

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
Energy Minerals and Natural Resources

Form C-101
Revised July 18, 2013

Oil Conservation Division

HOBBS OGD AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505

NOV 15 2013

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

Operator Name and Address VANGUARD PERMIAN LLC P O BOX 281 NORTH HIGHWAY 248 EUNICE, NM 88231		OGRID Number 258350
Property Code 013030 312410		API Number 30-025-26713
Property Name GRIZZELL B		Well No. 4

Surface Location

UL - Lot G	Section 8	Township 22S	Range 37E	Lot Idn	Feet from 1838	N/S Line NORTH	Feet From 1750	E/W Line EAST	County LEA
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Proposed Bottom Hole Location

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

Pool Name EUNICE GRAYBURG SAN ANDRES, SOUTHWEST	Pool Code 24180
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Additional Well Information

Work Type P	Well Type 0	Cable/Rotary	Lease Type STATE	Ground Level Elevation 3419
Multiple	Proposed Depth	Formation GRAYBURG	Contractor	Spud Date
NO				
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

Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
		13 3/8	48#	1163		
		9 5/8	36#	3910		
		7	20#,23#,26#	7500		

Casing/Cement Program: Additional Comments

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

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>Gaye Heard</i>		OIL CONSERVATION DIVISION	
Printed name: GAYE HEARD		Approved By: <i>[Signature]</i>	
Title: AGENT		Title: Petroleum Engineer	
E-mail Address: gheard@oilreportsinc.com		Approved Date: NOV 26 2013	
Date: 11/13/13		Expiration Date:	
Phone: 575-393-2727		Conditions of Approval Attached	

NOV 26 2013

VANGUARD PERMIAN LLC
GRIZZEL B #4
G 8 T22S R37E LEA COUNTY
API#30-025-26713

NOV 15 2013

RECEIVED

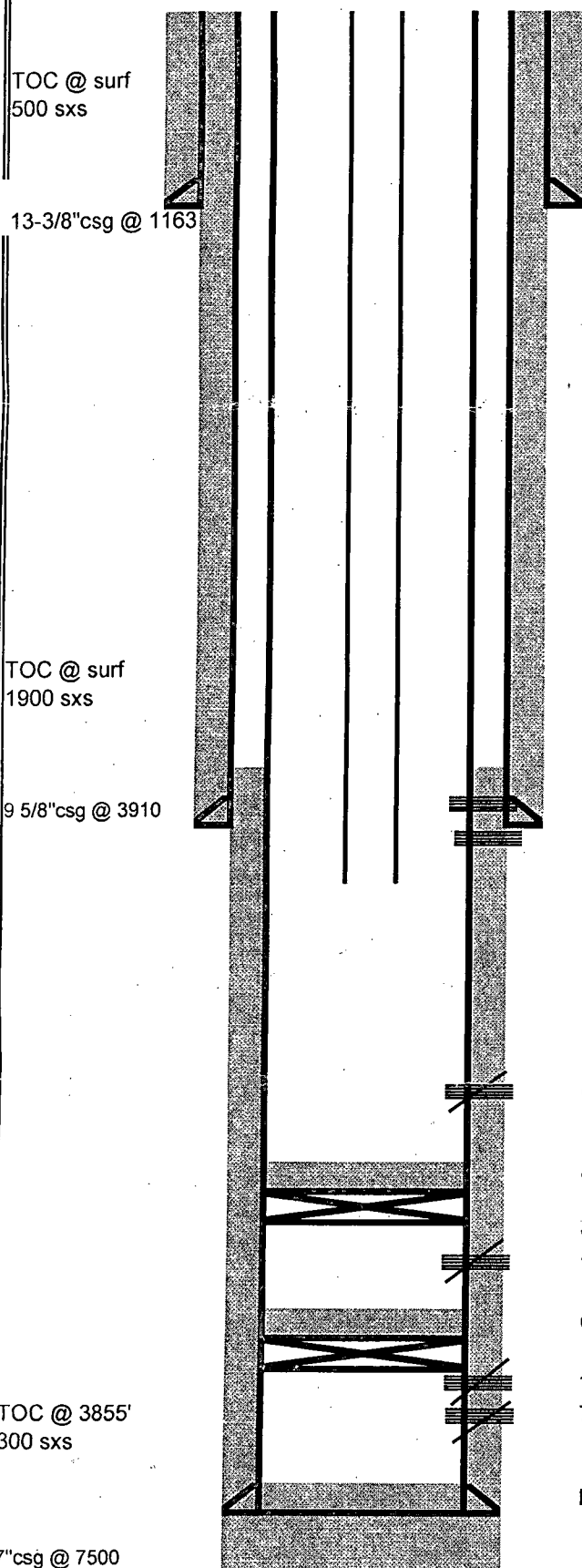
We want to move up to the Grayburg, we will need to circulate cement behind The 7" casing in order to get frac on the Grayburg.

1. MIRU completion rig and test anchors
2. Pump 4000 gals 15% NEFE acid with 125 ball sealers.
 - a. Pump 500 gals and flush to 3874'.
 - b. Pump last 500 gals and flush to 3874'.
 - c. Record ISIP, 5 min, 10 min and 30 min
3. PU 7" CIBP and RIH, set @ 3850. Dump sand on CBP. Test CBP to 3500 psi
4. Perforate as follows:
 - a. 3820-3811 (1', 2 shots)
5. PU packer and RIH to 3800' and set. Test Packer to 3500 psi.
6. MIRU cementers.
7. Open 7"x9-5/8" annulus and pump down tubing to get circulation up Annulus and injection rate.
8. Pump 300 sx cement, displace with water to 3810. WOC for 24 hrs.
9. RU power swivel and PU bit to drill cement and cleanout to CIBP @ 3850, Test casing to 500 psi and hold for 30 mins.
10. Set CBP @ 3800, test CBP to 3700 psi
11. MU 3-1/8" slick casing guns.
12. Perforate Grayburg as follows:
 - a. 3660-3670 (10', 20 shots)
 - b. 3780-3790 (10', 20 shots)
13. Pump 2500 gals 15% NEFE acid.
14. RU frac Co. and frac with 85,000lbs proppant
15. PU 2 7/8" production string and put well on production.



