

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

NM OIL CONSERVATION

ARTESIA DISTRICT

MAR 06 2017

OCD-ARTESIA

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

**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.*

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

5. Lease Serial No.  
NMLC029392B ✓
6. If Indian, Allottee or Tribe Name
7. If Unit or CA/Agreement, Name and/or No.
8. Well Name and No.  
GREENWOOD PRE-GRBG FED COM 1
9. API Well No.  
30-015-22601 ✓
10. Field and Pool or Exploratory Area  
SHUGART
11. County or Parish, State  
EDDY COUNTY, NM

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

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

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

3b. Phone No. (include area code)  
Ph: 575-677-2372

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 27 T18S R31E Mer NMP 1980FSL 660FWL ✓

**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 recompleate 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 recompleation 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. Configure SWD per OCD Permit SWD-1664

- MIRU WSU, Pull any remaining production equipment; RIH w/ guage ring/jnk bskt.
- Set CIBP @ ~11,000 w/ 35' Cmt cap.
- RU Wireline & Perforate selected intervals - max top: 10214'; max bottom: 10,892'. (Perfs determined from existing logs.)
- Optional: RIH w/ workstring; Acidize w/ 750-2500 gals HCl. Swab and circulate hole clean. POOH.
- Run PC Tubing and PKR - Notify BLM & OCD 24 hrs prior to: Conduct MIT.

PKR must be within 100' of uppermost perf.

Accepted For Record  
NMOCD

3/10/17

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct. Electronic Submission #366345 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 02/08/2017
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved By _____	Title _____
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 _____

APPROVED

JAN 14 2017

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.

(Instructions on page 2)

**\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\***



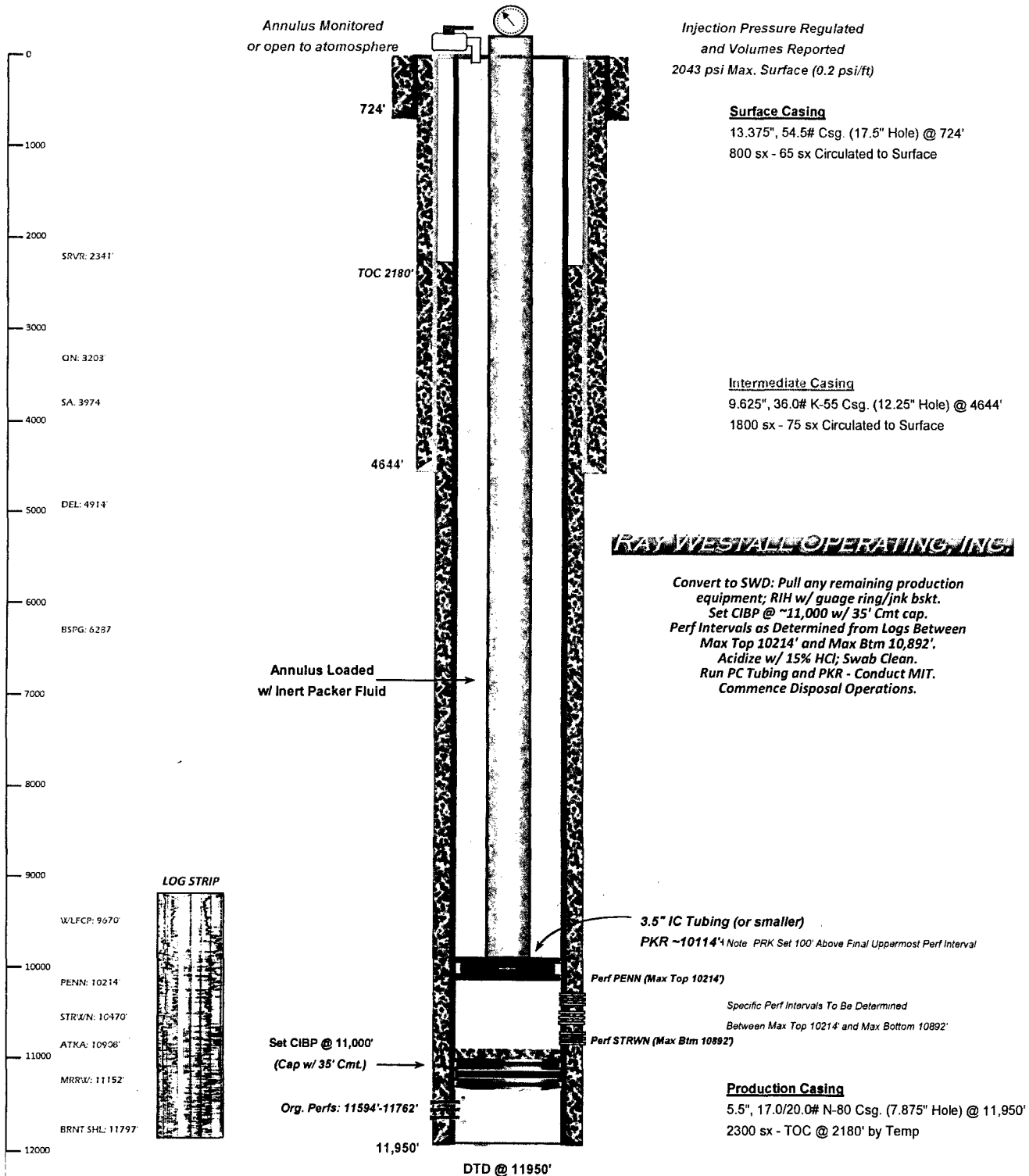
# WELL SCHEMATIC - PROPOSED Greenwood Federal SWD Well No.1

