

OCT 13 1961

STANDLEY

U. S. LAND OFFICE
SERIAL NUMBER
LEASE OR PERMIT TO PROSPECT

New Mexico

LC 061869

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Texasco Inc. Address Box 1109 Midland, Texas
Lessor or Tract Cotton Draw Unit Field Pedraza-Delaware State New Mexico
Well No. 57 Sec. 21 T. 5S R. 32E Meridian 109W County Lea
Location 990 ft. [N.] of 8 Line and 990 ft. [W.] of 4 Line of Sec 21 Elevation 3395.3 f. (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

Date October 5, 1961

Title

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

Commenced drilling September 22, 1961 Finished drilling September 22, 1961

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 4645' to 4666' 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 None 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—	
<u>8-5/8</u>	<u>26.0</u>	<u>8</u>	<u>API</u>	<u>200</u>	<u>None</u>	<u>See Below</u>	<u>See Below</u>	<u>See Below</u>	<u>Comp. Prod.</u>
<u>4-1/2</u>	<u>15.5</u>	<u>8</u>	<u>API</u>	<u>215</u>	<u>None</u>	<u>See Below</u>	<u>See Below</u>	<u>See Below</u>	<u>Production</u>
<u>2-3/8</u>	<u>10.7</u>	<u>8</u>	<u>API</u>	<u>200</u>	<u>None</u>	<u>See Below</u>	<u>See Below</u>	<u>See Below</u>	<u>Production</u>

Casing Perforations: 4645' to 4655' & from 4658' to 4666'

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
<u>8-5/8</u>	<u>388.31</u>	<u>300</u>	<u>R&P</u>	<u>14.2</u>	<u>Hole Full</u>
<u>4-1/2</u>	<u>4606.89</u>	<u>215</u>	<u>R&P</u>	<u>13.5</u>	<u>Hole Full</u>
<u>2-3/8</u>	<u>4606.61</u>	<u>Swag</u>			<u>Loaded Hole w/oil</u>

PLUGS AND ADAPTERS

Heaving plug—Material None Length _____ Depth set _____
Adapters—Material _____ Size _____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
<u>Acidized w/500</u>	<u>gals acid</u>	<u>war Press</u>	<u>2000</u>	<u>broke to</u>	<u>1000</u>	<u>immediate shut down</u>
<u>pressure</u>	<u>1000</u>	<u>5 minute</u>	<u>shut down</u>	<u>pressure</u>	<u>900</u>	<u>psi</u>

TOOLS USED

Rotary tools were used from _____ feet to 4707 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

October 5, 1961 Put to producing September 30, 1961

The production for the first 24 hours was 58.70 barrels of fluid of which 83.5 % was oil; _____ % emulsion, 16.5 % water; and _____ % sediment. Gravity, °Bé. 10.3

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

Rock pressure, lbs. per sq. in. _____

EMPLOYEES

V. H. Thomas, Driller G. L. Leatherwood, Driller
B. J. Brennan, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0</u>	<u>740</u>	<u>740</u>	<u>Red Bed</u>
<u>740</u>	<u>811</u>	<u>71</u>	<u>Anhydrite</u>
<u>811</u>	<u>900</u>	<u>169</u>	<u>Dolomite</u>
<u>900</u>	<u>1138</u>	<u>158</u>	<u>Anhydrite & Silt</u>
<u>1138</u>	<u>4360</u>	<u>3222</u>	<u>Salt & Anhydrite</u>
<u>4360</u>	<u>4586</u>	<u>226</u>	<u>Anhydrite</u>
<u>4586</u>	<u>4621</u>	<u>35</u>	<u>Black Shale</u>
<u>4621</u>	<u>4673</u>	<u>52</u>	<u>Sand</u>
<u>4673</u>	<u>4685</u>	<u>12</u>	<u>Black Shale</u>
<u>4685</u>	<u>4707</u>	<u>22</u>	<u>Sand - Total Depth</u>
	<u>4670</u>		<u>Plug Back Total Depth</u>
GEOLOGICAL TOPS			
	<u>740'</u>		<u>Top Anstler Anhydrite</u>
	<u>811'</u>		<u>Top Anstler Dolomite</u>
	<u>1138'</u>		<u>Top Salt</u>
	<u>4360'</u>		<u>Base Salt</u>
	<u>4586'</u>		<u>Top Delaware Line</u>
	<u>4621'</u>		<u>Top Delaware Sand</u>
	<u>4645'</u>		<u>Top Pay</u>
	<u>4707'</u>		<u>Total Depth</u>
	<u>4670'</u>		<u>Plug Back Total Depth</u>

-ILLEGIBLE

FORMATION RECORD—CONTINUED

LEW 240 80C J10 70 2001

A blank sheet of white graph paper with a light gray grid pattern. The grid consists of small squares. There are faint handwritten markings at the bottom left corner, which appear to be "Q-1".

OF OR 28 BANDS OR ZONES

STUDAS DETAY: 1417-0000

OTHER RECORDS

HISTORY OF OIL OR GAS WELL

16-43094-2 U. S. GOVERNMENT PRINTING OFFICE

FORMATION RECORD—Continued

TEXACO INC.
Cotton Draw Unit #57

Field core description, core #1, from 4603 to 4655. 1007 17 MI 0 46
Cut and recovered 52'.

