

Flow Time	1st 30	Min.	2nd 30	Min.	Date	6-8-66	Ticket Number	381344 S
Closed In Press. Time	1st 30	Min.	2nd 30	Min.	Kind of Job	OPEN HOLE	Halliburton District	GREAT BEND
Pressure Readings	Field			Office Corrected	Tester	LARRY MOORE	Witness	MR. MADDOX MR. MC CULLON
Depth Top Gauge	4347	Ft.	Blanked Off	no	Drilling Contractor	PEEL BROTHERS DRILLING	IC SS	
BT. P.R.D. No.	566		Hour Clock	12	Elevation	2236' DF	Top Packer	4354'
Initial Hydro Mud Pressure	2361			2283	Total Depth	4369'	Bottom Packer	4359'
Initial Closed in Pres.	48			41	Interval Tested	4359' - 4369'	Formation Tested	MISSISSIPPI
Initial Flow Pres.	10	1		11	Casing or Hole Size	7 7/8"	Casing Perfs.	{ Top Bot.
Final Flow Pres.	10	1		10	Surface Choke	1"	Bottom Choke	3/4"
Final Closed in Pres.	38			35	Size & Kind Drill Pipe	4 1/2" FH	Drill Collars Above Tester	I.D. - LENGTH -
Final Hydro Mud Pressure	2304			2270	Mud Weight	9.9	Mud flex weight	510'
Depth Cen. Gauge		Ft.	Blanked Off		Temperature	110	Anchor Size & Length	ID 3 1/2" X 10' OD 4 1/2"
BT. P.R.D. No.			Hour Clock		Depths Mea. From	KELLY BUSHING	Depth of Tester Valve	4334' Ft.
Initial Hydro Mud Pres.					TYPE AMOUNT		Depth Back Pres. Valve	Ft.
Initial Closed in Pres.					Recovered	25	Feet of	oil specked mud
Initial Flow Pres.		1			Recovered		Feet of	
Final Flow Pres.		2			Recovered		Feet of	
Final Closed in Pres.		1			Recovered		Feet of	
Final Hydro Mud Pres.		2			Recovered		Feet of	
Final Closed in Pres.					Oil A.P.I. Gravity		Water Spec. Gravity	
Depth Bot. Gauge	4365	Ft.	Blanked Off	yes	Gas Gravity		Surface Pressure	psi
BT. P.R.D. No.	239		Hour Clock	12	Tool Opened	4:25	A.M. P.M. Tool Closed	5:55 A.M. P.M.
Initial Hydro Mud Pres.	2364			2296	Remarks Tool opened for 30 minute first flow with			
Initial Closed in Pres.	55			52	a weak blow & decreasing. Closed for 30 minute			
Initial Flow Pres.	18	1		23	initial closed in pressure. Reopened for 30 minute			
Final Flow Pres.	27	2		27	second flow with a very weak to no blow. Closed			
Final Closed in Pres.	27	1		22	for 30 minute final closed in pressure.			
Final Hydro Mud Pres.	2327			2281				

Legal Location Sec. - Twp. - Rng. 25-20 21W

Field Area

County NESS

State KANSAS

MARTIN

Lease Name

Well No. C-1

Test No. 1

CITIES SERVICE OIL COMPANY  
Lease Owner/Company Name

KANSAS  
Owner's District

FORMATION TEST DATA

Gauge No.		566		Depth		43471		Clock		12 hour		Ticket No.		381344	
First Flow Period			Initial Closed In Pressure			Second Flow Period			Final Closed In Pressure						
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{e}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{e}$	PSIG Temp. Corr.					
P <sub>0</sub>	.000	11	.000		10	.000	14	.000		14					
P <sub>1</sub>	.200	10	.196		41	.213	14	.190		35					
P <sub>2</sub>															
P <sub>3</sub>															
P <sub>4</sub>															
P <sub>5</sub>															
P <sub>6</sub>															
P <sub>7</sub>															
P <sub>8</sub>															
P <sub>9</sub>															
P <sub>10</sub>															

