OCD-ARTESIA

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.***

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

5. Lease Serial No.
NMNM99018

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.
ZEBRA FF FEDERAL 1

2. Name of Operator
MEWBOURNE OIL COMPANY
Contact: JACKIE LATHAN
E-Mail: jlathan@mewbourne.com

9. API Well No.
30-015-32056

3a. Address
PO BOX 5270
HOBBS, NM 88241

3b. Phone No. (include area code)
Ph: 575-393-5905

10. Field and Pool, or Exploratory
SWD;CANYON

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 7 T21S R25E Mer NMP SENW 1980FNL 1980FWL

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 | | | |
|---|---|---|---|---|
| ☒ Notice of Intent | ☐ Acidize | ☐ Deepen | ☐ Production (Start/Resume) | ☐ Water Shut-Off |
| ☐ Subsequent Report | ☐ Alter Casing | ☐ Fracture Treat | ☐ Reclamation | ☐ Well Integrity |
| ☐ Final Abandonment Notice | ☒ Casing Repair | ☐ New Construction | ☐ Recomplete | ☐ Other |
| | ☐ Change Plans | ☐ Plug and Abandon | ☐ Temporarily Abandon | |
| | ☐ Convert to Injection | ☐ Plug Back | ☐ 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 shall 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 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.)

Procedure:

1. MIRU WS & pump truck. Blow well down.
2. ND WH & NU 3K BOP.
3. Unload & tally 9650' 2 3/8" 5.95# P110 RTS tbg(MOC DP)
4. RIH w/ 2 3/8" tbg tag CIBP @ +/- 8276.
5. POOH w/tbg.
6. RIH w/4 1/2" RBP & pkr. Set RBP @ 6800' & pkr @ 4250'.
7. Test csg & tbg to 500# to confirm hole in annulus. Reset pkr @ 4150' & isolate top hole. (4180'- 4196' per COG).
8. Establish injection rate for squeeze. Spot 200# Frac sand on RBP. POOH w/ tbg.

NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 14 2016

SUBJECT TO LIKE APPROVAL BY STATE

RECEIVED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Accepted for record
NMOCD 1/15/16

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

**Electronic Submission #325754 verified by the BLM Well Information System**
**For MEWBOURNE OIL COMPANY, sent to the Carlsbad**
**Committed to AFMSS for processing by JAMIE RHOADES on 12/09/2015 ()**

Name *(Printed/Typed)* ROBIN TERRELL — Title DISTRICT MANAGER

Signature (Electronic Submission) — Date 12/08/2015

APPROVED

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

Approved By _____ Title _____ Date DEC 9 2015

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.

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

## Additional data for EC transaction #325754 that would not fit on the form

**32. Additional remarks, continued**

9. RIH w/4 1/2" cmt retainer & set 100' above hole in csg.
10. Pump 50 bbls FW through retainer. Set retainer. Sting out & back in retainer.
11. Pump fluid caliper to determine volume of 7" & 4 1/2" annulus.
12. MIRU Cmt pump w/cmt volumes based on fluid caliper. Establish rate & circulate cmt up 7" & 4 1/2" annulus. Squeeze tail of cmt.
13. Sting out of retainer. Reverse circulate well clean.
14. POOH w/tbg & LD stinger.
15. WOC for 24 hrs to set.
16. MIRU reverse unit & swivel. NU stripper head. RIH w/3 7/8" skirted bit, bit sub, 6 DC's, X/O & tbg. Test to 500#. Drill cmt retainer.
17. Test squeeze to 500#. If needed repeat squeeze process.
18. RIH to RBP & circulate hole clean. ND stripper head & POOH w/tbg.
19. RIH w/RBP retrieving tool & tbg.
20. Latch on & release RBP. Test all squeezes(old & new) to 500#.
21. POOH w/ tbg & LD RBP.
22. RIH w/3 1/2" skirted bit, bit sub, 6-DCs, X/O & tbg to CIBP (+/-8276').
23. Drill CIBP, RIH & tag CIBP @ +/-9500'. Circulate hole clean.
24. MIRU cmt pump. Spot 80 sks Class H (15.6#/g @ 1.18 cf/sk) from 9500' to 8440'.
25. POOH to 6000'. WOC 8 hrs & tag plug. If tag higher than 8440' drill to 8440'.
26. ND stripper head, LD work string & BHA.
27. RDMO reverse unit & swivel.
28. Unload & tally 2 7/8" 6.5# N80 Poly Lined tbg w/turned down collars (3.460" w/ beveled edges).
29. PU 4 1/2" x 2 7/8" Model R pkr(nickel plated) RIH w/Poly Lined tbg & set within 30' of top Perf.
30. Displace csg capacity w/pkr fluid.
31. Set 16-20 pts compression on pkr, ND 3K BOP & NU 3K slip type WH & set slips.
32. Pump step rate test down tbg.
33. Notify NMOCD prior to MIT to witness.
34. Perform MIT on csg to minimum 500# w/data recorder for 30 min. (10% leak off allowable)
35. RDMO WSR.
36. PWOL.

