

District I  
1625 N French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
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

Form C-14  
Revised October 10, 2001  
Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

**Release Notification and Corrective Action**

Name of Company Fairway Resources <i>Operating LLC</i>		OPERATOR	<input checked="" type="checkbox"/> Initial Report	<input type="checkbox"/> Final Rep
Address 538 Silicon Drive Suite 101 Southlake, Tx 76902		Contact Mike Jones		
Facility Name South Red Lake Grayburg Unit 41		Telephone No. (432) 390-4611		
		Facility Type Flow Line		

Surface Owner BLM	Mineral Owner BLM	Lease No. 0577798
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	35	17S	27E		990'		990'	Eddy

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

**NATURE OF RELEASE**

Type of Release Produced Water and Crude	Volume of Release 15 bbl	Volume Recovered 0 bbl
Source of Release Flow Line	Date and Hour of Occurrence 9/28/2009	Date and Hour of Discovery 9/28/2009
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES. To Whom? Jim Amos (BLM)	
By Whom? Mike Jones	Date and Hour 9/28/2009	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES. Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
A fiberglass flow line above the north east corner of the location failed under pressure releasing 15 bbls of produced water and crude. All saturated materials will be removed and transported to an approved NMOCD disposal facility. Once all saturated materials have been removed the area will be delineated to determine what remedial steps will need to be taken.

Describe Area Affected and Cleanup Action Taken.\*

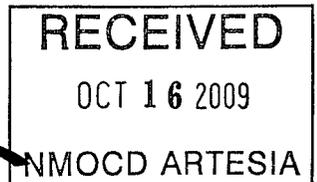
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger 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 groundwater, 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: <i>Mike Jones</i>	OIL CONSERVATION DIVISION	
Printed Name: <i>Mike Jones</i>	Approved by District Supervisor: <i>R. Dade by SB</i>	
Title: <i>Production Supt.</i>	Approval Date: <i>10-7-09</i>	Expiration Date: <i>12-31-09</i>
E-mail Address: <i>m.jones@FAIRWAY</i>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: _____ Phone: _____		<i>2RP-359</i>

**REMEDICATION IN PROGRESS**

2800 Plains Highway  
P. O. Box 381  
Lovington, New Mexico 88260  
cjbryant@basinenv.com  
Office: (575) 396-2378

Fax: (575) 396-1429



**REMEDIATION SUMMARY  
AND SITE CLOSURE STRATEGY**

*Fairway Resources Operating, LLC*

South Red Lake Grayburg Unit 41

Eddy County, New Mexico

UNIT P (SE/SE), Section 35, Township 17S, Range 27E

Latitude 32° , 47' , 10.62" North, Longitude 104° , 14' , 44.73" West

Prepared For:

Fairway Resources Operating, LLC  
538 Silicon Drive, Suite 101  
Southlake, Texas 76092

Prepared By:

Basin Environmental Consulting, LLC

**October 2009**

A handwritten signature in black ink, appearing to read "Camille J. Bryant". The signature is written in a cursive style with a large initial 'C'.

Camille J. Bryant

Project Manager

## TABLE OF CONTENTS

1.0	INTRODUCTION AND SITE BACKGROUND.....	1
2.0	NMOCD SITE CLASSIFICATION.....	1
3.0	SUMMARY OF FIELD ACTIVITIES .....	2
4.0	PROPOSED CLOSURE STRATEGY .....	2
5.0	REPORTING.....	3
6.0	LIMITATIONS.....	3
7.0	DISTRIBUTION.....	4

### FIGURES

Figure 1 – Site Location Map

Figure 2 – Site Map

### APPENDICES

Appendix A – Photographs

Appendix B – Release Notification and Corrective Action (Form C-141)

## **1.0 INTRODUCTION AND BACKGROUND INFORMATION**

Basin Environmental Consulting, LLC (Basin), on behalf of Fairway Resources Operating, LLC (Fairway), has prepared this Remediation Summary and Site Closure Strategy for the release site known as South Red Lake Grayburg Unit 41. The legal description of the release site is SE ¼ SE ¼ (Unit Letter P), Section 35, Township 17 South, Range 27 East, in Eddy County, New Mexico. The property is owned by the United States Bureau of Land Management (BLM). The release site GPS coordinates are 32° 47' 10.62" North and 104° 14' 44.73" West. A Site Location Map and a Site Map are provided as Figures 1 and 2, respectively. General site photographs are provided as Appendix A. The Release Notification and Corrective Action is provided as Appendix B.

