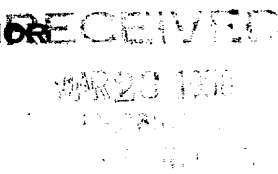


LOCATE WELL CORRECTLY



U. S. LAND OFFICE Santa Fe  
SERIAL NUMBER SF-078107-E  
LEASE OR PERMIT TO PROSPECT \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY



LOG OF OIL OR GAS WELL

Company Humble Oil & Refining Company Address Box 2180, Houston 1, Texas  
Box 1268, Farmington, N. M.  
Lessor or Tract No. Waterflow Unit No. 1 Field Wildcat State New Mexico  
Well No. 1 Sec. 28 T. 30N R. 15W Meridian \_\_\_\_\_ County San Juan  
Location 1980 ft. N. of 3 Line and 1980 ft. E. of W Line of Section 28 Elevation 5219'  
(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 Russell M. Lilly  
Date March 18, 1958 Title Dist. Supt.

The summary on this page is for the condition of the well at above date.  
Commenced drilling 1-10-, 1958 Finished drilling TD 2-8-58, 19\_\_\_\_

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from Well dry and is abandoned. 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—	
<u>9-5/8"</u>	<u>36</u>	<u>8</u>	<u>Dom.</u>	<u>298'</u>	<u>HOECO</u>	<u>4170'</u>	<u>4170'</u>	<u>4198'</u>	
<u>5-1/2"</u>	<u>22</u>	<u>8</u>	<u>Dom.</u>	<u>4198'</u>	<u>HOECO</u>	<u>4610'</u>			
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
<u>9-5/8"</u>	<u>313'</u>	<u>300</u>	<u>Pumped</u>	<u>10.4</u>	
<u>5-1/2"</u>	<u>4637'</u>	<u>280</u>	<u>Pumped</u>	<u>9.0</u>	

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
		<u>NONE</u>				

TOOLS USED

Rotary tools were used from 0 feet to 4967' feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet  
Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

DATES

\_\_\_\_\_, 19\_\_\_\_ Put to producing Plugged and abandoned 3-11-58, 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 \_\_\_\_\_ Gallons gasoline per 1,000 cu. ft. of gas \_\_\_\_\_  
Rock pressure, lbs. per sq. in. \_\_\_\_\_

EMPLOYEES

J. F. Blackburn, Driller Fred Brown, Driller  
Mr. Glover, Driller \_\_\_\_\_, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0</u>	<u>328</u>	<u>328</u>	<u>Sand &amp; shale</u>
<u>328</u>	<u>700</u>	<u>372</u>	<u>Shale</u>
<u>700</u>	<u>1191</u>	<u>491</u>	<u>Sand &amp; shale</u>
<u>1191</u>	<u>1295</u>	<u>104</u>	<u>Sand</u>
<u>1295</u>	<u>1701</u>	<u>406</u>	<u>Sand &amp; shale</u>
<u>1701</u>	<u>2025</u>	<u>324</u>	<u>Sand, shale &amp; coal</u>
<u>2025</u>	<u>2651</u>	<u>626</u>	<u>Sand &amp; shale</u>
<u>2651</u>	<u>2840</u>	<u>189</u>	<u>Sand</u>
<u>2840</u>	<u>4967 TD</u>	<u>2127</u>	<u>Sand &amp; shale</u>

Formation Tops:

Mesaverde 1068  
Menefee 1716  
Pt. Lookout 2600  
Mancos 2878  
Gallup 4135  
Greenhorn 4657  
Morrison 4959

FOLD MARK

# WELL HISTORY

This well was drilled to a total depth of 4967' and was spudded 1-10-58. Set 9-5/8" casing at 313' w/300 sks. 2% CC cement. Cement circulated.

