

Submit 1 Copy To Appropriate District Office  
 District I - (575) 393-6161  
 1625 N. French Dr., Hobbs, NM 88240  
 District II - (575) 748-1283  
 811 S. First St., Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV - (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 Revised August 1, 2011

OIL CONSERVATION DIVISION  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

WELL API NO. 30-005-63691
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. LG-155
7. Lease Name or Unit Agreement Name Willow Creek BFI State
8. Well Number 4
9. OGRID Number
10. Pool name or Wildcat Pecos Slope ABO

**SUNDRY NOTICES AND REPORTS ON WELLS**  
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well  Gas Well  Other

2. Name of Operator  
Vanguard Operating LLC

3. Address of Operator  
5847 San Felipe St., Suite 3000, Houston, TX 77057

4. Well Location  
 Unit Letter G : 1980 feet from the North line and 1980 feet from the East line  
 Section 31 Township            Range            NMPM County Chavez

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
GR 3839

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

<b>NOTICE OF INTENTION TO:</b> PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input checked="" type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/> DOWNHOLE COMMINGLE <input type="checkbox"/>		<b>SUBSEQUENT REPORT OF:</b> REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/> CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

1. Notify OCD 24 hrs prior to MIRU to P&A.
2. Set CIBP @ 3618' RIH tag CIBP w/tbg, circ hole w/MLF, test csg & CIBP.
3. Spot 25 sx's cmt @ 3618'-3518'.
4. Spot 25 sx's cmt @ 3012'-2912' (FULLERTON).
5. Spot 25 sx's cmt @ 1590'-1490' (GLORIETTA).
6. Spot 125 sx's cmt @ 928'-520'. - Perf @ 956' + 582
7. Perf @ 100' circ to surf.
8. RD cutoff wellhead/anchors, install dry hole marker, move off.

*Notify OCD 24 hrs. prior to any work done.*

**NM OIL CONSERVATION**  
 ARTESIA DISTRICT  
 FEB 27 2019  
 RECEIVED

Spud Date:  Rig Release Date:

*\* See Attached COA's Must be plugged by 4/2/19*

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE *Justin Bagley* TITLE Agent DATE 03/26/19  
 Type or print name Justin Bagley E-mail address: sunsetwellservice@yahoo.com PHONE: 432-561-8600

**For State Use Only**

APPROVED BY: *[Signature]* TITLE Staff Mgr DATE 4/2/19  
 Conditions of Approval (if any):