The Eddy County Soil Survey (2004) indicates the release site soil type is Reeves-Gypsum land complex with 0 – 3% slopes, the area surrounding the release site is in an active oil and gas production field.

On September 28, 2009, Fairway discovered a produced water/crude oil release from the South Red Lake Grayburg Unit 41 flow line. The cause of the release was attributed to failure of the flow line and was reported to the New Mexico Oil Conservation Division (NMOCD) on October 12, 2009. During initial response activities, Fairway installed a temporary clamp on the flow line to mitigate the release. Approximately fifteen (15) barrels of produced water/crude oil was released from the flow line, with no recovery.

## **2.0 NMOCD SITE CLASSIFICATION**

A search of the New Mexico Office of the State Engineer (NMOSE) database did not identify the average depth to groundwater information for Section 35, Township 17 South, Range 27 East. A reference map utilized by the NMOCD indicated depth to groundwater at the release site should be encountered at approximately 100 to 125 feet below ground surface (bgs). This depth to groundwater results in a score of zero (0) points being assigned to the site based on the NMOCD depth to groundwater criteria.

The water well database, maintained by the NMOSE, indicated there are no water wells less than 1,000 feet from the release, resulting in zero (0) points being assigned to this site as a result of the criteria.

There are no surface water bodies located within 1,000 feet of the site. Based on the NMOCD ranking system zero (0) points will be assigned to the site as a result of the criterion.

The NMOCD guidelines indicate the South Red Lake Grayburg Unit 41 release site has a ranking score of ten (10). Based on this score, the soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- BTEX – 50 mg/Kg (ppm)
- TPH – 5,000 mg/Kg (ppm)

The NMOCD chloride clean up level concentrations are site specific and will be 1,000 mg/Kg per the NMOCD – Artesia District office.

### **3.0 SUMMARY OF RECENT FIELD ACTIVITIES**

On October 1, 2009, Basin began excavation of the impacted soil at the release site. The impacted soil is being transportation to Lea Land (NMOCD permit #WM-01-035) for disposal.

On October 2, 2009, four (4) trenches were excavated at the site to delineate the vertical extent of impacted soil. Soil samples were collected from the trenches and the trenches were backfilled.

Trench 1 was located at the release point and excavated to a total depth of approximately seven (7) feet bgs. Three (3) soil samples (Trench 1 @ 3', Trench 1 @ 6' and Trench 1 @ 7') were collected and the trench was backfilled. Results of the chloride field test indicated chloride concentrations ranged from 216 mg/Kg in soil sample Trench 1 @ 7' to 17,204 mg/Kg in soil sample Trench 1 @ 3'.

Trench 2 was located in the center of the release area and excavated to a total depth of approximately five (5) feet bgs. Two (2) soil samples (Trench 2 @ 2' and Trench 2 @ 5') were collected and the trench was backfilled. Results of the chloride field test indicated chloride concentrations ranged from 540 mg/Kg in the soil sample Trench 2 @ 5' to 2,884 mg/Kg in soil sample Trench 2 @ 2'.

Trench 3 was located in the southwest flow path and excavated to a total depth of approximately eight (8) feet bgs. Four (4) soil samples (Trench 3 @ 2', Trench 3 @ 5', Trench 3 @ 7' and Trench 3 @ 8') were collected and the trench was backfilled. Results of the chloride field test indicated chloride concentrations ranged from 856 mg/Kg in soil sample Trench 3 @ 8' to 4,860 mg/Kg in soil sample Trench 3 @ 5'.

