

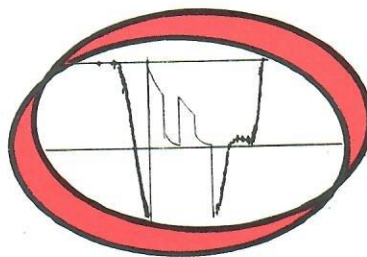
Formation Testing Service Report



RECEIVED

JUL 24 1978

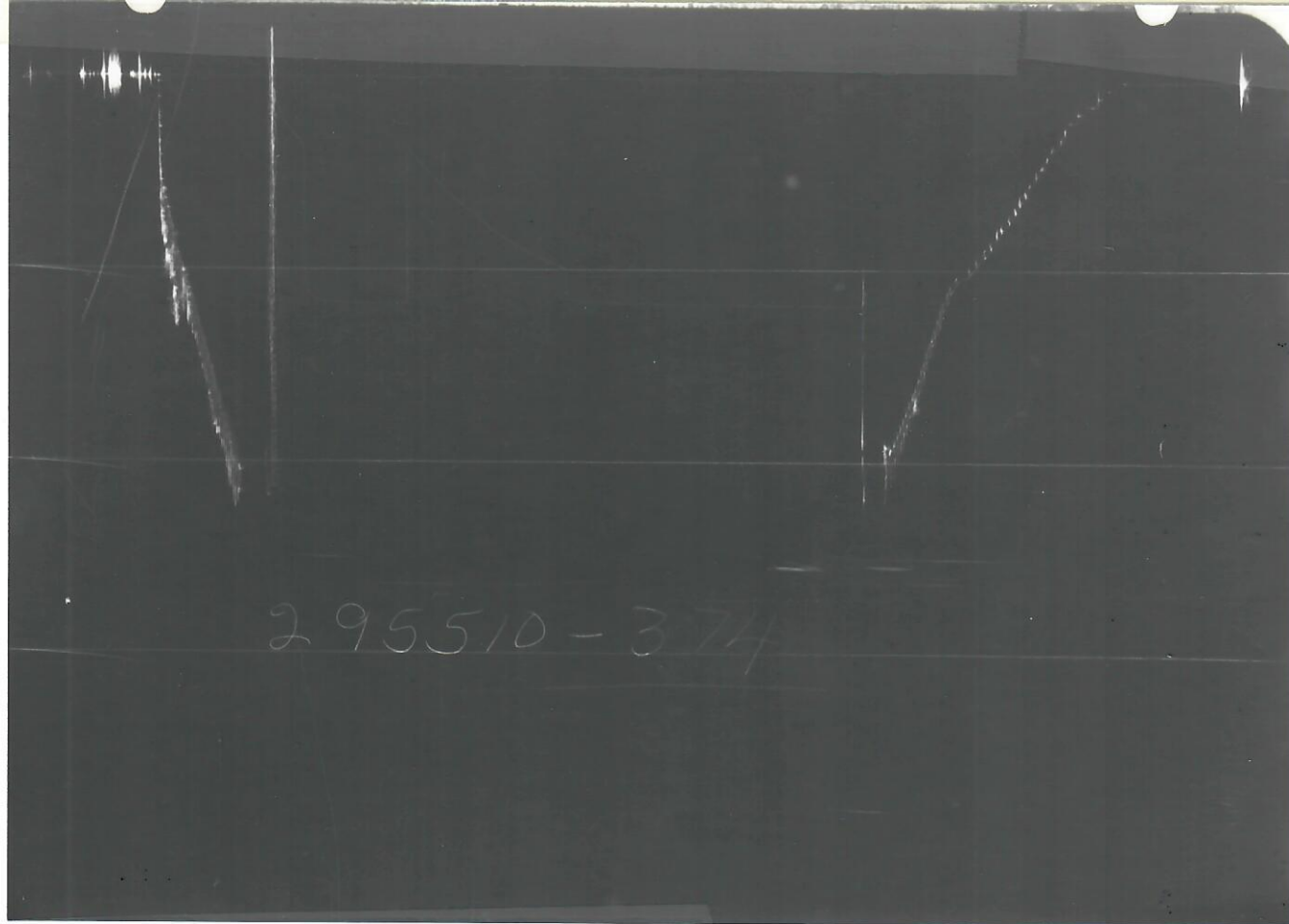
COLO. OIL & GAS CONS. COMM.



