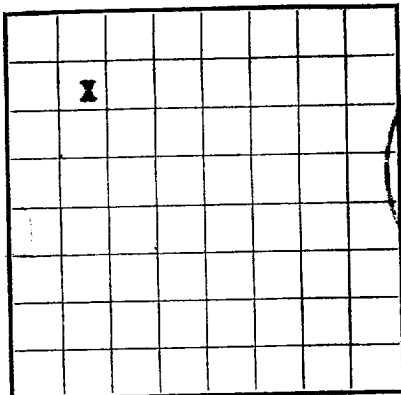


U. S. LAND OFFICE Navajo Tribal
SERIAL NUMBER I-149-IND-6185
LEASE OR PERMIT TO PROSPECT _____

LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Pan American Petroleum Corporation Address Box 487, Farmington, New Mexico
Lessor or Tract Navajo "C" Field Wildcat-Paradox State New Mexico
Well No. 1 Sec. 1 T. 29N R. 17W Meridian N.M.P.M. County San Juan
Location 790 ft. N of 1 Line and 990 ft. E of 1 Line of Section 1 Elevation 4976
(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.

ORIGINAL SIGNED BY
Signed R. M. Bauer, Jr.

Date April 30, 1959 Title Field Engineer
The summary on this page is for the condition of the well at above date.

Commenced drilling January 1, 1959 Finished drilling March 28, 1959

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

No. 1, from 6366 to 6390 (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—	
10-3/4"	33.7	8	National 5610	510	Guide	_____	_____	_____	Intermediate
7-5/8"	15	8	National 1047	1047	Guide	_____	_____	_____	Oil String

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
16"	361	500 sacks of cement	Halliburton No. 2 plug.		
10-3/4"	2300	1300 sacks of cement	Halliburton No. 2 plug.		
7-5/8"	3370	130 sacks of cement	Halliburton No. 2 plug.		
5"	7026	310 sacks of cement	Halliburton No. 2 plug.		

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 _____ feet to _____ feet, and from _____ feet to _____ feet

Completed as shut in Paradox discovery
Gas well _____, 1959

The production for the first 24 hours was _____ barrels of fluid of which _____% was oil; _____%
emulsion; _____% water; and _____% sediment.

If gas well, _____ cu. ft. per 24 hours _____ Gravity, °Bé. 89.3

Rock pressure, lbs. per sq. in. 9000 Gallons gasoline per 1,000 cu. ft. of gas _____

Casing pressure 2577 psig (shut in 7 days.)

_____, Driller _____, Driller
Jesse R. York, Driller James F. Clary, Driller

Lee E. Martin, Driller R. D. Zent, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	590	590	Sand & shale.
590	706	116	Greenhorn shale.
706	850	144	Dakota sand & shale.
850	1960	1110	Morrison sand & shale.
1960	2685	725	Entrada sand & shale.
2685	3907	1222	Chinle sand & shale.
3907	5265	1358	Cutler sand & shale.
5265	5947	682	Hermosa lime & shale.
5947	6842	895	Paradox lime & shale.
6842	6979	137	Molsa shale.
6979	7026	47	Mississippian lime.
			(Tops from E log)
FROM—	TO—	TOTAL FEET	FORMATION

FORMATION RECORD—Continued

$$d_{\text{eff}} = 0.0001 \text{ m}^2 \text{ s}^{-1}$$

1 case on Point to Prospect
Serial Number 1-14-1
U.S. and Oyster

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Y CORRECTION

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 _____
 J. M. [illegible]
 J. M. [illegible]
 Location of _____ of _____ line and _____ of _____ line of _____
 Well No. _____ Sec. _____ T. _____ R. _____
 Section or Tract _____
 Field Office _____ State _____
 County _____
 Address _____

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

Date _____

Title _____

OUT OR GAS SANDS OR ZONES

(1) $\forall x \exists y \text{ loves}(x, y)$

to No. 1, from

to No. 2, from

to No. 3, from

to No. 4, from

to No. 5, from

to No. 6, from

IMPORTANT WATER SANDS

No. 101
 No. 102
 No. 103
 No. 104
 No. 105
 No. 106
 No. 107
 No. 108
 No. 109
 No. 110
 No. 111
 No. 112
 No. 113
 No. 114
 No. 115
 No. 116
 No. 117
 No. 118
 No. 119
 No. 120
 No. 121
 No. 122
 No. 123
 No. 124
 No. 125
 No. 126
 No. 127
 No. 128
 No. 129
 No. 130
 No. 131
 No. 132
 No. 133
 No. 134
 No. 135
 No. 136
 No. 137
 No. 138
 No. 139
 No. 140
 No. 141
 No. 142
 No. 143
 No. 144
 No. 145
 No. 146
 No. 147
 No. 148
 No. 149
 No. 150
 No. 151
 No. 152
 No. 153
 No. 154
 No. 155
 No. 156
 No. 157
 No. 158
 No. 159
 No. 160
 No. 161
 No. 162
 No. 163
 No. 164
 No. 165
 No. 166
 No. 167
 No. 168
 No. 169
 No. 170
 No. 171
 No. 172
 No. 173
 No. 174
 No. 175
 No. 176
 No. 177
 No. 178
 No. 179
 No. 180
 No. 181
 No. 182
 No. 183
 No. 184
 No. 185
 No. 186
 No. 187
 No. 188
 No. 189
 No. 190
 No. 191
 No. 192
 No. 193
 No. 194
 No. 195
 No. 196
 No. 197
 No. 198
 No. 199
 No. 200

