

Flow Time	1st 8 Min.	2nd 90 Min.	Date	9-15-64	Ticket Number	419182 S
Closed In Press. Time	1st 37 Min.	2nd 32 Min.	Kind of Job	OPEN HOLE	Halliburton District	GREAT BEND
Pressure Readings	Field	Office Corrected	Tester	JOE M. OLIVER	Witness	--
Depth Top Gauge	4355 Ft.	no Blanked Off	Drilling Contractor	POOL BROTHERS INCORPORATED		LC
BT. P.R.D. No.	1463	12 Hour Clock	Elevation	--	Top Packer	--
Initial Hydro Mud Pressure	2270	2263	Total Depth	4383'	Bottom Packer	4366'
Initial Closed in Pres.	1347	1351	Interval Tested	4366' - 4383' (16')	Formation Tested	--
Initial Flow Pres.	5	1 13	Casing or Hole Size	7 7/8"	Casing Perfs. } Top	
	9	2 18			Casing Perfs. } Bot.	
Final Flow Pres.	14	1 14	Surface Choke	1"	Bottom Choke	7/8"
	65	2 43				
Final Closed in Pres.	1209	1203	Size & Kind Drill Pipe	4 1/2" ACME	Drill Collars Above Tester	I.D. - LENGTH ---
Final Hydro Mud Pressure	--	2236	Mud Weight	9.8	Mud Viscosity	44
Depth Cen. Gauge			Temperature	100 °F Est. °F Actual	Anchor Size & Length	ID 4 1/2" X 17" OD
BT. P.R.D. No.			Depths Mea. From	Kelly Bushing	Depth of Tester Valve	4354 Ft.
Initial Hydro Mud Pres.			TYPE AMOUNT		Depth Back Pres. Valve	-- Ft.
			Cushion	-- Ft.		
Initial Closed in Pres.			Recovered	80 Feet of oily mud.		
Initial Flow Pres.	1		Recovered	Feet of		
	2					
Final Flow Pres.	1		Recovered	Feet of		
	2					
Final Closed in Pres.			Recovered	Feet of		
Final Hydro Mud Pres.			Oil A.P.I. Gravity		Water Spec. Gravity	
Depth Bot. Gauge	4378 Ft.	yes Blanked Off	Gas Gravity		Surface Pressure	psi
BT. P.R.D. No.	396	12 Hour Clock	Tool Opened	2:40 P.M.	A.M. P.M. Tool Closed	5:30 P.M. A.M. P.M.
Initial Hydro Mud Pres.	2265	2275	Remarks Tool opened for a 8 minute first flow. with			
Initial Closed in Pres.	1371	1361	a weak blow. Closed tool for a 37 minute initial			
Initial Flow Pres.	13	1 26	closed in pressure. Reopened tool for a 90 minute			
	13	2 37	second flow with a very weak blow throughout test.			
Final Flow Pres.	17	1 26				
	61	2 52				
Final Closed in Pres.	1213	1211	Closed tool for a 32 minute final closed in pressure.			
Final Hydro Mud Pres.	2265	2247				

MOORE

Lease Name

Well No.

Test No.

