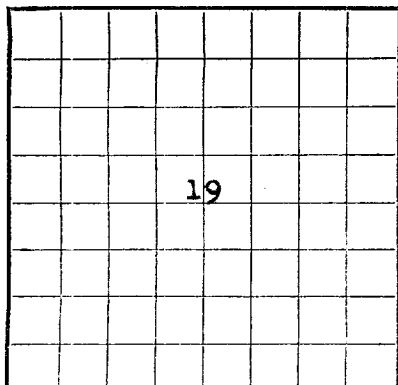


U. S. LAND OFFICE Santa Fe
SERIAL NUMBER SF-079353
LEASE OR PERMIT TO PROSPECT 14-08-001-446



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company PACIFIC NORTHWEST PIPELINE CORP. Address 405 1/2 W. Bldg., Farmington, New Mexico
Lessor or Tract San Juan 32-8 Field Blanco Mesa Verde State New Mexico
Well No. 24-19 Sec. 19 T. 32N R. 8W Meridian N.M.P.M. County San Juan
Location 890 ft. S. of N. Line and 890 ft. W. of E. Line of Section 19 Elevation 6433'
(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 G. H. Peppin

Date November 20th, 1957 Title District Proration Engineer

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

Commenced drilling June 20th, 1957 Finished drilling July 3rd, 1957

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

No. 1, from G 5368' to G 5816' 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 _____ 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	Perforated	From	To	Purpose
10-3/4	32.75	8rd.	CF&I	179'	Tex. Pat.					
7-5/8	24.18	8rd.	CF&I	1874.65	Burns Liner Hanger	3551.93'				
5-1/2	18.75	8rd.	CF&I	1874.65	Burns Liner Hanger	3551.93'				
3-1/2	8.3	10rd.	Youngston	5806.65'	(Tubing w/perf nipple)					

MUDDING AND CEMENTING RECORD					
Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4	192'	200	Pump Plug		
7-5/8	3620.48'	200	Pump Plug		
5-1/2	5930'	200	Pump Plug		

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 _____ feet to 5930' feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES
August 16th, 1957 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 well, cu. ft. per 24 hours 1,153,000 Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. 600#, Gas. 1138#, CADP 1,708
EMPLOYEES Shut in 7 days
_____, Driller _____, Driller
_____, Driller _____, Driller

FORMATION RECORD			
FROM—	TO—	TOTAL FEET	FORMATION
0'	2160'	2160'	Surface
2160'	2245'	85'	Ojo Alamo
2245'	3000'	755'	Kirtland
3000'	3325'	325'	Fruitland
3325'	3500'	175'	Pictured Cliffs
3500'	5368'	1868'	Lewis
5368'	5405'	37'	Cliff House
5405'	5695'	290'	Menefee
5695'	TD	235'	Point Lookout
5930'			Total Depth
5925'			Plug Back Total Depth

10 - 10-1-1442
LEASE OR PERMIT TO PROSPECT
SERIAL NUMBER 27-1442
U. S. LAND OFFICE BUREAU

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

[illegible]

The information given herein 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 G. H. Peppin _____

Location of well shown on map of _____ of _____ and _____ of _____
of _____ Line of _____ Elevation _____

Well No. _____ Sec. _____ T. _____ R. _____ S. _____
Person or Firm _____ Date _____
Field Notes _____ State _____

(Common Name) _____ Address _____ City _____ State _____

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

Maximum Deviation: 1-1/4° @ 100' Gas Sands or Zones
(Denote gas by G)
Commenced drilling 1937. Finished drilling 1937. 1937

Log: Jane Wells Garma Ray, surface to 5915, Neutron, surface to 5925, and
Multiple Spaced Neutron 2950', to 3600', and 4900' to 5925'.
No cores from 5915 to 5925'.
No cores from 4900' to 5925'.

7.6.3 from
 16.500 gal water, 168 rubber balls. BP 2100#, IP 1800#, AP 2000#, MP 2800#,
 16.500#, 5 min. standing 250#. In before belts 60 ppts/min., overall IR 66.3 ppts/
 min. Lac thurberia.
 IMPORTANT WATER SANDS

8-15-57 10:17 A/2 5802-04 5816-12 5819-04 5802-5792 5790-70 5761-58 5744-58 5722-12 5708-5700 5680-66 5620-08 5636-26 5466-62 5446-42 5416-12 5402-5394 5390-86 5380-74 5372-68.

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and the results. If there were any changes made in the casing, state fully, any casing was sidetracked, or left in the well, give its size and location. If the well has been abandoned, give date, size, position, and pump number of doors. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

