box 40345, Baton Rouge, La, 70835-0345

6. Name of analytical laboratory to conduct sample analysis:

American Analytical, 16550 Highland Rd., Baton Rouge, La.

7. Soil and/or groundwater samples must be collected to determine if a release has occurred. Proper sampling protocol should be obtained from the laboratory prior to commencement of closure activities.

- a. Tank(s) closed by removal: Soil samples must be taken immediately after tank removal and placed on ice. Samples should be collected approximately two (2) feet beneath the tank pad fill material at both ends of each tank's elongated portion. If groundwater is encountered during removal, soil samples should be collected from the excavation side wall at the uppermost level of the encountered groundwater. Groundwater samples are also acceptable.
- b. In-Place Closure: Samples must be obtained as described above utilizing an auger or similar instrument.
- c. Below is a chart depicting analytical requirements. The type of analysis is dependent upon the product last stored in greatest quantity by volume.

Product	Sample Type	Analysis	Method
Gasoline	Soil Groundwater	BTEX ^{aa} BTEX and Total Lead	Solid Waste 846-Method 8020
Diesel	Soil Groundwater	TPH-Diesel ^{aa} TPH-Diesel	Modified California Department of Health Services Method
Waste Oil	Soil Groundwater	E.P. Toxicity Metals Total Organic Halogens Oil and Grease Volatile Organic Hydrocarbons	Solid Waste 846-Method 1310 ASTM Method D808 503 E Standard Methods Solid Waste 846-Method 8240

^{aa}BTEX = Benzene, Toluene, Ethylbenzenes, and Xylenes
^{aa}TPH-Diesel = Total Petroleum Hydrocarbons for diesel

CERTIFICATION

I certify the above submitted information is correct and I agree to submit the analytical results within 60 days after tank(s) closure:

- (1) Analytical Results.
- (2) Site Diagram indicating location(s) where sample(s) were collected.
- (3) Amended Registration Form.

Roger Barrielle
Owner's Name

[Signature]
Owner's Signature

4/18/90
Date Signed

**ENVIRONMENTAL SITE ASSESSMENT
OLD SPUR STATION
(STAR VIDEO)
BATON ROUGE, LOUISIANA**

**Prepared For:
Star Video
3235 Perkins Road
Baton Rouge, LA 70808**

**Prepared By:
ENVIRONMENTAL MATERIALS, INC.
2237 S. ACADIAN THRUWAY, SUITE 301
BATON ROUGE, LOUISIANA 70808
(504) 927-4850**

**September 25, 1990
EMI Project No. 903018**

File
10-15-90

ENVIRONMENTAL MATERIALS, INC.

5930 LBJ Freeway
Suite 400
Dallas, TX 75240
(214) 458-8162
FAX # (214) 991-5302

2237 South Acadian Thruway
Suite 301
Baton Rouge, LA 70808
(504) 927-4850
FAX # (504) 926-8515

October 8, 1990

Mr. Frank L. Dautriel
Underground Storage Tank Division
Department of Environmental Quality
P.O. Box 44274
Baton Rouge, LA 70804-4274

RE: **Old Spur Service Station**
3235 Perkins Road
Baton Rouge, LA
East Baton Rouge Parish
Site Assessment

Dear Mr. Dautriel:

Attached is the above referenced site assessment. As stated in the report the contamination plume is limited in extent. The recommended corrective action for this site is to remove contaminated soils for on-site land treatment. The soils would be returned to the excavation after the treatment standard has been reached. If you have inquires regarding the site assessment or future corrective action, please call me at your convenience (Telephone 504-927-4850).

Sincerely,



Paul D. Templet
Environmental Geologist

PDT/blt

cc: Mr. Roger Barielle

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Appendix E	List of Area Water Wells

EXECUTIVE SUMMARY

Environmental Materials, Inc. was employed by the owner of Star Video, located on the site of a former spur service station, to perform an environmental site assesement. During the removal of the old tanks at the site, contamination was found at two locations. Subsequent investigation at the waste oil tank showed that contamination probably came from a surface spill. Contamination was confirmed near the former gasoline tank bed.

This site assesement, in conjunction with other information available, has defined the plume of contamination. The plume is limited in extent and has migrated very slowly with the ground water. The plume is only two to three feet off-site to the east and has a concentration in the center of 23.8 ppm total BTEX.

A soil gas survey was used to located the southern extent of the plume, and to give an indication of the levels of BTEX constituents remaining in the tank bed. These levels exceeded 2,000 ppm on the photoionization detector at one of the two locations in the tank bed.

The corrective action recommended for this site is to remove the contaminated soil in the tank bed (and at the waste oil location) for on-site land treatment. The soils will be returned to the excavation once the treatment standard has been reached. Ground water would be monitored during this period to measure the effect of natural degradation on the BTEX constituents. An alternative corrective action measure would be to treat the soil as

above, partially backfill the excavation with pea gravel and create a large sump. Ground water would be removed from a well screen placed in the sump and treated through an on-site air stripper, or through filtration, prior to discharge to Dawson Creek.

INTRODUCTION

In early 1990, the owner of Star Video, formerly a Spur service station, removed the three gasoline Underground Storage Tanks (USTs) and one waste oil tank at the site. Analysis of the soil under one UST and the waste oil tank indicated that leaks may have occurred. Environmental Materials, Inc. (EMI) was employed to respond to a request from the Department of Environmental Quality (DEQ) for tests of soil and ground water - if possible - from outside the tank pits.

EMI placed two hand auger borings near the previous sample locations. In a letter report dated June 13, 1990 (Appendix A), EMI reported that soil near the waste oil tank did not show contamination at the depth of the tank. However, oil in the upper four feet of the boring did indicate that a surface spill may have occurred. Ground water samples near the UST, however, did show over 18 ppm total BTEX.

In a letter dated July 10, 1990, DEQ required a site assessment of the property. This report documents the work done for that site assessment.

FACILITY DESCRIPTION

Star Video is located on Perkins Road in Baton Rouge, Louisiana (see Figure 1). The improvements on the property have been significantly altered from the original Spur



SITE MAP

Old Spur Station
Star Video

Scale - 1:24,000

EMI Project #903018

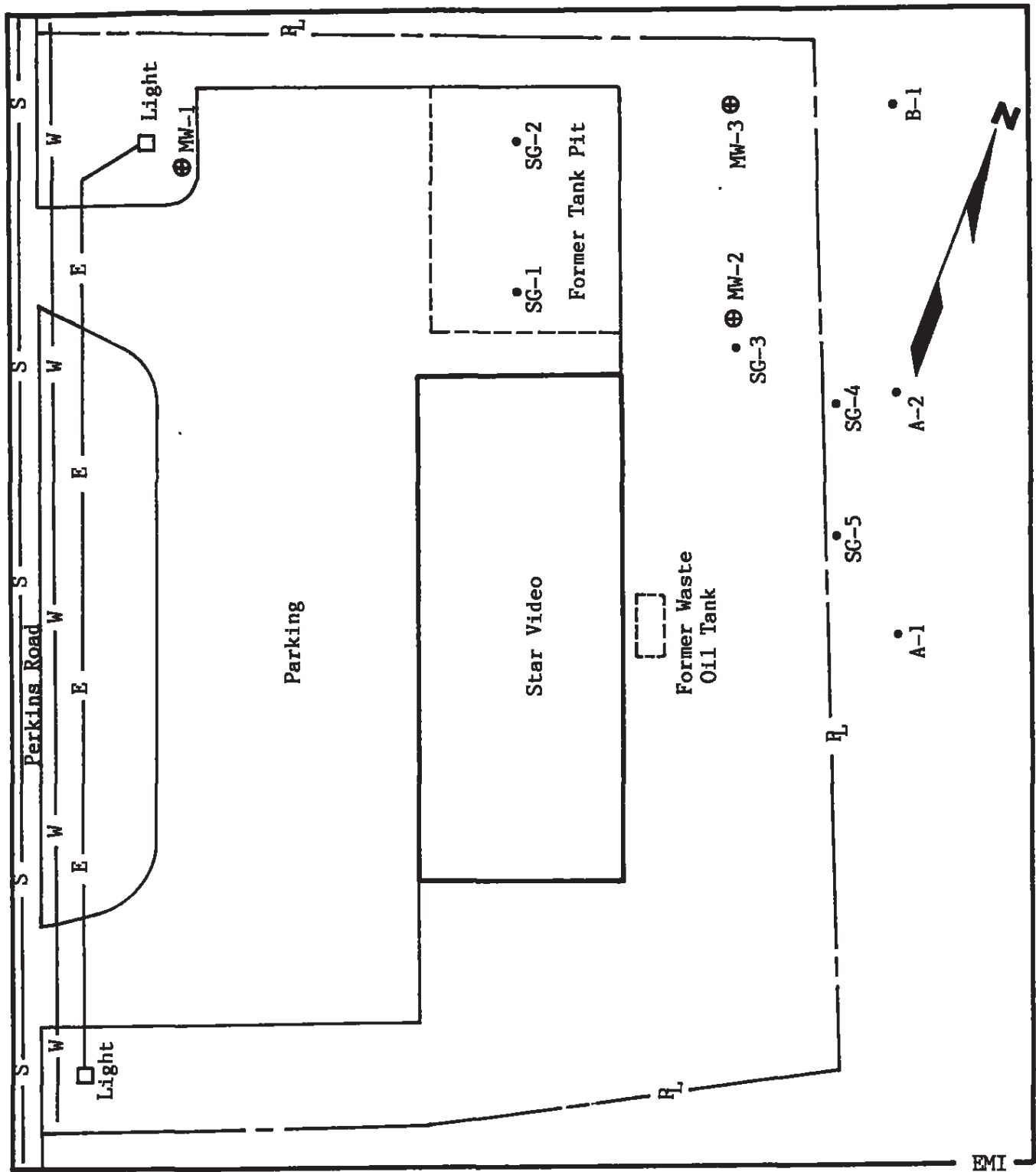
Figure 1

station. The building has been widened to accommodate the videotape rental business. Generalized tank locations are shown on the sketch map in Appendix A. Water, sanitary sewers, storm sewers and gas service are located underground. To the extent that these utilities were located, they are shown on Figure 2. Electrical and telephone service are above ground, except that outdoor lighting is run through underground conduits.

At some time in the past, prior to the construction of the Spur Station, the area was filled with rubble and dirt fill. The ground at the back of the building slopes sharply toward the back of the lot. The elevation of the store is approximately four feet above the elevation of the back of the property. The property slopes toward, and drains to, Dawson Creek. Construction of the Interstate 10 and its access ramp behind the store interrupts the flow of surface water. Ground water flow is still directly controlled by the creek, however.

BORING PROGRAM AND MONITOR WELL INSTALLATIONS

The site assessment field program began on August 20, 1990. Environmental Materials, Inc., (EMI) subcontracted drilling services to Encor, Inc., of Baton Rouge, LA. The field program was supervised by Paul D. Templet an environmental geologist with more than two years experience in monitor well installations. Three borings were drilled, continuously sampled and completed as three shallow monitoring wells. The well locations are displayed in Figure 2. Boring logs and well construction details are presented in Appendix B.



LEGEND

- E = Electric Line
- W = Water Line
- S = Storm Sewer
- SG-1 = Soil Gas Measurements
- A & B = Ground Water Grub Samples

SITE DIAGRAM

- Old Spur Station
- Star Video

Approx. Scale: 1"=20'

EMI Project #903018

Figure 2

The borings were drilled and the monitor wells completed in each boring using the solid stem auger method. The borings were advanced at 2-foot intervals using a 4-inch diameter solid stem auger. The borehole was continuously sampled ahead of the auger by hydraulically pushing a thin walled Shelby tube sampler into the soil at 2-foot intervals. Soil samples were collected from each interval, classified by the on-site EMI geologist and recorded on the boring log. Representative soil samples were selected from each borehole by the on-site geologist for Geotechnical testing. The number of geotechnical samples was based on the type and variability of the lithology encountered at the site. A representative soil sample was retained from each interval for headspace analysis of organic vapors representing gasoline constituents.

Soil samples collected for field screening of gasoline constituents were selected from the undisturbed portion of the shelby tube sampler. The ends and the exterior surface of each core sample were removed and the undisturbed portion placed in a clean ziplock bag and sealed. The soil samples were allowed to warm in the ambient air for a minimum of 20 minutes to allow warming to the atmospheric temperature ($>70^{\circ}\text{F}$). This promoted the volatilization of organic compounds present in the soil sample. The headspace above the soil sample in each ziplock bag was measured for organic vapors with a HNu photoionization instrument. After a sufficient period of time to allow volatilization of the organic vapors, the seal on the ziplock bag was broken and the HNu probe inserted into the ziplock bag and the measured organic vapor was recorded on the boring log. The HNu was factory calibrated before arriving on-site.

Following completion of the boring a monitor well was installed in each bore hole. All three monitor wells were constructed using 4-inch diameter flush threaded Schedule 40 PVC casing and well screen. The well screens for all three monitor wells were continuously slotted (0.01-inch slot size). The screen for MW-1 and MW-3 were 10-foot long and a 15-foot long screen was used to construct MW-2.

The screen interval for each monitor well was determined in the field by the EMI geologist. When ground water was encountered the depth was measured initially then after a minimum of 10 minutes to determine static ground water. The screen was then placed above and below the water table so that any floating hydrocarbons could be detected. Monitoring Well MW-1 was screened from 4 to 14 feet below land surface (ft bls), Monitor Well MW-2 was screened from 5 to 20 ft bls and Monitor Well MW-3 was screened from 5 to 15 ft bls.

Following casing and screen installation, a well screen filter pack was installed in the annulus surrounding each well screen. The filter pack consisted of a uniformly graded 20/40 silica sand. The sand pack was installed to 1 ft above the top of each well screen. The top of the filter pack was measured in each well with a weighted tape measure or a measured rod. After the filter pack installation was completed a one foot thick bentonite seal was installed on top of the filter pack of each monitor well.

The remainder of the well annulus was grouted to the base of the protective manhole insert

with portland cement. The wells were completed with locking well caps, and flush-mounted weather proof manhole covers and sealed at the surface with concrete. The well head is protected by a 2 feet x 2 feet x 4 inch sloping concrete pad.

All drilling equipment including the drilling rig were pressure washed initially and between each borehole to decrease the chance of cross-contamination between boreholes. To prevent cross contamination between sample intervals all shelby tubes were decontaminated by scrubbing with soap and water and using a pressure washer between each sample.

The development of the wells at the site was accomplished using a bottom discharging/filling PVC bailer. The wells were bailed in a manner as to not to damage to the well screen or disrupt the filter pack. All three wells were bailed dry then allowed to recover and were bailed dry again.

After all of the monitor wells were developed, the top-of-casing (TOC) elevations were surveyed and referenced to a common datum point. The relative TOC elevations are recorded on the boring logs.

REGIONAL GEOLOGY

The geology of the Baton Rouge area is composed of the Pleistocene deposits of the Prairie

ENVIRONMENTAL MATERIALS, INC.

Terrace. Loess deposits overlie the Pleistocene deposits in most areas of the city. Meandering streams have superimposed Holocene deposits, within their flood plains, over the older soils. This is the case at the subject property.

As can be seen in the geologic cross-section, Figure 3, the proximity of Dawson's Creek has produced a pattern of strata that grade from fine to coarser materials. The water table, as is expected, slopes toward the creek.

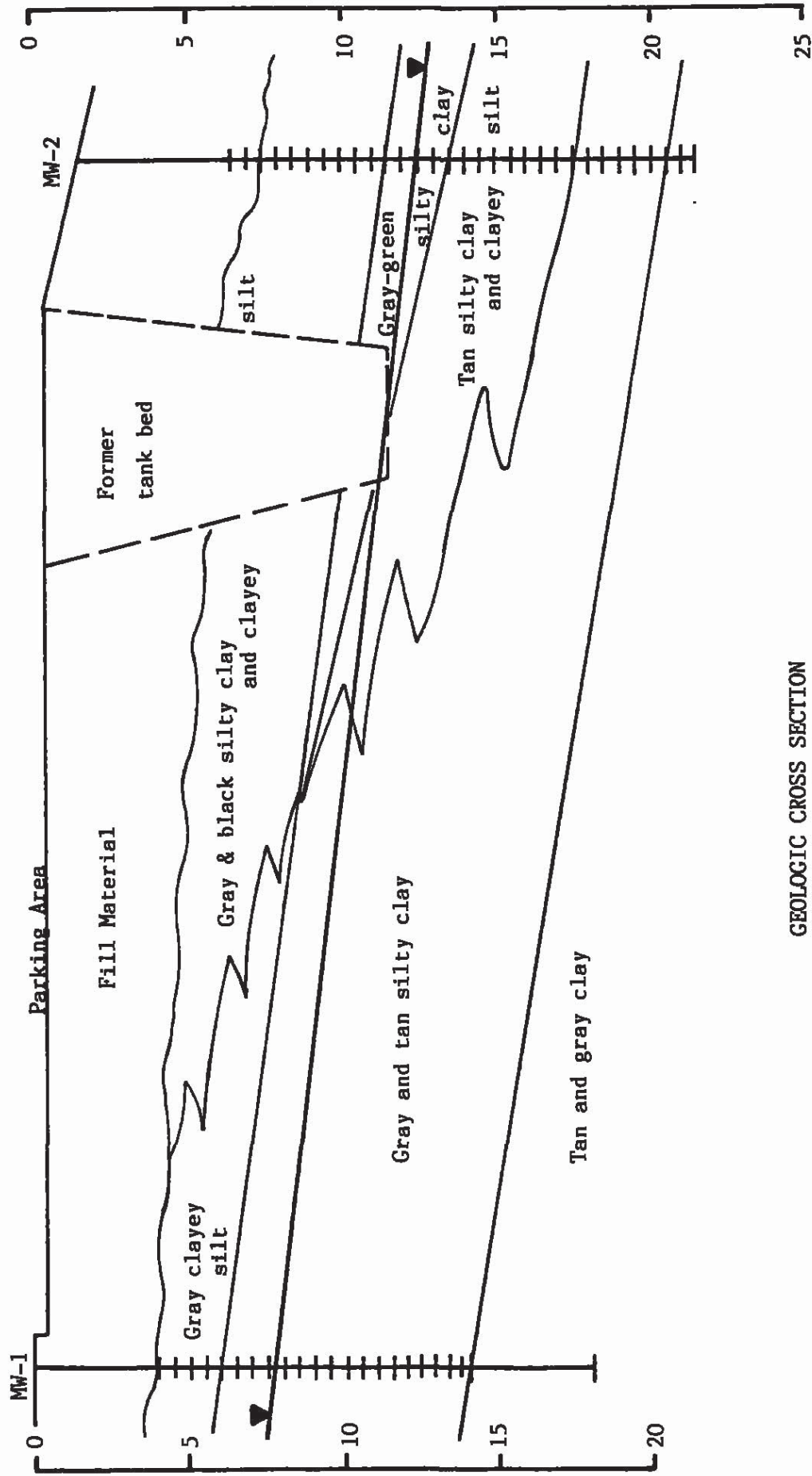
HYDROGEOLOGY

Water level measurements were made on the same day that the ground water was sampled, August 24, 1990. All measurements were made relative to a Reference Elevation (RE). The RE was set with a nail in the side of the building on the site. The water table measurements are shown on Table 1, below.

TABLE I
WATER LEVEL ELEVATIONS
AUGUST 24, 1990

Monitoring Well #	Relative Elevation TOC*	Depth to Water	Relative Water Elevation
1	48.04	7.92	40.12
2	48.58	11.10	37.48
3	47.70	9.27	38.43

*Reference Elevation - 53.72 feet.
Nail set in NE corner of building.



GEOLOGIC CROSS SECTION
 Old Spur Station
 Star Video

land surface elevations
 are approximations

Figure 3

LEGEND

- ▼ = Water level 8/24/90
- ▬ = Screened interval

Scale: horiz. - 1"=10'
 vert. - 1"=5'

EMI Project #903018

The elevations were contoured to produce a potentiometric map. This is shown as Figure 4. As is expected, the direction of flow is generally toward the east, in the direction of Dawson's Creek.

