

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. 30-015-36252	
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 4	
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>N</u> : <u>990</u> feet from the <u>SOUTH</u> line and <u>1,980</u> feet from the <u>WEST</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.) 3,625' GL	

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"/>	CASING/CEMENT JOB <input type="checkbox"/>
CLOSED-LOOP SYSTEM <input type="checkbox"/>	P AND A <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.

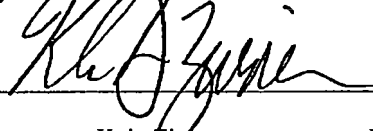
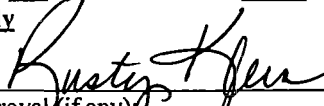
Vanguard Operating, LLC plans to downhole commingle (DHC) this San Andres oil well as follows:

1. MIRUSU.
2. RIH w/ 4-3/4" bit on 2-7/8" tbg and DO CBP @ 3,150'. CO to original PBTD (3,998').
3. Run production tbg and land @ ~3,900' 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 04/10/2015 and the well has an approved DHC order in place—DHC-ART-4609-V, and these pools are pre-approved State pools. The San Andres perforations are 1,728-3,052' and the Yeso perms are 3,308-3,994'. 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: 06/23/2008	Rig Release Date: <input type="text"/>	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 	TITLE Operations Engineer	DATE 12/06/2018
Type or print name <u>Kyle Zimmermann</u>	E-mail address: <u>kzimmerman@vnrenergy.com</u>	PHONE: <u>432-202-0145</u>
For State Use Only		
APPROVED BY: 	TITLE <u>Business Dev Spec A</u>	DATE <u>12-11-2018</u>
Conditions of Approval (if any)		

RECEIVED

District I
1825 N. French Dr. Hobbs, NM 88240

District II
811 South First, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DISTRICT

2040 South Pacheco
Santa Fe, N M 87505

DEC 06 2018

Form C-102

Revised March 17, 1999

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 51300	Red Lake, ON-GB-SA 61-Yeso NE	Pool Name
Property Code 26503	Staley State	Property Name	Well Number 4
OGRID No. 020451	Operation Name SDX RESOURCES, INC.		Elevation 3625

Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
N	30	17-S	28-E		990	SOUTH	1980	WEST	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 Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I HEREBY CERTIFY THAT THE INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.</p>
	<p>Signature <i>Bonnie Atwater</i></p> <p>Printed Name Bonnie Atwater</p>
	<p>Title Regulatory Tech</p> <p>Date 4/21/05</p>
	<p>SURVEYOR CERTIFICATION</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 KNOWLEDGE AND BELIEF.</p> <p>JULY 21, 2000</p> <p>Date of Survey</p> <p>Signature and Seal of Registered Surveyor</p>

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 30-015-36252	² Pool Code 96836	³ Pool Name Red Lake, Glorieta-Yeso NE
⁴ Property Code 309874	⁵ Property Name STALEY STATE	
⁷ OGRID No. 281994	⁸ Operator Name LRE OPERATING, LLC.	
		⁶ Well Number 4
		⁹ Elevation 3625' 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
N	30	17-S	28-E		990	SOUTH	1980	WEST	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.

30

1980'

990'

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.

° *Mike Pippin* 2/11/15

Signature _____ Date _____

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.

