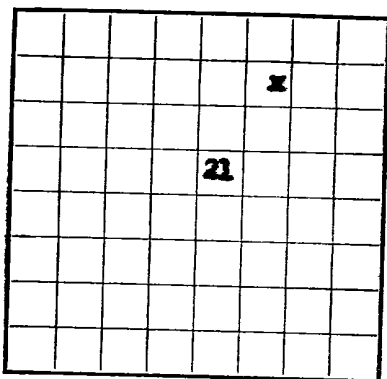




LOCATE WELL CORRECTLY

4-5500
1- M. Johnston
2- J. P. Alcorn
1- FileU. S. LAND OFFICE Santa Fe
SERIAL NUMBER 079193
LEASE OR PERMIT TO PROSPECTUNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYRECEIVED
MAY 31 1956
U. S. GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO

LOG OF OIL OR GAS WELL

Company Pacific Northwest Pipeline Corp. Address 4134 N. Main, Farmington, New Mexico
Lessor or Tract Unit 28-6 Field Blanco N.V. State New Mexico
Well No. 60-21 Sec. 28N T. 6 R. Meridian N.M.P.M. County Rio Arriba
Location 1140 ft. N. of Sec. Line and 1450 ft. E. of Sec. Line of 21 Elevation 6460
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.Date May 21, 1956 Signed Original signed by T. A. Dugan
Title District Engineer

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

Commenced drilling 3-13, 19 56 Finished drilling 3-29, 19 56

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3296 to 3392 G No. 4, from to
No. 2, from 5060 to 5696 G No. 5, from 5-29 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	Thread per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated	Purpose
10-3/4	32.75	8.625	J&L	20363	Tex Pattern	2035-22		
7-5/8	26.4	8.625	J&L	3280.99	Guide			
5-1/2	21.8	8.625	J&L	5676.54	San. & Appl.			
2-3/4	11.7	8.625	J&L	5676.54	San. & Appl.			

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4	213.38	200 sx reg.	Halliburton		
7-5/8	3296.33	150 sx 5% & 50 neat	Halliburton		
5-1/2	5676	200 sx reg.	Halliburton		

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 5676 feet, and from feet to feet
Cable tools were used from feet to feet, and from feet to feet

DATES

3-29, 19 56 Put to producing 19The production for the first 24 hours was barrels of fluid of which% was oil;%
emulsion; 100 water; and% sediment. Gravity, °Bé.If gas well, cu. ft. per 24 hours 4,495 Gallons gasoline per 1,000 cu. ft. of gasRock pressure, lbs. per sq. in. 1104 1023 3 hr. open flow 4-13-56

Robert Heise Drilling Engineer

EMPLOYEES

....., Driller Shut in for 15 days, Driller
....., Driller Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2333	2333	Surface
2333	2498	165	Ojo Alamo-Sand
2498	3018	520	Kirtland-Shale w/some sand
3018	3285	267	Pruitland-Interbedded sand, shale and coal
3285	3392	107	Pictured Cliffs-Sand
3392	5055	1663	Lewis-Shale
5055	5137	82	Cliff House-Sand
5137	5492	355	Monaca-Interbedded sand, shale and coal
5492	5630	138	Faint Lookout-Sand
5630			Total Depth (Lane Wells)

[illegible]

DATE	DEPT	EMPLOYEE
DATE	DEPT	EMPLOYEE
DATE	DEPT	EMPLOYEE

1. The first of the above mentioned items is a copy of the letter from the Secretary of the Department of the Interior, dated January 1, 1900, to the Secretary of the Department of the Navy, in which the Secretary of the Interior states that the Department of the Interior has no objection to the use of the land in question for the purpose of the proposed project.	2. The second of the above mentioned items is a copy of the letter from the Secretary of the Department of the Interior, dated January 1, 1900, to the Secretary of the Department of the Navy, in which the Secretary of the Interior states that the Department of the Interior has no objection to the use of the land in question for the purpose of the proposed project.
--	---

