

# FOREST OIL CORPORATION

CAPROCK MALJAMAR UNIT No. 242 SATELLITE

API 30-025-33242

## C141 CLOSURE DOCUMENTATION

NMOCD RP#: 1369 & 1458

UL-K (NE $\frac{1}{4}$  OF THE SW $\frac{1}{4}$ ) OF SECTION 28 T17S R33E

LATITUDE: N32° 48.106'      LONGITUDE: W103° 40.338'

~6.4 MILES SE (BEARING 125.1°) OF MALJAMAR

LEA COUNTY, NEW MEXICO

September 5, 2007

PREPARED FOR FOREST OIL CORPORATION BY:

### ***HUNGRY HORSE, LLC***

#### **ENVIRONMENTAL SERVICES**

P.O. Box 1058; 3709 S. Eunice Hwy.  
Hobbs, NM 88241

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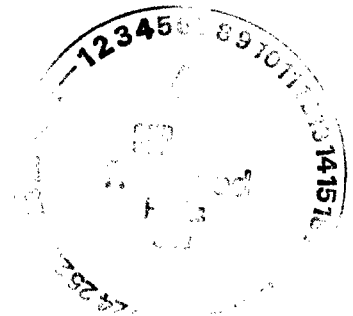
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**JOHN GOOD**  
ENVIRONMENTAL MANAGER



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## 1.0 Project Summary

Release Site Name: Caprock Maljamar Unit 242 Satellite (API: 30-025-33242)  
Operating Company: Forest Oil Corporation  
Company Representative: Roy Munoz, Foreman Phone: 505-392-9856  
Address: 3504 N. West County Rd, Hobbs, NM 88240 Email: rrmunoz@forestoil.com  
Remediation Company: Hungry Horse, LLC Phone: 505-393-3386

### SITE SPECIFIC DATA:

Legal Description: Lea County, New Mexico UL-K S28 T17S R33E  
General Location: 6.4 miles SE (bearing 125.1°) of Maljamar, NM.  
Latitude: N32° 48.106' Longitude: W103° 40.338' Elevation: 4,109-ft amsl  
Land Ownership: State of NM Mineral Ownership: State of NM  
Ground Water Elevation: ~150-ft bgs (based on Chevron/Texaco contour map)  
Water Wells within 1000-ft: none Surface Water within 1000-ft: none

### RELEASE SPECIFIC DATA:

Date and Time of Release(s): May 20, 2007 (AM) and June 27, 2007 (AM)  
Material Released: Produced Water with minor Hydrocarbon Component  
Volume Released: <25-bbl (5/20); 16-bbl (6/27) Volume Recovered: 20-bbl (5/20); 10-bbl (6/27)  
Cause of Releases: 5/20: Tester plugged off, relief valve opened 6/27: Power failure, overflow  
Release Affected Area: 5/20: 8300-ft<sup>2</sup> 6/27: 6000-ft<sup>2</sup>  
Depth of Contamination: <5-ft  
**NMOCD Site Ranking: 0 (ground water > 100-ft below lowest contamination)**

### REMEDIATION:

Remediation of the approximate 500-ft narrow (2-ft) flow path extending south from the release point was achieved by deep-blending the contaminated soil in-place (clean soil beneath the shallow surface contamination and clean soil from the sides of the ravine was utilized to mitigate the overall CoC concentrations to achieve the Remedial Goals for this site.

Analytical results of eight sample points (SP-7 to SP15) on the northern portion of the flow path indicated that re-blending was necessary to achieve the remedial goal for Total Chlorides of <250-ppm. This area was re-blended with additional clean soil and re-sampled. Analytical results for this re-blend confirm that the remedial goals for this site have been achieved (*see Plate 4 in the Attachments for sample points and analytical results*).

Remediation work at this site was conducted by Hungry Horse, LLC. The excavation/blending phase of the project commenced on July 11, 2007 and was completed on July 27, 2007.

## 2.0 Site Description

### 2.1 Geological Description

The United States Geological Survey (USGS) Ground-Water Report 6, "Geology and Ground-Water Conditions in Southern Lea County, New Mexico," A. Nicholson and A. Clebsch, 1961, describes the near surface geology of southern Lea County as "an intergrade of the Quaternary Alluvium (QA) sediments, i.e., fine to medium sand, with the mostly eroded Cenozoic Ogallala (CO) formation. Typically, the QA and CO formations in the area are capped by a thick interbed of caliche and generally overlain by sandy soil." The release site is located in the Querecho Plains physiographic subdivision, described by Nicholson & Clebsch as "covered almost entirely by dune sand which is stable or semi-stable over most of the area, but which locally drifts. The surface is very irregular and has not drainage features except at the edges of several playas. The sand is generally underlain by Recent alluvium but in several places the sand forms topographic highs where it is underlain by a caliche surface. The thickness of the sand cover ranges from a few inches to a probable maximum of 20 feet."

### 2.2 Ecological Description

The area is typical of the Upper Chihuahuan Desert Biome consisting primarily of hummocky sand hills covered with Harvard Shin Oak (*Quercus harvardi*) interspersed with Honey Mesquite (*Prosopis glandulosa*) along with typical desert grasses, flowering annuals and flowering perennials. Mammals represented, include Orrd's and Merriam's Kangaroo Rat, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit, Mule Deer, Bobcat, Red Fox and Coyote. Reptiles, Amphibians, and Birds are numerous and typical of area. A survey of Listed, Threatened, or Endangered species was not conducted.

### 2.3 Area Ground Water

Based on the most current available evidence, depth to ground water is projected to be ~150-feet below ground surface (bgs).

### 2.4 Area Water Wells

There are no recorded or observed water wells within 1000 horizontal feet of the site.

### 2.5 Area Surface Water Features

There are no recorded or observed surface water features within 1000 horizontal feet of the site.

## 3.0 Contaminant and Size of Area

The primary Contaminants of Concern (COCs) are Total Chlorides and to a lesser extent Petroleum Hydrocarbons (TPH and BTEX). The 5/20/07 produced water release at this site flowed ~500-ft south of the battery pad along a narrow (2-ft) ravine. The 6/27/07 release flowed along the same ravine but extended to ~300-ft south of the battery pad. The estimated total affected surface area is 8,300-ft<sup>2</sup> (Plate 4, Attachments).

The produced water and associated hydrocarbon component released during this event are considered RCRA Exempt oilfield waste. No evidence of other contaminants was observed.

