

FLUID SAMPLE DATA				Date <u>7-7-80</u>		Ticket Number <u>570275</u>	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of D.S.T. <u>OPEN HOLE TEST</u>		Halliburton Location <u>NESS CITY</u>	
Recovery: Cu. Ft. Gas _____				Tester <u>CARPENTER</u>		Witness <u>P. STUBBS</u>	
cc. Oil _____				Drilling Contractor <u>RED TIGER #8</u> <u>TJH</u>			
cc. Water _____				EQUIPMENT & HOLE DATA			
cc. Mud _____				Formation Tested <u>Mississippian</u>			
Tot. Liquid cc. _____				Elevation <u>2143'</u> KB _____ Ft.			
Gravity _____ ° API @ _____ °F.				Net Productive Interval _____ Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.				All Depths Measured From <u>Kelly Bushing</u>			
RESISTIVITY _____ CHLORIDE CONTENT _____				Total Depth <u>4654'</u> _____ Ft.			
Recovery Water _____ @ _____ °F. _____ ppm				Main Hole/Casing Size <u>7 7/8"</u>			
Recovery Mud _____ @ _____ °F. _____ ppm				Drill Collar Length <u>WP 1260'</u> I.D. <u>2.764"</u> WP			
Recovery Mud Filtrate _____ @ _____ °F. _____ ppm				Drill Pipe Length <u>3331'</u> I.D. <u>3.826"</u>			
Mud Pit Sample _____ @ _____ °F. _____ ppm				Packer Depth(s) <u>4586' - 4592'</u> _____ Ft.			
Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm				Depth Tester Valve <u>4569'</u> _____ Ft.			
Mud Weight <u>9.4</u> vis <u>35</u> sec.							
TYPE		AMOUNT		Depth Back		Surface	
Cushion				Ft. Pres. Valve		Choke	
						<u>.25"</u>	
						Bottom Choke <u>.75"</u>	
Recovered	<u>95</u>	Feet of	<u>slightly gas cut mud.</u>				
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks <u>SEE PRODUCTION TEST DATA SHEET . . .</u>							
TEMPERATURE		Gauge No. <u>514</u>		Gauge No. <u>376</u>		Gauge No. _____	
		Depth: <u>4571</u> Ft.		Depth: <u>4651</u> Ft.		Depth: _____ Ft.	
		<u>12</u> Hour Clock		<u>12</u> Hour Clock		Hour Clock	
Est.	°F.	Blanked Off <u>NO</u>		Blanked Off <u>YES</u>		Blanked Off _____	
Actual	°F.	Pressures		Pressures		Pressures	
		Field	Office	Field	Office	Field	Office
Initial Hydrostatic			<u>2281.6</u>	<u>2331</u>	<u>2325.5</u>		
First Period	Flow Initial		<u>27.5</u>	<u>55</u>	<u>61.3</u>		
	Flow Final		<u>36.6</u>	<u>83</u>	<u>76.0</u>		
	Closed in		<u>127.5</u>	<u>165</u>	<u>157.5</u>		
Second Period	Flow Initial		<u>49.5</u>	<u>92</u>	<u>90.6</u>		
	Flow Final		<u>59.6</u>	<u>110</u>	<u>97.9</u>		
	Closed in		<u>225.6</u>	<u>257</u>	<u>246.3</u>		
Third Period	Flow Initial						
	Flow Final						
Closed in							
Final Hydrostatic			<u>2300.1</u>	<u>2331</u>	<u>2345.0</u>		

Legal Location
Sec. - Twp. - Rng. 28 - 27 - 17

GRIMM - CORBET
Lease Name

1-28
Well No.

1
Test No.

4592' - 4654'
Tested Interval

Field Area
Mea. From Tester Valve

County

KIOWA

State

KANSAS

IMPERIAL OIL COMPANY
Lease Owner/Company Name

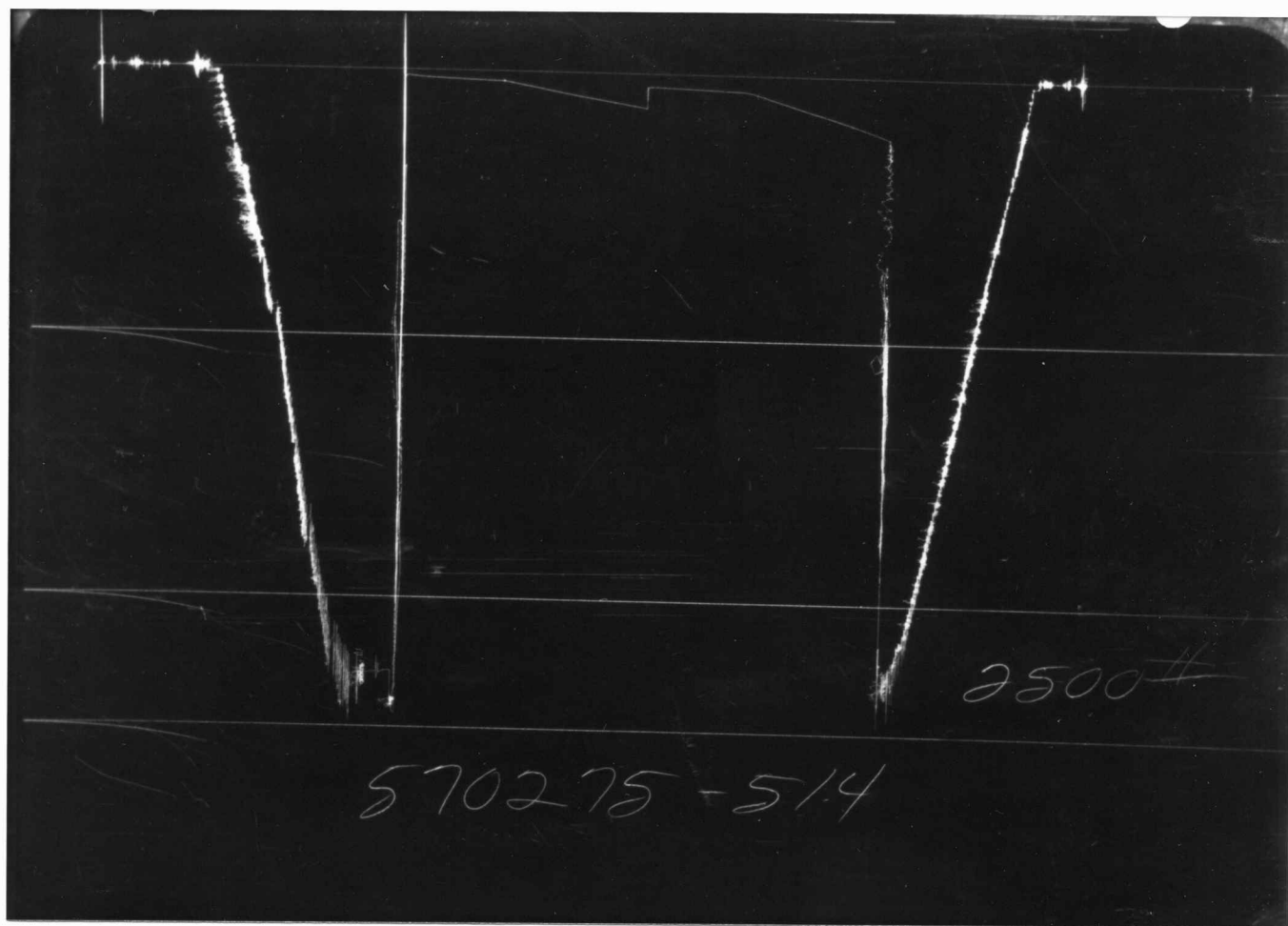
Casing perfs. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 570275
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

