PIEHL	1	1	GULF OIL CORPORATION	WICHITA
LEASE	WELL NO.	TEST NO.	COMPANY	DISTRICT

Halliburton
OIL WELL CEMENTING COMPANY

LOCATION	Sec. 19-30S-9W	Date	9-6-56
FIELD	Nashville	Ticket No.	40155
COUNTY	Kingman	HOWCO District	Pratt
STATE	Kansas	Kind of Job	Open Hole
CONTRACTOR	Barbour Drlg. Co.	Price	$215.00
MUD DATA	**HOLE & TOOL DATA**	Second Packer Assembly	
Kind	Starch Base	Safety Joint	
Weight	9.8 lbs.-gal.	Extra Folder Charge	
Viscosity	46 Sec.	Shaffer Jars	$100.00
Filter Loss	14.4 c. c. Filter Cake 2/32 in.		
Est. Gauge Depth Temp.	138 F°		
Tool Open	60 Min.		
Time Closed In.	20 Min. - Initial 30 Min. - Final		
		Total	$315.00
		Witnessed By	Paul Miller
		Tester	R.C. Kuhn Mr. Davis

Total Depth	4117'	Casing Perforations	Top -		
			Bottom -		
Top Packer Depth	4087'	Bottom Packer Depth	-		
Casing or Hole Size	7 7/8"	Liner or Rathole Size	-		
Formation Tested	Kansas City Lime				
Size Drill Pipe	4½" API F.H.	Size Drill Collars	5" x 260'		
Size Bottom Choke	3/4"	Size Surface Choke	1"		
Size Hook Wall Packer	-	Size Rings	-	No. Rings	-
Size D. E. Wall Packer	6 3/4" E.S.W.P.			No. Packers	1
Size & Length Anchor	5" x 30'				
Depth Top Gauge	4090' Ft.	Depth Bottom Gauge	4114' Ft.	Amount of Cushion	None
BT. P.R.D. No.	697	Blanked Off	No	BT. P.R.D. No.	311
				Blanked Off	Yes
12 Hr. Clock No.	2480			12 Hr. Clock No.	2798

Pressure Readings	Field	Office Corrected	Field	Office Corrected	
Initial Hydro Mud Pressure	-	2116	1975	2128	p.s.i.
Initial Flow Pres.	-	32	42	48	p.s.i.
Final Flow Pres.	-	167	180	185	p.s.i.
Closed in Pres.	-	1589 Initial 1457 Final	1470	1600 1468	p.s.i.
Final Hydro Mud Pressure	-	2106	1975	2116	p.s.i.

REMARKS: Set packer, opened tool and took a 20 minute initial closed in pressure. Dropped bar and broke disc and received a fair blow, continuing throughout test. Recovered 335' of muddy salt water. Disc sub was run 11' above tester using 4½" blank pipe for air chamber. Ran 260' of 5" drill collars immediately above disc sub.

