

U. S. LAND OFFICE
 SERIAL NUMBER 234869
 LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

U. S. GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company HUMBLE OIL & REFINING COMPANY Address BOX 2347, HOBBS, N.M., MEXICO
 Lessor or Tract NAVAJO TRIBE OF INDIANS "K" ^{NORTH HOGBACK} Field DAKOTA W/C UNDES. State NEW MEXICO
 Well No. 1 Sec. 31 T. 30N R. 16W Meridian _____ County SAN JUAN
 Location 1980 ft. [N. 8y] of S. Line and 4620 ft. [E. W.] of E. Line of SECTION 31 Elevation 3526
 (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.

Date JULY 26 1960

Title---AGENT

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

Commenced drilling 5-12-60, 1960 Finished drilling 5-17-60, 1960

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 310 to 330
No. 2, from 905 to 1060
No. 3, from 1060 to 1073
No. 4, from to
No. 5, 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

[illegible]

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
	116.50				
7"	23	25	HALLIBURTON	-	-
1 1/2	330	100	HALLIBURTON	-	-

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 1073 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

-----, 19----- Put to producing -----, 19-----
 DRY HOLE

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

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

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

EMPLOYEES

T. C. Peters	, Driller		, Driller
Evan Fugh	, Driller		, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	215	215	Shale
215	480	265	Shale & Sand
480	775	295	Shale
775	905	130	Sand & Shale
905	1073	168	Sand
<u>FORMATION TOPS</u>			
	Gallup —	310	
	Dakota —	905	
	Morrison —	1060	

[OVER]

LOCUTION RECORD-CONTINUED

16-42094-4

1570

[illegible]

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 balling.

HISTORY OF OIL OR GAS WELL

16-43094-2 U. S. GOVERNMENT PRINTING OFFICE

Spudded hole at 1:00 PM 5-12-60. Set 110' of 7" csg at 117'. Drilled 6-1/4" hole to 1073' TD. Cored from 908-933 and from 933-952. Set cmt plug from 1073- to 923 w/75 sacks cmt. Set plug from 435 to 335 w/35 sacks cement. Set 325' of 4-1/2" csg at 330'. Cement with 100 sacks cement. Perforate 4-1/2" csg from 314 to 320 w/2 shots per ft. Washed port from 3/4 to 320 w/200 gal 10% acid. Drilled port from 314 to 320 w/1500 gal use crude 700# FL-2 and 24000 mesh sand, inf rate 15 ft. After nine days of testing well failed to produce. Set cmt plug from 327 to 0' w/50 sacks. cty plugged and abandoned 6-1-60.

[illegible][illegible]

Country	Year	Population	Urban	Rural	Population	Urban	Rural
Algeria	1970	1,000,000	400,000	600,000	1,000,000	400,000	600,000
Algeria	1980	1,500,000	600,000	900,000	1,500,000	600,000	900,000
Algeria	1990	2,000,000	800,000	1,200,000	2,000,000	800,000	1,200,000
Algeria	2000	2,500,000	1,000,000	1,500,000	2,500,000	1,000,000	1,500,000
Algeria	2010	3,000,000	1,200,000	1,800,000	3,000,000	1,200,000	1,800,000
Algeria	2020	3,500,000	1,400,000	2,100,000	3,500,000	1,400,000	2,100,000
Algeria	2030	4,000,000	1,600,000	2,400,000	4,000,000	1,600,000	2,400,000
Algeria	2040	4,500,000	1,800,000	2,700,000	4,500,000	1,800,000	2,700,000
Algeria	2050	5,000,000	2,000,000	3,000,000	5,000,000	2,000,000	3,000,000
Algeria	2060	5,500,000	2,200,000	3,300,000	5,500,000	2,200,000	3,300,000
Algeria	2070	6,000,000	2,400,000	3,600,000	6,000,000	2,400,000	3,600,000
Algeria	2080	6,500,000	2,600,000	3,900,000	6,500,000	2,600,000	3,900,000
Algeria	2090	7,000,000	2,800,000	4,200,000	7,000,000	2,800,000	4,200,000
Algeria	2100	7,500,000	3,000,000	4,500,000	7,500,000	3,000,000	4,500,000
Algeria	2110	8,000,000	3,200,000	4,800,000	8,000,000	3,200,000	4,800,000
Algeria	2120	8,500,000	3,400,000	5,100,000	8,500,000	3,400,000	5,100,000
Algeria	2130	9,000,000	3,600,000	5,400,000	9,000,000	3,600,000	5,400,000
Algeria	2140	9,500,000	3,800,000	5,700,000	9,500,000	3,800,000	5,700,000
Algeria	2150	10,000,000	4,000,000	6,000,000	10,000,000	4,000,000	6,000,000
Algeria	2160	10,500,000	4,200,000	6,300,000	10,500,000	4,200,000	6,300,000
Algeria	2170	11,000,000	4,400,000	6,600,000	11,000,000	4,400,000	6,600,000
Algeria	2180	11,500,000	4,600,000	6,900,000	11,500,000	4,600,000	6,900,000
Algeria	2190	12,000,000	4,800,000	7,200,000	12,000,000	4,800,000	7,200,000
Algeria	2200	12,500,000	5,000,000	7,500,000	12,500,000	5,000,000	7,500,000
Algeria	2210	13,000,000	5,200,000	7,800,000	13,000,000	5,200,000	7,800,000
Algeria	2220	13,500,000	5,400,000	8,100,000	13,500,000	5,400,000	8,100,000
Algeria	2230	14,000,000	5,600,000	8,400,000	14,000,000	5,600,000	8,400,000
Algeria	2240	14,500,000	5,800,000	8,700,000	14,500,000	5,800,000	8,700,000
Algeria	2250	15,000,000	6,000,000	9,000,000	15,000,000	6,000,000	9,000,000
Algeria	2260	15,500,000	6,200,000	9,300,000	15,500,000	6,200,000	9,300,000
Algeria	2270	16,000,000	6,400,000	9,600,000	16,000,000	6,400,000	9,600,000
Algeria	2280	16,500,000	6,600,000	9,900,000	16,500,000	6,600,000	9,900,000
Algeria	2290	17,000,000	6,800,000	10,200,000	17,000,000	6,800,000	10,200,000
Algeria	2300	17,500,000	7,000,000	10,500,000	17,500,000	7,000,000	10,500,000
Algeria	2310	18,000,000	7,200,000	10			

[illegible]