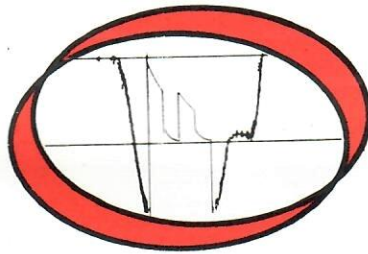


Formation Testing Service Report



00593094

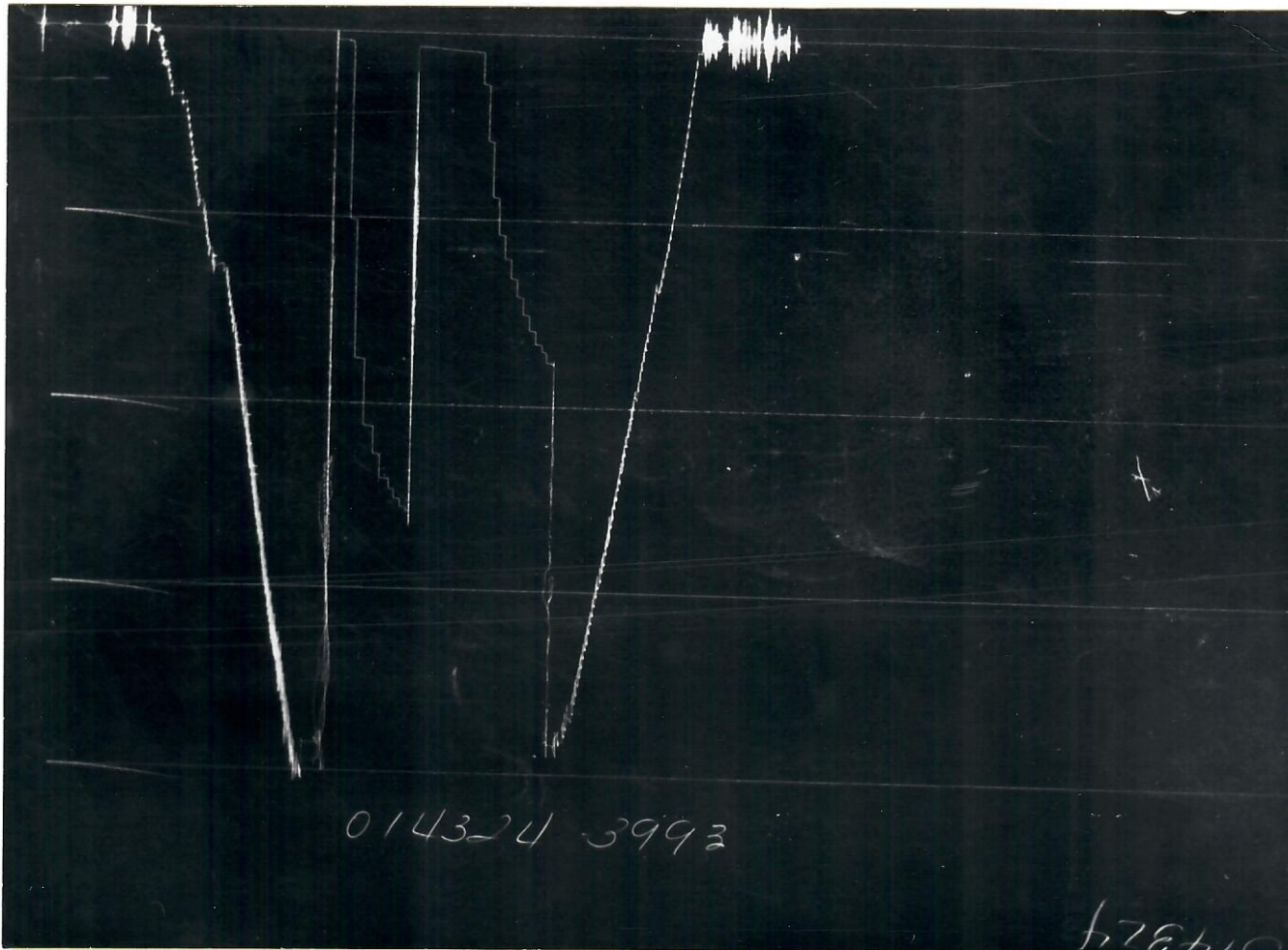
SEP 27, 74



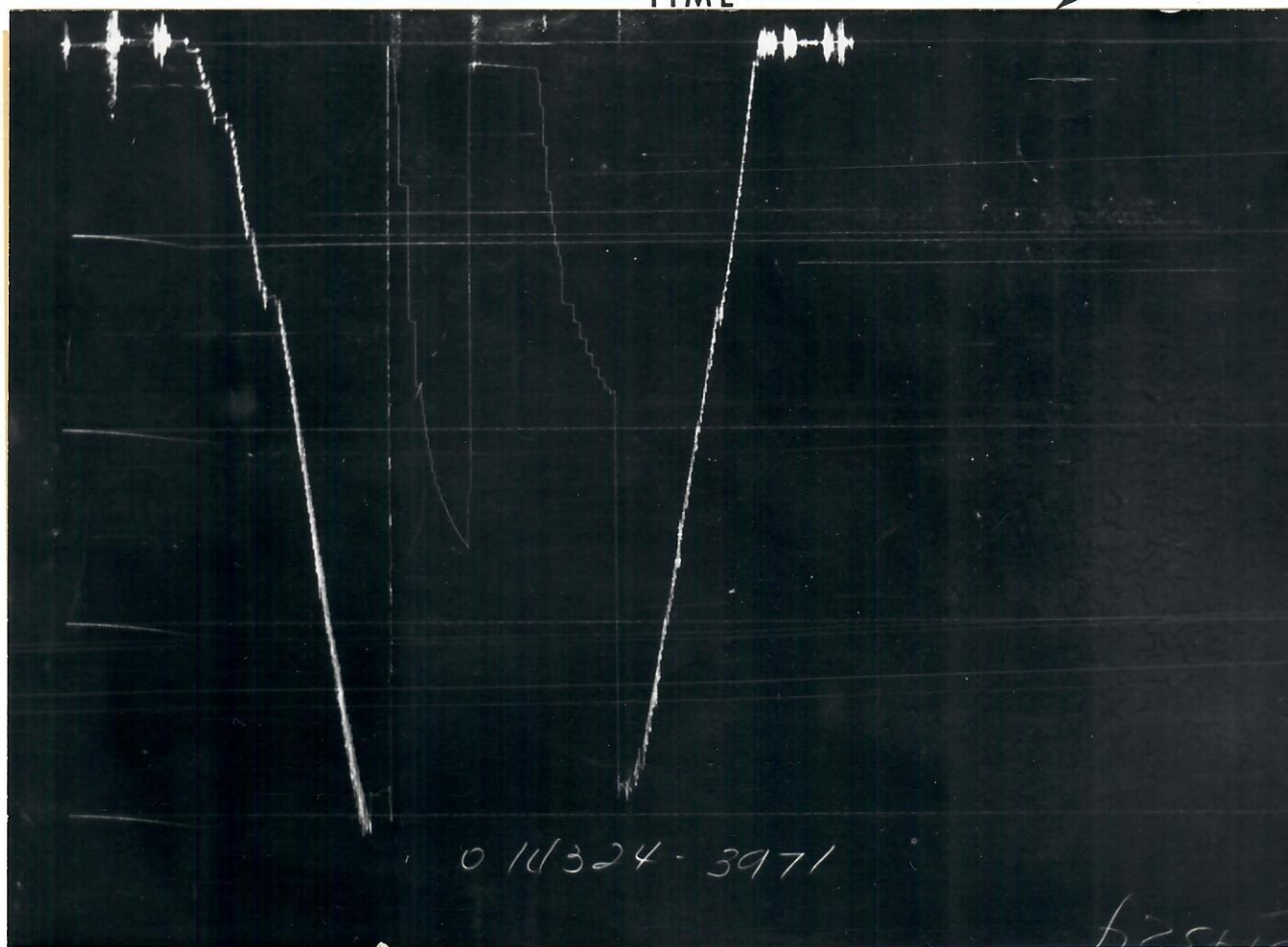
File

HALLIBURTON SERVICES
DUNCAN, OKLAHOMA

↓ PRESSURE



→ TIME



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

Lease Owner/Company Name

[illegible]

Casing perms. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 014324
Gas gravity _____ Oil gravity _____ GOR _____
Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

[illegible]

