

Casing perms. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 436223
Gas gravity _____ Oil gravity _____ GOR _____
Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED _____

[illegible]

Gauge No.		5579		Depth		4599'		Clock No.		10858		12 hour		Ticket No.		436223	
First Flow Period		First Closed In Pressure		Second Flow Period		Second Closed In Pressure		Third Flow Period		Third Closed In Pressure		PSIG Temp. Corr.		PSIG Temp. Corr.		PSIG Temp. Corr.	
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.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0	.0000 54.6	.0000		.0000	389.0	.0000	413.9	.0000		.0000			606.7				
1	.0269* 138.2	.0267		.0389**	1022.8	.0389**	455.2	.0266		.0266			1089.0				
2	.0605 221.8	.0535		.0713	1150.3	.0713	491.7	.0532		.0532			1187.9				
3	.0941 282.2	.0802		.1037	1214.8	.1037	522.1	.0798		.0798			1237.7				
4	.1278 320.3	.1069		.1362	1254.9	.1362	551.7	.1064		.1064			1270.4				
5	.1614 355.9	.1337		.1686	1285.9	.1686	578.8	.1330		.1330			1295.7				
6	.1950 389.0	.1604		.2010	1308.8	.2010	606.7	.1596		.1596			1315.3				
7		.1871			1327.6			.1862		.1862			1330.8				
8		.2138			1341.5			.2128		.2128			1343.9				
9		.2406			1354.5			.2394		.2394			1355.3				
10		.2673			1365.1			.2660		.2660			1364.3				
11		.2940			1374.1			.2926		.2926			1372.5				
12		.3208			1381.5			.3192		.3192			1379.0				
13		.3475			1388.8			.3458		.3458			1385.6				
14		.3742			1394.6			.3724		.3724			1391.3				
15		.4010			1399.5			.3990		.3990			1395.4				

Gauge No.		5575		Depth		4667'		Clock No.		hour	
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"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$
0	.0000 89.3	.0000		.0000	415.6	.0000	447.6	.0000			634.3
1	.0277* 167.2	.0275		.0407**	1055.8	.0407**	482.0	.0273			1125.4
2	.0624 254.1	.0551		.0745	1180.4	.0745	516.1	.0547			1216.0
3	.0970 309.8	.0826		.1084	1241.1	.1084	548.5	.0820			1266.2
4	.1317 346.7	.1101		.1423	1283.2	.1423	578.4	.1093			1299.3
5	.1664 383.6	.1377		.1761	1311.5	.1761	605.9	.1367			1324.4
6	.2010 415.6	.1652		.2100	1335.8	.2100	634.3	.1640			1343.0
7		.1927			1353.6			.1913			1358.4
8		.2202			1368.9			.2186			1372.8
9		.2478			1381.9			.2460			1382.7
10		.2753			1393.2			.2733			1392.4
11		.3028			1402.1			.3006			1400.5
12		.3304			1410.2			.3280			1407.8
13		.3579			1416.7			.3553			1414.2
14		.3854			1423.1			.3826			1419.2
15		.4130			1427.2			.4100			1423.1

Gauge No.		5575		Depth		4667'		Clock No.		hour	
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"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$
0	.0000 89.3	.0000		.0000	415.6	.0000	447.6	.0000			634.3
1	.0277* 167.2	.0275		.0407**	1055.8	.0407**	482.0	.0273			1125.4
2	.0624 254.1	.0551		.0745	1180.4	.0745	516.1	.0547			1216.0
3	.0970 309.8	.0826		.1084	1241.1	.1084	548.5	.0820			1266.2
4	.1317 346.7	.1101		.1423	1283.2	.1423	578.4	.1093			1299.3
5	.1664 383.6	.1377		.1761	1311.5	.1761	605.9	.1367			1324.4
6	.2010 415.6	.1652		.2100	1335.8	.2100	634.3	.1640			1343.0
7		.1927			1353.6			.1913			1358.4
8		.2202			1368.9			.2186			1372.8
9		.2478			1381.9			.2460			1382.7
10		.2753			1393.2			.2733			1392.4
11		.3028			1402.1			.3006			1400.5
12		.3304			1410.2			.3280			1407.8
13		.3579			1416.7			.3553			1414.2
14		.3854			1423.1			.3826			1419.2
15		.4130			1427.2			.4100			1423.1

