

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**5. Lease Serial No.
NMNM025559

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
IRWIN 13 FEDERAL 49. API Well No.
30-015-3810110. Field and Pool, or Exploratory
HACKBERRY11. County or Parish, and State
EDDY COUNTY COUNTY, NM

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

CIMAREX ENERGY COMPANY

Contact: CRISTEN BURDELL

E-Mail: cburdell@cimarex.com

3a. Address

202 S. CHEYENNE AVE STE 1000
TULSA, OK 74103

3b. Phone No. (include area code)

Ph: 918-560-7038

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 13 T19S R30E SESE 1300FSL 480FEL

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

TYPE OF SUBMISSION

- ☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input checked="" type="checkbox"/> Other |
| <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal | |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomple in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

H2S gas analysis for facility as requested

NM OIL CONSERVATION
ARTESIA DISTRICT

APR 18 2016

RECEIVED

Accepted for record
NIMCD 4/19/16
AB

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

Electronic Submission #273921 verified by the BLM Well Information System
For CIMAREX ENERGY COMPANY, sent to the Carlsbad
Committed to AFMSS for processing by LINDA DENNISTON on 01/13/2015 ()

Name (Printed/Typed) CRISTEN BURDELL

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 10/27/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

North Permian Basin Region

P.O. Box 740

Sundown, TX 79372-0740

(806) 229-8121

Lab Team Leader - Sheila Hernandez

(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	CIMAREX ENERGY	Sales RDT:	33521
Region:	PERMIAN BASIN	Account Manager:	STEVE HOLLINGER (575) 910-9393
Area:	LOCO HILLS, NM	Sample #:	581315
Lease/Platform:	IRWIN 13 FEDERAL	Analysis ID #:	120417
Entity (or well #):	4	Analysis Cost:	\$90.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 581315 @ 75 °F					
Sampling Date:	04/21/12	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	05/12/12	Chloride:	126324.0	3563.14	Sodium:	66631.6	2898.31
Analyst:	STACEY SMITH	Bicarbonate:	122.0	2.	Magnesium:	1669.0	137.3
TDS (mg/l or g/m3):	208126.5	Carbonate:	0.0	0.	Calcium:	10205.0	509.23
Density (g/cm3, tonne/m3):	1.139	Sulfate:	1297.0	27.	Strontium:	378.0	8.63
Anion/Cation Ratio:	1	Phosphate:			Barium:	0.4	0.01
		Borate:			Iron:	29.0	1.05
		Silicate:			Potassium:	1469.0	37.57
Carbon Dioxide:	500 PPM	Hydrogen Sulfide:		0	Aluminum:		
Oxygen:		pH at time of sampling:		6.2	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculation:		6.2	Lead:		
					Manganese:	1.500	0.05
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ *2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.04	0.86	0.02	30.08	0.05	57.58	0.23	82.21	0.35	0.00	0.49
100	0	0.12	2.29	-0.06	0.00	0.04	47.55	0.20	74.48	0.16	0.00	0.6
120	0	0.20	4.01	-0.12	0.00	0.06	66.75	0.19	70.76	-0.02	0.00	0.7
140	0	0.29	5.44	-0.17	0.00	0.10	108.57	0.19	70.18	-0.17	0.00	0.8

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.