

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

5. Lease Serial No.
~~NMNM025500~~ **NM93771**

6. If Indian, Allottee or Tribe Name

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

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: INJECTION		8. Well Name and No. RITZ FEDERAL 4 ✓
2. Name of Operator RAY WESTALL OPERATING, INC. Contact: RENE HOPE E-Mail: hope_rene@yahoo.com		9. API Well No. 30-015-25142
3a. Address PO BOX 4 LOCO HILLS, NM 88255	3b. Phone No. (include area code) Ph: 575-677-2372	10. Field and Pool or Exploratory Area SHUGART Y-SR-Q-GB-SA
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 35 T18S R30E Mer NMP 890FNL 2110FEL ✓ 32.708763 N Lat, 103.940971 W Lon		11. County or Parish, State EDDY COUNTY, NM

OCD-ARTESIA

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 type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<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 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.

Conduct Safety Meeting Prior to Start of All Operations ? Convert to SWD per OCD Permit SWD-1676 ✓

- 1) MIRU PU, remove horsehead, Install BOP, POOH w/ rods, pump & tubing.
- 2) Sqz existing perfs from 3314? - 42?
- 3) DO & CO; test casing/ sqz perfs to 500 psi/ 30 minutes.
- 4) RIH w/ gauge ring, junk basket to TD @ 3972?
- 5) RU Wireline Service; Perf 3726? to 3794?; 4 jspf.
- 6) Run Swab and Test for HC. - Results to OED & BLM
- 7) Acidize w/ 750-2500 gals HCl. Swab and/or circulate hole clean.
- 8) RIH with nickel plated 5.5" or equiv. VFE retrievable packer or equivalent on 2.875" IPC or equiv. tubing w/ PKR @3626", pump clean fresh water containing corrosion inhibitor, biocide and oxygen scavenger down annulus, set packer. Prepare to run MIT test and notify BLM & OCD to witness

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

**NM OIL CONSERVATION
ARTESIA DISTRICT**

AUG 29 2017

SEE NMCD CONDITIONS OF APPROVAL - NEXT PAGE

14. I hereby certify that the foregoing is true and correct. Electronic Submission #380031 verified by the BLM Well Information System For RAY WESTALL OPERATING, INC., sent to the Carlsbad Committed to AFMSS for processing by PRISCILLA PEREZ on 07/07/2017 ()		RECEIVED
Name (Printed/Typed) BEN STONE	Title AGENT / CONSULTANT	APPROVED
Signature (Electronic Submission)	Date 06/28/2017	

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____	Title TPET <i>PR</i>	Date 07/11/17
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

**BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD 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.

Additional data for EC transaction #380031 that would not fit on the form

32. Additional remarks, continued

24 hours in advance.

9) Build injection facility and commence water disposal. Limit injection pressure to 783 psi. Run injection profile within two years of start date.

OPERATOR IS PREPARED TO RIG UP UPON APPROVAL OF THIS SUNDRY.

NMOC CONDITIONS

SWD 1676 REQUIRES SQUEEZE CEMENTING
THE CURRENT PRODUCTION PERFORATIONS, ----

SHALL CONDUCT REMEDIAL CEMENTING OF THE
5 1/2-INCH PRODUCTION CASING FROM
APPROXIMATELY 3000' TO SURFACE.

YOU MUST INCLUDE THIS
IN YOUR PROCEDURE

RE - NMOC
8/30/19





WELL SCHEMATIC - PROPOSED Ritz Federal SWD Well No.1

SWD; Grayburg (96108)

API 30-015-25142

890' FNL & 2110' FEL, SEC. 35-T18S-R30E
EDDY COUNTY, NEW MEXICO

Spud Date: 1/01/1985

Config SWD Dt (Est): ~3/15/2

Annulus Monitored
or open to atmosphere

Injection Pressure Regulated
and Volumes Reported
745 psi Max. Surface (0.2 psi/ft)

Surface Casing

8.625" Csg. (17.5" Hole) @ 521'

300 sx - 40 sx Circulated to Surface

521'

1000

1500

B SLT 1602

2000

2500

Annulus Isolated
w/ Inert Packer Fluid

ON 2911

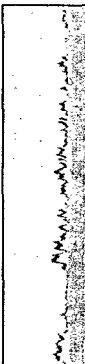
G39G 3551

3500

SA: 3850

4000

LOG STRIP



RAY WESTALL OPERATING, INC.

