	1st Min.	2nd Min.
Flow Time	30	45
Closed In Press. Time	30	60
Pressure Readings	Field	Office Corrected
Depth Top Gauge	4547 Ft.	NO Blanked Off
BT. P.R.D. No.	1839	12 Hour Clock
Initial Hydro Mud Pressure	2461	2377
Initial Closed in Pres.	1422	1426
Initial Flow Pres.	18 / 92 (1 / 2)	16 / 91 (1 / 2)
Final Flow Pres.	83 / 202 (1 / 2)	87 / 194 (1 / 2)
Final Closed in Pres.	1431	1427
Final Hydro Mud Pressure	2442	2363
Depth Cen. Gauge	Ft.	Blanked Off
BT. P.R.D. No.		Hour Clock
Initial Hydro Mud Pres.		
Initial Closed in Pres.		
Initial Flow Pres.	1 / 2	
Final Flow Pres.	1 / 2	
Final Closed in Pres.		
Final Hydro Mud Pres.		
Depth Bot. Gauge	4578 Ft.	YES Blanked Off
BT. P.R.D. No.	1838	12 Hour Clock
Initial Hydro Mud Pres.	-	2394
Initial Closed in Pres.		
Initial Flow Pres.	1 / HYDROSTATIC	
Final Flow Pres.	1 / RELEASE 2	
Final Closed in Pres.	-	1540
Final Hydro Mud Pres.	-	2381

Date	8-14-64	Ticket Number	423330 - S
Kind of Job	STRADDLE	Halliburton District	GREAT BEND
Tester	MR. WALKER / MR. MOORE	Witness	MR. MAY
Drilling Contractor	GARVEY DRILLING COMPANY		IC
Elevation	2296' K.B.	Top Packer	4558'
Total Depth	4582'	Bottom Packer	4571'
Interval Tested	4558'-4571'	Formation Tested	MISSISSIPPI
Casing or Hole Size	7 3/4"	Casing Perfs. Top / Bot.	-
Surface Choke	1"	Bottom Choke	3/4"
Size & Kind Drill Pipe	4½" F.H.	Drill Collars Above Tester (I.D. - LENGTH)	-
Mud Weight	9.8	Mud Viscosity	47
Temperature	123 °F Est. / °F Actual	Anchor Size & Length (ID / OD)	5" X 13'
Depths Mea. From	KELLY BUSHINGS	Depth of Tester Valve	4539' Ft.
Cushion (TYPE / AMOUNT)	- Ft.	Depth Back Pres. Valve	- Ft.
Recovered	156 Feet of	Oil specked mud	
Recovered	240 Feet of	Oil specked saltwater	
Recovered	Feet of		
Recovered	Feet of		
Oil A.P.I. Gravity	-	Water Spec. Gravity	-
Gas Gravity	-	Surface Pressure	- psi
Tool Opened	3:37 A.M. / P.M.	Tool Closed	6:22 A.M. / P.M.

Remarks: Opened tool for 30 minute 1st flow with weak blow increasing to good in 7 minutes. Closed tool for 30 minute initial closed in pressure. Reopened tool for 45 minute 2nd flow with good blow. Closed tool for 60 minute final closed in pressure.

Legal Location Sec. - Twp. - Rng.: SEC. 14 - 23W - 23W
Lease Name: LIPPOLDT
Well No.: 1
Test No.: 1
Field Area: ---
Lease Owner/Company Name: TEXACO INCORPORATED
Mea. From Tester Valve
County: HODGEMAN
State: KANSAS
Owner's District: KANSAS

FORMATION TEST DATA

5

Gauge No. 1839	Depth 4547'	Clock 12 hour	Ticket No. 423330

	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	16	.000	-	87	.000	91	.000	-	194
P_1	.0424	27	.0194	1.0765	1403	.064	111	.043	1.1262	1409
P_2	.0848	44	.0388	.8105	1412	.128	131	.086	.8565	1416
P_3	.1272	59	.0582	.6667	1416	.192	153	.129	.7096	1421
P_4	.1696	72	.0776	.5719	1419	.256	173	.172	.6120	1423
P_5	.2120	87	.0970	.5031	1421	.320	194	.215	.5408	1424
P_6			.1164	.4504	1423			.258	.4860	1426
P_7			.1358	.4084	1424			.301	.4420	1426
P_8			.1552	.3740	1425			.344	.4059	1426
P_9			.1746	.3452	1426			.387	.3756	1427
P_{10}			.1940	.3207	1426			.430	.3497	1427

