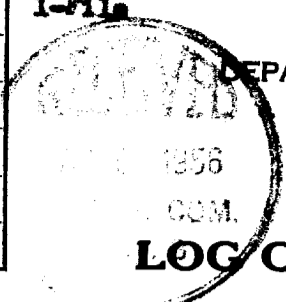


U. S. LAND OFFICE  
SERIAL NUMBER 110101  
LEASE OR PERMIT TO PROSPECT


U.S.G.S.  
16W. R. Johnston  
2-C. C. Rogers  
1-File



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company PACIFIC NORTHWEST PIPELINE CORP. Address 413 1/2 West Main, Farmington, N.M.  
Lessor or Tract Hom Unit 31-6 Field Wildcat State New Mexico  
Well No. 10-13 Sec. 13 T. 31N R. 6W Meridian N.M.P.M. County Rio Arriba  
Location 890 1/4 (N. of Sec. Line and 990 ft. (E. of Sec. Line of 13 Elevation 6253.3 ft. (Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.  
Signed Original signed by T. A. Dugan  
Date February 10, 1956 Title District Engineer

The summary on this page is for the condition of the well at above date.

Commenced drilling 10 - 25, 1955 Finished drilling 12 - 2, 1955

OIL OR GAS SANDS OR ZONES  
(Denote gas by G)

No. 1, from N.V. 5302 to 5712 No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
No. 3, from \_\_\_\_\_ to \_\_\_\_\_ No. 6, from \_\_\_\_\_ to \_\_\_\_\_

IMPORTANT WATER SANDS

No. 1, from NONE to \_\_\_\_\_ No. 3, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 4, from \_\_\_\_\_ to \_\_\_\_\_

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Cased		Purpose
							From	To	
10-3/4	32.75	8RD.	Rep.	185.5'					
10-3/4		8RD.							
7-5/8		8RD.							
7-5/8		8RD.							
5-1/2		8RD.	C.F.&L.	5712.5'					
5-1/2		8RD.	Whirlar	1'	Float				

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4	200'	160 sx 45	Halliburton		
7-5/8	1491	150 8 1/2 & 50 neat	Halliburton		
7-5/8	5725.09	150 sx regular	Halliburton		
5-1/2	5670.17				

PLUGS AND ADAPTERS

Heaving plug—Material \_\_\_\_\_ Length \_\_\_\_\_ Depth set \_\_\_\_\_  
Adapters—Material \_\_\_\_\_ Size \_\_\_\_\_

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 0 feet to 5725 feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet  
Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

DATES

12 - 2, 1955 Put to producing \_\_\_\_\_, 19  

The production for the first 24 hours was \_\_\_\_\_ barrels of fluid of which \_\_\_\_\_% was oil; \_\_\_\_\_% emulsion; \_\_\_\_\_% water; and \_\_\_\_\_% sediment. Gravity, °Bé. \_\_\_\_\_

If gas none cu. ft. per 24 hours \_\_\_\_\_ Gallons gasoline per 1,000 cu. ft. of gas \_\_\_\_\_

Rock pressure, lbs. per sq. 8177-1156 \_\_\_\_\_ SICP 1157

EMPLOYEES

Morris Jones, Drilling Foreman, Driller \_\_\_\_\_, Driller  
\_\_\_\_\_, Driller \_\_\_\_\_, Driller

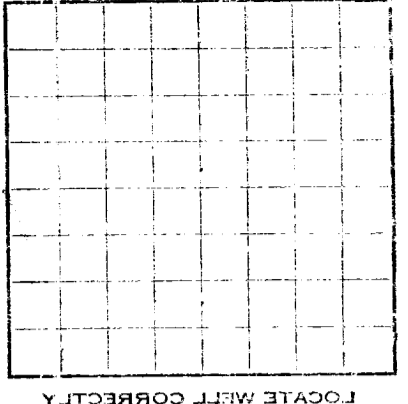
FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2348	2348	Surface
2348	2450	102	Cje Alamo - Sand
2450	2850	400	Kirtland - Shale w/some sand.
2850	3094	244	Fruitland - Interbedded sand, shale, and coal.
3094	3484	390	Pictured Cliffs - Sand
3484	5289	1805	Lewis - Shale
5289	5343	54	Cliff House - Sand
5343	5578	235	Manatee - Interbedded sand, shale, and coal.
5578	5725	147	Point Lookout - Sand
5725	—	5725	Total Depth

U.S. LAND OFFICE  
SERIAL NUMBER  
ISSUED ON PERMIT TO PROSPECT

# LOG OF OIL OR GAS WELL

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
UNITED STATES



Company \_\_\_\_\_  
Lessor or Trust \_\_\_\_\_  
Well No. \_\_\_\_\_  
Location \_\_\_\_\_  
The information given herewith is a complete and correct record of the well and all work done thereon as far as can be determined from all available records.  
Signed \_\_\_\_\_  
Date \_\_\_\_\_

The summary on this page is for the condition of the well at above date.  
Commenced drilling \_\_\_\_\_  
Finished drilling \_\_\_\_\_

### OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1 from	No. 2 from	No. 3 from	No. 4 from
5282-5287, 5288-5291, 5292-5293, 5294-5295, 5296-5297, 5298-5299, 5300-5301, 5302-5303, 5304-5305, 5306-5307, 5308-5309, 5310-5311, 5312-5313, 5314-5315, 5316-5317, 5318-5319, 5320-5321, 5322-5323, 5324-5325, 5326-5327, 5328-5329, 5330-5331, 5332-5333, 5334-5335, 5336-5337, 5338-5339, 5340-5341, 5342-5343, 5344-5345, 5346-5347, 5348-5349, 5350-5351, 5352-5353, 5354-5355, 5356-5357, 5358-5359, 5360-5361, 5362-5363, 5364-5365, 5366-5367, 5368-5369, 5370-5371, 5372-5373, 5374-5375, 5376-5377, 5378-5379, 5380-5381, 5382-5383, 5384-5385, 5386-5387, 5388-5389, 5390-5391, 5392-5393, 5394-5395, 5396-5397, 5398-5399, 5400-5401, 5402-5403, 5404-5405, 5406-5407, 5408-5409, 5410-5411, 5412-5413, 5414-5415, 5416-5417, 5418-5419, 5420-5421, 5422-5423, 5424-5425, 5426-5427, 5428-5429, 5430-5431, 5432-5433, 5434-5435, 5436-5437, 5438-5439, 5440-5441, 5442-5443, 5444-5445, 5446-5447, 5448-5449, 5450-5451, 5452-5453, 5454-5455, 5456-5457, 5458-5459, 5460-5461, 5462-5463, 5464-5465, 5466-5467, 5468-5469, 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