

File Review

AP-73

Chesapeake/State L #2 Tank Battery

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East of Buckeye. C-19-17S-36E

State L #1/Chesapeake 30-025-23719, 990 FNL 1890 FWL

State L #2/Chesapeake 30-025-23852, 2310 FSL 330 FWL (Unit L) Why this site is called the "L-2" is a mystery to me.

• 3/20/12 Stage 1 Abatement Report by Arcadis

5 wells and 9 soil borings have been advanced. Elevated chlorides and limited hydrocarbons in soils. Elevated chlorides and hydrocarbons in groundwater from one downgradient well.

Initial investigation by BBC in May 2007 after abandonment of the battery. 6 borings advanced with one (SB-1) converted to a temporary well. Chloride and benzene in the water from that well were beyond standards.

OCD notified of release via email on 5/30/07. OCD sends letter on 6/19/07 requesting Stage 1 Abatement Plan.

Stage 1 plan submitted on 8/22/07 proposing 4 additional bores, each converted to a monitoring well. Inquiry made on 4/24/10 about status of that plan and desire to initiate fieldwork. OCD responds on 4/27/10 that plan has not been reviewed due to staffing issues. On 6/23/10 BBC requests waiver of public notice and OCD says no, but that Chesapeake may proceed "at risk". On 7/12/10 OCD notified by registered mail that Chesapeake was planning to begin on or about 8/23/10 after submitted public notice. OCD does not respond.

EM survey conducted on 8/2 and 8/4/10. Indicates soil contamination to a depth of 49 feet in the area of the former battery and there may have been a pit to the southwest of the battery

On 8/23 thru 8/25/10 a group of 8 bores advanced, 5 of which were converted to monitoring wells. Groundwater samples gathered on 8/8/10 (How is that possible as the wells were not yet installed).

Arcadis samples groundwater on 9/13/11. Chloride in excess of standards in 3 wells; MWs-2, -4 and -5. Benzene above standard in MW-4

DTW is ~46 ft bgs

~~SECRET~~ Q35-PO
WTR
NO FURTHER
ACTION
REQUIRED
JF 3.2.06

Chesapeake - 147179



incident - n PAC 0606153777

application - pPAC0606154074

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Project Summary

Site Specific:

- ◆ **Company Name:** Chesapeake Energy
- ◆ **Facility Name:** ~~State L #2~~
- ◆ **Project Reference** ~~160024~~
- ◆ **Company Contacts:** ~~Bradley Blevins~~
- ◆ **Site Location:** ~~WGS84 N32° 49' 21.743", W103° 23' 55.798"~~
- ◆ **Legal Description:** ~~Unit Letter E, (SW¼ of the NE¼), Section 19, T17S, R36E~~
- ◆ **General Description:** approximately 9.0-miles southwest of Lovington, New Mexico
- ◆ **Elevation:** 3,898-ft amsl **Depth to Ground Water:** ~~<50-ft~~
- ◆ **Land Ownership:** ~~Darr Angell~~
- ◆ **EPI Personnel:** Project Consultant – Pat McCasland
 Site Foreman – David Robinson

Release Specific:

- ◆ **Product Released:** Produced Water (~~≈ 60 bbls~~) and Crude Oil (~~≈ 5 bbls~~)
- ◆ **Volume Released:** ≈ 65-bbl reported **Volume Recovered:** ~~0-bbl~~
- ◆ **Time of Occurrence:** 11-Aug-05 @ 17:00 hrs **Time of Discovery:** 11-Aug-05
- ◆ **Release Source:** Structural integrity of a 2-inch polyethylene flowline was compromised
- ◆ **Initial Surface Area Affected:** ~~≈ 8,000-ft²~~

Remediation Specific:

- ◆ **Final Vertical extent of contamination:** 16-ft bgs; Remaining depth to ground water: <50-ft
- ◆ **Water wells within 1,000-ft:** 0 **Surface water bodies within 1,000-ft:** 0
- ◆ **NMOCD Site Ranking Index:** 20 points (<50-ft to top of water table)
- ◆ **Remedial goals for Soil:** TPH – 100 mg/kg; BTEX – 50 mg/kg; Benzene – 10 mg/kg; Chloride and Sulfate residuals may not be capable of impacting groundwater above NMWQCC groundwater standards of 250 mg/kg, and 600 mg/kg, respectively.
- ◆ **RCRA Waste Classification:** Exempt
- ◆ **Remediation Option Selected:** a) Excavation of contaminated soil above NMOCD remedial goals; b) laboratory analyses to confirm removal of soil impacted above NMOCD remedial thresholds and NMWQCC groundwater standards; c) dispose of impacted soil at a state approved disposal facility; d) backfill excavation with clean soil
- ◆ **Disposal Facility:** Sundance Services, Inc. **Volume disposed of:** 1,078-yd³
- ◆ **Project Completion Date:** 23 September 2005
- ◆ **Additional Commentary:** None

1.0 Introduction & Background

This report addresses the site investigation and remediation of the Chesapeake Energy State L #2 flowline remediation site. On August 12, 2005, Environmental Plus, Inc. (EPI) was notified by Chesapeake Energy regarding a recently discovered produced water and crude oil release from a two inch polyethylene flowline. This site is located approximately 9.0 miles southwest of Lovington, Lea County, New Mexico (reference *Figure 1*). The initial C-141 Form submitted to the New Mexico Oil Conservation Division (NMOCD) on September 1, 2005, reports the release volume as approximately 65-barrels (bbls), comprised of approximately 60 bbls produced water and 5 bbls of crude oil with no recovery. EPI performed GPS surveying, photography and characterization of the site on August 12, 2005. The initial site consisted of an approximate 8,000 square feet (ft²) visibly affected surface area, with approximately 1,400 ft² impacted within the overspray area (reference *Figure 3*).

Initial activities at the site consisted of excavating saturated soil and stockpiling on plastic. On August 23, 2005, a composite soil sample was collected from the stockpiled soil and submitted for laboratory quantification of chloride concentrations. On August 31, 2005, soil samples were collected from a test trench excavated to a depth of 18-feet below ground surface (bgs) and 11 locations within the impacted area. A portion of each sample was analyzed in the field for the presence of organic vapors utilizing an UltraRae photoionization detector (PID) equipped with a 9.8 electron-volt (eV) lamp and chloride concentrations utilizing LaMotte Chloride Test Kit. In addition, a portion of each sample was submitted for laboratory confirmation to ensure the extents of contamination had been delineated.

Once the extents of contamination had been delineated, remediation activities commenced. Remediation of this site consisted of the excavation of approximately 1,078 cubic yards (yds³) of contaminated soil from what was ultimately a 2,800-ft² excavation extending to a maximum depth of 16-feet below ground surface (bgs). The contaminated soil was transported to Sundance Services, Inc. for disposal.

On September 6, 2005, soil samples were collected from the excavation floor and sidewalls. A portion of each sample was placed in a laboratory provided container, set in ice and submitted to an independent laboratory for quantification of benzene, toluene, ethylbenzene and total xylenes (BTEX), total petroleum hydrocarbons (TPH) and chloride concentrations. The remaining portion of each soil sample was analyzed in the field for the presence of organic vapors utilizing an UltraRae photoionization detector (PID) equipped with a 9.8 electron volt (eV) lamp.

Laboratory analytical results indicated all contaminant concentrations were less than the NMOCD hydrocarbon remedial thresholds and New Mexico Water Quality Control Commission (NMWQCC) groundwater standards. The construction phase of the site remediation commenced on August 31, 2005 and was completed with backfilling and contouring on September 23, 2005.

This release site is located in Unit Letter E, (SW¹/₄ of the NW¹/₄), Section 19, T17S, R36E, N32° 49' 21.74" and W103° 23' 55.79". The site is approximately 9-miles southwest of Lovington, New Mexico on property owned by Mr. Darr Angell (reference *Figures 1 through 3*).

2.0 Site Description

2.1 Geological Description

The United States Geological Survey (USGS) Ground-Water Report 6, "Geology and Ground-Water Conditions in Southern Lea County, New Mexico," A. Nicholson and A. Clebsch, 1961, describes the near surface geology of southern Lea County as "an intergrade of the Quaternary Alluvium (QA) sediments (i.e., fine to medium sand, with the mostly eroded Cenozoic Ogallala (CO) formation). Typically, the QA and CO formations in the area are capped by a thick interbed of caliche and generally overlain by sandy soil."

The release site is located in the High Plains physiographic subdivision, described by Nicholson & Clebsch as "a flat, gently sloping plain, treeless and marred only by slight undulations and covered with short prairie grass."

2.2 Ecological Description

The area is typical of the Upper Chihuahuan Desert Biome consisting primarily of sandy soil covered with short prairie grasses, primarily Blue Grama grass and Buffalograss, interspersed with Honey Mesquite (*Prosopis glandulosa*) and forbs. Mammals represented, include Orrd's and Merriam's Kangaroo Rats, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit, Mule Deer, Bobcat, Red Fox and Coyote. Reptiles, amphibians, and birds are numerous and typical of the area. A survey of Listed, Threatened, or Endangered species was not conducted.

2.3 Area Groundwater

The unconfined groundwater aquifer at this site is projected to be <50-ft bgs based on limited water depth data obtained from the New Mexico State Engineers Office data base and information provided by the landowner. Groundwater gradient in this area is generally to the east-southeast.

2.4 Area Water Wells

There are no water supply wells located within a 1,000 foot radius of the release site.

2.5 Area Surface Water Features

There are no surface water bodies within a 1,000 foot radius of the release site.

3.0 NMOCD Site Ranking

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

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

Acceptable thresholds for contaminants/constituents of concern (CoC) were determined based on the NMOCD Ranking Criteria as follows:

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

Based on the proximity of the site to protectable area water wells, surface water bodies, and depth to groundwater from the lower most contamination, the NMOCD ranking score for the site is 20 points with the soil remedial goals highlighted in the Site Ranking table presented below.

| | | | |
|--|--|--------------------------------------|-----------|
| 1. Ground Water | 2. Wellhead Protection Area | 3. Distance to Surface Water | |
| Depth to GW <50 feet: 20 points | If <1,000' from water source, or; <200' from private domestic water source: 20 points | <200 horizontal feet: 20 points | |
| Depth to GW 50 to 99 feet: 10 points | | 200-1,000 horizontal feet: 10 points | |
| Depth to GW >100 feet: 0 points | If >1,000' from water source, or; >200' from private domestic water source: 0 points | >1,000 horizontal feet: 0 points | |
| Ground Water Score = 20 | Wellhead Protection Score= 0 | Surface Water Score= 0 | |
| Site Rank (1+2+3) = 20 + 0 + 0 = 20 points | | | |
| Total Site Ranking Score and Acceptable Remedial Goal Concentrations | | | |
| Parameter | 20 or > | 10 | 0 |
| Benzene ¹ | 10 ppm | 10 ppm | 10 ppm |
| BTEX ¹ | 50 ppm | 50 ppm | 50 ppm |
| TPH | 100 ppm | 1,000 ppm | 5,000 ppm |

¹ A field soil vapor headspace measurement of 100 ppm may be substituted for a laboratory analysis of the benzene and BTEX concentration limits.

4.0 Subsurface Soil Investigation

Excavation of soil impacted above the NMOCD remedial thresholds commenced on August 11, 2005 with the excavation and stockpiling of saturated soil on plastic. The vertical extent of contamination from the produced water and crude oil release was determined with a test excavation at the point of release (POR) to a depth of 18-ft bgs on August 31, 2005. The lateral extent of contamination was determined with PID and chloride analyses in the field as the excavation progressed outwardly from the POR. Organic vapor concentrations were measured in the field utilizing an UltraRae PID equipped with a 9.8 eV lamp; chloride concentrations were measured in the field utilizing a La Motte Chloride Reactant #2 Field Titration Kit.

To verify soil impacted above NMOCD remedial thresholds and NMWQCC groundwater standards had been excavated, composite soil samples were collected on September 7, 2005, from the floor and sidewalls of the excavation and analyzed in the field to quantify chloride concentrations and verify remedial limits had been achieved. Field analyses indicated chloride concentrations ranged from 280 to 320 ppm with an average concentration of 312 ppm (reference *Table 1*).

Upon completion of excavation activities, samples were collected and submitted to an independent laboratory for quantification of chlorides, TPH and BTEX constituent concentrations. Analytical results indicated hydrocarbon concentrations for all analytes were not detected at or above laboratory method detection limits. Chloride concentrations were reported to range from 16.0 to 80.0 mg/Kg, below NMWQCC chloride groundwater standards of 250 mg/L (reference *Table 1 and Appendix I*).

5.0 Groundwater Investigation

The projected depth to groundwater at this site is <50-ft bgs. Excavation of the site was to a maximum depth of sixteen feet. Final field analyses for the composite soil samples collected from the east, west, north and south sidewalls and floor of the excavation indicated chloride concentrations ranged from 240 ppm to 320 ppm (reference *Table 1*). Laboratory analytical results for the samples collected from the sidewalls and base of the excavation indicated TPH and BTEX concentrations were not detected at or above each analytes' respective laboratory method detection limit (MDL). Reported chloride concentrations for these samples ranged from 16 to 80 mg/Kg (reference *Table 1 and Appendix I*).

The excavation was backfilled with clean soil purchased from the property owner (Mr. Darr Angell). Based on the treatment of impacted soil to below remedial goal concentrations and adequate depth to groundwater, there is no need for further groundwater investigation at this site.

6.0 Remediation Process

Remediation of the site commenced on August 31, 2005 and continued through September 23, 2005. Remedial activities at the site consisted of excavation and disposal of 1,078 yd³ of produced water and crude oil impacted soil from the site. After laboratory analyses of soil samples collected from the sidewalls and base of the excavation indicated remedial goals had been achieved, the excavation was backfilled with clean soil purchased from the landowner. The backfilling and contouring of the site was completed on September 23, 2005.

7.0 Closure Justification

This report documents successful treatment of impacted soil above the remedial thresholds discussed in Section 3 above and confirmed via laboratory analyses for this release site. The impacted soil was excavated and disposed of at Sundance Services, Inc. The excavation was backfilled with clean soil purchased from the landowner and contoured to allow natural drainage. Based on the data presented in this report, Environmental Plus, Inc., on behalf of Chesapeake Energy, requests that the NMOCD require "no further action" at this site and issue a *Site Closure Letter*.

FIGURES

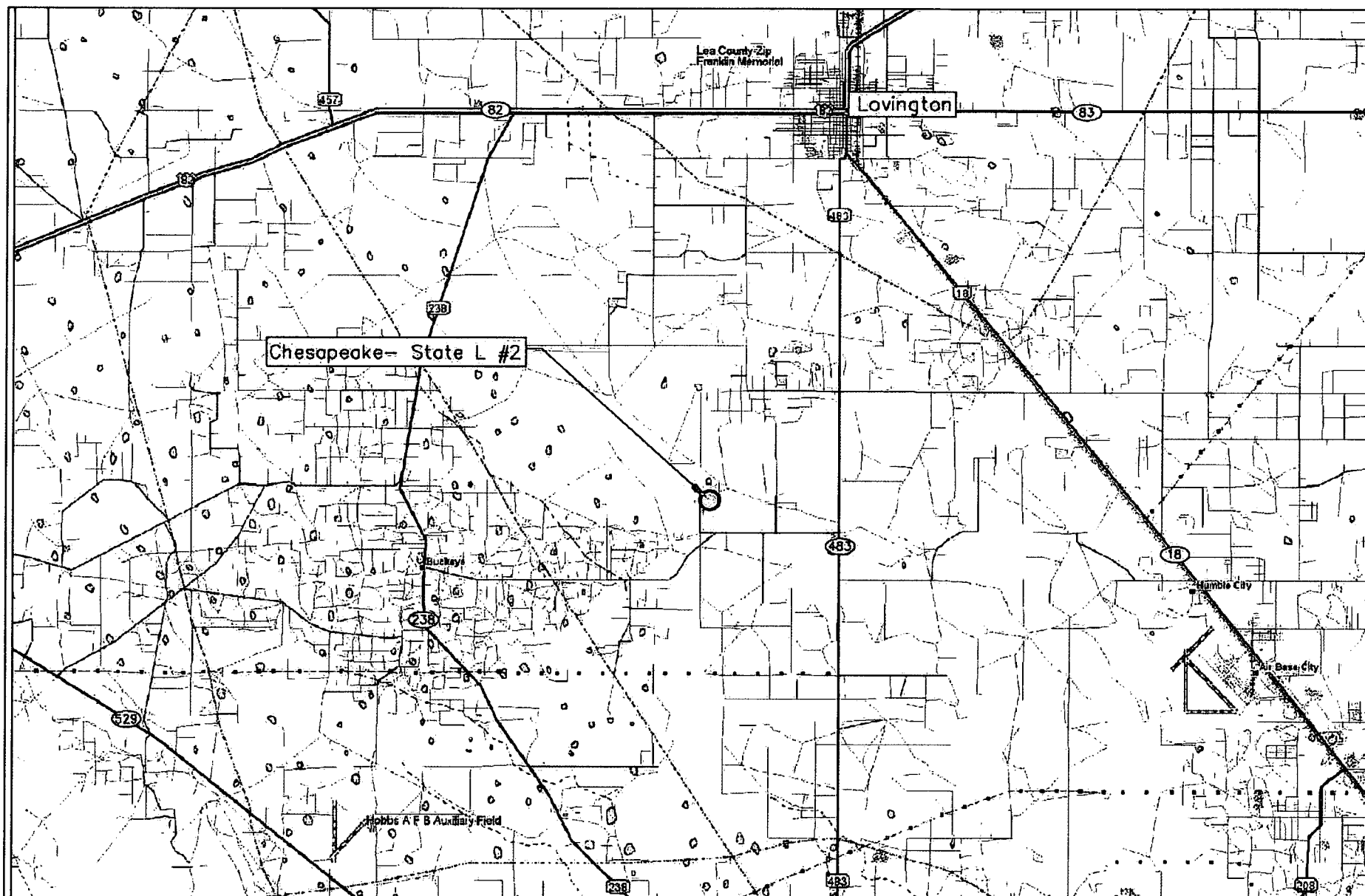
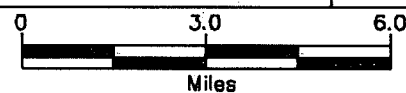


