



# JOHNSTON TESTERS, INC.

## Pressure Breakdown Data

Date 6-10-62 Field Report No. 64142 I.  
 Recorder No. T-505 Capacity 3000# Recorder Depth 5227'  
 Clock No. 35 Clock travel 0.02121 inches per min. Well Temperature - °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	2674		
B Initial Shut-in	1641		
C Initial Flow	118		
D Final Flow	7		
E Final Shut-in	1116		
F Final Hydrostatic Mud	2675		

Opened Tool	0757	
Initial Shut-in	60 Mins.	61 Mins.
Flow	65 Mins.	65 Mins.
Final Shut-in	60 Mins.	59 Mins.

C-1 13  
C-2 29

Remarks: Read on 100 °F. curve

PRESSURE INCREMENTS								
Initial Shut-In			Flow period			Final Shut-In		
Breakdown: <u>12</u> increments of <u>5</u> mins. and a final increment of <u>1</u> mins.			Breakdown: <u>13</u> increments of <u>5</u> mins. and a final increment of <u>-</u> mins.			Breakdown: <u>11</u> increments of <u>5</u> mins. and a final increment of <u>4</u> mins.		
Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$
C-1 0	13		C 0	118		D 0	7	
5	920		C-1 4	13		5	535	
10	1409		Initial Shut-In			10	872	
15	1552		C-2	29		15	982	
20	1585		5	5		20	1021	
25	1598		10	0		25	1045	
30	1608		15	0		30	1064	
35	1617		20	0		35	1080	
40	1623		25	0		40	1094	
45	1629		30	0		45	1108	
50	1633		35	0		50	1120	
55	1636		40	0		55	1130	
60	1641		45	3		E 59	1136	
B 61	1641		50	4				
			55	6				
			60	6				
			D 65	7				

