

RECEIVED: 10/16/2017	REVIEWER:	TYPE: SWD	APP NO: DMAm1729158265
-------------------------	-----------	--------------	---------------------------

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

15 day clock  
start  
10-27-2017

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Geological & Engineering Bureau -  
1220 South St. Francis Drive, Santa Fe, NM 87505

**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Applicant:** Cimarex Energy Co.**OGRID Number:** 162683**Well Name:** Freedom 36 State SWD #1**API:** 30-015-Pending 4489**Pool:** SWD; Devonian-Silurian**Pool Code:** 97869

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW**  
SWD

**1) TYPE OF APPLICATION:** Check those which apply for [A]

A. Location – Spacing Unit – Simultaneous Dedication

☐ NSL☐ NSP (PROJECT AREA)☐ NSP (PRORATION UNIT)☐ SD

B. Check one only for [I] or [II]

[I] Commingling – Storage – Measurement

☐ DHC☐ CTB☐ PLC☐ PC☐ OLS☐ OLM

[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery

☐ WFX☐ PMX☒ SWD☐ IPI☐ EOR☐ PPR**2) NOTIFICATION REQUIRED TO:** Check those which apply.A. ☒ Offset operators or lease holdersB. ☐ Royalty, overriding royalty owners, revenue ownersC. ☒ Application requires published noticeD. ☐ Notification and/or concurrent approval by SLOE. ☐ Notification and/or concurrent approval by BLMF. ☒ Surface ownerG. ☒ For all of the above, proof of notification or publication is attached, and/or,H. ☐ No notice required**FOR OCD ONLY**☐

Notice Complete

☐Application  
Content  
Complete

**3) CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note:** Statement must be completed by an individual with managerial and/or supervisory capacity.

Amithy Crawford

Print or Type Name

*Amithy Crawford*  
Signature

10/16/2017

Date

432-620-1909

Phone Number

acrawford@cimarex.com

e-mail Address

RECEIVED OGD



2017 OCT 18 P 3:51

CIMAREX ENERGY COMPANY  
600 N. Marienfeld Street  
Suite 600  
Midland, TX 79701

10/16/2017

Attn: New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

Subject: C-108 Application: Freedom 36 State SWD #1

Dear Sir or Madam,

Cimarex Energy Co. is seeking administrative approval to dispose of produced water into the Devonian-Silurian formation. Please find the following documents in our application package:

- Administrative Application Checklist
- C-102
- Form C-108 (Application for Authorization to Inject)
- C-108 Supporting information
- Injection Well Data Sheets
- Proposed wellbore schematic
- ½ mile & 2 mile AOR Maps
- ½ mile AOR table
- AOR P&Ad wellbore schematics and well information
- Water analysis
- Geological Description
- Water Well Search Information. Field review found no waters wells within a ½ mile
- Legal Notice ran on 10/15/17. Newspaper Clipping attached. Affidavit will be sent as soon as received.
- Notification Requirements and Proof of Notice

Please contact me with any questions, concerns, or if any additional paperwork is needed.

Thank you,

A handwritten signature in black ink that reads "Amithy Crawford". The signature is fluid and cursive, with the first name "Amithy" being more prominent.

Amithy Crawford  
Regulatory Analyst  
432-620-1909  
[acrawford@cimarex.com](mailto:acrawford@cimarex.com)

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1 API Number <b>30-015-44485</b>		2 Pool Code <b>97869</b>	3 Pool Name <b>SWD; Devonian-Silurian</b>
4 Property Code	5 Property Name <b>FREEDOM 36 STATE SWD</b>		6 Well Number <b>1</b>
7 OGRID NO. <b>215099</b>	8 Operator Name <b>CIMAREX ENERGY COMPANY</b>		9 Elevation <b>3387'</b>


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
<b>M</b>	<b>36</b>	<b>24S</b>	<b>26E</b>		<b>1300</b>	<b>SOUTH</b>	<b>660</b>	<b>WEST</b>	<b>EDDY</b>

11 Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres		13 Joint or Infill		14 Consolidation Code		15 Order No.			

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

<p>16 (C) N 89°51'45" W 2648.41' (D) S 89°52'14" E 2648.55' (E)</p> <p>GEODETIC DATA NAD 83 GRID - NM EAST</p> <p>SURFACE LOCATION N 425578.9 - E 566200.2</p> <p>LAT: 32.1699688° N LONG: 104.2529795° W</p> <p>CORNER DATA NAD 83 GRID - NM EAST</p> <p>A: FOUND BRASS CAP "1940" N 424284.3 - E 565541.3</p> <p>B: FOUND BRASS CAP "1968" N 426917.4 - E 565539.3</p> <p>C: FOUND BRASS CAP "1968" N 429555.3 - E 565537.4</p> <p>D: FOUND BRASS CAP "1968" N 429549.0 - E 568185.1</p> <p>E: FOUND BRASS CAP "1940" N 429543.0 - E 570833.0</p> <p>F: FOUND BRASS CAP "1940" N 426895.4 - E 570833.6</p> <p>G: FOUND BRASS CAP "1940" N 424249.0 - E 570831.5</p> <p>H: FOUND BRASS CAP "1940" N 424263.8 - E 568185.2</p> <p>(A) N 89°33'20" W 2644.58' (H) N 89°40'53" W 2646.99' (C)</p>		<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Amithy Crawford</i> 10/16/2017 Signature Date Amithy Crawford Printed Name acrawford@cimarex.com E-mail Address</p> <p>18 SURVEYOR CERTIFICATION</p> <p>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 belief.</p> <p>10-04-2017 Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>19680 Certificate Number</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance   X   Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? \_\_\_\_\_ Yes \_\_\_\_\_ No
- II. OPERATOR: Cimarex Energy Co.  
ADDRESS: 600 N. Marienfeld, Suite 600, Midland TX 79701  
CONTACT PARTY: Amithy Crawford PHONE: 432-620-1909
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? \_\_\_\_\_ Yes   X   No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Amithy Crawford TITLE: Regulatory Analyst  
SIGNATURE:  DATE: 10/16/2017  
E-MAIL ADDRESS: acrawford@cimarex.com
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: \_\_\_\_\_

### III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

---

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

## **C-108 Application For Authorization to Inject**

### **Freedom 36 State SWD #1**

1300 FSL & 660 FWL

Sec 36, 24S, 26E

Eddy County, NM

- III. Well Data Attached
- V. Maps area attached
- VI. Table of wells with the ½-mile AOR is attached as well as completion and plugging information on each well.
- VII.
  - 1. Proposed Average Daily injection rate= 20,000 BWPD  
Proposed Maximum Daily injection rate= 35,000 BWPD
  - 2. System will be Open. Water will both be piped and trucked.
  - 3. Proposed Maximum pressure= 2,450 psi  
Proposed Average max pressure= 2,000 psi
  - 4. Source of injected water will be Bone Spring, Cherry Canyon, and Wolfcamp produced water. No compatibility problems are expected. Analysis of the waters are attached.
  - 5. No Devonian receiving formation water samples directly offset. Deepest TVD (11757') well (30-015-32340) within a half-mile is in the Morrow formation.
- VIII. Geologic data attached
- IX. Stimulation on this well will be to acidize open hole with 15,000 gallons of 20% NeFe HCL
- X. Logs will be filed upon completion
- XI. 3<sup>rd</sup> party, Leidos, performed a 1-mile search around the proposed location and could not find any water wells.
- XII. See attached affirmative statement from Geologist
- XIII. See attached Proof of Notice and Publication

## INJECTION WELL DATA SHEET

OPERATOR: Cimarex Energy CoWELL NAME & NUMBER: Freedom 36 State SWD #1

WELL LOCATION: 1300 FSL & 660 FWL      M      36      24S      26E  
 FOOTAGE LOCATION      UNIT LETTER      SECTION      TOWNSHIP      RANGE

WELLBORE SCHEMATIC

\*\* See attached Proposed Wellbore Schematic\*\*

Intermediate Casing 1

Hole Size: 17.5"      Casing Size: 13 3/8"  
 Cemented with: 1200 sx.      or      1895 ft<sup>3</sup>  
 Top of Cement: Surface      Method Determined: Circulation

WELL CONSTRUCTION DATASurface Casing

Hole Size: 26"      Casing Size: 20"  
 Cemented with: 603      sx.      or      802      ft<sup>3</sup>  
 Top of Cement: Surface      Method Determined: Circulation

Intermediate Casing 2

Hole Size: 12.25"      Casing Size: 9 5/8"  
 Cemented with: 1624      sx.      or      3864      ft<sup>3</sup>  
 Top of Cement: Surface      Method Determined: Circulation

Production Casing

Hole Size: 8.75"      Casing Size: 7"  
 Cemented with: 1812      sx.      or      2184      ft<sup>3</sup>  
 Top of Cement: Surface      Method Determined: Circulation  
 Total Depth: 13,750'

Injection Interval

12,250'      feet      to      14,250'

(Perforated or Open Hole indicate which)

## INJECTION WELL DATA SHEET

Tubing Size: 4.5" Lining Material: Fiberglass

Type of Packer: Inconel Permanent Packer

Packer Setting Depth: 12,730'

Other Type of Tubing/Casing Seal (if applicable): N/A

### Additional Data

1. Is this a new well drilled for injection?   X   Yes        No

If no, for what purpose was the well originally drilled? N/A

---

2. Name of the Injection Formation: Devonian-Silurian

3. Name of Field or Pool (if applicable): SWD; Devonian-Silurian (97869)

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. N/A

---

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_

Over: Morrow (11106'), Bone Spring (7450'), Wolfcamp (8571'), Ramsey Sand (2046')

\_\_\_\_\_

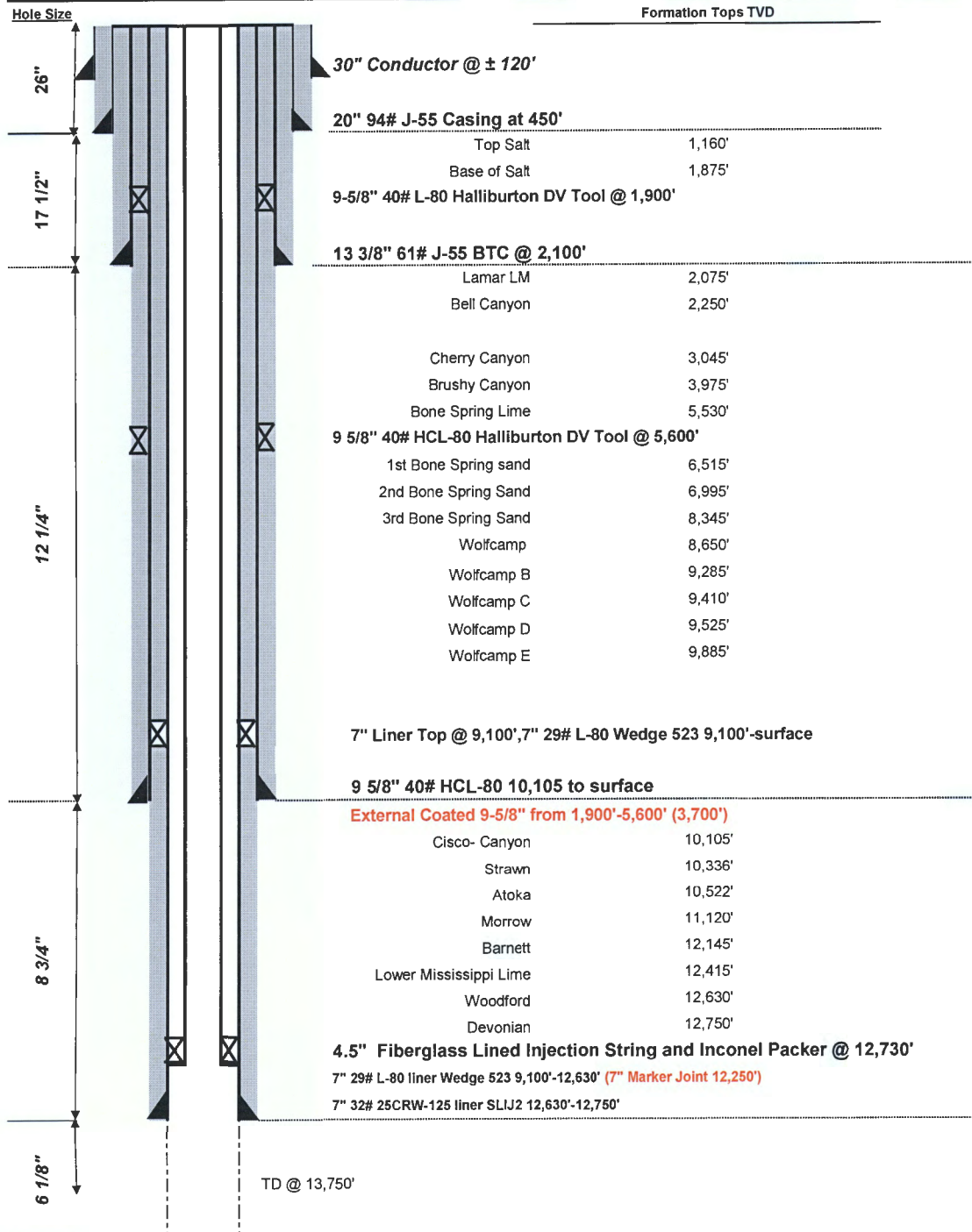
Under: None



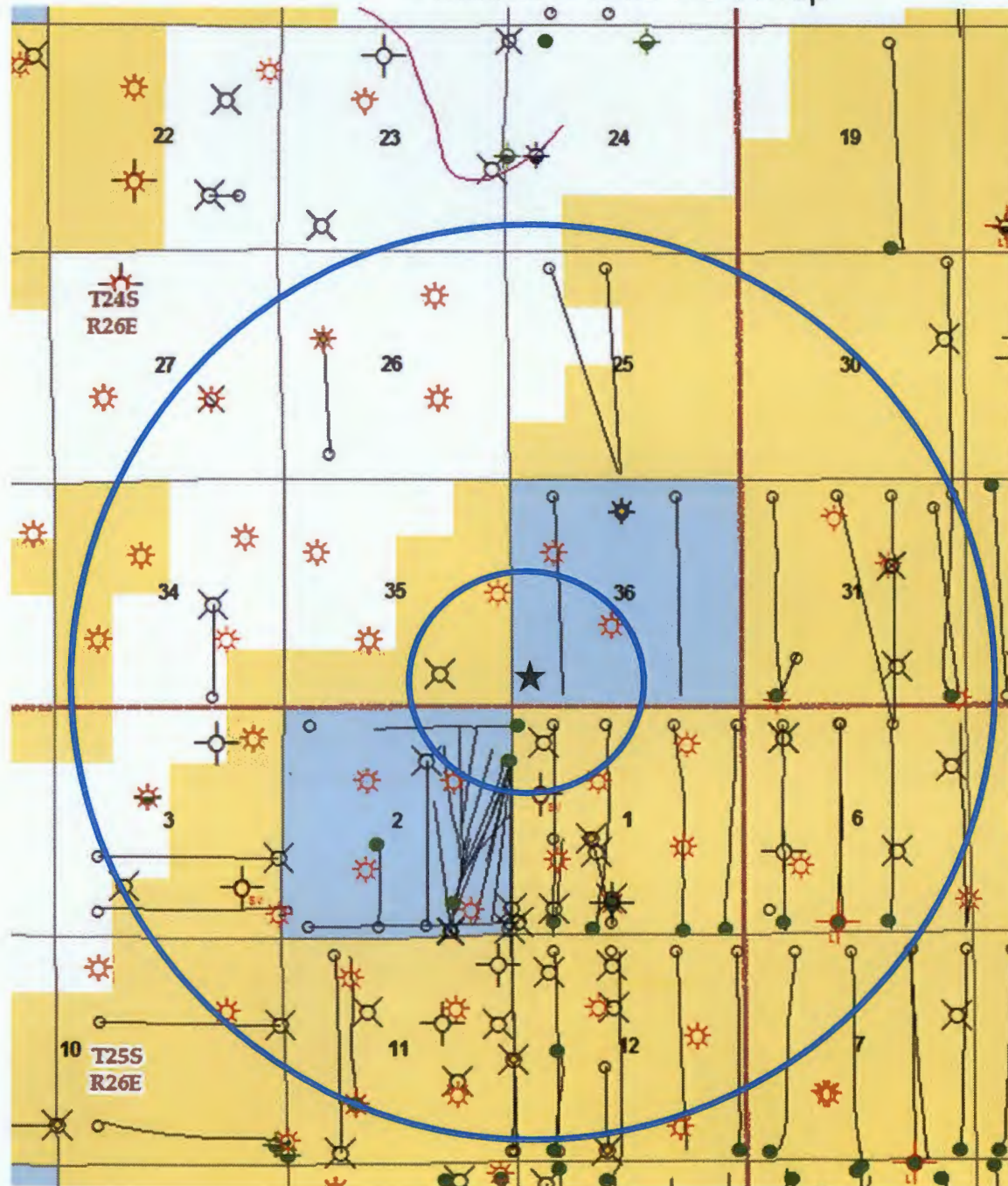


DRILLING PROGNOSIS  
Cimarex Energy Co.

