

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) 476-1265
1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

MAR 05 2018

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

WELL API NO.
30-015-42367

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name
WELCH RL STATE

8. Well Number 20

9. OGRID Number
258350

10. Pool name or Wildcat
Artesia; GL-Yeso; Red Lake; San Andres

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 E : 1,650 feet from the NORTH line and 420 feet from the WEST line
Section 28 Township 17S Range 28E NMPM County EDDY

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3623' GL

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐
CLOSED-LOOP SYSTEM ☐
OTHER: Recomplete Well to San Andres ☒

SUBSEQUENT REPORT OF:

REMEDIATION WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐
OTHER: ☐

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 would like to recomplate this Yeso oil well to the San Andres & DHC as follows: MIRUSU. TOH w/ rods, pump, tbg. Set a 5-1/2" CBP @ 3,375' & pressure test csg to 3,500 psig. Bleed pressure and chart csg integrity test at 1,000 psig for 30 minutes. (Existing Yeso perfs are @ 3,426'-3,510'). Perforate lower San Andres @ ~3,023'-3,261' w/ 34 holes. MIRU frac company. Stimulate with 1,000 gals 15% HCL & frac w/ ~30,000# 100 mesh, ~131,460# 40/70 Ottawa, and ~ 72,450# 40/70 Coolset sand in slick water. Spot 500 gals 15% HCL across stage 2 perforations.

Set a 5-1/2" CBP @ 3,005' & PT to 3,500 psig. Perf middle San Andres @ 2,769'-3,000' w/ 30 holes. Stimulate with 1,000 gals 15% HCL & frac w/ ~30,000# 100 mesh, ~140,074# 40/70 Ottawa, and ~ 68,250# 40/70 Coolset sand in slick water. Spot 500 gals 15% HCL across stage 3 perforations.

Set a 5-1/2" CBP @ 2,730' & PT to 3,500 psig. Perf upper San Andres @ 2,242'-2,704' w/ 34 holes. Stimulate with 1,000 gals 15% HCL & frac w/ ~30,000# 100 mesh, ~180,215# 40/70 Ottawa, and ~ 94,675# 40/70 Coolset sand in slick water.

CO after frac and drill out CBP's @ 2,730' & 3,005'. CO to CBP @ 3,375': Run 2-7/8" J-55 production tbg & land @ 3,225'. Run pump and rods. Release workover rig. Complete as a single San Andres oil well. See the attached proposed wellbore diagram. Following a test of the San Andres and approval of the DHC application, the CBP @ 3,375' will be removed and the well will be DHC.

Spud Date: 11/16/2014

Rig Release Date:

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

SIGNATURE [Signature] TITLE Operations Engineer DATE 03/01/2019

Type or print name Kyle Zimmermann E-mail address: kzimmerman@vnrenergy.com PHONE: 432-202-0145

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

LEASE/WELL: WELCH RL STATE #20

LOCATION 1,650' FNL & 420' FWL
E-28-T17S-R28E

CO/ST: EDDY COUNTY, NEW MEXICO

FIELD: ARTESIA, GLORIETA YESO

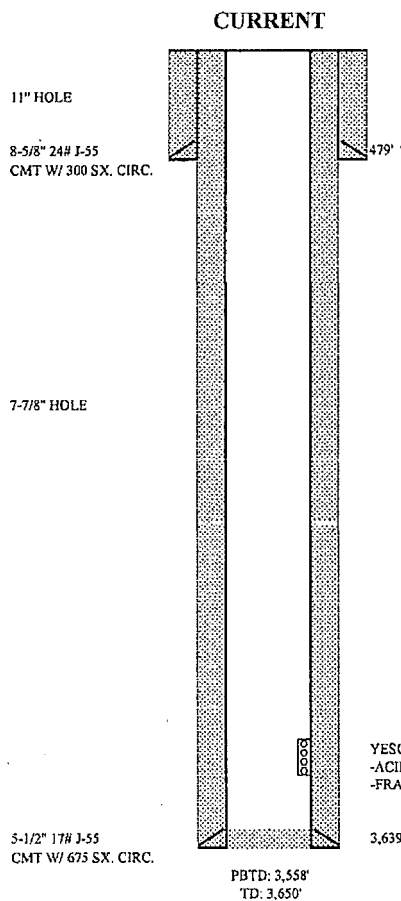
API NO. 30-015-42367

GR 3623

SPUDED 11/16/2014
COMPLETED 12/9/2014 ORIGINAL YESO COMPLETION

LAT 32.8078346
LONG -104.187973

FORMATION TOPS PER C-105
7 RIVERS 615
QUEEN 1181
GRAYBURG 1603
SAN ANDRES 1910
GLORIETA 3288
YESO 3398



YESO IP: 160 BOPD, 636 MCFPD, 1,273 BWPD

YESO PERFS: 3,426-3,510' (29 HOLES)
-ACIDIZE W/ 1,500 GALS 15%
-FRAC W/ 30,173# 100 MESH & 253,302# 40/70 ARIZONA SAND IN SW

KDZ 03-05-2019

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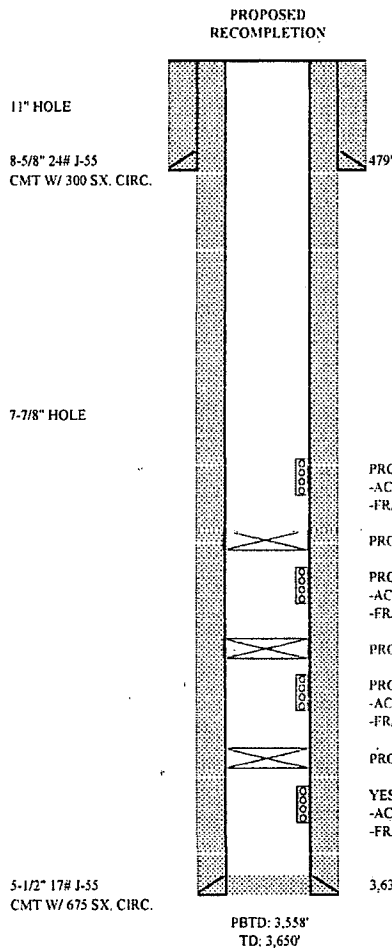
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PROPOSED UPPER SAN ANDRES PERFS: 2,242-2,704' (34 HOLES)
-ACIDIZE W/ ~1,500 GALS 15% HCL
-FRAC W/ ~30,000# 100 MESH, ~180,215# 40/70 OTTAWA, & 94,675# 40/70 COOLSET SAND IN SW

PROPOSED CBP @ 2,730'

PROPOSED MIDDLE SAN ANDRES PERFS: 2,769-3,000' (30 HOLES)
-ACIDIZE W/ ~1,500 GALS 15% HCL
-FRAC W/ ~30,000# 100 MESH, ~140,074# 40/70 OTTAWA, & 68,250# 40/70 COOLSET SAND IN SW

PROPOSED CBP @ 3,065'

PROPOSED LOWER SAN ANDRES PERFS: 3,023-3,261' (34 HOLES)
-ACIDIZE W/ ~1,500 GALS 15% HCL
-FRAC W/ ~30,000# 100 MESH, ~131,460# 40/70 OTTAWA, & 72,450# 40/70 COOLSET SAND IN SW

PROPOSED CBP @ 3,375'

YESO PERFS: 3,426-3,510' (29 HOLES)
-ACIDIZE W/ 1,500 GALS 15%
-FRAC W/ 30,175# 100 MESH & 253,302# 40/70 ARIZONA SAND IN SW

KDZ 03-05-2019