

**Bratcher, Mike, EMNRD**

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**From:** Susana Rodriguez [office2@sesi-nm.com]  
**Sent:** Friday, June 01, 2012 9:24 AM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** Green, Bill  
**Subject:** HOL-11-017 Delineation report  
**Attachments:** HOL-11-017 Delineation report.pdf; Appendix A Analyticals Results H200335.pdf; Appendix A Analytical Results H200457.pdf; Appendix C NMOCD C141.pdf; Figure 3 Logs of Boring.pdf

Mike:

As per your conversation with Bob, I have attached a copy of the delineation report for the Navajo Apache DAD lateral Line, as well as, the figures and appendices for your review. Please forward your approval/stipulations regarding this report.

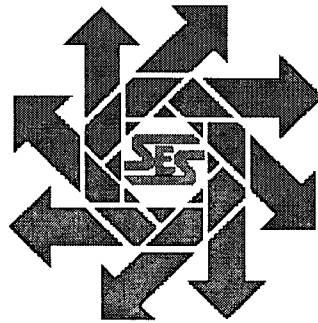
Thank you,

**Susana Rodriguez**  
**Administrative Assistant**  
**Safety & Environmental Solutions, Inc.**  
**O: 575.397.0510**  
**F: 575.393.4388**

# **Holly Energy Partners Navaho Apache DAD Lateral Delineation Report/Workplan**

**Eddy County, New Mexico**

**March 2, 2012**



**Prepared for:**

**Holly Energy Partners  
P.O. Box 1260  
Artesia, New Mexico 88211**

**By:**

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

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## I. Company Contacts

Representative	Company	Telephone	E-mail
Bill Green	Holly Energy Partners	575-748-8968	bill.green@hollyenergy.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

## II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by Holly Energy Partners to perform site assessment of a release area at the Navaho Apache DAD Lateral located in Section 30 of Township 17 South, Range 29 East, Eddy County, New Mexico.

According to the C-141 on October 22, 2011, the cause of the release was to due possible internal or external corrosion on a 3" steel pipe tie-in from Concho Resources Navaho Federal #8. The leak is located below ground at the tie-in of the Apache DAD lateral. Clean-up crews were dispatched and free product was removed. Approximately 100 barrels of crude oil was released with an unknown amount recovered.

New Mexico Oil Conservation Division (NMOCD) representatives were contacted.

## III. Surface and Ground Water

The average depth of groundwater of record listed with the United States Geological Survey (USGS) is in Section 22 Range 28 East and Township 17 South, which is located 2.8 miles northwest of the site, is 79 feet in February 1999.

## IV. Characterization

The target cleanup levels are reached by the application of the "Guidelines for Remediation of Leaks, Spills and Releases New Mexico Oil Conservation Division (NMOCD) – August 13, 1993 to this site is 1,000 parts per million (ppm) Total Petroleum Hydrocarbons (TPH).

Application of the New Mexico Oil Conservation Division's ranking criteria for contaminated soils at this site is presented below:

Depth to Ground Water:			
(Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet	20 points	
	50 feet to 99 feet	10 points	X
	>100 feet	0 points	
Wellhead Protection Area:			
(Less than 200 feet from a private domestic water source; or less than 1000 feet from all other water sources)	Yes	20 points	
	No	0 points	X
Distance to Surface Water:			
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet	20 points	
	200 feet to 1000 feet	10 points	
	>1000 feet	0 points	X
RANKING SCORE (TOTAL POINTS)			10

## V. Work Performed

On February 8, 2012, Safety and Environmental Solutions, Inc. (SESI) was onsite to install test trenches utilizing a backhoe to determine vertical extent of contamination. Samples were retrieved and transported under chain of custody to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for Chlorides (EPA Method 300.0), and Total Petroleum Hydrocarbons (TPH) (EPA Method 418.1), Benzene, Toluene, Ethyl Benzene, Xylenes (BTEX) (EPA Method 8021B).

The results of the analysis are as follows:

Sample ID	TPH 418.1 (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
Analysis Date:	2/22/12	2/22/12	2/22/12	2/22/12	2/22/12
TT-1, 11' BGS	6,790	8.24	101	82.4	132
TT-2, 10' BGS	5,180	<1.00	19.9	23.7	41.7
TT-3, 07' BGS	340	<0.050	<0.050	<0.050	<0.150
TT-4, 05' BGS	113	<0.050	<0.050	<0.050	<0.150

The first attempt at the delineation of this site only produced the vertical extent in Test Trenches 3 & 4, which was less than 5' BGS. Test Trenches 1 & 2 did not produce vertical extent at approximately 11-12' BGS.

On February 20, 2012, SESI was onsite with Atkins Drilling to install two boreholes to a depth where the TPH concentration is 100 ppm or less utilizing an auger rig with split spoon sampling. Samples were retrieved at 10 ft. intervals. Field tests will be run on the samples to determine the depth where the contamination is 1000 ppm TPH (NMOCD Guideline for this site) and where the vertical extent of 100 ppm has been reached. Samples will be transported under chain of custody to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for Total Petroleum Hydrocarbons (TPH) (EPA Method 418.1) and Benzene, Toluene, Ethyl Benzene, Xylenes (BTEX) (EPA Method 8021B).

The results of the analysis are as follows:

Sample ID	TPH 418.1 (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
Analysis Date:	2/22/12	2/22/12	2/22/12	2/22/12	2/22/12
BH-1, 19" to 21" BGS	118	<0.050	<0.050	<0.050	<0.150
BH-1, 29" to 31" BGS	<100	<0.050	<0.050	<0.050	<0.150
BH-2, 19" to 21" BGS	106	<0.050	<0.050	<0.050	<0.150
BH-2, 25" BGS	166	<0.050	<0.050	<0.050	<0.150

## VI. Action Plan

As a result of the most recent delineation, vertical extent of contamination was encountered between the 12' and 19' BGS in both BH # 1 and BH # 2. The original delineation found the vertical extent of contamination in TT # 3 and TT # 4 to be less than 7' BGS.

It is proposed that the most highly contaminated soil be excavated and placed on plastic and treated with enhanced bioremediation on-site. A bio-surfactant, UNIREM 800, will be applied to the excavated soil and covered with a fabric membrane. On the second day, the bacteria, UNIREM 200, will be applied to the soil and again covered with a fabric membrane. The soil will be field tested for THP on a weekly basis to monitor the progress of the bioremediation. Both the bio-surfactant and the bacteria are products produced by UNIREM Technologies. (See Material Safety Data Sheet in Appendix D) After completion of the bioremediation process, when the TPH concentration in the soil is less than 1,000 ppm, the soil will be backfilled into the excavation and returned to original grade. The time required for the bioremediation is estimate to be less than 30 days.

HEP and COG are still negotiating remediation regarding the Right-of-Way.

