

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. 30-015-40983
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Staley State
8. Well Number 20
9. OGRID Number 258350
10. Pool name or Wildcat Red Lake; Glorieta-Yeso NE (96836) Red Lake; Queen-Grayburg-San Andres (51300)
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3,648' GL

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 O : 330 feet from the SOUTH line and 1,650 feet from the EAST line
 Section 30 Township 17S Range 28E NMPM County EDDY

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

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

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:

- MIRUSU.
- RIH w/ 4-3/4" bit on 2-7/8" tbg and DO CBP @ 3,250'. CO to original PBTD (4,861').
- Run production tbg and land @ ~4,750' and run pump and rods.
- Produce well as a DHC well.

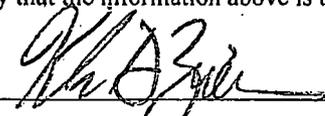
This work was previously submitted under the prior operator (LRE Operating) on an approved sundry dated 04/02/2015 and the well has an approved DHC order in place—DHC ART-4609-W, and these pools are pre-approved State pools. The San Andres perforations are 1,768-3,136' and the Yeso perms are 3,290-4,660'. 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: 03/03/2013 Rig Release Date:

NM OIL CONSERVATION
 ARTESIA DISTRICT
 DEC 06 2018

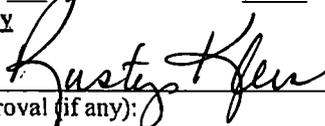
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

RECEIVED

SIGNATURE  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:  TITLE Business Director DATE 12-11-2018

Conditions of Approval (if any):

District I
1625 N. French Dr., Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED
FEB 26 2013
NMOCD ARTESIA

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 30-015-40983		² Pool Code 96836		³ Pool Name Red Lake, Glorieta-Yeso NE	
⁴ Property Code 309874		⁵ Property Name STALEY STATE			⁶ Well Number 20
⁷ OGRID No. 281994		⁸ Operator Name LRE OPERATING, LLC.			⁹ Elevation 3648' 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
Q	30	17-S	28-E		330	SOUTH	1650	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	¹⁷ OPERATOR CERTIFICATION			
	<p><i>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 unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at 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 heretofore entered by the division.</i></p> <p>Signature: <i>Mike Pippin</i> Date: 2/25/13</p> <p>Mike Pippin Printed Name</p>			
	¹⁸ SURVEYOR CERTIFICATION			
<p><i>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.</i></p> <p>12/27/12</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor: Filmon F. Jaramillo</p> <p>12797</p> <p>Certificate Number</p>				

RECEIVED

Form C-102

Revised October 12, 2005

District I
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1301 W. Grand Avenue, Artesia, NM 88201
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NM OIL CONSERVATION State of New Mexico
ARTESIA DISTRICT Energy, Minerals & Natural Resources Department

APR 03 2015 OIL CONSERVATION DIVISION
DEC 06 2018

1220 South St. Francis Dr.
Santa Fe, NM 87505

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DISTRICT II-ARTESIA O.C.D.

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-40983	² Pool Code 51300	³ Pool Name Red Lake, Queen-Grayburg-San Andres
⁴ Property Code 309874	⁵ Property Name STALEY STATE	
⁷ OGRID No. 281994	⁸ Operator Name LRE OPERATING, LLC.	⁶ Well Number 20 ⁹ Elevation 3648' GL

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UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	30	17-S	28-E		330	SOUTH	1650	EAST	EDDY

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30		330'	1650'	SURFACE	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>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 undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at 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 heretofore entered by the division.</i></p> <p>Signature: <u>Mike Pippin</u> Date: 4/2/15</p> <p>Printed Name: Mike Pippin</p>
	330'			<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>12/27/12</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor: Filmon F. Jaramillo</p> <p>12797</p> <p>Certificate Number</p>	
	1650'				

