

OPERATOR'S COPY

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
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.*

5. Lease Serial No.  
NMNM23765

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE** - Other instructions on page 2.

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

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.  
Phillips Federal #1

2. Name of Operator  
Claco Oil Company

9. API Well No.  
30-015-25167

3a. Address  
13 Havenhill Road, Artesia NM 88210

3b. Phone No. (include area code)  
575-457-2286

10. Field and Pool or Exploratory Area  
Brushy Draw Delaware

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
660' FSL & 660' FEL, Section 1, T26S, R29E

11. Country or Parish, State  
Eddy County, New Mexico

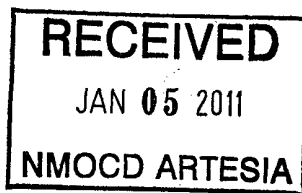
12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input 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 checked="" 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 recomplete 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

*APPLY FOR PERMIT TO DISPOSE OF PRODUCED WATER  
OFF LEASE*

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL



ACCEPTED FOR RECORD

JAN 4 2011  
/s/ JD Whitlock Jr

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

*RUSSELL CLACK*

Title *OWNER*

Signature

*Russell Clack*

Date

*12/5/2010*

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.

(Instructions on page 2)

The following information is needed before your disposal of produced water can be approved, per Onshore Oil & Gas Order #7.

You may attach this information to your Sundry Notice (3160-5). Submit all required information as per this attachment, submit a Sundry Notice(3160-5), one original and five copies to this office within the required time.

1. Name(s) of all formation(s) producing water on the lease. Cherry Canyon Delaware
2. Amount of water produced from all formations in barrels per day. 20
3. 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. - 0 -
5. How water is moved to the disposal facility. SEPARATOR PRESSURE PUSHES WATER TO DISPOSAL FACILITY.
6. Identify the Disposal Facility by:
  - A. Operators' Name STEPHENS & JOHNSON OPERATING CO.
  - B. Well Name MOBILE "22" #5
  - C. Well type and well number INJECTION WELL
  - D. Location by quarter/quarter, section, township, and range SE 1/4, SW 1/4, SEC 22, T26SOUTH R. 29EAST
7. A copy of the Underground Injection Control Permit - issued for the injection well by the Environmental Protection Agency or New Mexico Oil Conservation Division where the State has achieved primacy.

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

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 9646  
ORDER NO. R-9001

APPLICATION OF SUN EXPLORATION AND  
PRODUCTION COMPANY FOR A WATERFLOOD  
PROJECT, EDDY COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 12, 1989, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 26th day of September, 1989, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Sun Exploration and Production Company ("Sun"), seeks authority to institute a pilot waterflood project on its Mobil "22" Federal Lease comprising the E/2 NW/4 and S/2 of Section 22, Township 26 South, Range 29 East, NMPM, Eddy County, New Mexico, by the injection of water into the Brushy Draw-Delaware Pool through its existing Mobil Federal "22" Well No. 5 located 990 feet from the South line and 2310 feet from the West line (Unit N) of Section 22.

(3) J.C. Williamson, an operator in the Brushy Draw-Delaware Pool and operator of a commercial disposal well in the area, filed a written objection to Sun's application prior to the hearing and at the time of the hearing appeared in opposition to this case.

(4) At the hearing, Sun demonstrated that an incremental secondary recovery of oil of 220.8 MSTBU could be obtained by institution of the proposed pilot waterflood project, resulting in the recovery of additional oil which would not otherwise be recovered, and the waste of oil would thereby be prevented.

(5) The volumes which Sun proposes to inject do not exceed the current reservoir voidage from the proposed injection well and the four offsets thereto and the correlative rights of operators in the pool will therefore not be impaired by the proposed injection.

(6) The wells in the proposed project area are in an advanced state of depletion and should therefore be properly classified as "stripper wells."

(7) Sun proposes to utilize the Mobil Federal "22" Well No. 5 to inject water produced from the Brushy Draw-Delaware Pool back into this pool in the perforated interval from approximately 4938 feet to 5010 feet.

(8) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape into other formations or onto the surface from injection, production or plugged and abandoned wells.

