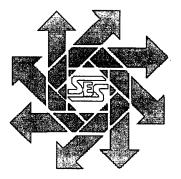
Fasken Oil and Ranch, LTD. Denton #10 Release Delineation Report/Work Plan Lea County, New Mexico

October 28, 2010



Prepared for:

Fasken Oil and Ranch, LTD. 303 West Wall, Suite 1800 Midland, Texas 79701-5116

Prepared by:

Safety & Environmental Solutions, Inc. 703 East Clinton Hobbs, New Mexico 88240 (575) 397-0510

approved b Terthro Enveronmenter Encimees NMOCD-Hobbs 10/28/10

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I. Company Contacts

Representative	Company	Telephone	E-mail
Jimmy Carlile	Fasken Oil and Ranch, Ltd.	432-818-0210	jimmyc@forl.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by Fasken Oil and Ranch, LTD. to perform cleanup services at the Denton #10.

On July 5, 2010, external corrosion of a flowline released approximately 28 barrels oil and produced water and 22 barrels were recovered.

III. Surface and Ground Water

There are (3) three monitoring wells located on the north and east side of the Denton SWD facility. The Denton SWD Facility is located approximately 4,550 feet southeast of the Denton #10. Depth to water measurements collected from these monitor wells on February 2, 2010 indicated an average ground water depth of 60.06 ft.

IV Soils

The surface soils in the area are predominantly sand and sandy loam.

V. Work Performed

On July 21, 2010 SESI was onsite with Jimmy Carlile representative of Fasken Oil & Ranch, Ltd. A total of five (5) auger holes were installed within the spill area to determine the vertical extent of the contamination. Samples were collected from each of the auger holes at depths ranging from 14" to 3' 2" below ground level (bgl). Due to auger refusal, borehole #4 was installed to a depth of 3' 2" bgs. All samples were properly preserved and transported under Chain of Custody to Cardinal Laboratories of Hobbs, New Mexico for analysis. The samples were analyzed for Chlorides (EPA Method 4500-Cl⁻ B) and Total Petroleum Hydrocarbons (TPH) (EPA Method 418.1 and 8015M).

Date	Sample ID	Cl (mg/kg)	GRO (C ₆ -C ₁₀) (mg/kg)	DRO (>C ₁₀ -C ₂₈) (mg/kg)	TPH 418.1 (mg/kg)
7/21/10	AH #1-14"	288	-	-	<100
7/21/10	AH #2-2'4"	80	-	-	<100
7/21/10	AH #3-2"	816	<10.0	103	-
7/21/10	AH #4-3'2"	3,040	-	-	<100
7/21/10	AH #5-2'5"	4,240	-	-	192

The results of the analysis are as follows:

On August 19, 2010, Safety and Environmental, Inc. (SESI) was onsite with Eco Enviro Drilling to install three (3) boreholes to determine the vertical extent of contamination. Each borehole was drilled to a depth of twenty-five (25) feet due to auger refusal. Samples were retrieved from surface and every five (5) foot intervals. The samples were transported under Chain of Custody to Cardinal Laboratories of Hobbs, New Mexico to be analyzed for Benzene, Toluene, Ethyl Benzene, and Total Xylenes, (BTEX, EPA Method SW-846-8021), Total Petroleum Hydrocarbons (TPH EPA Method 8015M) and Chlorides (EPA Method 4500-Cl⁻ B), if BTEX and TPH is not detected in the first five (5) foot sample then the following samples will only be analyzed for Chlorides.

