

[illegible]

Casing perms. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 085563
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F
 INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED _____

[illegible]

Gauge No. 514			Depth 3777'			Clock No. ???			12 hour		Ticket No. 085563				
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	11	.000		22	.000	29	.000		33					
1	.0338	14	.0273		638	.0335	27	.0205*		492					
2	.0677	16	.0547		888	.0670	27	.0478		804					
3	.1015	17	.0820		995	.1005	29	.0751		934					
4	.1353	19	.1093		1059	.1340	31	.1025		1003					
5	.1692	20	.1367		1097	.1675	32	.1298		1046					
6	.2030	22	.1640		1124	.2010	33	.1571		1077					
7			.1913		1144			.1844		1099					
8			.2186		1160			.2117		1117					
9			.2460		1171			.2391		1130					
10			.2733		1180			.2664		1141					
11			.3006		1187			.2937		1150					
12			.3280		1194			.3210		1157					
13			.3553		1199			.3483		1164					
14			.3826		1205			.3757		1169					
15			.4100		1209			.4030		1174					

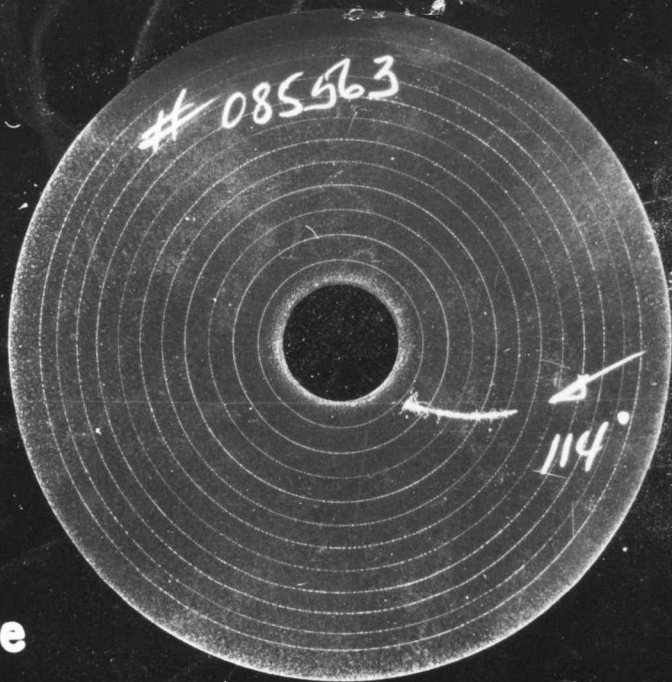
Gauge No. 376			Depth 3823'			Clock No. ???			12 hour						
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log} \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log} \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log} \frac{t + \theta}{\theta}$	PSIG Temp. Corr.
0	.000	42	.000		47	.000	61	.000		57					
1	.0333	40	.0267		660	.0333	53	.0200*		536					
2	.0667	41	.0535		911	.0667	54	.0467		835					
3	.1000	41	.0802		1014	.1000	55	.0735		955					
4	.1333	43	.1069		1073	.1333	56	.1002		1023					
5	.1667	45	.1337		1114	.1667	57	.1269		1067					
6	.2000	47	.1604		1141	.2000	57	.1536		1098					
7			.1871		1162			.1803		1121					
8			.2138		1178			.2070		1138					
9			.2406		1190			.2337		1152					
10			.2673		1201			.2604		1163					
11			.2940		1210			.2871		1173					
12			.3208		1217			.3138		1180					
13			.3475		1223			.3406		1187					
14			.3742		1228			.3673		1193					
15			.4010		1233			.3940		1198					

Reading Interval 5 4 5 4 Minutes

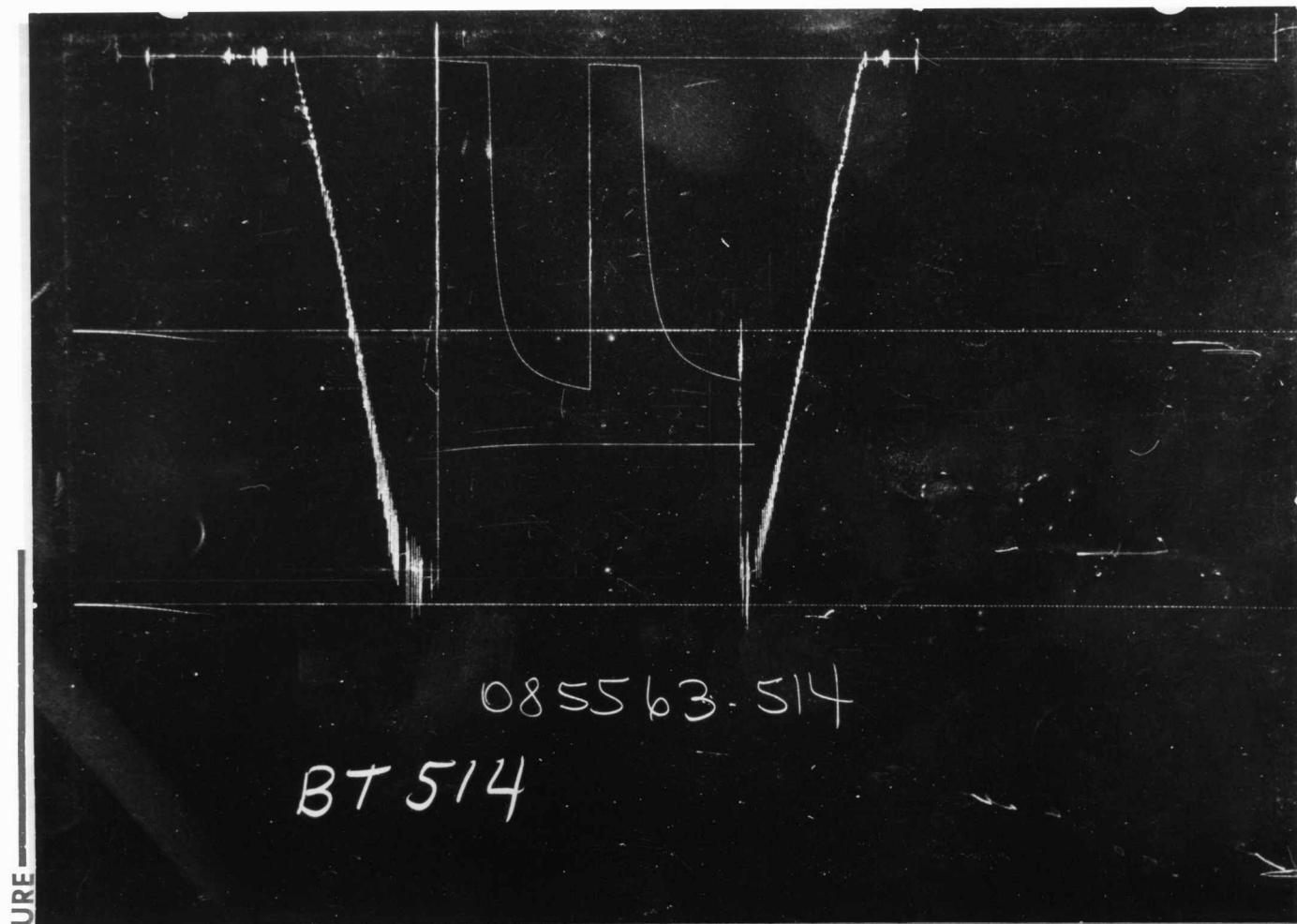
REMARKS: * = 3 minute interval.

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	5.75"	2.5"	1'	
Reversing Sub				
Water Cushion Valve	4.5"	3.826"	2321'	
Drill Pipe	4.5"	2.764"	1340'	
Drill Collars Weight Pipe				
Handling Sub & Choke Assembly	5.0"	.87"	5'	3767'
Dual CIP Valve				
Dual CIP Sampler	5.0"	.75"	5'	3772'
Hydro-Spring Tester				
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5.0"	3.06"	4'	3777'
Hydraulic Jar				
VR Safety Joint	5.0"	1.0"	3'	
Pressure Equalizing Crossover				
Packer Assembly				
Distributor				
Packer Assembly	6.75"	1.54"	6.0'	3783'
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	5.0"	3.84"	3.8'	
HT-500 Temp.	5.0"	3.84"	1'	3821'
Blanked-Off B.T. Running Case	5.0"	2.44"	4'	3823'
Total Depth				3826'

TEMPERATURE
RECORDER
CHART



10° each circle



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

RYAN

Lease Name

A-1

Well No.

2

Test No.

3960' - 3973'

Tested Interval

CITIES SERVICE OIL COMPANY

Lease Owner/Company Name

Legal Location
Sec. - Twp. - Rng.

