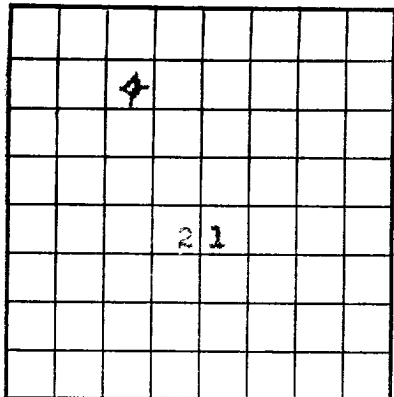


Form 9-330



U. S. LAND OFFICE SANTA FE
SERIAL NUMBER 080382-4
LEASE OR PERMIT TO PROSPECT _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company The Frontier Refining Company Address 410 Boston Bldg., Denver, Colorado
Lessor or Tract Schwerdtfeger-Government Field A. Kutz Canyon (Art) State New Mexico
Well No. 13 Sec. 21 T. 27N R. 11W Meridian N.M.P.M. County San Juan
Location 990 ft. {N.} of N. Line and 1650 ft. {E.} of W. Line of Section 21 Elevation 6280' Ord.
(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 Norman S. Galbraith

Date April 10, 1952 Title Norman S. Galbraith, Geologist

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

Commenced drilling 1/7, 1952 Finished drilling 1/10, 1952

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

No. 1, from 1929 to 2084 G 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		Purpose
							From—	To—	
<u>8-5/8"</u>	<u>23.25</u>	<u>5</u>	<u>Lucas</u>	<u>1021'</u>	<u>plug</u>	<u>1021'</u>			<u>plug</u>
<u>5-1/2"</u>	<u>19.3</u>	<u>5</u>	<u>Lucas</u>	<u>1929'</u>	<u>plug</u>	<u>1929'</u>			<u>plug</u>
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
<u>8-5/8"</u>	<u>111' KB</u>	<u>90 sacks</u>	<u>plug</u>	<u>-</u>	<u>-</u>
<u>5-1/2"</u>	<u>1923' KB</u>	<u>75 sacks</u>	<u>plug</u>	<u>-</u>	<u>-</u>

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
<u>4 x 20</u>	<u>7</u>	<u>liquid nitro</u>	<u>150 lbs.</u>	<u>1/21/52</u>	<u>1975-2025' KB</u>	<u>1985' KB</u>
<u>4 x 10</u>	<u>1</u>					

TOOLS USED

Rotary tools were used from 0 feet to 1942 feet, and from _____ feet to _____ feet
Cable tools were used from 1942 feet to 2084 feet, and from _____ feet to _____ feet

DATES

1/7, 1952 Put to producing 1/10, 1952

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 _____ Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. _____

EMPLOYEES

Carden Drilling Company, Driller _____, Driller _____
English Drilling Company, Driller _____, Driller _____

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0</u>	<u>800</u>	<u>800</u>	<u>Sand and shale. Torrohon-Auerco at surface. Ojo Alamo at 800'.</u>
<u>800</u>	<u>954</u>	<u>154</u>	<u>Sand with shale breaks. Top Airland shale at 954'.</u>
<u>954</u>	<u>1919</u>	<u>965</u>	<u>Sand and shale.</u>
<u>1919</u>	<u>1931</u>	<u>12</u>	<u>Coal. Top Pictured Cliffs at 1931'.</u>
<u>1931</u>	<u>1939</u>	<u>8</u>	<u>Hard and fine sand. Top Pictured Cliffs sand (sample top) at 1939'.</u>
<u>1939</u>	<u>2084</u>	<u>145</u>	<u>Sand with shale streaks.</u>
	<u>2084' KB</u>	<u>ID</u>	

File	_____
Transporter	_____
U. S. G. S.	_____
State Land Office	_____
Proration Office	_____
Santa Fe	_____
Operator	_____
NO. _____	_____
FURNISHED	_____
DISTRIBUTION	_____
NO. COPIES RECEIVED	_____
NO. 43094-2	_____

OIL CONSERVATION COMMISSION
AZTEC DISTRICT OFFICE
NO. COPIES RECEIVED
NO. 43094-2

PLEASE OR PERMIT TO PROSPECT
SERIAL NUMBER
U. S. LAND OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

A 10x10 grid with a small black mark in the top right quadrant. The mark is located in the 4th column from the right and the 2nd row from the top.

769 No. _____ Sec. _____ T. _____ R. _____
County _____ State _____

_____ Field _____
_____ Address _____
_____ Corporation _____

The information given in this report is a good basis and correct record of the well and all work done thereon.

RECEIVED
JAN 10 1967

Location of _____ of _____ Line and _____
if _____ of _____
The use of standard section shall be:

[Illegible handwritten notes]

1. The sum of \$100.00 was received from the following sources:

[illegible]

1/16/55 moved in cable to
1/17/55 drilled thru plug and baled hole dry. Note stood dry for 2 hours to
1/18/55 11:14 to 1:00 PM

[illegible]

10-10-68
State of New York
County of New York
Clerk of the Court
In and for the County of New York
I, the undersigned, Clerk of the Court, do hereby certify that the foregoing is a true and correct copy of the original as the same appears in the files and records of the Court.

[illegible]

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 burning.

HISTORY OF OIL OR GAS WELL

U. S. GOVERNMENT PRINTING OFFICE

[illegible]

PL 2 AND ADAPTERS

Depth test

SHOOTING RECORD

[illegible]

TOOLS USED

test	at test	most bus, test	at test	most bus new shoot vinyl
test	at test	most bus, test	at test	Caple tools new shoot vinyl

DATE		Put to proof	of
10	10	10	10

The proportion for the first 24 hours was ... of water; and ... of sediment.	Gravity, 68° Bé.
--	---

Rock pressure, lbs per sq in.
If gas well, on ft per 24 hours
Gallons gasoline per 1,000 cu. ft. of gas

END PAGE

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399</
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FORMATION RECORD

FORM	TOT	TOTAL FIRM	FORMATION

0114		
10000000		
0.0.2.1		
0010 0000 0000		
0000 0000 0000		

RECEIVED
NOV 10 1964
DIRECTOR'S OFFICE

FROM-	TO-	TOTAL FEET	FORMATION
			(over)

FORMATION RECORD—Continued

SOUTH TO TOWNSHIP DATA
DISTRICT OFFICE

OFFICE
CONSERVATION COMMISSION