

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NM OIL CONSERVATION

ARTESIA DISTRICT

MAR 14 2016

OCD-ARTESIA

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. NMNM89057
6. If Indian, Allottee or Tribe Name
7. If Unit or C/A/Agreement, Name and/or No.
8. Well Name and No. ROSS RANCH 10 FED 1 SWD
9. API Well No. 30-015-29605
10. Field and Pool, or Exploratory WILDCAT BRUSHY CANYON
11. County or Parish, and State EDDY COUNTY, NM

1. Type of Well ☐ Oil Well ☐ Gas Well ☒ Other: UNKNOWN OTH	2. Name of Operator DEVON ENERGY PRODUCTION CO, L.P. Contact: REBECCA DEAL Email: REBECCA.DEAL@DVN.COM
3a. Address 333 W. SHERIDAN OKLAHOMA CITY, OK 73102	3b. Phone No. (include area code) Ph: 405-228-8429
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 10 T26S R31E SENE 1980FNL 660FEL	

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
☐ Notice of Intent	☐ Acidize
☒ Subsequent Report	☐ Deepen
☐ Final Abandonment Notice	☐ Fracture Treat
	☐ Production (Start/Resume)
	☐ Reclamation
	☐ Recombine
	☐ Temporarily Abandon
	☒ Water Disposal
	☐ Water Shut-Off
	☐ Well Integrity
	☐ Other

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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been met and the operator has determined that the site is ready for final inspection.)

Attn: Paul Swartz

Actual procedures for pressure increase on the Ross Ranch 10 Federal 1 SWD well.

2/2/16: RU on well with slickline. Tag fill at ~5,463'. POOH w/ slickline and RD slickline.

2/17/16: RU Pump Truck and perform stimulation as follows

? Pump 300 gals xylene

? Pump brine to clear tubing and allow xylene to soak for 30 minutes

? Pump 1500 gals 15% NEFE acid

? Pump 875 lbs rocksalt in 590 gals gelled brine

? Pump 300 gals xylene

No disposal water injected in well after acid job. As evidenced by the fresh water flush wt. of 8# in the tbg on 02/19/2016.

Wellhead pressure of 1300psig BLM approved for production water disposal.

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

disposal.

Electronic Submission #332637 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION CO, LP, sent to the Carlsbad
Committed to AFMSS for processing by PAUL SWARTZ on 03/02/2016 ()

Name (Printed/Typed) REBECCA DEAL

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 03/01/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Date

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

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.

BUREAU OF LAND MANAGEMENT

CARLSBAD FIELD OFFICE

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

Additional data for EC transaction #332637 that would not fit on the form

32. Additional remarks, continued

- ? Pump 2000 gals 15% NEFE acid
- ? Pump 875 lbs rockalt in 590 gals gelled brine
- ? Pump 300 gals xylene
- ? Pump 1500 gals 15% NEFE acid
- ? Displace with fresh water and overflush 20 bbls

2/20/16: RU pump truck and perform step rate test (results attached)

See attached step rate tests.

STEP RATE TEST DATA for BLM CFO

Operator: Devon Energy Prod Co., LP

Well: ROSS RANCH 10 FEDERAL-1

API#: 3001529605

Lease: NM89057

Data Collection Date: 2/20/2016

Sfc Loc: T26S-R31E-10-1980n660e

< Cell(s) for Input

< Cell(s) that are Calculated by Excel

Tbg O.D.: 2.875 Tbg Wt.: 6.50 Grade: J-55 Pipe I.D.: 2.441 Packer at: 5054

Top Injection Depth: 5118 X 0.20psig/ft = Expected Surface Fracture psig: 1024

With Mud Wt Scale: 9.2 lbs/gal Msrd No Flow Formation psig: 3052 at Depth of: 5118

Beginning Wellhead psig: 655 Hydrostatic Pressure of fluid at top depth of injection: 2397

Injection Fluid lbs/gal: 9.0 Target Maximum Rate bpd (barrels per day): 11520

Minimum Bbls of Normally Pumped Disposal Water to be on Location: 756

1. Take a charted record of shut in psig for no less than 48 hours. If the wellhead shut in psig is not less than the approved injection pressure, bled the wellhead pressure below 0.2psig/ft x depth at top of injection before beginning the Step Rate Test.
2. Perform a minimum of seven steps, recording rate to $\pm 1/10$ bpm, surface and down hole pressures to ± 10 psig in five minute intervals. The first two psig(s) must be below 0.2psig/ft x top injection depth.
3. The last two five minute surface pressure readings of each (minimum 30 minute) step are to be within 15psig of each other. And the last two five minute formation pressure readings of each (minimum 30 minute) step are to be within 15psig of each other. If either are not, continue 5 minute readings. Record the (surface pressure, formation pressure, & rate) of the last reading as the Data Point for that Step.