24 - 5 S - 32 W

Field Area
WILDCAT

County

RAWLINS

State

KANSAS

FLUID SAMPLE DATA				Date 3-23-77				Ticket Number 085525	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of Job OPEN HOLE TEST		Halliburton District OBERLIN			
Recovery: Cu. Ft. Gas _____				Tester J. MONDERO		Witness _____			
cc. Oil _____				Drilling Contractor RED TIGER DRILLING COMPANY PW					
cc. Water _____				EQUIPMENT & HOLE DATA					
cc. Mud _____				Formation Tested Lower Kansas City					
Tot. Liquid cc. _____				Elevation 2949'				Ft.	
Gravity _____ ° API @ _____ ° F.				Net Productive Interval _____				Ft.	
Gas/Oil Ratio _____ cu. ft./bbl.				All Depths Measured From Kelly Bushing					
RESISTIVITY		CHLORIDE CONTENT		Total Depth 3973'				Ft.	
Recovery Water _____ @ _____ ° F. _____ ppm				Main Hole/Casing Size 7 7/8"					
Recovery Mud _____ @ _____ ° F. _____ ppm				Drill Collar Length 1112' WP I.D. 2.764" WP					
Recovery Mud Filtrate _____ @ _____ ° F. _____ ppm				Drill Pipe Length 2820' I.D. 3.826"					
Mud Pit Sample _____ @ _____ ° F. _____ ppm				Packer Depth(s) 3954' - 3960'				Ft.	
Mud Pit Sample Filtrate _____ @ _____ ° F. _____ ppm				Depth Tester Valve 3933'				Ft.	
Mud Weight 9.1 vis 43 sec									
TYPE		AMOUNT		Depth Back Pres. Valve		Surface Choke		Bottom Choke	
Cushion						.25"		.75"	
Recovered		250 Feet of muddy saltwater.							
Recovered		Feet of							
Recovered		Feet of							
Recovered		Feet of							
Recovered		Feet of							
Recovered		Feet of							
Remarks									
SEE PRODUCTION TEST DATA SHEET.....									
TEMPERATURE		Gauge No. 514		Gauge No. 376		Gauge No. _____		TIME	
		Depth: 3939 Ft.		Depth: 3970 Ft.		Depth: _____ Ft.			
		12 Hour Clock		12 Hour Clock		Hour Clock		Tool _____ A.M.	
Est. _____ ° F.		Blanked Off NO		Blanked Off YES		Blanked Off _____		Opened 1115 P.M.	
3968' @								Opened _____ A.M.	
Actual 120 ° F.		Pressures		Pressures		Pressures		Bypass 1415 P.M.	
		Field		Office		Field		Office	
Initial Hydrostatic		1886		1904		1907		Reported _____	
								Minutes _____	
First Period Flow Initial		8		18		23		Computed _____	
Flow Final		67		73		80		Minutes _____	
Closed in		1311		1324		1327		30 30	
								60 60	
Second Period Flow Initial		70		82		93		_____	
Flow Final		126		128		140		30 31	
Closed in		1308		1315		1324		68 67	

Third Period Flow Initial								_____	
Flow Final								_____	
Closed in								_____	

Final Hydrostatic		1880		1886		1900		_____	

Casing perms. _____ Bottom choke _____ Surf. temp _____ °F Ticket No. 085525
Gas gravity _____ Oil gravity _____ GOR _____
Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

[illegible]

Gauge No. 514			Depth 3939'				Clock No. ???			12 hour	Ticket No. 085525				
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	8	.000		67	.000	70	.000		126					
1	.0335	19	.0269		1246	.0410**	79	.0740***		1278					
2	.0670	29	.0539		1274	.0752	89	.1010		1287					
3	.1005	39	.0808		1285	.1094	98	.1279		1291					
4	.1340	48	.1077		1291	.1436	107	.1548		1294					
5	.1675	59	.1347		1297	.1778	116	.1818		1297					
6	.2010	67	.1616		1300	.2120	126	.2087		1299					
7			.1885		1302			.2356		1301					
8			.2154		1304			.2626		1302					
9			.2424		1306			.2895		1303					
10			.2693		1307			.3164		1305					
11			.2962		1309			.3433		1305					
12			.3232		1310			.3703		1306					
13			.3501		1310			.3972		1307					
14			.3770		1311			.4241		1308					
15			.4040		1311			.4510		1308					

Gauge No. 376			Depth 3970'			Clock No. ???			12 hour					
0	.000	23	.000		80	.000	93	.000		140				
1	.0335	32	.0268		1255	.0403**	95	.0744***		1293				
2	.0670	42	.0536		1287	.0738	104	.1014		1301				
3	.1005	52	.0804		1299	.1074	112	.1285		1306				
4	.1340	61	.1072		1307	.1409	122	.1555		1310				
5	.1675	71	.1340		1312	.1745	130	.1825		1313				
6	.2010	80	.1608		1316	.2080	140	.2096		1315				
7			.1876		1319			.2366		1317				
8			.2144		1321			.2637		1319				
9			.2412		1322			.2907		1320				
10			.2680		1324			.3177		1321				
11			.2948		1325			.3448		1321				
12			.3216		1326			.3718		1322				
13			.3484		1327			.3989		1323				
14			.3752		1327			.4259		1324				
15			.4020		1327			.4530		1324				
Reading Interval		5	4			5			4			Minutes		

REMARKS:

* = 6 minute interval.

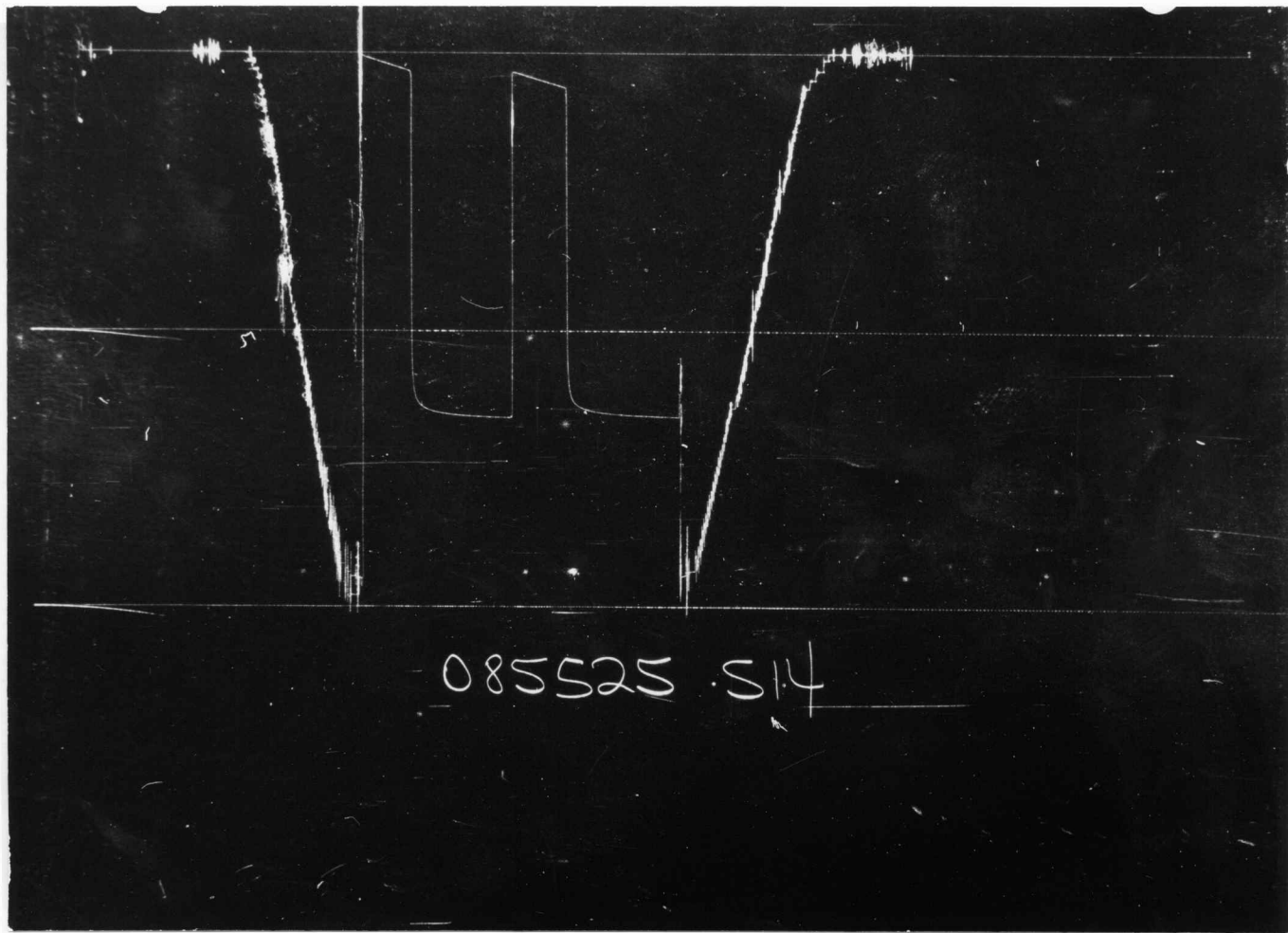
** = 11 minute interval.

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	5.75"	2.75"	1'	3800'
Reversing Sub				
Water Cushion Valve				
Drill Pipe	4 1/2"	3.826"	2820'	
Drill Collars Weight Pipe...	4 1/2"	2.764"	1112'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	5'	3928'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	3933'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	2.25"	4'	3939'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	6'	3954'
Distributor				
Packer Assembly	6.75"	1.53"	4'	3960'
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"	8'	
HT-500 Temp.	5"	2.25"	1'	3968'
Blanked-Off B.T. Running Case	5"	2.44"	4'	3970'
Total Depth				3973'