# JOHNSTON TESTERS, INC.

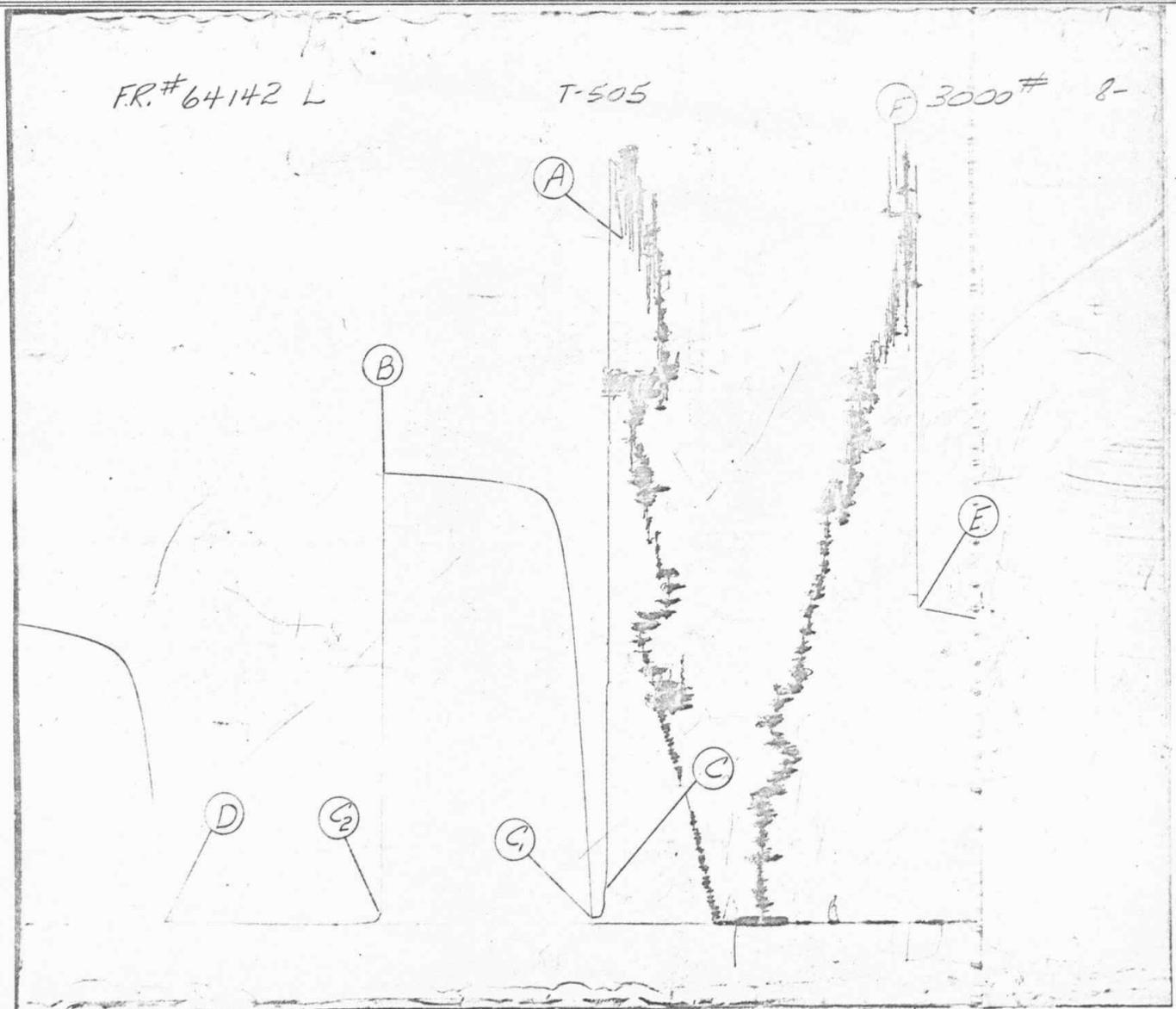
Pressure Data

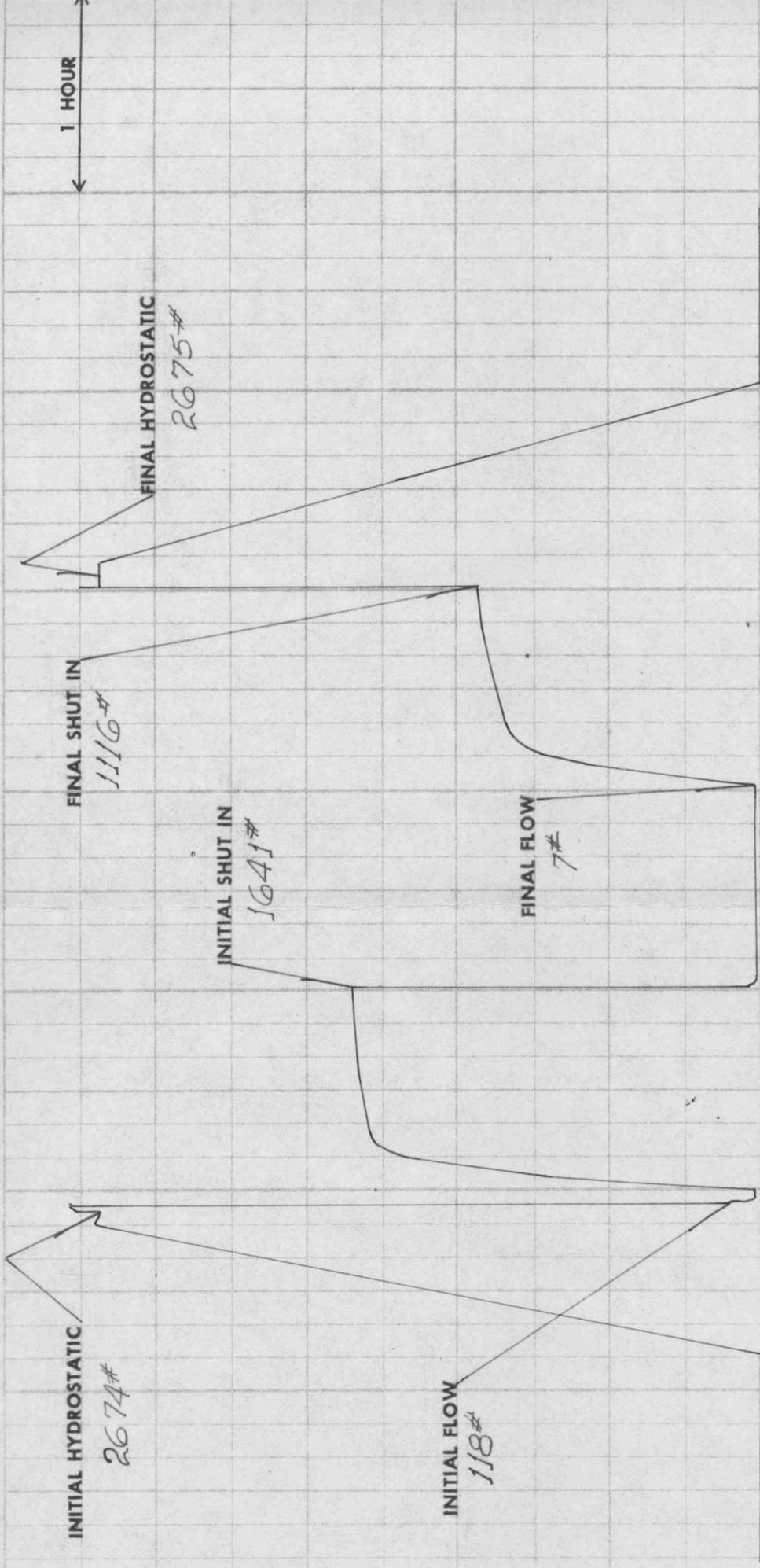
Field Report No. 64142 L

Recorder No.	T-505	Outside	
Capacity (P.S.I.G.)	3000		
Recorder Depth	5227'		
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
A Initial Hydrostatic Mud	2674		
B Initial Shut-in	* 1641		
C Initial Flow	118		
D Final Flow	7		
E Final Shut-in	* 1136		
F Final Hydrostatic Mud	2675		
Remarks:	C-1 13		
	C-2 29		

Read on 100 °F. curve.

\*Shut in pressure did not reach static reservoir pressure.





1 HOUR

FINAL HYDROSTATIC  
2675#

FINAL SHUT IN  
1116#

INITIAL SHUT IN  
1641#

FINAL FLOW  
7#

INITIAL HYDROSTATIC  
2674#

INITIAL FLOW  
118#

TIME



# JOHNSTON TESTERS, INC.

## Pressure Breakdown Data

Date 6-11-62

Field Report No. 64141 I

Recorder No. T-505

Capacity 3000#

Recorder Depth 5237'

Clock No. 35

Clock travel 0.02122 inches per min.

Well Temperature 118 °F.

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	2694		
B Initial Shut-in	1800	0839	
C Initial Flow	24	60 Mins.	60 Mins.
D Final Flow	27	35 Mins.	35 Mins.
E Final Shut-in	1627	30 Mins.	30 Mins.
F Final Hydrostatic Mud	2685		

C-1	21
C-2	29

Remarks:

PRESSURE INCREMENTS								
Initial Shut-In			Flow Period			Final Shut-In		
Breakdown: <u>12</u> increments of <u>5</u> mins. and a final increment of <u>-</u> mins.			Breakdown: <u>11</u> increments of <u>3</u> mins. and a final increment of <u>2</u> mins.			Breakdown: <u>10</u> increments of <u>3</u> mins. and a final increment of <u>-</u> mins.		
Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$
c-1 0	21		C 0	24		D 0	27	
5	1146		3	21		3	307	
10	1567		C-1 5	21		6	999	
15	1669			Initial Shut-in		9	1265	
20	1714		C-2	29		12	1391	
25	1740		6	27		15	1471	
30	1757		9	27		18	1520	✓
35	1769		12	27		21	1558	✓
40	1778	✓	15	27		24	1588	✓
45	1786	✓	18	27		27	1608	✓
50	1791	✓	21	27		E 30	1627	✓
55	1798	✓	24	27				
B 60	1800	✓	27	27				
			30	27				
			33	27				
			D 35	27				

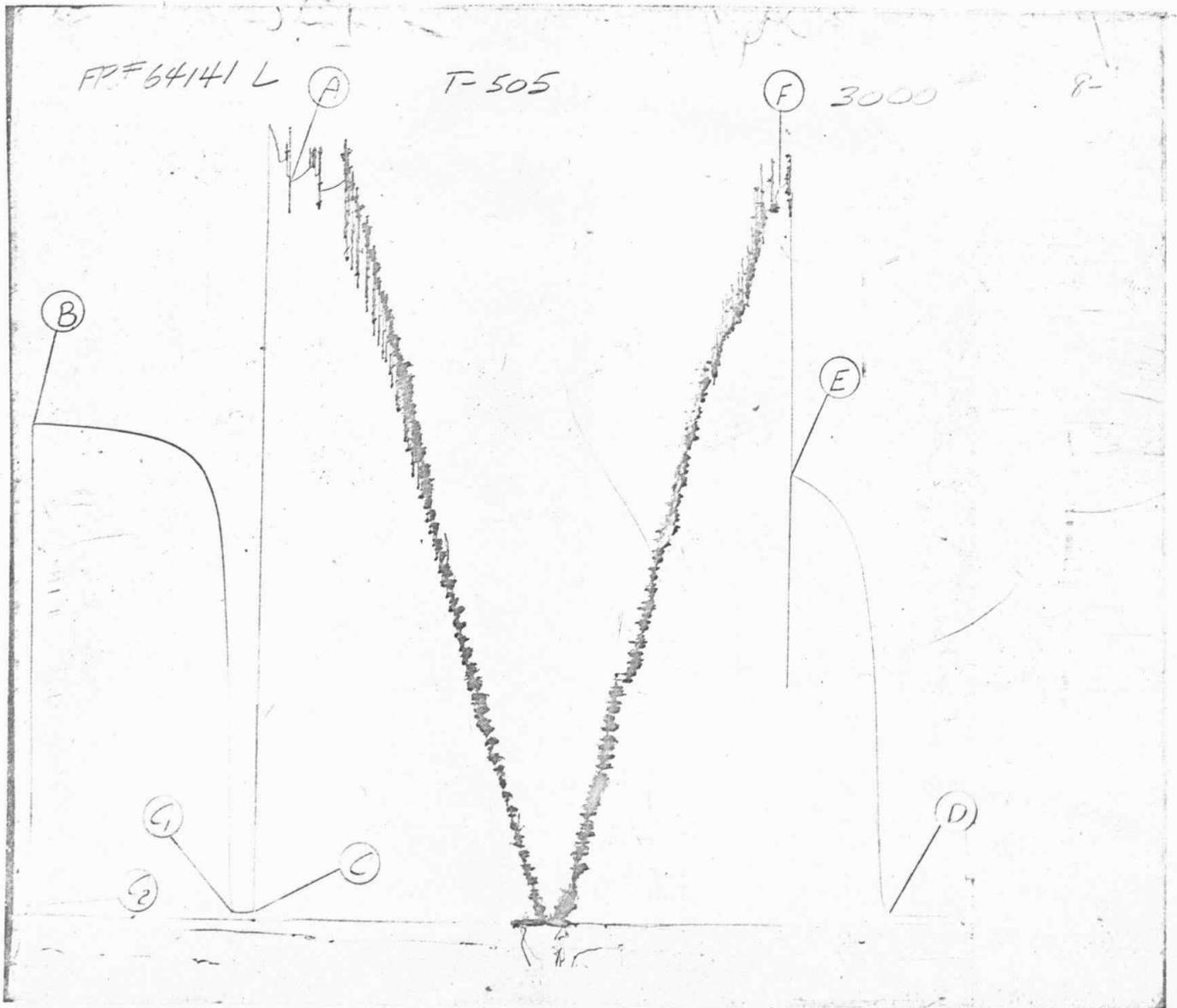
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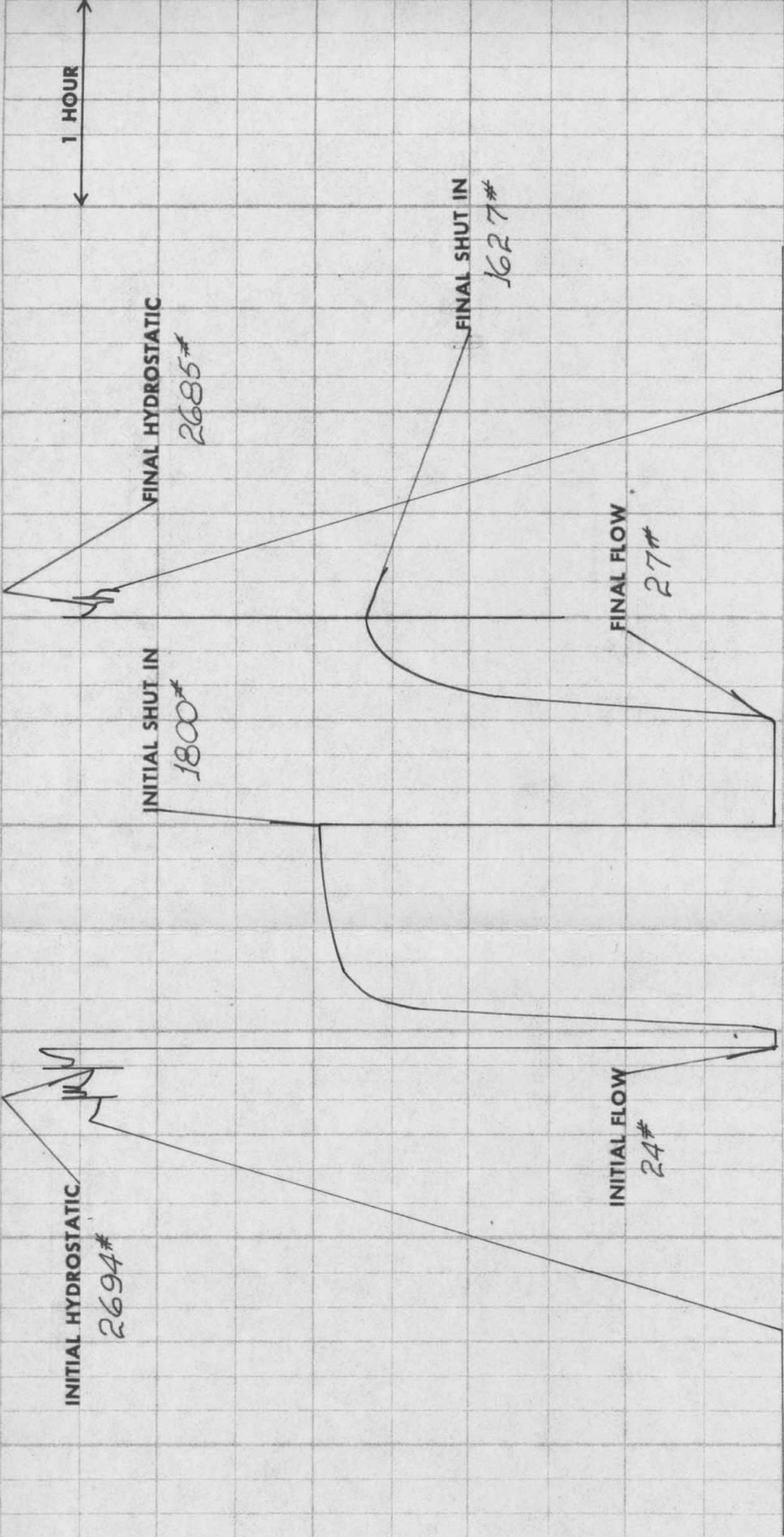
Pressure Data