SWD; Penn-Strawn (PROPOSED)

API 30-015-22601

1980' FSL & 660' FWL, SEC. 27-T18S-R31E  
EDDY COUNTY, NEW MEXICO

Spud Date: 12/06/1978  
Config SWD Dt (Est): ~2/15/2



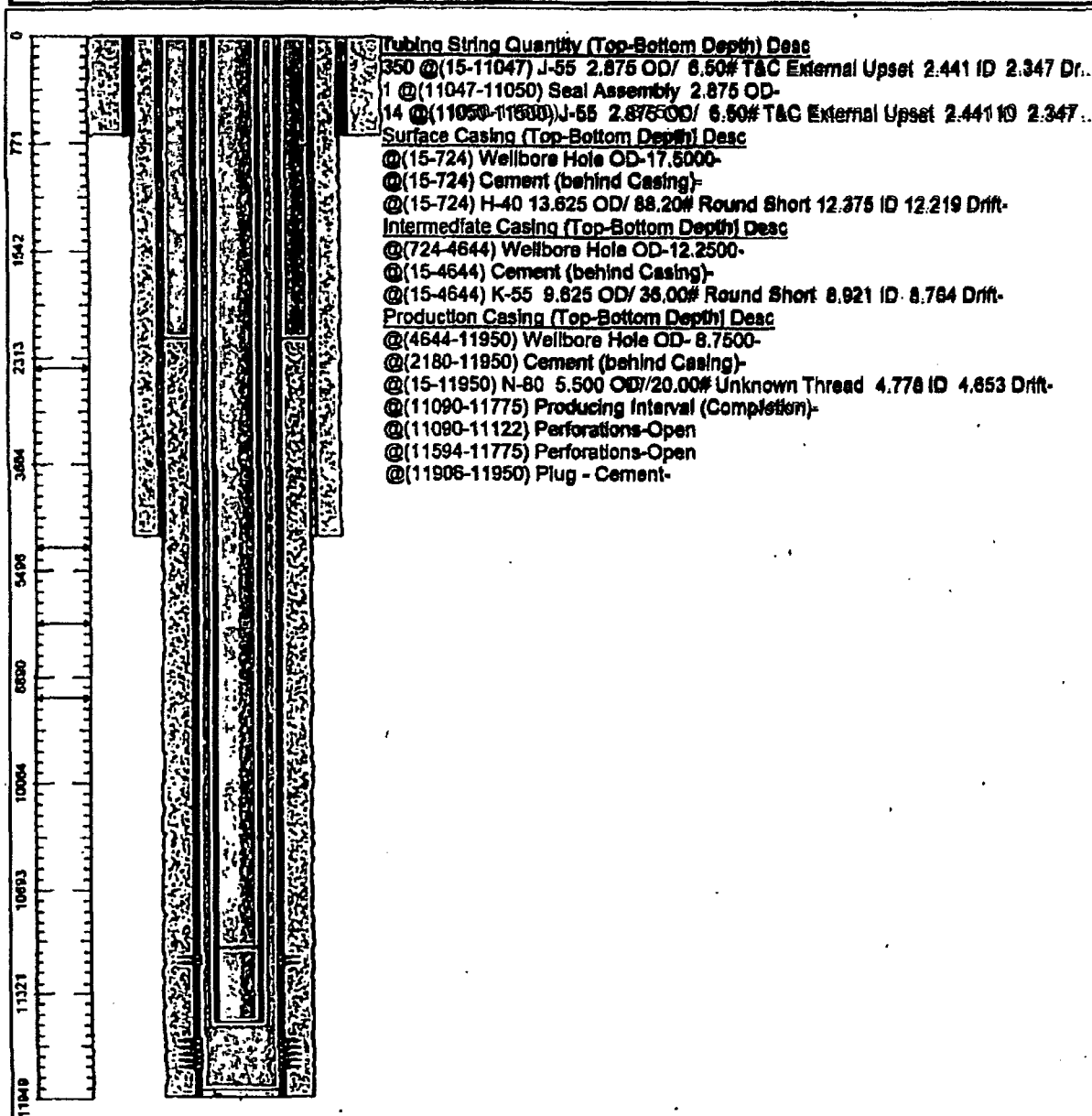
Drawn by: Ben Stone, Rvs'd 1/03/2017

**SOS Consulting, LLC**

# CURRENT WELLBORE DIAGRAM

Chevron U.S.A. Inc. Wellbore Diagram : GNWD P-G 1C

Lease: OEU EUNICE FMT	Well No.: GREENWOOD PRE-GRAYB 1 COM E 1	Field: SHUGART	
Location: 1980FSL660FWL	Sec.: N/A	BLK:	SURVEY: N/A
County: Eddy Sta.: New Mexico	Ratio: EQ2569	API: 300152009	Cost Center: UCR310700
Section: E031	Township: 27	Range: S018	
Current Status: ACTIVE		Dead Man Anchors Test Date: 08/04/2014	
Directions:			



Ground Elevation (MSL): 3614.00	Spud Date: 12/08/1978	Comp. Date: 01/01/1880
Well Depth Datum: Kelly Bushing	Elevation (MSL): 3629.00	Correction Factor: 15.00
Last Updated by: tri	Date: 09/08/2014	

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**Conditions of Approval**

**Ray Westall Operating, Inc.  
Greenwood - 01, API 3001522601  
T18S-R31E, Sec 27, 1980FSL & 660FWL  
February 09, 2017**

1. **Operator is required to have the BLM approved NOI procedure with applicable conditions of approval on location for this workover operation.**
2. 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.
3. Subject to like approval by the New Mexico Oil Conservation Division.
4. The comunization agreement for this well (NM72061) includes the Strawn and Atoka producing formations. Should the well be proven to be noncommercial as a hydrocarbon producer remove "Com" from the well name via sundry, and/or rename well.
5. A NMOCD 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.
6. 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.
7. Notify BLM 575-361-2822 Eddy Co. as work begins. Some procedures are to be witnessed. If there is no response, leave a voice mail with the API#, workover purpose, and a call back phone number.
8. **Verify (tag with tubing) the reported CIBP at 11060.**
9. **Set a balanced formation isolation plug of no less than 25sx Class "H" to be mixed 16.4#/gal, 1.06ft<sup>3</sup>/sx, 4.3gal/sx water on that plug.**
10. **WOC 8hrs and tag the plug with at tubing 10,848ft or above. NMOCD permitted injection depth will be restricted.**
11. **Perform a charted casing integrity test of 2100psig 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 are 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.**
12. **Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from 10500 to top of cement taken with 0psig casing pressure. The CBL may be attached to a pswartz@blm.gov email.**
13. Surface disturbance beyond the existing pad shall have prior BLM approval.
14. 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.

15. Functional H<sub>2</sub>S monitoring equipment shall be on location.
16. 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.
17. 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.