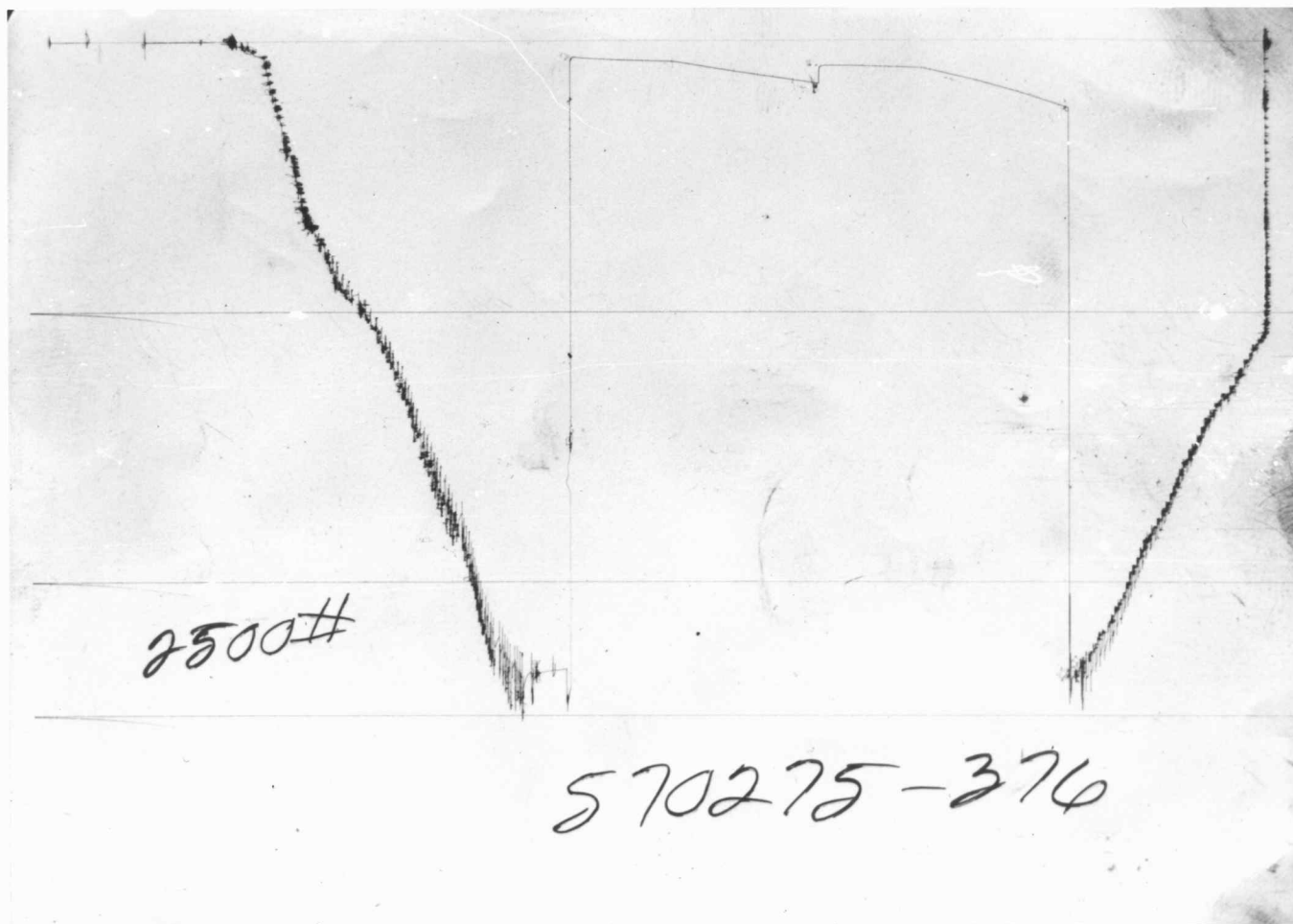
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	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub	5"	3"	1'	4496'
Water Cushion Valve				
Drill Pipe	4.5"	3.826"	3331'	
XXXXXXXXXX WEIGHT PIPE	4.5"	2.764"	1260'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	6'	4559'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4569'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4571'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	6'	4586'
Distributor				
Packer Assembly	6.75"	1.53"	6'	4592'
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				
SUBS	5"	3"	2'	4594'
Side Wall Anchor				
WEIGHT PIPE	4.5"	2.764"	32'	
Drill Collars				
Flush Joint Anchor	5"	3.84"	22'	
Blanked-Off B.T. Running Case	5"	2.44"	4'	4651'
Total Depth				4654'

PRESSURE



TIME



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

KANSAS

Casing perms. _____ Bottom choke _____ Surf. temp _____ °F Ticket No. 947326
Gas gravity _____ Oil gravity _____ GOR _____
Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE

