

Re: Spill Remediation Workplan, BTA Oil Producers, French #3 SWD, Unit Letter H (SE/4, NE/4), Section 24, Township 18 South, Range 32 East, Lea County, New Mexico (Latitude: 32.73537/Longitude: 103.71243) AP/# 30025 31206 0000

Dear Mr. Johnson:

BTA Oil Producers (BTA) has retained Larson and Associates, Inc. (LA) to remediate impacted soil from a salt water spill that occurred on July 12, 2005, from a salt water tank located in the southeast quarter (SE/4) of the northeast quarter (NE/4), Section 24, Township 18 South, Range 32 East, Lea County, New Mexico (Site). The spill occurred when the valve for the load line off the tank was opened by livestock. Approximately 200 to 300 barrels (bbl) of produced water was released, and approximately 140 bbl of free liquid was picked up with a vacuum truck. The spill area covered approximately 140 bbl of free liquid was picked up with a vacuum truck. The spill area covered approximately 140 x 200 feet, and BTA submitted a Release Notification and Corrective Action form (Form C-141) to the New Mexico Oil Conservation Division (NMOCD) on July 20, 2005, along with a work plan to conduct an investigation of the impacted soil at the Site. Figure 1 shows the location of the Site  $28,000^{\circ} = 4205505$  meV

On July 26, 2005, BTA received a letter from the NMOCD, approving their work plan for investigation. Larson and Associates, Inc. (LA) is pleased to submit this work plan for remediation at the French #3 SWD site.

#### **Initial Investigation**

On September 6 and 7, 2005, LA installed nine (9) soil borings (BH-1 through BH-9) at the site using direct-push technology (Terraprobe®) to assess the horizontal and vertical limits of the spill for defining the area of remediation. One (1) background soil boring (BH-10) was installed 100 feet north of the tank battery.

Samples from the exploratory borings were collected from ground surface to a depth of approximately twelve (12) feet below ground surface (bgs), where refusal was encountered, using a stainless steel core barrel and dedicated sample liners. Boring BH-4 encountered refusal at a depth of approximately eight (8) feet bgs. The sampling equipment was thoroughly cleaned between soil boring locations with a solution of laboratory-grade detergent and potable water, and rinsed with distilled water. All soil borings were plugged with bentonite. Figure 2 shows the locations of the soil borings.

The soil samples were collected in four-foot increments (i.e., 0-4', 4-8', etc.) and two (2) foot composite samples (i.e., 0-1', 2-4', 6-8', 10-12') were placed in clean glass sample jars, labeled, chilled in an ice chest, and delivered under chain-of-custody control to Environmental Lab of  $\frown$ 

Mr. Larry Johnson Page 2 September 23, 2005

Texas (ELOT), located in Odessa, Texas. A duplicate of each composite sample was also placed in a clean glass sample jar for headspace analysis. The headspace jars were filled approximately <sup>3</sup>/<sub>4</sub> full, and a layer of aluminum foil was placed over the opening of the jar before replacing the cap. The headspace samples were allowed to reach ambient temperature before a RAE Instruments, Model 2000 photoionization detector ("PID") was used to measure the concentration of organic vapors in the headspace of the sample jars. After calibrating the instrument to 99.9 parts per million ("ppm"), the PID probe was inserted into the headspace of the sample jars (through the aluminum foil), and the concentration of organic vapors was displayed by ppm. The PID readings are summarized in Table 1, and are shown on the boring logs in Appendix A.

The soil sample from each boring with the highest PID reading was analyzed for TPH by EPA method 8015 (extended) for gasoline range organics (GRO) and diesel range organics (DRO). Each sample was analyzed for chloride by EPA method 300. Table 1 presents a summary of the laboratory analyses of soil samples. Appendix B presents the laboratory analyses and chain of custody documentation.

Referring to Table 2, soil samples collected from each boring (BH-1 through BH-10) reported TPH concentrations below the test method detection limit. Chloride concentrations in soil are shown to reduce with depth at borings BH-3, BH-4, BH-7, but increased (specifically at a depth of approximately 10-12' bgs) at borings BH-1, BH-2, BH-5, BH-6, BH-9 and background boring BH-10.

Based on published literature (1961) and well records of the New Mexico State Engineer, groundwater occurs at approximately 117.28 feet bgs in the well located nearest the Site. No domestic water wells are located within 1,000 feet of the site. The NMOCD has established soil remediation action levels (RRAL) for benzene, total BTEX and TPH resulting from spills of natural gas liquids ("Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993"). Remediation levels for benzene, total BTEX and TPH were calculated using the following NMOCD criteria:

Criteria	Result	Ranking Score
Depth-to-Groundwater	>100 Feet	0
Wellhead Protection Area	No	0
Distance to Surface	>1000 Horizontal Feet	0
Water Body		
		Total: 0

The following RRALs have been assigned based on NMOCD criteria:

Benzene10 mg/kgTotal BTEX50 mg/kgTPH5,000 mg/kg

The NMOCD does not have an RRAL for chloride, but typically recommends an RRAL of 250 mg/kg.

Mr. Larry Johnson Page 3 September 23, 2005

#### **Proposed Remediation**

BTA proposes to excavate soil at the French #3 SWD site to a depth of approximately twelve (12) feet in the vicinity of soil borings BH-1, BH-2, BH-5, BH-6 and BH-9, and install a barrier to restrict further leaching of chlorides from the soil below the excavated depth. Excavated soil will be placed adjacent to the hole, and will be blended on-site to reduce concentrations of chloride below 250 mg/kg.

At a depth of approximately twelve (12) feet bgs, a layer of compacted clay, approximately three (3) feet thick will be placed at the bottom of the excavation in three (3) lifts of one foot each. The clay barrier will be slightly crowned, compacted to achieve 95% proctor density, and a licensed professional engineer will perform field tests following the compaction of each lift. Approximately nine (9) feet of blended soil will be placed over the clay barrier. A final report will be submitted to the NMOCD upon completion.

Please feel free to call Mr. Royce Boyce at (432) 682-3753 or me at (432) 687-0901 if you have any questions or need additional information. We may also be reached by email at <u>rboyce@btaoil.com</u> or <u>cindy@laenvironmental.com</u>.

Sincerely, Larson and Associates, Inc.

