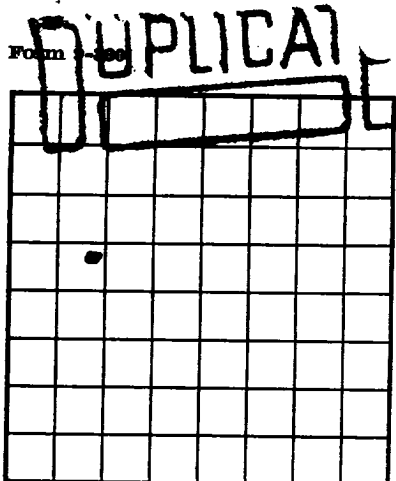


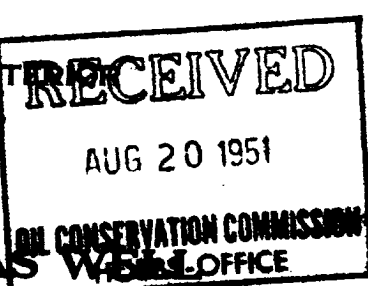


LOCATE WELL CORRECTLY

U.S. Geological Survey
Approval expires 11-30-49.

U. S. LAND OFFICE Las Cruces
SERIAL NUMBER 029509-A
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



LOG OF OIL OR GAS WELL

Company Buffalo Oil Company Address Artesia, New Mexico
Lessor or Tract Baish A Field Maljamar State New Mexico
Well No. 20 Sec. 21 T. 17 R. 32 Meridian NMPM County Lea
Location 2615 ft. {XX} of N Line and 1295 ft. {E} of W Line of Sec. 21 Elevation 4026
(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 /s/ Ralph L. Gray

Date Feb. 4, 1949

Title Asst. Supt.

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

Commenced drilling Oct. 13, 1948, 19 Finished drilling Jan. 17, 1949

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 2317 to 2325 No. 4, from 3856 to 3897
No. 2, from 2430 to 2435 G No. 5, from 4095 to 4102
No. 3, from 3711 to 3730 G No. 6, from to

IMPORTANT WATER SANDS

No. 1, from 725 to 730 No. 3, from to
No. 2, from 900 to 910 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--	
10 3/4 OD	40.5	8 rd	J-55	52	regular	-			conductor
8 5/8 OD	24	"	"	920	marker	920			cave
7 OD	20	"	"	367	float collar				oil string

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10 3/4	55	50	pump		none
8 5/8	918	none	"		15 sacks aquajel
7	3647	250	"		24 " "

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
Acidized with 500 gal. 3920-3955 on Jan. 21, 1949						
Acidized with 2500 gal. 3865-3890 on Jan. 24, 1949						

TOOLS USED

Rotary tools were used from feet to feet, and from feet to feet
Cable tools were used from 0 feet to 4102 feet, and from feet to feet

DATES

Jan. 25, 1949 Put to producing January 1, 1949
The production for the first 24 hours was 137 barrels of fluid of which 92.6 % was oil; 0.4 % emulsion; % water; and % sediment. Gravity, °Bé. 32
If gas well, cu. ft. per 24 hours Gallons gasoline per 1,000 cu. ft. of gas
Rock pressure, lbs. per sq. in.

EMPLOYEES

Brewer Drlg. Co., Driller G. W. Watts, Driller
W. C. Graham, Driller W. C. Cox, Driller

FORMATION RECORD

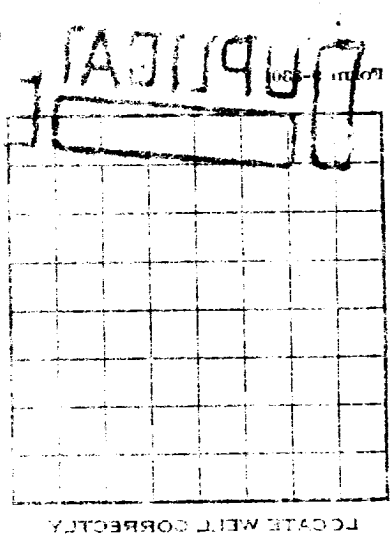
FROM—	TO—	TOTAL FEET	FORMATION
0	5	5	Sand
5	15	10	caliche
15	130	115	shale
130	775	645	red bed, 15 bbls water/ D at 725
775	820	45	anhy.
820	846	26	lime
846	900	54	anhy.
900	910	10	sdly lime, 20 bbls water/D and 200 MCF gas
910	925	15	anhy.
925	950	25	red shale
950	976	26	anhy.
976	1950	974	salt
1950	2317	367	anhy.
2317	2325	8	sand and anhy. Show oil and gas
2325	2357	32	anhy and lime
2357	2430	73	anhy
2430	2435	5	sand and anhy. show of gas
2435	2560	25	anhy
2560	2575	15	lime. Est. 8 BO and 500 MCF/D
2575	2900	325	anhy
2900	2970	70	anhy and lime
2970	3005	35	anhy
3005	3025	20	anhy and lime
3025	3060	35	lime
3060	3089	29	anhy

(OVER)

FORMATION RECORD—CONTINUED

16-43004-2

LOG OF OIL OR GAS WELL OFFICE
ON CONSERVATION COMMISSION
APR 5 1961
RECEIVED
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
UNITED STATES



Locate well correctly. The information given here is a complete and correct record of the well and all work done thereon so far as can be determined from available records. The information given here is a complete and correct record of the well and all work done thereon so far as can be determined from available records. The information given here is a complete and correct record of the well and all work done thereon so far as can be determined from available records.

OIL OR GAS SANDS OR SOLIDS

Oil or gas sands or solids. The information given here is a complete and correct record of the well and all work done thereon so far as can be determined from available records. The information given here is a complete and correct record of the well and all work done thereon so far as can be determined from available records. The information given here is a complete and correct record of the well and all work done thereon so far as can be determined from available records.

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 "struck" 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.

HISTORY OF OIL OR GAS WELL

FROM	TO	TOTAL FEET	FORMATION
3089	3108	19	Lime
3108	3121	13	Sand
3121	3145	24	Any
3145	3196	51	Any and lime
3196	3221	25	Lime
3221	3241	20	Any
3241	3258	17	Lime
3258	3270	12	Sand
3270	3288	18	Lime
3288	3332	44	Any and lime
3332	3408	76	Any
3408	3428	20	Lime, gas at 3408
3428	3458	30	Any, lime and shale
3458	3711	253	Lime
3711	3742	31	Sand and lime. 2 MM gas/D (see history)
3742	3779	37	Lime
3779	3791	12	Sandy lime
3791	3856	65	Lime
3856	3897	41	Lime - oil pay
3897	4095	198	Lime
4095	4102	7	Lime - oil pay

While drilling from 3211-3730. A retainer was set in the casing at 3630 with bottom of hole at 3746. Formation was broken down with water at 2400 psi to 1600 psi. 50 sacks of cement was pumped into the hole below the retainer with pressure existing at 1800 psi. and ending at 3100 psi. 1400# was held on the casing during this time. Upon drilling out the cement the bottom of cement was found at 3730. This would be approximately 20 sacks of cement left in the hole and 30 sacks pumped into the formation. When the cement was drilled out the gas was found to be entirely shut off, and no evidence of it breaking through has since been observed. It is believed a permanent shut-off was obtained.

History of the well. The information given here is a complete and correct record of the well and all work done thereon so far as can be determined from available records. The information given here is a complete and correct record of the well and all work done thereon so far as can be determined from available records. The information given here is a complete and correct record of the well and all work done thereon so far as can be determined from available records.