

Flow Time	1st	Min.	2nd	Min.	Date	Ticket Number	Legal Location
30			30		4-3-64	401149 S	Sec. - Twp. - Rng.
Closed In Press. Time	1st	Min.	2nd	Min.	Kind of Job	Halliburton District	NE
30			30		OPEN HOLE	HAYS	SE
Pressure Readings	Field		Office Corrected		Tester	Witness	23
					K.L. GROVER	O.H. HINERMAN	12S
Depth Top Gauge	3968	Ft.	no	Blanked Off	Drilling Contractor	RED TIGER DRILLING COMPANY	29W
BT. P.R.D. No.	737		12	Hour Clock	Elevation	2761'	1341
Initial Hydro Mud Pressure			2080		Total Depth	3986'	Field Area
Initial Closed in Pres.			1136		Interval Tested	3964' - 3986'	WILD CAT
Initial Flow Pres.			1 18		Casing or Hole Size	7 7/8"	County
			2 29		Surface Choke	1 1/4"	GOVE
Final Flow Pres.			1 20		Bottom Choke	3/4"	State
			2 23		Size & Kind Drill Pipe	4 1/2" FH	KANSAS
Final Closed in Pres.			1016		Drill Collars Above Tester	2 5/8" Flx Wt.	
Final Hydro Mud Pressure			2080		Mud Weight	10	
Depth Cen. Gauge		Ft.		Blanked Off	Temperature	111	
					Anchor Size & Length	ID 384 OD 5" X 22'	
BT. P.R.D. No.				Hour Clock	Depths Mea. From	Kelly Bushing	
Initial Hydro Mud Pres.					Cushion	none	
Initial Closed in Pres.					Recovered	15	
Initial Flow Pres.			1		Feet of drilling mud with spots of oil.		
			2		Recovered	Feet of	
Final Flow Pres.			1		Recovered	Feet of	
			2		Recovered	Feet of	
Final Closed in Pres.					Oil A.P.I. Gravity		
Final Hydro Mud Pres.					Water Spec. Gravity		
Depth Bot. Gauge	3982	Ft.	yes	Blanked Off	Gas Gravity		
BT. P.R.D. No.	397		12	Hour Clock	Surface Pressure		
Initial Hydro Mud Pres.	2146		2090		Tool Opened	7:55 A.M.	
Initial Closed in Pres.	1152		1147		Tool Closed	9:55 A.M.	
Initial Flow Pres.	26		1 29		Remarks Tool opened for a 30 minute first flow with a very weak blow 6 minutes & dead. Closed tool for a 30 minute initial closed in pressure. Reopened tool for a 30 minute second flow. Closed tool for a 30 minute final closed in pressure.		
			2 37				
Final Flow Pres.			1 32				
	35		2 34				
Final Closed in Pres.	1019		1027				
Final Hydro Mud Pres.	2128		2065				

FORMATION TEST DATA

5

E.M. BLAND
 Lease Name
 Well No. 1
 Test No. 1
 TIDEWATER OIL COMPANY
 Lease Owner/Company Name
 REECE, KANSAS
 Owner's District

Gauge No. 737		Depth 3068'			Clock 12 hour		Ticket No. 401149			
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 ₀	.000	18	.000		20	.000	29	.000		23
P ₁	.190	20	.020		79	.040	21	.0202		45
P ₂			.040		409	.080	21	.0404		137
P ₃			.060		718	.120	22	.0606		420
P ₄			.080		868	.160	22	.0808		656
P ₅			.100		956	.200	23	.1010		787
P ₆			.120		1015			.1212		867
P ₇			.140		1058			.1414		923
P ₈			.160		1091			.1616		962
P ₉			.180		1116			.1818		991
P ₁₀			.200		1136			.2020		1016

Gauge No. 397		Depth 3982'			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 ₀	.000	29	.000		32	.000	37	.000		34	
P ₁	.0388	30	.0206		88	.041	33	.0212		57	
P ₂	.0776	30	.0412		431	.082	33	.0424		154	
P ₃	.1164	31	.0618		707	.123	33	.0636		429	
P ₄	.1552	32	.0824		863	.164	34	.0848		660	
P ₅	.1940	32	.1030		956	.205	34	.1060		791	
P ₆			.1236		1017			.1272		873	
P ₇			.1442		1063			.1484		929	
P ₈			.1648		1096			.1696		968	
P ₉			.1854		1122			.1908		1002	
P ₁₀			.2060		1147			.2120		1027	
Reading Interval		6	3			6		3			Minutes

REMARKS:

SPECIAL PRESSURE DATA

PRESSURE ↑
↓



← TIME →



EACH HORIZONTAL LINE EQUAL TO 1000 P.S.I.