Field Area

County

NESS

State

KANSAS

Owner's District

CITIES SERVICE OIL COMPANY

30-195-

FORMATION TEST DATA

4

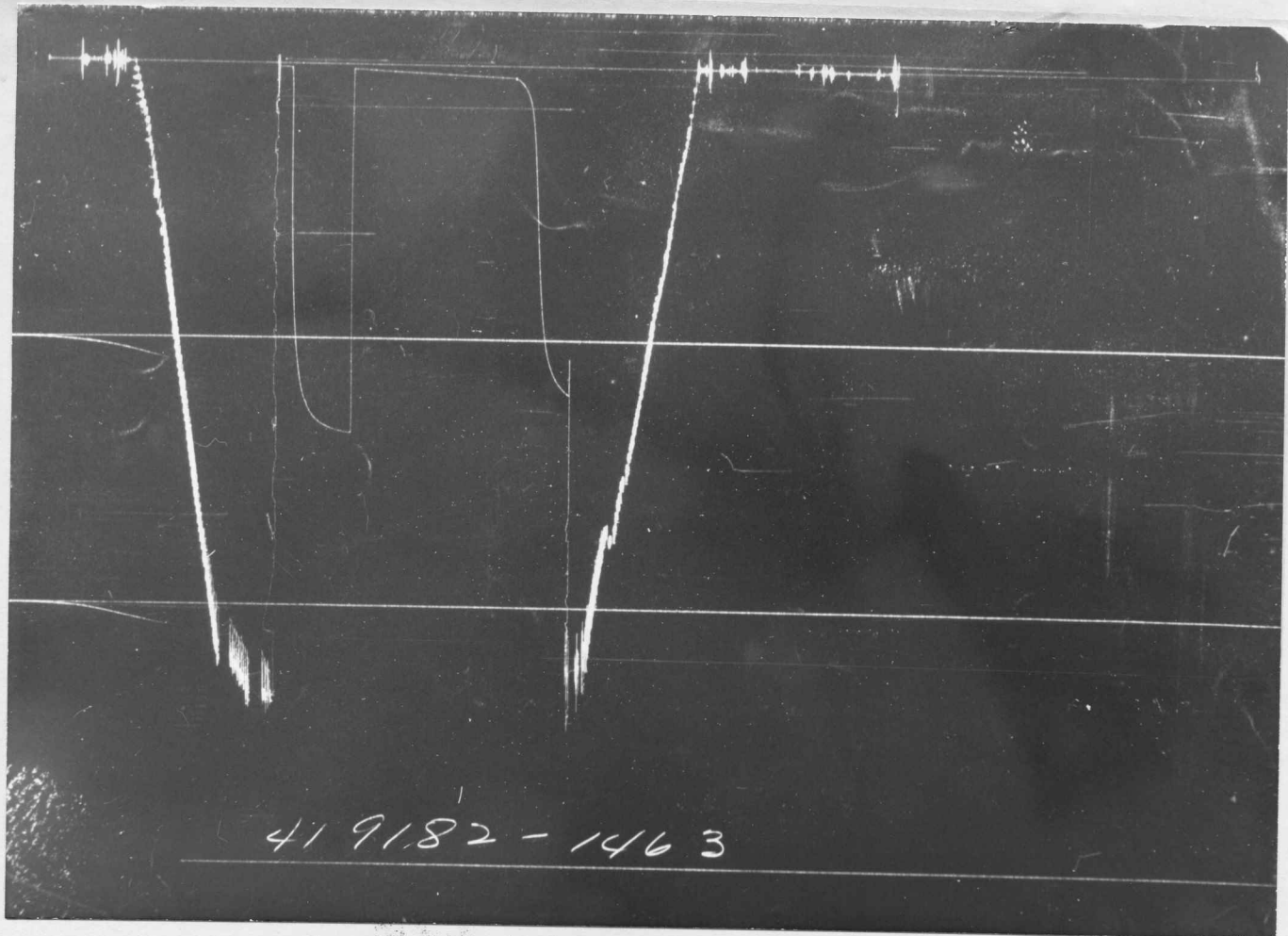
Gauge No. 1463		Depth 4355'			Clock 12 hour		Ticket No. 419182			
First Flow Period		Initial Closed In Pressure			Second Flow Period		Final Closed In Pressure			
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\phi}{\phi}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\phi}{\phi}$	PSIG Temp. Corr.	
P ₀	.000	13	.000		14	.000	18	.000		43
P ₁	.054	14	.0257		906	.1092	23	.0231		60
P ₂			.0514		1166	.2184	27	.0462		89
P ₃			.0771		1249	.3276	31	.0693		156
P ₄			.1028		1291	.4368	40	.0924		421
P ₅			.1285		1313	.5460	43	.1155		844
P ₆			.1542		1327	.6550		.1386		1037
P ₇			.1799		1336			.1617		1117
P ₈			.2056		1343			.1818		1157
P ₉			.2313		1348			.2079		1184
P ₁₀			.2570		1351			.2310		1203

Gauge No. 396		Depth 4378'			Clock 12 hour					
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\phi}{\phi}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\phi}{\phi}$	PSIG Temp. Corr.	
P ₀	.000	26	.000		26	.000	37	.000		52
P ₁	.054	26	.0257		797	.1068	34	.0223		68
P ₂			.0514		1158	.2136	37	.0446		98
P ₃			.0771		1250	.3204	42	.0669		250
P ₄			.1028		1297	.4272	45	.0892		408
P ₅			.1285		1321	.5340	49	.1115		795
P ₆			.1542		1336	.6410	52	.1338		1019
P ₇			.1799		1345			.1561		1119
P ₈			.2056		1352			.1784		1164
P ₉			.2313		1358			.2007		1192
P ₁₀			.2570		1361			.2230		1211
Reading Interval		3.7			15		3.2			Minutes
REMARKS:										