(indy K. Crain

Cindy K. Crain, P.G. Project Manager

cc: Royce Boyce, BTA

## Table

#### Table 1

## Summary of Laboratory Analyses of Soil Samples BTA Oil Producers, French #3 SWD SE/4, NE/4, Section 24, Township 18 South, Range 32 East Lea County, New Mexico

Page 1 of 2

	Comple		DID	GRO	DDO		Tage T UI 2	1
Boring	Sample	Sample	PID	GRO	DRO	TPH	Chlorida	
Number	Depth	Date	(ppm)	C6-C12	>C12-C35	C6-C35	Chloride	
	(Feet)			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
BH-1	0-2	09/06/05	2.4				598	
	2-4	09/06/05	2.5	<10.0	<10.0	<20.0	172	
	6-8	09/06/05	1.5				1,750	
	10-12	09/06/05	1.4				9,110	P
BH-2	0-2	09/06/05	12.3				327	
	2-4	09/06/05	34.7	<10.0	<10.0	<20.0	177	
	6-8	09/06/05	7.1			1-12 10-12	7,910	
	10-12	09/06/05	2.7				5,190	K
BH-3	0-2	09/06/05	12.7				20,300	
	2-4	09/06/05	1.2	<10.0	<10.0	<20.0	973	
	6-8	09/06/05	0.9				407	].
	10-12	09/06/05	0.6				11.1	
BH-4	0-2	09/06/05	1.1				21,300	
	2-4	09/06/05	1.1	<10.0	<10.0	<20.0	83.8	
_	6-8	09/06/05	1.0				6.08	
BH-5	0-2	09/06/05	2.1				571	
	2-4	09/06/05	2.7				86.8	
	6-8	09/06/05	3.2	<10.0	<10.0	<20.0	301	
	10 - 12	09/06/05	1.2				4,590	Ŵ
BH-6	0-2	09/06/05	1.1				153	
	2-4	09/06/05	1.1	<10.0	<10.0	<20.0	96	
	6-8	09/06/05	1.0				4,810	
	10-12	09/06/05	0.6				7,940	
BH-7	0-2	09/07/05	0.6				116	
	2-4	09/07/05	0.7	<10.0	<10.0	<20.0	79.3	
	6-8	09/07/05	0.7				9.08	
	10-12	09/07/05	0.5				35.8	

#### Table 1

## Summary of Laboratory Analyses of Soil Samples BTA Oil Producers, French #3 SWD SE/4, NE/4, Section 24, Township 18 South, Range 32 East Lea County, New Mexico

Page 2 of 2

Boring	Sample	Sample	PID	GRO	DRO	TPH	
Number	Depth	Date	(ppm)	C6-C12	>C12-C35		Chloride
	(Feet)			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH-8	0-2	09/07/05	0.7				40.6
	2-4	09/0705	0.7				53.9
	6-8	09/07/05	0.8	<10.0	<10.0	<20.0	136
	10-12	09/07/05	0.7				155
BH-9	0-2	09/07/05	0.9				147
	2-4	09/07/05	0.6	<10.0	<10.0	<20.0	12.2
	6-8	09/07/05	1.0				21.3
	10-12	09/07/08	2.1	<10.0	<10.0	<20.0	7,750
BH-10	0-2	09/07/05	2.0	<10.0	<10.0	<20.0	65.4
(Background)	2-4	09/07/05	0.7				208
	6-8	09/07/05	0.4				129
	10-12	09/07/05	0.1		<b>4</b> 2 y		1,100

