Mr. Bratcher:

I have attached a revised copy of the Holly Energy Partners Navajo DAD enhanced delineation report/workplan. Please forward your approval/stipulations regarding this workplan.

Thank you,

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

Bratcher, Mike, EMNRD

From:	Microsoft Outlook
To:	Susana Rodriguez; lori.coupland@hollyenergy.com
Sent:	Friday, August 10, 2012 10:52 AM
Subject:	Relayed: RE: HEP Navajo DAD Line Revised workplan

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

Susana Rodriguez (office2@sesi-nm.com)

lori.coupland@hollyenergy.com (lori.coupland@hollyenergy.com)

Subject: RE: HEP Navajo DAD Line Revised workplan

Bratcher, Mike, EMNRD

From:	Susana Rodriguez <office2@sesi-nm.com>
Sent:	Friday, June 08, 2012 10:33 AM
To:	Bratcher, Mike, EMNRD
Subject:	RE: HEP Navajo DAD Line Revised workplan
Attachments:	HOL-11-017 Delineation report_Rev 6.7.12.pdf; Figure 3 Logs of Boring.pdf; Appendix C NMOCD C141.pdf; Appendix D MATERIAL SAFETY AND DATA SHEET.pdf

Mr. Bratcher:

I have attached a revised copy of the Holly Energy Partners Navajo DAD enhanced delineation report/workplan. Please forward your approval/stipulations regarding this workplan.

Thank you,

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

2RP-942

Holly Energy Partners
Navaho Apache DAD Lateral
Delineation Report/Workplan

Eddy County, New Mexico

June 7, 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

TABLE OF CONTENTS

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.

This spill may be divided into three (3) areas. The area nearest to the release site on the west end, which ran along the salt water disposal line owned by Concho, is where the crude oil penetrated to a depth of approximately 19' BGS. The second area is the middle part of the spill which is mostly on the adjacent lease road. The third area is on the east end where the spill left the road and followed a rut into the pasture.

This work plan is only for the third area where the contamination had a vertical extent of less than 7' BGS.

SESI proposes to excavate the most highly contaminated soil and treat it 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.

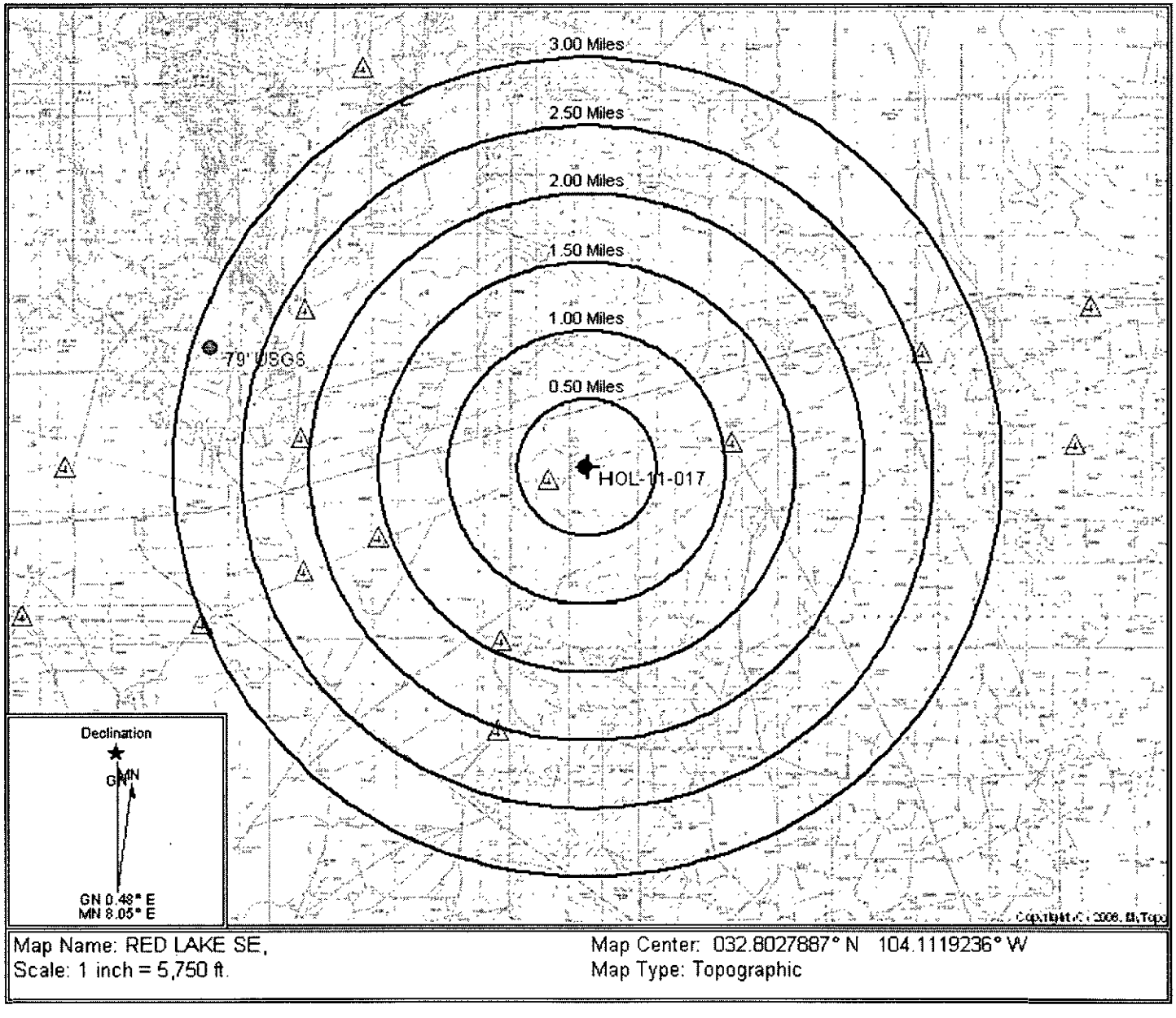
Both the bio-surfactant and the bacteria are products produced by UNIREM Technologies. (See Material Safety Data Sheet in Appendix D) After completion of the bioremediation process, when the TPH concentration in the soil is less than 1,000 ppm, the soil will be backfilled into the excavation and returned 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 cleanup in the COG 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



Map Name: RED LAKE SE,
Scale: 1 inch = 5,750 ft.

Map Center: 032.8027887° N 104.1119236° W
Map Type: Topographic

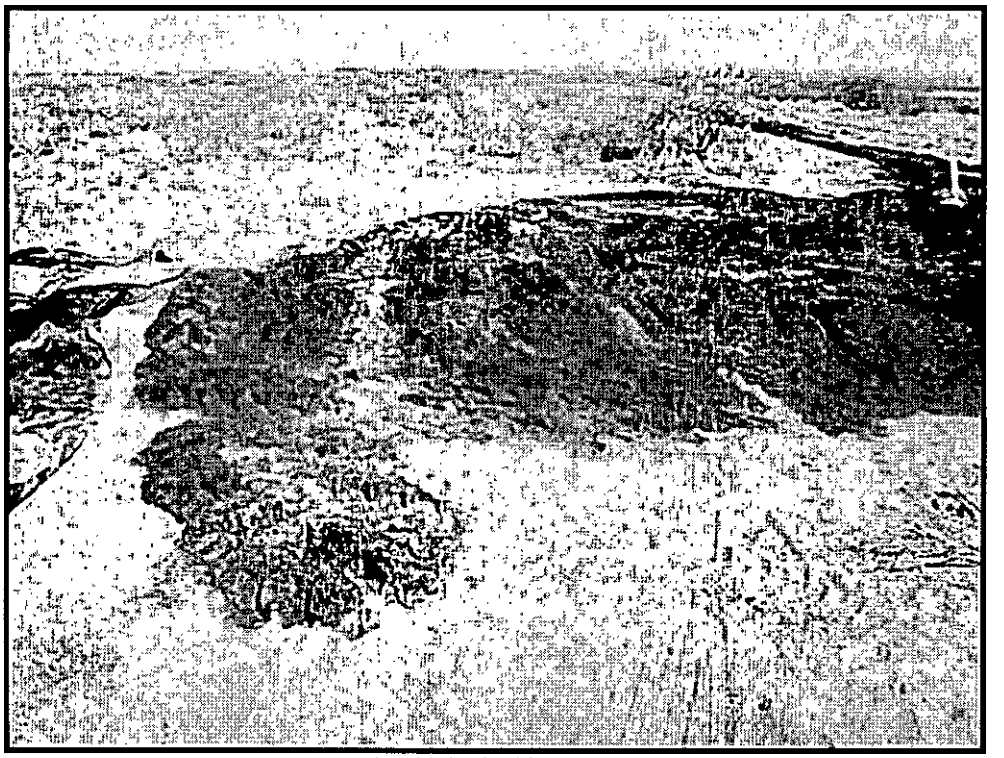
Figure 2
Site Plan


TT-4
TT-3
BH-2
TT-2
TT-1
BH-1
© 2012 Google
173 ft
Imagery Date: 6/11/2011
lat 32.802673° lon -104.111138° elev 3640 ft
Eye alt 4396 ft