LEASE/WELL: STALEY STATE 020

LOCATION: 330' FSL & 1,650' FEL
O-30-175-28E

CO/ST: EDDY COUNTY, NEW MEXICO

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

API NO. 30-015-40983

GR 3648

SUDDDED 3/3/2013

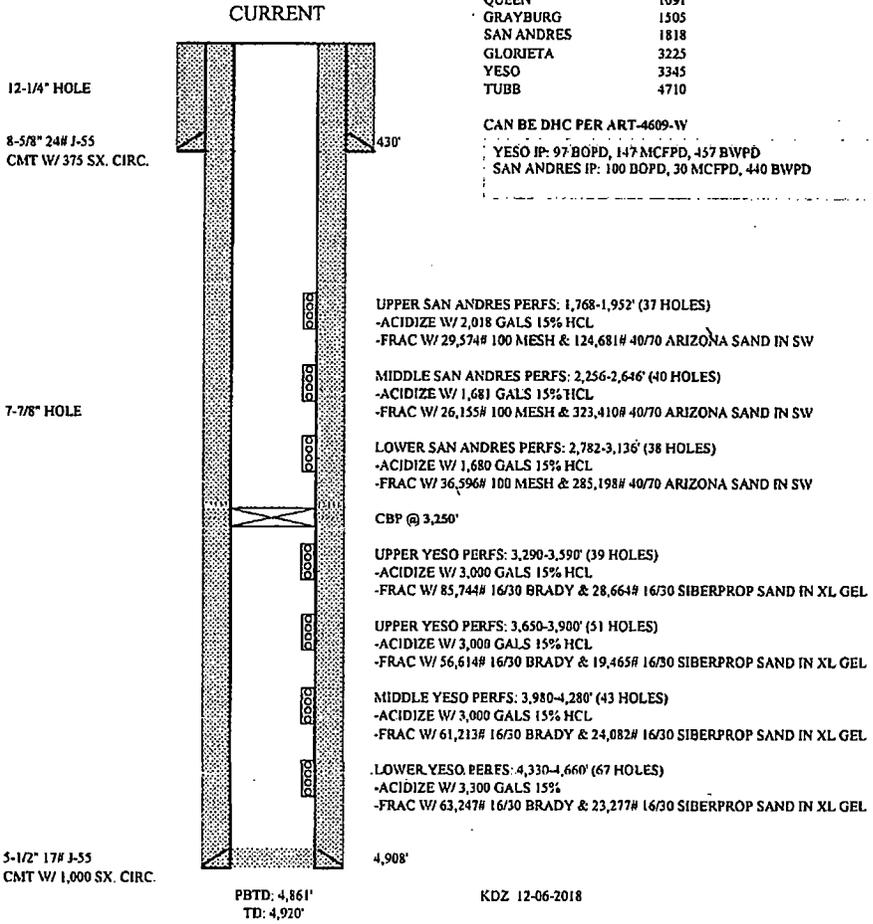
COMPLETED 3/19/2013 ORIGINAL YESO COMPLETION
5/15/2015 SAN ANDRES RECOMPLETION

LAT 32.7987099
LONG -104.2118073

FORMATION TOPS PER C-105
7 RIVERS 539
QUEEN 1091
GRAYBURG 1505
SAN ANDRES 1818
GLORIETA 3225
YESO 3345
TUBB 4710

DEVIATION SURVEY DATA

MD (ft)	Inclination (deg)
229	0.9
398	0.6
753	0.6
1006	0.9
1514	1.5
2021	0.4
2528	1.3
3003	1
3510	0.4
4017	1.2
4493	1.1
4920	0.6



CAN BE DHC PER ART-4609-W

YESO IP: 97 BOPD, 147 MCFPD, 157 BWPD
SAN ANDRES IP: 100 BOPD, 30 MCFPD, 440 BWPD

UPPER SAN ANDRES PERFS: 1,768-1,952' (37 HOLES)

-ACIDIZE W/ 2,018 GALS 15% HCL
-FRAC W/ 29,574# 100 MESH & 124,681# 40/70 ARIZONA SAND IN SW

MIDDLE SAN ANDRES PERFS: 2,256-2,646' (40 HOLES)

-ACIDIZE W/ 1,681 GALS 15% HCL
-FRAC W/ 26,155# 100 MESH & 323,410# 40/70 ARIZONA SAND IN SW

LOWER SAN ANDRES PERFS: 2,782-3,136' (38 HOLES)

-ACIDIZE W/ 1,680 GALS 15% HCL
-FRAC W/ 36,596# 100 MESH & 285,198# 40/70 ARIZONA SAND IN SW

CBP @ 3,250'

UPPER YESO PERFS: 3,290-3,590' (39 HOLES)

-ACIDIZE W/ 3,000 GALS 15% HCL
-FRAC W/ 85,744# 16/30 BRADY & 28,664# 16/30 SIBERPROP SAND IN XL GEL

UPPER YESO PERFS: 3,650-3,900' (51 HOLES)

-ACIDIZE W/ 3,000 GALS 15% HCL
-FRAC W/ 56,614# 16/30 BRADY & 19,465# 16/30 SIBERPROP SAND IN XL GEL

MIDDLE YESO PERFS: 3,980-4,280' (43 HOLES)

-ACIDIZE W/ 3,000 GALS 15% HCL
-FRAC W/ 61,213# 16/30 BRADY & 24,082# 16/30 SIBERPROP SAND IN XL GEL

LOWER YESO PERFS: 4,330-4,660' (67 HOLES)

-ACIDIZE W/ 3,300 GALS 15%
-FRAC W/ 63,247# 16/30 BRADY & 23,277# 16/30 SIBERPROP SAND IN XL GEL

4,908'

PBTD: 4,861'
TD: 4,920'

KDZ 12-06-2018

LEASE/WELL: STALEY STATE 020

LOCATION 330' FSL & 1,650' FEL
O-30-17S-28E

CO/ST: EDDY COUNTY, NEW MEXICO

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

API NO. 30-015-40983

GR 3648

SUDDDED 3/3/2013

COMPLETED 3/19/2013 ORIGINAL YESO COMPLETION
5/15/2015 SAN ANDRES RECOMPLETION

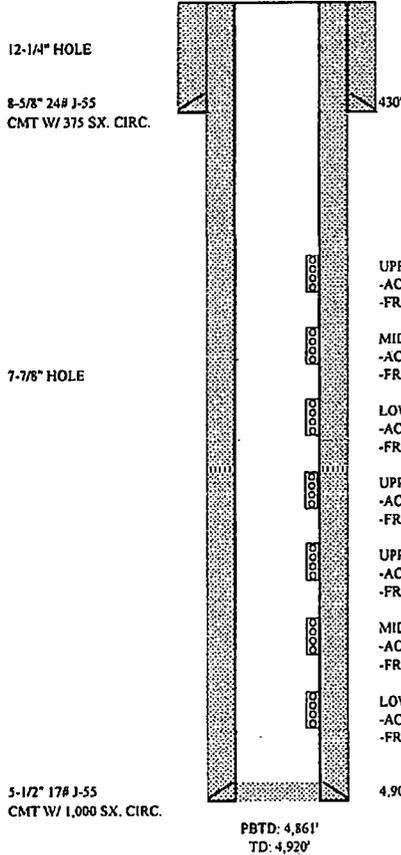
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PROPOSED DHC



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