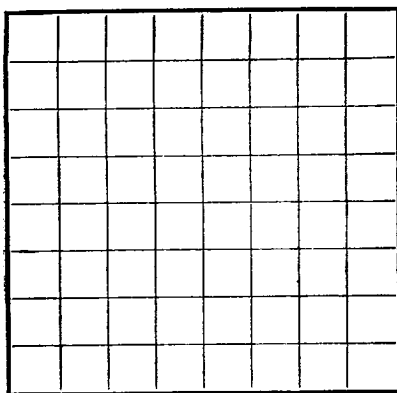
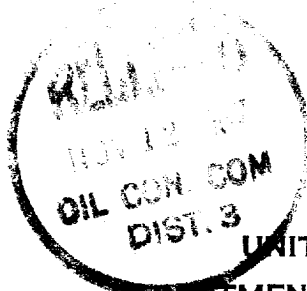




LOCATE WELL CORRECTLY

U. S. LAND OFFICE **Jicarilla Apache**
Dulce, New Mexico
LEASE OR PERMIT TO PROSPECT _____
CONTRACT # 102UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company **HONOLULU OIL CORPORATION** Address **P. O. DRAWER 1391, MIDLAND, TEXAS**Lessor or Tract **Jicarilla Apache** Field **Tapacito** State **New Mexico**Well No. **5** Sec. **4** T. **26N** R. **4W** Meridian **NMPM** County **Rio Arriba**Location **1450** ft. **N** of **N** Line and **1450** ft. **E** of **E** Line of **Section 4** Elevation **7230**
(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 **GEORGE R. HOY**Date **June 4, 1957** Title **DIVISION DEVELOPMENT ENGINEER**

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

Commenced drilling **June 26, 1957** Finished drilling **July 11, 1956**

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from **Gas 3992** to **4085** 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 **3410** to **3675** No. 3, from _____ to _____No. 2, from **3940** to **3995** 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"	32	8 rnd	Nat'l	392	Texas	not cut	not perforated		Surface
5 1/2"	14	8 rnd	CR & I	4153	Guide	not cut	4036	4062	Production
2"	4.70	8 rnd	Nat'l	4065	Bull Plug	not cut	4025	4031	Production

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8"	401	235	Pump & Plug	Water	
5 1/2"	4160	300	Pump & Plug	8.9 lbs. per gallon	

PLUGS AND ADAPTERS

Heaving plug—Material **None** Length _____ Depth set _____Adapters—Material **None** 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 **4160** feet, and from _____ feet to _____ feetCable tools were used from **not used** feet to **4160** feet, and from _____ feet to _____ feet

DATES

_____, 19____ Put to producing **not produced**, 19____The production for the first 24 hours was _____ barrels of fluid of which **0**% was oil; **0**% emulsion; **0**% water; and **0**% sediment. Gravity, °Bé. _____If gas well, cu. ft. per 24 hours **300,000** Gallons gasoline per 1,000 cu. ft. of gas **none**Rock pressure, lbs. per sq. in. **1,000**

EMPLOYEES

Jack Quinn, Toolpusher **S. R. Busbee**, Driller**R. C. Michels**, Driller **H. P. Boyd**, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	300	300	Sandstone
300	650	350	Shale
650	940	290	Sandstone & Shale
940	1760	820	Shale
1760	2960	1200	Shale & Sandstone
2960	3310	350	Sandstone
3310	3410	100	Shale
3410	3660	250	Sandstone
3660	3940	280	Shale
3940	3995	55	Coal
3995	4065	70	Sandstone (Pictured Cliff)
4065	4160	95	Shale