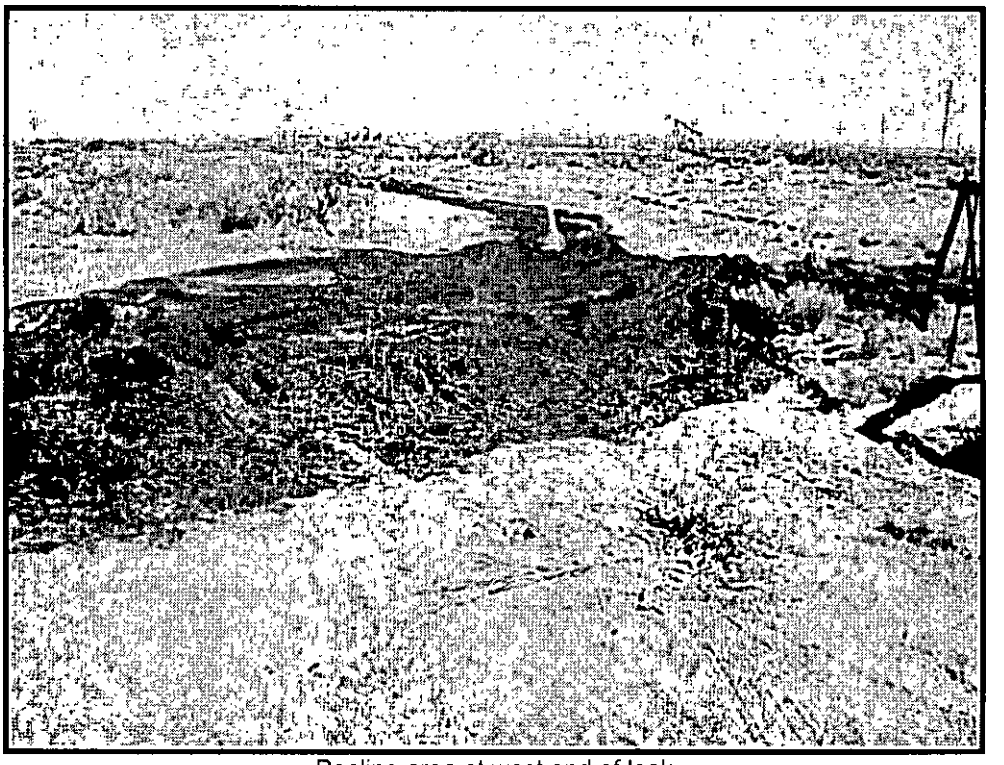
Figure 3
Logs of Boring

Appendix A
Analytical Results

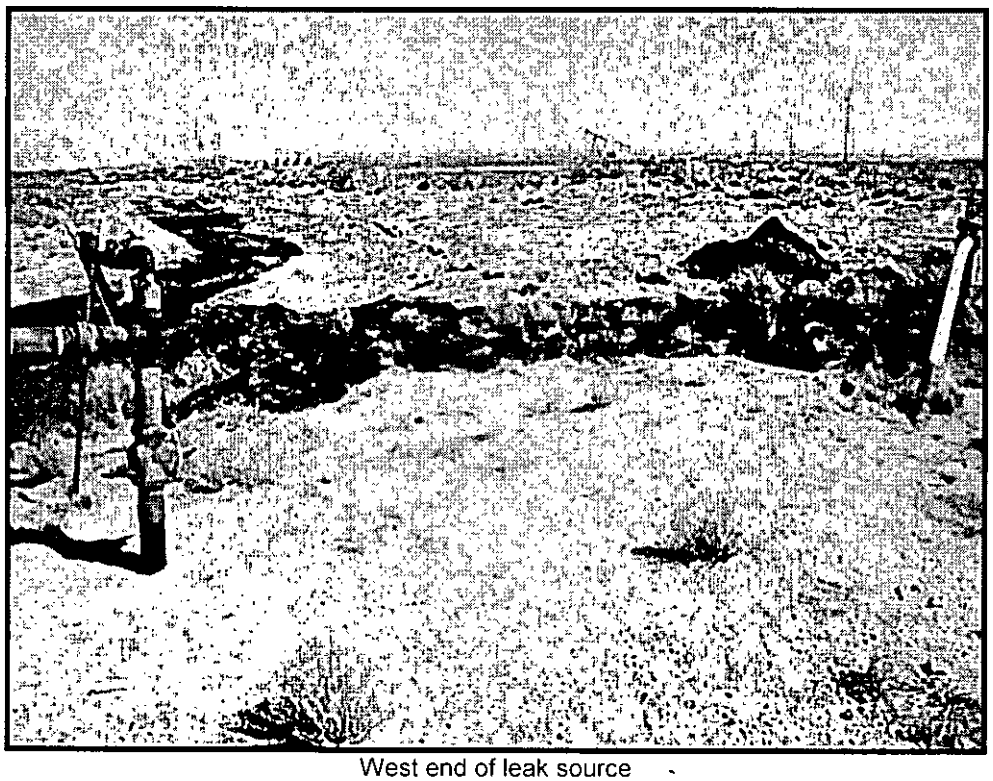
Appendix B
Site Photographs



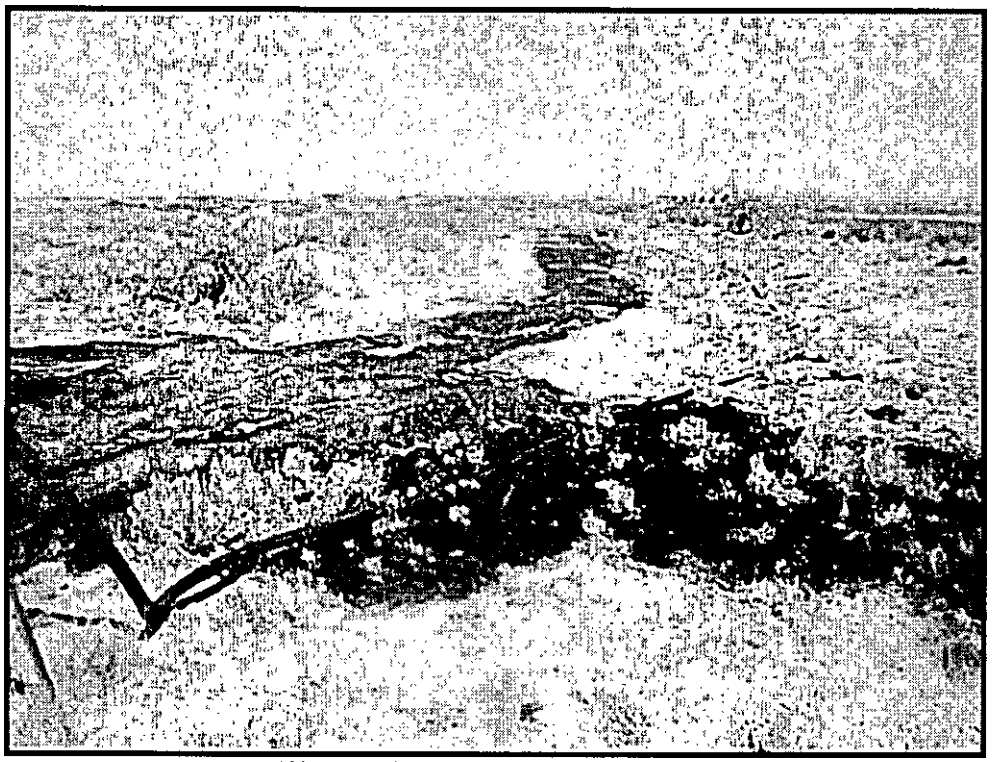
Leak site looking east



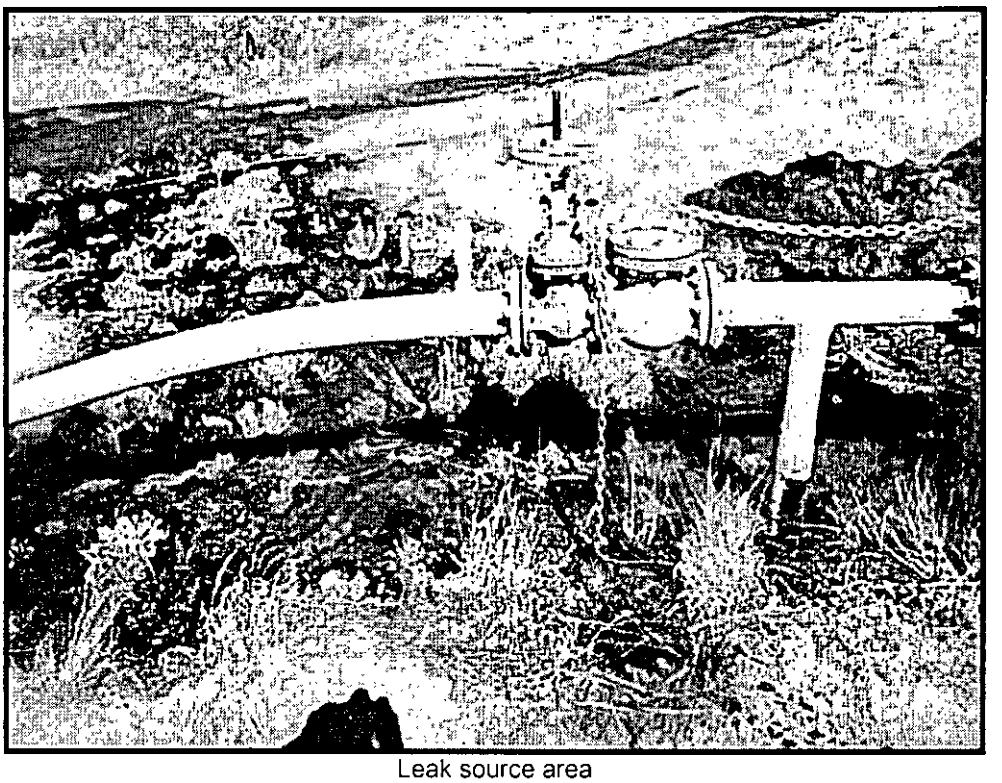
Pooling area at west end of leak



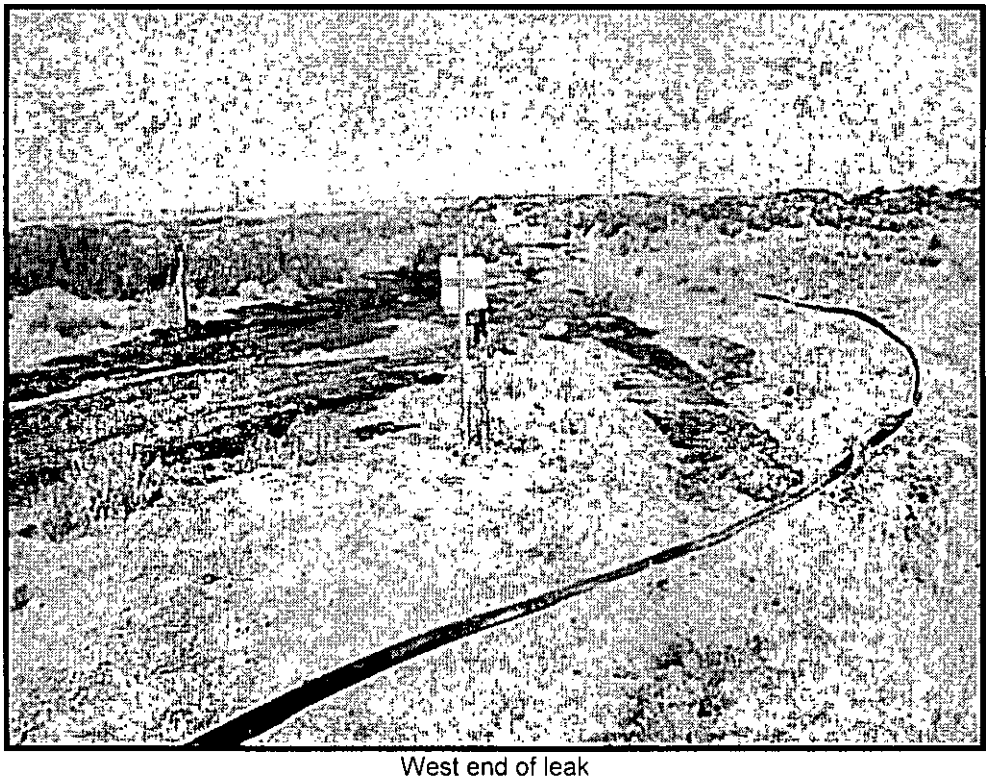
West end of leak source



West pooling area and right of way run