Figure 1
Area Map
Chesapeake
State L #2

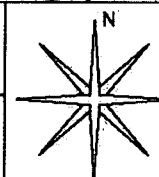
Lea County, New Mexico
SW 1/4 of the NW 1/4, Sec. 19, T17S, R36E
N 32° 49' 21.74" W 103° 23' 55.79"
Elevation: 3,898 feet amsl

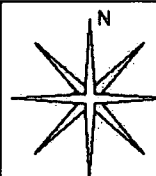
DWG By: Jason Stegemoller
August 2005

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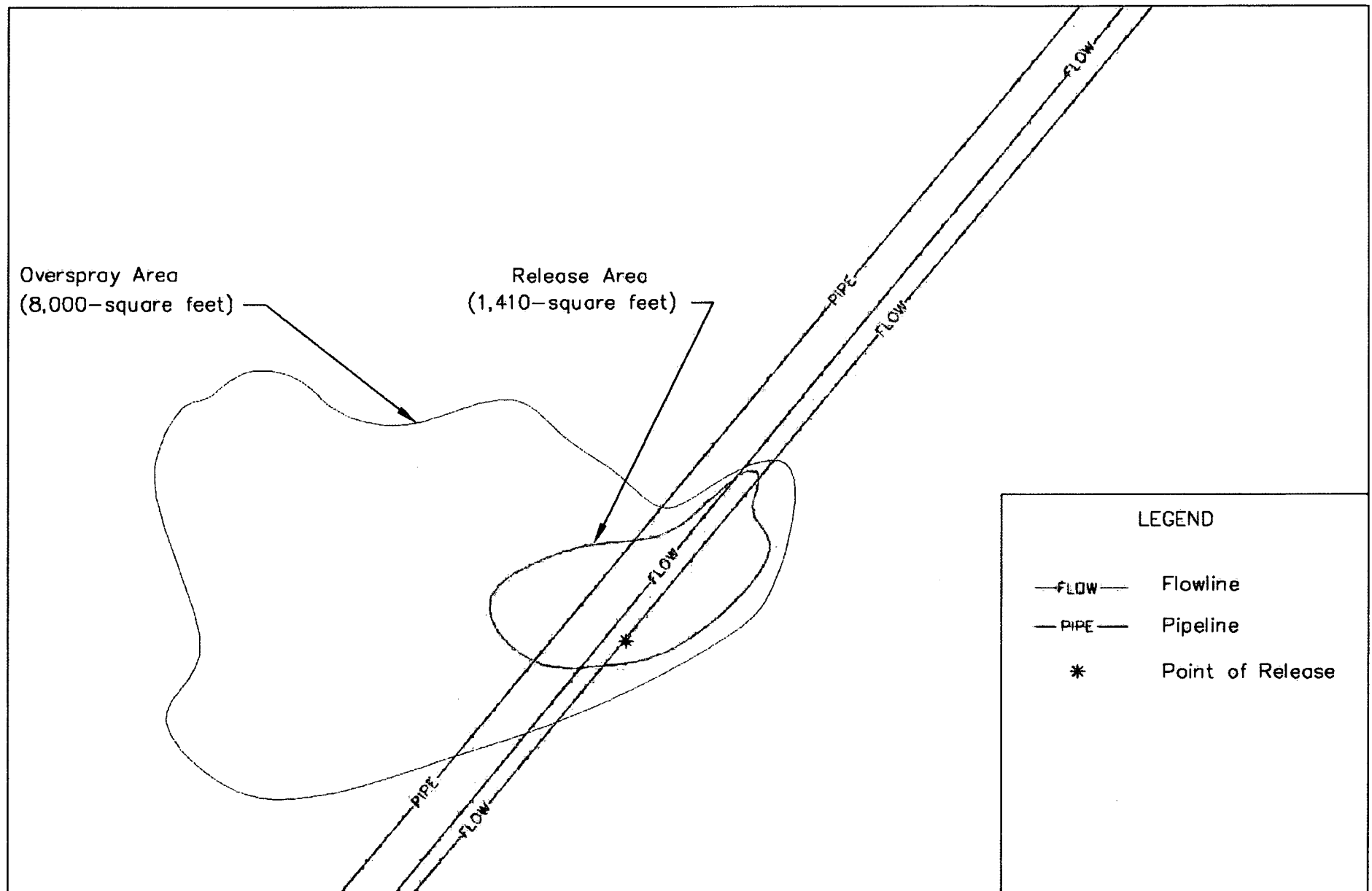
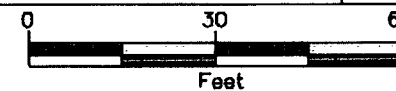


Figure 3
Site Map
Chesapeake
State L #2

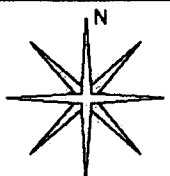
Lea County, New Mexico
SW 1/4 of the NW 1/4, Sec. 19, T17S, R36E
N 32° 49' 21.74" W 103° 23' 55.79"
Elevation: 3,898 feet amsl

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August 2005

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JCS, Oct. 2005



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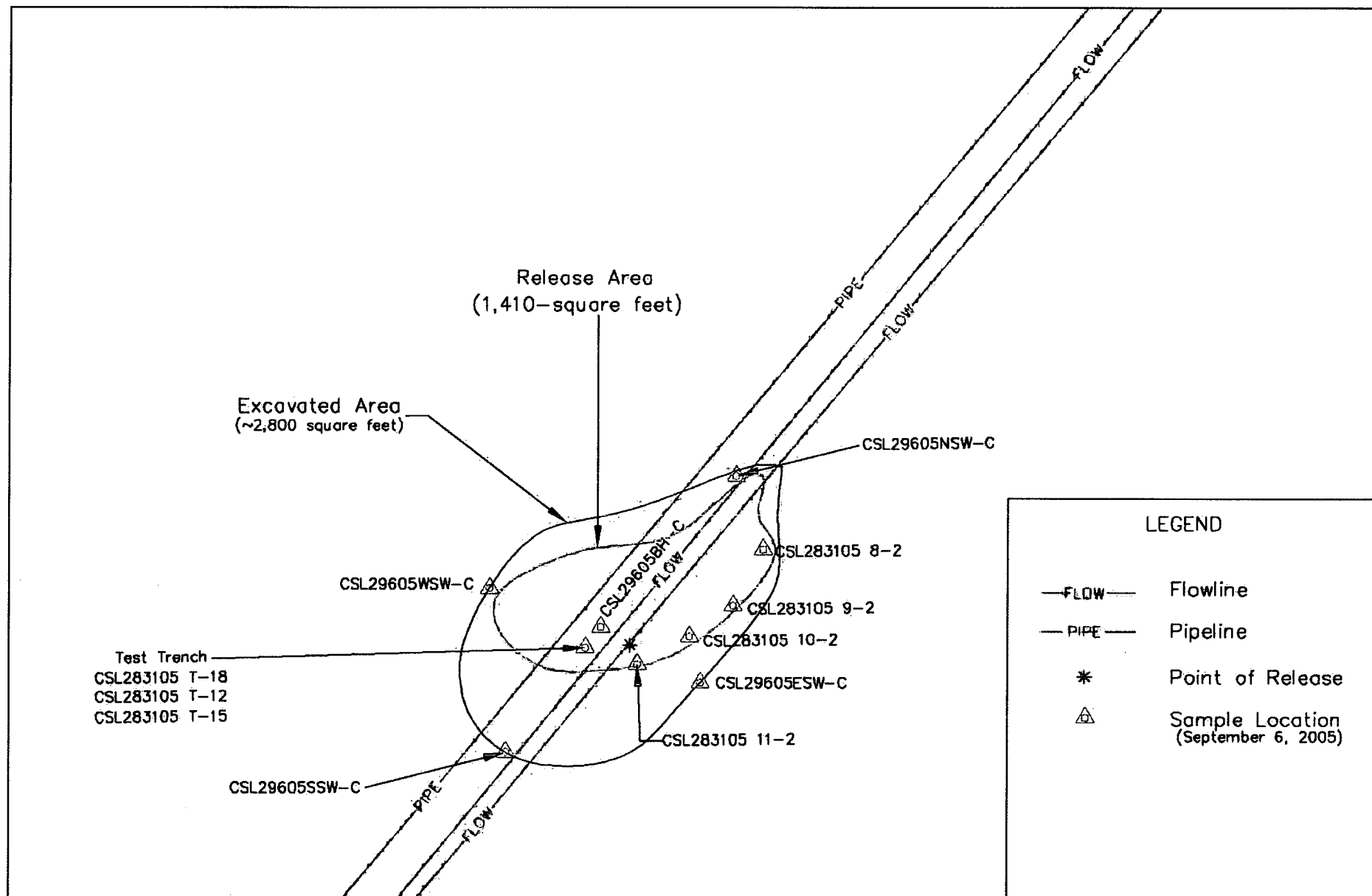
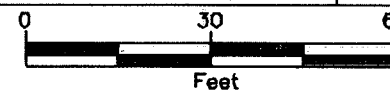


Figure 4
Excavation and Sample
Location Map
Chesapeake
State L #2

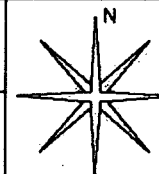
Lea County, New Mexico
SW 1/4 of the NW 1/4, Sec. 19, T17S, R36E
N 32° 49' 21.74" W 103° 23' 55.79"
Elevation: 3,898 feet amsl

DWG By: Jason Stegemoller
August 2005

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JCS, Oct. 2005



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TABLES

TABLE 1

Summary of Soil Sample Laboratory Analytical Results**Chesapeake Energy- State L #2 (Ref.# 160024)**

| Sample I.D. | Depth (feet) | Soil Status | Sample Date | Benzene (mg/Kg) | Toluene (mg/Kg) | Ethylbenzene (mg/Kg) | Total Xylenes (mg/Kg) | Total BTEX (mg/Kg) | TPH (as gasoline) (mg/Kg) | TPH (as diesel) (mg/Kg) | Total TPH (mg/Kg) | Chloride (mg/Kg) |
|----------------------------------|--------------|-------------|-------------|-----------------|-----------------|----------------------|-----------------------|--------------------|---------------------------|-------------------------|-------------------|-------------------------|
| SCSL082305SP | Comp | Excavated | 23-Aug-05 | NA ¹ | NA ¹ | NA ¹ | NA ¹ | NA ¹ | NA ¹ | NA ¹ | NA ¹ | 3,679 |
| CSL283105 8-2 | 2 | Excavated | 31-Aug-05 | <0.0250 | <0.0250 | <0.0250 | <0.05 | <0.125 | <10.0 | 14.3 | 14.3 | 609 |
| CSL283105 9-2 | 2 | Excavated | 31-Aug-05 | <0.0250 | <0.0250 | <0.0250 | <0.05 | <0.125 | <10.0 | <10.0 | <20.0 | 1,970 |
| CSL283105 T-18 | 18 | Excavated | 31-Aug-05 | <0.0250 | <0.0250 | <0.0250 | <0.05 | <0.125 | <10.0 | <10.0 | <20.0 | 36.4 |
| CSL283105 T-12 | 12 | Excavated | 31-Aug-05 | <0.0250 | <0.0250 | <0.0250 | <0.05 | <0.125 | <10.0 | <10.0 | <20.0 | 22.8 |
| CSL283105 T-15 | 15 | Excavated | 31-Aug-05 | <0.0250 | <0.0250 | <0.0250 | <0.05 | <0.125 | <10.0 | <10.0 | <20.0 | 26.2 |
| CSL283105 10-2 | 2 | Excavated | 31-Aug-05 | <0.0250 | <0.0250 | <0.0250 | <0.05 | <0.125 | <10.0 | <10.0 | <20.0 | 58.1 |
| CSL283105 11-2 | 2 | Excavated | 31-Aug-05 | <0.0250 | <0.0250 | <0.0250 | <0.05 | <0.125 | <10.0 | <10.0 | <20.0 | 73.9 |
| CSL29605NSW-C | Comp | In Situ | 06-Sep-05 | <0.005 | <0.005 | <0.005 | <0.015 | <0.03 | <10.0 | <10.0 | <20.0 | 64.0 |
| CSL29605SSW-C | Comp | In Situ | 06-Sep-05 | <0.005 | <0.005 | <0.005 | <0.015 | <0.03 | <10.0 | <10.0 | <20.0 | 16.0 |
| CSL29605ESW-C | Comp | In Situ | 06-Sep-05 | <0.005 | <0.005 | <0.005 | <0.015 | <0.03 | <10.0 | <10.0 | <20.0 | 32.0 |
| CSL29605WSW-C | Comp | In Situ | 06-Sep-05 | <0.005 | <0.005 | <0.005 | <0.015 | <0.03 | <10.0 | <10.0 | <20.0 | 16.0 |
| CSL29605BH-C | Comp | In Situ | 06-Sep-05 | <0.005 | <0.005 | <0.005 | <0.015 | <0.03 | <10.0 | <10.0 | <20.0 | 80.0 |
| NMOCD Remedial Thresholds | | | | 10 | | | | 50 | | | 100 | 250 ² |

Bolded values are in excess of NMOCD Remediation Thresholds

¹ NA=Not Analyzed

²Chloride residuals may not be capable of impacting local groundwater above the NMWQCC standards of 250 mg/l.

Comp= Composite sample

TABLE 2

Well Data

Chesapeake Energy State L #2 (Ref. #160024)

