

Attachment E

Initial & Final C-141

Final C-144

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

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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

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 – Forest Oil	Contact – Rick Rickman	
Address – 3504 NW County Rd Hobbs, NM 88240	Telephone No. – 575-392-9797	
Facility Name – Caprock Maljamar Unit #20	Facility Type – Workover Pit	
Surface Owner - State	Mineral Owner - State	Lease No. API # 30-025-01454

LOCATION OF RELEASE

Unit Letter K	Section 17	Township 17S	Range 33E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea County
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Latitude 32o 49.969' N Longitude 103o 41.246' W

NATURE OF RELEASE

Type of Release – Drilling Fluids	Volume of Release - Unknown	Volume Recovered – Unknown
Source of Release – Workover Pit	Date and Hour of Occurrence - ?	Date and Hour of Discovery – 12-24-08
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	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.*

Describe Cause of Problem and Remedial Action Taken.* After drilling contents and liner were hauled to Disposal. Bottoms and walls were tested and were above the RAL's for the site.

Describe Area Affected and Cleanup Action Taken.* The site was delineated vertically and horizontally to the RAL's of the pit closure plan. All impacted soil above the RAL's were hauled to the Disposal and clean native soil was backfilled into the excavation. A plat map, field analytical, lab confirmations and disposal manifests are attached.

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>Rick</i>	OIL CONSERVATION DIVISION <i>Johnson</i>	
Printed Name: Rick Rickman	Approved by District Supervisor ENVIRONMENTAL ENGINEER	
Title: HSE Specialist	Approval Date: <u>2-9-09</u>	Expiration Date: <u> </u>
E-mail Address: rdrickman@forestoil.com	Conditions of Approval: <u> </u>	Attached <input type="checkbox"/> <u>IRP# 09-2-2077</u>
Date: <u>1-28-09</u> Phone: 575-392-9797		

* Attach Additional Sheets If Necessary

FGRLO905758400

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State of New Mexico

Energy Minerals and Natural Resources

Department

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-144

July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOC District Office.

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOC District Office.

Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

- Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☒ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.

Operator: Forest Oil OGRID #: 8041

Address: 3504 NW County Rd Hobbs, NM 88240

Facility or well name: Caprock Maljamar Unit #20

API Number: 30-025-01454 OCD Permit Number: P1-00808

U/L or Qtr/Qtr K Section 17 Township 17S Range 33E County: Lea

Center of Proposed Design: Latitude 32° 49.969' N Longitude 103° 41.246' W NAD: ☐ 1927 ☒ 1983

Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.

☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC

Temporary: ☐ Drilling ☒ Workover

☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A

☒ Lined ☐ Unlined Liner type: Thickness 12 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____

☐ String-Reinforced

Liner Seams: ☒ Welded ☐ Factory ☐ Other _____ Volume: 50 bbl Dimensions: L 15' x W 15' x D 5'

3.

☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC

Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)

☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____

☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____

Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4.

☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC

Volume: _____ bbl Type of fluid: _____

Tank Construction material: _____

☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off

☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____

Liner type: Thickness _____ mil ☐ HDPE ☐ PVC ☐ Other _____

5.

☐ **Alternative Method:**

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

Fencing: Subsection D of 19.15.17.11 NMAC (*Applies to permanent pits, temporary pits, and below-grade tanks*)

- ☐ Chain link, six feet in height, two strands of barbed wire at top (*Required if located within 1000 feet of a permanent residence, school, hospital, institution or church*)
- ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
- ☐ Alternate. Please specify _____

7.

Netting: Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

- ☐ Screen ☐ Netting ☐ Other _____
- ☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

- ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

- ☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.
- ☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

11.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.

Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____☐ Previously Approved Operating and Maintenance Plan API Number: _____ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13.

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.

Proposed Closure: 19.15.17.13 NMAC**Instructions:** Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System
☐ AlternativeProposed Closure Method: ☐ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.

Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)**Instructions:** Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?☐ Yes (If yes, please provide the information below) ☐ No*Required for impacted areas which will not be used for future service and operations:*☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC**Instructions:** Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No
☐ NA

Ground water is between 50 and 100 feet below the bottom of the buried waste

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No
☐ NA

Ground water is more than 100 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No
☐ NA

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☐ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☐ No

18.

On-Site Closure Plan Checklist: (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

20.

OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: [Signature] Approval Date: 2-9-09

Title: ENVIRONMENTAL ENGINEER OCD Permit Number: P1.00808

21.

Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☒ Closure Completion Date: 1-16-2009

22.

Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

23.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

- ☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.

Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- ☒ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☒ Plot Plan (for on-site closures and temporary pits)
☒ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☒ Disposal Facility Name and Permit Number
☒ Soil Backfilling and Cover Installation
☒ Re-vegetation Application Rates and Seeding Technique
☒ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐ 1927 ☐ 1983

25.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Rick Rickman Title: HSE Specialist

Signature: [Signature] Date: 1-28-09

e-mail address: rdrickman@forestoil.com Telephone: 575-392-9797

Forest Oil Corporation

3504 NW County RD
Hobbs, NM 88240

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Closure Report

WORKOVER PIT

Caprock Maljamar Unit #20

Lea County, NM

PI-00808

IRP# 09.2.2077 (PIT LEAK CLEANUP)

Prepared by

Elke Environmental, Inc.

P O Box 14167 Odessa, TX 79768
Ph 432-366-0043 Fax 432-366-0884

Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768
Phone (432) 366-0043 Fax (432) 366-0884

January 21, 2009

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HOBBSOCD

NMOCD

Attn: Larry Johnson
1625 N French Dr
Hobbs, NM 88240

Re: Closure Report for Forest Oil – Caprock Maljamar Unit #20

Mr. Johnson,

The enclosed closure report is for the waste excavation and removal of the workover pit. All excess fluids were removed and disposed at a division-approved facility. The drilling mud and liner were excavated and hauled to Lea Land, Inc. (Permit # WM-1-035). After all drilling mud and liner was removed, the pit bottoms and walls were sampled for TPH, total BTEX, Benzene, Chlorides and the DRO and GRO combined fractions. The sample points that exceeded the levels of the closure plan were delineated to the standards in the closure plan and the impacted material was excavated and hauled to the disposal. The levels in the closure plan were 0.2 mg/kg of Benzene, 50 mg/kg of total BTEX, 2,500 mg/kg of TPH, 500 mg/kg of combined fraction GRO/DRO, 1,000 mg/kg of Chlorides. A C-141 is attached.

After the impacted material was excavated and removed the site was backfilled with clean native soil and a minimum of 1' of topsoil was placed on the site to promote revegetation. The site was reseeded with BLM Seed Mixture #3. If there are any questions about this report please call the office.