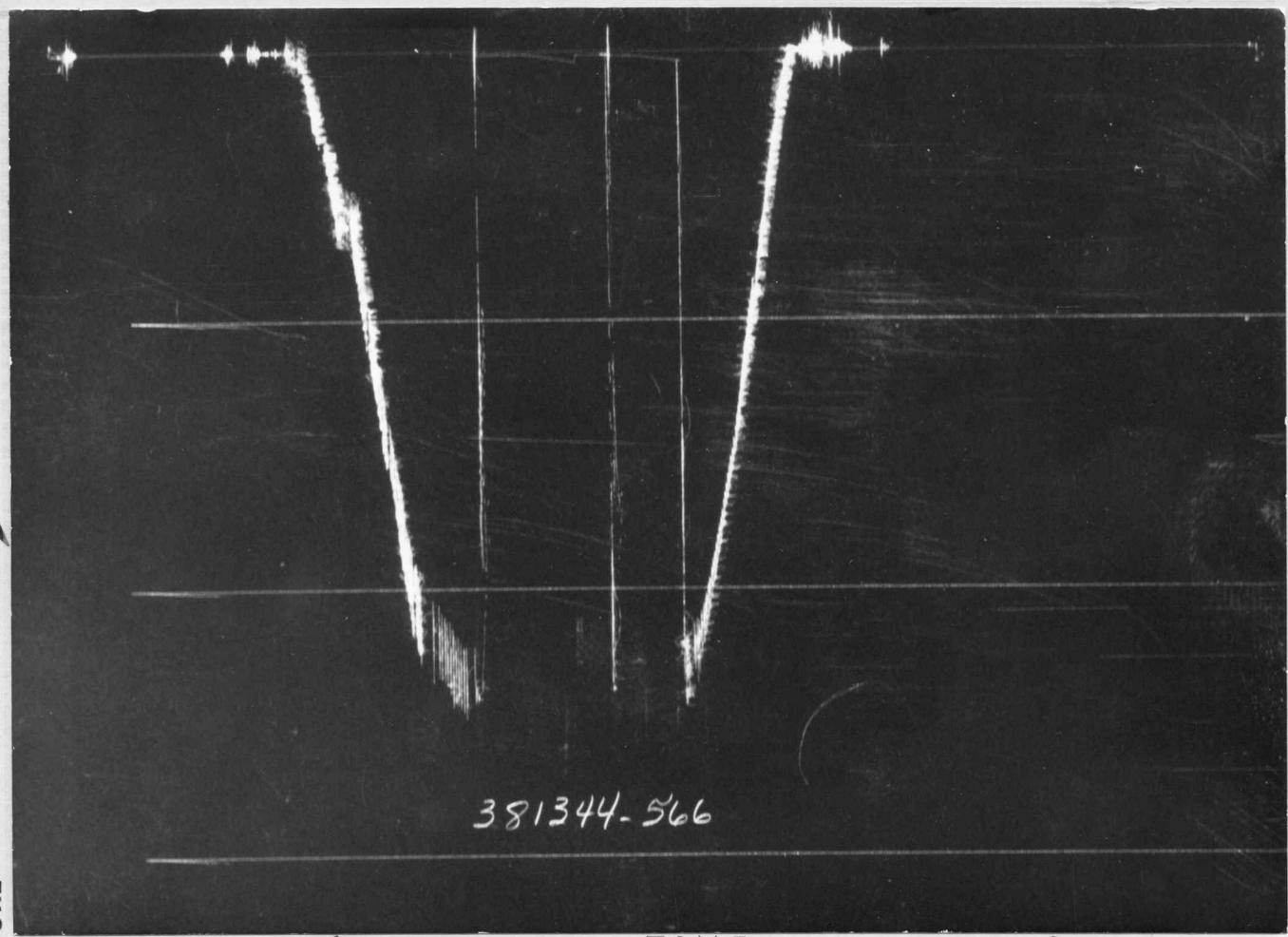
Gauge No.		239		Depth		43651		Clock		12 hour	
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{e}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{e}$	PSIG Temp. Corr.	
P <sub>0</sub>	.000	23	.000		22	.000	27	.000		26	
P <sub>1</sub>	.216	22	.197		52	.228	26	.191		46	
P <sub>2</sub>											
P <sub>3</sub>											
P <sub>4</sub>											
P <sub>5</sub>											
P <sub>6</sub>											
P <sub>7</sub>											
P <sub>8</sub>											
P <sub>9</sub>											
P <sub>10</sub>											

Reading Interval

Minutes

REMARKS:

PRESSURE



381344-566



381344-239

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

Flow Time	1st Min.	2nd Min.	Date	Ticket Number	381345 S
Closed In Press. Time	30	30	Kind of Job	OPEN HOLE	Halliburton District
Pressure Readings	Field	Office Corrected	Tester	LARRY MOORE	Witness
Depth Top Gauge	4362 Ft.	Blanked Off	Drilling Contractor	PEEL BROTHERS DRILLING	SS
BT. P.R.D. No.	566	12 Hour Clock	Elevation	2236' DF	Top Packer
Initial Hydro Mud Pressure	2361	2374	Total Depth	4379'	Bottom Packer
Initial Closed in Pres.	115	119	Interval Tested	4369' - 4379'	Formation Tested
Initial Flow Pres.	10	1 13	Casing or Hole Size	7 7/8"	Casing Perfs. } Top
Final Flow Pres.	19	1 13	Surface Choke	1"	Bottom Choke
Final Closed in Pres.	86	81	Size & Kind Drill Pipe	4 1/2" ACME	Drill Collars Above Tester
Final Hydro Mud Pressure	2304	2315	Mud Weight	9.8	Mud Viscosity
Depth Can. Gauge		Blanked Off	Temperature	110 °F Est.	Anchor Size & Length
BT. P.R.D. No.		Hour Clock	Depths Mea. From	KELLY BUSHING	Depth of Tester Valve
Initial Hydro Mud Pres.			Cushion		Depth Back Pres. Valve
Initial Closed in Pres.			Recovered	20	Feet of drilling mud with a few specks of oil
Initial Flow Pres.	1	2	Recovered		Feet of
Final Flow Pres.	1	2	Recovered		Feet of
Final Closed in Pres.			Recovered		Feet of
Final Hydro Mud Pres.			Oil A.P.I. Gravity		Water Spec. Gravity
Depth Bot. Gauge	4375 Ft.	Blanked Off	Gas Gravity		Surface Pressure
BT. P.R.D. No.	239	12 Hour Clock	Tool Opened	4:50	Tool Closed
Initial Hydro Mud Pres.	2382	2376	Remarks	Tool opened for 30 minute first flow with	
Initial Closed in Pres.	128	123		a very weak blow throughout. Closed for 30 minute	
Initial Flow Pres.	18	1 23		initial closed in pressure. Reopened for 30 minute	
Final Flow Pres.	27	1 22		second flow with a very weak blow to no blow, flush	
Final Closed in Pres.	91	87		tool. Closed for 30 minute final closed in pressure.	
Final Hydro Mud Pres.	2327	2323			

FORMATION TEST DATA

4

Legal Location Sec. - Twp. - Rng. 25-20-21W  
 Lease Name  
 Well No. U-1  
 Test No. 7  
 Field Area  
 County NESS  
 Owner/Company Name CITIES SERVICE OIL COMPANY  
 State KANSAS  
 Owner's District

Gauge No. 566		Depth 4362			Clock 12 hour		Ticket No. 381345		
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 <sub>0</sub>	.000	13	.000		13	.000	18	.000	22
P <sub>1</sub>	.211	13	.210		119	.211	22	.212	81
P <sub>2</sub>									
P <sub>3</sub>									
P <sub>4</sub>									
P <sub>5</sub>									
P <sub>6</sub>									
P <sub>7</sub>									
P <sub>8</sub>									
P <sub>9</sub>									
P <sub>10</sub>									