Trench 4 was located in the west flow path and was excavated to a total depth of approximately eight (8) feet bgs. Four (4) soil samples (Trench 4 @ 2', Trench 4 @ 4', Trench 4 @ 6' and Trench 4 @ 8') were collected and the trench was backfilled. Results of the chloride field test indicated chloride concentrations ranged from 216 mg/Kg in soil sample Trench 4 @ 8' to 4,464 mg/Kg in soil sample Trench 4 @ 2'.

### **4.0 PROPOSED CLOSURE STRATEGY**

Fairway proposes the following activities designed to advance the release site known as South Red Lake Grayburg Unit 41 toward an NMOCD approved site closure:

- Collect excavation floor confirmation soil samples and submit the soil samples for analysis of chlorides using EPA 300 Cl.

- If the confirmation analytical results indicate chloride concentrations exceed 1,000 mg/Kg, Fairway will continue the excavation of soil until analytical results indicate chloride concentrations are less than the NMOCD regulatory clean up level of 1,000 mg/Kg.
- If the confirmation analytical results indicate chloride concentrations are less than the NMOCD regulatory clean up level of 1,000 mg/Kg, Fairway will request NMOCD permission to backfill the excavation with locally purchased soil. Following backfilling activities, the site will be contoured to fit the surrounding topography and reseeded with a BLM approved seeding mixture.

## **5.0 REPORTING**

On completion of the proposed site closure activities, Fairway will submit a Remediation Summary and Site Closure Request for NMOCD and BLM approval.

## **6.0 LIMITATIONS**

Basin Environmental Consulting, LLC has prepared this Remediation Summary and Site Closure Strategy to the best of its ability. No other warranty, expressed or implied, is made or intended.

