

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-015-40027
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Staley State
8. Well Number 18
9. OGRID Number 258350
10. Pool name or Wildcat Red Lake; Glorieta-Yeso NE (96836) Red Lake; San Andres (97253)

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐	
2. Name of Operator VANGUARD OPERATING, LLC	
3. Address of Operator 5847 SAN FELIPE, STE. 3000, HOUSTON, TEXAS, 77057	
4. Well Location Unit Letter <u>H</u> : <u>2,310</u> feet from the <u>NORTH</u> line and <u>370</u> feet from the <u>EAST</u> line Section <u>30</u> Township <u>17S</u> Range <u>28E</u> NMPM County <u>EDDY</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3,602' GL	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☒			
CLOSED-LOOP SYSTEM ☐			
OTHER: DHC for pre-approved pools ☐		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Vanguard Operating, LLC plans to downhole commingle (DHC) this San Andres oil well as follows:

1. MIRUSU.
2. RIH w/ 4-3/4" bit on 2-7/8" tbg and DO CBP @ 3,240'. CO to original PBTD (5,058').
3. Run production tbg and land @ ~4,925' and run pump and rods.
4. Produce well as a DHC well.

This work was previously submitted under the prior operator (LRE Operating) on an approved sundry dated 03/23/2015 and the well has an approved DHC order in place—DHC-4740. The San Andres perforations are 1,750-3,077' and the Yeso perms are 3,295-4,660'. The pool allocations will be determined using a former test of the Yeso, the current test of the San Andres and a test of the new commingled production, and will be submitted on a subsequent sundry. Downhole commingling increases total remaining reserves through production efficiency and the ownership in these two pools is identical.

Spud Date: 04/22/2012 Rig Release Date: NM OIL CONSERVATION
ARTESIA DISTRICT
DEC 06 2018

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Kyle Zimmermann TITLE Operations Engineer DATE 12/06/2018
Type or print name Kyle Zimmermann E-mail address: kzimmerman@vnrenergy.com PHONE: 432-202-0145
For State Use Only
APPROVED BY: Rusty Jensen TITLE Business Ops Spec DATE 12-11-2018
Conditions of Approval (if any):

RECEIVED

DEC 06 2018

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State of New Mexico DISTRICT II-ARTESIA OF-DC-102
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised October 15, 2009
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-40027	Pool Code 96836	Pool Name Red Lake, Glorieta, Yeso Northeast
Property Code 309874	STALEY STATE	
UGRID No. 281994	Operator Name LRE OPERATING, LLC	Well Number 18
		Elevation 3601.6

" Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	30	17 S	28 E		2310	NORTH	370	EAST	EDDY

" Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Isfill	Consolidation Code	Order No.						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

NW CORNER SEC. 30 LAT. = 32.8121534°N LONG. = 104.2230975°W NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1927 (NAD27), AND ARE IN DECIMAL DEGREE FORMAT.	NE CORNER SEC. 30 LAT. = 32.8122566°N LONG. = 104.2057085°W SURFACE LOCATION 370' STALEY STATE #18 ELEV. = 3601.6' LAT. = 32.8059004°N (NAD27) LONG. = 104.2069768°W	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization holds an ownership interest or mineral interest in the land including the proposed bottom hole location or has a right to drill this well to the bottom pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>Barry W. Hunt</i> Date: <i>2/28/12</i> Printed Name: <i>Barry W. Hunt</i>
SW CORNER SEC. 30 LAT. = 32.7976322°N LONG. = 104.2230120°W	SE CORNER SEC. 30 LAT. = 32.7977087°N LONG. = 104.2056501°W	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. SEPTEMBER 1, 2011 Date of Survey: <i>2/28/12</i> Signature and Seal of Professional Surveyor: <i>[Signature]</i> Certificate Number: <i>1227</i> SURVEY NO. 581-R2

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State of New Mexico
 Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT**WELL LOCATION AND ACREAGE DEDICATION PLAT**

¹ API Number 30-015-40027	² Pool Code 97253	³ Pool Name Red Lake, San Andres
⁴ Property Code 309874	⁵ Property Name STALEY STATE	
⁷ OGRID No. 281994	⁶ Well Number 18	
⁸ Operator Name LRE OPERATING, LLC.		⁹ Elevation 3602' GL