**VII. Figures & Appendices**

Figure 1 – Vicinity Map

Figure 2 – Site Plan

Figure 3- Logs of Boring

Appendix A – Analytical Results

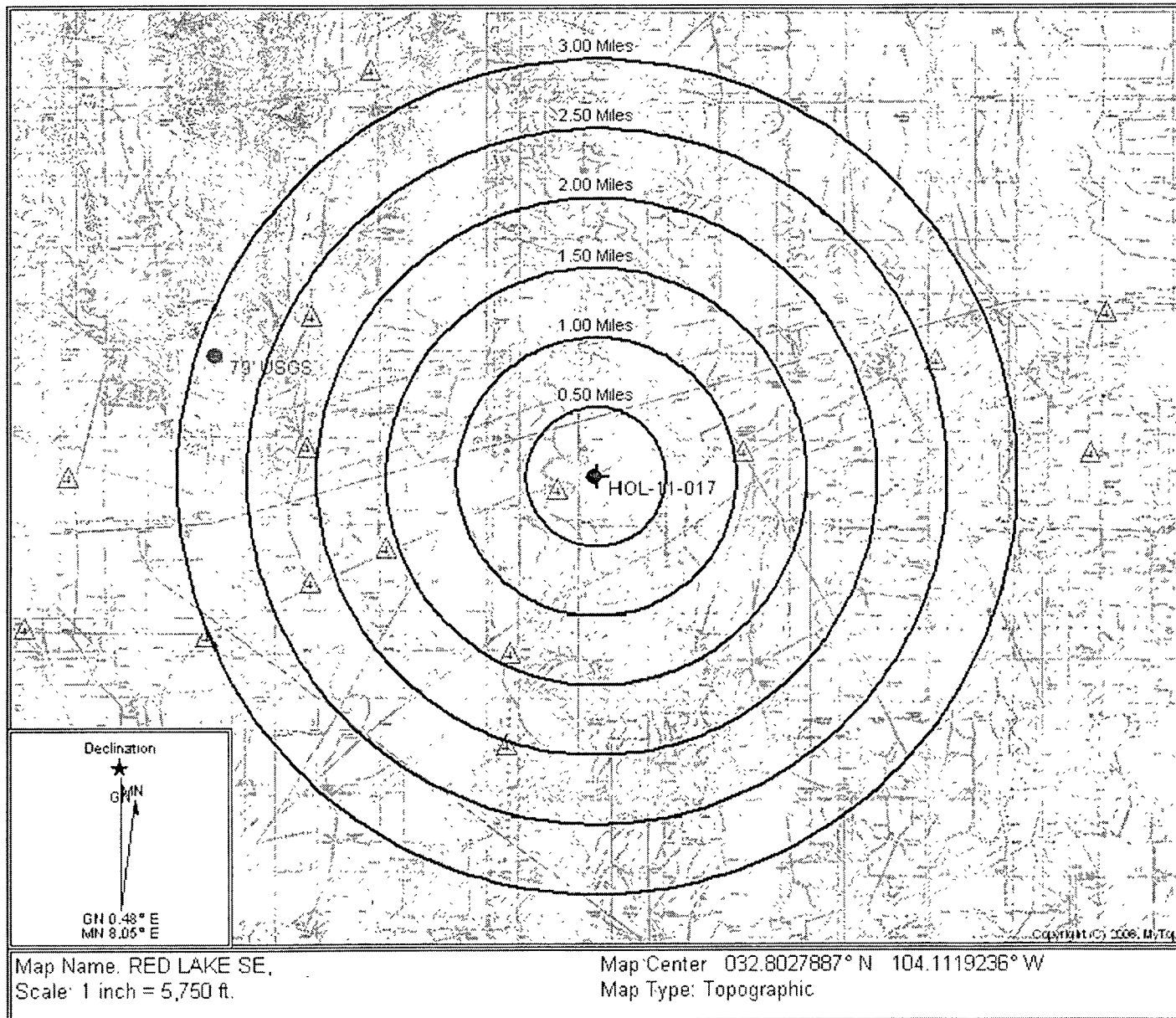
Appendix B – Site Photographs

Appendix C – C-141

Appendix D – Material Safety Data Sheet

# **Figure 1**

## **Vicinity Map**





## **Figure 2 Site Plan**



Navaho release 10-22-2011

TT-2

TT-1