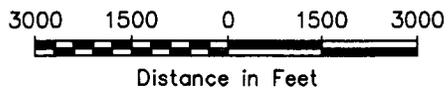
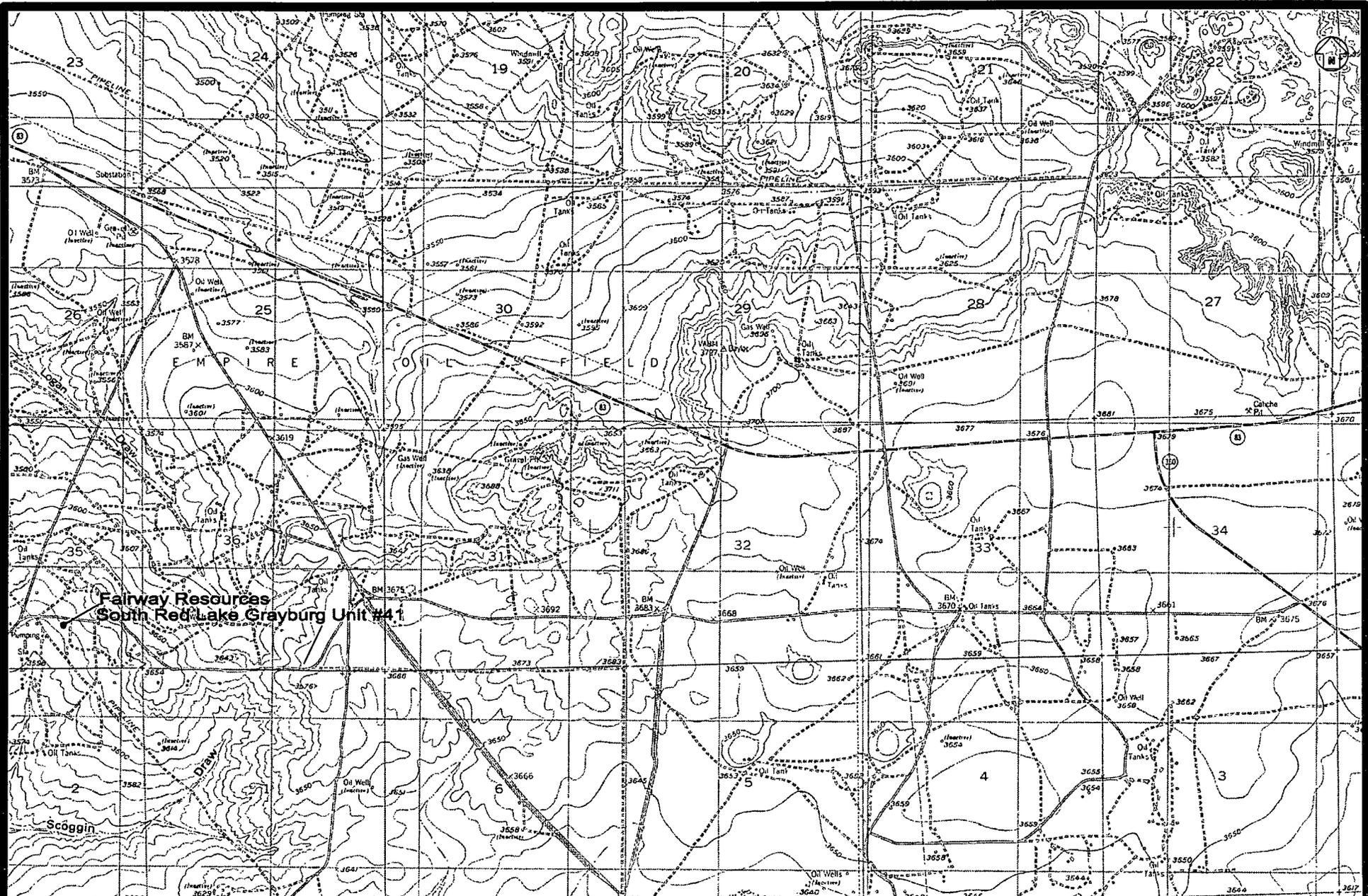
Basin Environmental Consulting, LLC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Consulting, LLC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin Environmental Consulting, LLC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Consulting, LLC also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Fairway Resources Operating, LLC. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Consulting, LLC and/or Fairway Resources Operating, LLC.

**7.0 DISTRIBUTION:**

- Copy 1: Sherry Bonham  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division (District 2)  
1301 E. Grand Avenue  
Artesia, New Mexico 88210
- Copy 2: Terry Gregston  
Bureau Of Land Management  
602 E. Greene Street  
Carlsbad, New Mexico 88220
- Copy 3: Jay Pulte  
Fairway Resources Operating, LLC.  
538 Silicon Drive,  
Suite 101  
Southlake, Texas 76092
- Copy 4: Basin Environmental Consulting, LLC  
P.O. Box 381  
Lovington, New Mexico 88260  
cjbryant@basin-consulting.com

