

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010**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.**

5. Lease Serial No.

NM 12690

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well

☐ Oil Well☐ Gas Well☐ Other

2. Name of Operator

Vanguard Operating, LLC

3a. Address

5847 San Felipe St., Ste. 3000, Houston, TX 77057

3b. Phone No. (include area code)

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

660' FSL & 2310' FWL  
U.L.N. Sec 21, T17S, R27E

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

NM 85349

8. Well Name and No.

Estrella "TA" Federal Com #001

9. API Well No.

30-015-24172

10. Field and Pool or Exploratory Area

Jennings Spring, Wolfcamp

11. Country or Parish, State

Eddy Co., NM

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 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 type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<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 recompletable 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 recompletable 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.)

1. Notify BLM 24 hrs prior to MIRU to P&amp;A.

2. Set CIBP @ 8568' RIH w/tbg tag CIBP circ hole w/MLF spot 20 sx cmt plug @ 8568' - 8468' WOC &amp; tag.

3. Spot 20 sx cmt plug @ 6657' - 6557' (DV Tool) WOC &amp; tag.

4. Set CIBP @ 6286' RIH w/tbg tag CIBP &amp; spot 20 sx cmt plug 6286' - 6186' (Wolfcamp).

5. Set CIBP @ 5019' RIH w/tbg tag CIBP &amp; spot 20 sx cmt plug @ 5019' - 4919' (ABO) spot 20 sx cmt plug @ 4265' - 4165'.

6. Perf @ 2830' sqz 50 sx's WOC &amp; tag (Glorieta).

7. Perf @ 1610' sqz 80 sx's WOC &amp; tag @ 1420' (8 5/8" shoe, San Andres).

8. Perf @ 455' sqz 50 sx's WOC &amp; tag @ 300' (13 3/8" shoe).

9. Perf @ 100' circ cmt to surf VIA 4 1/2" x 8 5/8" csg ann.

10. Cut off wellheads ensure cmt @ surf on all 3 strings.

11. Install dry hole marker.

NM OIL CONSERVATION  
ARTESIA DISTRICT

NOV 22 2016

RECLAMATION PROCEDURE  
ATTACHEDSEE ATTACHED FOR  
CONDITIONS OF APPROVAL

RECEIVED

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

Jimmy Bagley

Title Agent

Signature

Date 11/02/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

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

SPET

Date

11-17-16

Office

CFO

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)

LEASE/VEIL: ESTELLE "TA" FEDERAL COM #001

LOCATION 660' ESL & 2,310' FWL  
N-21-17S-27E

CO/ST: EDDY COUNTY, NEW MEXICO

FIELD: JENNINGS SPRING; WOLFCAMP

API NO. 30-015-24172

GR 3422

SPUDDED 8/13/1982

-COMPLETED 10/3/1982 ORIGINAL MORROW COMPLETION  
7/19/1991 ABANDON MORROW; RECOMPLETE TO ABO  
RECOMPLETE & ABANDON ATOKA;  
ATTEMPT STRAWN RECOMPLETE  
9/4/1991 RECOMPLETE TO WOLFCAMP

LAT (27) 32.8142204  
LONG(27) -104.2844696

FORMATION TOPS PER 3160-4

SAN ANDRES	1,473'
GLORIETA	2,828'
TUBB	4,262'
ABO	4,914'
WOLFCAMP	6,002'
LWR CANYON	7,925'
STRAWN	8,412'
ATOKA	8,872'
MORROW	9,052'
CHESTER	9,359'

17-1/2" HOLE

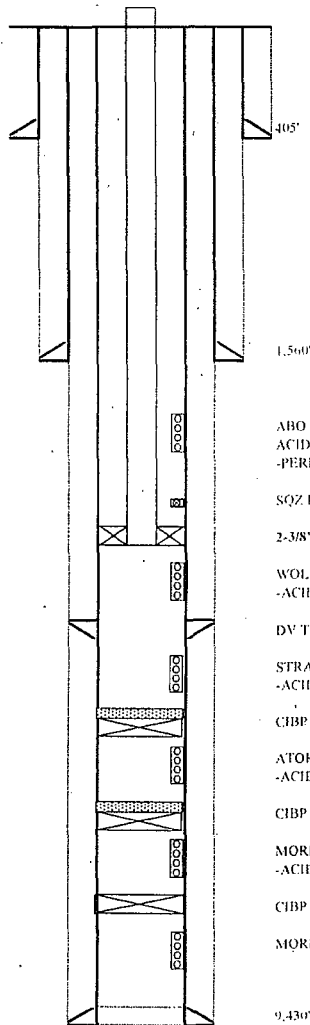
13-3/8" 48# K-55  
CMT W/ 350 SX, CIRC.

