

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
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Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
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State of New Mexico

Form C-101
Revised July 18, 2013

Energy Minerals and Natural Resources

NM OIL CONSERVATION
Oil Conservation Division
ARTESIA DISTRICT
1220 South St. Francis Dr.
JUL 22 2014 Santa Fe, NM 87505

☐ AMENDED REPORT

RECEIVED
APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

| | | |
|---|---------------------------------------|--|
| ¹ Operator Name and Address VANGUARD PERMIAN LLC 5847 SAN FELIPE, SUITE 3000 HOUSTON, TEXAS 77057 | | ² OGRID Number 258350 |
| | | ³ API Number 30-025-26472 015 |
| ⁴ Property Code 9470 | ⁵ Property Name ONSUREZ | ⁶ Well No. 2 |

7. Surface Location

| | | | | | | | | | |
|---------------|---------------|-----------------|--------------|---------|-------------------|-------------------|-------------------|------------------|----------------|
| UL - Lot F | Section 11 | Township 23S | Range 28E | Lot Idn | Feet from 1980 | N/S Line NORTH | Feet From 1980 | E/W Line WEST | County EDDY |
|---------------|---------------|-----------------|--------------|---------|-------------------|-------------------|-------------------|------------------|----------------|

8. Proposed Bottom Hole Location

| | | | | | | | | | |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|

9. Pool Information

| | |
|--|--------------------|
| Pool Name EAST LOVING Loving; Brushy Canyon, EAST | Pool Code 40350 |
|--|--------------------|

Additional Well Information

| | | | | |
|------------------------------|--------------------------------------|--|---------------------------------|---|
| ¹¹ Work Type p | ¹² Well Type O | ¹³ Cable/Rotary | ¹⁴ Lease Type FEE | ¹⁵ Ground Level Elevation 2990 GL |
| ¹⁶ Multiple | ¹⁷ Proposed Depth 6050 | ¹⁸ Formation | ¹⁹ Contractor | ²⁰ Spud Date |
| Depth to Ground water | | Distance from nearest fresh water well | | Distance to nearest surface water |

☐ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

| | | | | | | |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
| | 12 1/4 | 8 5/8 | 24 | 548 | 350 SX | |
| | 5 1/2 | 5 1/2 | 15.5 | 6300 | 1450 SX | |
| | | | | | | |

Casing/Cement Program: Additional Comments

| |
|--|
| |
|--|

22. Proposed Blowout Prevention Program

| | | | |
|------|------------------|---------------|--------------|
| Type | Working Pressure | Test Pressure | Manufacturer |
| | | | |

| | | | |
|---|---------------------|---|--|
| ²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input type="checkbox"/> if applicable. Signature: <i>Dave Heard</i> | | OIL CONSERVATION DIVISION | |
| Printed name: | | Approved By: <i>T. C. Shepard</i> | |
| Title: AGENT | | Title: "Geologist" | |
| E-mail Address: gheard@oilreportsinc.com | | Approved Date: 7-24-2014 Expiration Date: 7-24-2016 | |
| Date: 7-17-14 | Phone: 575-393-2727 | Conditions of Approval Attached | |

