
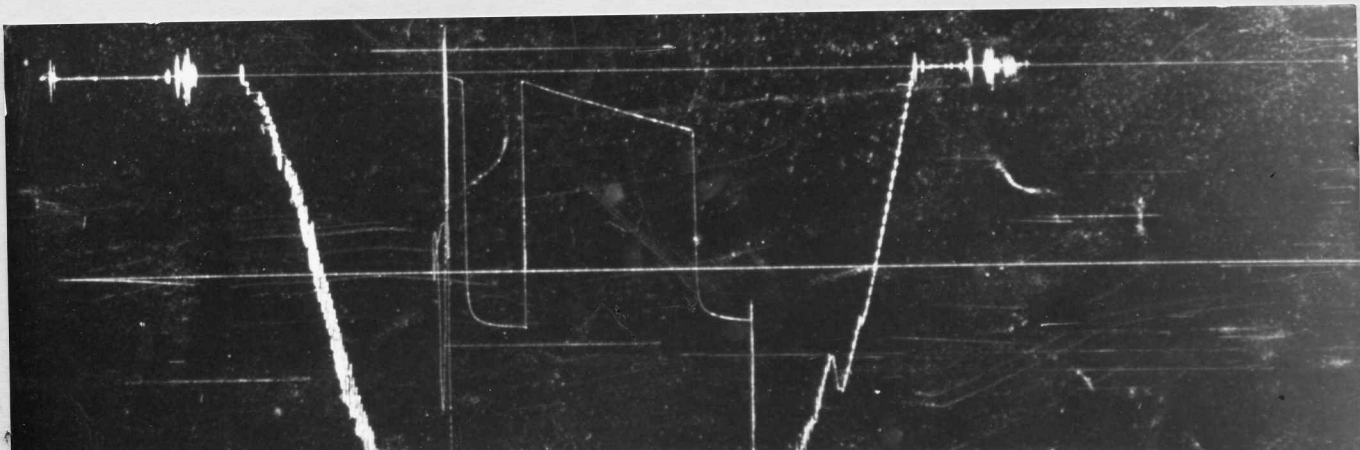


Initial Closed In Time	30	Minutes		Date	5-25-61	
Tool Open Flow Period	1st 10 / 2nd 90	Minutes		Ticket No.	314646	
Final Closed In Time	30	Minutes		Halliburton District	Liberal	
Depth Top Gauge	4420	Ft.	Blanked Off	no	Kind of Job	Open Hole
BT. P.R.D. No	690		12	Hr. Clock	CONTRACTOR	Hearndon Drilling Co.
Pressure Readings	Field		Office Corrected		HOLE & TOOL DATA	
Initial Hydro Mud Pressure	2200		2213		Elevation	2944'
Initial Closed in Pres.	1270		1285		Total Depth	4455'
Initial Flow Pres.	55		19-19		Casing or Hole Size	7 7/8"
Final Flow Pres.	300		46-310		Liner or Rathole Size	7 7/8"
Final Closed in Pres.	1255		1264		Casing Perforations	Top Bottom
Final Hydro Mud Pressure	2185		2190		Interval Tested	4455'-4437'
Depth Center Gauge	4451	Ft.	Blanked Off	yes	Formation Tested	Kansas City
BT. P.R.D. No	2019		4	Hr. Clock	Est. Gauge Depth Temp.	110 F°
Pressure Readings	Field		Office Corrected		MUD DATA Weight	9.8
Initial Hydro Mud Pressure					All depths measured from	Kelly Bushing
Initial Closed in Pres.					No...Folders Reproduced	5
Initial Flow Pres.					REMARKS: Testing Kansas City from 4455'-4437'	
Final Flow Pres.					Opened tool for 10 minute first flow at 7:12 PM. Fair blow at surface. Closed tool at 7:22 for 30 minutes for initial closed in pressure. Reopened tool at 7:52 for 90 minute test with fair blow at surface through out test. Closed tool at 10:22 for 30 minute final closed in pressure.	
Final Closed in Pres.						
Final Hydro Mud Pressure						
Depth Bottom Gauge		Ft.	Blanked Off			
BT. P.R.D. No				Hr. Clock		
Pressure Readings	Field		Office Corrected			
Initial Hydro Mud Pressure					Recovered	750 Feet of saltwater
Initial Closed in Pres.					Recovered	Feet of
Initial Flow Pres.					Recovered	Feet of
Final Flow Pres.					Recovered	Feet of
Final Closed in Pres.					Recovered	Feet of
Final Hydro Mud Pressure					Witnessed By	Toby Elster
Amount-Type of Cushion	none				Tester	L. V. Norman & J. Pitzer