Well: **Freedom 36 State (SWD) 1**  
Date: 10/13/2017  
Co., State: Eddy Co, NM  
Surf. Loc: 660' FSL & 660' FWL Sec 36, 24S, 26E  
Bottomhole Loc: Vertical



# Freedom 36 State SWD #1 2 Mile & ½ Mile AOR Map



## ½ Mile Wells

### Sec 35 24S 26E ½ Mile Wells

Moore Fed Com #3 30-015-33828

Moore Fed Com #4 30-015-33906

### Sec 2 25S 26E ½ Mile Wells

Murchinson 2 State #1 30-015-28288

Murchinson 2 State #4 30-015-28602

Jawbone State #1H 30-015-43987

Jawbone State #2H 30-015-43984

Ogden State #10H 30-015-40798

Ogden State #7H 30-015-40696

Ogden State #8H 30-015-40793

Ogden State Com #2 30-015-24068

### Sec 1 25S 26E ½ Mile Wells

Marquardt Federal #1 30-015-22674

Marquardt Federal #6 30-015-28561

Marquardt Federal #8 30-015-28563

### Sec 36 24S 26E ½ Mile Wells

Jake State #1 30-015-21340

Jake State #3 30-015-32340

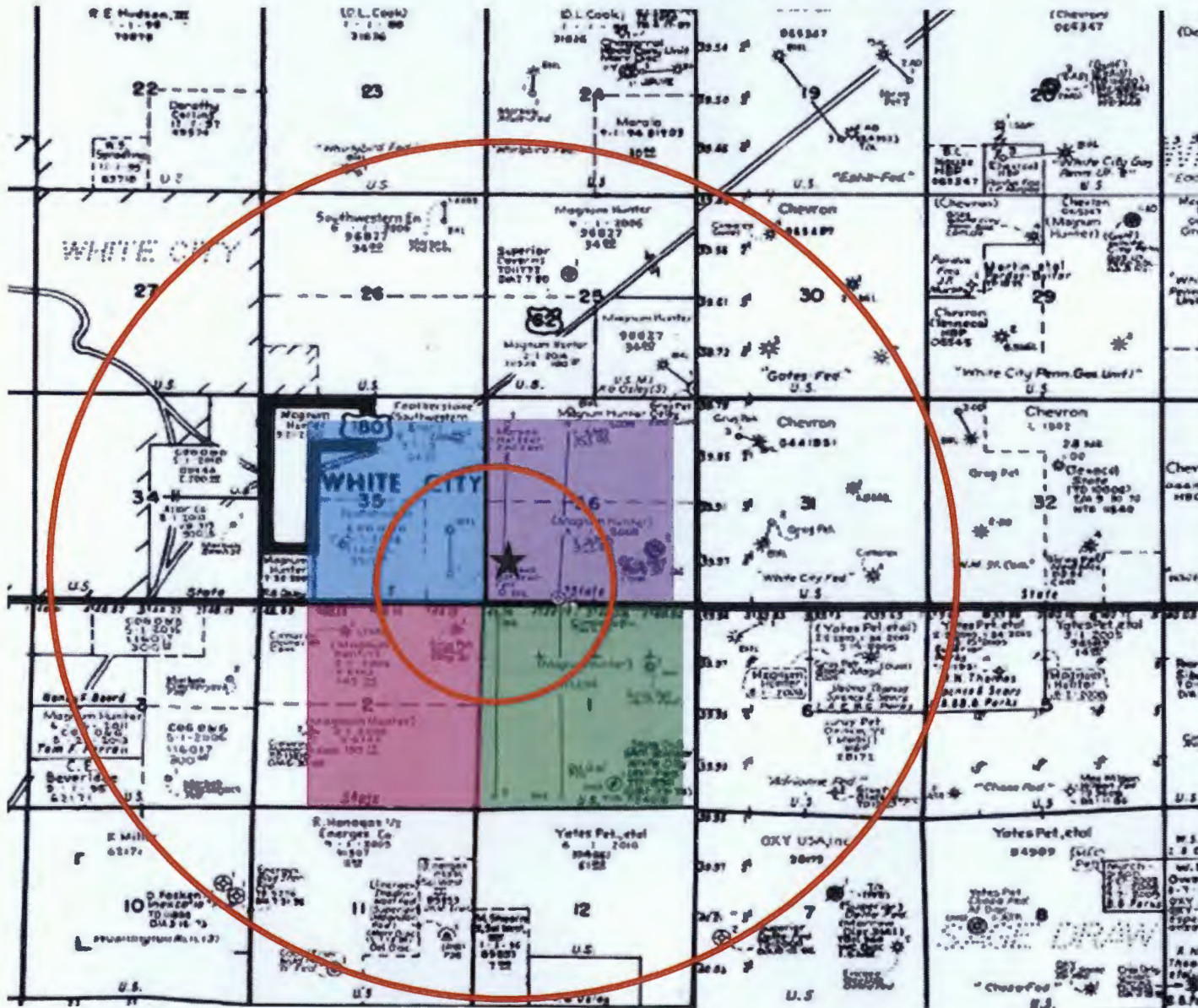
Jake State #4 30-015-33134

Jake 36 State #7H 30-015-42614

Jake 36 State #5 30-015-43500



# ½ Mile Lease Map



- Sec 36, 24S 26E  
Cimarex Energy Co.  
Chevron USA INC  
Unit Petroleum Co.
- Sec 35, 25S, 26E  
Murchison Oil & Gas
- Sec 1, 25S, 26E  
Chevron USA Inc
- Sec 2, 25S, 26E  
Chevron USA Inc  
Murchison Oil & Gas

# VI.

## Table of AOR Wells

**\*\* No Wells Penetrate the Proposed Disposal Interval\*\***

API	WELLNAME	WELLNO	OPERATOR	SECTION	TOWNSHIP	RANGE	SPUD	TVD	RECORD OF COMPLETION	STATUS
30-015-42614	Jake 36 State	#7H	Cimarex Energy Co.	36	24S	26E	N/A	N/A	N/A	Permitted Location
30-015-43500	Jake 36 State	#5H	Cimarex Energy Co.	36	24S	26E	N/A	N/A	N/A	Permitted Location
30-015-21340	Jake State	#1	Unit Petroleum Co.	36	24S	26E	9/7/1974	10405'	Single	P&Ad
30-015-32340	Jake State	#3	Chevron USA Inc	36	24S	26E	8/22/2002	11757'	Single	Active
30-015-33134	Jake State	#4	Chevron USA Inc	36	24S	26E	4/28/2004	11800'	Single	P&Ad
30-015-43987	Jawbone State	#1H	Murchison Oil & Gas	2	25S	26E	2/17/2017	7186'	Single	Active
30-015-43984	Jawbone State	#2H	Murchison Oil & Gas	2	25S	26E	1/26/2017	7200'	Single	Active
30-015-28563	Marquardt Federal	#8	Chevron USA Inc	1	25S	26E	N/A	N/A	N/A	Expired Permit
30-015-28561	Marquardt Federal	#6	Chevron USA Inc	1	25S	26E	6/29/1995	5625'	Single	P&Ad
30-015-22674	Marquardt Federal	#1	Chevron USA Inc	1	25S	26E	12/19/1978	11526'	Single	Shut In
30-015-33828	Moore Federal Com	#3	Murchison Oil & Gas	35	24S	26E	N/A	N/A	N/A	Expired Permit
30-015-33906	Moore Federal Com	#4	Murchison Oil & Gas	35	24S	26E	5/4/2005	11650'	Single	Active
30-015-28602	Murchison 2 State	#4	Chevron USA Inc	2	25S	26E	8/18/1995	5550'	Single	P&Ad
30-015-28288	Murchison 2 State	#1	Chevron USA Inc	2	25S	26E	1/20/1995	8361'	Single	P&Ad
30-015-40696	Ogden State	#7H	Murchison Oil & Gas	2	25S	26E	10/12/2012	5055'	Single	Active
30-015-40798	Ogden State	#10H	Murchison Oil & Gas	2	25S	26E	N/A	N/A	N/A	Cancelled APD
30-015-40793	Ogden State	#8H	Murchison Oil & Gas	2	25S	26E	10/12/2012	11176'	Multiple	Active
30-015-24068	Ogden State Com	#2	Murchison Oil & Gas	2	25S	26E	1/29/1982	10885'	Single	Active

**Geological Description**  
**Freedom 36 State (SWD) 1**

Formation(s) for injection: Devonian-Silurian

Injection Interval: Top 1000' of Devonian-Silurian (12,250' – 14,250'). Logs will be ran to pinpoint the exact top of the Devonian-Silurian while drilling.

Lithological Description: Highly porous and vugular dolomitized carbonate

Thickness: 1,000'+ of gross interval thickness

Porosity: 6% to over 20%

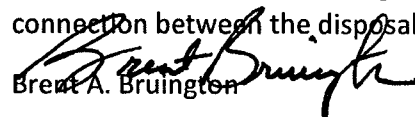
Permeability: Highly permeable 50+ md (estimated)

**Estimated Geological Formation Tops for the Freedom 36 State (SWD) 1**

Top of Salt	1,160'	Atoka	10,522'
Base of Salt	1,875'	Morrow	11,120'
Delaware Group	2,250'	Barnett	12,145'
Bone Spring	5,530'	Mississippian	12,415'
Wolfcamp	8,650'	Woodford	12,630'
Cisco/Canyon	10,105'	Devonian	12,750'
Strawn	10,336'		

The injection depths are 10,500' below the deepest potential source of brackish water that might be economically used as a source for drinking water.

After examining the available geological data, no evidence was found of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

  
Brent A. Bruington

Geologist

Cimarex Energy Company



Jake State #1

Submit 3 Copies To Appropriate District Office  
District I  
1625 N. French Dr., Hobbs, NM 87240  
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.

30-015-21340

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.  
K - 4593

7. Lease Name or Unit Agreement Name:  
JAKE STATE

8. Well Number

1

9. OGRID Number

115970

10. Pool name or Wildcat  
White City (Penn)

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

UNIT PETROLEUM COMPANY

3. Address of Operator

P.O. Box 702500 Tulsa, OK 74170

4. Well Location

Unit Letter J : 1980 feet from the SOUTH line and 1980 feet from the EAST line

Section 36 Township 24 - S Range 26 - 3 NMPM EDDY County NM

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

3,408' 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 COMPLETION ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☒

CASING TEST AND 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.

5-7-08 M.I.R.U.

5-20-08 Perf. @8,700'. R.I.H. to 8,750'. Spot 25 sx. cmt. W.O.C. & tag @8,290'.

5-21-08 Perf. @5,000'. R.I.H. w/tbg. to 5,050'. Spot 25 sx. W.O.C. & tag @4,905'. Perf. @2,300'. R.I.H. w/pkr. to 1,954'. Sqz. 50 sx. W.O.C. & tag @2,050'. Perf. @1,870'. R.I.H. w/pkr. to 1,618. Sqz. 25 sx. W.O.C. & tag @1,762'.

5-22-08 Perf. @1,300'. R.I.H. w/pkr. to 914'. Sqz. 50 sx. W.O.C. & tag @1,082'. Perf. @1,070'. Sqz. 25 sx

5-23-08 Perf. @460'. R.I.H. w/pkr. to 189'. Sqz. 25 sx. W.O.C. & tag @360'. Perf. @250'. Sqz. 70 sx. to surface.

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 Randall Minear TITLE P & A SUPV. DATE 6-2-08

E-mail address:

Type or print name RANDALL MINEAR

Telephone No. (432) 530-0907

For State Use Only

APPROVED BY [Signature] TITLE \_\_\_\_\_ DATE 6/23/08

Conditions of Approval, if any:

Approved for plugging of well bore only.  
Liability under bond is retained pending receipt of C-103 (Subsequent Report of Well Plugging) which may be found at OCD Web Page under Forms. [www.emnrd.state.nm.us/oed](http://www.emnrd.state.nm.us/oed).

NO. OF COPIES RECEIVED	6
DISTRIBUTION	
SANTA FE	1
FILE	1
U.S.G.S.	2
LAND OFFICE	1
OPERATOR	

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

**RECEIVED**

**MAR 3 1975**

Form C-105  
Revised 1-1-65

5a. Indicate Type of Lease	State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	K-4593

1a. TYPE OF WELL	OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/>
b. 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	Coquina Oil Corporation
3. Address of Operator	200 Bldg. of Southwest, Midland, Texas 79701
4. Location of Well	UNIV LETTER J LOCATED 1980 FEET FROM THE East LINE AND 1980 FEET FROM THE South LINE OF SEC. 36 TWP. 24S RGE. 26E NMPM

7. Unit Agreement Name	
8. Farm or Lease Name	Jake State
9. Well No.	1
10. Field and Pool for Wildcat	Und. Crawford Penn

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Casinghead
9-7-74	11-5-74	2-17-75	G.L. 3408	

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools	Cable Tools
10,405	10,399		0-10,405		--

24. Producing Interval(s), of this completion - Top, Bottom, Name	25. Was Directional Survey Made
10,214-24; 27-36; 41-48 Permo Penn	No

26. Type Electric and Other Logs Run	27. Was Well Cored
Gamma Ray-Neutron; Laterolog, Comp. Neutron-Densilog	No

CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
12 3/4	35.5	197	17 1/2	400	None
8 5/8	24.0	2188	11	1725	None
4 1/2	11.6	10,403	7 7/8	450 TOC 8606'	None

LINER RECORD					TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 3/8	10,159	10,162

31. Perforation Record (Interval, size and number)	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
10,214-24 2 JSPF	DEPTH INTERVAL
10,227-36 2 JSPF	AMOUNT AND KIND MATERIAL USED
10,241-48 2 JSPF	10,214-248 2000 gals. 28% NEA
	2000 gals. 15% NEA

33. PRODUCTION							
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
1-23-75		Flowing				S.I.	
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
2-17-75	4	Various		12	467	0	38900:1
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	
Various	Packer		72	10,758	0	62.7	
34. Disposition of Gas (Sold, used for fuel, vented, etc.)						Test Witnessed By	
Vented						Sprue11	

35. List of Attachments		
CAOF; Deviation; DST's		
36. 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>Deane C. Keith</i>	Engineer	2-27-75

*Revised 2-27-75*

# 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.

REVISION

## INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

### Southeastern New Mexico

### Northwestern New Mexico

T. Anhy	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	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	T. Simpson	T. Gallup	T. Ignacio Qtzite
T. Glorieta	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenburger	T. Dakota	T.
T. Blinberry	T. Gr. Wash	T. Morrison	T.
T. Tubb	T. Granite	T. Todilto	T.
T. Drinkard	T. Delaware Sand 2190	T. Entrada	T.
T. Abo	T. Bone Springs 5540	T. Wingate	T.
T. Wolfcamp 8995	T. Permo-Penn 9870	T. Chinle	T.
T. Penn.	T.	T. Permian	T.
T. Cisco (Bough C)	T.	T. Penn. "A"	T.

