

FLUID SAMPLE DATA				Date 1-1-72		Ticket Number 467965	
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.				Kind of Job OPEN HOLE		Halliburton District GREAT BEND	
				Tester MR. NUTTING		Witness MR. RICHARDSON	
				Drilling Contractor GABBERT AND JONES INCORPORATED # 3			
				EQUIPMENT & HOLE DATA			
				Formation Tested Howard			
				Elevation _____ Ft.			
				Net Productive Interval 45' Ft.			
				All Depths Measured From Kelly Bushing			
				Total Depth 3490' Ft.			
				Main Hole/Casing Size 7 7/8"			
				Drill Collar Length 340' I.D. 2.37"			
				Drill Pipe Length 3081' I.D. 3.826"			
				Packer Depth(s) 3445' Ft.			
				Depth Tester Valve 3433' Ft.			
		RESISTIVITY		CHLORIDE CONTENT			
Recovery Water		_____ @ _____ °F. _____ ppm					
Recovery Mud		_____ @ _____ °F. _____ ppm					
Recovery Mud Filtrate		_____ @ _____ °F. _____ ppm					
Mud Pit Sample		_____ @ _____ °F. _____ ppm					
Mud Pit Sample Filtrate		5 @ _____ °F. _____ ppm					
Mud Weight		10 vis 33 cp					
TYPE		AMOUNT		Depth Back Pres. Valve		Surface Choke	
Cushion				Ft.		Bottom Choke 3/4"	
Recovered		450 Feet of salt water					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks Opened tool for 10 minute first flow with a fair blow. Closed tool for 30 minute first closed in pressure. Reopened tool for 59 minute second flow with a fair blow. Closed tool for 31 minute second closed in pressure.							
TEMPERATURE		Gauge No. 684		Gauge No. 528		Gauge No.	
		Depth: 3442 Ft.		Depth: 3486 Ft.		Depth: _____ Ft.	
		12 Hour Clock		12 Hour Clock		Hour Clock	
Est. _____ °F.		Blanked Off No		Blanked Off Yes		Blanked Off	
3485'						Tool _____ A.M.	
Actual 97°F.						Opened 7:52 P.M.	
		Pressures		Pressures		Tool _____ A.M.	
						Closed _____ P.M.	
		Field Office		Field Office		Reported Computed	
		1818 1892 1852				Minutes Minutes	
Initial Hydrostatic							
Flow Initial		22 43 57					
Flow Final		69 103 104					
Closed in		1243 1271 1278				10 10	
						30 30	
Flow Initial		81 103 117					
Flow Final		218 257 251				60 59	
Closed in		1186 1236 1222				30 31	
Flow Initial							
Flow Final							
Closed in							
Final Hydrostatic		1777 1892 1812					

 Legal Location
 Sec. - Twp. - Rng.

 Lease Name
 10-29-16

Well No. 1

Test No. 1

Field Area

WILDCAT

3445'-3490'

Tested Interval

County

KIOWA

State

KANSAS

MARK RICHARDSON

Lease Owner/Company Name

Gauge No.			684			Depth			3442'			Clock No.			??			12 hour			Ticket No.			467965		
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 $t + \frac{\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.		Time Defl. .000"	Log $t + \frac{\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.		Time Defl. .000"	Log $t + \frac{\theta}{\theta}$	PSIG Temp. Corr.									
0	.000	22	.000		69	.000	81		.000		218															
1	.0124	34	.0202		1126	.0664	120		.0199		1046															
2	.0248	43	.0404		1168	.1328	153		.0398		1093															
3	.0372	52	.0606		1192	.1992	182		.0597		1119															
4	.0496	60	.0808		1206	.2656	195		.0796		1135															
5	.0620	69	.1010		1217	.3320	206		.0995		1149															
6			.1212		1225	.3920*	218		.1194		1159															
7			.1414		1231				.1393		1168															
8			.1616		1236				.1592		1175															
9			.1818		1241				.1791		1181															
10			.2020		1243				.2060**		1186															
11																										
12																										
13																										
14																										
15																										