Thanks,



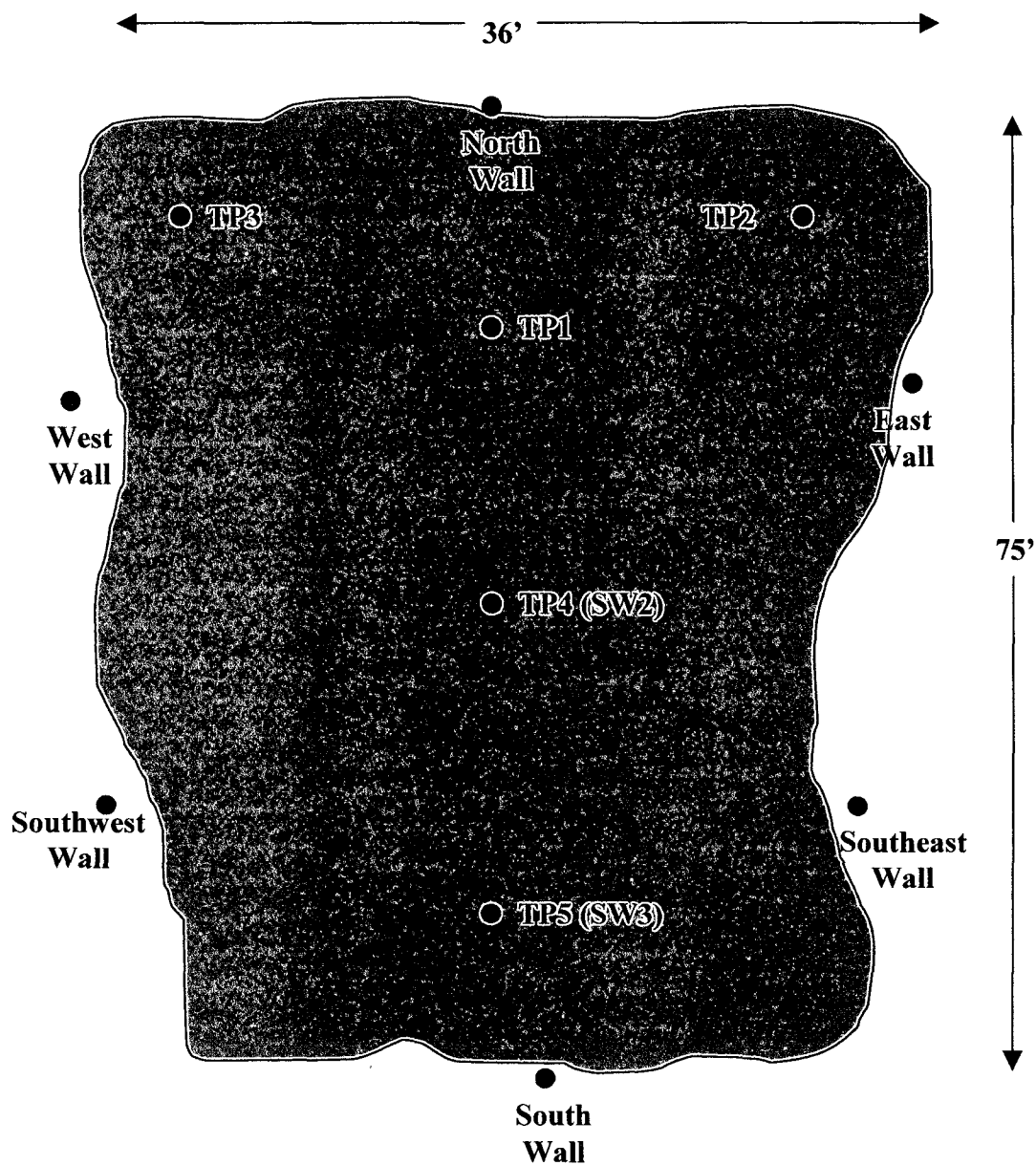
Curtis Elam

Attachment A

Plat Map, Field Analytical and Pictures

Forest Oil Corporation
Caprock Maljamar Unit #20

Plat Map



Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768

Field Analytical Report Form

Client Forest Oil

Analyst Curtis Elam

Site Caprock Maljamar Unit #20

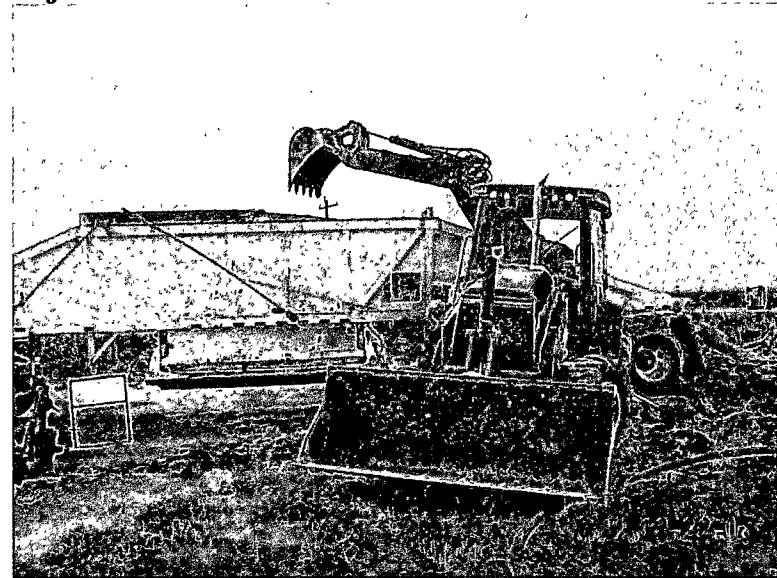
Sample ID	Date	Depth	TPH / PPM	CI / PPM	PID / PPM	GPS
TP1	12-24-08	4'		1,350		32° 49.963' N 103° 41.259' W
TP1	12-29-08	6'		386		32° 49.963' N 103° 41.259' W
TP2	12-29-08	4'		1,462		32° 49.967' N 103° 41.257' W
TP2	12-29-08	6'		412		32° 49.967' N 103° 41.257' W
TP3	12-29-08	4'		2,116		32° 49.967' N 103° 41.253' W
TP3	12-29-08	6'		286		32° 49.967' N 103° 41.253' W
TP4 (SW2)	12-24-08	2'		1,558		32° 49.967' N 103° 41.250' W
TP4 (SW2)	12-29-08	4'		1,162		32° 49.967' N 103° 41.250' W
TP4 (SW2)	12-29-08	6'		258		32° 49.967' N 103° 41.250' W
TP5 (SW3)	12-29-08	2'		5,772		32° 49.967' N 103° 41.247' W
TP5 (SW3)	12-29-08	4'		3,556		32° 49.967' N 103° 41.247' W
TP5 (SW3)	12-29-08	6'		357		32° 49.967' N 103° 41.247' W
North Wall	12-24-08	2'		509		32° 49.968' N 103° 41.268' W
South Wall	12-29-08	2'		245		32° 49.968' N 103° 41.245' W
East Wall	12-24-08	2'		306		32° 49.971' N 103° 41.253' W
West Wall	12-24-08	2'		655		32° 49.964' N 103° 41.255' W
South West Wall	12-29-08	2'		353		32° 49.962' N 103° 41.255' W
South East Wall	12-29-08	2'		210		32° 49.962' N 103° 41.253' W

Analyst Notes _____

Forest Oil – Caprock Maljamar Unit #20



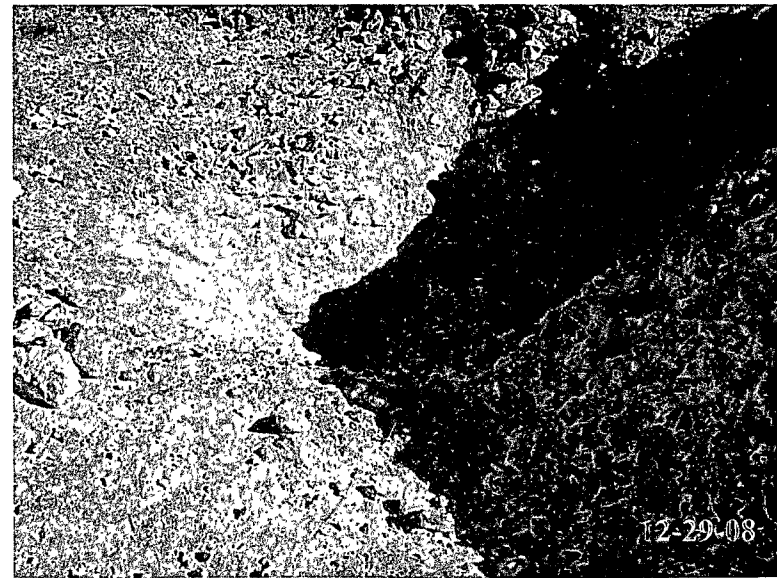
Workover pit before closure.



Loading pit contents on truck to be hauled to Disposal.



Site after excavation of pit contents.



Delineation of impacted soil below pit.

Forest Oil – Caprock Maljamar Unit #20



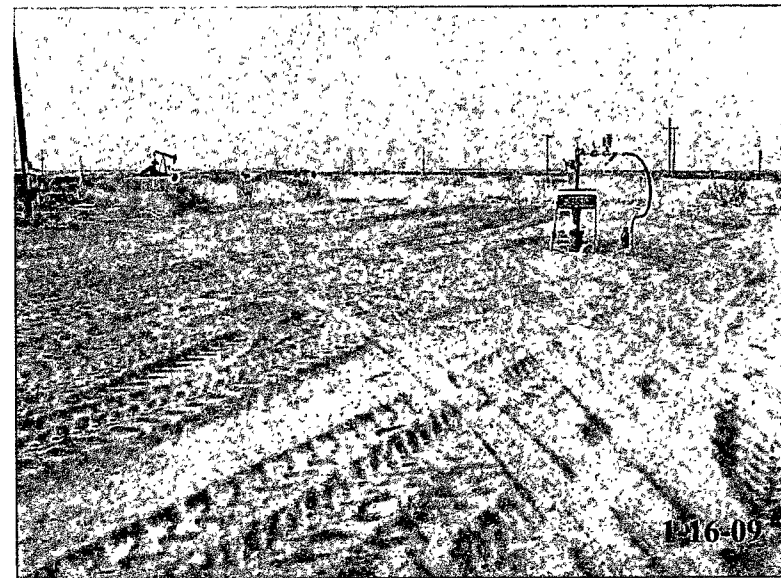
Excavation of impacted soil below workover pit.



After excavation of impacted soil below pit.



Site after backfill of clean native soil and 1' of topsoil.



Site after backfill of clean native soil and 1' of topsoil.

Attachment B

Lab Reports

Analytical Report 321906

for

Elke Environmental, Inc.