TEMPERATURE
RECORDER
CHART

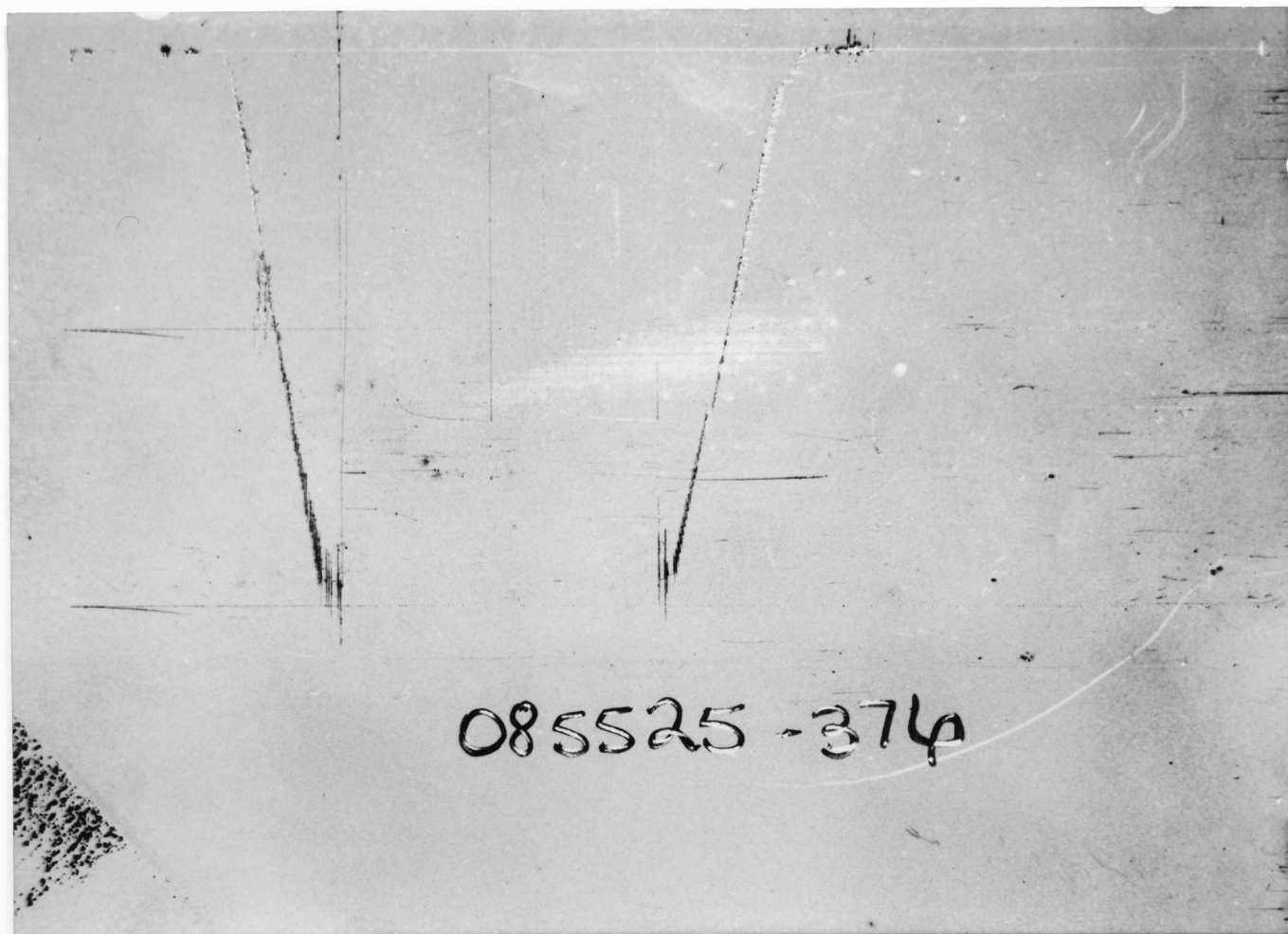


10° each circle



PRESSURE

TIME



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

KANSAS

Casing perfs. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 085920
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED

[illegible]

Gauge No. 514			Depth 3975'			Clock No. ????			12 hour	Ticket No. 085926					
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	128	.000		713	.000	732	.000		1125					
1	.0206	324	.0068		1279	.0142	768**	.0068		1306					
2	.0412	484	.0135		1293	.0498	867	.0137		1310					
3	.0618	592	.0203		1301	.0853	952	.0205		1312					
4	.0824	669	.0271		1305	.1209	1019	.0273		1314					
5	.1030	713	.0339		1309	.1564	1077	.0341		1316					
6			.0406		1312	.1920	1125	.0410		1318					
7			.0474		1313			.0478		1319					
8			.0542		1315			.0546		1320					
9			.0610		1317			.0615		1321					
10			.0677		1319			.0683		1322					
11			.0948		1324			.1161		1324					
12			.1219		1326			.1639		1328					
13			.1490		1329			.2117		1331					
14			.1761		1331			.2595		1332					
15			.2100		1334			.3210		1334					

Gauge No.		376	Depth		4046'	Clock No.		????	hour	12					
0	.000	148	.000		756	.000	785	.000		1153					
1	.0206	310	.0067		1303	.0139	809**	.0067		1335					
2	.0412	484	.0134		1319	.0487	901	.0135		1340					
3	.0618	610	.0201		1327	.0836	985	.0202		1343					
4	.0824	687	.0268		1332	.1184	1052	.0270		1346					
5	.1030	756	.0335		1337	.1532	1110	.0337		1348					
6			.0403		1341	.1880	1153	.0405		1350					
7			.0470		1344			.0472		1352					
8			.0537		1347			.0540		1353					
9			.0604		1349			.0607		1354					
10			.0671		1351			.0674		1355					
11			.0939		1355			.1147		1358					
12			.1208		1359			.1619		1363					
13			.1476		1362			.2091		1364					
14			.1744		1364			.2563		1365					
15			.2080		1365			.3170		1367					

Reading Interval 3 * 5 *** Minutes

REMARKS: * FIRST 10 READINGS = 1 MINUTE EACH - NEXT 4 READINGS = 4 MINUTES EACH AND THE LAST READING = 5 MINUTES.

** INTERVAL = 2 MINUTES. *** FIRST 10 READINGS = 1 MINUTE EACH - NEXT 4 READINGS = 7 MINUTES EACH AND THE LAST READING = 9 MINUTES.

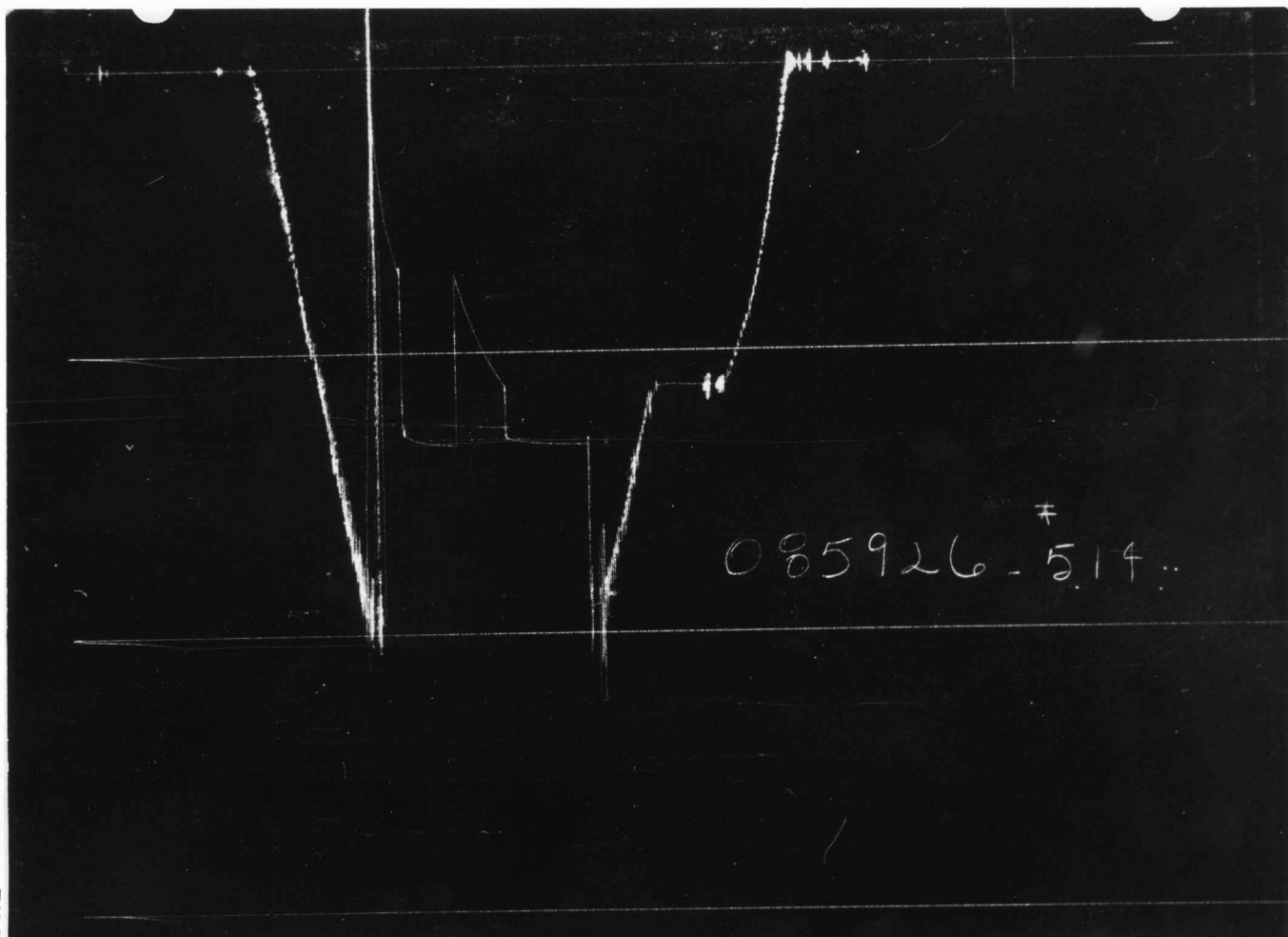
	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	5.75"	2.75"	1'	3836'
Reversing Sub				
Water Cushion Valve				
Drill Pipe	4 $\frac{1}{2}$ "	3.826"	2851'	
* Drill Collars * WEIGHT PIPE	4 $\frac{1}{2}$ "	2.764"	1112'	
Handling Sub & Choke Assembly	5"	.87"	5'	3964'
Dual CIP Valve				
Dual CIP Sampler	5"	.75"	5'	3969'
Hydro-Spring Tester				
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	2.25"	4'	3975'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	6'	3990'
Distributor				
Packer Assembly	6.75"	1.53"	4'	3996'
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"	49'	
HT-500 Clock	5"	2.25"	1'	4045'
Blanked-Off B.T. Running Case	5"	2.44"	4'	4046'
Total Depth				4050'

