Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NM OIL CONSERVATION
OCD ARTESIA
APR 17 2017
RECEIVED

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.

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
NMLC064490

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.
HACKBERRY HILLS FEDERAL 4

2. Name of Operator
READ & STEVENS

Contact: KELLY BARAJAS
E-Mail: kbarajas@read-stevens.com

9. API Well No.
30-015-10805

3a. Address
P. O. BOX 1518
ROSWELL, NM 88202

3b. Phone No. (include area code)
Ph: 575-624-3760

10. Field and Pool or Exploratory Area
HACKBERRY HILLS

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 22 T22S R26E 2310FNL 1980FWL

11. County or Parish, State
EDDY COUNTY, NM

12. CHECK THE 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	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Workover Operations
	☐ 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 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.

Please see attached workover document.

Accepted for record - NMOCD 4-18-17

Workover operations done without BLM approval.
Plugback operations appear out of compliance with
BLM regulations.
Submit Notice of Intent to gain BLM compliance or to plug.

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #370774 verified by the BLM Well Information System
For READ & STEVENS, sent to the Carlsbad
Committed to AFMSS for processing by DEBORAH MCKINNEY on 03/27/2017 ()

Name *(Printed/Typed)* RORY MCMINN — Title PRESIDENT

Signature (Electronic Submission) — Date 03/23/2017

ACCEPTED FOR RECORD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____ Title _____ Date APR 6 2017

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.

(Instructions on page 2)

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

February 11 - February 21, 2017

MIRU. Blow dwn well to pit. NDWH and NUBOP. Release pkr and TOH LD 314 jnts of 2-3/8" N80 8 round prod tbg. LD Otis retrieving head. TIH. LD pkr at 9946' and 146 jnts of tbg. Cont TOH standing back 80 stands in derrick. LD bit and scrapper. MIRU WL. Ran CBL-GR-CCL correlation log from 8967' to 4000'. All free pipe with no cmt. Set CIBP #1 at 8967'. Pressure tested csg and CIBP #1 to 500 psi for 5 min w/no drop. Dump bail 35' cmt on top of CIBP #1. Set CIBP #2 at 5490'. Pressure test CIBP #2 and csg to 500 psi for 5 min w/no drop. Dump bail 35' cmt on top of CIBP #2. Shot 4 cmt squeeze holes (.41") at 5100'. Pump dwn csg and establish returns to surface. TIH w/cmt retainer. MIRU cementers. Test H20. Pressure test lines to 300 psi. Reset pump kills 1200 psi. Pump 30 bbls dwn tbg. Set retainer at 5014'. Pump 10 bbls H20 and 380 sxs Class C Neat cmt at 14.8 ppg. Wash to pit. Displaced w/28 bbls H20. Cmt to surface after 27 bbls of flush. Max Pressure 700 psi, Average Pressure 450 psi, Max Rate 4 bpm, Average Rate 3.5 bpm. Sting our of retainer and pull up 7'. Reverse out w/60 bbls H20 and 1 bbl cmt to steel pit. WOC. MIRU WL. Tagged at 4976'. Ran CBL and noted cmt stringer at +/- 2650' on collar while TIH. Noted 2nd cmt stringer around collar at 4820'. TOH at 4786'. Hard TOC at 4852' (98% bond. Free pipe +/- 4724'.) Pull CBL log up to 3950' and TOH. Ran squeeze gun #1 and shot 2 JPF at 4840'. Pump at 1/4 bpm at 600 psi. Shot squeeze gun #2 at 4710'. Pump 1/2 to 3/4 bpm. Max bpm at 700 psi. Shot gun #3 2' (2) JPF at 4640' and 4641'. Pump 1 1/4 bpm at 800 psi and 2 bpm at 900 psi. RDWL. TIH w/Arrow Set I pkr w/unloader. Set pkr at 4536' w/12 pnt tension. Pressure csg to 400 psi and held w/no drop. Left pressure on csg.