Project Manager: Logan Anderson

Forrest

20-JAN-09



12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:

Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX

Florida certification numbers:

**Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Norcross(Atlanta), GA E87429**

South Carolina certification numbers:

Norcross(Atlanta), GA 98015

North Carolina certification numbers:

Norcross(Atlanta), GA 483

**Houston - Dallas - San Antonio - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta**



20-JAN-09

Project Manager: **Logan Anderson**
Elke Environmental, Inc.
4817 Andrews Hwy
P.O. Box 14167 Odessa, tx 79768
Odessa, TX 79762

Reference: XENCO Report No: **321906**
Forrest
Project Address: CMU 20

Logan Anderson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 321906. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 321906 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II

Odessa Laboratory Manager

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Sample Cross Reference 321906**Elke Environmental, Inc., Odessa, TX**

Forrest

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TP1 @ 6'	S	Jan-06-09 10:30	6 ft	321906-001
TP2 @ 6'	S	Jan-06-09 11:00	6 ft	321906-002
TP3 @ 6'	S	Jan-06-09 10:00	6 ft	321906-003
SW2 @ 6'	S	Jan-06-09 09:00	6 ft	321906-004
SW3 @ 6'	S	Jan-06-09 09:30	6 ft	321906-005



Certificate of Analysis Summary 321906

Elke Environmental, Inc., Odessa, TX

Project Name: Forrest



Project Id:

Contact: Logan Anderson

Project Location: CMU 20

Date Received in Lab: Wed Jan-07-09 04:20 pm


Report Date: 20-JAN-09

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	321906-001	321906-002	321906-003	321906-004	321906-005	
	Field Id:	TP1 @ 6'	TP2 @ 6'	TP3 @ 6'	SW2 @ 6'	SW3 @ 6'	
	Depth:	6 ft	6 ft	6 ft	6 ft	6 ft	
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	Jan-06-09 10:30	Jan-06-09 11:00	Jan-06-09 10:00	Jan-06-09 09:00	Jan-06-09 09:30	
Anions by EPA 300	Extracted:						
	Analyzed:	Jan-08-09 14:29	Jan-08-09 14:29	Jan-08-09 14:29	Jan-08-09 14:29	Jan-08-09 14:29	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		530 10.0	377 10.0	168 5.00	260 10.0	208 10.0	
BTEX by EPA 8021B	Extracted:	Jan-09-09 12:15	Jan-09-09 12:15	Jan-09-09 12:15	Jan-09-09 12:15	Jan-09-09 12:15	
	Analyzed:	Jan-10-09 23:54	Jan-11-09 00:15	Jan-11-09 00:36	Jan-11-09 00:57	Jan-11-09 01:18	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0010	
Toluene		ND 0.0022	ND 0.0022	ND 0.0022	ND 0.0021	ND 0.0021	
Ethylbenzene		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0010	
m,p-Xylenes		ND 0.0022	ND 0.0022	ND 0.0022	ND 0.0021	ND 0.0021	
o-Xylene		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0010	
Total Xylenes		ND 0.0022	ND 0.0022	ND 0.0022	ND 0.0021	ND 0.0021	
Total BTEX		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0010	
Percent Moisture	Extracted:						
	Analyzed:	Jan-08-09 17:00	Jan-08-09 17:00	Jan-08-09 17:00	Jan-08-09 17:00	Jan-08-09 17:00	
	Units/RL:	% RL	% RL	% RL	% RL	% RL	
Percent Moisture		9.15 1.00	9.31 1.00	10.45 1.00	6.26 1.00	3.37 1.00	
TPH By SW8015 Mod	Extracted:	Jan-08-09 09:30	Jan-08-09 09:30	Jan-08-09 09:30	Jan-08-09 09:30	Jan-08-09 09:30	
	Analyzed:	Jan-08-09 13:56	Jan-08-09 14:21	Jan-08-09 14:46	Jan-08-09 15:11	Jan-08-09 15:36	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
C6-C12 Gasoline Range Hydrocarbons		ND 16.5	ND 16.5	ND 16.8	ND 16.0	35.3 15.5	
C12-C28 Diesel Range Hydrocarbons		ND 16.5	ND 16.5	ND 16.8	109 16.0	212 15.5	
C28-C35 Oil Range Hydrocarbons		ND 16.5	ND 16.5	ND 16.8	47.0 16.0	115 15.5	
Total TPH		ND 16.5	ND 16.5	ND 16.8	156 16.0	362.3 15.5	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron
Odessa Laboratory Director



Certificate of Analysis Summary 321906

Elke Environmental, Inc., Odessa, TX

Project Name: Forrest



Project Id:

Contact: Logan Anderson

Project Location: CMU 20

Date Received in Lab: Wed Jan-07-09 04:20 pm


Report Date: 20-JAN-09

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	321906-001	321906-002	321906-003	321906-004	321906-005	
	<i>Field Id:</i>	TP1 @ 6'	TP2 @ 6'	TP3 @ 6'	SW2 @ 6'	SW3 @ 6'	
	<i>Depth:</i>	6 ft	6 ft	6 ft	6 ft	6 ft	
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	Jan-06-09 10:30	Jan-06-09 11:00	Jan-06-09 10:00	Jan-06-09 09:00	Jan-06-09 09:30	
TPH by EPA 418.1	<i>Extracted:</i>	Jan-19-09 15:08	Jan-19-09 15:08	Jan-19-09 15:08	Jan-19-09 15:08	Jan-19-09 15:08	
	<i>Analyzed:</i>						
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
TPH, Total Petroleum Hydrocarbons		ND 11.0	ND 11.0	82.4 11.2	700 10.7	997 10.3	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron
Odessa Laboratory Director

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
 - B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
 - D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
 - E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
 - F** RPD exceeded lab control limits.
 - J** The target analyte was positively identified below the MQL and above the SQL.
 - U** Analyte was not detected.
-
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
 - H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
 - K** Sample analyzed outside of recommended hold time.
 - JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
 - * Outside XENCO's scope of NELAC Accreditation.

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 2505 North Falkenburg Rd, Tampa, FL 33619
 5757 NW 158th St, Miami Lakes, FL 33014
 12600 West I-20 East, Odessa, TX 79765
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(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(361) 884-0371	(361) 884-9116



Form 2 - Surrogate Recoveries

Project Name: Forrest

Work Orders : 321906,

Project ID:

Lab Batch #: 746155

Sample: 321906-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

Lab Batch #: 746155

Sample: 321906-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 746155

Sample: 321906-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 746155

Sample: 321906-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 746155

Sample: 321906-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Forrest

Work Orders : 321906,

Project ID:

Lab Batch #: 746155

Sample: 321906-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 746155

Sample: 321906-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 746155

Sample: 522716-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 746155

Sample: 522716-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0314	0.0300	105	80-120	

Lab Batch #: 746155

Sample: 522716-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Forrest

Work Orders : 321906,

Project ID:

Lab Batch #: 745966

Sample: 321755-015 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	99.5	100	100	70-135	
o-Terphenyl	39.8	50.0	80	70-135	

Lab Batch #: 745966

Sample: 321755-015 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	40.6	50.0	81	70-135	

Lab Batch #: 745966

Sample: 321906-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	95.9	100	96	70-135	
o-Terphenyl	52.2	50.0	104	70-135	

Lab Batch #: 745966

Sample: 321906-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	94.1	100	94	70-135	
o-Terphenyl	51.3	50.0	103	70-135	

Lab Batch #: 745966

Sample: 321906-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	94.3	100	94	70-135	
o-Terphenyl	51.2	50.0	102	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Forrest

Work Orders : 321906,

Project ID:

Lab Batch #: 745966

Sample: 321906-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	94.9	100	95	70-135	
o-Terphenyl	51.5	50.0	103	70-135	

Lab Batch #: 745966

Sample: 321906-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	96.2	100	96	70-135	
o-Terphenyl	52.0	50.0	104	70-135	

Lab Batch #: 745966

Sample: 522620-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	43.7	50.0	87	70-135	

Lab Batch #: 745966

Sample: 522620-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	89.1	100	89	70-135	
o-Terphenyl	49.1	50.0	98	70-135	

Lab Batch #: 745966

Sample: 522620-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	44.9	50.0	90	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 \times A / B$

All results are based on MDL and validated for QC purposes.

Project Name: Forrest

Work Order #: 321906

Project ID:

Lab Batch #: 745936

Sample: 745936-1-BKS

Matrix: Solid

Date Analyzed: 01/08/2009

Date Prepared: 01/08/2009

Analyst: LATCOR

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Anions by EPA 300		Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes							
Chloride		ND	10.0	9.51	95	90-110	

Blank Spike Recovery [D] = $100 * [C] / [B]$

All results are based on MDL and validated for QC purposes.



BS / BSD Recoveries



Project Name: Forrest

Work Order #: 321906

Analyst: ASA

Date Prepared: 01/09/2009

Project ID:

Date Analyzed: 01/10/2009

Lab Batch ID: 746155

Sample: 522716-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		ND	0.1000	0.1024	102	0.1	0.1048	105	2	70-130	35	
Toluene		ND	0.1000	0.0971	97	0.1	0.0993	99	2	70-130	35	
Ethylbenzene		ND	0.1000	0.0998	100	0.1	0.1020	102	2	71-129	35	
m,p-Xylenes		ND	0.2000	0.1949	97	0.2	0.1986	99	2	70-135	35	
o-Xylene		ND	0.1000	0.0955	96	0.1	0.0970	97	2	71-133	35	

Analyst: ASA

Date Prepared: 01/19/2009

Date Analyzed: 01/19/2009

Lab Batch ID: 746919

Sample: 746919-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by EPA 418.1		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
TPH, Total Petroleum Hydrocarbons		ND	2500	2320	93	2500	2280	91	2	65-135	35	

Relative Percent Difference RPD = $200 * (C - F) / (C + F)$

Blank Spike Recovery [D] = $100 * (C) / [B]$

Blank Spike Duplicate Recovery [G] = $100 * (F) / [E]$

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



Project Name: Forrest

Work Order #: 321906

Analyst: BHW

Date Prepared: 01/08/2009

Project ID:

Date Analyzed: 01/08/2009

Lab Batch ID: 745966

Sample: 522620-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
C6-C12 Gasoline Range Hydrocarbons	ND	1000	1060	106	1000	1060	106	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	1010	101	1000	1020	102	1	70-135	35	

Relative Percent Difference RPD = $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] = $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS Recoveries



Project Name: Forrest

Work Order #: 321906

Lab Batch #: 745936

Project ID:

Date Analyzed: 01/08/2009

Date Prepared: 01/08/2009

Analyst: LATCOR

QC- Sample ID: 321906-001 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	530	200	675	73	80-120	X

Matrix Spike Percent Recovery [D] = $100 \times (C-A)/B$

Relative Percent Difference [E] = $200 \times (C-A)/(C+B)$

All Results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries



Project Name: Forrest

Work Order #: 321906

Project ID:

Lab Batch ID: 746155

QC- Sample ID: 321906-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 01/11/2009

Date Prepared: 01/09/2009

Analyst: ASA

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1101	0.0896	81	0.1101	0.1015	92	13	70-130	35	
Toluene	ND	0.1101	0.0843	77	0.1101	0.0943	86	11	70-130	35	
Ethylbenzene	ND	0.1101	0.0832	76	0.1101	0.0947	86	12	71-129	35	
m,p-Xylenes	ND	0.2201	0.1589	72	0.2201	0.1836	83	14	70-135	35	
o-Xylene	ND	0.1101	0.0778	71	0.1101	0.0890	81	13	71-133	35	

Lab Batch ID: 746919

QC- Sample ID: 321906-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 01/19/2009

Date Prepared: 01/19/2009

Analyst: ASA

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
TPH by EPA 418.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
TPH, Total Petroleum Hydrocarbons	ND	2750	2540	92	2750	2650	96	4	65-135	35	

Lab Batch ID: 745966

QC- Sample ID: 321755-015 S

Batch #: 1 Matrix: Soil

Date Analyzed: 01/08/2009

Date Prepared: 01/08/2009

Analyst: BHW

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1010	992	98	1010	1020	101	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1010	973	96	1010	1000	99	3	70-135	35	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times |(C-F)/(C+F)|$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit



Sample Duplicate Recovery



Project Name: Forrest

Work Order #: 321906

Lab Batch #: 745936

Date Analyzed: 01/08/2009

QC- Sample ID: 321906-001 D

Reporting Units: mg/kg

Project ID:

Date Prepared: 01/08/2009

Batch #: 1

Analyst: LATCOR

Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by EPA 300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	530	533	1	20	

Lab Batch #: 745941

Date Analyzed: 01/08/2009

QC- Sample ID: 321906-001 D

Reporting Units: %

Date Prepared: 01/08/2009

Batch #: 1

Analyst: BEV

Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	9.15	8.91	3	20	

Spike Relative Difference RPD $200 * |(B-A)/(B+A)|$
All Results are based on MDL and validated for QC purposes.

A Xenco Laboratories Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79768

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Logan Anderson

Project Name: Forest

Company Name Eike environmental

Project 6:

Company Address: 4817 andrews highway

Project Loc: CMU 20

City/State/Zip odessa Tx 79762

PO 6:

Telephone No: 432-366-0043

Fax No: 432-365-0884

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature:

e-mail:

[illegible]

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Client: Elke Env.
Date/ Time: 12.09 16.20
Lab ID #: 321900
Initials: al

Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	<u>Yes</u>	No	<u>3.5 °C</u>
#2	Shipping container in good condition?	<u>Yes</u>	No	
#3	Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	<u>Not Present</u>
#4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	<u>Not Present</u>
#5	Chain of Custody present?	<u>Yes</u>	No	
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No	
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No	
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	<u>ID written on Cont./ Lid</u>
#9	Container label(s) legible and intact?	<u>Yes</u>	No	<u>Not Applicable</u>
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No	
#11	Containers supplied by ELDT?	<u>Yes</u>	No	
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	<u>See Below</u>
#13	Samples properly preserved?	<u>Yes</u>	No	<u>See Below</u>
#14	Sample bottles intact?	<u>Yes</u>	No	
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No	
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No	
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	<u>See Below</u>
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	<u>See Below</u>
#19	Subcontract of sample(s)?	<u>Yes</u>	No	<u>Not Applicable</u>
#20	VOC samples have zero headspace?	<u>Yes</u>	No	<u>Not Applicable</u>

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

- Check all that Apply:
- ☐ See attached e-mail/ fax
 - ☐ Client understands and would like to proceed with analysis
 - ☐ Cooling process had begun shortly after sampling event

Attachment C

Disposal Manifests

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

D4P
M

NON-HAZARDOUS WASTE MANIFEST		NO 066427		1. PAGE <u> </u> OF <u> </u>		2. TRAILER NO. <u> </u>		
G E N E R A T O R	3. COMPANY NAME Forest Oil Corporation		4. ADDRESS 350 NW County Road		5. PICK-UP DATE 1/9/2009		#	
	PHONE NO. (505) 392-9797		CITY STATE ZIP Hobbs NM 88240		6. TNRCC I.D. NO.			
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:				8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol	11. TEXAS WASTE ID #
	a. Non-Regulated, Non-Hazardous Waste				1	CM		
	b.							
T R A N S P O R T E R S	c.							
	12. COMMENTS OR SPECIAL INSTRUCTIONS: MALDEN UNIT #20				13. WASTE PROFILE NO.			
	14. IN CASE OF EMERGENCY OR SPILL, CONTACT							
	NAME Kin Slaughter		PHONE NO. 575-887-4048		24-HOUR EMERGENCY NO.			
	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC							
D I S P O S I T O R	PRINTED/TYPED NAME				SIGNATURE		DATE	
	16. TRANSPORTER (1) NAME: ELK ENVIRONMENTAL				17. TRANSPORTER (2)			
	TEXAS I.D. NO.				NAME:			
	IN CASE OF EMERGENCY CONTACT:				TEXAS I.D. NO.			
	EMERGENCY PHONE:				IN CASE OF EMERGENCY CONTACT:			
D I S P O S I T O R	18. TRANSPORTER (1): Acknowledgment of receipt of material				19. TRANSPORTER (2): Acknowledgment of receipt of material			
	PRINTED/TYPED NAME Jose Brijano				PRINTED/TYPED NAME			
	SIGNATURE Jose Brijano DATE 1-9-09				SIGNATURE DATE			
	Lea Land, LLC		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 505-887-4048			
	PERMIT NO. WM-01-035 - New Mexico		20. COMMENTS					
D I S P O S I T O R	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.							
	AUTHORIZED SIGNATURE C. A. Tos		CELL NO.		DATE 1-9-09		TIME 2:00	

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 5

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

D4P
H

NON-HAZARDOUS WASTE MANIFEST		NO 066476		1. PAGE ___ OF ___		2. TRAILER NO. H				
G E N E R A T O R	3. COMPANY NAME Forest Oil Corporation		4. ADDRESS 350 NW County Road		5. PICK-UP DATE 1/12/2009					
	PHONE NO. (805) 202-9787		CITY Hobbs STATE NM ZIP 88240		6. TNRCC I.D. NO.					
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:				8. CONTAINERS	9. TOTAL	10. UNIT	11. TEXAS		
					No.	Type	QUANTITY	Wt/Vol.	WASTE ID #	
E N V I R O N M E N T A L	a. Non-Regulated, Non-Hazardous Waste				1	CM				
	b.									
	c. 30700									
R E C E I V E R	d. 32880 35240 38080									
	12. COMMENTS OR SPECIAL INSTRUCTIONS: CAPROCK MALLAMAR UNIT #20					13. WASTE PROFILE NO.				
T R A N S P O R T E R S	14. IN CASE OF EMERGENCY OR SPILL, CONTACT									
	NAME Kim Slaughter		PHONE NO. 575-887-4048		24-HOUR EMERGENCY NO.					
O F F I C E R	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC									
	PRINTED/TYPED NAME				SIGNATURE				DATE	
T R A N S P O R T E R S	16. TRANSPORTER (1)				17. TRANSPORTER (2)					
	NAME: ELK ENVIRONMENTAL				NAME:					
D I S P O S I T O R Y	TEXAS I.D. NO.				TEXAS I.D. NO.					
	IN CASE OF EMERGENCY CONTACT:				IN CASE OF EMERGENCY CONTACT:					
D I S P O S I T O R Y	EMERGENCY PHONE:				EMERGENCY PHONE:					
	18. TRANSPORTER (1): Acknowledgment of receipt of material				19. TRANSPORTER (2): Acknowledgment of receipt of material					
D I S P O S I T O R Y	PRINTED/TYPED NAME Joe R. [Signature]				PRINTED/TYPED NAME					
	SIGNATURE Joe R. [Signature] DATE 1/12				SIGNATURE				DATE	
D I S P O S I T O R Y	Lea Land, LLC		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM			PHONE: 505-887-4048				
	PERMIT NO. WM-01-035 - New Mexico				20. COMMENTS					
D I S P O S I T O R Y	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.									
	AUTHORIZED SIGNATURE [Signature]				CELL NO. —		DATE 1/12/2009		TIME 8:55	