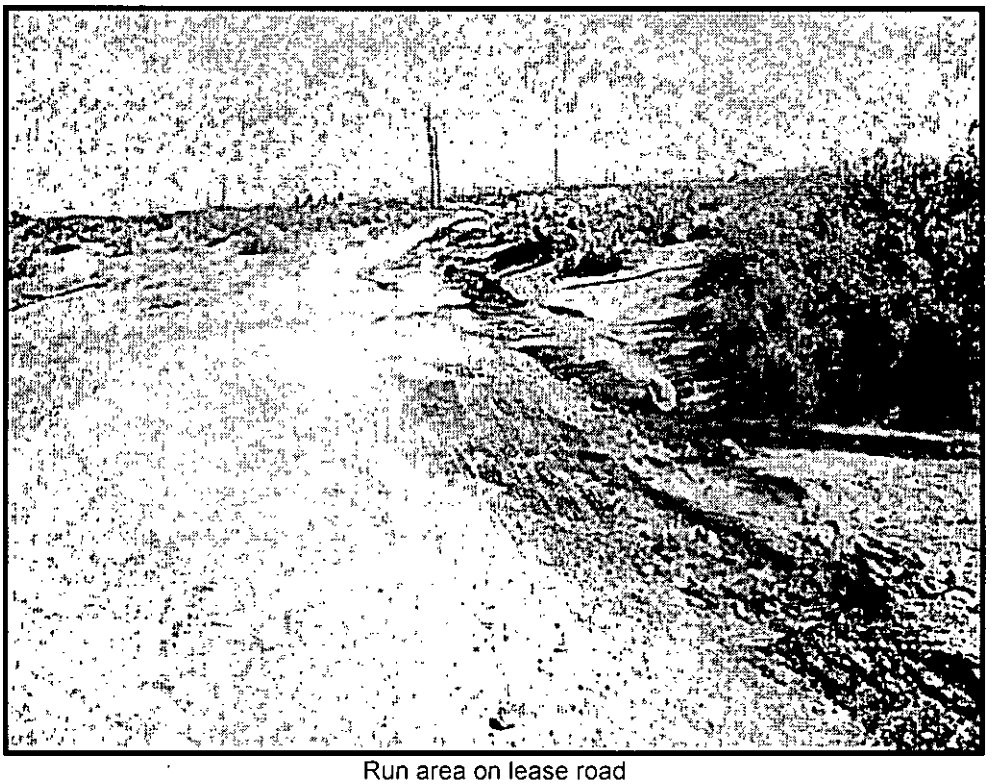


Leak source area

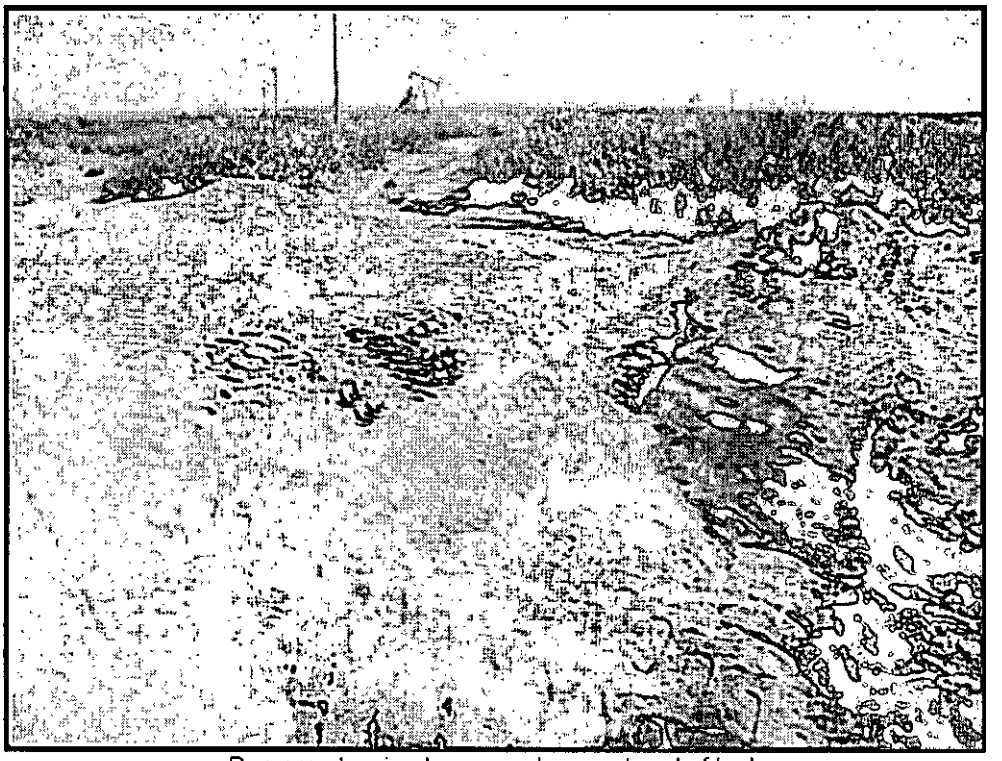


West end of leak

Run area before lease road

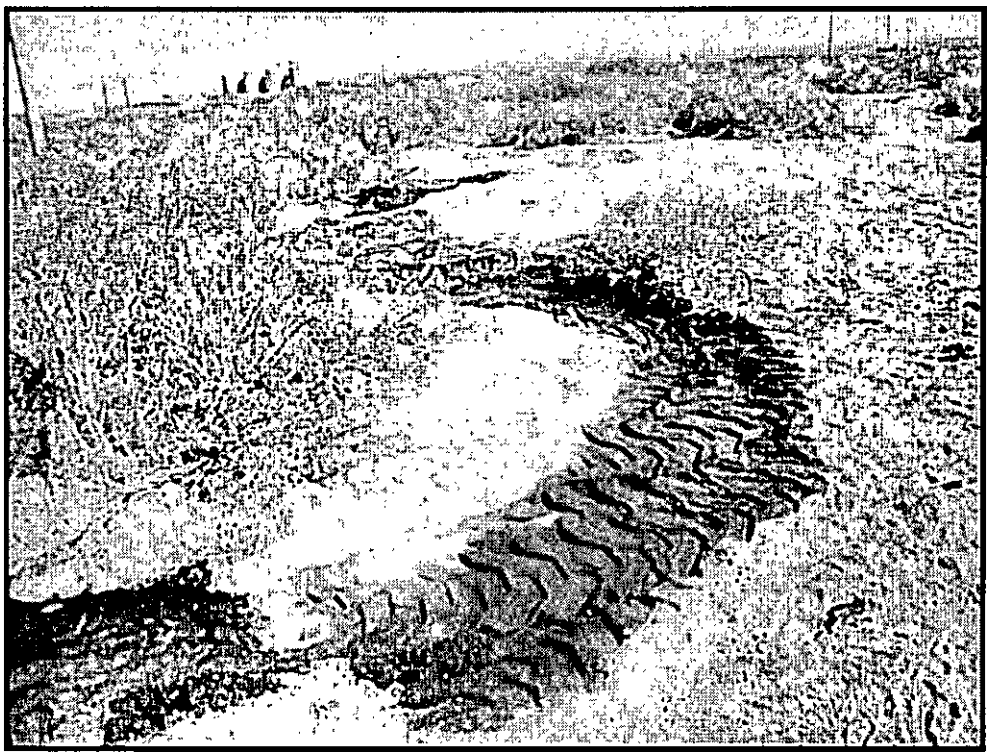


Run area on lease road



Run area leaving lease road on east end of leak

Run area east end of leak



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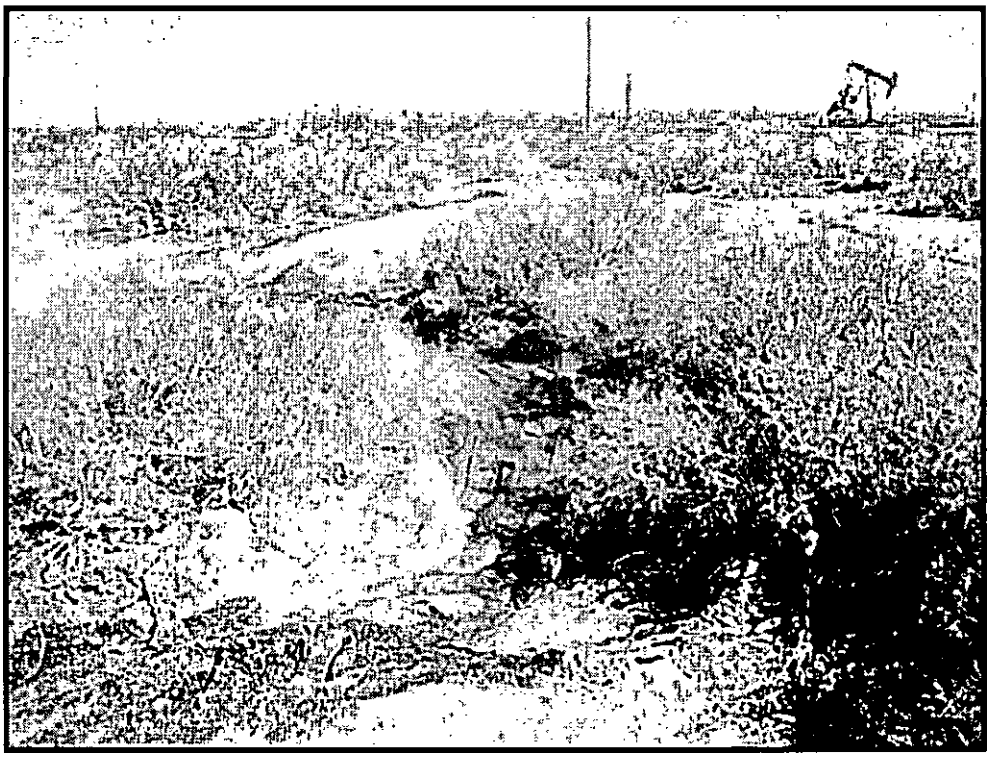
