

U. S. LAND OFFICE Las CrucesSERIAL NUMBER 029509-B

LEASE OR PERMIT TO PROSPECT _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Buffalo Oil Company Address Box 606, Artesia, N. Mex.
Lessor or Tract Baish R Field Wildcat State New Mexico
Well No. 12 Sec. 22 T. 17S R. 32E Meridian NMPM County Lea
Location 1080 ft. (N) of 9 Line and 860 ft. (E) of W Line of Sec. 22 Elevation 4022
(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.

Date Feb. 14, 1952Signed [Signature]
Title Vice President

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

Commenced drilling Apr. 26, 1951, 19____ Finished drilling Feb. 7, 19 52

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 10716 to 10732 No. 4, from _____ to _____
No. 2, from 10758 to 10784 No. 5, from _____ to _____
No. 3, from 13548 to 13573 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—	
13-3/8" OD	364	Armed		100'	bell				Conductor
9-5/8" OD	364	Armed		2700'	Plug				Intermediate
5 1/2" OD	180	11-11/16" x 3-1/2" x 3-1/2" x 3-1/2"		2811-12, 535'-204'	LTAC				String
"	13.535-13.554-237'	180	LTAC						

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/8" OD	100'	100	Plug		
9-5/8" OD	2700'	1600-47 rel 1st next Plug			
5 1/2" OD	13554	265-67 rel 1st stage, 1125-67 rel 2nd stage			
		400-47 rel 3rd stage			

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 surf to 12,573 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

February 14, 1952 Put to producing Jan. 31, 1952The production for the first 24 hours was 400 barrels of fluid of which 24 % was oil; _____ %
emulsion; 16 % water, and _____ % sediment. Gravity, °Bé. 40.0

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

Rock pressure, lbs. per sq. in. _____

EMPLOYEES

R. J. Lyster, Driller A. Davis, Driller
_____, Driller J. L. Lyster, Driller

FORMATION RECORD

FROM	TO	TOTAL FEET	FORMATION
Surface	800	800	Red beds
800	945	145	Anhydrite
945	990	45	Red shale and anhydrite
990	1090	900	Salt
1090	2170	1080	anhydrite
2170	3450	1280	Anhydrite, dolomite & sand
3450	440	440	Dolomite & sand
3890	5375	1485	Dolomite
5375	5500	125	Sand & dolo.
5500	7570	2070	Dolo. w/sand streaks
7570	8730	1160	Dolo. and green and red shale streaks
8730	9115	385	Dolo.
9115	10050	935	lime and dolo.
10050	10575	525	Black shale, lime & chert
10575	10690	115	Black shale
10690	10815	125	lime (Pennsylvanian Pay)
10815	11390	575	Black shale
11390	11750	360	lime
11750	12465	715	lime w/streaks of black shale & sand
12465	12760	295	Cherty lime
12760	12890	130	Black shale and lime
12890	13440	550	Chert and lime
13440	13548	108	Dark brown shale
13548	13573	25	Dolo.