Sample ID	Cl (mg/kg)		ſPH g/kg)	Benzene (mg/kg)	Toluene (mg/kg)	EthylBenzene (mg/kg)	Total Xylenes (mg/kg)
		GRO C ₆ -C ₁₀	DRO >C ₁₀ -C ₂₈				
Analysis Date	8/19/10	8/	19/10	8/19/10	8/19/10	8/19/10	8/19/10
BH#1-Surface	1,880	-	-	•		-	-
BH#1-5'	352	<10.0	18.0	<0.050	<0.050	0.066	<0.150
BH#1-10'	1,090	-	-	<0.050	<0.050	< 0.050	<0.150
BH#1-15'	1,760	-	-	-	-	-	-
BH#1-20'	3,440	-	-	-	-	-	-
BH#1-25'	2,640	-	-	-	-	-	-
BH#2-Surface	6,720	-	-				
BH#2-5'	2,600	<10.0	20.3	<0.050	<0.050	< 0.050	<0.150
BH#2-10'	1,840	-	-	-	-	-	-
BH#2-15'	1,180	-	-	-	-	-	-
BH#2-20'	1,410	-	-	-	-		-
BH#2-25'	2,280	-	-	-	-	-	-
BH#3-Surface	9,600	-	-				
BH#3-5'	2,360	<10.0	11.3	<0.050	< 0.050	< 0.050	<0.150
BH#3-10'	1,880	-	-	-	· -	-	-
BH#3-15'	496	-		•	-	-	-
BH#3-20'	224	-	-	-	-	-	-
BH#3-25'	256	-	-	-	-	-	

The results of the analysis are as follows:

After samples are retrieved the soil borings were backfilled from total depth to surface with bentonite and hydrated.

On October 6, 2010, Safety and Environmental, Inc. (SESI) was onsite with Eco-Enviro Drilling to further delineate BH#1 and BH#2 to determine the vertical extent of contamination utilizing an air rotary rig. Borehole #1 was re-drilled an additional twenty-five (25) feet to a total depth of fifty (50) feet.

Mr. Allen contacted Mr. Geoff Leking with New Mexico Oil Conservation Division (NMOCD) regarding the difficulty of penetrating the hard rock layer. Mr. Leking approved not to re-drill BH #2 since in BH #1 at 50 feet was less than 250 ppm Cl- it would be acceptable.

BH#1 samples were retrieved and transported under Chain of Custody to Cardinal Laboratories of Hobbs, New Mexico to be analyzed for Chlorides (EPA Method 4500-Cl⁻ B).

The results of the analysis are as follows:

Sample ID	Cľ (mg/kg)
Analysis Date:	10/6/10
BH#1-30'	1,250
BH#1-45'	16
BH#1-50'	32

VI. Action Plan

It is requested that entire area of contamination will be excavated to a depth of 4' below ground surface. Samples will be retrieved on the side walls to determine the horizontal extent. Samples will be transported to Cardinal Laboratories of Hobbs, New Mexico to be analyzed for Chlorides (EPA Method 4500-Cl B). The floor of the excavation will be padded and domed with one (1) foot of clean topsoil. A 20-mil reinforced geo-membrane liner will be installed. Upon completion, the area will be padded with an additional one (1) foot of clean topsoil then backfilled with like soils and contoured to grade.

Once all remediation is completed the area will be reseeded in the spring as per landowner's specifications.

After completion of the location a report will be filed with the New Mexico Oil Conservation Division (NMOCD).

VII. Figures & Appendices

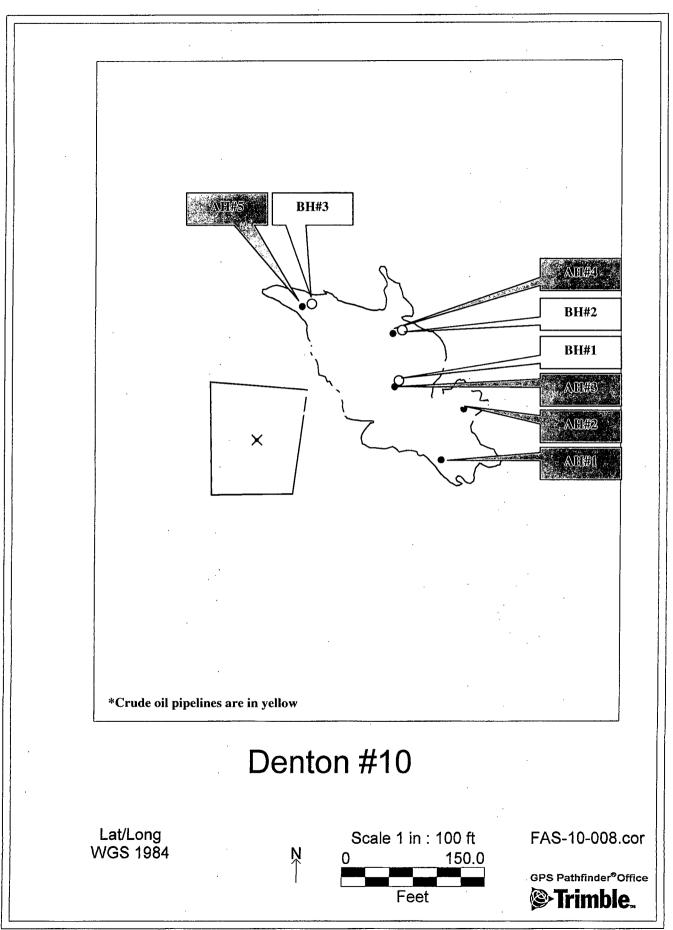
Figure 1: Vicinity Map Figure 2: Site Plan Appendix A: Analytical Results Appendix B: Site Photographs Appendix C: C-141

