

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

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.

OCD Hobbs

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

CIMAREX ENERGY CO. OF COLORADO

Contact: NATALIE E KRUEGER

Email: nkrueger@cimarex.com

3a. Address

600 N. MARIENFELD ST., STE. 600
MIDLAND, TX 79701

3b. Phone No. (include area code)

Ph: 432-620-1936
Fx: 432-620-1940

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

Sec 29 T19S R33E Mer NMP NWNE 460FNL 1980FEL

5. Lease Serial No.
NMNM14794

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
MADURO UNIT 004

9. API Well No.

30-025-30840

10. Field and Pool, or Exploratory
CRAZY HORSE; DELAWARE

11. County or Parish, and State

LEA COUNTY, NM

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

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice☐ Acidize☐ Alter Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Fracture Treat☐ New Construction☐ Plug and Abandon☐ Plug Back☐ Production (Start/Resume)☐ Reclamation☐ Recomplete☐ Temporarily Abandon☒ Water Disposal☐ Water Shut-Off☐ Well Integrity☐ Other

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 recompleat 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 recompleat 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.)

Cimarex Energy Co. of Colorado respectfully requests to dispose of water from the well above per the attached disposal information.

HOBBS OCD

JUN 02 2011

RECEIVED

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVED

MAY 26 2011

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

14. Thereby certify that the foregoing is true and correct.

Electronic Submission #108702 verified by the BLM Well Information System
For CIMAREX ENERGY CO. OF COLORADO, sent to the Hobbs

Name (Printed/Typed) NATALIE E KRUEGER

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 05/20/2011

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 these 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 ****

WATER PRODUCTION & DISPOSAL INFORMATION

In order to process your disposal request, the following information must be completed:

1. Name(s) of all formation(s) producing water on this lease.
Crazy Horse; Delaware
2. Amount of water produced from all formations in barrels per day.
Shut in since 04-2010
3. Attach a current water analysis of produced water from all zones showing at least the total dissolved solids, pH, and the concentrations of chlorides and sulfates.
4. How water is stored on the lease.
1 210 bbl fiberglass tank
5. How water is moved to the disposal facility.
Trucked
6. Identify the disposal facility by:
 - A. Facility Operator's Name: P&W Resources, LLC
 - B. Name of facility or well name and number: Kaiser State No. 9
 - C. Type of facility or well (WDW, WIW), etc.: SWD
 - D. Location by ¼ ¼, Section, Township, and Range: SWNW 13-21S-34E
 - E. Facility Operator's Name: Subsurface Water Disposal, Inc.
 - F. Name of facility or well name and number: Gevernment E No. 1
 - G. Type of facility or well (WDW, WIW), etc.: SWD
 - H. Location by ¼ ¼, Section, Township, and Range: SESW 25-19S-34E
7. Attach a copy of the state-issued permit for the Disposal Facility.

Submit 1 original and 5 copies within the required time frame with 3160-5. This form may be used as an attachment to the sundry notice.

5-26

OPERATOR COPY
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

☒ Certified Mail - Return Receipt Requested
70090820000144020212

☐ Hand Delivered Received by

NOTICE OF INCIDENTS OF NONCOMPLIANCE

Identification	
IID	
Lease	NMNM14794
CA	
Unit	
PA	

Bureau of Land Management Office HOBBS INSPECTION OFFICE		Operator CIMAREX ENERGY COMPANY OF CO	
Address 414 WEST TAYLOR HOBBS NM 88240		Address 600 N MARIENFELD STREET, SUITE 600 MIDLAND TX 79701	
Telephone 575.393.3612		Attention ZENO FARRIS	
Inspector HASTON		Attn Addr 600 N. MARIENFELD SUITE 600 MIDLAND TX 79701	

Site Name MADURO UNIT	Well or Facility 04	1/4 1/4 Section NWNE 29	Township 19S	Range 33E	Meridian NMP	County LEA	State NM
Site Name MADURO UNIT	Well or Facility 07	1/4 1/4 Section NESW 29	Township 19S	Range 33E	Meridian NMP	County LEA	State NM

THE FOLLOWING VIOLATION WAS FOUND BY BUREAU OF LAND MANAGEMENT INSPECTORS ON THE DATE AND AT THE SITE LISTED ABOVE

Date	Time (24 - hour clock)	Violation	Gravity of Violation
03/14/2011	10:15	OOGO #7.III.A	MINOR
Corrective Action To Be Completed By	Date Corrected	Assessment for Noncompliance	Assessment Reference
04/11/2011			43 CFR 3163.10

