Form 3160-5
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on page 2.

HOBBS OCD
FEB 22 2016
RECEIVED

1. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. NM-1410
	6. If Indian, Allottee or Tribe Name
	7. If Unit of CA/Agreement, Name and/or No. Federal
	8. Well Name and No. 1
2. Name of Operator VANGUARD PERMIAN LTD	9. API Well No. 30-025-26304
3a. Address 5847 SAN FELIPE, SUITE 3000, HOUSTON, TEXAS 77057 / 3b. Phone No. (include area code) 575-393-2727	10. Field and Pool or Exploratory Area EUNICE SAN ANDRES, SOUTHWEST
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) UNIT K SEC 17 T22S R37E 2310/S & 2310/W	11. County or Parish, State LEA NEW MEXICO

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☑ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Proposed:
Pump cement squeezes
Set packers and pressure test
Drill out CIBP
Perforate San Andres
Acidize San Andres perfs w/ 15% NEFE

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) COLLEEN GERMANY

Title AGENT

Signature Colleen Germany

Date 09/04/2014

APPROVED
FEB 5 2016
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

KG

MAR 02 2016

VANGUARD PERMIAN, LLC

Federal 1
Yates,Queen/Penrose Skelly - 30-025-26304
Lea County, New Mexico
PROPOSED COMPLETION - 8/2014

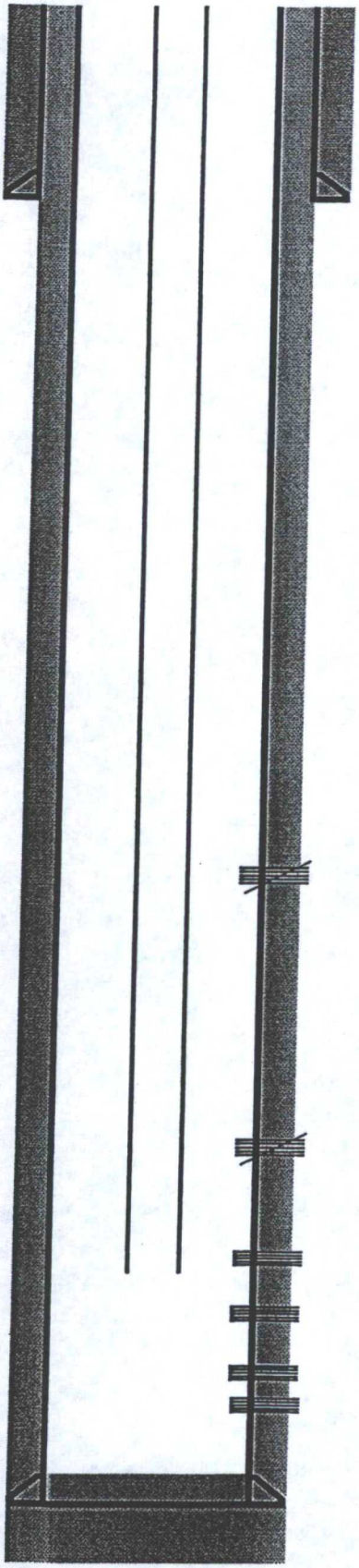
KB: 3394'
GL: 3382'

TOC @ surf
250 sxs

8 5/8"csg @ 370'

TOC @ surface
1300 sxs

5 1/2"csg @ 4310



CASING PROGRAM

Depth	Size	Weight	Grade	I.D.	Collapse	Burst
370'	8 5/8"	24#	J-55	8.097	1,370	2,950
4310	5 1/2"	17#	K-55	4.892	4,910	5,320

PRODUCTION TUBING

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

Yates, 7Rivers, Queen Perforations 23 holes:
2,652', 54',56',61',84',86',88',94', 2824',26',28',43',45',47',
2924',26',28',3086',3101',82',84',86',3207' (23 holes)
Squeeze perfs 2014

Penrose Skelly Perforations 36 holes:
3,445' - 3,614' (36 holes)
Squeeze perfs 2014

