

UNITED STATES **NM OIL CONSERVATION**  
DEPARTMENT OF THE INTERIOR **ARTESIA DISTRICT**  
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.*

5. Lease Serial No.  
NMLC0289921

6. If Indian, Allottee or Tribe Name

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

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

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

8. Well Name and No.  
CEDAR LAKE ADI FEDERAL 1

2. Name of Operator Contact: RENE HOPE  
RAY WESTALL OPERATING, INC. E-Mail: hope\_rene5@yahoo.com

9. API Well No.  
30-015-25494

3a. Address  
PO BOX 4  
LOCO HILLS, NM 88255

3b. Phone No. (include area code)  
Ph: 574-677-2372

10. Field and Pool, or Exploratory  
SWD; CISCO-CANYON

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 26 T17S R30E Mer NMP SWNW 2140FNL 660FWL

11. County or Parish, and State  
EDDY COUNTY, NM

**12. CHECK 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 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 checked="" 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.)

Conduct Safety Meeting Prior to Start of All Operations. Configure SWD per OCD Permit SWD-1507

1) MIRU WSU, reverse unit and associated equipment. Install B.O.P. POOH w/ Tbg.

2) D/O & C/O cement plugs to 10,200'; circulate hole clean.

3) Set CIBP @ 10,200' cap w/ 35' Cmt.

4) RU Wireline & Perforate selected intervals - max top: 7916'; max bottom: 10,114'. (Perfs determined from existing logs.)

5) Optional: RIH w/ workstring; Acidize w/ 750-2500 gals HCl. Swab and circulate hole clean. POOH.

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

**SUBJECT TO LIKE  
APPROVAL BY STATE**

*BLM NOT AUTHORIZED FOR "WELL WITH A PROPER" STIPULATIONS.*

*Accepted for record*

*NMOC PD 9/17/15*

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

Electronic Submission #298698 verified by the BLM Well Information System  
For RAY WESTALL OPERATING, INC., sent to the Carlsbad

Name (Printed/Typed) BEN STONE

Title AGENT / CONSULTANT

Signature (Electronic Submission)

Date 04/20/2015

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By

Title

**APPROVED**

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 \*\* OPERATOR-SUBMITTED**  
**BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE**

**Additional data for EC transaction #298698 that would not fit on the form**

**32. Additional remarks, continued**

6) RIH with nickel plated 5.5" or equiv. VFE retrievable packer or equivalent on 2.875" IPC or equiv. tubing w/ PKR @ 7816'+, pump clean fresh water containing corrosion inhibitor, biocide and oxygen scavenger down annulus, set packer.

*MUST BE WITHIN 100' OF TOP MOST PERF.  
RF - NMOB*

7) Prepare to run MIT test and notify BLM & OCD to witness min. 24 hours in advance.

10) Build injection facility (concurrent activity).

11) Start water disposal: Limit injection pressure to 1583 psi.

## Conditions of Approval

**Ray Westall Operating Company  
Cedar Lake ADI - 01, API 3001525494  
T17S-R30E, Sec 26, 2140FNL & 660FWL  
August 04, 2015**

1. Due to being within the Lesser Prairie Chicken habitat, this workover activity will be restricted to the hours of 9:00am through 3:00am for the period of March 1 through June 15. Exceptions to these restrictions may be granted by BLM's Johnny Chopp. <jchopp@blm.gov> 575.234.2227 or Bob Ballard <bballard@blm.gov> 575.234.5973.
2. **The open 7622-44 Bone Spring perforations are to be squeezed with Class H cement and shown to hold 1583psig via a recorded chart record.**
3. Subject to like approval by the New Mexico Oil Conservation Division.
4. Notify BLM 575-200-7902 Eddy Co. as work begins.
5. Tag the plug above the CIBP at 10650 and set a balanced class H cement plug. Tag the plug at 10228 or above.
6. **Perform a charted casing integrity test** of 1583psig minimum from 10228' to surface. Document the pressure test on a one hour full rotation calibrated (within 6 months) recorder chart registering within 25 to 85 per cent of its full range. **Verify all annular casing vents are plumbed to the surface and open during this pressure test. Call BLM 575-200-7902 and arrange for a BLM witness of that pressure test.** Include a copy of the chart in the subsequent sundry for this workover.
7. Prior to recompletion to disposal, **individual formations** of the proposed perforations are to be isolated and proven to be nonproductive. Records of **minimum 1,000bbl swab tests** of the individual formations with no evidence of commercial hydrocarbon production are to be submitted.
8. Before casing or a liner is added, replaced, or repaired prior BLM approval of the design is required. Use notice of intent Form 3160-5.
9. **Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from 10200 (just above the balanced plug set from 10650 to top of cement taken with 0psig casing pressure. The CBL may be attached to a pswartz@blm.gov email. The CFO BLM on call engineer may be reached at 575-706-2779.**
10. **Do not exceed the injection pressure of 1583 with stimulation pump pressure.**
11. Surface disturbance beyond the existing pad shall have prior approval.
12. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
13. Functional H<sub>2</sub>S monitoring equipment shall be on location.
14. 3000 (3M) Blow Out Prevention Equipment to be used. All BOPE and workover procedures shall establish fail safe well control. Blind ram(s) and pipe ram(s) designed to close on all workstring diameters used is required equipment. A manual BOP closure system (hand

wheels) shall be available for use regardless of BOP design. Function test the installed BOPE to 500psig when well conditions allow. Related equipment, (choke manifolds, kill trucks, gas vent or flare lines, etc.) shall be employed when needed for reasonable well control requirements.

15. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
16. Submit a (BLM Form 3160-5 subsequent report (daily **dated** reports) via BLM's Well Information System; <https://www.blm.gov/wispermits/wis/SP> (email [pswartz@blm.gov](mailto:pswartz@blm.gov) for instructions) describing all wellbore activity and Mechanical Integrity Test as per item 1) above. Include the date(s) of the well work, and the setting depths of installed equipment: internally corrosive protected tubing, tubing on/off equipment just above the packer, and an in line tubing check valve below the packer or between the on/off tool and packer. The setting depths and descriptions of each are to be included in the subsequent sundry. File intermediate Form 3160-5 within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.
17. Submit the BLM Form 3160-4 **Recompletion Report** within 30 days of the date all BLM approved procedures are complete.
18. Workover approval is good for 90 days (completion to be within 90 days of approval). A legitimate request is necessary for extension of that date.
19. The operator shall test for oil and gas production from the injection zone. Demonstrate that paying quantities of hydrocarbons are not produced when the well has a pumped off fluid level. Open hole logs may support the evaluation. BLM agreement is to be obtained prior completion as a disposal well.
20. Approval is granted for disposal of water produced from the lease, communitization, or unit agreement of this well only. Disposal fluid from another operator, lease, communitization, or unit agreement require BLM surface right-of-way agreement **approvals** and if applicable, authorization from the surface owner.
21. Disposal of water from another operator requires that the well be designated as a commercial well and BLM surface right-of-way agreement **approvals**.
22. If the well is to receive off-lease water or commercial disposal, the operator shall provide proof of surface right-of-way approval prior to injection.
23. Enclose a site security diagram for the water disposal facility upstream of this well. Document the lease name and the lease number of the source(s) of production water disposed to that facility with the diagram.

An inactive/shut-in well bore is a non-producing completion that is capable of "beneficial use" i.e. production in **paying quantities** or of service use.

24. Submit evidence to support your determination that the well has been returned to active "beneficial use" for BLM approval on the Sundry Notice Form 3160-5 (the original and 3 copies) before 02/05/2016.
25. Should "beneficial use" not be achieved submit for BLM approval a plan for plug and abandonment.

#### **Well with a Packer - Operations**

- 1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established.
- 2) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with a minimum 200 psig differential between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). Verify all annular casing vents are plumbed to surface and those valves open to the surface during this pressure test. An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
- 3) Document the pressure test on a one hour full rotation chart recorder (calibrated within the last 6 months) registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
- 4) Make arrangements 24 hours before the test for BLM to witness. In Eddy County email Paul R. Swartz [pswartz@blm.gov](mailto:pswartz@blm.gov) or phone 575-200-7902, if there is no response, 575-361-2822. If no answer, leave a voice mail or email with the API#, workover purpose, and a call back phone number
- 5) Use of tubing internal protection, tubing on/off equipment just above the packer, a profile nipple, and an in line tubing check valve below the packer or between the on/off tool and packer is a "Best Management Practice". The setting depths and descriptions of each are to be included in the subsequent sundry.
- 6) **Submit the original subsequent sundry with three copies to BLM Carlsbad.**
- 7) Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.
  - a) Approved injection pressure compliance is required.
  - b) If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.

- c) When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 8) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 9) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity. A BLM inspector may request verification of a full annular fluid level at any time.
- 10) A "Best Management Practice" is to maintain the annulus full of packer fluid at atmospheric pressure. Equipment that will display on site, continuous open to the air fluid level is necessary to achieve this goal.
- 11) Loss of packer fluid above five barrels per month indicates a developing problem. Notify BLM Carlsbad Field Office, Petroleum Engineering within 5 days.
- 12) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.
- 13) Gain of annular fluid pressure requires notification within 24 hours. Cease injection and maintain a production casing pressure of 0 psia. Notify the BLM's authorized officer ("Paul R. Swartz" <[pswartz@blm.gov](mailto:pswartz@blm.gov)>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
- 14) Submit a (BLM Form 3160-5 subsequent report (daily reports) via BLM's Well Information System; <https://www.blm.gov/wispermits/wis/SP> (email [pswartz@blm.gov](mailto:pswartz@blm.gov) for operator setup instructions) describing all wellbore activity and Mechanical Integrity Test as per item 1) above. Include the date(s) of the well work, and the setting depths of installed equipment: internally corrosive protected tubing, tubing on/off equipment just above the packer. The setting depths and descriptions of each are to be included in the subsequent sundry.
- 15) A request for increased wellhead pressures is to be accompanied by a step rate test. PRIOR to a Step Rate Test BLM – CFO is requiring a Notice of Intent.
- 16) Class II (production water injection) wells will not be permitted stimulation injection pressures that exceed frac pressure.

Access information for use of Form 3160-5 "Sundry Notices and Reports on Wells"

NM Fed Regs & Forms - [http://www.blm.gov/nm/st/en/prog/energy/oil\\_and\\_gas.html](http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas.html)

§ 43 CFR 3162.3-2 Subsequent Well Operations.

§ 43 CFR 3160.0-9 (c)(1) Information collection.

§ 3162.4-1 (c) Well records and reports.