Encore M State #1

Located in SECTION 30, T22S, R37E of Lea County, NM

GPS Reading of 32°-22'-05"-N & 103°-11'-51"-W

API # 30-025-~~38964~~ 38961

Reserve Drilling Pit Closure Report

RECEIVED
MAR 03 2009
HOBBSOCD

Presented to:

Encore Operating LP

777 Main St Suite 1400
Fort Worth, Texas 76105

C/O SB Oilfield Service
213 S Mesa
Carlsbad, NM 88220

Prepared by:

Phoenix Environmental, LLC.

P.O. Box 1856
Hobbs, New Mexico 88240

TABLE OF CONTENTS

SECTION I

Form C-1
July 21. 20

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

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 ordinance

1.
Operator: Encore Operating LP OGRID #:
Address: 777 main st suite 1400 fortworth TX. 76102
Facility or well name: Encore M State #1
API Number: 30-025-38961 OCD Permit Number:
U/L or Qtr/Qtr A Section 30 Township 22s Range 37e County: Lea Co. N.M.
Center of Proposed Design: Latitude 32°22'05 Longitude 103° 11' 51" 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: 3000 bbl Dimensions: L 120 x W 120 x D 6'

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	☐ Yes ☑ 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	☐ Yes ☑ 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	☐ Yes ☐ No ☑ 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	☐ Yes ☐ No ☑ 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	☐ 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

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: Sundance NM01-003

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 H_2S, 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 indentify 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 operation:
☐ 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 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 indicat 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): Bonnie N. Hawkins Title: Agent

Signature: Bonnie N. Hawkins Date:

e-mail address: Telephone: 432-208-1203

20.

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

OCD Representative Signature: Approval Date: 9.23.08

Title: ENVIRONMENTAL ENGINEER OCD Permit Number:

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 indentify 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): Chuck Roberts Title: Production Foreman

Signature: Chuck Roberts Date: 2/26/09

e-mail address: croberts@encoreacq.com Telephone: 432-362-2209

September 17, 2008

Encore Operating LP
777 Main St., Suite 1400
Fort Worth, Texas 76105

Attn: Mr. Ronnie Hawkins

RE: Work Plan for the Encore M State #1 Drilling Pit Located in UL-A, Sec 30, T22S and R37E of Lea County, New Mexico API # 30-025-~~38964~~ 38961

Dear Mr. Hawkins:

SB Oilfield Services would like to take this time to thank you and Encore Operating LP, for the opportunity to provide our professional services. Please find attached our work plan for the above listed site.

If you have any questions and/or need more data in regards to projects please call at any time. My cell phone is 575-706-5645.

Sincerely,

Cris Busby
Project Manager
SB Oilfield Services

Summary/Overview

The Encore M State #1 drilling pit should be completed and remediated in accordance with the standards of the NMOCD. It is our understanding that any potential contamination from the site was a result of activities associated with the drilling and production of oil and gas.

The potential contaminates of concern are mid to high-level concentrations of drilling mud and cuttings that were left in the pit once drilling operations were completed.

The lands primary use is domestic pasture for ranching and the production of oil and gas.

The ground water depth data available for this area showed the depth to ground water to be in the 100' range BGS.

Pursuant to the standards of the NMOCD, the clean up level for this site will be at <2,500ppm of TPH, <50ppm for BTEX and Chlorides less than <1,000ppm.

The following scope of work was based on data from our site visit and the requirements of the NMOCD for site clean up following the new pit rule 19.15.17 NMAC that started on 6-16-08.

Scope of Work for Off-Site Disposal

NOTE: SB, for the purpose of this work plan, will estimate that there is approximately 3,000cyds of impacted soils at the site that needs to be addressed for site closure.

1. SB will mobilize to the site located south of Eunice, NM equipment and personnel necessary to start and complete the site remediation as required, getting the site back into compliance with the requirements of subsection G of 19.15.17.13 NMAC.