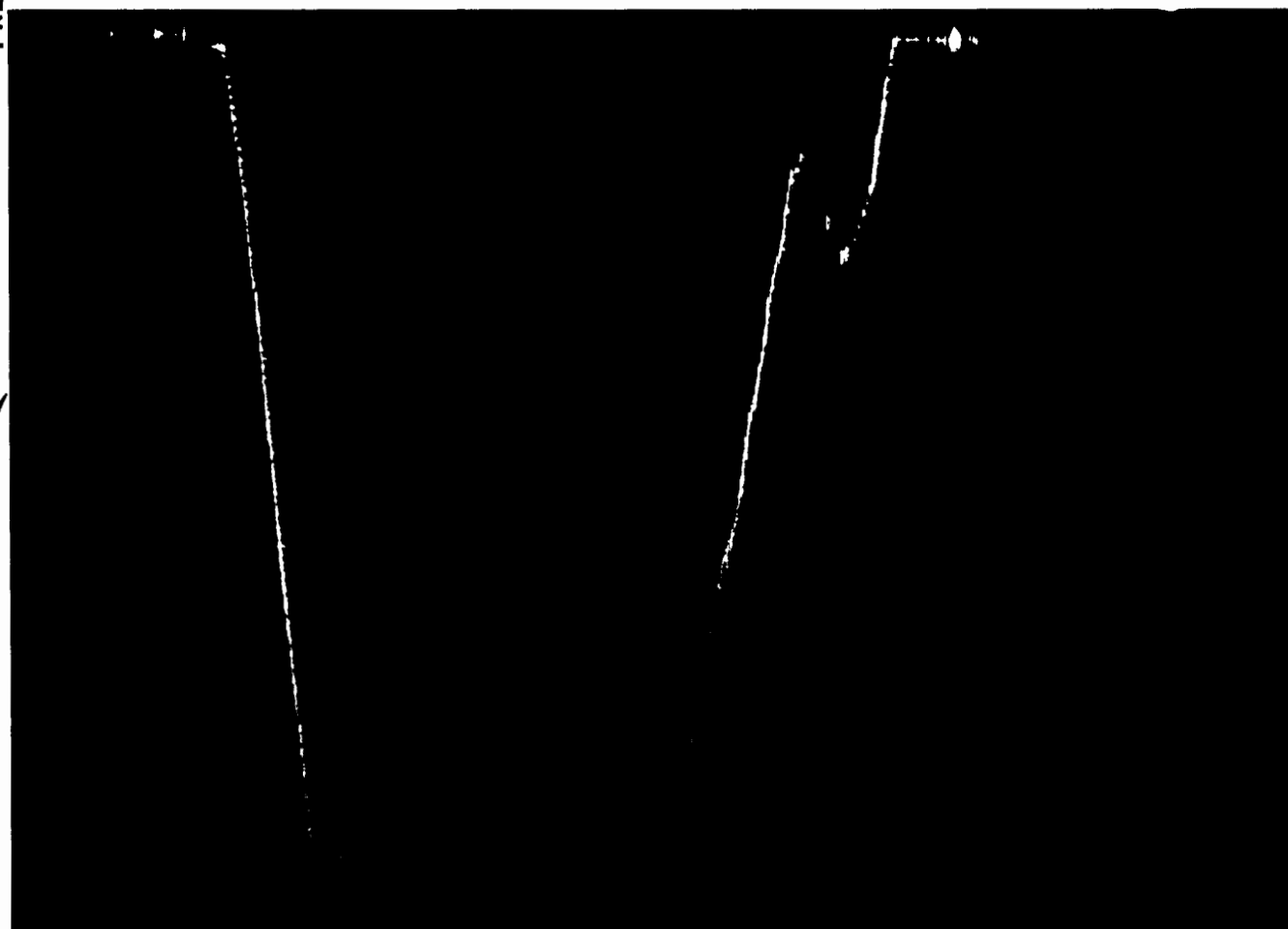
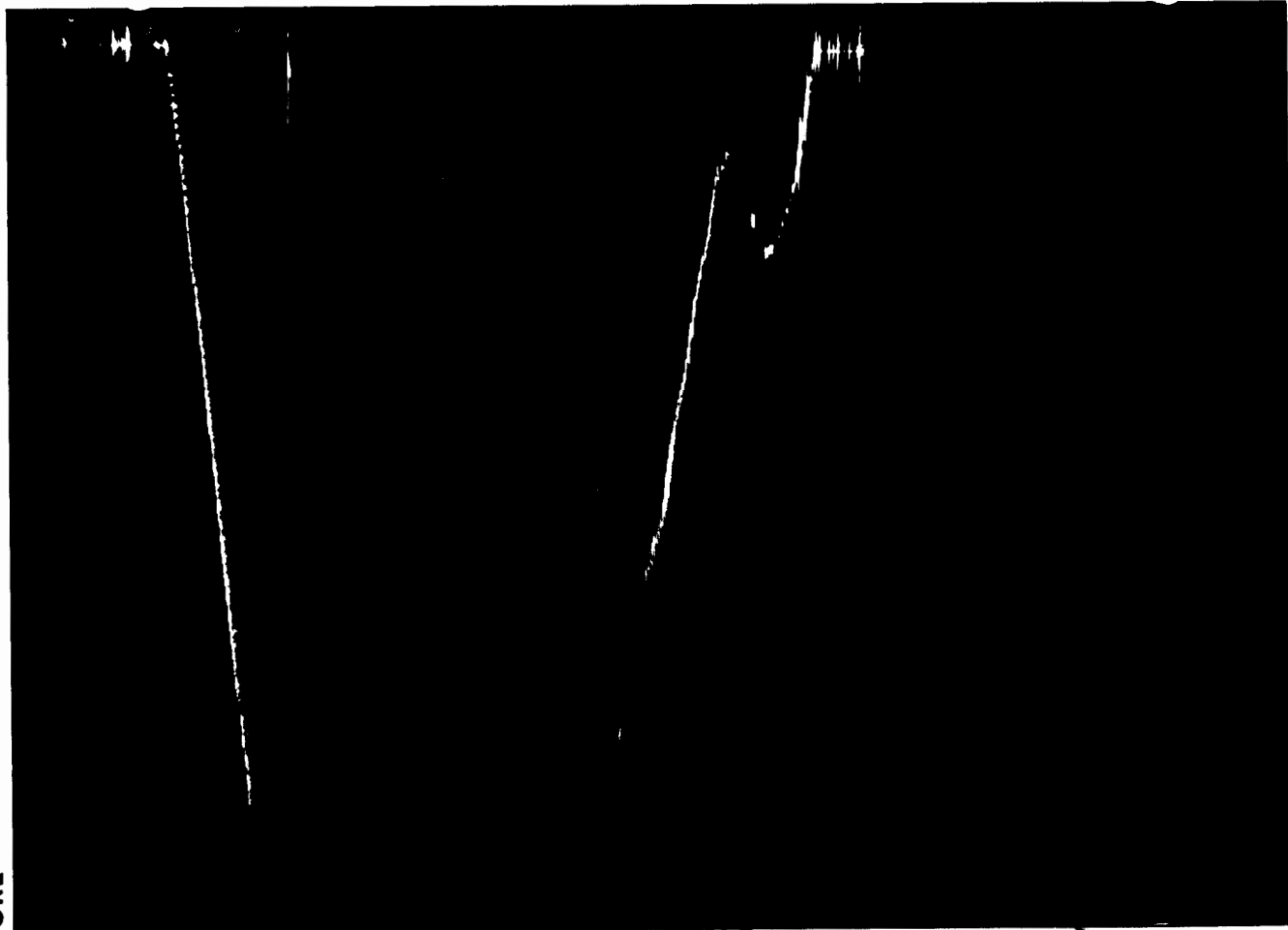
Gauge No.		5575		Depth		4667'		Clock No.		hour	
First Flow Period		First Closed In Pressure		Second Flow Period		Second Closed In Pressure		Third Flow Period		Third Closed In Pressure	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$
0	.0000 89.3	.0000		.0000	415.6	.0000	447.6	.0000			634.3
1	.0277* 167.2	.0275		.0407**	1055.8	.0407**	482.0	.0273			1125.4
2	.0624 254.1	.0551		.0745	1180.4	.0745	516.1	.0547			1216.0
3	.0970 309.8	.0826		.1084	1241.1	.1084	548.5	.0820			1266.2
4	.1317 346.7	.1101		.1423	1283.2	.1423	578.4	.1093			1299.3
5	.1664 383.6	.1377		.1761	1311.5	.1761	605.9	.1367			1324.4
6	.2010 415.6	.1652		.2100	1335.8	.2100	634.3	.1640			1343.0
7		.1927			1353.6			.1913			1358.4
8		.2202			1368.9			.2186			1372.8
9		.2478			1381.9			.2460			1382.7
10		.2753			1393.2			.2733			1392.4
11		.3028			1402.1			.3006			1400.5
12		.3304			1410.2			.3280			1407.8
13		.3579			1416.7			.3553			1414.2
14		.3854			1423.1			.3826			1419.2
15		.4130			1427.2			.4100			1423.1