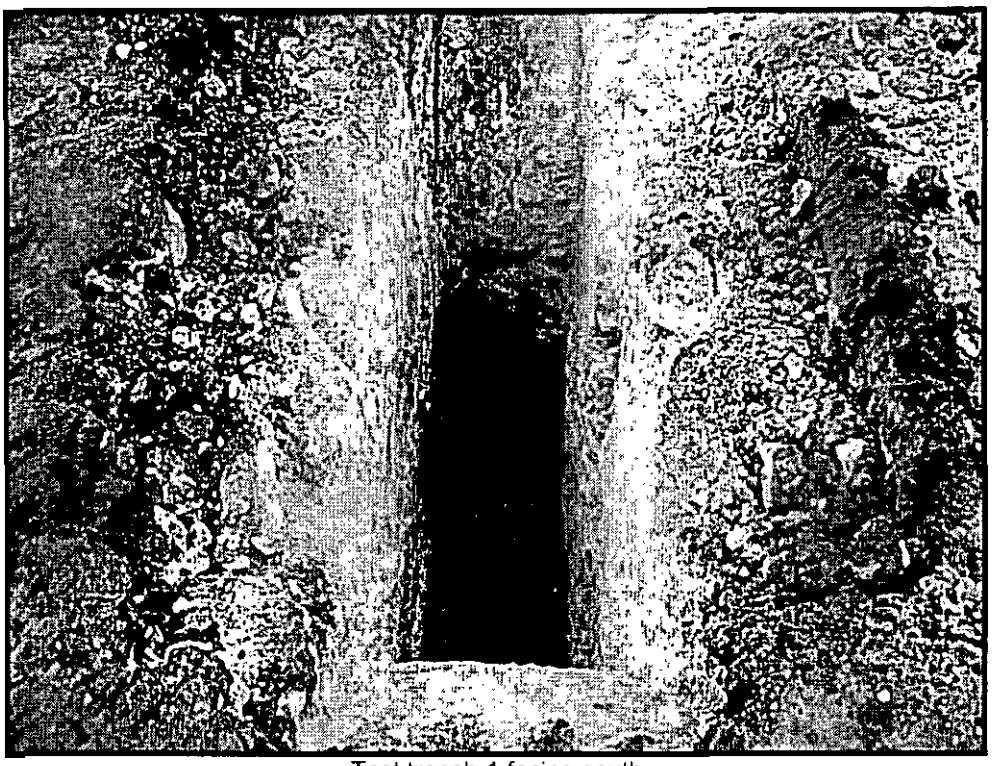
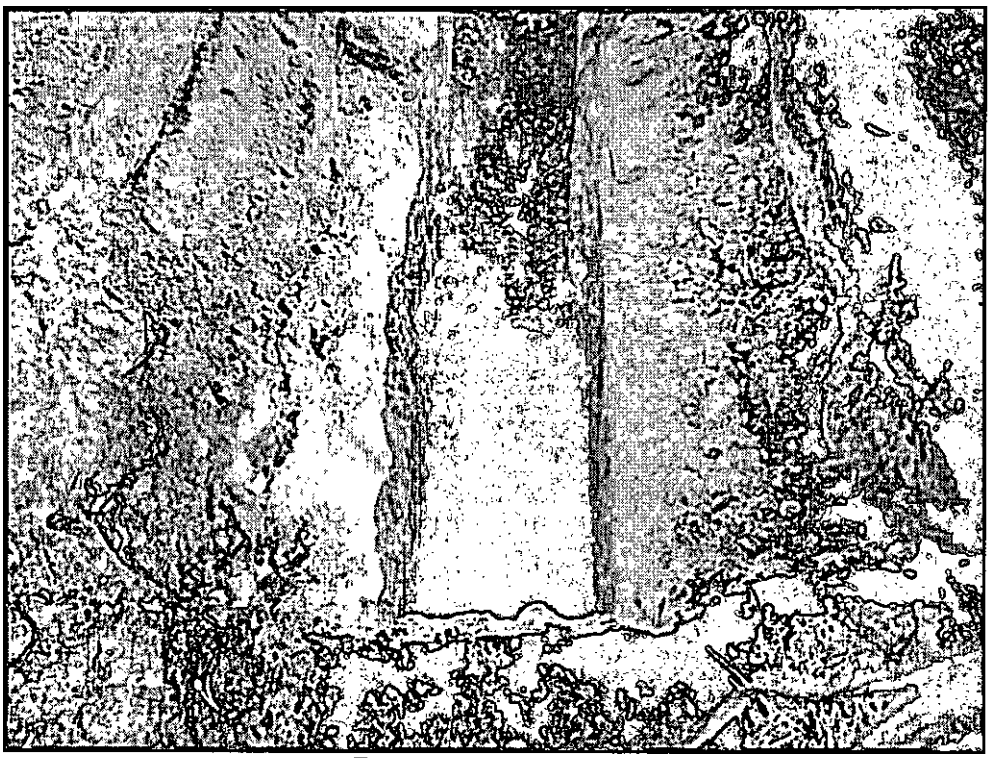


Run area east end of leak

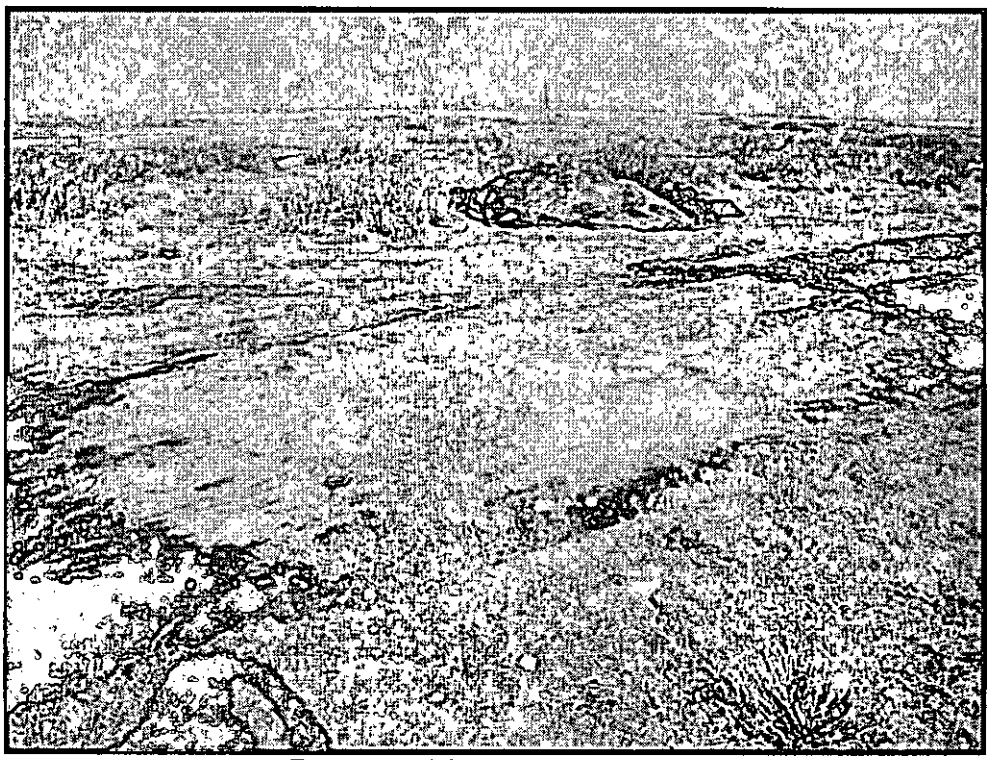


Test trench-1 facing south

Test trench-1 facing south (backfilled)



Test trench-2 facing west

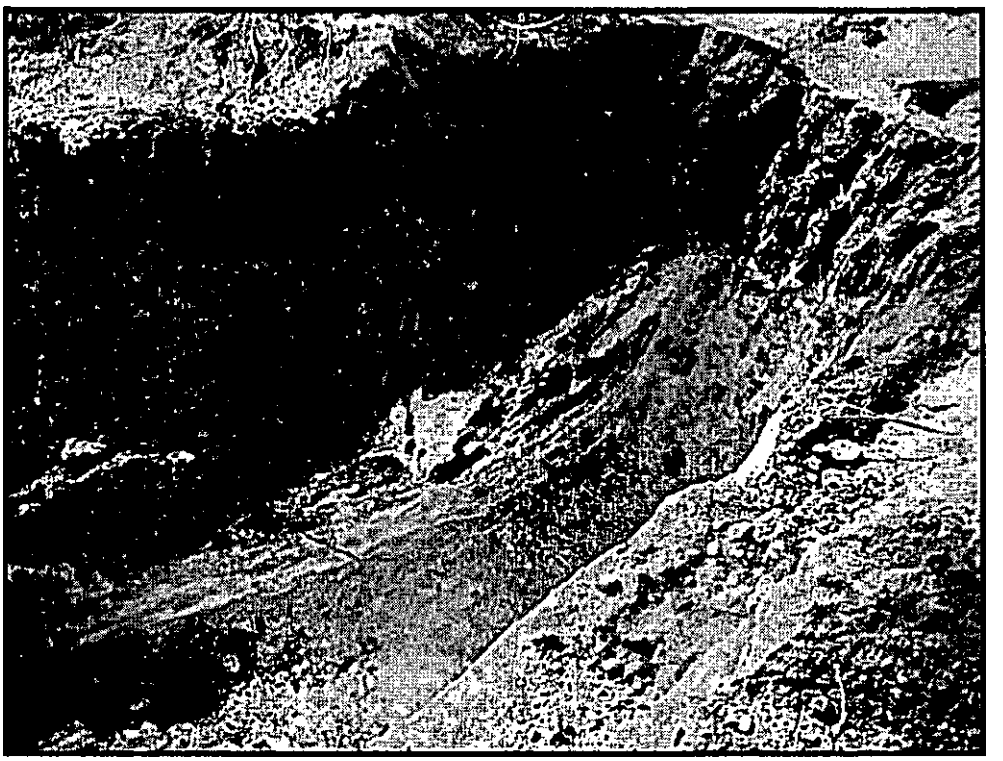


Test trench-2 facing west (backfilled)

Test trench-3 facing west

Test trench-3 facing west

Test trench-3 facing west (backfilled)