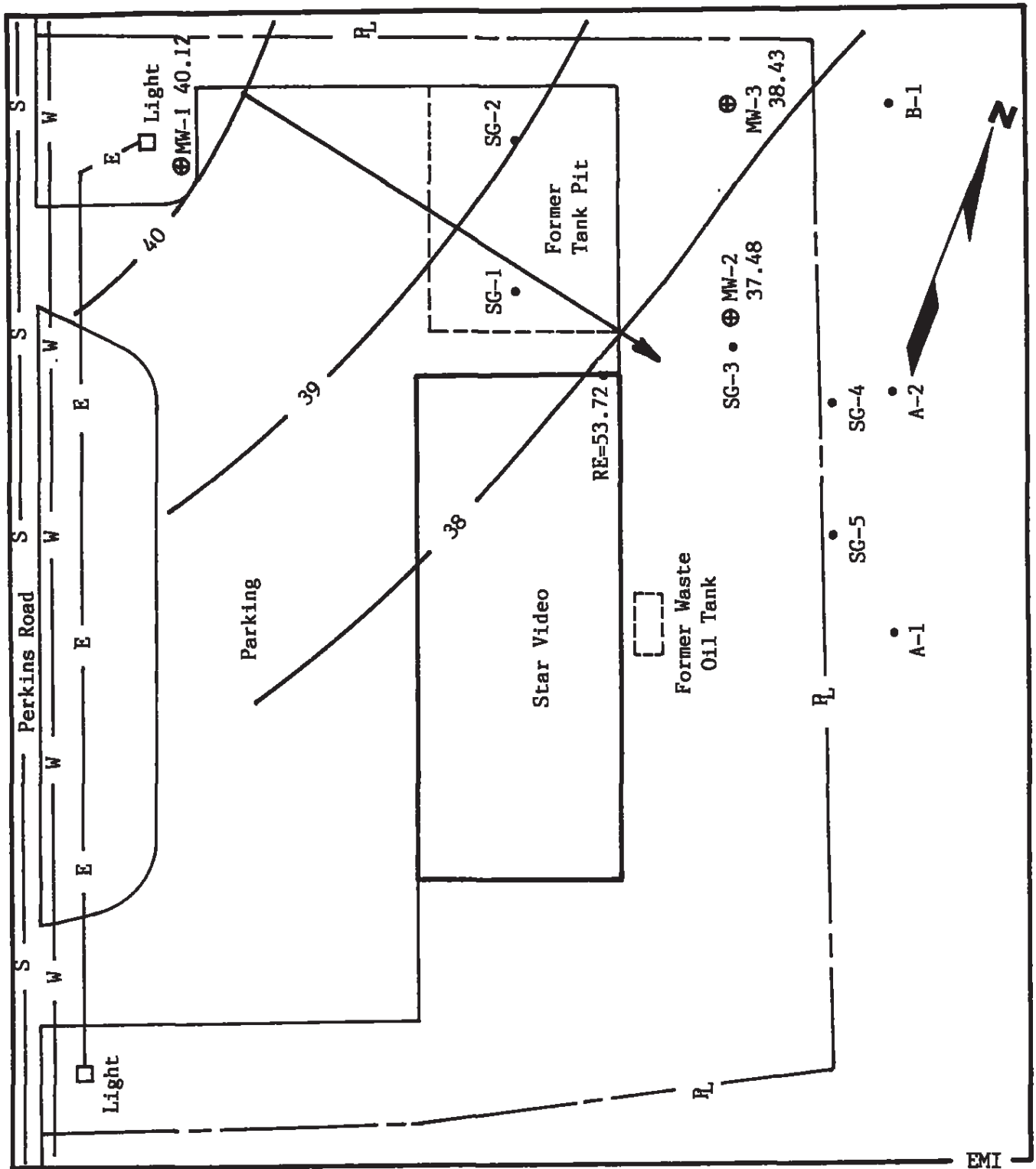
The hydraulic gradient of the water table is approximately .038 ft/ft. The mean ground water velocity can be calculated by assuming a hydraulic conductivity of 1×10^{-6} cm/sec (0.0028 ft/day) with an effective porosity of 0.80 for the silty clay under the site. Velocity can then be calculated by applying the Darcian flow equation $V = ki/n$ where:

V = Mean Ground Water Velocity (ft/day)
 k = Hydraulic Conductivity (ft/day)
 i = Hydraulic Gradient (ft/ft)
 n = Effective Porosity (dimensionless)

The calculated ground water velocity is 1.3×10^{-4} ft/day or .05 feet per year. At this rate one would not expect contamination being carried with the ground water to move very far.

GROUND WATER SAMPLES

Ground water samples from monitor wells 1-3 were collected on August 24, 1990. An electric water level indicator was used to take water level measurements in all wells prior to sampling. The electric water level indicator was decontaminated with a Tri-sodium phosphate wash followed by a potable water rinse followed by a distilled water rinse. All wells were bailed dry prior to sampling. The wells were allowed to recover then the ground water samples were collected with a disposable polyethylene bailer.



POTENTIOMETRIC SURFACE MAP

LEGEND

RE + Reference Elevation
 Old Spur Station
 Star Video

Approx. Scale: 1" = 20'

EMI Project #903018

Figure 4

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The samples were immediately put on ice, chilled to 4° C and transported to Dynatech Environmental Laboratories for analysis for Benzene, Ethylbenzene, Toluene, and Xylene by EPA Method 502/602. Proper chain-of-custody documentation was filled out for the samples and is included, along with the test results, as Appendix C. The test results are tabulated in Table 2, below.

**TABLE 2
ANALYTICAL RESULTS**

Well No.	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	Total BTEX (ppm)
1	ND*	ND	ND	ND	ND
2	7,880	5,865	192	9,858	23.8
3	BDL**	ND	ND	ND	ND

*ND = Not detected at method detection limit.

**BDL = Detected, but below the method detection limit, therefore not a reliable quantification could not be done.

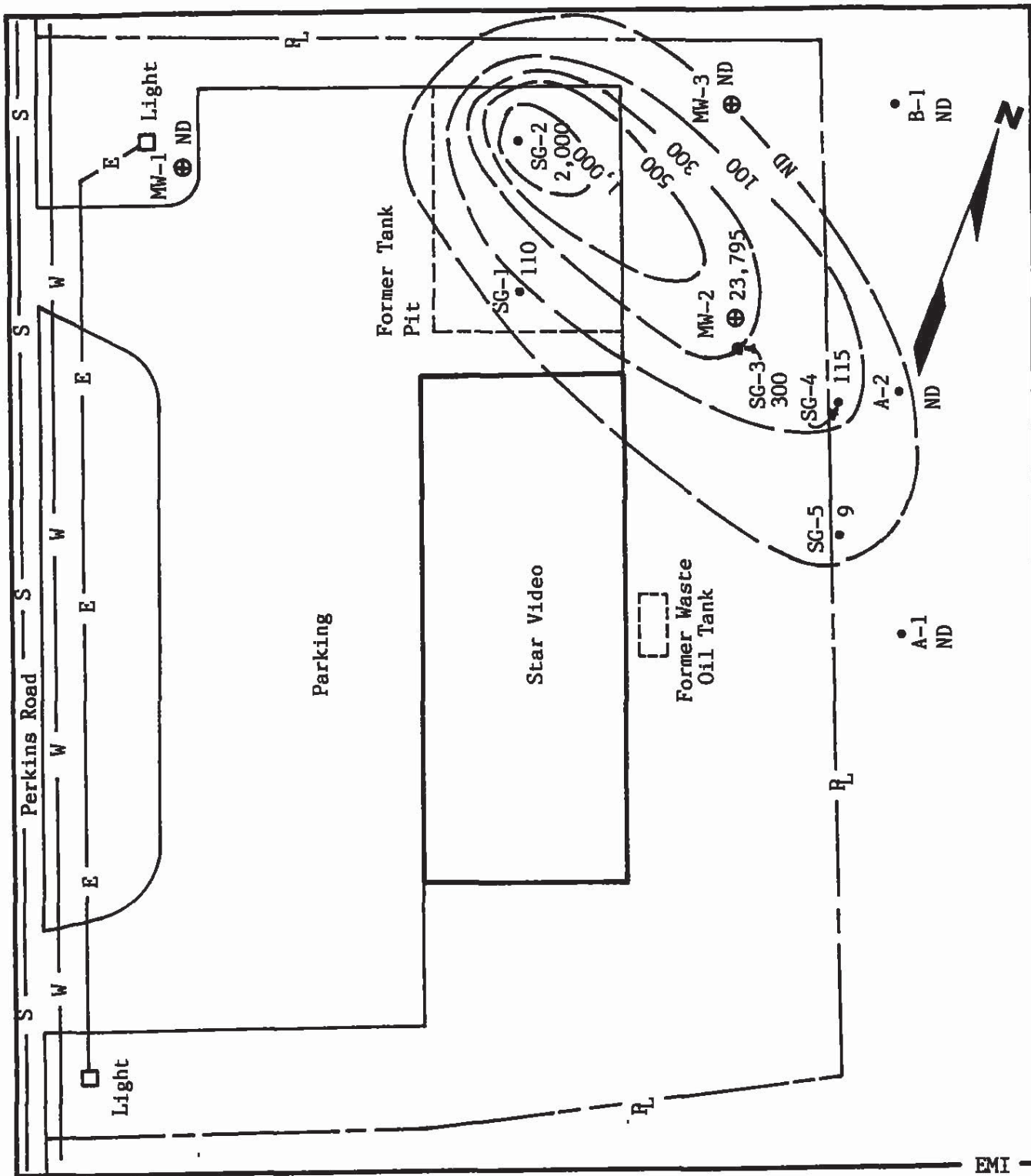
Method Detection Limit - 10 ppb

In addition to the water samples obtained as described above, three samples were obtained for the adjacent property owner. The samples were obtained from hand auger borings taken along the east boundary of the subject property. The approximate location of these samples are shown on Figures 2, 4 and 5. The results of these analyses are shown in Appendix D. No gasoline constituents as BTEX were found in the samples.

SOIL GAS SURVEY

BTEX constituents were confirmed in MW-2, and shown not to be present off-site by the Geosciences, Inc. borings, however, the plume of contamination was not well defined to the south. A soil gas survey was performed to further define the extent of the BTEX constituents in the ground water.

The survey was conducted by driving a steel penetrometer to the ground water table, as shown by the water level in MW-2. A polyethylene tube was inserted in the hole which remained after the penetrometer was removed, and soil vapors were measured for BTEX constituents at various depths. Measurements were made with the same HNu photoionization detector used to measure vapors during monitoring well installation. Five locations were chosen for the survey. They are shown on Figure 5. Two were located in the former tank bed to determine upgradient conditions, one was located next to MW-2 to calibrate the measurements with the previous work, and two were located on the southern edge of the plume to provide plume delineation. The results are listed in Table 3, and are graphically portrayed in Figure 5.



SOIL VAPOR CONCENTRATIONS

LEGEND

Monitoring Well & Grub Samples are total BTEX values in ppb
 SG data are in ppm, taken from the highest HNU reading in the hole.

Old Spur Station
 Star Video

Approx. Scale: 1"=20'

EMI Project #903018

Figure 5

**TABLE 3
SOIL VAPOR READINGS**

Boring	Depth (Ft.)	HNU Reading (ppm)	Boring	Depth (Ft.)	HNU Reading (ppm)
SG-1	7	15	SG-4	1	10
	9	110		2	115
SG-2	3	17		3	105
	6	>2,000		4	106
	9	25		5	110
SG-3	1	180		6	88
	2	280		7	88
	3	300	SG-5	1	7
	4	300		2	9
	5	240		3	7
	6	240		4	6
	7	190		5	6
				6	5
				7	3
				8	2

The results of the survey show that the plume is almost wholly contained on-site, with only a slight movement off-site to the east. Due to the slow movement of ground water in this area, extensive migration is not anticipated.

AREA WATER WELLS

A list of registered water wells within a one-half mile radius of the site was obtained from the department of Transportation and Development (DOTD), Water Resources Section. A total of 25 wells have been registered with DOTD in the given area. The list is included as Appendix E. Of the 25 wells, two have been abandoned, two are heat pump wells, two are used for water supply, one is used for irrigation and the remaining 19 are either monitoring or observation wells. Figure 6 shows the five wells from which water is taken. The remaining wells are not routinely pumped, and have no impact on the situation at this site. The five wells are all 250 feet deep or deeper. No impact from the site is anticipated on these wells.

CORRECTIVE ACTION PROPOSALS

DEQ requires the assessment of two alternative corrective action measures after the extent to contamination is determined. EMI recommends the following measure, after assessing several alternatives in general and specifically the two included below.



Area Water Wells

Old Spur Station
Star Video

- Heat pump wells
- ▲ Public supply well

- Irrigation well
- Domestic well

Scale - 1:24,000

EMI Project #903018

Figure 6

ALTERNATIVE 1 (Recommended)

Oil from the surface spill remains in the upper four (4) feet of the soil column in the area of the waste oil tank which was removed. Additionally, the soil gas survey indicates that pockets of gasoline-contaminated soil remain in the tank pit. Both areas should be excavated to clean soil. The excavated soil will be spread on visqueen at the back of the subject property and landfarmed until the BTEX constituents are below one (1) part per million for each. Landfarming will be done by turning the soil with a plow, tiller or disc. Once the BTEX constituents have degraded past the clean-up level, the soil will be placed back into the excavations from which it came, and the site will be clean-closed.

Ground water monitoring will continue in the three wells on-site for the duration of the clean-up. This will document the degradation of the BTEX constituents in the water column. Once clean-up is achieved, the wells will be properly plugged and abandoned.

Doesn't address 23.8 ppm in MW-2 -- check M&U & off site impact. could this well diam. be increased & used as a recovery well to increase zone of influence & reduce remediation time?

Alternative 2 (considered)
This measure is similar to Alternative 1, except that, in addition to the soil clean-up as outlined above, ground water clean-up is included. After excavation, the tank pit will be partially filled with pea gravel. A six inch, Schedule 40, PVC Well Screen will be placed in the low end of the excavation creating a sump. Ground water will be withdrawn from the sump and treated on-site prior to discharge. Ground water treatment will be accomplished through air stripping, filtration, or a combination of both.

after 1 ppm is reached?



As before, soils removed from the excavations will be placed back in the excavations. Additional soil volume caused by the placement of pea gravel in the tank pit will be spread on the slope at the back of the property. Ground water will be monitored quarterly, as in Alternative 1.

↓ after treatment?

Due to the relatively small size of the plume, and the slow movement of ground water in this area, EMI recommends Alternative 1.

APPENDIX

A

ENVIRONMENTAL MATERIALS, INC.

5930 LBJ Freeway
Suite 400
Dallas, TX 75240
(214) 458-8162
FAX # (214) 991-5302

2237 South Acadian Thruway
Suite 301
Baton Rouge, LA 70808
(504) 927-4850
FAX # (504) 926-8515

June 13, 1990

Mr. Roger Barielle
Corporate Investment
3235 Perkins Road
Baton Rouge, LA 70808

RE: Old Spur Station
EMI Project # 903018

Dear Mr. Barielle:

This letter is to confirm my verbal report to you concerning my findings at your facility. As agreed, I took two samples from hand auger borings; one near the location of the waste oil tank and one near the location of sample 3 from the previous set of samples (see sketch attached).

The first boring, HA-1, was taken just north of the waste oil tank location inside the area where the concrete was broken out to remove the tank. The sample was taken from a depth of seven feet. As can be seen from the test results (see attached) no oil and grease was detected. During the boring process, however, free oil was observed in the joints and cracks of the clay in the upper four feet. This observation is consistent with a surface spill of oil from the drum that was stored at this location. It is not consistent with a leaking waste oil tank.

The second boring, HA-2 was taken three feet east of the end of the middle tank. Water was encountered at a depth of six and one half feet. The hole was advanced to a depth of eight and one half feet, the last foot and a half through a medium sand. At this point the sand caved-in preventing boring any deeper. A water sample was secured from HA-2 in lieu of a soil sample. The test results indicate the following:

Benzene =	1.115 parts per million (ppm)
Toluene =	5.637 ppm
Ethylbenzene =	2.226 ppm
Total Xylenes =	9.256 ppm
Total BTEX =	18.234 ppm

Letter to Mr. Barielle
June 13, 1990
Page 2

These test results indicate that there has been a release to the ground water. DEQ will require further assessment and possibly some form of corrective action, for the release from the gasoline tank. The oil spill can physically be handled in conjunction with the gasoline tank, or as a separate action. I recommend that the upper four feet of soil be removed, land farmed on site, and returned to the hole when the oil has degraded sufficiently to meet DEQ criteria.

By copy of this letter, I am notifying DEQ of the results of this investigation. Further work at this site should await directions from DEQ.

Sincerely,



George H. Cramer II, R.P.G.
Vice President

GC/blt

cc: Dennis Strickland - DEQ

Randal Myers, Ph. D.
Laboratory Manager



Terry Wilks
Technical Director

 **DYNATECH ENVIRONMENTAL LABORATORIES**

Analytical Environmental Services
June 11, 1990

To: Environmental Materials, Inc.
2237 South Acadian Thruway
Suite 301
Baton Rouge, LA 70808

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA02160 P.O. Number: VERBAL
Sample location: ENVIRMAT HA-1
Collected by: GEORGE CRAMER Collection date: 06/04/90 Time: 18:45
Laboratory submittal date: 06/05/90 Time: 17:50
Received by: TRB Validated by: TRB

Parameter: Oil & Grease in Solids
Method reference: EPA 413.1
Result: 0 mg/Kg MDL or sensitivity: 10
Date started: 06/09/90 Date finished: 06/11/90
Time started: 13:40 Analyst: GEK

If there are any questions regarding this data, please call.

Randal B. Myers, Ph.D.
Laboratory Manager

Randal Myers, Ph. D.
Laboratory Manager



Terry Wilks
Technical Director

 **DYNATECH ENVIRONMENTAL LABORATORIES**

Analytical Environmental Services

June 11, 1990

To: Environmental Materials, Inc.
2237 South Acadian Thruway
Suite 301
Baton Rouge, LA 70808

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA02161 P.O. Number: VERBAL
Sample location: ENVIRMAT HA-2
Collected by: GEORGE CRAMER Collection date: 06/05/90 Time: 17:30
Laboratory submittal date: 06/05/90 Time: 17:50
Received by: TRB Validated by: TRB

Parameter: Benzene, Toluene, EthylBz, Xylenes
Method reference: EPA 502/602
Result: see appended report
Date started: 06/09/90 Date finished: 06/09/90
Time started: 08:16 Analyst: DRJ

Data for Benzene, Toluene, EthylBz, Xylenes ug/L

Component Name	Concentration	Component MDL
BENZENE	1115	440
TOLUENE	5637	440
ETHYLBENZENE	2226	440
PM-XYLENE	6573	440
O-XYLENE	2683	550
BFB RECOVERY %	90	

Environmental Materials, Inc. Sample I.D. AA02161 (continued)
Page: 2
June 11, 1990

If there are any questions regarding this data, please call.

Randal B. Myers, Ph.D.
Laboratory Manager

ENVIRONMENTAL MATERIALS, INC.

CHAIN OF CUSTODY RECORD

Dallas, Texas

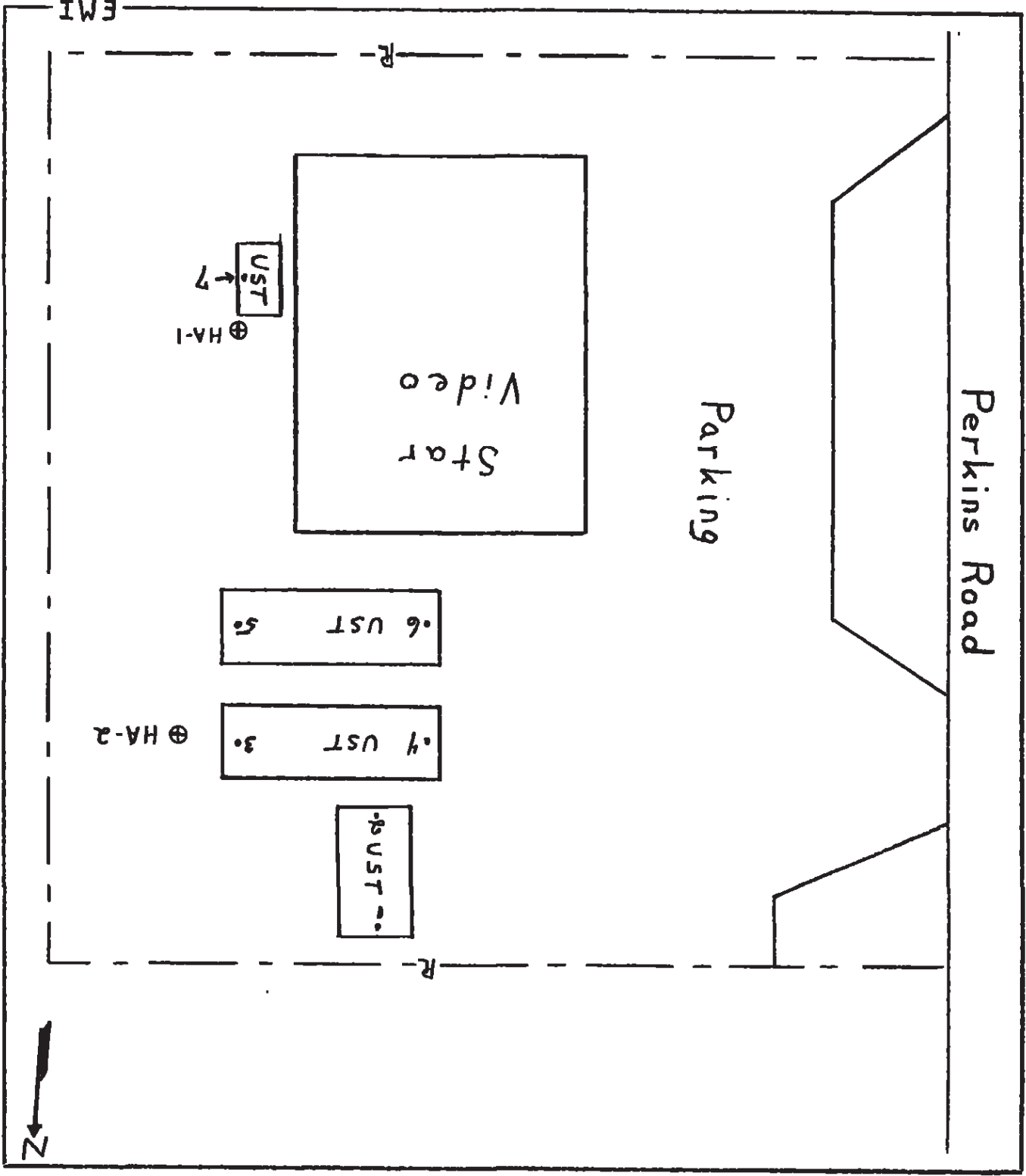
Baton Rouge, Louisiana

PROJECT NO.		PROJECT NAME		SAMPLE PARAMETER		OTHER		NUMBER OF CONTAINERS		REMARKS		
903018		Sta Video		Oil & Grease BTEX				1		Soil		
SAMPLES: (Signature) <i>Henry Lammert</i>								2		Water		
STATION NUMBER	DATE	TIME	STATION LOCATION									
HA-1	6/4	1845	7' AA02160									
HA-2	6/5	1730	2 1/2' AA02161									
TOTAL NUMBER OF CONTAINERS												
			3									
RELINQUISHED BY: (Signature)		DATE	TIME	RECEIVED BY: (Signature)		DATE	TIME	RECEIVED BY: (Signature)				
RELINQUISHED BY: (Signature)		DATE	TIME	RECEIVED BY: (Signature)		DATE	TIME	RECEIVED BY: (Signature)				
METHOD OF SHIPMENT		SHIPPED BY: (Signature)		CARRIER: (Signature)		RECEIVED FOR LAB BY: (Signature)		DATE/TIME				
Ice Chest		<i>Henry Lammert</i>		<i>Henry Lammert</i>		<i>Michael Kelly</i>		5/09/00 1750				