18. 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". **Wellhead disposal pressure through tubing greater than 2 ½" is restricted to 0.15 x the depth of the top perforation.**
19. A request for increased wellhead disposal pressure is to be accompanied by a "Step Rate Test:" conducted after 90 days of stabilized disposal wellhead pressures and rates. A request for increased wellhead pressures is to be accompanied by a "Step Rate Test:" that is to clearly indicate any requested wellhead pressure is +50psig below frac pressure for the wellbore's disposal formation. PRIOR to a Step Rate Test BLM – CFO is requiring a Notice of Intent.
20. The subsequent report is to include workover stimulation injection pressures. Report maximum/minimum injection rate (BPM) and max/min stimulation injection pressures (psig).
21. 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](mailto: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.
22. 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.
23. **The well is 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 may be offered as evidence.**

24. **A minimum of 1000 barrels is to be withdrawn from the proposed disposal formation after any recent stimulation load volumes have been recovered. Reports of ten samples from the last 200bbls analyzed for hydrocarbons and insitu salinity by a reputable laboratory. BLM agreement is to be obtained prior to this well being used as a disposal well.**
25. **The swabbing procedure is to be witnessed by BLM. Notify [pswartz@blm.gov](mailto:pswartz@blm.gov), 575-200-7902 24 hours prior to the 10 samples being taken.**
26. The intended use as a commercial production water disposal requires surface right-of-way agreement approvals and authorization from the surface owner.
27. 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.

28. 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 within 90 days of this sundry’s approval date.
29. Should “beneficial use” not be achieved submit for BLM approval a plan for plug and abandonment.

#### **Well with a Packer – Continued 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 35 to 75 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 575-361-2822. If no answer, leave a voice mail or email with the API#, workover purpose, and a call back phone number

- 5) 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.
- 6) 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.
- 7) Class II (production water injection) wells will not be permitted stimulation injection pressures that exceed frac pressure.
- 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 above the casing vent is necessary to achieve this goal.
- 11) Excessive (+5 bbls/month) gain or loss of annular fluid volume requires notification within 24 hours. Cease injection and maintain production casing and tubing pressure near Opsia. 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.
- 12) Submit a (BLM Form 3160-5 subsequent report (daily work reports dated) 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.