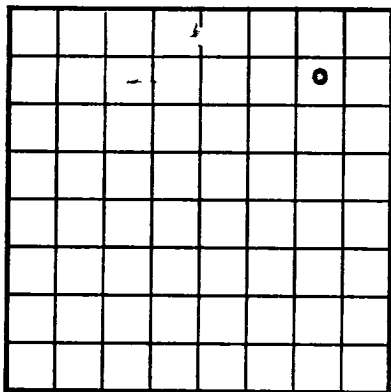


Form 9-330

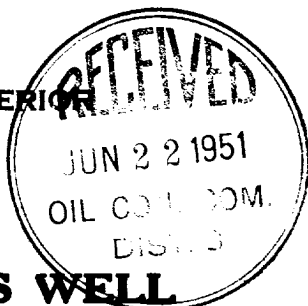
U. S. LAND OFFICE **Santa Fe**
SERIAL NUMBER **078134**

LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



LOG OF OIL OR GAS WELL

Company **Southern Union Gas Company** Address **1104 Burt Building - Dallas, Texas**
Lessor or Tract **Crandell** Field **Blanco** State **New Mexico**
Well No. **1** Sec. **19** T. **31N** R. **10W** Meridian **N.M.P.M.** County **San Juan**
Location **990 ft. {N.} of North Line and 990 ft. {E.} of East Line of Section 19** Elevation **5988' DF**
(Derivat. from 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 _____
Date **June 18, 1951** Title **Chief Engineer**

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

Commenced drilling **March 5,** 19 **51** Finished drilling **April 28,** 19 **51**

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

No. 1, from _____ to _____ 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		Purpose
							From—	To—	
10-3/4"				175'					
8-5/8"				246'					
5-1/2"				4909'					
2-3/8"				5240'					
Tubing									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4"	175'	75	Halliburton		
8-5/8"	246'	105	"		
5-1/2"	4909'	250	"		

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
		Nitroglycerine	750 qts.	4/29	4948-5240	5240'

TOOLS USED

Rotary tools were used from **0** feet to **4909** feet, and from _____ feet to _____ feet
Cable tools were used from **4909** feet to **5240** feet, and from _____ feet to _____ feet

DATES

April 30, 19 **51** Put to producing _____, 19 _____
The production for the first 24 hours was _____ barrels of fluid of which _____ % was oil; _____ % emulsion; _____ % water; and _____ % sediment. Gravity, °Bé. _____
If gas well, cu. ft. per 24 hours **3500 MCF** Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. **1075 #**

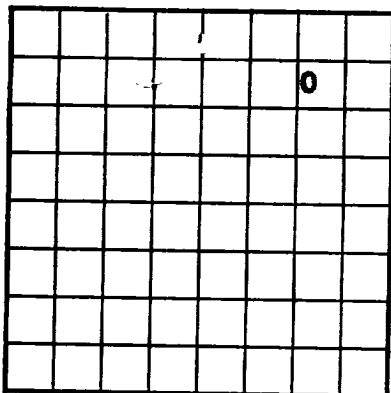
EMPLOYEES

Gardner Brothers Drilling Co., Driller **for Rotary** _____, Driller
Southern Union Gas Company, Driller **for Cable** _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	515	515	Sand & Shale
515	725	210	Sand
725	2715	1990	Sand & Shale—Top Pictured Cliffs 2695' (✓ 3293)
2715	2735	20	Sand
2735	2850	115	Sandy Shale & Shells—Top Lewis 2790' (✓ 3198)
2850	3280	430	Sand & Shale
3280	3400	120	Sandy Shale & Shells
3400	3680	280	Shale
3680	3790	110	Sand & Shale
3790	3920	130	Shale
3920	3960	40	Sand & Shale
3960	4015	55	Shale
4015	4125	110	Sand & Shale
4125	4156	31	Shale
4156	4200	44	Shale & Sand
4200	4230	30	Sand - Top Cliff House 4230' (✓ 1758)
4230	4280	50	Hard Sand
4280	4300	20	Sand
4300	4356	56	Hard Sand
4356	4439	83	Sand - Top Menefee 4380' (✓ 1608)
4439	4695	256	Sand & Shale
4695	4739	44	Sand & Shale, Streaks Coal
4739	4793	54	Sand & Shale
4793	4822	29	Sand

(OVER)

U. S. LAND OFFICE **Santa Fe**
SERIAL NUMBER **078134**
LEASE OR PERMIT TO PROSPECT _____UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Southern Union Gas Company Address 1104 Eurt Building - Dallas, Tex.
Lessor or Tract Grandell Field Blanco State New Mexico
Well No. 1 Sec. 19 T. 31N R. 10W Meridian N.M.P.M. County San Juan
Location 990 ft. N. of Line and 990 ft. E. of East Line of Section 19 Elevation 5968' DF
(Derivat 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. H. NewmanDate May 25, 1951 Title Engineer

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

Commenced drilling March 5, 19 51 Finished drilling April 28, 19 51

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from _____ to _____ 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		Purpose
							From—	To—	
10-3/4"	175			175'					
8-5/8"	246			526'					
5-1/2"	4909			4909'					
2-3/8" Tubing	5103'								
HISTORY 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
10-3/4"	175	75	Halliburton		
8-5/8"	246	105	"		
5-1/2"	4909	250	"		

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
		Nitroglycerine	750 qts.	4/29	4948-5240	5240

TOOLS USED

Rotary tools were used from 0 feet to 4909 feet, and from _____ feet to _____ feet
Cable tools were used from 4909 feet to 5240 feet, and from _____ feet to _____ feet

DATES

_____, 19____ Put to producing _____, 19____

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

If gas well, cu. ft. per 24 hours 1580 MCF Gallons gasoline per 1,000 cu. ft. of gas _____Rock pressure, lbs. per sq. in. 893#

EMPLOYEES

Gardner Bros. Drilling Company Driller for Rotary _____, DrillerSouthern Union Gas Company, Driller for Cable _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	515	515	Sand & Shale
515	725	210	Sand
725	2715	1990	Sand & Shale -Top Pictured Cliffs 2695' (3293)
2715	2735	20	Sand
2735	2850	115	Sandy Shale & Shells
2850	3280	430	Sand & Shale
3280	3400	120	Sandy Shale & Shells
3400	3680	280	Shale
3680	3790	110	Sand & Shale
3790	3920	130	Shale
3920	3960	40	Sand & Shale
3960	4015	55	Shale
4015	4125	110	Sand & Shale
4125	4156	31	Shale
4156	4200	44	Shale & Sand
4200	4230	30	Sand
4230	4280	50	Hard Sand
4280	4300	20	Sand
4300	4356	56	Hard Sand
4356	4439	83	Sand
4439	4695	256	Sand & Shale
4695	4739	44	Sand & Shale, Streaks Coal
4739	4793	54	Sand & Shale
4793	4822	29	Sand