San Andres Perforations:
3,841',54',66',74',82',3900',10',15',27',34',42' (11 holes)
3840' - 3843' (3 spf, 9 holes) **PROPOSED**
3866' - 3883' (3 spf, 51 holes) **PROPOSED**
3908' - 3922' (3 spf, 42 holes) **PROPOSED**
3932' - 3938' (3 spf, 18 holes) **PROPOSED**
4,015',38',47',56',62',70',78',86',90',4108',15',21',29',42',
46',59',81',92',97', 4204',17',27' (22 holes)

PBTD = 3,809' FC

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

VANGUARD PERMIAN LLC

FEDERAL #1 NM-1410

UNIT K SEC 17 T22S R37E API #30-025-26304

Procedure:

1. MIRU completion rig and test anchors.
2. Unseat pump and POOH w/ rods and pump.
3. ND WH and NU BOP. Kill well with 2% KCL water, if necessary. Release TAC and POOH w/ tubing.
4. PU, strap and TIH with 4-3/4" bit, 5-1/2" casing scrapper & 2-7/8" tubing. Clean out hole to CIBP @ 3812', circulate until clean returns, POOH.
5. PU a cement retainer and RIH to ~3420' and set same. Get injection rate and prepare to pump cement.
6. Pump 1st cement squeeze as per attached procedure.
7. Release from cement retainer and reverse circulate to clean hole, POOH.
8. PU second cement retainer and RIH to ~2630', set same. Get injection rate and prepare to pump cement squeeze.
9. Pump 2nd cement squeeze as per attached procedure.
10. Release from cement retainer and reverse circulate to clean hole, POOH.
11. WOC for minimum 8 hrs.
12. PU a 4-3/4" bit, 6 drill collars and RIH, drill out both cement retainers and cement to 3620', POOH.
13. PU test packer and RIH to 3420' and set packer. Pressure test lower squeeze perfs to 500 psi.
14. Release packer and PU to 2640' and set packer, test to 500 psi.
15. PU bit and collars and RIH to drill out CIBP at 3812', continue in hole to 4250', circulate hole clean, POOH.
16. MI wireline w/ packoff.
17. MU 3-1/8" slick casing guns set at 3 spf, 120° phasing (0.40" hole, 21" penetration).
18. Then Perforate the San Andres as follows:

a. 3840' - 3843' (3', 3 spf, 9 shots)
b. 3866' - 3883' (17', 3 spf, 51 shots)
c. 3908' - 3922' (14', 3 spf, 42 shots)
d. 3932' - 3938' (6', 3 spf, 18 shots)

19. RD wireline.
20. PU a 5-1/2" Arrowset I packer and RIH with tubing to ~3780'.
21. MIRU pump truck (with 5000 gals acid) and test lines to 3500 psi.

a. Spot 500 gals of acid across San Andres perforations. Load tubing with 2 % KCl and set packer at 3780'.
b. Pump 1000 gals 15% NEFE acid with 2000 lbs rock salt.
c. Pump another 1000 gals acid with 2000 lbs rock salt.
d. Pump 1000 gal acid and 3000 lbs rock salt.
e. Pump 1000 gal acid and 3000 lbs rock salt.
f. Pump last 500 gals and flush to 3942'.
g. Record ISIP, 5 min, 10 min and 30 min.

22. Swab test well. If water volumes dictate, a sub pump may be required to move the water. Call the office with swab results to discuss.
23. Release Arrowset packer and POOH.
24. RIH w/ 5-1/2" TAC, SN and 2-7/8" tubing. Set SN at ~4000'.
25. RIH w/ rods and pump.
26. RD & MO.
27. Turn well on to production.

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 & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-26304	24180	SW EUNICE SAN ANDRES

[4] Property Code	[5] Property Name	[6] Well Number
312408	FEDERAL	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
258350	VANGUARD PERMIAN LLC	3386.7

[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
K	17	22S	37E		2310	SOUTH	2310	WEST	LEA