Convert to SWD: Pull any remaining production
equipment; RIH w/ guage ring/jnk bskt.
Squeeze existing perfs from 3314' to 3342';
C/O cement. Spot 50' Cmt at DTD.
Perf Intervals as determined from Logs Between
Max Top 3726' and Max Btm 3794'.
Acidize w/ 15% HCl; Swab Clean.
Run PC Tubing and PKR - Conduct MIT.
Commence Disposal Operations.

2.875" ID Tubing (7.875" Hole)
PCAN-35520*

Production Casing

5.5", 17.0# J-55 Csg. (7.875" Hole) @ 3792'

113 sx - TOC @ 3000' by Calc.

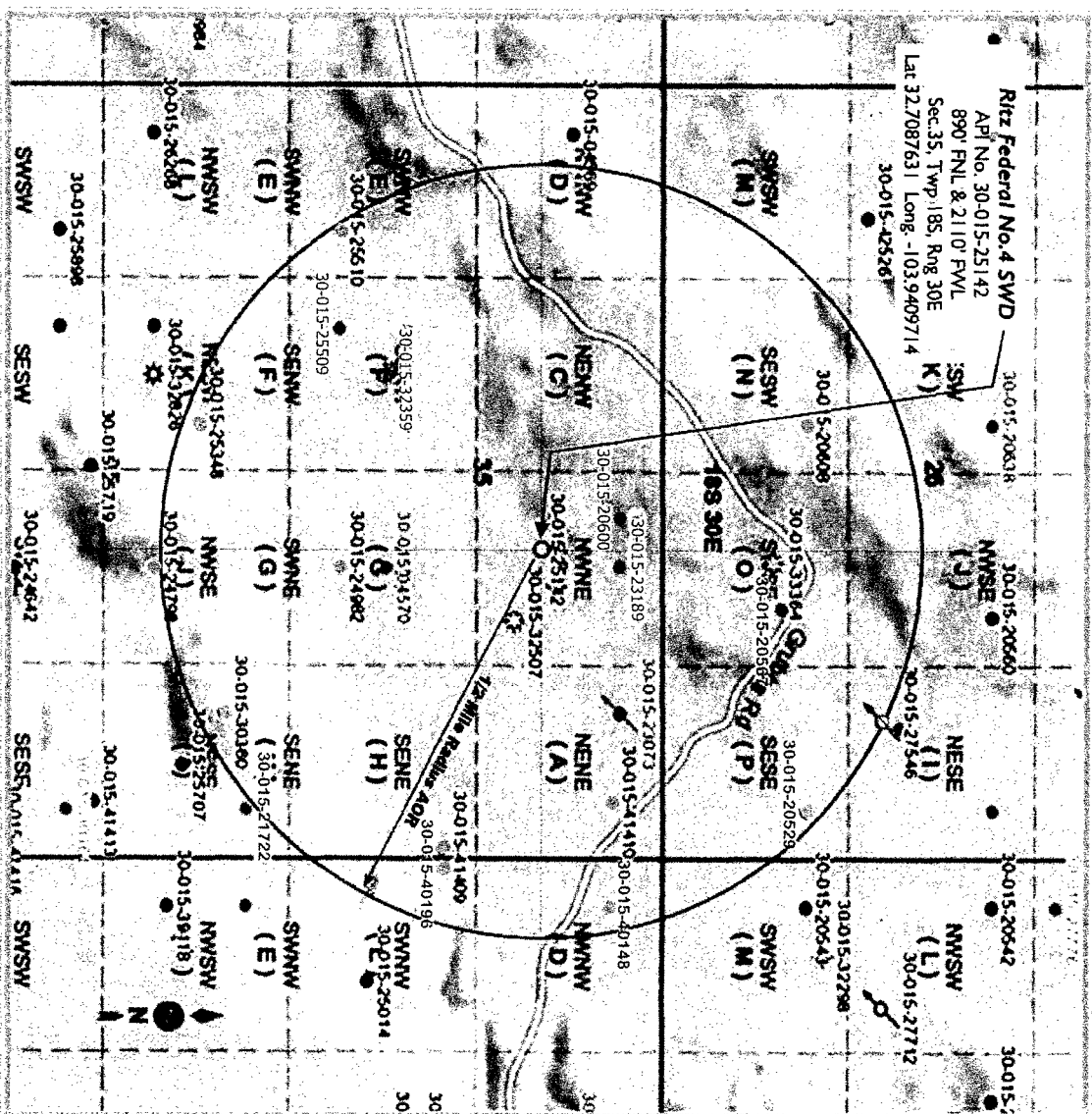
DTD @ 3972'

