

Flow Time	1st 30 Min.	2nd 60 Min.	Date	12-5-64	Ticket Number	412009 S
Closed In Press. Time	1st 60 Min.	2nd 60 Min.	Kind of Job	OPEN HOLE	Halliburton District	GT. BEND
Pressure Readings	Field	Office Corrected	Tester	LARRY MOORE	Witness	H. CAIN J. CRAIG
Depth Top Gauge	4394 Ft.	Blanked Off No	Drilling Contractor	PEEL BROS. INC.		JM
BT. P.R.D. No.	1463	12 Hour Clock	Elevation	2246' DF	Top Packer	-
Initial Hydro Mud Pressure	2309	2300	Total Depth	4410'	Bottom Packer	4400'
Initial Closed in Pres.	1292	1295	Interval Tested	4400-4410'	Formation Tested	Mississippi
Initial Flow Pres.	9 163	1 2	Casing or Hole Size	7 7/8"	Casing Perfs.	Top Bot.
Final Flow Pres.	191 327	1 2	Surface Choke	1"	Bottom Choke	7/8"
Final Closed in Pres.	1210	1208	Size & Kind Drill Pipe	4 1/2" ACME	Drill Collars Above Tester	I.D. - LENGTH none
Final Hydro Mud Pressure	2300	2263	Mud Weight	wt. pipe 3" - 488' 10	Mud Viscosity	56
Depth Cen. Gauge	Ft.	Blanked Off	Temperature	118	Anchor Size & Length	ID 4 1/2" OD 10'
BT. P.R.D. No.		Hour Clock	Depths Mea. From	Kelly Bushing	Depth of Tester Valve	4386' Ft.
Initial Hydro Mud Pres.			TYPE AMOUNT		Depth Back Pres. Valve	Ft.
Initial Closed in Pres.			Cushion	none		
Initial Flow Pres.			Recovered	830	Feet of Gas from drill pipe	
Final Flow Pres.			Recovered	504	Feet of Free Oil	
Final Closed in Pres.			Recovered	315	Feet of Slightly muddy oil	
Final Hydro Mud Pres.			Recovered	63	Feet of Heavy oil cut mud	
Depth Bot. Gauge	4406 Ft.	Blanked Yes Off	Oil A.P.I. Gravity	38.8 @ 60°	Water Spec. Gravity	
BT. P.R.D. No.	396	12 Hour Clock	Gas Gravity		Surface Pressure	psi
Initial Hydro Mud Pres.	2301	2307	Tool Opened	8:33	Tool Closed	12:03
Initial Closed in Pres.	1293	1298	Remarks Tool opened with a good to strong blow for			
Initial Flow Pres.	26 166	1 2	a 30 minute first flow. Rotated tool for a 60			
Final Flow Pres.	192 331	1 2	minute initial closed in pressure. Reopened			
Final Closed in Pres.	1222	1210	tool with a good to strong blow for a 60 minute			
Final Hydro Mud Pres.	2283	2266	second flow. Took a 60 minute final closed in			
			pressure.			

Legal Location Sec. - Twp. - Rng. 10 20 21W
 Lease Name KRAMER
 Well No. B-1
 Test No. 1
 Field Area
 County NESS
 State KANSAS
 Lease Owner/Company Name CITIES SERVICE OIL COMPANY
 Owner's District