## 4.0 NMOCD Site Ranking Table

Contaminant delineation and site evaluation work done at this site indicate that the chemical parameters of the soil and the physical parameters of the ground water and/or surface water were characterized consistent with the characterization and remediation/abatement goals and objectives set forth in the following New Mexico Oil Conservation Division (NMOCD) publications:

- *Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)*
- *Unlined Surface Impoundment Closure Guidelines (February 1993)*

Acceptable thresholds for contaminants/constituents of concern (CoCs), i.e., TPH<sup>8015M</sup>, Benzene, and the mass sum of Benzene, Toluene, Ethyl Benzene, and total Xylenes (BTEX<sup>8021B</sup>), was determined based on the NMOCD Ranking Criteria as follows:

- *Depth to Ground water, i.e., distance from the lower most acceptable concentration to the ground water.*
- *Wellhead Protection Area, i.e., distance from fresh water supply wells.*
- *Distance to Surface Water Body, i.e., horizontal distance to all down gradient surface water bodies.*

Based on the proximity of the site to area water wells, surface water bodies, and depth to ground water from the lower most contamination, the NMOCD ranking score for the site is 0 points with the soil remedial goals highlighted in the Site Ranking Table on the following page.

### NMOCD Remediation Site Ranking Table

1. GROUND WATER	2. WELLHEAD PROTECTION	3. DISTANCE TO SURFACE WATER
DEPTH TO GW <50 FEET: 20 POINTS	IF <1000' FROM WATER SOURCE, OR; <200' FROM PRIVATE DOMESTIC WATER SOURCE: 20 POINTS	<200 HORIZONTAL FEET: 20 POINTS
DEPTH TO GW 50 TO 99 FEET: 10 POINTS	IF >1000' FROM WATER SOURCE, OR; >200' FROM PRIVATE DOMESTIC WATER SOURCE: 0 POINTS	200-1000 HORIZONTAL FEET: 10 POINTS
DEPTH TO GW >100 FEET: 0 POINTS		>1000 HORIZONTAL FEET: 0 POINTS
GROUND WATER SCORE = 0	WELLHEAD PROTECTION SCORE = 0	SURFACE WATER SCORE = 0
SITE RANK (1+2+3) = 0 + 0 + 0 = 0 POINTS		
TOTAL SITE RANKING SCORE AND ACCEPTABLE REMEDIAL GOAL CONCENTRATIONS		
PARAMETER		0
BENZENE		10 PPM
BTEX		50 PPM
TPH		5000 PPM

## 5.0 Site Remediation

Due to numerous surface and sub-surface pipes and conduits, the contaminated area of the battery containment area could not be excavated for purposes of remediation.

Remediation of the approximate 500-ft narrow (2-ft) flow path extending south from the release point was achieved by deep-blending the contaminated soil in-place (clean soil beneath the shallow surface contamination and clean soil from the sides of the ravine was utilized to mitigate the overall CoC concentrations to achieve the Remedial Goals for this site.

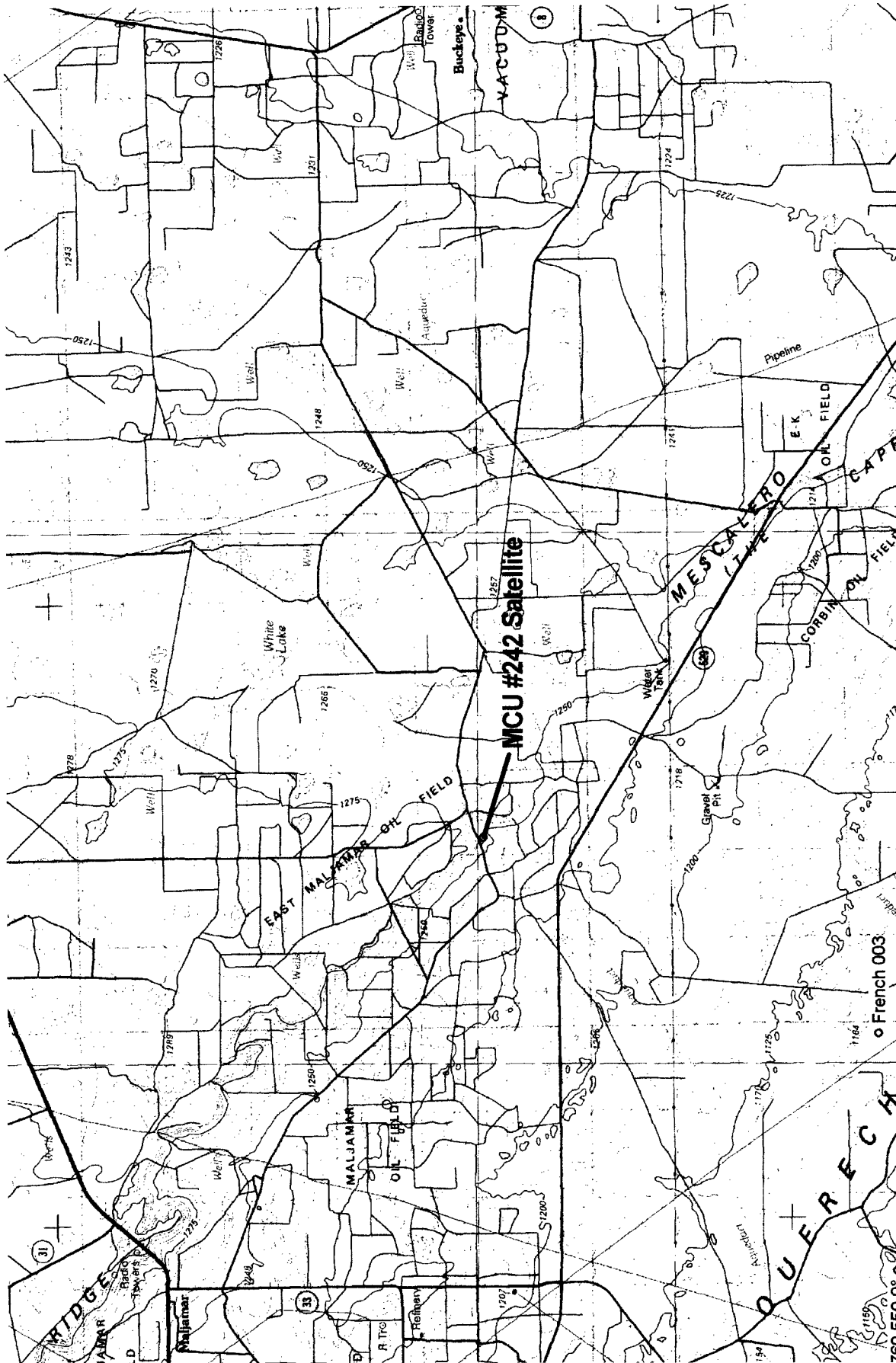
Fifteen samples of the blended soil (*Plate 4 – Attachments*) were collected on July 16<sup>th</sup> and transported to Cardinal Laboratories, Hobbs, NM under proper Chain of Custody for confirmation analyses (TPH<sup>8015M</sup>, BTEX<sup>8021B</sup> and Total Chlorides<sup>4500CIB</sup>). Laboratory analytical results confirmed the achievement of CoC concentrations below the Remedial Action Levels for Sample Points 1-6. The analytical results for Sample Points 7-15 indicated that the remedial goals for hydrocarbon contamination had been achieved, however, Total Chloride concentrations remained above the desired NMWQCC goal of 250-ppm. The flow path area defined by Sample Points 7-15 was re-blended and re-sampled on July 27<sup>th</sup>. Clean soil for this re-blending was obtained from the sides of the ravine. The analytical results for the re-sampling confirmed that the Total Chloride concentration had been reduced below the 250-ppm goal.