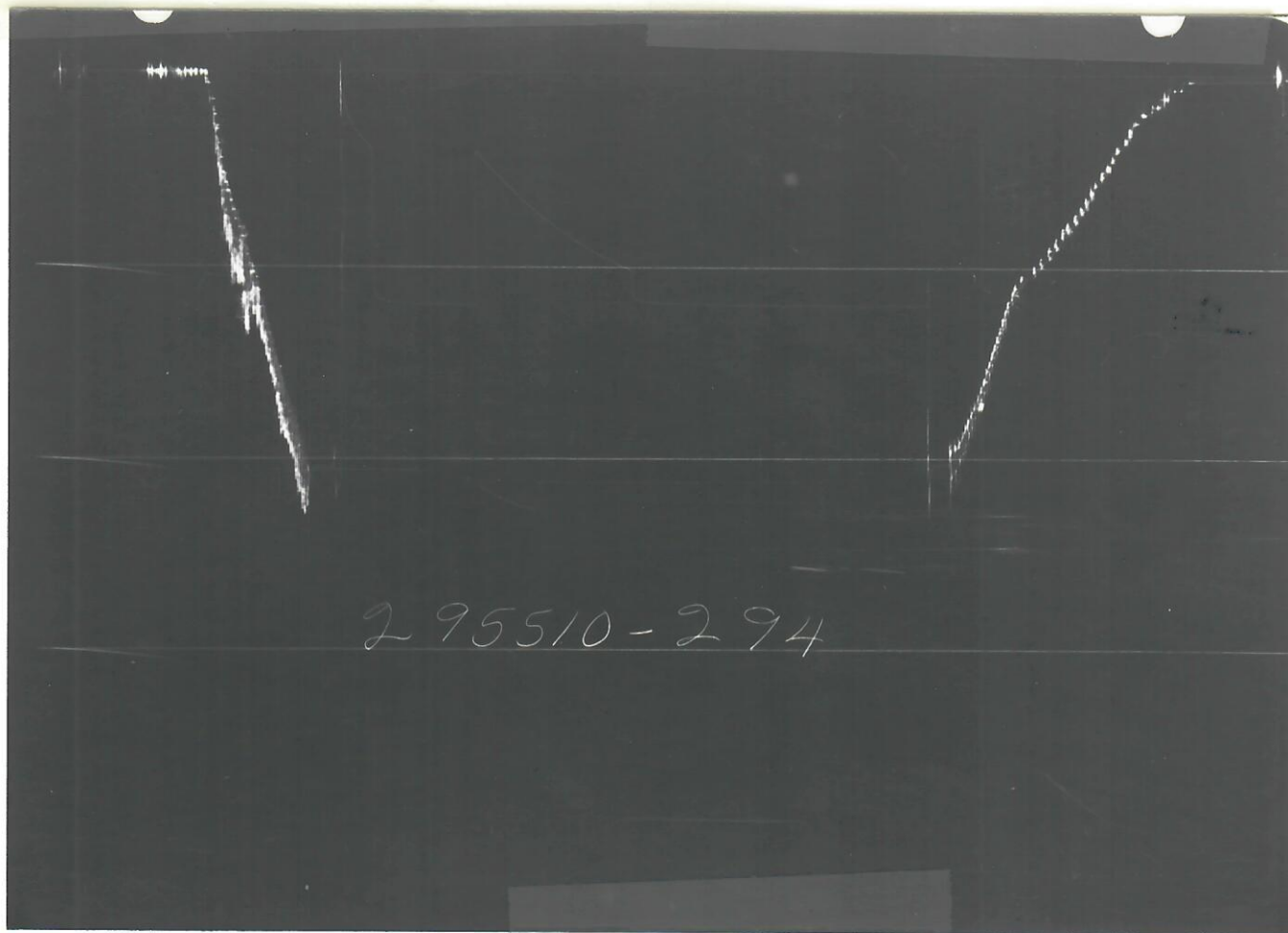
DVR	
FJP	
HHM	
JAM	<input checked="" type="checkbox"/>
JJD	
RLS	
OGM	