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
3000	2980	20	SHALE
2980	2960	20	SHALE (HYDROLYZED)
2960	2940	20	SHALE
2940	2920	20	SHALE
2920	2900	20	SHALE
2900	2880	20	SHALE
2880	2860	20	SHALE
2860	2840	20	SHALE
2840	2820	20	SHALE
2820	2800	20	SHALE
2800	2780	20	SHALE
2780	2760	20	SHALE
2760	2740	20	SHALE
2740	2720	20	SHALE
2720	2700	20	SHALE
2700	2680	20	SHALE
2680	2660	20	SHALE
2660	2640	20	SHALE
2640	2620	20	SHALE
2620	2600	20	SHALE
2600	2580	20	SHALE
2580	2560	20	SHALE
2560	2540	20	SHALE
2540	2520	20	SHALE
2520	2500	20	SHALE
2500	2480	20	SHALE
2480	2460	20	SHALE
2460	2440	20	SHALE
2440	2420	20	SHALE
2420	2400	20	SHALE
2400	2380	20	SHALE
2380	2360	20	SHALE
2360	2340	20	SHALE
2340	2320	20	SHALE
2320	2300	20	SHALE
2300	2280	20	SHALE
2280	2260	20	SHALE
2260	2240	20	SHALE
2240	2220	20	SHALE
2220	2200	20	SHALE
2200	2180	20	SHALE
2180	2160	20	SHALE
2160	2140	20	SHALE
2140	2120	20	SHALE
2120	2100	20	SHALE
2100	2080	20	SHALE
2080	2060	20	SHALE
2060	2040	20	SHALE
2040	2020	20	SHALE
2020	2000	20	SHALE
2000	1980	20	SHALE
1980	1960	20	SHALE
1960	1940	20	SHALE
1940	1920	20	SHALE
1920	1900	20	SHALE
1900	1880	20	SHALE
1880	1860	20	SHALE
1860	1840	20	SHALE
1840	1820	20	SHALE
1820	1800	20	SHALE
1800	1780	20	SHALE
1780	1760	20	SHALE
1760	1740	20	SHALE
1740	1720	20	SHALE
1720	1700	20	SHALE
1700	1680	20	SHALE
1680	1660	20	SHALE
1660	1640	20	SHALE
1640	1620	20	SHALE
1620	1600	20	SHALE
1600	1580	20	SHALE
1580	1560	20	SHALE
1560	1540	20	SHALE
1540	1520	20	SHALE
1520	1500	20	SHALE
1500	1480	20	SHALE
1480	1460	20	SHALE
1460	1440	20	SHALE
1440	1420	20	SHALE
1420	1400	20	SHALE
1400	1380	20	SHALE
1380	1360	20	SHALE
1360	1340	20	SHALE
1340	1320	20	SHALE
1320	1300	20	SHALE
1300	1280	20	SHALE
1280	1260	20	SHALE
1260	1240	20	SHALE
1240	1220	20	SHALE
1220	1200	20	SHALE
1200	1180	20	SHALE
1180	1160	20	SHALE
1160	1140	20	SHALE
1140	1120	20	SHALE
1120	1100	20	SHALE
1100	1080	20	SHALE
1080	1060	20	SHALE
1060	1040	20	SHALE
1040	1020	20	SHALE
1020	1000	20	SHALE
1000	980	20	SHALE
980	960	20	SHALE
960	940	20	SHALE
940	920	20	SHALE
920	900	20	SHALE
900	880	20	SHALE
880	860	20	SHALE
860	840	20	SHALE
840	820	20	SHALE
820	800	20	SHALE
800	780	20	SHALE
780	760	20	SHALE
760	740	20	SHALE
740	720	20	SHALE
720	700	20	SHALE
700	680	20	SHALE
680	660	20	SHALE
660	640	20	SHALE
640	620	20	SHALE
620	600	20	SHALE
600	580	20	SHALE
580	560	20	SHALE
560	540	20	SHALE
540	520	20	SHALE
520	500	20	SHALE
500	480	20	SHALE
480	460	20	SHALE
460	440	20	SHALE
440	420	20	SHALE
420	400	20	SHALE
400	380	20	SHALE
380	360	20	SHALE
360	340	20	SHALE
340	320	20	SHALE
320	300	20	SHALE
300	280	20	SHALE
280	260	20	SHALE
260	240	20	SHALE
240	220	20	SHALE
220	200	20	SHALE
200	180	20	SHALE
180	160	20	SHALE
160	140	20	SHALE
140	120	20	SHALE
120	100	20	SHALE
100	80	20	SHALE
80	60	20	SHALE
60	40	20	SHALE
40	20	20	SHALE
20	0	20	SHALE
0			

HISTORY OF OIL OR GAS WELL

16-43094-2

II. 6. GOVERNMENT PRINTING OFFICE

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 bailing.

Well drilled to T.D. 4160'. The 5 1/2" casing was set at 4160' and cemented with 300 sacks cement. The 5 1/2" casing was perforated as follows: 40 shots from 4002'

to 4012"; 104 shots from 4036' to 4062'. The Pictured Cliff was then fractured with 20,000 gallons water and 20,000 lbs. of sand. After frac the well made approximately 250 MCF gas and 50 barrels water per day. A Baker cast iron bridge plug was set at 3994'. The casing was perforated with 4 shots from 3992' to 3993'. A cement retainer was set at 3982'. The perforations were squeezed with a total of 500 sack cement to shut off the water from the coal section above the Pictured Cliffs sand. After the squeeze, the retainer and bridge plug were drilled out.

The casing was re-perforated with 104 shots from 4036' to 4062'. The Pictured
Cliff sandstone was then fractured through the new perforations with 10,000 gallons
water and 10,000 lbs. of sand. The open flow potential after the re-frac was 300
MCFD.