SPECIAL PRESSURE DATA

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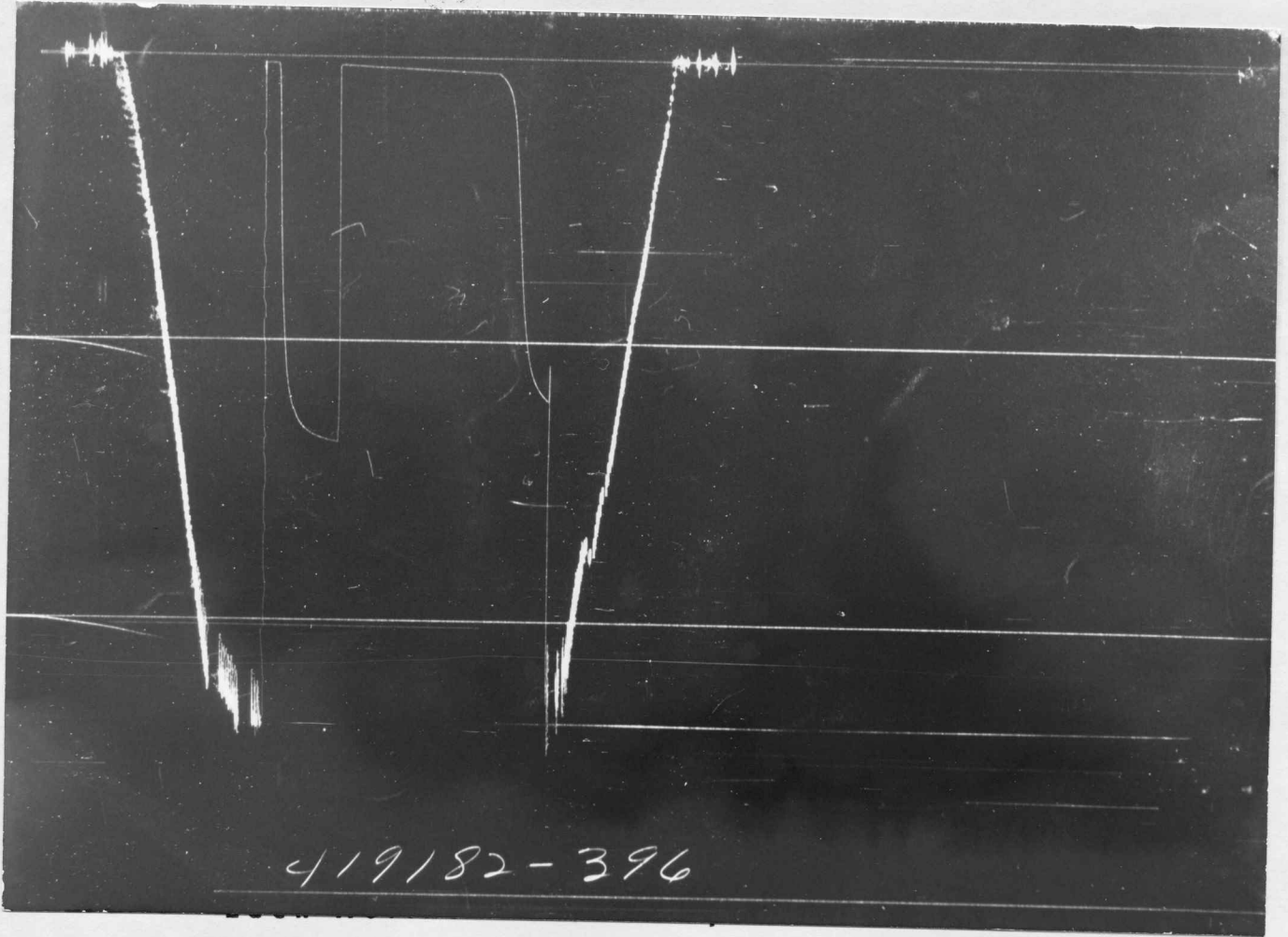
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PRESSURE
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419182-1463

← TIME →

↑
PRESSURE
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419182-396

Flow Time	1st 10 Min.	2nd 90 Min.	Date	9-16-64	Ticket Number	419183 - S	
Closed In Pres. Time	1st 30 Min.	2nd 30 Min.	Kind of Job	OPEN HOLE	Halliburton District	GREAT BEND	
Pressure Readings	Field	Office Corrected	Tester	OLIVER	Witness	-	
Depth Top Gauge	4372' Ft.	NO Blanked Off	Drilling Contractor	PEEL BROTHERS, INCORPORATED		BM	
BT. P.R.D. No.	1463	12 Hour Clock	Elevation	2275' K.B.	Top Packer	-	
Initial Hydro Mud Pressure	2289	2311	Total Depth	4398'	Bottom Packer	4383'	
Initial Closed in Pres.	1356	1350	Interval Tested	(NET PAY 15') 4383' - 4398'	Formation Tested	MISSISSIPPI	
Initial Flow Pres.	18 63	1 2	21 74	Casing or Hole Size	7 7/8"	Casing Perfs. } Top - Bot. -	
Final Flow Pres.	72 335	1 2	64 322	Surface Choke	1"	Bottom Choke	-
Final Closed in Pres.	1310	1282	Size & Kind Drill Pipe	4 1/2" ACME	Drill Collars Above Tester	I.D. - LENGTH -	
Final Hydro Mud Pressure	2289	2236	Mud Weight	9.9	Mud Viscosity	47	
Depth Cen. Gauge			Blanked Off	Temperature	100	*F Est. Anchor Size ID *F Actual & Length OD	- X -
BT. P.R.D. No.			Hour Clock	Depths Mea. From	KELLY BUSHING	Depth of Tester Valve	4371' Ft.
Initial Hydro Mud Pres.				TYPE	AMOUNT	Depth Back Pres. Valve	NONE Ft.
Initial Closed in Pres.				Cushion	NONE		
Initial Flow Pres.	1			Recovered	750'	Feet of	muddy gassy oil
Final Flow Pres.	2			Recovered	100'	Feet of	oily mud
Final Closed in Pres.	1			Recovered		Feet of	
Final Hydro Mud Pres.	2			Recovered		Feet of	
Depth Bot. Gauge	4393' Ft.	YES Blanked Off	Oil A.P.I. Gravity	-	Water Spec. Gravity	-	
BT. P.R.D. No.	396	12 Hour Clock	Gas Gravity	40.5 - 60	Surface Pressure	-	psi
Initial Hydro Mud Pres.	2282	2334	Tool Opened	12:38	A.M. Tool Closed	3:18	A.M. P.M.
Initial Closed in Pres.	1354	1353	Remarks	Tool opened for a 10 minute first flow, with a fair blow. Rotated tool for a 30 minute initial closed in pressure. Tool reopened with a good blow - increasing to a strong blow. Took a 30 minute final closed in pressure.			
Initial Flow Pres.	26 70	1 2	30 85				
Final Flow Pres.	27 339	1 2	68 327				
Final Closed in Pres.	1301	1285					
Final Hydro Mud Pres.	2282	2242					