Test trench-4 facing west

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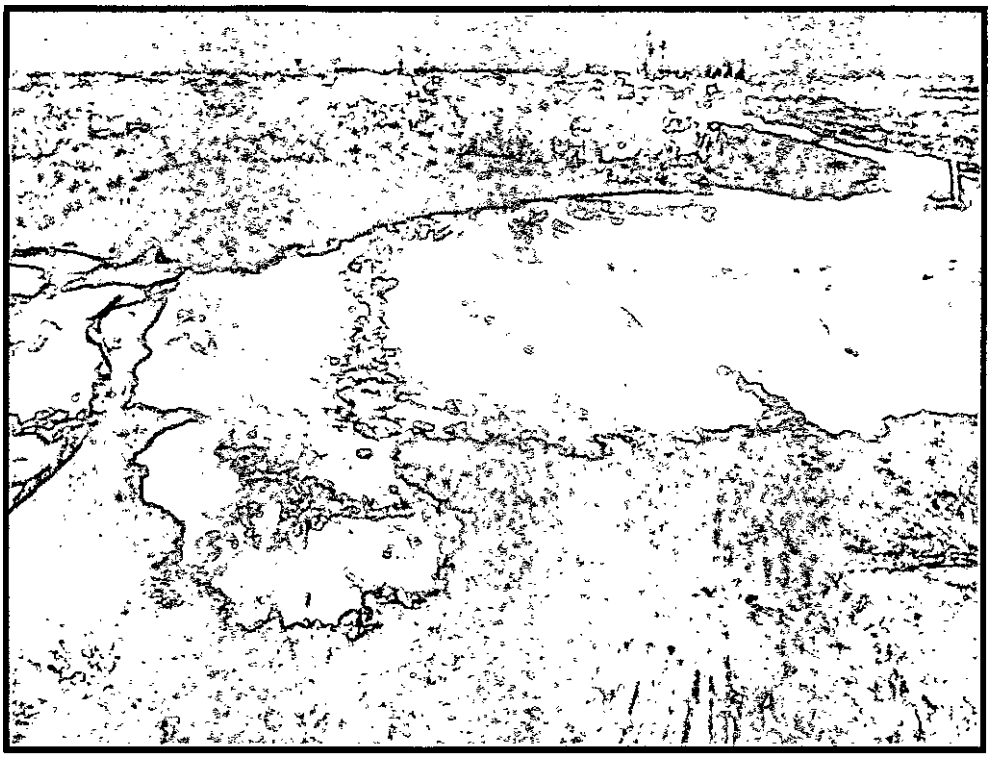
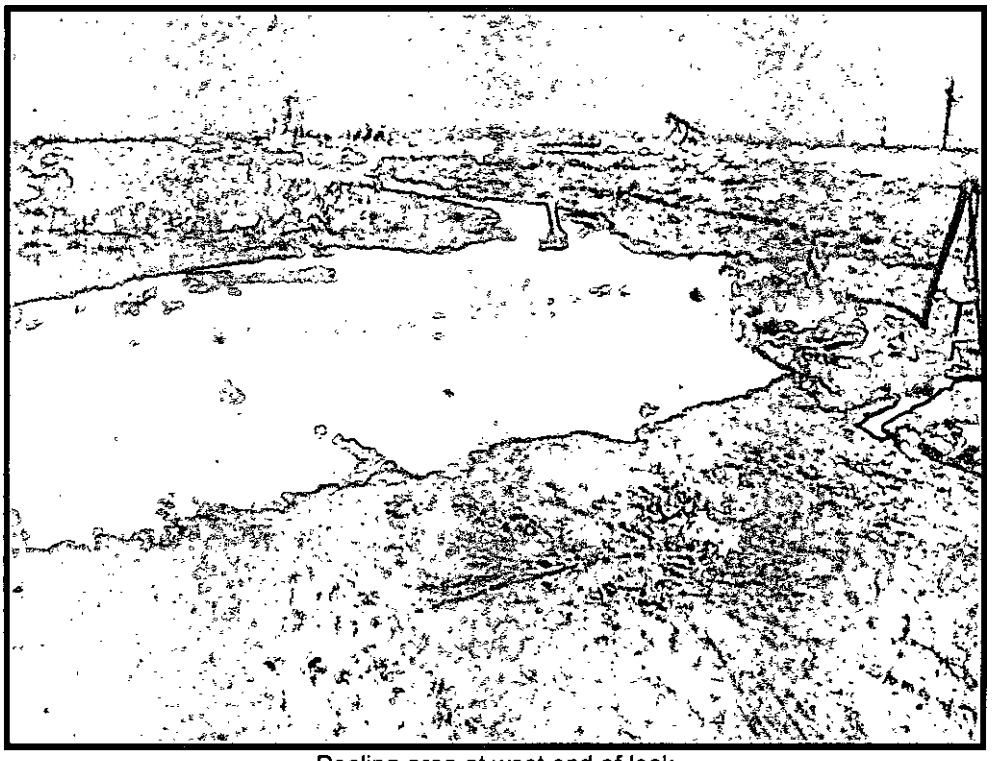
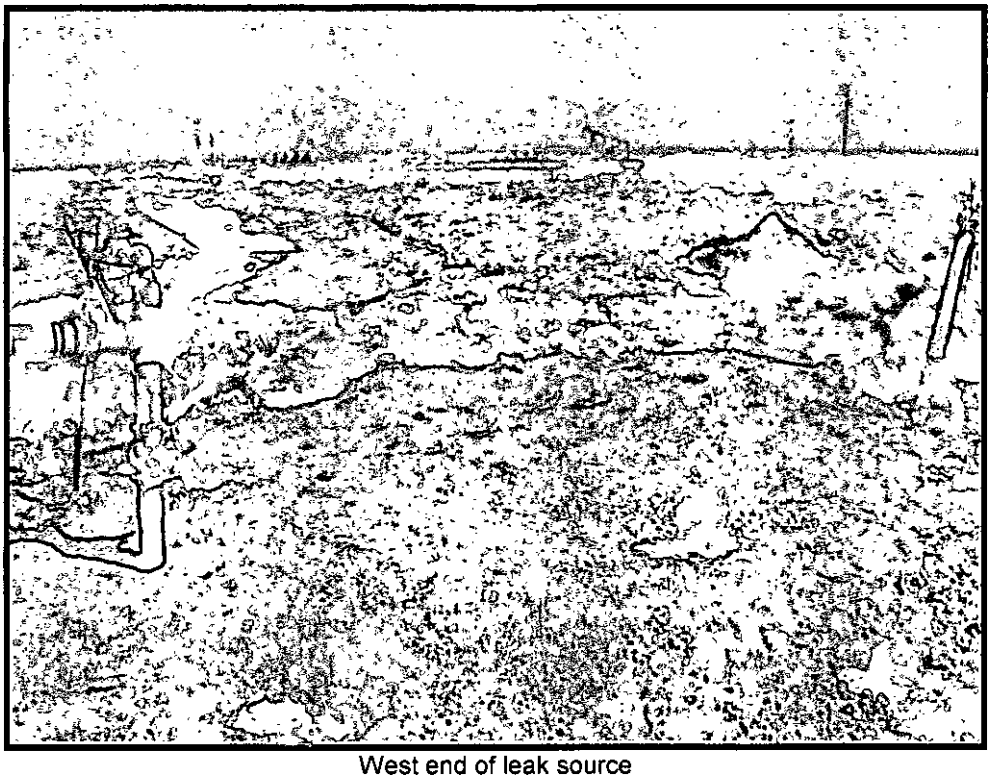