LOCATION SEC. 30-28-32 FIELD WILDCAT COUNTY HASKELL STATE KANSAS

MASONER LEASE NAME  
WELL NO. 1  
TEST NO. 1  
WALTER KUHNS LEASE OWNER  
HUGOTON, KS.  
OWNERS DISTRICT



COMPANY WALTER KUHN 5

Initial Hydro Mud Pressure		Time	PSI	DATE <u>5-25-61</u>
			2213	
1st	Initial Flow		19	TICKET NO. <u>314646</u>
	Final Flow	10 min.	46	LEASE <u>MASONER</u>
Initial Closed In Pressure		30 min.	1285	
2nd	Initial Flow		49	Well No. <u>1</u> Test No. <u>1</u>
	Final Flow	90 min.	310	BT No. <u>690</u> Depth <u>4420'</u>
Final Closed In Pressure		30 min.	1264	<u>12</u> Hr. Clock <u>-</u>
Final Hydro Mud Pressure			2190	Temp. Corr. <u>Calc. 110</u> ° F

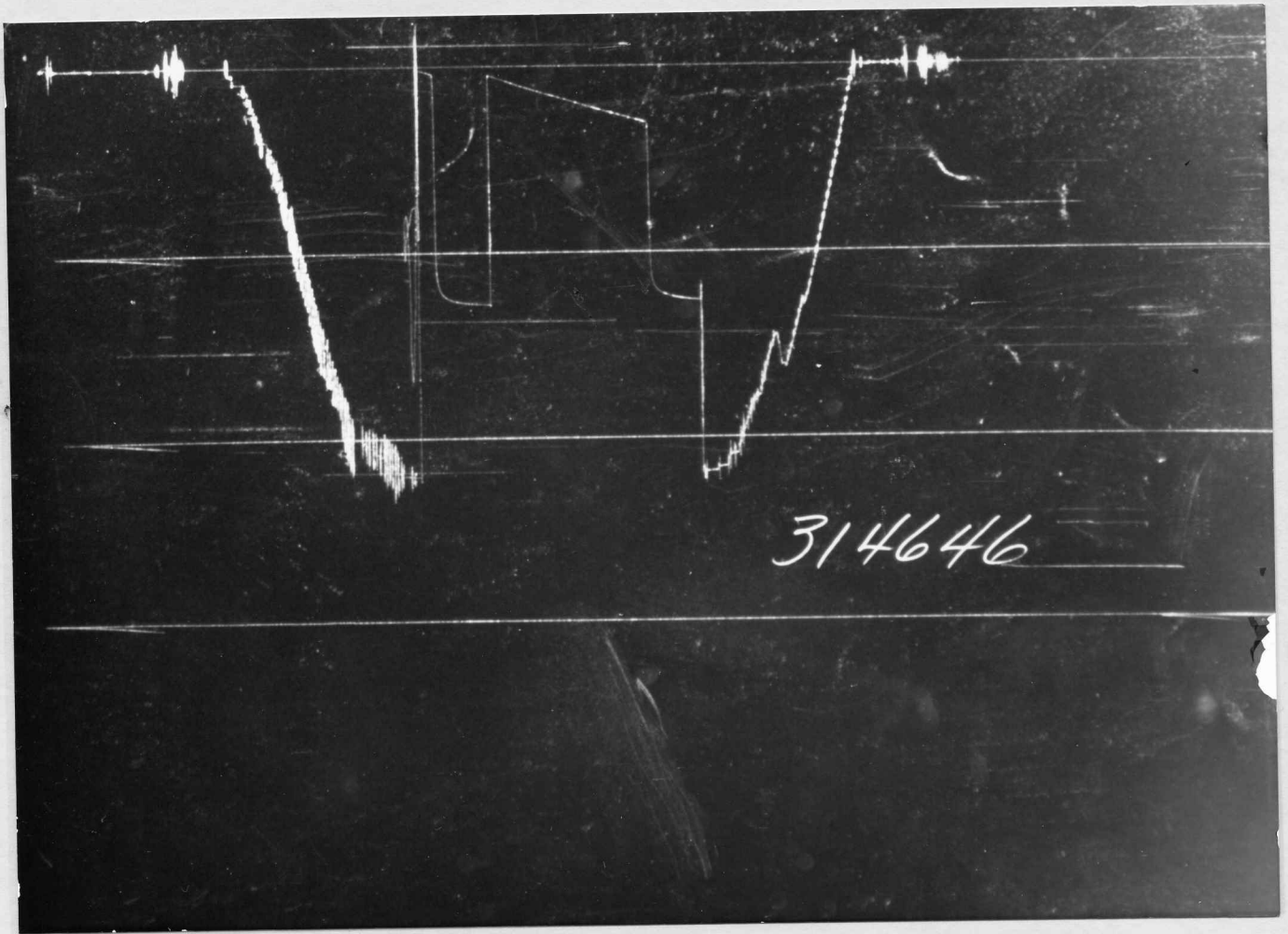