TEMPERATURE
RECORDER
CHART

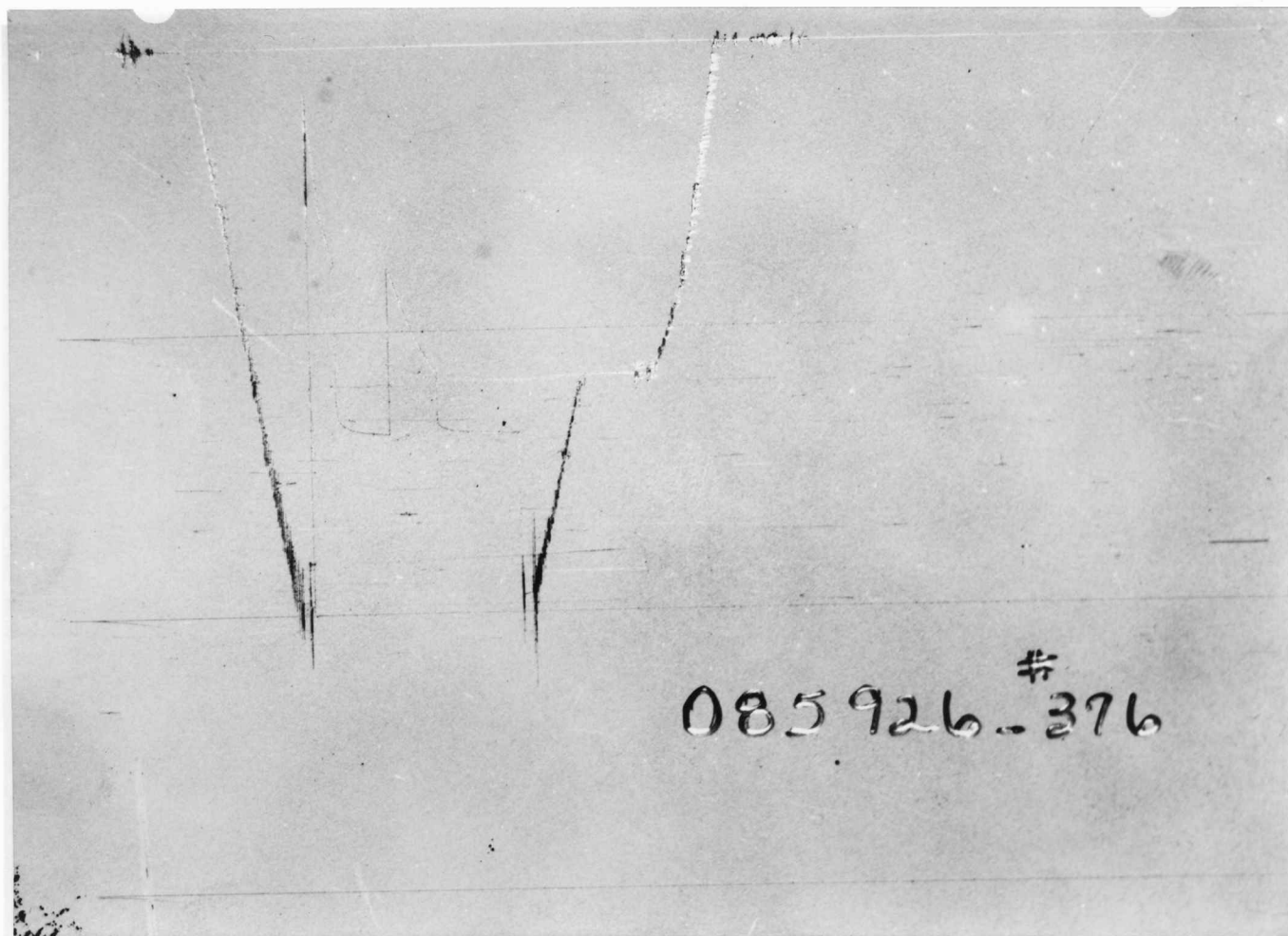


10° each circle

PRESSURE



TIME



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

Casing perms. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 085927
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

[illegible]

Gauge No. 514			Depth 4047'			Clock No. -			12 hour		Ticket No. 085927				
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	10	.000		151	.000	165	.000		340					
1	.0143	50	.0070		847*	.0343	195	.0348		1124**					
2	.0286	72	.0209		1088	.0687	228	.0557		1167					
3	.0429	88	.0348		1161	.1030	260	.0766		1193					
4	.0572	105	.0488		1197	.1373	288	.0974		1210					
5	.0715	120	.0627		1221	.1711	314	.1183		1223					
6	.0857	136	.0766		1236	.2060	340	.1392		1234					
7	.1000	151	.0906		1250			.1601		1244					
8			.1045		1259			.1810		1250					
9			.1184		1267			.2018		1256					
10			.1323		1273			.2227		1262					
11			.1463		1279			.2436		1266					
12			.1602		1284			.2645		1270					
13			.1741		1288			.2854		1273					
14			.1881		1291			.3062		1278					
15			.2020		1294			.3270		1279					

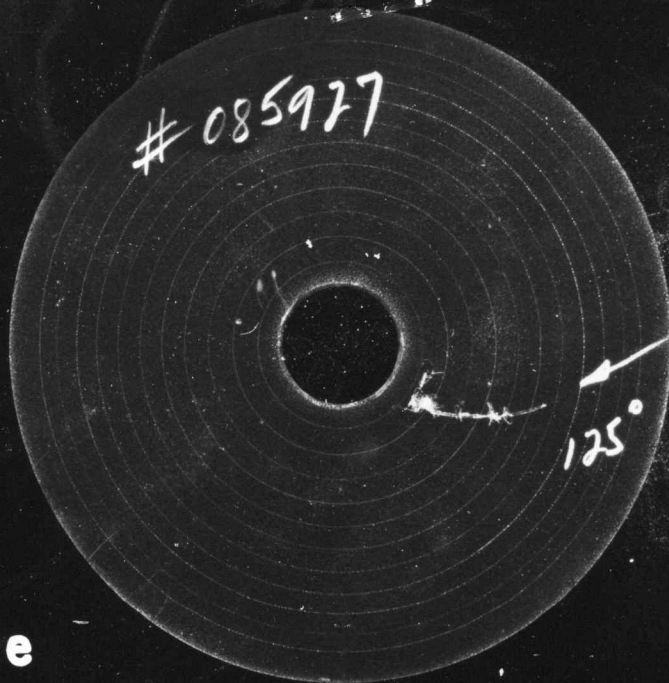
Gauge No. 376			Depth 4095'			Clock No. -			hour 12						
0	.000	330 Q	.000		185	.000	208	.000		359					
1	.0137	139	.0070		812*	.034	216	.0343		1139**					
2	.0274	139	.0209		1095	.068	248	.0548		1179					
3	.0411	141	.0348		1171	.102	278	.0753		1207					
4	.0548	146	.0488		1209	.136	307	.0959		1226					
5	.0686	157	.0627		1234	.170	336	.1165		1240					
6	.0823	174	.0766		1251	.204	359	.1370		1251					
7	.0960	185	.0906		1265			.1575		1260					
8			.1045		1275			.1781		1268					
9			.1184		1284			.1987		1275					
10			.1323		1290			.2192		1280					
11			.1463		1297			.2398		1285					
12			.1602		1302			.2603		1288					
13			.1741		1306			.2809		1292					
14			.1881		1310			.3014		1297					
15			.2020		1313			.3220		1299					
Reading Interval		2	2			5		3					Minutes		

REMARKS: *-1 minute **-5 minutes.