Figure 1 Vicinity Map

SCALE 1:48000									
() 	10000								
	FCET								

	103* 11.	6.11"W	103° 10' 55,13" v	V 103° 09' 5	6.15°W	103" 08 56.17"	'W 103* 07	56.19	
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							550 10 1 10 1 10 20	WiTopo	20.40° N
	GN 0 ⁴ 60' MN 7* 33'	E V	103* 10 50.13*	W 103° 09' 3	56.15" W	103 08 56,17	··· (vy 103° 0'	7 56.15	

Figure 2 Site Plan



Appendix A Analytical Results

CARDINAL Laboratories

October 08, 2010

Bob Allen Safety & Environmental Solutions 703 East Clinton Hobbs, NM 88240

RE: FAS-10-008

Enclosed are the results of analyses for samples received by the laboratory on 10/06/10 17:00.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager

CARDINAL Laboratories

Analytical Results For:

Safety & Environmental Solutions Bob Allen 703 East Clinton Hobbs NM, 88240 Fax To: (575) 393-4388

Received:	10/06/2010	Sampling Date:	10/06/2010
Reported:	10/08/2010	Sampling Type:	Soil
Project Name:	FAS-10-008	Sampling Condition:	Cool & Intact
Project Number:	DENTON #10	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NEW MEXICO		

Sample ID: BH #1 30' BGS (H021000-01)

Chloride, SM4500Ci-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1250	16.0	10/08/2010	NŅ	416	104	400	0.00	

Sample ID: BH #1 45' BGS (H021000-02)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: HM		, <u></u>			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/08/2010	ND	416	104	400	0.00	

Sample ID: BH #1 50' BGS (H021000-03)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/08/2010	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

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CARDINAL Laboratories

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D.Kune

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

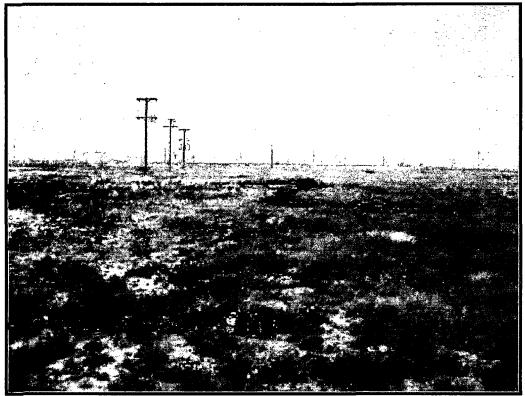
ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

