

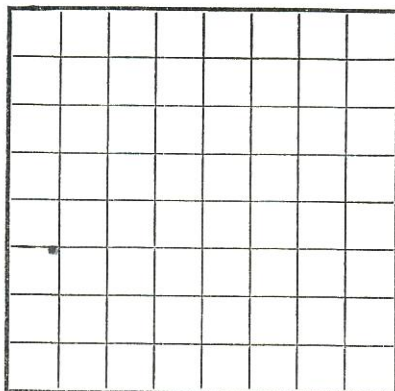
Calo. Oil & Gas Cons. Comm
 1162 1/2 E. 1st St
 Denver, Colo

Bud. Bureau No. 42-R355.4
 Appr. expires 12-31-60.

U. S. LAND OFFICE **Denver**
 SERIAL NUMBER **0-21692**
 LEASE OR PERMIT TO PROSPECT _____

12

Form 9-330



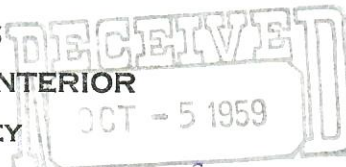
LOCATE WELL CORRECTLY

05705038



00222632

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 GEOLOGICAL SURVEY



OIL & GAS
 CONSERVATION COMMISSION

LOG OF OIL OR GAS WELL

Company Gulf Oil Corporation Address P. O. Box 1010, Casper, Wyoming
 Lessor or Tract Suddith Federal Field So. McCallum State Colorado
 Well No. 1 Sec. 22 T. 9N R. 78W Meridian 6th P.M. County Jackson
 Location 1980 ft. [N.] of 5 Line and 663 ft. [E.] of W Line of Section 22 Elevation 8374'
(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 September 28, 1959 Title Area Production Superintendent

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

Commenced drilling 4-3, 1959 Finished drilling 6-16, 1959

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 5416 to 5448 0 No. 4, from _____ to _____
 No. 2, from 6138 to 6171 G No. 5, from _____ to _____
 No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from 6339 to 6439 No. 3, from _____ to _____
 No. 2, from 6685 to 6700 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"	32.75	8 Round	New	305'	HONCO				Surface
5-1/2"	14 1/2	8 Round	New	6045'	HONCO		5416'	5448'	Production
4" OD	11.67	1 1/2 Hyd.	New	311'			6130'	6152'	

MUDDING AND CEMENTING RECORD

FOLD MARK 4"

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4"	317'	275	HOWCO		
5-1/2"	6057'	205	HOWCO		
4"	6277'	34			Top of liner 5947'

PLUGS AND ADAPTERS

Heaving plug—Material **60-ss cement** Length **478'** Depth set **6282'**
 Adapters—Material **Baker cast iron bridge plug at 6200'** Size **Baker cast iron bridge plug at 6154'**

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from **surface** feet to **6760** feet, and from _____ feet to _____ feet
 Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

Put to producing **July 30**, 19**59**
 The production for the first 24 hours was **18** barrels of fluid of which **33-1/3%** was oil; _____% emulsion **62-2%** water; and _____% sediment. Gravity, °Bé. _____

If gas well, cu. ft. per 24 hours **478 MCF of CO2** Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. _____

EMPLOYEES

Herndon Drilling Co., Driller _____, Driller _____
 _____, Driller _____, Driller _____

FORMATION RECORD

FROM-	TO-	TOTAL FEET	FORMATION
Surface	5108'	5108'	Pierre shale.
5108'	5416'	308'	Niobrara shale.
5416'	5994'	578'	Frontier fm.
5994'	6124'	130'	Mowry shale.
6124'	6219'	95'	Muddy ss.
6219'	6295'	76'	Thermopolis shale.
6295'	6345'	50'	Dakota ss.
6345'	6397'	52'	Fuson shale.
6397'	6481'	84'	Lakota ss.
6481'	6676'	195'	Morrison fm.
6676'	6754'	78'	Morrison ss.

DRILL STEM TEST RECORD

Drill stem test No. 1, interval 5404' to 5456', Initial shut in 45 minutes, tool open 3 hours. Final shut in 1-1/2 hours. Pressures: Initial Hydrostatic 2835 psi, Initial shut in 1590 psi, Initial flow 115 psi, Final flow 143 psi, Final shut in 250 psi, Final hydrostatic 2835 psi. Fair blow throughout test. Recovered 150' heavily oil and gas cut mud. Bottom hole temperature 127 degrees.

Drill stem test No. 2, interval 6057' to 6171', packer failed.

Drill stem test No. 3, interval 6057' to 6171'. Tool open 12 hours, shut in one hour. Good blow increasing to string blow in 3 minutes. Gas to surface in 6 minutes (CO₂) spray of mud in 2 hours, spray of distillate in 5 hours. Recovered 150' of oil and gas cut mud. Pressures: Initial hydrostatic 3330 psi, Initial flow 442 psi, Final flow _____

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FORMATION RECORD—Continued B.C. 00222632

