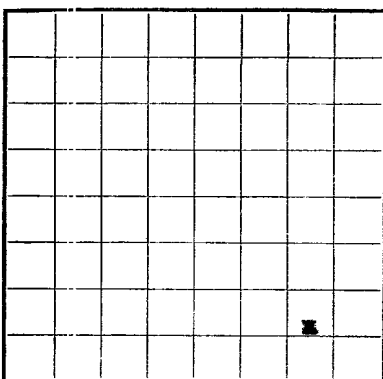


U. S. LAND OFFICE Hearilla Tribal

SERIAL NUMBER

LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Pan American Petroleum Corporation Address Box 480, Farmington, New MexicoLessor or Tract Hearilla Contract 155 Field Otero Chacra State New MexicoWell No. 18 Sec. 31 T. 26N R. 5W Meridian N.M.P.M. County Rio ArribaLocation 1140 ft. N. of 8 Line and 1140 ft. E. of 8 Line of Section 31 Elevation 5823
(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

Date January 15, 1963 Title Petroleum Engineer

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

Commenced drilling December 14, 19 62 Finished drilling December 21, 19 62

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3780 to 3784 (G) No. 4, from toNo. 2, from 3786 to 3792 (G) 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>21.70</u>	<u>8</u>	<u>API</u>	<u>201</u>	<u>Guide</u>	<u>Surface</u>			<u>Surface</u>
<u>4-1/2</u>	<u>9.58</u>	<u>8</u>	<u>J-55</u>	<u>3882</u>	<u>Guide</u>	<u>Oil String</u>			<u>Oil String</u>

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>211</u>	<u>135 sacks cement</u>	<u>Halliburton 1 Plug</u>		
<u>4-1/2</u>	<u>3870</u>	<u>300 sacks cement</u>	<u>Halliburton 2 Plug</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

TOOLS USED

Rotary tools were used from feet to feet, and from feet to feet

Cable tools were used from 0 feet to 3870 feet, and from feet to feet

DATES

....., 19..... Put to producing Completed as shut in well, 19 63The production for the first 24 hours was barrels of fluid of which January 6 63 % 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. 1520

EMPLOYEES

....., Driller , Driller

L. C. Davis, Driller Jack Bryant, DrillerJackie White, Driller Pete Estes, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0</u>	<u>2887</u>	<u>2887</u>	<u>Surface sand & shales</u>
<u>2887</u>	<u>2926</u>	<u>39</u>	<u>Pictured Cliffs sand & shale</u>
<u>2926</u>	<u>3772</u>	<u>846</u>	<u>Lewis shale</u>
<u>3772</u>	<u>3815</u>	<u>43</u>	<u>Chacra sand & shale</u>
<u>3815</u>	<u>3870</u>	<u>55</u>	<u>Lewis shale</u>

(OVER)

18-48004-4

1991-2000: 1991-2000: 1991-2000

100-443694-100 and 101

RECEIVED AT THE HQ OF ARAB

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

TO THE WELL KNOWN

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 _____

Location of _____ ft. of _____ line and _____ ft. of _____ line of _____ section _____

Well No. _____ Sec. _____ T. _____ R. _____ S. _____

Owner or Trust _____

Field _____ State _____

Company and American Petroleum Corporation Address _____

Completed drilling _____ 19____
Finished drilling _____ 19____
The quantity on this page is for the condition of the well at above date.
Date _____ 19____ Title _____

OIL OR GAS SANDS OR ZONES

10 (6 2-3 10-11-12)

No. 1 from	to	No. 1 from	to
No. 2 from	to	No. 2 from	to
No. 3 from	to	No. 3 from	to

IMPORTANT WATER SANDS

to	from	to	from
to	from	to	from

COASING RECORD

Case	Weight per foot	Length in feet	Mass	Amount	Kind of shoe	Cut and pulled from	Perforated	Footnote
							From - To -	

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 "shot down" 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.