| Well Number | Diversion ^A | Owner | Use | Twsp | Rng | Sec q q q | Latitude | Longitude | Date Measured | Well Depth (ft bgs) | Depth to Water (ft bgs) |
|-----------------|------------------------|--------------------------------|-----|------|-----|-----------|----------------|-----------------|---------------|---------------------|-------------------------|
| L 01919 | 242.1 | NOLAN H. BRUNSON | IRR | 17S | 36E | 29 2 1 1 | 32° 48' 33.62" | 103° 22' 34.74" | | 135 | |
| L 01919 S | | NOLAN H. BRUNSON | | 17S | 36E | 30 2 2 2 | 32° 48' 33.75" | 103° 22' 19.24" | 14-Jun-01 | 225 | 110 |
| L 04171 | 3 | NORWOOD DRILLING COMPANY | PRO | 17S | 36E | 18 1 4 | 32° 50' 4.77" | 103° 23' 52.25" | 09-Jun-59 | 128 | 128 |
| L 04171 APPRO | | NORWOOD DRILLING COMPANY | | 17S | 36E | 20 2 1 | 32° 50' 4.77" | 103° 23' 52.25" | 09-Jun-59 | 128 | 128 |
| L 04549 | 3 | INC. CARPER DRILLING CO. | PRO | 17S | 36E | 20 2 1 | 32° 49' 26" | 103° 22' 34.92" | 05-Nov-60 | 121 | 48 |
| L 04549 APPRO | | INC. CARPER DRILLING CO. | | 17S | 36E | 20 2 1 | 32° 49' 26" | 103° 22' 34.92" | 05-Nov-60 | 121 | 48 |
| L 04570 | 220.2 | NOLAN H. BRUNSON JR. | IRR | 17S | 36E | 29 2 3 1 | 32° 48' 20.54" | 103° 22' 34.68" | | 106 | |
| L 04570 S | | NOLAN H. BRUNSON JR. | | 17S | 36E | 29 2 4 4 | 32° 48' 20.7" | 103° 22' 19.17" | | 205 | |
| L 04599 | 3 | GARDNER BROTHERS DRILLING CO. | PRO | 17S | 36E | 20 1 2 | 32° 49' 25.91" | 103° 22' 50.39" | 16-Feb-61 | 128 | 38 |
| L 04599 APPRO | | GARDNER BROTHERS DRILLING CO. | | 17S | 36E | 20 1 2 | 32° 49' 25.91" | 103° 22' 50.39" | 16-Feb-61 | 128 | 38 |
| L 04601 | 0 | NOBLE DRG. CORP. | PRO | 17S | 36E | 30 | 32° 47' 53.71" | 103° 24' 6.86" | 22-Jan-61 | 125 | 50 |
| L 04602 | 3 | HUMBLE OIL & REFINING COMPANY | PRO | 17S | 36E | 17 3 4 2 | 32° 49' 39.02" | 103° 22' 50.42" | 16-Feb-61 | 115 | 45 |
| L 04602 APPRO | | HUMBLE OIL & REFINING COMPANY | | 17S | 36E | 17 4 3 2 | 32° 49' 39.1" | 103° 22' 34.96" | 16-Feb-61 | 115 | 45 |
| L 04876 | 0 | INC. B.L. MCFARLAND | PRO | 17S | 36E | 29 3 4 | 32° 47' 54.16" | 103° 22' 50.1" | 12-Apr-62 | 130 | 75 |
| L 05181 | 0 | LOFFLAND BROTHERS COMPANY | PRO | 17S | 36E | 20 1 4 | 32° 49' 12.8" | 103° 22' 50.36" | 21-Jun-63 | 125 | 75 |
| L 05361 | 0 | LOWE DRILLING CO. | PRO | 17S | 36E | 20 | 32° 48' 46.48" | 103° 23' 5.79" | 11-Apr-64 | 123 | 90 |
| L 05407 | 0 | TRI SERVICE DRILLING COMPANY | PRO | 17S | 36E | 19 1 4 | 32° 49' 12.37" | 103° 23' 52.27" | 10-Jun-64 | 108 | 49 |
| L 05407 (1) | 0 | TRI-SERVICE DRILLING COMPANY | PRO | 17S | 36E | 19 1 4 | 32° 49' 12.37" | 103° 23' 52.27" | | | |
| L 07790 | 0 | SOUTHWESTERN PUBLIC SERVICE CO | IND | 17S | 36E | 29 4 3 | 32° 47' 54.38" | 103° 22' 34.56" | | 225 | |
| L 07791 | 0 | SOUTHWESTERN PUBLIC SERVICE CO | IND | 17S | 36E | 29 3 3 | 32° 47' 53.94" | 103° 23' 5.63" | | 225 | |
| L 07792 | 0 | SOUTHWESTERN PUBLIC SERVICE CO | IND | 17S | 36E | 30 4 | 32° 47' 53.82" | 103° 23' 36.73" | | 225 | |
| L 07793 | 200 | SOUTHWESTERN PUBLIC SERVICE CO | IND | 17S | 36E | 30 2 | 32° 48' 20.05" | 103° 23' 36.74" | | | |
| L 07794 | 200 | SOUTHWESTERN PUBLIC SERVICE CO | IND | 17S | 36E | 30 1 | 32° 48' 19.9" | 103° 24' 6.81" | | | |
| L 07862 | 3 | R. A. ROGERS | DOM | 17S | 36E | 20 3 4 | 32° 48' 46.59" | 103° 22' 50.3" | 13-Apr-78 | 110 | 58 |
| L 07907 | 3 | NOLAN H. JR. BRUNSON | DOM | 17S | 36E | 29 2 3 | 32° 48' 20.54" | 103° 22' 34.68" | 05-Jun-78 | 150 | 45 |
| L 08266 (6) EXP | 0 | ARCO OIL COMPANY | PRO | 17S | 36E | 19 1 3 1 | 32° 48' 20.21" | 103° 23' 5.71" | | | |
| L 08266 (7) EXP | 0 | TMBR SHARP DRILLING CO. | PRO | 17S | 36E | 29 1 3 1 | 32° 48' 20.21" | 103° 23' 5.71" | | | |
| L 09342 | 3 | GREAT WESTERN DRILLING CO. | STK | 17S | 36E | 20 | 32° 48' 46.48" | 103° 23' 5.79" | 28-Sep-83 | 138 | 60 |
| L 10681 | 3 | GOFF DAIRY | STK | 17S | 36E | 19 4 1 | 32° 48' 59.38" | 103° 23' 36.77" | 02-Jul-97 | 120 | 40 |
| L 04503 | 3 | TRI SERVICE DRILLING CO. | PRO | 17S | 35E | 24 2 | 32° 49' 12.51" | 103° 24' 37.95" | 10-Sep-60 | 90 | 43 |
| L 04503 APPRO | | TRI SERVICE DRILLING CO. | | 17S | 35E | 24 2 | 32° 49' 12.51" | 103° 24' 37.95" | 10-Sep-60 | 90 | 43 |
| L 04875 | 0 | INC. A.W. THOMPSON | PRO | 17S | 35E | 25 2 1 1 | 32° 48' 33.26" | 103° 24' 38.04" | 12-Apr-62 | 130 | 71 |
| L 06723 EXP | 0 | GILES M. LEE | DOM | 17S | 35E | 25 1 4 2 | 32° 48' 20.27" | 103° 24' 53.61" | | | |
| L 08124 | 0 | HONDO DRILLING CO. | STK | 17S | 35E | 25 4 4 4 | 32° 47' 53.82" | 103° 24' 22.4" | 03-Aug-79 | 125 | 58 |
| L 08124 EXP | | HONDO DRILLING CO. | | 17S | 35E | 25 4 4 | 32° 47' 53.82" | 103° 24' 22.4" | | | |
| L 08124 (1) EXP | 0 | BTA OIL PRODUCERS. | STK | 17S | 35E | 25 4 4 4 | 32° 47' 53.82" | 103° 24' 22.4" | | | |
| L 08124 (2) EXP | 0 | PIONEER PRODUCTION CORPORATION | PRO | 17S | 35E | 25 4 4 4 | 32° 47' 53.82" | 103° 24' 22.4" | | | |
| L 08124 (3) EXP | 0 | BTA OIL PRODUCERS | PRO | 17S | 35E | 25 4 4 4 | 32° 47' 53.82" | 103° 24' 22.4" | | | |
| L 08731 | 391 | SOUTHWESTERN PUBLIC SERVICE | IND | 17S | 35E | 25 1 4 2 | 32° 48' 20.27" | 103° 24' 53.61" | | | |
| L 09727 EXP | 0 | GILES M LEE | DOM | 17S | 35E | 25 4 | 32° 47' 53.92" | 103° 24' 37.94" | | | |
| L 10121 | 0 | GILES M. LEE | STK | 17S | 35E | 24 1 3 2 | 32° 48' 59.44" | 103° 24' 38.01" | | | |
| L 10121 EXP | | GILES M. LEE | | 17S | 35E | 24 3 1 4 | 32° 48' 59.7" | 103° 25' 9.28" | | | |
| L 10121 (1) | 0 | ORYX ENERGY CO. | PRO | 17S | 35E | 24 3 1 4 | 32° 48' 59.7" | 103° 25' 9.28" | | | |

TABLE 2

Well Data

Chesapeake Energy State L #2 (Ref. #160024)

| Well Number | Diversion ^A | Owner | Use | Twsp | Rng | Sec q q q | Latitude | Longitude | Date Measured | Well Depth (ft bgs) | Depth to Water (ft bgs) |
|-------------|------------------------|-------|-----|------|-----|-----------|-------------|--------------|---------------|---------------------|-------------------------|
| USGS #1 | | | | 17S | 35E | 36 3 1 1 | 32° 47' 10" | 103° 24' 55" | 16-Jan-01 | 110 | 52.23 |
| USGS #2 | | | | 17S | 35E | 29 2 1 1 | 32° 48' 31" | 103° 22' 23" | 08-Feb-96 | 135 | 49.44 |
| USGS #3 | | | | 17S | 35E | 24 2 2 3 | 32° 49' 18" | 103° 24' 6" | 16-Jan-01 | 90 | 44.35 |
| USGS #4 | | | | 17S | 35E | 18 4 4 4 | 32° 49' 26" | 103° 23' 2" | 12-Jan-01 | 120 | 39.77 |
| USGS #5 | | | | 17S | 35E | 17 4 4 1 | 32° 49' 36" | 103° 22' 2" | 25-Jan-96 | 100 | 44.2 |
| USGS #6 | | | | 17S | 35E | 11 1 1 1 | 32° 51' 6" | 103° 26' 0" | 14-Feb-96 | 128 | 42.56 |
| USGS #7 | | | | 17S | 36E | 19 2 1 1 | | | 16-Jan-86 | | 37.46 |
| USGS #8 | | | | 17S | 36E | 17 3 4 3 | | | 26-Feb-76 | | 39.99 |
| USGS #9 | | | | 17S | 36E | 17 4 4 1 | | | 25-Jan-96 | | 44.2 |
| USGS #10 | | | | 17S | 36E | 18 4 4 4 | | | 25-Jan-96 | | 38.36 |
| USGS #11 | | | | 17S | 35E | 13 3 2 2 | | | 09-Feb-96 | | 44.5 |
| USGS #12 | | | | 17S | 35E | 24 1 1 3 | | | 19-Dec-90 | | 37.07 |
| USGS #13 | | | | 17S | 35E | 24 2 2 3 | | | 25-Jan-96 | | 43.16 |
| USGS #14 | | | | 17S | 35E | 24 3 1 2 | | | 19-Dec-90 | | 36.78 |
| USGS #15 | | | | 17S | 35E | 25 1 3 1 | | | 04-Mar-76 | | 43.6 |
| USGS #16 | | | | 17S | 35E | 29 2 1 1 | | | 08-Feb-96 | | 49.44 |
| USGS #17 | | | | 17S | 35E | 30 1 1 3 | | | 03-Mar-61 | | 39.4 |

* = Data obtained from the New Mexico Office of the State Engineer Website (http://iwaters.ose.state.nm.us:7001/iWATERS/wr_RegisServlet1)

Shaded areas indicate well locations shown on Figure 2

^A = in acre feet per annum

IND = Industrial

IRR = Irrigation

DOM = Domestic

EXP = Exploration

PRO= Prospecting or Development of Natural Resources

STK= Livestock Watering

quarters are 1=NW, 2=NE, 3=SW, 4=SE; quarters are biggest to smallest

APPENDIX I

LABORATORY ANALYTICAL REPORTS

AND

CHAIN-OF-CUSTODY FORM

**ANALYTICAL RESULTS NOT INCLUDED
IN DRAFT COPY OF REPORT**

APPENDIX II

PROJECT PHOTOGRAPHS



Photo #1: Release area, looking northerly along the flowline. Notice soil staining in center of photograph.

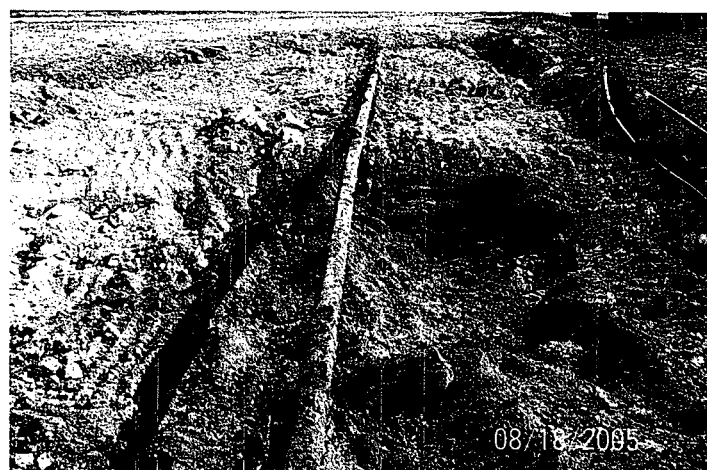


Photo #2: Release area, looking northerly. Notice soil staining in central portion of the photograph.

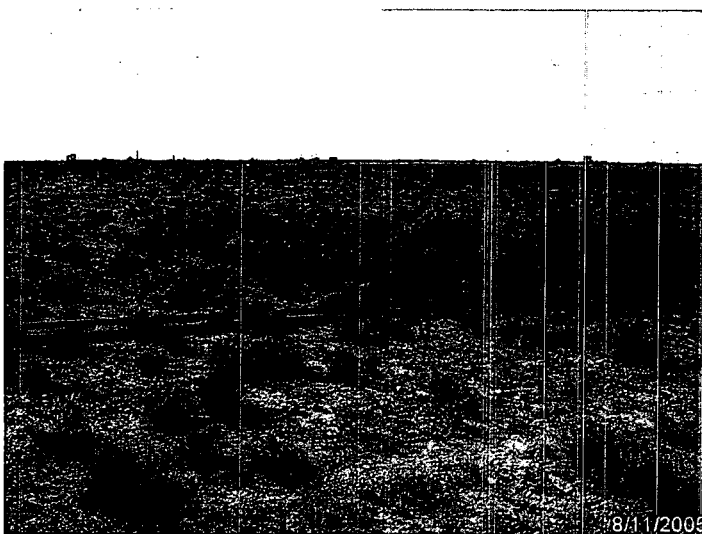


Photo #3: Overspray area, looking westerly.



Photo #4: Looking down into excavation.

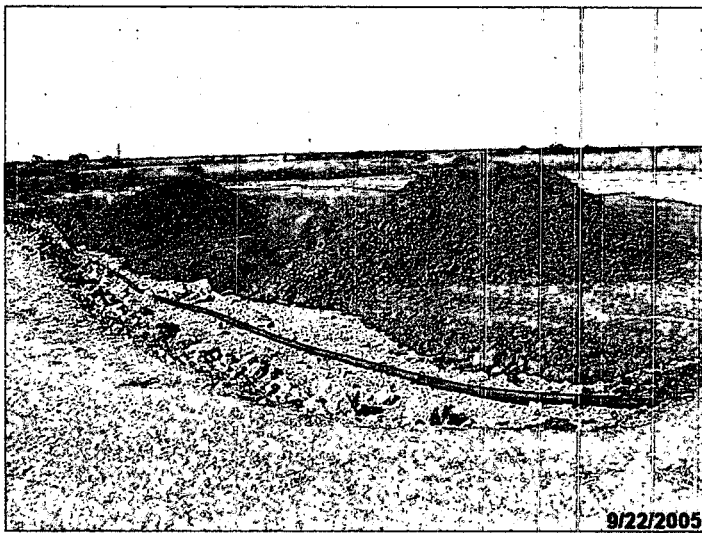


Photo #5: Site graded and contoured, looking southerly.

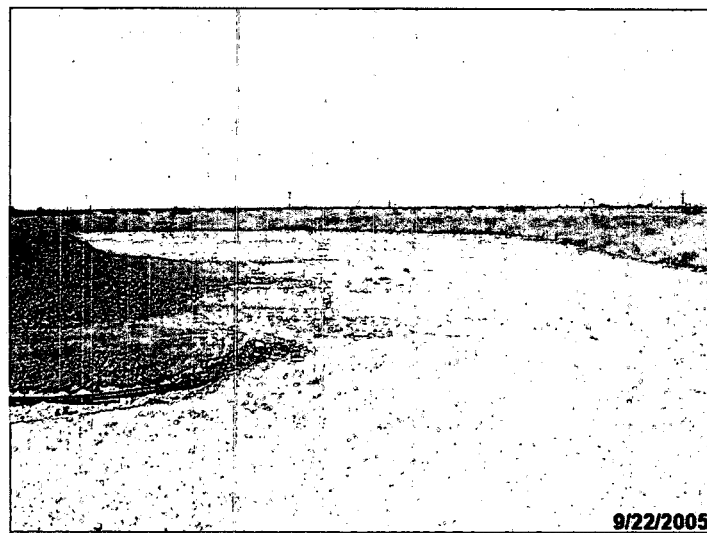
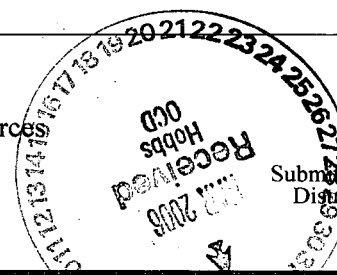


Photo #6: Site graded and contoured, looking westerly.

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

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



Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report

☒ Final Report

| | | | |
|---|-----------------------|--|--|
| Name of Company: Chesapeake Energy | | Contact: Bradley Blevins | |
| Address: 5014 Carlsbad Highway | | Telephone No.: (505) 391-1462 ext. 24 | |
| Facility Name: State L #2 | | Facility Type: Flowline | |
| Surface Owner: Darr Angell | Mineral Owner: | Lease No.: 3002523852 | |

LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| E | 19 | 17S | 36 E | | | | | Lea |

Latitude: N 32° 49' 21.74" **Longitude:** W 103° 23' 55.79"

NATURE OF RELEASE

| | | |
|---|--|---|
| Type of Release: Produced Water (60 bbls) and Oil (5 bbls) | Volume of Release: 65 | Volume Recovered: 0 gallons |
| Source of Release: Flowline | Date and Hour of Occurrence: August, 11 2005 @ 5:00 P.M. | Date and Hour of Discovery: August 11, 2005 @ 5:00 P.M. |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? Larry Johnson, NMOCD-Hobbs | |
| By Whom? Bradley Blevins, Chesapeake | Date and Hour: August 12, 2005 @ 8:46 A.M. | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse: Not Applicable | |

If a Watercourse was Impacted, Describe Fully.* Not Applicable

Describe Cause of Problem and Remedial Action Taken.* Polyethylene flowline release of produced water and oil. Saturated soil was scraped up and placed on plastic. Upon conclusion of remedial excavation, saturated soil was disposed of at Sundance Services, Inc.

Describe Area Affected and Cleanup Action Taken.* Approximately 8,000 square feet of surface area was impacted by the release, with approximately 1,400 square feet of soil saturated. Approximately 1,204 cubic yards of impacted soil was excavated and transported to Sundance Services, Inc. for disposal. The excavation was backfilled with clean soil purchased from the landowner and contoured to allow drainage.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|---|--------------------------------------|--|-------------------------------|
| Signature: | | OIL CONSERVATION DIVISION | |
| Printed Name: Bradley Blevins | | Approved by District Supervisor: <i>[Signature]</i> | |
| Title: Field Technician | | Approval Date: 3.2.06 | Expiration Date: _____ |
| E-mail Address: bblevins@chkenergy.com | | Attached <input type="checkbox"/> | |
| Date: | Phone: (505) 391-1462 ext. 24 | Conditions of Approval: <i>Completed</i> <i>NO FURTHER ACTION REQUIRED</i> | |

* Attach Additional Sheets If Necessary



ENVIRONMENTAL PLUS, INC.
CONSULTING AND REMEDIAL CONSTRUCTION

31 October 2006

Mr. Larry Johnson
Environmental Engineer
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240



Re: **Initial C-141**
Chesapeake Energy
#1 State L (EPI Reference #160078)
UL-C, Section 19, Township 17 South, Range 36 East

Dear Mr. Johnson:

Environmental Plus, Inc., on behalf of Mr. Bradley Blevins, Chesapeake Energy Corporation (Chesapeake), submits the attached New Mexico Oil Conservation Division (NMOCD) form C-141 for the above-referenced leak site, located on land owned by the state of New Mexico.