February 22 - February 28, 2017

MIRU Elite acid fleet. Pressure test surface lines to 2650 psi and reset pump kills to 1200 psi. Pump 5 bbls 2% KCL H20. Follow w/5000 gals 20.2% HCL acid w/additives. Displaced w/29 bbls KCL H2O. SD 40 min to allow acid to spend. Pump 90 bbls of 2% KCL. No returns while pumping. Max pressure 998 psi, Average pressure 840 psi, Max rate 3.35 bpm, Average rate 2.3 bpm. TIH w/cmt retainer. Pump 30 bbls through and past retainer. Set cmt retainer at 4531'. Pressure test backside to 400 psi and held w/no drop. MIRU cementers. Pump 10 bbls of H2O ahead to restablish rate. Pump 180 sxs of Class C Neat followed by 169 sxs of Class C w/2% CaCL. Cmt density averaged 14.8 ppg. Displaced w/25 bbls H2O. Stung out of retainer, pulled up 5', reversed out w/50 bbls H2O. Max pressure 930 psi, Average pressure 150 psi, Max rate 3 bpm, Average rate 1.5 bpm. TIH w/4 3/4" tri-cone bit sub, 6 DC's and 65 stands workstring to 4078'. NU stripping head, PU power swivel and 1 jnt. WOC. TIH. Tag cmt at 4524'. Drill up cmt and ~~CIBP~~ CICR at 4531'. Drill cmt to 4672'. Pressure test squeeze to 500 psi for 5 min w/no drop. Cont drilling cmt to 4743'. Pressure test to 500 psi for 5 min w/no drop. Cont drilling cmt to 4872'. Pressure test to 500 psi for 5 min., Dropped 120 psi in 3 min and held 380 for 5 min. Cont TIH. Tag at 5001'. Circ hole clean. TOH w/22 stands. MIRU WL. Ran CBL-VDL-GR-CCL log. Tag at 4985'. Hard TOC at 4850'. (98% bond.) TOC at 4646'. Bond average 50% from 4800' up to TOC at 4646'. Pull CBL log up to 3950'. TOH. Squeeze gun #1 and shot 2 JSPF at 4620'. Pump .40 bpm at 500 psi. Shot squeeze gun #2 at 4585'. Pump 3/4 bpm. Max bpm at 600 psi. Shot squeeze gun #3 2' 2 JSPF at 4555' and 4556'. Pump 1 1/4 bpm at 800 psi and 1.6 bpm at 850 psi. RDWL.

March 1 - March 6, 2017

TIH w/cmt retainer to 4438.5'. RU cementers. Pump 30 bbls through retainer. Pressure up backside to 400 psi. Pressure test hard lines to 3500 psi and reset pump kills to 1400 psi. Pump 10 bbls of H2O to establish rate. Pump 280 sxs of Class C Neat followed w/100 sxs Class C w/2% CaCL. Cmt density average 14.8 ppg. Displaced w/25 bbls H2O. Stung out of retainer. Pull up 5', reversed out w/50 bbls H2O. Max Pressure 985 psi, Average Pressure 350 psi, Max Rate 3 bpm, Average Rate 1.5 bpm. TOH. WOC. TIH w/4 3/4" tri-cone bit, sub, 6 DC's, and 60 stands workstring to 4085'. LD 20 jnts. NU stripping head, PU power swivel and 1 jnt. Tag cmt at 4432'. Drill cmt and retainer to 4574'. Pressure test to 500 psi for 5 min w/no drop. Cont drilling cmt to 4607'. Pressure test to 500 psi. Pressure dropped to 300 psi in 1 min and continued to leak very slow. TOH w/1 stand. Pressure test to 550 psi. Pressure dropped to 475 psi in 10 min. Cont drilling cmt to 4639'. Pressure test to 500 psi. Pressure dropped to 200 psi in 10 min. Cont drilling cmt to 4803'. Pressure test to 500 psi. Pressure dropped to 220 psi in 10 min. Circ well clean. TOH standing back. RUWL. Ran CBL-VDL-GR-CCL log. Pulled log from 4772' to 3750'. TOC at 4549' 100% bond. 4578'-4588' and 4612'-4620' 50% to 95% bond in a number of sections above proposed production perfs (4250' to 4779') RDWL. TIH w/4 3/4" bit, DC's and workstring. Tag cmt at 4803'. Drill out cmt to 4870'. Continue TIH to 5001'. Circ well clean w/2% KCL H2O. TOH to surface.