(9) Injection should be accomplished through 2 7/8-inch internally cement-lined tubing installed in a packer set at approximately 5850 feet; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.

(10) Prior to commencing injection operations, the casing of the subject well should be pressure-tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.

(11) Sun testified that injection at a pressure equal to 0.2 psi per foot of depth to the uppermost perforation (987.6 psi) may be sufficient but requested that it be authorized to inject at higher rates to be administratively approved by the Division after step-rate tests are run by Sun and witnessed by the Division and establishing that injection under higher pressures will not damage the confining strata.

(12) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such high pressure will not result in migration of the injected waters from the Delaware formation.

(13) The operator should give advance notification to the supervisor of the Artesia District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(14) The subject application should be approved and the project should be governed by the provisions of Rules 702 through 708 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Sun Exploration and Production Company, is hereby authorized to institute a pilot waterflood project on its Mobil "22" Federal Lease, as described below, by the injection of water into the Brushy Draw-Delaware Pool through its existing Mobil Federal "22" Well No. 5 located 990 feet from the South line and 2310 feet from the West line (Unit N) of Section 22, Township 26 South, Range 29 East, NMPM, Eddy County, New Mexico:

MOBIL "22" FEDERAL LEASE  
EDDY COUNTY, NEW MEXICO

TOWNSHIP 26 SOUTH, RANGE 29 EAST, NMPM  
Section 22: E/2 NW/4 and S/2

(2) Injection into said well shall be accomplished through 2 7/8-inch internally cement-lined tubing installed in a packer set at approximately 5850 feet, with injection into the perforated interval from approximately 4938 feet to 5010 feet;

PROVIDED HOWEVER THAT, the casing-tubing annulus shall be filled with an inert fluid; and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak-detection device in order to determine leakage in the casing, tubing or packer.

PROVIDED FURTHER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's Hobbs District Office.

(3) The injection well or system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 987 psi.

(4) 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 Delaware formation.

(5) The operator shall notify the supervisor of the Artesia District Office of the Division in advance of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(6) The operator shall immediately notify the supervisor of the Division's Artesia District Office of the failure of the tubing, casing or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(7) The subject waterflood project is hereby designated the Mobil

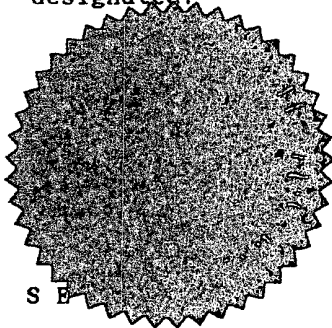
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Page No. 4

"22" Federal Lease Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

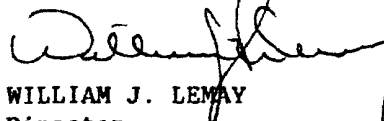
(8) Monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations. ◀

(9) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director



November 12, 2010

Rusty Clack  
Claco Oil Company  
13 Haven Hill Road  
Artesia, NM 88210

RE: PHILLIPS FEDERAL #1

Enclosed are the results of analyses for samples received by the laboratory on 11/08/10 9:50.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene  
Lab Director/Quality Manager

**Analytical Results For:**

 Claco Oil Company  
 Rusty Clack  
 13 Haven Hill Road  
 Artesia NM, 88210  
 Fax To: None

 Received: 11/08/2010  
 Reported: 11/12/2010  
 Project Name: PHILLIPS FEDERAL #1  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 11/05/2010  
 Sampling Type: Water  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Jodi Henson

**Sample ID: WATER SAMPLE (H021246-01)**

Chloride, SM4500Cl-B		mg/L	Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	198000	4.00	11/10/2010	ND	100	100	100	3.92		
pH		pH Units	Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
pH	4.82	0.100	11/11/2010		6.89	98.4	7.00	0.624		
Sulfate 375.4		mg/L	Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate	91.3	10.0	11/10/2010	ND	38.3	95.8	40.0	1.44		
TDS 160.1		mg/L	Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS	325000	5.00	11/10/2010	ND				5.65		

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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Celey D. Keene, Lab Director/Quality Manager



# Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

[illegible]

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

**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.

9/30/2010