VANGUARD
PERMIAN, LLC

Grizzell B #4
Eunice San Andres SW - 30-025-26713
Lea County, New Mexico
CURRENT COMPLETION - 10/2013



CASING PROGRAM						
Depth	Size	Weight	Grade	I.D.	Collapse	Burst
1163	13-3/8"	48#				
3910	9 5/8"	36#	K-55	8.097	1,370	2,950
7500	7"	20,#23#,26#	K-55	4.892	4,910	5,320

PRODUCTION TUBING				
Depth	Size	Weight	Grade	Threads
4100.00	2 7/8"	6.5#	J-55	EUE

HOBBS OCD

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San Andres Perforations:
3,885' - 3,900' (2 spf, 31 holes)
4,026' - 4,046' (2 spf, 40 holes)

Drinkard Perforations Sqz'd 3/98:
6,423' - 6,686' Sqz'd

CIBP @ 7080', capped w/ 35' cmt

Wantz Abo Perforations:
7,100' - 7,138'

CIBP @ 7200', capped w/ 35' cmt

7,234' - 7,245'
7,254' - 7,258'

PBTD = 7,045'

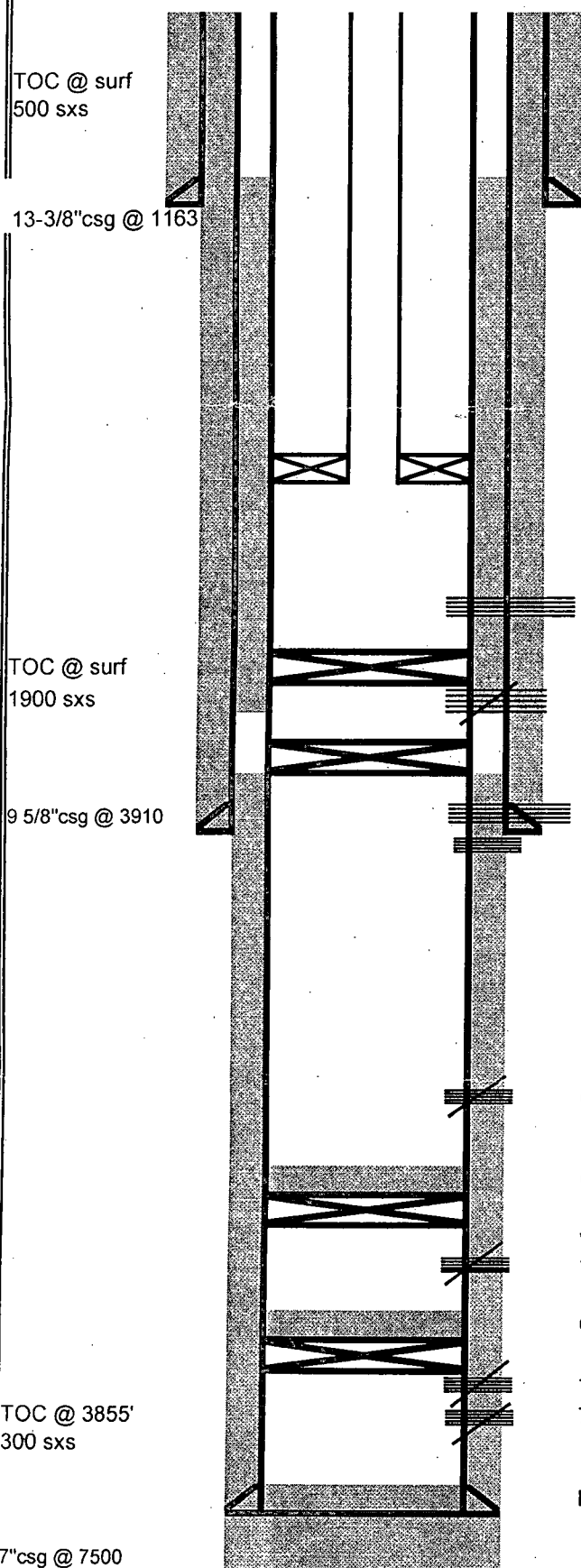
Note: This schematic is not to scale. For display purposes only.



VANGUARD
PERMIAN, LLC

Grizzell B #4
Eunice San Andres SW - 30-025-26713

Lea County, New Mexico
PROPOSED COMPLETION - 10/2013



CASING PROGRAM						
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3910	9 5/8"	36#	K-55	8.097	1,370	2,950
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FRAC TUBING				
Depth	Size	Weight	Grade	Threads
3500.00	3.5"	7.7#	J-55	EUE

HOBBS OCD

NOV 15 2013

RECEIVED

Packer @ 3600' for frac job

Grayburg Perforations:

3,660' - 3,670' (2 spf, 20 holes)

3,780' - 3,790' (2 spf, 20 holes)

PROPOSED

PROPOSED

CIBP @ 3800'

Squeeze perms @ 3820' - 3821'

CIBP @ 3850'

CIBP @ 3850'

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