All depths measured from Kelly Bushing

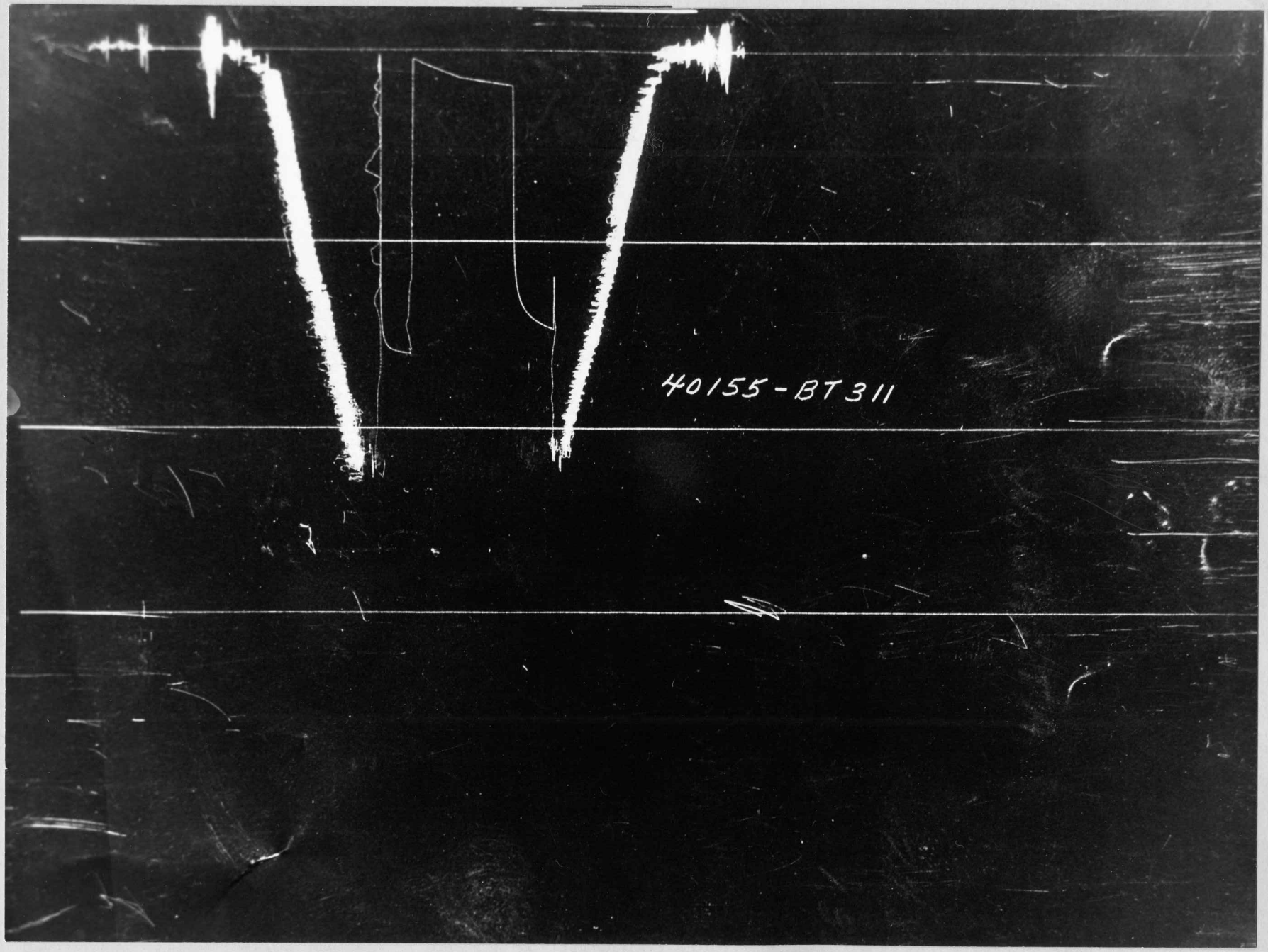
No. Folders Reproduced 5

PIEHL	1	1	GULF OIL CORPORATION	WICHITA
LEASE	WELL NO.	TEST NO.	COMPANY	DISTRICT

Bottom Recorder

TIME

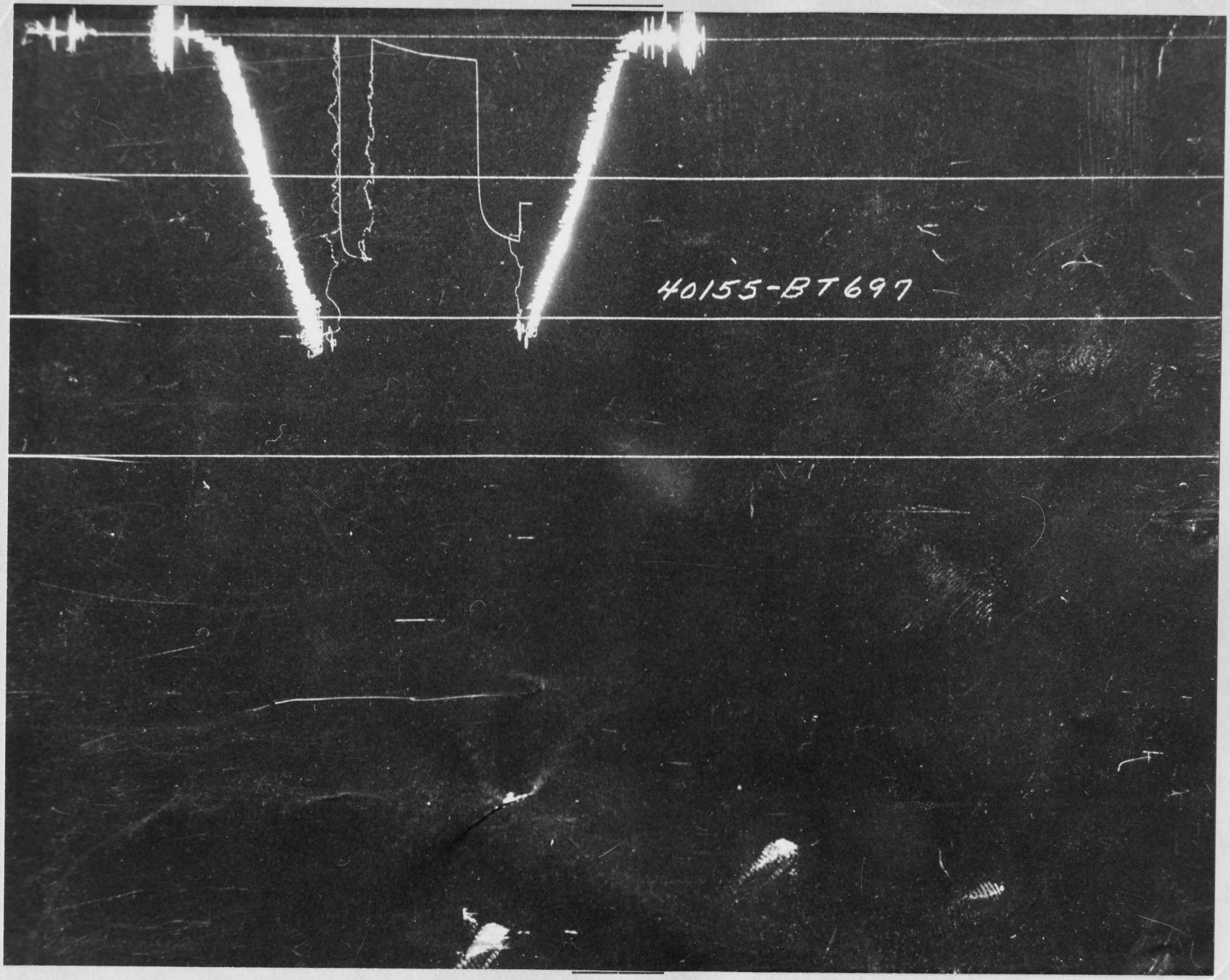
PRESSURE



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

Top Recorder

TIME



PRESSURE

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

Company GULF OIL CORPORATION

Date 9-6-56

Lease PIEHL

Well No. 1

Ticket No. 40155

Test No. 1

	Time	PSI
Initial Hydro Mud Pressure		2116
Initial Closed In Pressure	20 Min.	1589
Initial Flow		32
Final Flow	60 Min.	167
Final Closed In Pressure	30 Min.	1457
Final Hydro Mud Pressure		2106

Total Depth 4117'

Packer Depth 4087'

BT No. 697 Depth 4090'

12 Hr. Clock No. 2480

Temperature Corrected to 138 ° F.

	Initial CIP			Flow Pressure			Final CIP		
	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.
PO	.000	.000	0	.000	.017	32	.000	.089	167
P1	.013	.769	1437	.103	.044	82	.017	.647	1210
P2	.026	.819	1529	.206	.068	127	.034	.697	1303
P3	.039	.833	1555	.309	.079	148	.051	.724	1353
P4	.052	.839	1567	.412	.089	167	.068	.740	1383
P5	.065	.843	1574				.085	.751	1403
P6	.078	.845	1578				.102	.759	1418
P7	.091	.847	1581				.119	.765	1429
P8	.104	.849	1585				.136	.771	1440
P9	.117	.850	1587				.153	.776	1449
P10	.130	.851	1589				.170	.780	1457
	2 Minute Intervals			15 Minute Intervals			3 Minute Intervals		

Remarks:

Company GULF OIL CORPORATION

Date 9-6-56

Lease PIEHL

Well No. 1

Ticket No. 40155

Test No. 1

	Time	PSI
Initial Hydro Mud Pressure		2128
Initial Closed In Pressure	20 Min.	1600
Initial Flow		48
Final Flow	60 Min.	185
Final Closed In Pressure	30 Min.	1468
Final Hydro Mud Pressure		2116

Total Depth 4117'

Packer Depth 4087'

BT No. 311 Depth 4114'

12 Hr. Clock No. 2798

Temperature Corrected to 138 ° F.