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Francis

NON-HAZARDOUS WASTE		NO	066429	1. PAGE	OF	2. TRAILER NO.	7
G E N E R A T O R	3. COMPANY NAME Forest Oil Corporation	4. ADDRESS 350 NW County Road			5. PICK-UP DATE 1/9/2009		
	PHONE NO. (505) 392-9797	CITY Hobbs	STATE NM	ZIP 78240	6. TNRCC LD. NO.		
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:				8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.
	a. Non-Regulated, Non-Hazardous Waste				1	CM	
T R A N S P O R T E R S	b.						
	c.						
	12. COMMENTS OR SPECIAL INSTRUCTIONS: MAL JAMAR UNIT #20				13. WASTE PROFILE NO.		
	14. IN CASE OF EMERGENCY OR SPILL, CONTACT						
D I S P O S I T Y	NAME Kin Slaughter		PHONE NO. 575-887-4048		24-HOUR EMERGENCY NO.		
	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC						
	PRINTED/TYPED NAME			SIGNATURE		DATE	
	16. TRANSPORTER (1) NAME: ELK ENVIRONMENTAL TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:			17. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:			
D I S P O S I T Y	18. TRANSPORTER (1): Acknowledgment of receipt of material			19. TRANSPORTER (2): Acknowledgment of receipt of material			
	PRINTED/TYPED NAME: Baltazar Z Franco			PRINTED/TYPED NAME:			
	SIGNATURE: Baltazar Z Franco DATE: 1/9			SIGNATURE: DATE:			
	Lea Land, LLC			ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 505-887-4048	
D I S P O S I T Y	PERMIT NO. WM-01-035 - New Mexico			20. COMMENTS			
	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.						
	AUTHORIZED SIGNATURE Dantas			CELL NO.		DATE 1-9-09	
	TIME 8:35						

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Baltazar 7

NON-HAZARDOUS WASTE		NO	066478	1. PAGE ___ OF ___	2. TRAILER NO. 7
GENERATOR	3. COMPANY NAME Forest Oil Corporation PHONE NO. (505) 392-6797		4. ADDRESS 350 NW County Road CITY: Hobbs STATE: NM ZIP: 88240		5. PICK-UP DATE 1/12/2009
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol
	a. Non-Regulated, Non-Hazardous Waste		1	CM	
	b.				
	c. 33460				
RECEIVER	d. 37160 34920 38040				
	12. COMMENTS OR SPECIAL INSTRUCTIONS: CAPROCK MALJAMAR UNIT #20			13. WASTE PROFILE NO.	
TRANSPORTER	14. IN CASE OF EMERGENCY OR SPILL, CONTACT				
	NAME Kin Slaughter		PHONE NO. 575-887-4048		24-HOUR EMERGENCY NO.
DISPOSAL	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC				
	PRINTED/TYPED NAME		SIGNATURE		DATE
TRANSPORTER	16. TRANSPORTER (1)		17. TRANSPORTER (2)		
	NAME: ELK ENVIRONMENTAL		NAME:		
	TEXAS I.D. NO.		TEXAS I.D. NO.		
	IN CASE OF EMERGENCY CONTACT:		IN CASE OF EMERGENCY CONTACT:		
DISPOSAL	EMERGENCY PHONE:		EMERGENCY PHONE:		
	18. TRANSPORTER (1): Acknowledgment of receipt of material		19. TRANSPORTER (2): Acknowledgment of receipt of material		
DISPOSAL	PRINTED/TYPED NAME: Baltazar 2 Francisco		PRINTED/TYPED NAME		
	SIGNATURE: Baltazar 2 Francisco DATE: 1/12		SIGNATURE DATE		
DISPOSAL	Lea Land, LLC		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 505-887-4048
	PERMIT NO. WM-01-035 - New Mexico		20. COMMENTS		
	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.				
DISPOSAL	AUTHORIZED SIGNATURE: [Signature]		CELL NO.	DATE: 1/12/2009	TIME: 855

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

FRANCO

NON-HAZARDOUS WASTE MANIFEST		NO	066183	1. PAGE ___ OF ___	2. TRAILER NO.	
GENERATOR'S CERTIFICATION	3. COMPANY NAME FOREST OIL PHONE NO.	4. ADDRESS CITY _____ STATE <u>✓</u> ZIP _____		5. PICK-UP DATE 12-23-08		
			6. TNRCC I.D. NO.			
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
	a. Non-Regulated, Non Hazardous Waste		1	CM		
	b.					
TRANSPORTER'S CERTIFICATION	c.					
	d. ① 46800 ② 41400					
	12. COMMENTS OR SPECIAL INSTRUCTIONS: CAPROCK MAL JAMAR UNIT # 30				13. WASTE PROFILE NO.	
	14. IN CASE OF EMERGENCY OR SPILL, CONTACT					
	NAME Kin Slaughter		PHONE NO 575-887-4048		24-HOUR EMERGENCY NO.	
DISPOSAL FACILITY'S CERTIFICATION	15. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC					
	PRINTED/TYPED NAME			SIGNATURE		DATE
	16. TRANSPORTER (1) NAME: ELK ENVIRONMENTAL TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:			17. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:		
	18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME <u>Bolter 2 Franco</u>			19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME _____		
	SIGNATURE <u>Bolter 2 Franco</u> DATE <u>12-23-08</u>			SIGNATURE _____ DATE _____		
DISPOSAL FACILITY'S CERTIFICATION	Lea Land, LLC		ADDRESS: Mile Marker 64, U.S. Hwy. 62/180, 30 Miles East of Carlsbad, NM		PHONE: 505-887-4048	
	PERMIT NO. WM-01-035 - New Mexico		20. COMMENTS			
	21. DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.					
	AUTHORIZED SIGNATURE <u>[Signature]</u>		CELL NO. _____		DATE 12-23-08	TIME 8:35

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

A-96
Solis

NON-HAZARDOUS WASTE MANIFEST		NO	066428		1. PAGE	OF	2. TRAILER NO.		Solis		
GENERATOR'S CERTIFICATION:	3. COMPANY NAME Forest Oil Corporation		4. ADDRESS 350 NW County Road			5. PICK-UP DATE 1/9/2009		6. TNRCC I.D. NO.			
	PHONE NO. (505) 392-0797		CITY Hobbs		STATE NM	ZIP 88240					
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:					8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #	
	a. Non-Regulated, Non-Hazardous Waste					✓	CM				
	b.										
TRANSPORTER'S CERTIFICATION:	c.										
	④ 45420 ④ 48640 ③ 44840										
	12. COMMENTS OR SPECIAL INSTRUCTIONS:					13. WASTE PROFILE NO.					
	14. IN CASE OF EMERGENCY OR SPILL, CONTACT					24-HOUR EMERGENCY NO.					
	NAME: PHONE NO.:										
DISPOSAL FACILITY'S CERTIFICATION:	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC										
	PRINTED/TYPED NAME					SIGNATURE					DATE
	16. TRANSPORTER (1) NAME: ELK ENVIRONMENTAL					17. TRANSPORTER (2)					
	TEXAS I.D. NO.					NAME:					
	IN CASE OF EMERGENCY CONTACT:					TEXAS I.D. NO.					
DISPOSAL FACILITY'S CERTIFICATION:	EMERGENCY PHONE:					IN CASE OF EMERGENCY CONTACT:					
	18. TRANSPORTER (1): Acknowledgment of receipt of material					19. TRANSPORTER (2): Acknowledgment of receipt of material					
	PRINTED/TYPED NAME Roman Solis					PRINTED/TYPED NAME					
	SIGNATURE Roman Solis DATE 1/9					SIGNATURE DATE					
	ADDRESS:					PHONE:					
Lea Land, LLC					Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM						
PERMIT NO. WM-01-035 - New Mexico					20. COMMENTS						
21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.											
AUTHORIZED SIGNATURE					CELL NO.		DATE		TIME		
[Signature]					—		1-9-09		8:35		

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 4

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Solis

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 4

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Solis
A-96

NON-HAZARDOUS WASTE MANIFEST		NO	066479	1. PAGE ___ OF ___	2. TRAILER NO.
G E N E R A T O R	3. COMPANY NAME Forest Oil Corporation PHONE NO. 1505-382-8787	4. ADDRESS 350 NW County Road CITY Hobbs STATE NM ZIP 89240		5. PICK-UP DATE 1/12/2009	
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.
	a. Non-Regulated, Non Hazardous Waste		1	CM	
	b.				
T R A N S P O R T E R S	c.				
	d. 31,980 36000 38340				
	12. COMMENTS OR SPECIAL INSTRUCTIONS: CAPROCK MALJAMAR UNIT #20			13. WASTE PROFILE NO.	
	14. IN CASE OF EMERGENCY OR SPILL, CONTACT NAME PHONE NO. 24-HOUR EMERGENCY NO. Kin Slaughter 875-887-4048				
D I S P O S I T O R	15. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC		PRINTED/TYPED NAME SIGNATURE DATE		
	16. TRANSPORTER (1) NAME: ELK ENVIRONMENTAL TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:		17. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:		
	18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME Roman Solis SIGNATURE Roman Solis DATE 1/12		19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME SIGNATURE DATE		
	20. COMMENTS		21. DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.		
D I S P O S I T O R	Lea Land, LLC		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 505-887-4048
	PERMIT NO. WM-01-035 - New Mexico				
	AUTHORIZED SIGNATURE Santos Ontiveros		CELL NO.	DATE 1/12/2009	TIME 8:55

