Fasken Oil and Ranch, LTD. Denton SWD #5 Delineation Report/Work Plan Unit N, Section 2, Township 15S, Range 37E Lea County, New Mexico

September 12, 2007



Prepared for:

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

By:

Safety & Environmental Solutions, Inc. 703 E. Clinton Suite 102 Hobbs, New Mexico 88240 (505) 397-0510

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I. Company Contacts

NAME	Company	Telephone	E-mail
Jimmy Davis	Fasken	432-818-0267	jimmyd@forl.com
Jimmy Carlile	Fasken	432-818-0210	jimmyc@forl.com
Bob Allen	SESI	505-397-0510	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 SWD #5 Tank Battery. The facility was affected by an overflow in the tanks caused by an injection pump failure. Approximately 205 barrels of produced fluid were released, 195 barrels were recovered. The spill was contained inside the bermed area.

III. Surface and Ground Water

The closest groundwater of record listed with the New Mexico office of the state engineer is located in the same section, range and township. The depth of water in this well was 47' in 1974. SESI has a monitor well installed approximately 3,634 northeast of this site. The depth of water in this well was 69.41' in March of this year.

IV Soils

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

V. Work Performed

On August 29, 2007 SESI installed four (4) soil borings inside the spill area to determine the vertical extent of contamination. Borehole #1 was drilled to a depth of 20', Borehole #2 was drilled to a depth of 15' and Boreholes #3 and #4 were drilled to a depth of 10'. Samples were retrieved in 5' intervals from all boreholes. All samples were properly preserved and transported under Chain of Custody to Argon Laboratories of Hobbs, New Mexico for analysis. The samples were analyzed for Total Petroleum Hydrocarbons (EPA Method 418.1), BTEX (EPA Method SW-846-8260), and Chlorides (EPA Method 4500-Cl⁻B).

Date	Sample ID	Cl ⁻ (mg/kg)	TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
8/29/07	BH #1-5'	800	180	ND	ND	ND	ND
8/29/07	BH #1-10'	720	55	ND	ND	ND	ND
8/29/07	BH #1-15'	180	ND	ND	ND	ND	ND
8/29/07	BH #1-20'	140	ND	ND	ND	ND	ND
8/29/07	BH #2-5'	190	4500	ND	ND	0.23	1.9
8/29/07	BH #2-10'	180	3400	ND	ND	0.19	1.4
8/29/07	BH #2-15'	53	ND	ND	ND	ND	ND
8/29/07	BH #3-5'	120	3000	ND	ND	0.33	4.1

The results of the analysis are as follows:

Date	Sample ID	Cl ⁻ (mg/kg)	TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
8/29/07	BH #3-10'	90	870	ND	ND	0.017	0.19
8/29/07	BH #4-5'	320	1200	ND	ND	ND	0.040
8/29/07	BH #4-10'	150	140	ND	ND	ND	ND

All borings were backfilled from total depth to surface with bentonite.

VI. Action Plan

It is proposed that a cosmetic cleanup, consisting of the removal of the top 12"-15" inches of soil, be performed around the tank battery. The remaining spill area will be excavated for the removal of the most highly contaminated and/or saturated material. The excavated soils will be transported to an NMOCD approved facility for disposal. The excavations will then be backfilled with clean soils.

This is an active tank battery and the operator is fully aware that at such time the battery and lease is abandoned, additional cleanup may be required.

Upon completion a closure report will be submitted to the NMOCD.

VII. Figures & Appendices

Figure 1 – Vicinity Map Figure 2 – Site Plan Figure 3 – Logs of Boring Appendix A – C-141 Appendix B – Site Photos Figure 1 Vicinity Map



Figure 2 Site Plan



Figure 3 Logs of Boring Appendix A C-141 FASKEN ENG

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Form C-141 Revised October 10, 2003

side of form

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District III</u> 1301 W. Grand Avenue, Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Fe, NM 87505

OPERATOR X Initial Report **Final Report** П Contact Name of Company Fasken 011 and Ranch, Ltd. Jimmy D. Carlile Telephone No. Address 303 W. Wall, Ste 1800 Midland, TX 432.687-1777 Facility Type Salt Water Disposal Facility Name Denton SWD No. 5 Lease No. Mineral Owner Surface Owner Darr Ange11 Fee LOCATION OF RELEASE East/West Line County North/South Line | Feet from the Township Feet from the Unit Letter Section Range 1980 Lea 2 158 37E 660 south west N Longitude Latitude 15 BW NATURE OF RELEASE 20 BW Volume of Release 185 BO Volume Recovered salt water/oil 180 ጽስ Type of Release Date and Hour of Discovery Date and Hour of Occurrence Source of Release stock tank If YES, To Whom? 4/26/07 1 am Was Immediate Notice Given? 4/26/07 1 am K Yes 🔲 No 🗌 Not Required Datc and Hour By Whom? Jimmy D. Carlile If YES, Volume Impacting the Watercourse. Was a Watercourse Reached? 🗋 Yes 🖾 No If a Watercourse was Impacted, Describe Fully.* NA ć Describe Cause of Problem and Remedial Action Taken.* Injection pump failed. Pump to be repaired. Describe Area Affected and Cleanup Action Taken.* Area affected inside of bermed facility. Fluids picked up by vacuum trucks, I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant 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. OIL CONSERVATION DIVISION Signatore: Approved by District Supervisor: Carlile Jimmy D. Printed Name: Regulatory Affairs Coor. **Expiration Date:** Approval Date: Title: Conditions of Approval: Attached E-mail Address: jimmyc@forl.com Phone: 432 687-1777 4/26/07 Date

* Attach Additional Sheets If Necessary

Release Notification and Corrective Action

Appendix B Analytical Results Appendix C Site Photos