Gauge No. 1838	Depth 4578'	Clock 12 hour

P_0	Hydrastatic Release									
P_1										
P_2										
P_3										
P_4										
P_5										
P_6										
P_7										
P_8										
P_9										
P_{10}										
Reading Interval	6		3			9		6		Minutes

REMARKS:

SPECIAL PRESSURE DATA

TICKET NO.	423330	
BT GAUGE NO.	INITIAL	FINAL
1839	⊙	⊙
	◇	◇

Log $\frac{t+\theta}{\theta}$

10 9 8 7 6 5 4 3 2 1

1360 | 1380 | 1400 | Psig | 1440 | 1460 | 1480

EXTRAPOLATED PRESSURE GRAPH

Liquid Production

B.T. Gauge Numbers			1839	1838	**Ticket Number** 8/14/64	423330
			PRESSURE	PRESSURE		
Initial Hydrostatic			2377	2394	Elevation	2296 ft.
Final Hydrostatic			2363	2381	Indicated Production 1st Flow	bbls. day
		Time			Indicated Production Total Flow	bbls. day
1st Flow	Initial	————	16	-		
	Final	30	87	-	Drill Collar Length	0 ft.
Initial Closed In Pressure		30	1426	-	Drill Collar I.D.	0 in.
2nd Flow	Initial	————	91	-	Drill Pipe Factor	.01422 bbls. ft.
	Final	45	194	-	Hole Size	7.75 in.
Final Closed In Pressure		60	1427	1540	Footage Tested	13 ft.
Extrapolated Static Pressure	Initial		1436	-	Mud Weight	9.8 lbs. gal.
	Final		1434	-	Viscosity, Oil or Water	4.5 cp
Slope ~~psi/cycle~~ P_{10}	Initial		1405	-	Oil API Gravity Est.	36 —
	Final		1416	-	Water Specific Gravity	- —