Boring Locations Star Video

HA = Hand Auger Borings
• = location of previous samples

Not to Scale



APPENDIX

B

BORING LOG

PROJECT NUMBER: 903018		PROJECT NAME: Star Video	
BORING NUMBER: B-1		COORDINATES: N/A	DATE:
ELEVATION: 48.04		GWL Depth 40.12 Date/Time 8/24/90	DATE STARTED: 8/21/90
ENGINEER/GEOLOGIST: Paul D. Templet		Depth Date/Time	DATE COMPLETED: 8/21/90
DRILLING METHODS: Solid Stem Auger with Shelby Tube			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE TYPE/NO.	HNTU (ppm)	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	SOIL PROFILE	WELL CONSTRUCTION	REMARKS			
0		7	75	Fill material; brown medium sand, gray silt and clayey silt, trace gravel.	SM			Concrete			
		6	85					Portland Cement			
				Gray clayey silt with wood fragments and roots; moist.	OL			Bentonite Seal			
5		6	90	Gray silty clay with tan mottling.	CL			5			
	B-1 6-8	9	60								
		6	80								
10		11	90	Silt pockets from 12' to 14'	CL			10			
		9	85								
15		12	90	Tan clay, iron staining.	CL			15			
	B-1 16-18	9	95								Backfill
20				Boring terminated at 18' bls Completed monitor well MW-1 in borehole. All unified soil classifications based on visual field observation.				20			
25								25			

- KEY**
- Shelby Tube sampled interval
 - B-1 6-8 Sample sent to lab for physical tests
 - ▽ Initial water level
 - ▼ Static water level
 - bls Below land surface

BORING LOG

PROJECT NUMBER: 903018		PROJECT NAME: Star Video	
BORING NUMBER: B-2		COORDINATES: N/A	DATE:
ELEVATION: 48.58		GWL Depth 37.48 Date/Time 8/24/90	DATE STARTED: 8/21/90
ENGINEER/GEOLOGIST: Paul D. Templet		Depth Date/Time	DATE COMPLETED: 8/21/90
DRILLING METHODS: Solid Stem Auger with Shelby Tube			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE TYPE/NO.	FHU (ppm)	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	SOIL PROFILE	WELL CONSTRUCTION	REMARKS
0		12	70	Fill material; brown medium and fine sand, trace of clay and silt, HC odor.	SM			Concrete
		140	80					Portland Cement
		120	70					Bentonite Seal
5		35	65	Gray and black clay and silty clay, organic rich, HC odor.	OH			
		52	65					
10	B-2 10-12	72	80	Gray-green silty clay, slight HC odor.	CL			Initial water level
		210	80	Tan silty clay, coarsens downward to clayey silt, orange mottling, wet, HC odor	ML			4" Diameter PVC
	B-2 14-16	205	85					0.01" slotted screen
15		42	80	Tan silty clay, fining downwards, orange mottling, HC odor.	CL			Sandpack
		14	90					
20				Lt. gray clay, stiff, orange mott.	CL			1.5" Cap
				Boring terminated at 20' bls, completed monitor well MW-2 in borehole. All unified soil classifications based on visual field observation.				
25								

- KEY**
- Shelby Tube sampled interval
 - B-2 10-12 Sample sent to lab for physical tests
 - Initial water level
 - Static water level
 - bls Below land surface
 - HC Hydrocarbon

BORING LOG

PROJECT NUMBER: 903018	PROJECT NAME: Star Video	
BORING NUMBER: B-3	COORDINATES: N/A	DATE:
ELEVATION: 47.70	GWL Depth 38.43 Date/Time 8/24/90	DATE STARTED: 8/21/90
ENGINEER/GEOLOGIST: Paul D. Templet	Depth Date/Time	DATE COMPLETED: 8/21/90
DRILLING METHODS: Solid Stem Auger with Shelby Tube	PAGE 1	OF 1

DEPTH (ft.)	SAMPLE TYPE/NO.	HNU (ppm)	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	SOIL PROFILE	WELL CONSTRUCTION	REMARKS
0								0
5				Fill material; brown fine and medium sand, densely packed.	SM		Concrete Portland Cement Bentonite Seal	
5				Brown silt, fining downwards to black silty clay with organics.	OL			5
10				Tan and brown silty clay, black mottled, with organics, silt pockets from 8'-10'	CL			10
10				Tan clayey silt and silt, brown mottled, wet.	ML		4" Diameter PVC 0.01" slotted screen Sandpack 1.5" Cap	10
15	B-3 14-16			Tan clay, stiff, orange mottled silt-filled vert. burrow, 14-14.5'				15
20				Boring terminated at 16' bls Completed monitor well MW-3 in borehole. All unified soil classifications based on visual field observation.				20
25								25

KEY

- Shelby Tube sampled interval
- Sample sent to lab for physical tests
- Initial water level
- Static water level
- Below land surface
- Hydrocarbon

September 12, 1990

Environmental Materials, Inc.
2237 South Acadian Thruway, Suite 301
Baton Rouge, LA 70808

Attention: Mr. Paul Templet, Jr.

Project No. 90C085

Dear Mr. Templet:

ENCOR appreciates the opportunity to provide the drilling and geotechnical laboratory services for your underground storage tank projects. The following tables present details of the information ENCOR obtained for Environmental Materials, Inc. (EMI) at the Star Video facility in Baton Rouge, Louisiana. Table 1 presents level surveying results at the top of each monitor well casing. Table 2 presents the results of the geotechnical laboratory testing performed on soil samples selected by a representative of EMI. Enclosed as Attachment A are the owner's copies of the monitor well registrations.

TABLE 1

<u>Well No.</u>	<u>Top of Casing Elevation⁽¹⁾</u>
B-1	48.04
B-2	48.58
B-3	47.70

⁽¹⁾ Elevation relative to a temporary benchmark established as a nail driven into the wall on the northeast corner of the existing building and assigned a value of 50.00 feet.

We appreciate the opportunity to serve Environmental Materials, Inc. on this project. If you have any questions, please contact this office.

Very truly yours,
ENCOR


Charles D. Barber

CDB/arp
Enclosures

C190.085

TABLE 2

<u>Boring No.</u>	<u>Sample Depth (ft)</u>	<u>USCS Classification</u>	<u>% Water</u>	<u>Dry Weight (pcf)</u>	<u>Liquid Limit</u>	<u>Plastic Limit</u>	<u>Plasticity Index</u>
B-1	6 - 8	CH	24.2	96.2	59	16	43
B-1	16 - 18	CL	20.8	104.2	48	14	34
B-2	10 - 12	CL	23.9	98.8	47	18	29
B-2	14 - 16	CL	25.7	95.7	35	19	16
B-3	14 - 16	CL	21.7	97.2	48	14	34

(1) Samples submitted to geotechnical laboratory on 8/22/90, testing performed on 9/5/90.

ENCOR
BATON ROUGE, LOUISIANA

TABLE 2
PROJECT NO. 90C085

CITZ.085

ATTACHMENT A

WATER WELL REGISTRATION SHORT FORM (DOTD-GW-1S)

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

1. USE OF WELL (Check Appropriate Box)

- DOMESTIC RIG SUPPLY MONITORING HEAT PUMP SUPPLY
 HEAT PUMP HOLE ABANDONED PILOT HOLE OTHER

2. WELL OWNER: Star Vico - Royal Parkelle PHONE (504) 357-3741 (Please Specify)

3. ADDRESS: 3225 Perkins Road, ER, LA 70006

4. OWNER'S WELL NUMBER OR NAME (if any): 1111-1

5. DATE COMPLETED: 8/20/70 FT. DEPTH OF HOLE: 180 FT. DEPTH OF WELL: 180 FT.

6. STATIC WATER LEVEL: 4 FT. BELOW GROUND SURFACE MEASURED ON: 8-24 (Date)

7. CASING: 4 IN. STEEL OR PVC SCH. 40 LENGTH: 3.0 FT. SLOT SIZE: 0.01 LENGTH: 16.0 FT.

8. SCREEN: 4 IN. STEEL OR PVC SCH. 40 LENGTH: 16.0 FT.

9. CEMENTED FROM: 2.0 FT. TO GROUND SURFACE, USING PUMP-DOWN OR GRAVITY METHOD

10. LOCATION OF WELL: PARISH: East Baton Rouge WELL IS NEAR: Baton Rouge (Town or City)

APPROXIMATELY: 0.5 MILES FROM: Admet Drive, Baton Rouge, LA (Please draw sketch on back of Original)

with: Aradon. Pl (Please draw sketch on back of Original)

11. REMARKS: Site Address: 3225 Perkins Rd, ER LA

12. DRILLERS LOG (Description and color of cuttings, such as shale, sand, etc. in feet)

FROM	TO	DESCRIPTION	FROM	TO	DESCRIPTION
0	4	Sand			
4	6	Silly clay w/ organic			
6	12	Clay			

13. FOR HEAT PUMP HOLES ONLY: AVG DEPTH: _____ FT., NUMBER OF HOLES: _____

TUBING MATERIAL: PVC, PE, PB, OTHER _____

14. ABANDONMENT INFORMATION: DOES THE NEW WELL REPLACE AN EXISTING WELL? YES NO

(REV. 11/85) OWNER'S COPY

ENDOR
Name of Water Well Contractor

LICENSE NUMBER: WWC-376
Authorized Signature: [Signature] Date: _____

MAIL ORIGINAL TO:
LOUISIANA DEPARTMENT OF
TRANSPORTATION AND DEVELOPMENT
ATTN: CHIEF - WATER RESOURCES SECTION
P.O. BOX 94245
BATON ROUGE, LA 70804-9245
(504) 379-1434

FOR OFFICE USE ONLY

STATE: 22 PARISH: LOCAL WELL NO:

IDENTIFICATION NUMBER: ED2522071D95001

OWNERS NAME:

WELL DEPTH: Ft. Use of Well:

Date Completed: MO VR

OWNERS NO: Geologic Unit:

CONTRACTOR'S NAME:

SECTION: 174 TOWNSHIP: 17E RANGE: 11E

HOLE DEPTH: ELEV: 135 QUAD NO: 162A

Inspected By: _____
Date: _____
Remarks: _____

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
 WATER RESOURCES SECTION
 WATER WELL REGISTRATION SHORT FORM (DOTD-GW-1S)

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

- USE OF WELL (Check Appropriate Box)
 - DOMESTIC
 - RIG SUPPLY
 - MONITORING
 - HEAT PUMP SUPPLY
 - ABANDONED PILOT HOLE
 - OTHER
- WELL OWNER: Ryan L. Carriere PHONE: 504, 367-5441 (Please Specify)
- ADDRESS: 3235 Parkway Blvd. E.K. LA 71468
- OWNERS WELL NUMBER OR NAME (if any): 11-1 DEPTH OF HOLE: 206 FT. MEASURED ON: 8-17-90 (Date)
- DATE COMPLETED: 8/21/90 FT. BELOW GROUND SURFACE: 40 FT. LENGTH: 5' FT. SLOT SIZE: 0.01 FT. GRAVITY METHOD: (Date)
- STATIC WATER LEVEL: 11.1 FT. BELOW GROUND SURFACE: 40 FT. PVC SCH. 40 STEEL OR 40 FT. LENGTH: 15.0 FT. SCREEN: 4 IN. STEEL OR 40 FT. LENGTH: 15.0 FT. STEEL OR 40 FT. LENGTH: 15.0 FT.
- CEMENTED FROM: 3.0 FT. TO GROUND SURFACE, USING PUMP-DOWN OR GRAVITY METHOD
- LOCATION OF WELL, PARISH: East Baton Rouge WELL IS NEAR, East Baton Rouge (Town or City)
- APPROXIMATELY 6.5 MILES FROM Avoyelles (Crossroads, Railroad, Any Landmark, etc.)
- REMARKS: Site address same as above

12. DRILLER'S LOG (Description and color of cuttings, such as shale, sand, etc., in feet)

FROM	TO	DESCRIPTION	FROM	TO	DESCRIPTION
0	6	red fine sand (fill)			
6	10	silty clay w/pebbles			
10	12	silty clay			
12	16	clayey silt			
16	20	silty clay			

- FOR HEAT PUMP HOLES ONLY: AVG DEPTH _____ FT., NUMBER OF HOLES _____
- TUBING MATERIAL: PVC, PE, PB, OTHER _____
- ABANDONMENT INFORMATION: DOES THE NEW WELL REPLACE AN EXISTING WELL? YES NO

OWNER'S COPY

Name of Water Well Contractor: EMK
 LICENSE NUMBER: WWC-376
 Authorized Signature: H. A. Pinnick Date: 11/16/90

MAIL ORIGINAL TO:
 LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
 ATTN: CHIEF - WATER RESOURCES SECTION
 P.O. BOX 94245
 BATON ROUGE, LA 70804-9245
 (504) 379-1434

FOR OFFICE USE ONLY
 STATE: 22 PARISH: _____ LOCAL WELL NO: _____

IDENTIFICATION NUMBER: 302522071PE500R
 OWNERS NAME: _____
 WELL DEPTH: _____ Ft. Use of Well: _____
 Date Completed: _____ MO _____ YR _____

OWNERS NO: _____ Geologic Unit: _____ CONTRACTOR'S NAME: _____
 SECTION: 174 TOWNSHIP: 112 RANGE: 11E
 HOLE DEPTH: _____ ELEV: 125 QUAD. NO: 16BA

Inspected By: _____
 Date: _____
 Remarks: _____

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

- USE OF WELL (Check Appropriate Box)
 - DOMESTIC
 - RIG SUPPLY
 - MONITORING
 - HEAT PUMP SUPPLY
 - HEAT PUMP HOLE
 - ABANDONED PILOT HOLE
 - OTHER
- WELL OWNER: Roger Barrielle PHONE: 337-341 (Please Specify)
- ADDRESS: 3235 Perkins Rd., BR, LA 70008
- OWNER'S WELL NUMBER OR NAME (if any): AIW-3
- DATE COMPLETED: 6/21/70 DEPTH OF HOLE: 16.0 FT., DEPTH OF WELLY: 15.9 FT.
- STATIC WATER LEVEL: 7.3 FT. BELOW GROUND SURFACE MEASURED ON: 6/24/70 (Date)
- CASING: 4 IN. STEEL OR PVC SCH. 40 LENGTH: 5.0 FT. SLOT SIZE: 0.01 FT. LENGTH: 10.0 FT.
- SCREEN: 4 IN. STEEL OR PVC SCH. 40
- CEMENTED FROM: 3.0 FT. TO GROUND SURFACE, USING PUMP-DOWN OR GRAVITY METHOD
- LOCATION OF WELL: PARISH: East Baton Rouge WELL IS NEAR, Inter. Thruway, J.S. Perkins Road (Specify City)
- APPROXIMATELY: 0.5 MILES FROM Inter. Thruway, J.S. Perkins Road (Specify City)
- REMARKS: Sub Address same as above (Please draw sketch on back of Original)

DRILLER'S LOG (Description and color of cuttings, such as shale, sand, etc., in feet)

FROM	TO	DESCRIPTION	FROM	TO	DESCRIPTION
0	4	Sand			
4	6	Silty Clay / organic			
6	10	Silty Clay			
10	14	Clayey Silt			
14	16	Clay			

- FOR HEAT PUMP HOLES ONLY: AVG. DEPTH: _____ FT., NUMBER OF HOLES: _____
- TUBING MATERIAL: PVC, PE, PB, OTHER _____
- ABANDONMENT INFORMATION: DOES THE NEW WELL REPLACE AN EXISTING WELL? YES NO

OWNER'S COPY

SUCOR

Name of Water Well Contractor

LICENSE NUMBER

WWC - 396

H. B. Purnaud 9/1/70
 Authorized Signature Date

MAIL ORIGINAL TO:-

LOUISIANA DEPARTMENT OF
 TRANSPORTATION AND DEVELOPMENT
 ATTN: CHIEF - WATER RESOURCES SECTION
 P.O. BOX 94245
 BATON ROUGE, LA 70804-9245
 (504) 379-1434

FOR OFFICE USE ONLY

STATE: 22 PARISH: _____ LOCAL WELL NO: _____

IDENTIFICATION NUMBER: 20222070005013

OWNERS NAME: _____

WELL DEPTH: _____ FL. _____

Use of Well:

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date Completed: _____ MO. _____ VR _____

OWNERS NO. _____ Geologic Unit: _____

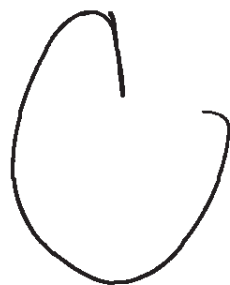
CONTRACTOR'S NAME: _____

SECTION: 77 TOWNSHIP: 175 RANGE: 17E

HOLE DEPTH: _____ ELEV: 135 QUAD NO: 16EA

Inspected By _____
 Date _____
 Remarks _____

APPENDIX



Randal Myers, Ph. D.
Laboratory Manager



Terry Wilks
Technical Director

DYNATECH ENVIRONMENTAL LABORATORIES

Analytical Environmental Services
August 27, 1990

To: Environmental Materials, Inc.
2237 South Acadian Thruway
Suite 301
Baton Rouge, LA 70808

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:


Sample I.D. AA03093 Project account code: 903018
Location code: ENVIRMAT Location Description: MW-1
Sample collector: PAUL TEMPLET
Sample collection date: 08/24/90 Time: 10:35
Laboratory submittal date: 08/24/90 Time: 13:30
Received by: TRB Validated by: TRB

Parameter: Benzene, Toluene, EthylBz, Xylenes
Method reference: EPA 502/602
Result: see appended report
Date started: 08/27/90 Date finished: 08/27/90
Time started: 10:21 Analyst: DRJ

Data for Benzene, Toluene, EthylBz, Xylenes ug/L:

Component Name	Concentration	Component MDL
BENZENE	bdl	1
TOLUENE	Not Det	1
ETHYLBENZENE	Not Det	1
PM-XYLENE	Not Det	1
O-XYLENE	Not Det	1
BFB RECOVERY %	100	

If there are any questions regarding this data, please call.


Randal B. Myers, Ph.D.
Laboratory Manager

Randal Myers, Ph. D.
Laboratory Manager



Terry Wilks
Technical Director

 **DYNATECH ENVIRONMENTAL LABORATORIES**

Analytical Environmental Services

August 27, 1990

To: Environmental Materials, Inc.
2237 South Acadian Thruway
Suite 301
Baton Rouge, LA 70808

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA03094 Project account code: 903018
Location code: ENVIRMAT Location Description: MW-2
Sample collector: PAUL TEMPLET
Sample collection date: 08/24/90 Time: 10:45
Laboratory submittal date: 08/24/90 Time: 13:30
Received by: TRB Validated by: TRB

Parameter: Benzene, Toluene, EthylBz, Xylenes

Method reference: EPA 502/602

Result: see appended report

Date started: 08/27/90

Date finished: 08/27/90

Time started: 12:03

Analyst: DRJ

Data for Benzene, Toluene, EthylBz, Xylenes ug/L:

Component Name	Concentration	Component MDL
BENZENE	7880	1
TOLUENE	5865	1
ETHYLBENZENE	192	1
PM-XYLENE	7063	1
O-XYLENE	2795	1
BFB RECOVERY %	99	

If there are any questions regarding this data, please call.



Randal B. Myers, Ph.D.
Laboratory Manager

Randal Myers, Ph. D.
Laboratory Manager



Terry Wilks
Technical Director

DYNATECH ENVIRONMENTAL LABORATORIES

Analytical Environmental Services

August 27, 1990

To: Environmental Materials, Inc.
2237 South Acadian Thruway
Suite 301
Baton Rouge, LA 70808

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA03095 Project account code: 903018
Location code: ENVIRMAT Location Description: MW-3
Sample collector: PAUL TEMPLET
Sample collection date: 08/24/90 Time: 10:55
Laboratory submittal date: 08/24/90 Time: 13:30
Received by: TRB Validated by: TRB

Parameter: Benzene, Toluene, EthylBz, Xylenes
Method reference: EPA 502/602
Result: see appended report
Date started: 08/27/90 Date finished: 08/27/90
Time started: 11:12 Analyst: DRJ

Data for Benzene, Toluene, EthylBz, Xylenes ug/L:

Component Name	Concentration	Component MDL
BENZENE	bdl	1
TOLUENE	Not Det	1
ETHYLBENZENE	Not Det	1
PM-XYLENE	Not Det	1
O-XYLENE	Not Det	1
BFB RECOVERY %	99	

If there are any questions regarding this data, please call.