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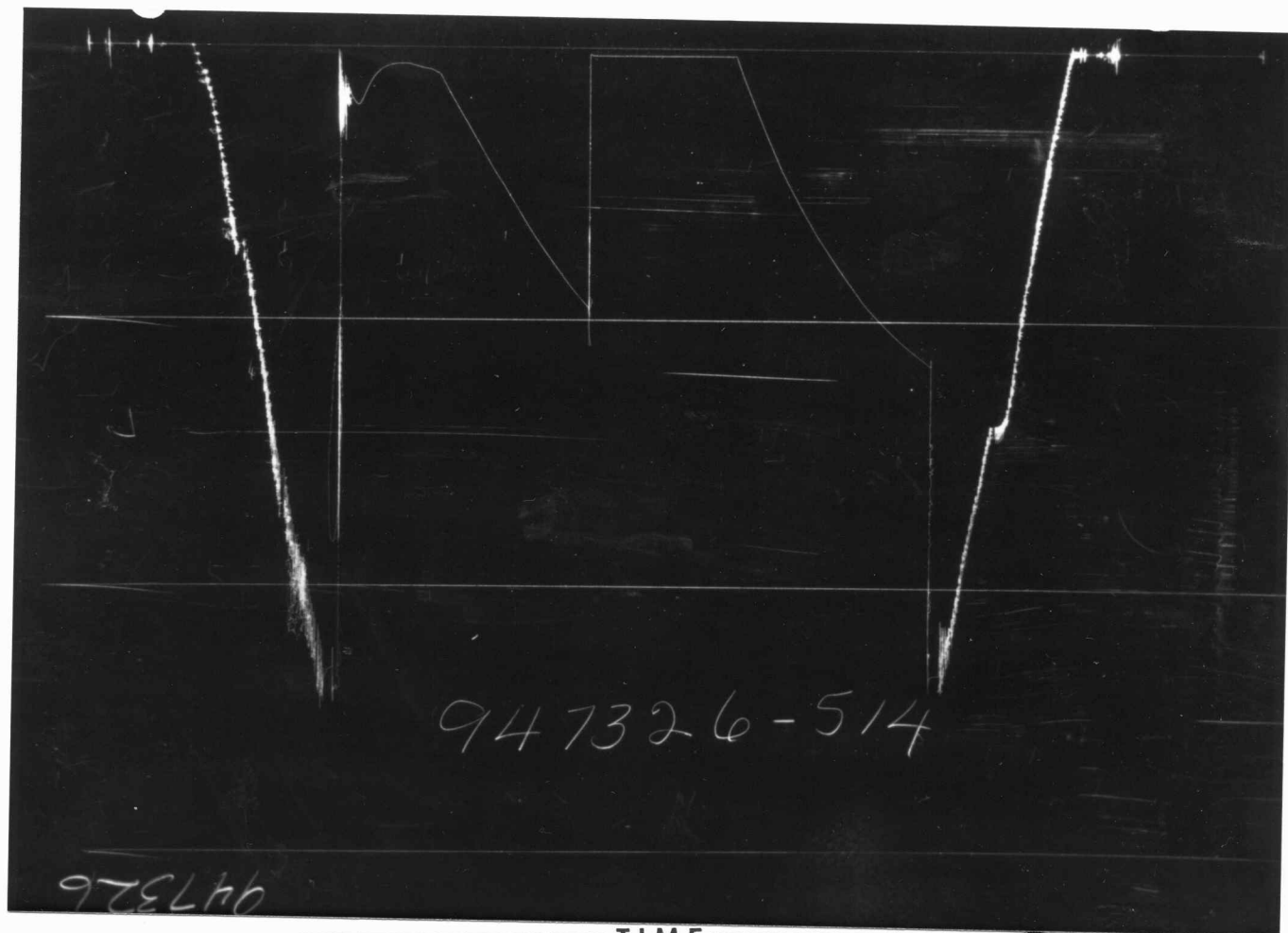
Gauge No. 514		Depth 4636'		Clock No. 17417		12 hour		Ticket No. 947326	
First Flow Period		First Closed In Pressure		Second Flow Period		Second Closed In Pressure		Third Flow Period	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0 .000	13.7 0	.000	94.4	.000	23.8	.000	27.5		
1 .0786*	205.4	.0608**	194.4	.591	27.5	.0465***	144.9		
2 .1441	101.8	.1150	279.8			.0997	262.3		
3 .2095	64.2	.1691	366.9			.1529	376.1		
4 .2750	59.6	.2232	451.3			.2060	481.6		
5 .3405	74.3	.2773	531.9			.2592	572.9		
6 .4060	94.4	.3314	614.0			.3124	657.8		
7		.3855	696.1			.3656	736.3		
8		.4397	766.4			.4188	806.5		
9		.4938	833.0			.4719	875.9		
10		.5479	898.7			.5251	943.4		
11		.6020	957.1			.5783	996.3		
12						.6315	1045.8		
13						.6846	1090.8		
14						.7378	1131.1		
15						.7910	1166.9		

Gauge No. 376		Depth 4666'		Clock No. 13853		hour 12	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0 .000	180.4	.000	108.9	.000	36.6	.000	39.3
1 .0797*	217.9	.0601**	205.1	.597	39.3	.0463***	152.0
2 .1462	127.2	.1135	293.0			.0992	271.0
3 .2126	82.4	.1668	377.3			.1521	382.8
4 .2791	76.9	.2202	464.3			.2050	481.7
5 .3455	88.8	.2736	544.7			.2579	576.6
6 .4120	108.9	.3270	624.0			.3108	662.4
7		.3804	700.7			.3637	743.6
8		.4338	772.8			.4166	817.5
9		.4872	842.1			.4695	885.0
10		.5405	907.8			.5225	946.1
11		.5940	968.0			.5754	1001.8
12						.6283	1052.0
13						.6812	1098.5
14						.7341	1139.5
15						.7870	1175.1

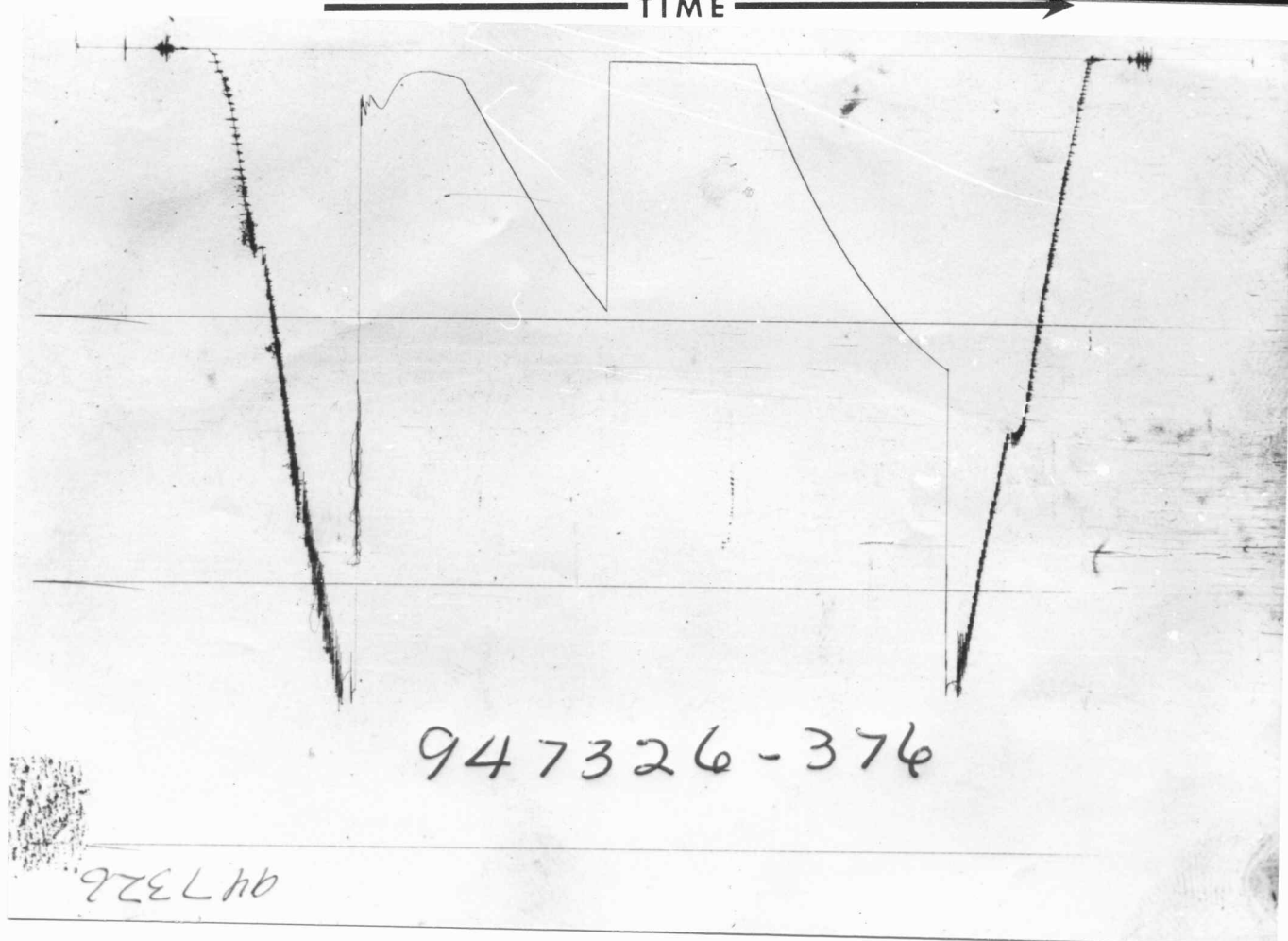
Reading Interval	10	8	8
REMARKS:	*-12 minutes	** -9 minutes	*** -7 minutes
Q-Questionable			
Minutes			

