

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.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

VANGUARD PERMIAN LLC

3a. Address

P O BOX 1570 281 NORTH NW HIGHWAY 248, EUNICE NM 88231

3b. Phone No. (include area code)

575-393-2727

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

UNIT K SEC 17 T22S R37E 1650/S & 2310/W

5. Lease Serial No.

NM 89872

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

Federal 1-17

8. Well Name and No.

3

9. API Well No.

API #30-025-38550

10. Field and Pool or Exploratory Area

DRINKARD/WANTZ ABO

11. County or Parish, State

LEA

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	PERF
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recompleat 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 recompleat 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.)

PLEASE SEE ATTACHMENT

HOBBS OCD

MAY 01 2014

RECEIVED  
SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

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

GAYE HEARD

Title AGENT

Signature

*Gaye Heard*

Date 09/27/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Office

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.

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)

*WBB/OCD 5/5/2014*

MAY 05 2014





**WORKOVER PROCEDURE**  
**Add Perforations & Acidize the Drinkard - Abo**  
**Federal 1-17 #3**  
**Eunice Area**  
**Lea County, New Mexico**  
**9/23/2013**

AFE #

**Well Data:**

RKB - GL: 3397' / 3387'  
Surf. Casing: 8-5/8", 24# J-55, set at 1158'  
Prod. Casing: 5-1/2", 17# K-55, set at 6867'  
Tbg & Pkr: 2 7/8", 6.5# J-55 EUE, set at unknown  
Perforations: Drinkard/Abo 6,538' – 6,752' (See WBD)  
PBTD: 6,817'  
BHP: Not certain – well on pump  
BHT: 105°F @ TD from logs

**Casing Specifications**

Depth ( ft)	Casing Wt & Grade	Burst	Col	Body Yield	JT Yield	Wall	ID	Drift Dia.	Top Cmt
0 – 1158'	8-5/8, 24#, J-55 ST&C	2,950	1,370	630	381	-	8.097	7.972	Surf.
0 – 6867'	5-1/2", 17#, K-55	5,320	4,910	273	272	-	4.892	4.767	Surf

**Safety:**

Vanguard's policy on safety as employees and contractors is for everyone to go home safely every day. To this end a safety meeting involving all persons on location will be held at the beginning of each day and prior to any significant activity during the course of this operation. **It is the responsibility of the Wellsite Supervisor to lead these safety**

*Federal 1-17 #3*  
*Add Perfs & Acidize the Drinkard & Abo*

meetings, document attendance, note in the daily report, and retain the documentation for the permanent well record.

While there are multiple aspects running a safe operation, one key point that should be made at each safety meeting is the Stop Work Authority (SWA) policy. The SWA Policy grants all persons on a Vanguard site, facility, location, or property the **Right, Obligation, Authority, and Responsibility** to stop any work or action that are unsafe to personnel, equipment, or that if continued may damage the environment. This is a key component of our safety policy and must be conveyed to all personnel on location.

**Scope of Operations:**

Add 26 new perforations to the Abo Formation, add 128 new perforations to the Drinkard formation and acidize all perfs.

**Contact Information:**

Name	Title	Office	Cell
Bryan Kindred	Workover Foreman		575-602-1788
Mike Jones	Production Foreman	575-396-0812	575-390-4611
Newt Painter	Production Superintendent	432-362-2209	432-438-3872
Randall Hicks	Senior Operations Engineer	832-377-2207	713-252-1626
Frank Lemkowitz	Operations Manager	832-377-2237	713-560-3122

**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 ~6817' until clean returns, POOH.
5. MI wireline w/ packoff.
6. MU 3-1/8" slick casing guns set at 3 spf, 120° phasing (0.40" hole, 21" penetration).
7. Perforate the Abo as follows:
  - a. ~~3710' - 3712'~~ (2', 3 spf, ~~6~~ shots)
  - b. ~~3734' - 3742'~~ (8', 3 spf, 24 shots)
8. Then Perforate the Drinkard as follows:
  - a. 6592' - 6604' (12', 3 spf, 36 shots)
  - b. 6566' - 6578' (12', 3 spf, 36 shots)
  - c. 6556' - 6562' (6', 3 spf, 18 shots)
  - d. 6528' - 6532' (4', 3 spf, 12 shots)
  - e. 6518' - 6525' (7', 3 spf, 21 shots)