CASING RECORD

Serial No.	Date	Place	Remarks	Amount	Kind of shoe	Car and buried from	From	To	Purpose
1	1904-5	10-10-04	U. S. GOVERNMENT PRINTING OFFICE						

ALLIED AIR AND GROUND SUPPORT

Amount to fund used	Mud gravity	Method used	Number of days to cement	Time	Remarks
1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.00

PHOTOGRAPH RECORD

Year	Month	Frequency	Quantity	Date	Depth (meters)	Depth (feet)
1960	1	1	1			
1960	2	1	1			
1960	3	1	1			
1960	4	1	1			
1960	5	1	1			
1960	6	1	1			
1960	7	1	1			
1960	8	1	1			
1960	9	1	1			
1960	10	1	1			
1960	11	1	1			
1960	12	1	1			
1961	1	1	1			
1961	2	1	1			
1961	3	1	1			
1961	4	1	1			
1961	5	1	1			
1961	6	1	1			
1961	7	1	1			
1961	8	1	1			
1961	9	1	1			
1961	10	1	1			
1961	11	1	1			
1961	12	1	1			
1962	1	1	1			
1962	2	1	1			
1962	3	1	1			
1962	4	1	1			
1962	5	1	1			
1962	6	1	1			
1962	7	1	1			
1962	8	1	1			
1962	9	1	1			
1962	10	1	1			
1962	11	1	1			
1962	12	1	1			
1963	1	1	1			
1963	2	1	1			
1963	3	1	1			
1963	4	1	1			
1963	5	1	1			
1963	6	1	1			
1963	7	1	1			
1963	8	1	1			
1963	9	1	1			
1963	10	1	1			
1963	11	1	1			
1963	12	1	1			
1964	1	1	1			
1964	2	1	1			
1964	3	1	1			
1964	4	1	1			
1964	5	1	1			
1964	6	1	1			
1964	7	1	1			
1964	8	1	1			
1964	9	1	1			
1964	10	1	1			
1964	11	1	1			
1964	12	1	1			
1965	1	1	1			
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1965	4	1	1			
1965	5	1	1			
1965	6	1	1			
1965	7	1	1			
1965	8	1	1			
1965	9	1	1			
1965	10	1	1			
1965	11	1	1			
1965	12	1	1			
1966	1	1	1			
1966	2	1	1			
1966	3	1	1			
1966	4	1	1			
1966	5	1	1			
1966	6	1	1			
1966	7	1	1			
1966	8	1	1			
1966	9	1	1			
1966	10	1	1			
1966	11	1	1			
1966	12	1	1			
1967	1	1	1			
1967	2	1	1			
1967	3	1	1			
1967	4	1	1			
1967	5	1	1			
1967	6	1	1			
1967	7	1	1			
1967	8	1	1			
1967	9	1	1			
1967	10	1	1			
1967	11	1	1			
1967	12	1	1			
1968	1	1	1			
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1968	5	1	1			
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1968	9	1	1			
1968	10	1	1			
1968	11	1	1			
1968	12	1	1			
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1969	8	1	1			
1969	9	1	1			
1969	10	1	1			
1969	11	1	1			
1969	12	1	1			
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1970	10	1	1			
1970	11	1	1			
1970	12	1	1			
1971	1	1	1			
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1971	6	1	1			
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1971	8	1	1			
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1971	11	1	1			
1971	12	1	1			
1972	1	1	1			
1972	2	1	1			
1972	3	1	1			
1972	4	1	1			
1972	5	1	1			
1972	6	1	1			
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1972	8	1	1			
1972	9	1	1			
1972	10	1	1			
1972	11	1	1			
1972	12	1	1			
1973	1	1	1			
1973	2	1	1			
1973	3	1	1			
1973	4	1	1			
1973	5	1	1			
1973	6	1	1			
1973	7	1	1			
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1973	10	1	1			
1973	11	1	1			
1973	12	1	1			
1974	1	1	1			
1974	2	1	1			
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1974	4	1	1			
1974	5	1	1			
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1974	7	1	1			
1974	8	1	1			
1974	9	1	1			
1974	10	1	1			
1974	11	1	1			
1974	12	1	1			
1975	1	1	1			
1975	2	1	1			
1975	3	1	1			
1975	4	1	1			
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1975	11	1	1			
1975	12	1	1			
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1976	10	1	1			
1976	11	1	1			
1976	12	1	1			
1977	1	1	1			
1977	2	1	1			
1977	3	1	1			
1977	4	1	1			
1977	5	1	1			
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1977	7	1	1			
1977	8	1	1			
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1977	10	1	1			
1977	11	1	1			
1977	12	1	1			
1978	1	1	1			
1978	2	1	1			
1978	3	1	1			
1978	4	1	1			
1978	5	1	1			
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1978	9	1	1			
1978	10	1	1			
1978	11	1	1			
1978	12	1	1			
1979	1	1	1			
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1979	3	1	1			
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1982	9	1	1			
1982	10	1	1			
1982	11	1	1			
1982	12	1	1			
1983	1	1	1			
1983	2	1	1			
1983	3	1	1			
1983	4	1	1			
1983	5	1	1			
1983	6	1	1			
1983	7	1	1			
1983	8	1	1			
1983	9	1	1			
198						