Step 1

Target Test Rate (5% of maximum bpd/1440 = 0.4 bpm for Step 1

Step 1 data at:	5 min	10 min	15 min	20 min	25 min	30 min	Start Time: 9:30AM
Surface (psig):	683	688	693	698	701	703	
Formation (psig)	3069	3077	3082	3086	3090	3093	target bpd: 576
bpm:	0.4	0.4	0.4	0.4	0.4	0.4	Data Point #1
Step 1 data at:	35 min	40 min	45 min	50 min	55 min	60 min	@ bpd: 576
Surface (psig):							Sfc psig: 703
Formation (psig):							F psig: 3093
bpm:							@ bpm: 0.4

Step 2

Target Test Rate (10% of maximum bpd/1440 = 0.8 bpm for Step 2

Step 2 data at:	5 min	10 min	15 min	20 min	25 min	30 min	
Surface (psig):	736	740	746	748	750	755	
Formation (psig):	3101	3106	3111	3114	3118	3121	target bpd: 1152
bpm:	0.8	0.8	0.8	0.8	0.8	0.8	Data Point #2
At bpm Rate:	35 min	40 min	45 min	50 min	55 min	60 min	@ bpd: 1152
Surface (psig):							Sfc psig: 755
Formation (psig):							F psig: 3121
bpm:							bpm: 0.8

Step 3

Target Test Rate (20% of maximum bpd/1440 = 1.6 bpm for Step 3

Step 3 data at:	5 min	10 min	15 min	20 min	25 min	30 min	
Surface (psig):	878	886	890	904	908	904	
Formation (psig):	3136	3145	3152	3159	3164	3168	target bpd: 2304
bpm:	1.6	1.6	1.6	1.6	1.6	1.6	Data Point #3
Step 3 data at:	35 min	40 min	45 min	50 min	55 min	60 min	@ bpd: 2304
Surface (psig):							Sfc psig: 908
Formation (psig):							F psig: 3168
bpm:							bpm: 1.6

STEP RATE TEST DATA for BLM CFO

Operator: Devon Energy Prod Co, LP

Well: ROSS RANCH 10 FEDERAL-1

API#: 3001529605

Lease: NM89057

Data Collection Date: 2/20/2016

Sfc Loc: T26S-R31E-10-1980N660E

Step 4

Target Test Rate (40% of maximum bpd/1440 = 3.2 bpm for Step 4

Step 4 data at:	5 min	10 min	15 min	20 min	25 min	30 min	target bpd: 4608 Data Point #4 @ bpd: 4608
Surface (psig):	1342	1355	1356	1379	1398	1400	
Formation (psig):	3192	3204	3213	3282	3228	3234	
Rate bbl/min:	3.2	3.2	3.2	3.2	3.2	3.2	
Step 4 data at:	35 min	40 min	45 min	50 min	55 min	60 min	Sfc psig: 1400 F psig: 3234 bpm: 3.2
Surface (psig):							
Formation (psig):							
bpm:							

Step 5

Target Test Rate (60% of maximum bpd/1440 = 4.8 bpm for Step 5

Step 5 data at:	5 min	10 min	15 min	20 min	25 min	30 min	target bpd: 6912 Data Point #5 @ bpd: 6912
Surface (psig):	2038	2055	2060	2064	2070	2072	
Formation (psig):	3252	3260	3267	3272	3277	3279	
bpm:	4.8	4.8	4.8	4.8	4.8	4.8	
Step 5 data at:	35 min	40 min	45 min	50 min	55 min	60 min	Sfc psig: 2072 F psig: 3279 bpm: 4.8
Surface (psig):							
Formation (psig):							
bpm:							

Step 6

Target Test Rate (80% of maximum bpd/1440 = 6.4 bpm for Step 6

Step 6 data at:	5 min	10 min	15 min	20 min	25 min	30 min	target bpd: 9216 Data Point #6 @ bpd: 9216
Surface (psig):	2889	2900	2904	2885	2872	2890	
Formation (psig):	3296	3301	3303	3306	3308	3310	
Rate bbl/min:	6.3	6.4	6.4	6.4	6.4	6.4	
Step 6 data at:	35 min	40 min	45 min	50 min	55 min	60 min	Sfc psig: 2890 F psig: 3310 bpm: 6.4
Surface (psig):							
Formation (psig):							
bpm:							