(575)	393-2326	FAX (575)	393-2476

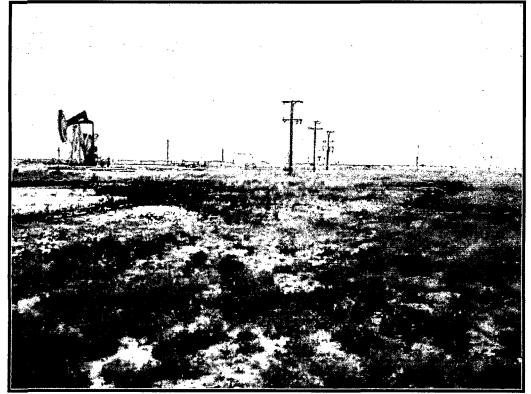
Company Name: SEST	BILL TO	ANALYSIS REQUEST
Project Manager: 36 Alley	P.O. #:	
Address: 703 E clinton	Company:	
City: 466bs State: MM Zin58240	Attn: Same	
Phone #: 575 75 75 75 Fax #:	Address:	
Project 11: FAS-10-005 Project Owner: Dasking	City:	
Project Name: Denton # 10	State: Zip:	
Project Location: Cec non	Phone #;	
Sampler Name: ISaac Kinca D	Fax #:'	
FOR LARUSE ONLY	PRESERV. SAMPLING	
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2 BHE 41 451555	1 1500	
H2-1000-1 134 E1 30'b55 (1) 2 1314 E1 45'b55 (1) 3 1314 E1 50'b55 (1)	1 1 1550	
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PLEASE NOTE: Udbyly and Datasiges. Caronauts apblity and allent's explosive remoty for any claim arising whether based in court or upsets. Attraans, including incose for negligence and any other cause whatdoever shall be ceaned watered water in sources, or an explosive of antication to make for negligence to consequential damages, including whole foilation between writtener sources, or an explosive of antication to make for negligence to consequential damages, including whole foilation between internation sources, or an explosive damages, and or register to the performance of election interested by Damages, including by Damages, register damages, including the consequence of the consequence of the performance of election internations of the consequence of the performance of election internations of the consequence of the performance of election internations of the consequence of the performance of election internations of the performance of the	ed feeleweld by Condinal within 39 days after completion of the a Jose of USB, or 1055 of profits incurred by client, its succidaries In its based upon any of the augre stated reasons or otherwise	opecas!e
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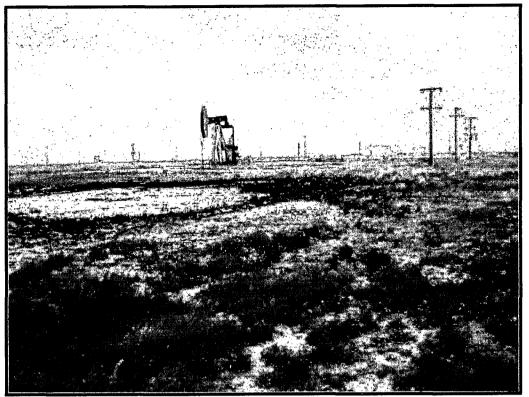
Appendix B Site Photographs



