



Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Santa Fe

SERIAL NUMBER

LEASE OR PERMIT TO PROSPECT -----
14-20-600-3531

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company The Atlantic Refining Co. Address Box 520, Casper, Wyoming
 Lessor or Tract Navajo Ute Mtn. Tribal Field Horseshoe Gallup State New Mexico
Navajo B
 Well No. 8 Sec. 20 T. 31N R. 16W Meridian NMPM County San Juan
 Location 1924 ft. [N.] of S Line and 576 ft. [E.] of W Line of Sec. 20 Elevation 5677 ft.

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 R. F. Cunningham

Date 6-24-59 Title District Clerk

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

Commenced drilling 6-1-59, 19____ Finished drilling 6-12-59, 19____

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 1503 to 1520 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. 2, from _____ to _____

No. 3, 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—	
8 5/8	2 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
10 1/2	3 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
12 1/2	4 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
14 1/2	5 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
16 1/2	6 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
18 1/2	7 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
20 1/2	8 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
22 1/2	9 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
24 1/2	10 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
26 1/2	11 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
28 1/2	12 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
30 1/2	13 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
32 1/2	14 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
34 1/2	15 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
36 1/2	16 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
38 1/2	17 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
40 1/2	18 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
42 1/2	19 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
44 1/2	20 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
46 1/2	21 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
48 1/2	22 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
50 1/2	23 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
52 1/2	24 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
54 1/2	25 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
56 1/2	26 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
58 1/2	27 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
60 1/2	28 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
62 1/2	29 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
64 1/2	30 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
66 1/2	31 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
68 1/2	32 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
70 1/2	33 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
72 1/2	34 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
74 1/2	35 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
76 1/2	36 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
78 1/2	37 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
80 1/2	38 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
82 1/2	39 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
84 1/2	40 1/4	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
86 1/2	41	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
88 1/2	42	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
90 1/2	43	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
92 1/2	44	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
94 1/2	45	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
96 1/2	46	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
98 1/2	47	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
100 1/2	48	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
102 1/2	49	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
104 1/2	50	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
106 1/2	51	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
108 1/2	52	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
110 1/2	53	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
112 1/2	54	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
114 1/2	55	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
116 1/2	56	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
118 1/2	57	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
120 1/2	58	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
122 1/2	59	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
124 1/2	60	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
126 1/2	61	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
128 1/2	62	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
130 1/2	63	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
132 1/2	64	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
134 1/2	65	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
136 1/2	66	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
138 1/2	67	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
140 1/2	68	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
142 1/2	69	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
144 1/2	70	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
146 1/2	71	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
148 1/2	72	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
150 1/2	73	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
152 1/2	74	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
154 1/2	75	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
156 1/2	76	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
158 1/2	77	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
160 1/2	78	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
162 1/2	79	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
164 1/2	80	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
166 1/2	81	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
168 1/2	82	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
170 1/2	83	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
172 1/2	84	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
174 1/2	85	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
176 1/2	86	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
178 1/2	87	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
180 1/2	88	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
182 1/2	89	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
184 1/2	90	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
186 1/2	91	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
188 1/2	92	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
190 1/2	93	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
192 1/2	94	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
194 1/2	95	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
196 1/2	96	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
198 1/2	97	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
200 1/2	98	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
202 1/2	99	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
204 1/2	100	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
206 1/2	101	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
208 1/2	102	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
210 1/2	103	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
212 1/2	104	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
214 1/2	105	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
216 1/2	106	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
218 1/2	107	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
220 1/2	108	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
222 1/2	109	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
224 1/2	110	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
226 1/2	111	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
228 1/2	112	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
230 1/2	113	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
232 1/2	114	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
234 1/2	115	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
236 1/2	116	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
238 1/2	117	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
240 1/2	118	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
242 1/2	119	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
244 1/2	120	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
246 1/2	121	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
248 1/2	122	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
250 1/2	123	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
252 1/2	124	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
254 1/2	125	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
256 1/2	126	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
258 1/2	127	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
260 1/2	128	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
262 1/2	129	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
264 1/2	130	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
266 1/2	131	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
268 1/2	132	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
270 1/2	133	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
272 1/2	134	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
274 1/2	135	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
276 1/2	136	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
278 1/2	137	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
280 1/2	138	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
282 1/2	139	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
284 1/2	140	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
286 1/2	141	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
288 1/2	142	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
290 1/2	143	2nd	Spring	98-09	Palmer	oil bearing	1503	1520	oil bearing
292 1/2	144	2nd	Spring	98-09	Palmer				