	Initial CIP			Flow Pressure			Final CIP		
	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.
PO	.000	.017	23	.000	.036	48	.000	.139	185
P1	.013	1.068	1427	.102	.074	99	.0175	.878	1172
P2	.026	1.149	1536	.204	.110	147	.035	.976	1303
P3	.039	1.169	1562	.306	.125	167	.0525	1.014	1354
P4	.052	1.179	1576	.408	.139	185	.070	1.040	1389
P5	.065	1.185	1584				.0875	1.056	1411
P6	.078	1.189	1589				.105	1.068	1427
P7	.091	1.191	1592				.1225	1.078	1440
P8	.104	1.194	1596				.140	1.086	1451
P9	.117	1.195	1597				.1575	1.094	1462
P10	.130	1.197	1600				.175	1.099	1468
	2 Minute Intervals			15 Minute Intervals			3 Minute Intervals		

Remarks:

PIEHL	1	2	GULF OIL CORPORATION	WICHITA
LEASE	WELL NO.	TEST NO.	COMPANY	DISTRICT

Halliburton
OIL WELL CEMENTING COMPANY

LOCATION	19-30S-9W
FIELD	Wildcat
COUNTY	Kingman
STATE	Kansas
CONTRACTOR	Barbour Drlg. Co.

MUD DATA

Kind	Starch
Weight	9.8 lbs.-gal.
Viscosity	47 Sec.
Filter Loss	7.6 c. c. Filter Cake 2/32 in.
Est. Gauge Depth Temp.	130 ° F°
Tool Open	70 Min.
Time Closed In.	20 Min. - Initial 30 Min. - Final

HOLE & TOOL DATA

Total Depth	4440'	Casing Perforations Top	-
		Bottom	-
Top Packer Depth	4421'	Bottom Packer Depth	-
Casing or Hole Size	7 7/8"	Liner or Rathole Size	6 1/8"
Formation Tested	Mississippian		
Size Drill Pipe	4½" F.H.	Size Drill Collars	5" x 240'
Size Bottom Choke	3/4"	Size Surface Choke	1"
Size Hook Wall Packer	-	Size Rings -	No. Rings -
Size D. E. Wall Packer	6 3/4" E.S.W.P.		No. Packers 1
Size & Length Anchor	5" x 19'		

Date	9-9-56
Ticket No.	40158
HOWCO District	Pratt
Kind of Job	Open Hole
Price	$215.00
Second Packer Assembly	
Safety Joint	
Extra Folder Charge	
Shaffer Jars	$100.00
Total	$315.00
Witnessed By	Paul Smith
Tester	Mr. Kuhn

Depth Top Gauge	4424' Ft.	Depth Bottom Gauge	4436' Ft.
BT. P.R.D. No.	697	Blanked Off	No
BT. P.R.D. No.	311	Blanked Off	Yes
12 Hr. Clock No.	2480	12 Hr. Clock No.	2798

Pressure Readings	Field	Office Corrected	Field	Office Corrected
Initial Hydro Mud Pressure	2495	2313	-	2344 p.s.i.
Initial Flow Pres.	20	62	-	44 p.s.i.
Final Flow Pres.	30	66	-	51 p.s.i.
Closed in Pres.	1342 Initial 1350 1230 Final 1259		- Initial 1321 - Final 1243	p.s.i.
Final Hydro Mud Pressure	2495	2292	-	2272 p.s.i.

Amount of Cushion None

REMARKS: Set packer, opened tool and took a 20 minute initial closed in pressure. Dropped bar and broke disc and received a strong blow. Gas to the surface in 58 minutes. Gauged (approximately) 8,800 cubic feet. Recovered 102' of gas cut mud. Ran disc sub 11' above tool. Had 270' of 5" drill collars above the disc sub.