Gauge No.		5575		Depth		4667'		Clock No.		hour	
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"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$
0	.0000 89.3	.0000		.0000	415.6	.0000	447.6	.0000			634.3
1	.0277* 167.2	.0275		.0407**	1055.8	.0407**	482.0	.0273			1125.4
2	.0624 254.1	.0551		.0745	1180.4	.0745	516.1	.0547			1216.0
3	.0970 309.8	.0826		.1084	1241.1	.1084	548.5	.0820			1266.2
4	.1317 346.7	.1101		.1423	1283.2	.1423	578.4	.1093			1299.3
5	.1664 383.6	.1377		.1761	1311.5	.1761	605.9	.1367			1324.4
6	.2010 415.6	.1652		.2100	1335.8	.2100	634.3	.1640			1343.0
7		.1927			1353.6			.1913			1358.4
8		.2202			1368.9			.2186			1372.8
9		.2478			1381.9			.2460			1382.7
10		.2753			1393.2			.2733			1392.4
11		.3028			1402.1			.3006			1400.5
12		.3304			1410.2			.3280			1407.8
13		.3579			1416.7			.3553			1414.2
14		.3854			1423.1			.3826			1419.2
15		.4130			1427.2			.4100			1423.1

Gauge No.		5575		Depth		4667'		Clock No.		hour	
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"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$
0	.0000 89.3	.0000		.0000	415.6	.0000	447.6	.0000			634.3
1	.0277* 167.2	.0275		.0407**	1055.8	.0407**	482.0	.0273			1125.4
2	.0624 254.1	.0551		.0745	1180.4	.0745	516.1	.0547			1216.0
3	.0970 309.8	.0826		.1084	1241.1	.1084	548.5	.0820			1266.2
4	.1317 346.7	.1101		.1423	1283.2	.1423	578.4	.1093			1299.3
5	.1664 383.6	.1377									

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	5.75"	2.75"	1'	
Reversing Sub				
Water Cushion Valve	4.50"	2.764"	534' Weight Pipe	
Drill Pipe				
Drill Collars				
Handling Sub & Choke Assembly	5"	.87"	6'	4587'
Dual CIP Valve				
Dual CIP Sampler	5"	.75"	5'	4597'
Hydro-Spring Tester				
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4599'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	6'	4616'
Distributor				
Packer Assembly	6.75"	1.53"	4'	4622'
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	5"	2.37"	41'	
Flush Joint Anchor	5"	3.75"	1'	
HT 500 temp	5"	2.44"	4'	4667'
Blanked-Off B.T. Running Case				
Total Depth				4670'