Re-seeding of the blended flow path was discussed with Mr. Leon Anderson of the NM State Land Office. It was agreed that because the ravine is used as a pathway by the numerous cattle being grazed in this area, natural re-seeding will be enhanced. It was agreed that the site will be evaluated in March-08 for the necessity of re-seeding with a natural grass seed mixture, i.e. BLM #2 or #4.

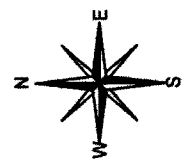
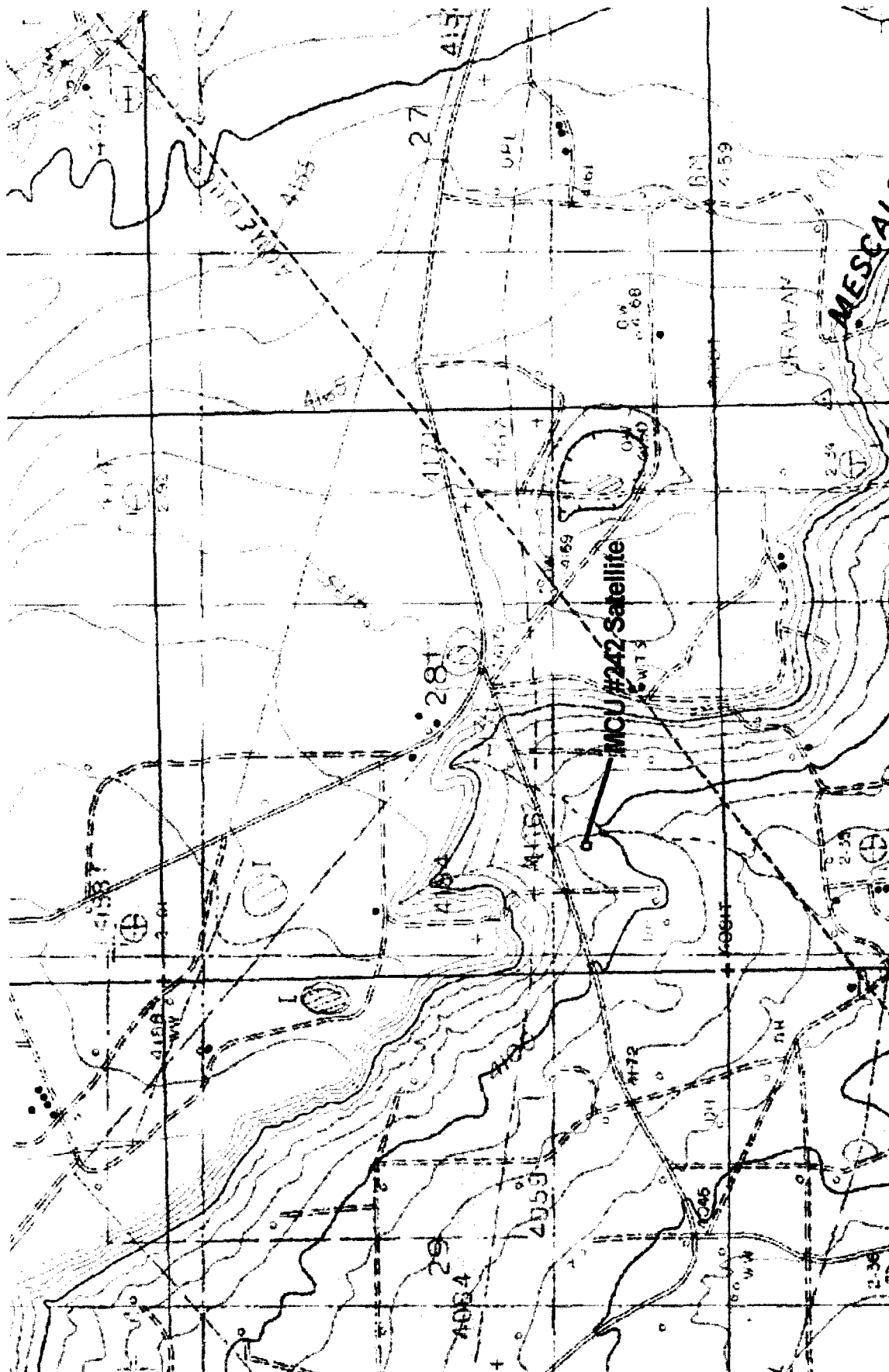
Based on the data submitted herein, Forest Oil Corporation requests that NMOCD require “No Further Action” at this location relative to the May 20<sup>th</sup> and June 27, 2007 releases at this site, excepting the evaluation and possible re-seeding in March-2008.

### ATTACHMENTS

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	Rev: 1
Drawing by: John Good September - 2007	SCALE: 0 3 Miles
Lea County, New Mexico UL-K SECTION 28 T17S R33E 32° 48.106' N; 103° 40.338' W Elevation: ~4109-ft amsl	Plate 1 Site Location Map Forest Oil Corporation MCU #242 Satellite