Drawn by: Ben Stone, 2/17/2017

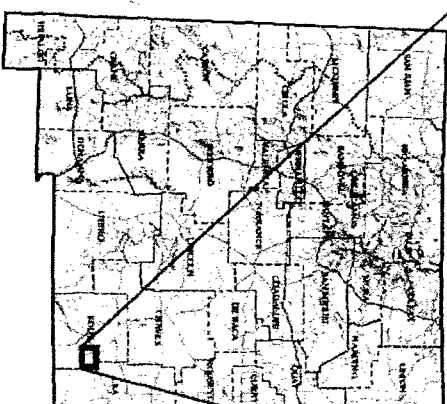


Ritz Federal Well No.4 SWD - Area of Review / Overview Map

(Attachment to NMOC Form C-108 - Item V)



8.0 miles South of Loco Hills, NM



Eddy County, New Mexico



RITZ FEDERAL WELL NO.4 SWD

[illegible]

036

Conditions of Approval, Template

**Ray Westall Operating, Inc
Ritz - 04, API 3001525142
T18S-R30E, Sec 35, 890FNL & 2110FEL
July 31, 2017**

1. **Within 90 days of these conditions of approval for the processed Electronic Submission #380031 begin wellbore workover operations.**
2. **Operator is required to have the BLM approved NOI procedure with applicable conditions of approval on location for this workover operation.**
3. Subject to like approval by the New Mexico Oil Conservation Division.
4. A NMOC Form C-102 "Well Location and Acreage Dedication Plat" with updated information is necessary with the notice of intent package when recompletion changes a well's Pool designation.
5. Before casing or a liner added, replaced, or repaired prior BLM approval of the design is required. Use notice of intent Form 3160-5.
6. Notify BLM 575-361-2822 Eddy Co. as work begins. Some procedures witnessed. If there is no response, leave a voice mail with the API#, workover purpose, and a call back phone number.
7. **Prior to perforating, perform a charted casing integrity test of 1000psig minimum from PBTD to surface. Document the pressure test on a one hour full rotation calibrated (within 6 months) recorder chart registering within 35 to 75 per cent of its full range. Verify all annular casing vents plumbed to the surface and open during this pressure test. Call BLM 575-361-2822 Eddy Co. and arrange for a BLM witness of that pressure test.**
Include a copy of the chart in the subsequent sundry for this workover.
8. **Record a cement bond log with 0psig casing pressure from 3650 or below prior to perforating. Attach the CBL to a pswartz@blm.gov email.**
9. **Do not exceed the approved SWD-1676 injection pressure of 745psig for stimulation operations or injectivity tests.**
10. Surface disturbance beyond the existing pad shall have prior BLM approval.
11. 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.
12. Functional H₂S monitoring equipment shall be on location.
13. 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.) employed when needed for reasonable well control requirements.

14. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created during 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. Portojohns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
15. Class II (production water disposal) wells will not be permitted Stimulation Pressures or "Injectivity Tests" which exceed 0.2 x ft depth to the topmost injection through tubing with an ID equal or less than 2 ½" or 50psig below the frac point as clearly indicated by a BLM accepted "Step Rate Test". Initial wellhead pressure through tubing with an ID greater than 2 ½" is restricted to 0.15 x the depth of the top perforation.
16. Increased wellhead disposal pressure approval requires stabilized wellhead pressures and rates for 90 days and Step Rate Test data. Prior to conducting a Step Rate Test file a Notice of Intent. A pressure of 50psig below formation fracture considered for approval.
17. Include formation stimulation pressures in the subsequent report. Report maximum/minimum rate (BPM) and max/min pressures (psig).
18. Submit a (BLM Form 3160-5 subsequent report via BLM's Well Information System; <https://www.blm.gov/wispermits/wis/SP> (email pswartz@blm.gov for instructions) describing (dated daily) all wellbore activity and the Mechanical Integrity Test. Include descriptions of and the setting depths of installed equipment: internally corrosive protected tubing, tubing on/off tool, profile nipple, and packer. File intermediate Form 3160-5 within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.
19. **The well considered a commercial hydrocarbon producer until proven otherwise. Provide statements with evidence that paying quantities of hydrocarbons are not produced when the well has a pumped off fluid level. A copy of the well's mudlog, and an estimated insitu water salinity based on copies of open hole logs can be offered as evidence.**
20. **A minimum of 1000 barrels is to be withdrawn from the proposed disposal formation after any recent stimulation load volumes recovered. Report ten samples from the last 200bbls analyzed for hydrocarbons and insitu salinity by a reputable laboratory. BLM agreement obtained prior to use as a disposal well. The swabbing procedure witnessed by BLM. Notify pswartz@blm.gov, 575-200-7902 prior to taking the 10 samples.**
21. Approval granted for disposal of water produced from the lease, communitization, or unit agreement of this well only. A right-of-way agreement authorized by the surface owner required to disposal fluid from another operator, lease, communitization, or unit agreement.
22. For non-commercial disposal; list API well numbers and lease identification of source production water on a subsequent sundry.
23. File intermediate **subsequent sundry** Form 3160-5 within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.

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 the well returned to active “beneficial use” for BLM approval on the Sundry Notice Form 3160-5 within 90 days of this sundry’s approval date.
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 reduced).
- 3) Verify all annular casing vents 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.
- 4) Use a one hour full rotation chart recorder registering within 35 to 75 per cent of its full range and calibrated within the last 6 months to document the pressure test. Greater than 10% pressure leakoff viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
- 5) Arrange 24 hours before the test for BLM to witness. In Eddy County 575-361-2822. If no answer, leave a voice mail or email with the API#, workover purpose, and a call back phone number.
- 6) Prior to a subsequent sundry request for increased wellhead pressures CFO is requiring a Step Rate Test Notice of Intent.
- 7) Class II (production water disposal) wells Stimulation Pressures or “Injectivity Tests” not to exceed $0.2 \times \text{ft depth to the topmost injection through tubing with an ID equal or less than } 2\frac{1}{2}$ ” or 50psig below the frac point as clearly indicated by a BLM accepted “Step Rate Test”. Initial wellhead pressure through tubing with an ID greater than $2\frac{1}{2}$ ” is restricted to $0.15 \times$ the depth of the top perforation.
- 8) Report unexplained significant variations of rate or pressure within 5 days.
- 9) The casing/tubing annulus requires monitoring 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 above the casing vent is necessary to achieve this goal.
- 11) A (5 bbls/month) gain or loss of annular fluid volume requires 24 hours notification. Cease injection and maintain production casing and tubing pressure near Opsia. Notify the BLM’s authorized officer (“Paul R. Swartz” <pswartz@blm.gov>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
- 12) Submit a (BLM Form 3160-5 subsequent report (daily reports) via BLM’s Well Information System; <https://www.blm.gov/wispermits/wis/SP> describing all wellbore (dated daily) activity and include the Mechanical Integrity Test chart document.