Cut Core No. 1, 2522 - 2557, cut 35', rec. 33': 8' dark gr sandy shale, NS; 3' lt gray FGSS, NS; 1' coal; 15' dk gr sandy shale; 5' gray ground up shale; 1' gr FG very hard tite SS, NS. Core No. 2, 2557 - 2608, cut & rec 51'; 20' dark gr sandy shale & shaley coal; 1' coal; 20' dark gr sandy shale & shaley coal; 2' coal; 8' light gr F-M gr SS, trace poro, trace golden fluor. & stn.

DST #1 2605 - 2657, rec. 450' muddy salt water and 1860' salt water.

DST #2 2811 - 2840, rec. 95' drlg. mud.

Core No. 3, 2608 - 2657, rec. lt gr fine to med gr SS, trace fluor & stn.

DST #3, 2814 - 2909, rec 40' drlg. mud.

DST #4, 3982 - 4015, rec. 5' drlg. mud.

Core No. 4, 4190 - 4216, cut & rec 26': 13' blk sandy shale; 9' blk sandy shale w/2" - 6" stks gr med to coarse grained hard tite SS; 4' gr sandy shale.

Core No. 5, 4216 - 4242, rec. 26' blk sandy shale, NS.

Core No. 6, 4242 - 4292, cut & rec. 50': 28' dark gr sandy shale, becomes more sandy toward bottom, NS; 3' gr shaley med to coarse gr SS, NS; 9' lt gr med to coarse gr SS, fair spotty stn & odor; 10' dark gr sandy shale, NS.

DST #5, 4193 - 4292, rec 3760' drlg mud & 90' mud cut water. Misrun

DST #6, 4193 - 4292, rec. 3350' gas cut mud.

Core No. 7, 4286 - 4836, cut & rec 50', Sand, shale & coal w/porosity, stn & odor.

DST #7, 4775 - 4836, rec 40' drlg. mud. Misrun

Core No. 8, 4836 - 4886, cut 52', rec. 51': SS, shale & coal, NS.

DST #8, 4775 - 4886, rec 105' drlg. mud. Tool plugged.

DST #9, 4775 - 4893, rec 30' drlg. mud. Tool plugged.

Core No. 9, 4893 - 4943, cut & rec 50', no odor or stn, good poro, drlg break from 4905 - 4925.

DST #10, 4904 - 4943, rec. 95' drlg. mud.

Core No. 10, 4943 - 4967, cut 24', rec. 21': 1' bl sandy shale, gr fine to med gr SS, NS; 3' gr F-M gr, hard shaley SS, looks tight, NS; 1' coal; 1.5' black shale; 1.5' gr coaly M-C gr SS, looks tight, NS; 2' tan M-C gr conglomerate SS, fair to good porosity, looks wet. NS; 3' assumed to be lost; 1.5' tan, M-C gr conglomerate SS, fair to good porosity, looks wet, NS; 9.5' green sandy, very hard & tight siltstone, NS.

Ran logs. Received USGS approval to plug back. 1st. plug 4625 - 4967 w/140 sks reg; 2nd. plug 4997 - 4497 w/40 sks reg. Found top of cement at 4437'. Set 5-1/2" casing at 4437' w/280 sks reg cement. Top of cement at 3792'.

Moved out rotary rig. Perforated 4170' - 4338' w/2 bullet/ft. Swabbed well dry. Treated formation w/2000 gals. MCA at inj. pr. of 50#. Sand/oil fraced w/30,000gals oil & 40,000# sand. Treating pr. 1750#. Used 300 rubber balls.

Set 2" tubing at 4181'. Swabbed.

On last 12 hour test, swabbed 22 bbls. fluid, 17 bbls. load oil, S/G 23% REAM. 497 bbls LO ~~Flashed~~ left in hole.

Received USGS approval to plug and abandon.

Set Baker Model K CI retainer at 4106'. Squeezed perf. 4170 - 4338 w/100 sks. reg. Dumped 1 bbls. cement on top of retainer. Cut 5-1/2" casing at 2610'. Ran open ended tubing. Set cement plug 3650 - 3500 w/40 sks., second plug 1100 - 975 w/50 sks. Spotted 25' plug in top of surface casing.

Installed markers as per USGS rules.

Well plugged and abandoned, 3-11-58.