Field Report No. 64141 L

Recorder No.	T-505	OUTSIDE		
Capacity (P.S.I.G.)	3000			
Recorder Depth	5237'			
Pressure Gradient P.S.I./Ft.	-			
Well Temperature °F.	118			
A Initial Hydrostatic Mud	2694			
B Initial Shut-in	*1800			
C Initial Flow	24			
D Final Flow	27			
E Final Shut-in	*1627			
F Final Hydrostatic Mud	2685			
Remarks:	C-1 21			
	c-2 29			

\*Shut in pressure did not reach static reservoir pressure.





TIME →

1 HOUR →

INITIAL HYDROSTATIC  
2694#

INITIAL SHUT IN  
1800#

FINAL HYDROSTATIC  
2685#

FINAL SHUT IN  
1627#

INITIAL FLOW  
24#

FINAL FLOW  
27#



# JOHNSTON TESTERS, INC.

## Pressure Breakdown Data

Date 6-12-62

Field Report No. 64143 I.

Recorder No. T-505 Capacity 3000#

Recorder Depth 5271'

Clock No. 35 Clock travel 0.02101 inches per min.

Well Temperature 128 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	2687		
B Initial Shut-in	1763	Opened Tool	0841
C Initial Flow	51	Initial Shut-in	60 Mins.
D Final Flow	69	Flow	65 Mins.
E Final Shut-in	1568	Final Shut-in	60 Mins.
F Final Hydrostatic Mud	2683		

C-1 25  
C-2 30

Remarks: From point "C" to point "C-1" = 5 Minutes

### PRESSURE INCREMENTS

Initial Shut-In			Flow period			Final Shut-In		
Breakdown: <u>12</u> increments of <u>5</u> mins. and a final increment of <u>-</u> mins.			Breakdown: <u>13</u> increments of <u>5</u> mins. and a final increment of <u>-</u> mins.			Breakdown: <u>12</u> increments of <u>5</u> mins. and a final increment of <u>-</u> mins.		
Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$
C-1 0	25		C 0	51		D 0	69	
5	945		C-1 5	25		5	611	
10	1444		Initial Shut-In			10	1073	
15	1590		C-2	30		15	1235	
20	1652		10	31		20	1325	
25	1688		15	34		25	1386	
30	1709		20	41		30	1429	
35	1726		25	44		35	1470	
40	1737		30	45		40	1492	
45	1746		35	52		45	1514	
50	1754		40	53		50	1532	
55	1758		45	58		55	1549	
B 60	1763		50	60		E 60	1568	
			55	63				
			60	66				
			D 65	69				

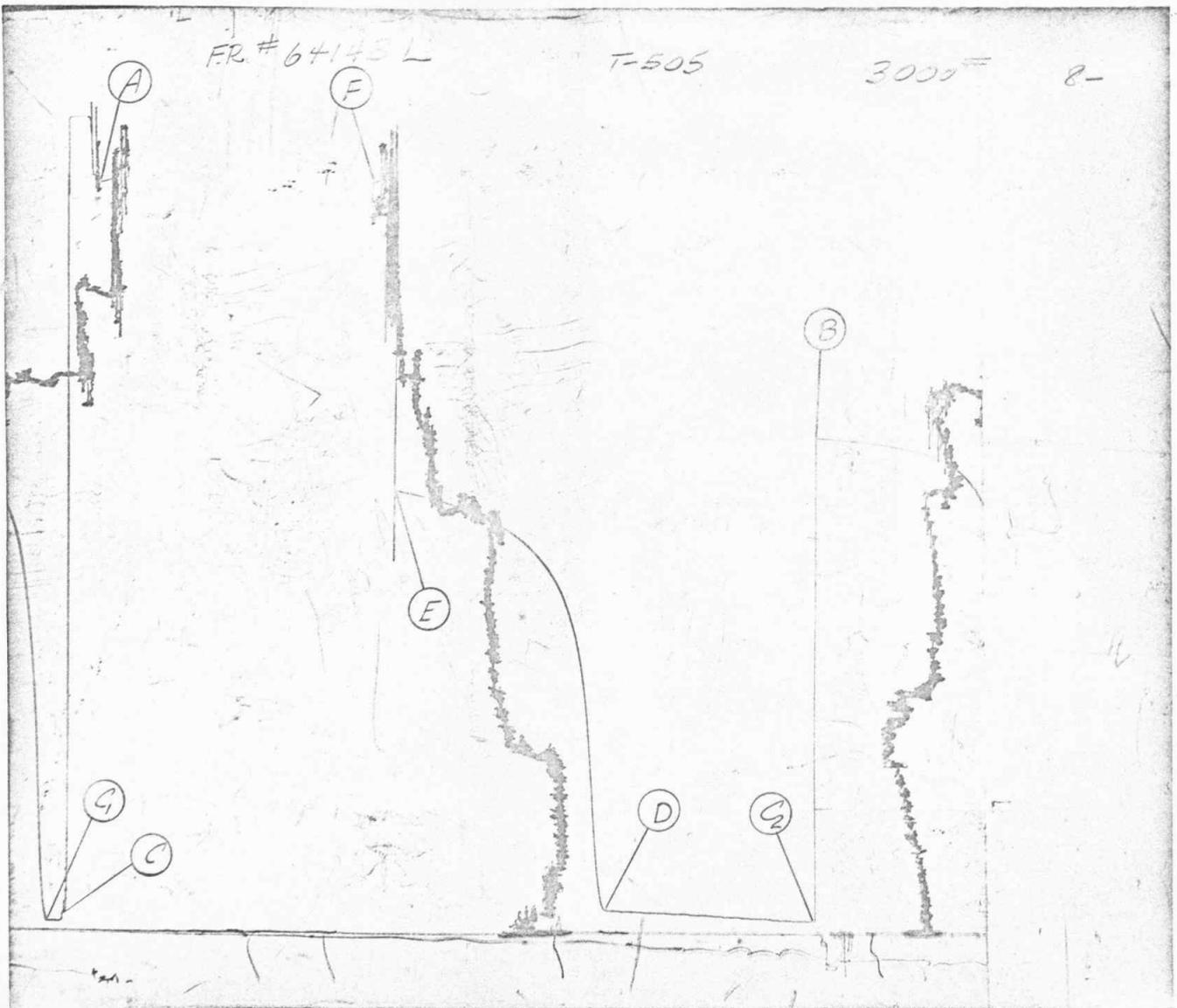
# JOHNSTON TESTERS, INC.