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8	99.09	115	pump-plug	8.9	
4 1/2	1588.24	150	pump-plug	8.9	

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 1598 feet, and from feet to feet

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

DATES

6-24-59	19	Put to producing	6-13-59	19
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after load oil recovered after fracture treatment
The production for the first ~~24~~ hours was 67.20 barrels of fluid of which 100 % was oil; ----- %
emulsion; ----- % water; and ----- % sediment. pump test Gravity, °Bé. 100 41.0

If gas well, cu. ft. per 24 hours ----- Gallons gasoline per 1,000 cu. ft. of gas -----

Rock pressure, lbs. per sq. in. -----

EMPLOYEES

_____, Driller _____, Driller

_____, Driller _____, Driller

FORMATION RECORD

FROM-	TO-	TOTAL FEET	FORMATION
0 1468	1468 1598		Mancos Gallup
First Fracture Treatment			
Treated perforations 1503-1520 with 100,000# 10/20 sand and 27,804 gals lease crude. Average treating pressure 1600# at 38.3 BPM			
FROM-	TO-	TOTAL FEET	FORMATION

A circular stamp with the word "RECEIVED" at the top and "JAN 10 1966" at the bottom. The text is in a bold, sans-serif font. The stamp is slightly tilted.

LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

14-00000-3521
PLEASE OR PERMIT TO PROSPECT
SERIAL NUMBER
U.S. LAND OFFICE
Baites Is

Date _____
Title District Clerk

Signed _____
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.
Location _____ ft. _____ of _____ Line and _____ ft. _____ of _____ Line of _____ Sec. _____ T. _____ S. _____ R. _____ E. _____ N. _____ W. _____
Well No. _____
Person or Firm Having Interest _____
Company The Atlantic Refining Co.
Address Box 90, Casper, Wyoming New Mexico

Continued drilling _____ 6-1-58 _____ finished drilling _____ 6-11-58 _____

OIL OR GAS SANDS OR ZONES

No. 1, from 1501		to 1502		No. 4, from		to	
No. 2, from		to		No. 5, from		to	
No. 3, from		to		No. 6, from		to	

(Denote gas by G)

IMPORTANT WATER SANDS

No. 1, from	to	No. 8, from	to
No. 2, from	to	No. 4, from	to

CASING RECORD

Case No.	Size Diameter	Weight Per Foot	Thickness Per Inch	Marks	Amount Kind of shoe	Cost and drilled from	From To	Purposes
1	12 in.	100 lbs.	1/2 in.		1000 ft.	1000 ft.	1000 ft.	1000 ft.

HISTORY OF OIL OR GAS WELL

MUDDING AND CEMENTING RECORD

Year	Number of students	Method used	Year	Number of students
1981	15	Self-guided	1982	15
1983	15	Self-guided	1984	15

PLUGS AND ADAPTERS

Adapters--Zinc	Length	Depth and

SHOOTING RECORD

[illegible]

TOOLS USED

Rotary tools were used from _____ feet to _____ feet	_____ feet to _____ feet	_____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet	_____ feet to _____ feet	_____ feet to _____ feet

DATE

[illegible]

EMPLOYERS

	Differ		
	Differ		

FORMATION RECORD

FROM-	TO -	TOTAL FEET	FORMATION
0 1958	1958 1958		Shale G-lump

First Extreme Treatment

Treated perforations 1957-1958 with 100,000 lbs. acid and 25,000 lbs. issue
Average resulting pressure 10000 at 10.0 BPM

FORMATION RECORD—Continued

FROM-	TO-	TOTAL FEET	FORMATION
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