PRESSURE



A—Ini  
B—Ini  
C—Fin  
D—Clc  
E—Fin

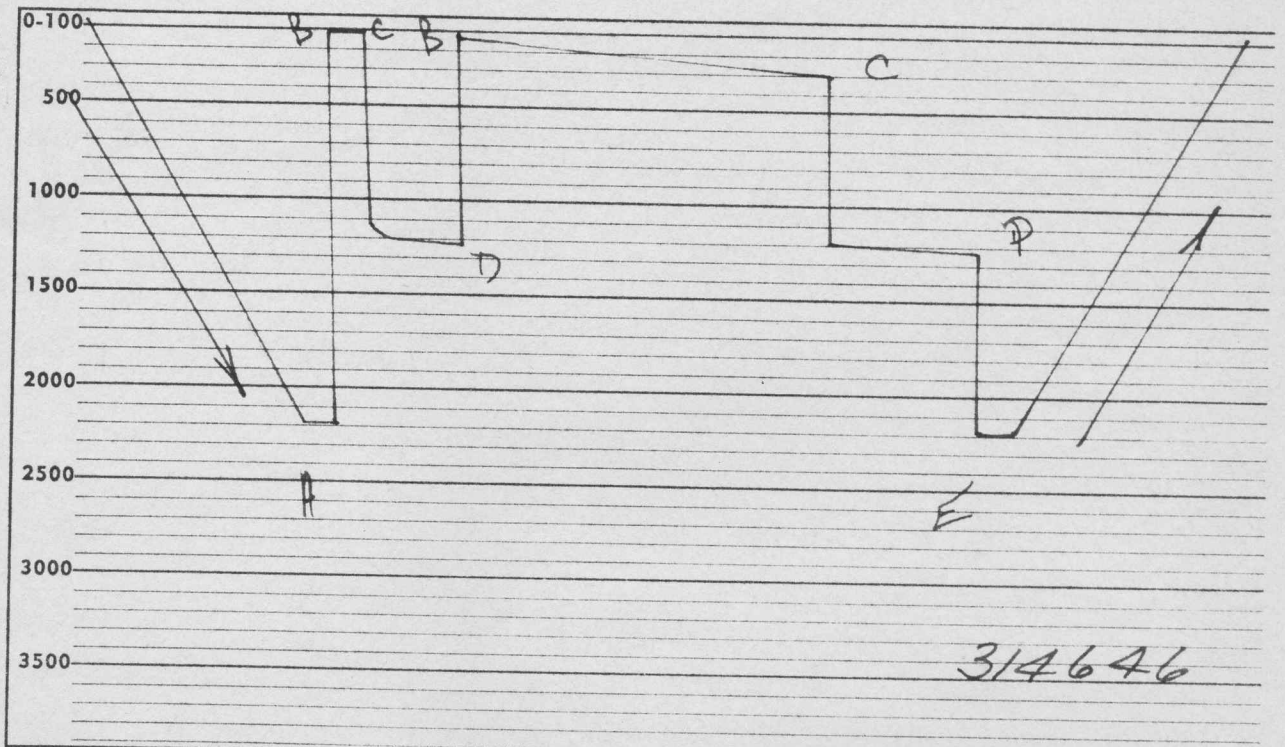
	1st Flow Pressure		Initial CIP		2nd Flow Pressure		Final CIP	
	Time	PSI	Time	PSI	Time	PSI	Time	PSI
P0	.000	19	.000	46	.000	49	.000	310
P1	.0126	20	.023	1199	.107	96	.0215	1176
P2	.0252	24	.046	1242	.214	141	.043	1215
P3	.0378	30	.069	1258	.321	183	.0645	1231
P4	.0504	34	.092	1268	.428	228	.086	1242
P5	.063	46	.115	1274	.535	268	.1075	1247
P6	.		.138	1278	.642	310	.129	1253
P7	.		.161	1280	.		.1505	1257
P8	.		.184	1282	.		.172	1258
P9	.		.207	1284	.		.1935	1261
P10	.		.230	1285	.		.215	1264
	2	Minute Intervals	3	Minute Intervals	15	Minute Intervals	3	Minute Intervals

