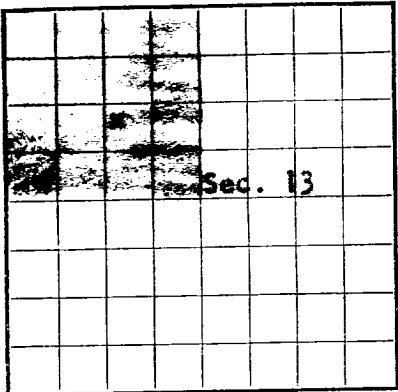


U. S. LAND OFFICE Santa Fe
SERIAL NUMBER Jic. Lease No. 160
LEASE OR PERMIT TO PROSPECT _____



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Shar-Alan Oil Company Address 1402 Denver U. S. National Center
Lessor or Tract Jicarilla Lease No. 160 Field Undesignated PC State New Mexico
Well No. 4-F Sec. 13 T. 23N R. 2W Meridian NMPM County Rio Arriba
Location 1850 ft. N of N Line and 1710 ft. E of N Line of NW 1/4 Elevation 7332.6
(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 _____

Date October 12, 1962 Title Mgr. of Lands & Explorations

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

Commenced drilling August 29, 19 62 Finished drilling September 2, 19 62

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

No. 1, from 3048 to 3072 (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"	24	8	CFI	100'	3060'	3048'	3048'	3072'	Production
4 1/2"	11.5	8	CFI	3060'	tubing				

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8"	102'	60	Halliburton		
4 1/2"	3130'	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 _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

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. 6,652 MCF/d

964 EMPLOYEES

_____, Driller _____, Driller
Rayco Drilling Company, Driller _____, Driller
Farmington, New Mexico

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
	2780		Qjo Alamo
	2908		Kirtland
	3012		Fruitland
	3036		Pictured Cliffs
			Subject well sand-fraced 9-6-62 with 30,000% sand and 37,470 gallons of water.
			3 hr Back Pressure test run 9-11-62 Charts Attached.