The site is located approximately 9 miles northeast of Lovington, New Mexico (reference *Figure 1*). Information obtained from the New Mexico Office of the State Engineer's website and a United States Geological Survey (USGS) database indicates no water supply wells within a 1,000-foot radius of the release site. However, there are eleven water supply wells located within a 1.0-mile radius of the release site (reference *Figure 2*). Groundwater level data indicates an average depth to water of approximately 53 feet below ground surface (reference *Table 1*). The attached site information and metrics form ranks the site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993).

Approximately fifteen (15) barrels of oil were released when a union on a flow-line failed with zero (0) barrels recovered.

ENVIRONMENTAL PLUS, INC.



Should you have any questions or concerns please feel free to contact me at (505) 394-3481 or via e-mail at dduncan@envplus.net or Mr. Bradley Blevins at (505) 391-1462 ext. 6224 or via e-mail at bblevins@chkenergy.com. All official communication should be addressed to:

Mr. Bradley Blevins
Chesapeake Energy
P.O. Box 190
Hobbs, New Mexico 88240

Sincerely,

ENVIRONMENTAL PLUS, INC.

David P. Duncan
Civil Engineer

cc: Bradley Blevins, Chesapeake Energy – Hobbs, NM
Curtis Blake, Chesapeake Energy – Hobbs, NM
Harlan Brown, Chesapeake Energy – Oklahoma City, OK
Thaddeus Kostrubala – New Mexico State Land Office
Myra Meyers – New Mexico State Land Office
File

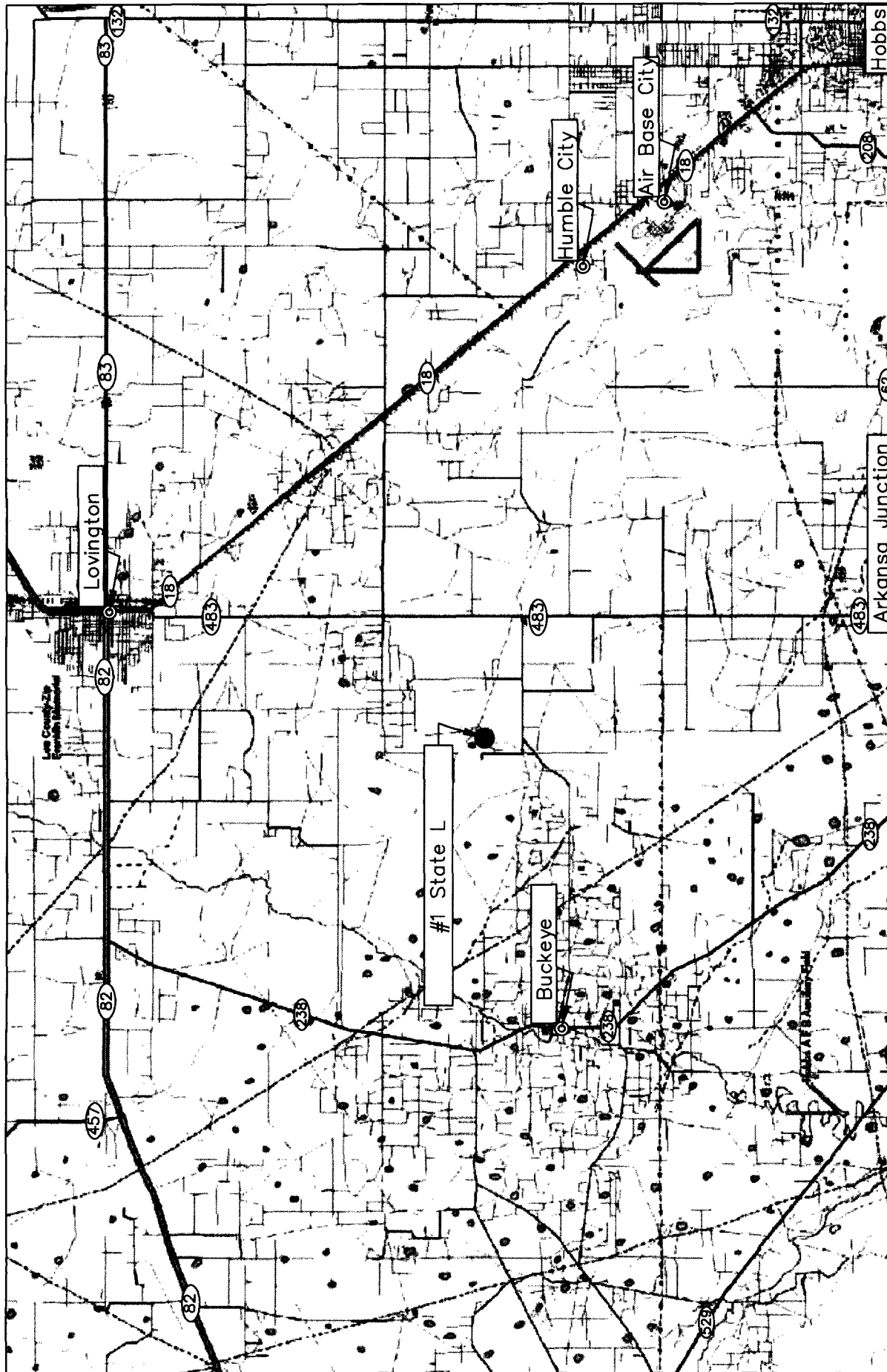
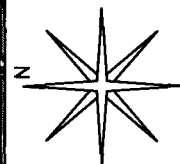


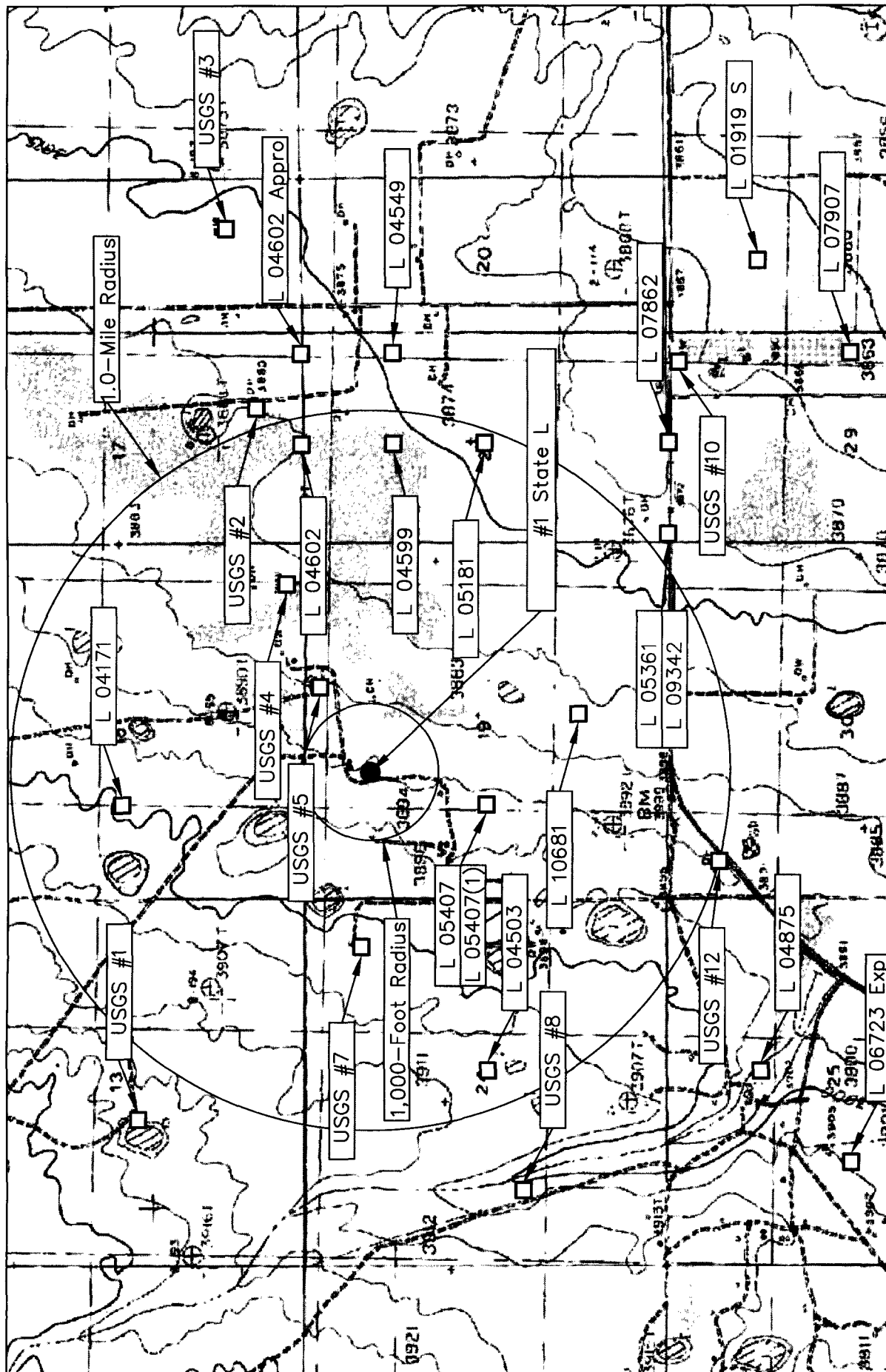
Figure 1
Area Map
Chesapeake Energy
#1 State L

Lea County, New Mexico
NE 1/4 of the NW 1/4, Sec. 19, T17S, R36E
N 32° 49' 29.16" W 103° 23' 46.41"
Elevation: 3,894 feet amsl

DWG By: Daniel Dominguez
October 2006

REVISED:





| | | |
|--|---|--|
| <p>Figure 2 Site Location Map Chesapeake Energy #1 State L</p> | <p>Lea County, New Mexico NE 1/4 of the NW 1/4, Sec. 19, T17S, R36E N 32° 49' 29.16" W 103° 23' 46.41" Elevation: 3,894 feet amsl</p> | <p>DWG By: Daniel Dominguez October 2006</p> <p>REVISED:</p> <p>4,000 SHEET 1 of 1</p> <p>0 2,000 Feet</p> |
|--|---|--|

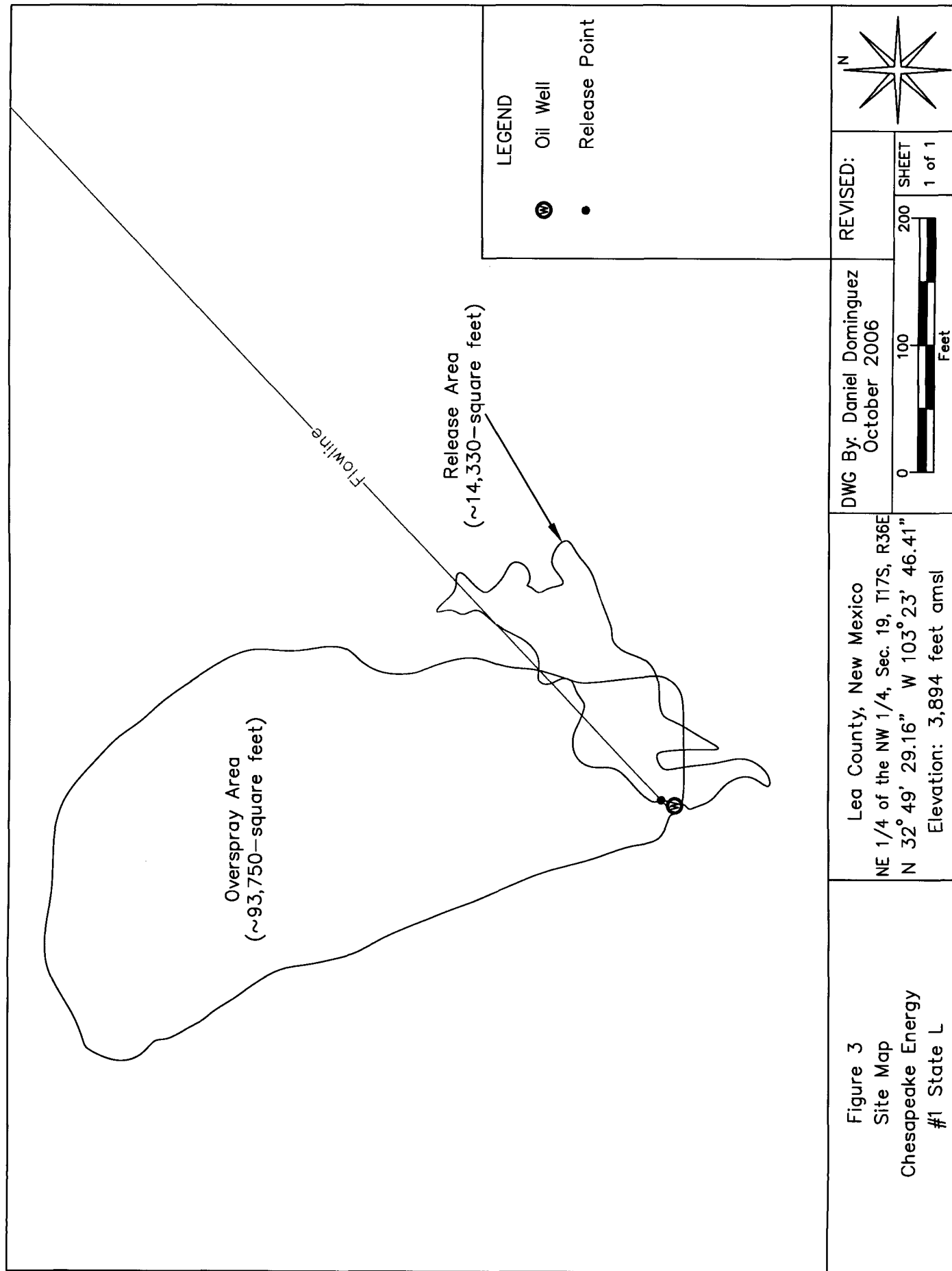


TABLE 1

Well Data

Chesapeake Energy - #1 State L (Ref. # 160078)

| Well Number | Diversion ^A | Owner | Use | Twsp | Rng | Sec q q q | Latitude | Longitude | Date Measured | Surface Elevation ^B | Depth to Water (ft bgs) |
|---------------|------------------------|-------------------------------|-----|------|-----|-----------|-----------------|------------------|---------------|--------------------------------|-------------------------|
| L 05407 | 0 | TRI SERVICE DRILLING COMPANY | PRO | 17S | 36E | 19 1 4 | N32° 49' 12.37" | W103° 23' 52.27" | 10-Jun-64 | 3,894 | 49 |
| L 05407 (1) | 0 | TRI-SERVICE DRILLING COMPANY | PRO | 17S | 36E | 19 1 4 | N32° 49' 12.37" | W103° 23' 52.27" | | 3,894 | |
| L 10681 | 3 | GOFF DAIRY | STK | 17S | 36E | 19 4 1 | N32° 48' 59.38" | W103° 23' 36.77" | 02-Jul-97 | 3,885 | 40 |
| L 04602 | 3 | HUMBLE OIL & REFINING COMPANY | PRO | 17S | 36E | 17 3 4 2 | N32° 49' 39.02" | W103° 22' 50.42" | 16-Feb-61 | 3,885 | 45 |
| L 04602 APPRO | | | | | | | | | | | |
| L 04171 | 3 | NORWOOD DRILLING COMPANY | PRO | 17S | 36E | 17 4 3 2 | N32° 49' 39.10" | W103° 22' 34.96" | 16-Feb-61 | 3,881 | 45 |
| L 04549 | 3 | INC. CARPER DRILLING CO. | PRO | 17S | 36E | 18 1 4 | N32° 50' 4.77" | W103° 23' 52.25" | 09-Jun-59 | 3,904 | 128 |
| L 04599 | 3 | GARDNER BROTHERS DRILLING CO. | PRO | 17S | 36E | 20 2 1 | N32° 49' 26.00" | W103° 22' 34.92" | 05-Nov-60 | 3,878 | 48 |
| L 05181 | 0 | LOFFLAND BROTHERS COMPANY | PRO | 17S | 36E | 20 1 2 | N32° 49' 25.91" | W103° 22' 50.39" | 16-Feb-61 | 3,881 | 38 |
| L 05361 | 0 | LOWE DRILLING CO. | PRO | 17S | 36E | 20 1 4 | N32° 49' 12.80" | W103° 22' 50.36" | 21-Jun-63 | 3,878 | 75 |
| L 07862 | 3 | R. A. ROGERS | DOM | 17S | 36E | 20 3 4 | N32° 48' 46.48" | W103° 23' 5.79" | 11-Apr-64 | 3,877 | 90 |
| L 09342 | 3 | GREAT WESTERN DRILLING CO. | STK | 17S | 36E | 20 2 1 | N32° 48' 46.59" | W103° 22' 50.30" | 13-Apr-78 | 3,872 | 58 |
| L 01919 S | | | | | | | N32° 48' 46.48" | W103° 23' 5.79" | 28-Sep-83 | 3,877 | 60 |
| L 07907 | 3 | NOLAN H. JR. BRUNSON | DOM | 17S | 36E | 29 2 2 2 | N32° 48' 33.75" | W103° 22' 19.24" | 14-Jun-01 | 3,868 | 110 |
| L 04503 | 3 | TRI SERVICE DRILLING CO. | PRO | 17S | 35E | 24 2 | N32° 48' 20.54" | W103° 22' 34.68" | 05-Jun-78 | 3,865 | 45 |
| L 04875 | 0 | INC. A. W. THOMPSON | PRO | 17S | 35E | 25 2 1 1 | N32° 49' 12.51" | W103° 24' 37.95" | 10-Sep-60 | 3,911 | 43 |
| L 06723 EXP | 0 | GILES M. LEE | DOM | 17S | 35E | 25 1 4 2 | N32° 48' 33.26" | W103° 24' 38.04" | 12-Apr-62 | 3,898 | 71 |
| USGS #1 | | | | 17S | 35E | 13 3 2 2 | | W103° 24' 53.61" | | 3,910 | |
| USGS #2 | | | | 17S | 36E | 17 3 4 3 | | | 09-Feb-96 | | 44.5 |
| USGS #3 | | | | 17S | 36E | 17 3 4 1 | | | 26-Feb-76 | | 39.99 |
| USGS #4 | | | | 17S | 36E | 18 4 4 4 | | | 25-Jan-96 | | 44.2 |
| USGS #5 | | | | 17S | 36E | 19 2 1 1 | | | 25-Jan-96 | | 38.36S |
| USGS #7 | | | | 17S | 35E | 24 2 2 3 | | | 16-Jan-86 | | 37.46 |
| USGS #8 | | | | 17S | 35E | 24 3 1 2 | | | 25-Jan-96 | | 43.16 |
| USGS #10 | | | | 17S | 35E | 29 2 1 1 | | | 19-Dec-90 | | 36.78 |
| USGS #12 | | | | 17S | 36E | 29 2 1 1 | | | 08-Feb-96 | | 49.44 |
| | | | | 17S | 36E | 30 1 1 3 | | | 03-Mar-61 | | 39.4 |