Remarks: \_\_\_\_\_



↑  
PRESSURE  
↓

← TIME →



- A—Initial Mud Weight
- B—Initial Flow
- C—Final Flow
- D—Closed In Pressure
- E—Final Mud Weight

HALLIBURTON FORM 1383—LITTLE'S 61742 5M 10/60

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

MASONER  
 Lease Name  
 Well No. 1  
 Test No. 2  
 WALTER KUHN  
 Lease Owner/Company Name  
 WICHITA  
 Owner's District

Legal Location  
 Sec. - Twp. - Rngg. SEC 30-28-32  
 Field Area  
 WILD CAT  
 County  
 HASKELL  
 State  
 KANSAS

Flow Time	1st 10 Min.	2nd 190 Min.	Date	5-31-61	Ticket Number	314650
Closed In Press. Time	1st 30 Min.	2nd 60 Min.	Kind of Job	Open Hole	Halliburton District	Liberal
Pressure Readings	Field	Office Corrected	Tester	Jack A Pitzes	Witness	Toby Elester
Depth Top Gauge	5287 Ft.	No Blanked Off	Drilling Contractor	HEARDEN DRILLING COMPANY		
BT. P.R.D. No.	690	12 Hour Clock	Elevation	-	Top Packer	5299'
Initial Hydro Mud Pressure	2715	2668	Total Depth	5350'	Bottom Packer	5303'
Initial Closed in Pres.	1330	1340	Interval Tested	5303-5350'	Formation Tested	Morrow
Initial Flow Pres.	100	1 89 2 140	Casing or Hole Size	7 7/8"	Casing Perfs.	Top Bot.
Final Flow Pres.	515	1 93 2 500	Surface Choke	1"	Bottom Choke	5/8"
Final Closed in Pres.	1215	1198	Size & Kind Drill Pipe	4 1/2" FH	Drill Collars Above Tester	I.D. - LENGTH
Final Hydro Mud Pressure	2690	2650	Mud Weight	9.9	Mud Viscosity	44
Depth Cen. Gauge		Blanked Off	Temperature	120 °F Est. °F Actual	Anchor Size & Length	ID OD X
BT. P.R.D. No.		Hour Clock	Depths Mea. From	-	Depth of Tester Valve	- Ft.
Initial Hydro Mud Pres.			Cushion	TYPE AMOUNT	Depth Back Pres. Valve	Ft.
Initial Closed in Pres.			Recovered	2200 Feet of	free oil- no water	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	29 <sup>0</sup>	Water Spec. Gravity	
Depth Bot. Gauge	5346 Ft.	Yes Blanked Off	Gas Gravity		Surface Pressure	psi
BT. P.R.D. No.	2019	4 Hour Clock	Tool Opened	A.M. P.M.	Tool Closed	A.M. P.M.
Initial Hydro Mud Pres.			Remarks	Tool opened with a fair blow at surface for		
Initial Closed in Pres.				a 10 minute first flow. Rotated for a 30 minute		
Initial Flow Pres.		1		initial closed in pressure. Tool re-opened at		
Final Flow Pres.		2		2:00 AM with gas to surface in 19 minutes. Took a		
Final Closed in Pres.				60 minute final closed in pressure. No P.R.D. was		
Final Hydro Mud Pres.				sent in.		