2. At the site a staging area will be set up for site control and safety.

3. The impacted soils will be excavated, stabilized and loaded into trucks for off-site disposal.

4. Impacted soils at the site will then be transported to a NMOCD approved disposal facility for disposal (Sundance Permit # NM01-003).

5. SB will field screen the site during the excavation, and, once the TPH BTEX and CL has dropped below clean-up requirements, final samples will be taken and sent to a third party lab for analysis and tested for BTEX 8021 B, TPH 418.1, TPH 8015 GRO/DRO and CL (chlorides) to meet the requirements of subsection D of 19.15.17.13 NMAC.

6. Once all of the remediation criteria have been met for site closure and compliance, the site will be backfilled with clean material from the site and contoured with a crown to prevent the ponding of water to meet the requirements of subsection H of 19.15.17.13 NMAC.

7. The site will be reseeded once backfilling operations have been completed to meet the requirements of subsection I of 19.15.17.13 NMAC

8. Once all of the closure criteria have been met, a final closure report will be prepared by SB. This report will include a summary of remediation operations, findings on-site and lab analysis, site maps and project photos to meet the requirements of subsection K of 19.15.17.13 NMAC.

If you have any questions and/or need more data in regards to this project please call 575-706-5645 at any time.

Sincerely,

Cris Busby
Project Manager
SB Oilfield Services

SECTION II

Project Overview

SB Oilfield Service. (SB) was contracted for the closure of a reserve-drilling pit on the Encore M State #1, belonging to Encore Operating LP. The Encore M State #1 is located in Section 30 T22S R37E. The GPS Reading is 32°22'05"N & 103°11'51"W, with an elevation of 3408 feet above sea level. The land, in and around the site, is primarily used as domestic pasture for ranching and the production of oil and gas. The pit site is located on the south side of the location.

The potential contaminates of concern were mid- to high-level concentrations of drill cuttings, and drilling fluids that were left after drilling operations were completed.

The ground water depth data available from the State of New Mexico Engineers' office showed the vertical depth to the top of water to be about 100 feet below surface.

Pursuant to the NMOCD guidelines for clean up of unlined surface impoundments, the clean up level for this site will be at <2,500 ppm for TPH (Total Petroleum Hydrocarbons) and <50 ppm for BTEX (Benzene, Toluene, Ethylbenzene, and Xylene). The NMOCD has also asked for CL (Chlorides) be returned back as close to background levels as possible or <1,000 ppm.

Findings and Conclusion

It appeared that in excess of 6,020 cubic yards (cyds) of cuttings, drilling mud, and soil were impacted in the pit area with the dimensions of 120'x120'x6'. . Impacted soils at the site were transported to a NMOCD approved disposal facility for disposal. (Sundance Permit # NM01-003)

The bottom of the excavation (approximately 10 feet) was tested for TPH, BTEX & Chlorides to make certain that the target limits had been met prior to backfilling and compaction for closure. The site cleaned up well with vertical depth of impact, listed above at 10 feet and not impacting groundwater. All of the final lab analyses were below the NMOCD guidelines for unlined surface impoundments (refer to attached laboratory reports for actual levels.)

The site was backfilled and compacted with clean backfill and contoured with a crown back to grade to prevent ponding on the area. The site was reseeded and should vegetate very well with upcoming rains.

Chronology of Operations

1. *November 19, 2008 – SB mobilized on-site. The first order on the agenda was a tailgate safety meeting to review any potential safety concerns of the site and to cover the clean- up operations. (Please note that a daily safety meeting is the first order of the day before any work begins on site). New Mexico One Call was notified of the intent to finish the pit closure.*

2. *November 20, 2008 – Crew began excavating impacted soils from the reserve drill pit and loaded the soils into trucks. Trucks hauled 240 cubic yards of drill cuttings off site to Sundance (Permit #NM01-003), a NMOCD disposal facility.*

3. *November 21, 2008– – Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 220 cubic yards of impacted soil and 100 bbls of solids off site for disposal.*