4/21/05

Date of Survey _____

Signature and Seal of Professional Surveyor:
Dan R. Reddy

5412

Certificate Number _____

LEASE/WELL: STALEY STATE #004

LOCATION 990' FSL & 1,980' FVL
N-30-17S-28E

CO/ST: EDDY COUNTY, NEW MEXICO

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

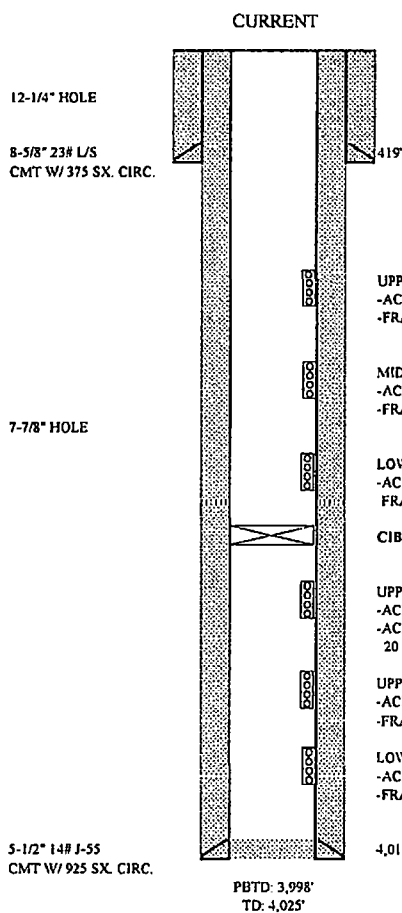
API NO. 30-015-36252

GR 3625

SPUDDED 6/23/2008
COMPLETED 9/20/2008 ORIGINAL YESO
6/16/2009 LOWER YESO PAY-ADD
12/5/2011 UPPER YESO PAY-ADD
4/9/2015 SAN ANDRES WORKOVER

LAT 32.8004913
LONG -104.2072012

INCLINATION SURVEY DATA	
MD (ft)	Inclination (deg)
412	0.75
993	1
1495	0.75
1999	0.5
2533	0.25
3005	0.5
3509	0.75
4012	0.5



FORMATION TOPS PER C-105

QUEEN 1,046'
GRAYBURG 1,470'
SAN ANDRES 1,777'
GLORIETA 3,165'
YESO 3,272'

CAN BE DIIC AS PER ART-4609-V

ORIGINAL YESO IP: 15 BOPD, 27 MCFPD, 262 BWPD
AFTER PAY-ADD IP: 14 BOPD, 22 MCFPD, 234 BWPD
SAN ANDRES IP: 25 BOPD, 35 MCFPD, 320 BWPD

UPPER SAN ANDRES PERFS: 1,728-2,222' (30 HOLES)

-ACIDIZE W/ 1,500 GALS 15% NEFE
-FRAC W/ 30,318# 100 MESH & 253,091# 40/70 ARIZONA SAND IN S/W

MIDDLE SAN ANDRES PERFS: 2,330-2,650' (33 HOLES)

-ACIDIZE W/ 1,500 GALS 15% NEFE
-FRAC W/ 31,000# 100 MESH & 281,693# 40/70 ARIZONA SAND IN S/W

LOWER SAN ANDRES PERFS: 2,750-3,052' (30 HOLES)

-ACIDIZE W/ 1,500 GALS 15% NEFE
FRAC W/ 30,381# 100 MESH & 253,091# 40/70 ARIZONA SAND IN S/W

CIBP @ 3,150'

UPPER YESO PERFS 3,308'-3,498' (38 HOLES)

-ACIDIZE W/ 3,500 GALS 15% NEFE
-ACID FRAC W/ 20,000 GALS 20% HCL, 30,000 GALS 40# LINEAR GEL,
20 PERF BALLS & 3,000 GALS 15% HCL

UPPER YESO PAY-ADD PERFS 3,210-3,628' (30 HOLES)

-ACIDIZE W/ 2,730 GALS 7.5% HCL
-FRAC W/ 155,406# 16/30 & 23,722# 16/30 SIBER PROP SAND IN 25# XL GEL

LOWER YESO PAY-ADD PERFS 3,671'-3,994' (63 HOLES)

-ACIDIZE W/ 3,404 GALS 15% NEFE
-FRAC W/ 164,983# 16/30 SAND IN XL GEL

KDZ 01/26/2016

LEASE/VELL: STALEY STATE #004

LOCATION 990' FSL & 1,980' FWL
N-30-17S-28E

CO/ST: EDDY COUNTY, NEW MEXICO

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

API NO. 30-015-36252

GR 3625

SPUDDED 6/23/2008
COMPLETED 9/20/2008 ORIGINAL YESO
6/16/2009 LOWER YESO PAY-ADD
12/5/2011 UPPER YESO PAY-ADD
4/9/2015 SAN ANDRES WORKOVER

LAT 32.8004913
LONG -104.2072012

INCLINATION SURVEY DATA

MD (ft)	Inclination (deg)
412	0.75
993	1
1495	0.75
1999	0.5
2533	0.25
3005	0.5
3509	0.75
4012	0.5