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 4

Attachment D

Approved Initial C-144 Closure Plan

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

RECEIVED

DEC 18 2008

HOBBSOCD

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☒ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1. Operator: Forest Oil OGRID #: 8041
Address: 3504 NW County Rd Hobbs, NM 88240
Facility or well name: Caprock Maljamar Unit #20
API Number: 30-025-01434 OCD Permit Number: PI-00808
U/L or Qtr/Qtr K Section 17 Township 17S Range 33E County: Lea
Center of Proposed Design: Latitude 32° 49.969' N Longitude 103° 41.246' W NAD: ☐ 1927 ☒ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2. ☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☒ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 12 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☒ Welded ☐ Factory ☐ Other _____ Volume: 50 bbl Dimensions: L 15' x W 15' x D 5'

3. ☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4. ☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: _____ bbl Type of fluid: _____
Tank Construction material: _____
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness _____ mil ☐ HDPE ☐ PVC ☐ Other _____

5. ☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

Fencing: Subsection D of 19.15.17.11 NMAC (*Applies to permanent pits, temporary pits, and below-grade tanks*)

- ☐ Chain link, six feet in height, two strands of barbed wire at top (*Required if located within 1000 feet of a permanent residence, school, hospital, institution or church*)
- ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
- ☐ Alternate. Please specify _____

7.

Netting: Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

- ☐ Screen ☐ Netting ☐ Other _____
- ☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

- ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

- ☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.
- ☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

11. **Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☒ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☒ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
- ☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12. **Closed-loop Systems Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
- ☐ Previously Approved Design (attach copy of design) API Number: _____
- ☐ Previously Approved Operating and Maintenance Plan API Number: _____ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13. **Permanent Pits Permit Application Checklist:** Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14. **Proposed Closure:** 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

- Type: ☐ Drilling ☒ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System
☐ Alternative
- Proposed Closure Method: ☒ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15. **Waste Excavation and Removal Closure Plan Checklist:** (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16. **Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:** (19.15.17.13.D NMAC)

Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17. **Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

18. **On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- ☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Rick RickmanTitle: HSE SpecialistSignature: Rick RickmanDate: 12-15-08e-mail address: rdrickman@forestoil.comTelephone: 575-392-9797

20.

OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: Jeffrey S. SiskApproval Date: 12/16/08Title: Environmental Engineer/SpecialistOCD Permit Number: PI-DD808

21.

Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ Closure Completion Date: _____

22.

Closure Method:

☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

23.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____

Disposal Facility Permit Number: _____

Disposal Facility Name: _____

Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

- ☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.

Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits)
☐ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☐ Disposal Facility Name and Permit Number
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique
☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____

Longitude _____

NAD: ☐ 1927 ☐ 1983

25.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): _____

Title: _____

Signature: RUC/K

Date: _____

e-mail address: _____

Telephone: _____

Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768
Phone (432) 366-0043 Fax (432) 366-0884

December 15, 2008

NMOCD
Attn: Larry Johnson
1625 N. French Dr.
Hobbs, NM 88240

Re: Closure Plan for Forest Oil – Caprock Maljamar Unit #20

Mr. Larry Johnson

NM-01-0006
The proposed closure for the above well is waste excavation and removal. All excess fluids will be removed and disposed at a division-approved facility. The drilling mud and liner will be excavated and hauled to Controlled Recovery Inc. (Permit # R9466). After all drilling mud and liner have been removed, the pit bottoms and walls will be sampled with a minimum 5 point composite for TPH 418.1, total BTEX, Benzene, Chlorides and the DRO and GRO combined fractions. The levels will not exceed 0.2 mg/kg of Benzene; 50 mg/kg of total BTEX; 2,500 mg/kg of TPH 418.1; 500 mg/kg of combined fraction GRO/DRO; 1,000 mg/kg of Chlorides. If samples exceed these levels a C-141 will be submitted.

Once backfill is approved the site will be backfilled with clean native soil and a minimum of 1' of topsoil will be placed on the site to promote revegetation. The site will be reseeded with BLM Seed Mixture #2. A final report will be attached to the Final C-144 once closure is commenced.

Thanks,
Curtis Elam
Field Supervisor

**New Mexico Office of the State Engineer
POD Reports and Downloads**

Township: Range: Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

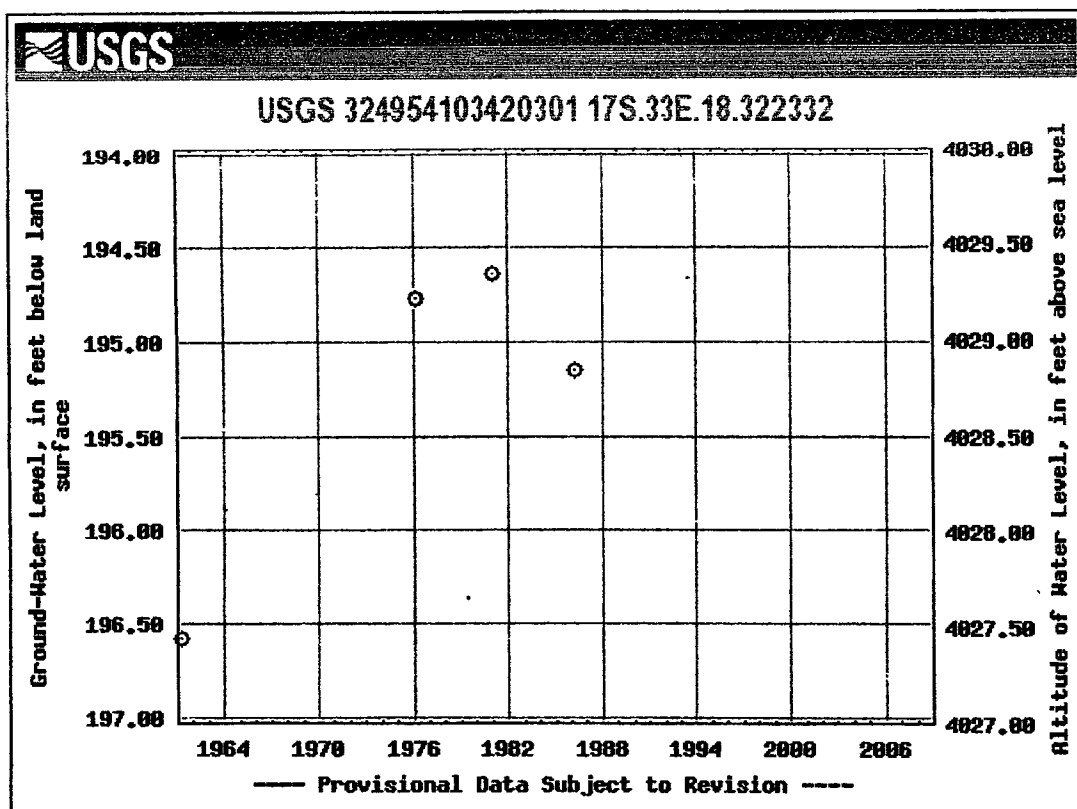
Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic
© All

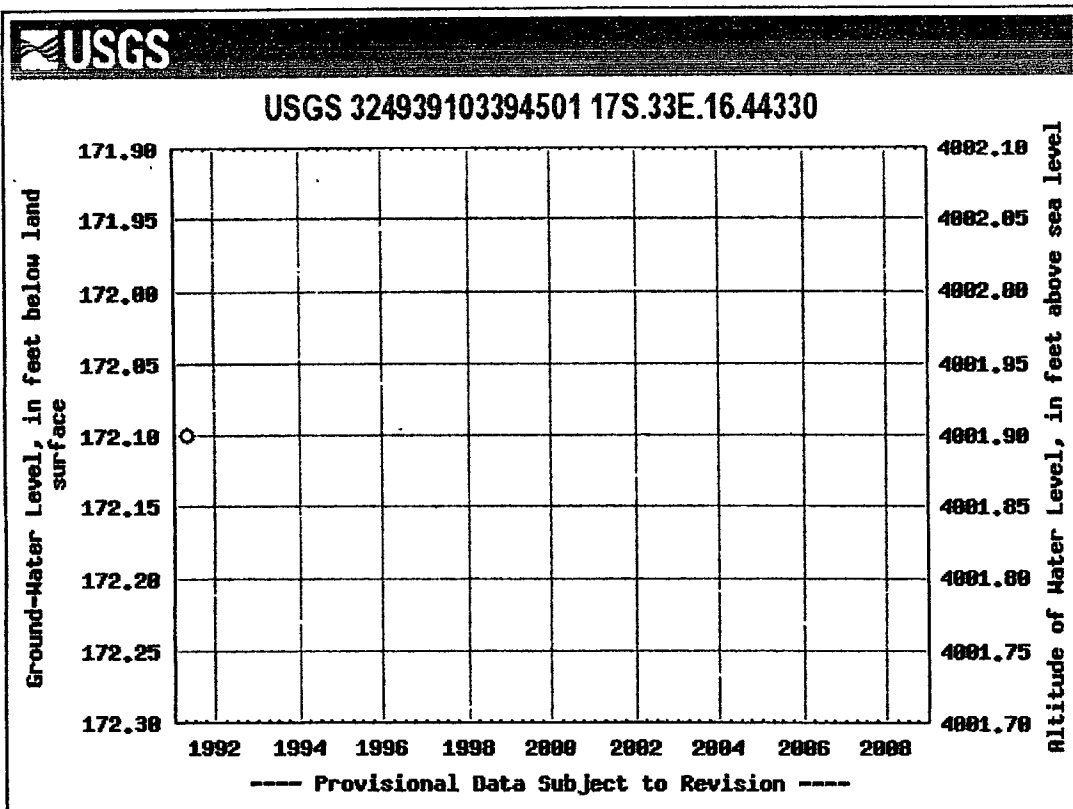
AVERAGE DEPTH OF WATER REPORT 12/15/2008