4. *November 24, 2008– Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 120 cubic yards of impacted soil off site for disposal.*

5. *November 25, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 280 cubic yards of impacted soil and 50 bbls of drilling fluid off site for disposal.*

6. *November 26, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 280 cubic yards of impacted soil off site for disposal.*

7. *December 1, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 340 cubic yards of impacted soil and 130 bbls of drilling fluid off site for disposal.*

8. *December 2, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 300 cubic yards of impacted soil off site for disposal.*

9. *December 3, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 300 cubic yards of impacted soil off site for disposal.*

10. *December 4, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 220 cubic yards of impacted soil off site for disposal.*

11. *December 5, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 240 cubic yards of impacted soil off site for disposal.*

12. *December 6, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 220 cubic yards of impacted soil and 360 bbls of drilling fluid off site for disposal.*

13. *December 8, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 380 cubic yards of impacted soil off site for disposal.*

14. *December 9, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 500 cubic yards of impacted soil off site for disposal.*

15. *December 10, 2005 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 600 cubic yards of impacted soil off site for disposal.*

16. *December 11, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 600 cubic yards of impacted soil off site for disposal.*

17. *December 12, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 600 cubic yards of impacted soil off site for disposal.*

18. *December 15, 2008 - Crew continued to excavate impacted soils from the reserve drill pit and loaded into trucks. Trucks hauled 580 cubic yards of impacted soil off site for disposal.*

19. *December 16, 2008 – The bottom of the reserve drill pit was cleaned and final samples were taken and sent to a third party laboratory for analysis Chlorides for final verification of the limits met. (Please refer to attached reports, pages 13 through 15 of this report).*

20. *December 17, 2008 – Crew loaded trucks with caliche and hauled to location. Reverse drill pit was backfilled with caliche. Final contouring and compactions was implemented to return the site back to grade. Contouring was completed with a crown to prevent rainwater ponding.*

Limitations

Phoenix Environmental LLC has prepared this report to the best of its ability. No other warranty expressed, implied or intended is made.

This report has been prepared for SB Oilfield Service our client. The information contained in this report including all exhibits and attachments, may not be used by any other party without the express consent from Phoenix Environmental LLC and/or the client.

Certification

The following Phoenix Environmental LLC personnel have reviewed this report and verify that to the best of their knowledge the contents are true and correct.

Name: ***Allen Hodge, REM # 7096***

Signature:

Title: VP Operations
Phoenix Environmental LLC

SECTION III

Summary Report

Chris Busby
SB Oil Field Serv.
P.O. Box 1502
Carlsbad, NM 88221-1502

Report Date: January 5, 2009

Work Order: 8122410

Project Location: Sec.30, T22S-R37E, Lea Co., NM
Project Name: Encore M State #1
Project Number: API 30-025-~~38964~~ 38961

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
183575	#001 NW Qtr. @ 10'	soil	2008-12-15	15:00	2008-12-24
183576	#002 NE Qtr. @ 10'	soil	2008-12-15	15:15	2008-12-24
183577	#003 Center 10'	soil	2008-12-15	15:30	2008-12-24
183578	#004 SW Qtr. @ 10'	soil	2008-12-15	15:45	2008-12-24
183579	#005 SE Qtr. @ 10'	soil	2008-12-15	16:00	2008-12-24
183580	#006 Background	soil	2008-12-15	16:30	2008-12-24

	BTEX				MTBE	TPH 418.1	TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	TRPHC	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
183575 - #001 NW Qtr. @ 10'	<0.0100	<0.0100	<0.0100	<0.0100		<10.0	<50.0	<1.00
183576 - #002 NE Qtr. @ 10'	<0.0100	<0.0100	<0.0100	<0.0100		<10.0	<50.0	<1.00
183577 - #003 Center 10'	<0.0100	<0.0100	<0.0100	<0.0100		<10.0	<50.0	<1.00
183578 - #004 SW Qtr. @ 10'	<0.0100	<0.0100	<0.0100	<0.0100		<10.0	<50.0	<1.00
183579 - #005 SE Qtr. @ 10'	<0.0100	<0.0100	<0.0100	<0.0100		<10.0	<50.0	<1.00
183580 - #006 Background	<0.0100	<0.0100	<0.0100	<0.0100		<10.0	<50.0	<1.00