LEASE/WELL: WILLOW CREEK BFI ST No. 4  
 LOCATION UL G , SEC 31, T4S, R25E  
 1,980' FNL & 1,980' FEL

GR 3839  
 KB  
 CORR -3839

CO/ST: CHAVES CO. NM  
 ABSTRACT

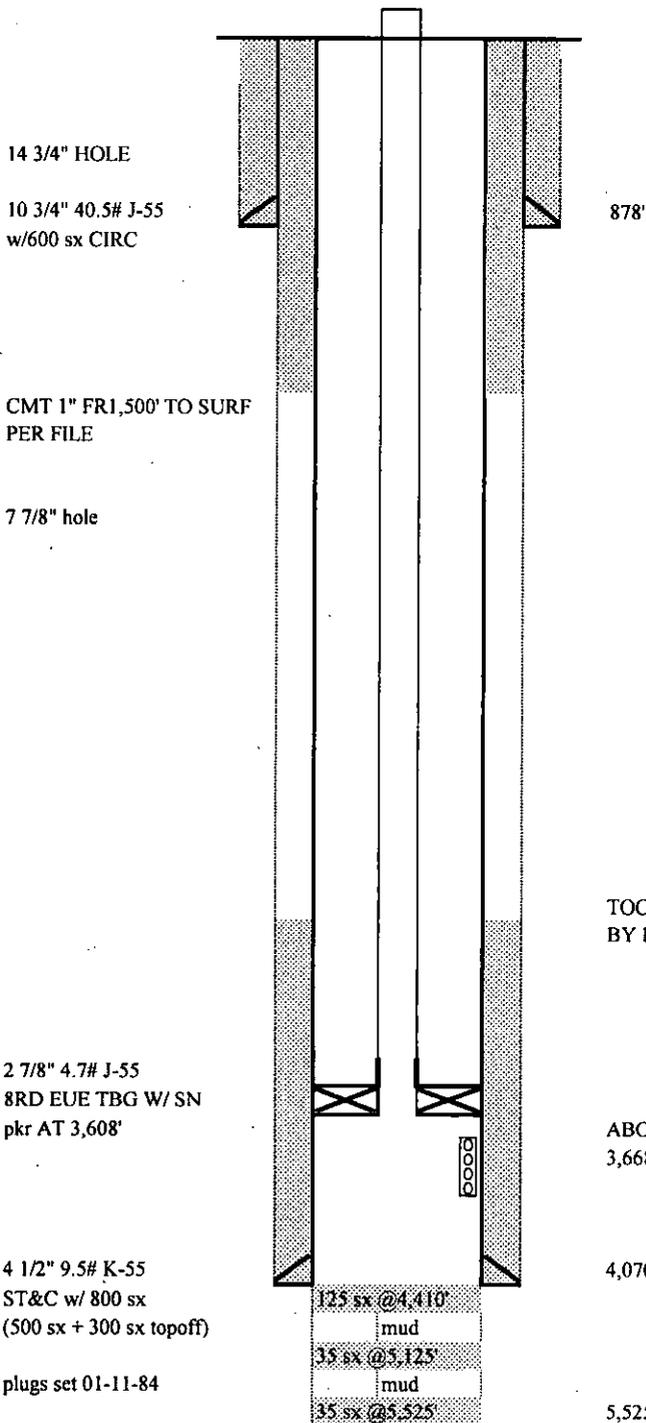
SPUDDED 12/18/83 ARTESIA FISHING TOOLS  
 COMPLETED 01/11/84 YATES PETROLEUM  
 PERMIT

FIELD: PECOS SLOPE (ABO)

ST LEASE LG - 155  
 API NO. 30-005-63691  
 PROP NO. 34268

LAT (83) 33.917423  
 LONG(83) -104.355125

BEFORE P&A



TOPS PER NMOCD	
	FT
San Andres	570
Glorieta	1540
Yeso	
Tubb	
Fullerton	2962
Abo	3612
Wolfcamp	4360
Penn	5080