© 2012 Google

Imagery Date: 6/10/2011

32°48'09.41"N 104°06'42.04"W elev: 3542m

Eye alt: 4510 ft

# **Figure 3**

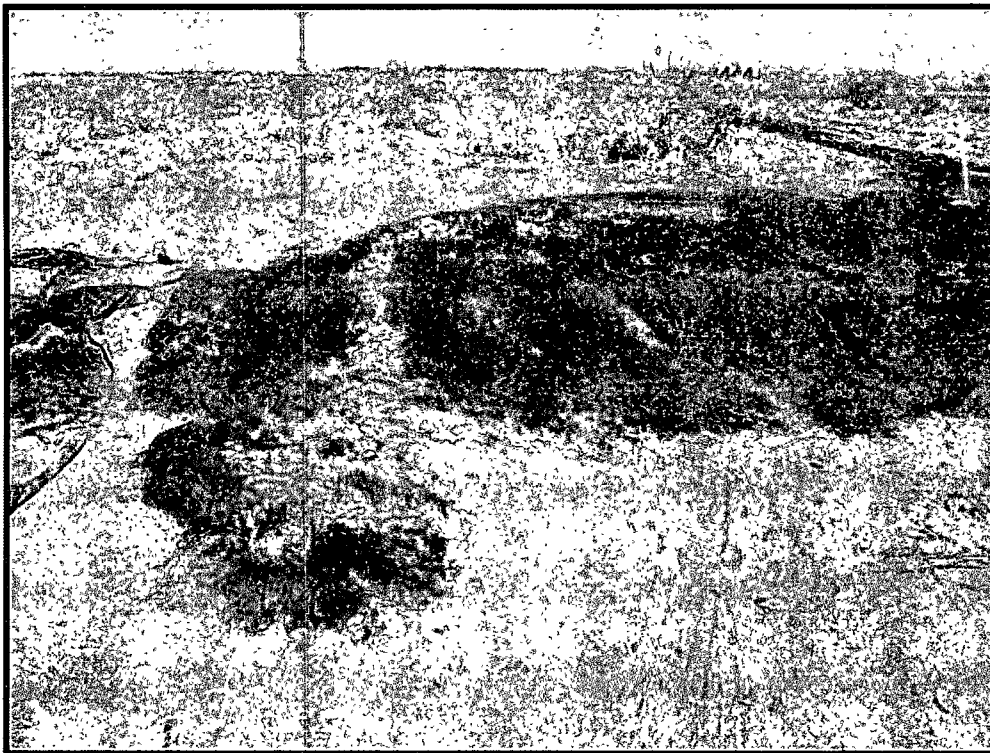
## **Logs of Boring**

# **Appendix A**

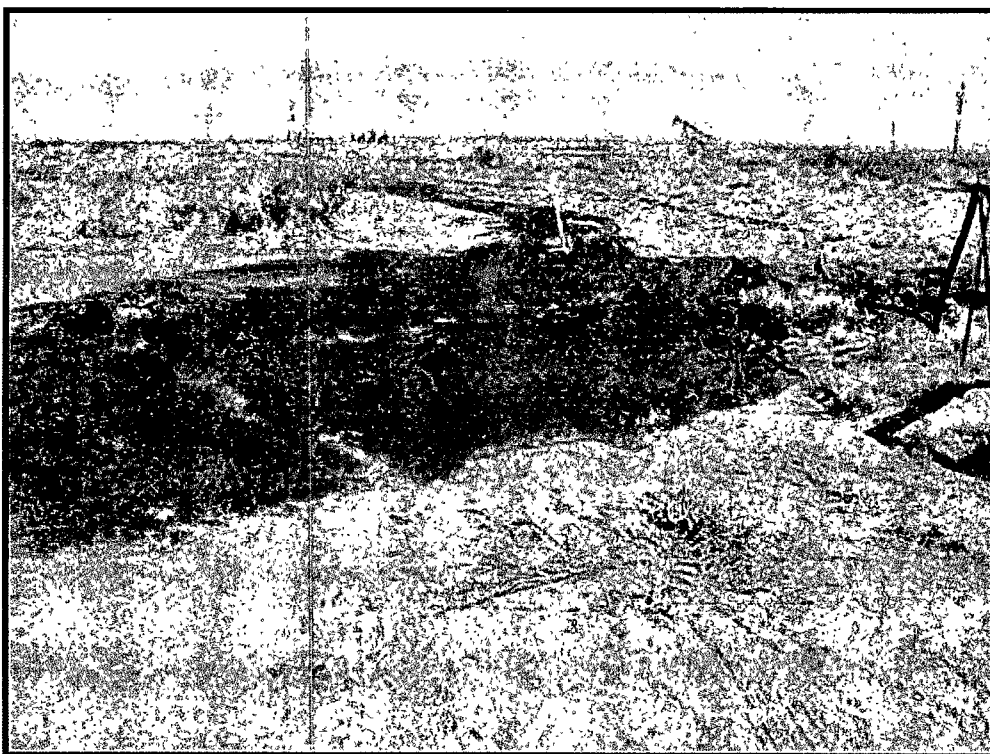
## **Analytical Results**

## **Appendix B**

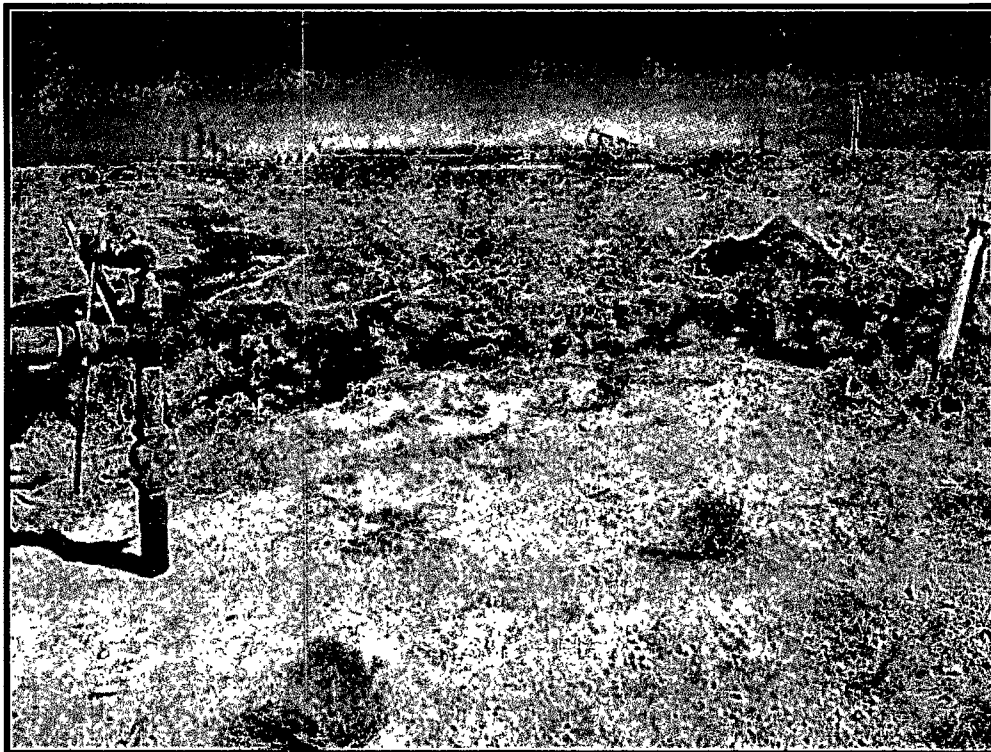
### **Site Photographs**



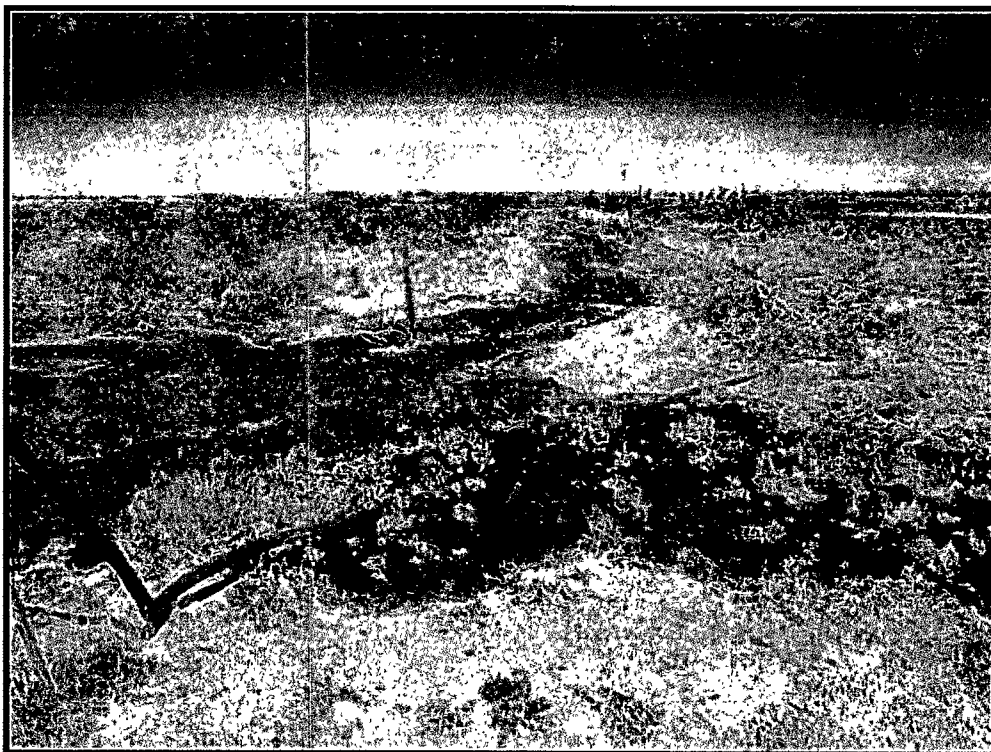
