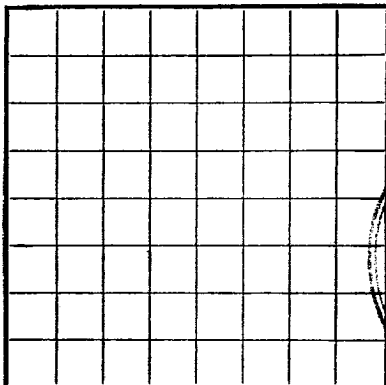


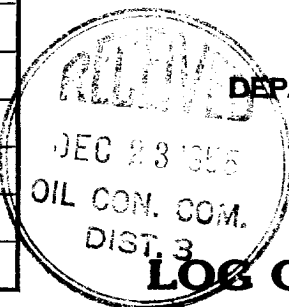
4 - U.S.G.S.
1 - W.R. Johnston
2 - D.F. Gandy
1 - File

Budget Bureau No. 42-R-355.3.
Approval expires 12-31-55.

U. S. LAND OFFICE **New Mexico**
SERIAL NUMBER **012698**
LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company **PACIFIC NORTHWEST PIPELINE CORP.** Address **413 1/2 West Main, Farmington, New Mexico**
Lessor or Tract **Unit 29-6** Field **Blanco** State **New Mexico**
Well No. **23-121** Sec. **12** T. **29N** R. **6W** Meridian **N.M.P.M.** County **Rio Arriba**
Location **1688** ft. **N** of **3** Line and **1573** ft. **E** of **W** Line of **Sec. 12** Elevation **6551'**
(Derrick base 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

Date **October 5, 1955**Title **District Engineer**

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

Commenced drilling **7-25**, 1955 Finished drilling **8-17**, 1955

OIL OR GAS SANDS OR ZONES
(Denote gas by G)
No. 1, from **5270** to **5275** No. 4, from **5275** to **5280**
No. 2, from **5280** to **5285** No. 5, from **5285** to **5290**
No. 3, from **5290** to **5295** No. 6, from **5295** to **5300**
IMPORTANT WATER SANDS:
No. 1, from **5300** to **5305** No. 3, from **5305** to **5310**
No. 2, from **5310** to **5315** No. 4, from **5315** to **5320**

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
10-3/4"	32.75	8 R4	Lone Star	160.15					
10-3/4"	32.75	8 R4	Lone Star	160.15					
7-5/8"	26.00	8 R4	Lone Star	375.00					
7-5/8"	26.00	8 R4	Lone Star	375.00					
5 1/2"	14.0	8 R4	Lone Star	375.00					
5 1/2"	14.0	8 R4	Lone Star	375.00					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4"	124.65	110 sx. 45	Ballburton		
7-5/8"	3605	65 sx. 85	50 Sx Neat		
5 1/2"	5037	135 sx. 25 gal			

PLUGS AND ADAPTERS

Heaving plug—Material **None** Length _____ Depth set _____
Adapters—Material _____ Size _____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
None						

TOOLS USED

Rotary tools were used from **0** feet to **5270** feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

8-17, 19**55** 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** ft. per 24 hours Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. **11,202**

Shut in 7 days S.I.C.P. **1080**, S.I.T.P. **1074**

EMPLOYEES

_____, Driller _____, Driller
_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2644	2644	Surface
2644	2790	146	Sand - Ojo Alamo
2790	3190	400	Shale w/ some sand - Kirtland
3190	3452	262	Interbedded Shales - Fruitland
3452	3597	145	Sand - Pictured Cliffs
3597	5278	1681	Shale - Lewis
5278	5360	82	Sand - Cliff Hse.
5360	5653	293	Sands, Shales, & Coals, Manosco
5653			Sand Point Lookout
5653	5834	181	Total Depth

FORM—

JO—

COUNT FEET

(OVER)

CONTINUOUS

16-43094-8

FORMATION RECORD—Continued

PLEASE OR PRINT TO PROPERTY
SERIAL NUMBER
LAND OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCALITY WELL CORRELATION

[illegible][illegible]

Commenced drilling _____ 1911 _____
Finished drilling _____ 1911 _____
The summary on this page is for the condition of the well at above date.

Total depth 5839'. Sand and gravel layers, 300 Gals. acid ahead, using
 40,000 Gals. and 35,000' sq/ Initial pressure 1250', avg. treatment 900'
 Initial pressure 700', work on venting and pump rate 46.5 BPM, avg. treat
 rate 606 BPM avg flush rate 72 BPM. Set bridge plug at 5600', and perforate
 5578-5544, 5532-5526, 5402-5374, 5332-5332, w/2 shots / 12.1 lbs
 w/10,000 Gals w/1.5' sq/ Initial pressure 1350', max. 1375' well went on
 vacuum, avg. injection rate 32.5 BPM, on 11th 57 BPM, over all 39 BPM.
 Perforated drill house from 5357-5326, 5250-5278, w/2 shots/16', ran 500
 600' ahead of track, now 40,000 Gals w/1.5' sq/ Initial pressure
 1700' and 1750' Initial 1700', well went on vacuum avg. injection rate
 48.5 BPM. Flush 53 BPM over all 54'. 54' GPM. Perforated out bridge plug,
 cleaned to bottom, dropping 12' and 12' and complete well.

Size inches	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated	Purpose
To	From	To						
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 of the work. 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 or other "sight-testing" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots.								

MUDDING AND CEMENTING RECORD

Case	Where set	Number acres of permanent	Method used	Wind rating	Amount of mud used
10-11-12	10-11-12	10-11-12	10-11-12	10-11-12	10-11-12
10-11-12	10-11-12	10-11-12	10-11-12	10-11-12	10-11-12
10-11-12	10-11-12	10-11-12	10-11-12	10-11-12	10-11-12

PLUGS AND ADAPTERS

[illegible]

SHOOTING RECORD

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

TOOTS' LIFE

Foot	of foot	from foot and	to foot	0	Rotary tools were used from
Foot	of foot	from foot and	to foot		Table tools were used from

DATE

Rock pressure, lbs. per sq. in.	
If gas well, cu. ft. per 24 hours	
Formation, % water; and % sediment.	
The production for the first 24 hours was	
Put to producing	

EMPLOYEES

[illegible]

FORMATION RECORD

FORMATION	TOTAL FEET	TO -	FROM -
1. 1000 - 1000	1000	1000	0
2. 1000 - 1000	1000	1000	1000
3. 1000 - 1000	1000	1000	2000
4. 1000 - 1000	1000	1000	3000
5. 1000 - 1000	1000	1000	4000
6. 1000 - 1000	1000	1000	5000
7. 1000 - 1000	1000	1000	6000
8. 1000 - 1000	1000	1000	7000
9. 1000 - 1000	1000	1000	8000
10. 1000 - 1000	1000	1000	9000
11. 1000 - 1000	1000	1000	10000

FORMATION RECORD—Continued