SPECIAL PRESSURE DATA

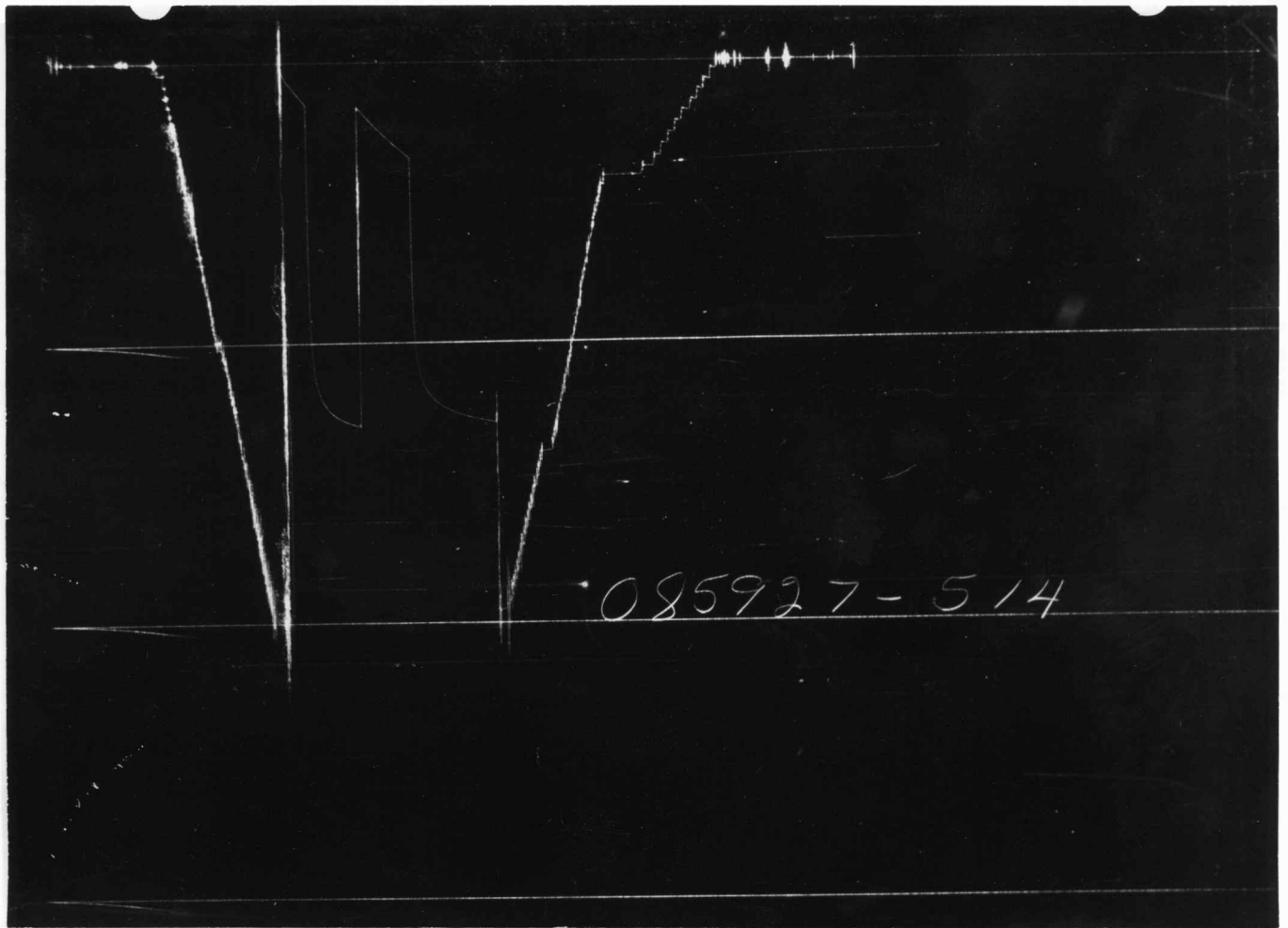
	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	5.75"	2.75"	1'	3908'
Reversing Sub				
Water Cushion Valve	4.5"	3.826"	127'	
Drill Pipe	4 1/2"	2.764"	1112' Wp	
Drill Collars				
Handling Sub & Choke Assembly	5"	.87"	5'	4036'
Dual CIP Valve				
Dual CIP Sampler	5"	.75"	5'	4041'
Hydro-Spring Tester				
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	2.25"	4'	4047'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	6'	4062'
Distributor				
Packer Assembly	6.75"	1.53"	4'	4068'
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"	25'	
	5"	2.25"	1'	4093' HT-500
Blanked-Off B.T. Running Case	5"	2.44"	4'	4095'
Total Depth				4098'

TEMPERATURE
RECORDER
CHART

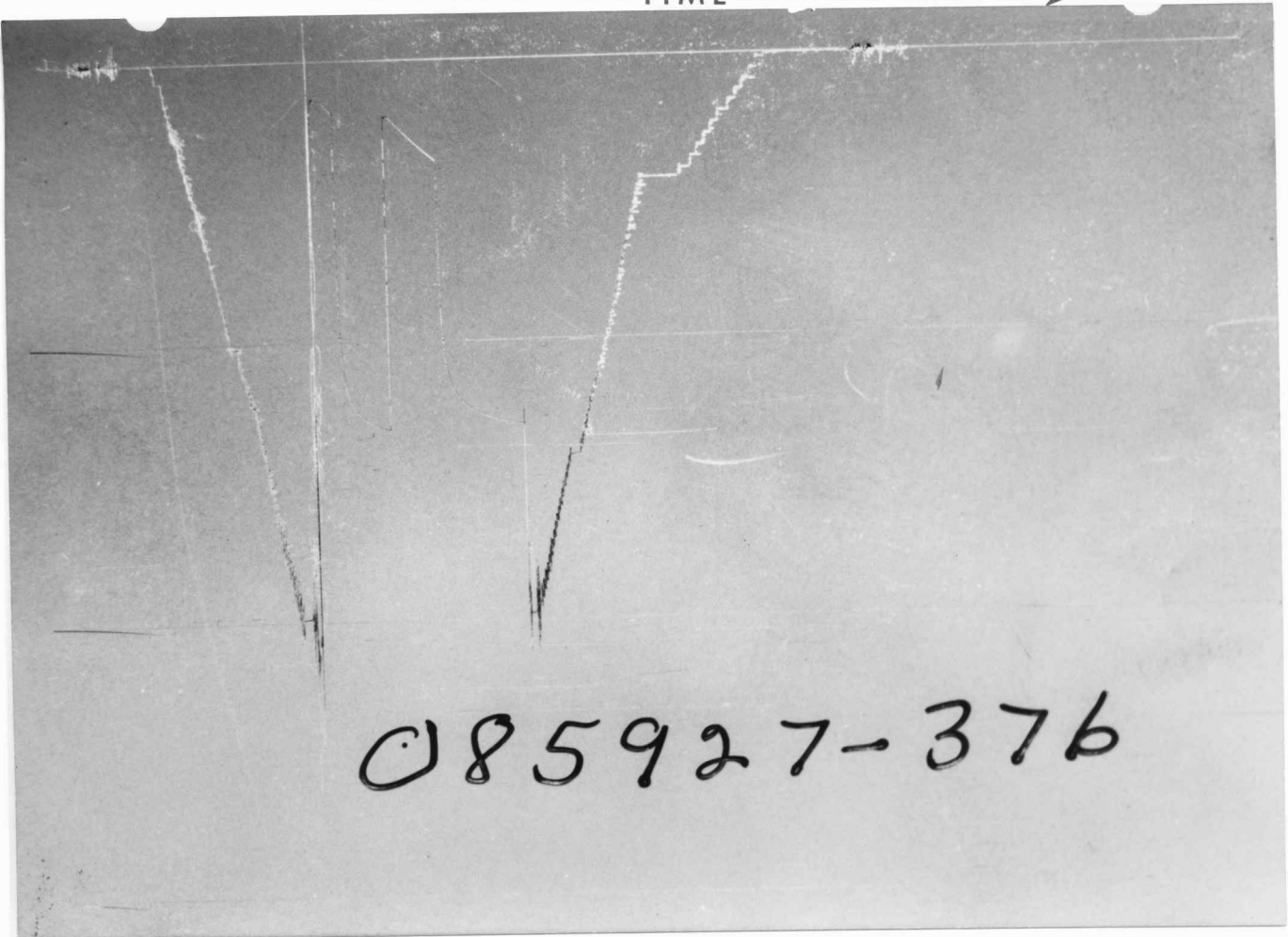
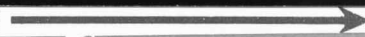


10° each circle

PRESSURE



TIME



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

FLUID SAMPLE DATA				Date 3-25-77		Ticket Number 085928	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of Job OPEN HOLE		Halliburton District OBERLIN	
Recovery: Cu. Ft. Gas _____				Tester MR. MONDERO		Witness MR. MALONE	
cc. Oil _____				Drilling Contractor RED TIGER DRILLING COMPANY BJ			
cc. Water _____				EQUIPMENT & HOLE DATA			
cc. Mud _____				Formation Tested _____			
Tot. Liquid cc. _____				Elevation _____ Ft.			
Gravity _____ ° API @ _____ °F.				Net Productive Interval _____ Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.				All Depths Measured From Kelly Bushing			
RESISTIVITY _____ CHLORIDE CONTENT _____				Total Depth 4125' Ft.			
Recovery Water @ _____ °F. _____ ppm				Main Hole/Casing Size 7 7/8"			
Recovery Mud @ _____ °F. _____ ppm				Drill Collar Length 1112' WP I.D. 2.764"			
Recovery Mud Filtrate @ _____ °F. _____ ppm				Drill Pipe Length 2972' I.D. 3.826"			
Mud Pit Sample @ _____ °F. _____ ppm				Packer Depth(s) 4111' 4117' Ft.			
Mud Pit Sample Filtrate @ _____ °F. _____ ppm				Depth Tester Valve 3990' Ft.			
Mud Weight 9.1 vis 50 sec				Cushion TYPE AMOUNT Depth Back Pres. Valve Surface Choke .25" Bottom Choke .75"			
Recovered Feet of				Meo. From Tester Valve			
Recovered Feet of							
Recovered Feet of							
Recovered Feet of							
Recovered Feet of							
Remarks UNSUCCESSFUL TEST....SEE PRODUCTION TEST DATA SHEET....				Field Area WILDCAT			
				County			
				RAWLINS			
				State KANSAS			
				City			
				Lease Owner/Company Name			
				Legal Location Sec. - Twp. - Rng.			
				Lease Name			
				Well No.			
				Test No.			
				Tested Interval			
				CITIES SERVICE OIL COMPANY			
				4117' to 4125'			
				5			
				24 5S 32W			
				A-1			
				RYAN			

Casing perms. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 085928
Gas gravity _____ Oil gravity _____ GOR _____
Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F
INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED _____

[illegible]