Notes: Analysis performed by Environmental Lab of Texas, I. Ltd., Odessa, Texas

1. Feet: Depth in feet below ground surface

2. GRO: Gasoline range organics

3. DRO: Diesel range organics

4. TPH: Total petroleum hydrocarbons (Sum of DRO + GRO)

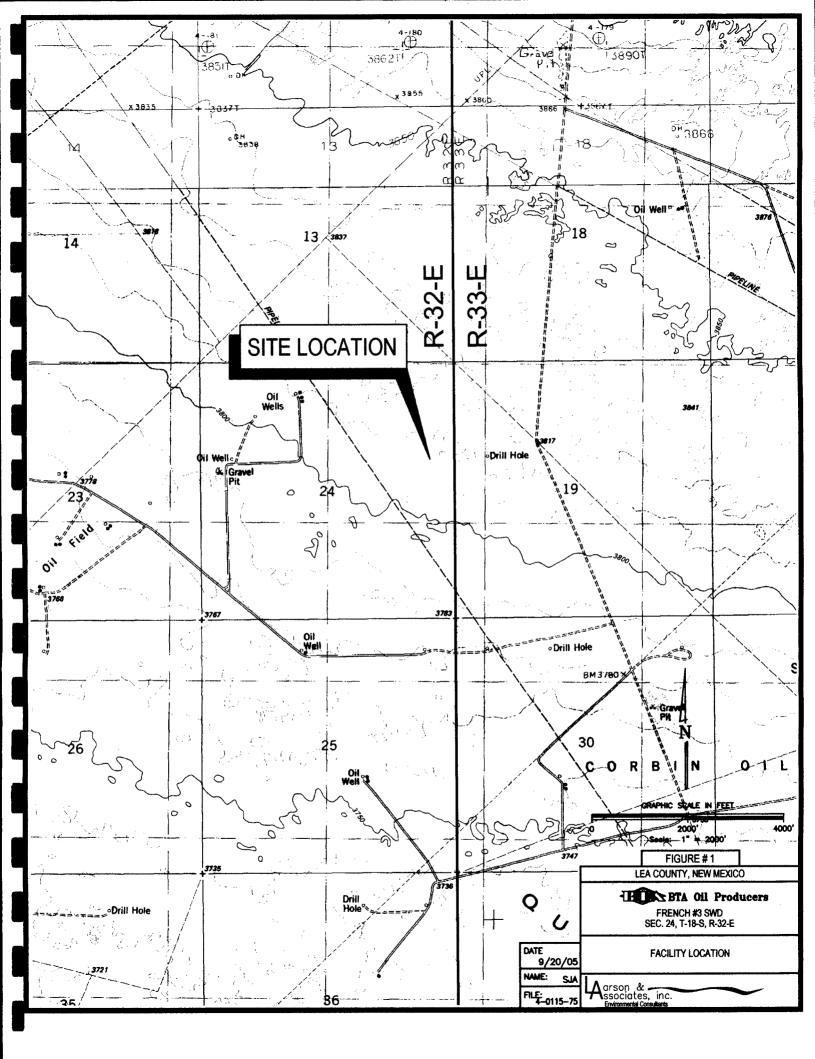
5. mg/kg: Milligrams per kilogram

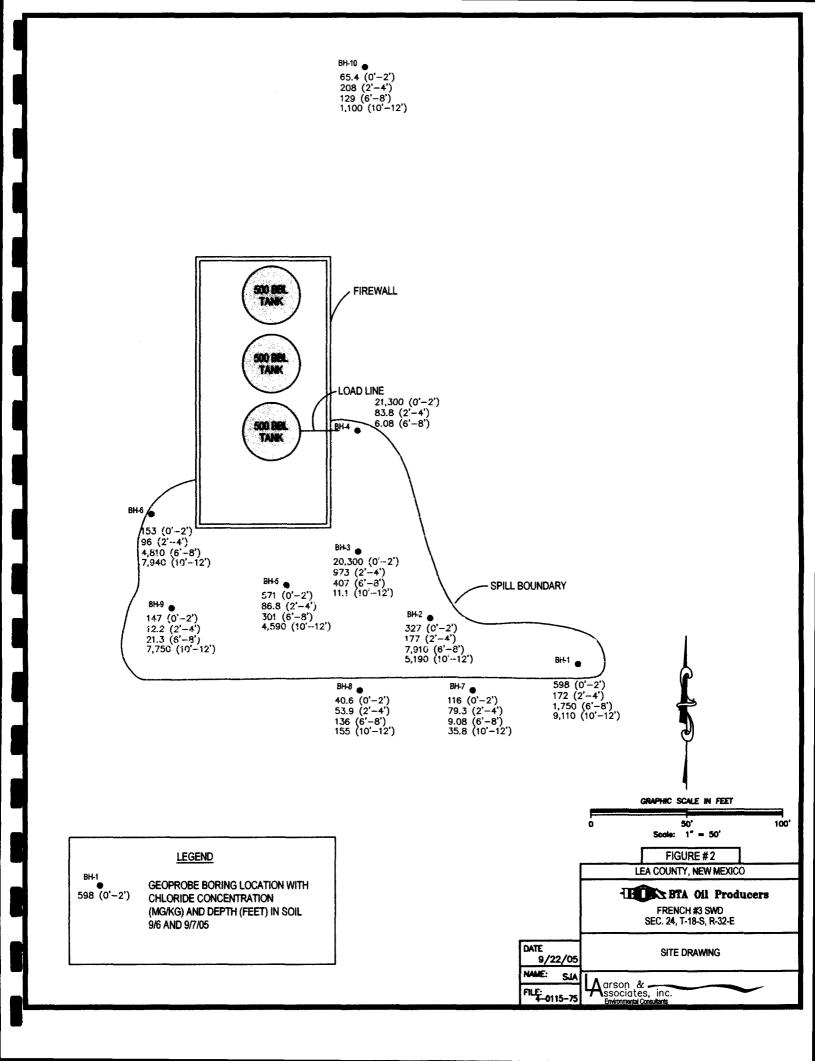
6. <: Below method detection limit

7. ppm: Parts per million

8. ---: No data available

Figures





# APPENDIX A

## SOIL BORING LOGS

I

507 North Marienfeld, Suite 202 ♦ Midland, Texas 79701 ♦ Ph. (432) 687-0901 ♦ Fax (432) 687-0456

#### Project: French # 3 SWD

Project No: 4-0115-75

# Log: BH - 1

Geologist: C. Crain

Page: 1 of 1

Location: Lea County, New Mexico, N32 44.075', W103 42.733'

		SUBSURFACE PROFILE	S	AMPI	.E		
Depth	Symbol	Description	Number	Type	Recovery	PID ppm 1 3 5 7 9	Notes
0-		Ground Surface					
0		Sand 2.5 YR 4/6, Red quartz sand, fine grained, moderately well sorted, loose, damp Sandy Clay 2.5 YR 4/6, Red clay, plastic, damp	1 2 3 4			2.4 2.5 1.5 1.4	
		\TD: 12'					
- - 15-							
Dr	ill Meth	od: Direct Push Larson and A	10000	iatee	Inc		Elevation: N/A
		507 N. Marie	nfeld,	Suite			
DI	rill Date:	9/6/05 Midland, Tex (432) 687-09	as 79	701			Checked by: CC
Ho	ole Size	3" (432) 007-09					Drilled by: LA
		·····		·····.			

Project: French # 3 SWD

Project No: 4-0115-75

#### Location: Lea County, New Mexico, N32 44.063', W103 42.733'

# Log: BH - 2

Page: 1 of 1

		SUBSURFACE PROFILE	S		LE		
Depth	Symbol	Description	Number	Type	Recovery	PID ppm 10 20 30 40	Notes
0-		Ground Surface					
-		Sand 5 YR 4/6, Yellowish red quartz sand, fine grained, moderately well sorted, loose, damp	1			12.3	
5-	/	<b>Sandy Clay</b> 2.5 YR 4/6, Red clay, plastic, soft, damp				7.1	
- - 10	1 1 1		3				
		TD: 12'	4			2.7	
- 15-							
D	rill Mether rill Date: ole Size:	(A32) 687-09	nfeld, as 79	Suite	Inc 202		Elevation: N/A Checked by: CC Drilled by: LA

#### Project: French # 3 SWD

Project No: 4-0115-75

#### Location: Lea County, New Mexico, N32 44.067', W103 42.777'

#### SUBSURFACE PROFILE SAMPLE Recovery Number PID Notes Symbol Depth Description Type ppm 6 10 14 18 2 Ground Surface 0 Sand 5 YR 4/6, Yellowish red quartz sand, fine 12.7 grained, moderately well sorted, loose, 1 damp 2 5. Sandy Clay 2.5 YR 4/6, Red clay, plastic, soft, damp 0.9 3 10 0.6 4 TD: 12' 15 Drill Method: Direct Push Elevation: N/A Larson and Associates, Inc 507 N. Marienfeld, Suite 202 Drill Date: 9/6/05 Checked by: CC Midland, Texas 79701 (432) 687-0901 Hole Size: 3" Drilled by: LA

Page: 1 of 1

#### Geologist: C. Crain

Log: BH - 3

Project: French # 3 SWD

Project No: 4-0115-75

Depth

#### Location: Lea County, New Mexico, N32 44.076', W103 42.781'

SAMPLE SUBSURFACE PROFILE Recovery Number PID Notes Symbol Description Type ppm 0.5 1 1.5 Ground Surface 0. Sand 5 YR 4/6, Yellowish red quartz sand, fine 1.1 grained, well sorted, loose, dry 1 1.1 2 5 1.0 3 TD: 8' 10-15·

Drill Method: Direct Push

Drill Date: 9/6/05

Hole Size: 3"

Larson and Associates, Inc 507 N. Marienfeld, Suite 202 Midland, Texas 79701 (432) 687-0901

Elevation: N/A

Checked by: CC

Drilled by: LA



Geologist: C. Crain

Page: 1 of 1

Project: French # 3 SWD

Project No: 4-0115-75

#### Location: Lea County, New Mexico, N32 44.062', W103 42.788'

# Page: 1 of 1 Geologist: C. Crain

		SUBSURFACE PROFILE	\$	AMP	LE		
Depth	Symbol	Description	Number	Type	Recovery	PID ppm 1 2 3 4	Notes
0-		Ground Surface					
-		<b>Sand</b> 5 YR 4/6, Yellowish red quartz sand, fine grained, well sorted, damp	1			2.1	
_			2			2.7	
5-							
-		<b>Sandy Clay</b> 2.5 YR 4/6, Red clay, plastic, soft, damp	3			3.2	
- 10-							
-			4			/ 1.2 ◀	
		\TD: 12'	/				
-							
15-							
D	rill Methorill Date: Date:	(432) 687	rienfeld exas 79	, Suite			Elevation: N/A Checked by: CC Drilled by: LA

Log: BH - 5

#### Project: French # 3 SWD

Project No: 4-0115-75

#### Location: Lea County, New Mexico, N32 44.069', W103 42.802'

SUBSURFACE PROFILE SAMPLE Recovery Number PID Notes Symbol Depth Description Type ppm 2 3 1 4 Ground Surface 0. Sand 5 YR 4/6, Yellowish red quartz sand, fine 1.1 grained, well sorted, loose, damp 1 1.1 2 5 1.0 3 Sandy Clay 2.5 YR 4/6, Red clay, plastic, soft, damp 10 0.6 4 TD: 12' 15 Drill Method: Direct Push Elevation: N/A Larson and Associates, Inc 507 N. Marienfeld, Suite 202 Drill Date: 9/6/05 Midland, Texas 79701 Checked by: CC (432) 687-0901 Hole Size: 3" Drilled by: LA

## Log: BH - 6

Page: 1 of 1

Project: French # 3 SWD

Project No: 4-0115-75

.