* = Data obtained from the New Mexico Office of the State Engineer Website (http://iwaters.ose.state.nm.us:7001/iWATERS/wr_RegisServlet1)

^A = In acre feet per annum

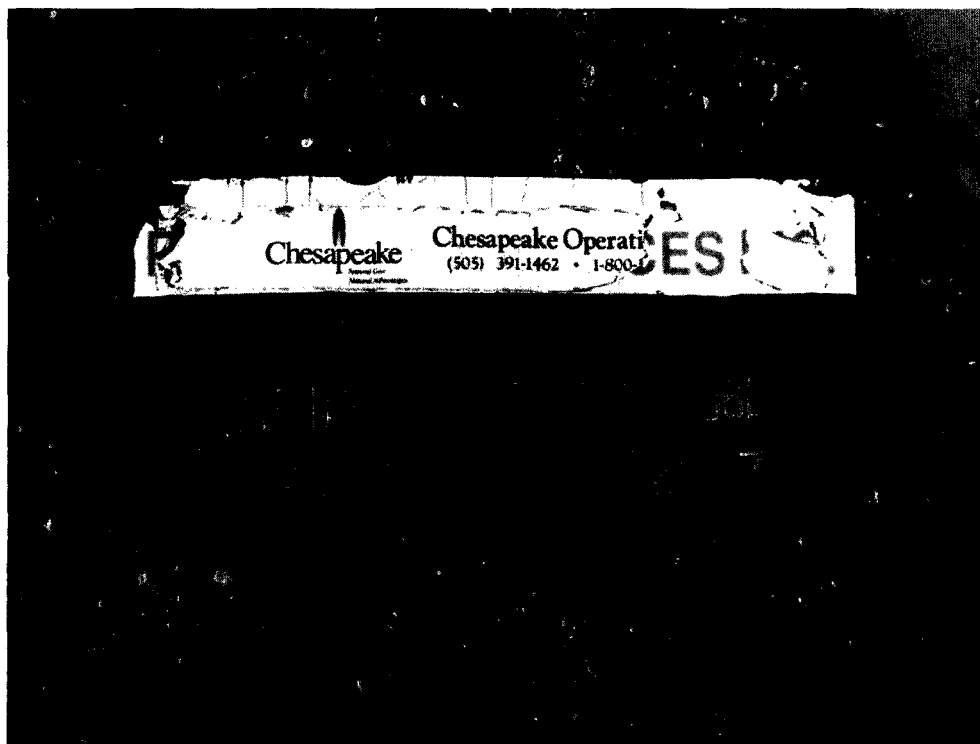
^B = Elevation interpolated from USGS topographical map based on referenced location.

DOM = 72-12-1 Domestic one household

STK = 72-12-1 Livestock watering

PRO = 72-12-1 Prospecting or development of natural resource quarters are 1=NW, 2=NE, 3=SW, 4=SE; quarters are biggest to smallest.

Shaded area indicates wells not shown in Figure 2



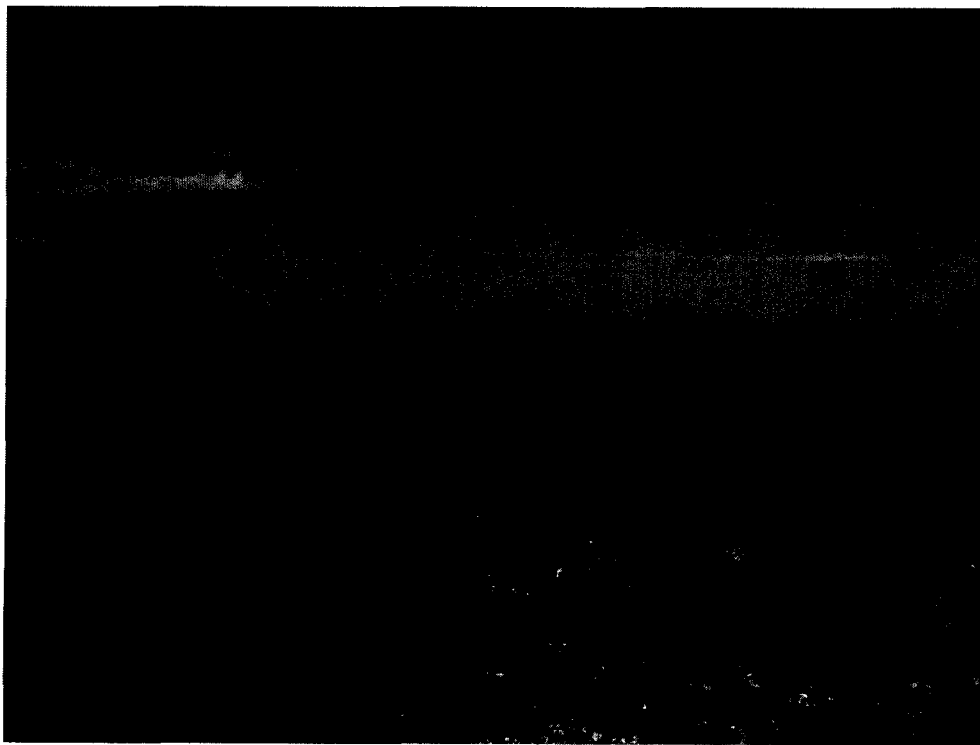
Photograph #1 – Lease sign.



Photograph #2 – Release area, looking northerly.



Photograph #3 - Looking northerly at the overspray area.



Photograph #4 - Looking northerly at the overspray area.



Information and Metrics

Incident Date:
26 October 2006

NMOCD Notified:
26 October 2006

| | | | |
|---|---------|---|-----------|
| Site: #1 State L | | Assigned Site Reference : #160078 | |
| Company: Chesapeake Operating | | | |
| Street Address: 1616 West Bender | | | |
| Mailing Address: P.O. Box 190 | | | |
| City, State, Zip: Hobbs, New Mexico 88240 | | | |
| Representative: Bradley Blevins | | | |
| Representative Telephone: (505) 391-1462 ext. 6224 | | | |
| Telephone: | | | |
| Fluid volume released (bbls): 15 bbls | | Recovered (bbls): none | |
| >25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas) | | | |
| 5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas) | | | |
| Leak, Spill, or Pit (LSP) Name: #1 State L | | | |
| Source of contamination: Flowline | | | |
| Land Owner, i.e., BLM, ST, Fee, Other: State | | | |
| LSP Dimensions: Unknown | | | |
| LSP Area: ~14,330 ft ² | | | |
| Location of Reference Point (RP): | | | |
| Location distance and direction from RP: | | | |
| Latitude: N 32° 49' 29.16" | | | |
| Longitude: W 103° 23' 46.41" | | | |
| Elevation above mean sea level: 3,894 feet | | | |
| Feet from South Section Line: | | | |
| Feet from East Section Line: | | | |
| Location- Unit or ¼: NE¼ of the NW¼ | | Unit Letter: C | |
| Location- Section: 19 | | | |
| Location- Township: 17 South | | | |
| Location- Range: 36 East | | | |
| Surface water body within 1000' radius of site: none | | | |
| Domestic water wells within 1000' radius of site: none | | | |
| Agricultural water wells within 1000' radius of site: one | | | |
| Public water supply wells within 1000' radius of site: none | | | |
| Depth from land surface to groundwater (DG): ~53 feet | | | |
| Depth of contamination (DC): unknown | | | |
| Depth to groundwater (DG - DC = DtGW): ~53 feet | | | |
| 1. Groundwater | | 2. Wellhead Protection Area | |
| If Depth to GW <50 feet: <i>20 points</i> | | If <1000' from water source, or; <200' from private domestic water source: <i>20 points</i> | |
| If Depth to GW 50 to 99 feet: <i>10 points</i> | | If >1000' from water source, or; >200' from private domestic water source: <i>0 points</i> | |
| If Depth to GW >100 feet: <i>0 points</i> | | | |
| 3. Distance to Surface Water Body | | | |
| <200 horizontal feet: <i>20 points</i> | | | |
| 200-1000 horizontal feet: <i>10 points</i> | | | |
| >1000 horizontal feet: <i>0 points</i> | | | |
| Site Rank (1+2+3) = 10+0+0=20 | | | |
| Total Site Ranking Score and Acceptable Concentrations | | | |
| Parameter | >19 | 10-19 | 0-9 |
| Benzene ¹ | 10 ppm | 10 ppm | 10 ppm |
| BTEX ¹ | 50 ppm | 50 ppm | 50 ppm |
| TPH | 100 ppm | 1,000 ppm | 5,000 ppm |

¹100 ppm field VOC headspace measurement may be substituted for lab analysis

District I
1625 N. French Dr., Hobbs, NM 88240
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1301 W. Grand Avenue, Artesia, NM 88210
District III
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District IV
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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: Chesapeake Operating | Contact: Bradley Blevins |
| Address: P.O. Box 190, Hobbs, NM 88240 | Telephone No.: (505) 391-1462 ext. 6224 |
| Facility Name: #1 State L | Facility Type: Flowline |

| | | |
|---|-----------------------|-------------------------------|
| Surface Owner: State of New Mexico | Mineral Owner: | API No.: 3002523719000 |
|---|-----------------------|-------------------------------|

LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| C | 19 | 17S | 36E | | | | | Lea |

Latitude: N 32° 49' 29.16" **Longitude:** W 103° 23' 46.41"

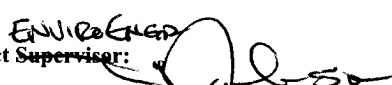
NATURE OF RELEASE

| | | |
|---|--|---|
| Type of Release: Crude oil | Volume of Release: 15 bbls | Volume Recovered: 0 bbls |
| Source of Release: Pipeline | Date and Hour of Occurrence: 26 October 2006 in the a.m. | Date and Hour of Discovery: 26 October 2006 @ 6:00 a.m. |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? Pat Caperton, NMOCD | |
| By Whom? Bradley Blevins | Date and Hour: October 26, 2006 @ 11:00 a.m. | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse: Not Applicable | |
| If a Watercourse was Impacted, Describe Fully.* Not Applicable | | |

Depth to Groundwater: ~53 feet
Describe Cause of Problem and Remedial Action Taken.* Approximately fifteen (15) barrels of oil were released when a union on a flow-line failed. Zero (0) barrels of fluid were recovered. Upon discovery of the release, Chesapeake Operating contacted EPI for an Emergency Response team. The Emergency Response team worked on the release area continuous from 10/26/06 through 10/27/06. Standing liquid was solidified and the impacted material loaded on plastic barriers. EPI is continuing cleanup of the release area. Upon assessment of the vertical and horizontal extent of impacted soil, EPI will provide the NMOCD with a Remediation Proposal.

Describe Area Affected and Cleanup Action Taken.* Approximately 14,330 square feet of surface area was affected by the release.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|---|--|---|--------------------------------|
| Signature: | | OIL CONSERVATION DIVISION | |
| Printed Name: Bradley Blevins | | Approved by District Supervisor:  | |
| Title: Field Supervisor | | Approval Date: 11-2-06 | Expiration Date: 1-2-07 |
| E-mail Address: bblevins@chkenenergy.com | | Conditions of Approval: SUBMIT FINAL Cleanup BY | |
| Date: | | Attached <input type="checkbox"/> | |
| Phone: (505) 391-1462 ext. 6224 | | | |

* Attach Additional Sheets If Necessary

Incident - nPAC0431335214
Application - nPAC0431335320

RP# 1110

District I
PO Box 1960, Hobbs, NM 88241-1960

District II

PO Drawer DD, Artesia, NM 88211-0719

District III

1000 Rio Branson Rd., Aztec, NM 87410

District IV

PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-104

Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

| | | |
|--|---|--|
| ¹ Operator name and Address PERMIAN RESOURCES, INC. DBA PERMIAN PARTNERS, INC. P.O. BOX 590 MIDLAND, TEXAS 79702 | | ² OGRID Number 025797 |
| | | ³ Reason for Filing Code CO- effective May 1, 1998 |
| ⁴ API Number 30 - 0 25-23719 | ⁵ Pool Name Vacuum Abo Reef | ⁶ Pool Code 61780 |
| ⁷ Property Code 009012 | ⁸ Property Name State "L" | ⁹ Well Number 1 |

II. ¹⁰ Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South Line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| C | 19 | 17S | 36E | | 990 | N | 1890 | W | Lea |

¹¹ Bottom Hole Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|-----------------------------|--|-----------------------------------|-----------------------------------|------------------------------------|-------------------------------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |
| ¹² Loc Code S | ¹³ Producing Method Code P | ¹⁴ Gas Connection Date | ¹⁵ C-129 Permit Number | ¹⁶ C-129 Effective Date | ¹⁷ C-129 Expiration Date | | | | |

III. Oil and Gas Transporters

| ¹⁸ Transporter OGRID | ¹⁹ Transporter Name and Address | ²⁰ POD | ²¹ O/G | ²² POD ULSTR Location and Description |
|---------------------------------|--|-------------------|-------------------|--|
| 015694 | Navajo Refining Co 110 W. Louisisna Midland, Texas 79701 | 2073810 | O | |
| 009171 | GPM Gas Corporation 4044 Penbrook Odessa, Texas 79760 | 2073830 | G | |
| | | | | |
| | | | | |
| | | | | |

IV. Produced Water

| | |
|------------------------------|--|
| ²³ POD 2073850 | ²⁴ POD ULSTR Location and Description |
|------------------------------|--|

V. Well Completion Data

| | | | | |
|-------------------------|------------------------------------|-------------------------|----------------------------|----------------------------|
| ²⁵ Spud Date | ²⁶ Ready Date | ²⁷ TD | ²⁸ PBTD | ²⁹ Perforations |
| ³⁰ Hole Size | ³¹ Casing & Tubing Size | ³² Depth Set | ³³ Sacks Cement | |
| | | | | |
| | | | | |
| | | | | |

VI. Well Test Data

| | | | | | |
|----------------------------|---------------------------------|-------------------------|---------------------------|-----------------------------|-----------------------------|
| ³⁴ Date New Oil | ³⁵ Gas Delivery Date | ³⁶ Test Date | ³⁷ Test Length | ³⁸ Tbg. Pressure | ³⁹ Csg. Pressure |
| ⁴⁰ Choke Size | ⁴¹ Oil | ⁴² Water | ⁴³ Gas | ⁴⁴ AOF | ⁴⁵ Test Method |

"I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name:

D'Ann Birkhead

Title:

Production Clerk

Date:

4-1-98

Phone:

915-685-0113

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

"If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature

Printed Name

Title

Date

| |
|---------|
| 23719 ✓ |
| |
| |

2702

| |
|-----------|
| Lease No. |
| B-2287 |
| West Line |
| County |

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| 79604 |
| n is to be sent) |
| OK 74005 |
| 0-71 |

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NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-1
Effective 1-1-65

I.