TOC RPTED AT  
 BY FILE AT 3,024

ABO PERFS  
 3,668-3,809' OA 10 SHOTS

4,070' PBTB

5,525' TD  
 cmb 03-24-19

LEASE/WELL: WILLOW CREEK BFI ST No. 4  
 LOCATION UL G, SEC 31, T4S, R25E  
 1,980' FNL & 1,980' FEL

GR 3839  
 KB  
 CORR -3839

CO/ST: CHAVES CO. NM  
 ABSTRACT

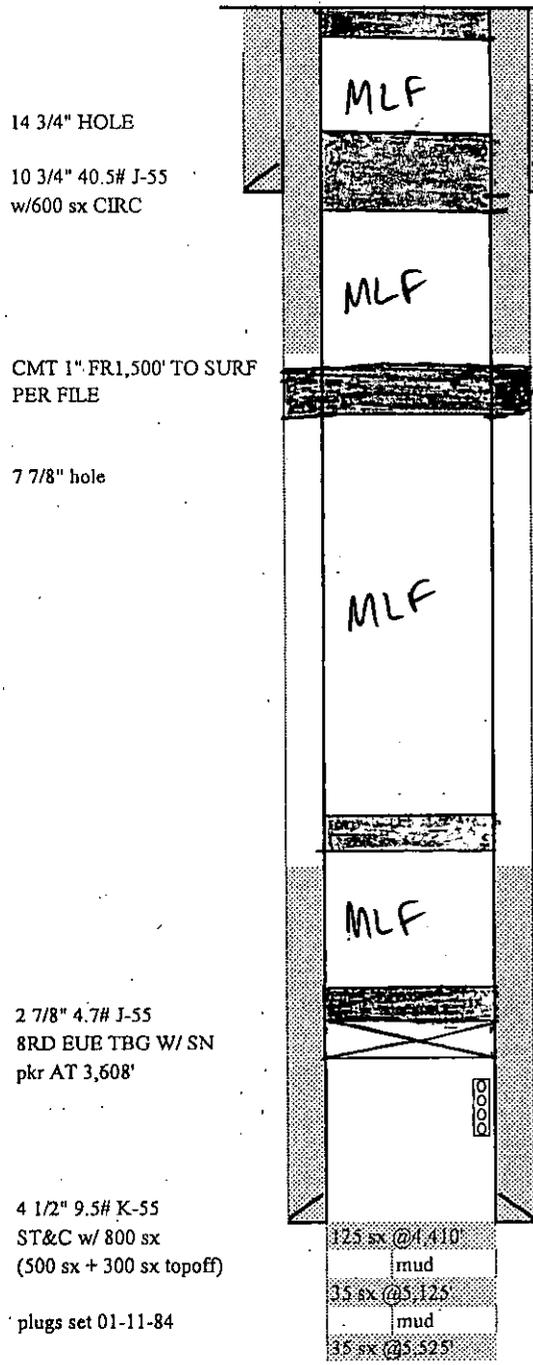
FIELD: PECOS SLOPE (ABO)

SPUDDED 12/18/83 ARTESIA FISHING TOOLS  
 COMPLETED 01/11/84 YATES PETROLEUM  
 PERMIT

ST LEASE LG - 155  
 API NO. 30-005-63691  
 PROP NO. 34268

LAT (83) 33.917423  
 LONG(83) -104.355125

AFTER D&A



PERF @ 100  
 CIRC TO SURF

TOPS PER NMOCD	FT
San Andres	570
Glorieta	1540
Yeso	
Tubb	
Fullerton	2962
Abo	3612
Wolfcamp	4360
Penn	5080

878'

SPOT 125 SX  
 CMT @ 928-520

5700 PERF @ 1590 592 65 SX CMT @ 1590-1490

SPOT 25 SX CMT @ 3012-2912  
 TOC RPT'D AT  
 BY FILE AT 3,024

SPOT 25 SX CMT @ 3618-3518  
 LIBP @ 3618  
 ABO PERFS  
 3,668-3,809' OA 10 SHOTS

4,070' PBTD

5,525' TD

14 3/4" HOLE

10 3/4" 40.5# J-55  
 w/600 sx CIRC

CMT 1" FR 1,500' TO SURF  
 PER FILE

7 7/8" hole

2 7/8" 4.7# J-55  
 8RD EUE TBG W/ SN  
 pkr AT 3,608'

4 1/2" 9.5# K-55  
 ST&C w/ 800 sx  
 (500 sx + 300 sx toff)

plugs set 01-11-84

## CONDITIONS FOR PLUGGING AND ABANDONMENT

### District II / Artesia N.M.

The following is a guide or checklist in preparation of a plugging program, this is not all inclusive and care must be exercised in establishing special plugging programs in unique and unusual cases, **Notify NMOCD District Office II at (575)-748-1283 at least 24 hours before beginning work.**