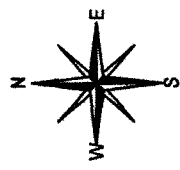
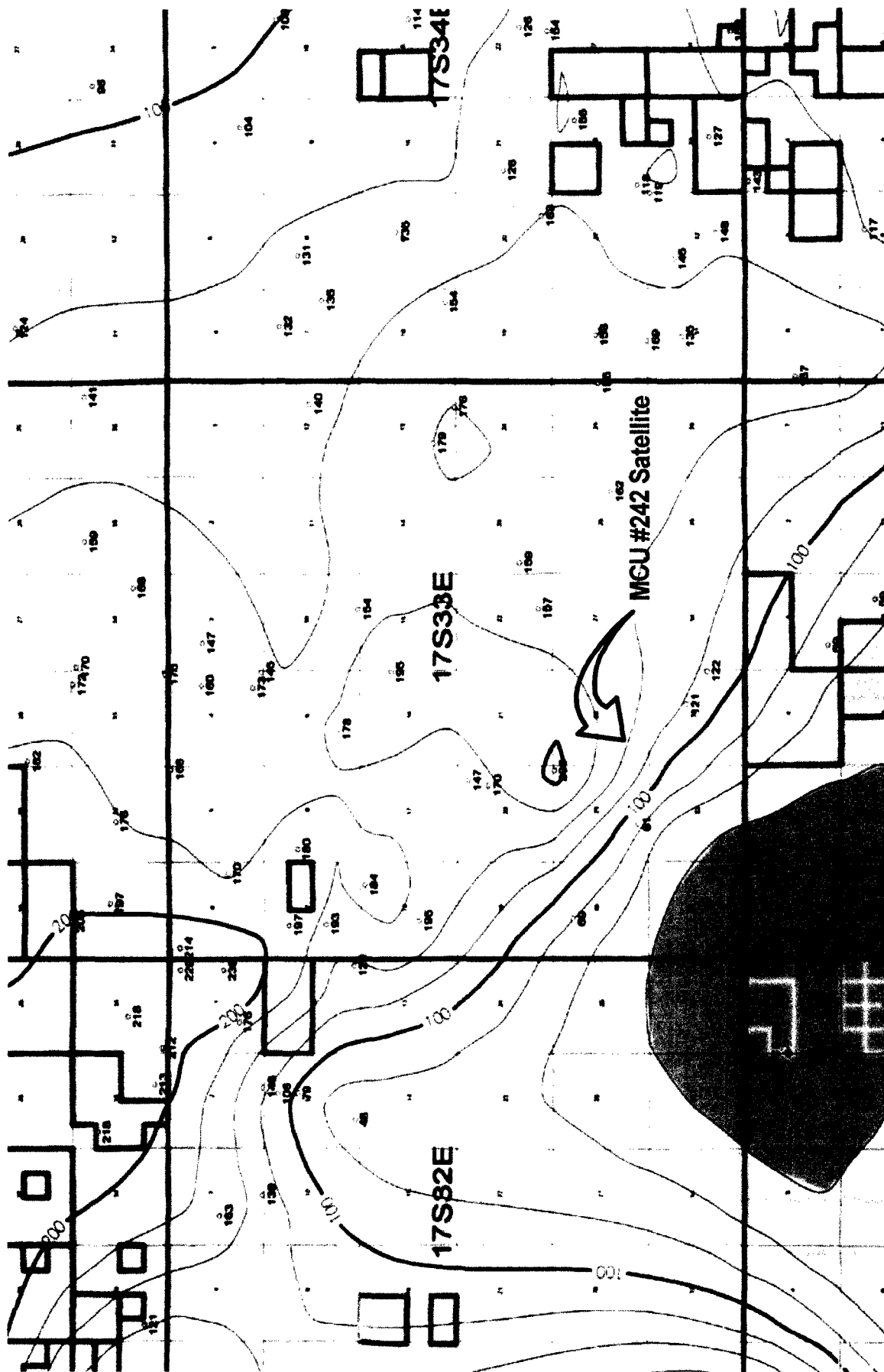


Drawing by: John Good  
September - 2007  
Rev: 1  
SCALE: 0 2800 Feet

Lea County, New Mexico  
UL-K SECTION 28 T17S R33E  
32° 48.106' N; 103° 40.338' W  
Elevation: ~4109-ft amsl

Plate 2  
Site Topography  
Forest Oil Corporation  
MCU #242 Satellite



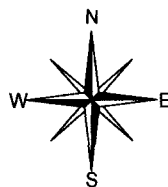
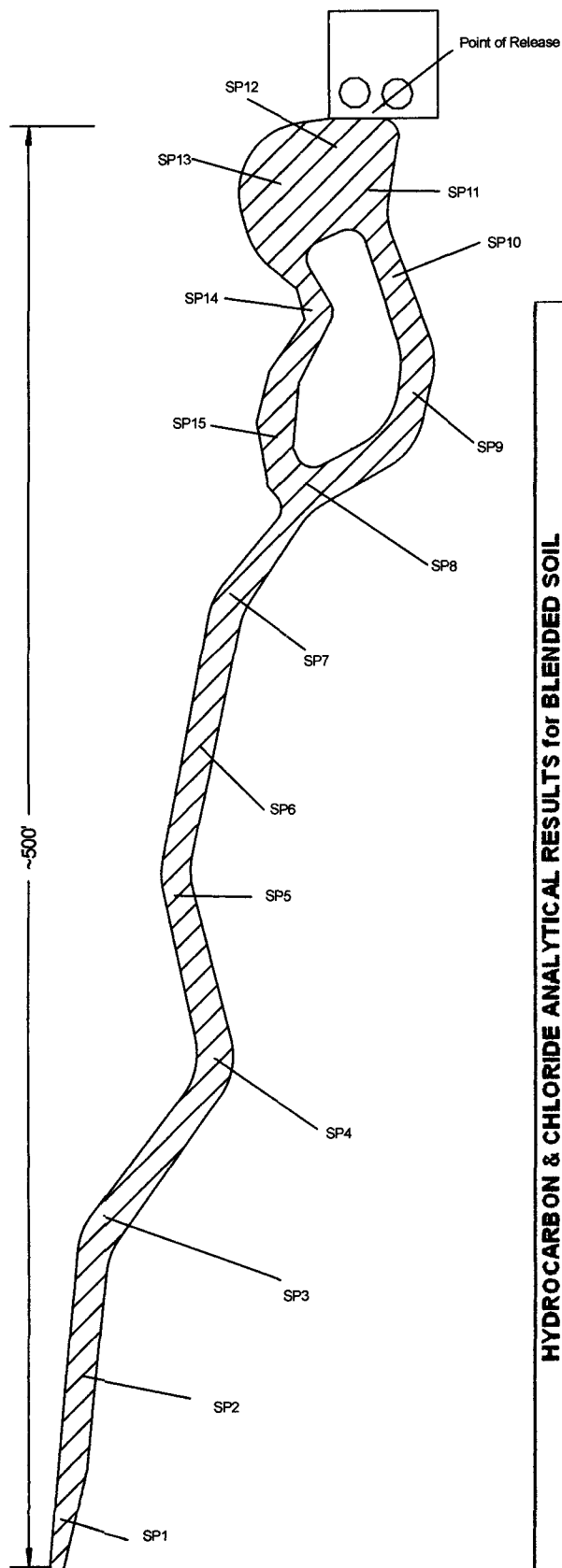