Gauge No.		528		Depth		3486'		Clock No.		??		12 hour			
0	.000	57	.000		104	.000	117	.000		251					
1	.0138	64	.0199		1150	.0668	151	.0198		1075					
2	.0276	75	.0398		1199	.1336	184	.0396		1128					
3	.0414	86	.0597		1226	.2004	214	.0594		1153					
4	.0552	94	.0796		1241	.2672	228	.0792		1171					
5	.0690	104	.0995		1252	.3340	241	.0990		1184					
6			.1194		1260	.3940*	251	.1188		1193					
7			.1393		1266			.1386		1203					
8			.1592		1272			.1584		1209					
9			.1791		1275			.1782		1215					
10			.1990		1278			.2050**		1222					
11															
12															
13															
14															
15															
Reading Interval		2		3		10		3							Minutes

Reading Interval 2 3 10 3

REMARKS: *Last interval is equal to 9 minutes. **Last = 4 minutes.



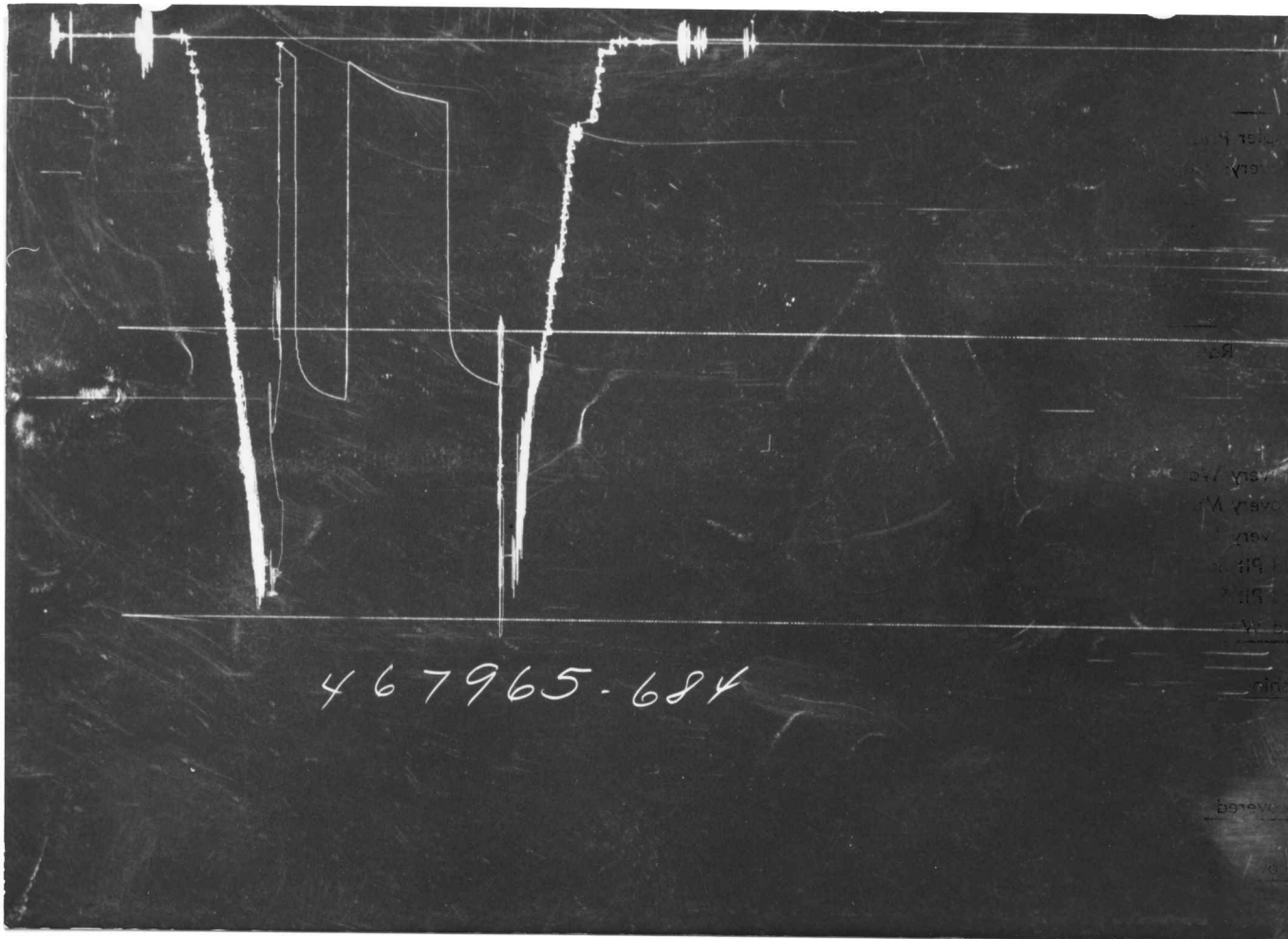
	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub	5.75"	2.75"	1'	
Water Cushion Valve				
Drill Pipe	4.5"	3.826"	3081'	
Drill Collars	6.00"	2.37"	340'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	5'	
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	3433'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.07"	4'	3442'
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	5'	3445'
Distributor				
Packer Assembly				
Flush Joint Anchor	5"	2.37"	45'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5"	3.07"	4'	3486'
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor				
Blanked-Off B.T. Running Case				