Remarks

METHOD OF WATER DISPOSAL HAS NOT BEEN APPROVED. - SUBMIT A REQUEST ON FORM 3160-5 SUNDRY NOTICE FOR APPROVAL TO DISPOSE OF PRODUCED WATER FROM THESE WELLS ALONG WITH ALL REQUIRED INFORMATION (SEE ATTACHMENT). SUBMIT A COPY TO THE HOBBS FIELD STATION, 414 W. TAYLOR, HOBBS, NM 88240 AND SUBMIT 1 ORIGINAL AND 5 COPIES TO CARLSBAD FIELD OFFICE, 620 E. GREENE ST., CARLSBAD, NM 88220.

When violation is corrected, sign this notice and return to above address.

Company Representative Title _____ Signature _____ Date _____

Company Comments _____

WARNING

Incidents of Noncompliance correction and reporting timeframes begin upon receipt of this Notice or 7 business days after the date it is mailed, whichever is earlier. Each violation must be corrected within the prescribed time from receipt of this Notice and reported to the Bureau of Land Management office at the address shown above. Please note that you already may have been assessed for noncompliance (see amount under "Assessment for Noncompliance"). If you do not comply as noted above under "Corrective Action To Be Completed By" you may incur an additional assessment under (43 CFR 3163.1) and may also incur Civil Penalties (43 CFR 3163.2). All self-certified corrections must be postmarked no later than the next business day after the prescribed time for correction.

Section 109(d)(1) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3163.2(f)(1), provides that any person who "knowingly or willfully" prepares, maintains, or submits, false, inaccurate, or misleading reports, notices, affidavits, record, data, or other written information required by this part shall be liable for a civil penalty of up to \$25,000 per violation for each day such violation continues, not to exceed a maximum of 20 days.

REVIEW AND APPEAL RIGHTS

A person contesting a violation shall request a State Director review of the Incidents of Noncompliance. This request must be filed within 20 working days of receipt of the Incidents of Noncompliance with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Lands Appeals, 801 North Quincy Street, Suite 300, Arlington VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

Signature of Bureau of Land Management Authorized Officer <i>Ruthy Haston</i>	Date <i>3/14/11</i>	Time <i>10:30</i>
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FOR OFFICE USE ONLY

Number 33	Date	Assessment	Penalty	Termination
Type of Inspection SP				

Analytical Laboratory Report for:
**CIMAREX ENERGY
COMPANY**

Account Representative:
Lavell Hanson



Production Water Analysis

Listed below please find water analysis report from: Maduro Unit, 4

Lab Test Number		Sample Date	
2011114989		05/19/2011	
[]			
Specific Gravity:		1.173	
TDS:	266382		
pH:	5.00		
Cations:	mg/L	as:	
Calcium	2530	(Ca ⁺⁺)	
Magnesium	5000	(Mg ⁺⁺)	
Sodium	73525	(Na ⁺)	
Iron	30.00	(Fe ⁺⁺)	
Potassium	1670.0	(K ⁺)	
Barium	3.19	(Ba ⁺⁺)	
Strontium	1100.00	(Sr ⁺⁺)	
Manganese	11.50	(Mn ⁺⁺)	
Anions:	mg/L	as:	
Bicarbonate	12	(HCO ₃ ⁻)	
Sulfate	400	(SO ₄ ⁼)	
Chloride	182100	(Cl ⁻)	
Gases:			
Carbon Dioxide	150	(CO ₂)	
Hydrogen Sulfide	0.0	(H ₂ S)	

Analytical Laboratory Report for:
**CIMAREX ENERGY
COMPANY**

Account Representative:
Lavell Hanson



DownHole SATTM Scale Prediction @ 100 deg. F

[
]

Lab Test Number	Sample Date	Location
2011114989	05/19/2011	4
Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO ₃)	0.00	-0.05
Strontianite (SrCO ₃)	0.00	-0.55
Anhydrite (CaSO ₄)	0.05	-1081.17
Gypsum (CaSO ₄ *2H ₂ O)	0.05	-1271.26
Barite (BaSO ₄)	0.34	-9.48
Celestite (SrSO ₄)	0.11	-573.92
Siderite (FeCO ₃)	0.00	-0.01
Halite (NaCl)	0.44	-129539.05
Iron sulfide (FeS)	0.00	-8.00

