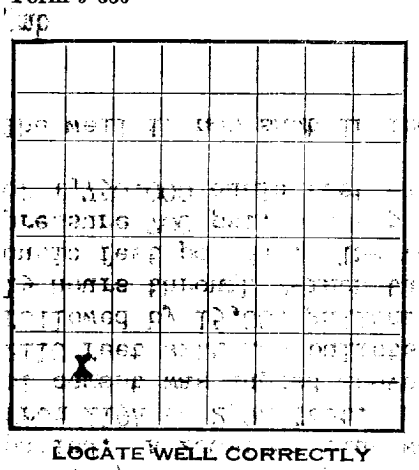
Budget Bureau No. 42-R-355.3.
Approval expires 12-31-55.

Form 9-330

U.S. LAND OFFICE Jicarilla Indians
SERIAL NUMBER Contract No. 39
LEASE OR PERMIT TO PROSPECT Co. #163112



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Humble Oil & Refining Company Address Box 2347, Hobbs, New Mexico
Lessor or Tract Jicarilla Apache Tribe of Indians, "C" Field Wildcat State New Mexico
Well No. 1 Sec. 4 T. 23 N R. 5 W Meridian NMPM County Rio Arriba
Location 814 ft. [N.] of S Line and 951 ft. [E.] of W Line of Section 4 Elevation 6646
(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 [signature]

Date July 25, 1955 Title Agent

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

Commenced drilling April 14, 19 55 Finished drilling May 24, 19 55

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from (G) 2080 to 2110 No. 4, from ____ to ____
No. 2, from ____ to ____ No. 5, from ____ to ____
No. 3, from ____ to ____ No. 6, from ____ to ____

JUL 1 5 1955
OIL CON. COM.
DIST. 3

IMPORTANT WATER SANDS

No. 1, from None 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 From—	Perforated To—	Purpose
13-3/8	48	8rd	Unk.	415.36	Baker	—	—	—	Surface
9-5/8	36	8rd	Unk.	2151.73	Baker	—	2080	2110	Intermediate
5-1/2	14-15.5	8rd	Jap & unk.	6632.20	Baker	Surface-2294	—	—	Production

5-1/2" casing was cut and pulled and plugged off; production is through 9-5/8" casing.

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/8	430.96	425	Pump & plug		
9-5/8	2164.00	800	"		
5-1/2	6644.00	900	"		

FOLD

MARK

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
See "Well History" for acidizing and fracturing record.						

TOOLS USED

Rotary tools were used from Surface feet to 6644 feet, and from ____ feet to ____ feet
Cable tools were used from ____ feet to ____ feet, and from ____ feet to ____ feet

DATES

July 25 11, 19 55 Put to producing Shut-in, 19____

The production for the first 24 hours was 1,750 barrels of fluid of which ____% was oil; ____% emulsion; ____% water; and ____% sediment. Gravity, °Bé. —

If gas well, cu. ft. per 24 hours 1,750 Gallons gasoline per 1,000 cu. ft. of gas —

Rock pressure, lbs. per sq. in. 280

EMPLOYEES

J. R. Hale, Driller Jeff Copeland, Driller
Aaron Holmes, Driller ____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	4980	4980	Sand & shale
4980	5094	114	Sand, shale, & lime
5094	6040	946	Sand & shale
6040	6281	241	Shale
6281	6491	210	Shale, lime shells, & sand
6491	6644	153	Shale & sand

Formation tops:

Ojo Alamo	1570
Kirtland-Fruitland	1710
Pictured Cliffs	2087
Mesa Verde	3607
Mancos	4496
Hospah	5302
Tocito	5904
Sanastee	6068
Greenhorn	6284
Dakota	6493
Morrison	6606

[OVER]

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

DRILL STEM TESTS

Date	Type Test	Formation Tested From	Formation Tested To	Choke Size Top	Choke Size Btm.	Tool Open Min.	Formation Press. Flow	Formation Press. Shut-in	Recovery-Feet Oil	Recovery-Feet Water	Recovery-Feet Mud
4-22-55	OH	2076	2138	1	3/4	75	0	820			23
5-4-55	OH	4298	4320	1	3/4	60	0	1020			100
5-6-55	OH	4316	4371	1	3/4	60	0	1325			105
5-10-55	OH	5290	5370	1	3/4	45	0	0			20
5-13-55	OH	5379	5423	1	3/4	60	0	0			15
5-19-55	OH	5538	5588	1	3/4	45	0	0			10
5-20-55	OH	6480	6514	1	3/4	60	0	0			10
5-22	OH	6511	6566	1	3/4	90	0	700	1		120

16-48004-2 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

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.

The well was drilled to total depth of 6644 feet at which point 5-1/2-inch casing was set and cemented, the cement returning to 2400 feet. The casing was perforated from 6514 to 6522 feet and treated withe 500 gallons of mud acidfollowed by 2800 gallons of Diesel oil and 2100 pounds of sand. A cast iron cement retainer was set at 6507 feet and a bridging ball dropped to seal the retainer; a three-hour pressure test at 3000# indicated nodrop in pressure.

The casing was then perforated from 6492 to 6502 feet with 60 bullets and the formation was treated with 500 gallons of mud acid and 5210 gallons of Diesel oil and 4000 pounds of sand. A cast iron bridge plug was set at 6485 feet and two sacks of cement dumped above. A second bridge plug was then set at 6125 feet and two sacks of cement dumped above.

Bullet perforations were then made in the 5-½" casing from 6055 to 6085 feet and the section was treated with 500 gallons of mud acid and fractured with 1760 gallons of Diesel oil and 1408 pounds of sand. A cast iron bridge plug was set at 5440 feet and two sacks of cement dumped above.

The casing was again perforated from 5380 to 5400 feet with 80 bullets. The interval was treated with 500 gallons of mud acid and 4000 gallons of Diesel fuel and 3100 pounds of sand. A bridge plug was run and set at 5345 feet, with 2 sacks of cement dumped above. Another plug was set at 4360 feet and 2 sacks of cement were dumped on top.

The interval from 4296 to 4328 feet was perforated with 128 bullets and treated with 500 gallons of mud acid and 4000 gallons of Diesel and 4000 pounds of sand. A cast iron cement retainer was run and set at 4235 feet and the perforations squeezed with 138 sacks of cement at 1600 psi.

The 5-1/2-inch casing was cut with a jet cutter at 2294 feet and 73 joints of pipe were pulled. A 200-foot plug was spotted across the top of the remaining 5-1/2-inch casing from 2194 to 2394 feet. A cast iron bridging plug was run and set at 2110 and 15 feet of cement was dumped above. The 9-5/8-inch casing was then perforated from 2080 to 2110 feet with 180 bullets. The interval was treated with 500 gallons of mud acid followed by 15,000 gallons of Diesel fuel and 20,000 pounds of sand. The well was tested 15 hours through 2-inch tubing and indicated gas production at the rate of 1,954,000 cubic feet per day. The well was shut-in 24 hours; tubing pressure was 600 psi, casing pressure 700 psi. On a 5 hour test the well levelled off and produced gas at the rate of 1,750,000 cubic feet per day through a 1/2-inch choke, flowing tubing pressure 280#.

The well is now shut-in indefinitely to await pipe line connection.

jmb