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub	5.75"	3"	1'	4623'
Water Cushion Valve				
Drill Pipe	4.5"	3.826"	3360'	
Drill Collars	4.5"	2.764"	1260' Flex weight	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	6'	4624'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4634'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4636'
Hydraulic Jar	5"	1.75'	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	6'	4648'
Distributor				
Packer Assembly	6.75"	1.53"	6'	4654'
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"	3.84"	9'	
Blanked-Off B.T. Running Case	5"	2.44"	4'	4666'
Total Depth				4669'

— PRESSURE —
↓



— TIME —→



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

Legal Location
Sec. - Twp. - Rng. 28-T-27S-R-17W

FLUID SAMPLE DATA				Date 7-9-80		Ticket Number 947327	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of D.S.T. OPEN HOLE		Halliburton Location NESS CITY	
Recovery: Cu. Ft. Gas _____				Tester THOMPSON		Witness PETE STUBBS	
cc. Oil _____				Drilling Contractor RED TIGER # 6		DR	
cc. Water _____				EQUIPMENT & HOLE DATA			
cc. Mud _____				Formation Tested Kinderhook sand			
Tot. Liquid cc. _____				Elevation 2143' KB Ft.			
Gravity _____ ° API @ _____ °F.				Net Productive Interval 45' up from total depth Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.				All Depths Measured From Kelly Bushing			
RESISTIVITY _____ CHLORIDE CONTENT _____				Total Depth 4714' Ft.			
Recovery Water _____ @ _____ °F. _____ ppm				Main Hole/Casing Size 7 7/8"			
Recovery Mud _____ @ _____ °F. _____ ppm				Drill Collar Length 1260' FW I.D. 2.764"			
Recovery Mud Filtrate _____ @ _____ °F. _____ ppm				Drill Pipe Length 3376' I.D. 3.826"			
Mud Pit Sample _____ @ _____ °F. _____ ppm				Packer Depth(s) 4663-4669' Ft.			
Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm				Depth Tester Valve 4646' Ft.			
Mud Weight 9.3 vis 44 sec.							
TYPE		AMOUNT		Depth Back Ft. Pres. Valve		Surface Choke .25" Bottom Choke .75"	
Cushion							
Recovered		248 Feet of gas in pipe					
Recovered		10 Feet of muddy oil					
Recovered		10 Feet of heavy oil cut mud					
Recovered		124 Feet of oil cut mud					
Recovered		Feet of					
Remarks See production test data sheet							
TEMPERATURE		Gauge No. 514		Gauge No. 376		Gauge No.	
Depth: 4648 Ft.		Depth: 4711 Ft.		Depth: Ft.		TIME (00:00-24:00 hrs.)	
Calc. 120F.		12 Hour Clock		12 Hour Clock		Hour Clock	
Est. 120F.		Blanked Off NO		Blanked Off YES		Blanked Off	
Actual °F.		Pressures		Pressures		Pressures	
		Field Office		Field Office		Field Office	
Initial Hydrostatic		2353 2319.7		2357.1			
First Period Flow Initial		18 14.6		65.0		Tool Opened 1513	
Flow Final		28 32.1		58.6		Opened Bypass 2313	
Closed in		1447 1439.4		1460.5		Reported Minutes Computed Minutes	
Second Period Flow Initial		28 45.8		92.4		60 61	
Flow Final		83 84.4		111.7		180 181	
Closed in		1530 1531.3		1554.1		180 179	
Third Period Flow Initial							
Flow Final							
Closed in							
Final Hydrostatic		2316 2319.7		2357.1			

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

FORM 162-R1—PRINTED IN U.S.A.

Gauge No. 514		Depth 4648'		Clock No. 17417		12 hour		Ticket No. 947327	
First Flow Period		First Closed In Pressure		Second Flow Period		Second Closed In Pressure		Third Flow Period	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.
0	.000	14.6	32.1	.000	45.8	.000	84.4		
1	.0734*	20.1	123.8	.2050***	48.6	.0725*	245.8		
2	.1401	23.8	322.0	.4034	55.9	.1516	592.1		
3	.2068	25.6	479.8	.6018	63.3	.2307	1128.4		
4	.2736	28.4	645.9	.8002	70.6	.3098	1368.7		
5	.3403	30.2	822.9	.9986	77.9	.3889	1444.0		
6	.4070	32.1	1009.1	1.1970	84.4	.4680	1475.2		
7			1165.1			.5471	1491.7		
8			1287.1			.6263	1502.7		
9			1382.5			.7054	1510.1		
10			1439.4			.7845	1515.6		
11						.8636	1520.2		
12						.9427	1524.9		
13						1.0218	1528.5		
14						1.1009	1530.4		
15						1.180	1531.3		