Leak site looking east



Pooling area at west end of leak

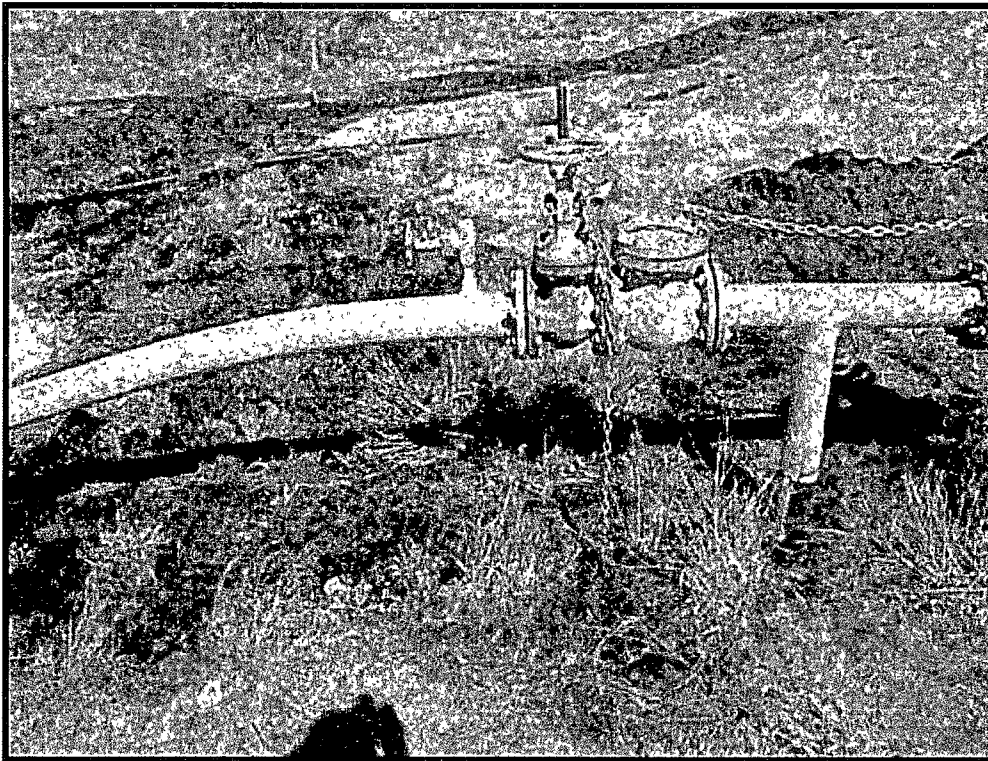


West end of leak source

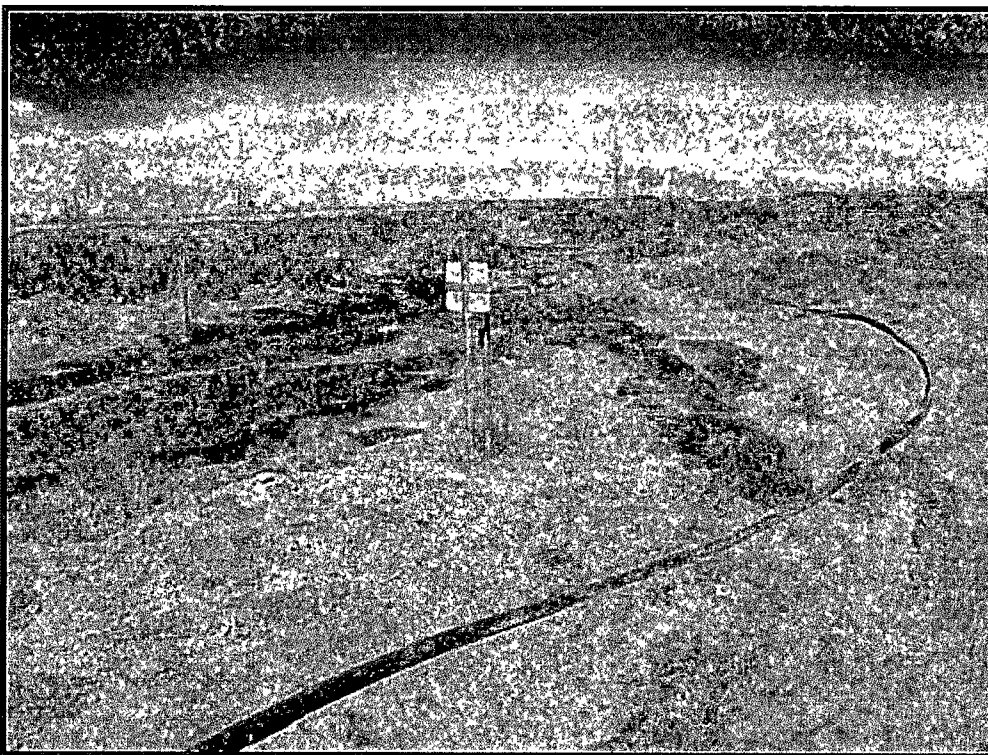


West pooling area and right of way run



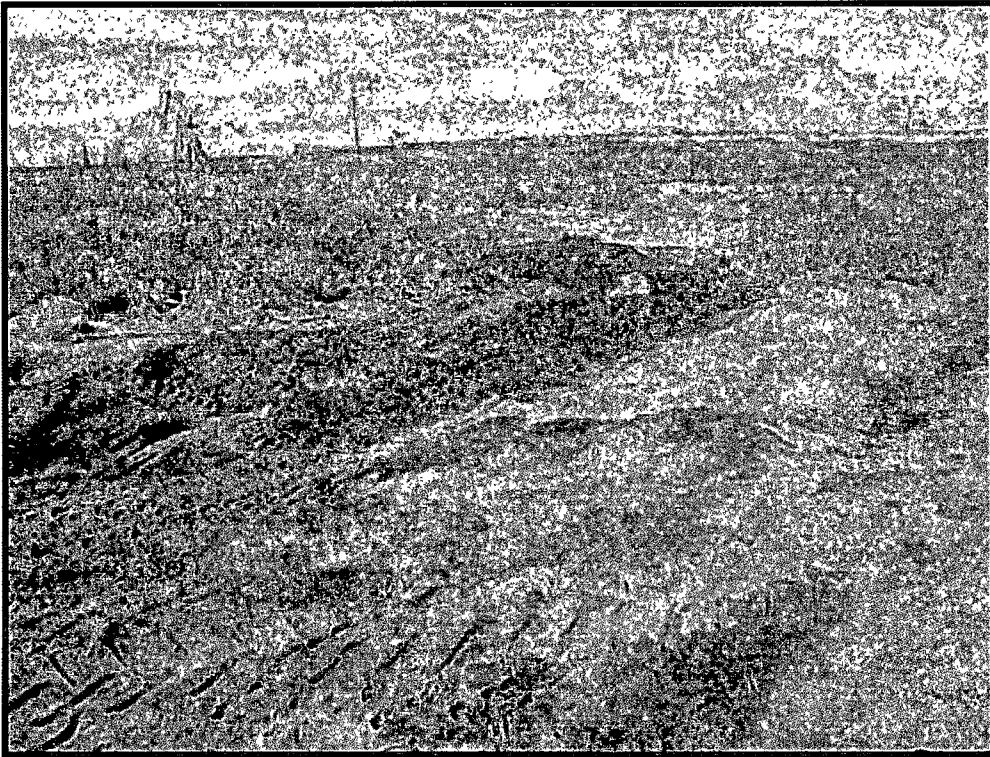


Leak source area

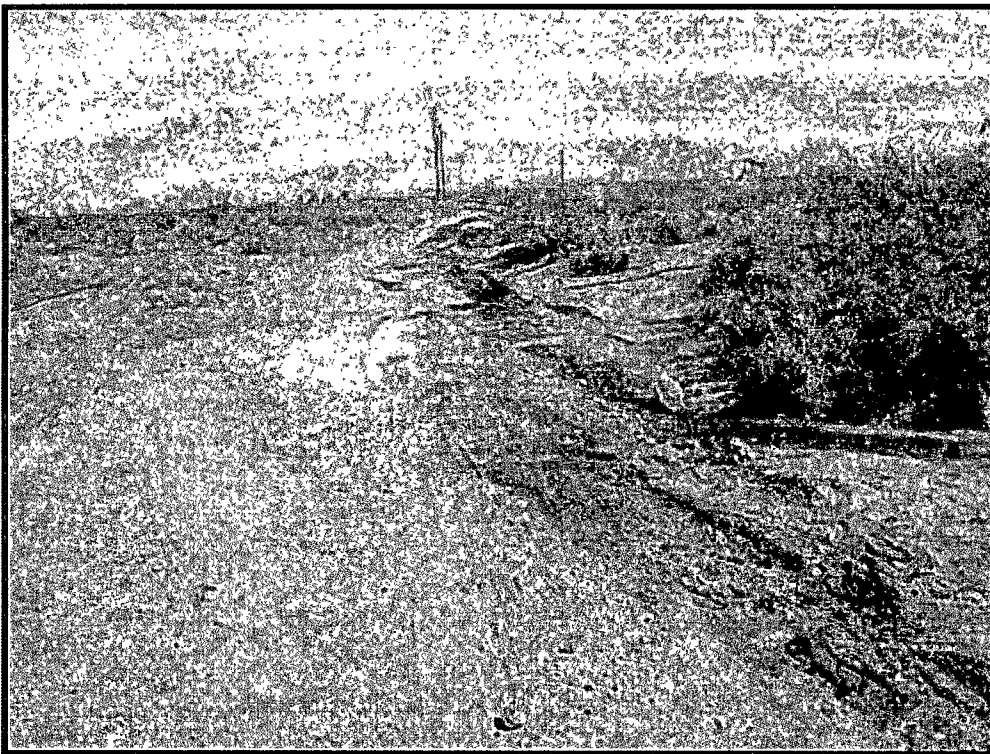


West end of leak