*Federal 1-17 #3  
Add Perfs & Acidize the Drinkard & Abo*

- f. 6500' – 6504' (4', 3 spf, 12 shots)
- 9. RD wireline.
- 10. PU a 5-1/2" Arrowset I packer and RIH with tubing to ~6630'.
- 11. MIRU pump truck (with 5000 gals acid) and test lines to 3500 psi.
  - a. Spot 500 gals of acid across Abo perforations. Load tubing with 2 % KCl and set packer at 6630'.
  - b. Pump 1000 gals 15% NEFE acid with 50 ball sealers.
  - c. Pump 3500 gal then drop 75 balls over next 3500 gals.
  - d. Pump last 500 gals and flush to 6752'.
  - e. Record ISIP, 5 min, 10 min and 30 min.
- 12. SI for 1 hr then RU swabber and swab well in to test acid job. Recover load and report fluid/gas entry.
- 13. Load hole and release packer, POOH to PU a 5-1/2" RBP.
- 14. PU and RIH with 5-1/2" RBP and 5-1/2" Arrowset packer. Set RBP at 6615'.
- 15. MIRU pump truck (with 5000 gals acid) and test lines to 3500 psi.
  - a. Spot 500 gals of acid across Drinkard perforations. Load tubing with 2 % KCl and set packer at 6490'.
  - 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 6604'.
  - g. Record ISIP, 5 min, 10 min and 30 min.
- 16. Release Arrowset packer and retrieve RBP, POOH laying out RBP and Packer.
- 17. RIH w/ 5-1/2" TAC, SN and 2-7/8" tubing. Set SN at ~6760'.
- 18. RIH w/ rods and pump.
- 19. RD & MO.
- 20. Turn well on to production.

*Note: It is the responsibility of Wellsite Supervisor to enter all daily activity reports and costs into WellView on a timely basis.*

Originator:

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Randall Hicks  
Senior Operations Engineer

Approved:

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Frank Lemkowitz  
Operations Manager

Federal 1-17 #3  
Add Perfs & Acidize the Drinkard & Abo



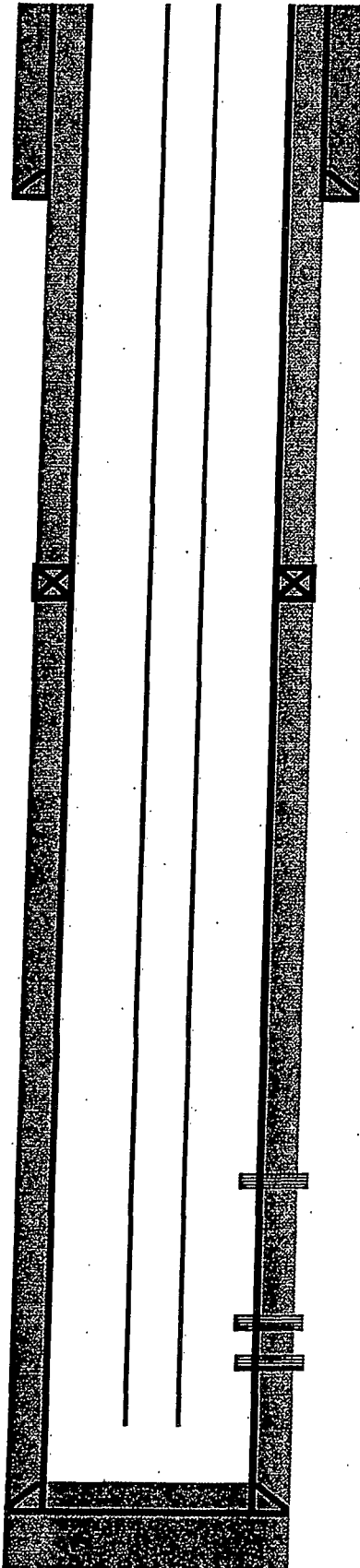
**Federal 1-17 #3**  
**Blinebry/Drinkard/Tubb/Abo - 30-025-38550**  
**Lea County, New Mexico**  
**CURRENT COMPLETION - 7/2013**

KB: 3397'  
 GL: 3387'

