

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

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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.)		WELL API NO. 30-015-37044
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator VANGUARD OPERATING, LLC		6. State Oil & Gas Lease No.
3. Address of Operator 5847 SAN FELIPE, STE. 3000, HOUSTON, TEXAS, 77057		7. Lease Name or Unit Agreement Name Staley State
4. Well Location Unit Letter <u>H</u> : <u>1,650</u> feet from the <u>NORTH</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>		8. Well Number <u>5</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3,595' GL		9. OGRID Number 258350
		10. Pool name or Wildcat Red Lake; Glorieta-Yeso NE (96836) Red Lake; San Andres (97253)

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:

1. MIRUSU.
2. RIH w/ 4-3/4" bit on 2-7/8" tbg and DO CBP @ 3,190'. CO to original PBTD (4,729').
3. Run production tbg and land @ ~4,600' 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 02/20/2015 and the well has an approved DHC order in place—DHC-4728. The San Andres perforations are 1,762-3,140' and the Yeso perms are 3,215-4,595'. 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: 10/27/2009 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@vnrenergy.com PHONE: 432-202-0145

For State Use Only

APPROVED BY: Rusty Kean TITLE Business Ops Spec DATE 12-11-18

Conditions of Approval (if any):

RECEIVED

DEC 06 2018

## DISTRICT I

1625 N. FRENCH DR., BOBBS, NM 86240

## State of New Mexico

Energy, Minerals and Natural Resources Department

## DISTRICT II

1501 W. GRAND AVENUE, ARTERIA, NM 86210

## DISTRICT III

1000 Rio Bravos Rd., Aztec, NM 87410

## DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

## DISTRICT II-ARTESIA O.C.D.

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

## WELL LOCATION AND ACREAGE DEDICATION PLAT

CI AMENDED REPORT

API Number <b>30-015-37044</b>	Pool Code <b>94836</b>	Pool Name <b>Red Lake; Glorieta-Yeso NE</b>
Property Code <b>305451</b>	Property Name <b>STALEY STATE</b>	Well Number <b>5</b>
GRID No. <b>255333</b>	Operator Name <b>LIME ROCK RESOURCES A, L.P.</b>	Elevation <b>3595'</b>

## 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		1650	NORTH	330	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	Joint or Infill	Consolidation Code	Order No.						
40									

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>LOT 1</p> <p>LOT 2</p> <p>LOT 3</p> <p>LOT 4</p>	<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=657594.2 N X=538848.0 E</p> <p>LA' = 32.807751° N LONG. = 104.206894° W</p>		<p>1650'</p> <p>330'</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information hereof 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>George R. Smith</i> 4/21/09 Signature Date George R. Smith, Agent Printed Name</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p>			<p>MARCH 24 2009</p> <p>Date Surveyed</p> <p>Signature &amp; Seal of Professional Surveyor</p> <p><i>Ronald J. Eidson</i> 03/27/09 09.11.0231</p>
	<p>Certificate No. GARY EIDSON 12641 RONALD J. EIDSON 3239</p>			

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

Form C-102  
Revised October 12, 2005  
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State Lease - 4 Copies  
Fee Lease - 3 Copies

RECEIVED

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-015-37044		<sup>2</sup> Pool Code 97253		<sup>3</sup> Pool Name Red Lake, San Andres	
<sup>4</sup> Property Code 309874		<sup>5</sup> Property Name STALEY STATE			<sup>6</sup> Well Number 5
<sup>7</sup> OGRID No. 281994		<sup>8</sup> Operator Name LRE OPERATING, LLC.			<sup>9</sup> Elevation 3595' GL

<sup>10</sup> Surface Location

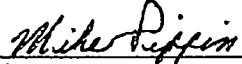
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
H	30	17-S	28-E		1650	NORTH	330	EAST	EDDY

<sup>11</sup> Bottom Hole Location If Different From Surface

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

<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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.

<div style="position: relative; width: 100%; height: 100%;"> <div style="position: absolute; top: 0; right: 0; left: 0; bottom: 0; border: 1px solid black; width: 100%; height: 100%;"></div> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-size: 2em;">30</div> <div style="position: absolute; top: 10%; right: 10%; transform: rotate(90deg); font-size: 1.5em;">1650'</div> <div style="position: absolute; top: 40%; right: 10%; transform: rotate(90deg); font-size: 1.5em;">330'</div> </div>	<p><sup>17</sup> <b>OPERATOR CERTIFICATION</b> 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.</p> <p style="text-align: right;">               Signature <span style="float: right;">1/22/15</span>              Date           </p> <p>             Mike Pippin              Printed Name           </p>	
	<p><sup>18</sup> <b>SURVEYOR CERTIFICATION</b> 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.</p> <p>3/24/09</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor: Ronald Eidson</p>	
	<p>3239</p> <p>Certificate Number</p>	