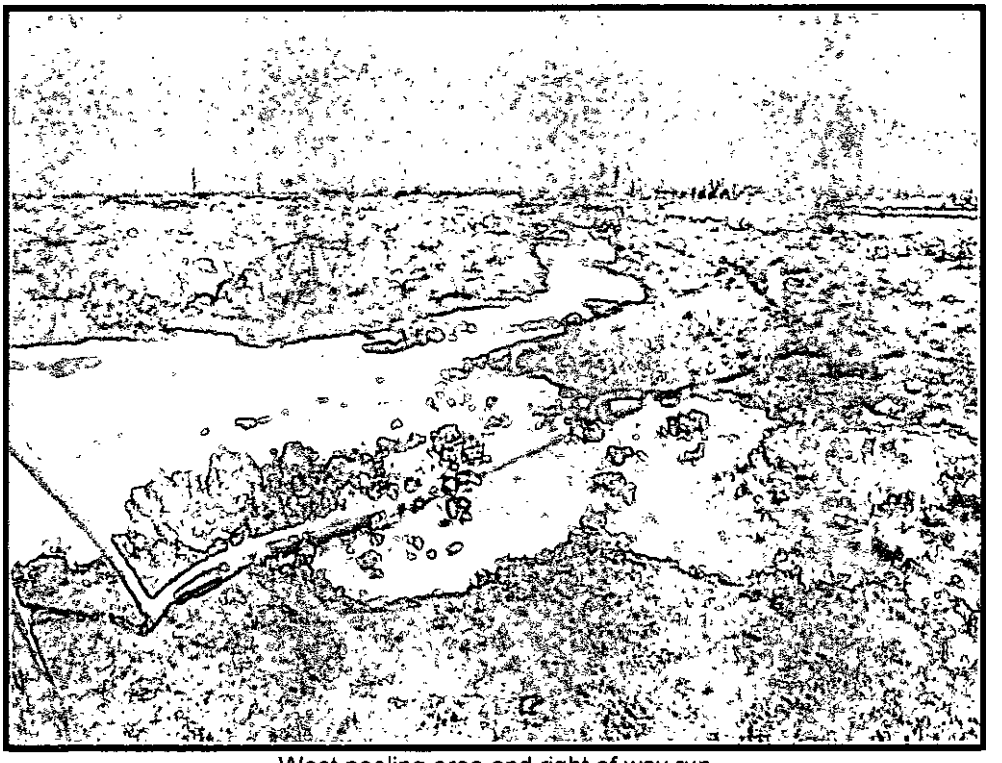
Leak site looking east



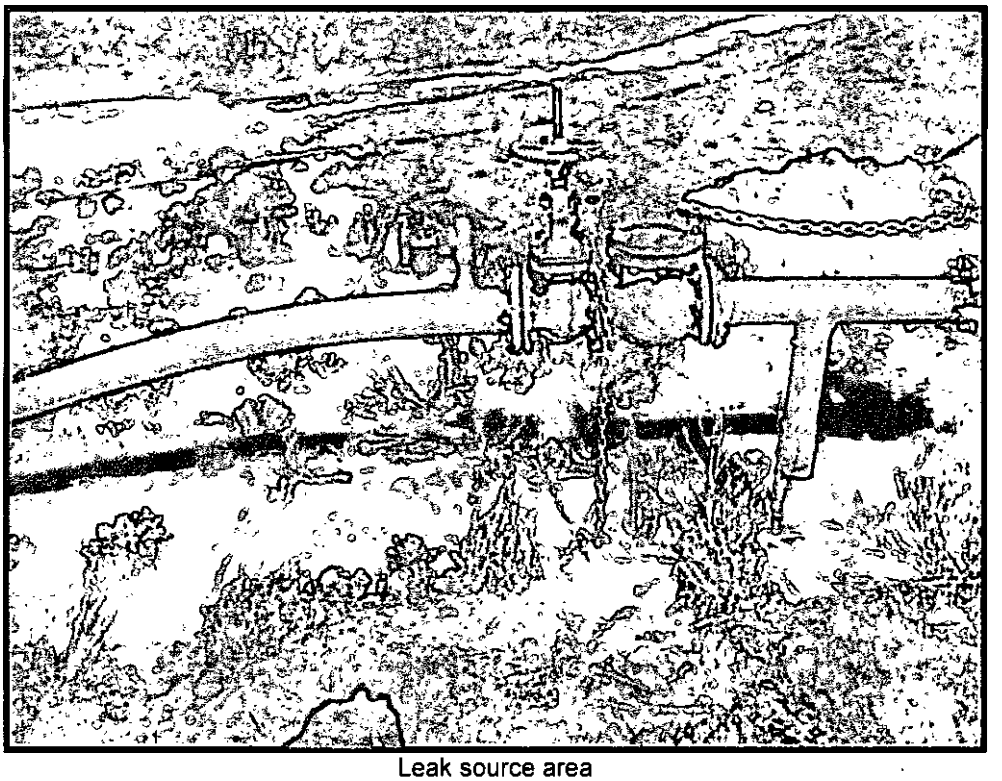
Pooling area at west end of leak



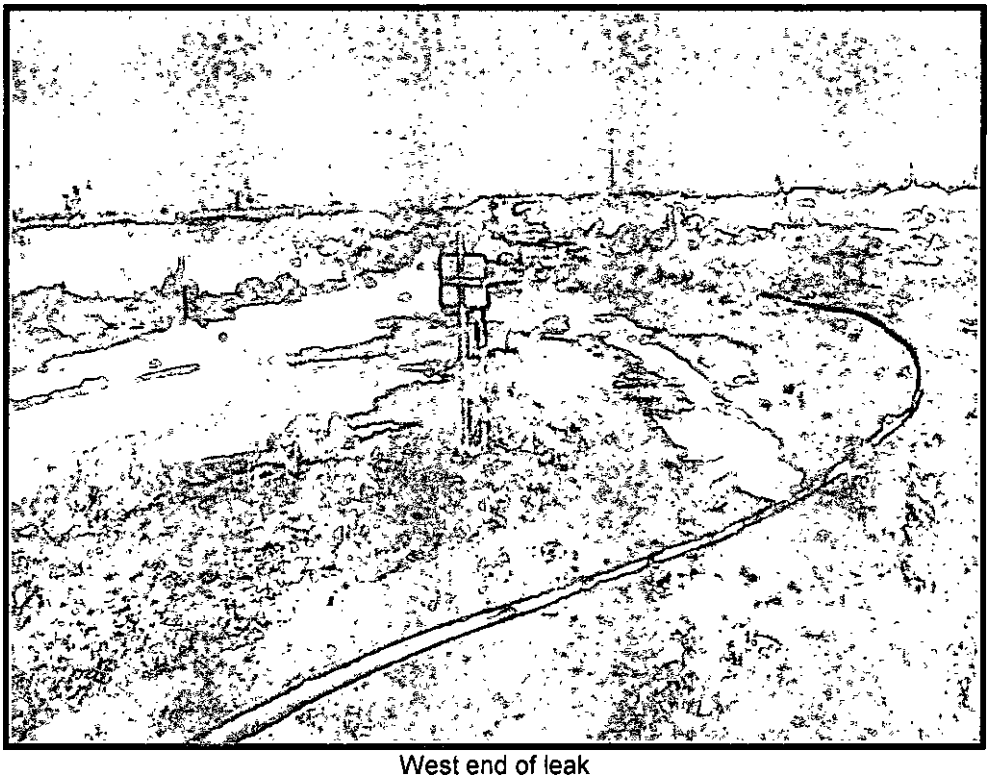
West end of leak source



West pooling area and right of way run

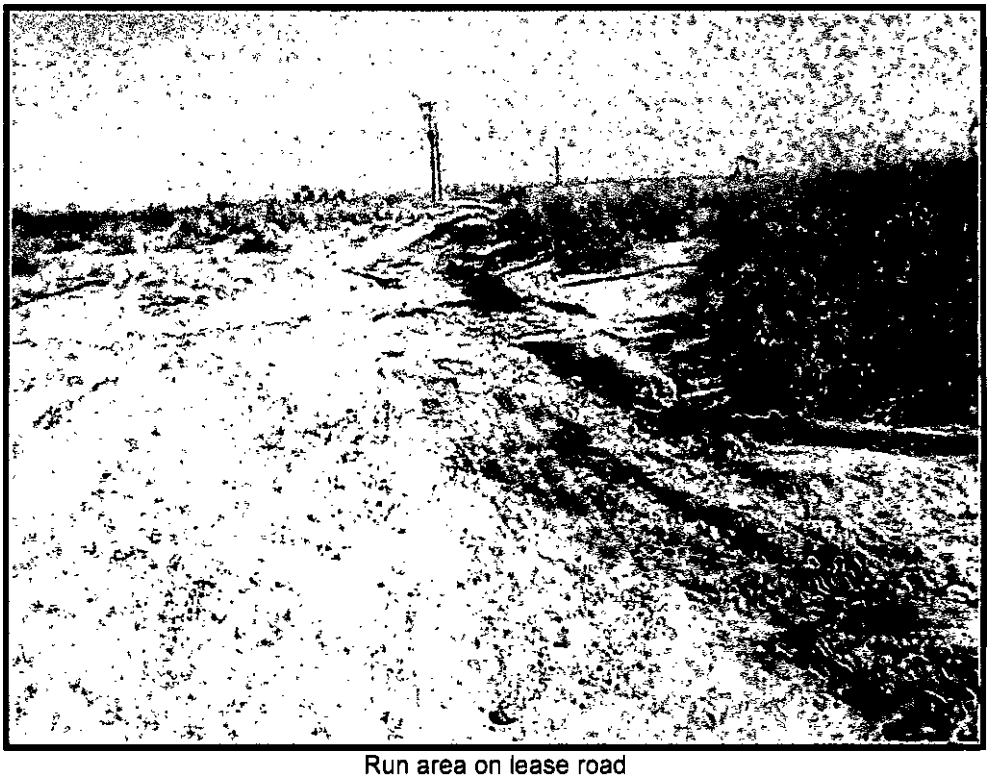


Leak source area

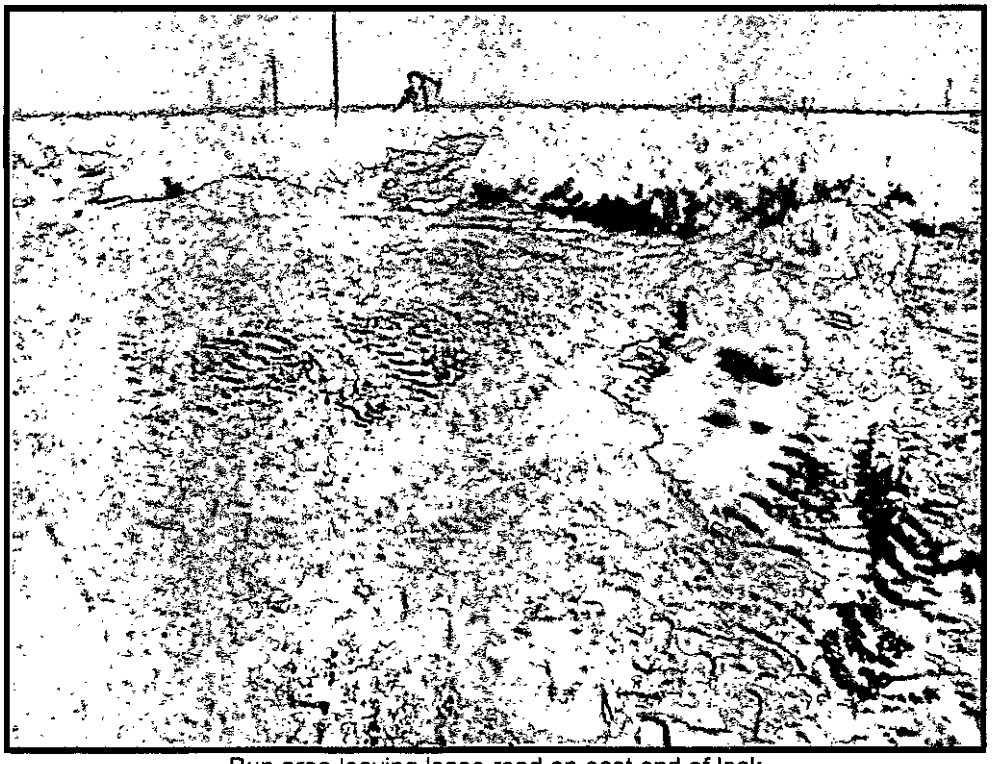


West end of leak

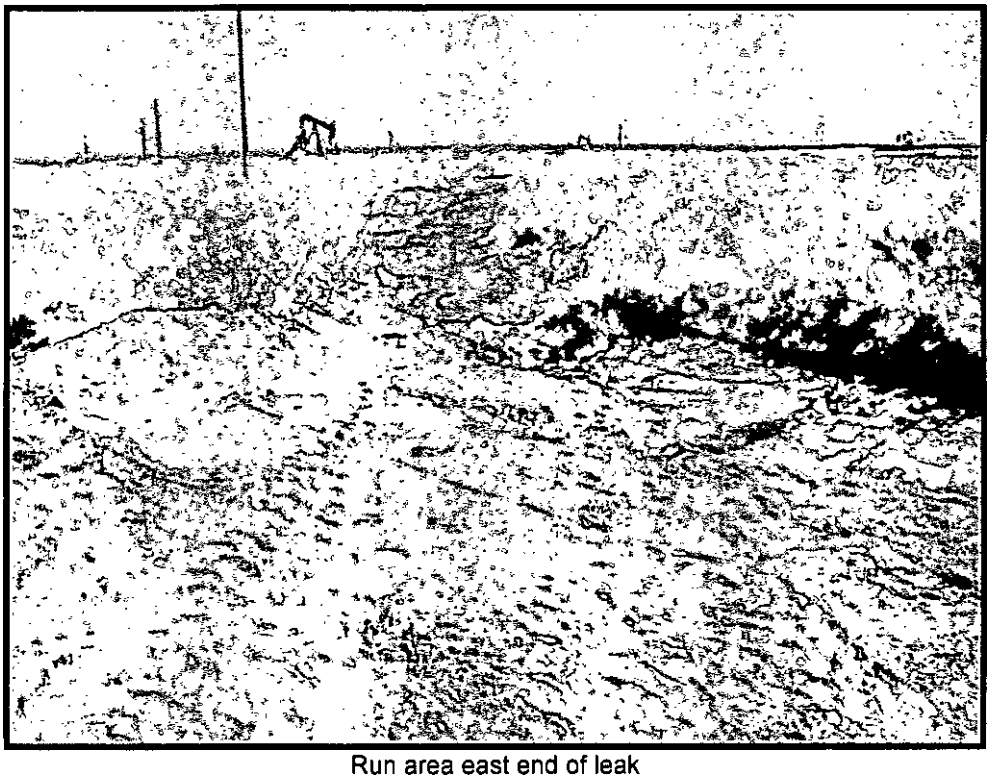
Run area before lease road



Run area on lease road

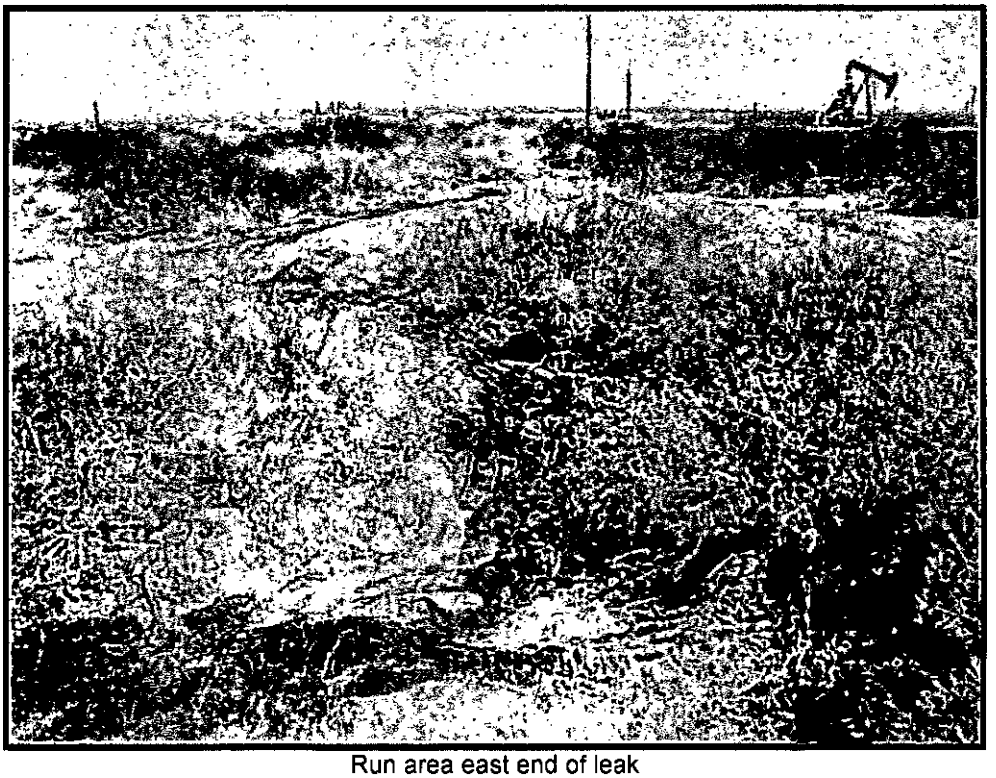