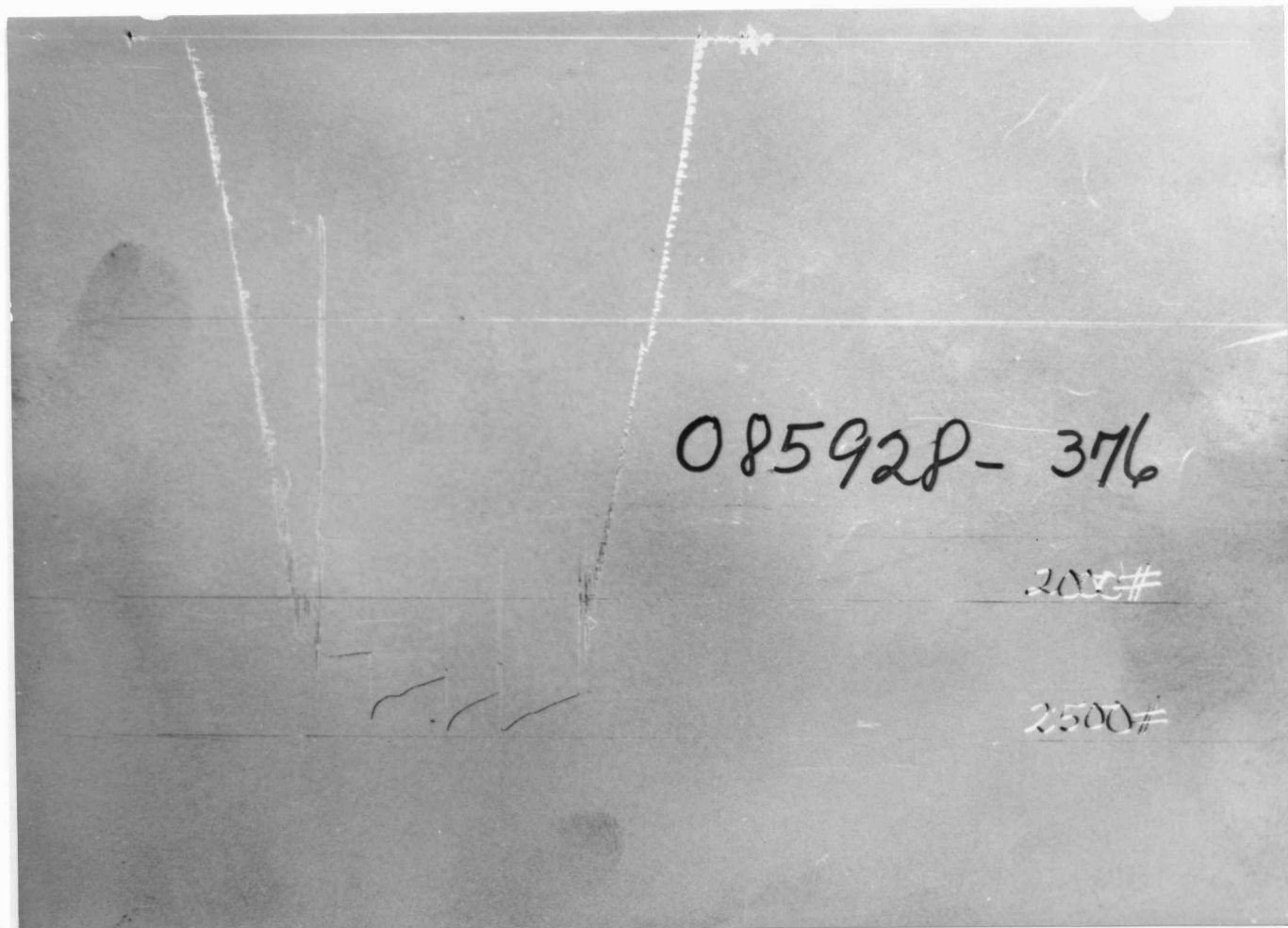
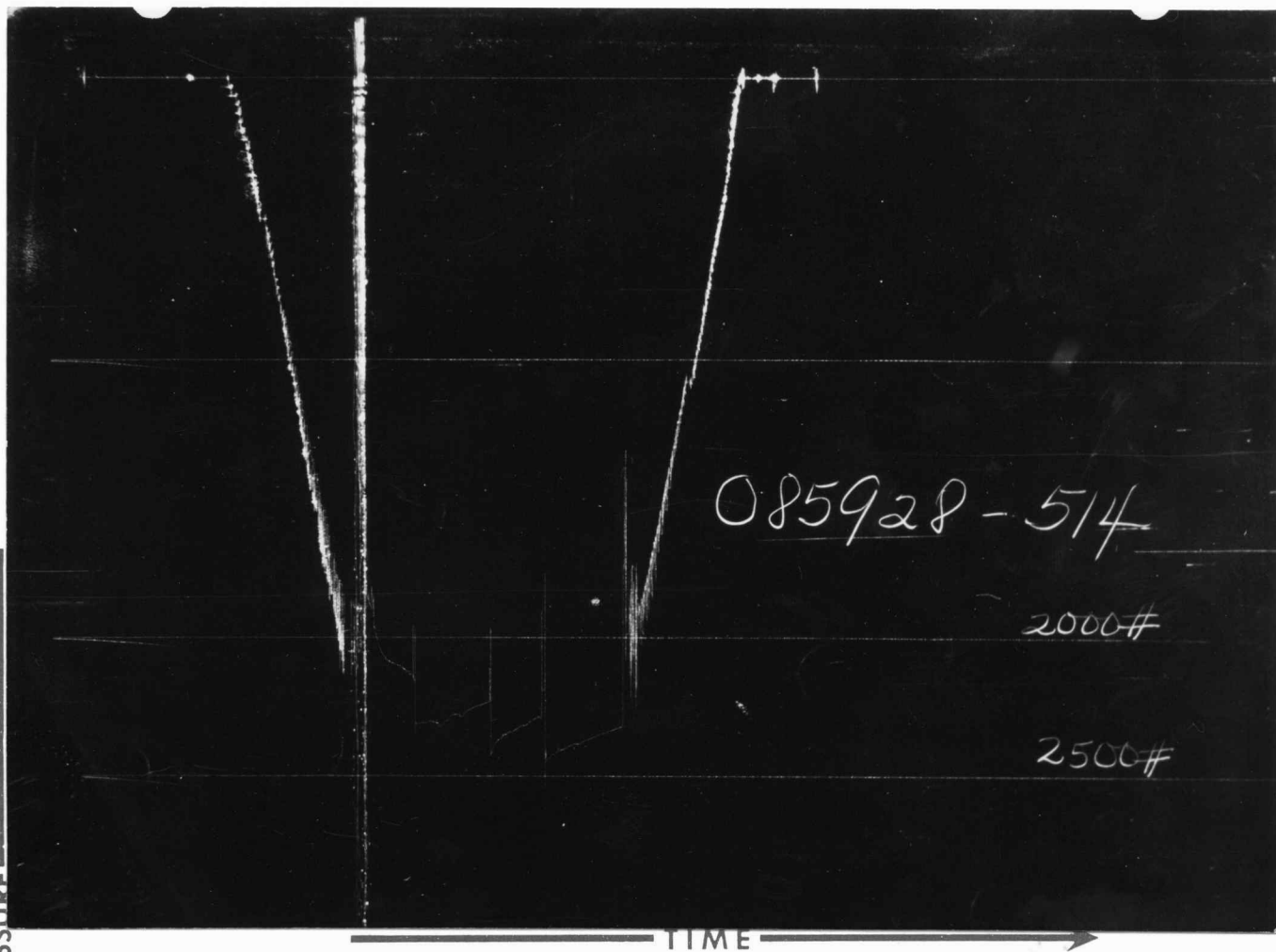
	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	5.75"	2.75"	1'	
Water Cushion Valve				3857'
Drill Pipe	4.50"	3.826"	2972'	
Drill Collars	4.50"	2.764"	1112'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	5'	3985'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	3990'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	2.25"	4'	3996'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	6'	4111'
Distributor				
Packer Assembly	6.75"	1.53"	4'	4117'
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"	3'	
HT 500	5"	2.25"	1'	4120'
Blanked-Off B.T. Running Case	5"	2.44"	4'	4122'
Total Depth				4125'

TEMPERATURE
RECORDER
CHART



10° each circle

PRESSURE



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

TIGHT HOLE

[illegible]