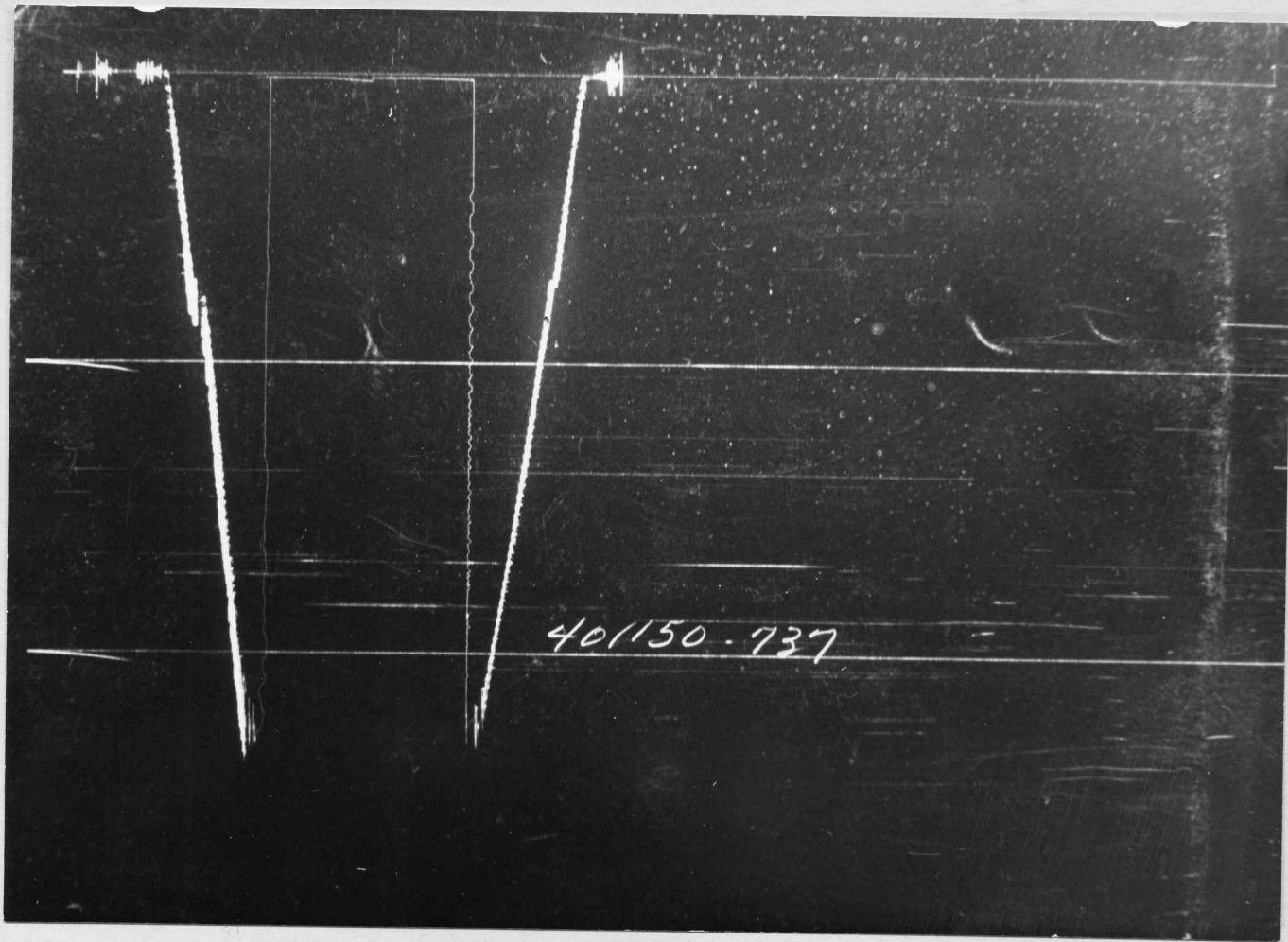
Flow Time	1st 30	Min.	2nd 30	Min.	Date	4-6-64	Ticket Number	401150	Legal Location Sec. - Twp. - Rng. NE SE 23 12S 29W
Closed In Press. Time	1st 30	Min.	2nd 30	Min.	Kind of Job	STRADDLE OPEN HOLE	Halliburton District	HAYS	
Pressure Readings	Field		Office Corrected		Tester	GROVER	Witness	MR. GILBERT	
Depth Top Gauge	4230	Ft.	No	Blanked Off	Drilling Contractor	RED TIGER DRLG.	Top Packer	4225'	
BT. P.R.D. No.	737		12	Hour Clock	Elevation	2761'	Bottom Packer	4270'	
Initial Hydro Mud Pressure	2307		2217		Total Depth	4325'	Formation Tested	Marmaton	
Initial Closed in Pres.	35		27		Interval Tested	4225-4270'	Casing Perfs. { Top	} Bot.	
Initial Flow Pres.			1 16		Casing or Hole Size	7 7/8"	Bottom Choke		
Final Flow Pres.	10		2 16		Surface Choke	1/4"	Drill Collars Above Tester	I.D. - LENGTH 2 7/8" - 134'	
Final Closed in Pres.	18		19		Size & Kind Drill Pipe	4 1/2" FH	Mud Weight	9.9	
Final Hydro Mud Pressure	2271		2217		Mud Weight	9.9	Mud Viscosity	40	
Depth Cen. Gauge		Ft.		Blanked Off	Temperature	118	Anchor Size & Length	ID 3.84 OD 5" X 45	
BT. P.R.D. No.				Hour Clock	Depths Mea. From	KB	Depth of Tester Valve	4200' Ft.	
Initial Hydro Mud Pres.					Cushion	TYPE none	Depth Back Pres. Valve	Ft.	
Initial Closed in Pres.					Recovered	10	Feet of Drilling Mud with oil spots	Mea. From Tester Valve	
Initial Flow Pres.			1		Recovered		Feet of		
Final Flow Pres.			1		Recovered		Feet of		
Final Closed in Pres.			2		Recovered		Feet of		
Final Hydro Mud Pres.					Oil A.P.I. Gravity		Water Spec. Gravity		
Depth Bot. Gauge	4321	Ft.	Yes	Blanked Off	Gas Gravity		Surface Pressure	psi	
BT. P.R.D. No.	397		12	Hour Clock	Tool Opened	12:15 AM	A.M. P.M. Tool Closed	2:15 AM A.M. P.M.	
Initial Hydro Mud Pres.			2267		Remarks	Tool opened with a weak blow, dead in 25			
Initial Closed in Pres.	Blanked Off				minutes. No special reading adaptable.				
Initial Flow Pres.			1						
Final Flow Pres.			2						
Final Closed in Pres.			1						
Final Hydro Mud Pres.			2						
Final Closed in Pres.									
Final Hydro Mud Pres.			2267						