FORMATION TEST DATA

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MOORE
D-1
2
CITIES SERVICE OIL COMPANY
30-195-
Legal Location Sec. - Twp. - Rng. 30 - 19S - 21W
Lease Name
Well No.
Test No.
Field Area
County
NESS
State
Owner's District
30-195-

Gauge No. 1163			Depth 4372'			Clock 12 hour		Ticket No. 419183		
First Flow Period			Initial Closed In Pressure			Second Flow Period		Final Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
P ₀	.000	21	.000		64	.000	74	.000		322
P ₁	.0132	26	.0209		1227	.103	134	.0211		1137
P ₂	.0264	37	.0418		1283	.206	192	.0422		1184
P ₃	.0396	46	.0627		1308	.309	227	.0633		1212
P ₄	.0528	55	.0836		1318	.412	260	.0844		1231
P ₅	.066	64	.1045		1330	.515	293	.1055		1244
P ₆			.1245		1336	.618	322	.1266		1255
P ₇			.1463		1341			.1477		1264
P ₈			.1672		1344			.1688		1272
P ₉			.1881		1348			.1899		1277
P ₁₀			.209		1350			.211		1282

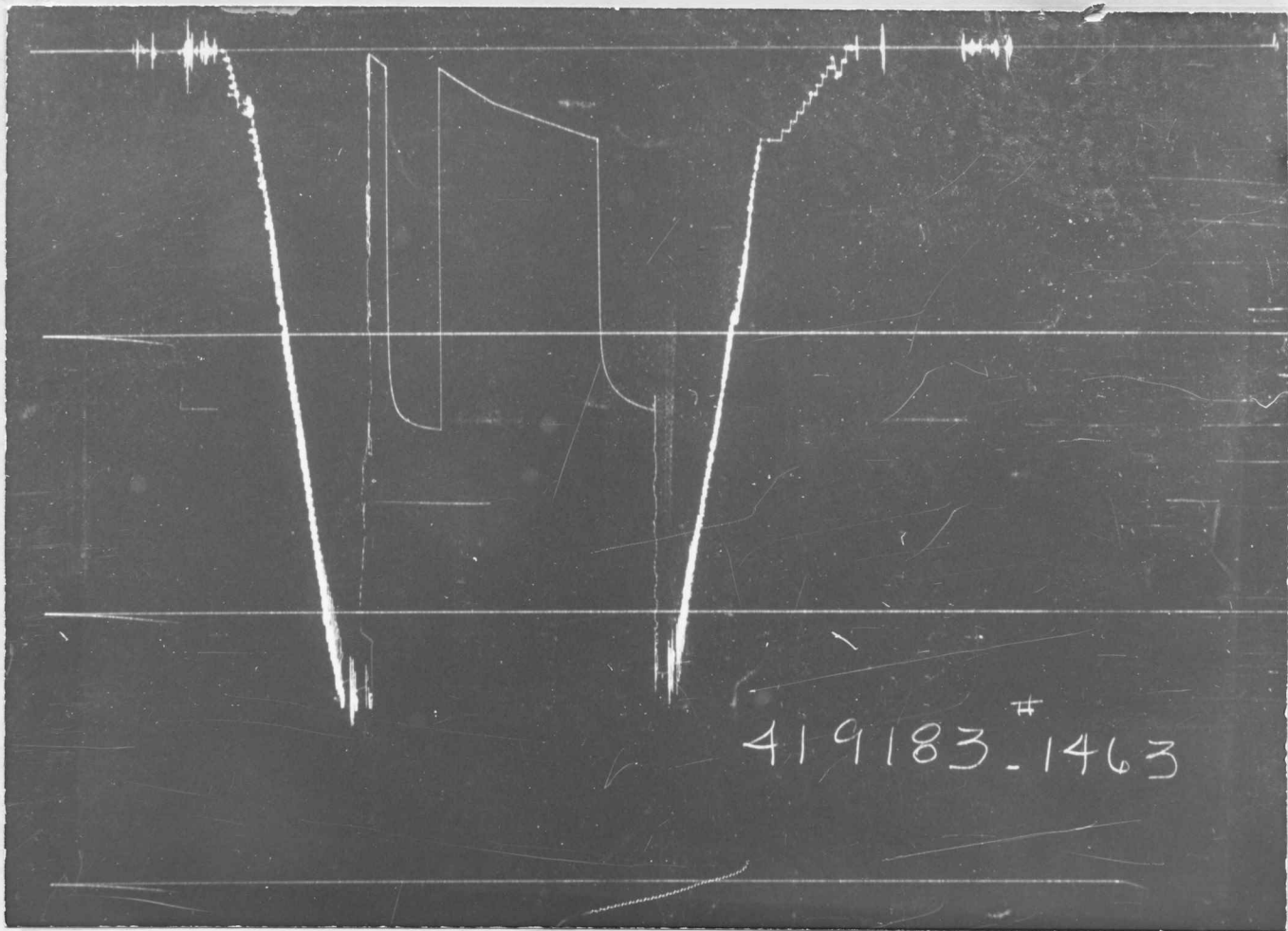
Gauge No. 396			Depth 4393'			Clock 12 hour						
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.		
P ₀	.000	30	.000		68	.000	85	.000		327		
P ₁	.0128	32	.0212		1203	.1032	137	.0211		1130		
P ₂	.0256	42	.0424		1278	.2064	195	.0422		1187		
P ₃	.0384	51	.0636		1307	.3096	230	.0633		1216		
P ₄	.0512	60	.0848		1322	.4128	263	.0844		1235		
P ₅	.064	68	.1060		1332	.5160	295	.1055		1248		
P ₆			.1272		1338	.619	327	.1266		1258		
P ₇			.1484		1344			.1477		1267		
P ₈			.1696		1348			.1688		1275		
P ₉			.1908		1351			.1899		1280		
P ₁₀			.212		1353			.211		1285		
Reading Interval		2			3			15			3	Minutes

REMARKS:

SPECIAL PRESSURE DATA

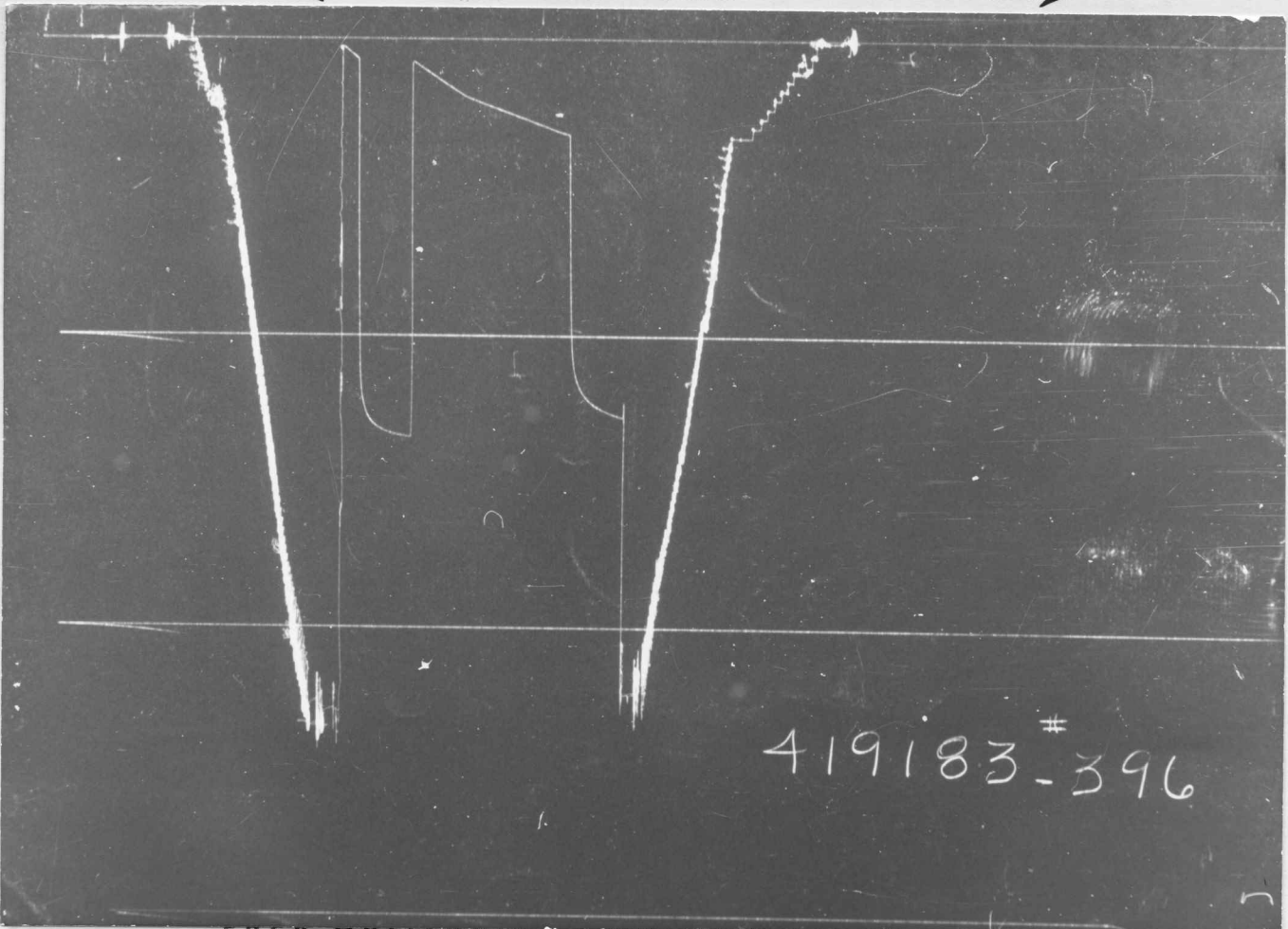
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PRESSURE
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← TIME →