Randal B. Myers, Ph.D.
Laboratory Manager

ENVIRONMENTAL MATERIALS, INC.

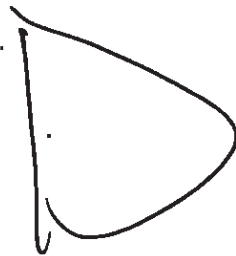
Dallas, Texas

Baton Rouge, Louisiana

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME		STATION NUMBER	DATE	TIME	STATION LOCATION	SAMPLE PARAMETER										OTHER	NUMBER OF CONTAINERS	REMARKS
	903018	Star video																	
SAMPLERS: (Signature)			BE EX (En 8000)																
[Signature]																			
MW-1	8/24/90	10:35														2	AA03093		
MW-2	8/24/90	10:45														2	AA03094		
MW-3	8/24/90	10:55														2	AA03095		
TOTAL NUMBER OF CONTAINERS																			
U																			
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE/TIME			
[Signature]	8/24	13:27	[Signature]			[Signature]			[Signature]			[Signature]			[Signature]	8/24/90 13:30			
METHOD OF SHIPMENT																			
IN Person																			
COURIER: (Signature)																			
[Signature]																			

APPENDIX





Geosciences, Inc.
Baton Rouge, LA 70835
June 20, 1990

Sample receipt at West-Paine Laboratories, Inc. is documented for your designated sample(s). Chain-of-custody documentation, if provided, is included in this report. Sample analysis was in accordance with Environmental Protection Agency protocol.

A. Methods for Organic Chemical Analysis of Municipal & Industrial Wastewater,
EPA-600/4-82-057, July 1982

Parameter
Purgeable Aromatics

Method
602

Documented results are shown on the following page(s).


Victor J. Blanchard III
General Manager



Geosciences, Inc.
Baton Rouge, LA 70835
SAMPLE #: 900612-0054

Method 602
Purgeable Aromatics

All results in micrograms per liter

SAMPLE SOURCE: A-1/6-12
Sample Date: 90/06/12 Sample Time: 10:30

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
<u>Benzene</u>	< 10	10
<u>Toluene</u>	< 10	10
<u>Ethylbenzene</u>	< 10	10
<u>Xylene</u>	< 10	10

Date of Analysis: 90/06/19 Analyst: JJM

Geosciences, Inc.
Baton Rouge, LA 70835
SAMPLE #: 900612-0054

QUALITY ASSURANCE/QUALITY CONTROL
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	<u>A-1/6-12</u>
Benzene	97
Toluene	93
Ethylbenzene	91
Xylene	91
Bromofluorobenzene (IS)	95



Geosciences, Inc.
Baton Rouge, LA 70835
SAMPLE #: 900612-0055

Method 602
Purgeable Aromatics

All results in micrograms per liter

SAMPLE SOURCE: A-2/6-12

Sample Date: 90/06/12 Sample Time: 10:35

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
Benzene	< 10	10
Toluene	< 10	10
Ethylbenzene	< 10	10
Xylene	< 10	10

Date of Analysis: 90/06/19 Analyst: JJM



Geosciences, Inc.
Baton Rouge, LA 70835
SAMPLE #: 900612-0055

QUALITY ASSURANCE/QUALITY CONTROL
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	<u>A-2/6-12</u>
Benzene	97
Toluene	93
Ethylbenzene	91
Xylene	91
Bromofluorobenzene (IS)	95



Geosciences, Inc.
Baton Rouge, LA 70835
SAMPLE #: 900612-0056

Method 602
Purgeable Aromatics

All results in micrograms per liter

SAMPLE SOURCE: B-1/6-12

Sample Date: 90/06/12 Sample Time: 10:45

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
<u>Benzene</u>	< 10	10
<u>Toluene</u>	< 10	10
<u>Ethylbenzene</u>	< 10	10
<u>Xylene</u>	< 10	10

Date of Analysis: 90/06/20 Analyst: JJM



Geosciences, Inc.
Baton Rouge, LA 70835
SAMPLE #: 900612-0056

QUALITY ASSURANCE/QUALITY CONTROL
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	<u>B-1/6-12</u>
Benzene	97
Toluene	93
Ethylbenzene	91
Xylene	91
Bromofluorobenzene (IS)	95

APPENDIX

E

REGISTERED WATER WELLS IN E BATON ROUGE PARISH --WITHIN GIVEN COORDINATES

WELL2071
 09/11/90
 NORTH- 302610 SOUTH- 302457 EAST- 910849 WEST- 910849
 IDENTIFICATION NUMBER OWNERS NAME WELL NUMBER WELL DEPTH OWNERS WELL NUMBER WELL USE SUB DATE COMPLETED PUMPING RATE (GPO) AVAILABLE INFORMATION

-----AQUIFER--SHALLOW SANDS OF BATON ROUGE AREA-----
 3025009109450 PHILLIPS H 554 284 PUBLIC SUPPLY -R 1153 700000 L C

TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE: 1

-----AQUIFER--NO WELL MADE LOG DEPTH SHOWN-----
 30253091091201 PUEA WAYNE -5354Z 250 HEAT PUMP HH 1185 L
 30255091085401 LEA, MAXWELL -5635Z 250 HEAT PUMP HH 0188 L

TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE: 2

-----AQUIFER--AQUIFER CODE NOT ASSIGNED-----
 302601091094101 SOUTHLAND CORP -5458Z MW-1 16 MONITOR L 1286 L
 302601091094102 SOUTHLAND CORP -5459Z MW-2 16 MONITOR L 1286 L
 302601091094103 SOUTHLAND CORP -5460Z MW-3 16 MONITOR L 1286 L
 302601091094104 SOUTHLAND CORP -5461Z MW-4 16 MONITOR L 1286 L

302530091090201 GULF OIL -5636Z MW-1 16 MONITOR L 0288 L
 302530091090202 GULF OIL -5637Z MW-2 16 MONITOR L 0288 L
 302530091090203 GULF OIL -5638Z MW-3 11 MONITOR L 0288 L
 302530091090204 GULF OIL -5639Z MW-4 16 MONITOR L 0288 L

302532091080007 CHEVRON -6266Z MW6A 11 MONITOR PA 0889 L W
 302532091090011 CHEVRON -6267Z MW-B 16 MONITOR PA 0889 L W

302533091090001 CHEVRON -6399Z MW-3 16 MONITOR PA
 302533091090002 CHEVRON -6400Z MW-5 16 MONITOR PA

TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE: 12

-----AQUIFER--400-FOOT SAND OF BATON ROUGE AREA-----
 302551081085901 RAMSEY, U 734 504 DOMESTIC 0660
 302560091089601 LA W R R INST 823 ALOY 582 OBSERVATION 0 0667 E C

302553091092002 LA W R R INST 825 CATL 475 OBSERVATION -W 0967 C

TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE: 3

WELL IDENTIFICATION NUMBER	SOUTH	EAST	WEST	WELL OWNERS NAME	WELL NUMBER	WELL DEPTH	WELL USE	SUB USE	DATE COMPLETED	PUMPING RATE (GPD)	AVAILABLE INFORMATION
----------------------------	-------	------	------	------------------	-------------	------------	----------	---------	----------------	--------------------	-----------------------

-----AQUIFER--600-FOOT SAND OF BATON ROUGE AREA-----

30255091092001	LA W R INST	824	824	824	581		OBSERVATION	-W	0967		E C
----------------	-------------	-----	-----	-----	-----	--	-------------	----	------	--	-----

TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE 1

-----AQUIFER--800-FOOT SAND OF BATON ROUGE AREA-----

30254091092601	JOLLY HENRY	130	130	130	1147		ABANDONED		0720		L
----------------	-------------	-----	-----	-----	------	--	-----------	--	------	--	---

TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE 1

-----AQUIFER--1000-FOOT SAND OF BATON ROUGE AREA-----

30255091090402	U S GEOL SURVEY	742A	742A	742A	1189		OBSERVATION	-O	0465		DC
----------------	-----------------	------	------	------	------	--	-------------	----	------	--	----

TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE 1

-----AQUIFER--1200-FOOT SAND OF BATON ROUGE AREA-----

302541091091901	BATES C	156	156	156	1200		ABANDONED		0618		L
-----------------	---------	-----	-----	-----	------	--	-----------	--	------	--	---

TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE 1

-----AQUIFER--1500-FOOT SAND OF BATON ROUGE AREA-----

302541091091902	BATES C	157	157	157	1552		IRRIGATION		0642	140000	L C
30255091090403	U S GEOL SURVEY	782B	782B	782B	1681		OBSERVATION	-O	0465		DC

TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE 2

-----AQUIFER--2000-FOOT SAND OF BATON ROUGE AREA-----

302535091090401	U S GEOL SURVEY	781	781	781	2286		OBSERVATION	-O	0465		ELDC
-----------------	-----------------	-----	-----	-----	------	--	-------------	----	------	--	------

TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE 1

-----AQUIFER--ALL AQUIFERS-----

TOTAL NUMBER OF REGISTERED WATER WELLS IN PARISH WITHIN COORDINATES 25

RECEIVED

OCT 29 1991

**UNDERGROUND STORAGE
TANK DIVISION**

**ENVIRONMENTAL SITE ASSESSMENT
OLD SPUR STATION
(STAR VIDEO)
BATON ROUGE, LOUISIANA**

AUGUST, 1991

Prepared For:

**STAR VIDEO
3235 PERKINS ROAD
BATON ROUGE, LA 70808**

Prepared By:

**ENVIRONMENTAL MATERIALS, INC.
7916 WRENWOOD BLVD., SUITE F
BATON ROUGE, LOUISIANA 70809
(504) 927-4850**

EMI PROJECT NO. 903018



**Paul D. Templet
Project Manager**



**George H. Cramer, II
Vice President
Registered Geologist**

ENVIRONMENTAL MATERIALS, INC.

5930 LBJ FREEWAY, SUITE 300
DALLAS, TX 75240
(214) 458-8162
(214) 239-3649 FAX

7916 WRENWOOD, SUITE F
BATON ROUGE, LA 70809
(504) 927-4850
(504) 928-2660 FAX

October 29, 1991

Mr. Dennis Strickland Acting Program Manager
Underground Storage Tank Division
Office of Solid and Hazardous Waste
LA Department of Environmental Quality
P.O. Box 82178
Baton Rouge, LA 70884-2178

RECEIVED

OCT 29 1991
UNDERGROUND STORAGE
TANK DIVISION

RE: Additional Site Assessment
Star Video (Old Spur Station)
3235 Perkins Road
Baton Rouge, Louisiana
East Baton Rouge Parish
Incident #90-02-140

Dear Mr. Strickland:

Attached for your review are three (3) copies of the additional Assessment Report for the above referenced facility. I would like to meet with you to review this report and discuss my client's options.

Your cooperation in this matter is greatly appreciated. If you have any questions, please call at your convenience (504) 927-4850.

Sincerely,



Paul D. Temple
Environmental Geologist

PDT/rds

attachment

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2.	Site Diagram
3.	Potentiometric Surface Map
4.	Total BTEX Concentration Map

APPENDICES

A.	Boring Logs and Monitor Well Registration Forms
B.	Analytical Report and Chain-of-Custody Documentation

1. INTRODUCTION AND BACKGROUND

Environmental Materials, Inc. (EMI) was contracted by the owner of Star Video, located on the site of a former Spur service station, (see Figure 1), to conduct an initial environmental site assessment in June, 1990. During the removal of the old tanks at the site (May, 1990), hydrocarbon constituents were found at two locations. Subsequent investigation by EMI in June of 1990 at the waste oil tank showed that the source of hydrocarbons came from a surface spill resulting from a overflowing 55-gallon drum containing unused industrial oil. A hydrocarbon release was confirmed by a hand auger sample in June, 1991 near the former gasoline tank bed. These results were reported by EMI to the Louisiana Department of Environmental Quality (LDEQ) in a report dated June 13, 1990.

EMI conducted a site assessment in August, 1990 which consisted of a soil vapor survey and the installation of three (3) monitor wells. This site assessment, in conjunction with other information available, had defined the plume of contamination. A soil gas survey was used to locate the southern extent of the plume, and to give an indication of the levels of BTEX constituents remaining in the tank bed.

The corrective action recommended for this site was to remove the contaminated soil in the tank bed (and at the waste oil location) for on-site land treatment. The soils will be returned to the excavation once the treatment standard has been reached. Groundwater would be monitored during this period to measure the effect of natural degradation on the BTEX constituents. An alternative corrective action measure would be to treat the soil as above, partially backfill the excavation with pea gravel and create a large sump. Groundwater would be removed from a well screen placed in the sump and treated through an on-site air stripper, or through filtration, prior to discharge to Dawson Creek. EMI submitted the assessment report to LDEQ in September, 1991.

LDEQ responded to the assessment report in a letter dated March 19, 1991. The option to aerate the soils on the adjacent property (authorized in LDEQ's response) is no longer

feasible because property access to the adjacent property has been denied. Due to economic considerations by the current owner/operator EMI requested an extension to respond to LDEQ's request.

On July 11, 1991 EMI, Roger Barielle (the owner) and LDEQ met to discuss alternatives to the corrective actions recommended by EMI in the October report. This additional assessment report is in response to that July 11, 1991 meeting.

2.0 SCOPE OF WORK

- o Install two additional borings to be completed as monitor wells. The location and specifications will meet the requirements agreed upon with LDEQ in the meeting on July 10, 1991 and site visit on July 11, 1991. Soil samples will be collected based on HNU field screening results and analyzed for Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) using EPA Method 5020.
- o Sample the ground water in the newly installed monitor wells MW-4 and MW-5 and in the existing wells MW-1, MW-2, and MW-3. The groundwater samples will be analyzed for Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) using EPA Method 602.
- o Prepare a report including laboratory analytical results, conclusions, and recommendations.

3.0 BORING PROGRAM AND MONITOR WELL INSTALLATION

The field program began on July 25, 1991. Two monitor wells were installed at the locations and specifications agreed upon with the LDEQ representative Mr. Dennis Piper during the July 11, 1991 site visit. EMI subcontracted drilling services to Custom Coring, Inc. of Baton Rouge, Louisiana. Two borings were drilled, continuously sampled and

completed as two shallow monitoring wells. The well locations are displayed in Figure 2. Borings logs, and well construction details and monitor well registration forms are presented in Appendix A.

The borings were drilled and the monitor wells completed in each boring using the hollow stem auger method. The borings were advanced at 2-foot intervals using a 12-inch outside diameter hollow stem auger. The borehole was continuously sampled ahead of the auger by hydraulically pushing a thin walled Shelby tube sampler into the soil at 2-foot intervals. Soil samples were collected from each interval, classified by the on-site EMI geologist using the Unified Soil Classification System and recorded on the boring log. A representative soil sample was retained from each interval for headspace analysis of organic vapors representing gasoline constituents.

Soil samples collected for field screening of gasoline constituents were selected from the undisturbed portion of the shelby tube sampler. The ends and the exterior surface of each core sample were removed and the undisturbed portion placed in a clean ziplock bag and sealed. The soil samples were allowed to warm in the ambient air for a minimum of 20 minutes to allow warming to the atmospheric temperature (>70°F). This promoted the volatilization of organic compounds present in the soil sampled. The headspace above the soil sampled in each ziplock bag was measured for organic vapors with a HNU photoionization instrument. After a sufficient period of time to allow volatilization of the organic vapors, the seal on the ziplock bag was broken and the HNU probe inserted into the ziplock bag. The measured organic vapor level was recorded on the boring log.

Following completion of the boring, a monitor well was installed in each borehole. Both monitor wells were constructed using 4-inch diameter flush threaded Schedule 40 PVC casing and well screen. The well screens for both monitor wells were 10-foot long continuously slotted (0.01-inch slot size). Monitor well construction details are provided on the boring logs in Appendix A.

All drilling equipment including the drilling rig, were pressure washed initially and between each borehole to decrease the chance of cross-contamination between boreholes. To prevent cross contamination between sample intervals all shelby tubes were decontaminated by scrubbing with soap and water and using a pressure washer between each sample.

The development of the wells at the site was accomplished using a bottom discharging/filling PVC bailer and a peristaltic pump. The wells were bailed in a manner as to not to damage the well screen or disrupt the filter pack. Both wells were surged with a bailer, pumped dry, then were allowed to recover and were pumped dry again.

After the monitor wells MW-4 and MW-5 were developed, the top-of-casing (TOC) elevations were resurveyed including the three existing wells and referenced to a common datum point with an assumed elevation of 100 feet.

4.0 HYDROGEOLOGY

Water level measurements were made on the same day that the groundwater was sampled, July 31, 1991. All measurements were made relative to the Reference Elevation of 100 feet. The water table measurements are shown in Table 1.

**TABLE 1
WATER LEVEL ELEVATIONS
JULY 31, 1991**

<u>Monitoring Well No.</u>	<u>Relative Elevation TOC*</u>	<u>Depth to Water</u>	<u>Relative Water Elevation</u>
MW-1	98.35	6.17	92.18
MW-2	98.89	4.42	94.47
MW-3	98.00	6.58	91.42
MW-4	97.28	5.07	92.21
MW-5	99.24	7.36	91.88

* Reference Elevation = 100.00 feet.

The direction of groundwater flow is illustrated in Figure 3. Based on groundwater measurements collected on July 31, 1991 the groundwater flow is radial away from the former tank pit with the steeper gradient of 0.1 ft/ft toward the east. The steeper gradient is in direct relation with the surface topography which drops 4 to 5 feet to the adjacent property line. The radial groundwater flow is probably due to the unpaved former UST Pit acting as a recharge area.

5.0 SOIL SAMPLES

Soil samples were collected from the borings for MW-4 and MW-5. The soil sample indicating the highest organic vapor measurement (HNU reading) was selected for laboratory analysis. The samples were immediately put on ice, chilled to 4° C and transported to Environmental Laboratories, Inc. for analysis for Benzene, Ethylbenzene, Toluene, and Xylene by EPA Method 5020. Proper chain-of-custody documentation was filled out for the samples and is included, along with the test results, in Appendix B. The analytical results are tabulated in Table 2, below.

TABLE 2**SOIL SAMPLE ANALYTICAL RESULTS**

Boring	Benzene	Toluene	Ethylbenzene	Xylene	Total
MW-4 (12-14')	6.2	15.3	10.7	50.9	83.1
MW-5 (8-10')	BDL*	BDL	BDL	BDL	BDL

BDL = Below Method Detection

Method Detection Limit = 0.1 for MW-4 and 0.01 Mg/Kg for MW-5

Results given in parts per million Mg/Kg

6.0 GROUNDWATER SAMPLES

Groundwater samples from monitor wells MW-1 through MW-5 were collected on July 31, 1991. An electric water level indicator was used to take water level measurements in all wells prior to sampling. The electric water level indicator was decontaminated with Liquinox soap, followed by a potable water rinse followed by a distilled water rinse. All wells were purged dry prior to sampling using a peristaltic pump and dedicated polyethylene tubing. The wells were allowed to recover then the groundwater samples were collected with a disposable polyethylene bailer.

The samples were immediately put on ice, chilled to 4° C and transported to Environmental Laboratories, Inc. for analysis for Benzene, Ethylbenzene, Toluene, and Xylene by EPA Method 602. Proper chain-of-custody documentation was filled out for the samples and is included, along with the test results, as Appendix B. The analytical results are tabulated in Table 3, below, and shown in Figure 4.

TABLE 3
ANALYTICAL RESULTS

Monitor Well	Benzene	Toluene	Ethyl Benzene	Xylene	Detection Limit	Total BTEX
MW-1	BDL*	BDL	BDL	BDL	1	BDL
MW-2	1580	100	95	1440	10	3215
MW-3	BDL	BDL	BDL	BDL	1	BDL
MW-4	8940	8950	597	9940	20	28,427
MW-5	2	2	BDL	3	1	7

BDL = Below Method Detection Method

Results given in parts per billion

7.0 CONCLUSIONS

- o A total BTEX concentration of 83.1 ppm was detected in the soil sample collected from boring MW-4.
- o Total BTEX concentrations were detected in monitor wells MW-2 (3215 ppb), MW-4 (28,427 ppb), and MW-5 (7 ppb).
- o Ground water flow is radial with the steepest gradient approximated at 0.1 ft/ft toward the east.
- o The BTEX plume has migrated off-site to the east.
- o The plume has not migrated off-site to the northwest as determined from the soil and water samples collected from MW-5.

