

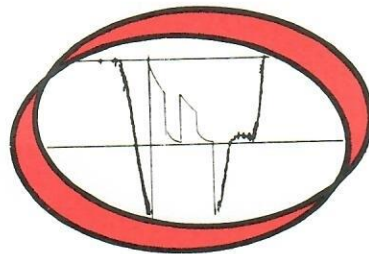
Formation Testing Service Report

RECEIVED

JUN - 7 1971

COLO. OIL & GAS CONS. COMM.

SW SE 27- 12N-45W



00290616

HALLIBURTON SERVICES
DUNCAN, OKLAHOMA

PRESSURE



533772[#] - 979

TIME

533772[#] - 97.8

Each Horizontal Line Equal to 1000 p.s.i.

FLUID SAMPLER DATA				Date 5-31-71		Ticket Number 533772	
Sampler Pressure <u>NO</u> P.S.I.G. at Surface				Kind of Job STRADDLE TEST		Halliburton District STERLING	
Recovery: Cu. Ft. Gas _____				Tester SUTER		Witness GAMBERG	
cc. Oil _____				Drilling Contractor CIRCLE "A" DRILLING COMPANY NM S			
cc. Water _____				EQUIPMENT & HOLE DATA			
cc. Mud _____							
Tot. Liquid cc. _____				Formation Tested <u>"D" Sand</u>			
Gravity <u>(Water) 1.010</u> API @ <u>72°</u> °F.				Elevation <u>3566'</u> Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.				Net Productive Interval <u>17'</u> Ft.			
RESISTIVITY CHLORIDE CONTENT				All Depths Measured From <u>Kelly Bushing</u>			
Recovery Water <u>.630</u> @ <u>74</u> °F. <u>1250</u> ppm				Total Depth <u>3476'</u> Ft.			
Recovery Mud <u>2.700</u> @ <u>70</u> °F.				Main Hole/Casing Size <u>7 7/8"</u>			
Recovery Mud Filtrate <u>2.460</u> @ _____ °F. _____ ppm				Drill Collar Length <u>153'</u> I.D. <u>2 1/2"</u>			
Mud Pit Sample <u>2.760</u> @ <u>70</u> °F.				Drill Pipe Length <u>3092'</u> I.D. <u>3.340"</u>			
Mud Pit Sample Filtrate <u>2.500</u> @ <u>70</u> °F. <u>400</u> ppm				Packer Depth(s) <u>3275'-3281' - 3298'</u> Ft.			
Mud Weight <u>9.1</u> vis <u>51</u> cp				Depth Tester Valve <u>3257'</u> Ft.			
TYPE CUSHION		AMOUNT <u>NONE</u>		Depth Back Pres. Valve <u>NONE</u>		Surface Choke <u>1 1/4"</u> Bottom Choke <u>3/4"</u>	
Recovered <u>120'</u> Feet of <u>mud cut water</u>				<div style="border: 1px solid black; padding: 10px; margin: 0 auto; width: 100%;"> RECEIVED JUN - 7 1971 COLO. OIL & GAS CONS. COMM. </div>			
Recovered <u>1338'</u> Feet of <u>water - very slightly gas cut</u>							
Recovered <u>135'</u> Feet of <u>mud</u>							
Recovered _____ Feet of <u>NOTE: MISRUN... CHARTS INDICATE PACKER SEAT GAVE WAY</u>							
Recovered _____ Feet of <u>DURING THE SECOND FLOW PERIOD..</u>							
Remarks <u>Tool opened for a 8 minute first flow with a strong blow of 4 PSI in 8 minutes. Rotated tool for a 29 minute first closed in pressure. Tool reopened for a second flow with a strong blow - had 24 ozs. in 7 minutes - 27 1/2 ozs. in 13 minutes - then starting to decrease - 4 ozs. in 30 minutes - 2 ozs. in 45 minutes - 1 oz. in 60 minutes. Took a second closed in pressure - approximately 4' fill in the hole. Packer slid all through the test...</u>							
TEMPERATURE		Gauge No. 979		Gauge No. 978		Gauge No.	
Depth: <u>3260'</u> Ft.		Depth: <u>3311'</u> Ft.		Depth: _____ Ft.		TIME	
Est. _____ °F.		12 Hour Clock		12 Hour Clock		Hour Clock	
Blanked Off ??		Blanked Off ??		Blanked Off		Tool _____ A.M.	
Actual <u>125° F.</u>		Pressures		Pressures		Opened <u>11:38 P.M.</u>	
		Pressures		Pressures		Tool <u>***A.M.</u>	
		Pressures		Pressures		Closed <u>2:15 P.M.</u>	
		Field Office		Field Office		Reported Computed	
		Field Office		Field Office		Minutes Minutes	
Initial Hydrostatic		<u>1787 1783</u>		<u>1786 1809</u>			
Flow Initial		<u>201 251</u>		<u>- -</u>			
Flow Final		<u>494 472</u>		<u>- -</u>			
Closed in		<u>666 675</u>		<u>- -</u>			
Flow Initial		<u>508 504</u>		<u>- -</u>			
Flow Final		<u>666 675</u>		<u>- -</u>			
Closed in		<u>PACKER FAILURE..</u>		<u>HYDROSTATIC RELEASE:</u>			
Flow Initial		<u>793 798</u>		<u>- -</u>			
Flow Final		<u>- -</u>		<u>- -</u>			
Closed in		<u>- -</u>		<u>- -</u>			
Final Hydrostatic		<u>1887 1739</u>		<u>1786 1745</u>			