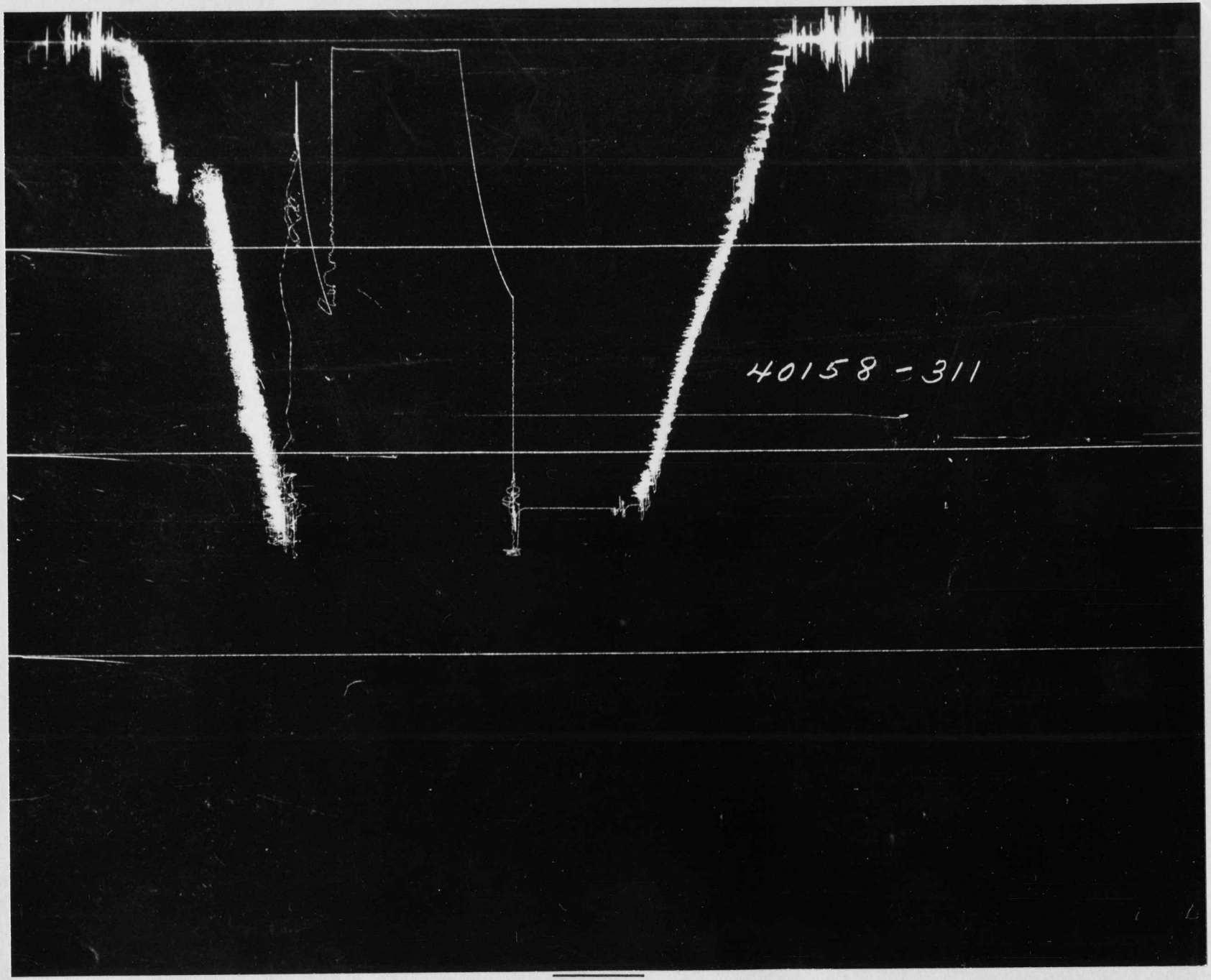
All depths measured from Kelly Bushing

No. Folders Reproduced 5

PIEHL	1	2	GULF OIL CORPORATION	WICHITA
LEASE	WELL NO.	TEST NO.	COMPANY	DISTRICT

Bottom Recorder

TIME



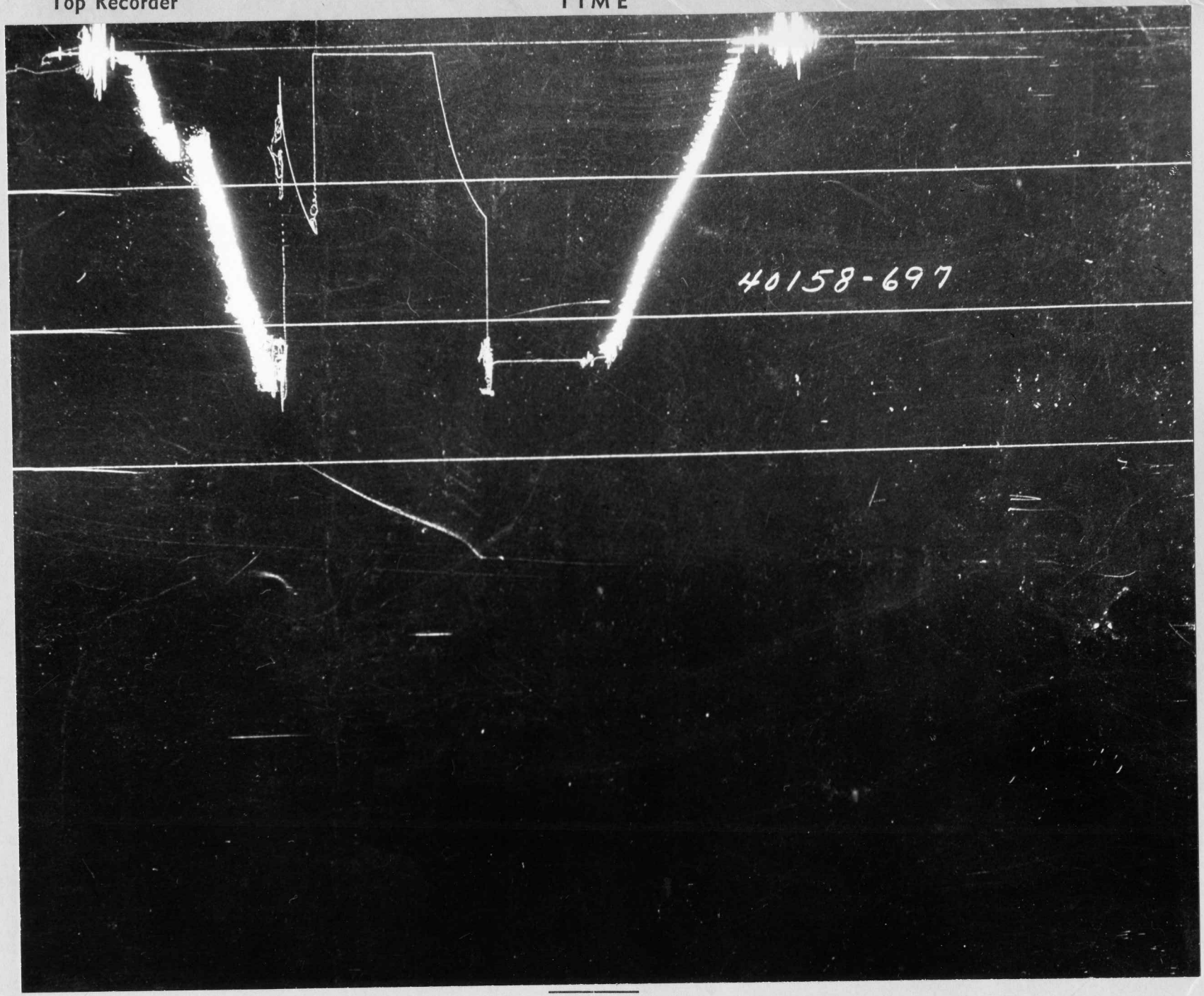
PRESSURE

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

Top Recorder

TIME

PRESSURE



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

Company GULF OIL CORPORATION Date 9-9-56

Lease PIEHL Well No. 1 Ticket No. 40158

Test No. 2

	Time	PSI
Initial Hydro Mud Pressure		2313
Initial Closed In Pressure	20 Min.	1350
Initial Flow		62
Final Flow	70 Min.	66
Final Closed In Pressure	30 Min.	1259
Final Hydro Mud Pressure		2292

Total Depth 4440'

Packer Depth 4421'

BT No. 697 Depth 4424'

12 Hr. Clock No. 2480

Temperature Corrected to 130 ° F.

	Initial CIP			Flow Pressure			Final CIP		
	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.
PO	.000	.115	216	.000	.033	62	.000	.035	66
P1	.0135	.352	661	.105	.031	58	.020	.161	302
P2	.027	.419	787	.210	.032	60	.040	.265	498
P3	.0405	.480	902	.315	.035	66	.060	.359	674
P4	.054	.530	996	.420	.034	64	.080	.432	812
P5	.0675	.575	1080	.473	.035	66 *	.100	.491	922
P6	.081	.613	1151				.120	.543	1020
P7	.0945	.651	1222				.140	.584	1097
P8	.108	.680	1275				.160	.618	1160
P9	.1215	.704	1320				.180	.650	1220
P10	.135	.720	1350				.200	.671	1259
	2 Minute Intervals			15 Minute Intervals			3 Minute Intervals		

Remarks: * Last interval of flow time is not equal to a full 15 minute interval.