Drawing by: John Good  
September - 2007  
Rev: 1  
SCALE: 0 Miles 3

Lea County, New Mexico  
UL-K SECTION 28 T17S R33E  
32° 48.106' N; 103° 40.338' W  
Elevation: ~4109-ft amsl

Plate 3  
Water Elevation Contour Map  
Forest Oil Corporation  
MCU #242 Satellite

# PLATE 4 – SITE DRAWING / ANALYTICAL RESULTS TABLE



Sample Location	Sample Date	GRO <sup>1</sup> mg/Kg	DRO <sup>2</sup> mg/Kg	TPH <sup>3</sup> mg/Kg	BTEX <sup>4</sup> mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethyl Benzene mg/Kg	Total Xylenes mg/Kg	Chlorides mg/Kg
SP1	7/16/07	10	10	20	0.030	0.005	0.005	0.005	0.015	16
SP2	7/16/07	10	10	20	0.030	0.005	0.005	0.005	0.015	32
SP3	7/16/07	10	923	933	0.030	0.005	0.005	0.005	0.015	96
SP4	7/16/07	10	217	227	0.030	0.005	0.005	0.005	0.015	80
SP5	7/16/07	10	89	99	0.034	0.005	0.005	0.005	0.019	80
SP6	7/16/07	10	437	447	0.288	0.005	0.005	0.076	0.202	48
SP7	7/16/07	10	285	295	0.115	0.005	0.005	0.005	0.100	1330
SP8	7/27/07	10	338	348	0.030	0.005	0.005	0.005	0.015	16
SP9	7/27/07	10	263	273	0.062	0.005	0.016	0.036	0.036	64
SP10	7/27/07	10	438	448	0.045	0.005	0.007	0.028	0.028	1820
SP11	7/27/07	10	266	276	0.035	0.005	0.007	0.018	0.018	992
SP12	7/27/07	10	10	20	0.030	0.005	0.005	0.015	0.015	1900
SP13	7/27/07	10	445	455	0.031	0.005	0.005	0.016	0.016	2240
SP14	7/27/07	10	780	790	0.030	0.005	0.005	0.015	0.015	1730
SP15	7/27/07	10	293	303	0.030	0.005	0.005	0.015	0.015	688
	7/27/07									16

<sup>1</sup>Casoline Range Organics (detection limit = 10 mg/Kg); <sup>2</sup>Diesel Range Organics (detection limit = 10 mg/Kg); <sup>3</sup>TPH = sum of GRO-DRO; <sup>4</sup>BTEX = sum of Benzene, Toluene, Ethyl Benzene and Total Xylenes (detection limits = 0.002 mg/Kg; 0.006 mg/Kg; 0.006 mg/Kg; Note: Detection limits are considered "de minimus" values and are included in TPH and BTEX summations.



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ANALYTICAL RESULTS FOR  
HUNGRY HORSE ENVIRONMENTAL  
ATTN: JOHN GOOD  
P.O. BOX 1058  
HOBBS, NM 88241  
FAX TO: (505) 391-4585

Receiving Date: 07/16/07  
Reporting Date: 07/18/07  
Project Owner: FOREST  
Project Name: SATELLITE-242  
Project Location: LEA CTY., NM

Sampling Date: 07/16/07  
Sample Type: SOIL  
Sample Condition: INTACT  
Sample Received By: AB  
Analyzed By: BC/KS/HM

LAB NUMBER	SAMPLE ID	GRO	DRO	CI*
		(C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	(>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	(mg/Kg)
ANALYSIS DATE		07/18/07	07/18/07	07/18/07
H12904-1	S-1 BLEND	<10.0	<10.0	16
H12904-2	S-2 BLEND	<10.0	<10.0	32
H12904-3	S-3 BLEND	<10.0	923	96
H12904-4	S-4 BLEND	<10.0	217	80
H12904-5	S-5 BLEND	<10.0	88.8	80
H12904-6	S-6 BLEND	<10.0	437	48
H12904-7	S-7 BLEND	<10.0	285	1330
H12904-8	S-8 BLEND	<10.0	338	3270
H12904-9	S-9 BLEND	<10.0	263	64
H12904-10	S-10 BLEND	<10.0	438	1820
H12904-11	S-11 BLEND	<10.0	266	992
H12904-12	S-12 BLEND	<10.0	<10.0	1900
H12904-13	S-13 BLEND	<10.0	445	2240
H12904-14	S-14 BLEND	<10.0	780	1730
H12904-15	S-15 BLEND	<10.0	293	688
Quality Control		797	748	500
True Value QC		800	800	500
% Recovery		99.6	93.5	100
Relative Percent Difference		1.0	0.6	<0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI\*: Std. Methods 4500-CI/B

\*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

H12904A HHE

Date

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**ANALYTICAL RESULTS FOR  
HUNGRY HORSE ENVIRONMENTAL**

ATTN: JOHN GOOD

P.O. BOX 1058

HOBBS, NM 88241

FAX TO: (505) 391-4585

Receiving Date: 07/16/07

Reporting Date: 07/18/07

Project Owner: FOREST

Project Name: SATELLITE-242

Project Location: LEA CTY., NM

Sampling Date: 07/16/07

Sample Type: SOIL

Sample Condition: INTACT

Sample Received By: AB

Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		07/17/07	07/17/07	07/17/07	07/17/07
H12904-1	S-1 BLEND	<0.005	<0.005	<0.005	<0.015
H12904-2	S-2 BLEND	<0.005	<0.005	<0.005	<0.015
H12904-3	S-3 BLEND	<0.005	<0.005	<0.005	<0.015
H12904-4	S-4 BLEND	<0.005	<0.005	<0.005	<0.015
H12904-5	S-5 BLEND	<0.005	<0.005	<0.005	0.019
H12904-6	S-6 BLEND	<0.005	<0.005	0.076	0.202
H12904-7	S-7 BLEND	<0.005	<0.005	<0.005	0.100
H12904-8	S-8 BLEND	<0.005	<0.005	<0.005	<0.015
H12904-9	S-9 BLEND	<0.005	<0.005	0.016	0.036
H12904-10	S-10 BLEND	<0.005	<0.005	0.007	0.028
H12904-11	S-11 BLEND	<0.005	<0.005	0.007	0.018
H12904-12	S-12 BLEND	<0.005	<0.005	<0.005	<0.015
H12904-13	S-13 BLEND	<0.005	<0.005	0.005	0.016
H12904-14	S-14 BLEND	<0.005	<0.005	<0.005	<0.015
H12904-15	S-15 BLEND	<0.005	<0.005	<0.005	<0.015
Quality Control		0.102	0.101	0.097	0.273
True Value QC		0.100	0.100	0.100	0.300
% Recovery		102	101	97.2	91.1
Relative Percent Difference		0.2	1.6	0.3	0.9