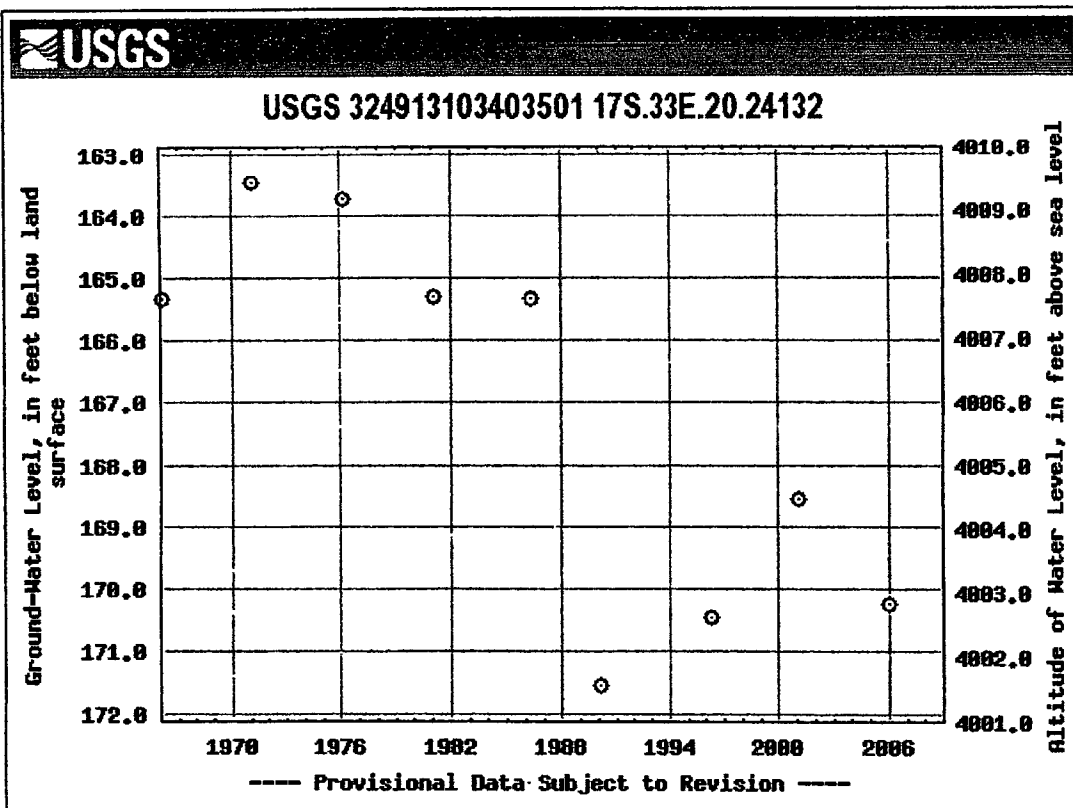
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
L	17S	33E	01				2	150	150	150
L	17S	33E	02				4	151	168	158
L	17S	33E	03				2	155	155	155
L	17S	33E	06				2	90	90	90
L	17S	33E	07				2	114	214	164
L	17S	33E	08				2	173	173	173
L	17S	33E	09				2	160	161	161
L	17S	33E	13				2	165	165	165
L	17S	33E	17				2	180	180	180
L	17S	33E	18				2	188	188	188
L	17S	33E	20				3	190	190	190
L	17S	33E	23				2	70	160	115
L	17S	33E	35				4	150	160	155

Record Count: 31

*Closest
Data*



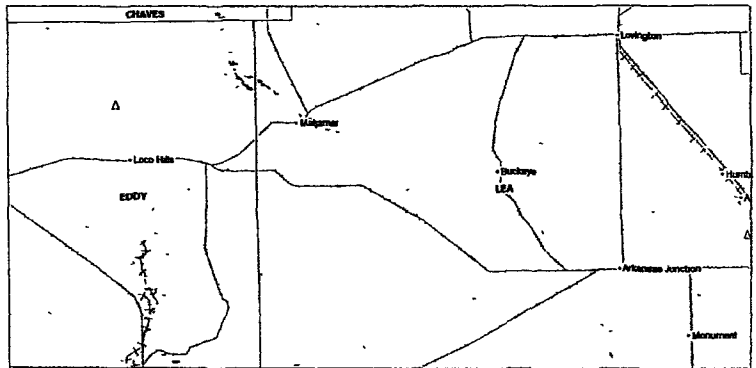




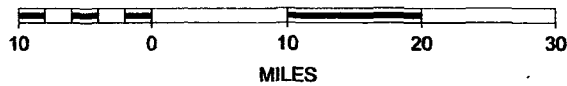
Forest - CMU #94

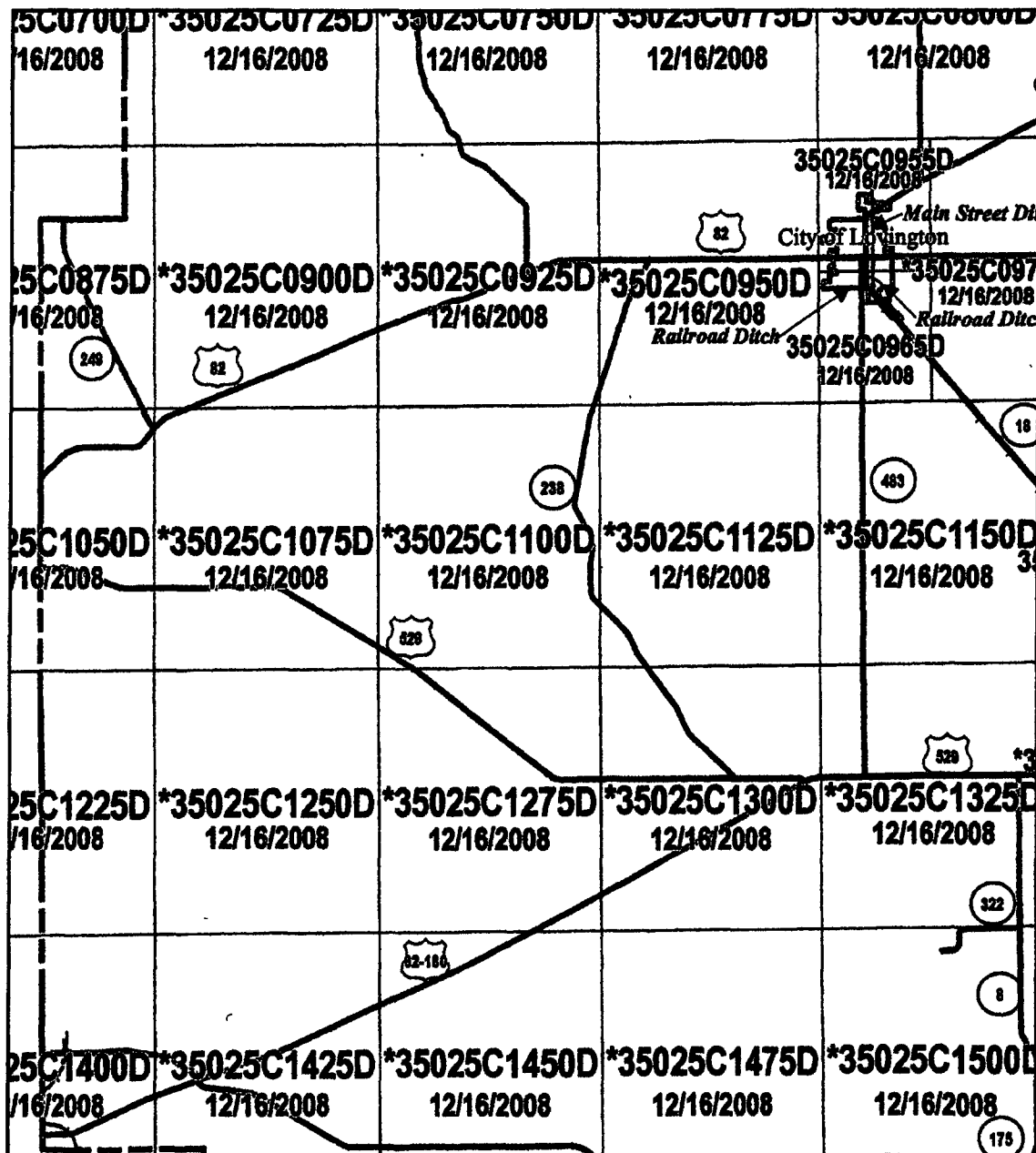
Mines, Mills & Quarries Commodity Groups