Bond on file: NM1693 nationwide & NMB000919

# Conditions of Approval

## COG Operating LLC
## Zebra FF - 01, API 3001532056
## T21S-R25E, Sec 07, 1980FNL & 1980FWL
## December 09, 2015

1. **Operator is required to have the BLM approved NOI procedure with applicable conditions of approval on location for this workover operation.**
2. Subject to like approval by the New Mexico Oil Conservation Division.
3. Notify BLM 575-200-7902 Eddy Co. as work begins. Some procedures are to be witnessed. If there is no response, call 575-361-2822, leave a voice mail with the API#, workover purpose, and a call back phone number. Note the contact, time, & date in your subsequent report.
4. Surface disturbance beyond the existing pad shall have prior BLM approval.
5. 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.
6. Functional $H_2S$ monitoring equipment shall be on location.
7. 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.
8. 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.
9. **This procedure is subject to the next three numbered paragraphs.**
10. Mix cement plugs to cover a minimum of 100ft plus 10ft for every 1,000ft from the bottom of the plug, rounding the number of necessary sacks up to the nearest 5 sacks. Never use less than 25sx. Examples: A cement plug set at 8000 in 7" casing would require a min of 35sx. A 25sx plug in 5 ½" casing should cover 250ft, which may exceed 100ft plus 10ft per 1000ft.
11. Class H > 7500ft & C < 7500ft) cement plugs(s) will be necessary. For any plug that requires a tag or pressure test a minimum WOC time of 4 hours(C) & 8 hours(H) is recommended. Formation isolation plugs of Class "C" to be mixed 14.8#/gal, 1.32 $ft^3$/sx, 6.3gal/sx water and "H" to be mixed 16.4#/gal, 1.06$ft^3$/sx, 4.3gal/sx water.

12. **Procedure Step 20 - Perform a charted casing integrity test** of 1300psig minimum from CIBP at 8276' 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** (if there is no response, 575-361-2822) **and arrange for a BLM witness of that pressure test.** Include a copy of the chart in the subsequent sundry for this workover.
13. **After the charted casing integrity test (¶12. above), provide BLM with an electronic copy (Adobe, PDF, or tiff) cement bond log record from 8250 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.**
14. 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.
15. **Procedure Step 32 - Do not exceed the approved SWD-869 injection pressure of 1664psig for stimulation operations or injectivity tests.** Class II (production water disposal) wells will not be permitted Stimulation Pressures or "Injectivity Tests" that exceed the NMOCD/BLM generic frac pressure which is: .2 x ft depth to the topmost injection or 50psig below the frac point as clearly indicated by a BLM accepted "Step Rate Test".
16. The subsequent report is to include injectivity and/or workover stimulation. Report maximum/minimum injection rate (BPM) and max/min stimulation injection pressures (psig).
17. 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.
18. 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 for instructions) describing all wellbore activity and the Mechanical Integrity Test. 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.
19. 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.
20. Submit a BLM Form 3160 – 5 indicating the date of 1$^{st}$ injection. Include rates and pressures.
21. Approval, if granted, will be 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.

22. Disposal of water from another operator requires that the well be designated as a commercial well and BLM surface right-of-way agreement **approvals.**
23. 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.
24. 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.

25. 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.
26. 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 or phone 575-200-7902, if there is no response, 575-361-2822. In Lea County phone 575-393-3612. 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) 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.
7) 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.
8) Class II (production water injection) wells will not be permitted stimulation injection pressures that exceed frac pressure.
9) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
10) 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.
11) 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.
12) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.
13) 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 0psia. 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.
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 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.

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

§ 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.