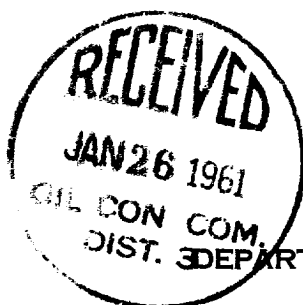


A coordinate grid with x and y axes ranging from 0 to 9. The point X is plotted at the coordinates (8, 6).

LOCATE WELL CORRECTLY



U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 078931-A
LEASE OR PERMIT TO PROSPECT _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Tennessee Gas Transmission Co. Address P. O. Box 1714, Durango, Colorado
 Lessor or Tract USA Glenn H. Callow Field Totah Gallup State New Mexico
 Well No. 15 Sec. 28 T. 29N R. 13W Meridian NMPM County San Juan
 Location 2310 ft. N of N Line and 560 ft. E of W Line of Section 28 Elevation 5740 GL
(Derive floor plate from 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 L. B. Plumb L. B. Plumb

Date January 18, 1961 Title District Production
The summary on this page is for the condition of the well at above date Superintendent

Commenced drilling November 19, 1960 Finished drilling November 30, 1960

OIL OR GAS SANDS OR ZONES

(Denote gas by $\mathbb{G}$)

(Denote gas by G)
 No. 1, from 5592 to 1598 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. 8, from _____ to _____
 No. 2, from _____ to _____ No. 4, from _____ to _____
CASING RECORD

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and galled from	Perforated		Purpose
							From	To	
8 5/8	24	3 x 4	CRAT	137	Full				Surface production
1 1/2	9.5	3 x 4	CRAT	9657	Full		9598	9598	
CHOICE OF SHOS OVER ALL									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8	169	125	Two Plug		
4 1/2	5652	240	Two 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 5652 feet, and from 5652 feet to 5652 feet
Cable tools were used from 5652 feet to 5652 feet, and from 5652 feet to 5652 feet

DATES Potential test 1-17-61. Flowed 43 bbls.
oil in 10 hrs. on 20/64" ch. GOR 1000

January 16 61 The production for the first 24 hours was 103 barrels of fluid of which 100% was oil; 0% emulsion; 0% water; and 0% sediment. Gravity, °Bé. 61

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

Rock pressure, lbs. per sq. in. _____

EMPLOYEES

_____, Driller

_____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	12	12	KB to ground level
12	840	828	Shale and sand stringers
840	1510	670	Brown shale
1510	1660	150	Sandstones
1660	3060	1400	Black shale w/occasional sand stringers
3060	4250	1190	Sandstone and shale
4250	5450	1200	Black shale
5450	5652	202	Shaley and silty sands w/shale
			<u>Electric Log Tops</u>
			Farmington Sands 550
			Fruitland Shale 960
			Pictured Cliff 1630
			Lewis Shale 1795
			Mesaverde 2730
			Mancoes 4290
			Gallup 5210

[OVER]

[OVER]
 LOYALTY OF RECORD - CONTINUED

16-48094-3

Company

Address

State

Field

Section

Well

Log

Notes

Pressure tested production casing at 1800' for 30 minutes. Pressure held 0.50 psi.

Oil or gas sands or zones

Flowed 43.4 bbls. oil in 10 hrs. on 20/64" choke. 11-60, MCP 480, GOR 1000.

Max. pressure 3300', min. pressure 2600'. Recovered 1000 gal. Potential 1-17-61.

4 photo log foot. Sand-oil log as follows: 130,000 lbs. sand and 24,000 gal. water.

on second stage 6:00 p.m. 11-30-60. WOC 24 hrs. Held 0.5 psi. Perforated 5592-5598 with

11-30-60. Second stage cemented at 1810' with 50 sacks 50-50 mix, 6% gel. Plug down

with 140 sacks 50-50 mix 6% gel, 2% gel, plug down 2:20 p.m.

casing, total footage 5640'. Set at 5652. Cemented in two stages. First stage cemented

5652'. Run ES induction and gamma ray logs. Run 17 1/4 joints 4 1/2", 9 5/8", J-55

Pressure tested to 1600' for 30 minutes. Pressure held 0.5 psi. Drilled 7 7/8" hole to

cement and circulated to surface. Run 11-20-60. WOC 12 hours.

5 joints casing, 2 1/4", J-55, total footage 157'. Set at 169'. Cemented with 125 sacks

Wells spudded 18:30 p.m. 11-19-60, and 12 1/4" hole was drilled to 175' and run

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 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.

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HISTORY OF OIL OR GAS WELL			
FORMATION RECORD			
FROM-	TO-	TOTAL FEET	FORMATION
100	110	10	Gravelly sand
110	120	10	Sand
120	130	10	Sand
130	140	10	Sand
140	150	10	Sand
150	160	10	Sand
160	170	10	Sand
170	180	10	Sand
180	190	10	Sand
190	200	10	Sand
200	210	10	Sand
210	220	10	Sand
220	230	10	Sand
230	240	10	Sand
240	250	10	Sand
250	260	10	Sand
260	270	10	Sand
270	280	10	Sand
280	290	10	Sand
290	300	10	Sand
300	310	10	Sand
310	320	10	Sand
320	330	10	Sand
330	340	10	Sand
340	350	10	Sand
350	360	10	Sand
360	370	10	Sand
370	380	10	Sand
380	390	10	Sand
390	400	10	Sand
400	410	10	Sand
410	420	10	Sand
420	430	10	Sand
430	440	10	Sand
440	450	10	Sand
450	460	10	Sand
460	470	10	Sand
470	480	10	Sand
480	490	10	Sand
490	500	10	Sand
500	510	10	Sand
510	520	10	Sand
520	530	10	Sand
530	540	10	Sand
540	550	10	Sand
550	560	10	Sand
560	570	10	Sand
570	580	10	Sand
580	590	10	Sand
590	600	10	Sand
600	610	10	Sand
610	620	10	Sand
620	630	10	Sand
630	640	10	Sand
640	650	10	Sand
650	660	10	Sand
660	670	10	Sand
670	680	10	Sand
680	690	10	Sand
690	700	10	Sand
700	710	10	Sand
710	720	10	Sand
720	730	10	Sand
730	740	10	Sand
740	750	10	Sand
750	760	10	Sand
760	770	10	Sand
770	780	10	Sand
780	790	10	Sand
790	800	10	Sand
800	810	10	Sand
810	820	10	Sand
820	830	10	Sand
830	840	10	Sand
840	850	10	Sand
850	860	10	Sand
860	870	10	Sand
870	880	10	Sand
880	890	10	Sand
890	900	10	Sand
900	910	10	Sand
910	920	10	Sand
920	930	10	Sand
930	940	10	Sand
940	950	10	Sand
950	960	10	Sand
960	970	10	Sand
970	980	10	Sand
980	990	10	Sand
990	1000	10	Sand