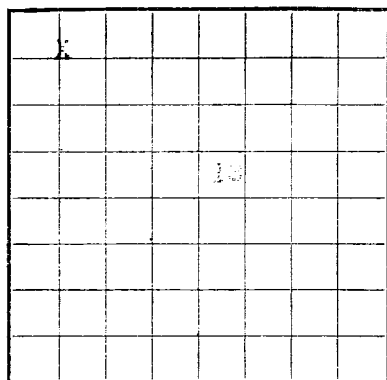


U. S. LAND OFFICE Santa Fe, N.M.
SERIAL NUMBER SF 078064
LEASE OR PERMIT TO PROSPECT -----



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Shell Oil Company Address P. O. Box 158, Farmington, N. M.
 Lessor or Tract Federal - Carson Unit Field Bisti State New Mexico
 Well No. 11-13 Sec. 13 T. 25N R. 12W Meridian N.M.P.M. County San Juan
 Location 625.4 ft. S of N. Line and 625.4 E. of N. Line of Section 13 Elevation 6376 KB

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.

Date January 5, 1960 Title Exploitation Engineer

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

Commenced drilling November 2, 19 52 Finished drilling November 3, 19 52

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

No. 1, from 4862 to 4976 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. 2, from _____ to _____

No. 3, from _____ to _____

No. 4, from _____ to _____

CASING RECORD

[illegible]

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
5/8	109	10	154 lbs cement	-	-
1/2	5030	10	154 lbs cement	-	-

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 1 foot to 5000 feet, and from feet to feet
Cable tools were used from feet to feet, and from feet to feet

DATES

January 5, 1960 Put to producing November 30, 1959

The production for the first 24 hours was 77 barrels of fluid of which 99.5 % was oil; ----- % emulsion; ----- % water; and .5 % sediment. Gravity, 88.4 40° API. 100 %

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 _____, Driller
_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
1190	1400	210	Pictured Cliffs
1400	1567	167	Lewis
1567	2048	481	Cliff House
2048	3690	1641	Allison - Menefee
3690	3867	177	Point Lookout
3867	4760	893	Ganges
4760	-	-	Gallup

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[illegible]

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.

10-43094-2 U. S. GOVERNMENT PRINTING OFFICE

FROM-	TO-	TOTAL FEET	FORMATION
			1. 0-10' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 2. 10-20' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 3. 20-30' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 4. 30-40' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 5. 40-50' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 6. 50-60' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 7. 60-70' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 8. 70-80' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 9. 80-90' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 10. 90-100' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert.

SHELL OIL COMPANY

Carson Unit 11-13
 WELL NO.

DRILLING REPORT

FOR PERIOD ENDING

Bisti

(FIELD)

San Juan

(COUNTY)

November 9, 1959

13

(SECTION OR LEASE)

T. 25 N., R. 12 W.

(TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS
	FROM	TO	
			Location: 695.4' S. and 695.4' E. of NW Corner Section 13, T. 25 N., R. 12 W., N.M.P.M., San Juan County, New Mexico Elevations: DF 6374.8' GR 6357.1' KB 6376.3'
11-2 to 11-3	0	2317	Spudded 4:00 P.M. 11-2-59. Ran and cemented (100') 8-5/8", 28#, J-55 casing at 109' with 100 sacks cement treated with 2% calcium chloride. Good returns to surface. Flanged up and waited on cement. Pressure tested casing and BOP with 700 psi, OK.
11-4 to 11-8	2317	5030	Drilled 2713'.
11-9	5030 TD		After cleaning out badges at 1088' and 1200', ran Micro-SP log. Ran and cemented (5021') 4-1/2", 9.5#, J-55 casing at 5030' with 150 sacks cement treated with 4% gel, displaced with oil, final pressure 1800 psi. Released rig 1:15 P.M., 11-9-59. Checked BOP daily Mud Summary Wt 9.3 - 9.7 #/gal. Vis 46 - 120 sec. WC 5 - 7 cc FC 2/32 Contractor: Brinkerhoff Drilling Company Company Pusher: C. L. Christiansen

CONDITION AT BEGINNING OF PERIOD				
HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
DRILL PIPE SIZES				

M. W. McGarry, Jr.

SIGNED

SHELL OIL COMPANY

Carson Unit 11-13
 WELL NO.

Bisti

(FIELD)

San Juan

(COUNTY)

DRILLING REPORT

FOR PERIOD ENDING

November 30, 1959

13

(SECTION OR LEASE)

T. 25 N., R. 12 W.

(TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS
	FROM	TO	
11-10	5030 TD		Perforated four 1/2" holes/ft. 4869-96, 4901-08, 4948-62 and 4966-76.
11-11			Spotted 200 gallons mud acid. Sand oil fractured with 50,000 gallons crude, 1 #/gallon sand and 175 balls. Initial injection pressure 2200 psi, after 75 balls 2300 psi, after 125 balls 2400 psi. Average rate 35 bbls/min.
11-12 to 11-13			Found frac sand at 4958', cleaned out to 5020'. Ran 2-3/8" tubing to 4880', pump and rods.
11-14 to 11-29			Pumped and recovered all load and frac oil, 1570 bbls.
11-30			INITIAL PRODUCTION Pumping 77 B/D gross, 77 B/D clean, cut 0.5%, gas 150 MCF/D, GOR 1950. Completed 11-30-59

CONDITION AT BEGINNING OF PERIOD

HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
12-1/4"	0	115	8-5/8"	109'
7-7/8"	115	5030	4-1/2"	5030'
DRILL PIPE SIZES 4-1/2				

M. W. McGarry, Jr.

SIGNED