WOODHAMS 1 3281' - 3298'

Legal Location Sec. - 1W - 1R - 1S

Lease Name

Well No. 1

Test No. 1

Field Area

Wildcat

County

Sedgwick

State

Colorado

ANSCHUTZ OIL CORPORATION, INCORPORATED & EMPLOYEES' UNION

Gauge No. 979			Depth 3260'			Clock No. 10568			12 hour		Ticket No. 533772				
First Flow Period			First Closed In Pressure			Second Flow Period		Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.
0	.000	251	.000		472	.000	504								
1	.0138	287	.0211		650	.260	675**								
2	.0276	360	.0422		659										
3	.0414	425	.0633		663										
4	.055	472	.0844		666			PACKER SEAT GAVE WAY..							
5			.1055		668										
6			.1266		670										
7			.1477		670										
8			.1688		674										
9			.1899		674										
10			.204		675*										
11															
12															
13															
14															
15															

PACKER SEAT GAVE WAY...

Gauge No. 978			Depth 3311'			Clock No. 10566			hour 12						
0															
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															

HYDROSTATIC RELEASE: 798

Reading Interval 2 3 Minutes

REMARKS: * INTERVAL = 2 MINUTES. ** READ AT THE END OF 37.1 MINUTES WHEN PACKER SEAT GAVE WAY

SPECIAL PRESSURE DATA

LITTLE'S

	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub	6"	2"	1'	
Water Cushion Valve				
Drill Pipe	4"	3.340"	3092'	
Drill Collars	5 7/8"	2 1/2"	153'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	3/4"	5'	
Dual CIP Sampler				
Hydro-Spring Tester	5"	3/4"	5'	3257'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3"	4'	3260'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.50"	5.80'	3275'
Distributor				
Packer Assembly	6 3/4"	1.50"	4.60'	3281'
Flush Joint Anchor	5"	2.37"	17'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5"	3"	4'	
Drill Collars		BLANK		
Anchor Pipe Safety Joint				
Packer Assembly	6 3/4"	1.50"	4.60'	3298'
Packer Assembly				
Anchor Pipe Safety Joint	5"	1.50"	4'	
Side Wall Anchor				
Drill Collars	5 7/8"	2 1/2"	149'	
Flush Joint Anchor	5"	2.37"	16.40'	
Blanked-Off B.T. Running Case			T.D.	3476'

NOMENCLATURE

b	= Approximate Radius of Investigation	Feet
b_1	= Approximate Radius of Investigation (Net Pay Zone h_1)	Feet
$D.R.$	= Damage Ratio	—
EI	= Elevation	Feet
GD	= B.T. Gauge Depth (From Surface Reference)	Feet
h	= Interval Tested	Feet
h_1	= Net Pay Thickness	Feet
K	= Permeability	md
K_1	= Permeability (From Net Pay Zone h_1)	md
m	= Slope Extrapolated Pressure Plot ($\text{Psi}^2/\text{cycle Gas}$)	psi/cycle
OF_1	= Maximum Indicated Flow Rate	MCF/D
OF_2	= Minimum Indicated Flow Rate	MCF/D
OF_3	= Theoretical Open Flow Potential with/Damage Removed Max.	MCF/D
OF_4	= Theoretical Open Flow Potential with/Damage Removed Min.	MCF/D
P_s	= Extrapolated Static Pressure	Psig.
P_f	= Final Flow Pressure	Psig.
P_{or}	= Potentiometric Surface (Fresh Water *)	Feet
Q	= Average Adjusted Production Rate During Test	bbls/day
Q_1	= Theoretical Production w/Damage Removed	bbls/day
Q_g	= Measured Gas Production Rate	MCF/D
R	= Corrected Recovery	bbls
r_w	= Radius of Well Bore	Feet
t	= Flow Time	Minutes
t_o	= Total Flow Time	Minutes
T	= Temperature Rankine	°R
Z	= Compressibility Factor	—
μ	= Viscosity Gas or Liquid	CP
Log	= Common Log	

* Potentiometric Surface Reference to Rotary Table When Elevation Not Given,
Fresh Water Corrected to 100° F.