Gauge No. 376		Depth 4711'		Clock No. 13853		12 hour	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0	.000	58.6	58.6	.000	92.4	.000	111.7
1	.0732*	54.0	176.7	.2043***	78.7	.0725*	269.2
2	.1398	54.9	330.6	.3989	84.2	.1515	587.5
3	.2063	55.8	492.7	.5966	90.6	.2305	1131.1
4	.2729	56.7	662.4	.7943	97.9	.3096	1388.0
5	.3394	57.6	839.4	.9921	105.3	.3886	1465.1
6	.4060	58.6	1029.3	1.193	111.7	.4676	1495.3
7			1192.6			.5467	1511.9
8			1318.3			.6257	1522.9
9			1406.4			.7048	1531.1
10			1460.5			.7838	1536.6
11						.8628	1542.1
12						.9419	1545.8
13						1.0209	1549.5
14						1.0999	1552.2
15						1.1790	1554.1

Gauge No. 376		Depth 4711'		Clock No. 13853		12 hour	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0	.000	58.6	58.6	.000	92.4	.000	111.7
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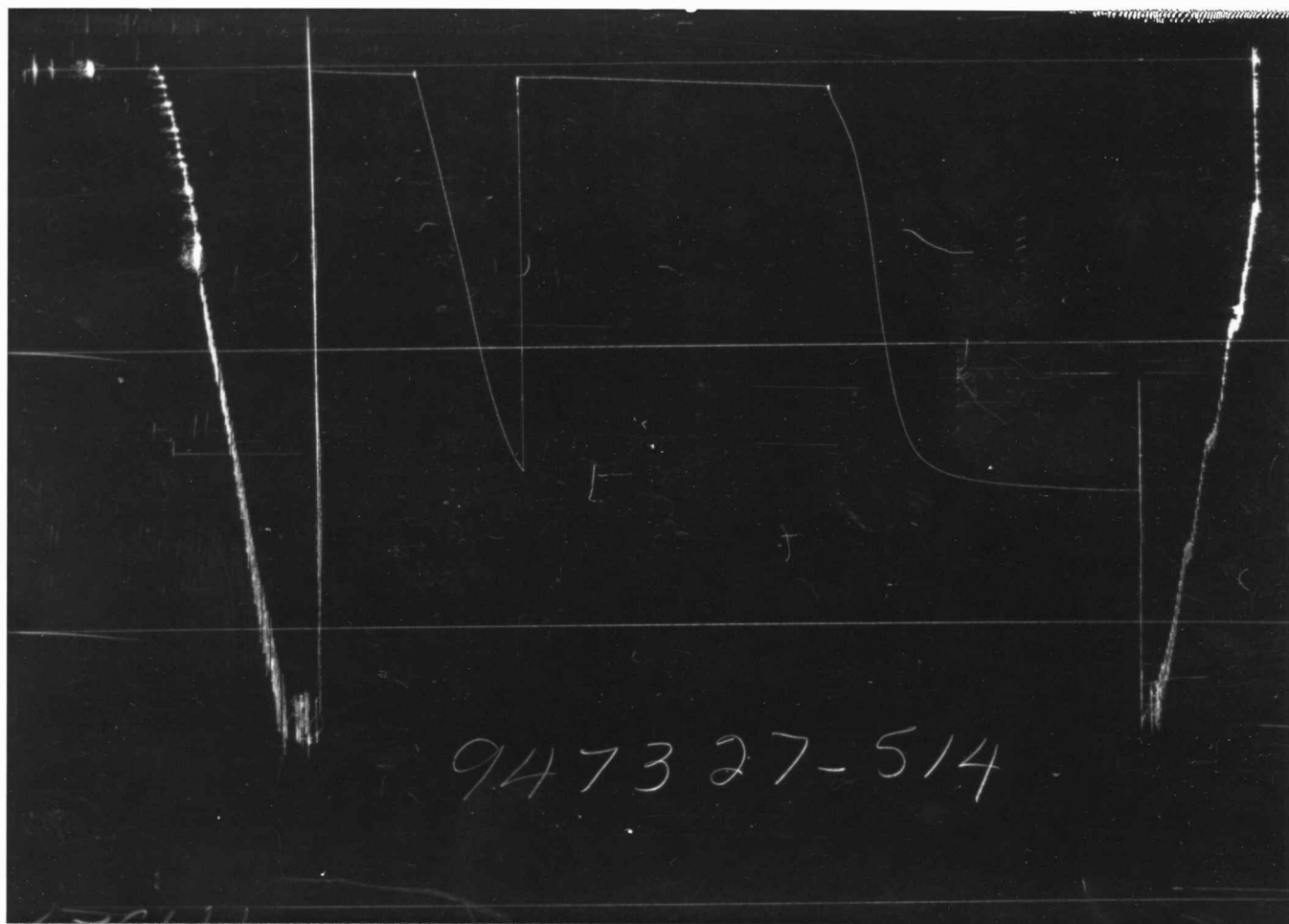
Gauge No. 376		Depth 4711'		Clock No. 13853		12 hour	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0	.000	58.6	58.6	.000	92.4	.000	111.7
1	.0732*	54.0	176.7	.2043***	78.7	.0725*	269.2
2	.1398	54.9	330.6	.3989	84.2	.1515	587.5
3	.2063	55.8	492.7	.5966	90.6	.2305	1131.1
4	.2729	56.7	662.4	.7943	97.9	.3096	1388.0
5	.3394	57.6	839.4	.9921	105.3	.3886	1465.1
6	.4060	58.6	1029.3	1.193	111.7	.4676	1495.3
7			1192.6			.5467	1511.9
8			1318.3			.6257	1522.9
9			1406.4			.7048	1531.1
10			1460.5			.7838	1536.6
11						.8628	1542.1
12						.9419	1545.8
13						1.0209	1549.5
14						1.0999	1552.2
15						1.1790	1554.1

Gauge No. 376		Depth 4711'		Clock No. 13853		12 hour	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0	.000	58.6	58.6	.000	92.4	.000	111.7
1	.0732*	54.0	176.7	.2043***	78.7	.0725*	269.2
2	.1398	54.9	330.6	.3989	84.2	.1515	587.5
3	.2063	55.8	492.7	.5966	90.6	.2305	1131.1
4	.2729	56.7	662.4	.7943	97.9	.3096	1388.0
5	.3394	57.6	839.4	.9921	105.3	.3886	1465.1
6	.4060	58.6	1029.3	1.193	111.7	.4676	1495.3
7			1192.6			.5467	1511.9
8			1318.3			.6257	1522.9
9			1406.4			.7048	1531.1
10			1460.5			.7838	1536.6
11						.8628	1542.1
12						.9419	1545.8
13						1.0209	1549.5
14						1.0999	1552.2
15						1.1790	1554.1