FOC @ surf  
 500 sxs

8 5/8" csg @ 1158

TOC @ surface  
 1400 sxs



CASING PROGRAM						
Depth	Size	Weight	Grade	I.D.	Collapse	Burst
1158	8 5/8"	24#	J-55	8.097	1,370	2,950
6867'	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

DV Tool @ 3523'

Drinkard Perforations 36 holes:  
 6,538' - 6,544' (6 spf, 36 holes)

Abo Perforations 48 holes:  
 6,712' - 6,724' (24 holes)  
 6,740' - 6,752' (24 holes)

PBTD = 6,817' FC

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

1/2" csg @ 6867'



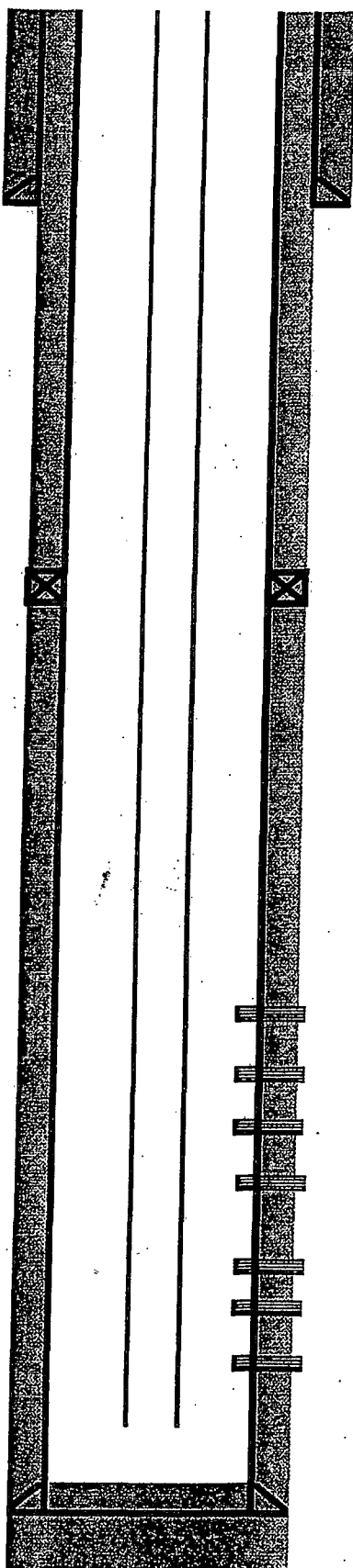
**Federal 1-17 #3**  
**Blinebry/Drinkard/Tubb/Abo - 30-025-38550**  
**Lea County, New Mexico**  
**PROPOSED COMPLETION - 9/2013**

KB: 3397'  
 GL: 3387'

TOC @ surf  
 500 sxs

8 5/8" csg @ 1158

TOC @ surf  
 1400 sxs



CASING PROGRAM						
Depth	Size	Weight	Grade	I.D.	Collapse	Burst
1158	8 5/8"	24#	J-55	8.097	1,370	2,950
6867'	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

DV Tool @ 3523'

Drinkard Perforations 171 holes:

6,500' - 6,504' (3 spf, 12 holes)	Proposed
6,518' - 6,525' (3 spf, 21 holes)	Proposed
6,528' - 6,532' (3 spf, 12 holes)	Proposed
6,538' - 6,544' (6 spf, 36 holes)	
6,556' - 6,562' (3 spf, 18 holes)	Proposed
6,566' - 6,578' (3 spf, 36 holes)	Proposed
6,592' - 6,604' (3 spf, 36 holes)	Proposed

Abo Perforations 64 holes:

6,644' - 6,652' (16 holes)	Proposed
6,626' - 6,631' (10 holes)	Proposed
6,712' - 6,724' (24 holes)	
6,740' - 6,752' (24 holes)	

PBTD = 6,817' FC

5 1/2" csg @ 6867'

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

**Federal 1-17  
30-025-38550  
Vanguard Permian LLC  
April 29, 2014  
Conditions of Approval**

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

**Work to be completed by July 29, 2014.**

- 1. 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.**
- 2. Operator shall run a new well test with production allocations for each formation individually. Submit results to the BLM.**
- 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. Operator to include well bore schematic of current well condition when work is complete.**

**JAM 042914**