FORMATION TEST DATA

Gauge No. 690		Depth 5287'			Clock 12 hour		Ticket No. 314650		
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 89	.000	---	93	.000	140	.000	---	500
P <sub>1</sub>	.038 93	.020	.462	397	.1285	168	.0415	1.52	949
P <sub>2</sub>		.040	.290	1031	.2570	225	.0830	1.23	1094
P <sub>3</sub>		.060	.213	1247	.3855	234	.1245	1.06	1138
P <sub>4</sub>		.080	.169	1290	.5140	312	.1660	.953	1157
P <sub>5</sub>		.100	.140	1308	.6425	351	.2075	.868	1169
P <sub>6</sub>		.120	.119	1319	.7710	388	.2490	.800	1177
P <sub>7</sub>		.140	.104	1325	.8995	419	.2905	.845	1184
P <sub>8</sub>		.160	.092	1331	1.028	450	.3320	.698	1190
P <sub>9</sub>		.180	.083	1336	1.157	474	.3735	.657	1194
P <sub>10</sub>		.200	.075	1340	1.285	500	.4150	.622	1198

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	3			19	6 Minutes

REMARKS:

SPECIAL PRESSURE DATA

TICKET NO.

314650

BT GAUGE NO.

INITIAL

FINAL

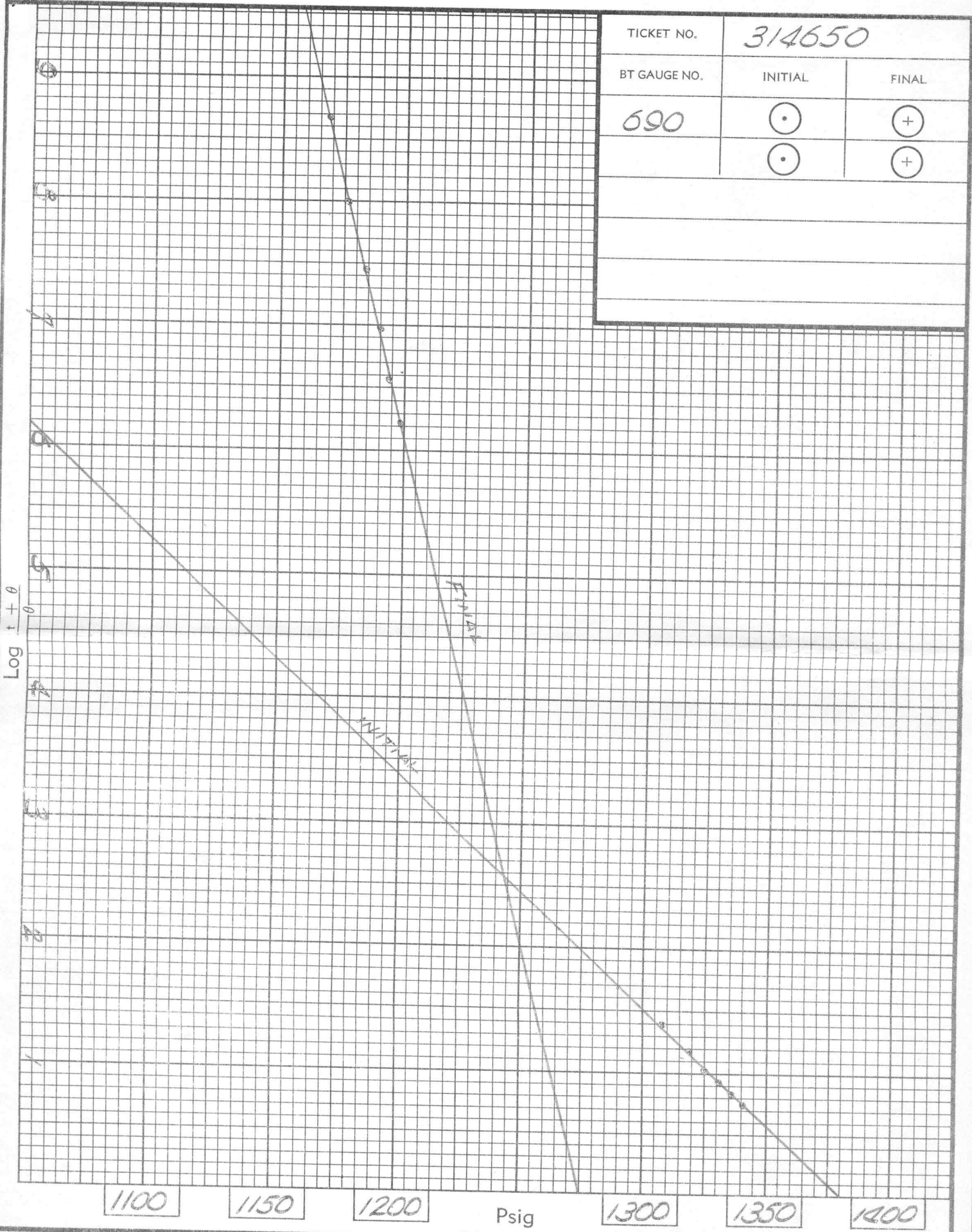
690

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EXTRAPOLATED PRESSURE GRAPH

## Liquid Production

B.T. Gauge Numbers		690		Ticket Number	5/31/61	314650
Initial Hydrostatic		PRESSURE	PRESSURE	Elevation		0 ft.
		2668				
Final Hydrostatic		2650		Indicated Production	1st Flow	bbls. day
1st Flow	Initial	Time	89		Total Flow	bbls. day
	Final	10	93			