TOOLS USED

Cable tools were used from	feet to	feet and from	feet to
Robbing tools were used from	feet to	feet and from	feet to

DATE

The production for the first 24 hours was _____ barrels of fluid of which _____ were oil. _____ Put to producing	_____ Put to producing
---	-------------------------------

If used in the per 24 hours Gallons gasoline per 1,000 cu. ft. of gas	% water; and % sediment	Gravity, B.S. 88.5 - 89.9 degrees
--	----------------------------	--------------------------------------

Rocky Mountain Press, Inc. per sd. m.

EMPLOYER

INFORMATION RECORD

FROM-	TO-	TOTAL FEET	FORMATION
50.0	51.0	10	(Top of E 100)
51.0	52.0	10	Claystone & shale
52.0	53.0	10	Shale & shale
53.0	54.0	10	Shale & shale
54.0	55.0	10	Shale & shale
55.0	56.0	10	Shale & shale
56.0	57.0	10	Shale & shale
57.0	58.0	10	Shale & shale
58.0	59.0	10	Shale & shale
59.0	60.0	10	Shale & shale
60.0	61.0	10	Shale & shale
61.0	62.0	10	Shale & shale
62.0	63.0	10	Shale & shale
63.0	64.0	10	Shale & shale
64.0	65.0	10	Shale & shale
65.0	66.0	10	Shale & shale
66.0	67.0	10	Shale & shale
67.0	68.0	10	Shale & shale
68.0	69.0	10	Shale & shale
69.0	70.0	10	Shale & shale
70.0	71.0	10	Shale & shale
71.0	72.0	10	Shale & shale
72.0	73.0	10	Shale & shale
73.0	74.0	10	Shale & shale
74.0	75.0	10	Shale & shale
75.0	76.0	10	Shale & shale
76.0	77.0	10	Shale & shale
77.0	78.0	10	Shale & shale
78.0	79.0	10	Shale & shale
79.0	80.0	10	Shale & shale
80.0	81.0	10	Shale & shale
81.0	82.0	10	Shale & shale
82.0	83.0	10	Shale & shale
83.0	84.0	10	Shale & shale
84.0	85.0	10	Shale & shale
85.0	86.0	10	Shale & shale
86.0	87.0	10	Shale & shale
87.0	88.0	10	Shale & shale
88.0	89.0	10	Shale & shale
89.0	90.0	10	Shale & shale
90.0	91.0	10	Shale & shale
91.0	92.0	10	Shale & shale
92.0	93.0	10	Shale & shale
93.0	94.0	10	Shale & shale
94.0	95.0	10	Shale & shale
95.0	96.0	10	Shale & shale
96.0	97.0	10	Shale & shale
97.0	98.0	10	Shale & shale
98.0	99.0	10	Shale & shale
99.0	100.0	10	Shale & shale
100.0	101.0	10	Shale & shale
101.0	102.0	10	Shale & shale
102.0	103.0	10	Shale & shale
103.0	104.0	10	Shale & shale
104.0	105.0	10	Shale & shale
105.0	106.0	10	Shale & shale
106.0	107.0	10	Shale & shale
107.0	108.0	10	Shale & shale
108.0	109.0	10	Shale & shale
109.0	110.0	10	Shale & shale
110.0	111.0	10	Shale & shale
111.0	112.0	10	Shale & shale
112.0	113.0	10	Shale & shale
113.0	114.0	10	Shale & shale
114.0	115.0	10	Shale & shale
115.0	116.0	10	Shale & shale
116.0	117.0	10	Shale & shale
117.0	118.0	10	Shale & shale
118.0	119.0	10	Shale & shale
119.0	120.0	10	Shale & shale
120.0	121.0	10	Shale & shale
121.0	122.0	10	Shale & shale
122.0	123.0	10	Shale & shale
123.0	124.0	10	Shale & shale
124.0	125.0	10	Shale & shale
125.0	126.0	10	Shale & shale
126.0	127.0	10	Shale & shale
127.0	128.0	10	Shale & shale
128.0	129.0	10	Shale & shale
129.0	130.0	10	Shale & shale
130.0	131.0	10	Shale & shale
131.0	132.0	10	Shale & shale
132.0	133.0	10	Shale & shale
133.0	134.0	10	Shale & shale
134.0	135.0	10	Shale & shale