8.0 RECOMMENDATIONS

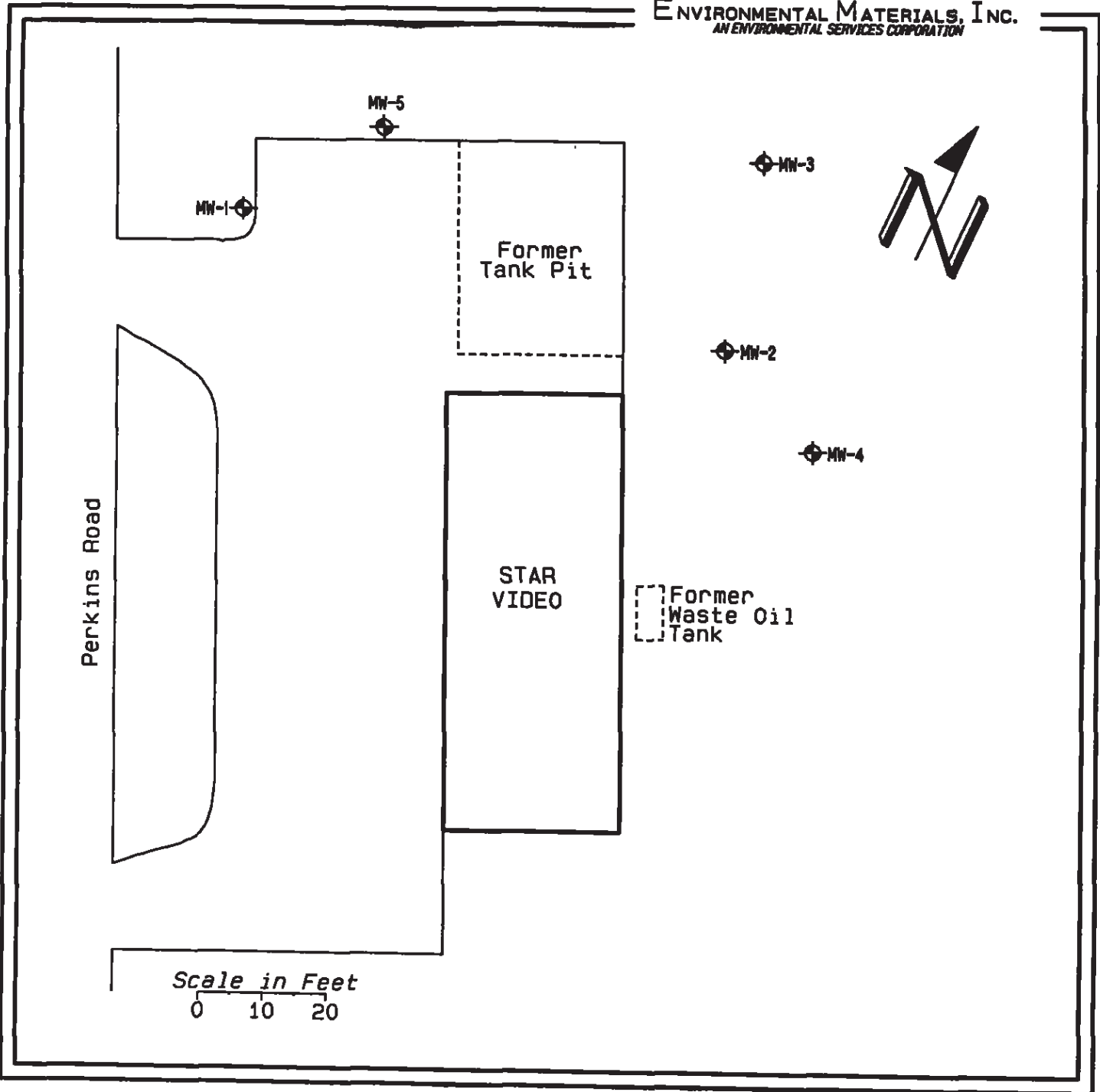
- o EMI recommends the continued monitoring of the 5 existing monitor wells. Water levels will be measured to determine the groundwater flow direction. If the BTEX concentrations remain at their current levels or decrease in concentration in the groundwater, this should be considered the basis for application for closure after three quarters of monitoring.

FIGURES



SITE MAP

Old Spur Station
Star Video



SITE DIAGRAM

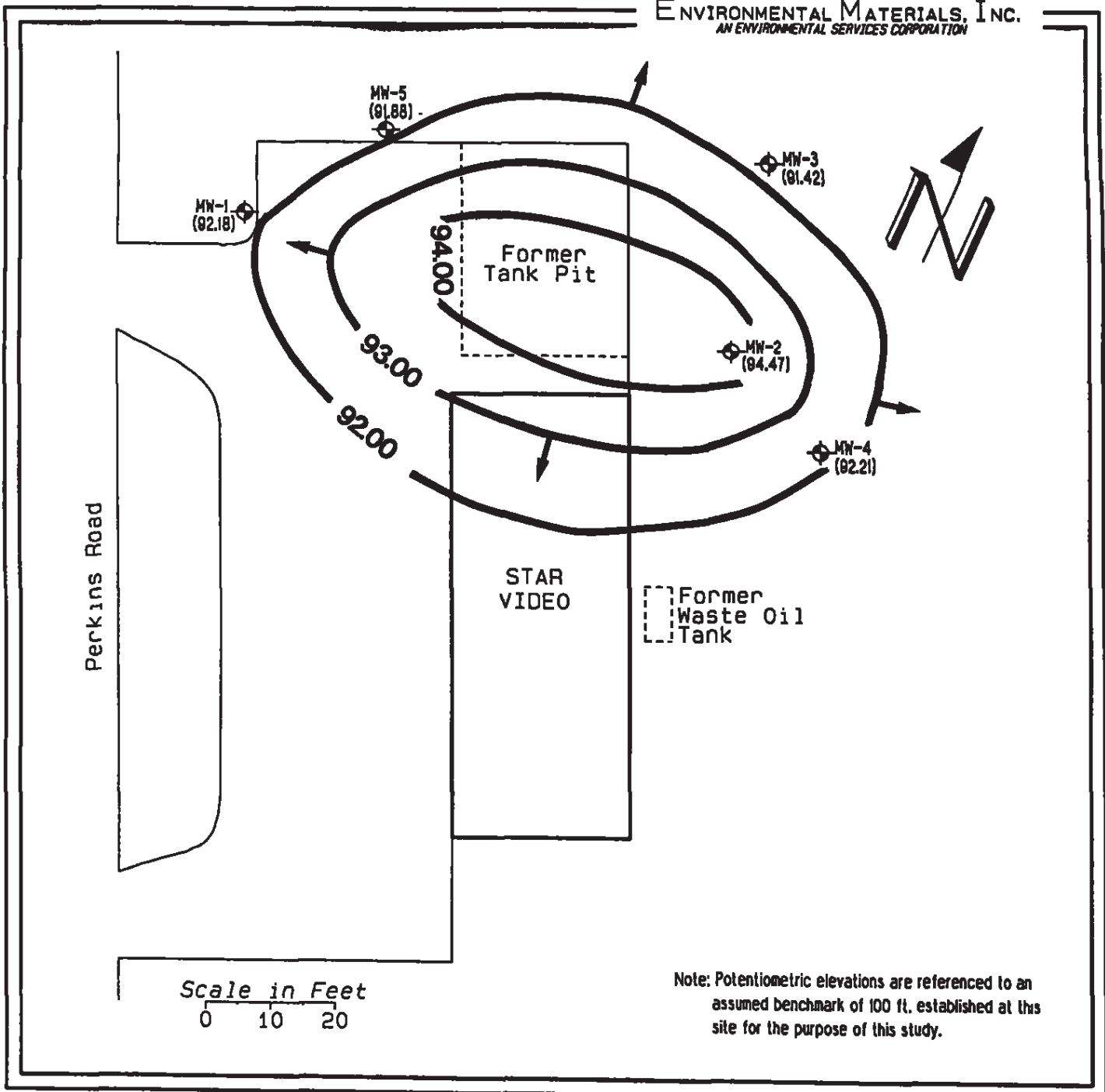
Star Video
3236 Perkins Road
Baton Rouge, Louisiana
Project #903018

KEY:



Existing Monitor Well

Figure 2



POTENTIOMETRIC SURFACE MAP

Star Video
3236 Perkins Road
Baton Rouge, Louisiana
Project #903018
07/31/91

KEY:




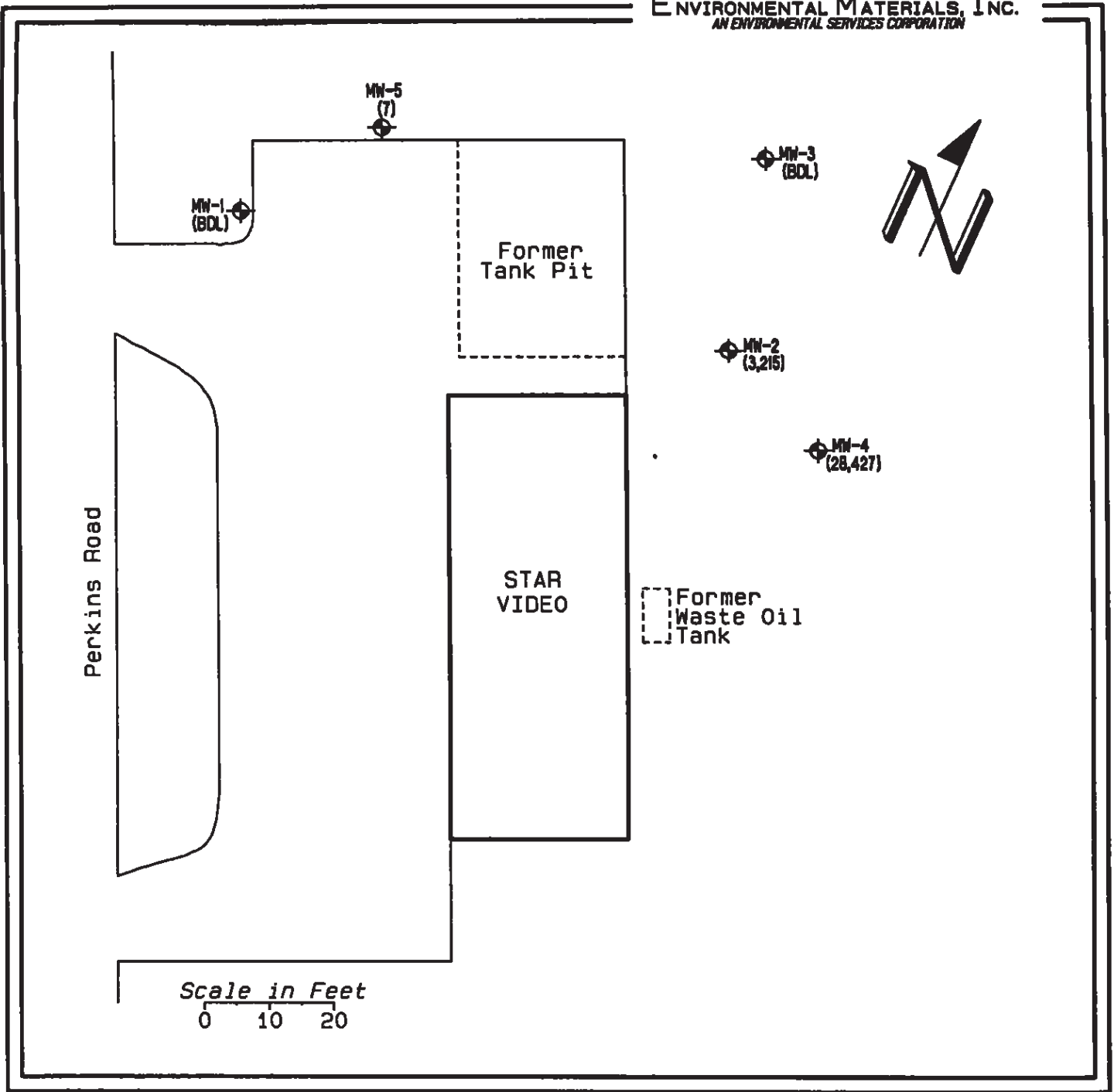
-  Groundwater Flow
-  Existing Monitor Well
-  Potentiometric Elevation

Figure 3



TOTAL BTEX CONCENTRATION MAP

Star Video
3236 Perkins Road
Baton Rouge, Louisiana
Project #903018
07/31/91

KEY:


-  Existing Monitor Well
- (PSH) Phase Separated Hydrocarbon
- (4530) Total BTEX in ppb
- (BDL) Below Detection Limits

Figure 4

APPENDIX

A

PROJECT NAME: <i>Star Video</i>	PROJECT NUMBER: <i>903018</i>
DATE STARTED: <i>07-24-91</i>	LOCATION: <i>Baton Rouge, Louisiana</i>
DATE COMPLETED: <i>07-24-91</i>	RELATIVE ELEVATION: <i>97.28 Feet</i>
DRILLING METHOD: <i>Hollow Stem Auger</i>	TOTAL DEPTH: <i>16 Feet</i>
DRILLING COMPANY: <i>Custom Coring Inc.</i>	GEOLOGIST: <i>P. Temple</i>

DEPTH (feet)	SAMPLE NUMBER	CORE SAMPLE	PID (ppm)		GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION AND REMARKS	WELL CONSTRUCTION
			VALUES	GRAPHIC PROFILE (Scale 0:1000)				
	A		3				FILL MATERIAL brown silty clay with brick fragments	
	B		30			ML	CLAYEY SILT brown and gray with roots and iron staining	
5	C		8			CL	SILTY CLAY brown, tan, and gray with roots and iron staining	
	D		8				slight HC odor	
10	E		90					
	F		900					
	G*		1000			ML	CLAYEY SILT tan and gray with iron staining mild HC odor	
15	H		200			CL	CLAY medium stiff, trace silt tan and gray with iron nodules	
<p><i>Boring terminated in this strata. All unified soil classifications based on visual field observations.</i></p>								

KEY: * - Sample Selected for Lab Analysis
 - Groundwater

CORE SAMPLES:

- Split Spoon

- Shelby Tube

- No Sample Recovered

PROJECT NAME: *Star Video*

PROJECT NUMBER: *903018*

DATE STARTED: *07-24-91*

LOCATION: *Baton Rouge, Louisiana*

DATE COMPLETED: *07-24-91*

RELATIVE ELEVATION: *99.24 Feet*

DRILLING METHOD: *Hollow Stem Auger*

TOTAL DEPTH: *16 Feet*

DRILLING COMPANY: *EMI*

GEOLOGIST: *P. Temple*

DEPTH (feet)	SAMPLE NUMBER	CORE SAMPLE	PID (ppm)		GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION AND REMARKS	WELL CONSTRUCTION
			VALUES	GRAPHIC PROFILE (Scale 0:200)				
	A		2				FILL MATERIAL dark brown organic clayey silt	
	B		12		SM	SILTY SAND brown		
	C		10		ML	SILT tan, fining downward		
5	D		22		CL	SILTY CLAY organic dark gray to black grading to medium gray		
	E*		92			silt lenses iron staining		
10	F		38					
	G		5		ML	SILT AND CLAYEY SILT tan and brown fining to gray with iron staining and wood fragments		
15	H		2			SILT tan and brown fining downward		
					CL	SILTY CLAY gray <i>Boring terminated in this strata. All united soil classifications based on visual field observations.</i>		

KEY: * - Sample Selected for Lab Analysis

▼ - Groundwater

CORE SAMPLES:

- Split Spoon

- Shelby Tube

- No Sample Recovered

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

1 USE OF WELL (Check Appropriate Box)
 DOMESTIC RIG SUPPLY MONITORING HEAT PUMP SUPPLY
 HEAT PUMP HOLE ABANDONED PILOT HOLE OTHER (Please Specify)

2 WELL OWNER ROGER BARNELLE PHONE 514 337-3141

3 ADDRESS 3335 PERKINS RD, B.R. LA. 70728

4 OWNER'S WELL NUMBER OR NAME (if any) McW-5 DEPTH OF HOLE 16 FT DEPTH OF WELL 16 FT

5 DATE COMPLETED 7-24-91 MEASURED ON 7-24-91 (Date)

6 STATIC WATER LEVEL 120 FT BELOW GROUND SURFACE LENGTH 6 FT
 7 CASING 4 IN STEEL OR PVC SCH 40 FT
 8 SCREEN 4 IN STEEL OR PVC SCH 40 SLOT SIZE 310 LENGTH 10 FT

9 CEMENTED FROM 2.5 FT TO GROUND SURFACE, USING PUMP DOWN OR GRAVITY METHOD

10 LOCATION OF WELL PARISH East Baton Rouge WELL IS NEAR Baton Rouge
 APPROXIMATELY 0.5 MILES FROM Academy Thruway (Crossroads, Railroad, Any Landmark, etc.) Perkins Rd.

11 REMARKS Static Video Store, Address Above
 (Please draw sketch on back of Original)

12 DRILLER'S LOG (Description and color of cuttings such as shale, sand, etc. in feet)

FROM	TO	DESCRIPTION	FROM	TO	DESCRIPTION
0	2	Fill material	15.5	16	Gray silty clay
2	4	Brown silty sand			
4	6	Tan silt			
6	12	Dark gray silty clay			
12	14	Tan silty clay-silt			
14	15.5	Tan silt			

13 FOR HEAT PUMP HOLES ONLY AVG DEPTH _____ FT NUMBER OF HOLES _____
 TUBING MATERIAL PVC, PE, PB, OTHER _____

14 ABANDONMENT INFORMATION DOES THE NEW WELL REPLACE AN EXISTING WELL? YES NO

INSPECTED BY _____ DATE _____
 REMARKS _____

Name of Water Well Contractor Chas J. Walker Contracting, Inc.
 LICENSE NUMBER WVC-320
 Authorized Signature Robert J. Walker 8-17-91
 Date

MAIL ORIGINAL TO:
 LOUISIANA DEPARTMENT OF
 TRANSPORTATION AND DEVELOPMENT
 ATTN CHIEF WATER RESOURCES SECTION
 P.O. BOX 94245
 BATON ROUGE, LA 70804-9245
 (504) 379-1434

FOR OFFICE USE ONLY

STATE 22 PARISH _____ LOCAL WELL NO _____

IDENTIFICATION NUMBER 3025320310350
 OWNERS NAME _____

WELL DEPTH _____ Ft Use of Well _____

Date Completed _____ MO _____ YR _____

OWNER'S NO _____ Geologic Unit _____

CONTRACTOR'S NAME _____

SECTION 14 TOWNSHIP 7S RANGE 1E
 HOLE DEPTH _____ ELEV 35 QUAD NO 1634

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
 WATER RESOURCES SECTION
 WATER WELL REGISTRATION SHORT FORM (DOTD-GW-1S)

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

- USE OF WELL (Check Appropriate Box)
 - DOMESTIC
 - RIG SUPPLY
 - MONITORING
 - HEAT PUMP SUPPLY
 - HEAT PUMP HOLE
 - ABANDONED PILOT HOLE
 - OTHER
- WELL OWNER Roger Babin He PHONE 504 387-3141 (Please Specify)
- ADDRESS 3235 Perkins Rd BR LA 70208
- OWNER'S WELL NUMBER OR NAME (if any) M.W. - 4
- DATE COMPLETED 7-24-91 DEPTH OF HOLE 16 FT. DEPTH OF WELL 16 FT.
- STATIC WATER LEVEL 12.0 FT BELOW GROUND SURFACE MEASURED ON 7-24-91 (Date)
- CASING 4 IN STEEL OR PVC SCH 40 LENGTH 6 FT
- SCREEN 4 IN STEEL OR PVC SCH 40 LENGTH 10 FT
- CEMENTED FROM 2.5 FT TO GROUND SURFACE USING PUMP DOWN OR GRAVITY METHOD
- LOCATION OF WELL PARISH EAST BATON ROUGE WELL IS NEAR BATON ROUGE (Town or City)

APPROXIMATELY 0.5 MILES FROM Acadian Thruway & Perkins Rd
 (Crossroads Railroad/Any Landmark etc)

REMARKS STAR VIDEO STORE, address above

DRILLER'S LOG (Description and color of cuttings such as shale sand etc in feet)

FROM	TO	DESCRIPTION	FROM	TO	DESCRIPTION
0	2	Fill			
2	4	Brown clay			
4	12	Brown silty clay			
12	13	Tan Gray clay			
13	16	Tan Gray clay			

- FOR HEAT PUMP HOLES ONLY AVG DEPTH _____ FT. NUMBER OF HOLES _____
- TUBING MATERIAL PVC, PE, PB, OTHER
- ABANDONMENT INFORMATION DOES THE NEW WELL REPLACE AN EXISTING WELL? YES NO

(REV 11/85)

OWNER'S COPY

Name of Water Well Contractor Custom Curving, Inc.
 LICENSE NUMBER WWC-320
 Authorized Signature R. J. D. Walker 8-12-91
 Date

MAIL ORIGINAL TO:
 LOUISIANA DEPARTMENT OF
 TRANSPORTATION AND DEVELOPMENT
 ATTN CHIEF WATER RESOURCES SECTION
 P O BOX 94245
 BATON ROUGE, LA 70804-9245
 (504) 379-1434

FOR OFFICE USE ONLY
 STATE 22 PARISH _____ LOCAL WELL NO _____

IDENTIFICATION NUMBER 3025220910250
 OWNERS NAME _____

WELL DEPTH _____ FT Use of Well _____
 Date Completed _____ MO _____ VR _____

OWNERS NO _____ Geologic Unit _____

CONTRACTOR'S NAME _____

SECTION 14 TOWNSHIP 715 RANGE 1E
 HOLE DEPTH _____ ELEV 35 QUAD NO 163A

Inspected By _____
 Date _____
 Remarks _____

APPENDIX

B

environmental laboratories, incorporated

9425 Lindale Avenue, Suite A, Baton Rouge, LA, 70815 (504) 926-2288

07-31-91

E.L.I. Analysis No. P107542-1

Client: Environmental Materials, Inc.
7916 Wrenwood Drive, Suite F
Baton Rouge, LA 70809-1772