FORMATION TEST DATA

3

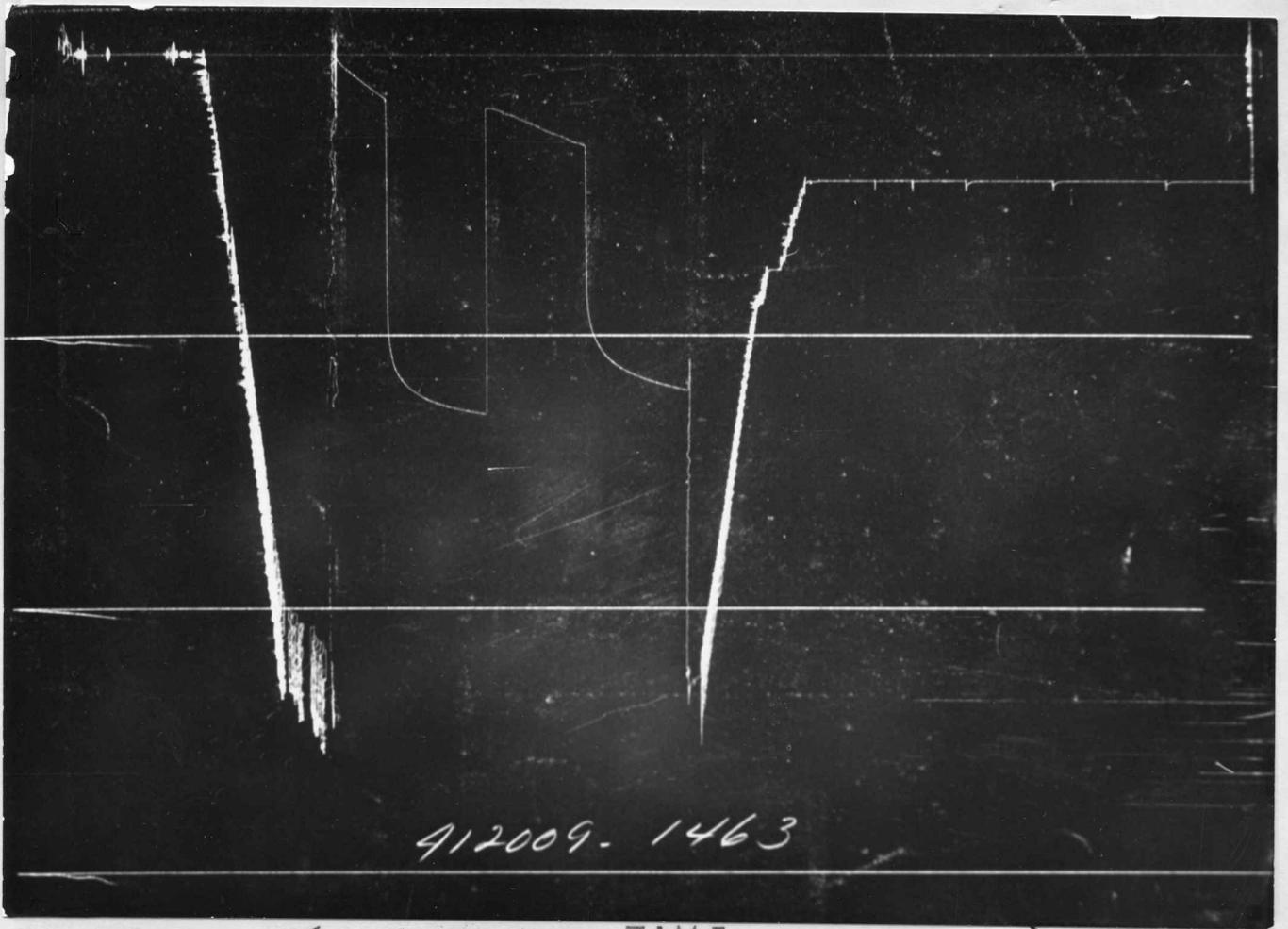
Gauge No. 1463		Depth 4394			Clock 12 hour		Ticket No. 412009			
First Flow Period		Initial Closed In Pressure			Second Flow Period		Final Closed In Pressure			
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
P ₀	.000	15	.000		162	.000	196	.000		330
P ₁	.039	51	.0394		1144	.0985	219	.0402		1030
P ₂	.078	80	.0788		1192	.1970	258	.0804		1085
P ₃	.117	108	.1182		1221	.2955	294	.1206		1117
P ₄	.156	134	.1576		1241	.3940	330	.1608		1139
P ₅	.195	162	.1970		1256			.2010		1155
P ₆			.2364		1267			.2412		1169
P ₇			.2758		1276			.2814		1181
P ₈			.3152		1283		330	.3216		1190
P ₉			.3546		1290			.3618		1199
P ₁₀			.3940		1295			.4020		1208

Gauge No. 396		Depth 4406			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	26	.000		165	.000	202	.000		331
P ₁	.0396	56	.039		1151	.099	222	.0402		1040
P ₂	.0792	85	.078		1198	.198	260	.0804		1091
P ₃	.1188	113	.117		1224	.297	296	.1206		1122
P ₄	.1584	139	.156		1244	.396	331	.1608		1143
P ₅	.1980	165	.195		1258			.2010		1159
P ₆			.234		1270			.2412		1172
P ₇			.273		1279			.2814		1184
P ₈			.312		1286		331	.3216		1194
P ₉			.351		1293			.3618		1202
P ₁₀			.390		1298			.4020		1210
Reading Interval 6		6			15		6			Minutes