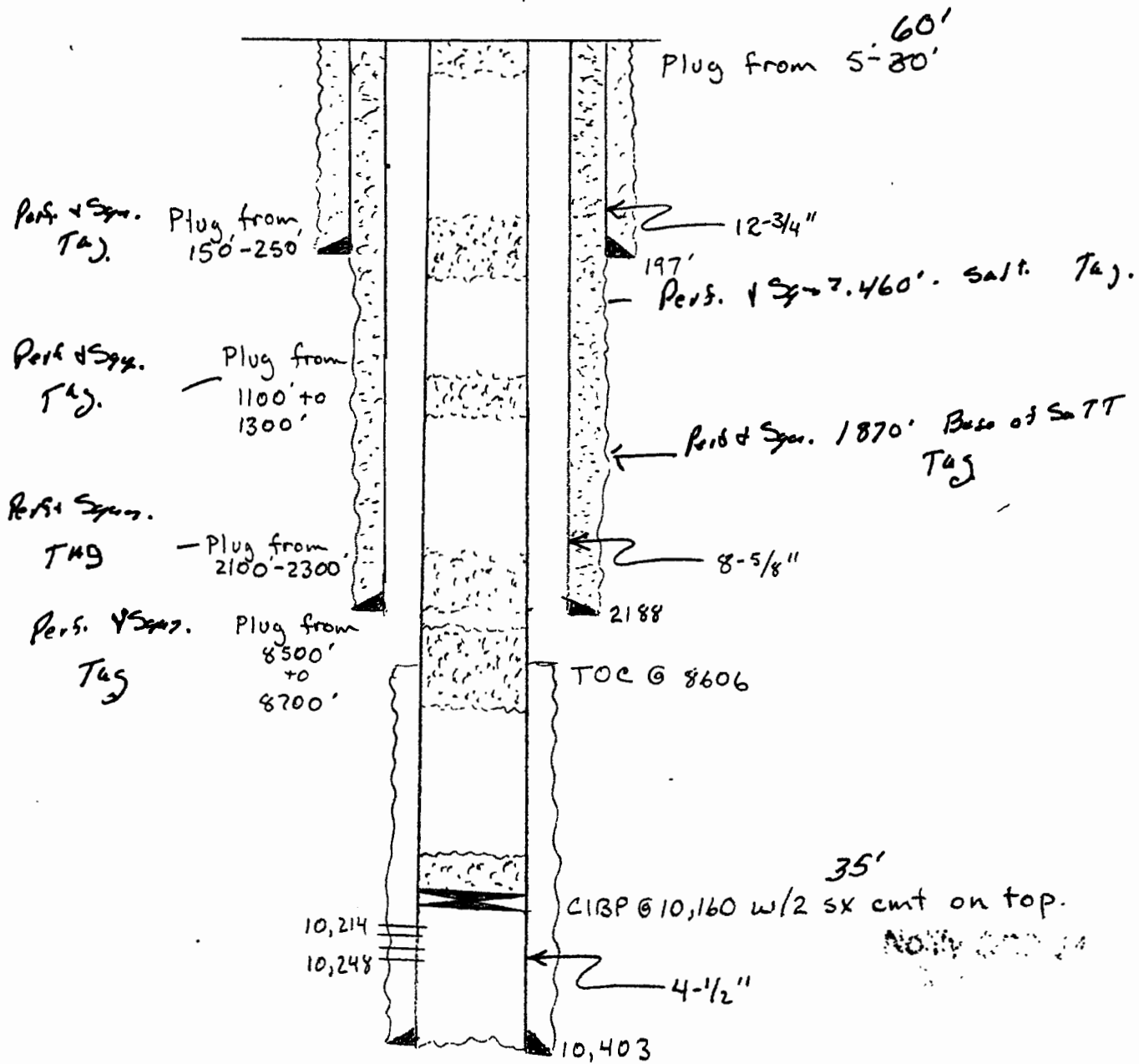
## FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	2100	2100	Evaporites				
2100	2190	90	Lm. & Sh.				
2190	5540	3350	Sand, Sh., Lm-Dolo Strks				
5540	6515	975	Lm. & Sh.				
6515	6840	325	Sand, Sh., Chert, Lm Strks.				
6840	7390	550	Sh., Sd., Lm.				
7390	8345	955	Lm., Sh.				
8345	9530	1185	Sd., Sh.				
9530	9870	340	Sh., Lm.				
9870	10215	345	Sh., Sd., Lm.				
10215	10405	190	Lm., Sh., Sd.				



# Proposed Plugs for Jake State #1

1980 FSL 1980 FEL See 36, T-24-5 R-26-E



Jake State #3

File

Submit To Appropriate District Office  
State Lease - 6 copies  
Fee Lease - 5 copies

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-105  
Revised March 25, 1999

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

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

WELL API NO.  
30-015-32340

5. Indicate Type of Lease  
STATE ☒ FEE ☐

State Oil & Gas Lease No. K-4593

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:  
OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER ☐

b. Type of Completion:  
NEW ☒ WORK ☐ DEEPEN ☐ PLUG ☐ DIFF.  
WELL OVER BACK RESVR. ☐ OTHER ☐

2. Name of Operator  
Rubicon Oil & Gas, LLC

3. Address of Operator  
400 West Illinois, Suite 1130, Midland, Texas 79701

7. Lease Name or Unit Agreement Name

Jake State

8. Well No.

3

~~Sub Black River~~  
~~White City~~ Morrow

4. Well Location  
Unit Letter K, 1980 Feet From The South Line and 1980 Feet From The West Line  
Section 36 Township 24-S Range 26-E NMPM Eddy County

10. Date Spudded 8-22-02 11. Date T.D. Reached 10-13-02 12. Date Compl. (Ready to Prod.) 11-28-02 13. Elevations (DF& RKB, RT, GR, etc.) GR-3358' - RKB-3375' 14. Elev. Casinghead 3356'

15. Total Depth 11,757' 16. Plug Back T.D. 11,714' 17. If Multiple Compl. How Many Zones? 18. Intervals Drilled By Rotary Tools 0 - 11,757' Cable Tools

19. Producing Interval(s), of this completion - Top, Bottom, Name 11,420' to 11,430' & 11,551' to 11,576' Morrow 20. Was Directional Survey Made No

21. Type Electric and Other Logs Run Density-Newtron-Laterolog; CBL-GR-CCL 22. Was Well Cored No

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.5#	304'	17-1/2"	335 sx "C"	None
9-5/8"	40# & 43.5#	5490'	12-1/4"	1905 sx "C"	None
7"	23# & 26#	10400'	8-3/4"	370 sx "H"	None

24. LINER RECORD				25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SIZE	DEPTH SET	PACKER SET
4-1/2"	10,150'	11,755'	140 "H"	2-7/8"	10,117'	10,094'

26. Perforation record (interval, size, and number)			27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.		
INTERVAL	SIZE	NUMBER	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED	
11,420' to 11,430'	0.25"	5 shots	11,420'-11,576'	2000 gal 7-1/2% Morrow Acid	
11,551' to 11,576'	0.25"	10 shots	11,420'-11,576'	38,400 gal Binary Foam; 40,340#	

Inter Prop

28. PRODUCTION

Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)			Well Status (Prod. or Shut-in)		
11-22-02		Flowing			Producing		
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl	Gas - Oil Ratio
12-18-02	24	20/64"		0	1674	94	
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl	Gas - MCF	Water - Bbl	Oil Gravity - API - (Corr.)	
750	-0-		-0-	1674	94	N/A	

29. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold and Fuel Test Witnessed By Bobby Matheny

30. List Attachments  
Open Hole Logs; Cased Hole Logs; Deviation Survey

31. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief

Signature Darol K. Ramey Printed Name Darol K. Ramey Title Agent Date 1-13-03

Submit 1 Copy To Appropriate District Office  
District I - (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II - (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV - (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised July 18, 2013

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

WELL API NO. 30-015-33134
5. Indicate Type of Lease STATE FEE <input checked="" type="checkbox"/> X
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name JAKE STATE
8. Well Number 4
9. OGRID Number 4323
10. Pool name or Wildcat BLACK RIVER SW (MORROW)

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

1. Type of Well: Oil Well <input checked="" type="checkbox"/> X Gas Well <input type="checkbox"/> Other <input type="checkbox"/>
2. Name of Operator CHEVRON U.S.A. INC.
3. Address of Operator 15 SMITH ROAD MIDLAND, TEXAS 79705
4. Well Location GPS Y- LAT 32.17633 X-LONG. -104.25297 Unit Letter E : 1,650 feet from the NORTH line and 660 feet from the WEST line Section 36 Township 24-S Range 26-E NMPM County LEA
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3,340' KB

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 ☐  
DOWNHOLE COMMINGLE ☐  
CLOSED-LOOP SYSTEM ☐  
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☒ X  
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 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion. 13 3/8" @ 360' TOC SURF. 9 5/8" 36# @ 2,000', TOC SURF. 7" 26# @ 8,913' TOC @ 1,800' TS, 4 1/2" LINER 8,702'-11,799', PERFS 9,965'-11,424', CIBP'S @ 11,480', 11,304', 9,915'  
7/24/15 MOVE IN & RIG UP, ROBBY KISER WSM CHEVRON NOTIFIED RANDY DADE W/ NMOC.D.  
7/26/15 RIH TO 9,920' RANDY DADE OK TO SPOT PLUG, MIX & SPOT 25 SX CL "H" CEMENT FROM 9,920'-9,568'.  
PU & REV OUT, TEST TO 500#, CIR W/ 10# SALT GEL.

7/27/15 PU TO 8,916', MIX & SPOT 50 SX CL "H" CEMENT FROM 8,916'-8,510', WOC TAG 8,664', OK BY RANDY DADE.  
PU 6,523', MIX & SPOT 40 SX CL "H" CEMENT FROM 6,523'-6,300', PU TO 4,526' MIX & SPOT 45 SX CL "C" 4,526'-4,281'.

7/28/15 PRESSURED TEST CASING 500#, MIX & SPOT 40 SX CL "C" CEMENT FROM 2,105'-1,860', WOC TAG @ 1,886',  
POOH, RIG UP WIRELINE, RIH PERF @ 460', MIX & CIRCULATE 300 SX CL "C" CEMENT FROM 460'-3' CIRCULATE  
CEMENT BACK TO SURFACE ON BOTH STRINGS, NIPPLE DOWN CUT & CAP WELL TO MEET WITH RULE 19.15.7.14  
NMAC REQUIRMENTS AND COA'S PROVIDED.

CLASS "H & C" CEMENT USED & IN A CLOSED LOOP SYSTEM.

NM OIL CONSERVATION  
ARTESIA DISTRICT

Spud Date:

Rig Release Date:

AUG 31 2015

RECEIVED

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

SIGNATURE

TITLE Agent Chevron U.S.A.

DATE 07/29/15

Type or print name Monty L. McCarver E-mail address: monty.mccarver@cjes.com PHONE: 713-325-6288

For State Use Only

APPROVED BY:

TITLE

DATE 9/3/15

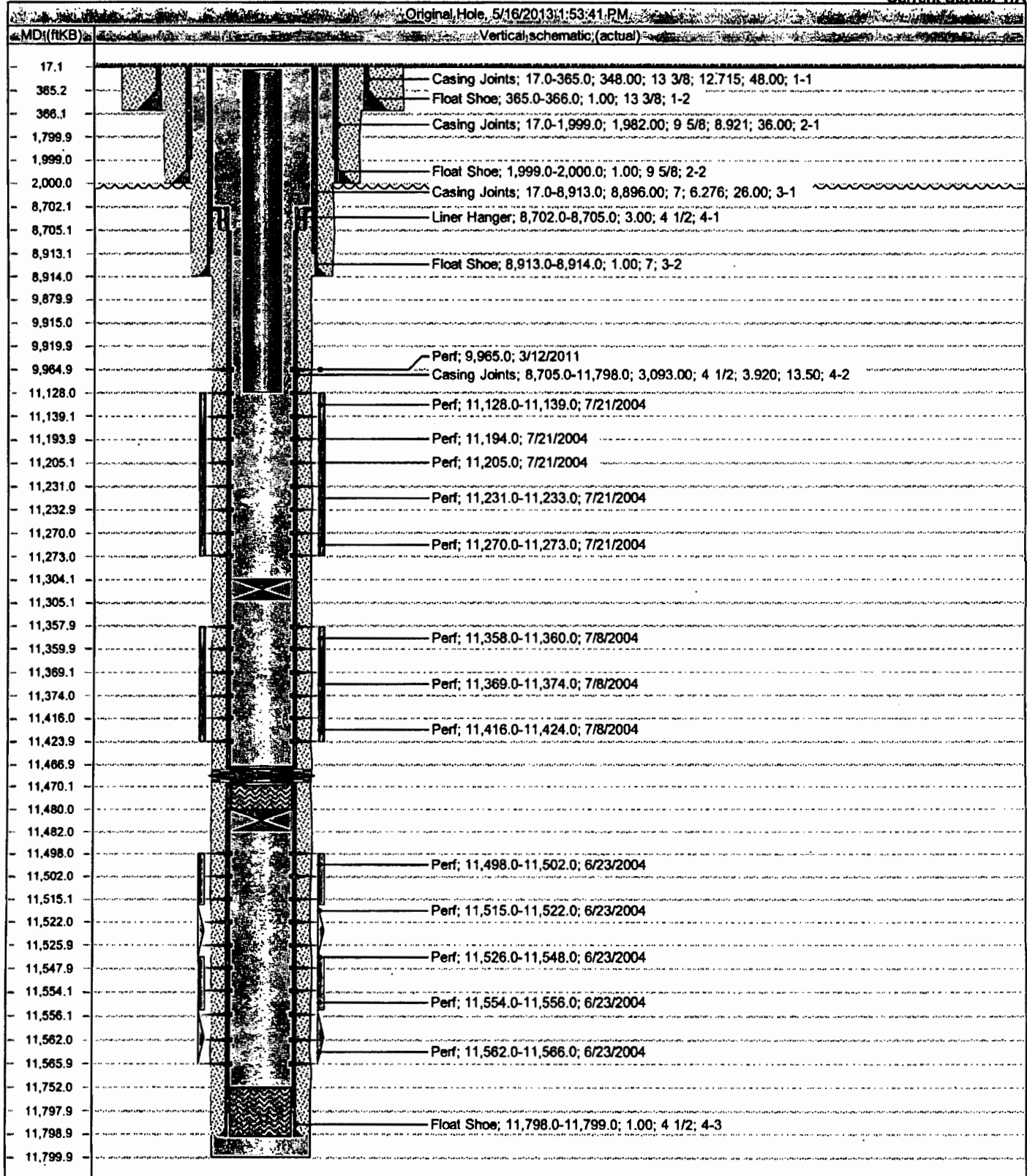
Conditions of Approval (if any):

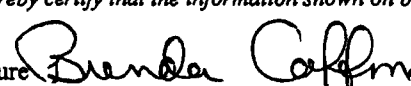
Submit Subsequent C-103

# Current Wellbore Schematic

WELL (PN): JAKE STATE 4(CVX) (819505)  
 FIELD OFFICE: HOBBS  
 FIELD: Black River SW (Morrow)  
 STATE / COUNTY: NEW MEXICO / EDDY  
 LOCATION: SEC 36-24S-26E, 1650 FNL & 660 FWL  
 ROUTE: HOB-NM-ROUTE 10- DAVID ORTEGA  
 ELEVATION: GL: 3,323.0 KB: 3,340.0 KB Height: 17.0  
 DEPTHS: TD: 11,800.0