Initial Closed In Pressure		30	1340	Drill Collar Length		0 ft.
				Drill Collar I.D.		0 in.
2nd Flow	Initial	-----	140	Drill Pipe Factor		.01422 bbls. ft.
	Final	190	500	Hole Size		7 7/8 in.
Final Closed In Pressure		60	1198	Footage Tested		net 14 ft.
Extrapolated Static Pressure	Initial		1380	Mud Weight		9.9 lbs. gal.
	Final		1275	Viscosity, Oil or Water		8.1 cp
Slope <del>PS/Kh</del> P10	Initial		840	Oil API Gravity		29
	Final		1150	Water Specific Gravity		---

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### SUMMARY

Gauge No. 690/  
Depth 5287

Gauge No.  
Depth

Product	Equation	Initial	Final	Initial	Final	Units
Production	$Q = \frac{1440 R}{t}$		132.1			bbls. day
Transmissability	$\frac{Kh}{\mu} = \frac{162.6 Q}{m}$		171.8			md. ft. cp
Indicated Flow Capacity	$Kh = \frac{Kh}{\mu} \mu$		1391.6			md. ft.
Average Effective Permeability	$K = \frac{Kh}{h}$		-			md.
	$K_r = \frac{Kh}{h_r}$		99.4			md.
Damage Ratio	$DR = .183 \frac{P_s - P_f}{m}$		1.13			---
Theoretical Potential w/Damage Removed	$Q_1 = Q DR$		149.8			bbls. day
Approx. Radius of Investigation	$b \approx \sqrt{Kt}$ or $\sqrt{Kt_0}$		-			ft.
	$b_1 \approx \sqrt{K_1 t}$ or $\sqrt{K_1 t_0}$		141.1			ft.
Potentiometric Surface *	$Pot. = EI - GD + 2.319 P_s$		-2330.3			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.

MASONER

LEASE NAME

WELL NO.

TEST NO.