TEMPERATURE
RECORDER
CHART

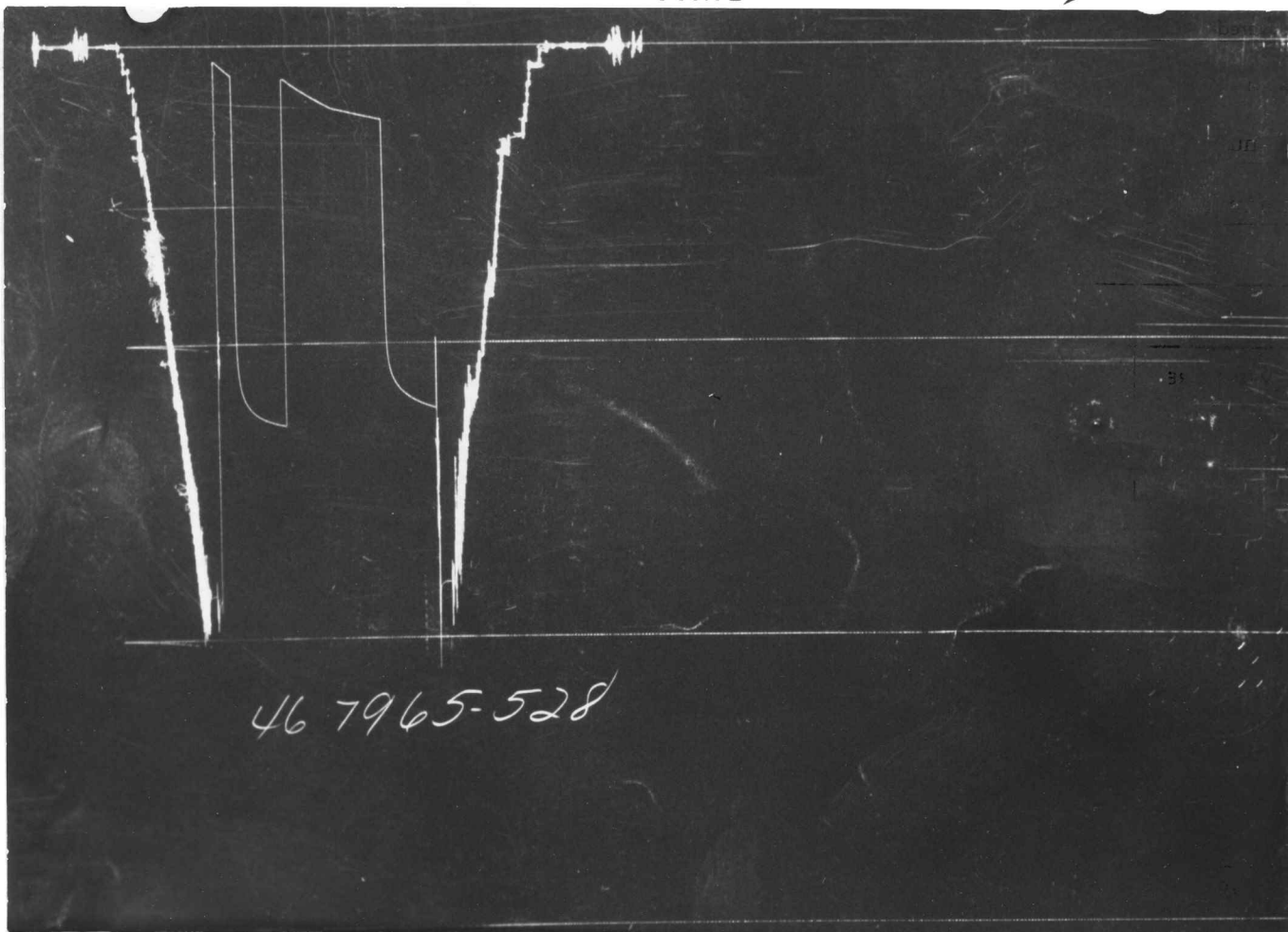


10° each circle

PRESSURE



TIME



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

FLUID SAMPLE DATA				Date 1-6-72		Ticket Number 467966	
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.				Kind of Job OPEN HOLE Halliburton District GREAT BEND		Tester MR. NUTTING Witness MR. RICHARDSON	
Drilling Contractor GABBERT & JONES #3 IC S				EQUIPMENT & HOLE DATA			
Formation Tested Mississippi Elevation _____ 2035' KB Ft. Net Productive Interval _____ Ft. All Depths Measured From Kelly Bushing Total Depth _____ 4740' Ft. Main Hole/Casing Size _____ 7 7/8" Drill Collar Length _____ 240' I.D. 2.37" Drill Pipe Length _____ 4332' I.D. 3.826" Packer Depth(s) _____ 4596' Ft. Depth Tester Valve _____ 4584' Ft.							
RESISTIVITY Recovery Water _____ @ _____ ° F. _____ ppm Recovery Mud _____ @ _____ ° F. _____ ppm Recovery Mud Filtrate _____ @ _____ ° F. _____ ppm Mud Pit Sample _____ @ _____ ° F. _____ ppm Mud Pit Sample Filtrate 12.4 @ _____ ° F. _____ ppm Mud Weight _____ 9.4 vis _____ 34 cp		CHLORIDE CONTENT _____		TYPE AMOUNT Depth Back Surface Bottom Cushion - Ft. Pres. Valve - Choke 1" Choke 3/4"			
Recovered 5 GALLONS ~~XXXX~~ of Oil				Meq. From Tester Valve			
Recovered _____ Feet of							
Recovered _____ Feet of							
Recovered _____ Feet of							
Recovered _____ Feet of							
Remarks SEE PRODUCTION TEST DATA SHEET FOR REMARKS.							