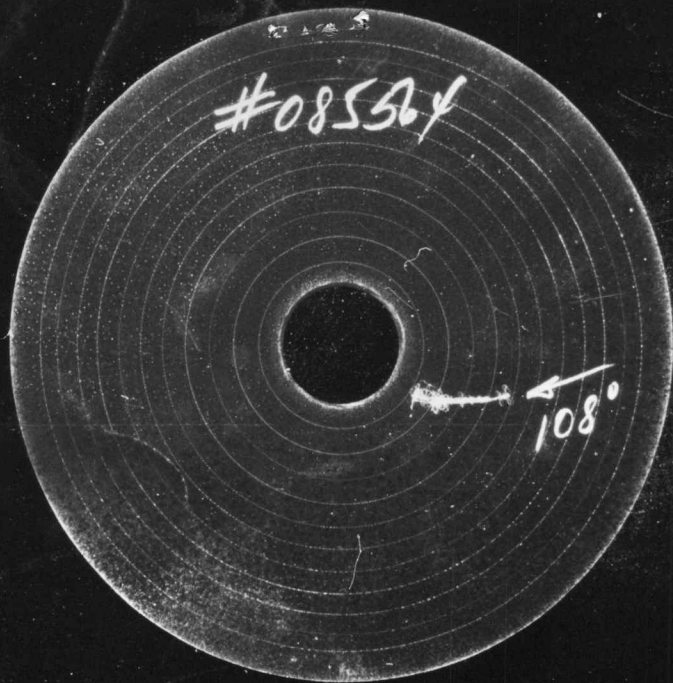
085564

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

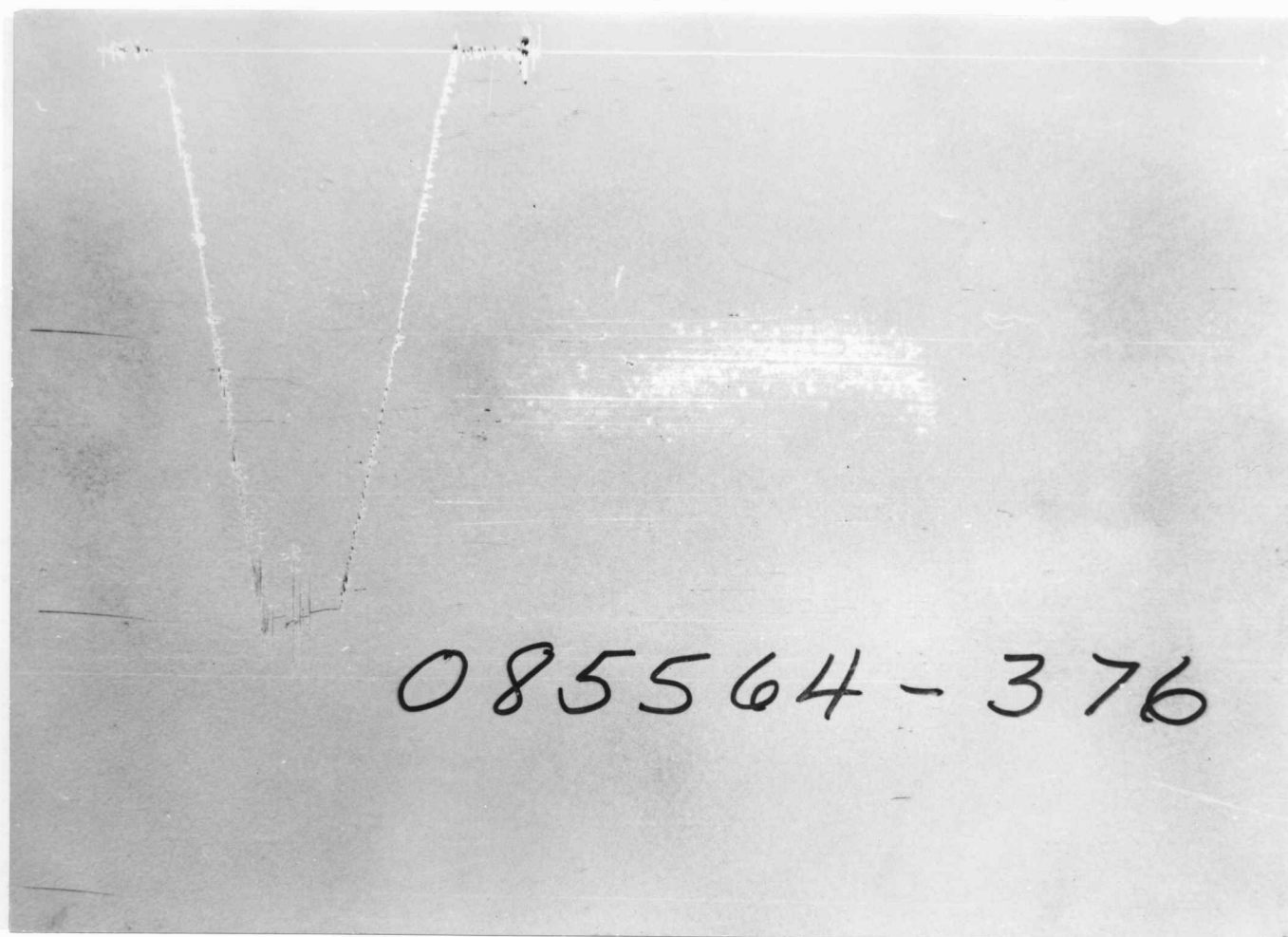
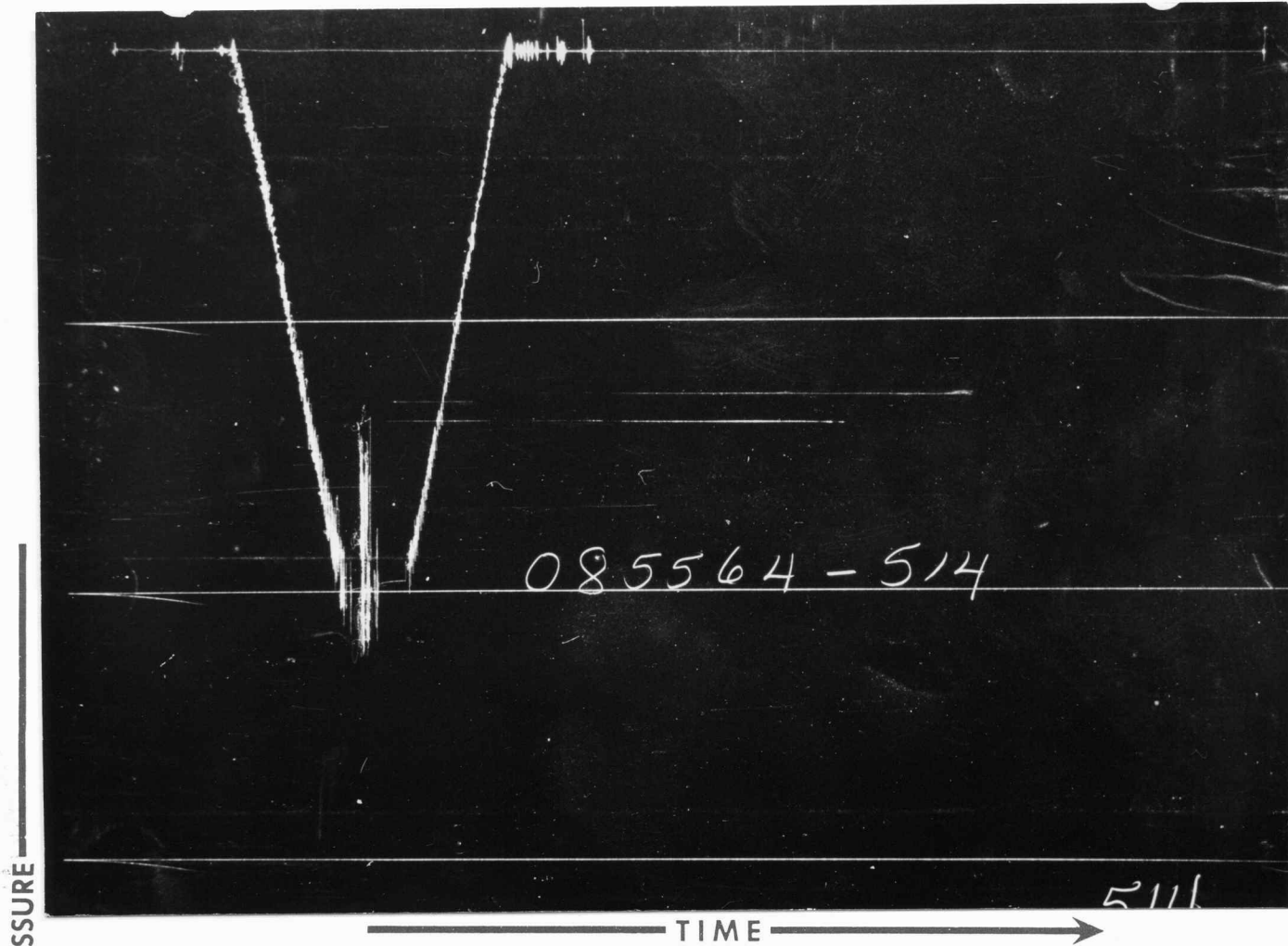
[illegible]

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	5.75"	2.5"	1'	
Reversing Sub				
Water Cushion Valve	4.5"	3.826"	2990'	
Drill Pipe	4 $\frac{1}{2}$ "	2.764"	1080' WP	
Drill Collars				
Handling Sub & Choke Assembly	5.0"	.87"	5'	4070'
Dual CIP Valve				
Dual CIP Sampler	5.0"	.75"	5'	4075'
Hydro-Spring Tester				
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5.0"	3.06"	4'	4080'
Hydraulic Jar	5.0"	1.75"	15'	
VR Safety Joint	5.0"	1.0"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.54"	6'	4092'
Distributor				
Packer Assembly	6.75"	1.54"	6'	4098'
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	5.0"	3.84"	22'	
	5.0"	3.84"	1' HT-500	
Blanked-Off B.T. Running Case	5.0"	2.44"	4'	4122'
Total Depth				4125'

TEMPERATURE
RECORDER
CHART



10° each circle



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

KANSAS

Casing perms. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 005505
Gas gravity _____ Oil gravity _____ GOR _____
Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

[illegible]

Gauge No. 514			Depth 4274'			Clock No. ???			12 hour	Ticket No. 085565					
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	19	.0000		112	.0000	123	.0000		253					
1	.0202	48	.0271		1053*	.0277	140*	.0344		1033**					
2	.0404	66	.0474		1097	.0624	166	.0620		1074					
3	.0606	81	.0677		1117	.0970	190	.0896		1096					
4	.0808	96	.0881		1132	.1317	211	.1171		1111					
5	.1010	112	.1084		1143	.1663	233	.1447		1121					
6			.1287		1153	.2010	253	.1722		1130					
7			.1490		1159			.1998		1137					
8			.1694		1164			.2273		1142					
9			.1897		1167			.2549		1147					
10			.2100		1170			.2824		1152					
11								.3100		1154					
12															
13															
14															
15															

Gauge No. 376																Depth 4317'				Clock No. ???				12 hour				
0	.0000	57	.0000		130	.0000	151	.0000		272																		
1	.0194	66	.0275		1057*	.0280	159*	.0348		1046**																		
2	.0388	82	.0481		1106	.0630	185	.0626		1090																		
3	.0582	100	.0687		1132	.0980	210	.0904		1114																		
4	.0776	115	.0893		1148	.1330	231	.1182		1129																		
5	.0970	130	.1099		1160	.1680	252	.1461		1141																		
6			.1305		1169	.2030	272	.1739		1150																		
7			.1512		1176			.2017		1157																		
8			.1718		1181			.2295		1162																		
9			.1924		1187			.2574		1167																		
10			.2130		1190			.2852		1170																		
11								.3130		1174																		
12																												
13																												
14																												
15																												