Interpretation of DHSat Results:

The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) to positive (precipitating) values. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

ADMINISTRATIVE ORDER SWD-559

APPLICATION OF SUBSURFACE WATER DISPOSAL, INC. FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Subsurface Water Disposal, Inc. made application to the New Mexico Oil Conservation Division on March 1, 1994, for permission to complete for salt water disposal its Government "E" Well No. 1 located 610 feet from the South line and 1880 feet from the West line (Unit N) of Section 25, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant herein, Subsurface Water Disposal, Inc. is hereby authorized to complete its Government "E" Well No. 1 located 610 feet from the South line and 1880 feet from the West line (Unit N) of Section 25, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico, in such manner as to permit the injection of salt water for disposal purposes into the Bone Springs formation at approximately 9716 feet to 10,240 feet through 2 7/8-inch plastic-lined tubing set in a packer located at approximately 9700 feet.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 1943 psi.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Bone Springs formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

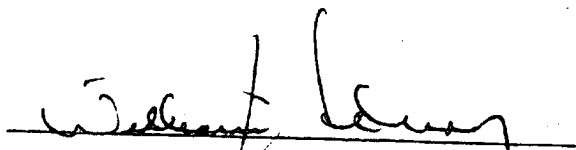
PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall submit monthly reports of the disposal operations in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

Administrative Order SWD-559
Subsurface Water Disposal, Inc.
May 19, 1994
Page 3

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 19th day of May, 1994.


WILLIAM J. LEMAY, Director

WJL/BES/amg

xc: Oil Conservation Division - Hobbs
US Bureau of Land Management - Carlsbad



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor

Joanna Prukop
Cabinet Secretary
Acting Director
Oil Conservation Division

ADMINISTRATIVE ORDER SWD-923

***APPLICATION OF P&W RESOURCES, LLC FOR PRODUCED WATER DISPOSAL,
LEA COUNTY, NEW MEXICO.***

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), P&W Resources, LLC made application to the New Mexico Oil Conservation Division on April 27, 2004, for permission to utilize for produced water disposal its Kaiser State Well No. 9 (API No. 30-025-02538) located 1,980 feet from the North line and 1,980 feet from the West line of Section 13, Township 21 South, Range 34 East, NMPM, Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant is hereby authorized to utilize its Kaiser State Well No. 9 (API No. 30-025-02538) located 1,980 feet from the North line and 1,980 feet from the West line of Section 13, Township 21 South, Range 34 East, NMPM, Lea County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Yates and Seven Rivers formations from 3,590 feet to 3,668 feet through 2-7/8 inch plastic-lined tubing set in a packer located at 3,490 feet.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Within 60 days following the effective date of this permit, the operator shall submit water analysis to the Division in Santa Fe for waters from all pools to be disposed of into this well. In addition, the operator shall estimate the current reservoir pressure of the injection interval and supply this data in writing to the Division.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well **to no more than 718 psi.**

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the injection formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

Administrative Order SWD-923

P&W Resources, LLC

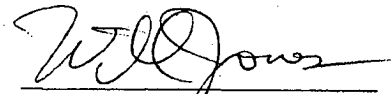
May 13, 2004

Page 3 of 3

The operator shall provide written notice of the date of commencement of injection to the Hobbs district office of the Division. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 13th day of May 2004.



JOANNA PRUKOP,
Interim Director

JP/wvjj

cc: Oil Conservation Division – Hobbs
State Land Office – Oil and Gas Minerals Division
Lee Engineering – Robert Lee
Case No. 4015

**BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972**

**Disposal of Produced Water From Federal Wells
Conditions of Approval**

Approval of the produced water disposal methodology is subject to the following conditions of approval:

1. This agency shall be notified of any change in your method or location of disposal.
2. Compliance with all provisions of Onshore Order No. 7.
3. This agency shall be notified of any spill or discharge as required by NTL-3A.
4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
5. All above ground structures on the lease shall be painted Shale Green (5Y 4/2), or as per approved APD stipulations. This is to be done within 90 days, if you have not already done so.
6. Any on-lease open top storage tanks shall be covered with a protective cover to prevent entry by birds and other wildlife.
7. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
8. If water is transported via a pipeline that extends beyond the lease boundary, then you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office if you have not already done so.
9. Disposal at any other site will require prior approval.
10. Subject to like approval by NMOCD.

2/09/2011