Q=Questionable							
TEMPERATURE Gauge No. 684 Depth: 4593' Ft. Est. _____ ° F. 4734' @ Actual 125 ° F.		Gauge No. 528 Depth: 4736' Ft. Blanked Off NO YES		Gauge No. _____ Depth: _____ Ft. Blanked Off _____		TIME Tool _____ Opened 9:00 P.M. Tool _____ Closed 10:43 P.M.	
Pressures Field Office Initial Hydrostatic - 2366 2414 2445 Flow Initial - 903Q 515 966Q Final - 1112 943 1259 Closed in - 1557 1547 1616 Second Period Flow Initial - 1123 1116 1205 Final - 1260 1202 1336 Closed in - - - - Third Period Flow Initial - 1040 1116 1106 Final - 1101 1202 1336 Closed in - 1553 1633 1630 Final Hydrostatic - 2363 2414 2438		Pressures Field Office Initial Hydrostatic - 2366 2414 2445 Flow Initial - 903Q 515 966Q Final - 1112 943 1259 Closed in - 1557 1547 1616 Second Period Flow Initial - 1123 1116 1205 Final - 1260 1202 1336 Closed in - - - - Third Period Flow Initial - 1040 1116 1106 Final - 1101 1202 1336 Closed in - 1553 1633 1630 Final Hydrostatic - 2363 2414 2438		Pressures Field Office Initial Hydrostatic - 2366 2414 2445 Flow Initial - 903Q 515 966Q Final - 1112 943 1259 Closed in - 1557 1547 1616 Second Period Flow Initial - 1123 1116 1205 Final - 1260 1202 1336 Closed in - - - - Third Period Flow Initial - 1040 1116 1106 Final - 1101 1202 1336 Closed in - 1553 1633 1630 Final Hydrostatic - 2363 2414 2438		Reported Computed Minutes Minutes _____ _____ 5 5 92 96 10 6 60 59 43 44	