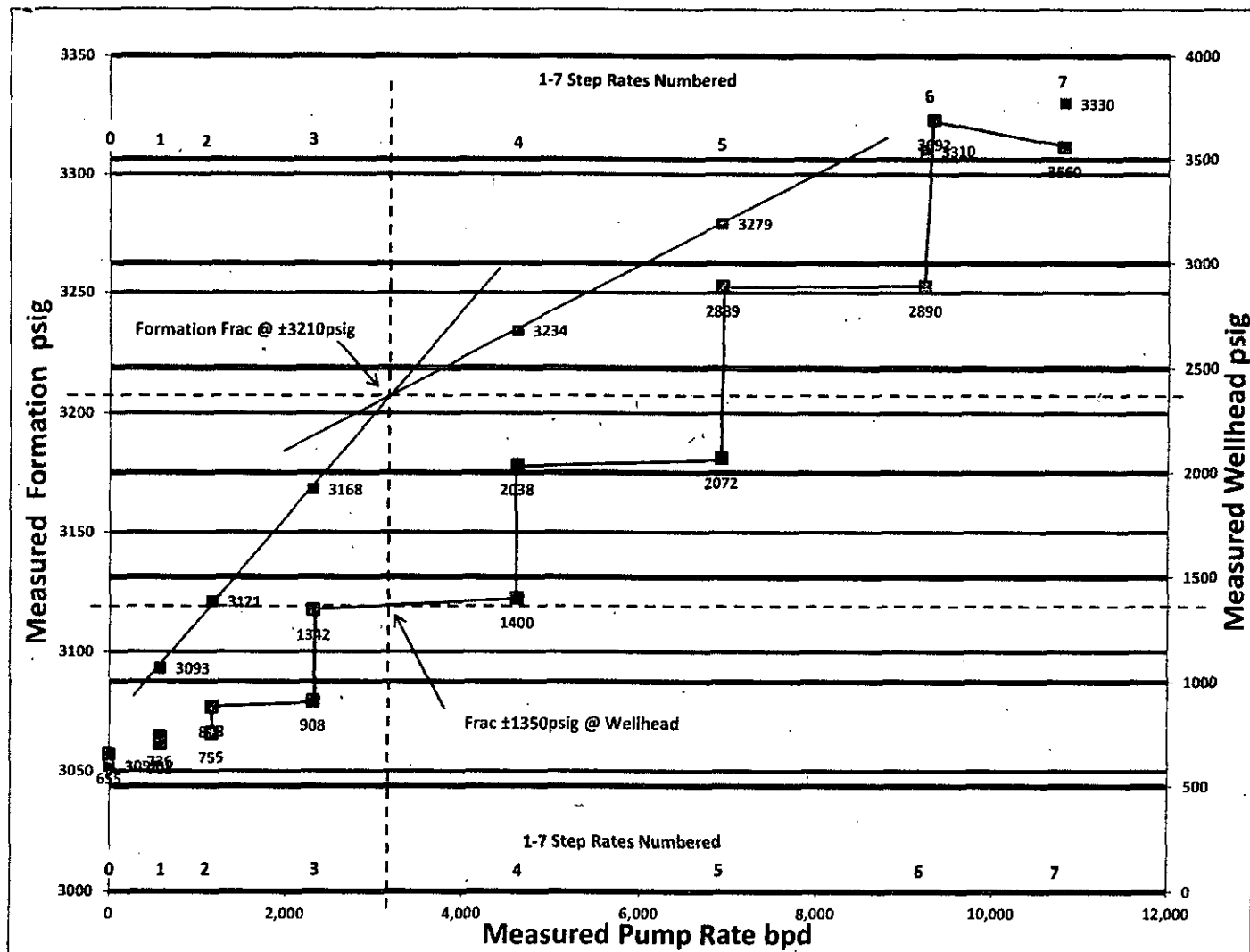
Step 7

Target Test Rate (100% of maximum bpd/1440 = 8.0 bpm for Step 7

Step 7 data at:	5 min	10 min	15 min	20 min	25 min	30 min	End Time: 1:23PM target bpd: 11520 Data Point #7 @ bpd: 10800
Surface (psig):	3692	3600	3533	3564	3554	3560	
Formation (psig):	3317	3320	3323	3325	3327	3330	
bpm:	7.5	7.5	7.5	7.5	7.5	7.5	
Step 7 data at:	35 min	40 min	45 min	50 min	55 min	60 min	Sfc psig: 3560 F psig: 3330 bpm: 7.5
Surface (psig):							
Formation (psig):							
bpm:							

Shut in pressures not acceptably monitored.

	Surface	Formation	
Instant Shut In Pressure:	914	3319	psig
5 minute Shut In Pressure:	883	3305	psig
10 minute Shut In Pressure:	875	3296	psig
15 minute Shut In Pressure:	868	3289	psig



Data collected: 2/20/16
 Operator: Devon Energy Prod Co., LP.
 Well: ROSS RANCH 10 FEDERAL-1
 Sfc Loc: T26S-R31E, 10.1980n660e
 API#: 3001529605
 Lease: NM89057
 Administrative Order: SWD-1298, 09/07/2011
 Disposal Formation: Cherry Canyon
 Top Prod Wtr Inj: 5,118
 Btm Prod Wtr Inj: 5,367

Step	Pmp bpm	Pmp bpd	Fmtn psig	Wellhead psig
0	0.0	0	3052	655
1	0.4	576	3093	703
1 to 2	0.4	577		736
2	0.8	1152	3121	755
2 to 3	0.8	1153		878
3	1.6	2304	3168	908
3 to 4	1.6	2306		1342
4	3.2	4608	3234	1400
4 to 5	3.2	4613		2038
5	4.8	6912	3279	2072
5 TO 6	4.8	6919		2889
6	6.4	9216	3310	2890
6 TO 7	6.5	9308		3692
7	7.5	10800	3330	3560

Shutin pressures not acceptably monitored.
 Instant Shut In Pressure at Surface - psig: 914
 I S I P at Formation - psig: 3319
 Surface psig @ Fracture: 1350
 Current Permitted WH pressure: 1024psig
 By this SRT the Maximum WH psig/ft: 1300
 By this SRT the Max frac gradient psig/ft: 0.26