

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

5. Lease Serial No.
NMNM048344

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 checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. WILLIAMS A FEDERAL 12
2. Name of Operator VANGUARD OPERATING LLC Contact: KYLE ZIMMERMANN E-Mail: kzimmerman@vnrlc.com		9. API Well No. 30-015-41890-00-S1
3a. Address 5847 SAN FELIPE, SUITE 3000 HOUSTON, TX 77057	3b. Phone No. (include area code) Ph: 432-202-0145	10. Field and Pool or Exploratory Area Red Lake Q - Artesia - Graybrig SA
4. Location of Well. (Footage, Sec., T., R., M., or Survey Description) Sec 29 T17S R28E SESW 0330FSL 2200FWL 32.789710 N Lat, 104.198683 W Lon		11. County or Parish, State 3030 EDDY COUNTY, NM 57300

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 checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input 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 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.

Vanguard Operating, LLC requests an extension to the sundry submitted and approved by the prior operator (LRE Operating) dated May 2014. The recompletion operations have not changed from the approved sundry and are outlined as follows:

GC 8-13-18
Accepted for record - NMOCD

MIRUSU. TOH w/ all production equipment. Set a 5-1/2" CBP @ ~3450' & PT 5-1/2" csg and CBP to 3500 psi. (Existing Yeso perms are @ 3536-3618'). Perf lower San Andres @ ~2920-3291' w/ ~38 holes. Stimulate w/ ~1500 gals 15% HCL acid & frac w/ ~30,000# 100 mesh & ~311,430# 40/70 Ottawa sand in slick water. Set a 5-1/2" CBP @ ~2850' and PT to 3500 psi. Perf middle San Andres @ ~2461-2779' w/ ~33 holes. Stimulate w/ ~1500 gals 15% HCL acid & frac w/ ~30,000# 100 mesh & ~271,530# 40/70 Ottawa sand in slick water. Set a 5-1/2" CBP @ ~2,330' & PT to 3,500 psi. Perf upper San Andres @ ~1980-2201' w/ ~32 holes. Stimulate w/ ~1500 gals 15% HCL acid & frac w/ ~30,000# 100 mesh &

NM OIL CONSERVATION
ARTESIA DISTRICT
AUG 10 2018
RECEIVED

Original COA's apply

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

Electronic Submission #428910 verified by the BLM Well Information System
For VANGUARD OPERATING LLC, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 07/27/2018 (18PP2365SE)

Name (Printed/Typed) KYLE ZIMMERMANN	Title OPERATIONS ENGINEER I
Signature (Electronic Submission)	Date 07/26/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <i>James C. Davis</i> (BLM Approver Not Specified)	Title <i>Supv. AET</i>	Date 08/02/2018
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 Carlsbad

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)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Rev. 8-16-18

Additional data for EC transaction #428910 that would not fit on the form

32. Additional remarks, continued

~119,700# 40/70 Ottawa sand in slick water. CO after frac, drill out CBP's @ 2330' & 2850' & CO to CBP @ 3450'. Land tbg and rod pump @ ~3225' and test SA.

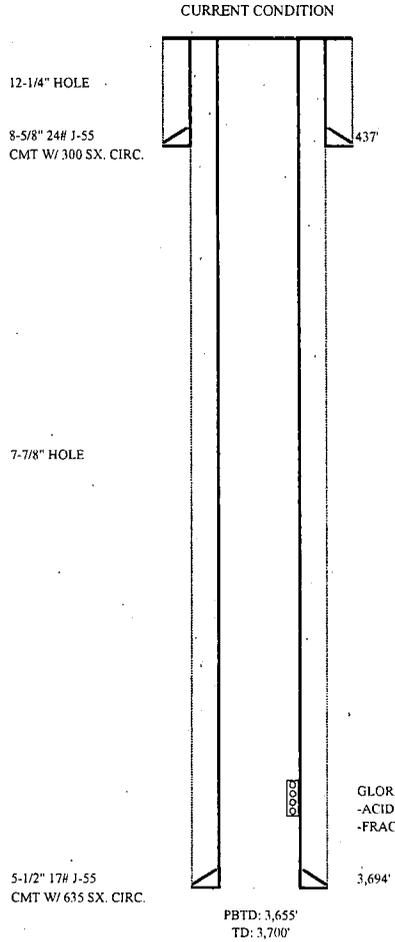
LEASE/WELL: WILLIAMS A FEDERAL 012
 SURF LOCATION: 330' FSL & 2,200' FWL
 BH LOCATION: 331' FSL & 1,642' FWL
 N-29-17S-28E
 CO/ST: EDDY COUNTY, NEW MEXICO
 FIELD: ARTESIA, GLORIETA-YESO
 API NO. 30-015-41890