API #: 3001533134  
 Serial #:  
 SPUD DATE: 4/28/2004  
 RIG RELEASE: 6/7/2004  
 1ST SALES GAS: 8/5/2004  
 1ST SALES OIL:  
 Current Status: T/A



Submit To Appropriate District Office State Lease - 6 copies Fee Lease - 5 copies <u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505	<b>State of New Mexico</b> <b>Energy, Minerals and Natural Resources</b>  <b>Oil Conservation Division</b> <b>1220 South St. Francis Dr.</b> <b>Santa Fe, NM 87505</b>	<b>Form C-105</b> Revised June 10, 2003  WELL API NO. <b>30-015-33134</b>  5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>  State Oil & Gas Lease No.
<b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG</b>		
1a. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER _____  b. Type of Completion: NEW <input checked="" type="checkbox"/> WORK <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG <input type="checkbox"/> DIFF. WELL OVER _____ BACK RESVR. <input type="checkbox"/> OTHER _____		7. Lease Name or Unit Agreement Name <b>Jake State</b>  <div style="text-align: center;"><b>RECEIVED</b></div> <div style="text-align: center;"><b>NOV 17 2004</b></div>
2. Name of Operator <b>Chesapeake Operating, Inc.</b>		8. Well No. <b>004</b>
3. Address of Operator <b>P. O. Box 11050 Midland, TX 79702-8050</b>		9. Pool name or Wildcat <b>Black River, Morrow, Southwest</b>
4. Well Location Unit Letter <u>E</u> : <u>1650</u> Feet From The <u>North</u> Line and <u>660</u> Feet From The <u>West</u> Line Section <u>36</u> Township <u>24S</u> Range <u>26E</u> NMPM <u>Eddy</u> County		
10. Date Spudded <b>04/28/2004</b>	11. Date T.D. Reached <b>06/04/2004</b>	12. Date Compl. (Ready to Prod.) <b>07/21/2004</b>
13. Elevations (DF& RKB, RT, GR, etc.) <b>3323 GR</b>		14. Elev. Casinghead
15. Total Depth <b>11800</b>	16. Plug Back T.D. <b>11470</b>	17. If Multiple Compl. How Many Zones? <b>0 - 11800</b>
18. Intervals Drilled By		19. Producing Interval(s), of this completion - Top, Bottom, Name <b>11,128 - 11,424 Morrow</b>
20. Was Directional Survey Made <b>yes</b>		21. Type Electric and Other Logs Run <b>HR LL/M CFL, LD, N/GR/IC</b>
22. Was Well Cored <b>No</b>		23. <b>CASING RECORD (Report all strings set in well)</b>
CASING SIZE	WEIGHT LB./FT.	DEPTH SET
13 3/8"	48#	360'
9 5/8"	36#	2000'
7"	26#	8,913'
24. <b>LINER RECORD</b>		25. <b>TUBING RECORD</b>
SIZE	TOP	BOTTOM
4 1/2"		11,800
SACKS CEMENT		SCREEN
810 sx		
SIZE	DEPTH SET	PACKER SET
2 3/8	11249	11250
26. Perforation record (interval, size, and number) 11,498 - 11,566 2 spf set CIBP @ 11,480 + 10' cmt 11,358 - 11,424 (30 holes 2 spf) 11,128 - 11,273 (2 spf 290 holes)		27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL 11,128 - 11,424 AMOUNT AND KIND MATERIAL USED 500 gals 7.5% HCL+Frac w/2000 7.5% NeFe + 4500 gals pad, + 45100# 18/40 Versaprop
<b>28 PRODUCTION</b>		
Date First Production <b>08/05/2004</b>		Production Method (Flowing, gas lift, pumping - Size and type pump) <b>Flowing</b>
Well Status (Prod. or Shut-in) <b>producing</b>		
Date of Test <b>08/13/2004</b>	Hours Tested <b>24</b>	Choke Size <b>10/64</b>
Prod'n For Test Period	Oil - Bbl <b>0</b>	Gas - MCF <b>3582</b>
Water - Bbl. <b>0</b>	Gas - Oil Ratio	
Flow Tubing Press. <b>2950</b>	Casing Pressure <b>210</b>	Calculated 24-Hour Rate <b>0</b>
Oil - Bbl. <b>0</b>	Gas - MCF <b>3582</b>	Water - Bbl. <b>0</b>
29. Disposition of Gas (Sold, used for fuel, vented, etc.) <b>Sold</b>		Test Witnessed By
30. List Attachments <b>Logs, Inclination Report, C-104</b>		
31. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief		
Signature 		Printed Name <b>Brenda Coffman</b>
E-mail Address <b>bcoffman@chkenergy.com</b>		Title <b>Regulatory Analyst</b>
		Date <b>11/16/2004</b>

Jawbone State #14

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., 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-105 Revised April 3, 2017					
					1. WELL API NO. 30-015-43987					
					2. Type of Lease <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> FED/INDIAN					
					3. State Oil & Gas Lease No.					
<b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG</b>										
4. Reason for filing: <input checked="" type="checkbox"/> <b>COMPLETION REPORT</b> (Fill in boxes #1 through #31 for State and Fee wells only)  <input type="checkbox"/> <b>C-144 CLOSURE ATTACHMENT</b> (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19-15-17-13 K NMAC)					5. Lease Name or Unit Agreement Name JAWBONE STATE					
					6. Well Number: 001H					
7. Type of Completion: <input checked="" type="checkbox"/> NEW WELL <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER										
8. Name of Operator MURCHISON OIL & GAS, INC.					9. OGRID 015363					
10. Address of Operator 7250 DALLAS PARKWAY, SUITE 1400 PLANO, TX 75024					11. Pool name or Wildcat COTTONWOOD DRAW; BONE SPRING					
<b>RECEIVED</b>										
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	B	2	25S	26E	2	200	NORTH	1675	EAST	EDDY
BH:	P	2	25S	26E	16	302	SOUTH	398	EAST	EDDY
13. Date Spudded 02/14/2017	14. Date T.D. Reached 02/26/2017	15. Date Rig Released 03/01/2017		16. Date Completed (Ready to Produce) 04/08/2017		17. Elevations (DF and RKB, RT, GR, etc.) 3384 GR				
18. Total Measured Depth of Well 12,135'		19. Plug Back Measured Depth 12,114'		20. Was Directional Survey Made? YES		21. Type Electric and Other Logs Run GAMMA RAY				
22. Producing Interval(s), of this completion - Top, Bottom, Name 7,588' - 12,100' MD - BONE SPRING										
<b>CASING RECORD (Report all strings set in well)</b>										
CASING SIZE		WEIGHT LB./FT.		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED
13.375		54.5		295'		16		228 sx Class C		
9.625		36		1922'		12.25		624 sx Class C		
9.625		40		1994'		12.25				
5.5		20		12132'		8.5		1913 sx Class C&H		
24. LINER RECORD							25. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT		SCREEN		SIZE	DEPTH SET		PACKER SET
26. Perforation record (interval, size, and number) 7,588' - 12,100'; 16 stages, 3-4 clusters/stage, 45-48 perfs/stage, total 729 0.4" holes							27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL    AMOUNT AND KIND MATERIAL USED 7,588' - 12,100'    6,677,430 lbs sand (fracture)			
<b>PRODUCTION</b>										
Date First Production 04/09/2017		Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing				Well Status (Prod. or Shut-in) Producing				
Date of Test 04/19/2017	Hours Tested 24	Choke Size 39/64	Prod'n For Test Period 24 HR	Oil - Bbl 1,109	Gas - MCF 2,184	Water - Bbl. 1,711	Gas - Oil Ratio 1,969			
Flow Tubing Press.	Casing Pressure 860	Calculated 24-Hour Rate	Oil - Bbl. 1,109	Gas - MCF 2,184	Water - Bbl. 1,711	Oil Gravity - API - (Corr.) 48.6				
29. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold							30. Test Witnessed By			
31. List Attachments										
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.							33. Rig Release Date: 03/01/2017			
34. If an on-site burial was used at the well, report the exact location of the on-site burial:										
Latitude							Longitude		NAD83	
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										
Signature		Printed		Name		Title		Date		
				Gary R Cooper		Vice President Operations		05/11/2017		
E-mail Address rcooper@dmii.com										

Submit To Appropriate District Office Two Copies District I 1625 N. French St., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505		<b>State of New Mexico</b> <b>Energy, Minerals and Natural Resources</b>  <b>Oil Conservation Division</b> <b>1220 South St. Francis Dr.</b> <b>Santa Fe, NM 87505</b>		<b>Form C-105</b> Revised April 3, 2017	
		1. WELL API NO. 30-015-43984			
		2. Type of Lease <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> FED/INDIAN			
		3. State Oil & Gas Lease No.			
<b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG</b>					
4. Reason for filing:  <input checked="" type="checkbox"/> <b>COMPLETION REPORT</b> (Fill in boxes #1 through #31 for State and Fee wells only)  <input type="checkbox"/> <b>C-144 CLOSURE ATTACHMENT</b> (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19-45-17-13-6 NMAC)				5. Lease Name or Unit Agreement Name JAWBONE STATE	
7. Type of Completion: <input checked="" type="checkbox"/> <b>NEW WELL</b> <input type="checkbox"/> <b>WORKOVER</b> <input type="checkbox"/> <b>DEEPENING</b> <input type="checkbox"/> <b>PLUGBACK</b> <input type="checkbox"/> <b>DIFFERENT RESERVOIR</b> <input type="checkbox"/> <b>OTHER</b>				6. Well Number: 002H	
8. Name of Operator MURCHISON OIL & GAS, INC.				9. OGRID    015363	
10. Address of Operator 7250 DALLAS PARKWAY, SUITE 1400 PLANO, TX 75024				11. Pool name or Wildcat COTTONWOOD DRAW; BONE SPRING	
12. Location Surface: B    Section: 2    Township: 25S    Range: 26E    Lot: 2    Feet from the N/S Line: NORTH    Feet from the E/W Line: 1695    County: EDDY		BH: O    Section: 2    Township: 25S    Range: 26E    Lot: 15    Feet from the N/S Line: SOUTH    Feet from the E/W Line: 1899    County: EDDY			
13. Date Spudded 01/26/2017		14. Date T.D. Reached 02/10/2017		15. Date Rig Released 02/12/2017	
16. Date Completed (Ready to Produce) 04/08/2017		17. Elevations (DF and RKB, RT, GR, etc.) 3383 GR			
18. Total Measured Depth of Well 11,983'		19. Plug Back Measured Depth		20. Was Directional Survey Made? YES	
21. Type Electric and Other Logs Run GAMMA RAY					
22. Producing Interval(s), of this completion - Top, Bottom, Name 7,450' - 11,945' MD - BONE SPRING					
<b>CASING RECORD (Report all strings set in well)</b>					
CASING SIZE		WEIGHT LB./FT.		DEPTH SET	
13.375		54.5		299'	
9.625		36		1983'	
5.5		20		11981'	
<b>24. LINER RECORD</b>					
SIZE		TOP		BOTTOM	
<b>25. TUBING RECORD</b>					
SIZE		DEPTH SET		PACKER SET	
26. Perforation record (interval, size, and number) 7,450' - 11,945'; 16 stages, 3-4 clusters/stage, 45-48 perfs/stage, total 726 0.4" holes					
27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL    AMOUNT AND KIND MATERIAL USED 7,450' - 11,945'    6,682,671 lbs sand (fracture)					
<b>28. PRODUCTION</b>					
Date First Production 04/13/2017		Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing			Well Status (Prod. or Shut-in) Producing
Date of Test 04/23/2017		Hours Tested 24		Choke Size 40/64	
Flow Tubing Press.		Casing Pressure 860		Calculated 24-Hour Rate	
Oil - Bbl 920		Gas - MCF 2,745		Water - Bbl. 2,299	
Gas - Oil Ratio 2,984		Oil - Bbl. 920		Gas - MCF 2,745	
Water - Bbl. 2,299		Oil Gravity - API - (Corr.) 48.3			
29. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold					30. Test Witnessed By 
31. List Attachments					
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.					33. Rig Release Date: 02/12/2017
34. If an on-site burial was used at the well, report the exact location of the on-site burial:					





Marquardt Federal #4

Oil Cons.  
N.M. DIV-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210

5

Form 3160-5  
(June 1990)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

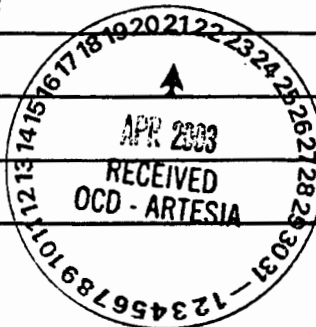
SUBMIT IN TRIPLICATE

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

2. Name of Operator  
Chevron USA, Inc.

3. Address and Telephone No.  
15 Smith Rd. Midland, Texas 79705

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
U.L.H. 1980 North 330 West  
Sec. 1 Township 25S Range 26E



5. Lease Designation and Serial No.  
NM-14124

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.  
Marquardt Federal #6

9. API Well No.  
30-015-28561

10. Field and Pool, or Exploratory Area  
S. Black River, Delaware

11. County or Parish, State  
Eddy, NM

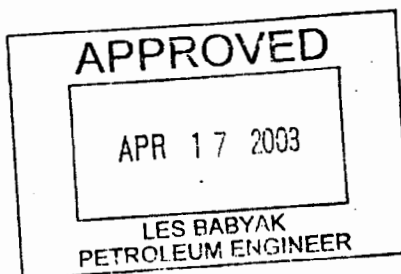
12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Other	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

- Set 5 1/2 CIBP @ 2300 Spot 25 sxs. plug Tag @ 2068
- Displace hole w/MLF 9.5# Brine w/25# gel P/BBL.
- Spot 30 sxs. plug 1975 to 1730 (Delaware, Salt Section) Tag @ 1689
- CIRC cmt. 325 to surf w/40 sxs.
- Install dry hole marker (3/15/02)



RECEIVED  
MAR 21 PM 1 53  
FEDERAL OIL FIELD SERVICE

14. I hereby certify that the foregoing is true and correct

Signed

Title

MANAGER

Date

3/15/02

This space for Federal or State office use

Approved by

Title

Date

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See instruction on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

FORM APPROVED  
OMB NO. 1004-0137  
Expires: February 28, 1995

CHK

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. CENVR. ☐

2. NAME OF OPERATOR

Chevron U.S.A. Inc.

3. ADDRESS AND TELEPHONE NO.

P.O. Box 1150 - Midland, TX 79702 (915) 687-7348

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 1930' FNL & 330' FWL

At top prod. interval reported below

At total depth 5625'

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED

16. DATE T.D. REACHED

17. DATE COMPL. (Ready to prod.)

18. ELEVATIONS (DF, RKB, RT, CB, ETC.)\*

19. ELEV. CASINGHEAD

6-29-95

7-7-95

10-19-95

3351'

20. TOTAL DEPTH, MD & TVD

21. PLUG, BACK T.D., MD & TVD

22. IF MULTIPLE COMPL., HOW MANY\*

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

5625'

5625'

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

25. WAS DIRECTIONAL SURVEY MADE

Brushy Canyon 4846'-5450'

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

27. WAS WELL CORED

Lithodensity/CNL/GR/Temp/CCL/GR/CRW/Ldt/Caliper/Combinable Mag Resonance

Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8-5/8"	23	272	12-1/4"	200 sx CLC surf	
5-1/2"	15.5	5625	7-7/8"	1125 sx CLC surf	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

5386-5450

5148-5209

4846-4887

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5386-5450	1500gals 7½% NEFE HCL; 20500gals linear gel; 40000 lbs 1b/30 sd
5148-5209	20bbbls 7½% HCL; 16300gals linear gel
	76000# 10/30 sd

33.\* PRODUCTION 4846-4887 1250 gals 15% HCL

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
10-18-95		Swab				TA	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10-19-95	3	NA	→	TR	0	75	NA
FLOW, TUBING PRESS.	CASINO PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
		→	TR	0	600		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

*Sonja Gray*

TITLE Technical Assistant

DATE

11/31/96

\*(See Instructions and Spaces for Additional Data on Reverse Side)

Marquardt Federal #1

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

NM OIL CONS COMMISSION

FORM APPROVED  
DRAWER NO. 108-0107  
FILED: February 28, 1995

C/SF

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER ☐ AUG 13 10 54 AM '95

2. TYPE OF COMPLETION:

NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. CEMENT ☒ OTHER ☐

3. NAME OF OPERATOR

CHEVRON U.S.A. INC.