Pressure Data

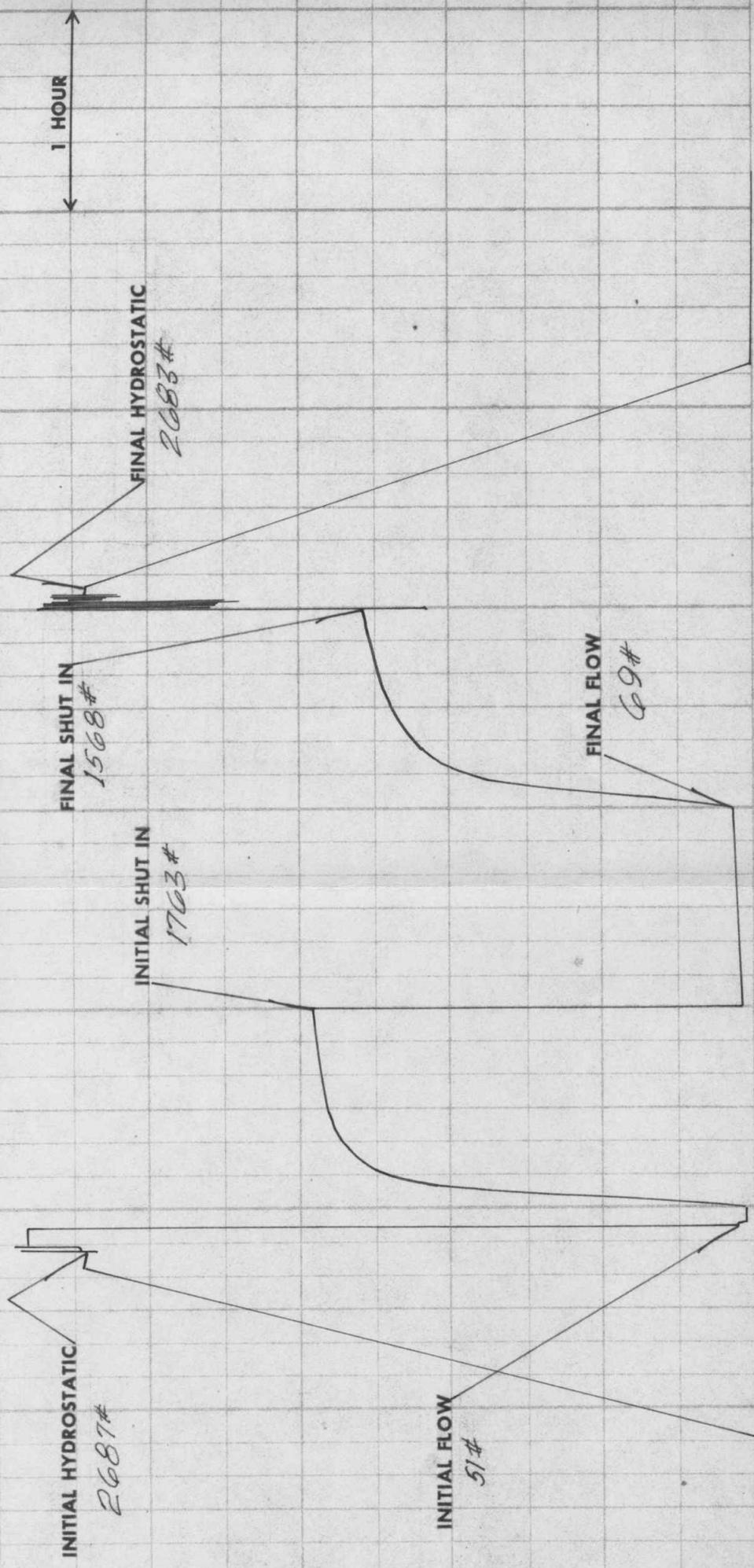
Field Report No. 64143-I

Recorder No.	T-505	Outside			
Capacity (P.S.I.G.)	3000				
Recorder Depth	5271'				
Pressure Gradient P.S.I./Ft.					
Well Temperature °F.	128				
A Initial Hydrostatic Mud	2687				
B Initial Shut-in	*1763				
C Initial Flow	51				
D Final Flow	69				
E Final Shut-in	*1568				
F Final Hydrostatic Mud	2683				
Remarks:	25				
	30				

\*Shut in pressure did not reach static reservoir pressure.



1 HOUR



TIME



# JOHNSTON TESTERS, INC.

## Pressure Breakdown Data

Date 6-16-62

Field Report No. 64144 L

Recorder No. T-467

Capacity 3000#

Recorder Depth 5715'

Clock No. 210

Clock travel 0.02296 inches per min.

Well Temperature 138 °

Point	Pressure	Time Given	Time Computer
A Initial Hydrostatic Mud	2952		
B Initial Shut-in	2004		
C Initial Flow	635	Opened Tool <u>0634</u>	
D Final Flow	1934	Initial Shut-in <u>60 Mins.</u>	59 Min
E Final Shut-in	2001	Flow <u>65 Mins.</u>	62 Min
F Final Hydrostatic Mud	2916	Final Shut-in <u>60 Mins.</u>	64 Min

C-1 685

C-2 849

Remarks: From point "C" to point "c-1" = 3 minutes

PRESSURE INCREMENTS								
Initial Shut-In			Flow period			Final Shut-In		
Breakdown: <u>11</u> increments of <u>5</u> mins. and a final increment of <u>4</u> mins.			Breakdown: <u>12</u> increments of <u>5</u> mins. and a final increment of <u>2</u> mins.			Breakdown: <u>12</u> increments of <u>5</u> mins. and a final increment of <u>4</u> mins.		
Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$
C-1 0	685		C 0	635		D 0	1934	
5	1970		C-1 3	685		5	1985	
10	1989		Initial Shut-In			10	1990	
15	1994		C-2	849		15	1993	
20	1998		5	854		20	1997	
25	2000		10	1029		25	1997	
30	2001		15	1203		30	1997	
35	2002		20	1355		35	2001	
40	2002		25	1486		40	2001	
45	2004		30	1596		45	2001	
50	2004		35	1687		50	2001	
55	2004		40	1762		55	2001	
B 59	2004		45	1820		60	2001	
			50	1865		E 64	2001	
			55	1900				
			60	1926				
			D 62	1934				