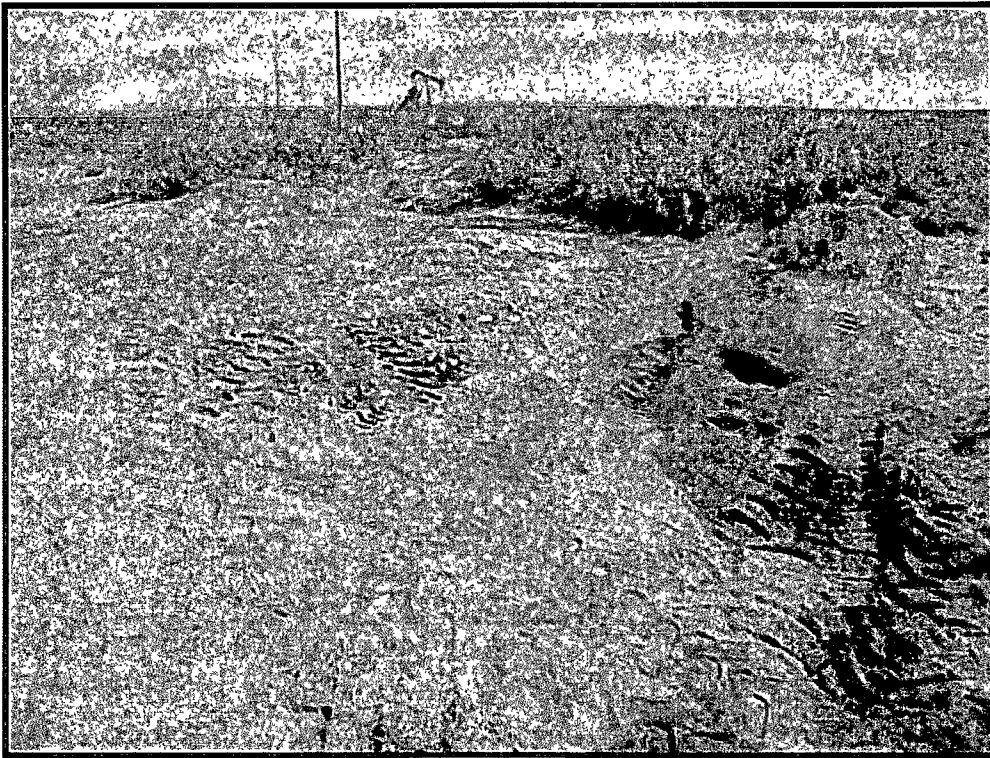




Run area before lease road



Run area on lease road



Run area leaving lease road on east end of leak



Run area east end of leak

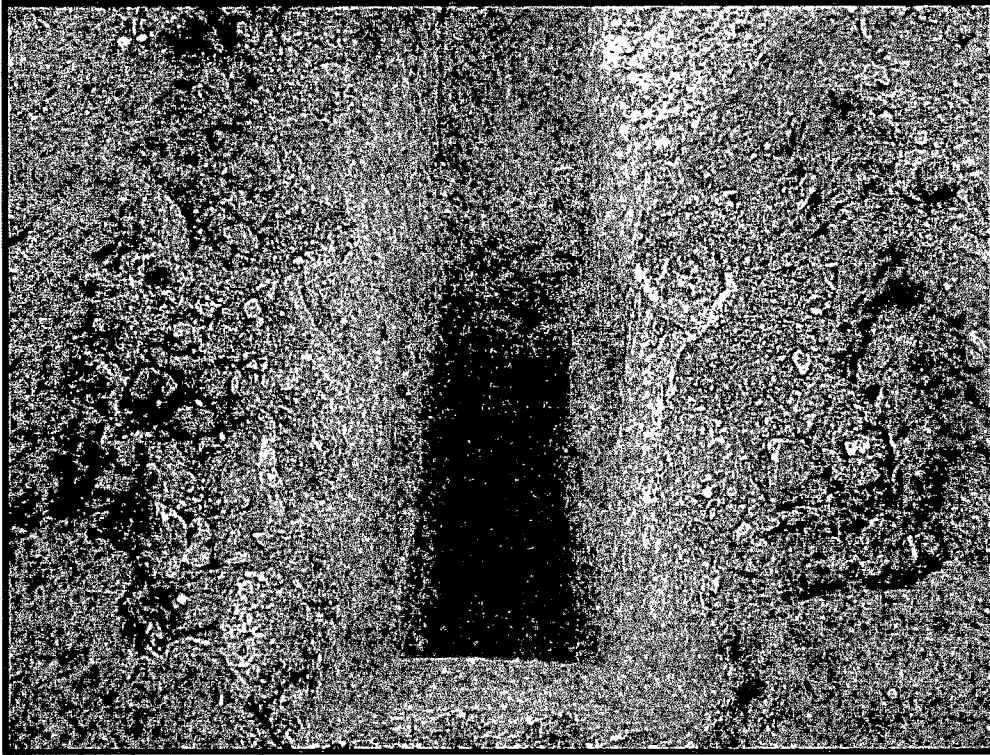


Run area east end of leak



Run area east end of leak





Test trench-1 facing south



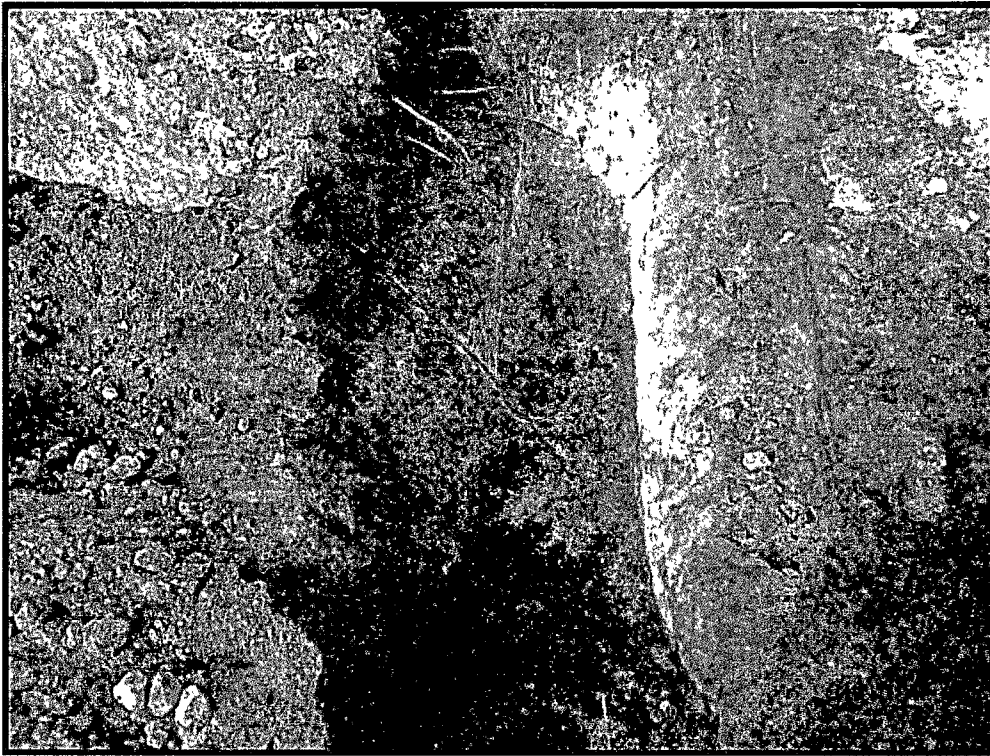
Test trench-1 facing south (backfilled)