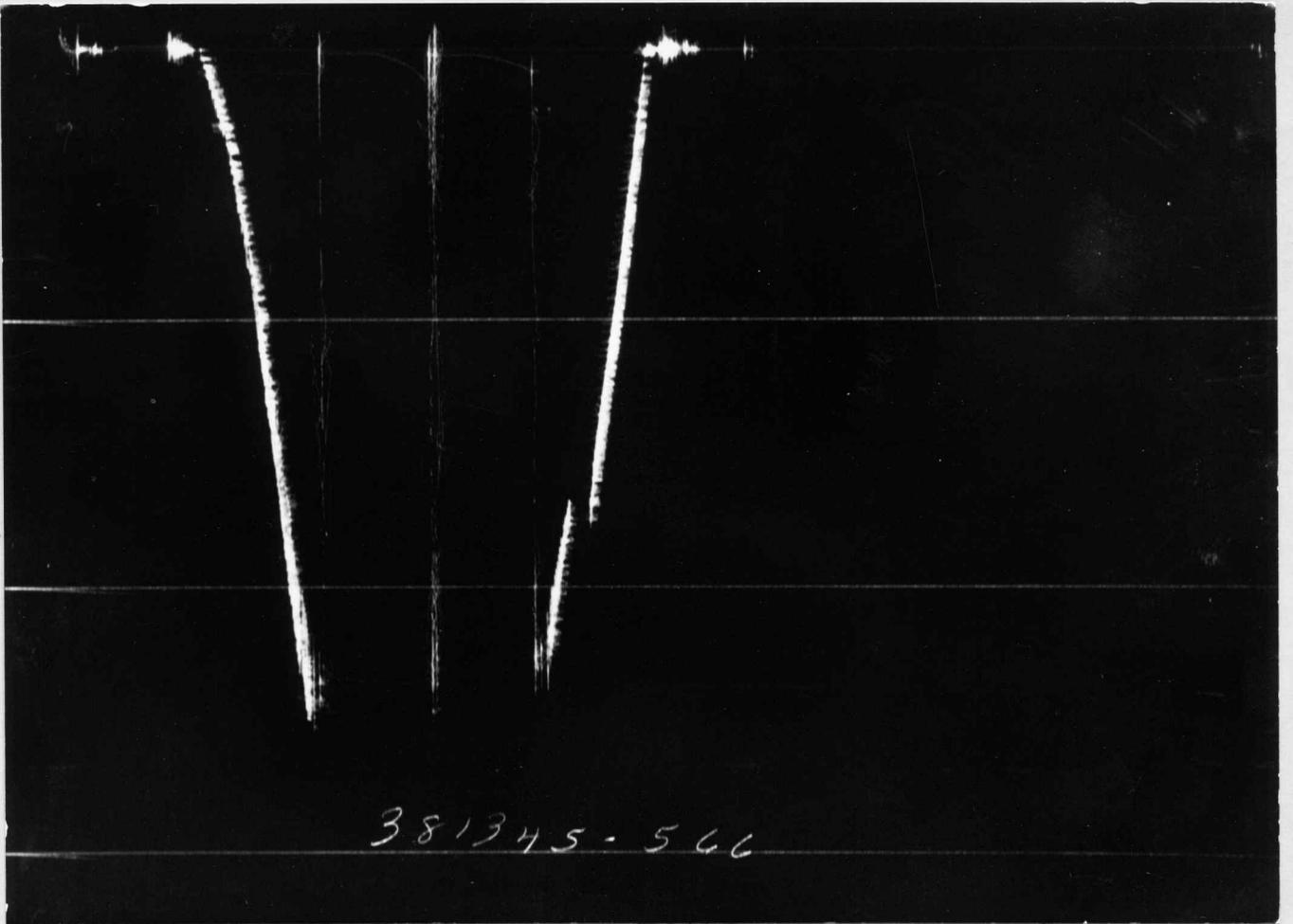
Gauge No. 239		Depth 4375'			Clock 12 hour				
P <sub>0</sub>	.000	23	.000		22	.000	29	.000	28
P <sub>1</sub>	.212	22	.190		123	.205	28	.199	87
P <sub>2</sub>									
P <sub>3</sub>									
P <sub>4</sub>									
P <sub>5</sub>									
P <sub>6</sub>									
P <sub>7</sub>									
P <sub>8</sub>									
P <sub>9</sub>									
P <sub>10</sub>									

Reading Interval

Minutes

REMARKS:

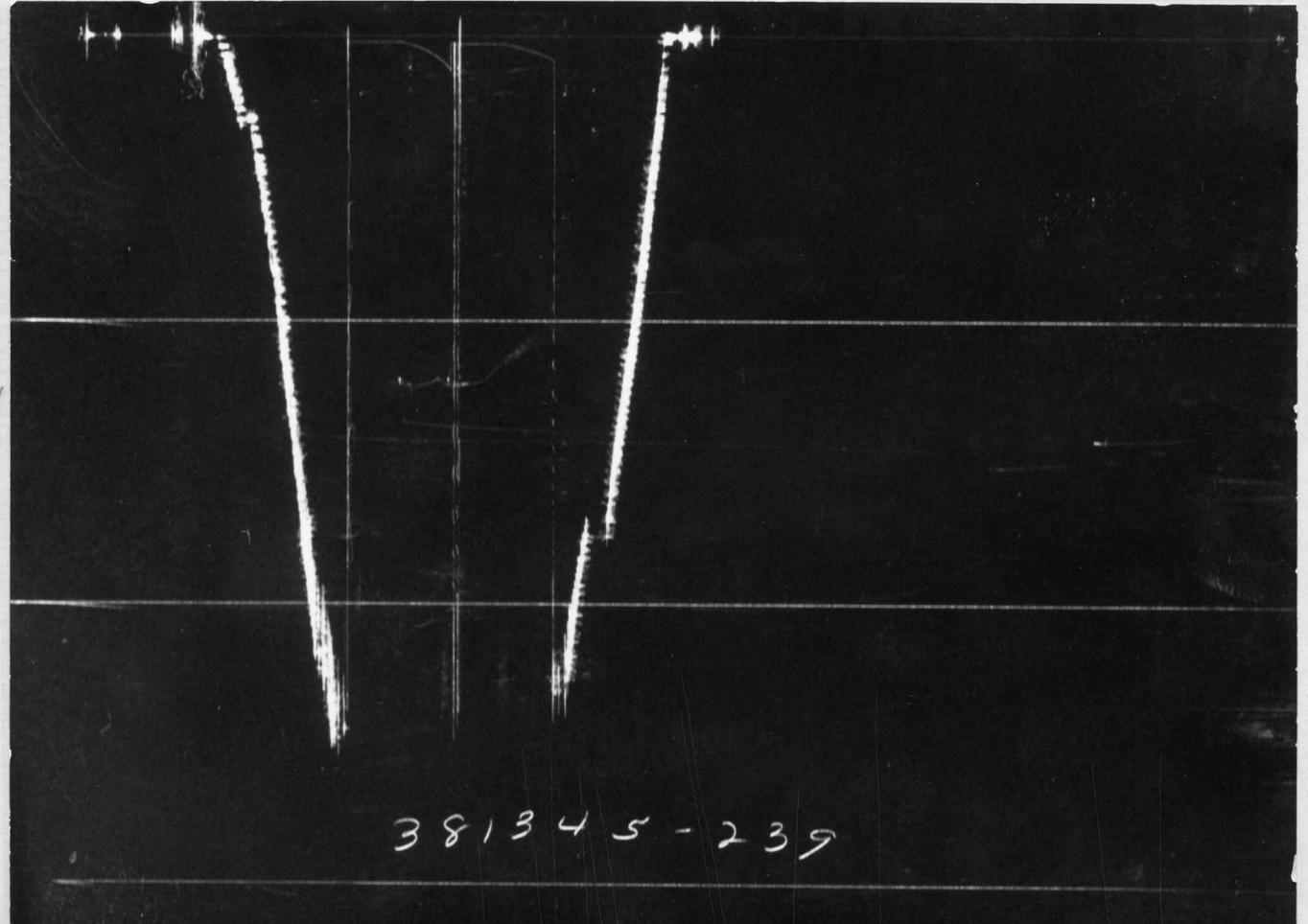
↑  
PRESSURE  
↓



381345-566

← TIME →

↑  
PRESSURE  
↓



381345-239

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

Flow Time	1st Min.	2nd Min.	Date	Ticket Number	381346 S
Closed In Pres. Time	1st 30	2nd 30	Kind of Job	OPEN HOLE	Halliburton District
Pressure Readings	Field	Office Corrected	Tester	LARRY MOORE	Witness
Depth Top Gauge	4372 Ft.	Blanked Off	Drilling Contractor	PEEL BROTHERS DRILLING	SS
BT. P.R.D. No.	566	12 Hour Clock	Elevation	2236' DF	Top Packer
Initial Hydro Mud Pressure	2295	2304	Total Depth	4386'	Bottom Packer
Initial Closed in Pres.	1208	1206	Interval Tested	4379' - 4386'	Formation Tested
Initial Flow Pres.	10	1	Casing or Hole Size	7 7/8"	Casing Perfs.
Final Flow Pres.	48	2	Surface Choke	1"	Bottom Choke
Final Closed in Pres.	1199	1197	Size & Kind Drill Pipe	4 1/2" ACME	Drill Collars Above Tester
Final Hydro Mud Pressure	2295	2275	Mud Weight	9.9	Mud Viscosity
Depth Cen. Gauge	Ft.	Blanked Off	Temperature	110 °F Est.	Anchor Size & Length
BT. P.R.D. No.		Hour Clock	Depths Mea. From	KELLY BUSHING	Depth of Tester Valve
Initial Hydro Mud Pres.			Cushion		Depth Back Pres. Valve
Initial Closed in Pres.			Recovered	575	Feet of gas in pipe
Initial Flow Pres.	1		Recovered	115	Feet of free oil
Final Flow Pres.	1		Recovered	90	Feet of oily mud
Final Closed in Pres.			Recovered		Feet of
Final Hydro Mud Pres.			Oil A.P.I. Gravity	39 @ 60° F	Water Spec. Gravity
Depth Bot. Gauge	Ft.	Blanked Off	Gas Gravity		Surface Pressure
BT. P.R.D. No.	Not enough	Hour Clock	Tool Opened	6:20	Tool Closed
Initial Hydro Mud Pres.	perforations in		Remarks	Tool opened for 30 minute first flow with a	
Initial Closed in Pres.	anchor to run			good blow. Closed for 30 minute initial closed in	
Initial Flow Pres.	1			pressure. Reopened for 30 minute second flow with	
Final Flow Pres.	2 B.T.'S			a good blow throughout test. Closed for 30 minute	
Final Closed in Pres.	1			final closed in pressure.	
Final Hydro Mud Pres.	2				

