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**NORTHWEST PRODUCTION CORPORATION**

ALBUQUERQUE, NEW MEXICO

REPLY TO:  
520 SIMMS BUILDING  
ALBUQUERQUE, NEW MEXICO

OCT 1 1956

**Oil & Gas Conservation Commission  
State of New Mexico  
Box 871  
Santa Fe, New Mexico**

**Re: Application for Dual Gas Completion  
of Northwest Production Corporation  
"E" Well No. 2-33 located in Section  
33, T26N, R3W, Rio Arriba County, N.M.**

**Attention: Mr. A. L. Porter**

**Gentlemen:**

In accordance with Rule 112, paragraph C of the Commission Rules and Regulations, Northwest Production Corporation requests final approval for the dual completion of "E" Well No. 2-33 in the Mesaverde and Pictured Cliffs gas formations. Tentative approval of the plan for drilling and equipping the well was received from Mr. Emory C. Arnold on July 2, 1956. Approval from the United States Geological Survey was received June 22, 1956 of the Notice of Intention to Drill a dual Mesaverde-Pictured Cliffs well.

Following is a resume of the work performed on "E" Well No. 2-33, which is located 1819 feet from the North line and 974 feet from the East line of Section 33, T26N, R3W, Rio Arriba County, New Mexico:

1. Seven inch intermediate casing was set at 4301.20 feet.
2. A 6½ inch hole was drilled to 6460 feet and a 5-inch O.D. liner was cemented at 6438 feet. The liner was hung from 4198.51 feet with a Burns liner hanger.
3. The 5-inch liner was perforated from 6300 to 6356 feet and the lower Point Lookout was fractured.
4. A bridge plug was set at 6290 feet, the 5-inch liner was perforated from 6200 to 6280 feet and the upper Point Lookout was fractured.
5. A bridge plug was set at 6190 feet, the 5-inch liner was perforated from 6122 to 6130 feet and the lower Menefee was fractured.



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Oil & Gas Conservation Commission

6. A bridge plug was set at 5860 feet, the 5-inch liner was perforated from 5794 to 5852 feet and the upper Menefee and lower Cliff House were fractured.
7. A bridge plug was set at 5780 feet, the 5-inch casing was perforated from 5740 to 5772 feet and the upper Cliff House was fractured.
8. The bridge plugs were drilled and the hole cleaned out to 6415 feet.
9. A bridge plug was set at 4220 feet, the 7 inch casing was perforated from 4083 to 4106 feet and the Pictured Cliffs was fractured.
10. The bridge plug was drilled and the hole cleaned out.
11. Two-inch EUE tubing was hung at 6333.78 feet with Lane Wells BOCL 4-A production packer set at 5677.96 feet and an Otis side-door choke at 5646.21 feet.

The three-hour absolute open flow from the Pictured Cliffs casing-tubing annulus completion was 502 Mcf taken on September 13, 1956. The Mesa-verde tubing completion had an absolute open flow of 4,321 Mcf taken September 20, 1956.

Attached for your information is a diagrammatic sketch of the dual with pertinent data of the completion.

Mineral rights of all acreage offsetting "E" Well No. 2-33 are held by Northwest Production Corporation.

Should you desire additional information before a formal order approving this dual completion is issued, please advise.

Yours very truly,

NORTHWEST PRODUCTION CORPORATION

WRJ/RP/11  
In duplicate  
Encl.

W. R. Johnston, Manager  
Production Operations

cc: Oil Conservation Commission  
Aztec, New Mexico

U. S. Geological Survey  
Farmington, New Mexico



6. A single plug was used at 0500 hours. The remaining three plugs were used at 0600, 0700 and 0800 hours. The plugs were used in the following order: 0500, 0600, 0700, 0800. The plugs were used in the following order: 0500, 0600, 0700, 0800.
7. A single plug was used at 0900 hours. The remaining three plugs were used at 1000, 1100 and 1200 hours. The plugs were used in the following order: 0900, 1000, 1100, 1200. The plugs were used in the following order: 0900, 1000, 1100, 1200.
8. The single plug was used at 1300 hours. The remaining three plugs were used at 1400, 1500 and 1600 hours. The plugs were used in the following order: 1300, 1400, 1500, 1600. The plugs were used in the following order: 1300, 1400, 1500, 1600.
9. A single plug was used at 1700 hours. The remaining three plugs were used at 1800, 1900 and 2000 hours. The plugs were used in the following order: 1700, 1800, 1900, 2000. The plugs were used in the following order: 1700, 1800, 1900, 2000.
10. The single plug was used at 2100 hours. The remaining three plugs were used at 2200, 2300 and 2400 hours. The plugs were used in the following order: 2100, 2200, 2300, 2400. The plugs were used in the following order: 2100, 2200, 2300, 2400.
11. The single plug was used at 0100 hours. The remaining three plugs were used at 0200, 0300 and 0400 hours. The plugs were used in the following order: 0100, 0200, 0300, 0400. The plugs were used in the following order: 0100, 0200, 0300, 0400.