E. M. BLAND
 Lease Name
 NE SE 23 12S 29W
 Well No. 1
 Test No. 2
 Field Area
 Wildcat
 County COVE
 TIDEWATER OIL COMPANY
 Lease Owner/Company Name
 KANSAS
 Owner's District
 REECE

FORMATION TEST DATA

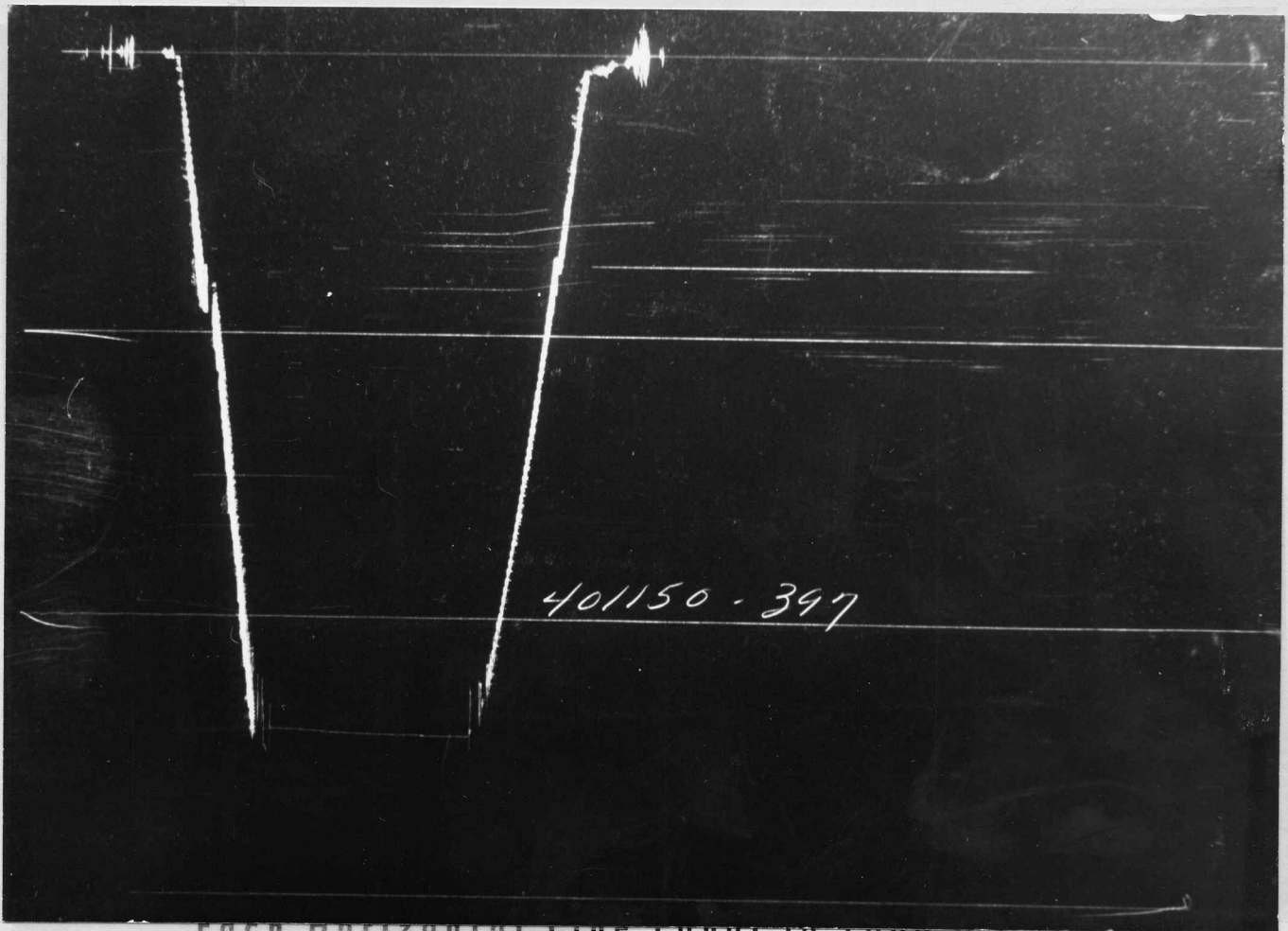
* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.

PRESSURE



401150-737

TIME



401150-397

EACH HORIZONTAL LINE EQUAL TO 1000 PSI.