METHOD: EPA SW-846 8260

Chemist

7/18/07  
Date

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. Cardinal shall not 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

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**(505) 393-2326 FAX (506) 393-2476 (325) 673-7001 FAX (325) 673-7020**

## ANALYSIS REQUEST

Company Name: <b>AHE</b>		Project Manager: <b>John Good</b>		Address: <b>Box 1059</b>		City: <b>Wabash</b>		State: <b>IN</b>		Zip: <b>46780</b>		Phone #: <b>3-3386</b>		Fax #:	
Project #:		Project Name: <b>KRAB Project Owner: Forest</b>		Project Location: <b>Sample Settlement-242</b>		Project Name: <b>Lea Cty.</b>		Project Name: <b>K. Reinold</b>		Project Name:		Project Name:		Project Name:	
FOR LAB USE ONLY															
Lab I.D.		Sample I.D.		# CONTAINERS		(G)RAB OR (C)OMP		MATRIX		PRESERV		SAMPLING		DATE	
								WASTEWATER SOIL OIL SLUDGE OTHER		ACID/BASE ICE / COOL OTHER				DATE TIME	
H2904-1		S-1 - Blend		X		X		X		X		X		7-16-07 12:00	
-2		S-2													
-3		S-3													
-4		S-4													
-5		S-5													
-6		S-6													
-7		S-7													
-8		S-8													
-9		S-9													
-10		S-10													

Relinquished By: [Signature] Date: 7-16-07 Time: 3:25  
 Relinquished By: [Signature] Date: 7-16-07 Time: 3:25  
 Relinquished By: [Signature] Date: 7-16-07 Time: 3:25

Delivered By: (Circle One) Sampler / UPS - Bus - Other:  
 Received By: [Signature] Date: 7-16-07 Time: 3:25  
 Received By: [Signature] Date: 7-16-07 Time: 3:25

CHECKED BY: [Signature]  
 Sample Condition: Intact  
 Cool: ☒ Yes ☐ No  
 Intact: ☒ Yes ☐ No

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

2.2

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# ARDINAL LABORATORIES

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## ANALYTICAL RESULTS FOR HUNGRY HORSE ENVIRONMENTAL

ATTN: JOHN GOOD  
P.O. BOX 1058  
HOBBS, NM 88241  
FAX TO: (505) 391-4585

Receiving Date: 07/27/07  
Reporting Date: 07/30/07  
Project Owner: FOREST  
Project Name: SATTELITE C-242  
Project Location: LEA CTY, NM

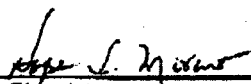
Analysis Date: 07/30/07  
Sampling Date: 07/27/07  
Sample Type: SOIL  
Sample Condition: INTACT  
Sample Received By: KS  
Analyzed By: HM

LAB NUMBER    SAMPLE ID    CF  
(mg/Kg)

H12997-1	S-7 BLEND	< 16
H12997-2	S-8 BLEND	< 16
H12997-3	S-10 BLEND	< 16
H12997-4	S-11 BLEND	< 16
H12997-5	S-12 BLEND	< 16
H12997-6	S-13 BLEND	< 16
H12997-7	S-14 BLEND	< 16
H12997-8	S-15 BLEND	< 16
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		2.0

METHOD: Standard Methods    4500-CrB

Note: Analyses performed on 1:4 w:v aqueous extracts.

  
Chemist

07/30/07  
Date

### H12997 HHE

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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603  
(505) 393-2326 FAX (505) 393-2476 (326) 673-7001 FAX (325) 673-7020

[illegible]





Blending area adjacent to  
battery pad (south side)

