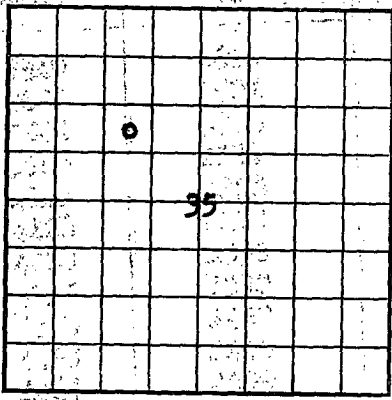


Form 9-380

FORMATION

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER I-149-Ind.-7850
LEASE OR PERMIT TO PROSPECT
Navajo Indian Tribal LandsUNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYNOV 6 1953
U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company Southern Union Gas Company Address Burt Building, Dallas 1, Texas
Lessor or Tract Texas Co.-Navajo Field Wildcat State New Mexico
Well No. 2-A Sec. 35 T. 32N R. 18W Meridian N.M.P.M. County San Juan
Location 1450ft. {N.} of N. Line and 1650ft. {E.} of W. Line of Section 35 Elevation 5395 G
(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

A. M. Wiederkehr

Title Reservoir EngineerDate November 2, 1953

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

Commenced drilling July 8, 1953, 19 Finished drilling October 2, 1953, 19

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from none to No. 4, from
No. 2, from to No. 5, from
No. 3, from to No. 6, from

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"	48#		H40	240'					Surface
9-5/8"	34.86#	36#	J55	2415'					Intermediate
MIS. LOG. OF OIL OR GAS WELL									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/8"	239'	200	Halliburton		
9-5/8"	2405'	650	"		

MARK

FOLD

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
Adapters—Material _____ Size _____

SHOOTING RECORD

Shot	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
		none				

TOOLS USED

Rotary tools were used from 0 feet to 8168 feet, and from _____ feet to _____ feet
Cable tools were used from no feet to _____ feet, and from _____ feet to _____ feet

DATES

10/2/53, 19 _____ Put to producing _____ DRY HOLE _____, 19 _____
The production for the first 24 hours was _____ barrels of fluid of which _____ % was oil; _____ %
emulsion; _____ % water; and _____ % sediment.
If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. _____ Gravity, °Bé. _____

EMPLOYEES

Derman Drilling Company, _____ Driller I. C. Brown _____, Driller
C. F. Polen _____, Driller H. F. Peter _____, Driller

FORMATION RECORD

FROM	TO	TOTAL FEET	FORMATION
0	131	131	Shale and sand
131	280	149	Shale
280	309	29	Sand Shale and lime
309	569	260	Shale
569	820	251	Shale w/sand streaks
820	890	70	Shale and sand
890	916	26	Sand and lime
916	973	57	Sandy shale
973	1125	152	Shale
1125	1227	102	Sand and lime
1227	1374	147	Shale and sand
1374	1415	41	Shale w/lime streaks
1415	1749	334	sand and shale
1749	1767	18	shale and sand
1767	1845	78	Sand
1845	2302	457	sand and shale streaks
2302	2368	66	Shale and sand
2368	2676	308	sand and shale
2676	2727	51	shale
2727	2813	86	sand
2813	3021	208	sand and shale
3021	3240	219	shale w/sand streaks
3240	3371	131	sand and shale
3371	3412	41	shale and sand
3412	3479	67	sand and shale
3479	3540	61	Shale

FORMATION RECORD—Continued

FORMATION RECORD—Continued

FROM	TO	TOTAL FEET	FORMATION	16-43094-3
3440	3600	60	Shale and sand	
3600	3901	301	shale and sand	
3901	3966	65	sand and shale, some	
3966	4111	145	shale and sand	
4111	4126	15	lime	
4126	4200	74	shale	
4200	4335	135	shale and lime	
4335	4390	55	shale, sand and lime shells	
4390	4450	60	shale w/ sand streaks	
4450	4465	15	shale	
4465	4559	94	lime and shale	
4559	4663	104	shale and sand	
4663	4689	26	lime and shale	
4689	4711	22	sand and shale	
4711	4804	93	shale and lime	
4804	4831	27	sand	
4831	4887	56	shale and lime	
4887	4934	47	sand and shale	
4934	5987	1053	lime and shale	
5987	6031	44	shale and lime	
6031	6081	50	lime	
6081	6201	120	shale and lime	
6201	6210	9	lime	
6210	6266	56	shale and lime	
6266	6397	131	shale and lime	
6397	6522	125	lime and shale	
6522	6530	8	sand and shale	
6530	6561	31	shale and lime	
6561	6585	24	shale and lime and sand	Differ
6585	6612	27	shale and lime	Differ
6612	6637	25	lime	Differ
6637	6915	278	shale and lime	
6915	7177	262	shale & lime w/ sm show anhydrite	
7177	7240	63	shale, lime and anhydrite	
7240	7430	190	lime and shale	
7430	7441	11	lime, shale and anhydrite	
7441	7482	41	shale and lime	
7482	7533	51	shale, lime and anhy.	
7533	7605	72	shale and lime	
7605	7627	22	anhydrite, lime and shale	
7627	7702	75	lime and shale	
7702	8168	466	lime	

LOGS USED

GEOLOGICAL TOPS

Tocito	885'					
Greenhorn	1415					
Dakota	1518					
Morrison	1690					
Chinle	3460					
Shinarump	4390					
Cutler	4686					
Rico	5922					
Hermosa	6155					
Paradox	7154					
Molas	8140					

DRILL-STEM TEST AND CORE RECORD ATTACHED

Well was plugged 7550-7900' w/150 sacks cement; 6900-7100 w/85 sx; 5500-5700 w/85 sx; 4300-4450 w/65 sx; 3350-3450 w/65 sx; 10' plug in top of surface casing.

MIDDING AND CEMENTING RECORD

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.

Casing size	Per foot weight	Depth	Make	Amount	Kind of shoe	Cut and burred from	Perforated	Purpose
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CASING RECORD

No. 5' from	to	No. 4' from	to
No. 1' from	to	No. 3' from	to
No. 3' from	to	No. 6' from	to
No. 5' from	to	No. 2' from	to
No. 1' from	to	No. 4' from	to

(Denote date of)

OIL OR GAS SANDS OR ZONES

Commenced drilling July 8, 1923 to Finished drilling October 3, 1923 to

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

Date December 3, 1923

so far as can be determined from all available records.

The information given hereafter is a complete and correct record of the well and all work done thereon.

Location Town of _____ of _____ Line and Range _____ of _____ Line of Section _____ of _____ Township _____ Range _____

Well No. _____ Sec. _____ T. _____ R. _____ Meridian _____ N. _____ S. _____ County _____ State _____

Lesser of _____ or _____ Field _____ State _____