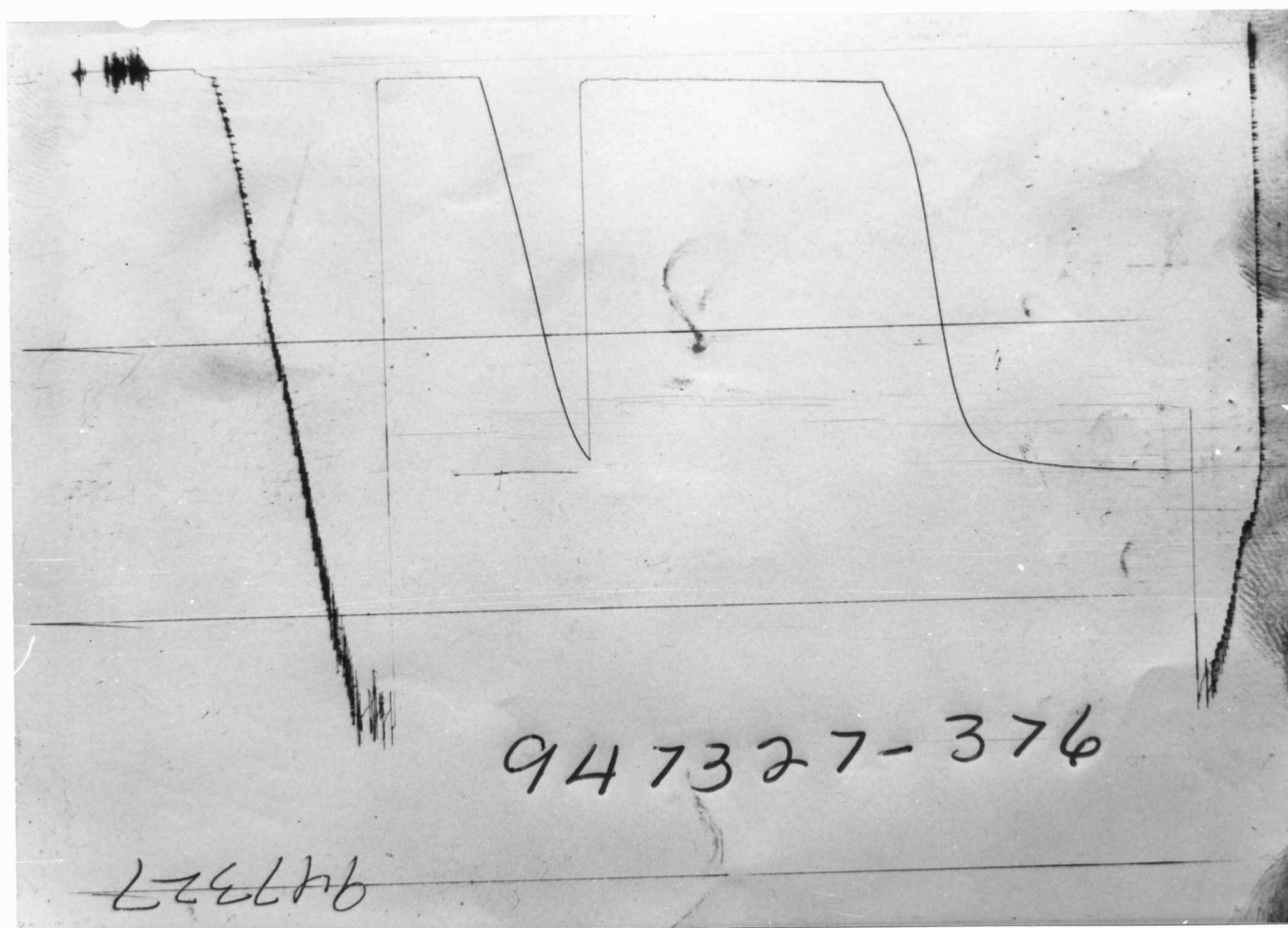
Gauge No. 376		Depth 4711'		Clock No. 13853		12 hour	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0	.000	58.6	58.6	.000	92.4	.000	111.7
1	.0732*	54.0	176.7	.2043***	78.7	.0725*	269.2
2	.1398	54.9	330.6	.3989	84.2	.1515	587.5
3	.2063	55.8	492.7	.5966	90.6	.2305	1131.1
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6	.4060	58.6	1029.3	1.193	111.7	.4676	1495.3
7			1192.6			.5467	1511.9
8			1318.3			.6257	1522.9
9			1406.4			.7048	1531.1
10			1460.5			.7838	

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub Fh	5"	3"	1'	4574'
Water Cushion Valve				
Drill Pipe	4.5"	3.826 "	3376'	
Drill Collars	4.5'	2.764 "	1260' Flex weight	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	6'	4636'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4646'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4648'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53 "	6'	4663'
Distributor				
Packer Assembly	6.75"	1.53"	6'	4669'
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"	3.84"	39'	
Blanked-Off B.T. Running Case	5"	2.44"	4'	4711'
Total Depth				4714'

— PRESSURE —
↓



— TIME —→



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

FLUID SAMPLE DATA				Date 7-10-80		Ticket Number 898197	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of D.S.T. OPEN HOLE OFF		Halliburton Location PRATT	
Recovery: Cu. Ft. Gas _____				Tester L. R. PARKER Witness P. STUBBS			
cc. Oil _____				Drilling Contractor RED TIGER DRILLING COMPANY DR			
cc. Water _____				EQUIPMENT & HOLE DATA			
cc. Mud _____				Formation Tested Kansas City			
Tot. Liquid cc. _____				Elevation 2143' Ft.			
Gravity _____ ° API @ _____ ° F.				Net Productive Interval 12' Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.				All Depths Measured From Kelly Bushing			
RESISTIVITY _____ CHLORIDE CONTENT _____				Total Depth 4714' Ft.			
Recovery Water _____ @ _____ ° F. _____ ppm				Main Hole/Casing Size 7 7/8"			
Recovery Mud _____ @ _____ ° F. _____ ppm				Drill Collar Length 1260' FW I.D. 2.764"			
Recovery Mud Filtrate _____ @ _____ ° F. _____ ppm				Drill Pipe Length 2826' I.D. 3.826"			
Mud Pit Sample _____ @ _____ ° F. _____ ppm				Packer Depth(s) 4119-4125'-4150' Ft.			
Mud Pit Sample Filtrate _____ @ _____ ° F. _____ ppm				Depth Tester Valve 4101' Ft.			
Mud Weight _____ vis _____ sec.							
TYPE		AMOUNT		Depth Back Surface		Bottom	
Cushion				Ft. Pres. Valve		Choke	
				1"		3/4"	
Recovered	1550	Feet of	salt water				
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks See production test data sheet							
TEMPERATURE		Gauge No. 5605	Gauge No. 5604	Gauge No. 6762	TIME		
Depth: 4103 Ft.		Depth: 4145 Ft.	Depth: 4170 Ft.	(00:00-24:00 hrs.)			
Est. 117°F.	Blanked Off NO	Blanked Off Yes	Blanked Off Yes	Tool Opened 2:30			
Actual _____ ° F.	Pressures	Pressures	Pressures	Opened Bypass 7:30			
	Field	Office	Field	Office	Field	Office	Reported
							Minutes
Initial Hydrostatic		2103.5	2058	2104.7		2119.4	Computed
Flow Initial		19.4	62	46.2			Minutes
Flow Final		546.9	575	572.8			60
Closed in		1449.6	1480	1465.0	HYDROSTATIC		90
Flow Initial		569.3	598	585.2	RELEASE: 1800.0		90
Flow Final		754.0	780	776.1			60
Closed in		1448.6	1480	1463.9			90
Flow Initial							
Flow Final							
Closed in							
Final Hydrostatic		2089.0	2058	2091.2		2111.1	

Legal Location
Sec. - Twp. - Rng.