Company GULF OIL CORPORATION Date 9-9-56

Lease PIEHL Well No. 1 Ticket No. 40158

Test No. 2

Total Depth 4440'

Packer Depth 4421'

BT No. 311 Depth 4436'

12 Hr. Clock No. 2798

Temperature Corrected to 130 ° F.

	Time	PSI
Initial Hydro Mud Pressure		2344
Initial Closed In Pressure	20 Min.	1321
Initial Flow		44
Final Flow	70 Min.	51
Final Closed In Pressure	30 Min.	1243
Final Hydro Mud Pressure		2272

	Initial CIP			Flow Pressure			Final CIP		
	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.
P0	.000	.148	197	.000	.033	44	.000	.038	51
P1	.013	.440	586	.102	.032	43	.020	.189	252
P2	.026	.554	738	.204	.035	47	.040	.346	461
P3	.039	.637	849	.306	.037	49	.060	.472	629
P4	.052	.701	934	.408	.037	49	.080	.572	762
P5	.065	.770	1027	.475	.038	51 *	.100	.667	889
P6	.078	.824	1099				.120	.742	989
P7	.091	.874	1166				.140	.799	1066
P8	.104	.914	1220				.160	.855	1141
P9	.117	.956	1276				.180	.894	1193
P10	.130	.989	1321				.200	.931	1243
	2 Minute Intervals			15 Minute Intervals			3 Minute Intervals		

Remarks: * Last interval of flow time is not equal to a full 15 minute interval.

PIEHL	1	3	GULF OIL CORPORATION	WICHITA
LEASE	WELL NO.	TEST NO.	COMPANY	DISTRICT

Halliburton
OIL WELL CEMENTING CO.

LOCATION	Sec. 19 - 30s - 9w
FIELD	Wildcat
COUNTY	Kingman
STATE	Kansas
CONTRACTOR	Barbour Drilling Co.

MUD DATA

Kind	Starch Base
Weight	9.8 lbs.-gal.
Viscosity	46 Sec.
Filter Loss	7 c. c. Filter Cake 2/32 in.
Est. Gauge Depth Temp.	Calculated 110 F°
Tool Open	60 Minutes
Time Closed In.	20 Minutes - Initial 30 Minutes - Final

HOLE & TOOL DATA

Total Depth	4472'	Casing Perforations Top	
		Bottom	
Top Packer Depth	4437'	Bottom Packer Depth	-
Casing or Hole Size	7 7/8"	Liner or Rathole Size	-
Formation Tested	Mississippi		
Size Drill Pipe	4½" API FH	Size Drill Collars	5" x 270'
Size Bottom Choke	3/4"	Size Surface Choke	1"
Size Hook Wall Packer	-	Size Rings -	No. Rings -
Size & Type Wall Packer	6 3/4" E.S.A.		No. Packers 1
Size & Length Anchor	5" x 35'		

Date	9-11-56
Ticket No.	40159
HOWCO DISTRICT	Pratt
Kind of Job	Open Hole Test
Price	$215.00
Second Packer Assembly	
Safety Joint	
Extra Folder Charge	
Shaffer Jars	100.00
Total	$315.00
Witnessed By	Paul Smith
Tester	R. C. Kuhn & L. Davis

Depth Top Gauge	4440' Ft.	Depth Bottom Gauge	4469' Ft.
BT. P. R. D. No.	697	Blanked Off	No
BT. P. R. D. No.	311	Blanked Off	Yes
12 Hr. Clock No.	2480	12 Hr. Clock No.	2798

Pressure Readings	Field	Office Corrected	Field	Office Corrected	
Initial Hydro Mud Pressure	2380	2330	2420	2389	p.s.i.
Initial Flow. Pres.	20	65	50	69	p.s.i.
Final Flow Pres.	35	54	60	65	p.s.i.
Closed in Pres.	380 80	395 80	380 110	402 Initial 92 Final	p.s.i.
Final Hydro Mud Pressure	2380	2330	2420	2345	p.s.i.

Amount of Cushion: None

REMARKS: Set packer, opened tool and took a 20 minute initial closed in pressure. Dropped bar and broke disc and received a good blow. No gas to surface. Recovered 120' of gas and 90' of gas cut mud.

All depths measured from Kelly Bushing

No. Folders Reproduced 5

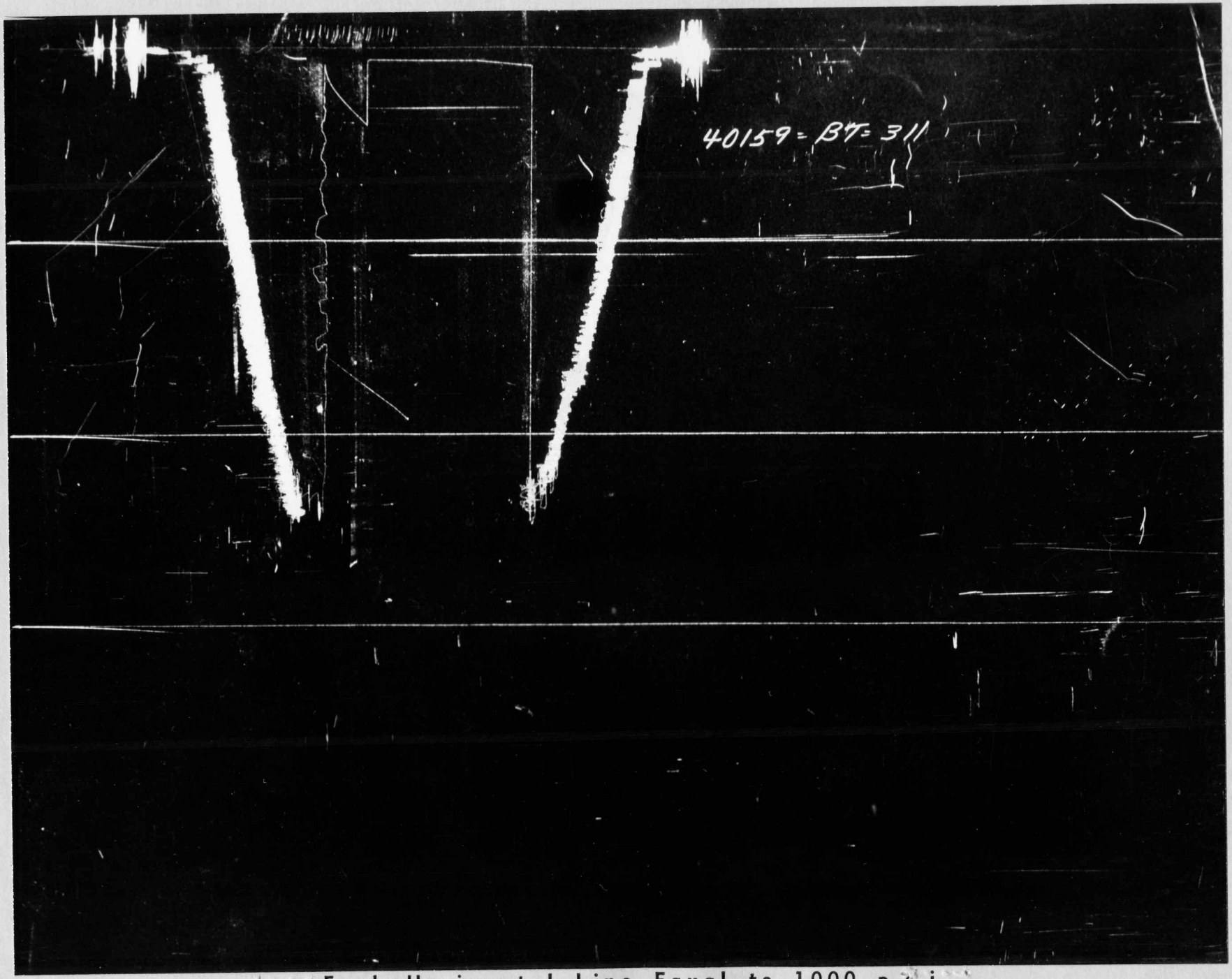
HOWCO No. 1102-A (Printed in U. S. A.)—Southwestern—4808E