Blending flow path extending  
south from battery



Blending flow path  
extending south from  
batterv



Re-blending flow path



Re-blending flow path

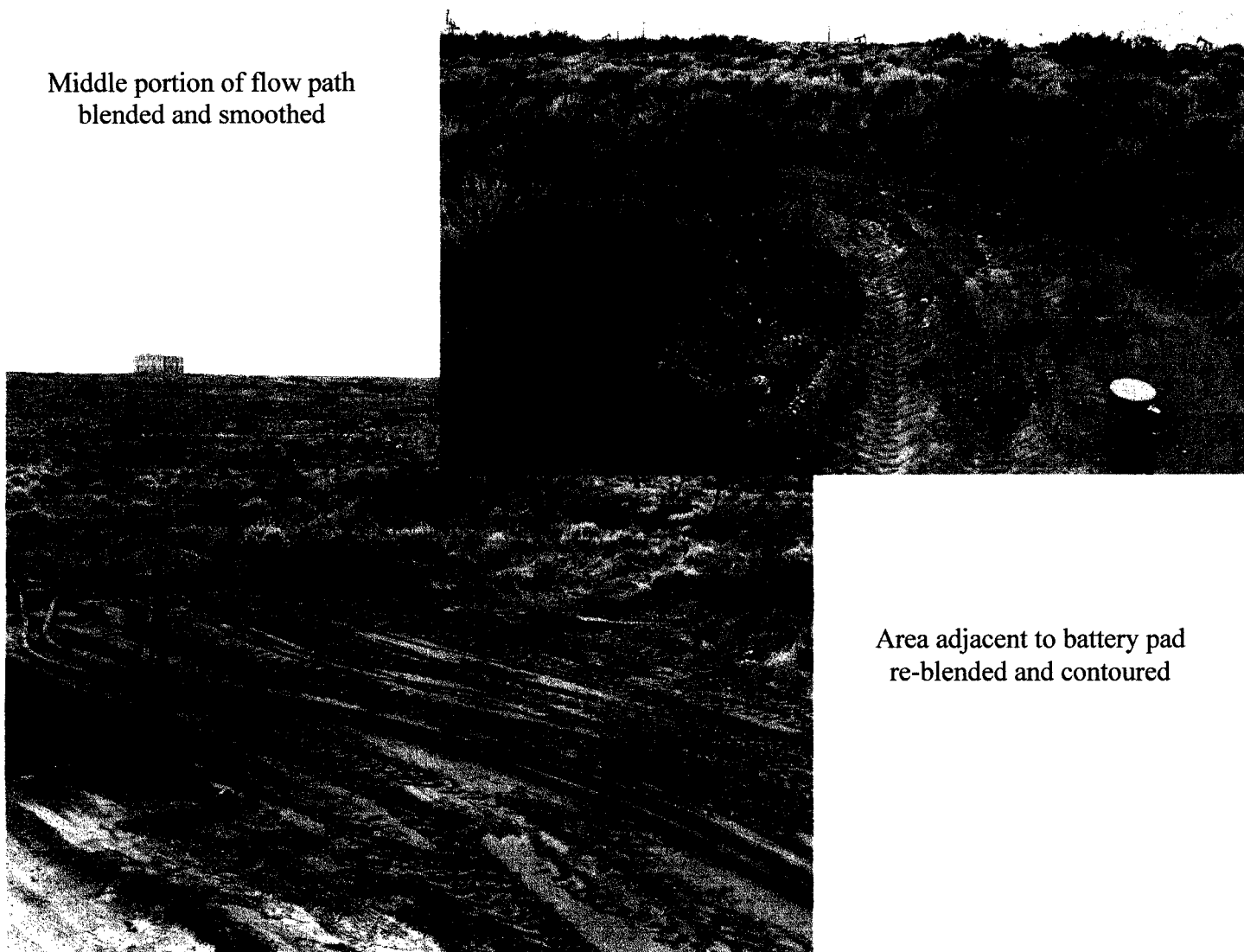


Re-blended area adjacent to  
battery pad.

Southern portion of flow  
path blended and smoothed



Middle portion of flow path  
blended and smoothed



Area adjacent to battery pad  
re-blended and contoured

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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

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Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company <i>Forest Oil Corp.</i>	Contact <i>Roy R. Muñoz</i>
Address <i>Box 3504 County Rd. Hobbs, N.M.</i>	Telephone No. <i>505-631-5850</i>
Facility Name <i>Caprock Malla Mar Unit-Satellite 242</i>	Facility Type
Surface Owner <i>ROSS BUSINESS STATE</i>	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
<i>K</i>	<i>28</i>	<i>17-S</i>	<i>33-E</i>				<i>1330' F.W.</i>	<i>Lea</i>

Latitude *32° 48' 11.3" N* Longitude *103° 40' 34" W*

NATURE OF RELEASE

Type of Release <i>WTR. &amp; oil</i>	Volume of Release <i>20 BBLs</i>	Volume Recovered <i>20 BBLs</i>
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery <i>5-20-07-6:30 A.</i>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <i>ROY MUÑOZ - WAS ON VACATION @ THAT TIME.</i>	
By Whom? <i>ROSS ARMSTRONG</i>	Date and Hour	
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.\* *TESTER plugged off. Relief Valve opened & spilled water & oil in SATELLITE CONTAINMENT DYKE, some MIST WAS carried by wind, and down cow trail, about 150 YDS, NO wider than 2'.*

*2x 150 yards*

Describe Cause of Problem and Remedial Action Taken.\* *TESTER plugged off. Relief Valve opened & spilled water & oil in SATELLITE CONTAINMENT DYKE, some MIST WAS carried by wind, down cow trail, about 150 yards, NO wider than 2' call VACUUM TRK, pick 20-BBLs WTR. ON CONTAINMENT DYKE.*

Describe Area Affected and Cleanup Action Taken.\* *Rake inside DYKE & rake cow trail - WILL TAKE SAMPLES & develop cleanup ACTION.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC 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, NMOC 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

Signature: <i>Roy Muñoz</i>	Approved by District Supervisor: <i>ENV. &amp; ENGR</i>	
Printed Name: <i>ROY MUÑOZ</i>		
Title: <i>FACILITY MAN</i>	Approval Date: <i>5.22.07</i>	Expiration Date: <i>7.22.07</i>
E-mail Address: <i>rmunoz@ForestOil.com</i>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <i>5-22-07</i> Phone: <i>505-631-5850</i>	<i>DELINATE &amp; REMOVE WTR</i>	

\* Attach Additional Sheets If Necessary

*Facility - PPAC0714531596*  
*Incident - PPAC0714531757*  
*Application - PPAC0714531862*

*CRUDE CONTAMINATION*

*RP# 1369*

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State of New Mexico  
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Oil Conservation Division  
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Santa Fe, NM 87505

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Revised October 10, 2011  
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Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☒ Final Report

Name of Company	Forest oil corp.	Contact	Roy Muñoz
Address	P.O. Box 3504 N.M. COUNTY Rd.	Telephone No.	505-392-9797
Facility Name	Caprock Mablemar UNIT #242-Sat	Facility Type	Production Sat.
Surface Owner	State	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
	28	17-S	33-E					

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

NATURE OF RELEASE

Type of Release	oil/water	Volume of Release	16-Bbls	Volume Recovered	10-Bbls-Water
Source of Release	Test Separator Vessel	Date and Hour of Occurrence		Date and Hour of Discovery	
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Larry Johnson	6-27-07 @ 6:30 A.M.	
By Whom?		Date and Hour	6-27-07 @ 6:30 A.M.		
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.\*

LEAK #2

Describe Cause of Problem and Remedial Action Taken.\* Lost electrical power (storm) Test Separator - got full - pop off valve, pop spill inside dyke & run down ravine 100 yards.

Describe Area Affected and Cleanup Action Taken.\*

10'x20' inside dyke & 100 yds. x 2' - approx. 6-Bbls NOT recovered.

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

Signature: Roy Muñoz	Approved by District Supervisor: [Signature]	
Printed Name: Roy Muñoz	Approval Date: 6-28-07	Expiration Date: _____
Title: Foreman	Conditions of Approval:	Attached <input type="checkbox"/>
E-mail Address:		
Date: 6-27-07	Phone: 505-631-5850	

