

U. S. LAND OFFICE **Navajo**
SERIAL NUMBER **14-20-61-2032**
LEASE OR PERMIT TO PROSPECT

RECEIVED
JAN 3 1961
OIL CON. COM.
DIST. OF OIL OR GAS WELL

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

Company Marathon Oil Refining Company Address Box 2367, Hobbs, New Mexico
Lessor or Tract Navajo Tribe of Indians & Field North Hobbs State New Mexico
Well No. 2 Sec. 22 T. 30N R. 16W Meridian NPM County San Juan
Location 3300 ft. N of 5 Line and 4200 ft. W of 5 Line of Section 22 Elevation 5114
(Derrick base 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 _____ ORIGINAL SIGNED: ARVIN D. EADY.

Date December 30, 1960 Title Agent

The summary on this page is for the condition of the well at above date. **Well Completed 11-19-60**
Commenced drilling **August 28**, 19**60** Finished drilling **October 24**, 19**60**

OIL OR GAS SANDS OR ZONES

(Denote gers by G)

No. 1, from _____ to _____

No. 2, from _____ to _____

No. 3, from _____ to _____

No. 4, from _____ to _____

No. 5, from _____ to _____

No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from 1-2 to 1-3 No. 3, from 1-4 to 1-5
No. 2, from 1-6 to 1-7 No. 4, from 1-8 to 1-9

CASING RECORD

[illegible]

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
16	210	250	Halliburton	-	-
10-3/4	2608	250	Halliburton	-	-
7-5/8	5600	175	Halliburton	-	-
5	1125	150	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
None						

TOOLS USED

Rotary tools were used from 0 feet to 750 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____

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

_____, Driller
Olin Glover, Driller
 _____, Driller
H. C. Ryan, Driller

Olin Glover Driller

Marion Laurence FORMATION RECORD

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	215	215	Sand
215	650	435	Shale
650	1126	476	Shale & sand
1126	1495	369	Sand, Shale, anhydrite
1495	2325	830	Shale & sand
2325	2845	520	Shale
2845	3291	446	Red shale
3291	4127	836	Sand & shale
4127	7360	3233	Lime & shale
Retention Logs			
Carmel	-	2255	
Cutler	-	7082	
Herzosa	-	5468	
Paradox	-	6205	
Wells	-	7060	
Leadville	-	7190	
			AT THE END OF COMPLETE DRILLER'S LOG, ADD GEOLOGIC TOPS. STATE WHETHER MASONRY OR CONCRETE SAMPLES.

AT THE END OF COMPLETE DRILLER'S LOG, ADD GEOLOGIC TOPS. STATE WHETHER MINOR OR MAJOR SAMPLES.

FORMATION RECORD—Continued[illegible]

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.

-padded 3-5/8" hole at 6100' - 8-28-60. Reamed to 20" hole. Ran 193' of 16" TC casing set at 210'. Core #1 from 315-344, run 29' sand & shale. Core #2 from 344 to 370, rec 25', 9' sandy shale and 16' shaly sand. Drilled to 2325. Ran 1592' of 10-1/4" csg. pipe stuck, set at 1608, cut w/950 ex cut. Took LST #1 from 5421 to 5449, rec 10' drilling mud. Drilled to 5600', ran 9984' of 7-5/8" csg. set at 5600', cut w/165 ex cut 1st stage, set to 11' tool at 2800'. Cut w/325 ex cut 2nd stage, cut channeled. Took LST #2 from 5999-6129, tool open 1 1/2 hrs. flowed at rate of 606.4 mcf/day for 1 hr decreased to 321 mcf/day last 30 min, rec 535' hvy gas cut mud and slight oil cut mud. Core #3 from 6186-6297, rec 51' lime & shale - no show. Core #4 from 6335 - 6386, rec 51', lime and shale, very light show of oil and gas from 6341 to 6346. Core #5 6515 to 6560, rec 45', 43' lime, 1' chert, 1' shale, had trace porosity, slight show oil 6528-6538. Core #6 from 6560-6588, rec 28' dol., lime and shale w/trace porosity and slight show 6561-6567 & 6572-6585. Core #7 from 6528-6624, rec 36', dol., lime and shale, good odor in dol. 6588-6593, good pore w/odor 6612-6618. LST #3 from 6554-6624, good to weak blow at surface for 120 min, rec 4924' hvy gas cut salt water. LST #4 from 7200-7229, good blow at surface for 60 min, rec 30' drilling mud, 180' slight gas cut salt water cut drilling mud, 1806 of heavy gas cut salt water. LST #5 from 7330-7350, strong blow for 55 min, gas at rate of 49 mcf day, salt water to surface in 35 min. Drilled to total depth of 7360'. Set out plug from 7360-7460 w/50 ex neat cut, set plug #2 from 6730-6630 w/30 ex neat cut. Ran 1089' 5" 16" liner, top of liner 5535, bottom of liner 6624, cut w/150 ex, top of cut 5800'. Perf 5" liner from 6583-6585 w/2 shots per ft, swabbed 34 bbls wt in 5 hrs, swabbed dry, good blow of gas after each run. Swabbed 10 hrs rec 63 bbls salt water, slight show of gas after each run. On 10 hr sub test rec 99 bbls salt water. On 4 hr sub test rec 20 bbls salt water. Spaced perf in 5" liner from 6583-6585 w/75 ex neat cut. Perf 5" liner from 6110-6120 w/2 shots per ft. Swabbed 3 hrs rec 28 bbls salt water w/slight show drilling mud. Swabbed 10 hrs rec 57 bbls fluid, 90% oil mud and 4% water w/slight oil stain. Swabbed 6 hrs rec 16 bbls fluid, 50% mud, 50% water. Spaced perf from 6110-6120 w/100 gal acid. Swabbed 7 hrs rec 16 bbls fluid. Swabbed 6 hrs rec 73 bbls oil, swabbed dry, rec 5 gal gas cut mud per hour. On 10 hr sub test rec 2 bbls hvy gas cut mud and 73 bbls water. Swabbed 10 hrs rec 202 bbls salt water. Spotted plug from 6174-5875 w/25 ex cut. Spotted plug from 5555-5355 w/50 ex cut. Spotted surface plug from 25' to 0', w/10 ex cut, installed dry hole marker as required by W.C.C. Dry Hole.