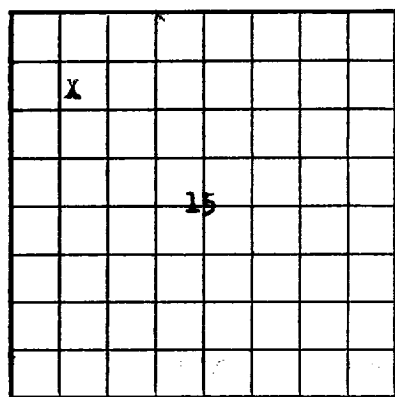


Form 9-330



LOCATE WELL CORRECTLY

U. S. LAND OFFICE Jicarilla Indians
SERIAL NUMBER Contract #77

LEASE OR PERMIT TO PROSPECT

Tract #155, T-23-N, R-5-E

UNITED STATES Sections 9, 10, 15, & 16

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 Wildcat State New Mexico

Well No. 1 Sec. 15 T. 23N R. 5W Meridian N.M.P.M. County Big Arriba

Location 990 ft. N of N Line and 1140 ft. E of N Line of Section 15 Elevation 6864
(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 November 10, 1954 Title District Superintendent

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

Commenced drilling 6-27-, 1954 Finished drilling 9-1-, 1954

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from G 6663 to G 6675 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—	
13-3/8	48	8R	Natl.	412.83	Texas Pat.				
9-5/8	36	8h	Spang	2324.15	Baker				
5-1/2	15.5	8h	Jap.	6750.80	Baker		6663	6675	Production

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/8	429.43	375	Halliburton	water	120-3/4 tons used in well
9-5/8	2339.00	1,000	Halliburton	9.6	
5-1/2	6762.00	1,020	Halliburton	9.1	

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
4"	Lane wells	Bullet	48	8-26	6663-6675	
4"	Lane wells	Bullet	104	9-15	5746-5772	
4"	Lane wells	Bullet	168	9-26	5674-5707; 5721-5732	

TOOLS USED

Rotary tools were used from Surface feet to 7658 feet, and from _____ feet to _____ feet

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

Completed 10/13/54 DATES Presently shut-in awaiting
November 10 Put to producing connection., 1954

The production for the first 24 hours was 33.40 barrels of fluid of which 60 % was oil; _____ % emulsion; 40 % water; and _____ % sediment. Gravity, °Bé. 60.6

If gas well, cu. ft. per 24 hours 859,000 Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. Tubing pressure 195 psi, Casing isolated by packer.

EMPLOYEES

John Brown, Driller R. M. Dodson, Driller

J. D. Gresham, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2136	2136	Sand & shale
2136	2144	8	Sand, shale, & coal
2144	2170	26	Sand & shale
2170	2190	20	Sand, shale, & coal
2190	2234	44	Sand & shale
2234	2248	14	Sand, shale, & coal, Pictured Cliffs at 2255',
2248	4030	1782	Sand & shale, Mesa Verde at 3824'
4030	4034	4	Sand, shale, dolomite, & coal
4034	4064	30	Sand & shale
4064	4072	8	Sand, shale, & dolomite
4072	4332	260	Sand & shale
4332	4338	6	Sand, shale, & coal
4338	4374	36	Sand & shale
4374	4378	4	Sand, shale, & coal
4378	6126	1748	Sand & shale, Mancos at 4705'
6126	6146	20	Shale & lime
6146	6154	8	Shale
6154	6160	6	Shale & lime
6160	6186	26	Shale
6186	6228	42	Shale & lime
6228	6232	4	Shale
6232	6282	50	Sand & shale
6282	6402	120	Shale
6402	6422	20	Shale & lime
6422	6456	34	Shale
6456	6468	12	Shale & lime Greenhorn at 6436'

(OVER)

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
6508	6508	40	Shale
6508	6516	8	Shale & lime
6530	6530	14	Shale
6786	6786	256	Sand & shale
6792	6792	6	Shale & chert
7442	7442	650	Sand & shale
7452	7452	10	Sand, shale, & lime
7452	7452	206	Sand, shale, & lime
Total depth 7658'			
Top of pay at 6663'			

Dakota at 6643'
Morrison at 6770'

Today to at 7625'
Entered at 7636'

DATE	TYPE	FROM TO	FORMATION TESTED	SIZE CHUCK	DRILL STICK TESTS	FORM. PRESSURE	FLOW SHUT-IN	RECOVERY
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7-8	OH	2239	2340	1	3/4	100	780	60' a
7-16	OH	3789	3844	1	3/4	40	475	—
7-19	Mstrun	4385	4418	1/8	3/4	45	940	15' b
7-20	OH	5543	5583	1	3/4	120	0	90' c
7-27	OH	5683	5788	1	3/4	107	2090	5040' d
8-2	OH	5938	5981	1	3/4	60	0	10' b
8-8	OH	6645	6678	1	3/4	90	300	300' e
Mstrun	OH	6673	6720	1	3/4	80	850	60' a
8-9-54	OH	7631	7658	1	3/4	60	2075	10' a
8-21	OH	7631	7658	1	3/4	60	0	10' a

a - gas cut drilling mud; b - drilling mud with no shows; c - slightly oil & gas cut drilling mud; d - heavily gas cut & slightly oil cut drilling mud; e - 50' clean oil, 250' heavily oil & gas cut mud.

MIN. PRESS. MAX. PRESS. 2500 2500

DATE	FROM TO	GALS.	KIND	MIN. PRESS.	MAX. PRESS.	SERVICE COMPANY
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8-27-54	6663	6675	500	Mud acid	2500	Halliburton
9-16	5746	5772	250	Mud acid	—	Dowell
9-27	5674	5707	500	Mud acid	—	Dowell

Note: This well was drilled to total depth of 7658 feet, but was plugged back to 6729'. On 9-15-54, test bridge plug at 5628 feet, and perforated 5746 to 5772 feet. Unable to obtain commercial production. Squeezed off perforations 5746 to 5772 feet, and reperforated from 5721 to 5732 and from 5674 to 5707. No production. Squeezed perforations, drilled plugs, and returned to lower zone at 6663 to 6675 feet.

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.

FRACURING RECORD

PRESSURES

DATE	FROM TO	GALS.	SAND	CRUDE	PETROLEUM	WATER	SERVICE COMPANY
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8-29	6663	6675	6000	4500#	6080#	4900#	Halliburton
9-19	5746	5772	6000	—	—	—	Dowell
9-28	5674	5707	6000	—	—	—	Halliburton

CORING RECORD

Core No.	Date	From To	Recovered	Description
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1	7-6-54	2265	2324	50' light sand, no shows.
2	7-15	3735	3785	50' Shale, sand, and coal stringers; 4' sand and shale; 14.5' clean coarse sand; 3.5' coal
3	7-16	3808	3844	40' gray fine sand
4	7-21	4509	4549	2' sand with slight oil odor; 18' sand and shale; 3' brown-gray medium fine sand with good to
5	7-27	5563	5583	16' black shale with lime streaks
6	7-29	5765	5788	16' black shale with slight odor, no stain, and gas odor
7	8-6	6468	6508	16' black shale with lime streaks
8	8-7	6627	6645	16' black shale with slight odor, no stain, and gas odor
9	8-9	6678	6720	16' black shale with slight odor, no stain, and gas odor
10	8-10	6746	6793	1' black shale; 6' shale sand; 17' Grey 18in Green sand; 20' Green shale.
11	8-20	7640	7658	16' black shale with lime streaks

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