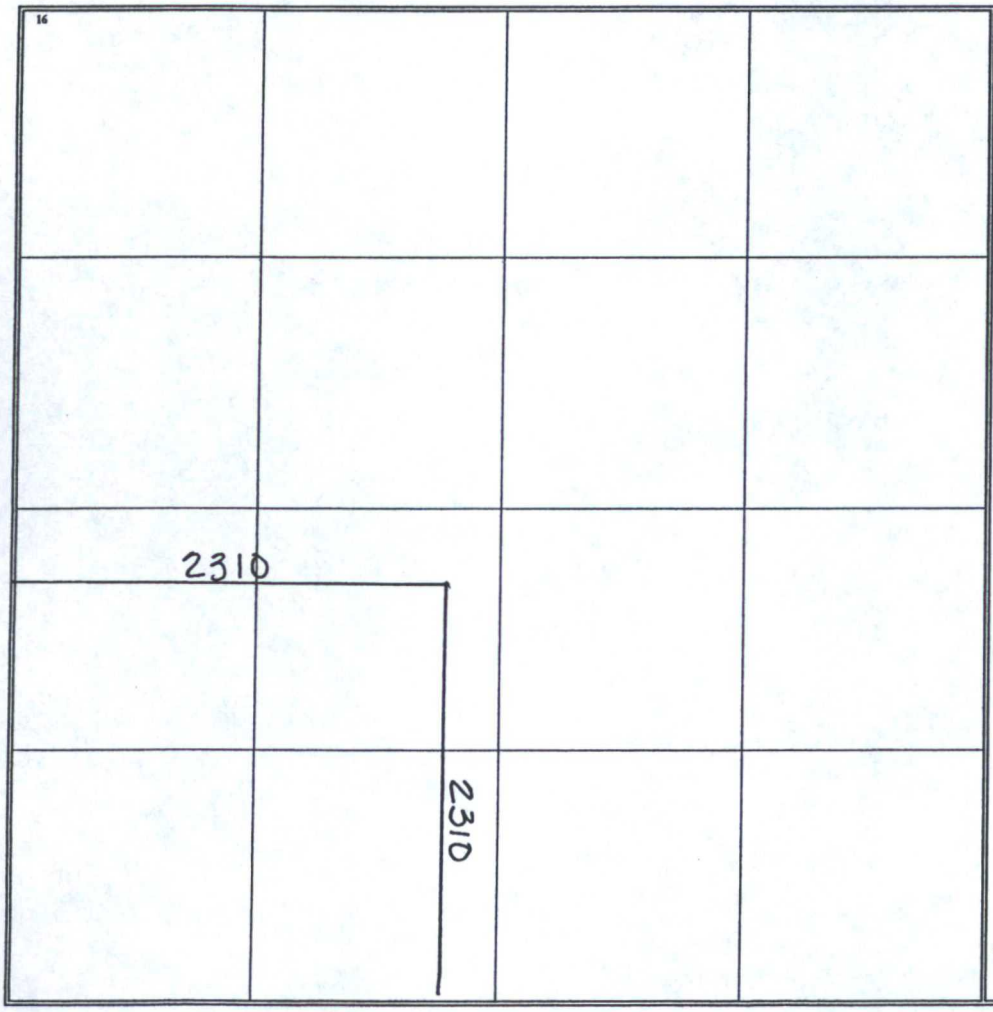
[11] Bottom Hole Location If Different From Surface

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	[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.

[16]



[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.

Colleen Germany 9-4-14
Signature Date

COLLEEN GERMANY
Printed Name

cgermany@oilreportsinc.com
E-mail Address

[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.

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

Federal 1
30-025-26304
Vanguard Permian LLC
February 05, 2016
Conditions of Approval

Notify BLM at 575-393-3612 a minimum of 24 hours prior to commencing work.

Work to be completed by May 05, 2016.

1. **Cement squeeze approved as written.**

2. **Must conduct a casing integrity test before perforating and fracturing. Submit results to BLM. The CIT is to be performed on the production casing to max treating pressure. Notify BLM if test fails**

3. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.

4. Surface disturbance beyond the originally approved pad must have prior approval.

5. Closed loop system required.

6. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

7. Operator to have H2S monitoring equipment on location.

8. A minimum of a **2000 (2M)** BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (2M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.

9. **Subsequent sundry required detailing work done, C-102 form, and completion report with the new formation. Operator to include well bore schematic of current well condition when work is complete.**

JAM 020516