

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
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  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Form C-101  
Revised July 18, 2013

HOBBS OCD

Energy Minerals and Natural Resources

Oil Conservation Division

☐ AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505

DEC 16 2013

RECEIVED

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

1. Operator Name and Address VANGUARD PERMIAN LLC P O BOX 1570 281 NORTH NM HIGHWAY 248 EUNICE, NM 88231		2. OGRID Number 258350
3. API Number 30-025-10337		4. Well No. 1
5. Property Code 312414	6. Property Name STATE C	

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
F	17	22S	37E		1980	NORTH	1981.5	WEST	LEA

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 PENROSE SKELLY; GRAYBURG	Pool Code 50350
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Additional Well Information

11. Work Type P	12. Well Type OIL	13. Cable/Rotary	14. Lease Type STATE	15. Ground Level Elevation 3405
16. Multiple	17. Proposed Depth 3929	18. Formation GRAYBURG	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
		8 5/8		315	210	
		5 1/2		3435	300	
		4" Lnr		3400-3929	70	

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 ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.

Signature:

Printed name: GAYE HEARD

Title: AGENT

E-mail Address: gheard@oilreportsinc.com

Date: 12-13-13

Phone: 575-393-2727

OIL CONSERVATION DIVISION

Approved By:

Title: Petroleum Engineer

Approved Date: 12/16/13

Expiration Date: 12/16/15

Conditions of Approval Attached

DEC 16 2013

VANGUARD PERMIAN LLC

STATE C #1

API #30-025-10337

Sec 17 T22S R37E

1. Unseat pump and POOH w/rods and pump
2. ND WH and NU BOP. Kill well with 2% KCL water, if necessary. Release TAC and POOH w/tubing.
3. PU, strap and TIH with 3 1/8" bit, 20 jts 2 1/16" CS Hydril and 2 7/8" tubing. Clean out hole to PBSD (3856') until clean returns, POOH.
4. MI wireline w/packoff. RIH and GR/CCL
5. Perforate as follows:
  - a. 3712-3716 (4', 8 shots)
  - b. 3740-3742 (2', 4 shots)
  - c. 3770-3774 (4', 8 shots)
  - d. 3781-3783 (2', 4 shots)
  - e. 3792-3798 (6', 12 shots)
  - f. 3805-3820 (15', 30 shots) – (66 total shots)
6. PU a 5 1/2" Arrowset I packer and RIH to ~3350', above 4" liner top at 3400'. Load tubing/hole with 2% KCl and set packer. Test csg/packer down backside to 3500 psi.
7. MIRU pump truck and test lines to 3500 psi.
8. Pump 4000 gals 15% NEFE acid with rock salt.
  - a. Pump 500 gal then pump rock salt over next 3000 gals.
  - b. Pump last 500 gals and flush to 3776'.
  - c. Record ISIP, 5 min, 10 min and 30 min
9. RU swabber and swab well in to test acid job. Recover load and report fluid/gas entry.
10. RIH w/rods and pump.
11. Turn well on production.



State C #1  
 Grayburg - 30-025-10337  
 Lea County, New Mexico  
 CURRENT COMPLETION - 10/2013

KB: 3415'  
 GL: 3398'

