

4 - U.S.G.S.
1 - W.R. Johnston
2 - J.D. Allison
1 - FileU. S. LAND OFFICE Santa Fe
SERIAL NUMBER 080379-A
LEASE OR PERMIT TO PROSPECT 29-6
#14-08-061-139UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYRECEIVED
APR 18 1956
U. S. GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Pacific Northwest Pipeline Corp. Address 113 1/2 W. Main St., Farmington, New Mex.
Lessor or Tract Unit San Juan 29-6 Field Blanco State New Mexico
Well No. 24-21 Sec. 21 T. 29N R. 6E Meridian S.M.P.M. County Rio Arriba
Location 990 ft. S of Sec Line and 990 ft. W of Sec Line of Section 21 Elevation 557.6 Ord.

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. DuganDate April 14th, 1956 Title District Engineer

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

Commenced drilling 6-16, 1955 Finished drilling 8-8, 1955

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 5019 to 5589 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	Perforated		Purpose
							From—	To—	
9-5/8"		8-34		218.75					
7"	33.00	8-34	1000	1000	1000				
2-3/8"	1.75	8-34	1000	1000	1000				
HISTORY OF OIL OR GAS WELL									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9-5/8"	232.71	150 sacks 45 gal	Flow		
7"	5019	150 sacks 45, 100 sacks	Flow		

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 5589 feet, and from _____ feet to _____ feet

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

DATES

_____ 8-8, 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 well NO per 24 hours 4300 Gallons gasoline per 1,000 cu. ft. of gas _____Rock pressure, lbs. per sq. in. 5137 1019 5137 1012 3 Hour I.P. 8-24-55

EMPLOYEES

S.I. period 15 daysBob Meine - Drilling Engineer Driller _____, Driller
_____ Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2400	2400	Surface
2400	2551	151	Ojo Alamo - Sand
2551	2955	404	Kirtland - Shale with some sand
2955	3223	268	Fruitland - Interbedded shales, coals & sand
3223	3334	111	Pictured Cliffs - Sand
3334	5019	1685	Lewis - Shale
5019	5112	93	Cliff House - Sand
5112	5437	325	Manuel - Sands, Shales & Coals
5437	5547	110	Point Lookout - Sand
5547	5589	42	Manuel - Shale
5589			Total Depth

FORMATION RECORD—Continued[illegible]

HISTORY OF OIL OR GAS WELL

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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 its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

Drilled to 5112'. Sand frac from 5010-5109, with 10,000 Gallons diesel with 1/4 sand per gallon; 20 barrels cushion and 60 barrels over flush. Test pressure: I.P. 150#, increase to 1000 man., decrease to 890 final, bled to 100# after 10 minutes. Average Injection Rate 17.8 B.P.M. Drilled to 5410'. Sand frac from 5010-5410' with 11,870 gallons diesel with 1/4 sand per gallon for the first 9,840 gallons and 1/2 sand per gallon on balance. I.P. 150#, Max. 900#, Final 100#. Cleaned out.

Sand frac from 5010-5589 with 20,000 gallons with 1/4 sand per gallon. I.P. 150#, Max. 400#, Final 400#, bled back to 290#, I.R. 25 B.P.M. cleaned out to 5371'. Stuck drill pipe at 5371'. Run dining free pt., backed off, left one drill collar and bit in hole. Unable to catch fish. Run cement plug; 90 barrels water, 50 an regular cement, followed by 10 barrels of water.

Used a whipstock, drilled off whipstock at 5116 with pilot bit. Reamed hole to 6-1/4", then went in hole with bit sub and drill pipe. Set second whipstock and drilled up to 5240', reamed pilot hole to 5240', changed deflection of hole at 5180', pulled bit and single drill collars at 5240'. Went back in and drilled from 5240' - 5287 and twisted off drill pipe. Top of fish 5191'. Recovered fish and drilled to 5589'. Sand frac with 20,000 gallons with 1/4 sand per gallon. Ran 500 gallons acid ahead of frac. I.P. 1000#, Max. 1150#, Final 5100#. Average Injection Rate 15.5 B.P.M. Ran 995.65' 2-3/8 casing, set at 5555.65'. Released rig August 6th, 1957.

LOG OF OIL OR GAS WELL

ГЕОЛОГИЧ. СЛУЖБА

DEPARTMENT OF THE INTERIOR

UNITED STATES

IMAGE ON LETTER IS CORRECT

WEBSTER'S DICTIONARY

1-27-77 0841-22