\* Attach Additional Sheets If Necessary

RP# 1458A

<b>Forest Oil Corporation</b>		Incident Dates: May 20, 2007; June 27, 2007	
SITE: Caprock Maljamar Unit 242 Satellite		Assigned Site Reference: FOR-242-052007 062707	
Company:	Forest Oil Corporation	API No.:	30-025- 33242
Street Address:	3504 N West Cnty Rd	Lease No.:	
Mailing Address:	3504 N West Cnty Rd		
City, State, Zip:	Hobbs, NM 88240		
Representative:	Roy Munoz	Position:	Foreman
Representative Telephone:	505-631-5850		
Telephone:	505-392-9856		
Fluid Volume Released (bbl):	<25; 16	Volume Recovered (bbl):	20; 10
		Net Release: ~	11
>25 bbl: Notify NMOCD verbally within 24 hours and submit C-141 within 15 days.			
5-25 bbl: Submit Form C-141 within 15 days. (Also applies to unauthorized release of >50 mcf Natural Gas).			
Leak, Spill, or Pit (LSP) Name:		Caprock Maljamar Unit 242 Satellite	
Source of Contamination:		Test Separator Vessel	
Land Owner, i.e. BLM, ST, Fee, Other:		State of NM	
LSP Dimensions:		~ 500' X 2'; 300' X 2'	
LSP Area		~ 8300-ft <sup>2</sup> ; 6000-ft <sup>2</sup>	
Location of Reference Point (RP):			
Location distance and direction from RP:			
Latitude: North		32	48.106
Longitude: West		103	40.338
Elevation above mean sea level (amsl):		4109 feet	1252 meters
Distance from South Section Line (feet):		1330	
Distance from West Section Line (feet):		1330	
Location - Unit Letter and 1/4 1/4:		UL- K	NE - 1/4 of SW - 1/4
Location - Section		28	
Location - Township		17S	
Location - Range		33E	
Surface water body within 1000' radius of site:		0	
Surface water body within 1000' radius of site:		0	
Domestic water wells within 1000' radius of site:		0	
Domestic water wells within 1000' radius of site:		0	
Agricultural water wells within 1000' radius of site:		0	
Agricultural water wells within 1000' radius of site:		0	
Public water supply wells within 1000' radius of site:		0	
Public water supply wells within 1000' radius of site:		0	
Depth (feet) from land surface to Ground Water (DG): ~		150	
Depth (feet) of lowest contamination (DC): ~		5	
Depth (feet) to Ground Water (DG - DC = DtGW): ~		145	
<b>1. Ground Water</b>		<b>2. Wellhead Protection Area</b>	<b>3. Distance to Surface Water</b>
If Depth to GW <50-feet: 20 points	If <1000' from water source, or, <200' from private domestic water source: 20 points	<200 horizontal feet: 20 points	
If Depth to GW 50 to 100-feet: 10 points	If >1000' from water source, or, >200' from private domestic water source: 0 points	200-1000 horizontal feet: 10 points	
If Depth to GW >100-feet: 0 points		>1000 horizontal feet: 0 points	
Ground Water Score: 0	Wellhead Protection Score: 0	Surface Water Score: 0	
Site Ranking (1 + 2 + 3): 0			
<b>Total Site Ranking Score and Acceptable Concentrations</b>			
Parameter	20 or >	10	0
Benzene <sup>1</sup>	10-ppm	10-ppm	10-ppm
BTEX <sup>1</sup>	50-ppm	50-ppm	50-ppm
TPH	100-ppm	1000-ppm	5000-ppm

## District I

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## District II

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## 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**

Form C-141

Revised June 10, 2003

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

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**Release Notification and Corrective Action**

**OPERATOR**

☐ Initial Report    ☒ Final Report

Name of Company	Forest Oil Corporation	Contact	Roy Munoz	Foreman
Address	3504 N. West Cnty Rd	Hobbs, NM 88240	Telephone No.	505-631-5850
Facility Name	Caprock Maljamar Unit 242 Satellite	Facility Type	Tank Battery	

Surface Owner	State of NM	Mineral Owner	State of NM	API Number: 30-015- 33242
---------------	-------------	---------------	-------------	---------------------------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from South Line	Feet from West Line	Longitude-W	Latitude-N	County
K	28	17S	33E	1330	1330	103.6723	32.8018	Lea

**NATURE OF RELEASE**

Type of Release	Volume of Release	Volume Recovered
Produced Water and Hydrocarbon Component	< 25 bbl	20 bbl
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Test Separator Vessel	05/20/07	5/20/2007 6:30 AM
Was Immediate Notice Given?	If YES, To Whom?	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Not Required		
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES, Volume Impacting the Watercourse	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		

If a Watercourse was Impacted, Describe Fully\*

Describe Cause of Problem and Remedial Action Taken. \*

Tester plugged off. Relief valve opened and released 20 to 25-bbl of PW into battery containment and beyond into ravine south of battery. Tester repaired and 20-bbl of fluid recovered from battery containment with vacuum truck.

Describe Area Affected and Cleanup Action Taken. \*

Release affected the immediate battery containment area and an approximate 500' X 2' flowpath emanating from the south side of the battery. Total off-battery area affected is ~8300-ft<sup>2</sup>. Hungry Horse, LLC, Hobbs, NM conducted initial contaminant delineation and final site remediation.

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: <i>Roy Munoz</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Roy Munoz	<i>[Signature]</i>	
Title: Foreman	Approved by District Supervisor	ENVIRONMENT
E-Mail Address: rrmunoz@forestoil.com	Approval Date: 10.5.07	Expiration Date:
Date: 9/6/2007    Phone: 505-392-9856	Conditions of Approval: RP #1369	<input type="checkbox"/> Attached

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Energy Minerals and Natural Resources

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Revised June 10, 2003

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Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	Forest Oil Corporation	Contact	Roy Munoz	Foreman
Address	3504 N. West Cnty Rd	Hobbs, NM 88240	Telephone No.	505-631-5850
Facility Name	Caprock Maljamar Unit 242 Satellite	Facility Type	Tank Battery	

Surface Owner	State of NM	Mineral Owner	State of NM	API Number: 30-015- 33242
---------------	-------------	---------------	-------------	---------------------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from South Line	Feet from West Line	Longitude-W	Latitude-N	County
K	28	17S	33E	1330	1330	103.6723	32.8018	Lea

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Produced Water and Hydrocarbon Component	< 16 bbl	10 bbl
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Test Separator Vessel	6/27/2007 AM	6/27/2007 6:00 AM
Was Immediate Notice Given?	If YES, To Whom?	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Not Required	Larry Johnson, NMOCD - Hobbs	
By Whom?	Date and Hour	
Roy Munoz	6/27/07 6:30 AM	
Was a Watercourse Reached?	If YES, Volume Impacting the Watercourse	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		

If a Watercourse was Impacted, Describe Fully\*

Describe Cause of Problem and Remedial Action Taken. \*

Loss of electrical power due to thunder storm caused test separator to fill up resulting in pop-off valve activation. Mechanical and electrical repairs were facilitated and 10-bbl of fluid were recovered from the contained battery with a vacuum truck.

Describe Area Affected and Cleanup Action Taken. \*

Release affected the immediate battery containment area and an approximate 300' X 2' flowpath emanating from the south side of the battery. Total off-battery area affected is ~6000-ft<sup>2</sup>. Hungry Horse, LLC, Hobbs, NM conducted site remediation in conjunction with area affected by prior (5-20-07) release at this location.

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:	<i>Roy Munoz</i>
Printed Name:	Roy Munoz
Title:	Foreman
E-Mail Address:	rrmunoz@forestoil.com
Date:	9/6/2007
Phone:	505-392-9856

OIL CONSERVATION DIVISION	
<i>Larry Johnson</i>	
Approved by District Supervisor ENVIRONMENTAL ENGINEER	
Approval Date:	10.3.07
Expiration Date:	—
Conditions of Approval:	RP# 1458
<input type="checkbox"/> Attached	