Operator
Tom L. Ingram
Address
P.O. Box 1757 Roswell, New Mexico 88201
Reason(s) for filing (check proper box)
New Well ☐ Change in Transporter of:
Per completion ☐ Oil ☒ Dry Gas ☐
Change in Ownership ☐ Casinghead Gas ☐ Condensate ☐
Other (Please explain)
If change of ownership give name and address of previous owner

II. DESCRIPTION OF WELL AND LEASE

| | | | | |
|---|----------------------|--|---|----------------------------|
| Lease Name <u>State "L"</u> | Well No. <u>1</u> | Pool Name, Including Formation <u>Vacuum Abo Reef</u> | Kind of Lease <u>State, Federal or Fee</u> | Lease No. <u>B-2287</u> |
| Location Unit Letter <u>C</u> <u>990</u> Feet From The <u>North</u> Line and <u>1890</u> Feet From The <u>West</u> Line of Section <u>19</u> Township <u>17 S</u> Range <u>36 E</u> , NMPM, <u>Lea</u> County | | | | |

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

| | | | | | | |
|---|---|-------------------|---------------------|----------------------|--|-------------------------|
| Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> <u>Pride Pipeline Company</u> | Address (Give address to which approved copy of this form is to be sent) <u>P.O.B. 2436 Abilene, Texas 79604</u> | | | | | |
| Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> <u>Phillips Petroleum Company</u> | Address (Give address to which approved copy of this form is to be sent) <u>Bartlesville, Oklahoma</u> | | | | | |
| If well produces oil or liquids, give location of tanks. | Unit <u>C</u> | Sec. <u>19</u> | Twp. <u>17 S</u> | Range <u>36 E</u> | Is gas actually connected? <u>Yes</u> | When <u>12-20-71</u> |

If this production is commingling with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

| | | | | | | | | |
|--------------------------------------|-----------------------------|----------|-----------------|----------|-------------------|-----------|-------------|--------------|
| Designate Type of Completion - (X) | Oil Well | Gas Well | New Well | Workover | Deepen | Plug Back | Same Res'v. | Diff. Res'v. |
| Date Spudded | Date Compl. Ready to Prod. | | Total Depth | | P.B.T.D. | | | |
| Elevations (DF, RAB, RT, GR, etc.) | Name of Producing Formation | | Top Oil/Gas Pay | | Tubing Depth | | | |
| Perforations | | | | | Depth Casing Shoe | | | |
| TUBING, CASING, AND CEMENTING RECORD | | | | | | | | |
| HOLE SIZE | CASING & TUBING SIZE | | DEPTH SET | | SACKS CEMENT | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

| | | | |
|---------------------------------|-----------------|---|------------|
| Date First New Oil Run To Tanks | Date of Test | Producing Method (Flow, pump, gas lift, etc.) | |
| Length of Test | Tubing Pressure | Casing Pressure | Choke Size |
| Actual Prod. During Test | Oil - Bbls. | Water - Bbls. | Gas - MCF |

GAS WELL

| | | | |
|----------------------------------|---------------------------|---------------------------|-----------------------|
| Actual Prod. Test - MCF/D | Length of Test | Bbls. Condensate/MMCF | Gravity of Condensate |
| Testing Method (pitot, back pr.) | Tubing Pressure (Shut-in) | Casing Pressure (Shut-in) | Choke Size |

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Joseph L. Lyons
Engineer (Signature)
(Title)
7-24-84
(Date)

OIL CONSERVATION COMMISSION

APPROVED JUL 27 1984, 19
BY Eddie W. Seay
TITLE Oil & Gas Inspector

This form is to be filed in compliance with RULE 1104.
If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.
All sections of this form must be filled out completely for allowable on new and recompleted wells.
Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.
Separate Forms C-104 must be filed for each pool in multiply completed wells.

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NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
 Supersedes Old C-104 and C-110
 Effective 1-1-65

I. OPERATOR

Operator TOM L. INGRAM

Address P. O. Box 1757 - Roswell, New Mexico 88201

Reason(s) for filing (Check proper box)

| | |
|--|---|
| New Well <input type="checkbox"/> | Change in Transporter of: |
| Recompletion <input type="checkbox"/> | Oil <input checked="" type="checkbox"/> Dry Gas <input type="checkbox"/> |
| Change in Ownership <input type="checkbox"/> | Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/> |

Other (Please explain) _____

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

| | | | | |
|---|----------------------|--|---|----------------------------|
| Lease Name <u>State "L"</u> | Well No. <u>1</u> | Pool Name, including Formation <u>Vacuum-Abo Reef</u> | Kind of Lease State, Federal or Fee <u>State</u> | Lease No. <u>B-2287</u> |
| Location Unit Letter <u>C</u> ; <u>990</u> Feet From The <u>North</u> Line and <u>1890</u> Feet From The <u>West</u> | | | | |
| Line of Section <u>19</u> Township <u>17-S</u> Range <u>36-E</u> , NMFM, <u>Lea</u> County | | | | |

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

| | |
|--|--|
| Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> | Address (Give address to which approved copy of this form is to be sent) |
| <u>Atlantic Richfield Co.</u> | <u>POB 1610 - Midland, Texas 79701</u> |
| Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/> | Address (Give address to which approved copy of this form is to be sent) |
| | |
| If well produces oil or liquids, give location of tanks. | Unit Sec. Twp. Rge. Is gas actually connected? When |
| | <u>c 19 17S 36E No (vented) Waiting on contract</u> |

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

| | | | | | | | | |
|---|-----------------------------|-----------------|-------------------|--------------|--------------|-----------|------------|-------------|
| Designate Type of Completion - (X) | Oil Well | Gas Well | New Well | Workover | Deepen | Plug Back | Same Rest. | Diff. Rest. |
| Date Spudded | Date Compl. Ready to Prod. | Total Depth | | P.B.T.D. | | | | |
| Elevations (DF, RKB, RT, GR, etc.) | Name of Producing Formation | Top Oil/Gas Pay | | Tubing Depth | | | | |
| Perforations | | | Depth Casing Shoe | | | | | |
| TUBING, CASING, AND CEMENTING RECORD | | | | | | | | |
| HOLE SIZE | CASING & TUBING SIZE | | DEPTH SET | | SACKS CEMENT | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

| | | | |
|---------------------------------|-----------------|---|------------|
| Date First New Oil Run To Tanks | Date of Test | Producing Method (Flow, pump, gas lift, etc.) | |
| Length of Test | Tubing Pressure | Casing Pressure | Choke Size |
| Actual Prod. During Test | Oil-Bbls. | Water-Bbls. | Gas-MCF |

| | | | |
|----------------------------------|---------------------------|---------------------------|-----------------------|
| GAS WELL | | | |
| Actual Prod. Test-MCF/D | Length of Test | Bbls. Condensate/MMCF | Gravity of Condensate |
| Testing Method (pitot, back pr.) | Tubing Pressure (Shut-in) | Casing Pressure (Shut-in) | Choke Size |

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

(Signature) _____
 Clerk
 (Title)
5-24-71
 (Date)

OIL CONSERVATION COMMISSION
MAY 26 1971

APPROVED _____, 19____
 BY [Signature]
 TITLE SUPERVISOR DISTRICT

This form is to be filed in compliance with RULE 1104.
 If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.
 All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.
 Forms C-104 must be filed for each pool in multiply

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**NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS**

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

I. Operator

Operator TOM L. INGRAM

Address P. O. Box 1757 - Roswell, New Mexico 88201

Reason(s) for filing (Check proper box)

| | |
|--|---|
| New Well <input type="checkbox"/> | Change in Transporter of: |
| Recompletion <input type="checkbox"/> | Oil <input checked="" type="checkbox"/> Dry Gas <input type="checkbox"/> |
| Change in Ownership <input type="checkbox"/> | Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/> |

Other (Please explain)

If change of ownership give name and address of previous owner

II. DESCRIPTION OF WELL AND LEASE

| | | | | |
|--------------------------------|--|--|---|----------------------------|
| Lease Name <u>State "L"</u> | Well No. <u>1</u> | Pool Name, Including Formation <u>Vacuum-Abo Reef</u> | Kind of Lease State, Federal or Fee <u>State</u> | Lease No. <u>B-2287</u> |
| Location | | | | |
| Unit Letter <u>C</u> | <u>990</u> Feet From The <u>North</u> Line and <u>1890</u> Feet From The <u>West</u> | | | |
| Line of Section <u>19</u> | Township <u>17S</u> | Range <u>36E</u> | <u>NMPM</u> | Lea County |

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

| | |
|--|--|
| Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> | Address (Give address to which approved copy of this form is to be sent) |
| <u>The Permian Corporation</u> | <u>1509 West Wall, Midland, Texas 79701</u> |
| Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> | Address (Give address to which approved copy of this form is to be sent) |
| | |
| If well produces oil or liquids, give location of tanks. | Unit Sec. Twp. Rge. Is gas actually connected? When |
| | <u>C 19 17S 36E No (Vented) Waiting on Contract</u> |

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

| | | | | | | | | |
|---|-----------------------------|-----------------|--------------|----------|--------|-----------|-------------------|--------------|
| Designate Type of Completion - (X) | Oil Well | Gas Well | New Well | Workover | Deepen | Plug Back | Same Res't. | Diff. Res't. |
| Date Spudded | Date Compl. Ready to Prod. | Total Depth | P.B.T.D. | | | | | |
| Elevations (DF, RKB, RT, GR, etc.) | Name of Producing Formation | Top Oil/Gas Pay | Tubing Depth | | | | | |
| Perforations | | | | | | | Depth Casing Shoe | |
| TUBING, CASING, AND CEMENTING RECORD | | | | | | | | |
| HOLE SIZE | CASING & TUBING SIZE | DEPTH SET | SACKS CEMENT | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

| | | | |
|---------------------------------|-----------------|---|------------|
| Date First New Oil Run To Tanks | Date of Test | Producing Method (Flow, pump, gas lift, etc.) | |
| Length of Test | Tubing Pressure | Casing Pressure | Choke Size |
| Actual Prod. During Test | Oil-Bbls. | Water-Bbls. | Gas-MCF |

GAS WELL

| | | | |
|----------------------------------|---------------------------|---------------------------|-----------------------|
| Actual Prod. Test-MCF/D | Length of Test | Bbls. Condensate/MMCF | Gravity of Condensate |
| Testing Method (pitot, back pr.) | Tubing Pressure (Shut-in) | Casing Pressure (Shut-in) | Choke Size |

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Elizabeth Blam
(Signature)
Secretary
(Title)
4-6-71
(Date)

OIL CONSERVATION COMMISSION

APPROVED MAY 5 1971, 19

BY [Signature]

TITLE SUPERVISOR DISTRICT

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply

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Form C-105
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION WELL COMPLETION OR RECOMPLETION REPORT AND LOG

| | |
|---|------------------------------|
| 5a. Indicate Type of Lease | |
| State <input checked="" type="checkbox"/> | Fee <input type="checkbox"/> |
| 5. State Oil & Gas Lease No. | |
| B-2287 | |

| | |
|--|--|
| 1. TYPE OF WELL | |
| OIL WELL <input checked="" type="checkbox"/> | GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/> |
| 2. TYPE OF COMPLETION | |
| NEW WELL <input checked="" type="checkbox"/> | WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/> |
| 2. Name of Operator | |
| TOM L. INGRAM | |
| 3. Address of Operator | |
| P. O. Box 1757 - Roswell, New Mexico 38201 | |
| 4. Location of Well | |

| |
|--------------------------------|
| 7. Unit Agreement Name |
| 8. Farm or Lease Name |
| State "L" |
| 9. Well No. |
| 1 |
| 10. Field and Pool, or Wildcat |
| Vacuum-Abo Reef |

| | | | | |
|---------------|-----------------|---------------------|---------------|-----------|
| UNIT LETTER C | LOCATED 990 | FEET FROM THE North | LINE AND 1890 | FEET FROM |
| THE West | LINE OF SEC. 19 | TWP. 17S | RGE. 36E | NMPM |

| | | | | |
|--|-----------------------|----------------------------------|--|---------------------------------|
| 15. Date Spudded | 16. Date T.D. Reached | 17. Date Compl. (Ready to Prod.) | 18. Elevations (DF, RKB, RT, GR, etc.) | 19. Elev. Casinghead |
| 2-26-71 | 3-21-71 | 3-25-71 | 3891' GR, 3901' DF, 3902' KB | -- |
| 20. Total Depth | 21. Plug Back T.D. | 22. If Multiple Compl., How Many | 23. Intervals Drilled By | Rotary Tools |
| 8945' | 8902' | | 0' to TD | Cable Tools |
| 24. Producing Interval(s), of this completion -- Top, Bottom, Name | | | | 25. Was Directional Survey Made |
| 8780 to 8893 Abo Reef | | | | Totco only |
| 26. Type Electric and Other Logs Run | | | | 27. Was Well Cored |
| Sidewall Neutron, Laterolog, Microlaterolog | | | | Yes |

| 28. CASING RECORD (Report all strings set in well) | | | | | |
|--|----------------|-----------|-----------|------------------|---------------|
| CASING SIZE | WEIGHT LB./FT. | DEPTH SET | HOLE SIZE | CEMENTING RECORD | AMOUNT PULLED |
| 13-3/8 | 48 | 335' | 17" | 300 SX | Circulated |
| 8-5/8 | 24-32 | 3300' | 11" | 200 SX | 0 |
| 5-1/2 | 14-15 1/2-17 | 8945' | 7-7/8" | 300 SX | 0 |

| 29. LINER RECORD | | | | | 30. TUBING RECORD | | |
|------------------|-----|--------|--------------|--------|-------------------|-----------|------------|
| SIZE | TOP | BOTTOM | SACKS CEMENT | SCREEN | SIZE | DEPTH SET | PACKER SET |
| | | | | | 2-3/8 | 8733 | 8630 |

| 31. Perforation Record (Interval, size and number) | | 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. | | | | | |
|---|-------------------------------|---|--|----------------|-------------------------------|-----------|----------|
| 8780, 84, 87, 84, 8811, 30, 32, 49, 56, 62, 76, 84, 87, 93. | | <table border="1"> <tr> <th>DEPTH INTERVAL</th> <th>AMOUNT AND KIND MATERIAL USED</th> </tr> <tr> <td>8780-8893</td> <td>1000 gal</td> </tr> </table> | | DEPTH INTERVAL | AMOUNT AND KIND MATERIAL USED | 8780-8893 | 1000 gal |
| DEPTH INTERVAL | AMOUNT AND KIND MATERIAL USED | | | | | | |
| 8780-8893 | 1000 gal | | | | | | |

| | | | | | | | |
|-----------------------|-----------------|--|-------------------------|-------------|---------------|--------------------------------|------------------|
| 33. PRODUCTION | | | | | | | |
| Date First Production | | Production Method (Flowing, gas lift, pumping -- Size and type pump) | | | | Well Status (Prod. or Shut-in) | |
| 3-25-71 | | Flowing | | | | Producing | |
| Date of Test | Hours Tested | Choke Size | Prod'n. For Test Period | Oil -- Bbl. | Gas -- MCF | Water -- Bbl. | Gas -- Oil Ratio |
| 3-25-71 | 24 | 20/64 | | 310 | 280 | 0 | 903 |
| Flow Tubing Press. | Casing Pressure | Calculated 24-Hour Rate | Oil -- Bbl. | Gas -- MCF | Water -- Bbl. | Oil Gravity -- API (Corr.) | |
| 225 | 0 (Pkr) | | 310 | 280 | 0 | 38 | |

| | |
|--|-------------------|
| 34. Disposition of Gas (Sold, used for fuel, vented, etc.) | Test Witnessed By |
| Vented | A. C. Bonnell |

| |
|-------------------------|
| 35. List of Attachments |
| Cores, DSTs, Logs |

| | | |
|---|----------|---------|
| 35. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief. | | |
| SIGNED | TITLE | DATE |
| <i>Tom L. Ingram</i> | Operator | 3-26-71 |

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

| | | | | |
|--------------------------|------|------------------------|-----------------------------|------------------------|
| T. Anhy _____ | 1804 | T. Canyon _____ | T. Ojo Alamo _____ | T. Penn. "B" _____ |
| T. Salt _____ | | T. Strawn _____ | T. Kirtland-Fruitland _____ | T. Penn. "C" _____ |
| B. Salt _____ | | T. Atoka _____ | T. Pictured Cliffs _____ | T. Penn. "D" _____ |
| T. Yates _____ | 3052 | T. Miss _____ | T. Cliff House _____ | T. Leadville _____ |
| T. 7 Rivers _____ | | T. Devonian _____ | T. Menefee _____ | T. Madison _____ |
| T. Queen _____ | | T. Silurian _____ | T. Point Lookout _____ | T. Elbert _____ |
| T. Grayburg _____ | | T. Montoya _____ | T. Mancos _____ | T. McCracken _____ |
| T. San Andres _____ | 4600 | T. Simpson _____ | T. Gallup _____ | T. Ignacio Qtzte _____ |
| T. Glorieta _____ | 3253 | T. McKee _____ | Base Greenhorn _____ | T. Granite _____ |
| T. Paddock _____ | | T. Ellenburger _____ | T. Dakota _____ | T. _____ |
| T. Blinebry _____ | | T. Gr. Wash _____ | T. Morrison _____ | T. _____ |
| T. Tubb _____ | | T. Granite _____ | T. Todilto _____ | T. _____ |
| T. Drinkard _____ | | T. Delaware Sand _____ | T. Entrada _____ | T. _____ |
| T. Abo _____ | 8770 | T. Bone Springs _____ | T. Wingate _____ | T. _____ |
| T. Wolfcamp _____ | | T. _____ | T. Chinle _____ | T. _____ |
| T. Penn. _____ | | T. _____ | T. Permian _____ | T. _____ |
| T. Cisco (Bough C) _____ | | T. _____ | T. Penn. "A" _____ | T. _____ |

FORMATION RECORD (Attach additional sheets if necessary)

| From | To | Thickness in Feet | Formation | From | To | Thickness in Feet | Formation |
|------|------|----------------------|---------------------------------------|------|----|----------------------|-----------|
| 0 | 130 | 130 | Surface andss & caliche | | | | |
| 130 | 1804 | 1674 | Red beds & sand | | | | |
| 1804 | 3052 | 1248 | Anhydrite & salt | | | | |
| 3052 | 4000 | 1548 | Sand, shale, anhydrite, & dolomite | | | | |
| 4000 | 6253 | 2253 | Dolomite & anhydrite | | | | |
| 6253 | 8770 | 2517 | Sand, dolomite, & shale | | | | |
| 8770 | 8945 | 175 | Dolomite & shale | | | | |

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REGISTRATION COMM.

402LS, W. L.

360'

is and
water.