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	30	17-S	28-E		2310	NORTH	370	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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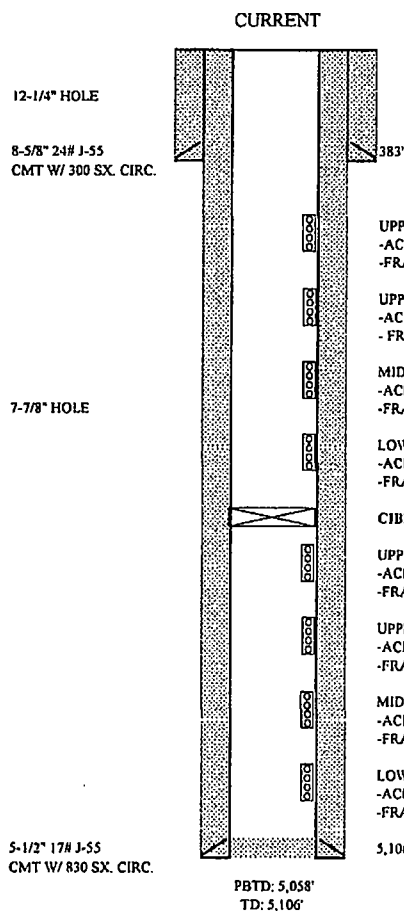
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

30	2310'	370'	¹⁷ OPERATOR CERTIFICATION	
			I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or mineral interest in the land including the proposed bottom hole location or has a right to drill this well on this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order hereinafter entered by this division.	
			Signature: <u>Mike Pippin</u> Date: <u>2/27/15</u>	
			Printed Name: <u>Mike Pippin</u>	
30	2310'	370'	¹⁸ SURVEYOR CERTIFICATION	
			I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.	
			Date of Survey: <u>9/1/11</u>	
			Signature and Seal of Professional Surveyor: <u>Filmon F. Jaramillo</u>	
			Certificate Number: <u>12791</u>	

LEASE/WELL: STALEY STATE 018
 LOCATION: 2,310' FNL & 370' FEL
 H-30-17S-28E
 CO/ST: EDDY COUNTY, NEW MEXICO
 FIELD: RED LAKE, GLORIETA-YESO NE
 RED LAKE, SAN ANDRES
 API NO. 30-015-40027

GR 3602
 SPUDDED 4/22/2012
 COMPLETED 5/10/2012 ORIGINAL YESO COMPLETION
 3/3/2014 UPPER YESO PAY-ADD
 3/21/2015 SAN ANDRES RECOMPLETION
 LAT 32.8060150
 LONG -104.2075729
 FORMATION TOPS PER C-105
 7 RIVERS 500'
 QUEEN 1,065'
 GRAYBURG 1,490'
 SAN ANDRES 1,801'
 GLORIETA 3,173'
 YESO 3,285'
 TUBB 4,712'

INCLINATION SURVEY DATA
 MD (ft) Inclination (deg)
 263 0
 416 1
 953 0.6
 1462 0.6
 1958 0.4
 2465 0.6
 3001 0.4
 3504 1.2
 4002 0.6
 4510 1.2
 5007 1.2
 5075 1.2



CAN BE DHC PER DHC-4740
 ORIGINAL YESO IP: 155 BOPD, 190 MCFPD, 500 BWPD
 AFTER PAY-ADD IP: 52 BOPD, 139 MCFPD, 205 BWPD
 SAN ANDRES IP: 85 BOPD, 40 MCFPD, 600 BWPD

UPPER SAN ANDRES PERFS: 1,750-1,992' (32 HOLES)
 -ACIDIZE W/ 1,500 GALS 15% NEFE
 -FRAC W/ 15,719# 100 MESH & 90,971# 40/70 WISCONSIN SAND IN S/W

UPPER SAN ANDRES PERFS: 2,116-2,342' (24 HOLES)
 -ACIDIZE W/ 1,500 GALS 15% NEFE
 -FRAC W/ 29,996# 100 MESH & 162,718# 40/70 WISCONSIN SAND IN S/W