Casing perms. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 467966
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

Date Time	1-6-72 a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
4:40 PM		1"				Opened tool with a strong blow for 1st
						flow with gas to surface in 1 minute.
4:45						Closed tool for closed in pressure.
6:17						Reopened tool with a strong blow.
6:27						Pulled tool off bottom because packing
						blew out of Chicksen.
9:00						Reopened tool with a strong blow.
9:03						Gauged 25#
9:05						Gauged 28#
9:10						Gauged 70# with spray of water
9:15						Gauged 70# with spray of water
9:20						Gauged 65# with spray of water
9:25						Gauged 60# with spray of water
9:30						Gauged 60# with spray of water
9:35						Gauged 60# with spray of water
9:40						Gauged 60# with spray of water
9:45						Gauged 60# with spray of water
9:50						Gauged 60# with spray of water
9:55						Gauged 60# with spray of water
10:00						Closed tool for closed in pressure.
10:43						Off bottom.

Gauge No. 684

Depth

4593'

Clock No. ???

12 hour

Ticket
No.

467966

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"	$\log \frac{t + \theta}{\theta}$	PSIG Temp. Corr.
0	.000	903Q	.000			1112	.000	1123				.000	1040		.000		1101
1	.033	1112	.624			1557	.0073	1124				.0669	1140		.296		1553
2							.0146	1140				.1339	1131				
3							.0219	1182				.2008	1118				
4							.0292	1222				.2678	1112				
5							.0365	1245				.3347	1106				
6							.0440	1260				.3950	1101*				
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Gauge No. 528

Depth

4736'

Clock No. ???

12 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"	$\log \frac{t + \theta}{\theta}$	PSIG Temp. Corr.
0	.000	966Q	.000			1259	.000	1205				.000	1106		.000		1190
1	.029	1259	.617			1616	.007	1209				.0663	1226		.292		1630
2							.014	1228				.1326	1219				
3							.021	1268				.1989	1205				
4							.028	1297				.2652	1200				
5							.035	1320				.3316	1195				
6							.042	1336				.3910	1190*				
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Reading Interval