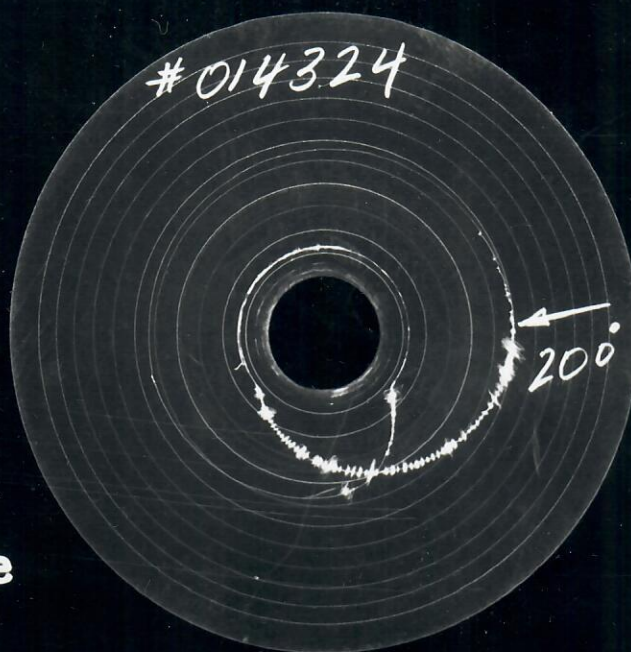
Gauge No. 3993-			Depth 9269'			Clock No. 16769			24 hour	Ticket No. 014324					
First Flow Period			First Closed In Pressure			Second Flow Period		Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log} \frac{t + \theta}{\theta}$	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	.0000	49	.0000		54	.0000	77	.0000		100					
1	.0102	49	.0300		1020	.0432	78	.0240		277					
2	.0203	49	.0670		1765	.0863	83	.0440		582					
3	.0305	50	.1060		2130	.1295	89	.0680		882					
4	.0407	50	.1330		2281	.1727	93	.0940		1088					
5	.0509	54	.1690		2413	.2159	97	.1190		1217					
6	.0610	54	.1890		2470	.2590	100	.1430		1322					
7			.2130		2520			.1680		1418					
8			.2360		2564			.1930		1513					
9			.2490		2583			.2170		1595					
10								.2420		1668					
11	First flow and closed in pressure							.2610		1708					
12	segmented in unequal intervals (at							.2900		1772					
13	each stair step)														
14								Segmented in unequal							
15								intervals due to stair stepping.							

Gauge No. 3971			Depth 9368'			Clock No. 13833			24 hour						
0	.0000	99	.0000		755-Q	.0000	131	.0000		153					
1	.0230	109	.0190		757	.0438	132	.0090		223					
2	.0410	339	.0430		1451	.0877	136	.0210		349					
3	.0600	755Q	.0640		1788	.1315	142	.0330		558					
4			Above intervals read at each stair step-unequal			.1753	146	.0480		790					
5						.2192	150	.0630		956					
6	Read in		.0841*		2052	.2630	153	.0760		1061					
7	unequal		.1009		2159			.0840		1118					
8	intervals due		.1177		2288			.0900		1158					
9	to stair-step-		.1344		2340			.1340		1364					
10	ping.		.1512		2398			.1580		1455					
11			.1680		2451			.1810		1543					
12			.1847		2497			.2050		1622					
13			.2015		2538			.2280		1691					
14			.2183		2572			.2410		1751					
15			.2350		2603			.2730		1801					
Reading Interval -			.2510	5	2624		13	2900		1816	Minutes				

REMARKS: Q = questionable First closed in period on BT # 3971; Only last 56 minutes segmented in equal intervals- first 3 intervals read at each stair step. *First interval after stair steps is equal to 6 minutes. Final closed in pressure on BT 3971 read in equal intervals at each stair step.

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	5.75"	2.75"	12"	
Water Cushion Valve				
Drill Pipe	4½"	3.826"	9318'	
Drill Collars	6"	2.25"	150'	
Handling Sub & Choke Assembly	5.87"	3"	56.50"	
Dual CIP Valve				
Dual CIP Sampler	5"	.87"	84.50"	9263'
Hydro-Spring Tester	5"	.75"	60.21"	9268'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	49.63"	9269'
Hydraulic Jar	5.03"	1.75"	60"	
VR Safety Joint	5"	1"	33.40"	
Pressure Equalizing Crossover				
Packer Assembly	7½"	1.53"	69.73"	9294'
Distributor				
Packer Assembly	7½"	1.53"	69.73"	9300'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint	5"	1.5"	48"	
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars	6"	2.25"	31'	
Flush Joint Anchor	5"	3.24"	28'	
Blanked-Off B.T. Running	5"	2.44"	48.71"	9368'
Total Depth				9371'

TEMPERATURE RECORDER CHART



10° each circle

- 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.