PRESSURE



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

TEMPERATURE
RECORDER
CHART

H 436223



10° each circle

FLUID SAMPLE DATA				Date 5-31-79		Ticket Number 436224	
Sampler Pressure _____ P.S.I.G. at Surface Recovery: Cu. Ft. Gas _____ cc. Oil _____ cc. Water _____ cc. Mud _____ Tot. Liquid cc. _____ Gravity _____ ° API @ _____ °F. Gas/Oil Ratio _____ cu. ft./bbl. RESISTIVITY CHLORIDE CONTENT				Kind of Job OPEN HOLE Halliburton District OBERLIN Tester MR. NUTTING Witness MR. NOAH Drilling Contractor ABERCROMBIE DRILLING, INCORPORATED EQUIPMENT & HOLE DATA TB S			
Recovery Water _____ @ _____ °F. _____ ppm Recovery Mud _____ @ _____ °F. _____ ppm Recovery Mud Filtrate _____ @ _____ °F. _____ ppm Mud Pit Sample _____ @ _____ °F. _____ ppm Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm Mud Weight 9.8 vis 42 cp				Formation Tested Pawnee Elevation 3450' Ft. Net Productive Interval 3' Ft. All Depths Measured From Kelly Bushing Total Depth 4705 Ft. Main Hole/Casing Size 7 7/8" Drill Collar Length 534' WP I.D. 2.764" Drill Pipe Length 4135' I.D. 3.826" Packer Depth(s) 4688' - 4694' Ft. Depth Tester Valve 4669' Ft.			
Cushion		TYPE	AMOUNT	Depth Back Pres. Valve	Surface Choke	Bottom Choke	
					.25"	.75"	
Recovered		10	Feet of	Slightly oil cut mud			
Recovered		120	Feet of	Muddy water			
Recovered			Feet of				
Recovered			Feet of				
Recovered			Feet of				
Remarks		SEE PRODUCTION TEST DATA SHEET.					
TEMPERATURE		Gauge No. 5579		Gauge No. 5575		Gauge No.	
Depth:		4671' Ft.		4702' Ft.		Ft.	
Est. 115°F.		12 Hour Clock		12 Hour Clock		Hour Clock	
Blanked Off NO		Blanked Off YES		Blanked Off		Tool A.M.	
Actual °F.		Pressures		Pressures		Opened 0845 P.M.	
		Pressures		Pressures		Opened A.M.	
		Pressures		Pressures		Bypass 1245 P.M.	
		Field	Office	Field	Office	Field	Office
Initial Hydrostatic			2435.5	2448	2449.1	Reported	Computed
Flow Initial			12.4	16	23.7	Minutes	Minutes
Flow Final			38.9	49	52.4		
Closed in			1468.9	1479	1481.4	60	60
Flow Initial			47.1	49	61.4	60	60
Flow Final			72.8	82	86.0	60	60
Closed in			1378.2	1382	1392.4	60	61
Flow Initial							
Flow Final							
Closed in							
Final Hydrostatic			2386.6	2448	2401.4		

Legal Location Sec. - Twp. - Rng. 17 - 6S - 37W C 5W-5E

Field Area

Med. From Tester Valve

County SHERMAN

State KANSAS

COOPER "C"

Lease Name

Well No. 1

Test No. 2

4694' - 4705'

Tested Interval

PETROLEUM, INCORPORATED

Lease Owner/Company Name

Gauge No. 5579		Depth 4671		Clock No. 10858		12 hour		Ticket No. 436224	
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	.0000	.0000	38.9	.0000	47.1	.0000	72.8		
1	.0658	.0264	981.1	.0660	49.6	.0333*	912.1		
2	.1317	.0528	1225.4	.1320	55.4	.0599	1093.1		
3	.1975	.0792	1298.2	.1980	60.4	.0865	1174.8		
4	.2633	.1056	1340.6	.2640	64.5	.1131	1244.6		
5	.3292	.1320	1370.9	.3300	69.5	.1398	1256.5		
6	.3950	.1584	1392.1	.3960	72.8	.1664	1280.2		
7		.1848	1408.5			.1930	1303.9		
8		.2112	1421.5			.2196	1318.6		
9		.2376	1431.3			.2462	1331.7		
10		.2640	1441.1			.2729	1342.3		
11		.2904	1448.5			.2995	1352.1		
12		.3168	1455.0			.3261	1360.2		
13		.3432	1459.9			.3527	1366.8		
14		.3696	1464.8			.3793	1373.3		
15		.3960	1468.9			.4060	1378.2		