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PRESSURE
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Each horizontal line equal to 1000 p.s.i.

Flow Time	1st 10	Min.	2nd 90	Min.	Date	9-17-64	Ticket Number	419184 S	Legal Location Sec. - Twp. - Rng.	MOORE		
Closed In Press. Time	1st 30	Min.	2nd 35	Min.	Kind of Job	OPEN HOLE	Halliburton District	GREAT BEND			Lease Name	D-1
Pressure Readings	Field			Office Corrected			Tester	JOE M. OLIVER				
Depth Top Gauge	4389	Ft.	no	Blanked Off	Drilling Contractor	POOL BROTHERS INCORPORATED			Field Area	30 19S 21W		
BT. P.R.D. No.	1463		12	Hour Clock	Elevation	2275' KB	Top Packer	--			Test No.	3
Initial Hydro Mud Pressure	2251		2252		Total Depth	4410'	Bottom Packer	4398'				
Initial Closed in Pres.	1347		1342		Interval Tested	4398' - 4410' (12')	Formation Tested	Mississippi	State	KANSAS		
Initial Flow Pres.	13	1	18		Casing or Hole Size	7 7/8"	Casing Perfs.	Top			Owner's District	36-19S-21
Final Flow Pres.	36	1	25		Surface Choke	1"	Bottom Choke	7/8"				
Final Closed in Pres.	117	2	112		Size & Kind Drill Pipe	4 1/2" ACME	Drill Collars Above Tester	--				
Final Hydro Mud Pressure	2251		2201		Mud Weight	9.6	Mud Viscosity	45	I.D. - LENGTH			
Depth Cen. Gauge		Ft.		Blanked Off	Temperature	100	°F Est.	Anchor Size & Length	ID	X		
BT. P.R.D. No.				Hour Clock	Depths Mea. From	Kelly Bushing	Depth of Tester Valve	4404	Ft.			
Initial Hydro Mud Pres.					TYPE AMOUNT		Depth Back Pres. Valve	--	Ft.			
Initial Closed in Pres.					Cushion	--	Recovered	180	Feet of gas.			
Initial Flow Pres.		1					Recovered	210	Feet of slightly muddy, gassy oil.			
Final Flow Pres.		1					Recovered	45	Feet of oil cut mud.			
Final Closed in Pres.							Recovered	15	Feet of muddy water.			
Final Hydro Mud Pres.					Oil A.P.I. Gravity		Water Spec. Gravity					
Depth Bot. Gauge	4405	Ft.	yes	Blanked Off	Gas Gravity		Surface Pressure		psi			
BT. P.R.D. No.	396		12	Hour Clock	Tool Opened	21:28 P.M.	A.M. P.M.	Tool Closed	3:13 P.M.	A.M. P.M.		
Initial Hydro Mud Pres.	2283		2262		Remarks	Tool opened with a weak blow for 10 minute						
Initial Closed in Pres.	1345		1345		first flow. Closed tool for a 30 minute initial							
Initial Flow Pres.	17	1	28		closed in pressure. Reopened to oil for a 90 minute							
Final Flow Pres.	34	1	32		second flow with a weak blow increased to fair blow.							
Final Closed in Pres.	122	2	119		Closed tool for a 35 minute final closed in pres-							
Final Hydro Mud Pres.	2283		2210		sure.							