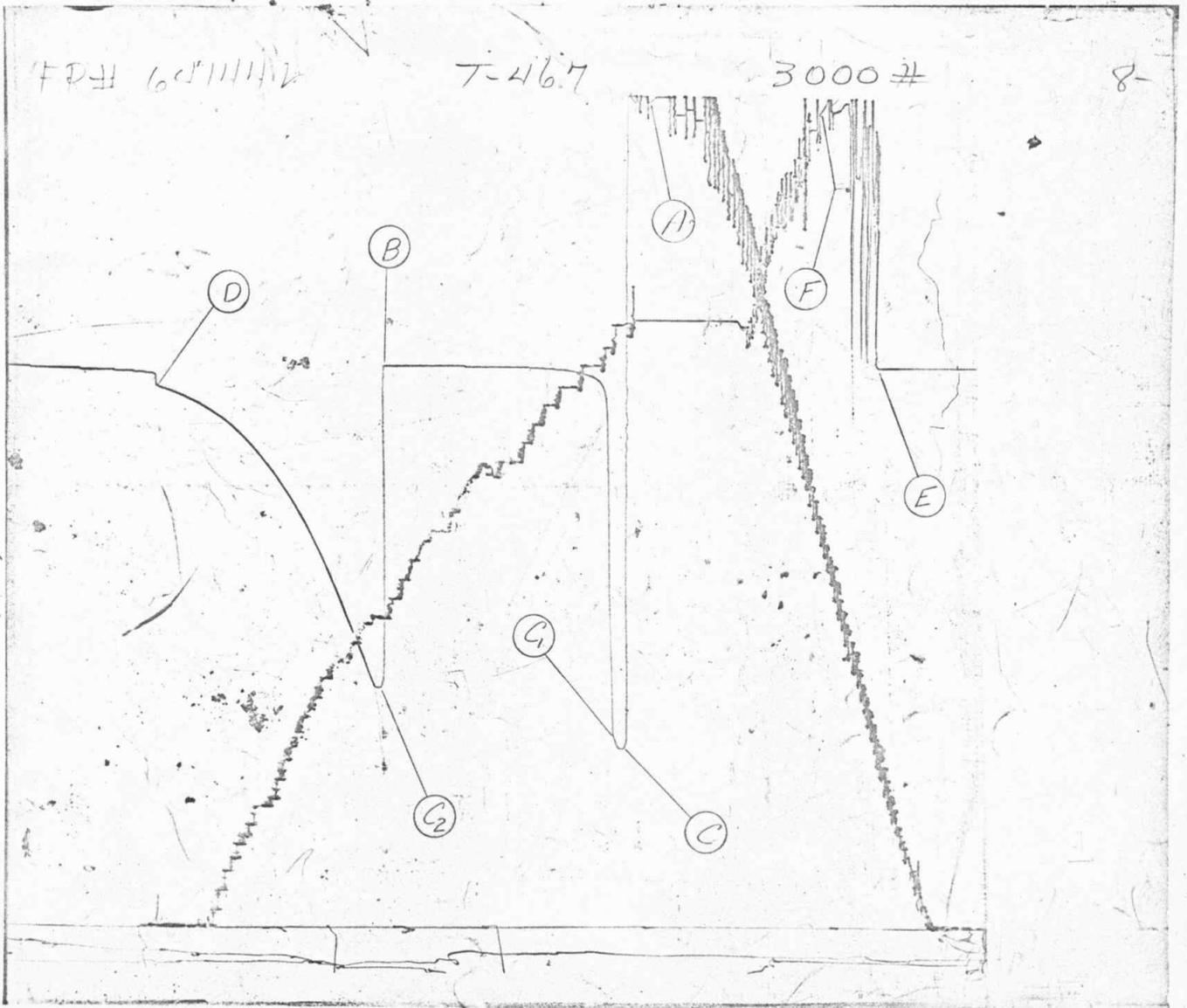
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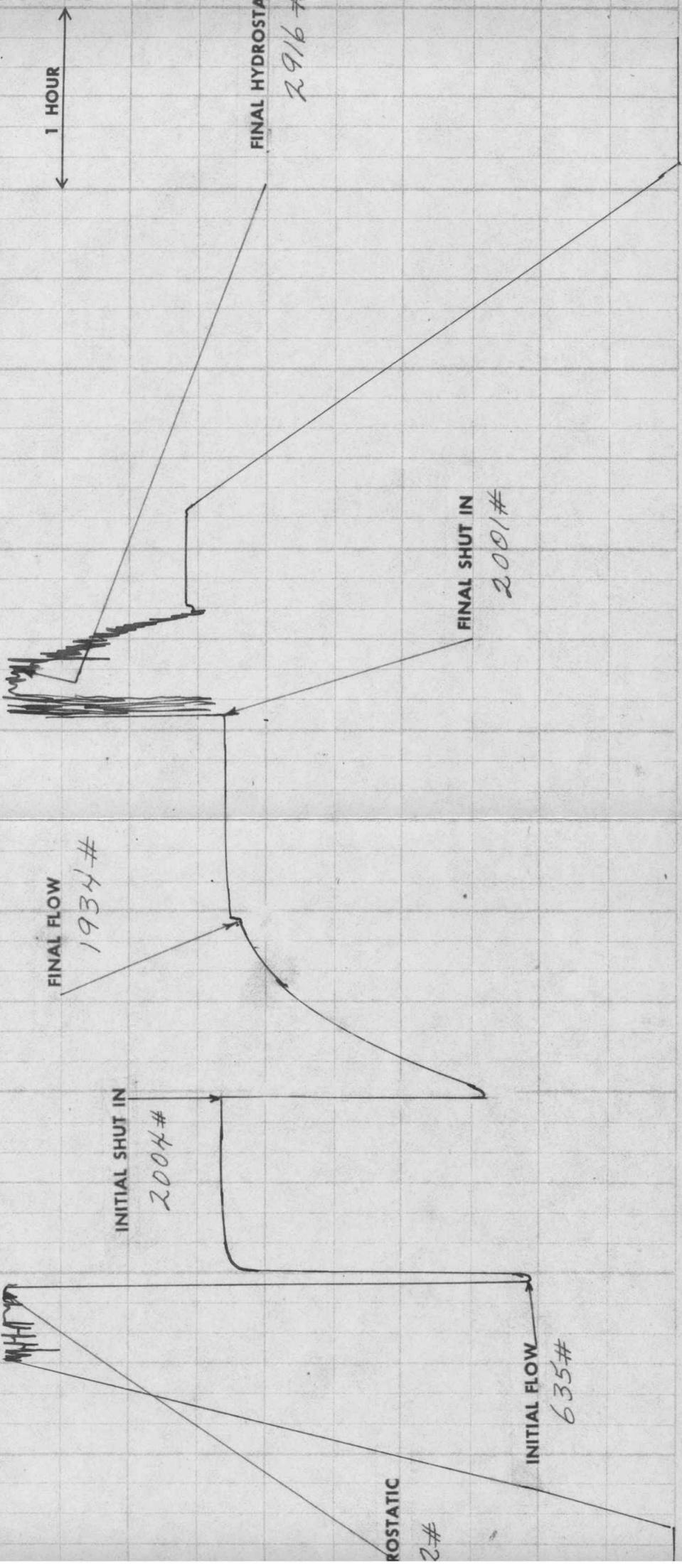
Pressure Data

Field Report No. 64144 L

Recorder No.	T-467	Outside	
Capacity (P.S.I.G.)	3000		
Recorder Depth	5715'		
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.	138		
A Initial Hydrostatic Mud	2952		
B Initial Shut-in	2004		
C Initial Flow	635		
D Final Flow	1934		
E Final Shut-in	2001		
F Final Hydrostatic Mud	2916		
Remarks:	C-1 685		
	C-2 819		

\*Shut in pressure did not reach static reservoir pressure.





TIME



# JOHNSTON TESTERS, INC.

## Pressure Breakdown Data

Date 6-17-62 Field Report No. 64145 T  
 Recorder No. T-467 Capacity 3000# Recorder Depth 5740'  
 Clock No. 35 Clock travel 0.02259 inches per min. Well Temperature 139 °F.

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	2951		
B Initial Shut-in	2007	Opened Tool	0510
C Initial Flow	63	Initial Shut-in	60 Mins.
D Final Flow	694	Flow	65 Mins.
E Final Shut-in	1973	Final Shut-in	60 Mins.
F Final Hydrostatic Mud	2943		59 Mins.

C-1 127  
C-2 149

Remarks: From point "C" to point "C-1" = 6 minutes

### PRESSURE INCREMENTS

Initial Shut-In			Flow period			Final Shut-In		
Breakdown: <u>12</u> increments of <u>5</u> mins. and a final increment of <u>-</u> mins.			Breakdown: <u>13</u> increments of <u>5</u> mins. and a final increment of <u>1</u> mins.			Breakdown: <u>11</u> increments of <u>5</u> mins. and a final increment of <u>4</u> mins.		
Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$
C-1 0	127		C 0	63		D 0	694	
	1923			111			1872	
	1966			127			1903	
	1981		C-1 6	127			1920	
	1989		Initial Shut-In				1930	
	1992		C-2	149			1940	
	1998			189			1946	
	1998			245			1952	
	2002			303			1957	
	2002			355			1960	
	2002			404			1964	
	2002			449			1969	
B 60	2007			493		E 59	1973	
				535				
				573				
				614				
				650				
				685				
			D 66	694				