4. ADDRESS AND TELEPHONE NO.

Box 1150 - Midland, TX 79702 (915) 687-7348

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface

1650 FNL & 1650 FWL

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

Marquardt Federal #1

9. API WELL NO.

30-015-22674

10. FIELD AND POOL, OR WILDCAT

White City Wolfcamp

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec 1, T25S, R26E,  
Unit F

12. COUNTY OR PARISH

Eddy

13. STATE

NM

15. DATE SPUDDED

16. DATE T.D. REACHED

17. DATE COMPL. (Ready to prod.)

18. ELEVATIONS (DP, RKB, RT, GS, ETC.)\*

19. ELEV. CASINGHEAD

3326'

20. TOTAL DEPTH, MD & TVD

11,670'

21. PLUG, BACK T.B., MD & TVD

11,617'

22. IF MULTIPLE COMPLETIONS, HOW MANY\*

24. PRODUCING INTERVAL(S). OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

Wolfcamp, 8,571' -- 10,195'

26. TYPE ELECTRIC AND OTHER LOGS RUN

ACCEPTED FOR RECORD

1995

25. WAS DIRECTIONAL SURVEY MADE

27. WAS WELL CORRED

29. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36	2150'		circ 825 sx	
7"	26	9720'		top 7630' 500 sx	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)
5"	15	11,659	250	

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8	11,017	

31. PERFORATION RECORD (Interval, size and number)

9609' -- 9622'  
9706' -- 9719'  
9733' -- 9746'

4JHPF, 90 degree phasing

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
9609-9746	2000 gals 15% HCl

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
1/21/95		FLOWING				PRODUCING	
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
7/23/95	24	WO	→	2	458	1	229 MCF/bbl
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
210	--	→	2	458	1	62	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

*Sonya Gray*  
Sonya Gray

TITLE Technical Assistant

DATE Aug. 16, 1995

\*(See Instructions and Spaces for Additional Data on Reverse Side)

MOORE Fed Com #4  
N.M. Oil Cons. DIV-Dist. 2  
1301 W. Grand Avenue  
Alamogordo, NM 88210

Form 3160-4  
(April 2004)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FORM APPROVED  
OMB NO. 1004-0137  
Expires: March 31, 2007

1a. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other		5. Lease Serial No. NM-21158							
b. Type of Completion: <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Reavr., Other _____		6. If Indian, Allottee or Tribe Name							
2. Name of Operator MURCHISON OIL & GAS, INC.		7. Unit or CA Agreement Name and No.							
3. Address 1100 MIRA VISTA BLVD. PLANO, TX. 75093-4698		8. Lease Name and Well No. MOORE FED COM #4							
3a. Phone No. (include area code) 972-931-0700		9. API Well No. 30-015-33906							
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 2580' FNL & 660' FEL SE/NE (H) At top prod. interval reported below At total depth		10. Field and Pool, or Exploratory WHITE CITY PENN							
14. Date Spudded 05/04/2005		15. Date T.D. Reached 07/03/2005							
16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod.		11. Sec., T., R., M., on Block and Survey or Area SEC. 35, T24S-R26E							
18. Total Depth: MD 11650 TVD		19. Plug Back T.D.: MD 11450 TVD							
20. Depth Bridge Plug Set: MD 11220 TVD		12. County or Parish EDDY							
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) COMPENSATED NEUTRON DENSITY, LATERLOG, GR		13. State NM							
22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit report) Directional Survey? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit copy)		17. Elevations (DF, RKB, RT, GL)* 3346 GL							
23. Casing and Liner Record (Report all strings set in well)									
Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Sherry Vol. (BBL)	Cement Top*	Amount Pulled
17-1/2	13-3/8	68 #/FT		365'		600 SXS "H"	79 BBL	SURFACE	
12-1/4	9-5/8	40 #/FT		1992'		665 SXS "C"	85 BBL	SURFACE	
8-3/4	7-5/8	33#38		8805'		915 SXS "H"	117 BBL	2028' CBL	
6-1/2	5-1/2	17 #/FT	8472	11650'		360 SXS "H"	46 BBL		
24. Tubing Record									
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	
2-7/8	11011	11011							
25. Producing Intervals									
Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status			
A) MORROW	11508	11535	11508 - 11535		88	PLUG BACK @ 11502'			
B) MORROW	11467	11480	11467 - 11480		52	PLUG BACK @ 11450'			
C) MORROW	11327	11406	11327 - 11406		104	PLUG BACK @ 11220'			
D) MORROW	11230	11240	11230 - 11240		40	PLUG BACK @ 11220			
27. Acid, Fracture, Treatment, Cement Squeeze, etc.									
Depth Interval	Amount and Type of Material								
11480 - 11327	3500 GAL 7.5% MORROW ACID								
11230 - 11240	1500 GAL 7.5% MORROW ACID								
11106 - 11122	4000 GAL 10% ACETIC W/ METHANOL								
28. Production - Interval A									
Date First Produced 08/10/2005	Test Date 08/10/2005	Hours Tested 12	Test Production →	Oil BBL 0	Gas MCF 0	Water BBL 70	Oil Gravity Contr. API	Gas Gravity	Production Method SWAB
Choke Size	Tub. Pres. Pwg. SI	Cog. Pres.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
28a. Production - Interval B									
Date First Produced 08/11/2005	Test Date 08/11/2005	Hours Tested 12	Test Production →	Oil BBL 0	Gas MCF 0	Water BBL 54	Oil Gravity Contr. API	Gas Gravity	Production Method SWAB
Choke Size	Tub. Pres. Pwg. SI	Cog. Pres.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

\*(See instructions and spaces for additional data on page 2)

See  
page add  
for addi  
interval  
E

ACCEPTED FOR RECORD  
OCT - 4  
LES BABYAK  
PETROLEUM ENGINEER

## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
08/18/2005	08/18/2005	24	→	0	193	0		.65	FLOWING
Choke Size	Tbg. Press. Pwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
12/64	SI 240	0	→	0	193	0	0		TEMPORARY PLUG BACK

See page added for addition interval

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
08/26/2005	08/26/2005	2	→	0	507	0		.45	FLOWING
Choke Size	Tbg. Press. Pwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
3/4	SI 35	0	→	0	42	0			TEMPORARY PLUG BACK

## 29. Disposition of Gas (Sold, used for fuel, vented, etc.)

FLARED

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth

## 32. Additional remarks (include plugging procedure):

PLUG BACK @ 11502'    CIBP W/ 10' CEMENT  
 PLUG BACK @ 11450'    CIBP W/ 10' CEMENT  
 PLUG BACK @ 11220'    RBP TO BE RETRIEVED AS SOON AS PRACTICAL

## 33. Indicate which items have been attached by placing a check in the appropriate boxes:

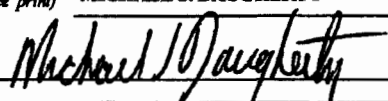
- ☒ Electrical/Mechanical Logs (1 full set req'd.)    ☐ Geologic Report    ☐ DST Report    ☐ Directional Survey  
☐ Sundry Notice for plugging and cement verification    ☐ Core Analysis    ☐ Other:

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (please print) MICHAEL S. DAUGHERTY

Title V P OPERATIONS

Signature



Date 09/21/2005

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0137  
Expires: March 31, 2007

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

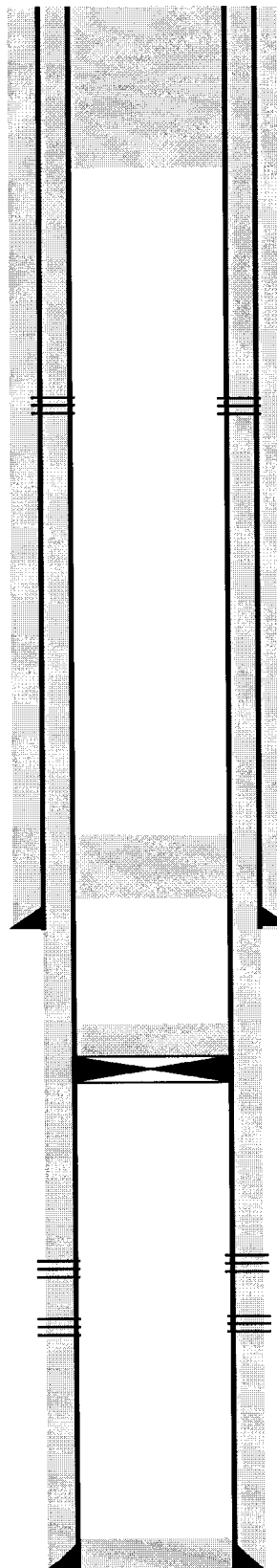
[illegible]

\*(See instructions and spaces for additional data on page 2)



Current WBD

Chevron U.S.A Inc.  
Murchison 2 State #4  
660' FNL & 330' FEL  
Sec. 2, T-25-S, R-26-E, Eddy Co., NM



Cmt plug 105' to sfc

Perf'd at 380'

Tag plug @ 1,843'  
Cmt plug (25 sxs) 1,822'-2,075'

8-5/8" 24# csg @ 2,010'  
cmt'd w/ 1285 sx, cmt circ

Tag plug at 4,855'  
CIBP @ 5,108' with 25 sxs cmt

Brushy Canyon perfs (5,167' - 5,171')

Brushy Canyon perfs (5,202' - 5,206')

5-1/2" 17# csg @ 5,550' cmt'd w/ 580 sxs

Murchison 2 State #4

Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-103  
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I

P.O. Box 1980, Hobbs NM 88241-1980

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

2040 Pacheco St.  
Santa Fe, NM 87505

WELL API NO. 30-015-28602
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 MURCHISON 2 STATE
8. Well No. 4
9. Pool name or Wildcat BLACK RIVER:DELAWARE. SOUTH

<p>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.)</p>	
1. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER	
2. Name of Operator Chevron U.S.A. Inc.	
3. Address of Operator P.O. Box 1150, Midland, TX 79702	
4. Well Location Unit Letter A : 660 Feet From The NORTH Line and 330 Feet From The EAST Line Section 2 Township 25S Range 26E NMPM EDDY County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.)	

11. 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 ☐  
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☒  
CASING TEST AND CEMENT JOB ☐  
OTHER: ☐

12. 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.

SET CIBP @ 5108'. CIRC HOLE W/SALT GEL BRINE. SPOTTED 25 SX CMT 5108'-4855'. SPOTTED 25 SX CMT 2075'-1822'. TAGGED CMT @ 1843'. PERFD @ 380'. CIRC CMT 105'-SURF (UP 8-5/8 & 5-1/2). CUT OFF WH, SET P&A MARKER.

P&A'D 8/5/99

Post FD-2  
9-3-99  
f+H

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

SIGNATURE J. K. Ripley TITLE REGULATORY O.A. DATE 8/24/99  
TYPE OR PRINT NAME J. K. RIPLEY TELEPHONE NO. (915)687-7148

(This space for State Use)

APPROVED BY [Signature] TITLE Reg. Insp. DATE 10-15-99  
CONDITIONS OF APPROVAL, IF ANY



Submit to Appropriate  
District Office  
State Lease - 6 copies  
Fee Lease - 5 copies  
DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-105  
Revised 1-1-89

WELL API NO.  
30-015-28602

5. Indicate Type of Lease  
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.  
L6921

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:  
OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐

b. Type of Completion:  
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER ☐

2. Name of Operator  
DALEN Resources Oil & Gas Co. *Enserch Expl. Inc.*

3. Address of Operator  
6688 N. Central Expwy., Suite 1000, Dallas, TX 75206

4. Well Location  
Unit Letter A: 660 Feet From The North Line and 330 Feet From The East Line

Section 2 Township 25S Range 26E NMPM Eddy County

10. Date Spudded 08/18/95 11. Date T.D. Reached 08/29/95 12. Date Compl. (Ready to Prod.) 13. Elevations (DF & RKB, RT, GR, etc.) 3382' 14. Elev. Casinghead

15. Total Depth 5,550' 16. Plug Back T.D. 5,509' 17. If Multiple Compl. How Many Zones? 18. Intervals Drilled By Rotary Tools ☒ Cable Tools

19. Producing Interval(s), of this completion - Top, Bottom, Name 5,167' - 5,171' & 5,202' - 5,206' - Brushy Canyon 20. Was Directional Survey Made No

21. Type Electric and Other Logs Run Compensated Neutron Litho Density GR/Array Induction GR/AMS/CBL 22. Was Well Corred Yes

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	2,010'	12-1/4"	1285sx	0
5-1/2"	17#	5,550'	7-7/8"	580sx	0

24. LINER RECORD					25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-3/8"	5113'	NA

26. Perforation record (interval, size, and number) 27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.  
5202' - 5206' 2 SPF 9 Holes  
5167' - 5171' 2 SPF 9 Holes  
DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED  
5202-06' 1000 gals 15% NEFE Acid  
5167-71' 1000 gals 15% NEFE Acid  
5202' - 5167' 45636 gal 35# gel + 23415#

28. PRODUCTION 15/30 Ottawa Sand  
Date First Production 09/23/95 Production Method (Flowing, gas lift, pumping, etc. and type pump) Swabbing/Flowing Well Status (Prod. or Shut-in) Shut-In  
Date of Test 09/23/95 Hours Tested 13-1/2 Choke Size 40/64" Prod'n For Test Period 20 Oil - Bbl Gas - MCF Water - Bbl Gas - Oil Ratio TSTM 150 NA  
Flow Tubing Press. 150 Casing Pressure 0 Calculated 24-Hour Rate 35.5 Oil - Bbl Gas - MCF Water - Bbl Oil Gravity - API - (Corr.) TSTM 956 46.5

29. Disposition of Gas (Sold, used for fuel, vented, etc.) Vented during testing Test Witnessed By

30. List Attachments

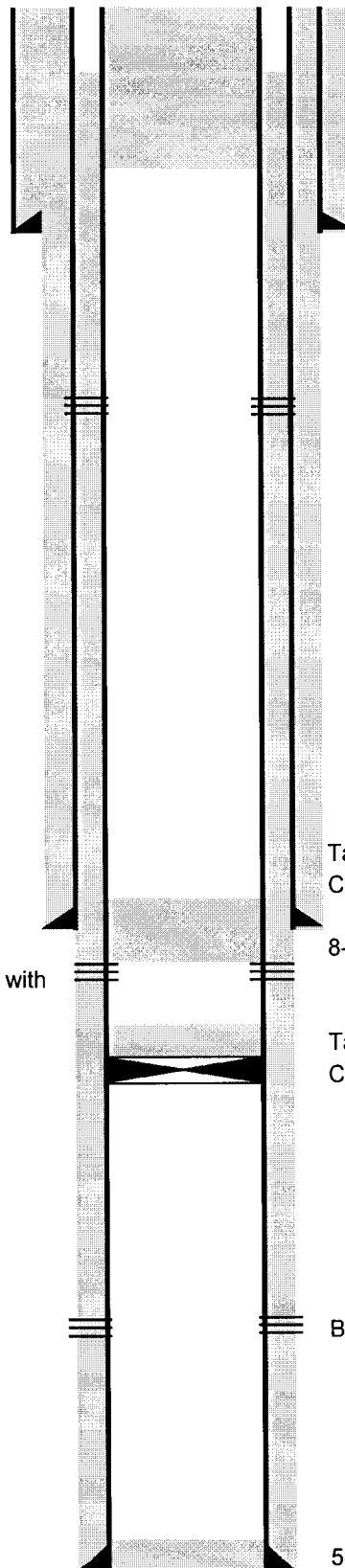
31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature *Cindy R. Keister* Printed Name Cindy R. Keister Title Regulatory Compliance Spec. Date 11/16/95



# Current WBD

DALEN Resources Oil & Gas Co.  
Murchison 2 State #1  
1980' FNL & 660' FEL  
Sec. 2, T-25-S, R-26-E, Eddy Co., NM



Cmt plug 70' to sfc

13-3/8" 48# csg @ 256'  
260 sxs cmt class C lite

Perf'd at 625' squeezed with 250 sxs TOC @ 198'  
inside 5-1/2 x 8-5/8" ann

Tag plug @ 1,843'  
Cmt plug (25 sxs) 1,822'-2,075'

8-5/8" 24# csg @ 2,008'  
cmt'd w/ 500 sxs

Perf w/ 4 shot gun @ 2,060 and squeeze with  
50 sxs class C Cmt TOC 1,850'

Tag plug at 2,693'  
CIBP @ 2,980' with 25 sxs cmt

Brushy Canyon perfs (5,133' - 5,166')

5-1/2" 17# csg @ 5,520' cmt'd w/ 1270 sxs

Murchison 2 State #1

Jan 13 05 11:29a

Sunset Well Service

4325618601

Scanned  
2/22/05  
Form C-103  
Revised March 25, 1999

Submit 3 Copies To Appropriate District Office

District I  
1625 N. French Dr., Hobbs, NM 88240

District II  
811 South First, Artesia, NM 88210

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

WELL API NO.