### Location: Lea County, New Mexico, N32 44.058', W103 42.764'

# Log: I

		SUBSURFACE PROFILE	s	AMP	.E		
Depth	Symbol	Description	Number	Type	Recovery	PID ppm 1 2 3 4	Notes
0-		Ground Surface					
-		<b>Sand</b> 7.5 YR 4/4, Brown quartz sand, fine grained, well sorted, loose, damp	1			0.6	
-			2			0.7	
5-							
-		<b>Sandy Clay</b> 2.5 YR 4/6, Red clay, soft, plastic, damp	- 3			0.7	
- 10							
-	/		4			0.5	
-		TD: 12'					
15-							
D	rill Methorill Date:	(432) 687-0	enfeld, xas 79	Suite	Inc 202		Elevation: N/A Checked by: CC Drilled by: LA

**Page:** 1 of 1

Geologist: C. Crain

## Log: BH - 7

#### Project: French # 3 SWD

Project No: 4-0115-75

#### Location: Lea County, New Mexico, N32 44.056', W103 42.777'

#### SUBSURFACE PROFILE SAMPLE Recovery PID Notes Symbol Number Depth Description Type ppm 2 3 4 1 Ground Surface 0. Sand 5 YR 4/6, Yellowish red quartz sand, fine 0.7 grained, well sorted, damp 1 0.7 2 5 0.8 3 Sandy Clay 2.5 YR 4/6, Red clay, soft, plastic, damp 10 0.7 4 TD: 12' 15 Drill Method: Direct Push Elevation: N/A Larson and Associates, Inc 507 N. Marienfeld, Suite 202 Drill Date: 9/7/05 Checked by: CC Midland, Texas 79701 (432) 687-0901 Hole Size: 3" Drilled by: LA

*Page:* 1 of 1

Project: French # 3 SWD

Project No: 4-0115-75

Location: Lea County, New Mexico, N32 44.107', W103 42.780'

SAMPLE SUBSURFACE PROFILE Recovery Notes PID Symbol Number Depth Description Type ppm 2 3 4 1 Ground Surface 0 Sand 5 YR 4/6, Yellowish red quartz sand, fine 2.0 grained, well sorted, damp 1 0.7 2 5 IO 4 3 Sandy Clay 2.5 YR 4/6, Red clay, soft, plastic, damp 10 0.1 4 TD: 12' 15 Elevation: N/A Drill Method: Direct Push Larson and Associates, Inc 507 N. Marienfeld, Suite 202 Drill Date: 9/7/05 Midland, Texas 79701 Checked by: CC (432) 687-0901 Hole Size: 3" Drilled by: LA

## Log: BH - 10

Page: 1 of 1

Project: French # 3 SWD

Project No: 4-0115-75

Location: Lea County, New Mexico, N32 44.061', W103 42.800'

Page: 1 of 1

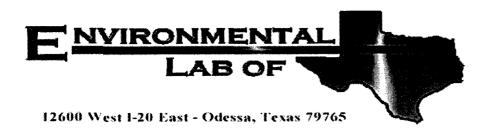
SUBSURFACE PROFILE SAMPLE Recovery Number Notes PID Symbol Depth Description Type ppm 2 3 4 1 Ground Surface 0-Sand 5 YR 4/6, Yellowish red quartz sand, fine 0.9 grained, well sorted, loose, damp 1 0.6 2 5. 1.0 3 10 2,1 4 TD: 12' 15· Drill Method: Direct Push Elevation: N/A Larson and Associates, Inc 507 N. Marienfeld, Suite 202 Drill Date: 9/7/05 Midland, Texas 79701 Checked by: CC (432) 687-0901 Hole Size: 3" Drilled by: LA