LEASE/VELL: STALEY STATE 005

LOCATION 1,650' FNL & 330' FEL  
H-30-17S-28E

CO/ST: EDDY COUNTY, NEW MEXICO

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

API NO. 30-015-37044

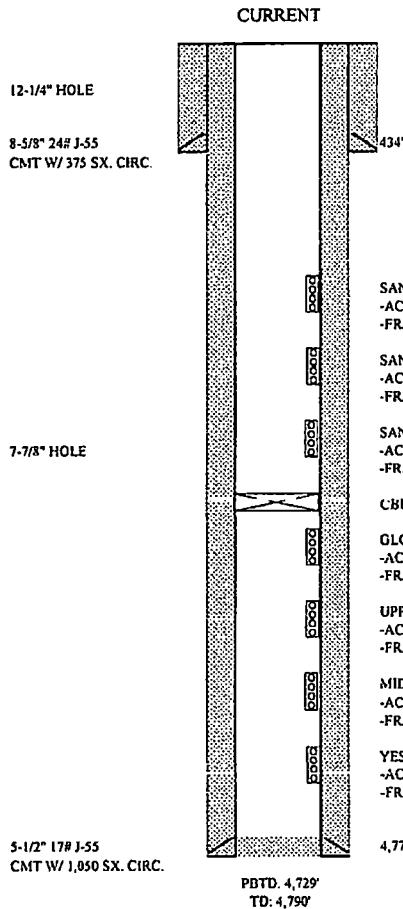
GR 3595

SPUDED 10/27/2009  
COMPLETED 11/22/2009 ORIGINAL YESO  
2/18/2010 UPPER/MIDDLE YESO PAY-ADD  
10/18/2013 GLORIETA/UPPER YESO PAY-ADD  
2/19/2015 SAN ANDRES RECOMPLETION

LAT 32.8078308  
LONG -104.207428

DEVIATION SURVEY DATA

MD (ft)	Inclination (deg)
445	1
935	0.25
1513	0.5
2486	0.75
2992	0.75
3565	1.25
4007	1
4506	1
4790	1.25



FORMATION TOPS PER C-105  
QUEEN 1064  
GRAYBURG 1501  
SAN ANDRES 1813  
GLORIETA 3180  
YESO 3301  
TUBB 4720

CAN BE DHC PER DHC-4728

ORIGINAL YESO IP: 46 BOPD, 104 MCFPD, 281 BWPD  
AFTER PAY-ADD IP: 39 BOPD, 33 MCFPD, 481 BWPD  
AFTER SECOND PAY-ADD IP: 33 BOPD, 121 MCFPD, 275 BWPD  
SAN ANDRES IP: 90 BOPD, 35 MCFPD, 300 BWPD

SAN ANDRES PERFS: 1,762-2,256' (29 HOLES)

-ACIDIZE W/ 1,512 GALS 7.5% HCL

-FRAC W/ 29,424# 100 MESH & 161,844# 40/70 BRADY SAND IN SW

SAN ANDRES PERFS: 2,365-2,664' (31 HOLES)

-ACIDIZE W/ 1,504 GALS 7.5%

-FRAC W/ 30,384# 100 MESH & 256,133# 40/70 BRADY SAND IN SW

SAN ANDRES PERFS: 2,747-3,140' (38 HOLES)

-ACIDIZE W/ 1,503 GALS 7.5%

-FRAC W/ 28,345# 100 MESH & 323,926# 40/70 BRADY SAND IN SW

C&P (g) 3,190'

GLORIETA/UPPER YESO PERFS: 3,215-3,540' (66 HOLES)

-ACIDIZE W/ 4,000 GALS 15%

-FRAC W/ 96,432# 16/30 WISCONSIN & 22,171# 16/30 RESIN COATED SAND IN XL GEL

UPPER YESO PAY-ADD PERFS: 3,668-3,943' (66 HOLES)

-ACIDIZE W/ 4,422 GALS 15% NEFE

-FRAC W/ 100,287# 16/30 OTTAWA & 37,054# 16/30 SIBERPROP SAND IN XL GEL

MIDDLE YESO PAY-ADD PERFS: 3,982-4,218' (71 HOLES)

-ACIDIZE W/ 3,500 GALS 15% NEFE

-FRAC W/ 79,795# 16/30 OTTAWA & 37,054# 16/30 SIBERPROP SAND IN XL GEL

YESO PERFS: 4,305-4,595' (59 HOLES)

-ACIDIZE W/ 5,000 GALS 15% NEFE

-FRAC W/ 116,196# 16/30 OTTAWA & 24,092# SIBERPROP SAND IN XL GEL

4,771'

KDZ 12-06-2018

LEASE/VELL: STALEY STATE 005

LOCATION 1,650' FNL & 330' FEL.  
H-30-17S-28E

CO/ST: EDDY COUNTY, NEW MEXICO

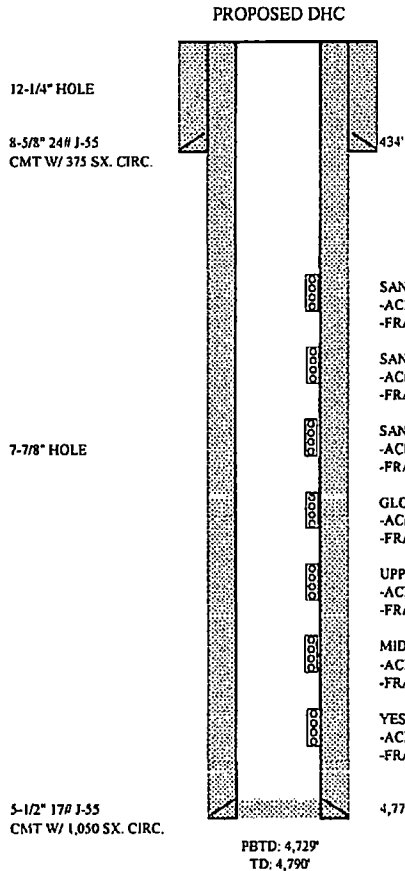
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RED LAKE, SAN ANDRES

API NO. 30-015-37044

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KDZ 12-06-2018