Flow Time	1st Min.	2nd Min.	Date	Ticket Number
30	30	30	4-7-64	423851 S
Closed In Press. Time	1st Min.	2nd Min.	Kind of Job	Halliburton District
30	30	30	OPEN HOLE TEST	HAYS
Pressure Readings	Field	Office Corrected	Tester	Witness
			MR. GROVES	MR. GILBERT
Depth Top Gauge	Ft.	Blanked Off	Drilling Contractor	
4460		NO	RED TIGER DRILLING COMPANY	
BT. P.R.D. No.		Hour Clock	Elevation	Top Packer
737		12	2761'	4452'
Initial Hydro Mud Pressure			Total Depth	Bottom Packer
-		2352	4480'	4456'
Initial Closed in Pres.			Interval Tested	Formation Tested
-		826	4456'-4480'	MISSISSIPPI
Initial Flow Pres.			Casing or Hole Size	Casing Perfs. } Top
-		1 24	7 7/8"	Bot. -
Final Flow Pres.			Surface Choke	Bottom Choke
-		2 56	1/4"	3/4"
Final Closed in Pres.			Size & Kind Drill Pipe	Drill Collars Above Tester
-		1 47	4 1/2" F.H.	2 3/4" x 1341' I.D. FLEX WT.
Final Hydro Mud Pressure			Mud Weight	Mud Viscosity
-		2 69	9.8	47
Depth Cen. Gauge	Ft.	Blanked Off	Temperature	Anchor Size & Length
			119 °F Est. °F Actual	ID 3.84" OD 5.00" X 24'
BT. P.R.D. No.		Hour Clock	Depths Mea. From	Depth of Tester Valve
			KELLY BUSHINGS	4432' Ft.
Initial Hydro Mud Pres.			Cushion	Depth Back Pres. Valve
Initial Closed in Pres.			Recovered	Mea. From Tester Valve
			120 Feet of Formation water with	
Initial Flow Pres.			Recovered	
			18,000 G1.	
Final Flow Pres.			Recovered	
Final Closed in Pres.			Recovered	
Final Hydro Mud Pres.			Oil A.P.I. Gravity	Water Spec. Gravity
Depth Bot. Gauge	Ft.	Blanked Off	Gas Gravity	Surface Pressure
4477		YES		psi
BT. P.R.D. No.		Hour Clock	Tool Opened	Tool Closed
397		12	4:00 AM	6:00 AM
Initial Hydro Mud Pres.			Remarks	
2356		2359	Opened tool for 30 minute 1st flow with weak	
Initial Closed in Pres.			blow. Closed tool for 30 minute initial closed in	
Initial Flow Pres.			pressure. Reopened tool for 30 minute 2nd flow	
Final Flow Pres.			with weak blow throughout test. Closed tool for	
Final Closed in Pres.			30 minute final closed in pressure.	
Final Hydro Mud Pres.				
2300		2347		

FORMATION TEST DATA

Legal Location: SEC. 23 - 12S - 29W
 Lease Name: E. M. BLAND
 Well No.: 1
 Test No.: 3
 Field Area: WILD CAT
 County: GOVE
 State: KANSAS
 Owner's District: REECE
 Lease Owner/Company Name: WINDMILL OIL COMPANY

Gauge No. 737		Depth 4460'			Clock 12 hour		Ticket No. 423851			
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	24	.000		47	.000	56	.000		69
P ₁	.0408	29	.0201		161	.0404	56	.0196		160
P ₂	.0816	33	.0402		283	.0808	60	.0392		237
P ₃	.1224	38	.0603		411	.1212	63	.0588		322
P ₄	.1632	42	.0804		518	.1616	67	.0784		399
P ₅	.2040	47	.1005		596	.2020	69	.0980		472
P ₆			.1206		661			.1176		527
P ₇			.1407		716			.1372		576
P ₈			.1608		761			.1568		619
P ₉			.1809		797			.1764		658
P ₁₀			.2010		826			.1960		692

Gauge No. 397		Depth 4477'			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	32	.000		56	.000	63	.000		78
P ₁	.040	40	.020		171	.040	65	.0196		170
P ₂	.080	44	.040		283	.080	68	.0392		247
P ₃	.120	47	.060		400	.120	72	.0588		325
P ₄	.160	52	.080		504	.160	75	.0784		403
P ₅	.200	56	.100		583	.200	78	.0980		473
P ₆			.120		650			.1176		533
P ₇			.140		707			.1372		582
P ₈			.160		756			.1568		624
P ₉			.180		796			.1764		664
P ₁₀			.200		830			.1960		696
Reading Interval 6					3		6		3	

REMARKS:

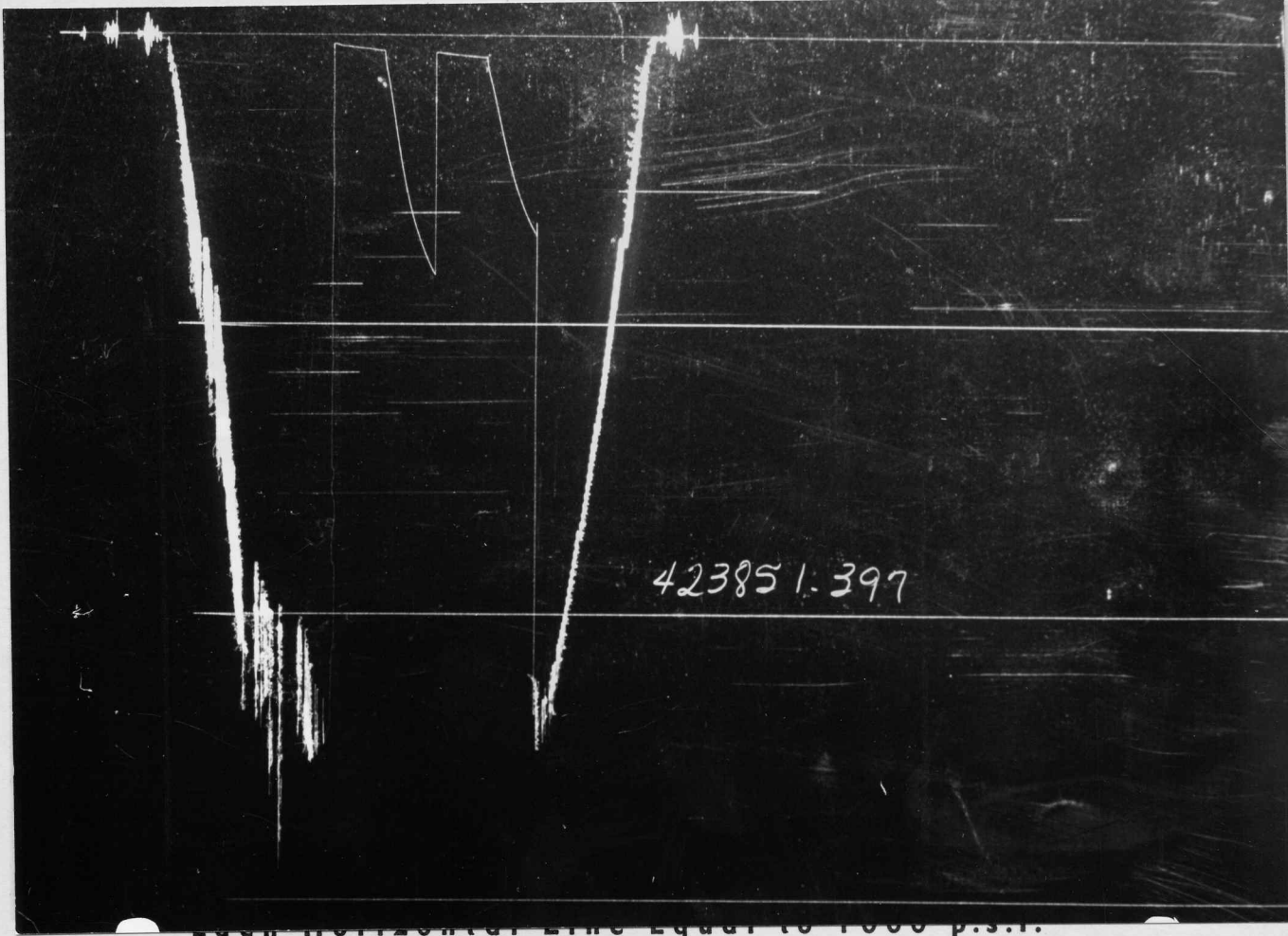
SPECIAL PRESSURE DATA

PRESSURE



423851.737

TIME



423851.397

EACH HORIZONTAL LINE EQUAL TO 1000 P.S.I.