## Log: BH - 9

## **APPENDIX B**

## LABORATORY ANALYSES AND CHAIN OF CUSTODY DOCUMENTATION

507 North Marienfeld, Suite 202 Midland, Texas 79701 Ph. (432) 687-0901 Fax (432) 687-0456



# Analytical Report

#### Prepared for:

Cindy Crain Larson & Associates, Inc. P.O. Box 50685 Midland, TX 79710

Project: BTA/ French #3 Project Number: None Given Location: None Given

Lab Order Number: 5I08001

Report Date: 09/15/05

Larson & Associates, Inc.	Project: BTA/ Frencl	h #3		Fax: (432) 687-0456
P.O. Box 50685	Project Number: None Given			Reported:
Midland TX, 79710	Project Manager: Cindy Crain			09/15/05 09:15
	ANALYTICAL REPORT FOR SAM	IPLES		
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Receive
BH-1 (0-2')	5108001-01	Soil	09/06/05 10:27	09/07/05 14:
BH-1 (2-4')	5108001-02	Soil	09/06/05 10:28	09/07/05 14:
BH-1 (6-8')	5108001-03	Soil	09/06/05 10:36	09/07/05 14:
BH-1 (10-12')	5108001-04	Soil	09/06/05 10:50	09/07/05 14:
BH-2 (0-2')	5108001-05	Soil	09/06/05 11:14	09/07/05 14:
BH-2 (2-4')	5108001-06	Soil	09/06/05 11:15	09/07/05 14:
BH-2 (6-8')	5108001-07	Soil	09/06/05 11:23	09/07/05 14:
BH-2 (10-12')	5108001-08	Soil	09/06/05 11:37	09/07/05 14:
BH-3 (0-2')	5108001-09	Soil	09/06/05 12:13	09/07/05 14:
BH-3 (2-4')	5108001-10	Soil	09/06/05 12:14	09/07/05 14:
BH-3 (6-8')	5108001-11	Soil	09/06/05 12:23	09/07/05 14:
BH-3 (10-12')	5108001-12	Soil	09/06/05 12:32	09/07/05 14:
BH-4 (0-2')	5108001-13	Soil	09/06/05 12:53	09/07/05 14
BH-4 (2-4')	5108001-14	Soil	09/06/05 12:54	09/07/05 14:
BH-4 (6-8')	5108001-15	Soil	09/06/05 13:05	09/07/05 14:
BH-5 (0-2')	5108001-16	Soil	09/06/05 13:25	09/07/05 14:
BH-5 (2-4')	5108001-17	Soil	09/06/05 13:26	09/07/05 14
BH-5 (6-8')	5108001-18	Soil	09/06/05 13:34	09/07/05 14:
BH-5 (10-12')	5108001-19	Soil	09/06/05 13:48	09/07/05 14:
BH-6 (0-2')	5108001-20	Soil	09/06/05 14:10	09/07/05 14:
BH-6 (2-4')	5108001-21	Soil	09/06/05 14:11	09/07/05 14:
BH-6 (6-8')	5108001-22	Soil	09/06/05 14:24	09/07/05 14:
BH-6 (10-12')	5108001-23	Soil	09/06/05 14:41	09/07/05 14:
BH-7 (0-2')	5108001-24	Soil	09/07/05 09:25	09/07/05 14:
BH-7 (2-4')	5108001-25	Soil	09/07/05 09:26	09/07/05 14:
BH-7 (6-8')	5108001-26	Soil	09/07/05 09:34	09/07/05 14:
BH-7 (10-12')	5108001-27	Soil	09/07/05 09:47	09/07/05 14:
BH-8 (0-2')	5108001-28	Soil	09/07/05 10:08	09/07/05 14:
BH-8 (2-4')	5108001-29	Soil	09/07/05 10:09	09/07/05 14:
BH-8 (6-8')	5108001-30	Soil	09/07/05 10:16	09/07/05 14:
BH-8 (10-12')	5108001-31	Soil	09/07/05 10:29	09/07/05 14:
BH-9 (0-2')	5108001-32	Soil	09/07/05 11:09	09/07/05 14:
BH-9 (2-4')	5108001-33	Soil	09/07/05 11:10	09/07/05 14:
BH-9 (6-8')	5108001-34	Soil	09/07/05 11:19	09/07/05 14::

Page 1 of 13

Larson & Associates, Inc.	Project:	BTA/ French #3	Fax: (432) 687-0456
P.O. Box 50685	Project Number:	None Given	Reported:
Midland TX, 79710	Project Manager:	Cindy Crain	09/15/05 09:15

#### ANALYTICAL REPORT FOR SAMPLES

.

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH-9 (10-12')	5108001-35	Soil	09/07/05 11:45	09/07/05 14:26
BH-10 (0-2')	5108001-36	Soil	09/07/05 12:14	09/07/05 14:26
BH-10 (2-4')	5108001-37	Soil	09/07/05 12:15	09/07/05 14:26
BH-10 (6-8')	5108001-38	Soil	09/07/05 12:25	09/07/05 14:26
BH-10 (10-12')	5108001-39	Soil	09/07/05 12:39	09/07/05 14:26

Environmental Lab of Texas

Larson & Associates, Inc. P.O. Box 50685 Midland TX, 79710		Project N	Project: BTA Jumber: Non anager: Cinc	e Given	43			Fax: (432) 6 Report 09/15/05	ted:
			rganics by						
			mental La		exas				
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
BH-1 (2-4') (5108001-02) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	E150804	09/08/05	09/09/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	*			"		
Total Hydrocarbon C6-C35	ND	10.0	"			"	м	n	
Surrogate: 1-Chlorooctane		77.8 %	70-1.	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		78.2 %	70-1	30	n	"	"	"	
BH-2 (2-4') (5108001-06) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI50804	09/08/05	09/09/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"		*			
Total Hydrocarbon C6-C35	ND	10.0		*	#	"			
Surrogate: 1-Chlorooctane		85.2 %	70-1.	30	"	"	".	"	
Surrogate: 1-Chlorooctadecane		85.6 %	70-1	30	"	"	"	n	
BH-3 (2-4') (5108001-10) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI50804	09/08/05	09/09/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	H		м	"	"		
Total Hydrocarbon C6-C35	ND	10.0	"	*			*	•	
Surrogate: 1-Chlorooctane		76.4 %	70-1.	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		79.6 %	70-13	30	"	"	"	"	
BH-4 (2-4') (5108001-14) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI50804	09/08/05	09/09/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"		"		"	PT	
Total Hydrocarbon C6-C35	ND	10.0	**	"	"	"		н	
Surrogate: 1-Chlorooctane		78.8 %	70-1.	30	"	"	n	"	
Surrogate: 1-Chlorooctadecane		78.0 %	70-13	30	"	N	17	"	
BH-5 (6-8') (5108001-18) Soil	· • • • • • • • • • • • • • • • • • • •								
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	E150804	09/08/05	09/09/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0		"			"	*	
Total Hydrocarbon C6-C35	ND	10.0	11	*	"	"		н	
Surrogate: 1-Chlorooctane		76.0 %	70-13	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		74.2 %	70-13	30	"	"	"	"	

