

Casing perf. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 521807
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F
 INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED _____

Date Time	7-24-79 a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
0415						On location.
0730						Picked up tools.
0830						Tools made up.
0933						Tool on bottom.
0937						Opened tool.
0945		1 1/4"	10	802		Opened 2"
0949		3/4"	30	522		Changed choke.
1000		"	32	546		
1003		"	35	586		
1007						Closed tool.
1037						Reopened tool.
1040		3/4"	35	558		
1041		"	"	581		
1045		"	40	639		
1050		"	"	"		
1055		"	"	"		
1100		"	35	581		
1115		"	"	"		
1122						Closed tool.
1152						Off bottom.

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Gauge No. 7350					Depth 2837'			Clock No. 17418			12 hour	Ticket No. 521807			
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	187.8	.000		236.1	.000	261.8	.000		289.5					
1	.0276	183.7*	.0070		481.5**	.0407	250.5***	.0199		579.7****					
2	(.0480	231.0-CC)	.0210		592.0	.0950	261.8	.0332		597.1					
3	.0621	209.4	.0350		612.4	.1492	265.9	.0465		606.3					
4	.0966	209.4	.0490		620.6	.2035	274.1	.0598		611.4					
5	.1310	219.7	.0630		626.7	.2577	281.3	.0731		614.5					
6	.1655	227.9	.0770		628.8	.3120	289.5	.0864		617.5					
7	.2000	236.1	.0910		631.9			.0997		619.6					
8			.1050		633.9			.1130		621.6					
9			.1190		634.9			.1263		622.7					
10			.1330		635.9			.1396		623.7					
11			.1470		635.9			.1528		625.7					
12			.1610		637.0			.1661		626.7					
13			.1750		637.0			.1794		626.7					
14			.1890		638.0			.1927		627.8					
15			.2030		638.0			.2060		627.8					