FORMATION TEST DATA

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Gauge No. 1163		Depth 1387'			Clock 12 hour		Ticket No. 419184			
First Flow Period		Initial Closed In Pressure			Second Flow Period		Final Closed In Pressure			
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	
P ₀	.000	18	.000		25	.000	33	.000		112
P ₁	.0136	15	.0208		321	.1043	45	.0235		563
P ₂	.0272	17	.0416		1090	.2086	59	.0470		1055
P ₃	.0408	20	.0624		1207	.3129	72	.0705		1156
P ₄	.0544	23	.0832		1261	.3172	87	.0940		1208
P ₅	.0680	25	.1040		1289	.5215	99	.1175		1238
P ₆			.1248		1308	.6260	112	.1410		1260
P ₇		20	.1456		1320			.1645		1275
P ₈		23	.1664		1330			.1880		1287
P ₉		25	.1872		1337			.2115		1296
P ₁₀			.2080		1342			.2350		1303

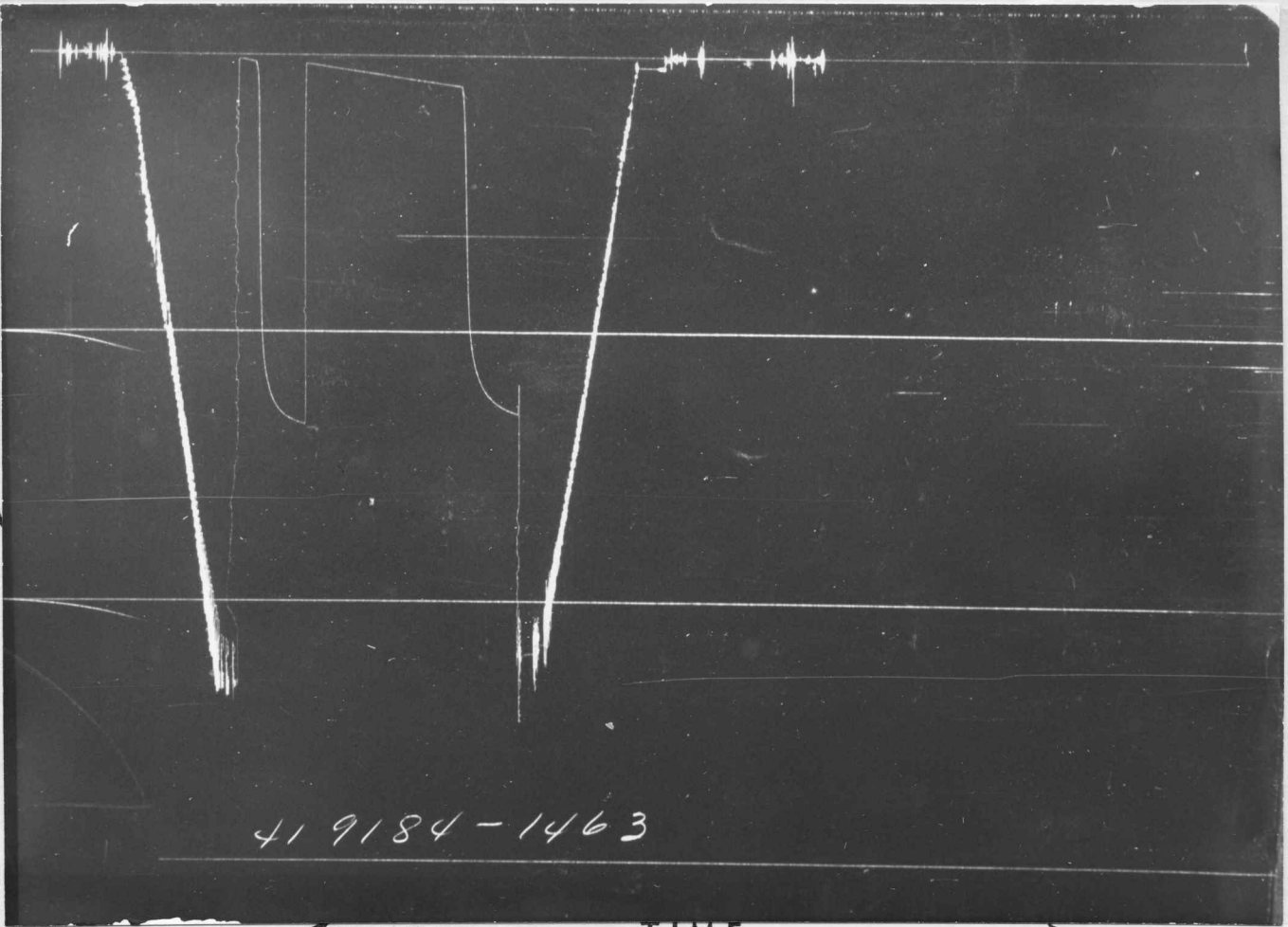
Gauge No. 396		Depth 4405'			Clock 12 hour					
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	
P ₀	.000	28	.000		32	.000	46	.000		119
P ₁	.0144	24	.0215		253	.1057	52	.0228		547
P ₂	.0288	25	.0430		1050	.2114	65	.0456		1046
P ₃	.0432	28	.0645		1201	.3171	78	.0684		1161
P ₄	.0576	30	.0860		1260	.4228	93	.0912		1212
P ₅	.0720	32	.1075		1291	.5285	105	.1140		1242
P ₆			.1290		1310	.6340	119	.1368		1264
P ₇		28	.1505		1323			.1596		1279
P ₈		30	.1720		1334			.1824		1292
P ₉		32	.1935		1341			.2052		1301
P ₁₀			.2150		1345			.2280		1308
Reading Interval	2		3		15		3.5		Minutes	