## **Figures**



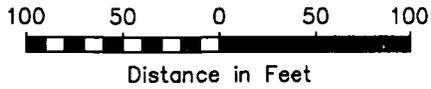
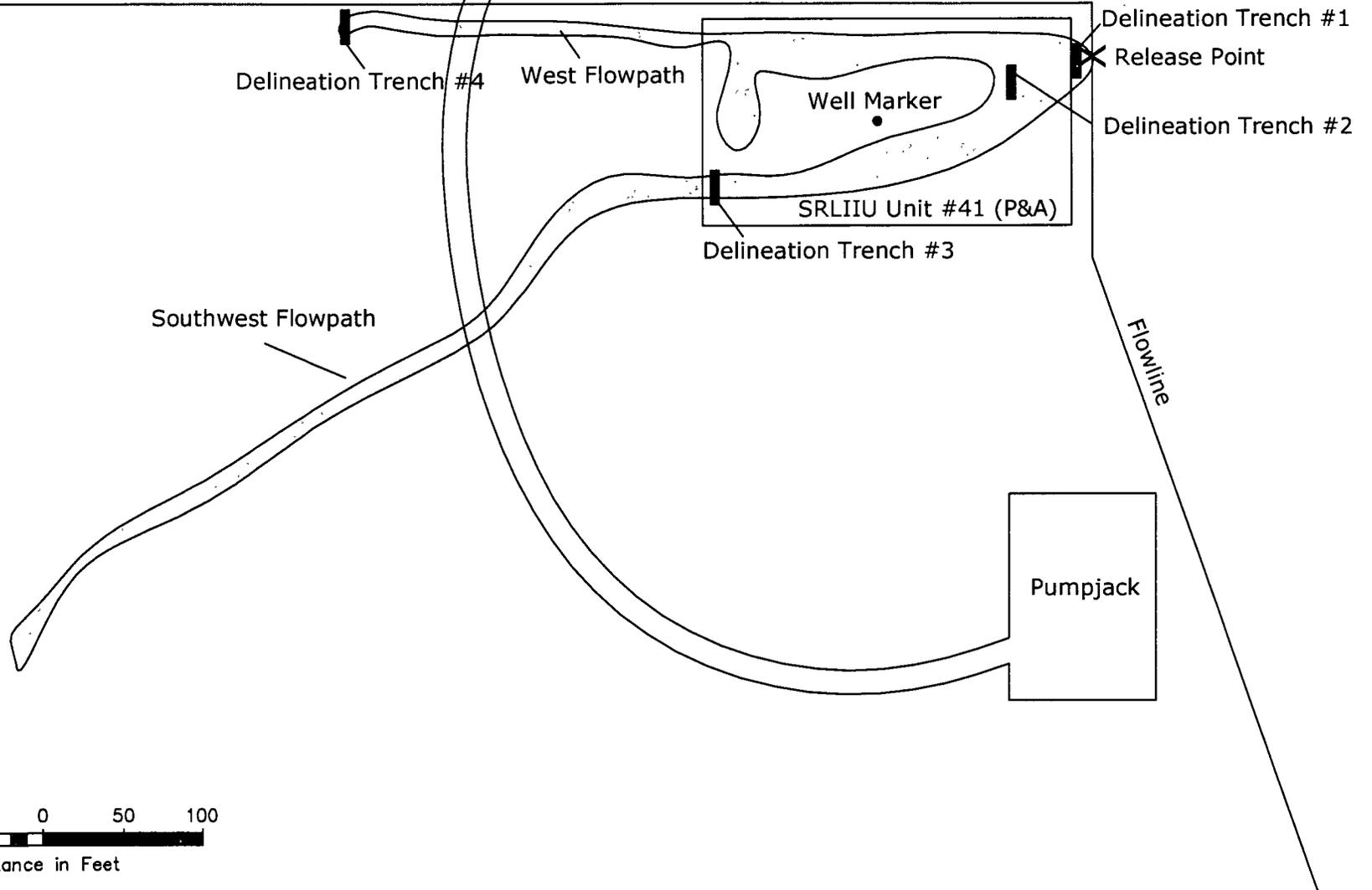
**Figure 1**  
**Site Location Map**  
**Fairway Resources**  
**South Red Lake Grayburg**  
**Unit #41**  
**Eddy County, New Mexico**

**Basin Environmental Consulting**

Prep By CDS	Checked By: CDS
October 15, 2009	Scale 1"=3000'



Evans Road (Asphalt)