Legal Location  
Sec. - Twp. - Rng. 25-20-21W

Well No. 3  
Field Area

County NESS

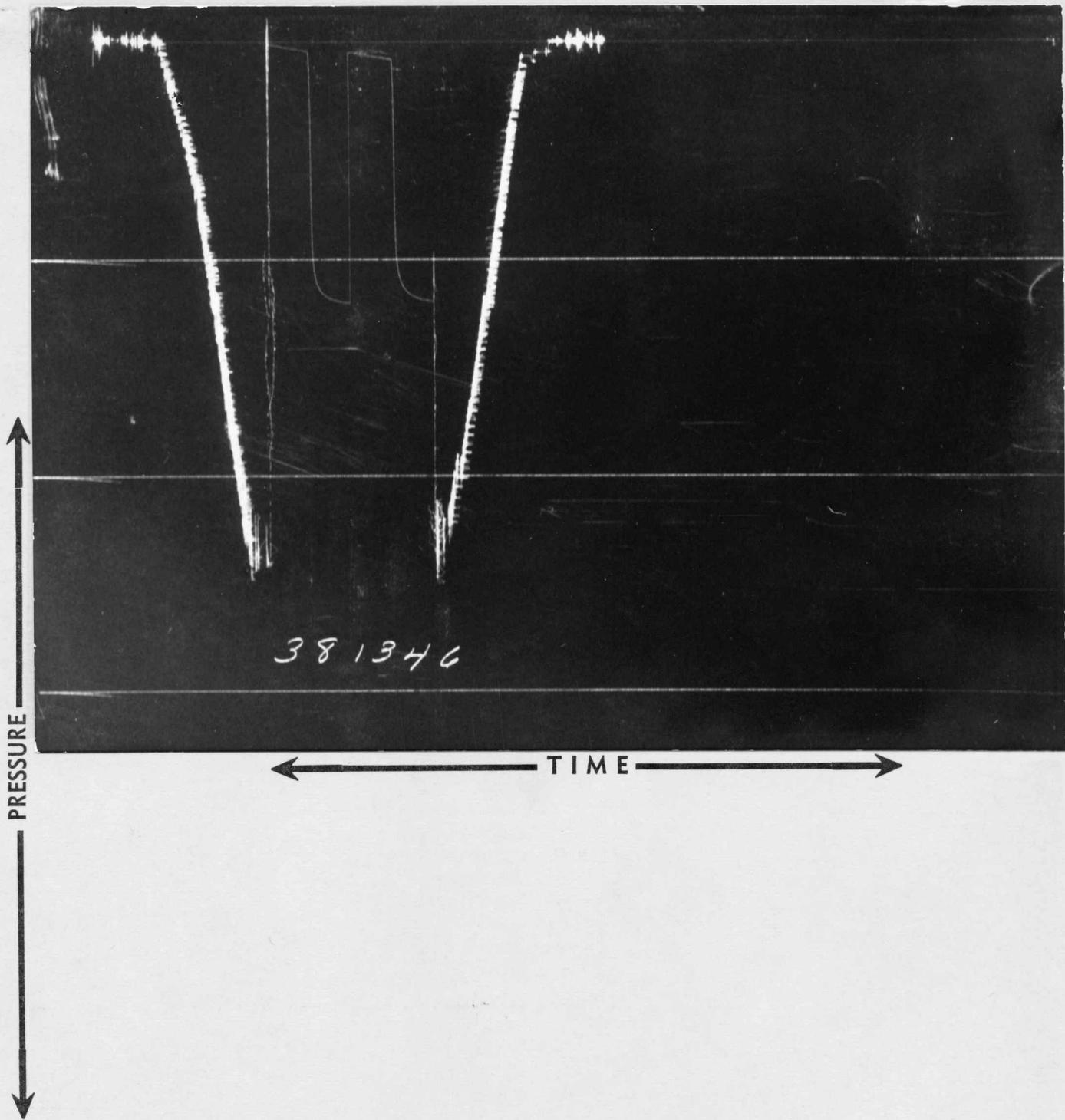
State KANSAS

MARTIN  
Lease Name  
C-1  
Well No.  
3  
Test No.  
CITIES SERVICE OIL COMPANY  
Lease Owner/Company Name  
KANSAS  
Owner's District