1

10

Minutes

REMARKS: Q=Questionable *Last interval equal to 9 minutes

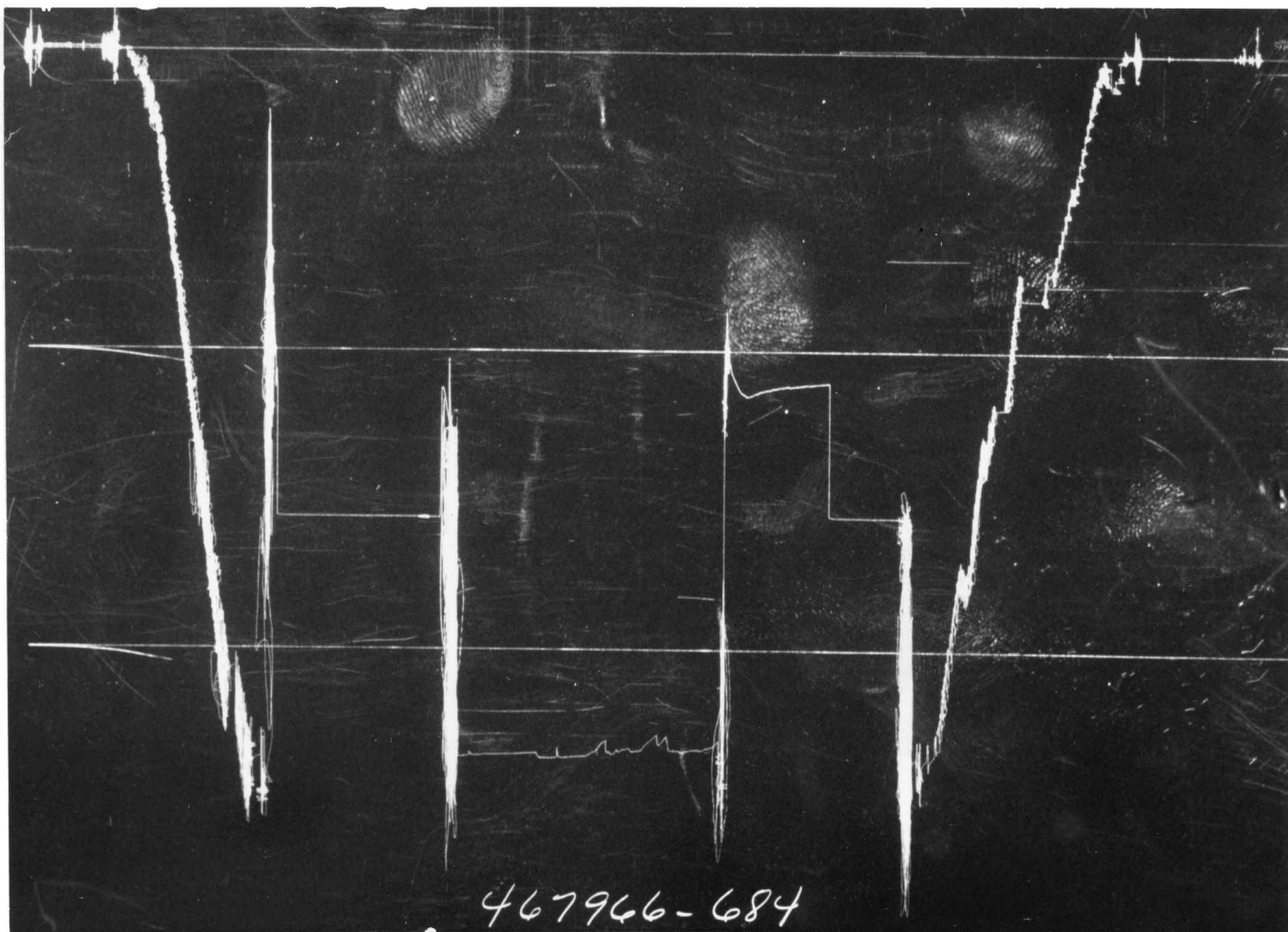
	O. D.	I. D.	LENGTH	DEPTH
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Water Cushion Valve				
Drill Pipe	4.5"	3.826"	4332'	
Drill Collars	6.00"	2.37"	240'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	5'	
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4584'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4593'
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	5'	4596'
Distributor				
Packer Assembly				
Flush Joint Anchor	5"	2.37"	144'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5"	3.06"	4'	4736'
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor				
Blanked-Off B.T. Running Case				