1. A notice of intent to plug and abandon a wellbore is required to be approved before plugging operations are conducted. A cement evaluation tool is required in order to ensure isolation of producing formations, protection of water and correlative rights. A cement bond log or other accepted cement evaluation tool is to be provided to the division for evaluation if one has not been previously run or if the well did not have cement circulated to surface during the original casing cementing job or subsequent cementing jobs.
2. Closed loop system is to be used for entire plugging operation. Upon completion, contents of steel pits are to be hauled to a permitted disposal location.
3. Trucking companies being used to haul oilfield waste fluids to a disposal – commercial or private – shall have an approved NMOCD C-133 permit. A copy of this permit shall be available in each truck used to haul waste products. It is the responsibility of the operator as well as the contractor, to verify that this permit is in place prior to performing work. Drivers shall be able to produce a copy upon request of an NMOCD Field inspector.
4. Filing a subsequent C-103 will serve as notification that the well has been plugged.
5. A final C-103 shall be filed (and a site inspection by NMOCD Inspector to determine if the location is satisfactorily cleaned, all equipment, electric poles and trash has been removed to Meet NMOCD standards) before bonding can be released.
6. If the well is not plugged within 1
7. If work has not begun within 1 Year of the approval of this procedure, an extension request must be file stating the reason the well has not been plugged.
8. **Squeeze pressures are not to exceed 500 psi, unless approval is given by NMOCD.**
9. Produced water **will not** be used during any part of the plugging operation.
10. Mud laden fluids must be placed between all cement plugs mixed at 25 sacks per 100 bbls of water.
11. All cement plugs will be a minimum of 100' in length or a minimum of 25 sacks of cement, whichever is greater. 50' of calculated cement excess required for inside casing plugs and 100% calculated cement excess required on outside casing plugs.
12. **Class 'C' cement will be used above 7500 feet.**
13. **Class 'H' cement will be used below 7500 feet.**
14. **A cement plug is required to be set 50' above and 50' below, casing stubs, DV tools, attempted casing cut offs, cement tops outside casing, salt sections and anywhere the casing is perforated, these plugs require a 4 hour WOC and then will be tagged**
15. **All Casing Shoes Will Be Perforated 50' below shoe depth and Attempted to be Squeezed, cement needs to be 50' above and 50' Below Casing Shoe inside the Production Casing**

16. When setting the top out cement plug in production, intermediate and surface casing, wellbores should remain full at least 30 minutes after plugs are set
17. **A CIBP is to be set within 100' of production perforations, capped with 100' of cement, WOC 4 hours and tag.**
18. A CIBP with 35' of cement may be used in lieu of the 100' plug if set with a bailer. This plug will be placed within 100' of the top perforation, **(WOC 4 hrs and tag).**
19. **No more than 3000' is allowed between cement plugs in cased hole and 2000' in open hole.**
20. Some of the Formations to be isolated with cement plugs are: These plugs to be set to isolate formation tops
  - A) Fusselman
  - B) Devonian
  - C) Morrow
  - D) Wolfcamp
  - E) Bone Springs
  - F) Delaware
  - G) Any salt sections
  - H) Abo
  - I) Glorieta
  - J) Yates.
  - K) **Potash---** (In the R-111-P Area (Potash Mine Area), a solid cement plug must be set across the salt section. Fluid used to mix the cement shall be saturated with the salts that are common to the section penetrated and in suitable proportions, not more than 3% calcium chloride (by weight of cement) will be considered the desired mixture whenever possible, **WOC 4 hours and tag, this plug will be 50' below the bottom and 50' above the top of the Formation.**
21. **If cement does not exist behind casing strings at recommended formation depths, the casing can be cut and pulled with plugs set at recommended depths. If casing is not pulled, perforations will be shot and cement squeezed behind casing, WOC and tagged. These plugs will be set 50' below formation bottom to 50' above formation top inside the casing**

#### **DRY HOLE MARKER REQUIRMENTS**

The operator shall mark the exact location of the plugged and abandoned well with a steel marker not less than four inches in diameter, 3' below ground level with a plate of at least ¼" welded to the top of the casing and the dry hole marker welded on the plate with the following information welded on the dry hole marker:

**1. Operator name 2. Lease and Well Number 3.API Number 4. Unit Letter 5. Quarter Section (feet from the North, South, East or West) 6. Section, Township and Range 7. Plugging Date 8. County (SPECIAL CASES)-----AGRICULTURE OR PRARIE CHICKEN BREEDING AREAS**

In these areas, a below ground marker is required with all pertinent information mentioned above on a plate, set 3' below ground level, a picture of the plate will be supplied to NMOCD for record, the exact location of the marker (longitude and latitude by GPS) will be provided to NMOCD (We typically require a current survey to verify the GPS)