30-015-28288

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name:

Murchison 2 State RECEIVED

NOV 15 2005

8. Well No.

1

9. Pool name or Wildcat

Black River, Delaware South

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

Chevron USA, Inc.

3. Address of Operator

15 Smith Rd. Midland, Tx. 79705

4. Well Location

Unit Letter H : 1980 feet from the North line and 660 feet from the East line

Section 2 Township 25-S Range 26-E NMPM County Eddy

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

11. 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 COMPLETION ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☒

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

12. 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.

1. MI & RU Plugging Equipment. 8-29-03.

2. Set 5 1/2 CIBP @2980'. Circ. w/65 BBL MLF 2980-Surf. Spot 25 sx Class C Cmt @2980'. Tag Toc @2693'. 9-2-03.

3. Perf. w/4-Shot Gun @2060'. Squeezed 50sx Class C Cmt. 9-2-03. Tag Toc @1850'. 9-3-03

4. Perf. w/4-Shot Gun @625'. Squeezed 250sx Class C Cmt Down 5 1/2 Csg out @Perfs up 5 1/2 x 8 5/8 Ann. & 8 5/8 x 13 3/8 Ann. 9-3-03. Tag Toc @198'. 9-4-03.

5. Spot 10sx Class C Cmt 70'- Surface 9-4-03. Tag Toc @ Surface. 9-5-03. P & A Complete.

6. Install Dry Hole Marker. 9-05-03.

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

SIGNATURE Jimmy Bagley TITLE MANAGER DATE 9-5-03

Type or print name Jimmy BAGLEY  
(This space for State use)

Telephone No. 432-565-8600

APPROVED BY [Signature] TITLE Field Supervisor DATE NOV 16 2005

Conditions of approval, if any:

Submit to Appropriate  
District Office  
State Lease - 6 copies  
Fee Lease - 5 copies  
**DISTRICT I**  
P.O. Box 1980, Hobbs, NM 88240

**DISTRICT II**  
P.O. Drawer DD, Artesia, NM 88210

**DISTRICT III**  
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

**OIL CONSERVATION DIVISION**  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-105  
Revised 1-1-89

WELL API NO. 30-015-28288

5. Indicate Type of Lease  
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.  
L6921

7. Lease Name or Unit Agreement Name  
P.O. Box 2088  
Murchison 2 State

8. Well No.  
1

9. Pool name or Wildcat  
Wildcat - Orange

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. Type of Well:  
OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐

b. Type of Completion:  
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESER ☐ OTHER ☐

2. Name of Operator  
DALEN Resources Oil & Gas Co.

3. Address of Operator  
6688 N. Central Expwy., Suite 1000, Dallas, TX 75206

4. Well Location  
Unit Letter H : 1980 Feet From The North Line and 660 Feet From The East Line

Section 2 Township 25S Range 26E NMPM County

10. Date Spudded 01/20/95 11. Date T.D. Reached 02/08/95 12. Date Compl. (Ready to Prod.) 03/05/95 13. Elevations (DF & RKB, RT, GR, etc.) 3343' 14. Elev. Casinghead

15. Total Depth 8631' 16. Plug Back T.D. 5270' 17. If Multiple Compl. How Many Zones? 18. Intervals Drilled By XX 19. Producing Interval(s), of this completion - Top, Bottom, Name 5,133' - 5,166' Orange Sand 20. Was Directional Survey Made No

21. Type Electric and Other Logs Run  
DIL/Compensated Neutron/Digital Array Acoustic Gamma Ray 22. Was Well Cored Yes

**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	256'	17-1/2"	260sx Class "C"	0
8-5/8"	24	2008'	12-1/4"	400sx Pace Lite "C" +	0
				100sx Class "C"	
5-1/2"	17	5520'	7-7/8"	470sx Super "C" +	0
				800sx Super "C"	

LINER RECORD					TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-7/8"	5074'	

26. Perforation record (interval, size, and number)  
5,133' - 5,166' 2 SPF 67 Holes  
27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.  
DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED  
See Attachment

**PRODUCTION**

Date First Production 03/17/95		Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing					Well Status (Prod. or Shut-in) Prod	
Date of Test 03/29/95	Hours Tested 24	Choke Size 16	Prod'n For Test Period	Oil - Bbl. 115	Gas - MCF 645	Water - Bbl. 70	Gas - Oil Ratio 5607	
Flow Tubing Press. 1350	Casing Pressure	Calculated 24- Hour Rate	Oil - Bbl. 115	Gas - MCF 645	Water - Bbl. 70	Oil Gravity - API - (Corr.) 46.2		

29. Disposition of Gas (Sold, used for fuel, vented, etc.)  
Vented during testing  
Test Witnessed By

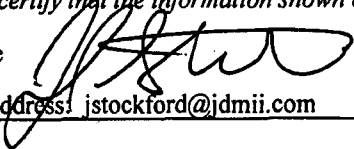
30. List Attachments

31. 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

Signature Cindy R. Keister Printed Name Cindy R. Keister Title Supvr. Regulatory Date 03/31/95

Submit To Appropriate District Office Two Counties <b>District I</b> 1625 N. French Dr., Hobbs, NM 88240 <b>District II</b> 1301-W. Grand Avenue, Artesia, NM 88210 <b>District III</b> 1000 Rio Brazos Rd., Aztec, NM 87410 <b>District IV</b> 1220 S. St. Francis Dr., Santa Fe, NM 87505		<b>State of New Mexico</b> <b>Energy, Minerals and Natural Resources</b>  <b>Oil Conservation Division</b> 1220 South St. Francis Dr. Santa Fe, NM 87505-0820		Form C-105 July 17, 2008	
		<div style="border: 2px solid black; padding: 5px; display: inline-block;"> <b>RECEIVED</b>            JUL 17 2008            NMOCN ARTESIA         </div>			
<b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG</b>					
4. Reason for filing:		5. Lease Name or Unit Agreement Name		6. Well Number: 007H	
<input checked="" type="checkbox"/> <b>COMPLETION REPORT</b> (Fill in boxes #1 through #31 for State and Fee wells only)  <input type="checkbox"/> <b>C-144 CLOSURE ATTACHMENT</b> (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)		OGDEN STATE		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>REC'D</b>            MAP 08 2013  <b>NMOCN ARTESIA</b> </div>	
7. Type of Completion: <input checked="" type="checkbox"/> NEW WELL <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER		8. Name of Operator MURCHISON OIL & GAS, INC.		9. OGRID 15363	
10. Address of Operator 1100 MIRA VISTA BLVD., PLANO, TX 75093		11. Pool name or Wildcat BLACK RIVER; DELAWARE, SOUTH			
12. Location	Unit Ltr	Section	Township	Range	Lot
Surface:	A	2	25S	26E	
BH:	D	2	25S	26E	
Feet from the N/S Line	Feet from the E/W Line	County			
350	175	EDDY			
415	1786	EDDY			
13. Date Spudded 10/12/12	14. Date T.D. Reached 10/19/12	15. Date Rig Released 10/20/12	16. Date Completed (Ready to Produce) 02/21/2013		17. Elevations (DF and RKB, RT, GR, etc.) 3383' GR
18. Total Measured Depth of Well 5055'		19. Plug Back Measured Depth	20. Was Directional Survey Made? YES		21. Type Electric and Other Logs Run Gamma Ray
22. Producing Interval(s), of this completion - Top, Bottom, Name 2377' MD – 3783' MD Ramsey Sand					
<b>CASING RECORD (Report all strings set in well)</b>					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9.625"	36	377'	12.25"	445 sx/ CL C	
7"	26	2,280'	8.75"	616 sx/ CL C	
24. LINER RECORD					
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	
4.5	2153' MD	3855' MD			
25. TUBING RECORD					
SIZE	DEPTH SET	PACKER SET			
2.875	2,069'				
26. Perforation record (interval, size, and number) 2,377' TO 3,783' 8 STAGE OPEN HOLE SYSTEM			27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.		
DEPTH INTERVAL			AMOUNT AND KIND MATERIAL USED		
2377'-3783' MD			606,448 lbs sand & 17,785 bbls treated water		
<b>PRODUCTION</b>					
Date First Production 02/26/2013		Production Method ( <i>Flowing, gas lift, pumping - Size and type pump</i> ) PCP Pump #LHM 869, Stator 18.84", Rotor 19", 40 HP		Well Status ( <i>Prod. or Shut-in</i> ) PRODUCING	
Date of Test 03/05/2013	Hours Tested 24	Choke Size 0	Prod'n For Test Period 24hr	Oil - Bbl 40	Gas - MCF 52
Flow Tubing Press. 200	Casing Pressure 25	Calculated 24-Hour Rate	Oil - Bbl 40	Gas - MCF 52	Water - Bbl. 513
					Gas - Oil Ratio 1300
29. Disposition of Gas ( <i>Sold, used for fuel, vented, etc.</i> ) Flare				30. Test Witnessed By	
31. List Attachments GAMMA RAY LOG					
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.					
33. If an on-site burial was used at the well, report the exact location of the on-site burial: Currently drying cuttings; on-site burial not yet completed.					
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					
Signature		Printed Name: Michael S. Daugherty		Title: COO	Date: 3/7/13
E-mail Address: mdaughterv@idmii.com					

Ogden State 8H

<b>Submit To Appropriate District Office</b> Two Copies <b>District I</b> 1625 N. French Dr., Hobbs, NM 88240 <b>District II</b> 1301 W. Grand Avenue, Artesia, NM 88210 <b>District III</b> 1000 Rio Brazos Rd., Aztec, NM 87410 <b>District IV</b> 1220 S. St. Francis Dr., Santa Fe, NM 87505		<b>State of New Mexico</b> <b>Energy, Minerals and Natural Resources</b>  <b>Oil Conservation Division</b> 1220 South St. Francis Dr. Santa Fe, NM 87505		<b>Form C-105</b> July 17, 2008						
<b>1. WELL API NO.</b> 30-015-40793		<b>2. Type of Lease</b> <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> FED/INDIAN		<b>3. State Oil &amp; Gas Lease No.</b>						
<b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG</b>										
<b>4. Reason for filing:</b> <input checked="" type="checkbox"/> <b>COMPLETION REPORT</b> (Fill in boxes #1 through #31 for State and Fee wells only)  <input type="checkbox"/> <b>C-144 CLOSURE ATTACHMENT</b> (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)				<b>5. Lease Name or Unit Agreement Name</b> OGDEN STATE						
<b>7. Type of Completion:</b> <input checked="" type="checkbox"/> NEW WELL <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER				<b>6. Well Number:</b> 008H						
<b>8. Name of Operator</b> MURCHISON OIL & GAS, INC.				<b>9. OGRID</b> 15363						
<b>10. Address of Operator</b> 1100 MIRA VISTA BLVD., PLANO, TX 75093				<b>11. Pool name or Wildcat</b> BLACK RIVER; DELAWARE, SOUTH						
<b>12. Location</b>	<b>Unit Ltr</b>	<b>Section</b>	<b>Township</b>	<b>Range</b>	<b>Lot</b>	<b>Feet from the</b>	<b>N/S Line</b>	<b>Feet from the</b>	<b>E/W Line</b>	<b>County</b>
<b>Surface:</b>	A	2	25S	26E		1175	N	350	E	EDDY
<b>BH:</b>	P	2	25S	26E		354	S	357	E	EDDY
<b>13. Date Spudded</b> 10/21/12	<b>14. Date T.D. Reached</b> 11/06/12	<b>15. Date Rig Released</b> 11/07/12		<b>16. Date Completed (Ready to Produce)</b> 11/14/12		<b>17. Elevations (DF and RKB, RT, GR, etc.)</b> 3362' GR				
<b>18. Total Measured Depth of Well</b> 11,176'		<b>19. Plug Back Measured Depth</b>		<b>20. Was Directional Survey Made?</b> YES		<b>21. Type Electric and Other Logs Run</b> Gamma Ray				
<b>22. Producing Interval(s), of this completion - Top, Bottom, Name</b> 2,046' - 2,053' Ramsey Sand										
<b>23. CASING RECORD (Report all strings set in well)</b>										
<b>CASING SIZE</b>		<b>WEIGHT LB./FT.</b>		<b>DEPTH SET</b>		<b>HOLE SIZE</b>		<b>CEMENTING RECORD</b>		<b>AMOUNT PULLED</b>
9.625"		36		377'		12.25"		275 sx/ CL C		
7"		26		2,363'		8.75"		800 sx/ CL C		
<b>24. LINER RECORD</b>										
<b>SIZE</b>	<b>TOP</b>	<b>BOTTOM</b>	<b>SACKS CEMENT</b>	<b>SCREEN</b>	<b>25. TUBING RECORD</b>					
					<b>SIZE</b>	<b>DEPTH SET</b>	<b>PACKER SET</b>			
					2.875	1,752'				
<b>26. Perforation record (interval, size, and number)</b>  None					<b>27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.</b>					
					<b>DEPTH INTERVAL</b>		<b>AMOUNT AND KIND MATERIAL USED</b>			
<b>28. PRODUCTION</b>										
<b>Date First Production</b> 11/16/2012		<b>Production Method (Flowing, gas lift, pumping - Size and type pump)</b> PUMPING				<b>Well Status (Prod. or Shut-in)</b> PRODUCING				
<b>Date of Test</b> 11/19/2012	<b>Hours Tested</b> 22	<b>Choke Size</b> 0	<b>Prod'n For Test Period</b>	<b>Oil - Bbl</b> 10	<b>Gas - MCF</b> 20	<b>Water - Bbl.</b> 738	<b>Gas - Oil Ratio</b> 2000			
<b>Flow Tubing Press.</b> 220	<b>Casing Pressure</b> 110	<b>Calculated 24-Hour Rate</b>	<b>Oil - Bbl.</b> 11	<b>Gas - MCF</b> 22	<b>Water - Bbl.</b> 805	<b>Oil Gravity - API - (Corr.)</b> 42.2				
<b>29. Disposition of Gas (Sold, used for fuel, vented, etc.)</b> Flare						<b>30. Test Witnessed By</b>				
<b>31. List Attachments</b> GAMMA RAY LOG										
<b>32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.</b>										
<b>33. If an on-site burial was used at the well, report the exact location of the on-site burial:</b> Currently drying cuttings; on-site burial not yet completed.										
<b>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</b>										
<b>Signature</b>		<b>Printed Name:</b>		<b>Title:</b>		<b>Date:</b>				
		Joel Stockford		Drilling Manager		11/20/12				
<b>E-mail Address:</b> jstockford@jdmii.com										