**Legend:**

-  Flowpath Extents
-  Flowline

**Figure 2**  
**Site Map**  
**Fairway Resources**  
**South Red Lake Grayburg #41**  
**Eddy County, New Mexico**

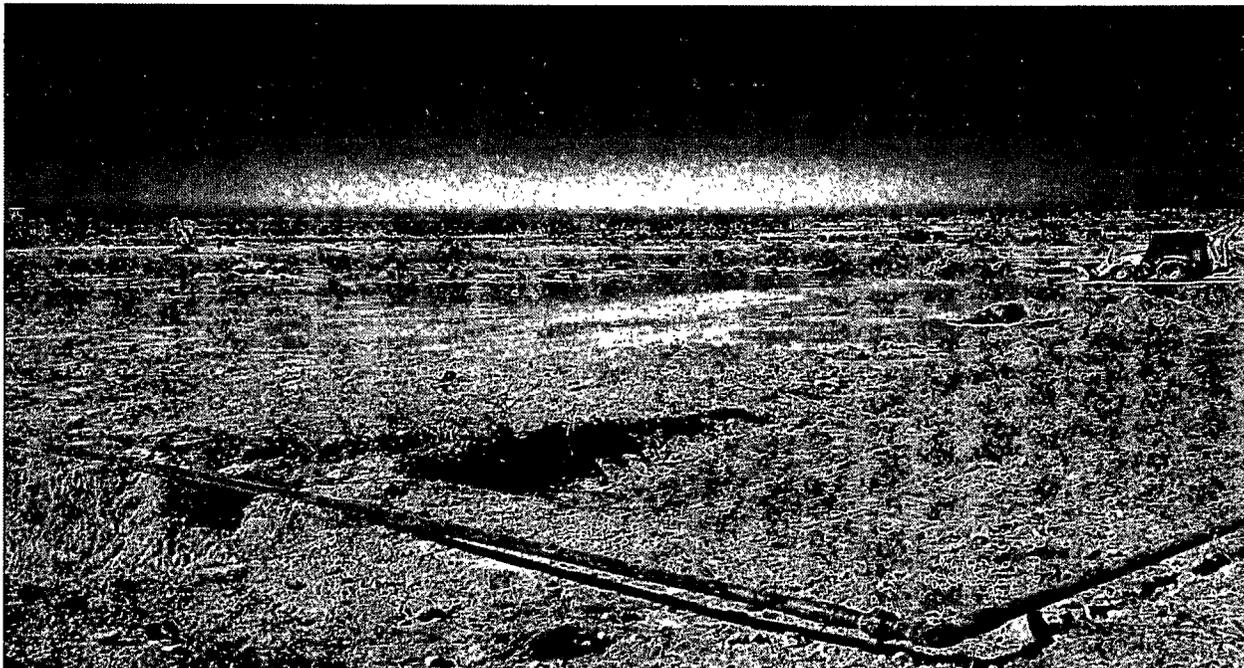
**Basin Environmental Consulting**

Prep By: CDS	Checked By: CJB
October 15, 2009	Scale 1"=100'

# **Appendices**

# **Appendix A**

## **Photographs**



South Red Lake Grayburg Unit 41 release site during initial activities



South Red Lake Grayburg Unit 41 release site during initial activities

**Appendix B**  
**Release Notification and Corrective**  
**Action (Form C-141)**

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State of New Mexico  
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Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-1  
Revised October 10, 2008  
Submit 2 Copies to appropriate District Office in accordance with Rule 116 on the side of for

Release Notification and Corrective Action

OPERATOR  Initial Report  Final Report

Name of Company Fairway Resources	Contact Mike Jones
Address 538 Silicon Drive Suite 101 Southlake, Tx 76902	Telephone No. (432) 390-4611
Facility Name South Red Lake Grayburg Unit 41	Facility Type Flow Line

Surface Owner BLM	Mineral Owner BLM	Lease No. 0577798
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OIL CONSERVATION DIVISION

Signature: *Mike Jones*  
Printed Name: Mike Jones  
Title: Production Supt.  
E-mail Address: mjones@fairway.com  
Date: \_\_\_\_\_ Phone: \_\_\_\_\_  
Attach Additional Sheets If Necessary

Approved by District Supervisor:  
Approval Date: \_\_\_\_\_ Expiration Date: \_\_\_\_\_  
Attachments of Approval:  
Attached