PIEHL	1	3	GULF OIL CORPORATION	WICHITA
LEASE	WELL NO.	TEST NO.	COMPANY	DISTRICT

Bottom Recorder

TIME

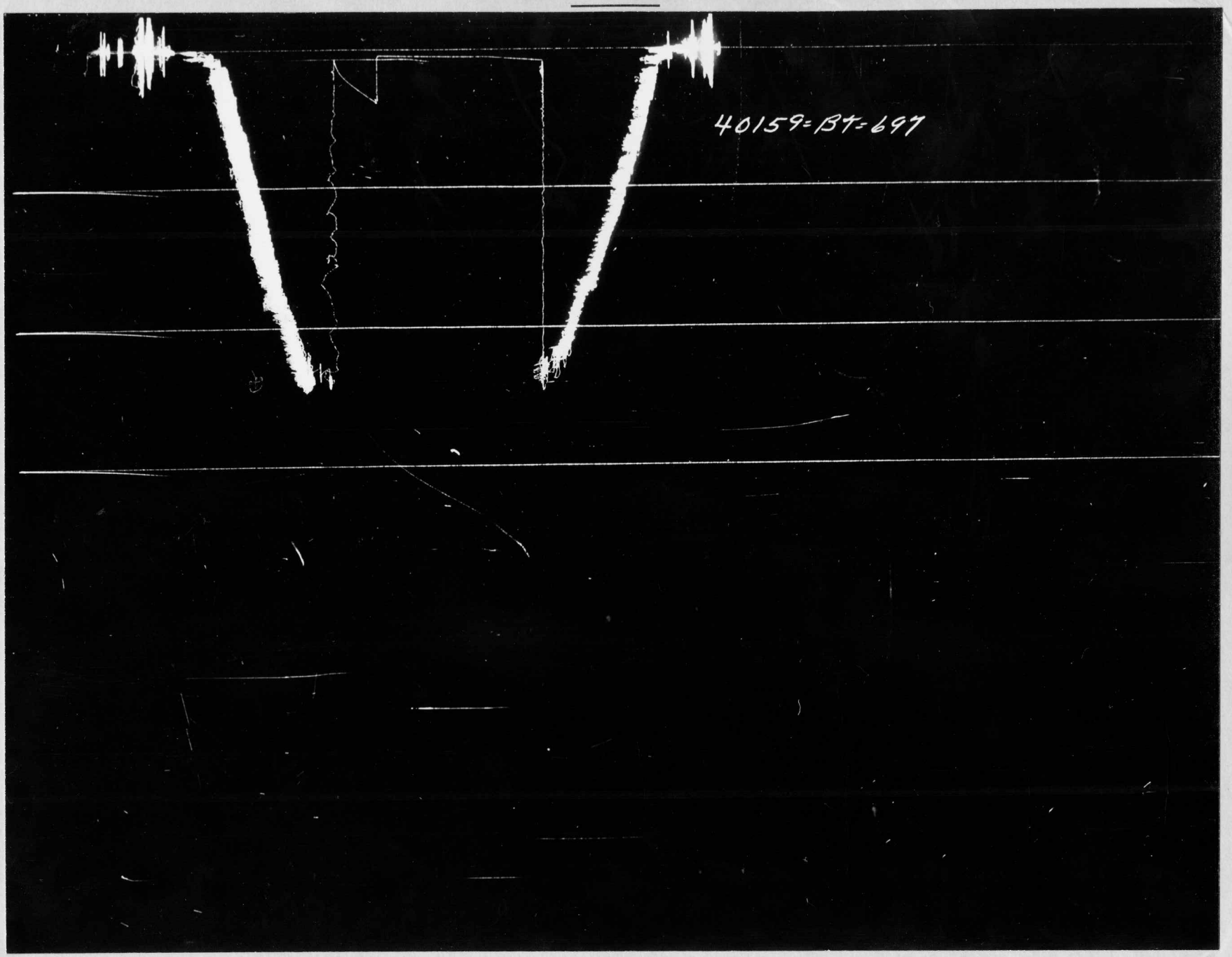
PRESSURE



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

Top Recorder

TIME



PRESSURE

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

Company GULF OIL CORPORATION

Date 9-11-56

Lease PIEHL

Well No. 1

Ticket No. 40159

Test No. 3

	Time	PSI
Initial Hydro Mud Pressure		2330
Initial Closed In Pressure	20 Mins.	395
Initial Flow		65
Final Flow	60 Mins.	54
Final Closed In Pressure	30 Mins.	80
Final Hydro Mud Pressure		2330

Total Depth 4472'

Packer Depth 4437'

BT No. 697 Depth 4440'

12 Hr. Clock No. 2480

Temperature Corrected to Calc. 110 ° F.