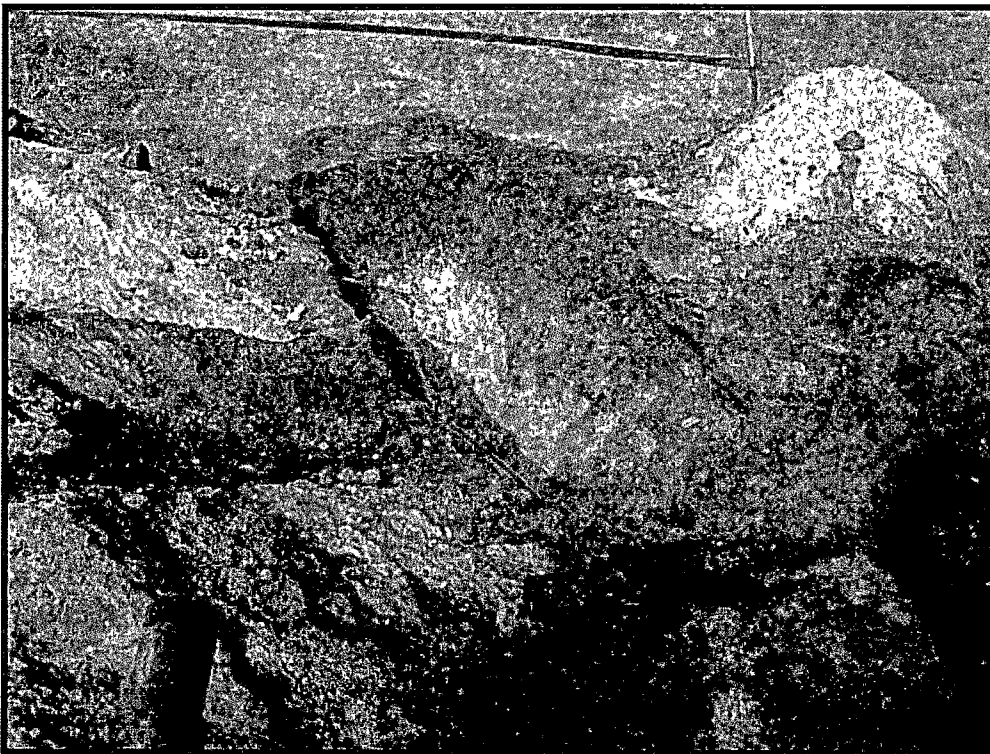
Test trench-2 facing west



Test trench-2 facing west (backfilled)



Test trench-3 facing west

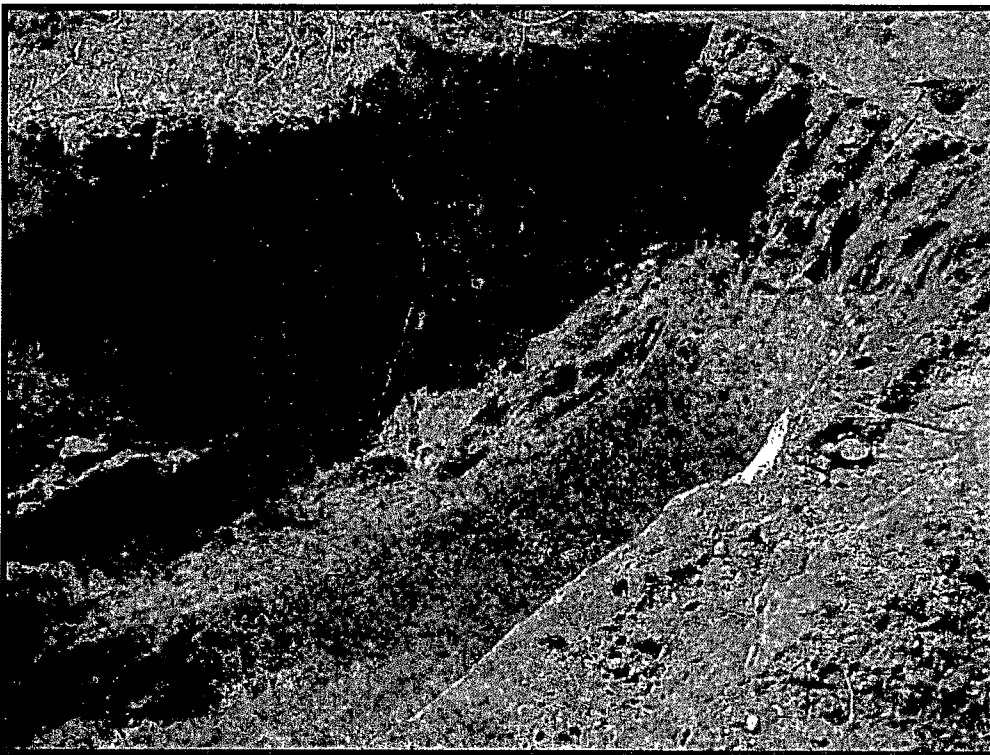


Test trench-3 facing west

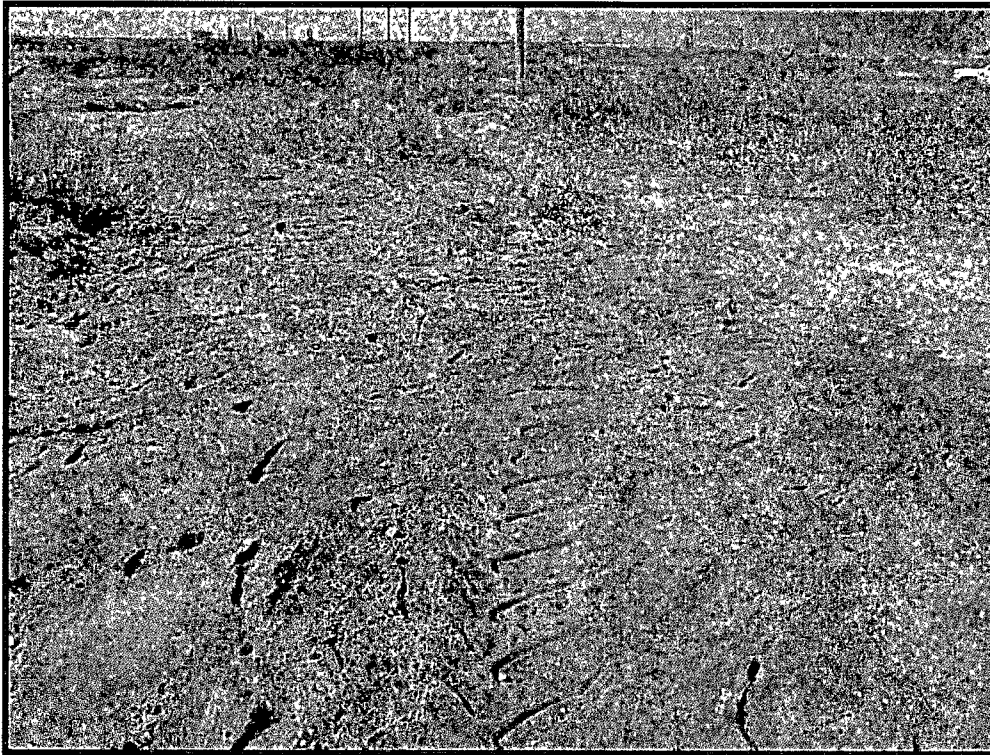




Test trench-3 facing west (backfilled)



Test trench-4 facing west



Test trench-4 facing west (backfilled)



## **Appendix C**

### **C-141**

District I  
1625 N French Dr., Hobbs, NM 88240  
District II  
1301 W Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Bravo Road, Artesia, 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-141  
Revised October 10, 2003  
Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Holly Energy Partners	Contact	Jeff Stubblefield
Address	1602 W Main Street Artesia, NM 88210	Telephone No	972-322-5782
Facility Name	Navaho Federal / Apache DAD Lateral	Facility Type	Gathering Line

Surface Owner	BLM	Mineral Owner		Lease No.	
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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
	30	T17S	29E	1650'	FSL	2306'	FEL	Eddy

Latitude N 32° 48.167

Longitude W 104° 06.730

NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	~100 bbls	Volume Recovered	bbl
Source of Release	3" steel pipeline	Date and Hour of Occurrence	10/22/2011 unknown	Date and Hour of Discovery	10.10 a.m.
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Randy Dade 575-626-1372		
By Whom?	Lori Coupland	Date and Hour	10/22/2011 1:55 p.m.		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	N/A		

If a Watercourse was Impacted, Describe Fully.\*

N/A

Describe Cause of Problem and Remedial Action Taken \*

Possible internal or external corrosion on a 3" steel pipe tie-in from Concho Resources Navaho Federal #8. The leak is located below ground at the tie-in of the Apache DAD lateral. Clean-up crews have been dispatched and free product will be removed. Contaminated soil will also be removed and placed on plastic near the site.

Describe Area Affected and Cleanup Action Taken \*

Lease road - nearest well: Concho Resources Navaho Federal #8. Lease road has been closed on both sides of release and earthen dikes built to prevent surface migration. The free product will be recovered and the contaminated soil will be excavated and placed on plastic to allow for natural aeration. The soil will be hauled to an approved land farm once analytical tests have been completed and the levels are at acceptable levels for disposal.

