

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

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

Form C-103
Revised July 18, 2013

WELL API NO. 30-015-40989	
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 21	
9. OGRID Number 258350	
10. Pool name or Wildcat Red Lake; Glorieta-Yeso NE (96836) Red Lake; Queen-Grayburg-San Andres (51300)	
4. Well Location Unit Letter <u>I</u> : <u>1,655</u> feet from the <u>SOUTH</u> line and <u>330</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.) 3,615' GL	
SUNDY 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 <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> 2. Name of Operator VANGUARD OPERATING, LLC 3. Address of Operator 5847 SAN FELIPE, STE. 3000, HOUSTON, TEXAS, 77057	

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"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
DOWNHOLE COMMINGLE <input checked="" type="checkbox"/>	P AND A <input type="checkbox"/>
CLOSED-LOOP SYSTEM <input type="checkbox"/>	CASING/CEMENT JOB <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:

1. MIRUSU.
2. RIH w/ 4-3/4" bit on 2-7/8" tbg and DO CBP @ 3,250'. CO to original PBTD (4,918').
3. Run production tbg and land @ ~4,825' 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 06/19/2015 and the well has an approved DHC order in place—DHC ART-4609-Z, and these pools are pre-approved State pools. The San Andres perforations are 1,758-3,110' and the Yeso perms are 3,310-4,580'. 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: 03/21/2013 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 Kyle Zimmermann TITLE Operations Engineer DATE 12/06/2018

Type or print name Kyle Zimmermann E-mail address: kzimmerman@vnenergy.com PHONE: 432-202-0145
For State Use Only

APPROVED BY: Lustig Klen TITLE Business Ops Spec A DATE 12-11-2018
Conditions of Approval (if any):

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720

District II
511 S. First St., Artesia, NM 88210
Phone: (505) 748-1231 Fax: (505) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6175 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

RECEIVED

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

DEC 06 2018

DISTRICT II-ARTESIA O.C.D. AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-40989	² Pool Code 96836	³ Pool Name Red Lake; BL-4650; N.E.
⁴ Property Code 39648	⁵ Property Name STALEY STATE	
⁶ GRID No. 281994 277558	⁷ Operator Name LRE OPERATING, LLC	
		⁸ Well Number 21
		⁹ Elevation 3615.0

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
I	30	17 S	28 E		1655	SOUTH	330	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.

<p>589°33'02"W 2722.70 FT</p> <p>NW CORNER SEC. 30 LAT. = 32.8121534°N LONG. = 104.2230975°W</p>		<p>589°30'49"W 2621.88 FT</p> <p>N/4 CORNER SEC. 30 LAT. = 32.8122039°N LONG. = 104.2142379°W</p>		<p>NE CORNER SEC. 30 LAT. = 32.8122566°N LONG. = 104.2057065°W</p>	
<p>LOT 1</p> <p>LOT 2</p>		<p>NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1927 (NAD27), AND ARE IN DECIMAL DEGREE FORMAT.</p>		<p>E/4 CORNER SEC. 30 LAT. = 32.8049828°N LONG. = 104.2057820°W</p>	
<p>W/4 CORNER SEC. 30 LAT. = 32.8048934°N LONG. = 104.2230524°W</p>		<p>STALEY STATE #21 ELEV. = 3615.0' LAT. = 32.8022519°N (NAD27) LONG. = 104.2068815°W</p>		<p>330'</p> <p>SURFACE LOCATION</p>	
<p>LOT 3</p> <p>LOT 4</p>		<p>SW CORNER SEC. 30 LAT. = 32.7976322°N LONG. = 104.2230120°W</p>		<p>S/4 CORNER SEC. 30 LAT. = 32.7976685°N LONG. = 104.2142439°W</p>	
<p>SE CORNER SEC. 30 LAT. = 32.7977087°N LONG. = 104.2058501°W</p>		<p>589°36'30"E 2579.98 FT</p>		<p>589°39'23"E 2695.00 FT</p>	

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 patented mineral interest in the land including the proposed bottom hole location or has a right to drill this well as 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.

Eric P. Melusky 11/01/13
Signature Date

Eric Melusky
Printed Name

Emelusky@limerockresources.com
E-mail Address

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.

DECEMBER 27, 2012 W 10:23
Date of Survey

Antonio P. Aramillo
Signature and Seal of Professional Surveyor

Antonio P. Aramillo, PLS 12797
Certificate Number

SURVEY NO. 1425

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

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

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

RECEIVED☒ **AMENDED REPORT****WELL LOCATION AND ACREAGE DEDICATION PLAT**

¹ API Number 30-015-40989	² Pool Code 51300	³ Pool Name Red Lake, Queen-Grayburg-San Andres
⁴ Property Code 39648	⁵ Property Name STALEY STATE	
⁶ Well Number 21		
⁷ OGRID No. 281994	⁸ Operator Name LRE OPERATING, LLC.	
⁹ Elevation 3615' 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
I	30	17-S	28-E		1655	SOUTH	330	EAST	EDDY

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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

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

SURFACE

330'

1655'

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 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.

