

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

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.)		WELL API NO. 30-015-41066
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>I</u> : <u>2,310</u> feet from the <u>SOUTH</u> line and <u>965</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>25</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3,597' GL		9. OGRID Number 258350
		10. Pool name or Wildcat Red Lake; Glorieta-Yeso NE (96836) Red Lake; Queen-Grayburg-San Andres (51300)

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 @ 3,240'. CO to original PBTD (4,856').
3. Run production tbg and land @ ~4,775' 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-BB, and these pools are pre-approved State pools. The San Andres perforations are 1,740-3,014' and the Yeso perms are 3,314-4,606'. 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: 08/22/2013 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@vnrenergy.com PHONE: 432-202-0145
For State Use Only

APPROVED BY: Rusty Klen TITLE Business Ops Spec A 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
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

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-41066	² Pool Code 51300	³ Pool Name Red Lake, Queen-Grayburg-San Andres
⁴ Property Code 309874	⁵ Property Name STALEY STATE	⁶ Well Number 25
⁷ OGRID No. 281994	⁸ Operator Name LRE OPERATING, LLC.	⁹ Elevation 3597' 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		2310	SOUTH	965	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.
-------------------------------------	-------------------------------	----------------------------------	-------------------------

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="text-align: center; font-size: 2em;">30</div>	<div style="text-align: center; font-size: 2em;">965'</div>	<div style="text-align: center; font-size: 2em;">2310'</div>	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 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. <div style="display: flex; justify-content: space-between;"> <div>Signature <i>Mike Pippin</i></div> <div>Date 6/24/15</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Printed Name Mike Pippin</div> <div></div> </div>
			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. 12/29/12 Date of Survey Signature and Seal of Professional Surveyor: Filmon F. Jaramillo 12797 Certificate Number

LEASE/WELL: STALEY STATE #25

LOCATION 2,310' FSL & 965' 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. 30-015-41066

GR 3597

SPUDED 8/22/2013

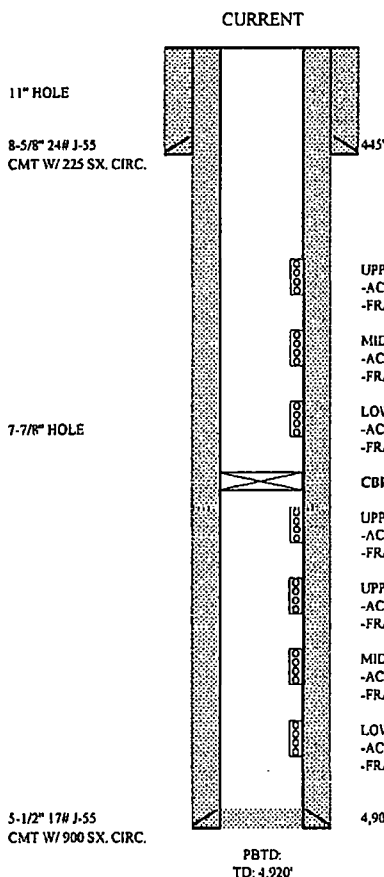
COMPLETED 9/11/2013 ORIGINAL YESO COMPLETION
7/17/2015 SAN ANDRES RECOMPLETION

LAT 32.8041649
LONG -104.2095261

FORMATION TOPS PER C-105
SEVEN RIVERS 488
QUEEN 1045
GRAYBURG 1472
SAN ANDRES 1773
GLORIETA 3166
YESO 3287
TUBB 4687

INCLINATION SURVEY DATA

MD (ft)	Inclination (deg)
420	0.6
856	0.5
1241	0.2
1625	0.7
2010	0.8
2843	0.3
3260	0.3
3672	0.6
4061	0.2
4477	0.4
4860	0.5



CAN BE DHC PER ART-4609-BB

ORIGINAL YESO IP: 137 BOPD, 275 MCFPD, 46 BWPD
SAN ANDRES IP: 85 BOPD, 20 MCFPD, 600 BWPD

UPPER SAN ANDRES PERFS: 1,740-1,962' (27 HOLES)

-ACIDIZE W/ 1,500 GALS 15%
-FRAC W/ 28,625# 100 MESH & 128,615# 40/70 ARIZONA SAND IN SW

MIDDLE SAN ANDRES PERFS: 2,200-2,570' (36 HOLES)

-ACIDIZE W/ 1,500 GALS 15%
-FRAC W/ 29,499# 100 MESH & 312,528# 40/70 ARIZONA SAND IN SW

LOWER SAN ANDRES PERFS: 2,632-3,014' (35 HOLES)

-ACIDIZE W/ 1,500 GALS 15%
-FRAC W/ 30,405# 100 MESH & 321,214# 40/70 ARIZONA SAND IN SW

CBP @ 3,240'

UPPER YESO PERFS: 3,314-3,498' (33 HOLES)