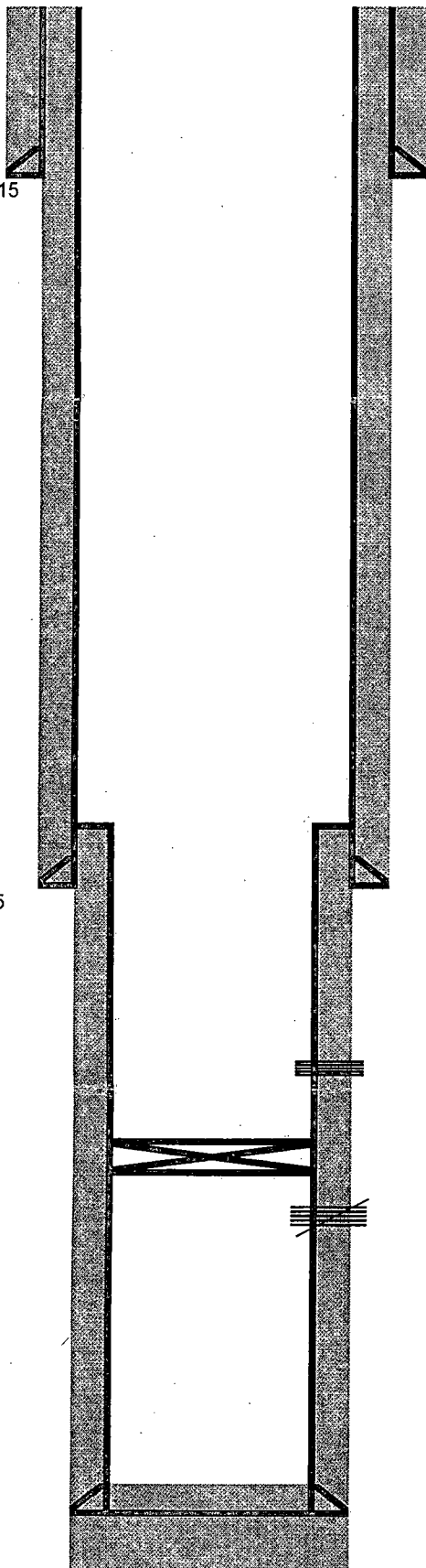
TOC @ surf  
 500 sxs

8 5/8" csg @ 315

TOC @ surf  
 1050 sxs

5 1/2" csg @ 3435

4" csg @ 3929



#### CASING PROGRAM

Depth	Size	Weight	Grade	I.D.	Collapse	Burst
315	8 5/8"	24#	J-55	8.097	1,370	2,950
3435	5 1/2"	14#	K-55	4.892	4,910	5,320
3929	4"	12.5	K-55	4.892	4,910	5,320

#### PRODUCTION TUBING

Depth	Size	Weight	Grade	Threads
unknown	2 7/8"	6.5#	J-55	EUE

Top of 4" Liner at 3400'

Grayburg Perforations:  
 3830' - 3834' (2 spf, 4 holes)

Cmt retainer @ 3856'

San Andres Perforations: Squeezed in 1980  
 3,864' (3 holes)

PBD = 3,929' FC

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



**State C #1**  
**Grayburg - 30-025-10337**  
**Lea County, New Mexico**  
**PROPOSED COMPLETION - 11/2013**

KB: 3415'  
 GL: 3398'

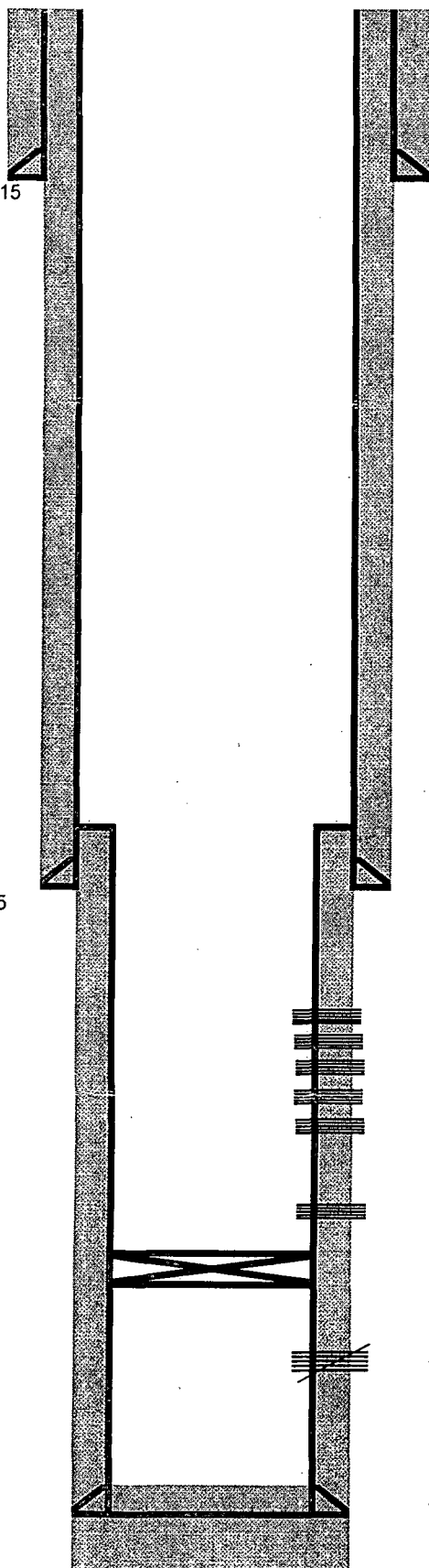
TOC @ surf  
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**CASING PROGRAM**

<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>I.D.</u>	<u>Collapse</u>	<u>Burst</u>
315	8 5/8"	24#	J-55	8.097	1,370	2,950
3435	5 1/2"	14#	K-55	4.892	4,910	5,320
3929	4"	13.4#	N-80	3.340	12,110	11,550

3.215" Drift

**PRODUCTION TUBING**

<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Threads</u>
unknown	2 7/8"	6.5#	J-55	EUE

**Top of 4" Liner at 3400'**

**Grayburg Perforations:**

3712' - 3716' (2 spf, 8 holes)  
 3740' - 3742' (2 spf, 4 holes)  
 3770' - 3774' (2 spf, 8 Holes)  
 3781' - 3783' (2 spf, 4 Holes)  
 3792' - 3796' (2 spf, 12 Holes)  
 3805' - 3820' (2 spf, 30 Holes)

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**Grayburg Perforations:**

3830' - 3832' (2 spf, 4 holes)

**Cmt retainer @ 3856'**

**San Andres Perforations: Squeezed in 1980**  
 3,864' (3 holes)

**PBTD = 3,929' FC**

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