FROM-	TO-	TOTAL FEET	FORMATION
DST RECORD			
DST #1-540-15	open 45 min.	vy weak blow, died in 37 min.	recovered 10' mud.
DST #2-5380-5455	open 4 hrs.	Recov. 100' O&G cut mud plus 330' salty sulfur	
Water FFP-260#, 15 min. SIP-1013#.			
DST #3-6358-6438	open 4 hrs.	Recov. 30' mud cut slightly with oil & gas FFP40#	
DST #4-6732-6768	open 2 hrs.	Recov. 15' sl gas cut mud.	
DST #5-7050-7177	open 6 hrs.	Recov. 100' O&G cut mud. FFP 65#, 30 min SIP-226#	
DST #6-8953-9001	open 3 hrs.	Recov. 100' O&G cut mud. FFP 65#, 30 min SIP-226#	
184' O&G cut mud plus 2576' salt water. FFP-1212#, 15 min SIP-2300#.			
DST #7-9179-9205	open 3 hrs.	Recov. 100' O&G cut mud. FFP-1212#, 15 min SIP-2300#.	
DST #8-9210-9260	open 4 hrs.	Recov. 260' O&G cut mud. FFP-145#, 15 min.	
SIP-260#.			
DST #9-9300-9410	open 4 hrs.	Weak blow. Recov. 60' mud. FFP-300#, 15 min. SIP-1080#.	
DST #10-9615-9658	open 3 hrs.	good blow. Recov. 90' gas cut mud plus 82' salt water cut mud. FFP-100#, 15 min. SIP-179#.	
DST #11-9815-9853	open 1 hr. 35 min.	Died at end of test. Recov. 180' gas & sulfur water cut mud. FFP-80, 15 min. SIP-1710#.	
DST #12-13-Mis-run.			
DST #14-10,076-10,210	open 1 hr.	Died in 14 min. Recov. 30' mud. FFP-240.	
DST #15-10,584-10,685	open 2 hrs.	23 min. Weak blow. Recov. 900' water blanket plus 103' sl gas cut mud. FFP-502#, 15 min. SIP-548#.	
DST #16-10,715-10,836	open 4 hrs.	Recov. 900' water blanket plus 2900' oil. FFP-1463, 15 min. SIP-2315#.	
DST #17-Failed			
DST #18-12,915-13,167	open 1 hr.	sl blow for 3 min. Recov. 75' mud plus 2500' water blanket.	

INTERVAL RECORD

Core #1-8959-79	Recov. 20' dense dolo. & shale	
Core #2-8979-9001	Recov. 22' dolo. & shale, good porosity	
Core #3-9193-9205	Recov. 12' gasilliferous lime w/sl. porosity & stained	
Core #4-1-12510-525	Recov. 10' dense dolo. chert.	
Core #5-2-12525-523	Recov. 7' black chert	
Core #6-3-12533-581	Recov. 50' shale and dolo.	
Core #7-4-12563-598	Recov. 25' hd. black chert and dolo.	
Core #8-5-12928-561	Recov. 32' black chert.	
Core #9-6-12961-13001	Recov. 41' black chert and dolo.	
Core #10-7-13001-018	Recov. 16' black chert and dolo.	
Core #11-8-13018-039	Recov. 16' chert and dolo.	
Core #12-9-13039-062	Recov. 14' black chert and dolo.	
Core #13-1-13563-573	Recov. 1' small pieces of dolo. showing evidence of v. high porosity.	

SURVEY RUN

Schlumberger with gamma-ray and micro-log, gamma ray-neutron, Caliper, and Temperature survey.

ANALYTICAL RECORD

WATER AND SOLIDS

HISTORY OF OIL OR GAS WELL

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.

For additional history, see Sundry Notice, dated Feb. 6, 1952, which summarizes casing and cementing programs and testing. Prior to running 3 1/2" OD casing, circulation was lost after circulating 7' into the Devonian. It was quickly restored after mixing gel-flake. After running 2-3/8" OD tubing on Jan. 30, 1952, the well was snubbed in, and showed the following test:

Date	Bbls. Oil	Bbls. Water	Wt. % Chloride in water
Feb. 9	220	40	24 (approx. 1% Tbr) Fresh
10	422	58	24 " "
11	406	61	24 " "
12	400	42	24 " "
13	330	22	24 " "
14	513	12	24 " "
15	371	15	24 " "
16	481	7	24 " "
17	480	25	24 " "
18	308	80	24 " 11,000 ppm Cl.
19	223	45	16 " "
20	442	8	8 " "
21	114	8	12 " 13,000 " "
22	205	39	24 " "
23	241	50	24 " 15,000 " "
24	228	50	24 " "
25	188	34	24 " 16,000 " "
26	273	7	24 (Started lifting)
27	305	25	24 " 21,000 " "
28	309	129	24 " 23,000 " "
29	379	98	24 " "
Mar. 1	367	89	24 " "
2	332	85	24 " 24,000 " "
3	332	86	24 " "

LOC OF OIL OR GAS WELL

REGIONAL MAP

DEVELOPMENT OF THE WELL

WELL DATA