The single-plug operation was used in the following order: 0500, 0600, 0700, 0800, 0900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 0100, 0200, 0300, 0400. The single-plug operation was used in the following order: 0500, 0600, 0700, 0800, 0900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 0100, 0200, 0300, 0400.

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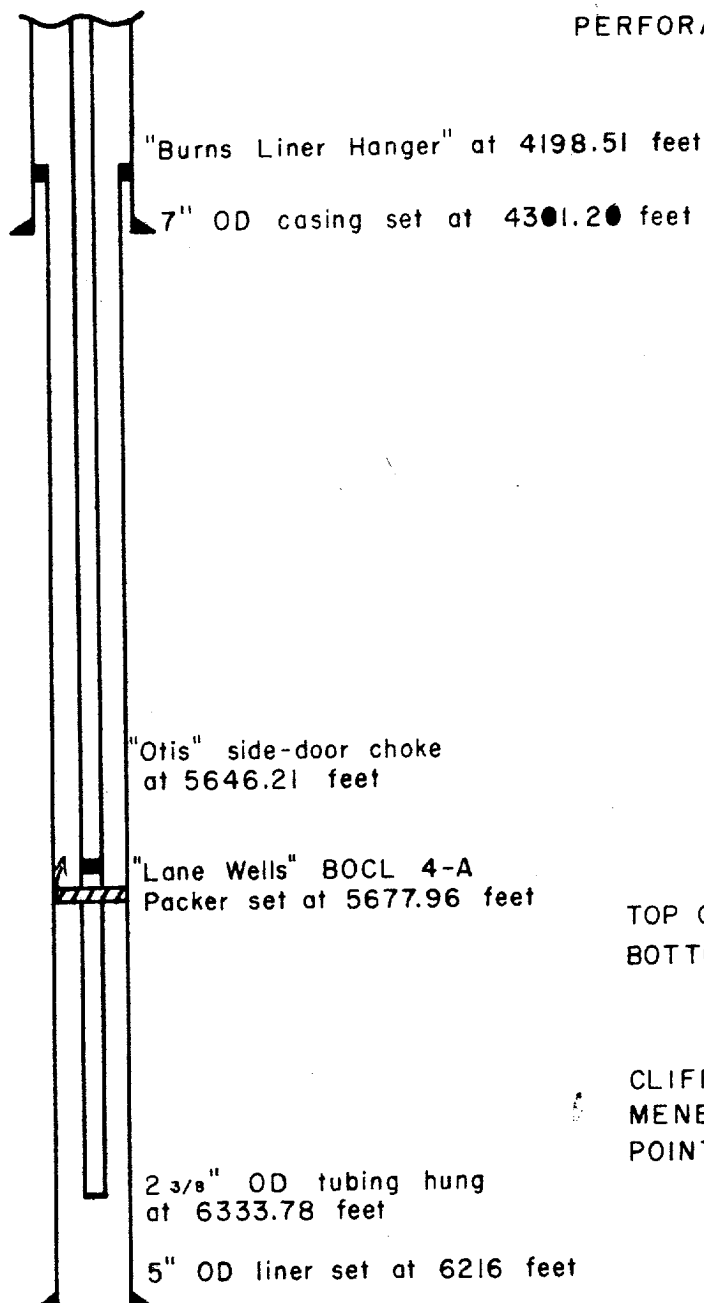
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PICTURED CLIFFS DATA:

TOP OF PICTURED CLIFFS - 4052'  
BOTTOM OF PICTURED CLIFFS - 4112'  
PERFORATIONS: 4082'-4108'



MESAVERDE DATA:

TOP OF MESAVERDE - 5716'  
BOTTOM OF MESAVERDE - 6358'

PERFORATIONS:

CLIFF HOUSE: 5740'-5822'  
MENESEE: 5838'-6180'  
POINT LOOKOUT: 6200'-6356'

DIAGRAMATIC SKETCH OF DUAL GAS  
COMPLETION FOR "E" WELL 2-33

NORTHWEST PRODUCTION CORPORATION  
ALBUQUERQUE, NEW MEXICO

APPLICATION FOR DUAL GAS COMPLETION  
OF "E" WELL 2-33 IN PICTURED CLIFFS  
AND MESAVERDE FORMATIONS

RIO ARriba COUNTY  
NEW MEXICO

CONTRACT # 117

DRAWN: W.H. McGAHEY  
APPROVED: RAY PHILLIPS

SCALE 1" = 400'  
DATE: 9-24-56