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.

Signature	OIL CONSERVATION DIVISION		
Printed Name: Lori Coupland	Approved by District Supervisor		
Title: Mgr - Regulatory Compliance	Approval Date:	Expiration Date:	
E-mail Address: lori.coupland@hollyenergy.com	Conditions of Approval		Attached <input type="checkbox"/>
Date: 10/22/2011 Phone: 575.748.4076			

\* Attach Additional Sheets If Necessary

## **Appendix D**

# **Material Safety Data Sheet**

## MATERIAL SAFETY AND DATA SHEET

### I NAME, BRAND, AND TRADEMARK

UNI-REM® 200 BIOLOGICAL PREPARATION

A. Type of product for remediation of soil and water contamination with oil and oil products.

### II. MANUFACTURER'S NAME, ADDRESS & TELEPHONE NUMBER

UNIREM TECHNOLOGIES LLC  
7929 Rhyne Lane  
Knoxville, TN 37918  
Phone (865) 257-8733 Fax (865) 859-0541  
www.Uniremtechnologies.com

### III. NAME, ADDRESS, & TELEPHONE NUMBER OF DISTRIBUTOR:

UNIREM TECHNOLOGIES  
7929 Rhyne Lane  
Knoxville, TN 37918  
Phone (865) 257-8733 Fax (865) 859-0541  
www.Uniremtechnologies.com

### IV. SPECIAL HANDLING AND WORKER PRECAUTIONS FOR STORAGE AND FIELD APPLICATION

1. Flammability: UNI-REM® is non-flammable.
2. Ventilation.
  - B. Inhalation of UNI-REM® - 200 should be avoided.
  - C. Normal ventilation is adequate for handling and storage.
3. Skin and eye contact, personal protective equipment:
  - D. Direct contact of UNI-REM® with skin or eyes should be avoided.
  - E. The use of goggles, gloves, and respirators is recommended during application.
4. Emergency and First Aid Procedures.
  - A. None required, ordinary measure of personal hygiene is adequate.
  - B. Avoid direct eye contact. Contact with concentrate will irritate the eye. Should accidental contact occur, wash with water for 5-10 minutes. If irritation persists, consult a physician.

In the event of direct contact, wash the affected area with soap and water.

### KEEP OUT OF REACH OF CHILDREN

#### Storage Temperatures

- C. Minimum Storage Temperature: -23 F(-50 C)
- D. Maximum Storage Temperature: 86 F(+30 C)
- E. Optimum Storage Temperature: 39 F (+4 C)
- F. Temperatures of phase separation and chemical changes: N/A

### V. SHELF LIFE

The shelf life of BIOLOGICAL PRODUCT is 12 months.



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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February 16, 2012

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: HOL-11-017

Enclosed are the results of analyses for samples received by the laboratory on 02/09/12 14:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited 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 (V1, 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. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	02/09/2012	Sampling Date:	02/08/2012
Reported:	02/16/2012	Sampling Type:	Soil
Project Name:	HOL-11-017	Sampling Condition:	Cool & Intact
Project Number:	NAVAJO APACHE DAD LATERAL	Sample Received By:	Jodi Henson
Project Location:	LOCO HILLS, NM		

**Sample ID: TT - 4 5' BGS (H200335-01)**

BTEX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2012	ND	1.93	96.5	2.00	16.0	
Toluene*	<0.050	0.050	02/16/2012	ND	2.09	105	2.00	15.8	
Ethylbenzene*	<0.050	0.050	02/16/2012	ND	2.15	107	2.00	15.0	
Total Xylenes*	<0.150	0.150	02/16/2012	ND	6.65	111	6.00	15.5	

Surrogate 4-Bromofluorobenzene (PIL) 110 % 64 4-134

TPH 418.1		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	113	100	02/10/2012	ND	2570	103	2500	2.28	

**Sample ID: TT - 3 7' BGS (H200335-02)**

BTEX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2012	ND	1.93	96.5	2.00	16.0	
Toluene*	<0.050	0.050	02/16/2012	ND	2.09	105	2.00	15.8	
Ethylbenzene*	<0.050	0.050	02/16/2012	ND	2.15	107	2.00	15.0	
Total Xylenes*	<0.150	0.150	02/16/2012	ND	6.65	111	6.00	15.5	

Surrogate 4-Bromofluorobenzene (PIL) 108 % 64 4-134

TPH 418.1		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	340	100	02/10/2012	ND	2570	103	2500	2.28	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	02/09/2012	Sampling Date:	02/09/2012
Reported:	02/16/2012	Sampling Type:	Soil
Project Name:	HOL-11-017	Sampling Condition:	Cool & Intact
Project Number:	NAVAJO APACHE DAD LATERAL	Sample Received By:	Jodi Henson
Project Location:	LOCO HILLS, NM		

**Sample ID: TT - 2 10' BGS (H200335-03)**

BTX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	02/16/2012	ND	1.93	96.5	2.00	16.0	
Toluene*	19.9	1.00	02/16/2012	ND	2.09	105	2.00	15.8	
Ethylbenzene*	23.7	1.00	02/16/2012	ND	2.15	107	2.00	15.0	
Total Xylenes*	41.7	3.00	02/16/2012	ND	6.65	111	6.00	15.5	

Surrogate 4-Bromofluorobenzene (PIL) 124 % 64 4-134

TPH 418.1	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	5180	100	02/10/2012	ND	2570	103	2500	2.28	

**Sample ID: TT - 1 11' BGS (H200335-04)**

BTX 8021B		mg/kg		Analyzed By: AP					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	8.24	1.00	02/16/2012	ND	1.93	96.5	2.00	16.0		
Toluene*	101	1.00	02/16/2012	ND	2.09	105	2.00	15.8		
Ethylbenzene*	82.4	1.00	02/16/2012	ND	2.15	107	2.00	15.0		
Total Xylenes*	132	3.00	02/16/2012	ND	6.65	111	6.00	15.5		

Surrogate 4-Bromofluorobenzene (PIL) 141 % 64 4-134

TPH 418.1		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	6790	100	02/10/2012	ND	2570	103	2500	2.28	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

S-04            The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

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 SM4500Cl-B does not require samples be received at or below 6°C .

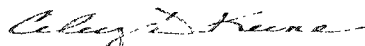
                  Samples reported on an as received basis (wet) unless otherwise noted on report

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Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager







PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

---

February 24, 2012

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: HOL-11-017

Enclosed are the results of analyses for samples received by the laboratory on 02/20/12 13:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited 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 (V1, 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. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 02/20/2012  
 Reported: 02/24/2012  
 Project Name: HOL-11-017  
 Project Number: NAVAJO APACHE DAD LATERAL  
 Project Location: LOCO HILLS, NM

 Sampling Date: 02/20/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: BH-1 19" TO 21" BGS (H200457-01)**

BTEX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/22/2012	ND	1.76	87.9	2.00	5.15	
Toluene*	<0.050	0.050	02/22/2012	ND	1.91	95.6	2.00	4.87	
Ethylbenzene*	<0.050	0.050	02/22/2012	ND	1.97	98.6	2.00	3.43	
Total Xylenes*	<0.150	0.150	02/22/2012	ND	6.17	103	6.00	3.45	

Surrogate 4-Bromofluorobenzene (PIL) 112 % 64 4-134

TPH 418.1		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	118	100	02/24/2012	ND	2470	98.7	2500	0.0810	

**Sample ID: BH-1 29" TO 31" BGS (H200457-02)**

BTEX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/22/2012	ND	1.76	87.9	2.00	5.15	
Toluene*	<0.050	0.050	02/22/2012	ND	1.91	95.6	2.00	4.87	
Ethylbenzene*	<0.050	0.050	02/22/2012	ND	1.97	98.6	2.00	3.43	
Total Xylenes*	<0.150	0.150	02/22/2012	ND	6.17	103	6.00	3.45	