Run area leaving lease road on east end of leak

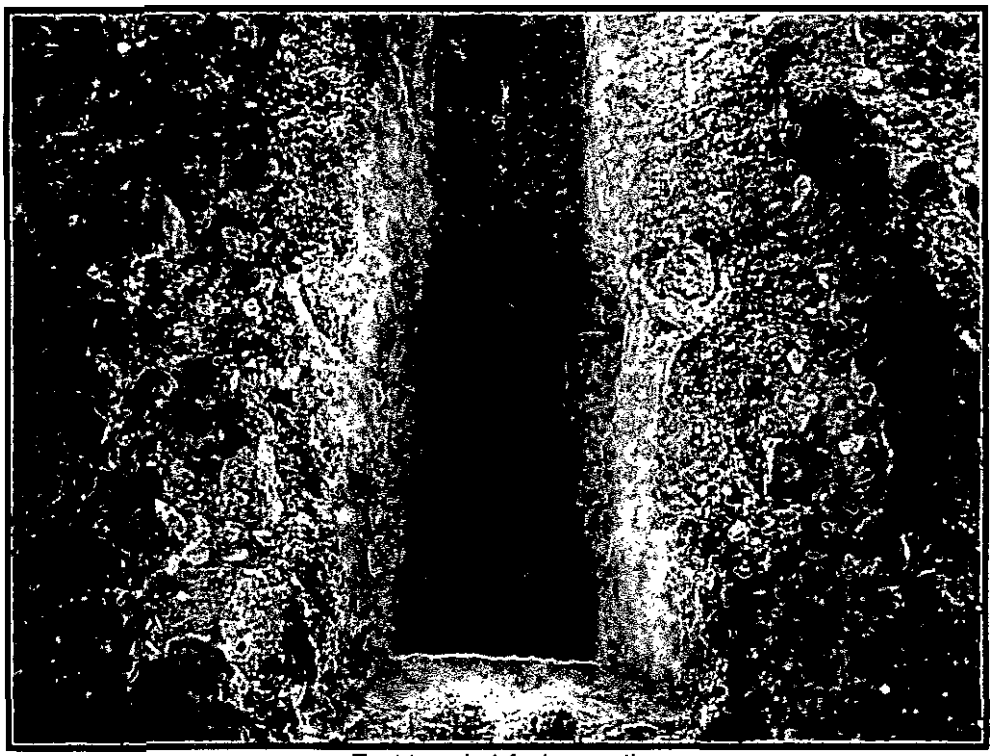


Run area east end of leak

Run area east end of leak

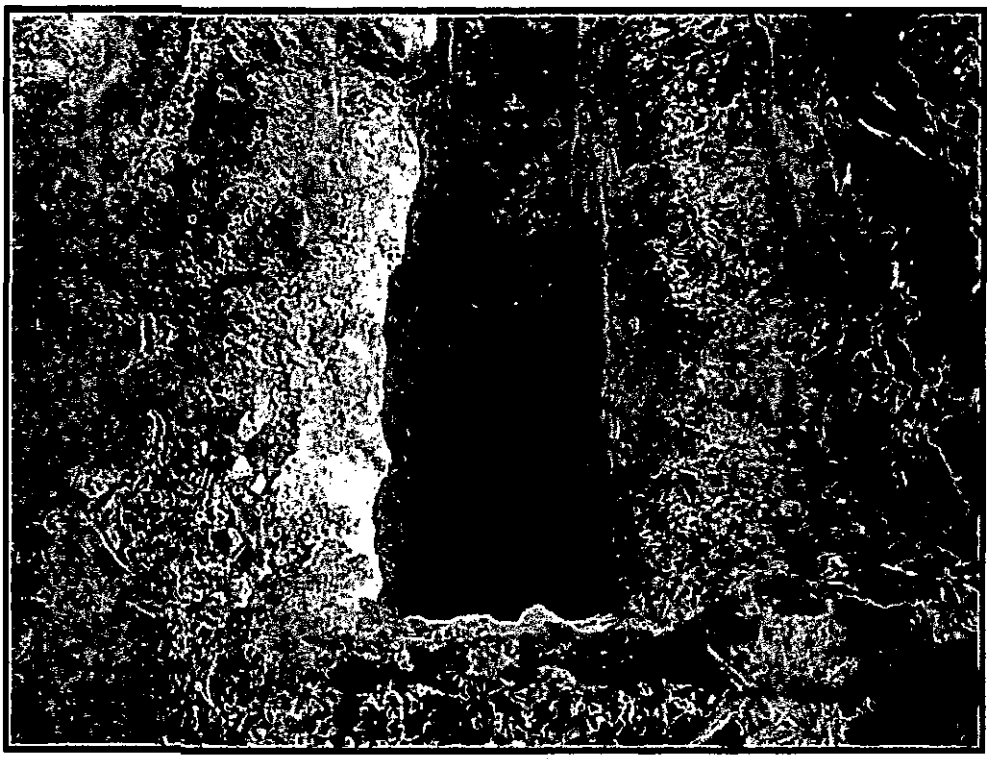


Run area east end of leak



Test trench-1 facing south

Test trench-1 facing south (backfilled)



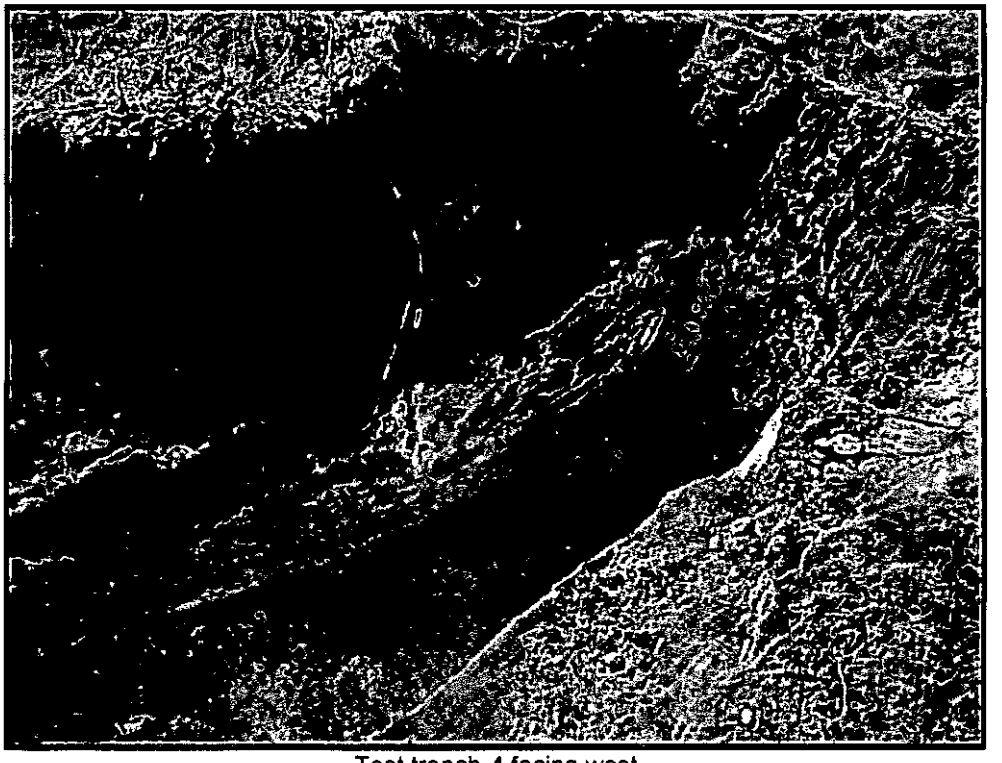
Test trench-2 facing west

Test trench-2 facing west (backfilled)

Test trench-3 facing west

Test trench-3 facing west

Test trench-3 facing west (backfilled)