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Larson & Associates, Inc.		]	Project: BT.	A/ French #	<b>‡</b> 3			Fax: (432) 6	687-0456
P.O. Box 50685			lumber: No					Repor	ted:
Midland TX, 79710		Project M	anager: Cin	dy Crain				09/15/05	09:15
		0	rganics b	y GC					
		Environ	mental L	ab of Te	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Dranorad	Anaburad	Method	Note
BH-6 (2-4') (5108001-21) Soil				Dilution	Daten	Prepared	Analyzed		Note
									<u>.</u>
Gasoline Range Organics C6-C12	ND		mg/kg dry "	1	E150804 "	09/08/05	09/09/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0				"			
Total Hydrocarbon C6-C35	ND	10.0	.,		**				
Surrogate: 1-Chlorooctane		77.2 %	70-1		"	"	"	"	
Surrogate: 1-Chlorooctadecane		76.8 %	70-1	30	"	n	"	"	
BH-7 (2-4') (5108001-25) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI50804	09/08/05	09/09/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0		**		"	=	-	
Total Hydrocarbon C6-C35	ND	10.0	"	н	"	"	Ħ	**	
Surrogate: 1-Chlorooctane		74.2 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		75.0 %	70-1	30	"	"	"	"	
BH-8 (6-8') (5108001-30) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI50804	09/08/05	09/09/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	и		*	"	*		
Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35	ND ND	10.0 10.0	11 17	n n	H H	"	"	**	
			" 70-1	"			" " "		
Total Hydrocarbon C6-C35		10.0		" 30	#	<b>n</b>		<b>H</b>	
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane		10.0 81.2 %	70-1	" 30	"	"	tt	"	
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane		10.0 81.2 %	70-1 70-1	" 30	"	"	tt	"	
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane BH-9 (2-4') (5108001-33) Soil	ND	10.0 81.2 % 76.2 %	70-1 70-1	" 30 30	11 17 17	"	n	n 17	
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane BH-9 (2-4') (5108001-33) Soil Gasoline Range Organics C6-C12	ND ND	10.0 81.2 % 76.2 % 10.0	70-1 70-1	" 30 30	11 17 17	"	n	" " EPA 8015M	
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane BH-9 (2-4') (5108001-33) Soil Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35	ND ND ND	10.0 81.2 % 76.2 % 10.0 10.0	70-1 70-1	" 30 30 1 "	11 17 17	"	n	" " EPA 8015M	
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane BH-9 (2-4') (5108001-33) Soil Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35	ND ND ND	10.0 81.2 % 76.2 % 10.0 10.0 10.0	70-1 70-1 mg/kg dry "	" 30 30 1 " "	11 17 17	" " 09/08/05 "	" " 09/09/05 "	" " EPA 8015M "	
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane BH-9 (2-4') (5108001-33) Soil Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane	ND ND ND	10.0 81.2 % 76.2 % 10.0 10.0 10.0 77.4 %	70-1 70-1 mg/kg dry " " 70-1	" 30 30 1 " "	11 17 17	" " 09/08/05 "	" " 09/09/05 " "	" " EPA 8015M " "	
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane BH-9 (2-4') (5108001-33) Soil Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane	ND ND ND	10.0 81.2 % 76.2 % 10.0 10.0 10.0 77.4 % 77.0 %	70-1 70-1 mg/kg dry " " 70-1	" 30 30 1 " "	11 17 17	" " 09/08/05 "	" " 09/09/05 " "	" " EPA 8015M " "	
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane BH-9 (2-4') (5108001-33) Soil Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane BH-9 (10-12') (5108001-35) Soil	ND ND ND ND	10.0 81.2 % 76.2 % 10.0 10.0 10.0 77.4 % 77.0 %	70-1 70-1 mg/kg dry " " 70-1 70-1	" 30 30 1 " " 30 30 30	" " E150804 " " "	" " 09/08/05 " "	" " 09/09/05 " " "	" " EPA 8015M " "	
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane BH-9 (2-4') (5108001-33) Soil Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane BH-9 (10-12') (5108001-35) Soil Gasoline Range Organics C6-C12	ND ND ND ND	10.0 81.2 % 76.2 % 10.0 10.0 77.4 % 77.0 %	70-1 70-1 mg/kg dry " " 70-1 70-1	" 30 30 1 " " 30 30 30	" " E150804 " " "	" " 09/08/05 " " " "	" " 09/09/05 " " "	" " EPA 8015M " " " " " " " " " "	
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane BH-9 (2-4') (5108001-33) Soil Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane BH-9 (10-12') (5108001-35) Soil Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35	ND ND ND ND ND ND	10.0 81.2 % 76.2 % 10.0 10.0 77.4 % 77.0 %	70-1 70-1 mg/kg dry " " 70-1 70-1	" 30 30 1 " " 30 30 30	" " E150804 " " "	" " 09/08/05 " " " " " "	" " 09/09/05 " " "	" " EPA 8015M " " " " " " " " "	

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Larson d	& Associates, Inc.	Project:	BTA/ French #3	Fax: (432) 687-0456
P.O. Bo	x 50685	Project Number:	None Given	Reported:
Midland	i TX, 79710	Project Manager:	Cindy Crain	09/15/05 09:15

#### Organics by GC

#### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-10 (0-2') (5108001-36) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	E150804	09/08/05	09/09/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0		"				•	
Total Hydrocarbon C6-C35	ND	10.0	**	"	*	"	н	*	
Surrogate: 1-Chlorooctane		74.8 %	70-1	30	"	"	"	**	
Surrogate: 1-Chlorooctadecane		72.2 %	70-1	30	"	"	"	"	

Environmental Lab of Texas

Larson & Associates, Inc.	Project:	BTA/ French #3	Fax: (432) 687-0456
P.O. Box 50685	Project Number:	None Given	Reported:
Midland TX, 79710	Project Manager:	Cindy Crain	09/15/05 09:15

#### General Chemistry Parameters by EPA / Standard Methods

		Environr	nental I	ab of To	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (0-2') (5108001-01) Soil									
Chloride	598	10.0	mg/kg	20	EI51305	09/12/05	09/12/05	EPA 300.0	
BH-1 (2-4') (5108001-02) Soil			<u> </u>						
Chloride	172	5.00	mg/kg	10	EI51305	09/12/05	09/12/05	EPA 300.0	
% Moisture	7.3	0.1	%	1	EH50909	09/08/05	09/09/05	% calculation	
BH-1 (6-8') (5108001-03) Soil					<u></u>				
Chloride	1750	25.0	mg/kg	50	EI51305	09/12/05	09/12/05	EPA 300.0	
BH-1 (10-12') (5108001-04) Soil									<u></u>
Chloride	9110	100	mg/kg	200	EI51305	09/12/05	09/12/05	EPA 300.0	
BH-2 (0-2') (5108001-05) Soil			·						
Chloride	327	5.00	mg/kg	10	EI51305	09/12/05	09/12/05	EPA 300.0	
BH-2 (2-4') (5108001-06) Soil			_						
Chloride	177	5.00	mg/kg	10	EI51305	09/12/05	09/12/05	EPA 300.0	
% Moisture	5.5	0.1	%	1	EH50909	09/08/05	09/09/05	% calculation	
BH-2 (6-8') (5108001-07) Soil	<u></u>								
Chloride	7910	100	mg/kg	200	EI51305	09/12/05	09/12/05	EPA 300.0	
BH-2 (10-12') (5108001-08) Soil									
Chloride	5190	50.0	mg/kg	100	E151305	09/12/05	09/12/05	EPA 300.0	
BH-3 (0-2') (5108001-09) Soil									
Chloride	20300	200	mg/kg	400	EI51305	09/12/05	09/12/05	EPA 300.0	
BH-3 (2-4') (5108001-10) Soil									
Chloride	973	20.0	mg/kg	40	EI51305	09/12/05	09/12/05	EPA 300.0	
% Moisture	3.2	0.1	%	1	EH50909	09/08/05	09/09/05	% calculation	