HISTORY OF OIL OR GAS WELL

MUDGING AND CEMENTING RECORD			
Size casing	Weight per foot	Number sacks of cement	Amount of mud used
13 1/2"	130	10	100
13 1/2"	130	10	100
13 1/2"	130	10	100
PLUGS AND ADAPTERS			
Leaving plug - 13 1/2"			
Adapter - 13 1/2"			
SHOOTING RECORD			
Time	Weight of shot	Quantity	Depth cleaned out
TOOLS USED			
Cable tools were used from 100 feet to 130 feet and from 130 feet to 150 feet			
DATES			
Put to producing on 10/13/25			
The production for the first 24 hours was 10 barrels of fluid of which 8 was oil, 2 was gas			
If gas well, cut off per 24 hours 1000 cu. ft. of gas			
Block pressure 1000 lbs. per sq. in.			
EMPLOYEES			
Driller			
Driller			
FORMATION RECORD			
FROM -	TO -	TOTAL FEET	FORMATION
0	100	100	Shale
100	150	50	Oil sand
150	200	50	Shale
200	250	50	Shale
250	300	50	Shale
300	350	50	Shale
350	400	50	Shale
400	450	50	Shale
450	500	50	Shale
500	550	50	Shale
550	600	50	Shale
600	650	50	Shale
650	700	50	Shale
700	750	50	Shale
750	800	50	Shale
800	850	50	Shale
850	900	50	Shale
900	950	50	Shale
950	1000	50	Shale
1000	1050	50	Shale
1050	1100	50	Shale
1100	1150	50	Shale
1150	1200	50	Shale
1200	1250	50	Shale
1250	1300	50	Shale
1300	1350	50	Shale
1350	1400	50	Shale
1400	1450	50	Shale
1450	1500	50	Shale
1500	1550	50	Shale
1550	1600	50	Shale
1600	1650	50	Shale
1650	1700	50	Shale
1700	1750	50	Shale
1750	1800	50	Shale
1800	1850	50	Shale
1850	1900	50	Shale
1900	1950	50	Shale
1950	2000	50	Shale
2000	2050	50	Shale
2050	2100	50	Shale
2100	2150	50	Shale
2150	2200	50	Shale
2200	2250	50	Shale
2250	2300	50	Shale
2300	2350	50	Shale
2350	2400	50	Shale
2400	2450	50	Shale
2450	2500	50	Shale
2500	2550	50	Shale
2550	2600	50	Shale
2600	2650	50	Shale
2650	2700	50	Shale
2700	2750	50	Shale
2750	2800	50	Shale
2800	2850	50	Shale
2850	2900	50	Shale
2900	2950	50	Shale
2950	3000	50	Shale
3000	3050	50	Shale
3050	3100	50	Shale
3100	3150	50	Shale
3150	3200	50	Shale
3200	3250	50	Shale
3250	3300	50	Shale
3300	3350	50	Shale
3350	3400	50	Shale
3400	3450	50	Shale
3450	3500	50	Shale
3500	3550	50	Shale
3550	3600	50	Shale
3600	3650	50	Shale
3650	3700	50	Shale
3700	3750	50	Shale
3750	3800	50	Shale
3800	3850	50	Shale
3850	3900	50	Shale
3900	3950	50	Shale
3950	4000	50	Shale
4000	4050	50	Shale
4050	4100	50	Shale
4100	4150	50	Shale
4150	4200	50	Shale
4200	4250	50	Shale
4250	4300	50	Shale
4300	4350	50	Shale
4350	4400	50	Shale
4400	4450	50	Shale
4450	4500	50	Shale
4500	4550	50	Shale
4550	4600	50	Shale
4600	4650	50	Shale
4650	4700	50	Shale
4700	4750	50	Shale
4750	4800	50	Shale
4800	4850	50	Shale
4850	4900	50	Shale
4900	4950	50	Shale
4950	5000	50	Shale
5000	5050	50	Shale
5050	5100	50	Shale
5100	5150	50	Shale
5150	5200	50	Shale
5200	5250	50	Shale
5250	5300	50	Shale
5300	5350	50	Shale
5350	5400	50	Shale
5400	5450	50	Shale
5450	5500	50	Shale
5500	5550	50	Shale
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5700	5750	50	Shale
5750	5800	50	Shale
5800	5850	50	Shale
5850	5900	50	Shale
5900	5950	50	Shale
5950	6000	50	Shale
6000	6050	50	Shale
6050	6100	50	Shale
6100	6150	50	Shale
6150	6200	50	Shale
6200	6250	50	Shale
6250	6300	50	Shale
6300	6350	50	Shale
6350	6400	50	Shale
6400	6450	50	Shale
6450	6500	50	Shale
6500	6550	50	Shale
6550	6600	50	Shale
6600	6650	50	Shale
6650	6700	50	Shale
6700	6750	50	Shale
6750	6800	50	Shale
6800	6850	50	Shale
6850	6900	50	Shale
6900	6950	50	Shale
6950	7000	50	Shale
7000	7050	50	Shale
7050	7100	50	Shale
7100	7150	50	Shale
7150	7200	50	Shale
7200	7250	50	Shale
7250	7300	50	Shale
7300	7350	50	Shale
7350	7400	50	Shale
7400	7450	50	Shale
7450	7500	50	Shale
7500	7550	50	Shale
7550	7600	50	Shale
7600	7650	50	Shale
7650	7700	50	Shale
7700	7750	50	Shale
7750	7800	50	Shale
7800	7850	50	Shale
7850	7900	50	Shale
7900	7950	50	Shale
7950	8000	50	Shale
8000	8050	50	Shale
8050	8100	50	Shale
8100	8150	50	Shale
8150	8200	50	Shale
8200	8250	50	Shale
8250	8300	50	Shale
8300	8350	50	Shale
8350	8400	50	Shale
8400	8450	50	Shale
8450	8500	50	Shale
8500	8550	50	Shale
8550	8600	50	Shale
8600	8650	50	Shale
8650	8700	50	Shale
8700	8750	50	Shale
8750	8800	50	Shale
8800	8850	50	Shale
8850	8900	50	Shale
8900	8950	50	Shale
8950	9000	50	Shale
9000	9050	50	Shale
9050	9100	50	Shale
9100	9150	50	Shale
9150	9200	50	Shale
9200	9250	50	Shale
9250	9300	50	Shale
9300	9350	50	Shale
9350	9400	50	Shale
9400	9450	50	Shale
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9600	9650	50	Shale
9650	9700	50	Shale
9700	9750	50	Shale
9750	9800	50	Shale
9800	9850	50	Shale
9850	9900	50	Shale
9900	9950	50	Shale
9950	10000	50	Shale