Attn: Paul Templet

RECEIVED
08/01/91

Project Name: Star Video
Job No.: 903018
Sample ID.: MW-4
Sample Matrix: Soil
Sampled By: P. Templet / Environmental Materials, Inc.
Date Collected: 07-25-91 @ 8:00AM

<u>COMPOUND</u>	<u>CONCENTRATION (MG/KG)</u>	<u>DETECTION LIMIT (MG/KG)</u>
Benzene	6.20	0.10
Toluene	15.3	0.10
Ethylbenzene	10.7	0.10
Xylene	50.9	0.10

*METHOD: EPA Test Method 5030/8020 (SW-846, 3rd. Edition)

Date/Time Analyzed: 07-30-91 @ 11:55AM

BDL = Below Detection Limits


John D. Trahan

environmental laboratories, incorporated

9425 Lindale Avenue, Suite A, Baton Rouge, LA, 70815 (504) 926-2288

07-31-91

E.L.I. Analysis No. P107542-2

Client: Environmental Materials, Inc.
7916 Wrenwood Drive, Suite F
Baton Rouge, LA 70809-1772

Attn: Paul Templet

Project Name: Star Video
Job No.: 903018
Sample ID.: MW-5
Sample Matrix: Soil
Sampled By: P. Templet / Environmental Materials, Inc.
Date Collected: 07-25-91 @ 10:00AM

<u>COMPOUND</u>	<u>CONCENTRATION (MG/KG)</u>	<u>DETECTION LIMIT (MG/KG)</u>
Benzene	BDL	0.01
Toluene	BDL	0.01
Ethylbenzene	BDL	0.01
Xylene	BDL	0.01

*METHOD: EPA Test Method 5030/8020 (SW-846, 3rd. Edition)

Date/Time Analyzed: 07-30-91 @ 12:29PM

BDL = Below Detection Limits



John D. Trahan

QA/QC DATA

SOIL MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

E.L.I. Sample No.: P107541-1

Analysis Date: 07-30-91

COMPOUND	BLANK CONC.	CONC. SPIKE ADDED (UG/KG)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS RPD	RECOVERY
BENZENE	BDL	50	BDL	45	90	42	84	7	20	39-150
TOLUENE	BDL	50	BDL	47	94	43	86	9	20	46-148
ETHYLBENZENE	BDL	50	BDL	47	94	44	88	7	20	32-160
P&M XYLENE	BDL	100	BDL	100	100	92	92	8	20	32-160
O XYLENE	BDL	50	BDL	53	106	49	98	8	20	32-160

$$\text{Matrix Spike Percent Recovery (\%REC)} = \frac{\text{Spike Sample Result (Conc. MS)} - \text{Sample Result}}{\text{Concentration of Spike Added}}$$

$$\text{Relative Percent Difference (RPD)} = \frac{\text{Matrix Spike Conc.} - \text{Matrix Spike Duplicate Conc.}}{(\text{Matrix Spike Conc.} + \text{Matrix Spike Duplicate Conc.}) / 2} \times 100$$

*UNITS = UG/KG

environmental laboratories, incorporated

9425 Lindale Avenue, Suite A, Baton Rouge, LA, 70815 (504) 926-2288

* SUMMARY REPORT *

CLIENT: ENVIRONMENTAL MATERIALS, INC.
7916 WRENWOOD DRIVE, SUITE F
BATON ROUGE, LA 70809-1772

ATTN: PAUL TEMPLET

PROJECT: STAR VIDEO

PROJECT NO.: 903018

MATRIX: SOIL

<u>E.L.I. NO.</u>	<u>SAMPLE ID</u>	<u>BENZENE</u>	<u>TOLUENE</u>	<u>ETHYLBENZENE</u>	<u>XYLENE</u>
P107542-1	MW-4	6.20	15.3	10.7	50.9
P107542-2	MW-5	BDL	BDL	BDL	BDL

BDL = Below Detection Limits

* All values have units of MG/KG

ENVIRONMENTAL MATERIALS, INC.

CHAIN OF CUSTODY RECORD

Dallas, Texas

Baton Rouge, Louisiana

PROJECT NO.		PROJECT NAME		SAMPLE PARAMETER		OTHER		NUMBER OF CONTAINERS		REMARKS
903018		STAR VIDEO		BTEX (8020)						
SAMPLERS: (Signature) <i>Paul D. Tangelos</i>										
STATION NUMBER	DATE	TIME	STATION LOCATION							
MW-4	7/25/91	8:00	Below Land. (12-14)						1	
MW-5	7/25/91	10:00	Below Surface (8-10)						1	
TOTAL NUMBER OF CONTAINERS										
				2						
RELINQUISHED BY: (Signature)		DATE	TIME	RECEIVED BY: (Signature)		DATE	TIME	RECEIVED BY: (Signature)		
<i>Steven H. Ward</i>		7-25-91	3:12	<i>Paul D. Tangelos</i>						
RELINQUISHED BY: (Signature)		DATE	TIME	RECEIVED BY: (Signature)		DATE	TIME	RECEIVED BY: (Signature)		
METHOD OF SHIPMENT		SHIPPED BY: (Signature)		COURIER: (Signature)		RECEIVED FOR LAB BY: (Signature)		DATE/TIME		

environmental laboratories, incorporated

9425 Lindale Avenue, Suite A. Baton Rouge, LA, 70815 (504) 926-2288

08-02-91

E.L.I. Analysis No. P107556-1

Client: Environmental Materials, Inc.
7916 Wrenwood Drive, Suite F
Baton Rouge, LA 70809-1772

Attn: Paul Templet

RECEIVED
08/02/91

Project Name: Star Video (Perkins Rd.)
Job No.: 903018
Sample ID.: MW-1
Sample Matrix: Water
Sampled By: S. Hilliard / Environmental Materials, Inc.
Date Collected: 07-31-91 @ 11:10AM

<u>COMPOUND</u>	<u>CONCENTRATION (UG/L)</u>	<u>DETECTION LIMIT (UG/L)</u>
Benzene	BDL	1
Toluene	BDL	1
Ethylbenzene	BDL	1
Xylene	BDL	1

*METHOD: EPA Test Method 602 (40 CFR Pt. 136, Appendix A)

Date/Time Analyzed: 08-01-91 @ 2:52PM

BDL = Below Detection Limits


John D. Trahan

environmental laboratories, incorporated

9425 Lindale Avenue, Suite A, Baton Rouge, LA, 70815 (504) 926-2288

08-02-91

E.L.I. Analysis No. P107556-2

Client: Environmental Materials, Inc.
7916 Wrenwood Drive, Suite F
Baton Rouge, LA 70809-1772

Attn: Paul Templet

Project Name: Star Video (Perkins Rd.)
Job No.: 903018
Sample ID.: MW-2
Sample Matrix: Water
Sampled By: S. Hilliard / Environmental Materials, Inc.
Date Collected: 07-31-91 @ 11:32AM

<u>COMPOUND</u>	<u>CONCENTRATION (UG/L)</u>	<u>DETECTION LIMIT (UG/L)</u>
Benzene	1580	10
Toluene	100	10
Ethylbenzene	95	10
Xylene	1440	10

*METHOD: EPA Test Method 602 (40 CFR Pt. 136, Appendix A)

Date/Time Analyzed: 08-01-91 @ 3:27PM

BDL = Below Detection Limits


John D. Trahan



environmental laboratories, incorporated

9425 Lindale Avenue, Suite A, Baton Rouge, LA. 70815 (504) 926-2288

08-02-91

E.L.I. Analysis No. P107556-3

Client: Environmental Materials, Inc.
7916 Wrenwood Drive, Suite F
Baton Rouge, LA 70809-1772

Attn: Paul Templet

Project Name: Star Video (Perkins Rd.)
Job No.: 903018
Sample ID.: MW-3
Sample Matrix: Water
Sampled By: S. Hilliard / Environmental Materials, Inc.
Date Collected: 07-31-91 @ 11:25AM

<u>COMPOUND</u>	<u>CONCENTRATION (UG/L)</u>	<u>DETECTION LIMIT (UG/L)</u>
Benzene	BDL	1
Toluene	BDL	1
Ethylbenzene	BDL	1
Xylene	BDL	1

*METHOD: EPA Test Method 602 (40 CFR Pt. 136, Appendix A)

Date/Time Analyzed: 08-01-91 @ 4:02PM

BDL = Below Detection Limits



John D. Trahan

environmental laboratories, incorporated

9425 Lindale Avenue, Suite A, Baton Rouge, LA, 70815 (504) 926-2288

08-02-91

E.L.I. Analysis No. P107556-4

Client: Environmental Materials, Inc.
7916 Wrenwood Drive, Suite F
Baton Rouge, LA 70809-1772

Attn: Paul Templet

Project Name: Star Video (Perkins Rd.)
Job No.: 903018
Sample ID.: MW-4
Sample Matrix: Water
Sampled By: S. Hilliard / Environmental Materials, Inc.
Date Collected: 07-31-91 @ 11:45AM

<u>COMPOUND</u>	<u>CONCENTRATION (UG/L)</u>	<u>DETECTION LIMIT (UG/L)</u>
Benzene	8940	20
Toluene	8950	20
Ethylbenzene	597	20
Xylene	9940	20

*METHOD: EPA Test Method 602 (40 CFR Pt. 136, Appendix A)

Date/Time Analyzed: 08-02-91 @ 8:19AM

BDL = Below Detection Limits



John D. Trahan

environmental laboratories, incorporated

9425 Lindale Avenue, Suite A, Baton Rouge, LA, 70815 (504) 926-2288

08-02-91

E.L.I. Analysis No. P107556-5

Client: Environmental Materials, Inc.
7916 Wrenwood Drive, Suite F
Baton Rouge, LA 70809-1772

Attn: Paul Templet

Project Name: Star Video (Perkins Rd.)
Job No.: 903018
Sample ID.: MW-5
Sample Matrix: Water
Sampled By: S. Hilliard / Environmental Materials, Inc.
Date Collected: 07-31-91 @ 11:15AM

<u>COMPOUND</u>	<u>CONCENTRATION (UG/L)</u>	<u>DETECTION LIMIT (UG/L)</u>
Benzene	2	1
Toluene	2	1
Ethylbenzene	BDL	1
Xylene	3	1

*METHOD: EPA Test Method 602 (40 CFR Pt. 136, Appendix A)

Date/Time Analyzed: 08-01-91 @ 5:12PM

BDL = Below Detection Limits



John D. Trahan

QA/QC DATA

WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

E.L.I. Sample No.: P107556-1

Analysis Date: 08-01-91

COMPOUND	BLANK CONC.	CONC. SPIKE ADDED (UG/L)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	RPD	QC LIMITS RECOVERY
BENZENE	BDL	50	BDL	45	90	43	86	5	20	39-150
TOLUENE	BDL	50	BDL	46	92	43	86	7	20	46-148
ETHYLBENZENE	BDL	50	BDL	45	90	43	86	5	20	32-160
P&M XYLENE	BDL	100	BDL	92	92	88	88	4	20	32-160
O XYLENE	BDL	50	BDL	46	92	44	88	4	20	32-160

$$\text{Matrix Spike Percent Recovery (\%REC)} = \frac{\text{Spike Sample Result (Conc. MS)} - \text{Sample Result}}{\text{Concentration of Spike Added}}$$

$$\text{Relative Percent Difference (RPD)} = \frac{\text{Matrix Spike Conc.} - \text{Matrix Spike Duplicate Conc.}}{(\text{Matrix Spike Conc.} + \text{Matrix Spike Duplicate Conc.}) / 2} \times 100$$

* UNITS = UG/L

environmental laboratories, incorporated

9425 Lindale Avenue, Suite A. Baton Rouge, LA, 70815 (504) 926-2288

* SUMMARY REPORT *

CLIENT: ENVIRONMENTAL MATERIALS, INC.
7916 WRENWOOD DRIVE, SUITE F
BATON ROUGE, LA 70809-1772

ATTN: PAUL TEMPLET

PROJECT: STAR VIDEO (PERKINS RD.)

PROJECT NO.: 903018

MATRIX: WATER

<u>E.L.I. NO.</u>	<u>SAMPLE ID</u>	<u>BENZENE</u>	<u>TOLUENE</u>	<u>ETHYLBENZENE</u>	<u>XYLENE</u>
P107556-1	MW-1	BDL	BDL	BDL	BDL
P107556-2	MW-2	1580	100	95	1440
P107556-3	MW-3	BDL	BDL	BDL	BDL
P107556-4	MW-4	8940	8950	597	9940
P107556-5	MW-5	2	2	BDL	3

BDL = Below Detection Limits

* All values have units of UG/L

ENVIRONMENTAL MATERIALS, INC.

CHAIN OF CUSTODY RECORD

Dallas, Texas

Baton Rouge, Louisiana

PROJECT NO.	PROJECT NAME		STATION NUMBER	DATE	TIME	STATION LOCATION	SAMPLE PARAMETER					OTHER	NUMBER OF CONTAINERS	REMARKS			
	903018	Star Video (Perkins rd)					2	7-31-91	11:10	A20							
SAMPLERS: (Signature) <i>Stevie Hilliard</i>																	
			MW 2	"	11:32	"								2			
			MW 3	"	11:25	"								2			
			MW 4	"	11:45	"								2			
			MW 5	"	11:15	"								2			
							TOTAL NUMBER OF CONTAINERS						10				
RELINQUISHED BY: (Signature) <i>Stevie Hilliard</i>			DATE			TIME			RECEIVED BY: (Signature) <i>[Signature]</i>			DATE			TIME		
RELINQUISHED BY: (Signature)			DATE			TIME			RECEIVED BY: (Signature)			DATE			TIME		
METHOD OF SHIPMENT			SHIPPED BY: (Signature)			DATE			RECEIVED BY: (Signature)			DATE			TIME		
						7-31-91									7/31/91 1:30PM		
									COURIER: (Signature) <i>[Signature]</i>			RECEIVED FOR LAB BY: (Signature) <i>[Signature]</i>			DATE/TIME		

RECEIVED

DEC 16 1992

UNDERGROUND STORAGE
TANK DIVISION

**GROUNDWATER MONITORING REPORT
STAR VIDEO
BATON ROUGE, LOUISIANA**

DECEMBER 11, 1992

Prepared For:

**MR. ROGER BARRIERE
CORPORATE INVESTMENT
BATON ROUGE, LOUISIANA**

Prepared By:

**ENVIRONMENTAL MATERIALS, INC.
2237 S. ACADIAN THRUWAY, SUITE 604
BATON ROUGE, LOUISIANA 70808
(504) 927-4850**

EMI PROJECT NO. 903018



Charles A. Hudson, Project Manager



Date

ENVIRONMENTAL MATERIALS, INC.

5930 LBJ FREEWAY, SUITE 300
DALLAS, TX 75240
(214) 458-8162
(214) 239-3649 FAX

2237 S. ACADIAN THRUWAY, SUITE 604
BATON ROUGE, LA 70808
(504) 927-4850
(504) 928-2660 FAX

11251 NORTHWEST FWY., SUITE 300
HOUSTON, TX 77092
(713) 688-9254
(713) 688-5638 FAX

December 14, 1992

Mr. Dennis Strickland
Enforcement Program Director
Underground Storage Tank Division
Louisiana Department of Environmental Quality
Post Office Box 82178
Baton Rouge, Louisiana 70884-2178

Re: Request for No Further Action
Star Video
3235 Perkins Road
Baton Rouge, Louisiana

Dear Mr. Strickland:

Enclosed please find three (3) copies of the Groundwater Monitoring Report for the above referenced facility.

It is our recommendation that No Further Action towards site assessment or remediation should be granted for this facility, and that the existing monitor wells (MW-1 through MW-5) be removed by plugging and abandonment procedures as established by the Louisiana Department of Environmental Quality.

If you have any questions or if I may be of any further assistance to you, please let me know.

Sincerely,



Charles A. Hudson
Project Manager

CAH/rmm

Enclosures

cc: Mr. Roger Barielle
Corporate Investment

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

RECEIVED
DEC 16 1992
UNDERGROUND STORAGE
TANK DIVISION

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1.0 SUMMARY

Mr. Roger Barielle of Corporate Investments, Inc., contracted Environmental Materials, Inc. (EMI), in June 1990 to conduct an Initial Site Assessment (ISA) on the property known as Star Video (a former Spur retail gasoline distribution facility and service station) located at 3235 Perkins Road in Baton Rouge, Louisiana (Figure 1). The ISA was conducted in August 1990 after evidence of a hydrocarbon release was detected during removal of the underground storage tanks (UST's) in May 1990. The ISA consisted of the installation of three (3) soil borings/monitor wells MW-1 through MW-3, five (5) soil gas survey points, and associated soil and groundwater sampling.

A subsequent comprehensive site assessment (CSA) was conducted in July 1991, which consisted of the installation of two (2) additional soil borings/monitor wells, MW-4 and MW-5. The locations of all monitor wells are illustrated on the potentiometric map in Figure 2.

Based on the data collected during the ISA and CSA, a groundwater sampling program was instituted and approved by LDEQ as stipulated in the LDEQ communication record dated December 16, 1991 (Appendix A). As stated in the LDEQ Communication Record, if levels of Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) decrease significantly in the groundwater, site closure will be considered.

2.0 GROUNDWATER SAMPLES

On November 13, 1992, the groundwater samples were collected from monitor wells MW-1 through MW-5. An electronic interface probe (probe) was used to gauge water levels in all wells prior to sampling and to check for phase-separated hydrocarbons (PSH). There were no PSH detected during the sampling event, and PSH has not been detected in any of the wells since their installation. A Quality Assurance (QA) / Quality Control (QC) Plan is provided in Appendix B which describes the groundwater

sampling procedures and analytical methods used to ensure validity of the samples and analytical results.

Groundwater elevations measured on November 13, 1992, from monitor wells MW-1 through MW-5 were contoured to form a potentiometric surface map (Figure 2). Measurements were referenced to a benchmark with an assumed elevation of 100 feet for the purpose of this investigation. Predominant groundwater flow is toward the northwest with a gradient of approximately 1 foot per 100 feet.

3.0 GROUNDWATER ANALYTICAL RESULTS

The groundwater samples collected from the five (5) monitor wells were analyzed by West-Paine Laboratories for BTEX using Waste Water Method 602. The laboratory results and chain-of-custody documentation are included in Appendix C. A summary of the November 1992 analytical results is presented in Table 1. Historical analytical data is provided in Table 2.

ENVIRONMENTAL MATERIALS, INC.

TABLE 1 GROUNDWATER ANALYTICAL DATA (BTEX) NOVEMBER 13, 1992					
SAMPLE NO.	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOTAL BTEX
MW-1	<1	<1	<1	<1	<4
MW-2	1,750	86.2	533.0	1,610.0	3,979.0
MW-3	<1	<1	<1	<1	<4
MW-4	3,110	1,250	964	4,410	9,734
MW-5	<1	<1	<1	<1	<4

Results are given in parts per billion.
Total BTEX is the sum of the concentrations of Benzene, Toluene, Ethylbenzene, and Xylenes.

Concentrations of dissolved BTEX were detected in MW-2 and MW-4 during the November 13, 1992, sampling event. There were no dissolved BTEX concentrations detected in MW-1, MW-3 or MW-5.

TABLE 2 HISTORICAL GROUNDWATER ANALYTICAL RESULTS					
DATE	MW-1 BTEX	MW-2 BTEX	MW-3 BTEX	MW-4 BTEX	MW-5 BTEX
08/90	ND	23,795	BDL	*	*
07/91	BDL	3,215	BDL	28,427	7
02/92	BDL	2,780	BDL	22,080	BDL
05/92	BDL	1,845	BDL	11,860	BDL
11/92	BDL	3,979	BDL	9,734	BDL

NOTE: Concentrations are given in parts per billion (ppb).
BTEX concentrations equal sum of Benzene, Toluene, Ethylbenzene, and Xylenes.
ND = Below Detection Limit
BDL = Below Detection Limit
* Wells installed after 08/24/90.

4.0 CONCLUSIONS

- The facility is not an operating gasoline distribution facility.
- The UST's with associated ancillary equipment were removed in May 1990.
- BTEX concentrations in monitor wells MW-1, MW-3, and MW-5 have been BDL or less than three (3) times the detection limit for each of the five (5) sampling events.
- Historical analytical laboratory data indicate a decreasing trend of BTEX concentrations in MW-2 and MW-4.
- Groundwater flow is toward the north and west with a gradient of 1 foot per 100 feet.

5.0 RECOMMENDATIONS

Based on the information provided in this report, EMI recommends the following:

- LDEQ should grant No Further Action towards site assessment or remediation, and the monitor wells at the site should be properly plugged and abandoned.