-  **Aggregate & Stone Mines**
-  **Coal Mines**
-  **Industrial Minerals Mines**
-  **Industrial Minerals Mills**
-  **Metal Mines and Mill Concentrate**
-  **Potash Mines & Refineries**
-  **Smelters & Refineries**



SCALE 1 : 843,707





MAP INDEX

FIRM

FLOOD INSURANCE RATE MAP

LEA COUNTY,
NEW MEXICO

AND INCORPORATED AREAS

MAP INDEX

PANELS PRINTED: 440, 445, 955,
965, 1165, 1170, 1200, 1335, 1345, 1355,
1365, 1670, 2102



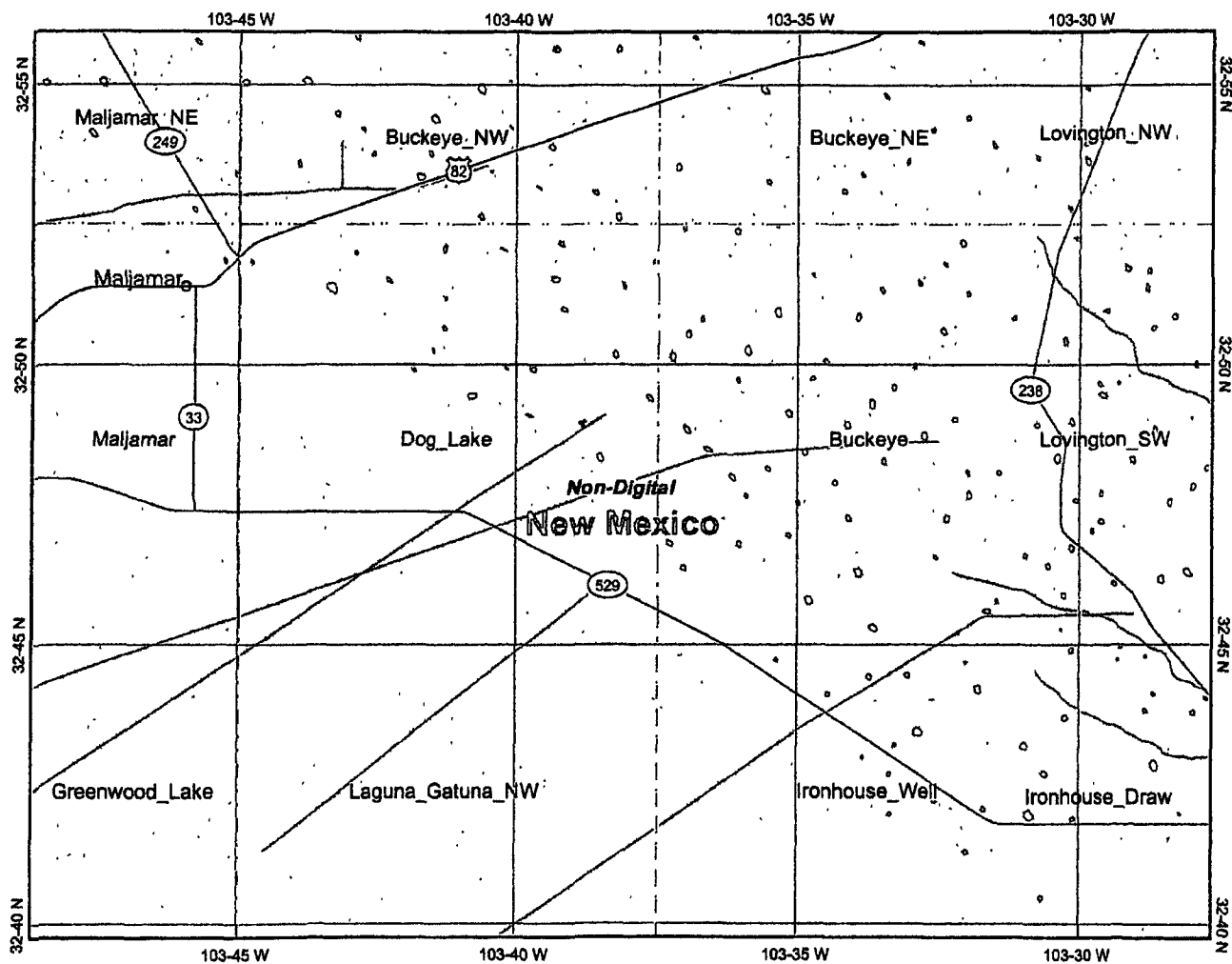
MAP NUMBER
35025CIND0A

EFFECTIVE DATE
DECEMBER 16, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.maf.fema.gov

Forest Oil - CMU #20



Legend

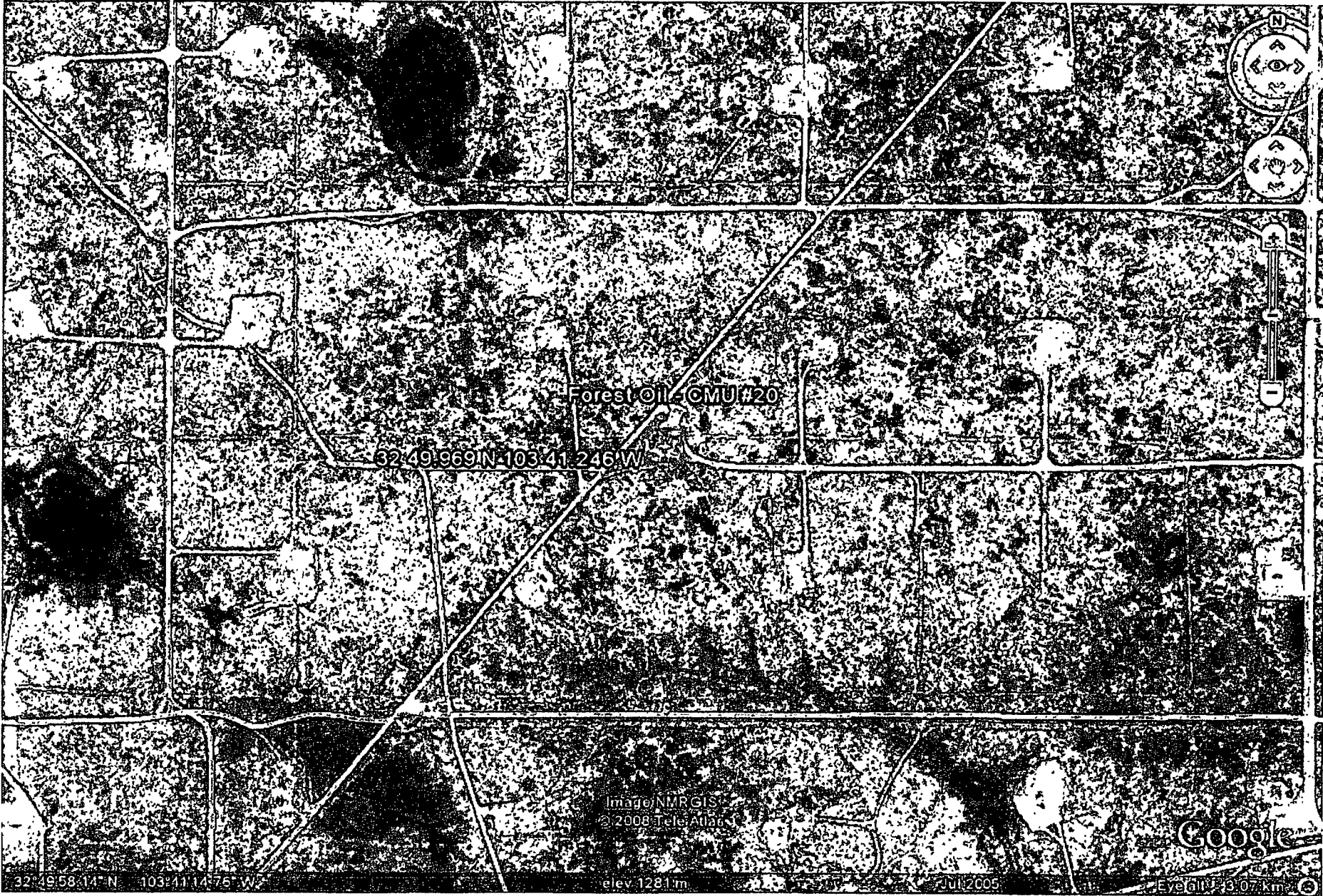
- Interstate
- Major Roads
- Other Road
- Interstate
- State highway
- US highway
- Cities
- USGS Quad Index 24K
- Lower 48 Available Wetland Data
- Non-Digital
- Digital
- No Data
- Scan
- NHD Waterbodies
- LAKE/POND
- RESERVOIR
- STREAM/RIVER
- NHD Streams
- Counties 100K
- Urban Areas 300K
- States 100K
- South America
- North America



Scale: 1:210,244

Map center: 32°47' N, 103°38' W

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.



Forest Oil CMU #20

32°49'56.9"N 103°41'24.6"W

Image/NMRGIS
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Google

32°49'58.14" N 103°41'14.76" W

elev 1281 m

Jul 2005

Eye alt 3.07 km