FROM—	TO—	TOTAL FEET	FORMATION
1078 psi, Final shut in 2345 psi, Gas rate with 1/2" plate, 150# pressure, 592,000 cubic feet per day with dry gas. Gas rate with 3/4" plate, 80# pressure, 742,000 cubic feet per day. Unable to get distillate measurement, too much mud, packer leaked some. Final shut in pressure built up quickly.			hydrostatic 3330 psi, temperature 182 degrees F.
Drill stem test No. 4, interval 6340' to 6439'. Opened tool with strong blow, decreased to very weak blow in 4 hours. Recovered 5538' heavily gas and mud cut water. Pressures: Initial hydrostatic 3307 psi, Initial flow zero, Final flow 2248 psi, Final shut in 2350 psi, Final hydrostatic 3307 psi. Temperature 178 degrees. Tool open 4 hours, shut in 1 hour.			
Drill stem test No. 5, interval 6339' to 6361', 22', straddle test. Opened tool with weak blow, increased to fair blow in 30 minutes, gradually decreased to weak blow in 4 hours. Open 4 hours, shut in 1 hour. Recovered 3369' CO ₂ gas in drill pipe, 720' CO ₂ gas cut water. Pressures: Initial hydrostatic 3255 psi, Initial flow 43 psi, Final flow 203 psi, Final shut in 245 psi, Final hydrostatic 3110 psi. Pressure under bottom packer 2370 psi.			
Drill stem test No. 6, interval 6685' to 6703' (18'), opened tool, no blow, after 15 minutes flushed tool, still no blow, after 5 minutes flushed tool, still no blow. Tool open 1 hour shut in 30 minutes. Recovered 30' drilling mud. Pressures: Initial hydrostatic 3433 psi, Initial flow zero, Final flow 33 psi, Shut in 33 psi, Final hydrostatic 3375 psi. Temperature 157 degrees. Top chart did not show tool to be plugged.			
Drill stem test No. 7, interval 6685' to 6760', opened tool, no blow. After 15 minutes flushed tool, still no blow. Open 1 hour, shut in 30 minutes. Recovered 5' slightly gas cut drilling mud. Pressures: Initial hydrostatic 3460 psi, Initial flow zero, Final flow zero, Final shut in 115 psi, Final hydrostatic 3460 psi. Temperature 177 degrees. Charge did not show tool to be plugging.			
CORE RECORD			
Core No. 1 from 6187' to 6191', recovered 3-1/2' - 2.8' sandstone, gray, hard and tight, apparent dips 30° to 70°, cross-bedded, brown sulphide mineralization on bedding planes. Top 1" slightly bleeding brown oil, top 2' 6" good brown stain at top decreasing to spotty. Good yellow fluorescence and cut. .7' Breccia, shale, black, hard, silty, no show.			
Core No. 2 from 6191' to 6194-1/2', recovered 1' - barrel jammed. 1' Breccia, hard, fractured, no show.			
Core No. 3 from 6214-1/2' to 6231'. Recovered 16-1/2'. Coring time 5 hours, 23 min. 5' sandstone, light gray, very fine to fine, hard and tight, no show, 3' sandstone, light gray to brown, fine to medium grain, slight porosity, irregular brown oil stain, yellow fluorescence and cut in stain area, slight odor, 4-1/2' sandstone, brown as above, fair porosity, good brown oil stain, yellow fluorescence and cut, odor, slight bleeding brown oil, 1.3' sandstone, light gray, fine to medium, fair porosity, occ. light tan stain, no fluorescence, cut or odor, 2.7' shale, black and hard, thin stringers of siltstone to very fine sandstone. Top of Muddy 6138', base 6228'.			
Core No. 4 from 6300' to 6307', recovered 4'. Coring time 2 hours 57 minutes, core barrel jammed. Down 3/4 hours circulating. 2' light gray quartzite, very fine, very hard, very fractured. 1.6' shale, carbonaceous, slickensided, dips 30 to 35 degrees; .5' quartzite, dark gray, fine to medium with interbeds of shale as above. Dips 35°.			

siliceous, occasional very slight porosity with black coaly oil residue. No fluor, cut or stain.

Core No. 5 from 6309' to 6316' cored 7', recovered 5-1/2'. Coring time 2 hours, 27 min. Barrel jammed. 5-1/2' shale, very dark gray to black, some silty to occasional siltstone with black soft slickensided partings. Dips are unreliable. No show.

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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.

Core No. 6 from 6409' to 6439', recovered 30', coring time 9-1/2 hours. 14' sandstone, white, fine grain, porous, no show, 3' sandstone, as above, with pebbles, no show, 4' conglomerate, chert pebbles, porous, 4' 6" sandstone, as above, no show, 4' conglomerate as above, 6" sandstone, as above.

PRODUCING INTERVALS AND TREATMENTS

TD 6760'. Ran 60 sack cement plug from TD to 6282'. Set 4" liner 6277' to 5947' with 34 sacks. Drilled out cement to 6245'.

Perforated 6204'-6218' with 4 jets per foot.

Swabbed approximately 3 gallons black heavy crude in 3 hours.

Faced with 2478 gallons water containing 50# J-79, and 2648# 20/40 mesh sand, preceded with 500 gallons mud acid. Screened out.

Set Baker cast iron bridge plug at 6200'.

Perforated 6166' to 6190' with 4 jets per foot. Treated as follows: 500 gallons mud acid and 38 barrels water, followed by 2000 gallons jelled water. Pumped 1874 gallons jelled water containing 3500# 20/40 mesh sand; screened out with 3500# sand and 92 barrels water in formation.

Set bridge plug at 6154'-PBTD - Producing Interval.

Perforations: 6130'-6152' 4 jets per foot

5416'-5448' 4 jets per foot

Faced perforations 6130' to 6152' with 10,000 gallons jelled water and 15,000# 20/40 mesh sand. Spearheaded with 500 gallons mud acid.

Faced perforations 5416'-5448' with 7750 gallons #2 diesel oil and 3050# 20/40 mesh sand. Spearheaded with 250 gallons 7% HCL. Screened out.

FOR USE OF THE BUREAU OF OIL AND GAS ADMINISTRATION

U. S. GOVERNMENT PRINTING OFFICE

DEPARTMENT OF THE INTERIOR