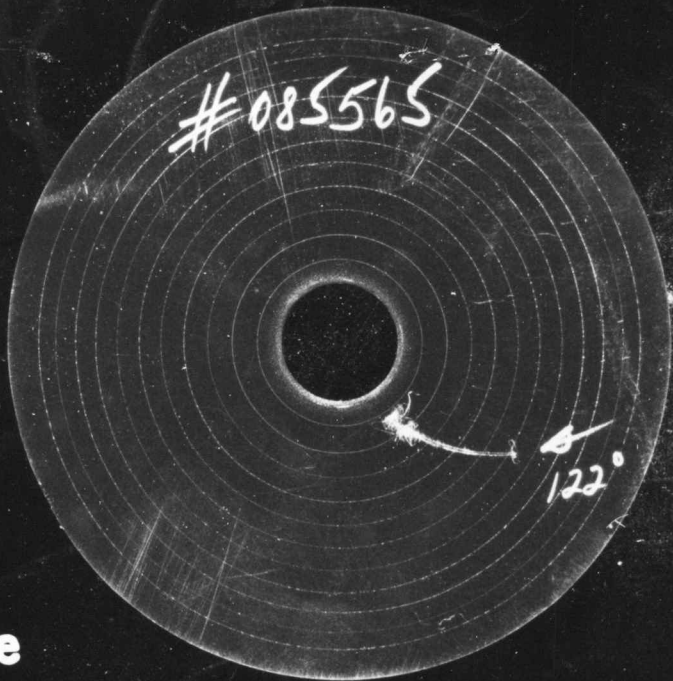
Reading Interval 3 3 5 4 Minutes

REMARKS: *Interval = 4 minutes **Interval = 5 minutes

SPECIAL PRESSURE DATA

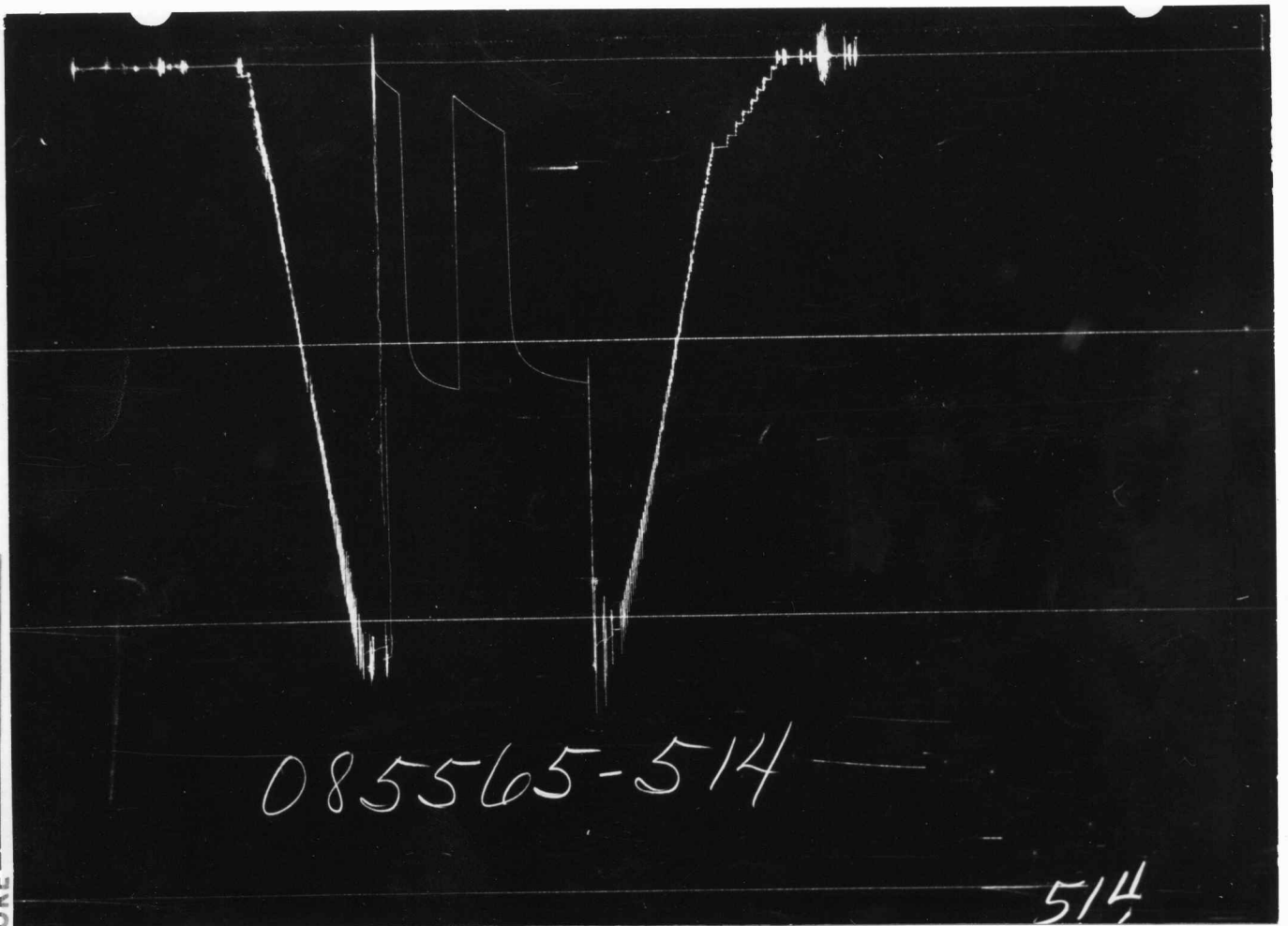
	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	5.75"	2.5"	1'	
Reversing Sub				
Water Cushion Valve				
Drill Pipe	4.5"	3.826"	3184'	
Drill Collars	4.5" WP	2.764"	1080'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	5'	4264'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4269'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4274'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly				
Distributor				
Packer Assembly	6.75"	1.54"	6'	4286'
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"	29'	
HT-500	5"	3.84"	1'	4316'
Blanked-Off B.T. Running Case	5"	2.44"	4'	4317'
Total Depth				4320'

TEMPERATURE
RECORDER
CHART



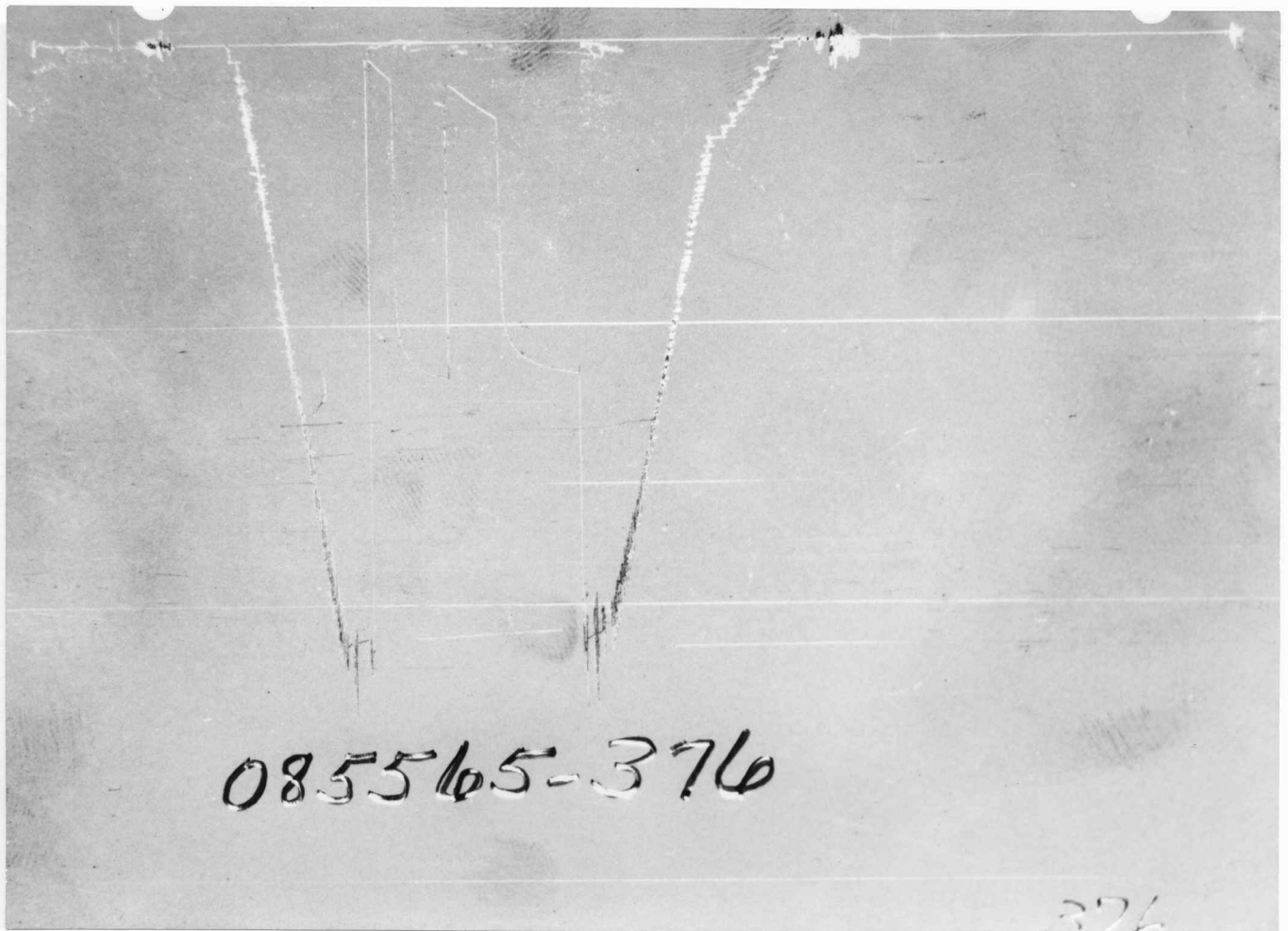
10° each circle

PRESSURE



TIME

514



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

376