Larson & Associates, Inc.				A/ French #	13			Fax: (432)	687-0456
P.O. Box 50685			umber: No					Repor	
Midland TX, 79710		Project Ma	nager: Ci	ndy Crain				09/15/05	5 09:15
	General Cher	nistry Para	meters l	oy EPA /	Standar	rd Method	s		
		Environn	nental L	ab of Te	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
BH-3 (6-8') (5108001-11) Soil				· · ·					
Chloride	407	10.0	mg/kg	20	EI51305	09/12/05	09/12/05	EPA 300.0	
BH-3 (10-12') (5108001-12) Soil									
Chloride	11.1	5.00	mg/kg	10	EI51305	09/12/05	09/12/05	EPA 300.0	
BH-4 (0-2') (5I08001-13) Soil									
Chloride	21300	500	mg/kg	1000	EI51305	09/12/05	09/12/05	EPA 300.0	
BH-4 (2-4') (5108001-14) Soil									
Chloride	83.8	5.00	mg/kg	10	EI51305	09/12/05	09/12/05	EPA 300.0	
% Moisture	2.0	0.1	%	1	EH50909	09/08/05	09/09/05	% calculation	
BH-4 (6-8') (5108001-15) Soil									
Chloride	6.08	5.00	mg/kg	10	EI51305	09/12/05	09/12/05	EPA 300.0	
BH-5 (0-2') (5108001-16) Soil									=
Chloride	571	20.0	mg/kg	40	E151305	09/12/05	09/12/05	EPA 300.0	
BH-5 (2-4') (5108001-17) Soil									
Chloride	86.8	5.00	mg/kg	10	EI51305	09/12/05	09/12/05	EPA 300.0	
BH-5 (6-8') (5108001-18) Soil				<u>.</u>					
Chloride	301	10.0	mg/kg	20	EI51305	09/12/05	09/12/05	EPA 300.0	
% Moisture	12.1	0.1	%	1	EH50909	09/08/05	09/09/05	% calculation	
BH-5 (10-12') (5108001-19) Soil		· =·							
Chloride	4590	50.0	mg/kg	100	EI51305	09/12/05	09/12/05	EPA 300.0	
BH-6 (0-2') (5108001-20) Soil									
Chloride	153	5.00	mg/kg	10	EI51305	09/12/05	09/12/05	EPA 300.0	

Environmental Lab of Texas

Larson & Associates, Inc.	Project:	BTA/ French #3	Fax: (432) 687-0456
P.O. Box 50685	Project Number:	None Given	Reported:
Midland TX, 79710	Project Manager:	Cindy Crain	09/15/05 09:15

#### General Chemistry Parameters by EPA / Standard Methods

		Environn	nental I	Lab of To	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
BH-6 (2-4') (5108001-21) Soil									
Chloride	96.0	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	
% Moisture	6.7	0.1	%	1	EH50909	09/08/05	09/09/05	% calculation	
BH-6 (6-8') (5108001-22) Soil									
Chloride	4810	100	mg/kg	200	EI51306	09/13/05	09/13/05	EPA 300.0	
BH-6 (10-12') (5108001-23) Soil									
Chloride	7940	100	mg/kg	200	EI51306	09/13/05	09/13/05	EPA 300.0	
BH-7 (0-2') (5108001-24) Soil									
Chloride	116	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	-
BH-7 (2-4') (5108001-25) Soil									
Chloride	79.3	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	
% Moisture	2.6	0.1	%	1	EH50909	09/08/05	09/09/05	% calculation	
BH-7 (6-8') (5108001-26) Soil									
Chloride	9.08	5.00	mg/kg	10	E151306	09/13/05	09/13/05	EPA 300.0	
BH-7 (10-12') (5108001-27) Soil									
Chloride	35.8	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	
BH-8 (0-2') (5108001-28) Soil									
Chloride	40.6	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	
BH-8 (2-4') (5108001-29) Soil									
Chloride	53.9	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	
BH-8 (6-8') (5108001-30) Soil									
Chloride	136	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	
% Moisture	11.0	0.1	%	1	EH50909	09/08/05	• 09/09/05	% calculation	

Larson & Associates, Inc.	Project: BTA/ French #3	Fax: (432) 687-0456
P.O. Box 50685	Project Number: None Given	Reported:
Midland TX, 79710	Project Manager: Cindy Crain	09/15/05 09:15

#### General Chemistry Parameters by EPA / Standard Methods

		Environn	nental I	ab of Te	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-8 (10-12') (5108001-31) Soil									
Chloride	155	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	
BH-9 (0-2') (5108001-32) Soil					_				
Chloride	147	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	
BH-9 (2-4') (5108001-33) Soil									
Chloride	12.2	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	
% Moisture	5.9	0.1	%	1	EH50909	09/08/05	09/09/05	% calculation	
BH-9 (6-8') (5108001-34) Soil							- <u></u>		
Chloride	21.3	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	
BH-9 (10-12') (5108001-35) Soil									
Chloride	7750	200	mg/kg	400	EI51306	09/13/05	09/13/05	EPA 300.0	
% Moisture	9.5	0.1	%	1	EH50909	09/08/05	09/09/05	% calculation	
BH-10 (0-2') (5108001-36) Soil							<u></u>		
Chloride	65.4	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	
% Moisture	3.8	0.1	%	1	EH50909	09/08/05	09/09/05	% calculation	
BH-10 (2-4') (5108001-37) Soil									
Chloride	208	20.0	mg/kg	40	EI51306	09/13/05	09/13/05	EPA 300.0	
BH-10 (6-8') (5108001-38) Soil									
Chloride	129	5.00	mg/kg	10	EI51306	09/13/05	09/13/05	EPA 300.0	
BH-10 (10-12') (5108001-39) Soil									
Chloride	1100	20.0	mg/kg	40	EI51306	09/13/05	09/13/05	EPA 300.0	

Environmental Lab of Texas

Larson & Associates, Inc.	Project: BTA/ French #3	Fax: (432) 687-0456
P.O. Box 50685	Project Number: None Given	Reported:
Midland TX, 79710	Project Manager: Cindy Crain	09/15/05 09:15

#### Organics by GC - Quality Control

#### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch El50804 - Solvent Extraction (GC)										
Blank (EI50804-BLK1)				Prepared: (	09/08/05 A	nalyzed: 09	0/09/05			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0								
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	42.9		mg/kg	50.0		85.8	70-130			
Surrogate: 1-Chlorooctadecane	46.2		"	50.0		92.4	70-130			
LCS (E150804-BS1)				Prepared: (	)9/08/05 A	nalyzed: 09	/09/05			
Gasoline Range Organics C6-C12	397	10.0	mg/kg wet	500		79.4	75-125			
Diesel Range Organics >C12-C35	438	10.0		500		87.6	75-125			
Total Hydrocarbon C6-C35	835	10.0		1000		83.5	75-125			
Surrogate: 1-Chlorooctane	42.5		mg/kg	50.0		85.0	70-130			
Surrogate: 1-Chlorooctadecane	<b>45</b> .7		"	50.0		91.4	70-130			
Calibration Check (EI50804-CCV1)				Prepared: (	)9/08/05 A	nalyzed: 09	/09/05			
Gasoline Range Organics C6-C12	444		mg/kg	500		88,8	80-120			
Diesel Range Organics >C12-C35	489			500		97.8	80-120			
Total Hydrocarbon C6-C35	933		*	1000		93.3	80-120			
Surrogate: 1-Chlorooctane	46.7		"	50.0		93.4	0-200			
Surrogate: 1-Chlorooctadecane	49.0		"	50.0		98.0	0-200			
Matrix Spike (EI50804-MS1)	Sou	rce: 5108001-	-02	Prepared: (	)9/08/05 A	nalyzed: 09	/09/05			
Gasoline Range Organics C6-C12	455	10.0	mg/kg dry	539	ND	84.4	75-125			
Diesel Range Organics >C12-C35	456	10.0		539	ND	84.6	75-125			
Total Hydrocarbon C6-C35	911	10.0	"	1080	ND	84.4	75-125			
Surrogate: 1-Chlorooctane	47.5		mg/kg	50.0		95.0	70-130			
Surrogate: 1-Chlorooctadecane	46.8		"	50.0		93.6	70-130			
Matrix Spike Dup (EI50804-MSD1)	Sou	rce: 5108001-	-02	Prepared: (	)9/08/05 A	nalyzed: 09	/09/05			
Gasoline Range Organics C6-C12	442	10.0	mg/kg dry	539	ND	82.0	75-125	2.90	20	
Diesel Range Organics >C12-C35	469	10.0		539	ND	87.0	75-125	2.81	20	
Total Hydrocarbon C6-C35	911	10.0		1080	ND	84.4	75-125	0.00	20	
Surrogate: 1-Chlorooctane	48.9		mg/kg	50.0		97.8	70-130			
Surrogate: 1-Chlorooctadecane	46.6		"	50.0		93.2	70-130			