FORMATION TEST DATA

Gauge No. 566		Depth 4372			Clock 12		hour		Ticket No. 381346	
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 <sub>0</sub>	.000	10	.000		44	.000	52	.000		82
P <sub>1</sub>	.040	18	.0202		974	.0424	54	.0202		974
P <sub>2</sub>	.080	26	.0404		1116	.0848	63	.0404		1100
P <sub>3</sub>	.120	31	.0606		1152	.1272	69	.0606		1138
P <sub>4</sub>	.160	38	.0808		1170	.1696	75	.0808		1159
P <sub>5</sub>	.200	44	.1010		1182	.212	82	.1010		1172
P <sub>6</sub>			.1212		1190			.1212		1180
P <sub>7</sub>			.1414		1196			.1414		1186
P <sub>8</sub>			.1616		1201			.1616		1191
P <sub>9</sub>			.1818		1203			.1818		1194
P <sub>10</sub>			.202		1206			.202		1197
Gauge No.		Depth			Clock		hour			
P <sub>0</sub>										
P <sub>1</sub>										
P <sub>2</sub>										
P <sub>3</sub>										
P <sub>4</sub>										
P <sub>5</sub>										
P <sub>6</sub>										
P <sub>7</sub>										
P <sub>8</sub>										
P <sub>9</sub>										
P <sub>10</sub>										
Reading Interval		6	3			6		3 Minutes		
REMARKS:										

SPECIAL PRESSURE DATA



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

Flow Time	1st 30	Min.	2nd 40	Min.	Date	6-9-66	Ticket Number	381347 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	LARRY MOORE	Witness	MR. MADDOX MR. MC CULLOM	
Depth Top Gauge	4379	Ft.	no	Blanked Off	Drilling Contractor	PEEL BROTHERS DRILLING		LC SS	
BT. P.R.D. No.	566		12	Hour Clock	Elevation	2236' DF	Top Packer	-	
Initial Hydro Mud Pressure	2304		2305		Total Depth	4393'	Bottom Packer	4386'	
Initial Closed in Pres.	1218		1215		Interval Tested	4386' - 4393'	Formation Tested	MISSISSIPPI	
Initial Flow Pres.	48	1	86		Casing or Hole Size	7 7/8"	Casing Perfs. } Top		
	980	2	1003				Bot.		
Final Flow Pres.	999	1	979		Surface Choke	1"	Bottom Choke	3/4"	
	1199	2	1201						
Final Closed in Pres.	1218		1216		Size & Kind Drill Pipe	4 1/2" ACME	Drill Collars Above Tester	-	
Final Hydro Mud Pressure	2285		2272		Mud Weight	9.6	Mud flex weight 510'		
							Temperature	110	*F Est.
Depth Cen. Gauge	Ft.	Blanked Off	*F Actual	OD 4 1/2"					
					BT. P.R.D. No.		Hour Clock	Depths Mea. From	KELLY BUSHING
Initial Hydro Mud Pres.					TYPE AMOUNT		Depth Back Pres. Valve	Ft.	
Initial Closed in Pres.					Cushion			Ft.	
Initial Flow Pres.					Recovered	3340	Feet of free gassy oil		
					Recovered	220	Feet of muddy gassy oil		
					Recovered	31	Feet of heavy oil & gas cut mud		
					Recovered		Feet of		
Final Closed in Pres.					Oil A.P.I. Gravity	39 @ 60°F	Water Spec. Gravity		
Depth Bot. Gauge		Ft.		Blanked Off	Gas Gravity		Surface Pressure	psi	
BT. P.R.D. No.	Left B.T.	out		Hour Clock	Tool Opened	7:05	A.M. P.M.	Tool Closed	8:35
Initial Hydro Mud Pres.	wanted more				Remarks Tool opened for 30 minute first flow with				
Initial Closed in Pres.	perforations anchor				a strong blow. Closed for 30 minute initial closed				
Initial Flow Pres.	1				in pressure. Reopened for 40 minute second flow				
	2								
Final Flow Pres.	1				with a strong blow, gas to surface in 50 minutes, to				
	2				small to measure. Closed for 30 minute final closed				
Final Closed in Pres.									
Final Hydro Mud Pres.					in pressure.				