WALTER KUHN

LEASE OWNER

WICHITA

OWNERS DISTRICT

LOCATION SEC 30 28 32

FIELD WILDCAT

COUNTY HASKELL

STATE KANSAS



Date 5-31-61  
 Ticket No. 314650  
 Halliburton District Liberal  
 Kind of Job Open Hole

Initial Closed In Time 30 Minutes  
 Tool Open Flow Period 1st 10 / 2nd 190 Minutes  
 Final Closed In Time 60 Minutes  
 Depth Top Gauge 5287 Ft. Blanked Off no

BT. P.R.D. No 690 12 Hr. Clock  
 Pressure Readings Field Office Corrected  
 Initial Hydro Mud Pressure 2715 2668  
 Initial Closed in Pres. 1330 1340  
 Initial Flow Pres. 100 89-140  
 Final Flow Pres. 515 93-500  
 Final Closed in Pres. 1215 1198  
 Final Hydro Mud Pressure 2690 2650

CONTRACTOR HEARDEN DRILLING COMPANY  
 HOLE & TOOL DATA  
 Elevation - Top Packer Depth 5299'  
 Total Depth 5350' Bottom Packer Depth 5303'  
 Casing or Hole Size 7 7/8" Size & Type Wall Packer 6 3/4" ESWP  
 Liner or Rathole Size - Size Bottom Choke 5/8"  
 Casing Perforations Top Bottom Size Surface Choke 1"  
 Interval Tested 5303-5350' ID & Length Air Chamber -

Depth Center Gauge Ft. Blanked Off  
 BT. P.R.D. No Hr. Clock  
 Pressure Readings Field Office Corrected  
 Initial Hydro Mud Pressure  
 Initial Closed in Pres.  
 Initial Flow Pres.  
 Final Flow Pres.  
 Final Closed in Pres.  
 Final Hydro Mud Pressure

Formation Tested Morrow ID & Length Drill Collars ~~2 1/2" x 3"~~  
 Est. Gauge Depth Temp. C 120 F° Size Drill Pipe 1 1/2" FH  
 MUD DATA Weight 9.9 Viscosity 144  
 All depths measured from - No. Folders Reproduced 5  
 REMARKS: Tool opened with a fair blow at surface for a 10 minute first flow. Rotated for a 30 minute initial closed in pressure. Tool re-opened at 2:00 AM with gas to the surface in 19 minutes. Took a 60 minute final closed in pressure.

Depth Bottom Gauge 5346 Ft. Blanked Off yes  
 BT. P.R.D. No 2019 4 Hr. Clock  
 Pressure Readings Field Office Corrected  
 Initial Hydro Mud Pressure  
 Initial Closed in Pres.  
 Initial Flow Pres.  
 Final Flow Pres.  
 Final Closed in Pres.  
 Final Hydro Mud Pressure

NO P.R.D. WAS SENT IN. 5324-32  
 Reversed out. Use 14' as H.  
 Gravity of oil 29°  
 Recovered 2200 Feet of free oil - no water  
 Recovered Feet of  
 Recovered Feet of  
 Recovered Feet of  
 Witnessed By Toby Elester

