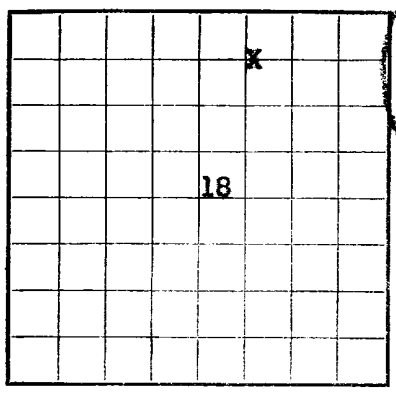
Form 9-330

Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Santa Fe, N. M.
SERIAL NUMBER 14-20-603-1283
LEASE OR PERMIT TO PROSPECT .....



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

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. 31-18 Sec. 18 T. 25N R. 12W Meridian NMPM County San Juan

Location 660 ft. {N./S.} of N Line and 1980 ft. {E./W.} of E Line of Sec. 18 Elevation 6404 KB
(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 R. W. SHERMAN

Date April 12, 1960 Title Exploitation Engineer

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

Commenced drilling January 27, 19 60 Finished drilling February 4, 19 60

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from 4920 (gross) to 5030 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			107					
4-1/2"	9.5			5067			4920 (gross)	5030	Production

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	107	100	Displacement	-	-
4-1/2"	5067	150	"	-	-

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 5070 feet, and from - feet to - feet

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

DATES

April 12, 1960 Put to producing March 23, 1960

The production for the first 24 hours was 12 barrels of fluid of which 99.9% was oil; ....% emulsion; ....% water; and 0.1% sediment.

If gas well, cu. ft. per 24 hours ..... Gravity, °Bé. xxxx 40° API (approx.)

Rock pressure, lbs. per sq. in. ..... Gallons gasoline per 1,000 cu. ft. of gas .....

EMPLOYEES

..... Driller Brinkerhoff Drilling Co. Driller

..... Driller ..... Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
1192	1385	193	Pictured Cliffs
1385	1590	205	Lewis
1590	2065	475	Cliff House
2065	3727	1662	Allison-Menefee
3727	3924	197	Point Lookout
3924	4823	899	Mancos
4823	-	-	Gallup

(OVER)

16—48094-1

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

FORMATION RECORD

DATES

TOOLS USED

SHOOTING RECORD

CASING AND CEMENTING RECORD

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.

CASING RECORD

IMPORTANT WATER SANDS

OIL OR GAS SANDS OR ZONES

LOG OF OIL OR GAS WELL

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

Proprtst M 1718-P 5-59

SHELL OIL COMPANY

Carson Unit 31-18
WELL NO.

Bisti
(FIELD)

DRILLING REPORT
FOR PERIOD ENDING

18
(SECTION OR LEASE)

San Juan, New Mexico
(COUNTY)

2-5-60

T25N R11W
(TOWNSHIP OR RANCHO)

DAY	DEPTHS FROM	DEPTHS TO	REMARKS
			Location: 660' S and 1980' W of NE corner Sec. 18, T25N, R11W, NMPM, San Juan County, New Mexico. Elevations: DF 6402.1' GR 6394.2' KB 6403.6'
1-27 to 1-28	0	2379	Spudded 8:00 A.M. 1-27-60. Ran and cemented (96') 8-5/8", 28#, J-55 casing at 107' 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.
1-29 to 2-2	2379	4925	Drilled 2546'. Changed to oil base mud.
2-3	4925	4979	Cored 54'. Core #1 4925-4928 Rec. 3'. Core #2 4928-4979 Rec. 51'.
2-4 to 2-5	4979	5070 (TD)	Drilled 91'. Attempted to run logs - Sonde would not go to bottom. Cleaned out to bottom. Ran Induction Log and Sonic Log. Ran and cemented (5056') 4-1/2", 9.5#, J-55 casing at 5067' with 150 sacks cement treated with 4% gel. Displaced with oil. Held 1500 psi, OK. Released rig 9:30 P.M. 2-5-60. Checked BOP daily Oil base mud summary Wt 8-8.4#/gal. Vis 88-92 sec. Contractor: Brinkerhoff Drilling Co. Co. Pusher: W. C. Thompson

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

M. W. McGarry, Jr.
SIGNED

Preprint M 1718-P 5-59

SHELL OIL COMPANY

Carson Unit 31-18
WELL NO.

DRILLING REPORT
FOR PERIOD ENDING 3-23-60

Bisti
(FIELD)

San Juan, New Mexico
(COUNTY)

18
(SECTION OR LEASE)

T25N R11W
(TOWNSHIP OR RANCHO)

DAY	DEPTHS FROM	DEPTHS TO	REMARKS
2-8	5070 (TD)		Perforated four 1/2" holes/ft. 4920-65, 4988-98, 5004-14, 5020-30.
2-9			Spotted 200 gal. Shell solvent. Sand oil fractured with 50,000 gal. crude, 1#/gal. sand, 180 balls. Maximum pressure after last 25 balls-3400 psi. Average injection pressure 3000 psi. average rate 26.3 bbls/min.
2-10 to 2-11			Bailed frac sand. Ran 2-3/8" tubing to 4920', ran rods and pump.
2-12 to 3-22			Pumped and recovered all load and frac oil, 1524 bbls.
3-23			INITIAL PRODUCTION Pumping 12 B/D gross, 12 B/D clean, cut 0.1%, 56 MCF/D gas, GOR 4670, completed 3-23-60.

CONDITION AT BEGINNING OF PERIOD

HOLE SIZE	HOLE FROM	HOLE TO	CASING SIZE	DEPTH SET
12-1/4"	0	115	8-5/8"	107'
7-7/8"	115	5070	4-1/2"	5067'

DRILL PIPE SIZES 4-1/2"

M. W. McGarry, Jr.
SIGNED