Sample: 183575 - #001 NW Qtr. @ 10'

Param	Flag	Result	Units	RL
Chloride		**132**	mg/Kg	3.25

Sample: 183576 - #002 NE Qtr. @ 10'

Param	Flag	Result	Units	RL
Chloride		**76.8**	mg/Kg	3.25

This is only a summary. Please, refer to the complete report package for quality control data.

Sample: 183577 - #003 Center 10'

Param	Flag	Result	Units	RL
Chloride		**176**	mg/Kg	3.25

Sample: 183578 - #004 SW Qtr. @ 10'

Param	Flag	Result	Units	RL
Chloride		**138**	mg/Kg	3.25

Sample: 183579 - #005 SE Qtr. @ 10'

Param	Flag	Result	Units	RL
Chloride		**119**	mg/Kg	3.25

Sample: 183580 - #006 Background

Param	Flag	Result	Units	RL
Chloride		<32.5	mg/Kg	3.25

LAB Order ID # 812270 Page _____ of _____

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: SB Services
Phone #: (575) 706-5645
Address: (Street, City, Zip) Po Box 1502 Carlsbad NM 88221
Fax #: (575) 628-0176
Contact Person: Cris Busby
E-mail: crisbusby@gmail.com
Invoice to: (If different from above) Same
Project #: Api# 30-025-38961
Project Name: Encore M State #1
Project Location (including state): Sec. 30, T22s, R37e Lea Co. NM.
Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE		PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE		SAMPLING: DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Cl (Titr/Calc)				Turn Around Time if different from standard	Hold
1835	#001 NW 1/4 at 10'	1	4oz		X								X			12/15	3:00																X					
76	#002 NE 1/4 at 10'				X								X				3:15																X					
77	#003 Center 10'				X								X				3:30																X					
78	#004 SW 1/4 10'				X								X				3:45																X					
79	#005 SE 1/4 10'				X								X				4:00																X					
80	#006 Background				X								X				4:30																X					

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
	Phoenix	12.22.08	9:00	Cris Busby		12/22/08	9:00am	
Cris Busby		12/22/08	11:17am					
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
						122408	1117	3.2 / 3.7 IR

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review MK

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # _____ JAN -5 2009

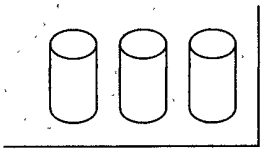
Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

SECTION IV

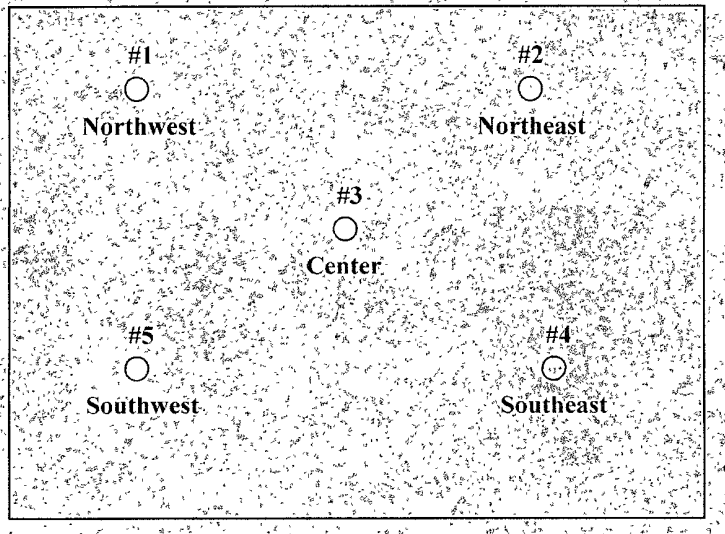
Encore Operating LP

Encore M State #1
UL-A SEC-30 – T22S – R37E
API # 30 – 025 – ~~38964~~ 38961
32°-22' – 05" – W103°- 11' – 51"