\* See attached for BHL's

JW

Ogden State Com #2

Form L-100  
Revised 10-1-78STATE OF NEW MEXICO  
OIL AND MINERALS DEPARTMENT

## OIL CONSERVATION DIVISION

P. O. BOX 2600

SANTA FE, NEW MEXICO 87501

RECEIVED

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

MAY 14 1982

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	<input checked="" type="checkbox"/>
FILE	<input checked="" type="checkbox"/>
U.S.O.S.	<input checked="" type="checkbox"/>
LAND OFFICE	<input checked="" type="checkbox"/>
OPERATOR	<input checked="" type="checkbox"/>

3a. Indicate Type of Lease  
State ☒ Fee ☐

5. State Oil &amp; Gas Lease No.

L-896

7. Unit Agreement Name

8. Farm or Lease Name

RIVER STATE COM

9. Well No.

1

10. Field and Pool, or Wildcat

WHITE CITY PENN

12. County

EDDY

TYPE OF WELL *Bar of Mines* ☒ OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER ☐ O. C. D. ☐

TYPE OF COMPLETION  
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER ☐ ARTESIA, OFFICE

Name of Operator

MESA PETROLEUM CO. ✓

Address of Operator

1000 VAUGHN BUILDING/MIDLAND, TX 79701-4493

Location of Well

LETTER G LOCATED 1650 FEET FROM THE NORTH LINE AND 1650 FEET FROM EAST 2 25S 26E

LINE OF SEC. TWP. RGE. NMPM

11. Date Spudded 1-29-82 16. Date T.D. Reached 4-18-82 17. Date Compl. (Ready to Prod.) 5-10-82 18. Elevations (DF, RKB, RT, GR, etc.) 3374' GR 19. Elev. Casinghead 3374'

20. Total Depth 11,574' 21. Plug Back T.D. 11,519' 22. If Multiple Compl., How Many - 23. Intervals Drilled By ALL Rotary Tools ALL Cable Tools -

24. Producing Interval(s), of this completion - Top, Bottom, Name

11,049' --- 11,453', MORROW

25. Was Directional Survey Made

NO

26. Type Electric and Other Logs Run

GR-CNFD/DLL-RXO

27. Was Well Cored

NO

## CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
16"	65#	253'	20"	200/200	
10 3/4"	40.5#	2025'	14 3/4"	1450/300	
7 5/8"	26.4#	8641'	9 1/2"	850/650	

Posted ID 2  
5-11-82  
Comp & BR

## LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
4 1/2"	8,277	11,573	530		2 3/8"	10,954'	10,944'

28. Perforation Record (Interval, size and number)

(11,049'---55') 6 holes, (11,061'---68')  
8 holes, (11,097', 11', 14', 15', 18', 11,129')  
5 holes, (11,193'---11,200') 8 holes,  
(11,207', 08', 09', 355') 4 holes, (11,431',  
32', 33', 34', 36', 40', 43', 47', 53') 9 holes -  
total 40 holes

30. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
11,049'---11,453'	A/8000 gals 7 1/2% HCL + 100 BS

## PRODUCTION

First Production -		Production Method (Flowing, gas lift, pumping - Size and type pump) FLOWING				Well Status (Prod. or Shut-in) SHUT-IN	
Date of Test 5-10-82	Hours Tested 1	Choke Size 26/64"	Prod'n. For Test Period →	Oil - Bbl. TRACE	Gas - MCF 184	Water - Bbl. -	Gas - Oil Ratio -
Flow Tubing Press. 1080	Casing Pressure PACKER	Calculated 24- Hour Rate →	Oil - Bbl. TSTM	Gas - MCF 4400	Water - Bbl. -	Oil Gravity - API (Corr.) -	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

VENTED

Test Witnessed By

A. A. NOLL

31. List of Attachments

\*4 PT to be run after connection to sales line.

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

R. J. Noll

TITLE

REGULATORY COORDINATOR

DATE

5-12-82

## Water Analysis Report

Attention: **Brendan.McCalpin@nalco.com**

Location Code: **320645**

Sample ID: **AI07942**

Login Batch: **170213093534 GC**

Collection Date: **02/10/2017**

Receive Date: **02/13/2017**

Report Date: **02/13/2017**

Customer: **Cimarex (150248965)**

Region: **Delware Basin**

Location: **White City**

System: **Production System**

Equipment: **Davinci 7 Fed Com 2H**

Lab ID: **ABU-1031**

Sample Point: **Separator**

Analyses	Result	Unit
Dissolved CO2	430	mg/L
Dissolved H2S	0	mg/L
pH	6.4	
Pressure	120	psi
Temperature	78	° F

Cations	Result	Unit
Iron	50.22	mg/L
Manganese	1.561	mg/L
Barium	3.094	mg/L
Strontium	1502	mg/L
Calcium	7502	mg/L
Magnesium	1068	mg/L
Sodium	86320.89	mg/L

Analyses	Result	Unit
Bicarbonate	170.8	mg/L
Conductivity (Calculated)	386731	µS - cm3
Ionic Strength	4.41	
Resistivity	0.026	ohms - m
Specific Gravity	1.141	
Total Dissolved Solids	247559.6	mg/L

Anions	Result	Unit
CHLORIDE	150566.05	mg/L
SULFATE	375	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	-0.49
Barite BaSO4 PTB	1.5
Barite BaSO4 SI	0.74
Calcite CaCO3 SI	-0.38
Celestite SrSO4 PTB	184.5
Celestite SrSO4 SI	0.78
Gypsum CaSO4 SI	-0.62
Hemihydrate CaSO4 SI	-0.64

Saturation Index Calculation (Tomson-Oddo Model)

This document contains the confidential and/or proprietary information of NALCO Champion. The recipient agrees to maintain the confidentiality of the terms of this document, and shall not reproduce it by any means, disclose the contents of it to any third party, or use the contents of it for any purpose other than the purpose for which it was intended by NALCO Champion.



## Water Analysis Report

Attention: **Brendan.McCalpin@nalco.com**

Location Code: **329435**

Sample ID: **AH54143**

Login Batch: **161107112625-JHI SW**

Collection Date: **11/03/2016**

Receive Date: **11/04/2016**

Report Date: **11/11/2016**

Customer: **Cimarex (150248965)**

Region: **Delware Basin**

Location: **White City**

System: **Production System**

Equipment: **Pintail 23 Fed Com 4H**

Lab ID: **ABU-1031**

Sample Point: **Oil Dump**

Analyses	Result	Unit
Dissolved CO2	390	mg/L
Dissolved H2S	101	mg/L
pH	5.9	
Pressure	60	psi
Temperature	75	° F

Analyses	Result	Unit
Bicarbonate	244	mg/L
Conductivity (Calculated)	212855	µS - cm3
Ionic Strength	2.62	
Resistivity	0.047	ohms - m
Specific Gravity	1.127	
Total Dissolved Solids	136228.8	mg/L

Cations	Result	Unit
Iron	0.498	mg/L
Manganese	1.391	mg/L
Barium	0.247	mg/L
Strontium	267.8	mg/L
Calcium	11460	mg/L
Magnesium	3027	mg/L
Sodium	36116.98	mg/L

Anions	Result	Unit
CHLORIDE	84580.93	mg/L
SULFATE	530	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	-0.45
Barite BaSO4 SI	-0.49
Calcite CaCO3 SI	-0.83
Celestite SrSO4 SI	-0.08
Gypsum CaSO4 SI	-0.37
Hemihydrate CaSO4 SI	-0.41

Saturation Index Calculation (Tomson-Oddo Model)

### Comments

This document contains the confidential and/or proprietary information of NALCO Champion. The recipient agrees to maintain the confidentiality of the terms of this document, and shall not reproduce it by any means, disclose the contents of it to any third party, or use the contents of it for any purpose other than the purpose for which it was intended by NALCO Champion.

## Water Analysis Report

Attention: **Brendan.McCalpin@nalco.com**

Location Code: **353645**

Sample ID: **AJ25825**

Login Batch: **2017-08-28-001-LP**

Collection Date: **08/24/2017**

Receive Date: **08/28/2017**

Report Date: **09/01/2017**

Customer: **Cimarex (150248965)**

Region: **Delware Basin**

Location: **White City**

System: **Production System**

Equipment: **Marquardt 12-13 Fed Com 11H**

Lab ID: **ABU-1031**

Sample Point: **Separator**

Analyses	Result	Unit
Dissolved CO2	<b>80</b>	mg/L
Dissolved H2S	<b>Not Detected</b>	mg/L
pH	<b>6.86</b>	
Pressure	<b>125</b>	psi
Temperature	<b>85</b>	° F

Analyses	Result	Unit
Bicarbonate	<b>170</b>	mg/L
Conductivity (Calculated)	<b>160695</b>	µS - cm3
Ionic Strength	<b>1.88</b>	
Resistivity	<b>0.062</b>	ohms - m
Specific Gravity	<b>1.076</b>	
Total Dissolved Solids	<b>102855.4</b>	mg/L

Cations	Result	Unit
Iron	<b>9.57</b>	mg/L
Manganese	<b>0.8</b>	mg/L
Barium	<b>6.15</b>	mg/L
Strontium	<b>904.87</b>	mg/L
Calcium	<b>3045.55</b>	mg/L
Magnesium	<b>573.45</b>	mg/L
Sodium	<b>36273.02</b>	mg/L

Anions	Result	Unit
Chloride	<b>61704</b>	mg/L
Sulfate	<b>168</b>	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	<b>-1.50</b>
Barite BaSO4 PTB	<b>2.2</b>
Barite BaSO4 SI	<b>0.40</b>
Calcite CaCO3 SI	<b>-0.50</b>
Celestite SrSO4 SI	<b>-0.01</b>
Gypsum CaSO4 SI	<b>-1.37</b>
Hemihydrate CaSO4 SI	<b>-1.39</b>

Saturation Index Calculation (Tomson-Oddo Model)

### Comments

This document contains the confidential and/or proprietary information of NALCO Champion. The recipient agrees to maintain the confidentiality of the terms of this document, and shall not reproduce it by any means, disclose the contents of it to any third party, or use the contents of it for any purpose other than the purpose for which it was intended by NALCO Champion.

## Water Analysis Report

Attention: **Brendan.McCalpin@nalco.com**

Location Code: **338997**

Sample ID: **A135509**

Login Batch: **17032707\_JZ**

Collection Date: **03/23/2017**

Receive Date: **03/24/2017**

Report Date: **03/27/2017**

Customer: **Cimarex (150248965)**

Region: **Delware Basin**

Location: **White City**

System: **Production System**

Equipment: **Pintail 23-26 Fed Com 10H**

Lab ID: **ABU-1031**

Sample Point: **Separator**

Analyses	Result	Unit
Dissolved CO2	180	mg/L
Dissolved H2S	0	mg/L
pH	6.5	
Pressure	120	psi
Temperature	78	° F

Analyses	Result	Unit
Bicarbonate	105.6	mg/L
Conductivity (Calculated)	185538	µS - cm3
Ionic Strength	2.11	
Resistivity	0.054	ohms - m
Specific Gravity	1.077	
Total Dissolved Solids	118751.6	mg/L

Cations	Result	Unit
Iron	6.254	mg/L
Manganese	0.764	mg/L
Barium	2.481	mg/L
Strontium	705	mg/L
Calcium	3611	mg/L
Magnesium	605.3	mg/L
Sodium	41241.44	mg/L

Anions	Result	Unit
CHLORIDE	71983.77	mg/L
SULFATE	490	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	-0.98
Barite BaSO4 PTB	1.0
Barite BaSO4 SI	0.49
Calcite CaCO3 SI	-1.08
Celestite SrSO4 PTB	118.7
Celestite SrSO4 SI	0.33
Gypsum CaSO4 SI	-0.85
Hemihydrate CaSO4 SI	-0.87

Saturation Index Calculation (Tomson-Oddo Model)

### Comments

This document contains the confidential and/or proprietary information of NALCO Champion. The recipient agrees to maintain the confidentiality of the terms of this document, and shall not reproduce it by any means, disclose the contents of it to any third party, or use the contents of it for any purpose other than the purpose for which it was intended by NALCO Champion.

Geological Description  
**Freedom 36 State (SWD) 1**

Formation(s) for injection: Devonian-Silurian

Injection Interval: Top 1000' of Devonian-Silurian (12,250' – 14,250'). Logs will be ran to pinpoint the exact top of the Devonian-Silurian while drilling.

Lithological Description: Highly porous and vugular dolomitized carbonate

Thickness: 1,000'+ of gross interval thickness

Porosity: 6% to over 20%

Permeability: Highly permeable 50+ md (estimated)

Estimated Geological Formation Tops for the Freedom 36 State (SWD) 1

Top of Salt	1,160'	Atoka	10,522'
Base of Salt	1,875'	Morrow	11,120'
Delaware Group	2,250'	Barnett	12,145'
Bone Spring	5,530'	Mississippian	12,415'
Wolfcamp	8,650'	Woodford	12,630'
Cisco/Canyon	10,105'	Devonian	12,750'
Strawn	10,336'		

The injection depths are 10,500' below the deepest potential source of brackish water that might be economically used as a source for drinking water.

After examining the available geological data, no evidence was found of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

Brent A. Bruington

Geologist

Cimarex Energy Company



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
O=orphaned,

C=the file is (quarters are 1=NW 2=NE 3=SW 4=SE)

closed) (quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 00819	C	ED		4	4	26	24S	26E		570022	3560935*	62	42	20

Average Depth to Water: 42 feet

Minimum Depth: 42 feet

Maximum Depth: 42 feet

Record Count: 1

PLSS Search:

Section(s): 26

Township: 24S

Range: 26E

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



# *New Mexico Office of the State Engineer* **Water Column/Average Depth to Water**

---

No records found.

**PLSS Search:**

**Section(s):** 36

**Township:** 24S

**Range:** 26E



# *New Mexico Office of the State Engineer* **Water Column/Average Depth to Water**

---

No records found.

**PLSS Search:**

Section(s): 35

Township: 24S

Range: 26E



# *New Mexico Office of the State Engineer* **Water Column/Average Depth to Water**

---

No records found.

**PLSS Search:**

Section(s): 25

Township: 24S

Range: 26E





---

# *New Mexico Office of the State Engineer* **Water Column/Average Depth to Water**

---

No records found.

**PLSS Search:**

Section(s): 1

Township: 25S

Range: 26E



# *New Mexico Office of the State Engineer* **Water Column/Average Depth to Water**

---

No records found.

**PLSS Search:**

Section(s): 2

Township: 25S

Range: 26E



# *New Mexico Office of the State Engineer* **Water Column/Average Depth to Water**

---

No records found.

**PLSS Search:**

Section(s): 6

Township: 25S

Range: 27E



# *New Mexico Office of the State Engineer* **Water Column/Average Depth to Water**

---

No records found.

**PLSS Search:**

**Section(s): 31**

**Township: 24S**

**Range: 27E**



# *New Mexico Office of the State Engineer* **Water Column/Average Depth to Water**

---

No records found.

**PLSS Search:**

**Section(s):** 30

**Township:** 24S

**Range:** 27E



XIII.