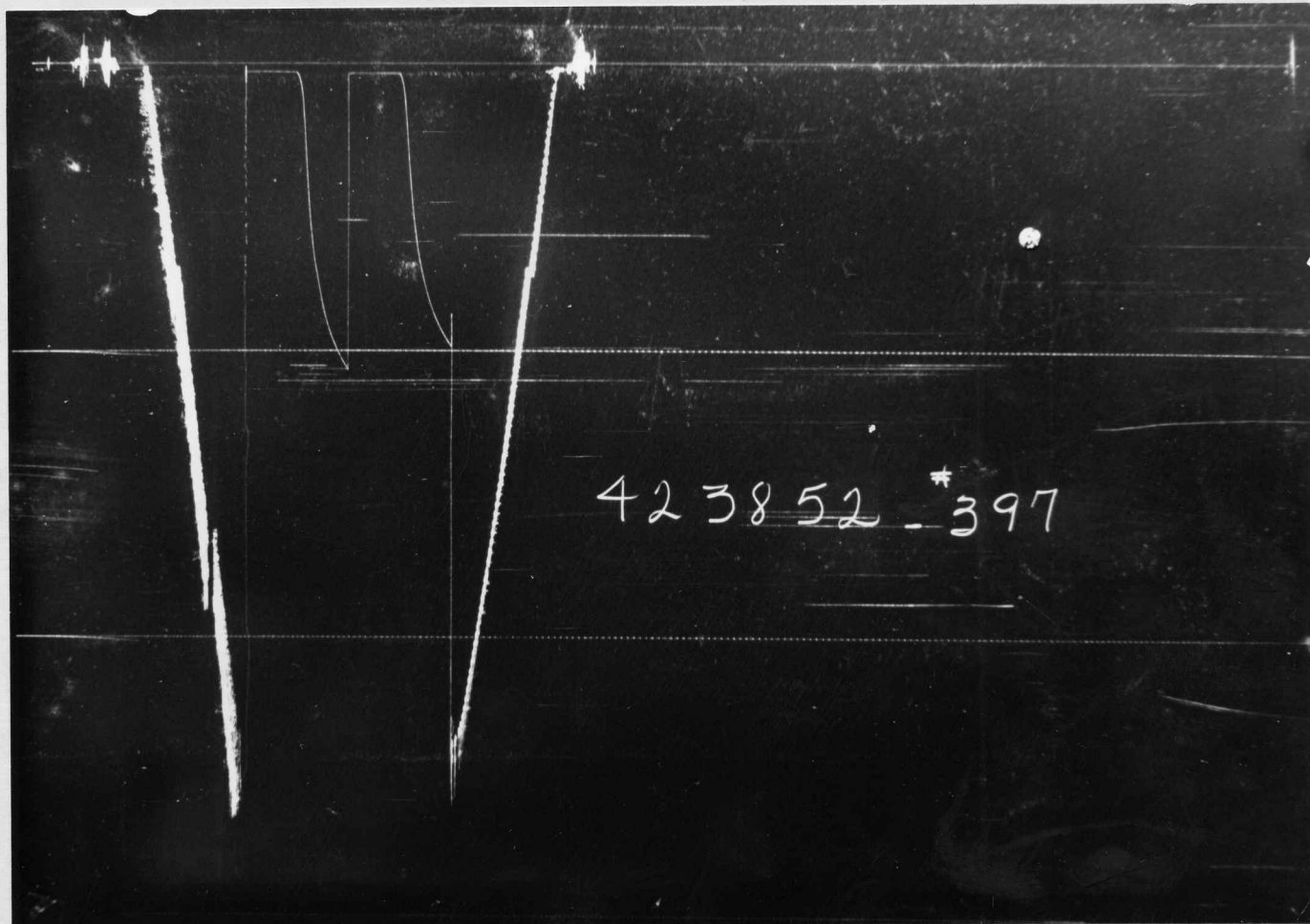
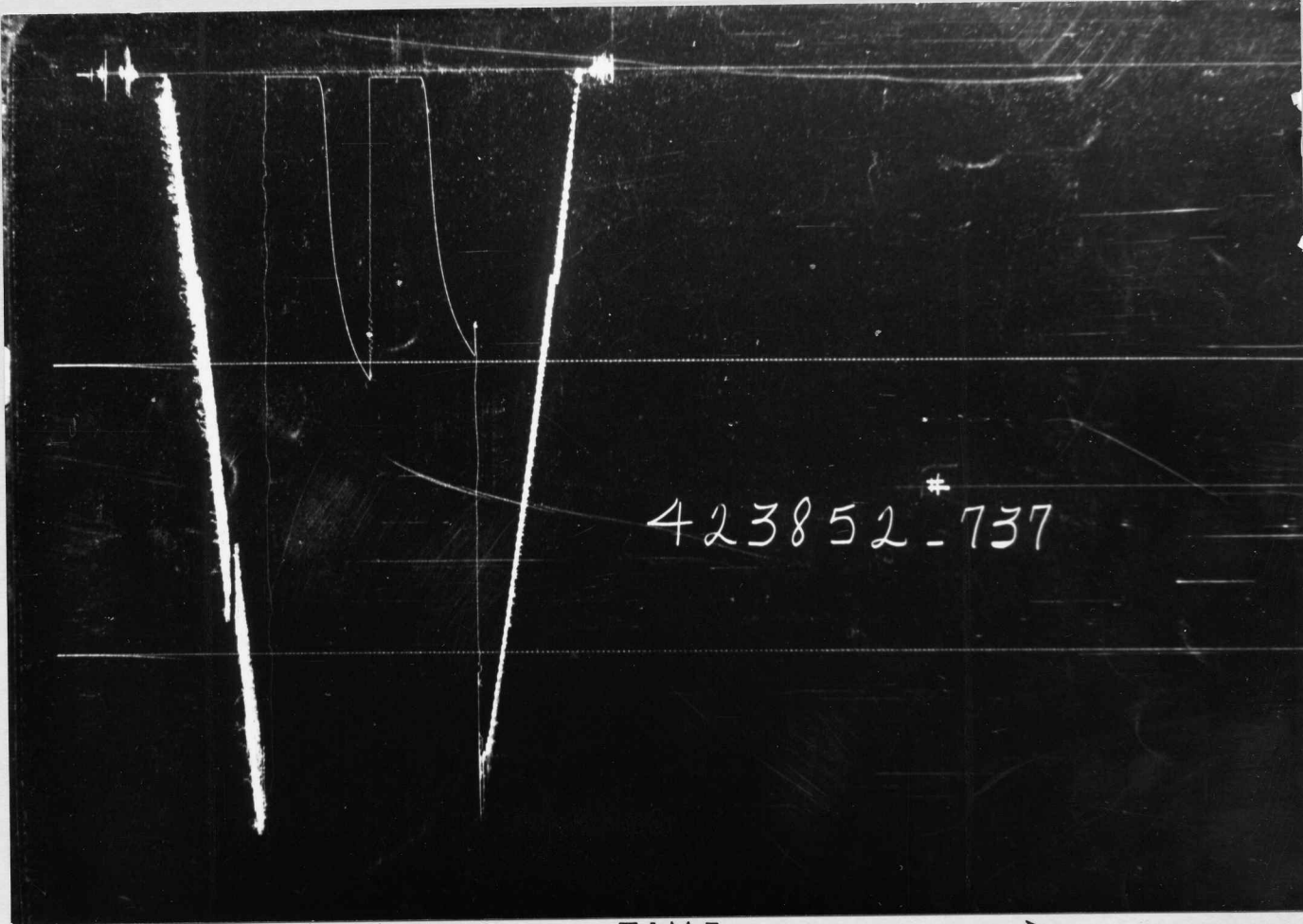
Flow Time	1st Min.	2nd Min.	Date	Ticket Number	Legal Location
30	30	4-8-64	423852 - S	N.E. S.E. 23 - 125 - 29W	
Closed In Press. Time	1st Min.	2nd Min.	Kind of Job	Halliburton District	Sec. - Typ. - Rng.
30	30	OPEN HOLE	HAYS, KANSAS		
Pressure Readings	Field	Office Corrected	Tester	Witness	Lease Name
			GROVER	GILBERT	
Depth Top Gauge	Ft.	Blanked Off	Drilling Contractor	Top Packer	Well No.
4560'		NO	RED TIGER DRILLING COMPANY	4552'	1
BT. P.R.D. No.		Hour Clock	Elevation	Bottom Packer	Field Area
737		12	2761'	4556'	WILDCAT
Initial Hydro Mud Pressure			Total Depth	Formation Tested	Test No.
2576		2506	4578'	MISSISSIPPI	1
Initial Closed in Pres.			Interval Tested	Casing or Hole Size	Field Area
1090		1061	4556' - 4578'	7 7/8"	1
Initial Flow Pres.			Surface Choke	Bottom Choke	Field Area
17		1 18	1/4"	3/4"	1
Final Flow Pres.			Size & Kind Drill Pipe	Drill Collars Above Tester	Field Area
26		2 29	4 1/2" F.H.	2 3/4" x ?	1
Final Closed in Pres.			Mud Weight	Mud Viscosity	Field Area
1001		980	9.8	44	1
Final Hydro Mud Pressure			Temperature	Anchor Size & Length	Field Area
2504		2405	120 °F Est. °F Actual	ID 3.84" OD 5" X 22'	1
Depth Cen. Gauge	Ft.	Blanked Off	Depths Mea. From	Depth of Tester Valve	Field Area
			KELLY BUSHING	4509' Ft.	1
BT. P.R.D. No.		Hour Clock	TYPE	AMOUNT	Field Area
			Cushion	NONE	1
Initial Hydro Mud Pres.			Recovered	Feet of	Field Area
			20'	drilling mud	1
Initial Closed in Pres.			Recovered	Feet of	Field Area
					1
Initial Flow Pres.			Recovered	Feet of	Field Area
					1
Final Flow Pres.			Recovered	Feet of	Field Area
					1
Final Closed in Pres.			Oil A.P.I. Gravity	Water Spec. Gravity	Field Area
			-	-	1
Final Hydro Mud Pres.			Gas Gravity	Surface Pressure	Field Area
			-	0# psi	1
Depth Bot. Gauge	Ft.	Blanked Off	Tool Opened	A.M. P.M.	Tool Closed
4575'		YES	10:35 AM		12:35 PM
BT. P.R.D. No.		Hour Clock	Remarks		
397		12	Tool opened for a 30 minute first flow. Re-		
Initial Hydro Mud Pres.			tated tool for a 30 minute initial closed in press-		
		2518	ure. Tool reopened with a weak blow for 30 minutes		
Initial Closed in Pres.			and died. Took a 30 minute final closed in press-		
		1067	ure.		
Initial Flow Pres.					
		1 30			
Final Flow Pres.					
		2 40			
Final Closed in Pres.					
		1 30			
Final Hydro Mud Pres.					
		2 36			
Final Closed in Pres.					
		988			
Final Hydro Mud Pres.					
		2444			