12-1/4" HOLE

8-5/8" 24# K-55  
CMT W/ 750 SX, CIRC.

7-7/8" HOLE

4-1/2" 11.6 & 10.5#  
CMT W/ 775 SX



ABO PERFS: 5,069-5,185' (20 HOLES)  
-ACIDIZED W/ 5,000 GALS 20%; RE-ACIDIZED W/ 20,000 GALS 20% GELLED  
-PERFS TESTED NON-COMMERCIAL

SOZ PERFS:  $\alpha$  5,450' SOZ 900 SX "C" BEHIND 4-1/2" CSG. CALC TOC  $\alpha$  1,540' (75% $\alpha$  YIELD)

2-3/8" PRODUCTION TBG W/ PKR @ 6,236'

WOLFCAMP PERFS: 6,336-6,340' (10 HOLES)  
-ACIDIZED W/ 1,000 GALS 15%

DV TOOL:  $\alpha$  6,607'

STRAWN PERFS: 8,618-8,675' (13 HOLES)  
-ACIDIZED W/ 2,500 GALS 15%; SWABBED DRY

CIBP  $\alpha$  8,930' CAPPED W/ 35' CMT

ATOKA PERFS: 8,969-8,973' (10 HOLES)  
-ACIDIZED W/ 1,000 GALS 15%; SWABBED DRY

CIBP  $\alpha$  9,065' CAPPED W/ 35' CMT

MORROW PERFS: 9,083-9,097' (28 HOLES)  
-ACIDIZED W/ 1,500 GALS

CIBP  $\alpha$  9,160'

MORROW PERFS: 9,177-9,189' (10 HOLES)

9,430'

PBTD: 8,895'  
TD: 9,430'

KDZ: 09-27-2016

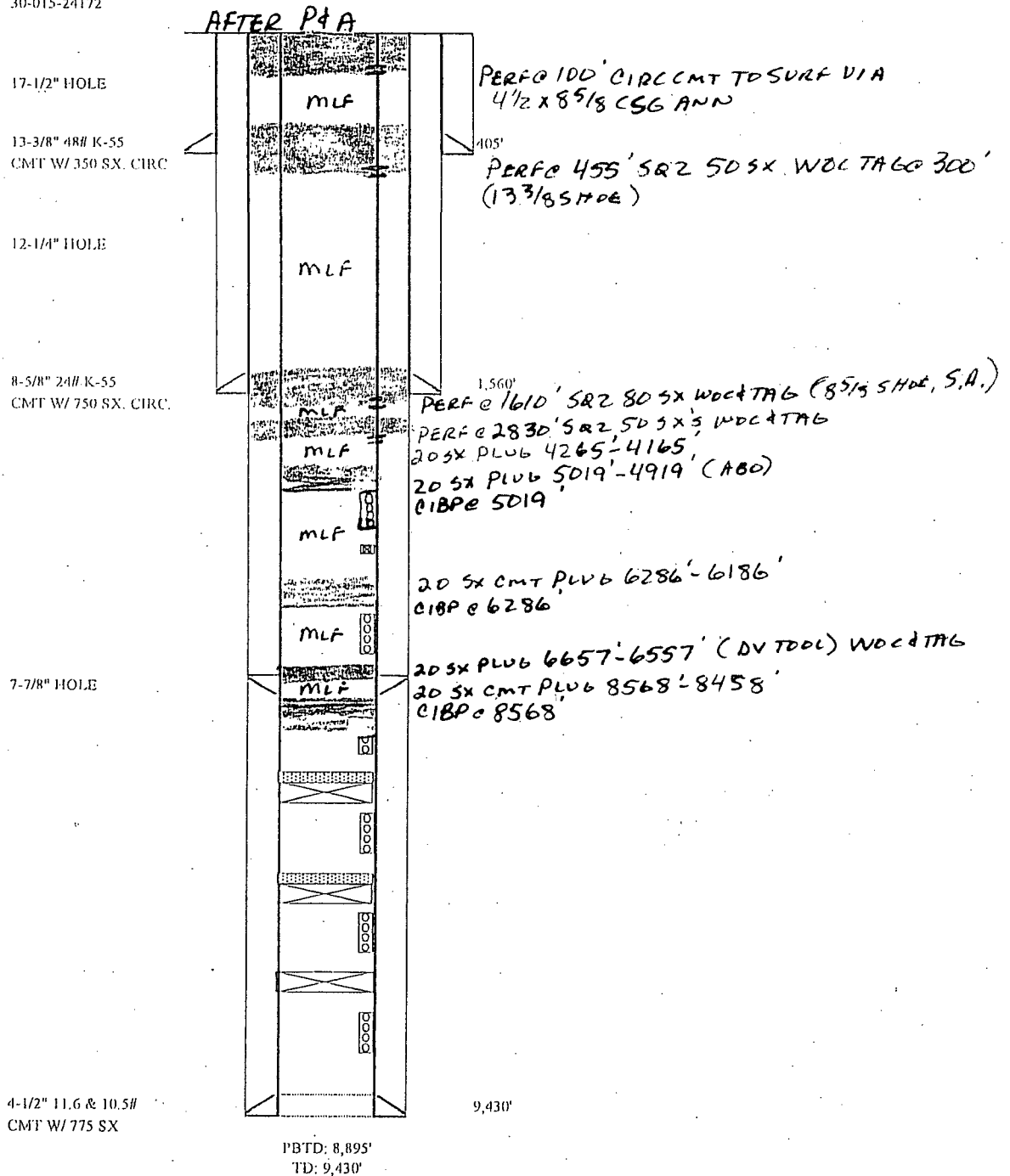
LEASE/WELL: ESTELLE "TA" FEDERAL COM #001