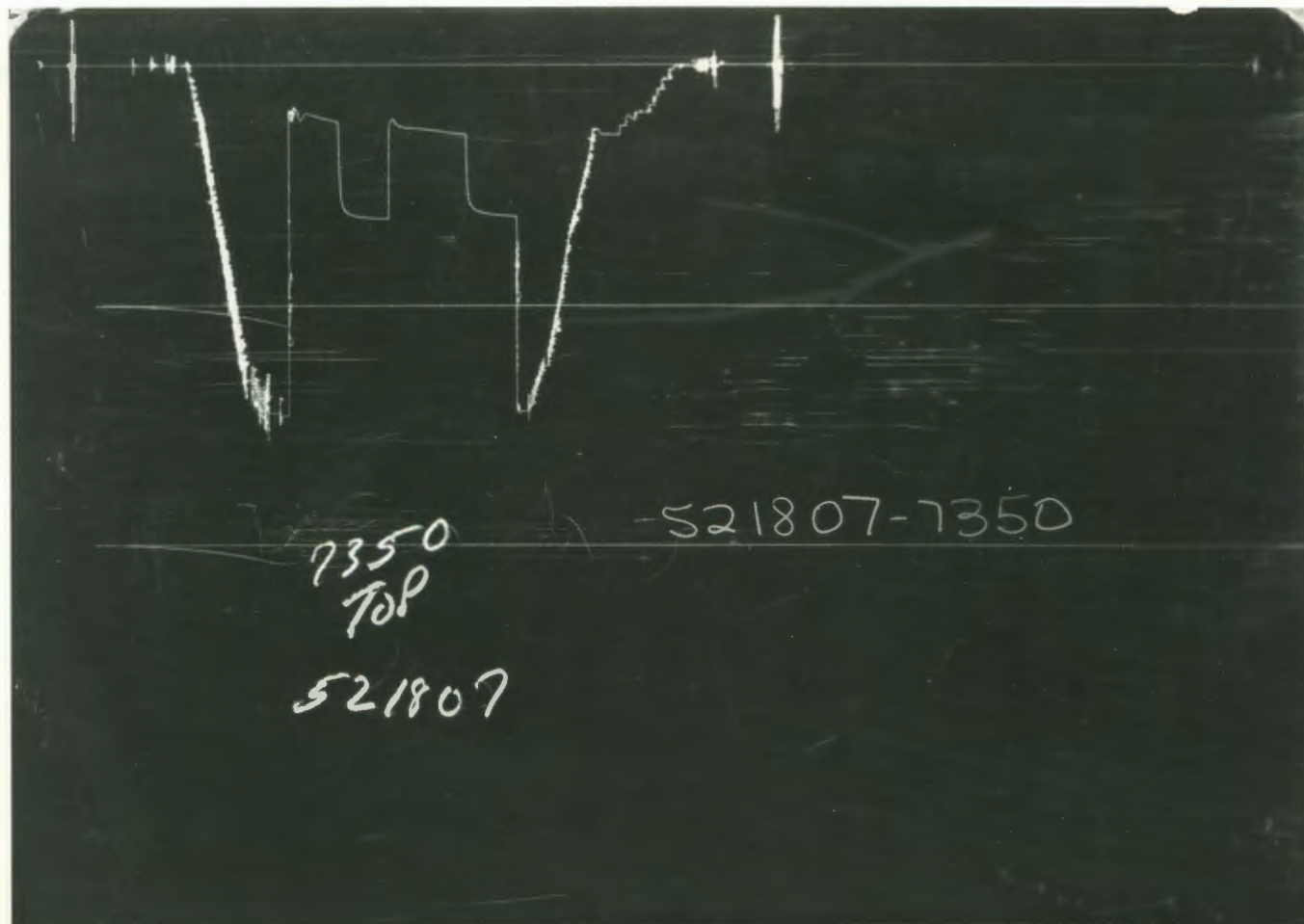
Gauge No. 7349			Depth 2921'			Clock No. 17419			12 hour					
0	.000	265.3	.000	258.9	.000	264.2	.000		306.5					
1	.0276	219.8*	.0069	470.4**	.0406	270.6***	.0201		598.5****					
2	.0470	255.8-CC)	.0208	607.9	.0947	281.1	.0335		615.3					
3	.0621	230.4	.0347	629.9	.1488	286.4	.0470		621.5					
4	.0966	233.6	.0485	637.3	.2028	292.8	.0604		626.8					
5	.1310	243.1	.0624	641.5	.2569	300.2	.0738		631.0					
6	.1655	250.5	.0762	644.6	.3110	306.5	.0872		633.1					
7	.2000	258.9	.0901	646.7			.1007		635.2					
8			.1040	647.7			.1141		636.2					
9			.1178	649.8			.1275		638.3					
10			.1317	650.9			.1409		639.4					
11			.1455	650.9			.1543		639.4					
12			.1594	651.9			.1678		640.4					
13			.1733	651.9			.1812		642.5					
14			.1871	651.9			.1946		642.5					
15			.2010	651.9			.2080		642.5					
Reading Interval 5		2			8		2							Minutes

REMARKS: * = 4 minute interval; ** = 1 minute interval; *** = 6 minute interval; **** = 3 minute interval.

CC = Choke Change.....

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	5 3/4"	2.75"	1'	
Reversing Sub				
Water Cushion Valve	4 1/2"	3.826"	2822.50'	
Drill Pipe				
Drill Collars	4 1/2"	3.50"	3'	
Handling Sub & Choke Assembly	5"	.87"	5'	2826'
Dual CIP Valve				
Dual CIP Sampler	5"	.75"	5'	2835'
Hydro-Spring Tester				
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.75"	4'	2837'
Hydraulic Jar				
VR Safety Joint	5"	1.00"	3'	
Pressure Equalizing Crossover				
Packer Assembly				
Distributor				
Packer Assembly	6 3/4"	1.53"	6'	2848'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly	6 3/4"	1.53"	6'	2854'
Distributor	Change Over	5 3/4"	2.75"	1/2'
Packer Assembly	Drill Pipe	4 1/2"	3.826"	31'
Anchor Pipe Safety Joint	Change Over	5 3/4"	2.75"	1/2'
Side Wall Anchor	Perf.	5"	2.37"	31'
Drill Collars				
Flush Joint Anchor	Temp. Rec.	5"	3.75"	1 1/2'
Blanked-Off B.T. Running Case		5"	2.75"	4'
Total Depth				2924'

PRESSURE
↓



TIME →



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

TEMPERATURE RECORDER CHART



10° each circle

- 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_{oi} = 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.