FIGURES

Reference Sheet



REF+34350

09/30/99 9:30 AM

LEGEND

EXISTING MONITOR WELL

POTENTIOMETRIC CONTOUR

DIRECTION OF GROUNDWATER FLOW

92.65 GROUNDWATER ELEVATIONS

<2235> TOTAL BTEX (PPB)

<BDL> BELOW DETECTION LIMITS

NOTES:

POTENTIOMETRIC ELEVATIONS ARE REFERENCED TO AN ASSUMED BENCHMARK OF 1000.0'



STAR VIDEO

6230 FORTNER ROAD
BATON ROUGE, LOUISIANA

Environmental Materials, Inc.
AN ENVIRONMENTAL SERVICES CORPORATION

2237 SOUTH ACADIAN THORWAY • SUITE 804
BATON ROUGE, LOUISIANA • 70808 • (504) 827-4850

PROJECT NUMBER: EMI/ 903018

P. TEMPLET

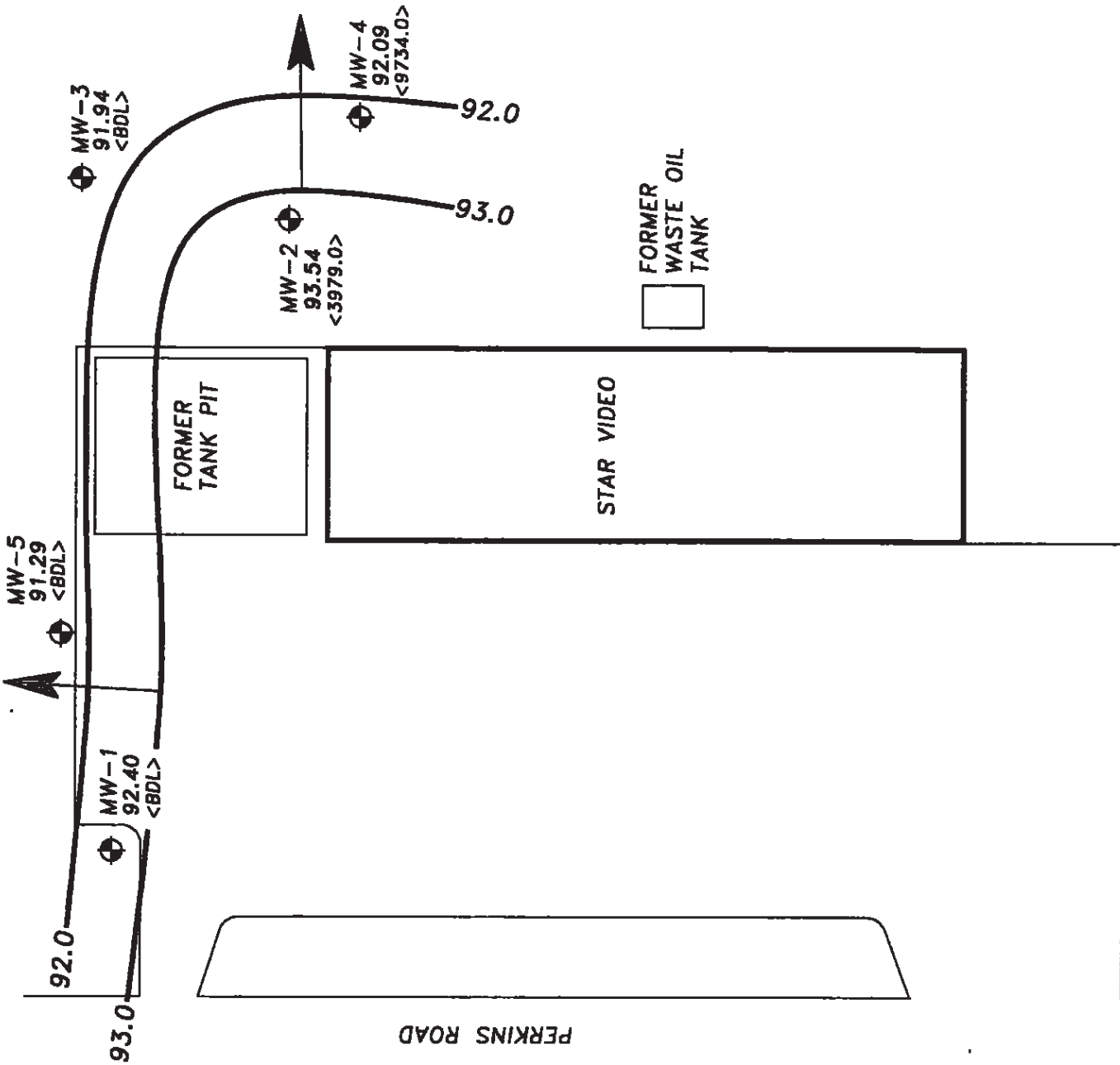
DATE DRAWN: MAY 21, 1992

DATE REVISED: DECEMBER 4, 1992

DRAWN BY: S. T. KOJIS
DRAWING FILE: \18-SITE.DWG

POTENTIOMETRIC SURFACE DIAGRAM

FIGURE NO. 2



Reference Sheet



REF+34351

09/30/99 9:30 AM

RECORD OF COMMUNICATION
UNDERGROUND STORAGE TANK DIVISION
LA. DEPT. OF ENVIRONMENTAL QUALITY

DATE: 12-16-91	TIME:	<input checked="" type="checkbox"/> Phone Call	<input type="checkbox"/> Discussion	<input type="checkbox"/> Field Trip	<input type="checkbox"/> Conference
PHONE NO: 927-4850		<input type="checkbox"/> Other (Specify)			

TO: Paul Zenglet Environmental Materials Inc.	FROM: Dennis Strickland
--	-------------------------

SUBJECT: old Spun Station
Star Videos, Baton Rouge

Summary of Communication

Based on 8-91 Site Assessment Report,
I agreed to accept a proposal to do
2 more quarterly samples at the site and
if levels of BTEX decrease significantly in
the monitor wells, closure could be considered.

Conclusions, Action Taken or Required

Information Copies
TO:

APPENDIX

B

QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES

Included in this section are the groundwater sampling procedures and analytical methods used to ensure validity of the samples and laboratory results.

Prior to purging and sampling the monitoring wells, static water levels and the presence and thickness of phase-separated hydrocarbons were measured to provide data for determining the corrected depth to groundwater. The wells were then purged of three (3) well volumes of groundwater to ensure the collection of representative samples of the formation water.

Groundwater samples were collected, after a suitable period of time to allow recharge of the wells, with disposable polyethylene bailers (one per well). They were then immediately transferred to glass sample containers, processed, and chilled to 4°C until received by the laboratory. Each Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) sample was contained in two (2) 40 ml vials with teflon sealed caps.

Care was taken to ensure that each of the BTEX samples were put in vials with no visible air bubbles.

The groundwater samples were analyzed for BTEX by EPA Method 602.

All samples collected for laboratory analysis were documented on chain-of-custody forms that included:

- o The identification number of the sample, the date and time collected, and the signature of the sampler;

ENVIRONMENTAL MATERIALS, INC.

QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES (continued)

- o The signature of the person receiving the sample, including the time of receipt;**
- o The shipping method;**
- o A description of the sample condition upon receipt, if the sample condition did not meet the strict protocol of the laboratory.**
- o The date of analysis;**
- o The report date; and**
- o The method detection limit*.**

* To be submitted upon request.

APPENDIX

C



7878 GSRI AVE • BATON ROUGE, LA 70820

SAMPLE ANALYSES

for

ENVIRONMENTAL MATERIALS, Inc.
2237 S ACADIAN THRUWAY
SUITE 604
BATON ROUGE, LA 70808

ATTENTION: MR CHUCK HUDSON

November 17, 1992

hal

208673



ENVIRONMENTAL MATERIALS, Inc.
BATON ROUGE, LA 70808
November 17, 1992

Sample receipt at WEST-PAINE LABORATORIES INC is documented for your designated sample(s). Chain-of-custody documentation, if provided, is included in this report. Sample analysis was in accordance with Environmental Protection Agency protocol.

A. Test Methods for Evaluating Solid Waste, SW-846, July 1982

Parameter
Purgeable Aromatics

Method
8020

Documented results are shown on the following page(s).

W. R. Palmer
Chief Operating Officer



7879 GSRI AVE. • BATON ROUGE, LA 70820

ENVIRONMENTAL MATERIALS, Inc.
BATON ROUGE, LA 70808
SAMPLE #: 9211130011

Method 8020

Purgeable Aromatics

All results in micrograms per liter

SAMPLE SOURCE: MW-1 PROJECT #903018

Sample Date: 92/11/13 Sample Time: 11:35

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
<u>Benzene</u>	< 1.0	1.0
<u>Toluene</u>	< 1.0	1.0
<u>Ethylbenzene</u>	< .1.0	1.0
<u>Xylene</u>	< 1.0	1.0

Date of Analysis: 92/11/16 Analyst: JEA



ENVIRONMENTAL MATERIALS, Inc.
BATON ROUGE, LA 70808
SAMPLE #: 9211130011

QUALITY ASSURANCE/QUALITY CONTROL
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	MW-1 PROJECT #903018
Bromofluorobenzene	98



7879 GSRI AVE. • BATON ROUGE, LA 70820

ENVIRONMENTAL MATERIALS, Inc.
BATON ROUGE, LA 70808
SAMPLE #: 9211130012

Method 8020

Purgeable Aromatics

All results in micrograms per liter

SAMPLE SOURCE: MW-5 PROJECT #903018

Sample Date: 92/11/13 Sample Time: 11:50

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
<u>Benzene</u>	< 1.0	1.0
<u>Toluene</u>	< 1.0	1.0
<u>Ethylbenzene</u>	< 1.0	1.0
<u>Xylene</u>	< 1.0	1.0

Date of Analysis: 92/11/16 Analyst: JEA



ENVIRONMENTAL MATERIALS, Inc.
BATON ROUGE, LA 70808
SAMPLE #: 9211130012

QUALITY ASSURANCE/QUALITY CONTROL
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	MW-5 PROJECT #903018
Bromofluorobenzene	99



7070 GSRI AVE • BATON ROUGE, LA 70820

ENVIRONMENTAL MATERIALS, Inc.
BATON ROUGE, LA 70808
SAMPLE #: 9211130013

Method 8020

Purgeable Aromatics

All results in micrograms per liter

SAMPLE SOURCE: MW-3 PROJECT #903018

Sample Date: 92/11/13 Sample Time: 12:08

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
<u>Benzene</u>	< 1.0	1.0
<u>Toluene</u>	< 1.0	1.0
<u>Ethylbenzene</u>	< 1.0	1.0
<u>Xylene</u>	< 1.0	1.0

Date of Analysis: 92/11/16 Analyst: JEA



ENVIRONMENTAL MATERIALS, Inc.
BATON ROUGE, LA 70808
SAMPLE #: 9211130013

QUALITY ASSURANCE/QUALITY CONTROL
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	<u>MW-3 PROJECT #903018</u>
Bromofluorobenzene	98



7979 GSRI AVE. • BATON ROUGE, LA 70820

ENVIRONMENTAL MATERIALS, Inc.
BATON ROUGE, LA 70808
SAMPLE #: 9211130014

Method 8020

Purgeable Aromatics

All results in micrograms per liter

SAMPLE SOURCE: MW-2 PROJECT #903018

Sample Date: 92/11/13 Sample Time: 12:30

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
<u>Benzene</u>	1,750	50.0
<u>Toluene</u>	86.2	50.0
<u>Ethylbenzene</u>	533	50.0
<u>Xylene</u>	1,610	50.0

Date of Analysis: 92/11/16

Analyst: JEA



ENVIRONMENTAL MATERIALS, Inc.
BATON ROUGE, LA 70808
SAMPLE #: 9211130014

QUALITY ASSURANCE/QUALITY CONTROL
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	MW-2 PROJECT #903018
Bromofluorobenzene	95



ENVIRONMENTAL MATERIALS, Inc.
BATON ROUGE, LA 70808
SAMPLE #: 9211130015

Method 8020

Purgeable Aromatics

All results in micrograms per liter

SAMPLE SOURCE: MW-4 PROJECT #903018

Sample Date: 92/11/13 Sample Time: 12:30

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
<u>Benzene</u>	3,110	50.0
<u>Toluene</u>	1,250	50.0
<u>Ethylbenzene</u>	964	50.0
<u>Xylene</u>	4,410	50.0

Date of Analysis: 92/11/16 Analyst: JEA



7979 GSRI AVE. • BATON ROUGE, LA 70820

ENVIRONMENTAL MATERIALS, Inc.
BATON ROUGE, LA 70808
SAMPLE #: 9211130015

QUALITY ASSURANCE/QUALITY CONTROL
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	MW-4 PROJECT #903018
Bromofluorobenzene	95

GAS CHROMATOGRAPHY
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sample No: 9211090051

Level: (low/med): Low

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC#	QC LIMITS REC.
Benzene	20.0	2.44	23.10	103.29	78-121
Toluene	20.0	<1.0	18.15	90.73	75-124
Ethylbenzene	20.0	<1.0	18.40	91.98	75-126
M,P-Xylene	40.0	<1.0	41.14	102.86	81-122
O-Xylene	40.0	<1.0	40.36	100.90	81-128

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Benzene	20.0	23.08	103.20	0.08	0-14 78-121
Toluene	20.0	18.09	90.45	0.30	0-12 75-124
Ethylbenzene	20.0	18.25	91.23	0.82	0-15 75-126
M,P-Xylene	40.0	41.05	102.62	0.23	0-14 81-122
O-Xylene	40.0	40.26	100.65	0.25	0-11 81-128

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: ABTEX-028

**** QC Limits are currently being evaluated.**

ENVIRONMENTAL MATERIALS, INC. 11-13-92
 CHAIN OF CUSTODY RECORD

Dallas, Texas Baton Rouge, Louisiana

PROJECT NO.		PROJECT NAME		STATION LOCATION		SAMPLE PARAMETER		OTHER		CONTAINERS	REMARKS
STATION NUMBER	DATE	TIME	STATION LOCATION	STATION LOCATION	STATION LOCATION	STATION LOCATION	STATION LOCATION	STATION LOCATION			
903018	Star video										
SAMPLERS: (Signature) <i>Sam Hilliard / Robert Johnson</i>											
MW1	11/13/92	1135								2	All samples preserved with HCL
MW5		1150								2	
MW3		1208								2	
MW2		1230								2	
MW4		1230								2	
TOTAL NUMBER OF CONTAINERS											
RELINQUISHED BY: (Signature) <i>Sam Hilliard</i>		DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)		DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE/TIME
METHOD OF SHIPMENT		1900		SHIPPED BY: (Signature)		COURIER: (Signature)		RECEIVED FOR LAB BY: (Signature)		DATE/TIME	
								<i>Davis Hughes</i>		11-13-92/1250	

Temp = 0°C water
 5 sets of via

70



State of Louisiana
Department of Environmental Quality



Edwin W. Edwards
Governor

Kai David Midboe
Secretary

May 18, 1993

Mr. Roger Barielle
3235 Perkins Road
Baton Rouge, La. 70808

Attention: Mr. Roger Barielle

RE: Termination of Remediation
Star Video (Old Spur Station)
3235 Perkins Road
Baton Rouge, Louisiana 70808
East Baton Rouge Parish
Facility ID# 17-013030
Incident #UE-90-2-0140

Dear Mr. Barielle:

We are in receipt of your March 19, 1993 correspondence regarding the above-referenced facility. Based upon the information submitted we concur with your decision that no further action is warranted at this time.

All existing wells are to be plugged and abandoned in accordance with all regulations administered by the Louisiana Department of Transportation and Development. Thank you for your cooperation in this matter. If you have any questions please contact Verretta Johnson at (504) 295-8583.

Sincerely,

Dennis Strickland, Program Manager
Enforcement Section
Underground Storage Tank Division

DS\VJ\tb



ENVIRONMENTAL MATERIALS, INC.

5930 LBJ FREEWAY, SUITE 300
DALLAS, TX 75240
(214) 458-8162
(214) 239-3649 FAX

2237 S. ACADIAN THRUWAY, SUITE 604
BATON ROUGE, LA 70808
(504) 927-4850
(504) 928-2660 FAX

11251 NORTHWEST FWY., SUITE 300
HOUSTON, TX 77092
(713) 688-9254
(713) 688-5638 FAX

March 19, 1993

Ms. Verretta Johnson
Louisiana Department of Environmental Quality
Underground Storage Tanks Division
Post Office Box 82178
Baton Rouge, Louisiana 70884-2178

RE: Star Video (Old Spur Station)
3235 Perkins Road
Baton Rouge, Louisiana
Incident #90-02-140

Dear Ms. Johnson:

Pursuant to the letter of March 11, 1993, from your office regarding the above referenced site, Environmental Materials, Inc. (EMI), proposes to conduct a hand auger boring east of Monitor Well 4 to determine if natural degradation is occurring. The site diagram enclosed with this letter illustrates the proposed location of the hand auger boring.

EMI proposes to install a hand auger boring of approximately 12 feet, or until groundwater is encountered. A groundwater sample will be collected from the boring for Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) and Total Petroleum Hydrocarbons - Gasoline (TPH-G) analysis. A letter report will be sent to your office describing the boring activities to include the analytical results.

Provided the groundwater sample is below the action levels established by Louisiana Department of Environmental Quality (LDEQ), EMI will again petition for termination of remediation.

Please contact this office to discuss this project and to comment on this proposal. I look forward to hearing from you soon.

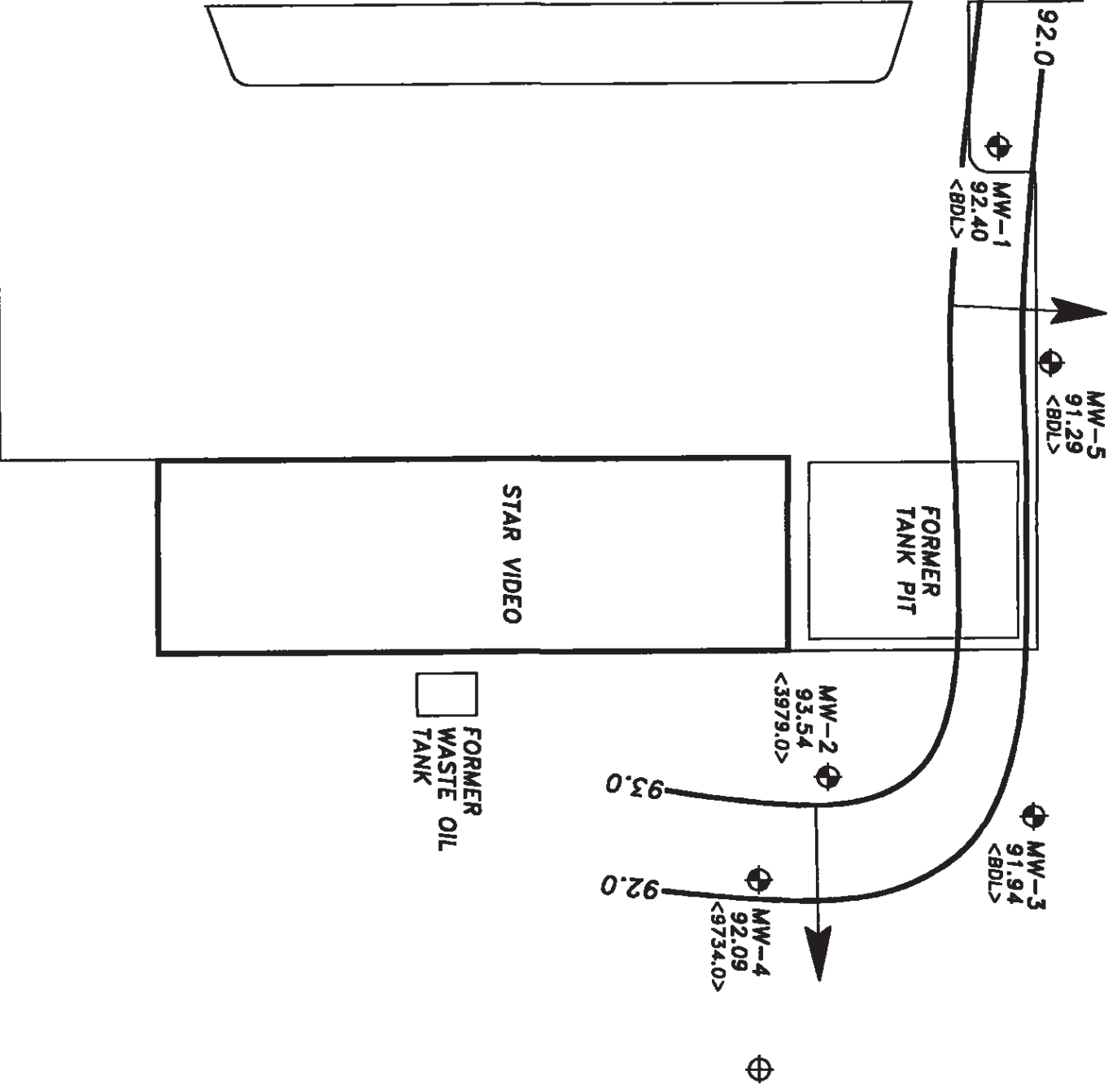
Sincerely,



Charles A. Hudson
Project Manager

CAH/rmm
Attachment
cc: Mr. Roger Barielle

PERKINS ROAD



LEGEND

- ⊕ EXISTING MONITOR WELL
- ⊕ PROPOSED HAND AUGER LOCATION
- POTENTIOMETRIC CONTOUR
- DIRECTION OF GROUNDWATER FLOW
- 92.65 GROUNDWATER ELEVATIONS
- <2235> TOTAL BTEX (PPB)
- <BDL> BELOW DETECTION LIMITS

NOTES:
 POTENTIOMETRIC ELEVATIONS ARE ADJUSTED TO AN ASSUMED BENCHMARK OF 100.0' GROUNDWATER DATA FROM NOVEMBER 1992



STAR VIDEO
 8000 PERKINS ROAD
 BATON ROUGE, LOUISIANA

ENVIRONMENTAL MATERIALS Inc.
 AN ENVIRONMENTAL SERVICES CORPORATION
 2217 NORTH ACADIAN THERWAY • SUITE 604
 BATON ROUGE, LOUISIANA • 70808 • (504) 827-4888

PROJECT MANAGER: P. TEMPLET	PROJECT NUMBER: EM# 903018
DATE DRAWN: MAY 21, 1992	DRAWN BY: S. T. KOJIS
DATE REVISED: MARCH 18, 1993	DRAWING FILE: \18-SITE.DWG

POTENTIOMETRIC SURFACE DIAGRAM FIGURE NO. **1**



State of Louisiana
Department of Environmental Quality



Edwin W. Edwards
Governor

Kai David Midboe
Secretary

March 11, 1993

Mr. Roger Barielle
3235 Perkins Road
Baton Rouge, Louisiana 70808

ATTENTION: Roger Barielle

RE: Request for Termination of Remediation
Star Video (Old Spur Station)
3235 Perkins Road
Baton Rouge, Louisiana
East Baton Rouge Parish
Unregistered
Incident #90-02-140

Dear Mr. Barielle:

EBR Parish

This is to acknowledge receipt of your December 16, 1992, correspondence requesting termination of remediation for the above-referenced facility. Due to the variable direction of Groundwater Flow a new boring/well need to be added east of Monitor Well 4 to determine if natural degradation is occurring.