LOCATION 660' FSL & 2,310' FWL  
N-21-17S-27E

CO/ST: EDDY COUNTY, NEW MEXICO

FIELD: JENNINGS SPRING; WOLF CAMP

API NO. 30-015-24172



**BUREAU OF LAND MANAGEMENT**  
**Carlsbad Field Office**  
**620 East Greene Street**  
**Carlsbad, New Mexico 88220**  
**575-234-5972**

**Permanent Abandonment of Federal Wells**  
**Conditions of Approval**

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within **ninety (90)** days from the approval date of this Notice of Intent to Abandon.

**If you are unable to plug the well by the 90<sup>th</sup> day provide this office, prior to the 90<sup>th</sup> day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.**

**The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.**

2. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.

3. **Blowout Preventers:** A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. **Mud Requirement:** Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.

5. **Cement Requirement:** Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.**

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. Dry Hole Marker: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). **The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10<sup>th</sup> day, the BLM is to be contacted with justification to receive an extension for completing the cut off.**

The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement, unless otherwise noted in COA (requirements will be attached). The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).

7. Subsequent Plugging Reporting: Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**

8. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation objectives.



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Carlsbad Field Office  
620 E. Greene St.  
Carlsbad, New Mexico 88220-6292  
[www.blm.gov/nm](http://www.blm.gov/nm)



In Reply Refer To: 1310

### Reclamation Objectives and Procedures

**Reclamation Objective:** Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses. At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its pre-disturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any and all contaminants, scrap/trash, equipment, pipelines and powerlines. Strip and remove caliche, contour the location to blend with the surrounding landscape, re-distribute the native soils, provide erosion control as needed, rip and seed as specified in the original APD COA. This will apply to well pads, facilities, and access roads. Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

1. The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of Operations must include adequate measures for stabilization and reclamation of disturbed lands. Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD process as per Onshore Oil and Gas Order No. 1.
2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.
3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.
4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. If you have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation

equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.

5. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.
6. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met. If after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.
7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

If there are any questions, please feel free to contact any of the following specialists:

Jim Amos  
Supervisory Petroleum Engineering Tech  
575-234-5909, 575-361-2648 (Cell)

Arthur Arias  
Environmental Protection Specialist  
575-234-6230

Linda Denniston  
Environmental Protection Specialist  
575-234-5974

Henryetta Price  
Environmental Protection Specialist  
575-234-5951

Dara Glass  
Environmental Protection Specialist  
575-234-5924

Shelly Tucker  
Environmental Protection Specialist  
575-234-5979