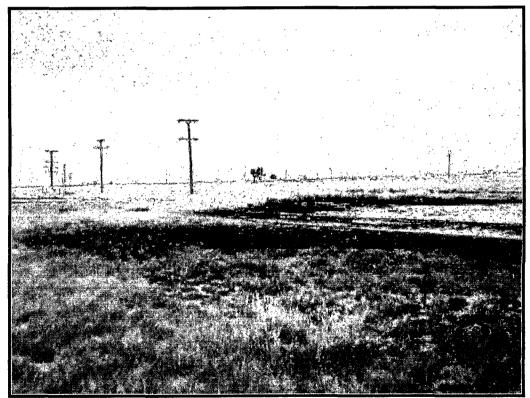
Affected area facing west



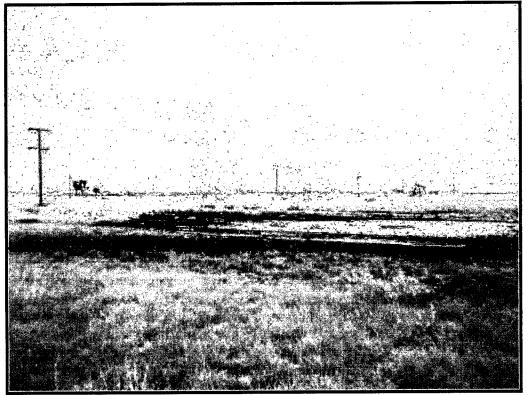
Affected area facing west



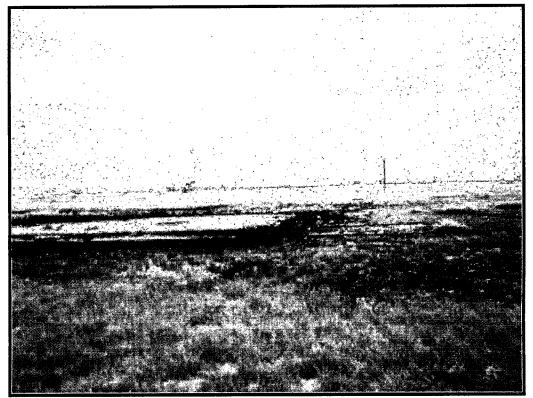
Affected area facing west



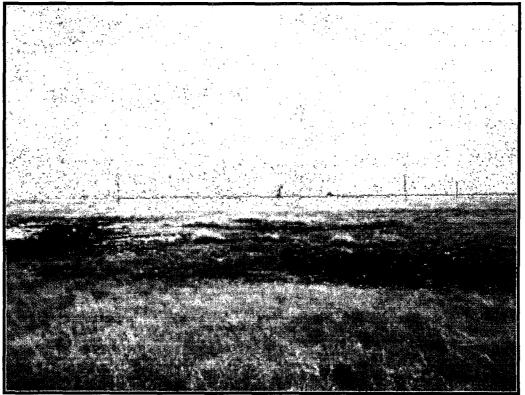
Affected area facing northwest



Affected area facing north



Affected area facing north



Affected area facing north



Affected area facing north

Appendix C C-141

•	District II Energy Miner 1301 W. Grand Avenue, Artesia, NM 88210 Oil Con District III 0il Con 1000 Rio Brazos Road, Aztec, NM 87410 1220 Sc	of New Mexals and Natura servation Diouth St. France Fe, NM 875	il Resources vision cis Dr.		Form C-141 Revised October 10, 2003 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form	
•	Release Notificat			ction		
•		OPERA	,		al Report 🔲 Final Repor	
	Name of Company Fasken 011 and Ranch, Ltd.	Contact J	immy D. Ca	arlile		
	Address 303 W. Wall St., Ste. 1800, Midlan Facility Name Denton No. 10 TX, 79701		No. 432-6 >= 011 We	587-1777		
			E UIL We.			
•	Surface Owner Darr Angell Mineral Own	er		Lease I	ło.	
		ON OF RE	LEASE	<u>.</u>	• ·	
	Unit Letter Section Township Range Feet from the No	orth/South Line	Feet from the	East/West Line	County	
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	API No. 30-025-05297 Latitude	Longitud	le		, ·	
					;	
•	INAIUE Type of Release Oil and produced water	Volume of	and the second sec	Volume F	Recovered 22	
	Source of Release Flowline	Date and H	lour of Occurrent	ce · Date and	Hour of Discovery	
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	By Whom?	Date and H) am	9:00 am	
	Was a Watercourse Reached?			the Watercourse.	1	
	🗌 Yes 🕅 No	N/A	· • •			
	If a Watercourse was Impacted, Describe Fully.*		···	ŀ		
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		· · ·		•		
	Describe Cause of Problem and Remedial Action Taken.*			<u>_</u>		
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	External corrosion on flowmane. Section	от ртре г	epraceu.			
		ء 	· · · · · · · · · · · · · · · · · · ·			
	Describe Area Affected and Cleanup Action Taken.*	_		•	. •	
	215' X 115' leak occurred in area of stan					
·	water and oil. Will allow area to dry and	d grab 601	I samples	to check ro	or chloride levels.	
•	I hereby certify that the information given above is true and complete t	o the best of my	knowledge and u	nderstand that purs	uant to NMOCD rules and	
	regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger					
	public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health					
	or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other					
┢	federal, state, or local laws and/or regulations.					
	signature furning) ailie	<u>OIL CONSERVATION DIVISION</u>				
	Printed Name: Jimmy D. Carlile	Approved by I	District Supervise	br:	· ,	
	Title: Regulatory Affairs Coordinator	Approval Date	24 13	Expiration f)atc:	
	E-mail Address: jimmyc@for1.com	Conditions of	Approval:	-	Attached	
·	Date: 7-12-10 Phone: 432-687-1777		1		La construction and the state	
	Attach Additional Sheets If Necessary		· · · · · · · · · · · · · · · · · · ·	<u>*</u>		

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