Notification Requirements:

<b>Surface Owner</b>	<b>New Mexico State Land Office</b> PO BOX 1148 Santa Fe, NM 87504	<b>Certified #</b> 9407 1102 0088 3596 7989 97
<b>Offset Operator</b> <b>Within ½ mile</b>	<b>Chevron USA INC</b> 6301 Deauville BLVD Midland, TX 79706	<b>Certified #</b> 9407 1102 0082 8544 3979 38
	<b>Unit Petroleum Co.</b> PO Box 702500 Tulsa OK 74170	<b>Certified #</b> 9407 1102 0088 2544 3729 13
	<b>Murchison Oil &amp; Gas</b> 7520 Dallas Parkway Suite 1400 Dallas TX 75024	<b>Certified #</b> 9407 1102 0088 3596 8150 52

A copy of the application was sent certified mail to the above addresses on 10/16/2017. Proof of certification and delivery receipt attached.

Thank you,



Amithy Crawford

Cimarex Energy

Cimarex Energy Co.  
600 N. Marienfeld  
Suite 600  
Midland TX 79701



10/16/2017

**Notification Letter**

New Mexico State Land Office  
PO BOX 1148  
Santa Fe, NM 87504

RE: Freedom 36 State SWD #1  
1300' FSL & 660' FWL  
Sec 36, 24S, 26E  
Eddy County, NM

To Whom it May Concern,

Please accept this letter as our notification to you, as surface owner, of Cimarex Energy Co.'s plans to drill the Freedom 36 State SWD #1. Attached is a copy of our C-108 permit application with the NMOCD. This letter and attachments are intended to satisfy the notification requirements for this permit application.

Any parties opposed to the approval of this application should contact the New Mexico Oil Conservation Division.

Sincerely,

A handwritten signature in black ink, appearing to read "Amithy Crawford".

Amithy Crawford  
Regulatory Analyst  
432-620-1909  
[acrawford@cimarex.com](mailto:acrawford@cimarex.com)



Cimarex Energy Co.  
600 N. Marienfeld  
Suite 600  
Midland TX 79701



10/16/2017

**Notification Letter**

Chevron USA INC  
6301 Deaville BLVD  
Midland TX 79706

RE: Freedom 36 State SWD #1  
1300' FSL & 660' FWL  
Sec 36, 24S, 26E  
Eddy County, NM

To Whom it May Concern,

Please accept this letter as our notification to you, as offset operator, of Cimarex Energy Co.'s plans to drill the Freedom 36 State SWD #1. Attached is a copy of our C-108 permit application with the NMOCD. This letter and attachments are intended to satisfy the notification requirements for this permit application.

Any parties opposed to the approval of this application should contact the New Mexico Oil Conservation Division.

Sincerely,

A handwritten signature in black ink, appearing to read "Amythy Crawford".

Amythy Crawford  
Regulatory Analyst  
432-620-1909  
[acrawford@cimarex.com](mailto:acrawford@cimarex.com)

Cimarex Energy Co.  
600 N. Marienfeld  
Suite 600  
Midland TX 79701



10/16/2017

**Notification Letter**

Unit Petroleum Co.  
PO Box 702500  
Tulsa OK 74170

RE: Freedom 36 State SWD #1  
1300' FSL & 660' FWL  
Sec 36, 24S, 26E  
Eddy County, NM

To Whom it May Concern,

Please accept this letter as our notification to you, as offset operator, of Cimarex Energy Co.'s plans to drill the Freedom 36 State SWD #1. Attached is a copy of our C-108 permit application with the NMOCD. This letter and attachments are intended to satisfy the notification requirements for this permit application.

Any parties opposed to the approval of this application should contact the New Mexico Oil Conservation Division.

Sincerely,

A handwritten signature in black ink, appearing to read "Amythy Crawford".

Amythy Crawford  
Regulatory Analyst  
432-620-1909  
[acrawford@cimarex.com](mailto:acrawford@cimarex.com)

Cimarex Energy Co.  
600 N. Marienfeld  
Suite 600  
Midland TX 79701



10/16/2017

**Notification Letter**

Murchison Oil & Gas  
7520 Dallas Parkway  
Suite 1400  
Dallas TX 75024

RE: Freedom 36 State SWD #1  
1300' FSL & 660' FWL  
Sec 36, 24S, 26E  
Eddy County, NM

To Whom it May Concern,

Please accept this letter as our notification to you, as offset operator, of Cimarex Energy Co.'s plans to drill the Freedom 36 State SWD #1. Attached is a copy of our C-108 permit application with the NMOCD. This letter and attachments are intended to satisfy the notification requirements for this permit application.

Any parties opposed to the approval of this application should contact the New Mexico Oil Conservation Division.

Sincerely,

A handwritten signature in black ink, appearing to read "Amithy Crawford". The signature is fluid and cursive, written over the printed name.

Amithy Crawford  
Regulatory Analyst  
432-620-1909  
[acrawford@cimarex.com](mailto:acrawford@cimarex.com)

Cimarex Energy Co  
600 N MARIENFELD ST STE 600  
MIDLAND TX 79701-4405

USPS CERTIFIED MAIL



9407 1102 0088 3596 7989 97

New Mexico State Land Office  
PO BOX 1148  
SANTA FE NM 87504-1148



US POSTAGE AND FEES PAID  
FIRST-CLASS  
Oct 16 2017  
Mailed from ZIP 79701  
12 oz First-Class Mail Rate



endicia.com

071500777793

Cimarex Energy Co  
600 N MARLENFELD ST STE 600  
MIDLAND TX 79701-4405

USPS CERTIFIED MAIL



9407 1102 0088 3596 8150 52

Murchison Oil and Gas  
7520 DALLAS PKWY STE 1400  
PLANO TX 75024-4017



US POSTAGE AND FEES PAID  
FIRST-CLASS  
Oct 16 2017  
Mailed from ZIP 79701  
12 oz First-Class Mail Rate



endicla.com

071S00777793

Cimarex Energy Co  
600 N MARIENFELD ST STE 600  
MIDLAND TX 79701-4405

USPS CERTIFIED MAIL

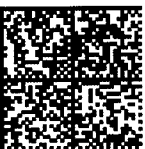


9407 1102 0088 2544 3729 13

Unit Petroleum  
PO BOX 702500  
TULSA OK 74170-2500



US POSTAGE AND FEES PAID  
FIRST-CLASS  
Oct 16 2017  
Mailed from ZIP 79701  
12 oz First-Class Mail Flats Rate



endicia.com

071S00777793

Cimarex Energy Co  
600 N MARIENFELD ST STE 600  
MIDLAND TX 79701-4405

**USPS CERTIFIED MAIL**



**9407 1102 0082 8544 3979 38**

Chevron USA Inc  
6301 DEAUVILLE  
MIDLAND TX 79706-2964



US POSTAGE AND FEES PAID  
FIRST-CLASS  
Oct 16 2017  
Mailed from ZIP 79701  
12 oz First-Class Mail® Rate



071S00777793

endicia.com

October 15, 2017

Legal Notice

**Affidavit of Publication**

State of New Mexico,  
County of Eddy, ss.

**Danny Fletcher**, being first duly  
sworn, on oath says:

That he is the Publisher of the  
Carlsbad Current-Argus, a  
newspaper published daily at the  
City of Carlsbad, in said county of  
Eddy, state of New Mexico and of  
general paid circulation in said  
county; that the same is a duly  
qualified newspaper under the laws  
of the State wherein legal notices  
and advertisements may be  
published; that the printed notice  
attached hereto was published in the  
regular and entire edition of said  
newspaper and not in supplement  
thereof on the date as follows, to wit:

October 15 2017

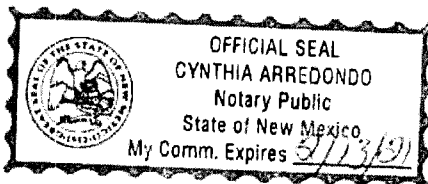
That the cost of publication is **\$72.15**  
and that payment thereof has been  
made and will be assessed as court  
costs.

Subscribed and sworn to before me  
this 24 day of October, 2017

Cynthia Arredondo

My commission Expires 8/13/21

Notary Public



Cimarex Energy Co.,  
600 N. Marienfeld  
Suite 600, Midland TX  
79701, (432-571-  
7800) has filed form  
C-108 (Application for  
Authorization to Inject)  
with the New Mexico Oil  
Conservation Division  
seeking administrative  
approval to drill the  
Freedom 36 State  
SWD #1 as a salt wa-  
ter disposal well. The  
well is staked at  
1300' FSL & 660' FWL  
of Section 36, T24S,  
R26E, Eddy County NM.  
The well is located ap-  
proximately 7.5 miles  
East of White City, NM.  
The proposed open hole  
Disposal/injection in-  
terval is in the  
Devonian-Silurian for-  
mation from 12,250'-  
14,250'. Disposal fluid  
would be produced  
water from Cimarex's  
leases. Cimarex plans  
to dispose a maximum  
of 35000 BWPd with  
a maximum pressure  
of 2450 psi or as al-  
lowed by depth.

Parties with questions  
regarding this propos-  
al can contact  
Cimarex at the ad-  
dress or phone num-  
ber listed above.

Interested parties  
must file objections or  
requests for hearing  
within 15 days of  
publication to the  
New Mexico Oil Con-  
servation Division,  
1220 South St. Frances  
Dr., Santa Fe NM 87505.





# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 31 Township: 24S Range: 27E

The data is furnished by the NMOS/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/14/17 9:17 AM

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

**PLSS Search:**

Section(s): 36 Township: 24S Range: 26E

The data is furnished by the NM/OSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/14/17 9:18 AM WATER COLUMN/ AVERAGE DEPTH TO WATER






# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW#### in the  
POD suffix indicates the  
POD has been replaced  
& no longer serves a  
water right file.)

(R=POD has been  
replaced,  
O=orphaned,  
C=the file is  
closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	Sub-basin	County	Q			Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
				64	16	4								
<u>C 04036 POD1</u>	C	ED	1	4	3	06	25S	26E	562745	3557733		160	125	35
<u>C 04049 POD1</u>	CUB	ED	3	2	3	06	25S	26E	562592	3557864		165	120	45
<u>C 04050 POD1</u>	CUB	ED	1	4	3	06	25S	26E	562695	3557776		165	125	40

Average Depth to Water: 123 feet  
Minimum Depth: 120 feet  
Maximum Depth: 125 feet

Record Count: 3

PLSS Search:

Section(s): 6 Township: 25S Range: 26E

The data is furnished by the NM/OSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/14/17 9:19 AM

WATER COLUMN/ AVERAGE DEPTH TO  
WATER



# *New Mexico Office of the State Engineer*

## Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C 04036 POD1		1	4	3	06	25S	26E	562745	3557733

**Driller License:** 1690 **Driller Company:** VISION RESOURCES, INC

**Driller Name:** JASON MALEY

**Drill Start Date:** 04/01/2017 **Drill Finish Date:** 04/02/2017 **Plug Date:**

**Log File Date:** 04/07/2017 **PCW Rcv Date:** **Source:** Shallow

**Pump Type:** **Pipe Discharge Size:** **Estimated Yield:** 300 GPM

**Casing Size:** 6.00 **Depth Well:** 160 feet **Depth Water:** 125 feet

**Water Bearing Stratifications:**

Top	Bottom	Description
122	160	Sandstone/Gravel/Conglomerate

**Casing Perforations:**

Top	Bottom
100	160

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/14/17 9:49 AM

POINT OF DIVERSION SUMMARY



**C-108 Review Checklist:** Received \_\_\_\_\_ Add. Request: \_\_\_\_\_ Reply Date: \_\_\_\_\_ Suspended: \_\_\_\_\_ [Ver 15]

**ORDER TYPE:** WFX / PMX (SWD) Number: 1703 Order Date: \_\_\_\_\_ Legacy Permits/Orders: \_\_\_\_\_

Well No. I Well Name(s): Freedom 36 SW

API: 30-0 15-44489 Spud Date: TBD New or Old: N (UIC Class II Primacy 03/07/1982)

Footages 1300FSL  
660FWL Lot \_\_\_\_\_ or Unit Sec 36 Tsp 245 Rge 26E County Edy

General Location: 3.10 miles SW of Louisa Pool: SWD, Deviation-Silhouette Pool No.: 57869

BLM 100K Map: Carlsbad Operator: Energy, CO OGRID: 21509 Contact: Amithy Crawford, Regulatory Tech

**COMPLIANCE RULE 5.9:** Total Wells: 33 Inactive: 1 Fincl Assur: OK Compl. Order? N/A TS 5.9 OK? X Date: 11-14-2017

**WELL FILE REVIEWED** ☐ Current Status: Proposed

**WELL DIAGRAMS:** NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: N/A

Planned Rehab Work to Well: \_\_\_\_\_

Well Construction Details		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement (S) or Cf	Cement Top and Determination Method
Planned ___ or Existing ___ Surface		26" / 20"	450	603	Surface / Visual
Planned ___ or Existing ___ Interm/Prod		17 1/2" / 13 3/4"	2100	120V	Surface / Visual
Planned ___ or Existing ___ Interm/Prod		12 1/4" / 9 5/8"	10105	1624	Surface / Visual
Planned ___ or Existing ___ Prod/Liner		8 3/4" / 7"	12750	1812	Surface / Visual
Planned ___ or Existing ___ Liner					
Planned ___ or Existing <input checked="" type="radio"/> (OH) PERF		12 1/2" / 14 1/2"			

Injection Lithostratigraphic Units	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.		wd	12630
Confining Unit: Litho. Struc. Por.		OV	12750
Proposed Inj Interval TOP:			
Proposed Inj Interval BOTTOM:			
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:	
Drilled TD	13750 PBDT
NEW TD	NEW PBDT
NEW Open Hole	<input checked="" type="radio"/> or NEW Perfs <input type="radio"/>
Tubing Size	4.5 in. Inter Coated? <u>X</u>
Proposed Packer Depth	ft
Min. Packer Depth	245 (100-ft limit)
Proposed Max. Surface Press.	2450 psi
Admin. Inj. Press.	2450 (0.2 psi per ft)

**AOR: Hydrologic and Geologic Information**

POTASH: R-111-P Noticed? ☐ BLM Sec Ord ☐ WIPP ☐ Noticed? ☐ Salt/Salado T/160 B1 875 NW: Cliff House fm

FRESH WATER: Aquifer Quaternary(?) Max Depth 1215 HYDRO AFFIRM STATEMENT By Qualified Person ☒

NMOSE Basin: Carlsbad CAPITAN REEF: thru adj NA No. Wells within 1-Mile Radius? 0 FW Analysis N/A

Disposal Fluid: Formation Source(s) Bone Springs Analysis? X On Lease ☐ Operator Only ☒ or Commercial ☐

Disposal Int: Inject Rate (Avg/Max BWPD): 2.92/3.56 Protectable Waters? X Source: \_\_\_\_\_ System: Closed or Open

HC Potential: Producing Interval N/A Formerly Producing? X Method: Logs/DST/P&A/Other none 2-Mile Radius Pool Map ☐

AOR Wells: 1/2-M Radius Map? X Well List? \_\_\_\_\_ Total No. Wells Penetrating Interval: \_\_\_\_\_ Horizontals? \_\_\_\_\_

Penetrating Wells: No. Active Wells 0 Num Repairs? \_\_\_\_\_ on which well(s)? \_\_\_\_\_ Diagrams? \_\_\_\_\_

Penetrating Wells: No. P&A Wells 0 Num Repairs? \_\_\_\_\_ on which well(s)? \_\_\_\_\_ Diagrams? \_\_\_\_\_

NOTICE: Newspaper Date October 13, 2017 Mineral Owner NMSO Surface Owner NMSO N. Date 10-16-2017

RULE 26.7(A): Identified Tracts? X Affected Persons: Murphy, William N. Date \_\_\_\_\_

Order Conditions: Issues: Circulate cement to N/PASINGS to surface

Add Order Cond: \_\_\_\_\_