REMARKS:

SPECIAL PRESSURE DATA

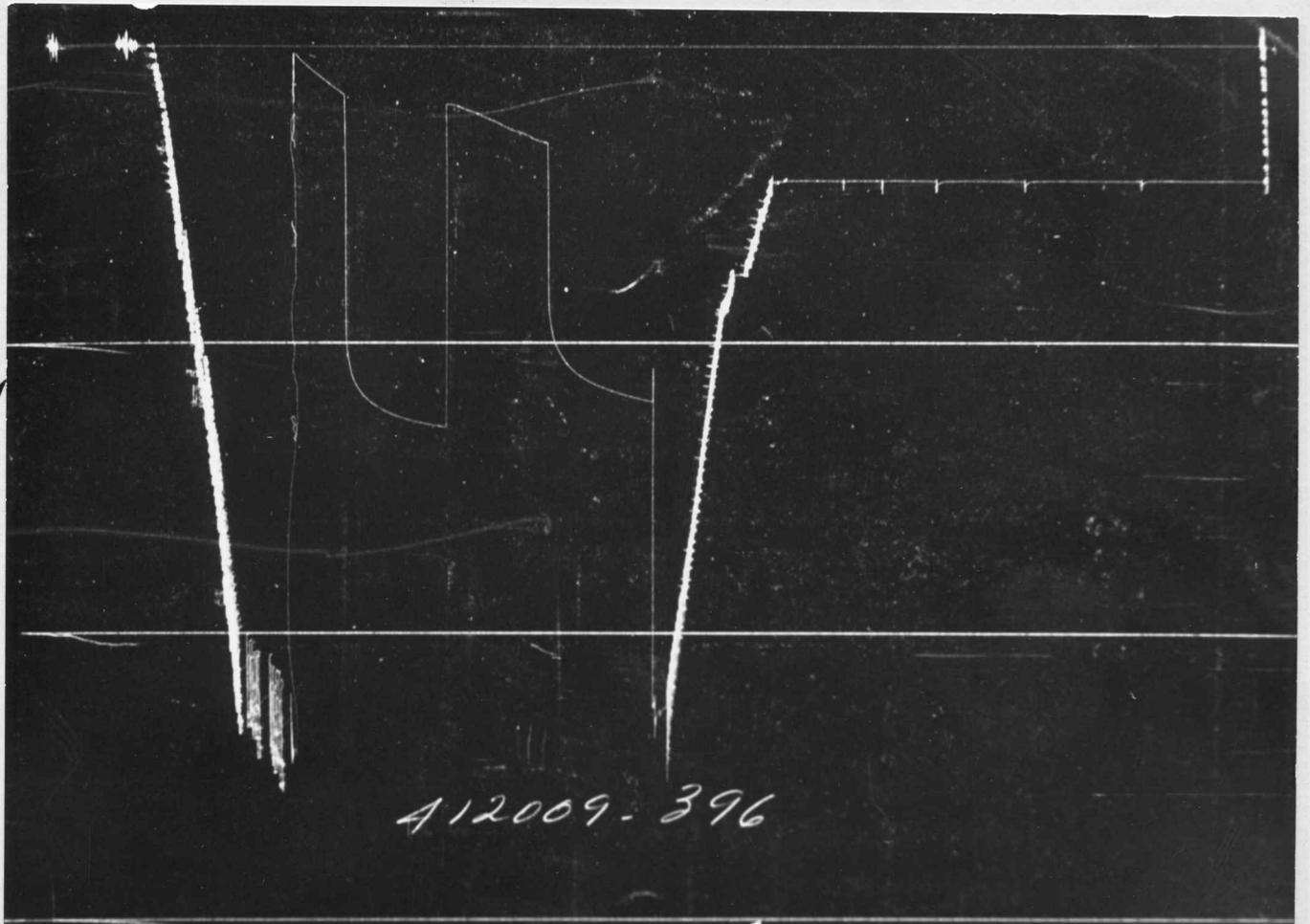
↑
PRESSURE
↓



412009-1463

← TIME →

↑
PRESSURE
↓



412009-396

Flow Time	1st 30 Min.	2nd 60 Min.	Date	12-7-64	Ticket Number	412010 - S
Closed In Press. Time	1st 45 Min.	2nd 45 Min.	Kind of Job	OPEN HOLE	Halliburton District	GREAT BEND
Pressure Readings	Field	Office Corrected	Tester	MOORE	Witness	MADDOX CRAIG
Depth Top Gauge	4404' Ft.	NO Blanked Off	Drilling Contractor	PEEL BROTHERS, INCORPORATED	ICBM	
BT. P.R.D. No.	1463	12 Hour Clock	Elevation	2246' D. F.	Top Packer	-
Initial Hydro Mud Pressure	2300	2292	Total Depth	4420'	Bottom Packer	4410'
Initial Closed in Pres.	1311	1308	Interval Tested	4410' - 4420'	Formation Tested	MISSISSIPPI
Initial Flow Pres.	9	1 10	Casing or Hole Size	7 5/8"	Casing Perfs. } Top - Bot. -	-
	82	2 91				
Final Flow Pres.	82	1 81	Surface Choke	1"	Bottom Choke	7/8"
Final Closed in Pres.	1219	1235	Size & Kind Drill Pipe	4 1/2" ACME	Drill Collars Above Tester	I.D. - LENGTH -
Final Hydro Mud Pressure	2300	2289	Mud Weight	9.9	WGHT PIPE	3" x 488'
Depth Cen. Gauge		Blanked Off	Temperature	118 °F Est. °F Actual	Anchor Size & Length	ID - OD 4 1/2" X 10'