	Initial CIP			Flow Pressure			Final CIP		
	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.
PO	.000	.038	73	.000	.034	65	.000	.028	54
P1	.017	.081	155	.110	.026	50	.021	.030	57
P2	.034	.106	203	.220	.027	52	.042	.031	59
P3	.051	.123	236	.330	.028	54	.063	.033	63
P4	.068	.137	262	.440	.028	54	.084	.035	67
P5	.085	.149	285				.105	.036	69
P6	.102	.160	307				.126	.037	71
P7	.119	.172	330				.147	.038	73
P8	.136	.184	352				.168	.040	77
P9	.153	.196	375				.189	.041	79
P10	.170	.206	395				.210	.042	80
	2 Minute Intervals			15 Minute Intervals			3 Minute Intervals		

Remarks:

SANDEFER 6959 2½M 12-55

Company GULF OIL CORPORATION Date 9-11-56

Lease PIEHL Well No. 1 Ticket No. 40159

Test No. 3

	Time	PSI
Initial Hydro Mud Pressure		2389
Initial Closed In Pressure	20 Mins.	402
Initial Flow		69
Final Flow	60 Mins.	65
Final Closed In Pressure	30 Mins.	92
Final Hydro Mud Pressure		2345

Total Depth 4472'

Packer Depth 4437'

BT No. 311 Depth 4469'

12 Hr. Clock No. 2798

Temperature Corrected to Calc. 110 ° F.

	Initial CIP			Flow Pressure			Final CIP		
	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Defl. .000"	PSI Temp. Corr.
P0	.000	.065	88	.000	.051	69	.000	.048	65
P1	.017	.130	176	.1085	.045	61	.0205	.051	69
P2	.034	.158	214	.217	.046	62	.041	.052	70
P3	.051	.180	244	.3255	.047	64	.0615	.054	73
P4	.068	.200	271	.434	.048	65	.082	.056	76
P5	.085	.218	295				.1025	.058	79
P6	.102	.236	320				.123	.059	80
P7	.119	.252	341				.1435	.061	83
P8	.136	.278	376				.164	.064	87
P9	.153	.284	385				.1845	.065	88
P10	.170	.297	402				.205	.068	92
	2 Minute Intervals			15 Minute Intervals			3 Minute Intervals		

Remarks:

PIEHL	1	4	GULF OIL CORPORATION	WICHITA
LEASE	WELL NO.	TEST NO.	COMPANY	DISTRICT

Halliburton
OIL WELL CEMENTING CO.

LOCATION	19-30-9			Date	9-14-56
FIELD	Wildcat			Ticket No.	40070
COUNTY	Kingman			HOWCO DISTRICT	Pratt
STATE	Kansas	HOLE & TOOL DATA		Kind of Job	Open Hole Test
CONTRACTOR	Barbour Drilling Co.	Total Depth 4800'	Casing Perforations Top / Bottom	Price	$215.00
MUD DATA		Top Packer Depth 4780'	Bottom Packer Depth -	Second Packer Assembly	
Kind	Starch Base	Casing or Hole Size 7 7/8"	Liner or Rathole Size -	Safety Joint	
Weight	9.8 lbs.-gal.	Formation Tested Simpson Sand		Extra Folder Charge	15.00
Viscosity	47 Sec.	Size Drill Pipe 4½" API FH	Size Drill Collars -	Jars	Shaffer 100.00
Filter Loss	9.4 c. c. Filter Cake 2/32 in.	Size Bottom Choke 3/4"	Size Surface Choke 1"		
Est. Gauge Depth Temp.	Calculated 120 F°	Size Hook Wall Packer -	Size Rings -	No. Rings -	
Tool Open	1 Hour	Size & Type Wall Packer 6 3/4"		No. Packers 1	Total $330.00
Time Closed In.	25 Minutes - Initial 30 Minutes - Final	Size & Length Anchor 5" x 20'			Witnessed By Paul Miller
Depth Top Gauge	4790' Ft.	Depth Bottom Gauge 4795' Ft.		Amount of Cushion None	Tester V. E. Snidle
BT. P. R. D. No.	698 Blanked Off No	BT. P. R. D. No. 536	Blanked Off Yes		
12 Hr. Clock No.	3004	12 Hr. Clock No. 2480			

Pressure Readings	Field	Office Corrected	Field	Office Corrected	
Initial Hydro Mud Pressure	2564	2442	-	2464	p.s.i.
Initial Flow. Pres.	22	23	-	41	p.s.i.
Final Flow Pres.	58	61	-	72	p.s.i.
Closed in Pres.	1678 1624	1680 1607	- -	1700 Initial 1635 Final	p.s.i.
Final Hydro Mud Pressure	-	2442	-	2464	p.s.i.

REMARKS: Set packer, opened tool and took a 25 minute initial closed in pressure. Dropped bar and broke disc and received a weak blow. Recovered 100' of watery mud. No special reading. Closed in pressures are considered questionable due to lack of recovery and reverse type buildup curves.