GR 3710
 SPUDDED 2/28/2014
 COMPLETED 3/15/2014
 LAT 32.7988358
 LONG -104.1992722

MWD SURVEY DATA		
MD (ft)	Inclination (deg)	Azimuth (deg)
505	0.4	287.7
599	5.4	292.5
695	8.4	281.7
790	11.9	273.6
887	15.6	271.2
984	18.9	270.3
1080	23.7	270.8
1176	28	269.2
1272	28.4	269.9
1368	27.1	269.4
1464	27	270.7
1561	28.1	269.9
1656	26.8	269.7
1753	23.4	268.8
1849	19.8	265.1
1946	18.2	268.4
2049	14	275.4
2145	9.4	259.6
2241	5.3	274.1
2338	1.3	234.9
2434	0.7	215.5
2531	1	227.1
2627	0.8	234.6
2723	0.8	232.4
2820	0.3	79.1
2916	0.4	24.2
3012	0.4	75.5
3108	0.2	28.7
3204	0.3	42.3
3302	0.4	77.6
3398	0.2	131.5
3493	0.3	106.6
3589	0.4	69.5
3655	0.4	71.6
3700	0.4	71.6

FORMATION TOPS PER 3160-4

7 RIVERS	-626
QUEEN	1219
GRAYBURG	1682
SAN ANDRES	2014
GLORIETA	3430
YESO	3562



GLORIETA/YESO PERFS: 3,536-3,618' (40 HOLES)
 -ACIDIZE W/ 2,500 GALS 15%
 -FRAC W/ 54,545# 16/30 ARIZONA & 18,866# 16/30 RESIN COATED SAND

KDZ 07-26-2018

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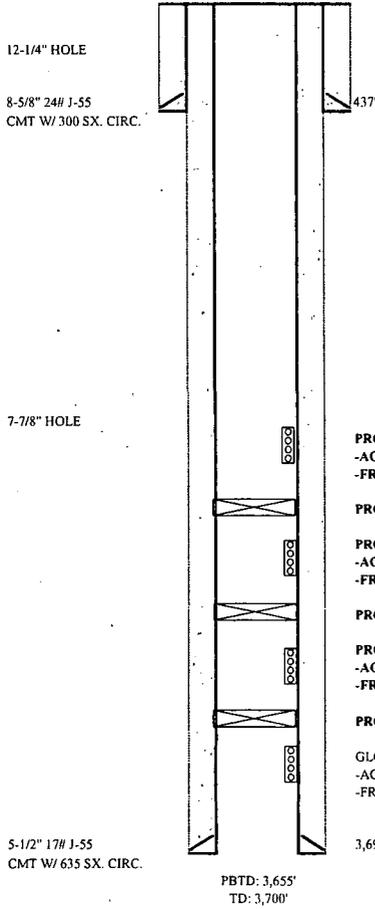
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PROPOSED

FORMATION TOPS PER 3160-4

7 RIVERS	626
QUEEN	1219
GRAYBURG	1682
SAN ANDRES	2014
GLORIETA	3430
YESO	3562



PROPOSED UPPER SAN ANDRES PERFS: 1,980-2,201' (32 HOLES)
 -ACIDIZE W/ ~1,500 GALS 15%
 -FRAC W/ ~30,000# 100 MESH & ~119,700# 40/70 OTTAWA SAND IN SW

PROPOSED CBP @ 2,330'

PROPOSED MIDDLE SAN ANDRES PERFS: 2,461-2,779' (33 HOLES)
 -ACIDIZE W/ ~1,500 GALS 15%
 -FRAC W/ ~30,000# 100 MESH & ~271,530# 40/70 OTTAWA SAND IN SW

PROPOSED CBP @ 2,850'

PROPOSED LOWER SAN ANDRES PERFS: 2,920-3,291' (38 HOLES)
 -ACIDIZE W/ ~1,500 GALS 15%
 -FRAC W/ ~30,000# 100 MESH & ~311,430# 40/70 OTTAWA SAND IN SW

PROPOSED CBP @ 3,450'

GLORIETA/YESO PERFS: 3,536-3,618' (40 HOLES)
 -ACIDIZE W/ 2,500 GALS 15%
 -FRAC W/ 54,545# 16/30 ARIZONA & 18,866# 16/30 RESIN COATED SAND

PBTD: 3,655'
 TD: 3,700'

KDZ 07-26-2018