HISTORY OF OIL OR GAS WELL

NUDDING AND CEMENTING RECORD

beam burn to maximum	efficiency	beam source	Number of scans to centroid	Time used	Beam quality
	9.0%	Electron beam	10000 scans	1.0	Good
	9.0%	Electron beam	10000 scans	1.0	Good

PLUGS AND ADAPTERS

Heaving plug Material	Length	Depth set
Adapted Material	Size	

SHOOTING RECORD

[illegible]

TOOLS USED

to	from	to	from
to	from	to	from

DATE

It was 7.30, and in the next 24 hours emulsion of 10% water and 10% sediment	The program for the first 24 hours was For 10 pounds of sediment as shown in table 1
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TIME

1950-1951	1951-1952	1952-1953	1953-1954	1954-1955	1955-1956	1956-1957	1957-1958	1958-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965	1965-1966	1966-1967	1967-1968	1968-1969	1969-1970	1970-1971	1971-1972	1972-1973	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978	1978-1979	1979-1980	1980-1981	1981-1982	1982-1983	1983-1984	1984-1985	1985-1986	1986-1987	1987-1988	1988-1989	1989-1990	1990-1991	1991-1992	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	2031-2032	2032-2033	2033-2034	2034-2035	2035-2036	2036-2037	2037-2038	2038-2039	2039-2040	2040-2041	2041-2042	2042-2043	2043-2044	2044-2045	2045-2046	2046-2047	2047-2048	2048-2049	2049-2050	2050-2051	2051-2052	2052-2053	2053-2054	2054-2055	2055-2056	2056-2057	2057-2058	2058-2059	2059-2060	2060-2061	2061-2062	2062-2063	2063-2064	2064-2065	2065-2066	2066-2067	2067-2068	2068-2069	2069-2070	2070-2071	2071-2072	2072-2073	2073-2074	2074-2075	2075-2076	2076-2077	2077-2078	2078-2079	2079-2080	2080-2081	2081-2082	2082-2083	2083-2084	2084-2085	2085-2086	2086-2087	2087-2088	2088-2089	2089-2090	2090-2091	2091-2092	2092-2093	2093-2094	2094-2095	2095-2096	2096-2097	2097-2098	2098-2099	2099-2100	2100-2101	2101-2102	2102-2103	2103-2104	2104-2105	2105-2106	2106-2107	2107-2108	2108-2109	2109-2110	2110-2111	2111-2112	2112-2113	2113-2114	2114-2115	2115-2116	2116-2117	2117-2118	2118-2119	2119-2120	2120-2121	2121-2122	2122-2123	2123-2124	2124-2125	2125-2126	2126-2127	2127-2128	2128-2129	2129-2130	2130-2131	2131-2132	2132-2133	2133-2134	2134-2135	2135-2136	2136-2137	2137-2138	2138-2139	2139-2140	2140-2141	2141-2142	2142-2143	2143-2144	2144-2145	2145-2146	2146-2147	2147-2148	2148-2149	2149-2150	2150-2151	2151-2152	2152-2153	2153-2154	2154-2155	2155-2156	2156-2157	2157-2158	2158-2159	2159-2160	2160-2161	2161-2162	2162-2163	2163-2164	2164-2165	2165-2166	2166-2167	2167-2168	2168-2169	2169-2170	2170-2171	2171-2172	2172-2173	2173-2174	2174-2175	2175-2176	2176-2177	2177-2178	2178-2179	2179-2180	2180-2181	2181-2182	2182-2183	2183-2184	2184-2185	2185-2186	2186-2187	2187-2188	2188-2189	2189-2190	2190-2191	2191-2192	2192-2193	2193-2194	2194-2195	2195-2196	2196-2197	2197-2198	2198-2199	2199-2200	2200-2201	2201-2202	2202-2203	2203-2204	2204-2205	2205-2206	2206-2207	2207-2208	2208-2209	2209-2210	2210-2211	2211-2212	2212-2213	2213-2214	2214-2215	2215-2216	2216-2217	2217-2218	2218-2219	2219-2220	2220-2221	2221-2222	22
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FORMATION RECORD—Continued

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[illegible]