March 8 - March 9, 2017

TIH. LD DC's. RUWL. Run confirmation CBL-GR-CCL-VDL. Tag at 4980'. Pull log up to 3950'. Perf Brushy Canyon-Delaware (4,760' to 4810', 2 runs, 2 JSPF w/.41 holes.) RDWL. TIH and set pkr at 4657.66'. RU Elite Acid. Acid tested at 15.2%. Pressure hardlines to 2670 psi. Pump in .7 bbls and noticed some equalization of pressure on backside. Suspect one of the squeeze holes leaking. Release pkr and reset at 4690'. Attempt to pump in several times and went dwn on pump kills. Release pkr and TIH w/3 stands. Spot 3 bbls acid across perfs. TOH w/3 stands and reset pkr. Open up bypass above pkr and spot 1214 gals of 15% HCL acid to top of pkr inside tbg. Close bypass above pkr. Pump in at .25 bpm H2O while going dwn on kills. Got pressure to break. Follow w/3660 gals of 15% HCL acid and flush w/30.2 bbls of 2% KCL H2O. Suspected limited communication to backside through another squeeze hole while pumping last part of job. Pumped a total of 5000 gals of acid for entire job. Max Pressure 2248 psi, Average Pressure 1800 psi, Max Rate 6.4 bpm, Average Rate 4 bpm. ISIP 695 psi, 5 min SI 626 psi, 10 min SI 609 psi, 15 min SI 590 psi. RD Elite. RU swab. Open well and flow back 10 bbls to tank. Swab run #1 FL Surface, pulled from 1300', 8 bbls H2O. Run #2 Fl 700', pulled from 1800', 8 bbls H2O. Swabbed 16 bbls. 149 BLTR. 20 psi on tbg, backside 20 psi, intermediate csg 100 psi. Open up tbg and flowed 1 bbl H2O to steel pit. 20 swab runs from surface to 4600'. Total of 112 bbls swabbed. 37 BLTR.

March 10 - March 14, 2017

TIH w/RBP-Pkr combo and set RBP at 4970'. LD 1 jnt and pressure test RBP to 500 psi w/no drop. Release and reset pkr at 4823'. Pressure test below pkr at 500 psi for 5 min w/no drop. Set RBP at 4700' and pkr at 4562'. Pressure test above pkr to 500 psi w/no drop. Leak below pkr. Release pkr and noted backside full. Circ out 3+ bbls of green crude. Reset RBP at 4970'. RBP tested good. Set pkr at 4823'.

Pump dwn tbg and had communication to backside. Release pkr and retrieve RBP. Reset RBP at 4855'. Attempt to get pkr off of RBP. Csg and tbg FL at surface. Pump dwn tbg w/unloader above pkr. RBP and pkr are set. RUWL. TIH w/string shot to 4844' and 4848'. TIH w/chemical cutter and cut off tbg in middle of 1st jnt above pkr. Top of fish at 4827'. LD shot off jnt. TIH w/2 stands. Pour 23 100# bags of sand through funnel dwn well. TIH w/RBP, 4' sub, and pkr. Tag on 13th jnt in. TOH. TIH open ended and wash through sand bridge (410' to 575'). Circ clean. Tag top of fish at 4827'. Circ well clean. TOH to 4653'. Drop 18 sxs sand through funnel w/wtr dwn tbg while pouring sand. Pump 26 bbls H2O dwn tbg. TOH. TIH w/RBP #2, 4' sub, and pkr to 2653'. Tag sand at 4768'. TOH and LD RBP #2 and pkr. RUWL. TIH w/select fire squeeze gun and CCL. Shoot squeeze holes at 4650', 4446', 4635', and 4633' (4 JSPF). TOH. TIH open ended to 4685'. Dump 4 sxs sand dwn tbg and on top of RBP #1 (fish). Trickle wtr dwn tbg while pouring sand through funnel. Pump 24 bbls H2O dwn tbg. TOH.