VANGUARD PERMIAN LLC

ONSUREZ #2

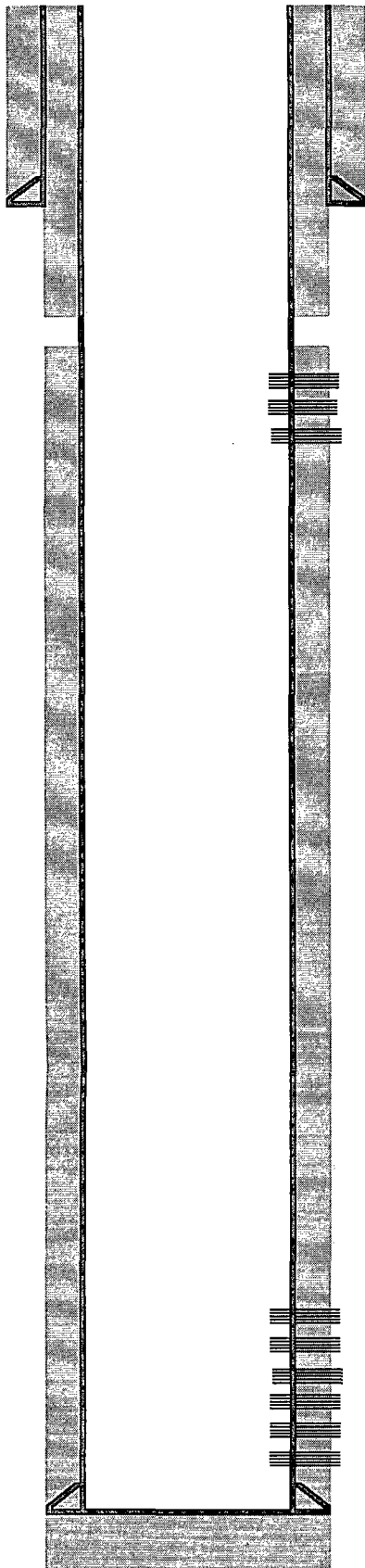
11 T23S R28E API #30-015-26472

1. MIRU completion rig and test anchors.
2. Kill well with 2% KCL water, if necessary. Unseat pump and POOH w/ rods and pump.
3. ND WH and NU BOP. Release TAC and POOH w/ tubing. Lay out 2-7/8" tubing.
4. PU, strap and TIH with 4-3/4" bit, 5-1/2" casing scraper and 3-1/2" frac string tubing. Clean out hole to PBTD (6290') until clean returns, POOH
5. Set the CBP @ 6050'.
6. MU 3-1/8" casing guns set at 1 spf, 180° phasing (0.38" hole, 39.5" penetration).
7. Perforate as follows:
 - a. 5790' – 5802' (12', 12 holes)
 - b. 5952' – 5958' (6', 6 holes)
 - c. 6004' – 6006' (2', 2 holes)
 - d. 6024' – 6028' (2', 2 shots), 22 holes total
8. RD wireline.
9. PU a 5-1/2" Arrowset I packer and RIH to ~5750'. Load tubing/hole with 2 % KCl and set packer.
10. MIRU pump truck and test lines to 3500 psi.
11. Pump 3000 gals 7.5% NEFE acid with rock salt.
 - a. Pump 500 gal then pump 33 ball sealers over next 2000 gals.
 - b. Pump last 500 gals and flush to 6050'.
 - c. Record ISIP, 5 min, 10 min and 30 min.
12. RU swabber and swab well in to test acid job. Recover load and report fluid/gas entry.
13. RDMO completion rig.
14. Call out 5-500 bbl tanks & fill with 2% KCl water. Install frac valve in preparation for frac job down 3-1/2" tubing.
15. RU frac Co. and test lines & pump as per frac schedule.
16. Monitor ISIP, 5 min, 10 min, 15 min. Flowback until well dies.
17. Rig down frac valve and release frac tanks.
18. MIRU completion rig.
19. Load hole and release packer, POOH and lay out 3-1/2" frac string tubing.
20. PU a 4-3/4" bit, sand bailer and 2-7/8" tubing and RIH. Clean out the well as needed and knockout CBP @ 6050' to comeingle all zones, POOH.
21. RIH w/ 5-1/2" TAC, SN and 2-7/8" tubing. Set SN at ~6190', discuss with Mike Jones.
22. RIH w/ rods and pump.
23. RD & MO.
24. Turn well on to production.



Onsurez 2
Loving East - 30-015-26472
Eddy County, New Mexico
CURRENT COMPLETION - 7/2014

KB: 3003'
 GL: 2989'



DV tool @ 3525'

| <u>CASING PROGRAM</u> | | | | | | |
|-----------------------|-------------|---------------|--------------|-------------|-----------------|--------------|
| <u>Depth</u> | <u>Size</u> | <u>Weight</u> | <u>Grade</u> | <u>I.D.</u> | <u>Collapse</u> | <u>Burst</u> |
| 548' | 8 5/8" | 24# | J-55 | 8.097 | 1,370 | 2,950 |
| 6300' | 5 1/2" | 15.5# | J-55 | 4.892 | 4,910 | 5,320 |

Cement

Surface: 350 sx Class C, TOC @ Surf
 Production: 1st stage w/ 500 sx 50/50 poz C + 200 sx CL C, TOC @ DV tool, 2nd
 Stage w/ 650 sx PSL C and 100 sx Class C . TOC @ surf

Pardue Perforations:

4728' - 4740'
 4750' - 4770' 110 holes
 4780' - 4800'

Brushy Canyon "C"

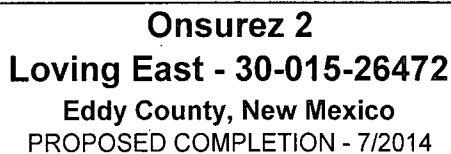
6126' - 6136'
 6142' - 6148'
 6154' - 6156'
 6162' - 6166'
 6172' - 6176'
 6178' - 6182'

PBTD = 6290'

History - Highlights

10/90 - Well spudded
 10/90 - Frac'd 6126' - 6182' w/ 42000# sand.
 ISIP=1100#
 6/02 - Frac'd 4728' - 4800' w/ 125320# 16/30
 sand + 50840# RC 16/30. ISIP=1001#

Note: This schematic is not to scale. For display purposes only.



| CASING PROGRAM | | | | | | |
|----------------|-------------|---------------|--------------|-------------|-----------------|--------------|
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Pardue Perforations:
4728' - 4740'
4750' - 4770' 110 holes
4780' - 4800'

Brushy Canyon "AA"
5790' - 5802' - 1 spf, 12 holes
12 holes total

PROPOSED 7/14

Brushy Canyon "A"
5952' - 5958' - 1 spf, 6 holes
6 holes total

PROPOSED 7/14

Brushy Canyon "B"
6004' - 6006' - 1 spf, 2 holes
6022' - 6024' - 1 spf, 2 holes
4 holes total

PROPOSED 7/14

Brushy Canyon "C"
6126' - 6136'
6142' - 6148'
6154' - 6156'
6162' - 6166'
6172' - 6176'
6178' - 6182'

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