All depths measured from Kelly Bushing

No. Folders Reproduced 8

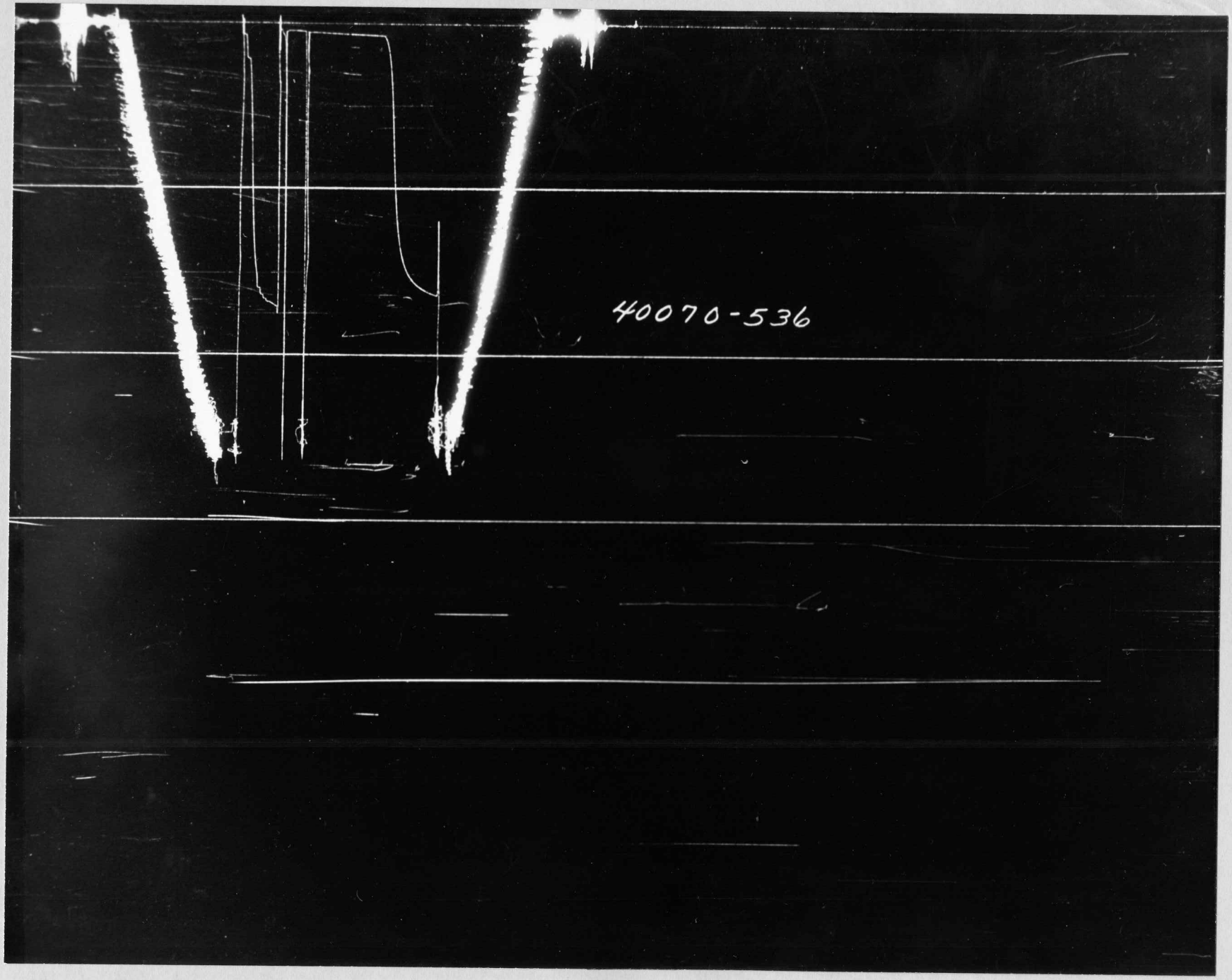
HOWCO No. 1102 A (Printed in U. S. A.) Southwestern 4808E

PIEHL	1	4	GULF OIL CORPORATION	WICHITA
LEASE	WELL NO.	TEST NO.	COMPANY	DISTRICT

Bottom Recorder

TIME

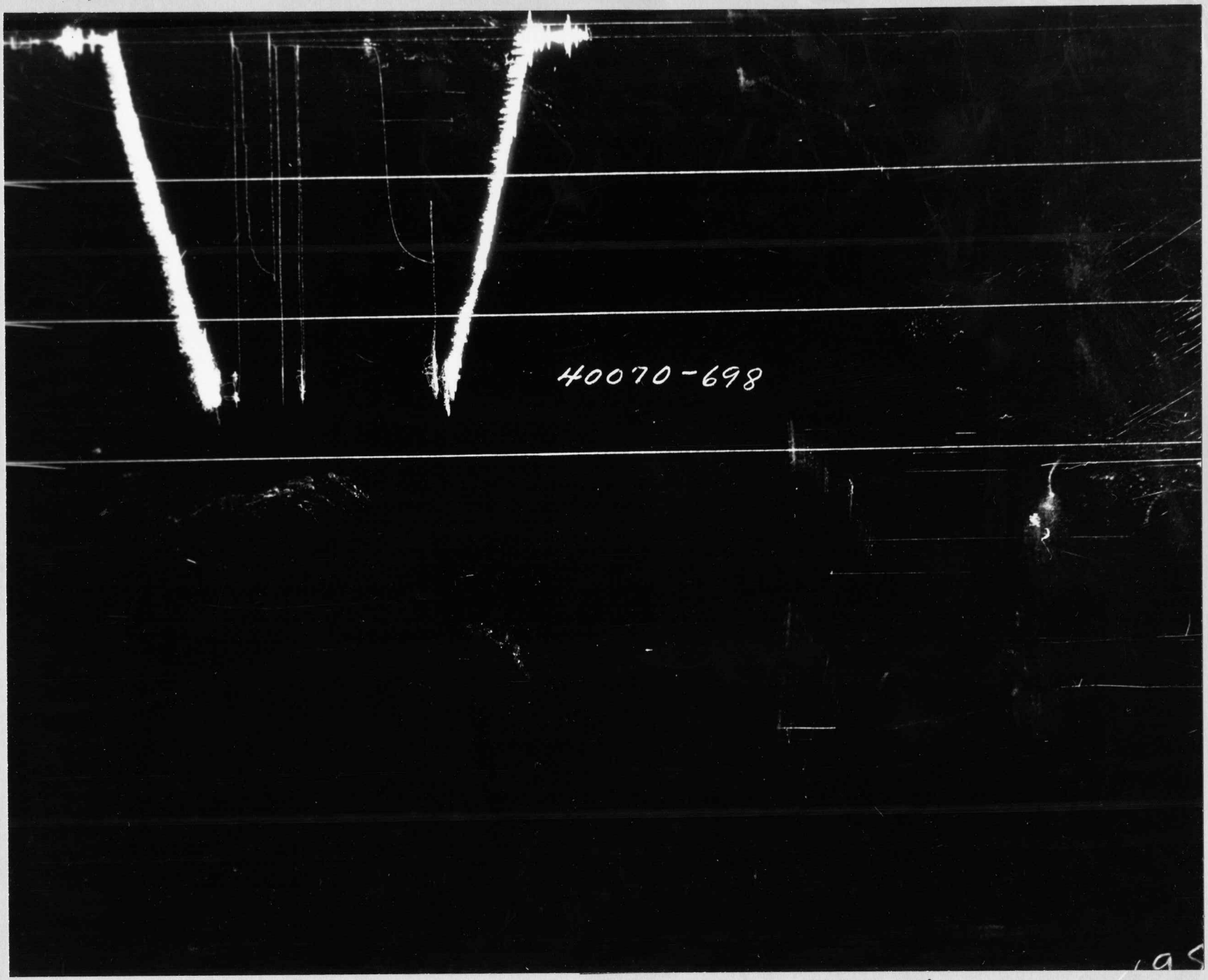
PRESSURE



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

Top Recorder

TIME



PRESSURE

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