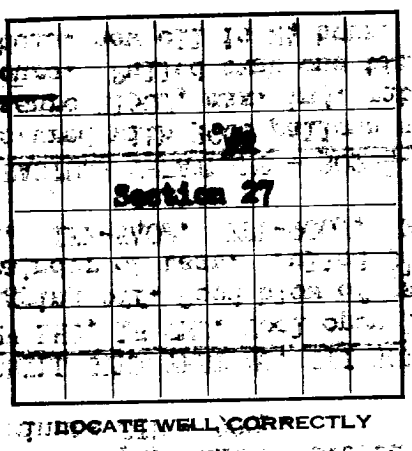
Budget Bureau No. 42-R-355.3.
Approval expires 12-31-55.

U. S. LAND OFFICE New Mexico

SERIAL NUMBER 02509

LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Shelly Oil Company Address Box 36 - Hobbs, New Mexico

Lessor or Tract Lea Gulsen #A Field Caprock Queen State New Mexico

Well No. 2 Sec. 27 T. 13S R. 31E Meridian N.M.P.M. County Chaves

Location 1650 ft. [N] of [S] Line and 330 ft. [E] of [W] Line of Sec. 27 Elevation 4428' D.F.

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 J. A. Gentry

Date August 15, 1955 Title Dist. Supt.

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

Commenced drilling July 22, 19 55 Finished drilling August 8, 19 55

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3027.5' to 3045' 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 From—	Perforated To—	Purpose
8-5/8"	32#	8R	J&L	296'	Float				Surface
5-1/2"	14#	8R	J&L	3045'	Float				Production

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	296'	200	Halliburton		
5-1/2"	3027.5'	200	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 3045' feet, and from feet to feet

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

DATES

August 15, 19 55

Put to producing August 7, 19 55

The production for the first 24 hours was 55 barrels of fluid of which 100 % was oil; % emulsion; % water; and % sediment.

Gravity, °Bé. 31.0

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

Rock pressure, lbs. per sq. in.

EMPLOYEES

Jack Henderson, Driller O. Gentry, Driller

W. D. Cope, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0'	1100'	1100'	Red Bed
1100'	1410'	310'	Anhydrite & Red Bed
1410'	1520'	110'	Anhydrite
1520'	1540'	20'	Red Sand & Shale
1540'	2110'	570'	Salt
2110'	2275'	165'	Anhydrite & Salt
2275'	2330'	55'	Red Sand
2330'	2795'	465'	Anhydrite, Dolomite & Sand
2795'	2950'	155'	Anhydrite, Salt & Sand
2950'	3045'	95'	Sand

FOLD | MARK

[OVER]

16—43084-3

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

HISTORY OF OIL OR GAS WELL

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

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.

CORE # I 3010-3045'

Cut core No. I 3010-3045' (35') and recovered 33'. Geologist's description of core as follow

3010-3011' (1') - Salt & Red Shale
3011-3012' (1') - Anhydrite
3012-3014' (2') - Red Shale
3014-3016' (2') - Salt
3016-3019' (3') - Anhydrite
3019-3020' (1') - Dolomite-Anhydrite, slightly porus and bleeding oil.
3020-3024' (4') - Gray Soft Sand, no shows top 3', (gas sand) light oil stain bottom 1'.
3024-3025' (1') - Same, spotted oil stain
3025-3026' (1') - Gray very fine, very anhydrite sand, no shows.
3026-3027' (1') - Gray fine-medium anhydrite sand w/½" streaks soft oil saturated sand.
3027-3028' (1') - Fine medium sand, fair porosity, bleeding oil, 50% saturated.
3028-3030' (2') - Brown soft 100% oil saturated sand.
3030-3031' (1') - Gray, very fine, tight anhydrite sand.
3031-3035' (4') - Red shaly anhydrite sand.
3035-3038' (3') - Anhydrite
3038-3043' (5') - Red shaly sand & sandy shale. Had total 4' of oil pay in core.

DRILL STEM TEST NO. I 3020-3045'

1/2" BHC, 1" THC. Tool open 1 hour, good blow of air to surface in 1 minute, mud in 3 minutes Formation air and gas in 4 minutes. Tested at rate of 2,960 MCF/day flowing against 110# back pressure on drill pipe. Shut in 5 minutes and well head pressure built up to 800#. Pulled 3½" drill pipe, had no fluid in pipe. F.P. initial and final-810#. 20 minute SIP 900#.

DRILL STEM TEST NO. II 3020-3045'

1/2" BHC, 1" THC. Tool open 3 hours. Had light blow of air for 10 minutes and died. After 20 minutes closed and reopened tool. Had light blow of air for 5 minutes and died. Pulled 3½" Drill pipe and recovered 60' of drilling mud. Tool had apparently plugged off. F.P.810#. 20 minute SIP - 900#.

DRILL STEM TEST NO. III 3027-3045'

1/2" BHC, 1" THC. Tool open 3 hours. Good blow of air for 1½ hours. Tool was apparently plugging off. Good blow of gas to surface in 2 hours and continued as good blow throughout remainder of test. Pulled 3½" Drill pipe and recovered 310' of clean oil and 30' of drilling mud. IFP-540#. FFP-900#. 20 minute build up - 1050#.

FRACTURE TREATMENT - 3027½-3045'

Fractured with 3000 gallons sand oil, mixed 1 lb. sand/gallon by Dowell's process. Max. pressure 2150#, max. inj. rate 13.2 bbls/minute, time of treatment 26 minutes. Left shut in 3 hours. Pulled swab one time and well kicked off. After flowing back all load oil, tested 55 bbls. new oil in 24 hours flowing through open 2" tubing.

Well completed and placed on proration schedule effective August 7, 1955 at top allowable of 39 BOPD.