Form 9-330

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

U. S. LAND OFFICE Hobbs
SERIAL NUMBER NM 0631
LEASE OR PERMIT TO PROSPECT Federal 11-20-34 No. 1

LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company United States Smelting Refining and Mining Company Address Post Office Box 1877 Midland, Texas

Lessor or Tract Federal 11-20-34 Field Lea (Bone Springs) State New Mexico

Well No. 1 Sec. 11 T. 20S R. 34E Meridian County Lea

Location 1980 ft. N. of N Line and 2130 ft. W. of W Line of NW/4 Elevation 3666' DF (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 W C Dougherty

Date April 19, 1961 Title Manager of Production

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

Commenced drilling November 4, 1960 Finished drilling April 4, 1961

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

No. 1, from 8090 to 8170 No. 4, from 10180 to 10210
No. 2, from 9465 to 9610 No. 5, from 10370 to 10430
No. 3, from 10010 to 10070 No. 6, from 10730 to 10930
No. 7 from 13040 G to 13130 G

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
16	65	8	Nat'l Tb	723	- -	None	- -	- -	Surface
10-3/4	51	8	Lone St.	5293	Guide	None			Intermediate
7	23-32	8	Lone St.	14360	Guide	None	10150	10160	Production

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
16	723	1200	Pump and plug		
10-3/4	5293	3420	Pump and plug.		
7	14360	1700	Pump and plug.		

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 14,019 feet, and from feet to feet
Cable tools were used from feet to feet, and from feet to feet

DATES

April 19, 1961 Put to producing April 19, 1961

The production for the first 24 hours was 205 barrels of fluid of which 100 % was oil; % emulsion; % water; and % sediment. Gravity, °Bé. 42

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

Rock pressure, lbs. per sq. in.

EMPLOYEES

W. O. Chambers, Driller N. C. Ward, Driller
J. F. Lake, Driller , Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	1610	1610	Sand and shale
1610	1850	240	Anhydrite
1850	3260	1410	Salt
3260	3440	180	Anhydrite
3440	3750	310	Sand, shale, dolomite, and anhydrite.
3750	3840	90	Sand, anhydrite, and dolomite.
3840	5750	1910	Dolomite w/sand stringers
5750	6210	460	Sand w/dolomite stringers.
6210	7110	900	Lime w/sand and shale streaks
7110	8060	950	Sand w/shale and dolomite streaks.
8060	8202	142	Lime w/sandy shale streaks
8202	8700	498	Lime
8700	9020	320	Shale
9020	9190	170	Lime
9190	9475	285	Shale, lime and chert.
9475	9610	135	Sand
9610	9790	180	Dolomite
9790	10670	880	Sand, shale, dolomite and lime

[OVER] 16—43094-3

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
10670	10990	320	Sand
10990	11260	270	Shale
11260	11420	160	Lime and chert
11420	12060	640	Shale w/lime stringers
12060	13040	980	Lime w/shale and chert stringers
13040	13120	80	Sand and shale
13120	13695	575	Shale w/sand and lime stringers
13695	14305	610	Lime and chert
14305	14478	173	Shale
14478	14525	47	Lime
14525	14619	94	Dolomite
Core #1 14532-587'. Rec. 3' hard lime.			
Core #2 14537-592'. Rec. 52', being 20' dense lime and 32' porous dolomite.			
Core #3 14590-14606'. Rec. 16' porous dolomite w/lime stringers.			
Core #4 14606-14619'. Rec. 13' dolomite w/vugs and dense lime stringers.			
DRILL STEM TESTS			
DST #1 3826-3860'	(Seven-Rivers)		Took open one hr. w/weak blow. Rec. 270' drilling mud, no show. IFP 20#, FFP 80#, 30" ISIP 1830#, 30" FSIP 1830#. Had dull fluorescence and stain in samples.
DST #2 7800-7900'	(Delaware Sand)		Tool open 3'. Rec. 2970' XW. FP 215-1595#. 30" ISIP 2515#, 30" FSIP 2655#.
DST #3 8005-8080'	(Delaware Sand)		Tool open 3'. Rec. 250' SI GCDM. FP 85-175#. 30" SIP 2262#.
DST #4 8090-8209'	(Delaware Sand)		Tool open 2'. Rec. 78' DM plus 2' oil. FP 90-90#, 30" FSIP 135#.
DST #5 9475-9575'	(Bone Springs)		5/8" x 1" chks. Tool open 3'. G/55", TSTM. Rec. 270' OCGCDM. FP 87-132#, 30" SIP 1495#.
DST #6 10085-10199'	(Bone Springs)		Tool open 4'. G/50", TSTM. Oil/2'30". Cleaned to pits 40". Flowed 4 bbls. oil in 1'. SIP 50-70#. Rev. out 38 bbls. oil, gty. 36°. FP 360-1805#. 30" BHSIP 3950#. Rec. 450' HOCGCDM below circ. sub.
DST #7 10375-10473'	(Bone Springs)		5/8" x 1" chks. Tool open 1'40" w/very weak blow of air. Died in 40". Rec. 110' SI. GCDM. FP 115-115#, 30" SIP 160#.
DST #8 10845-10934'	(Bone Springs)		Tool open 90". Fair blow of air. Dead 59". Rec. 270' mud, FP 90-112#, 30" SIP 135#.
DST #9 13018-13109'	(Pennsylvanian)		Tool open 1-1/2'. Gas and water blanket/20". Flowed 7.334 MMCFGPD at end of test. FP 225#. Rec. 390' 47.5 deg. distl. and 270' water, 27,000 ppm. IFP 1955#, FFP 1865#, 75" FSIP 6760#.
DST #10 14295-14530'	(Devonian)		Tool open 1'45" weak blow 35" and died. Rec. 520' mud, no show. FP 320-390#, 30" SIP 390#.
DST #11 14548-14619'	(Devonian)		Tool open 2' strong blow decreased to weak at end of test. Rec. 14,000' SW. IFP 1370#. FFP 6140#, 30" FSIP 6140#.

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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.