HALLIBURTON SERVICES
DUNCAN, OKLAHOMA

— PRESSURE —
↓



— TIME —→



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

BEST IMAGE
AVAILABLE

LITTLE'S 102548 5M 9/76

Gauge No. 374			Depth 4247'		Clock No. -----			12 hour	Ticket No. 295510						
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"	$\text{Log} \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log} \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log} \frac{t + \theta}{\theta}$	PSIG Temp. Corr.
0	.000	43	.000		355	.000	376	.000		986					
1	.0270	161*	.0134		1098	.0871	500***	.0334		1148					
2	.0472	234	.0269		1124	.1943	632	.0667		1155					
3	.0674	265	.0403		1139	.3015	746	.1001		1157					
4	.0876	295	.0538		1147	.4086	846	.1334		1160					
5	.1078	327	.0672		1153	.5158	924	.1668		1161					
6	.1280	355	.0806		1159	.6230	986	.2001		1163					
7			.0941		1161			.2335		1164					
8			.1075		1163			.2668		1165					
9			.1210		1164			.3002		1167					
10			.1344		1165			.3335		1168					
11			.2016		1169			.5003		1169					
12			.2688		1169			.6670		1171					
13			.3360		1171			.8338		1172					
14			.4032		1172			1.005		1172					
15			.4100		1172			1.1740		1172					

Gauge No. 294			Depth 4297'			Clock No. 3247			hour 12			
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0	.000	69	.000		389	.000	405	.000		1018		
1	.0263	205*	.0134		1134	.0867	521***	.0332		1176		
2	.0461	270	.0268		1158	.1933	161	.0664		1182		
3	.0658	302	.0401		1169	.3000	274	.0996		1185		
4	.0855	332	.0535		1175	.4067	371	.1328		1188		
5	.1053	365	.0669		1179	.5134	454	.1661		1189		
6	.1250	389	.0803		1182	.6200	1018	.1993		1191		
7			.0937		1184			.2325		1192		
8			.1070		1187			.2657		1194		
9			.1204		1188			.2989		1195		
10			.1338		1189			.3321		1196		
11			.2007		1193			.4982		1197		
12			.2676		1196			.6642		1199		
13			.3345		1197			.8303		1200		
14			.4014		1199			.9963		1201		
15			.4080		1199			1.169		1203		

Reading Interval 3

**

16

Minutes

REMARKS: *-4 minutes **-First 10 intervals equal to 2 minutes each; next 4 intervals equal to 10 minutes each; last interval equal to 1 minute. ***-13 minutes ****-First 10 intervals equal to 5 minutes each; next 4 intervals equal to 25 minutes each; last interval equal to 26 minutes.

[illegible]

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	5.25"	2.75"	1'	
Reversing Sub				
Water Cushion Valve				
Drill Pipe	5"	4.214"	3815'	
Drill Collars	6"	2.25"	468'	
Handling Sub & Choke Assembly	5.87"	3"	5'	
Dual CIP Valve				
Dual CIP Sampler	5"	.87"	7'	4251'
Hydro-Spring Tester	5"	.75"	5'	4255'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4247'
Hydraulic Jar	5.03"	1.75'	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	5"	1.53"	6'	4268'
Distributor				
Packer Assembly	5"	1.53"	6'	4274'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor	5"	3.24"	5'	
Blanked-Off B.T. Running Case	5"	2.44"	4'	4297'
Total Depth				4300'

NOMENCLATURE

b	= Approximate Radius of Investigation	Feet
b₁	= Approximate Radius of Investigation (Net Pay Zone h ₁)	Feet
D.R.	= Damage Ratio	—
El	= Elevation	Feet
GD	= B.T. Gauge Depth (From Surface Reference)	Feet
h	= Interval Tested	Feet
h₁	= Net Pay Thickness	Feet
K	= Permeability	md
K₁	= Permeability (From Net Pay Zone h ₁)	md
m	= Slope Extrapolated Pressure Plot (Psi ² /cycle Gas)	psi/cycle
OF₁	= Maximum Indicated Flow Rate	MCF/D
OF₂	= Minimum Indicated Flow Rate	MCF/D
OF₃	= Theoretical Open Flow Potential with/Damage Removed Max.	MCF/D
OF₄	= Theoretical Open Flow Potential with/Damage Removed Min.	MCF/D
P_s	= Extrapolated Static Pressure	Psig.
P_f	= Final Flow Pressure	Psig.
P_{ot}	= Potentiometric Surface (Fresh Water *)	Feet
Q	= Average Adjusted Production Rate During Test	bbls/day
Q₁	= 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.