Surrogate 4-Bromofluorobenzene (PIL) 111 % 64 4-134

TPH 418.1		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	<100	100	02/24/2012	ND	2470	98.7	2500	0.0810	

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 02/20/2012  
Reported: 02/24/2012  
Project Name: HOL-11-017  
Project Number: NAVAJO APACHE DAD LATERAL  
Project Location: LOCO HILLS, NM

Sampling Date: 02/20/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BH-2 19" TO 21" BGS (H200457-03)**

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/22/2012	ND	1.76	87.9	2.00	5.15		
Toluene*	<0.050	0.050	02/22/2012	ND	1.91	95.6	2.00	4.87		
Ethylbenzene*	<0.050	0.050	02/22/2012	ND	1.97	98.6	2.00	3.43		
Total Xylenes*	<0.150	0.150	02/22/2012	ND	6.17	103	6.00	3.45		

Surrogate 4-Bromofluorobenzene (PII) 111 % 64 4-134

TPH 418.1		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	106	100	02/24/2012	ND	2470	98.7	2500	0.0810	

**Sample ID: BH-2 25" BGS (H200457-04)**

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/22/2012	ND	1.76	87.9	2.00	5.15		
Toluene*	<0.050	0.050	02/22/2012	ND	1.91	95.6	2.00	4.87		
Ethylbenzene*	<0.050	0.050	02/22/2012	ND	1.97	98.6	2.00	3.43		
Total Xylenes*	<0.150	0.150	02/22/2012	ND	6.17	103	6.00	3.45		


Surrogate 4-Bromofluorobenzene (PII) 111 % 64 4-134

TPH 418.1		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TPH 418.1	166	100	02/24/2012	ND	2470	98.7	2500	0.0810		

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Celey D. Keene, Lab Director/Quality Manager

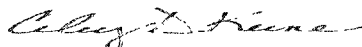
**Notes and Definitions**

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 SM4500Cl-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

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Celey D. Keene, Lab Director/Quality Manager



# **CARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240

(505) 393-2326 Fax (505) 393-2476

## **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Page \_\_\_\_ of \_\_\_\_

Company Name: <b>Safety &amp; Environmental Solutions, Inc.</b>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																																																																																																												
Project Manager: <b>Bob Allen</b>				P.O. #:				<div style="display: flex; justify-content: space-between;"> <div style="width: 15%;"> TPH 418.1 BTR-X </div> <div style="width: 85%;"></div> </div>																																																																																																												
Address: <b>703 East Clinton</b>				Company: <b>Same</b>																																																																																																																
City: <b>Hobbs</b> State: <b>NM</b> Zip: <b>88240</b>				Attn:																																																																																																																
Phone #: <b>575-397-0510</b> Fax #: <b>575-393-4388</b>				Address:																																																																																																																
Project #: <b>HOL-11-017</b> Project Owner: <b>Holly</b>				City:																																																																																																																
Project Name: <b>Nunago Apache DIB Material</b>				State: Zip:																																																																																																																
Project Location: <b>Leach Hill N.M.</b>				Phone #:																																																																																																																
Sampler Name: <b>Sei Jerry</b>				Fax #:																																																																																																																
<table border="1"> <thead> <tr> <th colspan="2">FOR LAB USE ONLY</th> <th rowspan="2">Lab I.D.</th> <th rowspan="2">Sample I.D.</th> <th rowspan="2">G/RAB OR C/COMP</th> <th rowspan="2"># CONTAINERS</th> <th colspan="8">MATRIX</th> <th colspan="2">PRESERV</th> <th colspan="2">SAMPLING</th> </tr> <tr> <th>GROUNDWATER</th> <th>WASTEWATER</th> <th>SOIL</th> <th>OIL</th> <th>SLUDGE</th> <th>OTHER</th> <th>ACID/BASE</th> <th>ICE / COOL</th> <th>OTHER</th> <th>DATE</th> <th>TIME</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>BH-1</td> <td>19" to 24" BGS</td> <td>5</td> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td>02/20</td> <td>0900</td> <td>XXX</td> <td>XXX</td> </tr> <tr> <td>2</td> <td>BH-1</td> <td>24" to 31" BGS</td> <td>5</td> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td>02/20</td> <td>0915</td> <td>XXX</td> <td>XXX</td> </tr> <tr> <td>3</td> <td>BH-2</td> <td>19" to 21" BGS</td> <td>5</td> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td>02/20</td> <td>1000</td> <td>XXX</td> <td>XXX</td> </tr> <tr> <td>4</td> <td>BH-2</td> <td>25" BGS</td> <td>5</td> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td>02/20</td> <td>1020</td> <td>XXX</td> <td>XXX</td> </tr> </tbody> </table>																FOR LAB USE ONLY		Lab I.D.	Sample I.D.	G/RAB OR C/COMP	# CONTAINERS	MATRIX								PRESERV		SAMPLING		GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME	1	BH-1	19" to 24" BGS	5	1			X					X		02/20	0900	XXX	XXX	2	BH-1	24" to 31" BGS	5	1			X					X		02/20	0915	XXX	XXX	3	BH-2	19" to 21" BGS	5	1			X					X		02/20	1000	XXX	XXX	4	BH-2	25" BGS	5	1			X					X		02/20	1020	XXX	XXX
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Sampler Relinquished By: <b>Sei Jerry</b>				Date: <b>02/20/12</b>				Received By: <b>Jodi Benson</b>				Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No				Add'l Phone #:																																																																																																				
Relinquished By:				Time: <b>1300</b>				Received By:				Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No				Add'l Fax #:																																																																																																				
Delivered By: (Circle One)				Temp. <b>42</b>				Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				CHECKED BY: <b>44</b>																																																																																																								
Sampler - UPS - Bus - Other:																																																																																																																				

† Cardinal cannot accept verbal changes Please fax written changes to 575-393-2476.

#26

2RP-942

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-141  
Revised October 10, 2003

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

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Holly Energy Partners	Contact	Jeff Stubblefield
Address	1602 W Main Street Artesia, NM 88210	Telephone No.	972-322-5782
Facility Name	Navaho Federal / Apache DAD Lateral	Facility Type	Gathering Line
Surface Owner	BLM	Mineral Owner	
		Lease No.	

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	30	T17S	29E	1650'	FSL	2308'	FEL	Eddy

Latitude N 32' 48.167

Longitude W 104' 06.730

### NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	~100 bbls	Volume Recovered	bbl
Source of Release	3" steel pipeline	Date and Hour of Occurrence	10/22/2011 unknown	Date and Hour of Discovery	10:10 a.m.
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Randy Dade 575-626-1372		
By Whom?	Lori Coupland	Date and Hour	10/22/2011 1:55 p.m.		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	N/A		
If a Watercourse was Impacted, Describe Fully.*					
N/A					
Describe Cause of Problem and Remedial Action Taken.*					
Possible internal or external corrosion on a 3" steel pipe tie-in from Concho Resources Navaho Federal #8. The leak is located below ground at the tie-in of the Apache DAD lateral. Clean-up crews have been dispatched and free product will be removed. Contaminated soil will also be removed and placed on plastic near the site.					
Describe Area Affected and Cleanup Action Taken *					
Lease road – nearest well: Concho Resources Navaho Federal #8. Lease road has been closed on both sides of release and earthen dikes built to prevent surface migration. The free product will be recovered and the contaminated soil will be excavated and placed on plastic to allow for natural aeration. The soil will be hauled to an approved land farm once analytical tests have been completed and the levels are at acceptable levels for disposal.					
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.					
Signature:		<u>OIL CONSERVATION DIVISION</u>			
Printed Name: Lori Coupland		Approved by District Supervisor:			
Title: Mgr – Regulatory Compliance		Approval Date:		Expiration Date:	
E-mail Address: lori.coupland@hollyenergy.com		Conditions of Approval:			Attached <input type="checkbox"/>
Date: 10/22/2011 Phone: 575.748.4076					

\* Attach Additional Sheets If Necessary