Started coring at 5:15 a.m. MST 9-22-61.

Finished coring at 10:59 a.m. 9-22-61.

Total coring time 5 hrs. 44 min.

Down time: 5 min. Connection.

Net coring time: 5 hrs. 39 min.

Make corehead: Williams. Type: Diamond. Size: 6-11/16" x 3 1/2". Serial #K 197.

Rotary RPM: 70. Weight on corehead: 15,000 lbs. Pump pressure 700 psi.

Mud conditions: Weight 10.2 lbs, per gal. Vis. 32 sec. Water loss 6 cc.

cake 1/32", salt content 171,000 ppm.

CORING TIME - MINUTES PER FOOT:

14-11-10-14-15-21-10-7-5-6-14-8-12-14-16-6-12-16-9-8-6-9-7-7-7-6-5-2-3-5-6-2-4-3-3-4-5-3-3-5-3-1-1-1-1-4-2-2-4-3-2-2.

From	To	Length	Description
4603	4608	5	SHALE - Black, calcareous.
4608	4608.5	0.5	LIME- Tan, dense, massive, vertically fractured with hairline fractures, good oil stain and fluorescence in fractures.
4608.5	4609	0.5	SHALE - Black, limey.
4609	4614	5	SAND - Light gray, very fine, very tight, hard, well cemented, very shaley, and very calcareous. Scattered copralites or worms.
4614	4616	2	SHALE- Black, calcareous.
4616	4626	10	SAND - Gray, tight, very well cemented, very calcareous, scattered copralites, very shaley.
4626	4634	8	SAND - Light gray, very fine grained, tight, shaley, slightly laminated, with light odor, very pale blue-white fluorescence.
4634	4634.3	0.3	SHALE - Dark gray to black, slightly calcareous, silty.
4634.3	4635	0.7	SAND - Light gray, friable, fine grained, clean, with traces of feldspar, good odor, light stain, excellent solid yellow-green fluorescence.
4635	4636	1	SAND - Light gray, very fine grained, clean, very calcareous, feldspathic, very tight, well cemented, no show.
4636	4637	1	SAND - Light gray, friable, fine grained, clean, traces of feldspar, good odor, light stain, excellent solid yellow green fluorescence.
4637	4640	3	SAND - Light gray, very fine grained, slightly friable, shaley, laminated with good odor and good blue-white fluorescence.
4640	4640.3	0.3	SHALE - Dark gray, dense, slightly calcareous, silty.
4640.3	4643	2.7	SAND - Light gray, very fine grained, tight, shaley, laminated, slightly calcareous, having fair odor, good pale blue-white fluorescence and scattered vertical fractures.
4643	4652	9	SAND - Light gray, friable, fine grained, clean, good odor, light stain, excellent yellow-green fluorescence.
4652	4654	2	SAND - Light gray, very fine grained, tight, laminated with a trace of show in scattered laminations.
4654	4655	1	SAND - Light gray, fine to medium fine grained, very soft and friable, having excellent yellow-green fluorescence and odor.

TEXACO, INC.
Cotton Draw Unit No. 57

Core #2: 4655-4707',
Cut and recovered 52'.
Started coring at 3:19 p.m., 9-22-61.
Finished coring at 8:20 p.m., 9-22-61.
Total coring time: 5 hours, 01 minutes.
Down time: 16 minutes -- connection.
Net coring time: 4 hours, 45 minutes.
Make corehead: Williams. Type: Diamond. Size: 6-11/16" x 3-1/2". Serial #k 197.
Rotary RPM: 70. Weight on corehead: 15,000#. Pump pressure 700 psi.
Mud conditions: Weight 10.2#/gal., viscosity 32 sec., water loss 6 cc, cake 1/32",
salt content 171,000 ppm.
CORING TIME - MIN./FT:
2-1-2-1-1-4-5-5-5-5-6-9-10-10-5-6-4-5-5-6-4-4-2-2-4-2-4-7-5-8-5-7-7-8-5-6-5-3-8-3-5-
5-13-11-13-7-5-8-4-4-4-12.

FROM	TO	LENGTH	DESCRIPTION
4655	4660	5'	SAND -- light gray, fine to med. finely granular, soft, friable, clean, excellent yellow green fluorescence, excellent odor, light stain, calcareous.
4660	4666	6'	SAND -- gray, very fine, very shaley, slightly laminated, very tight, hard, no show.
4666	4673	7'	SHALE - Dark gray, dense, slightly calcareous, silty.
4673-	4676	3'	SAND - light gray, very fine, very hard, very shaley, slightly laminated, no show.
4676	4677	1'	SAND - light gray, fine-grained, very slightly friable, clean, good laminated fluorescence, good odor.
4677	4678	1'	SAND - as above, no show.
4678	4679	1'	SAND - as above, with excellent fluorescence and odor.
4679	4682	3'	SAND - as above, no show.
4682	4698	16'	SAND - light gray, very fine, tight, laminated with excellent scattered laminated fluorescence and good scattered odor.
4698	4701	3'	SHALE - dark gray, black, dense, silty.
4701	4707	6'	SAND - light gray, very fine, hard, tight, well-cemented, shaley, no show.