1966 TO 1967	1967 TO 1968	1968 TO 1969	1969 TO 1970	1970 TO 1971	1971 TO 1972	1972 TO 1973	1973 TO 1974	1974 TO 1975	1975 TO 1976	1976 TO 1977	1977 TO 1978	1978 TO 1979	1979 TO 1980	1980 TO 1981	1981 TO 1982	1982 TO 1983	1983 TO 1984	1984 TO 1985	1985 TO 1986	1986 TO 1987	1987 TO 1988	1988 TO 1989	1989 TO 1990	1990 TO 1991	1991 TO 1992	1992 TO 1993	1993 TO 1994	1994 TO 1995	1995 TO 1996	1996 TO 1997	1997 TO 1998	1998 TO 1999	1999 TO 2000	2000 TO 2001	2001 TO 2002	2002 TO 2003	2003 TO 2004	2004 TO 2005	2005 TO 2006	2006 TO 2007	2007 TO 2008	2008 TO 2009	2009 TO 2010	2010 TO 2011	2011 TO 2012	2012 TO 2013	2013 TO 2014	2014 TO 2015	2015 TO 2016	2016 TO 2017	2017 TO 2018	2018 TO 2019	2019 TO 2020	2020 TO 2021	2021 TO 2022	2022 TO 2023	2023 TO 2024	2024 TO 2025	2025 TO 2026	2026 TO 2027	2027 TO 2028	2028 TO 2029	2029 TO 2030	2030 TO 2031	2031 TO 2032	2032 TO 2033	2033 TO 2034	2034 TO 2035	2035 TO 2036	2036 TO 2037	2037 TO 2038	2038 TO 2039	2039 TO 2040	2040 TO 2041	2041 TO 2042	2042 TO 2043	2043 TO 2044	2044 TO 2045	2045 TO 2046	2046 TO 2047	2047 TO 2048	2048 TO 2049	2049 TO 2050	2050 TO 2051	2051 TO 2052	2052 TO 2053	2053 TO 2054	2054 TO 2055	2055 TO 2056	2056 TO 2057	2057 TO 2058	2058 TO 2059	2059 TO 2060	2060 TO 2061	2061 TO 2062	2062 TO 2063	2063 TO 2064	2064 TO 2065	2065 TO 2066	2066 TO 2067	2067 TO 2068	2068 TO 2069	2069 TO 2070	2070 TO 2071	2071 TO 2072	2072 TO 2073	2073 TO 2074	2074 TO 2075	2075 TO 2076	2076 TO 2077	2077 TO 2078	2078 TO 2079	2079 TO 2080	2080 TO 2081	2081 TO 2082	2082 TO 2083	2083 TO 2084	2084 TO 2085	2085 TO 2086	2086 TO 2087	2087 TO 2088	2088 TO 2089	2089 TO 2090	2090 TO 2091	2091 TO 2092	2092 TO 2093	2093 TO 2094	2094 TO 2095	2095 TO 2096	2096 TO 2097	2097 TO 2098	2098 TO 2099	2099 TO 2100	2100 TO 2101	2101 TO 2102	2102 TO 2103	2103 TO 2104	2104 TO 2105	2105 TO 2106	2106 TO 2107	2107 TO 2108	2108 TO 2109	2109 TO 2110	2110 TO 2111	2111 TO 2112	2112 TO 2113	2113 TO 2114	2114 TO 2115	2115 TO 2116	2116 TO 2117	2117 TO 2118	2118 TO 2119	2119 TO 2120	2120 TO 2121	2121 TO 2122	2122 TO 2123	2123 TO 2124	2124 TO 2125	2125 TO 2126	2126 TO 2127	2127 TO 2128	2128 TO 2129	2129 TO 2130	2130 TO 2131	2131 TO 2132	2132 TO 2133	2133 TO 2134	2134 TO 2135	2135 TO 2136	2136 TO 2137	2137 TO 2138	2138 TO 2139	2139 TO 2140	2140 TO 2141	2141 TO 2142	2142 TO 2143	2143 TO 2144	2144 TO 2145	2145 TO 2146	2146 TO 2147	2147 TO 2148	2148 TO 2149	2149 TO 2150	2150 TO 2151	2151 TO 2152	2152 TO 2153	2153 TO 2154	2154 TO 2155	2155 TO 2156	2156 TO 2157	2157 TO 2158	2158 TO 2159	2159 TO 2160	2160 TO 2161	2161 TO 2162	2162 TO 2163	2163 TO 2164	2164 TO 2165	2165 TO 2166	2166 TO 2167	2167 TO 2168	2168 TO 2169	2169 TO 2170	2170 TO 2171	2171 TO 2172	2172 TO 2173	2173 TO 2174	2174 TO 2175	2175 TO 2176	2176 TO 2177	2177 TO 2178	2178 TO 2179	2179 TO 2180	2180 TO 2181	2181 TO 2182	2182 TO 2183	2183 TO 2184	2184 TO 2185	2185 TO 2186	2186 TO 2187	2187 TO 2188	2188 TO 2189	2189 TO 2190	2190 TO 2191	2191 TO 2192	2192 TO 2193	2193 TO 2194	2194 TO 2195	2195 TO 2196	2196 TO 2197	2197 TO 2198	2198 TO 2199	2199 TO 2200	2200 TO 2201	2201 TO 2202	2202 TO 2203	2203 TO 2204	2204 TO 2205	2205 TO 2206	2206 TO 2207	2207 TO 2208	2208 TO 2209	2209 TO 2210	2210 TO 2211	2211 TO 2212	2212 TO 2213	2213 TO 2214	2214 TO 2215	2215 TO 2216	2216 TO 2217	2217 TO 2218	2218 TO 2219	2219 TO 2220	2220 TO 2221	2221 TO
--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	---------