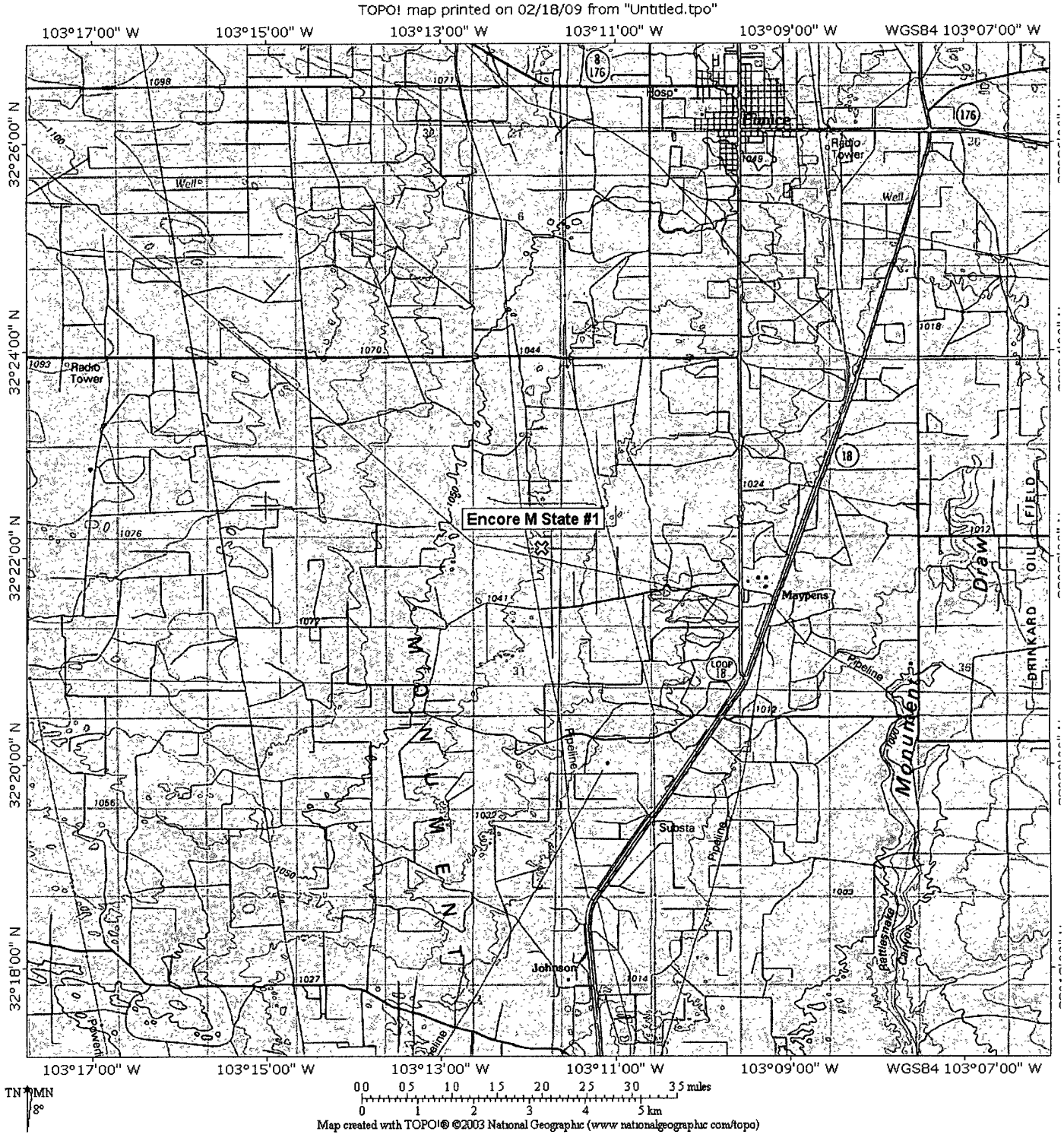
Location

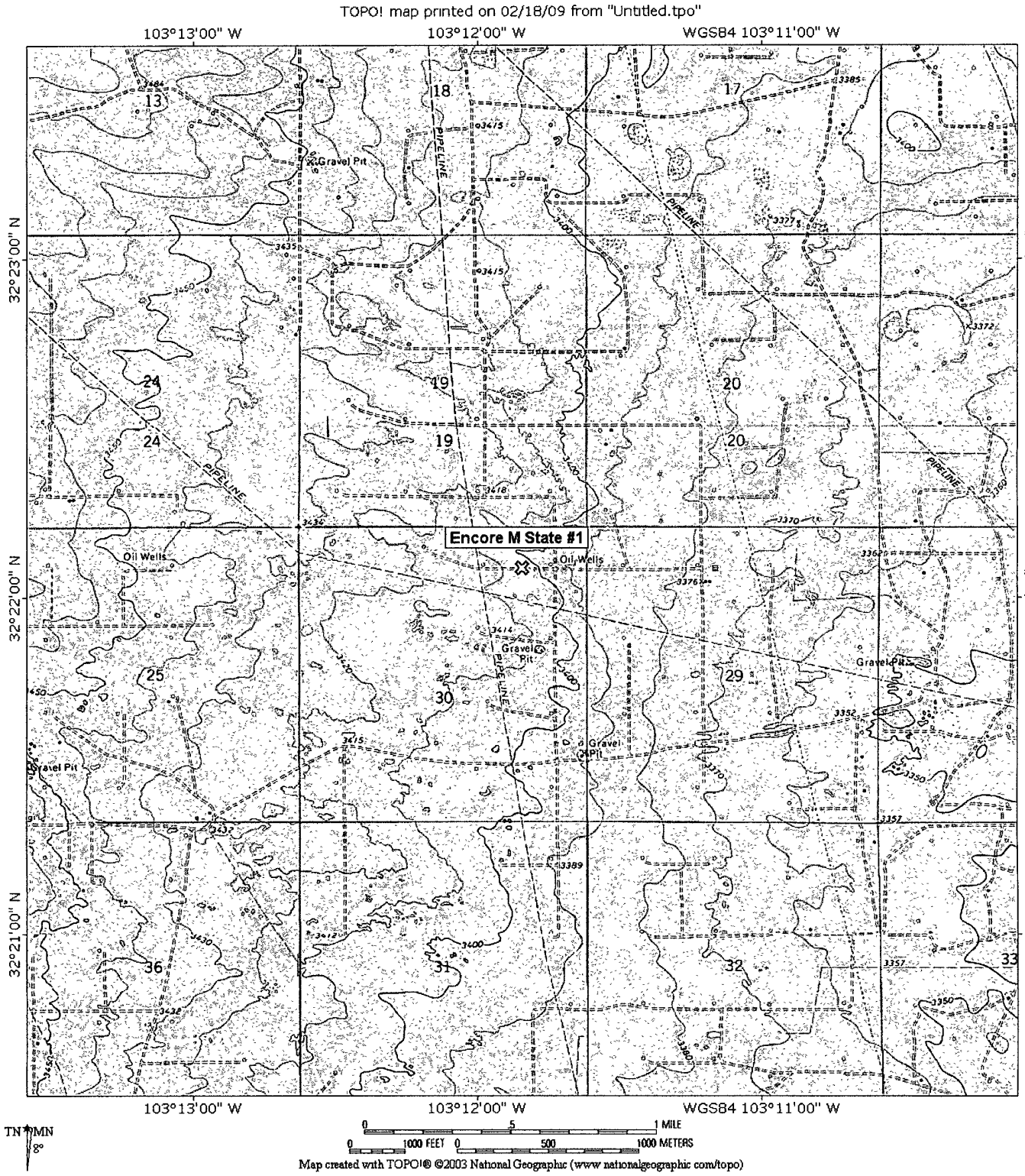
1. **N32° 22' 04.0" – W103° 11' 51.7"**
2. **N32° 22' 04.0" – W103° 11' 50.8"**
3. **N32° 22' 03.7" – W103° 11' 51.2"**
4. **N32° 22' 03.3" – W103° 11' 50.8"**
5. **N32° 22' 03.4" – W103° 11' 51.7"**
6. **N32° 22' 03.1" – W103° 11' 53.6"**