Larson & Associates, Inc. P.O. Box 50685	Project: BTA/ French #3 Project Number: None Given	Fax: (432) 687-0456 Reported:
Midland TX, 79710	Project Manager: Cindy Crain	09/15/05 09:15
General Ch	emistry Parameters by EPA / Standard Methods - Q	uality Control
	Environmental Lab of Texas	

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EH50909 - General Preparation (Prep)										
Blank (EH50909-BLK1)				Prepared: 0	8/09/05 A	nalyzed: 09	/09/05			
% Solids	100		%							
Duplicate (EH50909-DUP1)	Sour	ce: 5107011-0	)1	Prepared: 0	8/09/05 A	nalyzed: 09	/09/05			
% Solids	85.1		%		85.7			0.703	20	
Duplicate (EH50909-DUP2)	Sour	ce: 5108002-0	2	Prepared: 0	8/09/05 A	nalyzed: 09	/09/05			
% Solids	91.7		%		91.9			0.218	20	
Duplicate (EH50909-DUP3)	Sour	ce: 5108003-1	5	Prepared: 0	8/09/05 A	nalyzed: 09	/09/05			
% Solids	88.2		%		88.1			0.113	20	
Duplicate (EH50909-DUP4)	Sour	ce: 5108010-0	1	Prepared: 0	8/09/05 A	nalyzed: 09	/09/05			
% Solids	98.8		%		98.7			0.101	20	
Batch EI51305 - Water Extraction							·			
Blank (EI51305-BLK1)				Prepared &	Analyzed	: 09/12/05				
Chloride	ND	0.500	mg/kg							
LCS (EI51305-BS1)				Prepared &	Analyzed	: 09/12/05				
Chloride	8.96		mg/L	10.0		89.6	80-120			
Calibration Check (EI51305-CCV1)				Prepared &	Analyzed	: 09/12/05				
Chloride	9.27		mg/L	10.0		92.7	80-120			
Duplicate (EI51305-DUP1)	Sour	ce: 5108001-0	1	Prepared &	Analyzed	: 09/12/05				
Chloride	597	10.0	mg/kg		598			0.167	20	

Environmental Lab of Texas

Larson & Associates, Inc.	Project: BTA/ French #3	Fax: (432) 687-0456
P.O. Box 50685	Project Number: None Given	Reported:
Midland TX, 79710	Project Manager: Cindy Crain	09/15/05 09:15

#### General Chemistry Parameters by EPA / Standard Methods - Quality Control

#### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
			Cints			701020			Linit	
Batch EI51306 - Water Extraction										
Blank (EI51306-BLK1)				Prepared &	Analyzed:	09/13/05				
Chloride	ND	0.500	mg/kg							
LCS (EI51306-BS1)				Prepared &	Analyzed:	09/13/05				
Chloride	8,90		mg/L	10.0		89.0	80-120			
Calibration Check (EI51306-CCV1)				Prepared &	Analyzed:	09/13/05				
Chloride	8.41		mg/L	10.0		84.1	80-120			
Duplicate (EI51306-DUP1)	Sou	rce: 5108001-2	21	Prepared &	: Analyzed:	09/13/05				
Chloride	105	5.00	mg/kg		96.0			8.96	20	

Environmental Lab of Texas

P.O. Box	2 Associates, Inc. x 50685 TX, 79710	Project: Project Number: Project Manager:		Fax: (432) 687-0456 <b>Reported:</b> 09/15/05 09:15
		Notes and De	finitions	
DET	Analyte DETECTED			
ND	Analyte NOT DETECTED at or above the reporting limit			
NR	Not Reported			
dry	Sample results reported on a dry weight basis			
RPD	Relative Percent Difference			
LCS	Laboratory Control Spike			
MS	Matrix Spike			
Dup	Duplicate			

Report Approved By:

Raland K Junits

Date: 9/15/2005

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

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 have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

ВТА ВТА иест No.: <i>R</i> 2 ог 3 IAB. PO # <i>R</i> 24/8 V 6/4 SAMP <i>HID</i> V C 6/4 <i>HID</i> V C 7 <i>HID</i> V C 7 <i>HID</i> V C 6/4 <i>HID</i> V C 7 <i>HID</i> V C		CONTRINERS			
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PAGE	ц Ц	n		LAB. PO #	}		108	न्त्				507 N. Man	02 •	79701
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					1,21		V	C. Coin			,	. 1	S. I	
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## Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

Client:	arson & Assoc.
Date/Time:	9/7/05 14:26
Order #:	5203001
Initials	CK

### Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	1,5 0
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished and received?	res	No	
Chain of custody agrees with sample label(s)	Yes	No	I-D.on
Container labels legible and intact?	Yes	No	inla
Sample Matrix and properties same as on chain of custody?	Yes	No	L.
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yes	No	
Sample bottles intact?	Xes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	YES	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

## Variance Documentation:

Contact Person: Regarding:		Contacted by:	
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Corrective Action Taken:	······································	*****	
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September 23, 2005

Mr. Larry Johnson New Mexico Oil Conservation Division – District 1 1625 North French Drive Hobbs, New Mexico 88240

#### Re: Spill Remediation Workplan, BTA Oil Producers, Unit Letter H (SE/4, NE/4), Section 24, Township 18 South, Range 32 East, Lea County, New Mexico

Dear Mr. Johnson:

Please find enclosed a copy of the above-referenced workplan. The workplan is submitted on behalf of BTA Oil Producers., and presents the proposed remediation to be conducted by Larson and Associates, Inc.

Please call Royce Boyce at (432) 682-3753 or myself at (432) 687-0901 if you have questions.

Sincerely, Larson and Associates, Inc.

Ciny K. Crain

Cindy K. Crain, P.G. Project Manager

cc: Royce Boyce - BTA