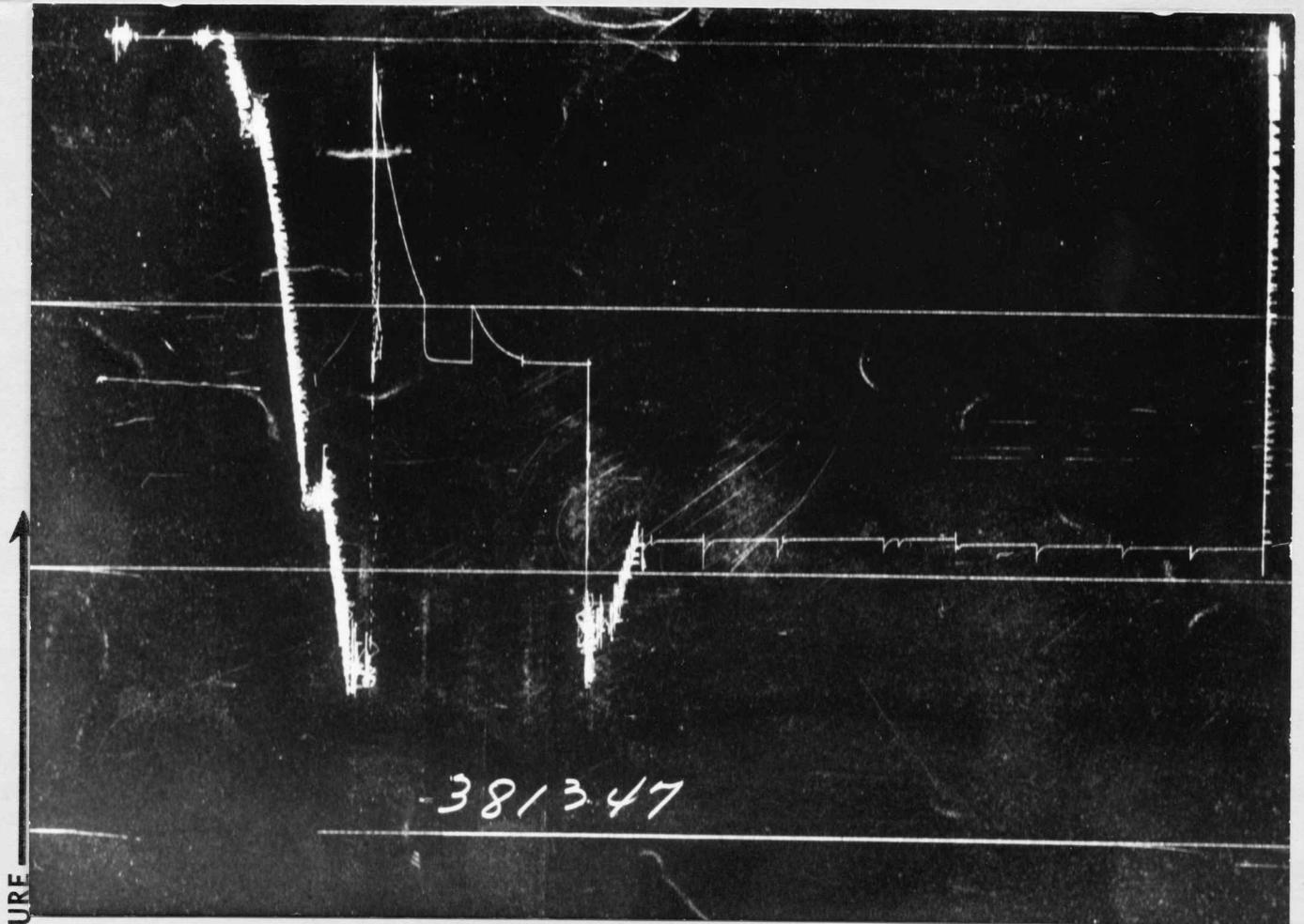
Logal Location Sec - Typ - Rng. 25-20-21W  
 Lease Name  
 C-1  
 Well No.  
 4  
 Test No.  
 Field Area  
 County NESS  
 State KANSAS  
 Owner's District  
 CITIES SERVICE OIL COMPANY  
 Lease Owner/Company Name

FORMATION TEST DATA

Gauge No.		566		Depth		4379'		Clock		12 hour		Ticket No.		381347	
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 <sub>0</sub>	.000	86	.000		979	.000	1003	.000		1201					
P <sub>1</sub>	.0424	378	.0192		1200	.051	1090	.0264		1212					
P <sub>2</sub>	.0848	578	.0384		1206	.102	1149	.0528		1213					
P <sub>3</sub>	.1272	750	.0576		1209	.153	1182	.0792		1214					
P <sub>4</sub>	.1696	879	.0768		1210	.2040	1201	.1056		1215					
P <sub>5</sub>	.2120	979	.0960		1211	.		.1320		1215					
P <sub>6</sub>			.1152		1212			.1584		1215					
P <sub>7</sub>			.1344		1213			.1848		1216					
P <sub>8</sub>			.1536		1214			.2112		1216					
P <sub>9</sub>			.1728		1214			.2376		1216					
P <sub>10</sub>			.1920		1215			.2640		1216					

Gauge No.		Depth		Clock		hour				
P <sub>0</sub>										
P <sub>1</sub>										
P <sub>2</sub>										
P <sub>3</sub>										
P <sub>4</sub>										
P <sub>5</sub>										
P <sub>6</sub>										
P <sub>7</sub>										
P <sub>8</sub>										
P <sub>9</sub>										
P <sub>10</sub>										
Reading Interval		6		3		10		3		Minutes

SPECIAL PRESSURE DATA



PRESSURE

TIME

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