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

[illegible][illegible]

16-43094-2 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

[illegible]

T.D. 5676'. Ran Lane Wells Log. Perf. 5582-96, 5622-32, 5636-46, 5650-56, w/2 shots/ft. L.P.L. w/47,880 gals water only. BD 900#, Avg. Max, and Final 900#, to vacuum. Avg I.R. 52 BPM. Perf 5582-96, 5622-32, 5636-46, 5650-56, w/2 shots/ft. Set retrievable BP @ 5575'. Frac U.P.L. w/47,880 gals water only. BD 1000#, Avg. Max, and Final 1000#, to vacuum. Avg I.R. 60 BPM. Retrieved BP. Perf 5154-62, 5190-98, 5234-42, 5414-18, 5426-42, w/2 shots/ft. Set BP @ 5470'. Frac Menafee w/47,880 gals water only. BD 1600#, Avg treat 1250#, Max and Final 1300#. Standing 200# in 5 min. Avg I.R. 52 BPM. Retrieved BP. Perf 5060-66, 5070-76, 5084-5110, 5120-28, w/2 shots/ft. Set BP @ 5142'. Frac Chow/47,880 gals water only. BD 2200#, Avg 1900#, Max and Final 1400#. Standing 300# in 5 minutes. Avg I.R. 52 BPM. Set 5650.95' of 2-3/8" O.D. tubing. Set @ 5663.15'. Released rig @ 3:30 P.M. 3-29-56.

Commenced trading _____ Estimated trading _____ 19

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

Date: _____

Signature: _____

to get the data determined from all available records.

REGISTRATION

MEMORANDUM FOR THE RECORD

TABLE OF CONTENTS

Comptroller _____

[illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

ГЕОЛОГИЧЕСКИЕ ПОКАЗАТЕЛИ

DEPARTMENT OF THE INTERIOR

UNITED STATES

REVENUE OF BUREAU TO PROCEED

SERIAL 40-3881
FBI WASH DC OFFICE

10/10/68 8-330 770604 460000 13-21-68