#6
Background

N


TOPO! map printed on 02/18/09 from "Untitled.tpo"
103°17'00" W
103°15'00" W
103°13'00" W
103°11'00" W
103°09'00" W
WGS84 103°07'00" W
32°26'00" N
32°24'00" N
32°22'00" N
32°20'00" N
32°18'00" N
Encore M State #1
Eunice
Hosp
Radio Tower
Well
Maypens
Substa
Johnson
Pipeline
Monument Draw
DRINKARD OIL FIELD
MONUMENT
Rattlesnake Canyon
TN MN
8°
0 0.5 1 1.5 2 2.5 3 3.5 miles
0 1 2 3 4 5 km
Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)


TOPO! map printed on 02/18/09 from "Untitled.tpo"
103°13'00" W
103°12'00" W
WGS84 103°11'00" W
32°23'00" N
32°22'00" N
32°21'00" N
Encore M State #1
Oil Wells
Gravel Pit
PIPELINE
13
18
17
24
19
20
25
30
29
36
31
32
33
TN MN
8°
0 1 MILE
0 1000 FEET 0 500 1000 METERS
Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

SECTION V

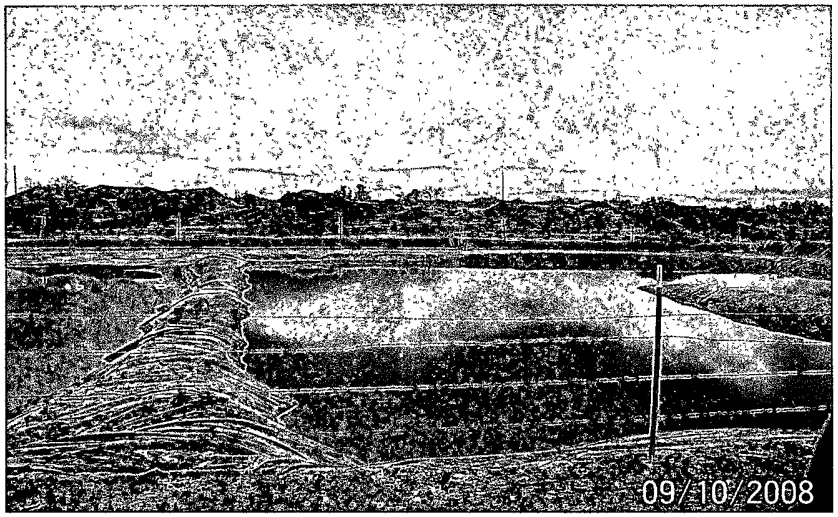


Photo #1 Beginning View

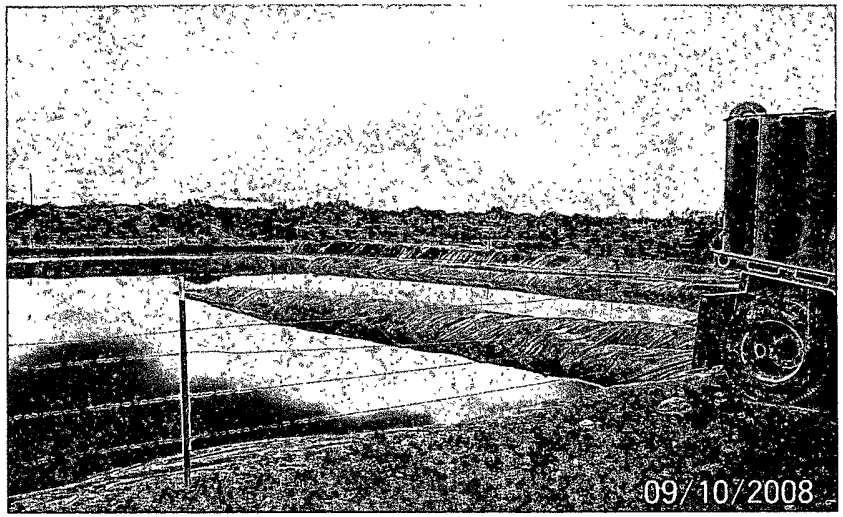


Photo #2 Beginning View

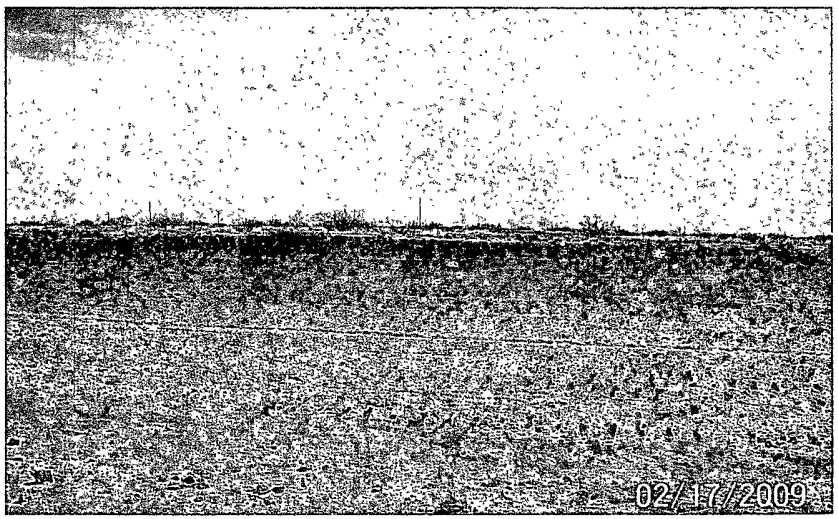


Photo #3 Final View

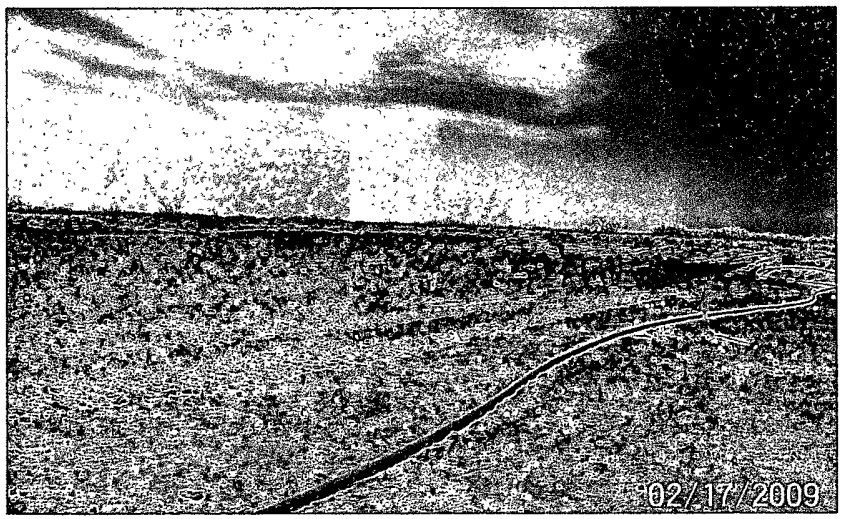


Photo #4 Final View