28-27-17

Field Area

County

KIOWA

State

KANSAS

Lease Name

Well No.

Test No.

Tested Interval

Lease Owner/Company Name

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

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

[illegible]

Gauge No. 5605		Depth 4103'		Clock No. 4285		12 hour		Ticket No. 898197	
First Flow Period		Closed In Pressure		Second Flow Period		Closed In Pressure		Third Flow Period	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.
0 .000	19.4	.000	546.9	.000	569.3	.000	754.0		
1 .0889*	165.6	.0417	1365.5	.0622**	607.1	.0346***	1372.6		
2 .1573	262.7	.0833	1397.3	.1354	645.9	.0761	1408.6		
3 .2258	346.6	.1250	1412.7	.2045	676.5	.1177	1420.9		
4 .2942	420.2	.1667	1421.9	.2737	704.0	.1592	1429.1		
5 .3626	484.6	.2084	1428.1	.3428	730.6	.2007	1433.2		
6 .4310	546.9	.2500	1432.2	.4080	754.0	.2422	1437.3		
7		.2917	1434.2			.2838	1439.4		
8		.3334	1439.4			.3253	1441.4		
9		.3750	1440.4			.3668	1443.5		
10		.4167	1443.5			.4084	1445.5		
11		.4584	1445.5			.4499	1446.6		
12		.5000	1446.6			.4914	1447.6		
13		.5417	1447.6			.5329	1448.6		
14		.5834	1448.6			.5745	1448.6		
15		.6250	1449.6			.6160	1448.6		

Gauge No. 5604		Depth 4145'		Clock No. 3228		hour 12	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0 .000	46.2	.000	572.8	.000	585.2	.000	776.1
1 .0863*	201.2	.0401	1394.0	.0596**	633.4	.0333***	1409.4
2 .1526	295.6	.0801	1421.8	.1258	666.3	.0732	1433.1
3 .2189	376.7	.1202	1434.1	.1920	697.1	.1131	1442.3
4 .2853	449.6	.1602	1441.3	.2583	725.8	.1530	1447.5
5 .3516	514.3	.2003	1445.4	.3245	751.5	.1929	1450.6
6 .4180	572.8	.2404	1449.5	.3910	776.1	.2328	1453.7
7		.2804	1453.7			.2727	1455.7
8		.3205	1455.7			.3126	1456.7
9		.3605	1457.8			.3525	1457.8
10		.4006	1459.8			.3925	1459.8
11		.4407	1460.9			.4324	1460.9
12		.4807	1461.9			.4723	1461.9
13		.5208	1462.9			.5122	1462.9
14		.5608	1463.9			.5521	1463.9
15		.6010	1465.0			.5920	1463.9

Gauge No. 5604		Depth 4145'		Clock No. 3228		hour 12	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0 .000	46.2	.000	572.8	.000	585.2	.000	776.1
1 .0863*	201.2	.0401	1394.0	.0596**	633.4	.0333***	1409.4
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Gauge No. 5604		Depth 4145'		Clock No. 3228		hour 12	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0 .000	46.2	.000	572.8	.000	585.2	.000	776.1
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14		.5608	1463.9			.5521	1463.9
15		.6010	1465.0			.5920	1463.9

Gauge No. 5604		Depth 4145'		Clock No. 3228		hour 12	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0 .000	46.2	.000	572.8	.000	585.2	.000	776.1
1 .0863*	201.2	.0401	1394.0	.0596**	633.4	.0333***	1409.4
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15		.6010	1465.0			.5920	1463.9