-ACIDIZE W/ 2,165 GALS 15%
-FRAC W/ 74,325# 16/30 & 19,566# 16/30 RESIN COATED SAND IN XL GEL

UPPER YESO PERFS: 3,552-3,798' (25 HOLES)

-ACIDIZE W/ 2,500 GALS 15%
-FRAC W/ 61,139# 16/30 & 19,652# 16/30 RESIN COATED SAND IN XL GEL

MIDDLE YESO PERFS: 3,900-4,229' (29 HOLES)

-ACIDIZE W/ 2,200 GALS 15%
-FRAC W/ 80,689# 16/30 & 21,689# 16/30 RESIN COATED SAND IN XL GEL

LOWER YESO PERFS: 4,298-4,606' (28 HOLES)

-ACIDIZE W/ 3,100 GALS 15%
-FRAC W/ 75,429# 16/30 & 17,222# 16/30 RESIN COATED SAND IN XL GEL

4,909'

PBTD:
TD: 4,920'

KDZ 12-06-2018

LEASE/WELL: STALEY STATE #25

LOCATION 2,310' FSL & 965' FEL
I-30-T17S-R28E

COST: EDDY COUNTY, NEW MEXICO

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

API NO. 30-015-41066

GR 3597

SPUDDED 8/22/2013

COMPLETED 9/11/2013 ORIGINAL YESO COMPLETION
7/17/2015 SAN ANDRES RECOMPLETION

LAT 32.8041649
LONG -104.2095261

FORMATION TOPS PER C-105

SEVEN RIVERS 488
QUEEN 1045
GRAYBURG 1472
SAN ANDRES 1773
GLORIETA 3166
YESO 3287
TUBB 4687

INCLINATION SURVEY DATA

MD (ft)	Inclination (deg)
420	0.6
856	0.5
1241	0.2
1625	0.7
2010	0.8
2843	0.3
3260	0.3
3672	0.6
4061	0.2
4477	0.4
4860	0.5

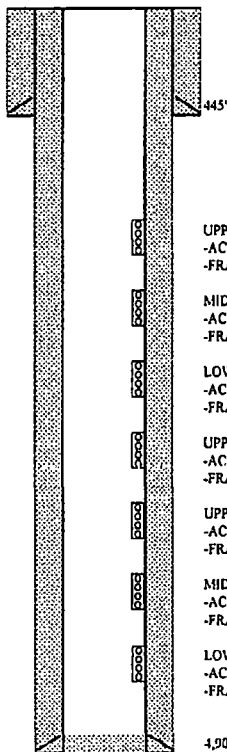
PROPOSED DHC

11" HOLE

8-5/8" 24# J-55
CMT W/ 225 SX. CIRC.

7-7/8" HOLE

5-1/2" 17# J-55
CMT W/ 900 SX. CIRC.



PBTD:
TD. 4,920'

CAN BE DIHC PER ART-4609-BB

ORIGINAL YESO IP: 137 BOPD, 275 MCFPD, 46 BWPD
SAN ANDRES IP: 85 BOPD, 20 MCFPD, 600 BWPD

UPPER SAN ANDRES PERFS: 1,740-1,962' (27 HOLES)

-ACIDIZE W/ 1,500 GALS 15%
-FRAC W/ 28,625# 100 MESH & 128,615# 40/70 ARIZONA SAND IN SW

MIDDLE SAN ANDRES PERFS: 2,200-2,570' (36 HOLES)

-ACIDIZE W/ 1,500 GALS 15%
-FRAC W/ 29,499# 100 MESH & 312,528# 40/70 ARIZONA SAND IN SW

LOWER SAN ANDRES PERFS: 2,632-3,014' (35 HOLES)

-ACIDIZE W/ 1,500 GALS 15%
-FRAC W/ 30,405# 100 MESH & 321,214# 40/70 ARIZONA SAND IN SW

UPPER YESO PERFS: 3,314-3,498' (33 HOLES)

-ACIDIZE W/ 2,165 GALS 15%
-FRAC W/ 74,325# 16/30 & 19,566# 16/30 RESIN COATED SAND IN XL GEL

UPPER YESO PERFS: 3,552-3,798' (25 HOLES)

-ACIDIZE W/ 2,500 GALS 15%
-FRAC W/ 61,139# 16/30 & 19,652# 16/30 RESIN COATED SAND IN XL GEL

MIDDLE YESO PERFS: 3,900-4,229' (29 HOLES)

-ACIDIZE W/ 2,200 GALS 15%
-FRAC W/ 80,689# 16/30 & 21,689# 16/30 RESIN COATED SAND IN XL GEL

LOWER YESO PERFS: 4,298-4,606' (28 HOLES)

-ACIDIZE W/ 3,100 GALS 15%
-FRAC W/ 75,429# 16/30 & 17,222# 16/30 RESIN COATED SAND IN XL GEL

KDZ 12-06-2018