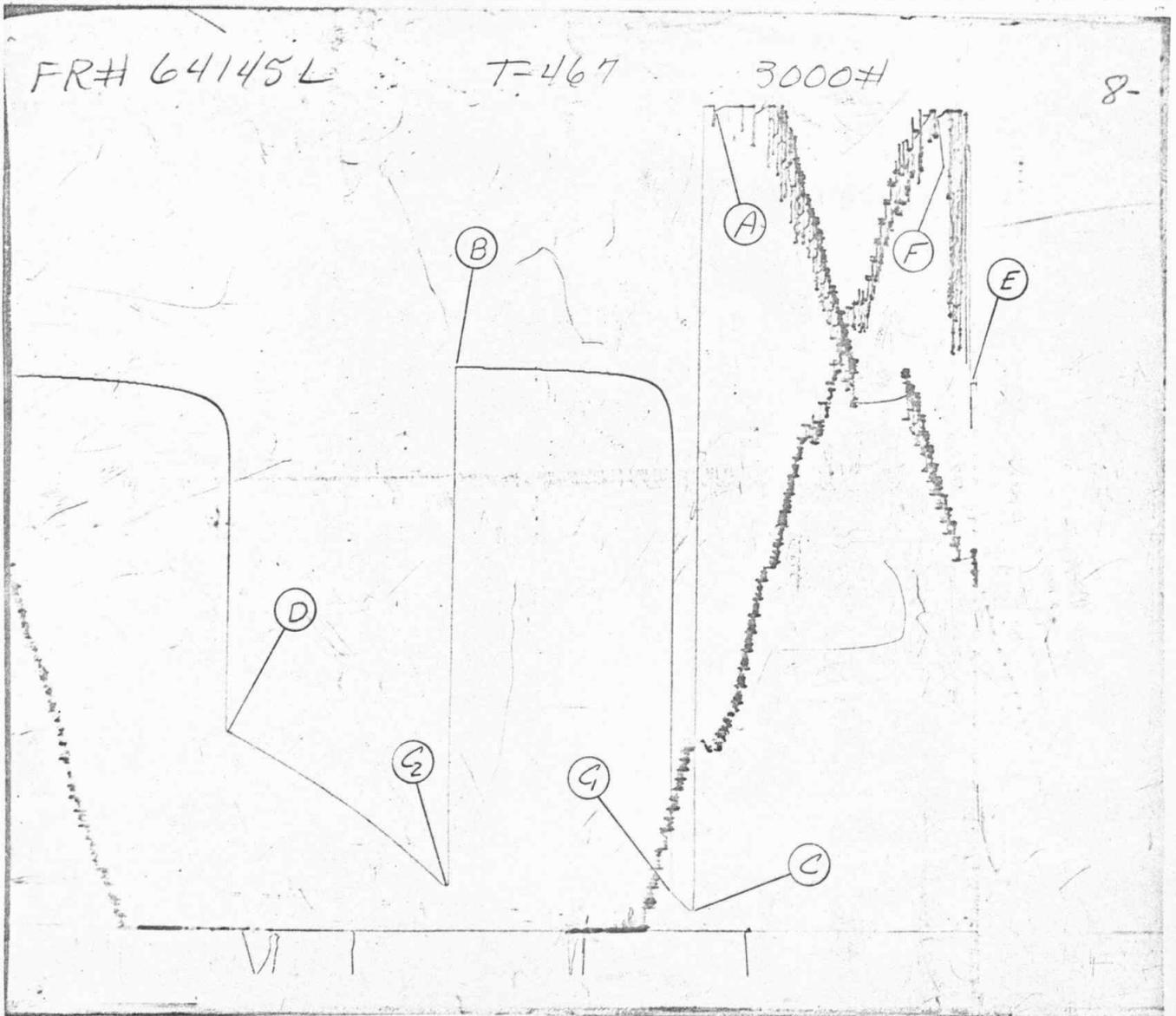
# JOHNSTON TESTERS, INC.

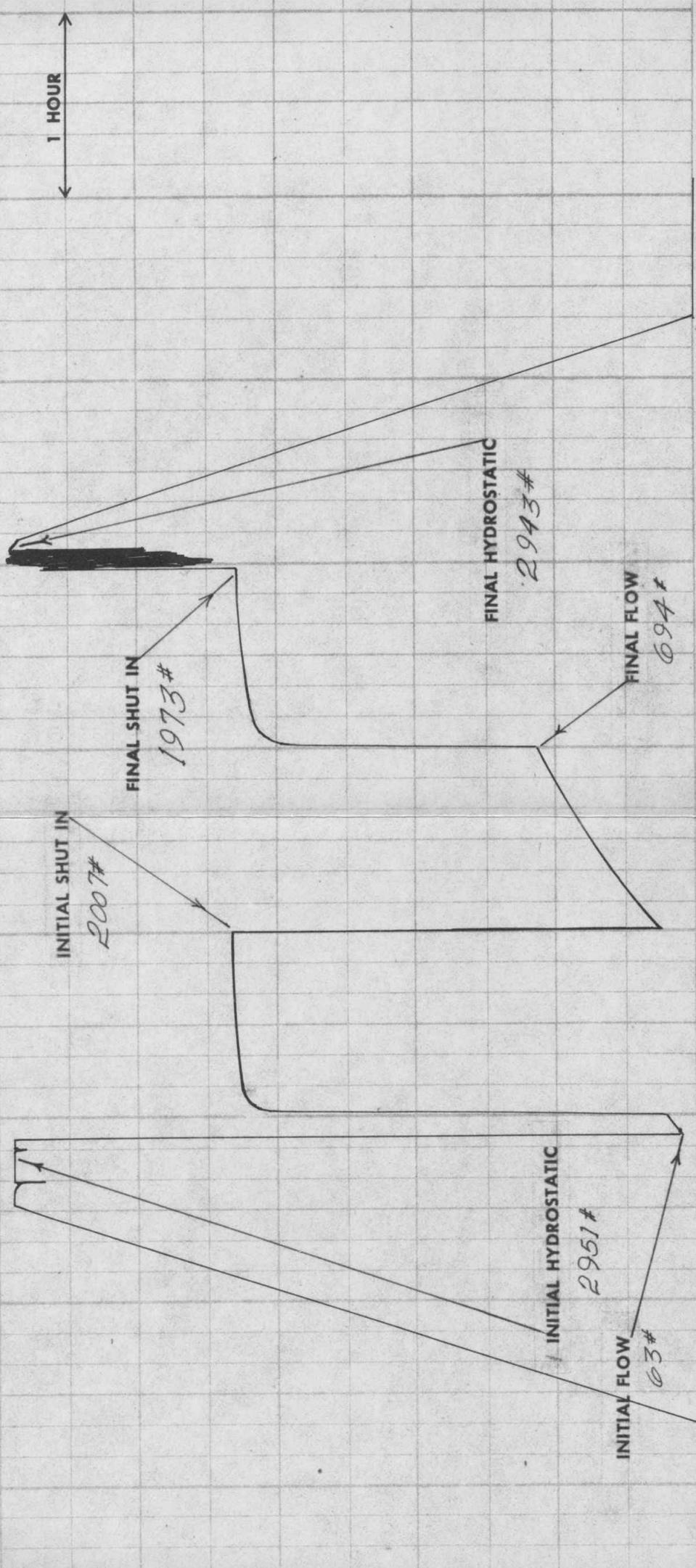
Pressure Data

Field Report No. 64145 L

Recorder No.	T-467	Inside		
Capacity (P.S.I.G.)	3000			
Recorder Depth	5740'			
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.	139			
A Initial Hydrostatic Mud	2951			
B Initial Shut-in	* 2007			
C Initial Flow	63			
D Final Flow	694			
E Final Shut-in	* 1973			
F Final Hydrostatic Mud	2943			
Remarks:	C-1 127			
	C-2 149			

\*Shut in pressure did not reach static reservoir pressure.





# JOHNSTON TESTERS, INC.

## SURFACE INFORMATION

Well Flowed NO	Amount

Reversed Out NO	Amount

Recovered GAS IN DRILL PIPE SLIGHTLY GAS CUT MUD	Amount 10.9990 BLS. (3000') 1.56 BBLs. (120')

Blow GOOD THROUGHOUT TEST.

