

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OPERATORS COPY

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. **NMNM-129044 LC 06313**  
6. If Indian, Allottee or Tribe Name

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

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

**Ray Westall Operating, Inc.**

3a. Address

**P.O. Box 4, Loco Hills, NM 88255**

3b. Phone No. (include area code)

**575-622-2372**

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

**Culwin Queen Unit NM 70930x**

8. Well Name and No.

**No.17**

9. API Well No.

**30-015-04585**

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

**1980' FSL & 1980' FEL, 1-19S-30E**

10. Field and Pool or Exploratory Area

**Shugart Yates-Seven Rivers-Queen-Grayburg**

11. Country or Parish, State

**Eddy, NM**

**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 checked="" 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 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 must 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 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.)

**NMOCD WFX-941 - 2/16/15**

**MIRU Pulling Unit. Pull rods, pump, tubing, horsehead.**

**RIH w/ 2-3/8" IC Tubing & PKR. Set PKR within 100' of uppermost perf / openhole injection interval @ ~2985'. Inj. interval: 3080'-3112'.**

**Install injection wellhead, valve, pressure gauge, injection flowline.**

**Commence Injection - Max Pressure: 616 psi (.2 psi / foot depth)**

**Note: Wells may be tagged on bottom, cleaned out w/ bailer or basket, small acid clean up of formation or perfs as applicable. 500-1000 gals 15%.**

**SUBJECT TO LIKE  
APPROVAL BY STATE**

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

*Accepted for record*  
*NMCO*

*RD* *5/27/2015*

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

Name (Printed/Typed)

**Ben Stone**

**903-488-9850**

Title **Partner, SOS Consulting, LLC, Agent for Ray Westall Operating, Inc.**

Signature

*[Signature]*

*[Signature]*

pdf sign

Date

**2/18/2015**

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

Approved by

Title

Office

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.

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)

**APPROVED**

**MAY 12 2015**

**BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE**

## Conditions of Approval

Ray Westall Operating, Inc.  
Culwin Queen Unit - 17, API 3001504585  
T19S-R30E, Sec 01, 1980FSL & 1980FEL  
May 12, 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. Subject to like approval by the New Mexico Oil Conservation Division.
3. The perforations 3198-207 (04/28/1959) in the Queen formation are not included for injection by the NMOCD Administration Order WFX-941 for this well.
4. **Perform a charted casing integrity test** of 1200psig minimum from above the top perforation 3080 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.
5. 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.
6. **Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from 3000 (just above perforations or below 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.**
7. **Do not exceed the approved WFX-941 injection pressure of 624psig with stimulation pump pressure.**
8. Surface disturbance beyond the existing pad shall have prior approval.
9. 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.
10. Functional H<sub>2</sub>S monitoring equipment shall be on location.
11. 2000 (2M) 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.

12. 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.
13. Submit the BLM Form 3160-4 **Recompletion Report** 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) within 30 days of the date all BLM approved procedures are complete.
14. 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.

#### **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 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 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.
- 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) 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.
  - 15) 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.