BT. P.R.D. No.		Hour Clock	Depths Mea. From	KELLY BUSHING	Depth of Tester Valve	4396' Ft.
Initial Hydro Mud Pres.			TYPE AMOUNT	Cushion	NONE	Depth Back Pres. Valve
Initial Closed in Pres.			Recovered	60'	Feet of gas from drill pipe	
Initial Flow Pres.		1	Recovered	123'	Feet of oily gassy mud	
Final Flow Pres.		1	Recovered	416'	Feet of slightly gassy muddy oil	
Final Closed in Pres.			Recovered		Feet of	
Final Hydro Mud Pres.			Oil A.P.I. Gravity		Water Spec. Gravity	
Depth Bot. Gauge	4416' Ft.	YES Blanked Off	Gas Gravity		Surface Pressure	psi
BT. P.R.D. No.	396	12 Hour Clock	Tool Opened		A.M. P.M.	Tool Closed
Initial Hydro Mud Pres.	2301	2298	Remarks			
Initial Closed in Pres.	1319	1314	Tool opened @ 3:08 with a good blow - increasing to a strong blow for a 30 minute first flow. Tool			
Initial Flow Pres.	17	1 18	closed @ 3:38. Rotated tool for a 45 minute initial			
Final Flow Pres.	96	1 84	closed in pressure. Tool reopened @ 4:23 with a			
Final Closed in Pres.	1240	1242	strong blow. Tool closed @ 5:23. Took a 45 minute			
Final Hydro Mud Pres.	2301	2296	final closed in pressure. Came off bottom @ 6:08.			