CORE DESCRIPTIONS

TOM L. INGRAM

#1 State "L"

Core #1

8695' - 8751'. Recovered 56' being:

- 19' Buff Medium crystalline dolomite with anhydrite filling vugs.
- 8' Buff fine to medium crystalline dolomite with scattered pinpoint porosity and slight bleeding water
- 1' Green shale
- 9' Green shaley dolomite
- 11' Buff fine to medium crystalline dolomite with scattered pin point porosity
- 1' Green shale
- 1' Green shaley dolomite
- 4' Buff fine crystalline dolomite

Core #2

8751' - 8802'. Recovered 51' being:

- 3' Light gray fine to medium crystalline dolomite
- 1' Green shaley dolomite
- 15' White to buff medium crystalline dolomite with anhydritic inclusions
- 6' Buff medium to coarse crystalline dolomite with pin point porosity and stain
- 9' with good porosity and stain
- 7' with pin point porosity fractures and stain
- 3' Dense dolomite
- 1' Coarse crystalline dolomite with good pin point porosity and stain
- 1' Anhydrite
- 3' Shaley dolomite
- 1' Coarse crystalline dolomite with good pin point porosity and stain
- 1' Shaley dolomite

Core #3

8802' - 8859' Recovered 56' being:

- 1' Green shaley dolomite
- 1' Anhydrite
- 2' Buff medium crystalline dolomite with porosity and good stain
- 1' Buff fine crystalline dolomite
- 1' Buff fine crystalline dolomite with fractures and good stain
- 1' Buff fine crystalline dolomite
- 1' Buff crystalline dolomite with porosity and good stain
- 5' Buff fine to medium crystalline dolomite
- 4' Buff fine to medium crystalline dolomite with slight porosity and fractures and good stain
- 1' Anhydrite
- 2' Buff medium to coarse crystalline dolomite with slight fractures and good stain
- 5' Buff medium to coarse crystalline dolomite with good porosity and stain
- 6' Fine to medium crystalline dolomite
- 2' Buff fine to medium crystalline dolomite/slightly anhydritic
- 12' Buff medium to coarse crystalline dolomite with good porosity and stain
- 1' Buff fine to medium crystalline dolomite
- 2' Buff medium to coarse crystalline dolomite with good porosity and stain
- 1' Fine to medium crystalline dolomite
- 4' Anhydrite and anhydritic dolomite
- 1' Buff medium crystalline dolomite with slight fractures and good stain
- 1' Green shaley dolomite
- 1' Anhydrite

Core #4

8859' - 8900'. Recovered 43' being:

- 10' Buff to light gray fine to medium crystalline dolomite
- 3' Buff medium to coarse crystalline dolomite with good porosity and stain
- 2' Buff medium crystalline dolomite
- 1' Buff anhydritic dolomite
- 8' Buff medium to coarse crystalline dolomite with good porosity and stain.
Dull fluorescence in last foot
- 2' Buff fine to medium crystalline dolomite
- 6' White medium to coarse crystalline dolomite with good porosity and dull
fluorescence last three feet.
- 2' Buff medium to coarse crystalline dolomite
- 1' Green shaley dolomite
- 1' Buff medium crystalline dolomite with good porosity and fluorescence
- 1' Anhydrite
- 1' Buff medium to coarse crystalline dolomite with good porosity and dull
fluorescence
- 1' Anhydritic dolomite
- 1' Medium to coarse crystalline dolomite with good porosity and stain
- 3' Buff medium to coarse crystalline dolomite with good porosity and dull
fluorescence

Core #5

8902' - 8940'. Recovered 38' being:

- 1' Buff fine crystalline dolomite
- 8' Buff medium to coarse crystalline dolomite with good porosity and stain
- 1' light gray fine crystalline dolomite
- 1' light gray shaley dolomite
- 1' light gray fine crystalline dolomite
- 2' Buff medium crystalline dolomite with good porosity and dull fluorescence
- 2' Shaley dolomite
- 3' Gray fine to medium crystalline dolomite
- 1' Green shaley dolomite
- 1' Green shale
- 1' Green shaley dolomite
- 3' Buff fine to medium crystalline dolomite
- 1' Buff medium crystalline dolomite with good vuggy porosity and some stain
- 3' Buff medium crystalline dolomite with good vuggy porosity and dull fluorescence
- 2' Buff medium crystalline dolomite
- 2' Buff medium crystalline dolomite with good vuggy porosity and trace of stain
- 1' Green shaley dolomite
- 3' Buff medium to coarse crystalline dolomite with good vuggy porosity and dull
fluorescence
- 1' Buff medium to coarse crystalline dolomite with good porosity and dull
fluorescence.

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| | GAS |
| OPERATOR | |
| PRORATION OFFICE | |

**NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS**

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

I. OPERATOR

Operator TOM L. INGRAM

Address P. O. Box 1757 - Roswell, New Mexico 88201

Reason(s) for filing (Check proper box)

| | | |
|--|---|---------------------------------------|
| New Well <input checked="" type="checkbox"/> | Change in Transporter of: | Other (Please explain) <u>5/25/71</u> |
| Recompletion <input type="checkbox"/> | Oil <input type="checkbox"/> | Dry Gas <input type="checkbox"/> |
| Change in Ownership <input type="checkbox"/> | Casinghead Gas <input type="checkbox"/> | Condensate <input type="checkbox"/> |

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

| | | | | |
|--------------------------------|--|---|---|----------------------------|
| Lease Name <u>State "L"</u> | Well No. <u>1</u> | Pool Name, including Formation <u>Vacuum- Abo Reef</u> | Kind of Lease State, Federal or Fee <u>State</u> | Lease No. <u>8-2287</u> |
| Location | | | | |
| Unit Letter <u>C</u> | <u>990</u> Feet From The <u>North</u> Line and <u>1890</u> Feet From The <u>West</u> | | | |
| Line of Section <u>19</u> | Township <u>17S</u> | Range <u>36E</u> | NMPM, <u>Lea</u> | County |

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

| | |
|--|--|
| Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> | Address (Give address to which approved copy of this form is to be sent) |
| <u>Atlantic Richfield Company Trucks</u> | <u>P. O. Box 1610, Midland, Texas 79701</u> |
| Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/> | Address (Give address to which approved copy of this form is to be sent) |
| <u>Skelly Oil Company</u> | <u>P. O. Box 1650, Tulsa, Oklahoma</u> |
| If well produces oil or liquids, give location of tanks. | Is gas actually connected? When |
| <u>C 19 17S 36E</u> | <u>No 30 days</u> |

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

| | | | | | | | | |
|--|--|-----------------------------------|--|----------|--------|-----------|-------------|--------------|
| Designate Type of Completion - (X) | Oil Well <input checked="" type="checkbox"/> | Gas Well | New Well <input checked="" type="checkbox"/> | Workover | Deepen | Plug Back | Same Res't. | Diff. Res't. |
| Date Spudded <u>2-26-71</u> | Date Compl. Ready to Prod. <u>3-25-71</u> | Total Depth <u>8945'</u> | P.B.T.D. <u>8902'</u> | | | | | |
| Elevations (DF, RAB, RT, GR, etc.) <u>8891 GR, 3901 DF, 3902 KB</u> | Name of Producing Formation <u>Abo Reef</u> | Top Oil/Gas Pay <u>8780'</u> | Tubing Depth <u>8730'</u> | | | | | |
| Perforations <u>8780, 84, 87, 94, 8811, 30, 32, 49, 56, 62, 76, 84, 87, 93.</u> | | Depth Casing Shoe <u>8945'</u> | | | | | | |
| TUBING, CASING, AND CEMENTING RECORD | | | | | | | | |
| HOLE SIZE | CASING & TUBING SIZE | DEPTH SET | SACKS CEMENT | | | | | |
| <u>17"</u> | <u>13-3/8</u> | <u>335'</u> | <u>300 sx Circ.</u> | | | | | |
| <u>11"</u> | <u>8-5/8</u> | <u>3300'</u> | <u>200 sx</u> | | | | | |
| <u>7-7/8 "</u> | <u>5-1/2</u> | <u>8945'</u> | <u>300 sx</u> | | | | | |

V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

| | | | |
|---|--------------------------------|---|----------------------------|
| Date First New Oil Run To Tanks <u>3-25-71</u> | Date of Test <u>3-25-71</u> | Producing Method (Flow, pump, gas lift, etc.) <u>Flowing</u> | |
| Length of Test <u>24 hours</u> | Tubing Pressure <u>225</u> | Casing Pressure <u>0 (Packer)</u> | Choke Size <u>20/64</u> |
| Actual Prod. During Test | Oil-Bbls. <u>310</u> | Water-Bbls. <u>0</u> | Gas-MCF <u>280</u> |

GAS WELL

| | | | |
|----------------------------------|---------------------------|---------------------------|-----------------------|
| Actual Prod. Test-MCF/D | Length of Test | Bbls. Condensate/MMCF | Gravity of Condensate |
| Testing Method (pitot, back pr.) | Tubing Pressure (shut-in) | Casing Pressure (shut-in) | Choke Size |

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Tom L. Ingram
(Signature)
Operator
(Title)
3-26-71
(Date)

OIL CONSERVATION COMMISSION

APPROVED MAR 26 1971, 19____

BY [Signature]

TITLE SUPERVISOR DISTRICT 1

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply

WELL NAME AND NUMBER State L #1

LOCATION NE NW Section 19, T17S, R36E, Lea County, New Mexico
(New Mexico give U.S.T&R: TEXAS GIVE S,BLK,SURV.& TWP)

OPERATOR Tom L. Ingram

DRILLING CONTRACTOR Moran Oil Producing & Drilling Corp.

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above-described well and that he has conducted deviation tests and obtained the following results:

| <u>Degrees @ Depth</u> | <u>Degrees @ Depth</u> | <u>Degrees @ Depth</u> | <u>Degrees @ Depth</u> |
|------------------------|-----------------------------|-----------------------------|-----------------------------|
| <u>1/4 125</u> | <u>1 1/2 5363</u> | <u> </u> | <u> </u> |
| <u>1/2 335</u> | <u>1 3/4 5925</u> | <u> </u> | <u> </u> |
| <u>1/2 740</u> | <u>1 3/4 6400</u> | <u> </u> | <u> </u> |
| <u>1/2 1150</u> | <u>2 6900</u> | <u> </u> | <u> </u> |
| <u>3/4 1575</u> | <u>2 7400</u> | <u> </u> | <u> </u> |
| <u>3/4 1720</u> | <u>2 1/4 7900</u> | <u> </u> | <u> </u> |
| <u>3/4 2200</u> | <u>2 1/4 8340</u> | <u> </u> | <u> </u> |
| <u>3/4 2695</u> | <u>1 3/4 8695</u> | <u> </u> | <u> </u> |
| <u>3/4 3100</u> | <u>2 1/4 8940</u> | <u> </u> | <u> </u> |
| <u>1 3300</u> | <u> </u> | <u> </u> | <u> </u> |
| <u>1/4 3790</u> | <u> </u> | <u> </u> | <u> </u> |
| <u>3/4 4250</u> | <u> </u> | <u> </u> | <u> </u> |
| <u>3/4 4600</u> | <u> </u> | <u> </u> | <u> </u> |

Drilling Contractor MORAN OIL PRODUCING & DRILLING CORP.

By R. M. Moran
R. M. Moran, President

Subscribed and sworn to before me this 26th day of March, 1971

My Commission expires:
April 1, 1974

Dwayne L. Lanning
Notary Public
Lea County, New Mexico

| | |
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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

| |
|--|
| 5a. Indicate Type of Lease |
| State <input checked="" type="checkbox"/> Fee <input type="checkbox"/> |
| 5. State Oil & Gas Lease No. |
| B-2237 |

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

| | |
|---|---|
| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> | 7. Unit Agreement Name |
| 2. Name of Operator Tom L. Ingram | 8. Form or Lease Name State "L" |
| 3. Address of Operator P. O. Box 1757 - Roswell, New Mexico 88201 | 9. Well No. 1 |
| 4. Location of Well UNIT LETTER C 990 FLY FROM THE North LINE AND 1890 THE West LINE, SECTION 19 TOWNSHIP 17S RANGE 30E | 10. Field and Pool, or Wildcat Vacuum-Abo Reef |
| 15. Elevation (Show whether DF, RT, GR, etc.) 3902' KB | 12. County Lea |

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

| | | | |
|--|---|--|---|
| PERFORM REMEDIAL WORK <input type="checkbox"/> | PLUG AND ABANDON <input type="checkbox"/> | REMEDIAL WORK <input type="checkbox"/> | ALTERING CASING <input type="checkbox"/> |
| TEMPORARILY ABANDON <input type="checkbox"/> | CHANGE PLANS <input type="checkbox"/> | COMMENCE DRILLING OPNS. <input type="checkbox"/> | PLUG AND ABANDONMENT <input type="checkbox"/> |
| PULL OR ALTER CASING <input type="checkbox"/> | OTHER <input type="checkbox"/> | CASING TEST AND CEMENT JOB <input checked="" type="checkbox"/> | OTHER <input type="checkbox"/> |

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

3-23-71 Ran 5 1/2" casing to 8945'. TD 8945'.
59 joints (1909.57') 17# K-55 LT&C
73 joints (2334.26') 15 1/2# K-55 ST&C
118 joints (3526.64') 14# K-55 ST&C
36 joints (1182.96') 15 1/2# K-55 ST&C
Cemented with 300 sacks Class C Inferno pozmix + 3/4 of 1% CFR-2 + 8# salt per sack.
Top of cement 7600'. WOC 48 hours. Tested casing and shoe to 1000 psi for 30 minutes. Held OK.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

| | | |
|---------------------------------|----------------------------------|-------------------------|
| SIGNED <u>Tom L. Ingram</u> | TITLE <u>Operator</u> | DATE <u>3-26-71</u> |
| APPROVED BY <u>[Signature]</u> | TITLE <u>SUPERVISOR DISTRICT</u> | DATE <u>MAR 26 1971</u> |
| CONDITIONS OF APPROVAL, IF ANY: | | |

| | |
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| LAND OFFICE | |
| OPERATOR | |

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes C-102 and C-104
Effective 1-1-71

1. Indicate by check () or (X) the type of well:
Oil () Gas (X)
2. State Oil & Gas Lease No.
B-2237

| SUNDRY NOTICES AND REPORTS ON WELLS | |
|---|---|
| (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.) | |
| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> | 2. Name of Operator TOM L. INGRAM |
| 3. Address of Operator P. O. Box 1757 - Roswell, New Mexico 88201 | 4. Location of Well UNIT LETTER C 990 FEET FROM THE North LINE AND 1890 FEET FROM THE West LINE, SECTION 19 TOWNSHIP 17S RANGE 36E NMPM. |
| 5. Elevation (Show whether DF, RT, GR, etc.) 3902' KB | 6. Field and Foot, or Loc. Vacuum-Abs Reef |
| 7. County Lea | 8. Well No. 1 |

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
|--|---|--|---|
| PERFORM REMEDIAL WORK <input type="checkbox"/> | PLUG AND ABANDON <input type="checkbox"/> | REMEDIAL WORK <input type="checkbox"/> | ALTERING CASING <input type="checkbox"/> |
| TEMPORARILY ABANDON <input type="checkbox"/> | CHANGE PLANS <input type="checkbox"/> | COMMENCE DRILLING OPNS. <input type="checkbox"/> | PLUG AND ABANDONMENT <input type="checkbox"/> |
| PULL OR ALTER CASING <input type="checkbox"/> | OTHER <input type="checkbox"/> | CASING TEST AND CEMENT JOB <input checked="" type="checkbox"/> | OTHER <input type="checkbox"/> |

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

- 3-2-71 Ran 905.83' 8-5/8" 32# K-55 casing and 2418.67' 8-5/8" 24# K-55 casing and set @ 3300'. Cemented with 200 sx of Class H with 2% CaCl. Plug down @ 14:30.
- 3-3-71 After WOC 24 hours, tested casing and shoe to 1000 psi for 30 minutes. Held OK.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Tom L. Ingram TITLE Operator DATE 3-3-71

APPROVED BY John W. Remyan TITLE Supervisor DATE 4-9-71

CONDITIONS OF APPROVAL, IF ANY:

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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

| |
|--|
| 5a. Indicate Type of Lease State <input checked="" type="checkbox"/> Fee <input type="checkbox"/> |
| 5. State Oil & Gas Lease No. B-2287 |

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

| | |
|--|---|
| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- <input type="checkbox"/> | 7. Unit Agreement Name |
| 2. Name of Operator TOM L. INGRAM | 8. Farm or Lease Name State "L" |
| 3. Address of Operator P. O. Box 1757 - Roswell, New Mexico 88201 | 9. Well No. 1 |
| 4. Location of Well UNIT LETTER C 990 FEET FROM THE North LINE AND 1890 FEET FROM THE West LINE, SECTION 19 TOWNSHIP 17S RANGE 36E NMPM. | 10. Field and Pool, or Wildcat Vacuum-Abo Reef |
| 15. Elevation (Show whether DF, RT, GR, etc.) 3902' KB | 12. County Lea |

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐
OTHER ☐

PLUS AND ABANDON ☐
CHANGE PLANS ☐
OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐
COMMENCE DRILLING OPNS. ☒
CASING TEST AND CEMENT JOBS ☒
OTHER ☐

ALTERING CASING ☐
PLUS AND ABANDONMENT ☐
OTHER ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

2-26-71 Commenced drilling @ 10:30 a.m.

2-27-71 Set 13-3/8" casing (48#) @ 335' and cemented with 300 sx of cement.
Cement Circulated.

