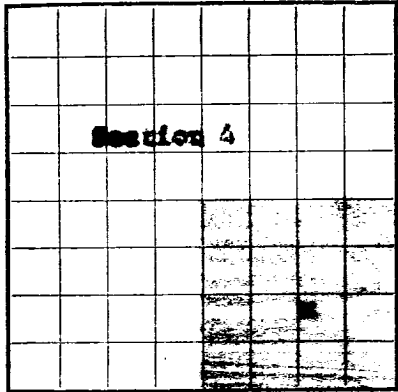
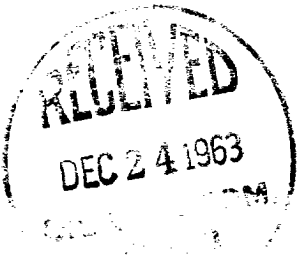


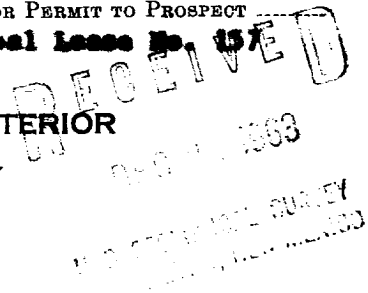


LOCATE WELL CORRECTLY



Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.
Dulce, New Mexico
U. S. LAND OFFICE
SERIAL NUMBER

LEASE OR PERMIT TO PROSPECT
Micarrilla Tribal Lease No. 157
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



LOG OF OIL OR GAS WELL

Company **Star-Alco Oil Company** Address **1401 Beaver U. S. National Center**
Lessor or Tract **Micarrilla "T" No. 157** Field **So. Blanco NC** State **New Mexico**
Well No. **2** Sec **4** T23N R. 2W Meridian **MTN** County **Rio Arriba**
Location **790** ft. ^{N.} of **3** Line and **790** ft. ^{W.} of **5** Line of **22/4** Elevation _____
(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 **Richard S. Hunt** Title **Eng. of Lands & Explorations**

Date **December 19, 1963**

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

Commenced drilling **4-25-63**, 19____ Finished drilling **5-1-63**, 19____

OIL OR GAS SANDS OR ZONES
(Denote gas by G)

No. 1, from **2995** to **3021' (G)** 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—	
8 5/8"	14.6	87	GFI	90'		2995	3001		Prod.
4 1/2"	7.3	85	GFI	3115'					
1 1/4"	4.54	87	GFI	3010'					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8"	98'	60	Halliburton		
4 1/2"	3115'	100			

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 _____ feet to _____ feet, and from _____ feet to _____ feet
Cable tools were used from **4** feet to **3115'** 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. **3051** **3 hours.**

EMPLOYEES

_____, Driller _____, Driller
Rayco Drilling Company, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
2624'	2629		Ojo Alamo
2630	2951		Kirtland
2952	3001		Fruitland
3002	3033		Pictured Cliffs
	3125'		Total depth

Subject well perforated as shown above and sand fraced with 30,000# sand and 30,460 gallons water. Pulled 2" tubing. Unable to get to bottom with cement bond log. Cleaned out well to 3050' with 1 1/4" tubing. Pulled tubing. Stubbed casing. Made some gas then filled up again with water. Fluid level at about 900'. Ann cement bond log. Superforated Pictured Cliffs from 2995 to 3021 feet. Frac treated down casing with 30,000# of 20-40 sand and 30,460 gallons of water. Breakdown pressure 1700 psi. Treating pressure 1200-2150 psi. Drapped 10 rubber balls during treatment. Instant shut in 400 psi. Injection rate 40.3 BPM. Stubbed well in.

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 "side-tracked" 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.

16-43084-2 U. S. GOVERNMENT PRINTING OFFICE

FORMATION RECORD—Continued