REMARKS:

SPECIAL PRESSURE DATA

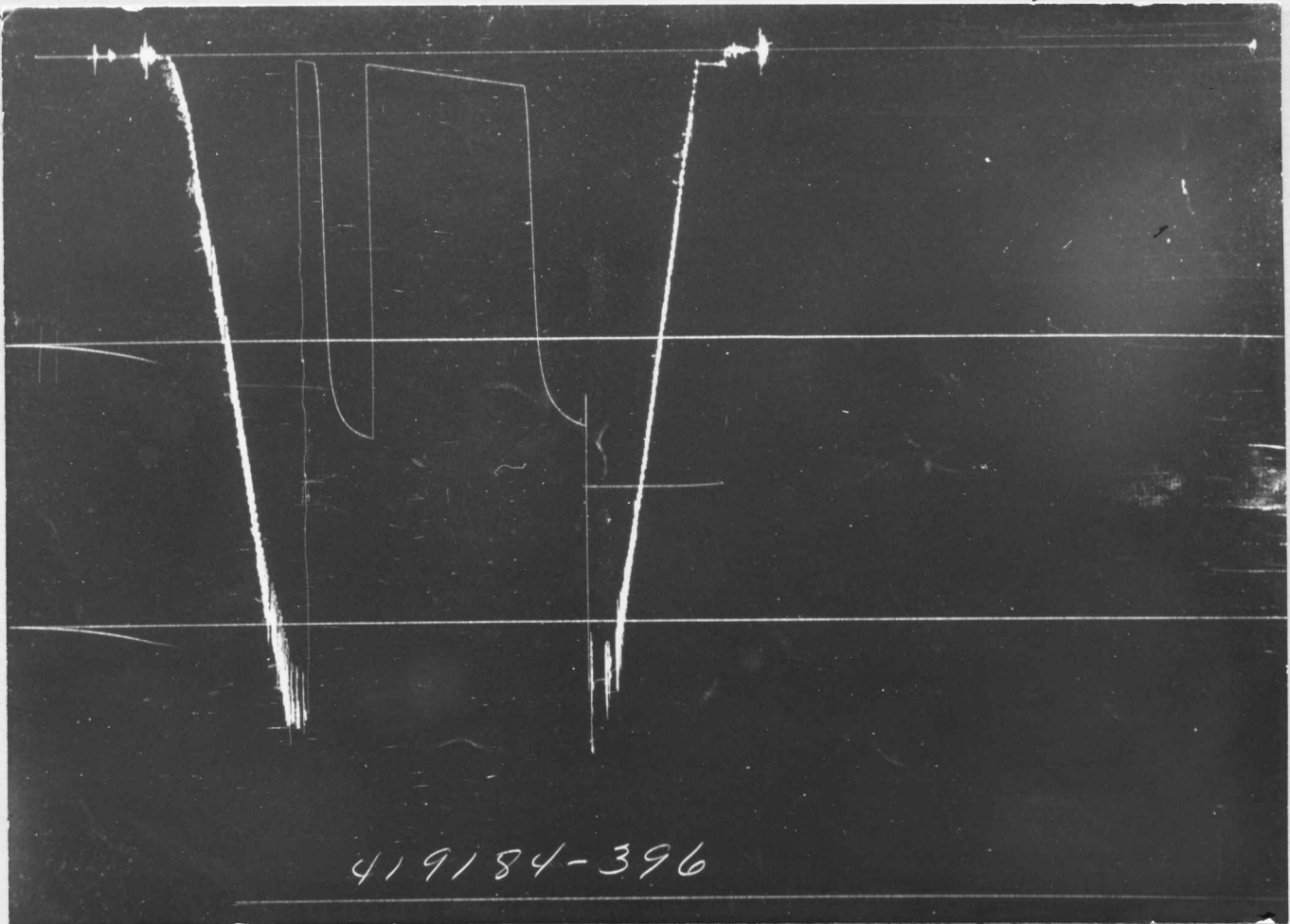
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↑
PRESSURE
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← TIME →

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PRESSURE
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Each horizontal line equal to 1000 p.s.i.