Amount-Type of Cushion  
 Tester Jack A. Pitzes

COMPANY WALTER KUHN

5

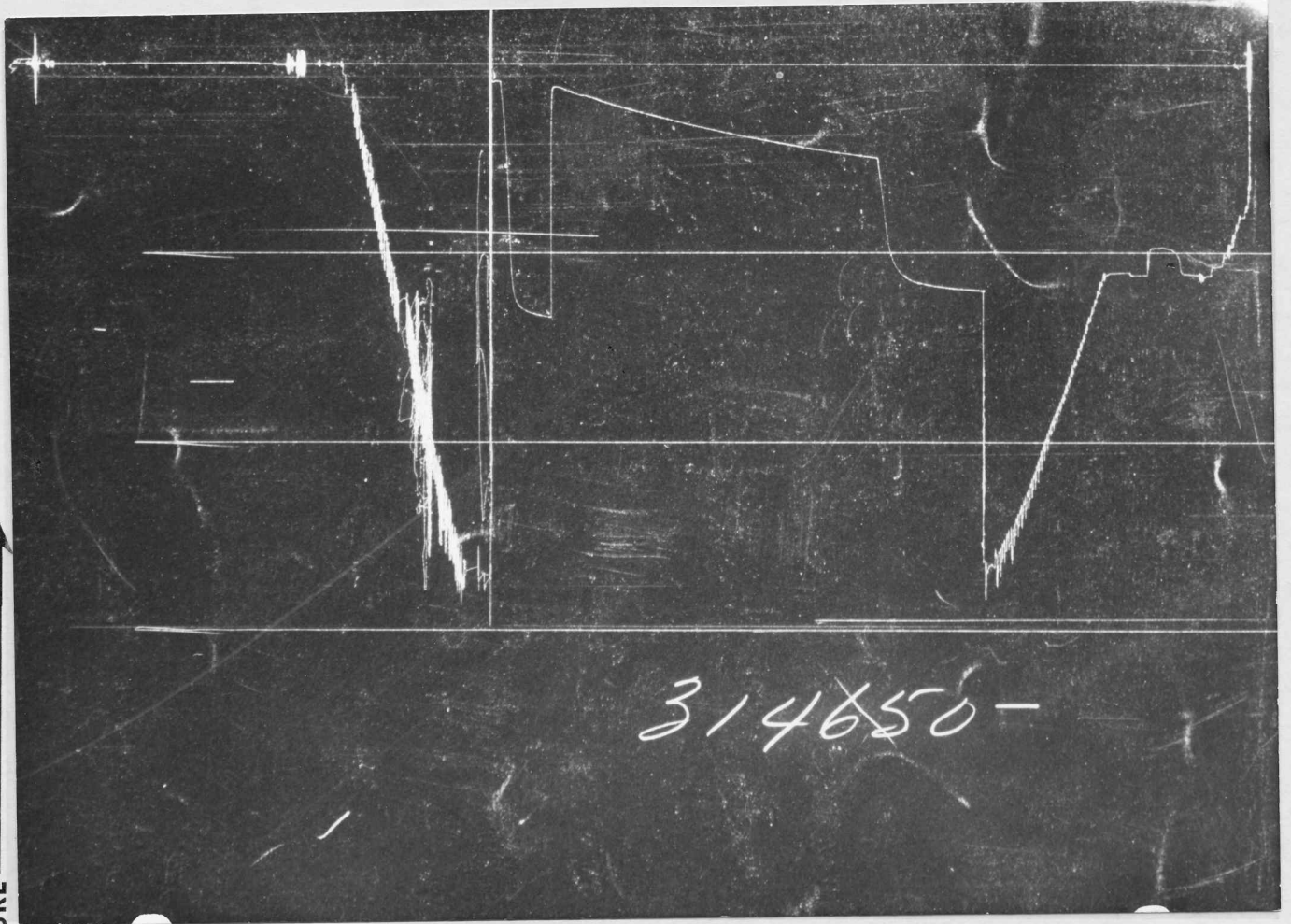
PRESSURE

		Time	PSI
Initial Hydro Mud Pressure			2668
1st	Initial Flow		89
	Final Flow	10 mins.	93
Initial Closed In Pressure		30 mins.	1340
2nd	Initial Flow		140
	Final Flow	190 mins.	500
Final Closed In Pressure		60 mins.	1198
Final Hydro Mud Pressure			2650

DATE 5-31-61  
 TICKET NO. 314650  
 LEASE MASONER  
 Well No. 1 Test No. 2  
 BT No. 690 Depth 5287'  
12 Hr. Clock  
 Temp. Corr. C-120 ° F

	1st Flow Pressure		Initial CIP		2nd Flow Pressure		Final CIP	
	Time	PSI	Time	PSI	Time	PSI	Time	PSI
P0	.000	89	.000	93	.000	140	.000	500
P1	.038	93	.020	397	.1285	168	.0415	949
P2	.		.040	1031	.2570	225	.0830	1094
P3	.		.060	1247	.3855	234	.1245	1138
P4	.		.080	1290	.5140	312	.1660	1157
P5	.		.100	1308	.6425	351	.2075	1169
P6	.		.120	1319	.7710	388	.2490	1177
P7	.		.140	1325	.8995	419	.2905	1184
P8	.		.160	1331	1.028	450	.3320	1190
P9	.		.180	1336	1.157	474	.3735	1194
P10	.		.200	1340	1.285	500	.4150	1198
	Minute Intervals		3	Minute Intervals	19	Minute Intervals	6	Minute Intervals

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



PRESSURE

TIME

314650-

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