Thank you for your cooperation in this matter, if you have any question please contact Ms. Verretta Johnson at (504) 295-8583.

Sincerely,

Dennis Strickland

Dennis Strickland, Program Manager
Enforcement Section
Underground Storage Tank Division

DDS\VAJ\tb



REGISTRATION FOR UNDERGROUND STORAGE TANKS

RECEIVED
MAY 02 1986
GROUND WATER PROTECTION DIVISION

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF SOLID AND HAZARDOUS WASTE
UNDERGROUND STORAGE TANK PROGRAM
P.O. BOX 44274 BATON ROUGE, LA 70804

STATE USE ONLY	
I.D. NUMBER	17-604226
DATE RECEIVED	
DATE CHECKED	11/7/86
CHECKED BY	DW

GENERAL INFORMATION

Registration is required by State and Federal law for all underground tanks that have been used to store regulated substances since January 1, 1974, that are in the ground as of May 8, 1986, or that are brought into use after May 8, 1986. The information requested is required by the Louisiana Environmental Quality Act, L.R.S. 30:1051 et seq, as amended.

The primary purpose of this registration program is to locate and evaluate underground tanks that store or have stored petroleum or hazardous substances. It is expected that the information you provide will be based on reasonably available records, or, in the absence of such records, your knowledge, belief, or recollection.

Who Must Register? The Louisiana Environmental Quality Act, L.R.S. 30:1051 et seq, as amended, requires that, unless exempted, owners of underground tanks that store regulated substances must notify the Louisiana Department of Environmental Quality of the existence of their tanks. Owner means—

(a) in the case of an underground storage tank in use on November 8, 1984, or brought into use after that date, any person who owns an underground storage tank, or who has the right to use, or dispense of regulated substances, and

(b) in the case of any underground storage tank in use before November 8, 1984, but no longer in use on that date, any person who owned such tank immediately before the discontinuation of its use.

What Tanks Are Included? Underground storage tank is defined as any one or combination of tanks that (1) is used to contain an accumulation of "regulated substances," and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing, 1. gasoline, used oil, or diesel fuel, and 2. industrial solvents, pesticides, herbicides or fumigants.

NOTE: Underground storage tanks of less than 500 gallon capacity, which are required to be registered by the Environmental Protection Agency, shall likewise register with the state; however, these tanks are exempt from Louisiana fees and regulations.

What Tanks Are Excluded? Tanks excluded from Louisiana registration are

1. farm or residential tanks with a capacity of less than 500 gallons used for storing motor fuel for noncommercial purposes;
2. tanks used for storing heating oil for consumptive use on the premises where stored;
3. septic tanks;
4. pipeline facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, or the Hazardous Liquid Pipeline Safety Act of 1979, or which is an intrastate pipeline facility regulated under State laws.

5. surface impoundments, pits, ponds or lagoons;
6. storm water or waste water collection systems;
7. flow-through process tanks;
8. liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;
9. storage tanks situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

What Substances Are Covered? The registration requirements apply to underground storage tanks that contain regulated substances. This includes 1.) any substance defined in section 10(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C of the Solid Waste Disposal Act as amended by RCRA), and 2.) petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute.)

Where to Register? Completed registration forms should be sent to the address given at the top of this page.

When to Register? 1. Owners of underground storage tanks in use or that have been taken out of operation after January 1, 1974, but still in the ground, must register by May 8, 1986. 2. Owners who bring underground storage tanks into use after May 8, 1986, must register within 30 days of bringing the tanks into use.

Registration Fee: The owners of operational or non-operational underground storage tanks containing regulated substances must submit with the registration form the payment of the registration fee for each underground storage tank according to the following schedule:

1. For any substance defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C of the Solid Waste Disposal Act as amended by RCRA)—\$25.00 per tank.
2. For petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute)—\$15.00 per tank.

In no case shall one owner be required to pay an aggregate registration fee in excess of one thousand dollars (\$1,000.00) in addition to the registration fee, an annual monitoring and maintenance fee is required commencing May 8, 1987 in accordance with the regulations.

Penalties: Any owner who knowingly fails to register or submits false information shall be subject to a civil penalty not to exceed \$25,000 per day for each tank for which registration is not given or for which false information is submitted.

INSTRUCTIONS

Please type or print in ink all items except "signature" in Section V. This form must be completed for each location containing underground storage tanks. If more than 5 tanks are owned at this location, photocopy the reverse side, and staple continuation sheets to this form. Make checks payable to the Louisiana Department of Environmental Quality.

Indicate number of continuation sheets attached

I. OWNERSHIP OF TANK(S)

Owner Name (Corporation, Individual, Public Agency, or Other Entity)
Exxon Company, U.S.A.

Street Address
P.O. Box 380,

Parish
Shelby County

City State Zip Code
Memphis Tn. 38101

Area Code Phone Number
901 947-2684

Type of Owner (Mark all that apply)

Current State or Local Gov't. Private or Corporate
 Former Federal Gov't. (GSA facility I.D. no. _____) Ownership uncertain

II. LOCATION OF TANK(S)

(If same as Section I, mark box here)

Facility Name or Company Site Identifier, as applicable
1052

Street Address or State Road, as applicable
3191 S. Acadian Thwy./Perkins

Parish
E. Baton Rouge

City (nearest) State Zip Code
Baton Rouge LA 70808

Latitude: 30°(deg.) 25'(min.) 14"(sec.)
Longitude: 91°(deg.) 01'(min.) 09"(sec.)

Indicate number of tanks at this location **4**

Mark box here if tank(s) are located on land within an Indian reservation or on other Indian trust lands

III. CONTACT PERSON AT TANK LOCATION

Name (If same as Section I, mark box here) Job Title Area Code Phone Number
Elizabeth Shavers MGR 504-344-8658

IV. TYPE OF REGISTRATION

Mark Box here only if this is an amended or subsequent registration for this location.

V. CERTIFICATION (Read and sign after completing Section VI.)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner or owner's authorized representative J. C. BUGGEL	Signature <i>J. C. Buggel</i>	Date Signed 4/12/86
--	----------------------------------	-------------------------------

CONTINUE ON REVERSE SIDE

1052

VI. DESCRIPTION OF UNDERGROUND STORAGE TANKS (Complete for each tank at this location.)

Tank Identification No. (e.g., ABC-123), or Arbitrarily Assigned Sequential Number (e.g., 1,2,3 ...)	Tank No. 1	Tank No. 2	Tank No. 3	Tank No. 4	Tank No.
1. Status of Tank (Mark all that apply <input checked="" type="checkbox"/> Currently in Use Temporarily Out of Use Permanently Out of Use Brought into Use after 5/8/86	12007 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	12008 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	12009 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	12010 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2. Age (Years)	16	16	16	16	
3. Total Capacity (Gallons)	8000	8000	6000	1000	
4. Is Tank and/or Piping Leaking? (YES or NO)	NO	NO	NO	NO	
5. Material of Construction (Mark one <input checked="" type="checkbox"/> Steel Concrete Fiberglass Reinforced Plastic Unknown Other, Please Specify _____	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____
6. Internal Protection (Mark all that apply <input checked="" type="checkbox"/> Cathodic Protection Interior Lining (e.g., epoxy resins) None Unknown Other, Please Specify _____	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____
7. External Protection (Mark all that apply <input checked="" type="checkbox"/> Cathodic Protection Painted (e.g., asphaltic) Fiberglass Reinforced Plastic Coated None Unknown Other, Please Specify _____	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____
8. Piping (Mark all that apply <input checked="" type="checkbox"/> Bare Steel Galvanized Steel Fiberglass Reinforced Plastic Cathodically Protected Unknown Other, Please Specify _____	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____
9. Substance Currently or Last Stored in Greatest Quantity by Volume (Mark all that apply <input checked="" type="checkbox"/> a. Empty b. Petroleum Diesel Kerosene Gasoline (including alcohol blends) Used Oil Other, Please Specify _____ c. Hazardous Substance Please Indicate Name of Principal CERCLA Substance _____ OR Chemical Abstract Service (CAS) No. _____ Mark box <input checked="" type="checkbox"/> if tank stores a mixture of substances d. Unknown	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
10. Additional Information (for tanks permanently taken out of service) a. Estimated date last used (mo./yr.) b. Estimated quantity of substance remaining (gal.) c. Mark box <input checked="" type="checkbox"/> if tank was filled with inert material (e.g., sand, concrete)	NONE _____ <input type="checkbox"/>	/_____ <input type="checkbox"/>	/_____ <input type="checkbox"/>	/_____ <input type="checkbox"/>	/_____ <input type="checkbox"/>
11. Additional Information (for replacement tanks installed after January 1, 1974) a. Is the tank currently in use a replacement tank for one previously in use at the same site? (YES or NO) b. When was the previous tank removed? (mo./yr.) c. What was the age of the previous tank at time of removal? (years) d. Was the tank and/or piping previously removed found to be leaking? (YES or NO) e. If so, was contamination of the regulated substance removed from the soil and/or ground water? (YES or NO)	NO _____ _____ _____ _____	NO _____ _____ _____ _____	NO _____ _____ _____ _____	NO _____ _____ _____ _____	_____ _____ _____ _____

DATA BASE TRACKING CHART

Inspector's Initials DSS Standard Exxon 5-102

LEAK # 91-2-0181	DATE FOUND 12/24/90
DATE RPT 12/24/90	DATE CONF 12/24/90
ASSESS RQD. ^{request} 6/25/91	ASSESS. RCD. 8/20/91
ASSESS. APD.	ADD'L INFO
Assessment not conducted - hv received stating they will remove tanks and over-excavate.	
C.A. RQD.	C.A. RCD. 8/20/91
ADD. INFO	C.A. APPD. 10/28/91
REMED. METHOD Over-excavate	TERM. REMED.

12/24/90

RECEIVED

File (Dennis)
1/3/91

JAN 03 1991
UNDERGROUND STORAGE
TANK DIVISION

INCIDENT # _____

LOUISIANA NOTIFICATION REQUIREMENTS

This form should be completed and submitted to the Underground Storage Tank Division within seven (7) calendar days after verbal notification.

If mailed, submittal date will be the postmark date of the written notification. Forward to:

ADMINISTRATOR
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Underground Storage Tank Division
P. O. Box 44274
Baton Rouge, Louisiana 70804

1. Name of person, company or other party who is filing the written report.

*Donald W. Simpson, Exxon Co. U.S.A.
Construction & Maintenance Engineer*

2. Time and date of verbal notification, name of person making the notification and identification of the site or facility. (Name and address).

*Donald W. Simpson, Exxon Co, U.S.A.
Stanford Exxon, Store No. 5-1052
3191 S. Acadian Thruway
Baton Rouge, La. 70808*

3. Release date and time.

Dec. 24, 1990, 7:00 p.m.

4. Incident details and/or emergency condition.

During routine store operations, a small leak was discovered on the impact valve under the #1/2 Plus Unlead dispenser.

- 5. Product released and estimated quantity released in gallons.
Plus Unlead gasoline was released. The amount is undetermined but believed to be very small. No inventory losses have been found.
- 6. Surface or groundwater impact.
No surface impacts were caused by this incident. Further assessment will be done to determine if incident caused any subsurface impacts.
- 7. Action taken to stop release.
Impact valve was replaced.
- 8. Measures taken to prevent recurrence of the incident.

9. Is the U.S.T. System registered?

YES U.S.T. ID# _____
 NO

ANSWER THE FOLLOWING ONLY IF GROUNDWATER CONTAMINATION IS CONFIRMED

- 1. Reporting party status (owner, operator, consultant, etc.)
- 2. Attach groundwater contamination data and/or analytical results.
- 3. Possible routes of migration.
- 4. List all abandoned or active water wells within the immediate area.
- 5. Names of all other responsible parties.

File Dennis

EXXON COMPANY, U.S.A.

P.O. BOX 4415-HOUSTON, TEXAS 77210-4415

MARKETING DEPARTMENT
REAL ESTATE & ENGINEERING

ENVIRONMENTAL ENGINEERING

G. T. EWING

SR. ENVIRONMENTAL ENGINEER

RECEIVED

APR 8 1991

UNDERGROUND STORAGE
TANK DIVISION

April 12, 1991

RE: Exxon RAS #5-1052
3191 S. Acadian Thruway
Baton Rouge, Louisiana

LADEQ - UST Division
P. O. Box 82178
Baton Rouge, Louisiana 70884-2178
Attn: Mr. Frank L. Dautriel

Dear Mr. Dautriel:

Enclosed are three (3) copies of the initial soil boring report for the above-referenced location. The investigation was conducted in response to our report to your office on December 24, 1990 of a small piping leak discovered and repaired in one of the product lines. Four hand-augured soil borings were installed and a composite sample taken which 714 ppm Total BTEX. As a result of these findings, we plan to conduct further investigative work in the form of an initial subsurface investigation. I. T. Corporation will be our approved trust fund consultant for site management in this matter. They are presently preparing a workplan for submittal to your office and approval prior to work commencement.

Should any questions arise, please contact me at (713)-656-7698. Exxon appreciates the opportunity to work together with the LADEQ to ensure a safe and quality future for our environment.

Sincerely,

[Handwritten Signature]

GTE;7420D

c - w/o attachment:

Mr. P. J. Brininstool
Mr. P. G. Liebman
Mr. John Rachel - I. T. Corporation, Baton Rouge, Louisiana





ENVIRONMENTAL & ENGINEERING
CONSULTANTS

February 28, 1991

Exxon Company, U.S.A.
P. O. Box 52919, Istrouma Station
Baton Rouge, Louisiana 70805
Attn: Mr. Don Simpson

Ref: Soil Boring Investigation
Exxon Station No. 5-1052
3191 S. Acadian Thruway
East Baton Rouge Parish, Baton Rouge, Louisiana 70808
C-K Associates' Project No. 34-668-2

Dear Mr. Simpson:

Exxon Company, U.S.A. (Exxon) of Baton Rouge, Louisiana requested C-K Associates, Inc. to complete four hand augered soil borings, collect soil samples, submit samples to a laboratory for analysis, and document in a report, findings at Exxon Station No. 5-1052 (Stanford Exxon). The station is located on the corner of South Acadian Thruway and Perkins Road at 3191 South Acadian Thruway in Baton Rouge, Louisiana (Figure 1.) A small leak was discovered at a product dispenser island at the station and was subsequently repaired. The purpose of this investigation is to determine if the leak caused an environmental impact on the soil surrounding the dispenser island.

During a routine operations inspection of the product dispensers on December 24, 1990 at Station No. 5-1052, a leak was discovered under unleaded plus dispenser Nos. 1 and 2. The leak was located at the impact valve which connects the fuel supply lines with the dispenser. The leak was repaired by replacing the impact valve and the dispenser was returned to service.

The leak did not cause a great enough pressure loss in the product supply system to trip the leak detector. An unknown amount of product was lost due to the leak, but is estimated to be a very small quantity because the leak detectors did not trip and no loss of inventory has been discovered. The Underground Storage Tank Division of the Louisiana Department of Environmental Quality (DEQ) was given the required notification after the discovery of the leak.

BATON ROUGE
17170 PERKINS ROAD
BATON ROUGE, LA 70810
PH (504) 755-1000
FAX (504) 751-2010

LAKE CHARLES
600 BAYOU PINES EAST, SUITE E
LAKE CHARLES, LA 70601
PH (318) 494 0303
FAX (318) 439-1145

SHREVEPORT
2001 EAST 70TH STREET, SUITE 503
SHREVEPORT, LA 71105
PH (318) 797 8636
FAX (318) 798-0478

Mr. Don Simpson
February 28, 1991
Page 2

On January 8, 1991, personnel from C-K Associates, Inc. arrived on site to begin investigating the area where the leak had occurred. To complete this task, C-K Associates, Inc. contracted the services of A & B Concrete Coring Company of Zachary, Louisiana to core four holes in the concrete surrounding the dispenser island. After completion of the concrete coring, it was possible to hand auger soil borings into the soil beneath the concrete slab. While completing the concrete coring for B-2, a 3/4- inch copper pipe was cut; however, no repairs were made to the line since it was an abandoned air or water supply line which at one time served the island but has since been removed. Soil borings were completed on four sides of the repaired dispenser and were located as close as possible to the area of the leak to prevent damaging the fuel supply lines with coring equipment or the hand auger. The location of the dispenser island and the four soil borings are illustrated in Figure 2.

The four soil borings were completed to a depth of eight feet. The soil removed from the borings were sampled at two foot intervals and screened with an Organic Vapor Analyzer (OVA) to determine if there were any organic vapors in the soil. The samples were placed in plastic Ziplock[®] bags to prevent any volatiles from escaping the soil sample without detection and to ensure that gasoline vapors in the ambient air surrounding the dispensers would not affect the OVA readings.

Each two foot sample interval was screened with a portable OVA to determine which interval had the highest reading. A composite sample was made up of soil from the interval with the highest readings from the deepest depth of each boring. This procedure produced a composite sample (Comp E) which was composed of soil collected from each of the four borings. The sample was transported to Dynatech Environmental Laboratories in Baton Rouge, Louisiana and analyzed for benzene, toluene, ethylbenzene and xylene (BTEX) and total petroleum hydrocarbons (TPH). A summary of the analytical results is presented in Table 1 and the complete laboratory reports are included as Attachment 1.

After the borings were completed, the four borings were grouted with a mixture of bentonite and cement. Although not required for shallow geotechnical borings, bentonite was utilized to grout the borings since the borings are located in an area where future product spills are possible due to motorists overfilling their automobile fuel tanks. The bentonite will help prevent the migration of any future surface contamination into the borings. All soil removed from the borings has been stored until it can be determined if it is contaminated. If laboratory results indicate the soil is contaminated, the soil will be disposed of at an approved industrial landfill. If the soil is not contaminated, the soil will be reused at the station as fill.

Mr. Don Simpson
February 28, 1991
Page 3

This report serves to document the activities performed by C-K Associates, Inc. personnel at Station No. 5-1052 in response to the gasoline leak which was discovered on December 24, 1990. If you have any questions or comments regarding this project please feel free to call me or the Project Geologist, Mike Kyle, at (504) 755-1000.

Very truly yours,
C-K Associates, Inc.

Brad Morris
Project Manager

BM/fhb

cc: Glen Ewing
Exxon Company, U.S.A.
Houston, Texas

TABLE 1
SUMMARY OF ANALYTICAL RESULTS

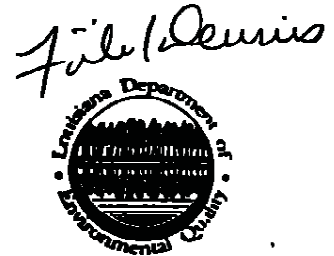
Sample Identification	Parameters	Results (ppb)
Comp-E	Benzene	24,966
	Toluene	365,407
	Ethylbenzene	53,590
	PM-Xylene	60,387
	O-Xylene	210,154
	Total BTEX	714,504
	Total Petroleum Hydrocarbons (TPH)	ND

Note: ND = Not Detected
Sample collected on 1/8/91



State of Louisiana

Department of Environmental Quality



BUDDY ROEMER
Governor

October 9, 1991

PAUL TEMPLET
Secretary

Exxon Co., USA
3301 Scenic Hwy.
Baton Rouge, LA

RE: Stanford Exxon, 3191 S. Acadian, B.R., LA
Four Tank Closure - FAC ID# 17-004226

Dear Sir:

We acknowledge receipt of your "Underground Storage Tank (UST) Closure Notification Form" dated October 2, 1991 for the above referenced facility.

Guidelines for permanent closure of USTs may be found in the American Petroleum Institute Publication #1604, or the National Fire Protection Association Handbook #30. The State Fire Marshal's Office must be contacted prior to tank closure; however, in cases where the USTs are located within a city's corporate limits, the local fire department is the appropriate body to contact. There may also be some local building demolition permit(s) required from the parish or municipality.

After UST closure, we require the completion of the following forms to be submitted in duplicate: 1) UST Removal Information (form attached); 2) an amended copy of the UST Registration Form; 3) results of soil or groundwater analyses with a completed chain of custody form and 4) a sketch of the site depicting UST and sampling locations. This information will be used to update our inventory data base.

If you have any questions, please contact Mr. Dennis Strickland of our Capitol Regional Office at (504) 765-0243. We require you to contact him the week prior to the anticipated tank(s) closure. Thank you for your assistance in this matter.

Sincerely,

Dennis D. Strickland
Acting Enforcement Program Manager
Underground Storage Tank Division

DDS, DS, tb