TEMPERATURE
RECORDER
CHART

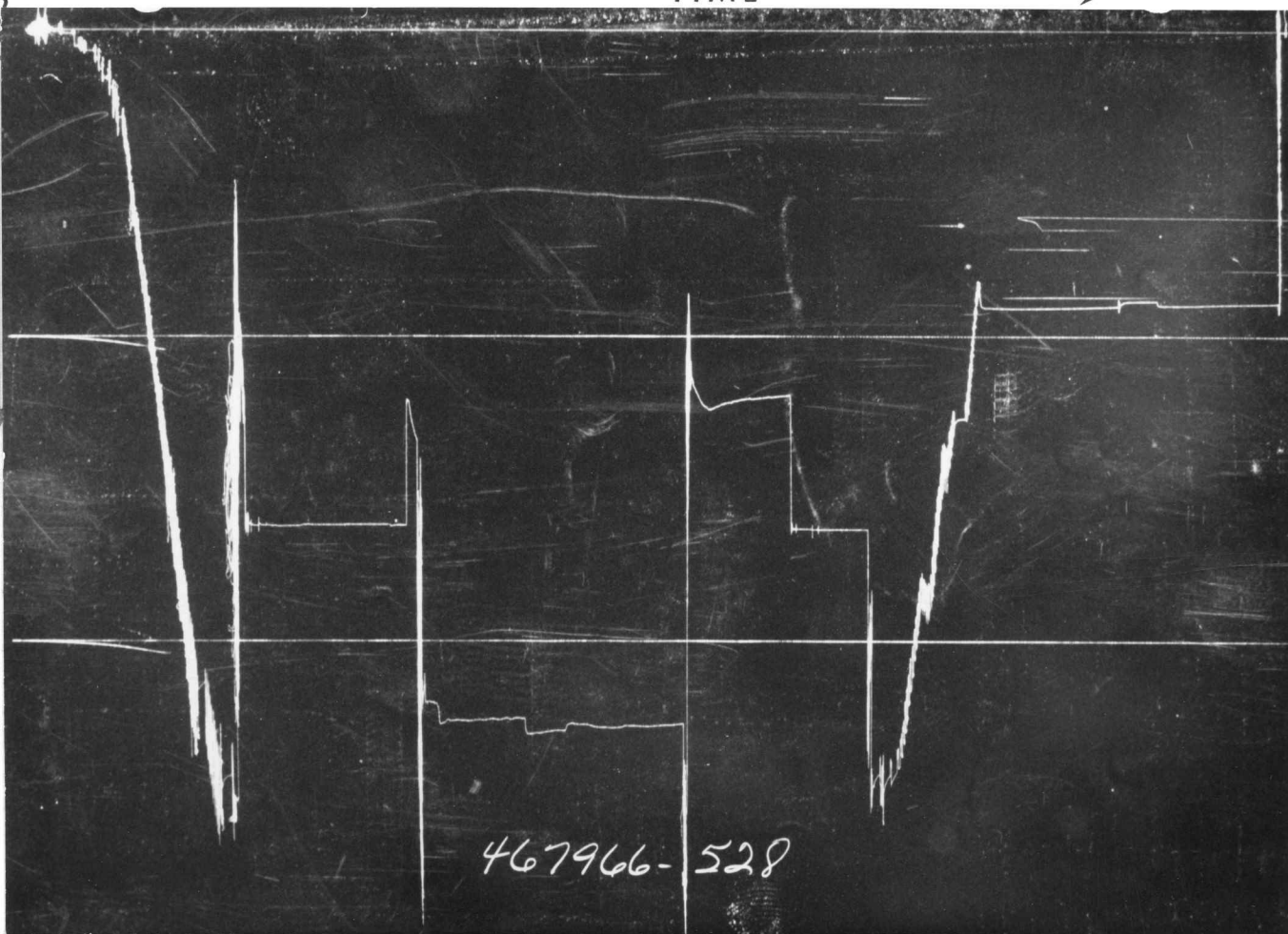


10° each circle

PRESSURE
↓



TIME →



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