Legal Location Sec. - Twp. - King. 10 - 20 - 21W

Lease Name KRAMER

Well No. B-1

Test No. 2

Field Area

County NESS

Lease Owner/Company Name CITIES SERVICE OIL COMPANY

State KANSAS

Owner's District

FORMATION TEST DATA

4

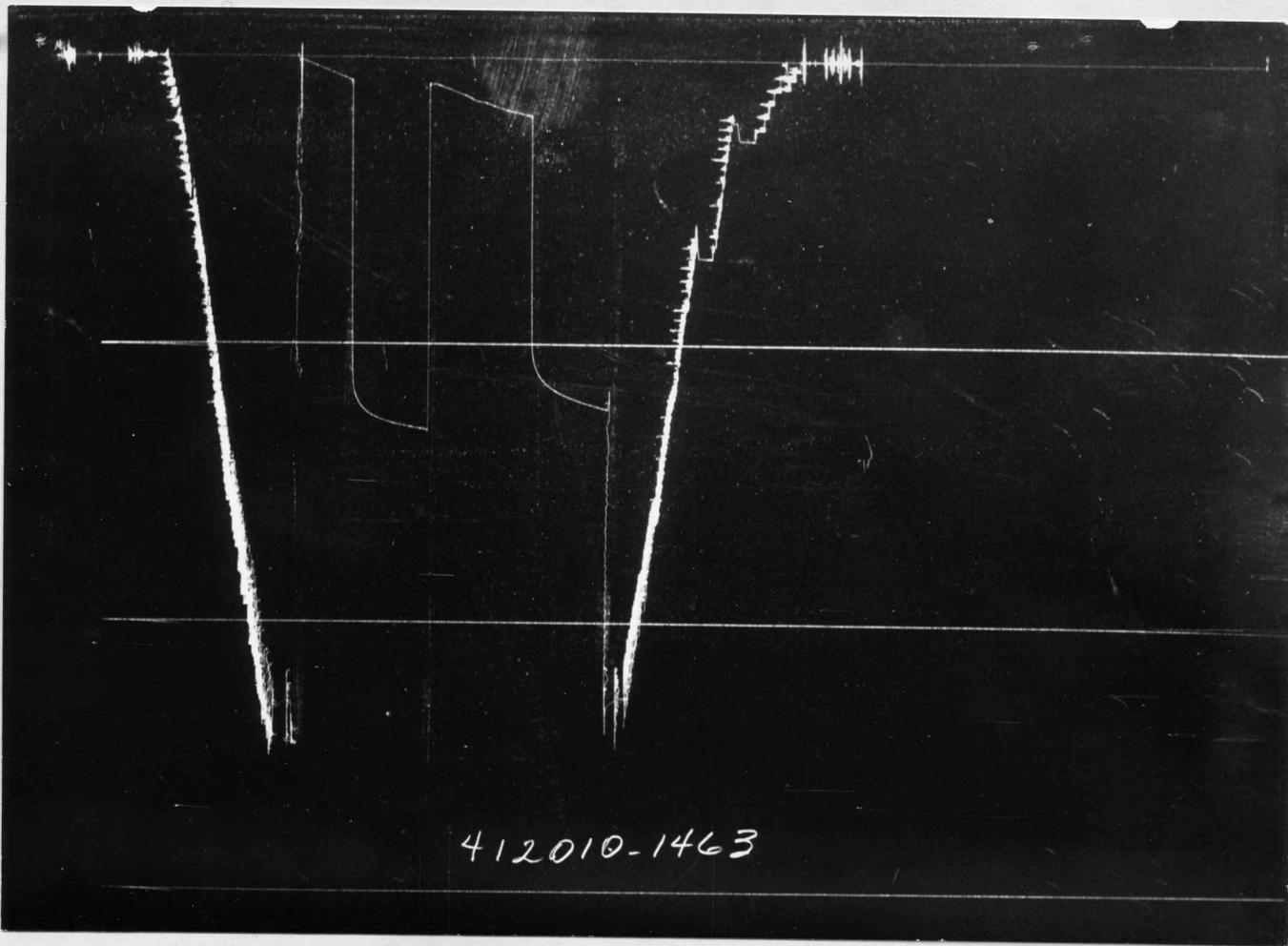
Gauge No.		1463		Depth		4404'		Clock		12 hour		Ticket No.		412010	
First Flow Period			Initial Closed In Pressure			Second Flow Period			Final Closed In Pressure						
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.					
P ₀	.000	10	.000		81	.000	91	.000		201					
P ₁	.0398	23	.0297		1217	.099	117	.030		1113					
P ₂	.0796	36	.0594		1247	.198	153	.060		1146					
P ₃	.1194	52	.0891		1264	.297	181	.090		1166					
P ₄	.1592	66	.1188		1275	.396	201	.120		1182					
P ₅	.1990	81	.1485		1283			.150		1194					
P ₆			.1782		1290			.180		1205					
P ₇			.2079		1295			.210		1213					
P ₈			.2376		1301			.240		1222					
P ₉			.2673		1305			.270		1229					
P ₁₀			.2970		1308			.300		1235					

Gauge No.		396		Depth		4416'		Clock		12 hour	
P ₀	.000	18	.000		84	.000	101	.000		207	
P ₁	.0392	29	.0294		1224	.1003	123	.0298		1124	
P ₂	.0784	43	.0588		1251	.2006	159	.0596		1156	
P ₃	.1176	57	.0882		1268	.3009	187	.0894		1175	
P ₄	.1568	71	.1176		1279	.4010	207	.1192		1189	
P ₅	.1960	84	.1470		1287			.1490		1200	
P ₆			.1764		1294			.1788		1211	
P ₇			.2058		1300			.2086		1221	
P ₈			.2352		1305			.2384		1228	
P ₉			.2646		1310			.2682		1235	
P ₁₀			.2940		1314			.2980		1242	
Reading Interval		6		4.5		15		4.5		Minutes	

REMARKS:

SPECIAL PRESSURE DATA

PRESSURE



TIME

PRESSURE