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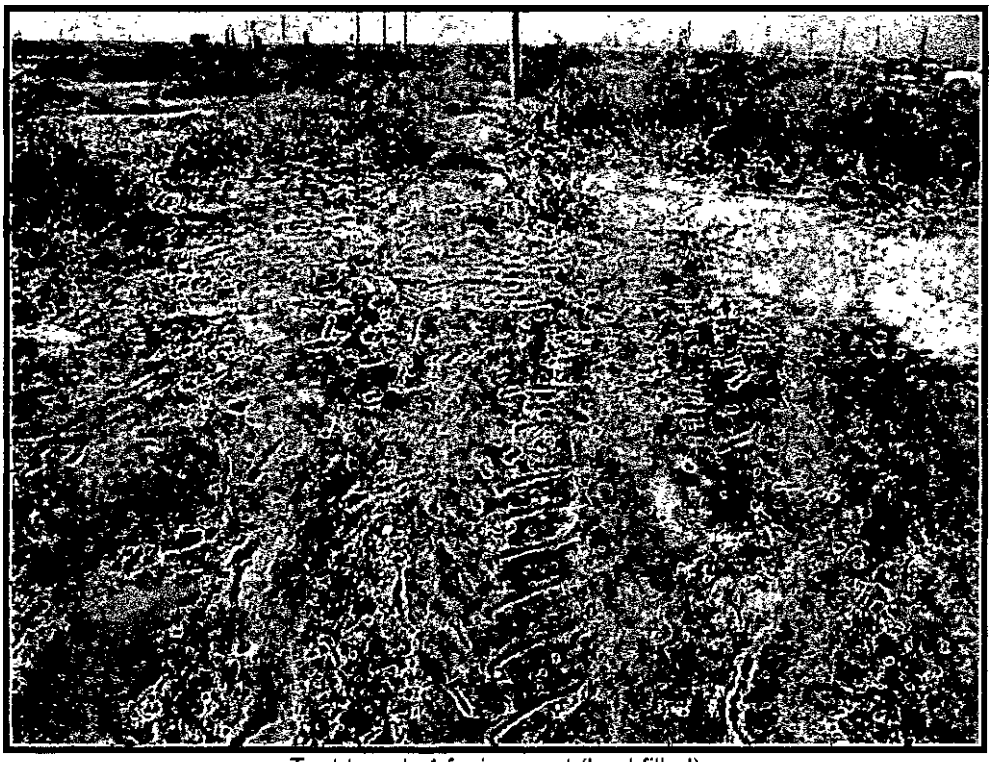


Test trench-4 facing west (backfilled)

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 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? ☒ Yes ☐ No ☐ 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? ☐ Yes ☒ 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 ☐
Date: 10/23/2011 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 APPLACATION

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 an 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 even 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

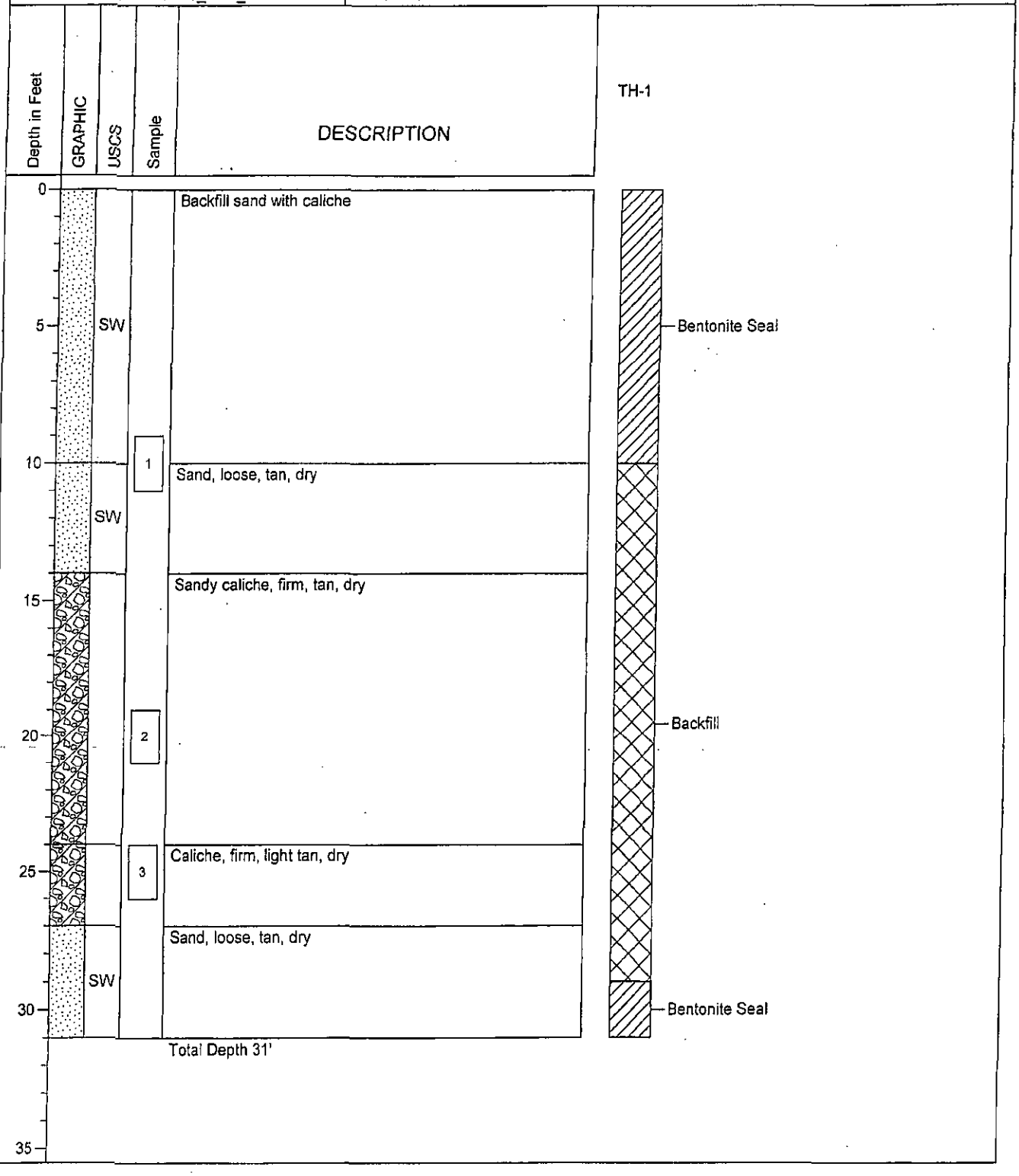
V. SHELF LIFE:
The shelf life of BIOLOGICAL PRODUCT is 12 months.

Log of Boring: HOLLY ENERGY TEST HOLE 1

Atkins ENGINEERING ASSOCIATES

SAFETY ENVIRONMENTAL
P.O. Box 1613
Hobbs, NM 88241
Contact: Bob Allen
Job: SAFETYS_DRL_12

Drilling Date	: 02/20/2012
Site Location	: Arco Field
Boring Location	: 32°48.131, 104°06.746
Auger Type	: 3¼ Hollow Stem
Logged By	: Mort Bates



02-21-2012 C:\Program Files\mtech2002\acegeo\TEST1_safetys_drl_12.bor

Log of Boring: HOLLY ENERGY TEST HOLE 2

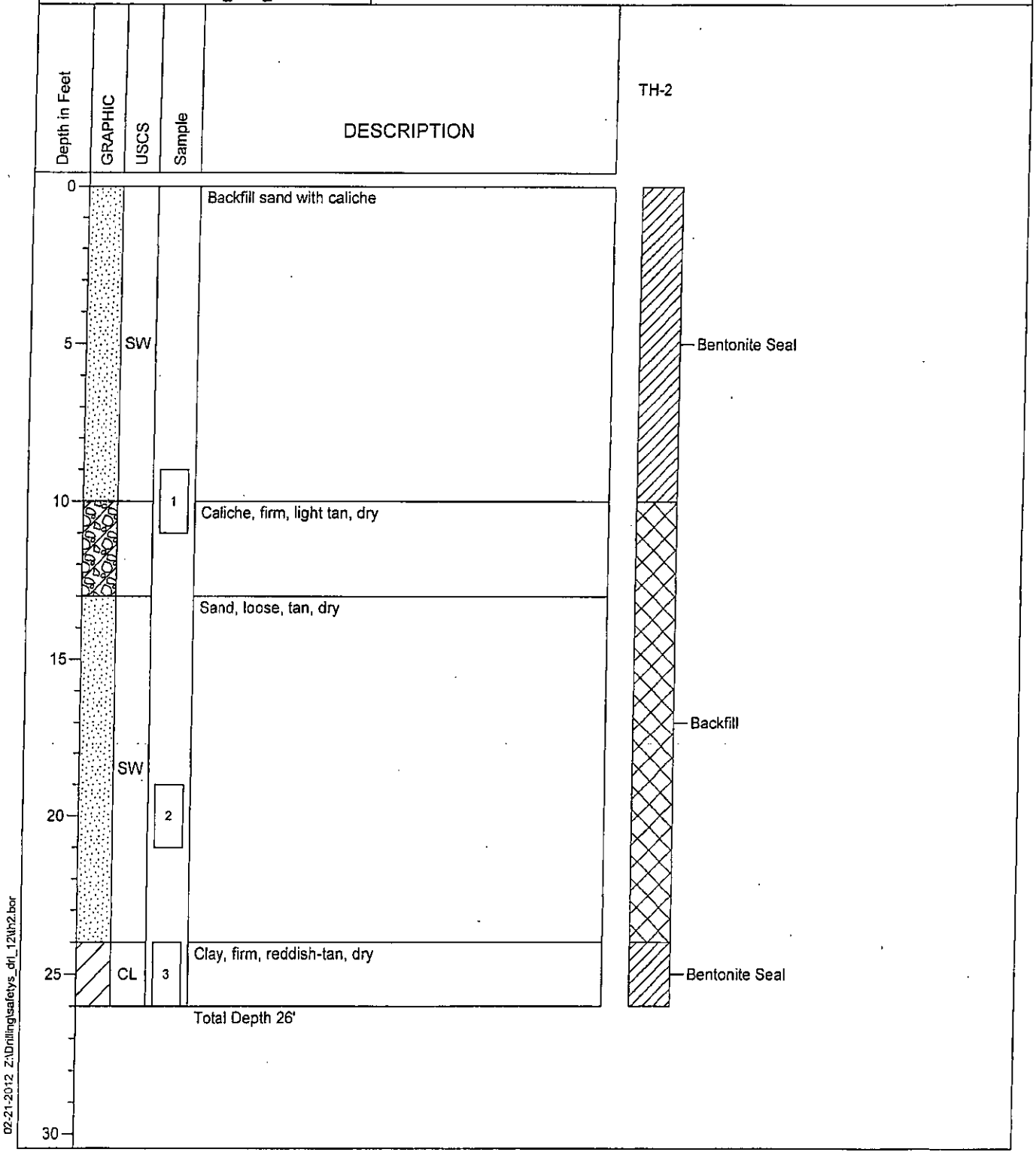
Atkins ENGINEERING ASSOCIATES

SAFETY ENVIRONMENTAL
P.O. Box 1613
Hobbs, NM 88241

Contact: Bob Allen

Job: SAFETYS_DRL_12

Drilling Date	: 02/20/2012
Site Location	: Arco Field
Boring Location	: 32°48.145, 104°06.720
Auger Type	: 3¼ Hollow Stem
Logged By	: Mort Bates



02-21-2012 Z:\Drilling\safetys_drl_12\th2.bor

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? ☒ Yes ☐ No ☐ 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? ☐ Yes ☒ 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 ☐
Date: 10/22/2011 Phone: 575.748.4076		

* Attach Additional Sheets If Necessary

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 APPLACATION

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 an 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 even 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.