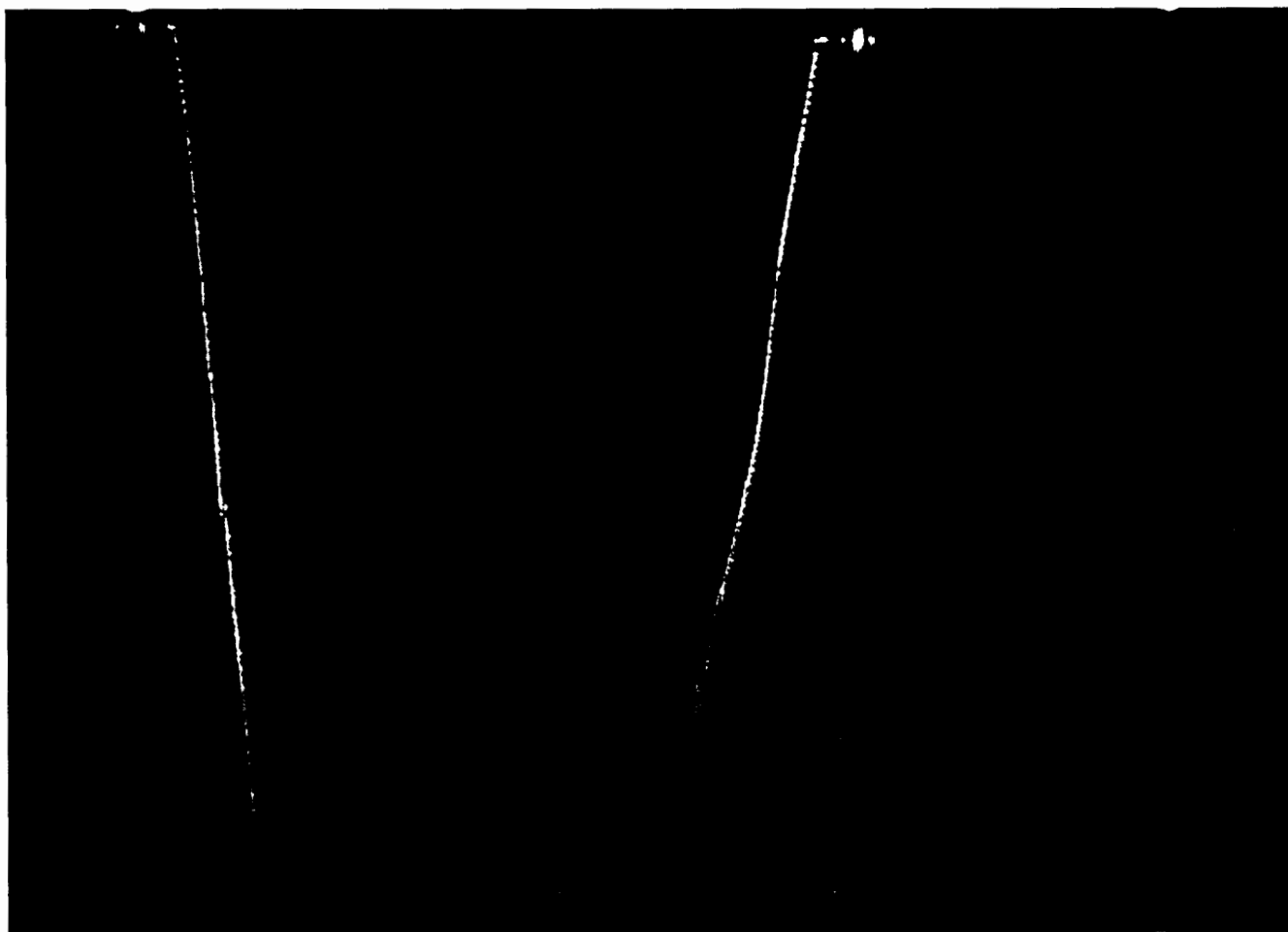
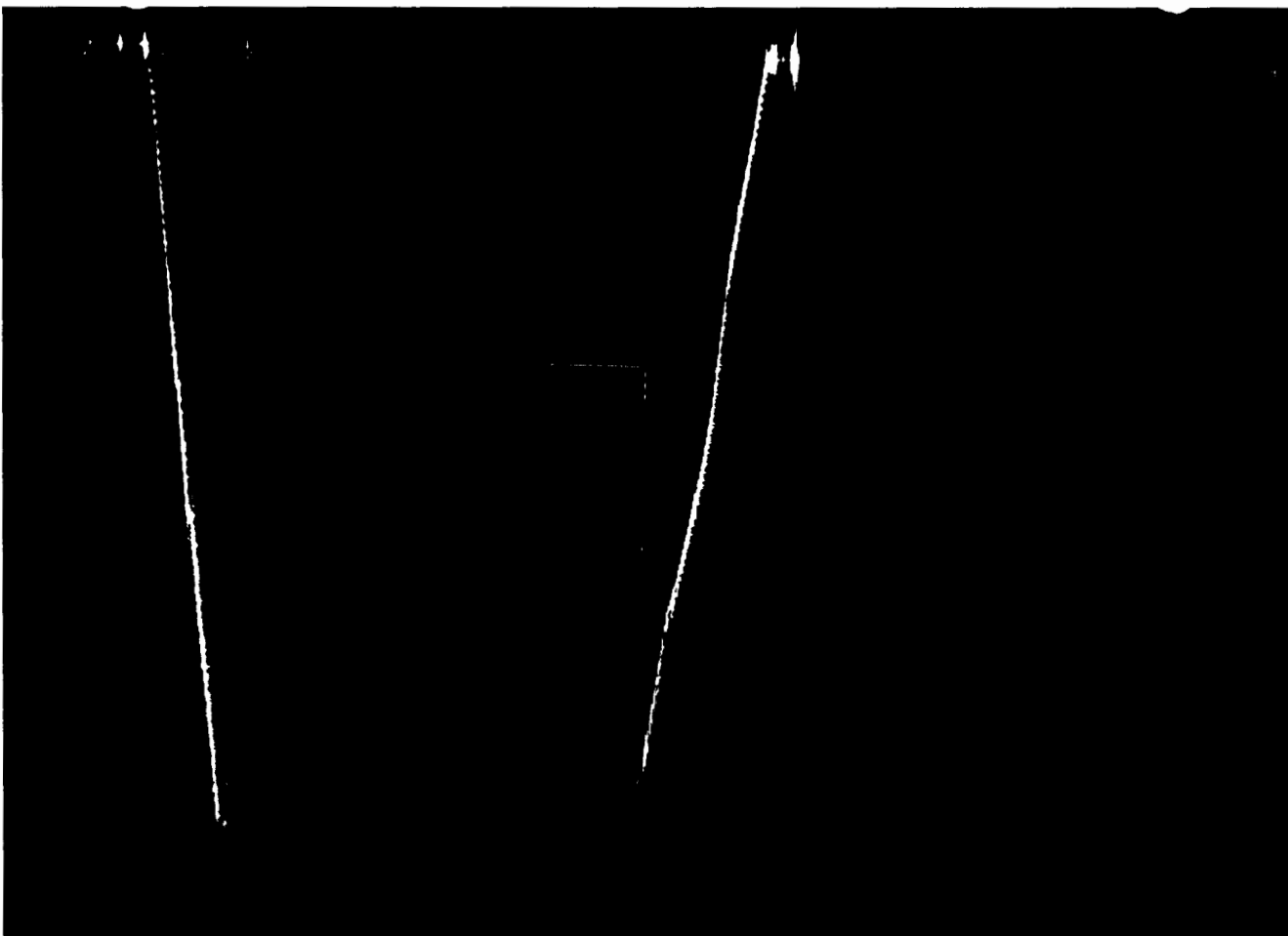
Gauge No. 5575		2 Depth 4701		Clock No. 2414		12 hour	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0	.0000	.0000	52.4	.0000	61.4	.0000	86.0
1	.0683	.0273	968.4	.0692	63.9	.0343*	964.4
2	.1367	.0547	1233.8	.1383	68.8	.0618	1124.6
3	.2050	.0820	1309.0	.2075	73.7	.0893	1198.2
4	.2733	.1093	1354.3	.2766	77.8	.1168	1242.7
5	.3417	.1367	1382.7	.3458	82.7	.1442	1275.9
6	.4100	.1640	1405.3	.4150	86.0	.1717	1296.9
7		.1913	1423.1			.1992	1317.9
8		.2186	1435.2			.2266	1333.3
9		.2460	1445.8			.2541	1347.1
10		.2733	1454.7			.2816	1357.6
11		.3006	1461.1			.3090	1366.5
12		.3280	1468.4			.3365	1373.8
13		.3553	1473.3			.3640	1381.0
14		.3826	1478.1			.3915	1386.7
15		.4100	1481.4			.4190	1392.4
Reading Interval	10	4	10	4			Minutes

REMARKS: * - first interval is equal 5 minutes.

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	5.75"	2.75"	1'	
Reversing Sub				
Water Cushion Valve				
Drill Pipe	4½"	3.826"	4135'	
Drill Collars	4½" WP	2.764"	534'	
Hondling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	6'	4659'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4669'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4671'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	6'	4688'
Distributor				
Packer Assembly	6.75"	1.53"	4'	4694'
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"	2.37"	5'	
Blanked-Off B.T. Running Case	5"	2.44"	4'	4702'
Total Depth				4705'

↑
PRESSURE
↓

← TIME →



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