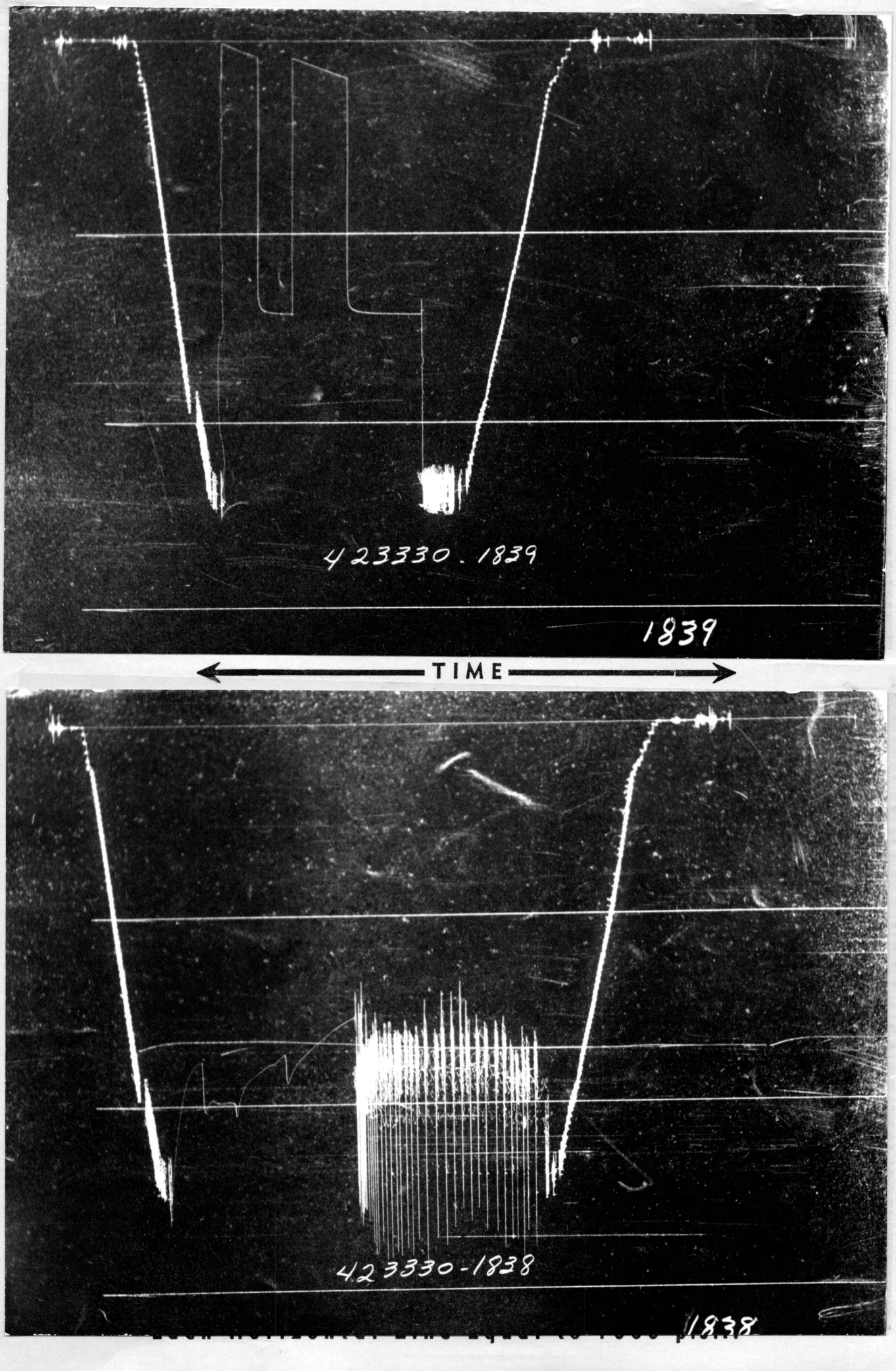
Remarks:

SUMMARY

Product	Equation	Gauge No. 1839 Depth 4547 Initial	Gauge No. 1839 Depth 4547 Final	Gauge No. 1838 Depth 4578 Initial	Gauge No. 1838 Depth 4578 Final	Units
Production	$Q = \frac{1440\ R}{t}$	139.8	128.9			bbls. day
Transmissability	$\frac{Kh}{\mu} = \frac{162.6\ Q}{m}$	733.6	1165			$\frac{\text{md. ft.}}{\text{cp}}$
Indicated Flow Capacity	$Kh = \frac{Kh}{\mu}\ \mu$	3301	5243			md. ft.
Average Effective	$K = \frac{Kh}{h}$	253.9	4033			md.
Permeability	$K_I = \frac{Kh}{h_I}$	-	-			md.
Damage Ratio	$DR = .183\ \frac{Ps - Pf}{m}$	7.96	12.6			—
Theoretical Potential w/Damage Removed	$Q_1 = Q\ DR$	1114	1626			bbls. day
Approx. Radius of Investigation	$b \leftrightarrows \sqrt{Kt}$ or $\sqrt{Kt_0}$	87.3	173.9			ft.
	$b_1 \leftrightarrows \sqrt{K_1 t}$ or $\sqrt{K_1 t_0}$	-	-			ft.
Potentiometric Surface *	$Pot. = El - GD + 2.319\ Ps$	1079	1074			ft.

NOTICE: These calculations are based upon information furnished by you and taken from Drill Stem Test pressure charts, and are furnished you for your information. In furnishing such calculations and evaluations based thereon, Halliburton is merely expressing its opinion. You agree that Halliburton makes no warranty express or implied as to the accuracy of such calculations or opinions, and that Halliburton shall not be liable for any loss or damage, whether due to negligence or otherwise, in connection with such calculations and opinions.

INTERPRETATIONS AND CALCULATIONS


PRESSURE
TIME
423330 . 1839
1839
423330-1838
1838