Signature *Mike Pippin*

Date 5/6/15

Mike Pippin
 Printed Name

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 12/27/12
 Signature and Seal of Professional Surveyor:
 Filmon F. Jaramillo
 12797
 Certificate Number

LEASE/VELL: STALEY STATE #21

LOCATION 1,655' FSL & 330' FEL
I-30-T17S-R28E

CO/ST: EDDY COUNTY, NEW MEXICO

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

API NO. 30-015-40989

GR 3615

SPUDDED 3/21/2013

COMPLETED 4/5/2013 ORIGINAL YESO COMPLETION
6/18/2015 SAN ANDRES RECOMPLETION

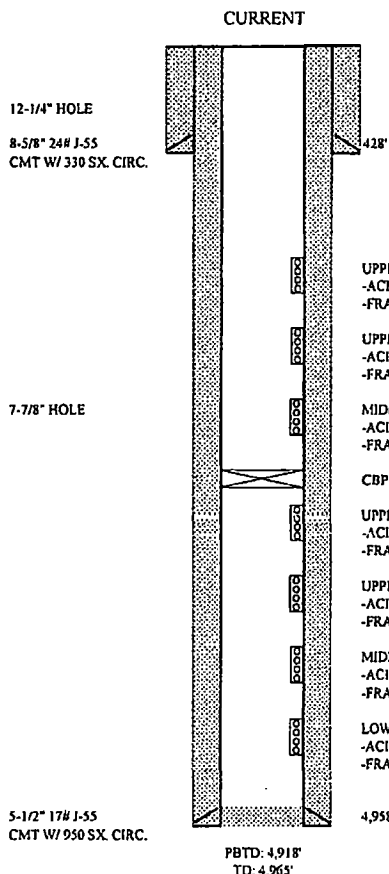
LAT 32.8023758
LONG -104.2074738

FORMATION TOPS PER C-105

SEVEN RIVERS 511
QUEEN 1073
GRAYBURG 1491
SAN ANDRES 1795
GLORIETA 3178
YESO 3295
TUBB 4899

INCLINATION SURVEY DATA

MD (ft)	Inclination (deg)
253	0.7
430	1.1
663	1.2
949	1.2
1425	0.8
1900	0.7
2439	0.4
2946	0.2
3485	0.9
3993	0.8
4468	0.5
4928	0.7



CAN BE DHC PER ART-4609-Z

ORIGINAL YESO IP: 152 BOPD, 314 MCFPD, 666 BWPD
SAN ANDRES IP: 80 BOPD, 30 MCFPD, 400 BWPD

UPPER SAN ANDRES PERFS: 1,758-1,992' (35 HOLES)

-ACIDIZE W/ 1,500 GALS 15%
-FRAC W/ 32,345# 100 MESH & 126,826# 40/70 OTTAWA SAND IN SW

UPPER SAN ANDRES PERFS: 2,238-2,640' (40 HOLES)

-ACIDIZE W/ 1,500 GALS 15%
-FRAC W/ 30,558# 100 MESH & 344,409# 40/70 OTTAWA SAND IN SW

MIDDLE SAN ANDRES PERFS: 2,766-3,110' (35 HOLES)

-ACIDIZE W/ 1,500 GALS 15%
-FRAC W/ 29,386# 100 MESH & 304,471# 40/70 OTTAWA SAND IN SW

CBP @ 3,250'

UPPER YESO PERFS: 3,310-3,610' (53 HOLES)

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

UPPER YESO PERFS: 3,668-3,950' (33 HOLES)

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

MIDDLE YESO PERFS: 4,000-4,300' (37 HOLES)

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

LOWER YESO PERFS: 4,350-4,580' (29 HOLES)

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

PBTD: 4,918'
TD: 4,965'

KDZ 12-06-2018

LEASE/WELL: STALEY STATE #21

LOCATION 1,655' FSL & 330' FEL
I-30-T17S-R28E

CO/ST: EDDY COUNTY, NEW MEXICO

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

API NO. 30-015-40989

GR 3615

SPUDDED 3/21/2013

COMPLETED 4/5/2013 ORIGINAL YESO COMPLETION
6/18/2015 SAN ANDRES RECOMPLETION

LAT 32.8023758
LONG -104.2074738

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