2-28-71 Tested casing and shoe to 500 psi for 30 minutes. Held OK.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Tom L. Ingram

TITLE Operator

DATE 3-1-71

APPROVED BY Joe Ramsey

TITLE SUPERVISOR DISTRICT

DATE MAR 3 1971

CONDITIONS OF APPROVAL, IF ANY:

| | |
|------------------------|--|
| NO. OF COPIES RECEIVED | |
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| FILE | |
| U.S.G.S. | |
| LAND OFFICE | |
| OPERATOR | |

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101
Revised 1-1-65

| |
|--|
| 5A. Indicate Type of Lease |
| STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 5. State Oil & Gas Lease No. |
| B-2287 |

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

| | |
|--|----------------------------------|
| 1a. Type of Work | 7. Unit Agreement Name |
| b. Type of Well OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> | 8. Farm or Lease Name |
| 2. Name of Operator | 9. Well No. |
| TOM L. INGRAM | 1 |
| 3. Address of Operator | 10. Field and Pool, or Wildcat |
| P. O. Box 1757 - Roswell, New Mexico 88201 | Vacuum-Abo Reef |
| 4. Location of Well UNIT LETTER C LOCATED 990 FEET FROM THE North LINE AND 1890 FEET FROM THE West LINE OF SEC. 19 TWP. 17S RGE. 36E NMPM | 12. County |
| | Lea |
| 19. Proposed Depth | 19A. Formation |
| 9000' | Abo Reef |
| 20. Rotary or C.T. | |
| Rotary | |
| 21. Elevations (Show whether DF, RT, etc.) | 21A. Kind & Status Plug. Bond |
| 3891.0 GR | Statewide |
| 21B. Drilling Contractor | 22. Approx. Date Work will start |
| Moran | 2-28-71 |

PROPOSED CASING AND CEMENT PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | SACKS OF CEMENT | EST. TOP |
|--------------|----------------|-----------------|---------------|-----------------|-----------|
| 17" | 13-3/8 | 48 | 325 | 250 | Circulate |
| 11" | 8-5/8 | 24-32 | 3250 | 200 | |
| 7-7/8" | 5-1/2 | 15 1/2-17 | 8900 | 700 | |

Drill to 9000', test, log, and if production indicated, set production string, perforate, stimulate and complete.

Blowout preventer will be used.

APPROVAL VALID
FOR 90 DAYS UNLESS
DRILLING COMMENCED,

COMMISSION MUST BE NOTIFIED
24 HOURS PRIOR TO RUNNING
CASING.

MAY 23, 1971

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Tom L. Ingram Title Operator Date 2-23-71

(This space for State Use)

APPROVED BY John W. Remington DATE FEB 24 1971

CONDITIONS OF APPROVAL, IF ANY:

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

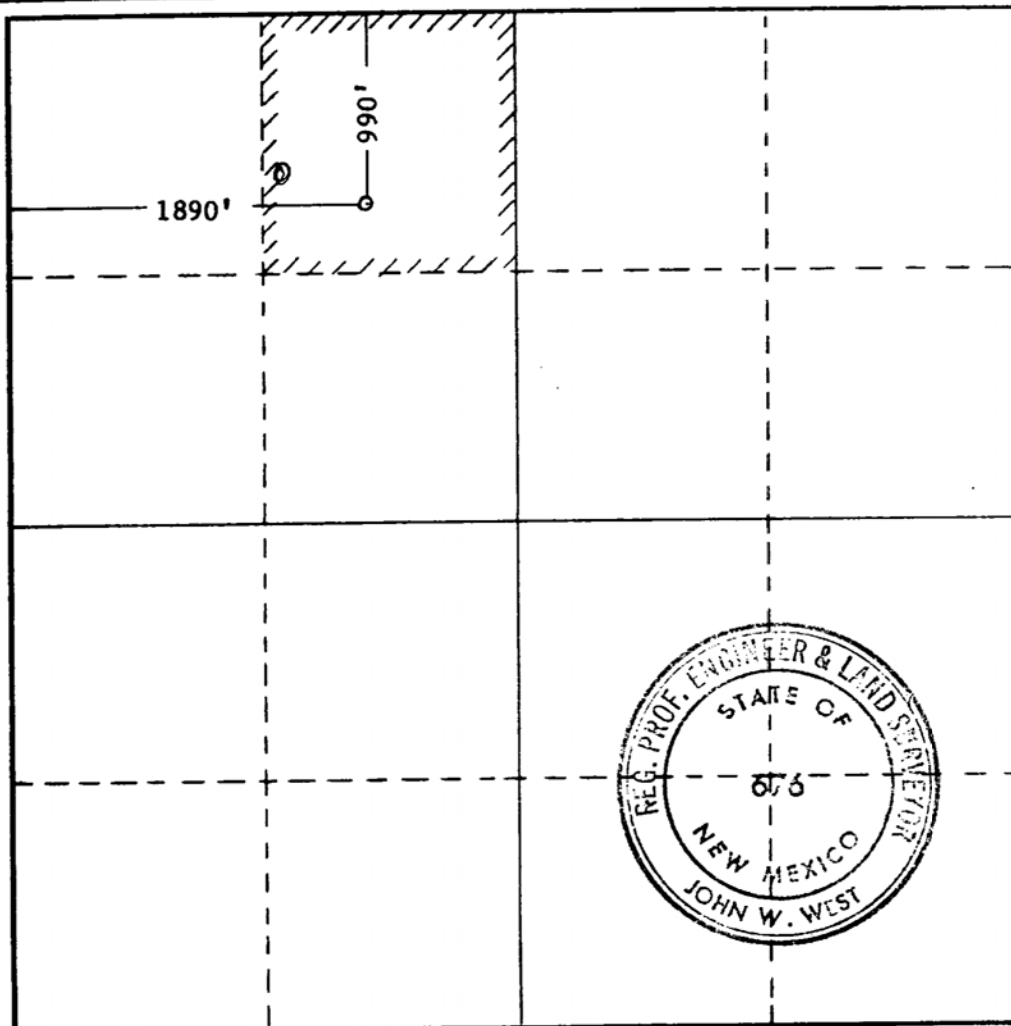
| | | | | | |
|---|--|-----------------------------|---------------------------------|----------------------|---------------------------------------|
| Operator TOM L. INGRAM | | | Lease STATE "L" | | Well No. 1 |
| Unit Letter C | Section 19 | Township 17 SOUTH | Range 36 EAST | County LEA | |
| Actual Footage Location of Well: 990 feet from the NORTH line and 1890 feet from the WEST line | | | | | |
| Ground Level Elev. 3891 | Producing Formation ABO REEF | | Pool VACUUM- ABO REEF | | Dedicated Acreage: 40 Acres |

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Rex Alcorn
Name

REX ALCORN

Position

GEOLOGIST

Company

TOM L. INGRAM, OPERATOR

Date

FEBRUARY 24, 1971

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

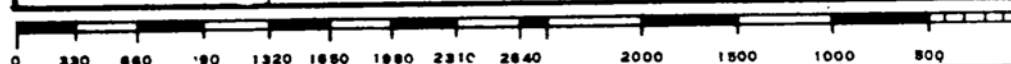
Date Surveyed

2-24-1971

Registered Professional Engineer and/or Land Surveyor

John W. West
Certificate No.

676



DR

COUNTY LEA FIELD Vacuum STATE NM 30-025-23-19

OPR INCEAM, TOM L. MAP

1 State "1"

Sec 19, T-17-S, R-36-E CO-ORD

990' ENL. 1890' FWL of Sec

Spd 2-26-71 CLASS EL. 3898Z

Cmp 3-25-71

| | FORMATION | DATUM | FORMATION | DATUM |
|---------------------------|---------------------|-------|-----------|-------|
| CSG & SX - TUBING | | | | |
| 13 3/8" at 335' w/300 SX | | | | |
| 8 5/8" at 3300' w/200 SX | | | | |
| 5 1/2" at 8945' w/300 SX. | | | | |
| | | | | |
| | | | | |
| | | | | |
| LOGS EL GR RA IND HC A | | | | |
| | TD 8945'; PED 8902' | | | |

IP (Abc) Perfs 8780-8893' F 310 BOPD. Not based on 24 hr test thru 20/64" chk. COR 903; Grav 38; CF Pkr; IF 225#.

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CONT. Moran PROP DEPTH 9000' TYPE bl

F.R. 3-2-71; Opr's Elev. 3891' CE
PD 9000' RI (A) O;
Contractor - Moran

4-1-71 AMEND FIELD NAME, Formerly reported as
Undesignated.

3-2-71 TD 3300'; Rng 8 5/8" Casing
3-8-71 Drlg. 5965' 1m
3-15-71 Drlg. 8407' 1m
3-23-71 TD 8945'; WOC
Cored 8695-8751', rec 56' tight dolo
Cored 8751-8802', rec 51' dolo w/seat ppp & st i
Cored 8802-8902', rec 57' dolo w/seat fines & stain
good pore in bottom
Cored 8859-8900', rec 41' dolo w/cull floor,
good pore & stain

LEA
INGRAM, TOM L.

Vacuum NM
1 State "L"

Sec 19, T17S, R36E
Page #2

3-23-71

Continued

DST 8866-8900', open 2 hrs, GTS 14 mins @
60 MCPCPD, rec 1530' oil (grav 40) +
90' MCO + 360' HG, O & sli WCM, 1 hr ISIP
2213#, FP 116-393#, 2 hr FSIP 2213#
Cored 8902-40', rec 38' dolo w/good vuggy
poro, scat stains & dull fluor
DST 8902-40', open 2 hrs, GTS 34 min @ TSTM,
rec 658' HG&OCM + 1316' HG & sli WCO +
742' O&GCW + 2481' wtr, 1 hr ISIP 2423#,
FP 1046-1934#, 2 hr FSIP 2097#

3-29-71

ID 8945'; PBD 8902'; COMPLETE
Perf @ 8780', 8784', 8787', 8794', 8811',
8830', 8832', 8849', 8856', 8862', 8876',
8884', 8887', 8893' w/1 SPI

3-29-71

Continued

Acid (8780-8893') 1000 gals (MA)
LOG TOPS: Anhydrite 1804', Yates 3052', San
Andres 4600', Glorieta 6253', Abo 8770'
COMPLETION REPORTED

4-1-71

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

Form C-104A
Revised June 10, 2003

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

Submit 1 copy of the final affected wells
list along with 1 copy of this form per
number of wells on that list to appropriate
District Office

Change of Operator

Previous Operator Information:

OGRID: 025797
Name: Permian Resources, Inc.
Address: P.O. Box 590
Address: _____
City, State, Zip: Midland, TX 79702-0590

New Operator Information:

Effective Date: March 1, 2004
New Ogrid: 147179
New Name: Chesapeake Operating, Inc.
Address: P.O. Box 18496
Address: _____
City, State, Zip: Oklahoma City, OK 73154-0496

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the attached list of wells is true and complete to the best of my knowledge and belief.

New Operator

Signature: *Douglas Jacobson*

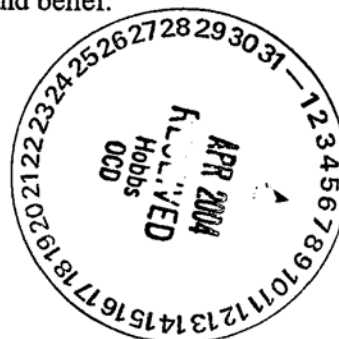
Printed name: Douglas Jacobson

Title: Sr. Vice President

E-mail: _____

Address: _____

Date: 04/01/04 Phone: (405) 848-8000



Previous operator complete below:

Previous

Operator: PERMIAN RESOURCES, INC.

Previous

OGRID: 025797

Signature: *Robert H. Marshall*

Printed

Name: ROBERT H. MARSHALL

E-mail: _____

Address: _____

NMOCD Approval

Signature: *Paul F. Kautz*

Printed

Name: PAUL F. KAUTZ

District: PETROLEUM ENGINEER

Date: APR 08 2004

Submit 3 Copies To Appropriate District Office
 District I
 1625 N. French Dr., Hobbs, NM 88240
 District II
 1301 W. Grand Ave., Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 May 27, 2004

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

| | | |
|--|--|---|
| SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) | | WELL API NO. 30-025-23719 |
| 1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> | | 5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 2. Name of Operator Chesapeake Operating Inc. | | 6. State Oil & Gas Lease No. |
| 3. Address of Operator 2010 Rankin Hwy Midland, TX 79701 | | 7. Lease Name or Unit Agreement Name State L |
| 4. Well Location Unit Letter C : 990 feet from the North line and 1890 feet from the West line Section 19 Township 17S Range 36E NMPM County/Lea | | 8. Well Number 1 |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3891 GR | | 9. OGRID Number 147179 |
| Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/> | | 10. Pool name or Wildcat Vacuum; Abo Reef |
| Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____ | | |
| Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____ | | |

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐

OTHER: ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Chesapeake, respectfully, request permission to plug this well per the attached procedure.

SEE NEXT PAGE

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☒.

SIGNATURE

TITLE Regulatory Tech.

DATE 01/18/2007

Type or print name Shay Stricklin
 For State Use Only

E-mail address: sstricklin@chkenergy.com Telephone No. (432)687-2992

APPROVED BY:

TITLE REPRESENTATIVE II/STAFF MANAGER

DATE

Conditions of Approval (if any):

FEB 01 2007

State L #1
Lea County, New Mexico
Plugging Procedure

Date: November 30, 2006

Location: 990' FNL & 1,890' FWL Sec. 19-T17S-R36E

Production Casing: 5 1/2" 14, 15.5 & 17# K-55 0-8,945'

PBTD/TD: 8,665'/8,945'

Current Perfs: Abo 8,780-11', 8,830-93' (below CIBP)

Recommended Procedure:

1. MIRU PU. NDWH/NUBOP. POH w/ 2 7/8" tbg, rods and pump.
2. RU slickline. Tag PBTD of 8,665'.
3. RIH w/ open ended tbg to ~~6,000'~~ ^{6300' PERF+SQZ. F/6300'-6200' WOC+TA6} and set a 50 sxs cement plug.
^{PERF+SQZ 50 OUT+IN TA6 @ 3250' 9 5/8" SHOE}
4. Pull tbg up to 3,350' and ~~set a 50 sxs casing shoe plug.~~ Tag plug.
5. Pull tbg up to ~~2400'~~ ^{2950'} and set a ~~50~~ ²⁵ sxs cement plug. ^{F/3000'-2900'}
^{385' PERF+SQZ, OR TA6 @ 285' + SPOT 10 SX @ SURF.}
6. Pull tbg up to ~~400'~~ ^{385'}. Fill casing back to surface with cement. POH w/ tbg. Top off casing with cement.
7. RD and move off. Install dry hole marker and cut off dead men. Restore location.

T05-1900
B05-2950

13 3/8 - 335'
8 5/8 - 3300'
5 1/2 - 8945'
GLOR. 6253'

3
mitages.

3
1
1
1
1

49', 56',
3,450
FTP

above

pection
onal

date.
irs.

Submit 3 Copies To Appropriate District Office
District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

| |
|---|
| WELL API NO. 30-025-23719 |
| 5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 6. State Oil & Gas Lease No. |
| 7. Lease Name or Unit Agreement Name State L |
| 8. Well Number 1 |
| 9. OGRID Number 147179 |
| 10. Pool name or Wildcat Vacuum; Abo Reef |

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Chesapeake Operating Inc.

3. Address of Operator 2010 Rankin Hwy
Midland, TX 79701

4. Well Location
Unit Letter C : 990 feet from the North line and 1890 feet from the West line
Section 19 Township 17S Range 36E NMPM County Lea

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3891 GR

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type Depth to Groundwater Distance from nearest fresh water well Distance from nearest surface water

Pit Liner Thickness: mil Below-Grade Tank: Volume bbls; Construction Material

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☒
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

2/7/07. MIRU plugging unit and surface equipment, unhang, work w/stuck pump back off rods, strip OOH.

2/14/07. Tag plug @1735, POOH w/tbg, POOH w/WL, perforate @385, RIH w/pkr set @52, squeeze 70 sx @385, WOC, tag @235, ND BOP, set plug @60-surface, Install dry hole marker. Well is P&A.



Approved as to plugging of the Well Bore.
Liability under bond is retained until
surface restoration is completed.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☒.

SIGNATURE Shay Stricklin TITLE Regulatory Tech. DATE 06/26/2007

Type or print name Shay Stricklin
For State Use Only

E-mail address: sstricklin@chkenegy.com Telephone No. (432)687-2992

APPROVED BY: Larry W. Wink OCTOBER REPRESENTATIVE II/STAFF MANAGER DATE 1 JUN 28 2007

Conditions of Approval (if any):

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

| | | |
|---|--|---|
| SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) | | WELL API NO. 30-025-23719 |
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| 2. Name of Operator Chesapeake Operating Inc. | | 6. State Oil & Gas Lease No. |
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| 11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3891 GR | | 9. OGRID Number 147179 |
| Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/> | | 10. Pool name or Wildcat Vacuum; Abo Reef |
| Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____ | | |
| Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____ | | |

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PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPLETIONS ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☒
CASING/CEMENT JOB ☐
OTHER: Location clean ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Well was P&A on 2/13/07. Location has been cleaned and is ready for inspection.



I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☒.

SIGNATURE

Shay Stricklin

TITLE Regulatory Tech.

DATE 08/17/2007

Type or print name Shay Stricklin

E-mail address: sstricklin@chkenergy.com

Telephone No. (432)687-2992

For State Use Only

APPROVED BY:

Gary W. Wink

TITLE

Conditions of Approval (if any):

AUG 21 2007

Submit 3 Copies To Appropriate District
Office
District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd, Aztec, NM 87410
District IV
1220 S St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

| | | |
|--|--|---|
| SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS) | | WELL API NO. 30-025-23719 |
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| Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/> | | |
| Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____ | | |
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NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☒
CASING/CEMENT JOB ☐
OTHER: Install dry hole marker and clean location. ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

2/14/07. Tag plug @ 1735, POOH w/tbg, POOH w/WL, perforate @ 385, RIH w/pkr set @ 52, squeeze 70 sx @ 385, WOC, tag @ 235, ND BOP, set plug @ 60. Install dry hole marker. Well is P&A. Location has been cleaned and is ready for inspection.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☒.

SIGNATURE Shay Stricklin TITLE Regulatory Tech. DATE 08/17/2007

Type or print name Shay Stricklin

E-mail address: sstricklin@chkenergy.com Telephone No. (432)687-2992

For State Use Only

APPROVED BY: Larry W. Wink DATE AUG 21 2007
Conditions of Approval (if any):