Form 9-330

Form approved.
Budget Bureau No. 42-R355.4.

U. S. LAND OFFICE .....

SERIAL NUMBER .....

LEASE OR PERMIT TO PROSPECT Navajo Tribal 14-20-603-5012

RECEIVED AUG 2 1963 OIL CON. COM. DIST. 3

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company Curtis J. Little ~~Texas Pacific Coal & Oil Co.~~ Address 202y Monte Vista, NE, Albuquerque, N.M.

Lessor or Tract Murphy Corporation Field Undesignated State New Mexico

Well No. 1-23 Sec. 23 T. 32N R. 17W Meridian NM County San Juan

Location 660 ft. {N./S.} of N Line and 690 ft. {E./W.} of E Line of Section 23 Elevation 5915 (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 Curtis J. Little

Date July 30, 1963 Title Operator

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

Commenced drilling August 15, 1962 Finished drilling August 20, 1962

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from 1647 to 1656 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 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
8-5/8"	19.0	8 rd	CF&I	26'	None				
5½"	14	8 rd	CF&I	1721'	Baker Float		1646	1654	Production

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	26'	7	Scott Drilling Company		
5½"	1721'	25	Dowell		

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 1721 feet, and from ..... feet to ..... feet

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

DATES

....., 19..... Put to producing July 24, 1963

The production for the first 24 hours was 70 barrels of fluid of which 100 % was oil; ..... % emulsion; ..... % water; and ..... % sediment. Gravity, °Bé. 42

If gas well, cu. ft. per 24 hours None Gallons gasoline per 1,000 cu. ft. of gas .....

Rock pressure, lbs. per sq. in. 415 psi

EMPLOYEES

Scott Drilling Company, Driller ....., Driller

....., Driller ....., Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	220	220	Point Lookout Sandstone
220	1647	1427	Mancos Shale
1647	1656	9	Gallup Sandstone
1656	1669	13	Carlile Shale
1669	1675	6	Sanostee Limestone
1675	1721	54	Carlile Shale

FOLD MARK

[OVER]

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

16—43094-2 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.

Air drilled 6-1/4" hole to 1650'. Had estimated 200' formation oil fillup. Loaded hole with crude. Core No. 1 - 1650-1665. Cut and recovered 15' core: 4' sandstone, light gray, medium grained, subangular, glauconitic, slightly shaley near bottom of interval, slightly calcareous, fair to good porosity, good stain, odor, fluorescence and cut. 11' shale: gray, dense, with thin interbeds of siltstone and fossiliferous limestone. Drilled to 1697'. Ran Induction-gamma ray and sonic logs. Ran tubing and swabbed hole dry. After hole set for 4½ months found fluid level at 436' from surface. Calculated BHP 415 psi. Re-entered hole 4-12-63. Drilled to 1729'. Ran 1721.5 of 5" casing and cemented with 25 sx treated with 10 cu. ft. Stratcrete, 5 cu. ft. Kolite, 75 lbs. bentonite and 5 lbs. Jel flake. Perforated 1646-1654' with 4 jet shots per foot. Sand-oil frac'd with 32,760 gallons lease crude and 15,000 lbs. of 20/40 sand and 300 lbs. of E-300 (paraffin solvent granules). Breakdown 3400 psi, injection rate 15.2 bbls/min., treating pressure 1900-2300 psi, dropped 15 rubber ball sealers in three stages, 15 minute shut-in 1700 psi. Pressure to zero after shut in overnight. Washed to bottom. Ran 1670.5' of 2-3/8" J-55 tubing, 4' perforated sub and 31.5 feet of 2-3/8" mud anchor. Recovered all load oil on 5-27-63 and potentialed on pump for 15 bbls. oil in 24 hrs.

Re-fractured on 7-2-63 after cutting notch with abrasijet from 1649-50. Frac'd with 44,400 gallons lease crude, 35,000 lbs. sand. Broke at 1900 psi, treated at 1700 psi, injection rate 23 BPM, instant shut in 1000 psi, 15 min. shut in 750 psi. Recovered all load oil on 7-24-63 and potentialed on pump for 70 barrels of oil in 24 hrs.