FORMATION TEST DATA

E.M. BLAND
 Lease Name
 1
 WILDCAT
 County
 GOVE
 State
 KANSAS
 TIDEWATER OIL COMPANY
 Lease Owner/Company Name
 REECE, KANSAS
 Owner's District

Gauge No.		737		Depth		4560'		Clock		12 hour		Ticket No.		423852	
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	18	.000		20	.000	29	.000		25					
P ₁	.200	20	.020		75	.202	25	.0203		115					
P ₂			.040		340			.0406		407					
P ₃			.060		617			.0609		595					
P ₄			.080		744			.0812		708					
P ₅			.100		841			.1015		787					
P ₆			.120		911			.1218		844					
P ₇			.140		960			.1421		887					
P ₈			.160		1002			.1624		924					
P ₉			.180		1033			.1827		953					
P ₁₀			.200		1061			.203		980					
Gauge No.		397		Depth		4575'		Clock		12 hour					
P ₀	.000	30	.000		30	.000	40	.000		36					
P ₁	.194	30	.0201		75	.200	36	.0204		121					
P ₂			.0402		307			.0408		371					
P ₃			.0603		589			.0612		578					
P ₄			.0804		726			.0816		702					
P ₅			.1005		831			.1020		785					
P ₆			.1206		903			.1224		847					
P ₇			.1407		958			.1428		894					
P ₈			.1608		1001			.1632		932					
P ₉			.1809		1037			.1836		965					
P ₁₀			.201		1067			.204		988					
Reading Interval			3						3			Minutes			
REMARKS:															