MIDDLE SAN ANDRES PERFS: 2,408-2,670' (27 HOLES)
 -ACIDIZE W/ 1,500 GALS 15% NEFE
 -FRAC W/ 30,349# 100 MESH & 228,776# 40/70 WISCONSIN SAND IN S/W

LOWER SAN ANDRES PERFS: 2,736-3,077' (31 HOLES)
 -ACIDIZE W/ 1,500 GALS 15% NEFE
 -FRAC W/ 30,064# 100 MESH & 281,763# 40/70 WISCONSIN SAND IN S/W

CIBP @ 3,240'

UPPER YESO PAY-ADD PERFS: 3,295-3,540' (50 HOLES)
 -ACIDIZE W/ 2,429 GALS 7.5%
 -FRAC W/ 74,100# 16/30 & 16,440# 16/30 SIBER PROP SAND IN XL GEL

UPPER YESO PERFS: 3,606-3,934' (49 HOLES)
 -ACIDIZE W/ 2,772 GALS 7.5%
 -FRAC W/ 91,775# 16/30 & 12,901# 16/30 SIBER PROP SAND IN XL GEL

MIDDLE YESO PERFS: 4,003-4,347' (64 HOLES)
 -ACIDIZE W/ 3,500 GALS 7.5%
 -FRAC W/ 92,495# 16/30 & 17,244# 16/30 SIBER PROP SAND IN XL GEL

LOWER YESO PERFS: 4,398-4,660' (40 HOLES)
 -ACIDIZE W/ 3,500 GALS 7.5%
 -FRAC W/ 69,343# 16/30 & 21,999# 16/30 SIBER PROP SAND IN XL GEL

5,106'

KDZ 01/26/2016

LEASE/WELL: STALEY STATE 018

LOCATION 2,310' FNL & 370' FEL
H-30-17S-28E

CO/ST: EDDY COUNTY, NEW MEXICO

FIELD: RED LAKE, GLORIETA-YESO NE
RED LAKE, SAN ANDRES

API NO. 30-015-40027

GR 3602

SPUDDED 4/22/2012

COMPLETED 5/10/2012 ORIGINAL YESO COMPLETION
3/3/2014 UPPER YESO PAY-ADD
3/21/2015 SAN ANDRES RECOMPLETION

LAT 32.8060150

LONG -104.2075729

FORMATION TOPS PER C-105

7 RIVERS 500'

QUEEN 1,065'

GRAYBURG 1,490'

SAN ANDRES 1,801'

GLORIETA 3,173'

YESO 3,285'

TUBB 4,712'

INCLINATION SURVEY DATA

MD (ft) Inclination (deg)

263 0

416 1

953 0.6

1462 0.6

1958 0.4

2465 0.6

3001 0.4

3504 1.2

4002 0.6

4510 1.2

5007 1.2

5075 1.2

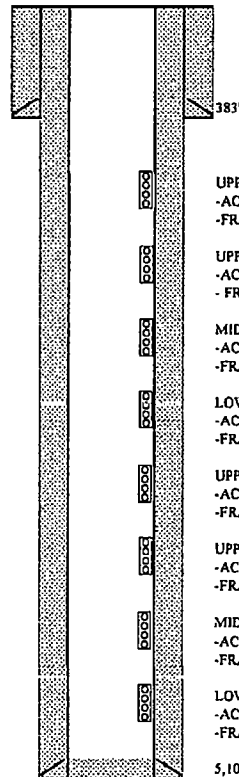
PROPOSED DHC

12-1/4" HOLE

8-5/8" 24# J-55
CMT W/ 300 SX. CIRC.

7-7/8" HOLE

5-1/2" 17# J-55
CMT W/ 830 SX. CIRC.



PBTD: 5,058'
TD: 5,106'

CAN BE DHC PER DHC-4740

ORIGINAL YESO IP: 155 BOPD, 190 MCFPD, 500 BWPD
AFTER PAY-ADD IP: 52 BOPD, 139 MCFPD, 205 BWPD
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