Gauge No. 5604		Depth 4145'		Clock No. 3228		hour 12	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0 .000	46.2	.000	572.8	.000	585.2	.000	776.1
1 .0863*	201.2	.0401	1394.0	.0596**	633.4	.0333***	1409.4
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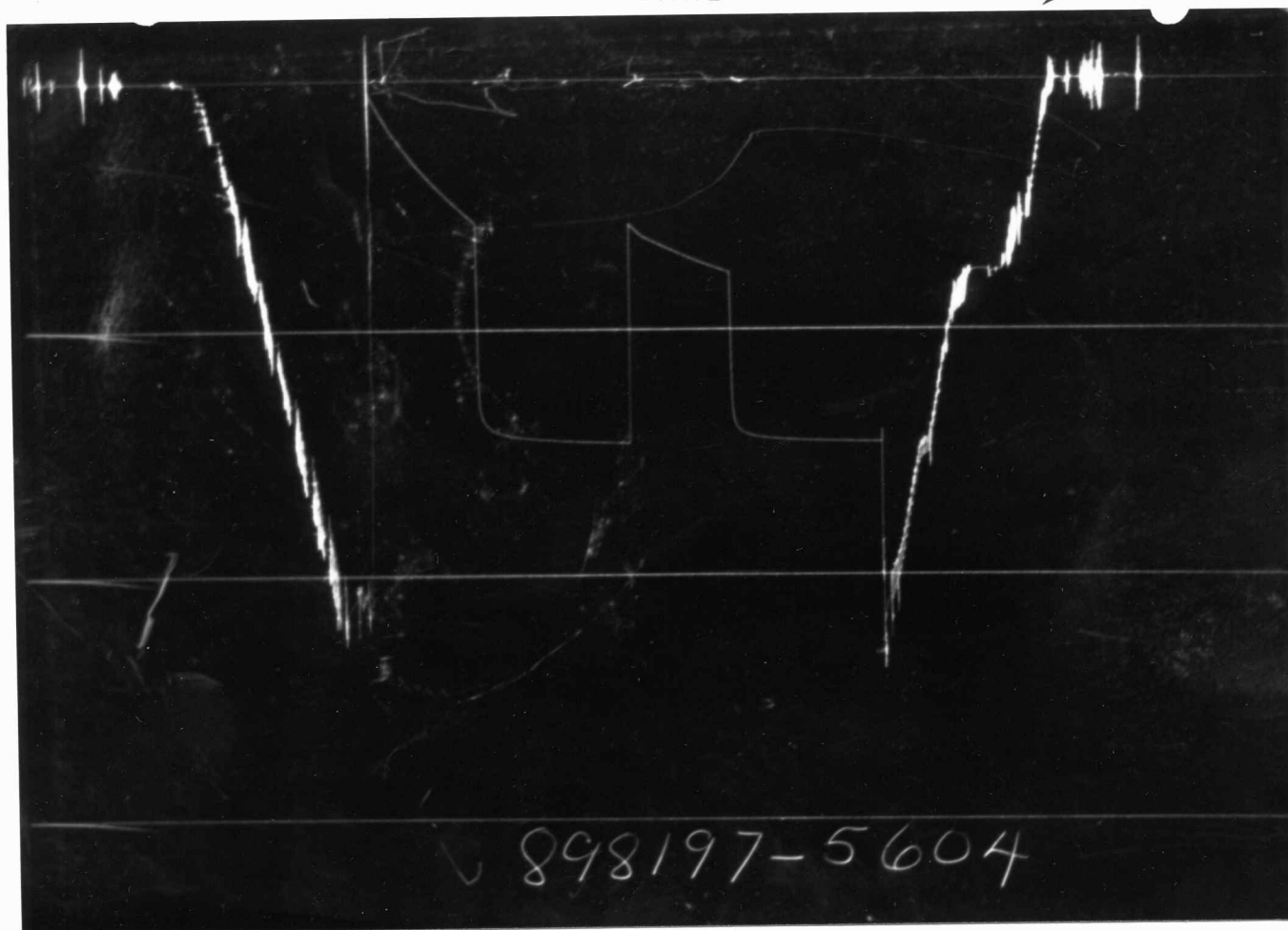
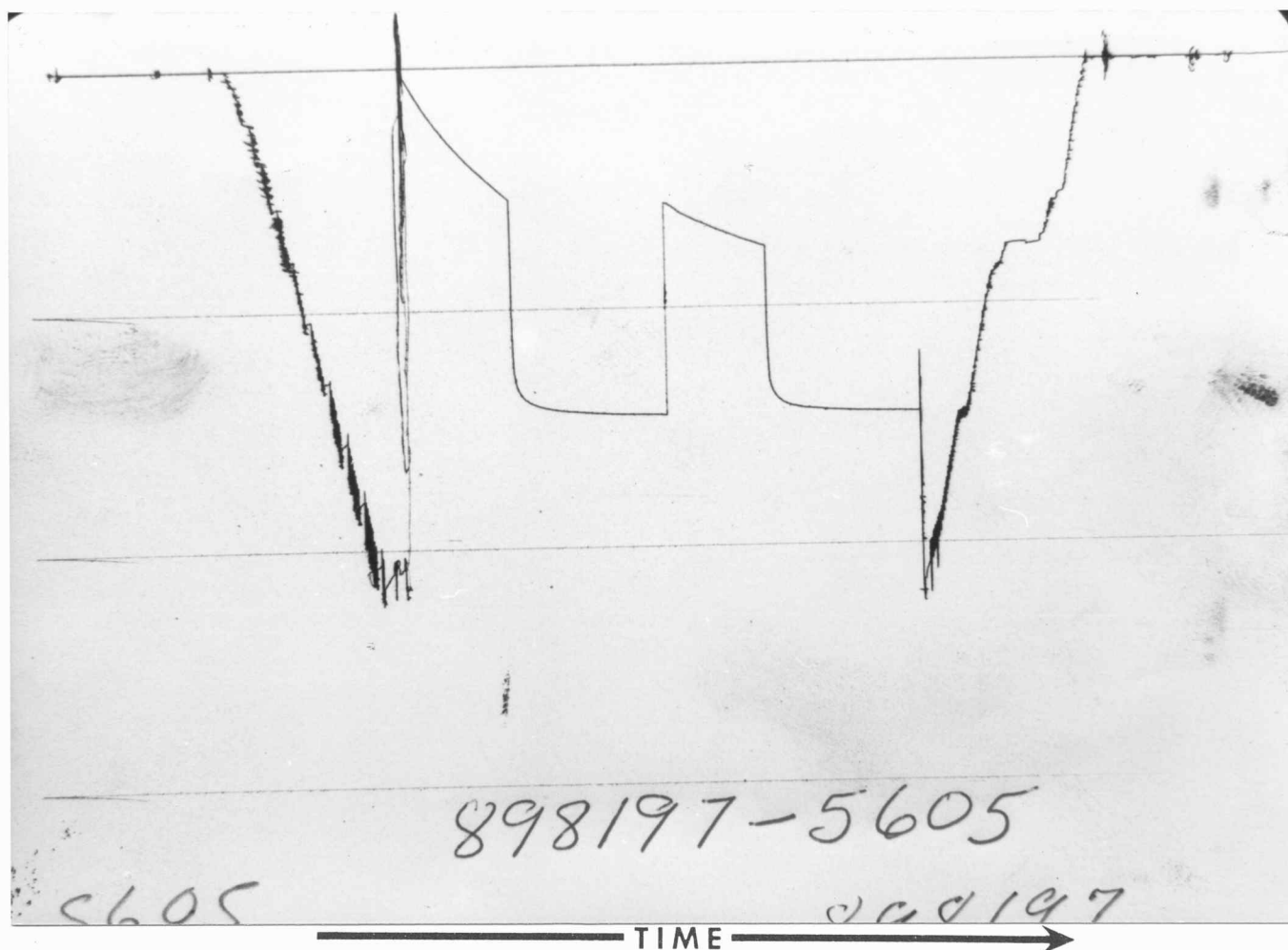
Gauge No. 5604		Depth 4145'		Clock No. 3228		hour 12	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
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13		.5208	1462.9			.5122	1462.9
14		.5608	1463.9			.5521	1463.9
15		.6010	1465.0			.5920	1463.9

Gauge No. 5604		Depth 4145'		Clock No. 3228		hour 12	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
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Gauge No. 5604		Depth 4145'		Clock No. 3228		hour 12	
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10		.4006	1459.8			.3925	1459.8
11		.4407	1460.9			.4324	1460.9
12		.4807	1461.9			.4723	1461.9

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars	6"	2.75'	1'	
Reversing Sub				
Water Cushion Valve			2826'	
Drill Pipe	4 1/2"	3.826"	1260' Flex weight	
Drill Collars	4 1/2"	2.764"	5'	
Handling Sub & Choke Assembly	5.75"	3.75"	5'	4096'
Dual CIP Valve	5'	.87"	5'	
Dual CIP Sampler	5"	.75'	5'	4101'
Hydro-Spring Tester				
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4103'
Hydraulic Jar	5"	1.75'	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover	5'		1'	
Packer Assembly	6.75"	1.53"	6'	4119'
Distributor				
Packer Assembly	6.75"	1.53"	6'	4125'
Flush Joint Anchor	5"	2.37"	16'	
Pressure Equalizing Tube	5"		1'	
Blanked-Off B.T. Running Case	5"	3.06"	4'	4145'
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly	6.75'	1.53 "	6'	4150'
	5"	2.37"	1' Double Pin	
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint	5"	2.37"	8'	
Side Wall Anchor	5"	1.62'	6'	4165'
Drill Collars				
Flush Joint Anchor				
Blanked-Off B.T. Running Case	5"	2.44"	4'	4170'
Total Depth				4714'

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