Description (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool	1026	-	3/4"
CLOSED FOR INITIAL SHUT-IN	1031	-	"
RE-OPENED TOOL	1131	-	"

Remarks:

9

## TOOL, HOLE & MUD DATA

Type Test SELECTIVE ZONE STRADDLE  
 Formation Tested MISSISSIPPI  
 Elevation - Ft.  
 All Depths Measured From KELLY BUSHING

TOOL SEQUENCE		
Tool	Size/Type	Depth/Length/ I.D.
DRILL PIPE	4 1/2" FH	5166'
		3.8"
CIRCULATING SUB	4 1/2" FH	
CROSS OVER SUB	3 1/2" FH	
4-STAGE SHUT-IN	3 1/2" FH	
HYD. TOOL	3 1/2" FH	
JARS	3 1/2" BOWEN	
CROSS OVER SUB	4 1/2" R	
SAFETY JOINT	4 1/2" HOMCO	
PACKER-BOB TAIL	6 5/8"	5196'
PERF. ANCHOR	3 1/2" FH	13' 2 1/2"
	4 1/2" OD	
RECORDER CARRIER	4 7/8" OD	6' 4"
4' x 2 7/8" OD	T RECORDER	
RECORDER CARRIER	4 7/8" OD	4' 4"
2' x 3 3/4" OD	L RECORDER	
CROSS OVER SUB	3 1/2" FH	1' 2 1/2"
	4 1/2" OD	
PACKER-BOB TAIL	6 5/8"	5220'
RECORDER CARRIER	4 7/8" L	6'
SELECTIVE ZONE		
ANCHORING DEVICE	3 1/2" FH	5228'

Total Depth 5990 Ft.  
 Main Hole Size 7 7/8" Rat Hole Size \_\_\_\_\_  
 Casing Size \_\_\_\_\_ Liner Size \_\_\_\_\_  
 Bottom Choke Size 1/2" Mud Type STARCH  
 Mud. Wt. 9.5 Mud Viscosity 54  
 Air Chamber Length \_\_\_\_\_ Ft. \_\_\_\_\_ I.D.

Cushion Type	Amount	Pressure

TIME DATA		
Initial Shut-in	1 Hrs.	0 Mins
Flow Period	1 Hrs.	5 Mins
Final Shut-in	1 Hrs.	- Mins

Company SINCLAIR OIL & GAS COMPANY; BOX 521; TULSA, OKLAHOMA Date 6-20-62  
 Well MCCAULEY #1 Field WILD CAT Location 20-32s-18w  
 Test Interval 5196' TO 5220' Formation Test # 6 Casing Test # -  
 County GOMANGHE State KANSAS Field Report No. 64146 L  
 Tester M.D. GLOVER Test Approved By MR. R.W. SHERWIN No. DST Reports Requested 14 XXXXX

# JOHNSTON TESTERS, INC.

## Pressure Breakdown Data

 Date 6-20-62

 Field Report No. 64146 L

 Recorder No. T-467 Capacity 3,000

 Recorder Depth 5,210'

 Clock No. - Clock travel 0.02241 inches per min.

 Well Temperature 119 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	2605		
B Initial Shut-in	1379	1026	
C Initial Flow	12	60 Mins.	60 Mins
D Final Flow	47	65 Mins.	66 Mins
E Final Shut-in	720	60 Mins.	59 Mins
F Final Hydrostatic Mud	2615		

C-1 22

C-2 43

Remarks:

### PRESSURE INCREMENTS

Initial Shut-In			Flow Period			Final Shut-In		
Breakdown: <u>12</u> increments of <u>5</u> mins. and a final increment of <u>-</u> mins.			Breakdown: <u>13</u> increments of <u>5</u> mins. and a final increment of <u>1</u> mins.			Breakdown: <u>11</u> increments of <u>5</u> mins. and a final increment of <u>4</u> mins.		
Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$
C-1 0	22		C 0	12		D 0	47	
5	326		C-1 5	22		5	131	
10	629		Initial Shut-In			10	212	
15	843		C-2	43		15	288	
20	991		10	29		20	354	
25	1088		15	29		25	416	
30	1159		20	29		30	471	
35	1214		25	40		35	522	
40	1258		30	47		40	568	
45	1293		35	47		45	613	
50	1325		40	47		50	648	
55	1351		45	47		55	693	
B 60	1379		50	47		E 59	720	
			55	47				
			60	47				
			65	47				
			D 66	47				

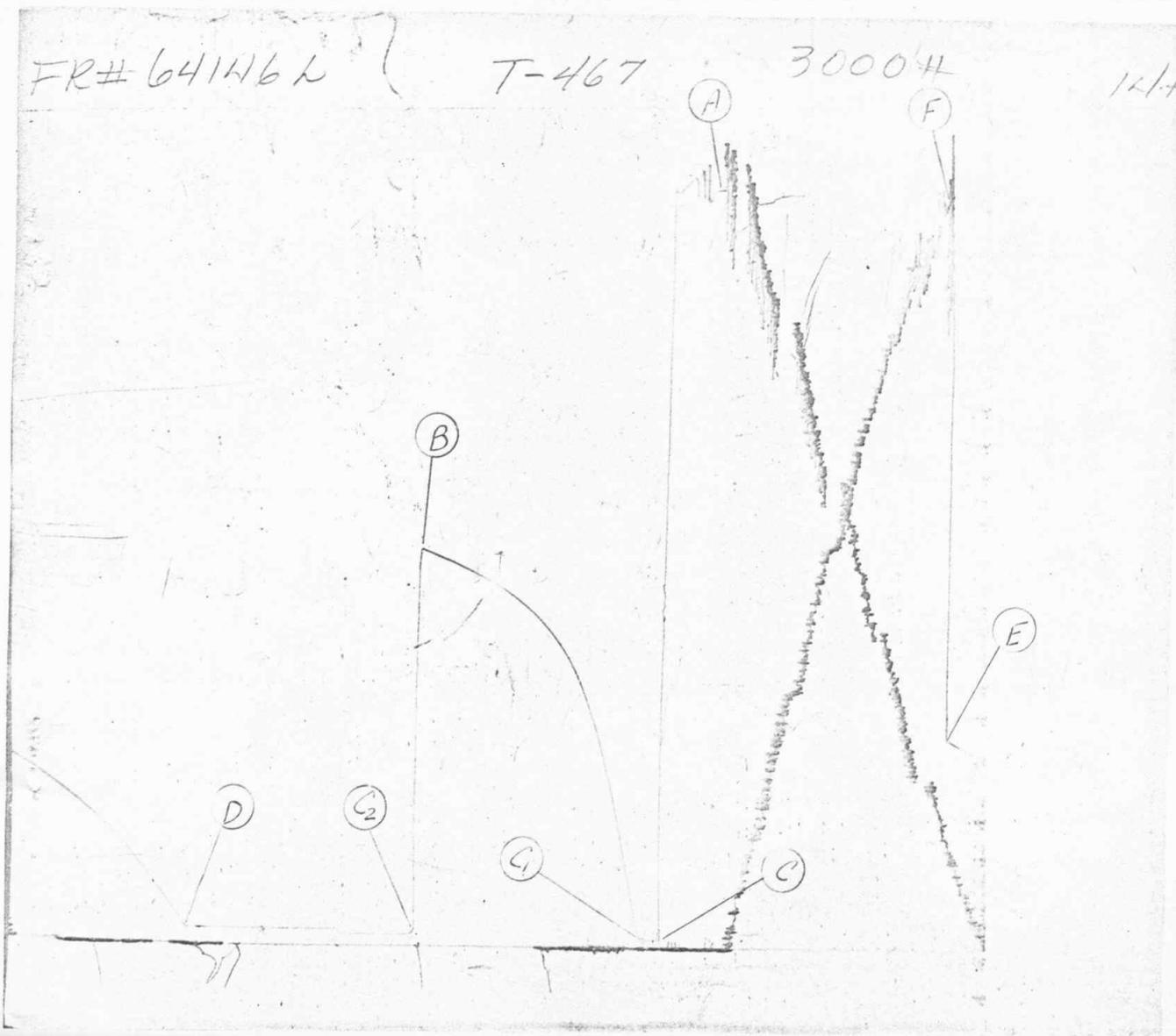
# JOHNSTON TESTERS, INC.

Pressure Data

Field Report No. 64146 L

Recorder No.	T-467	Outside		
Capacity (P.S.I.G.)	3,000			
Recorder Depth	5,210'			
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.	119			
A Initial Hydrostatic Mud	2605			
B Initial Shut-in	* 1379			
C Initial Flow	12			
D Final Flow	47			
E Final Shut-in	* 720			
F Final Hydrostatic Mud	2615			
Remarks:	C-1 22			
	C-2 43			

\*Shut in pressure did not reach static reservoir pressure.