SPECIAL PRESSURE DATA



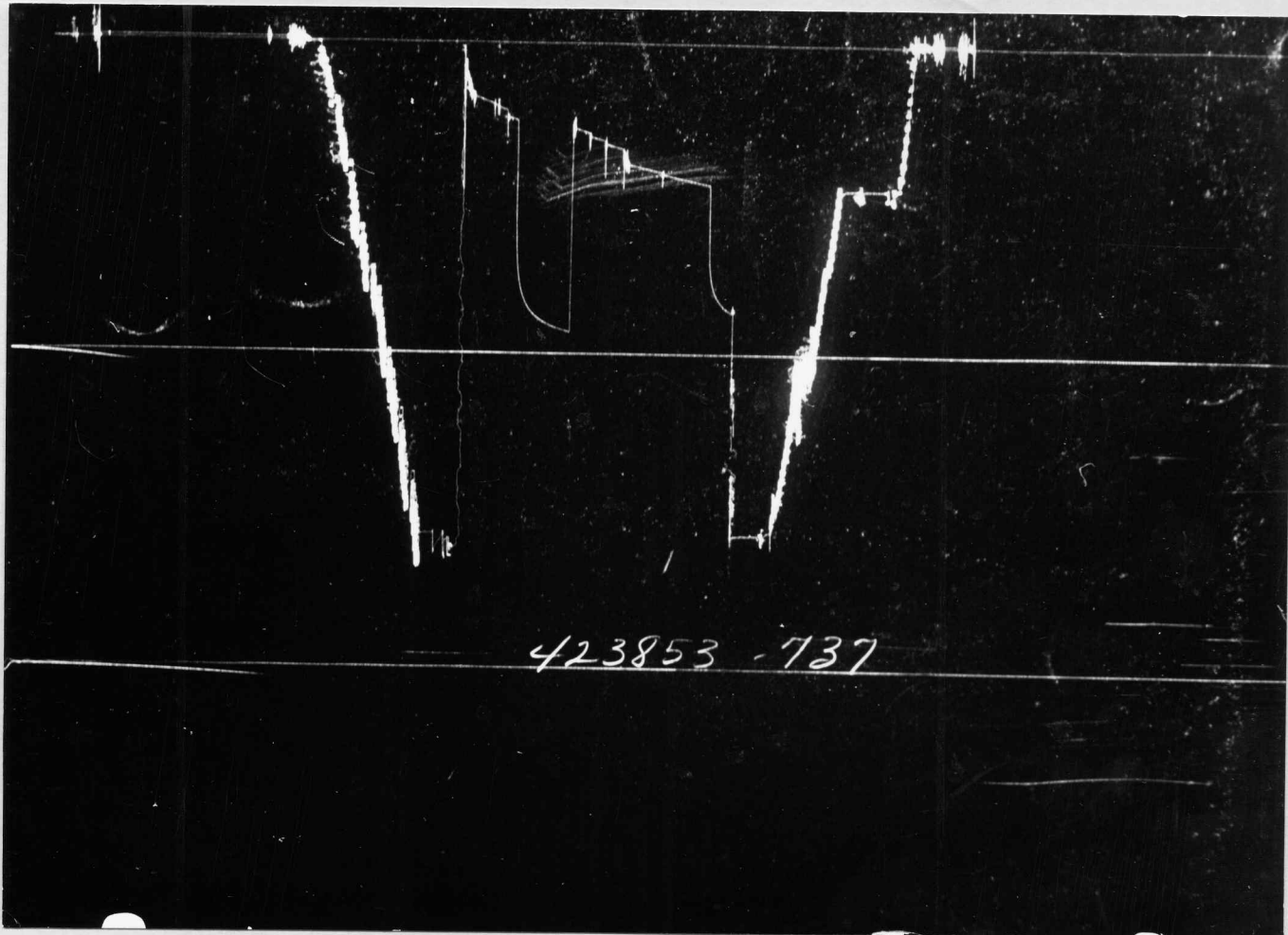
Each Horizontal Line Equal to 1000 p.s.i.

Flow Time	1st 30	Min.	2nd 75	Min.	Date	4-9-64	Ticket Number	423853
Closed In Press. Time	1st 30	Min.	2nd 30	Min.	Kind of Job	OPEN HOLE	Halliburton District	HAYS
Pressure Readings	Field		Office Corrected		Tester	K. L. GROVER	Witness	B. GILBERT
Depth Top Gauge	2960	Ft.	No	Blanked Off	Drilling Contractor	RED TIGER DRILLING CO.		
BT. P.R.D. No.	737		12	Hour Clock	Elevation	2761'	Top Packer	2956'
Initial Hydro Mud Pressure	1624		1567		Total Depth	4578'	Bottom Packer	2976'
Initial Closed in Pres.	992		922		Interval Tested	2956-2976'	Formation Tested	
Initial Flow Pres.	173		1 30 2 260		Casing or Hole Size	7 7/8"	Casing Perfs.	Top Bot.
Final Flow Pres.	433		1 255 2 456		Surface Choke	1/4"	Bottom Choke	3/4"
Final Closed in Pres.	846		859		Size & Kind Drill Pipe	4 1/2"	Drill Collars Above Tester	I.D. - LENGTH 2 3/4" X 134 1/2'
Final Hydro Mud Pressure	1554		1567		Mud Weight	9.8	Mud Viscosity	44
Depth Cen. Gauge		Ft.		Blanked Off	Temperature	100	Anchor Size & Length	ID 3.84 OD 5" X 20'
BT. P.R.D. No.				Hour Clock	Depths Mea. From	KB	Depth of Tester Valve	2932' Ft.
Initial Hydro Mud Pres.					TYPE AMOUNT		Depth Back Pres. Valve	Ft.
Initial Closed in Pres.					Cushion		Recovered	840 Feet of Muddy Water
Initial Flow Pres.			1				Recovered	Feet of
Final Flow Pres.			1				Recovered	Feet of
Final Closed in Pres.			2				Recovered	Feet of
Final Hydro Mud Pres.					Oil A.P.I. Gravity		Water Spec. Gravity	
Depth Bot. Gauge	2982	Ft.	Yes	Blanked Off	Gas Gravity		Surface Pressure	psi
BT. P.R.D. No.	397		12	Hour Clock	Tool Opened	6:45 A.M.	Tool Closed	9:30 AM A.M.
Initial Hydro Mud Pres.			1574		Remarks	Strong blow throughout test. MISRUN:		
Initial Closed in Pres.	Anchor Perfs.				ANCHOR PERFS. PLUGGED. No special			
Initial Flow Pres.	Plugged 1				reading adaptable.			
Final Flow Pres.	2							
Final Closed in Pres.								
Final Hydro Mud Pres.	1574							

Legal Location: NE SE 23 12S 29W
 Lease Name: E. M. BLAND
 Well No.: 1
 Field Area: Wildcat
 Test No.: 5
 County: COVE
 Lease Owner/Company Name: TIDEWATER OIL COMPANY
 State: KANSAS
 Owner's District: REECE

FORMATION TEST DATA

* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.



PRESSURE

TIME



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