# JOHNSTON TESTERS, INC.

Pressure Data

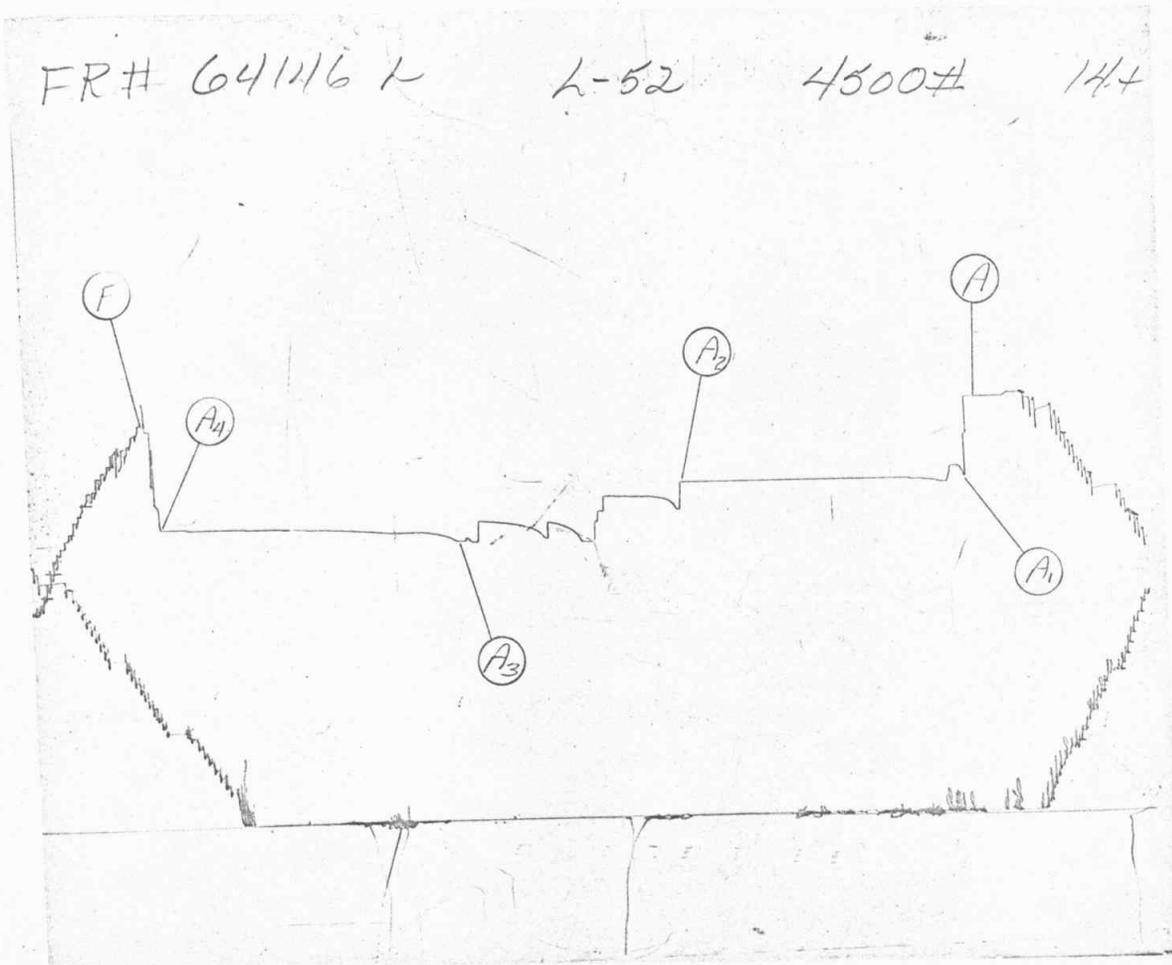
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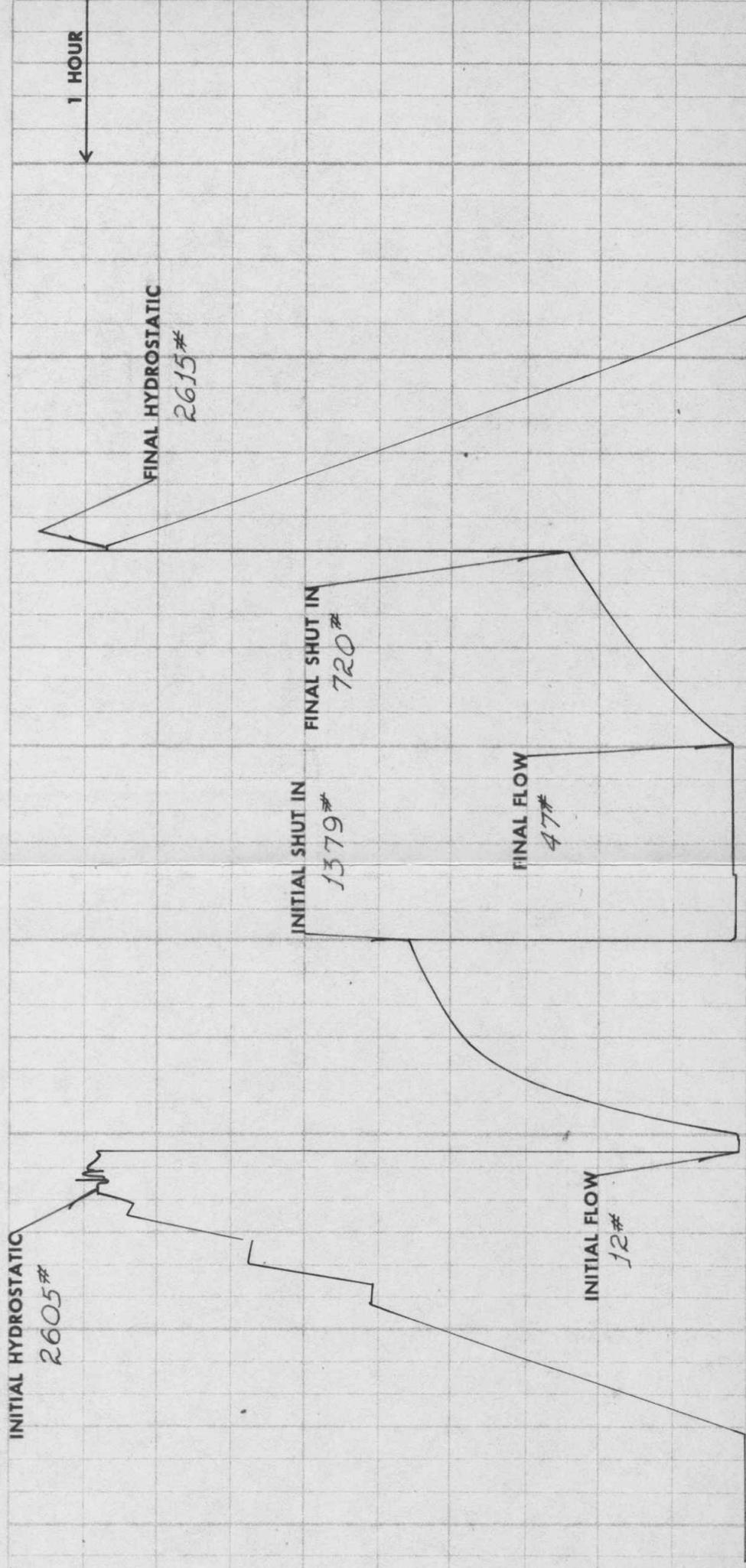
Recorder No.	L-52	Inside		
Capacity (P.S.I.G.)	4,500			
Recorder Depth	5,226'			
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.	119			
A Initial Hydrostatic Mud	2787			
B Initial Shut-in	-			
C Initial Flow	-			
D Final Flow	-			
E Final Shut-in	-			
F Final Hydrostatic Mud	2706			

Remarks: A-1 2256  
 A-2 2249  
 A-3 1886  
 A-4 1997

Below straddle.

\*Shut in pressure did not reach static reservoir pressure.







# JOHNSTON TESTERS, INC.

## Pressure Breakdown Data

Date 6-21-62

Field Report No. 64147 L

Recorder No. T-467

Capacity 3000#

Recorder Depth 5986'

Clock No. 35

Clock travel 0.02294 inches per min.

Well Temperature 104 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	2978 <i>f</i>		
B Initial Shut-in	1952		
C Initial Flow	15		
D Final Flow	18		
E Final Shut-in	1338		
F Final Hydrostatic Mud	2981 <i>f</i>		

Opened Tool	0947	
Initial Shut-in	60 Mins.	57 Mins
Flow	65 Mins.	73 Mins
Final Shut-in	60 Mins.	55 Mins

C-1 15  
C-2 15

Remarks:

PRESSURE INCREMENTS								
Initial Shut-In			Flow period			Final Shut-In		
Breakdown: <u>11</u> increments of <u>5</u> mins. and a final increment of <u>2</u> mins.			Breakdown: <u>14</u> increments of <u>5</u> mins. and a final increment of <u>3</u> mins.			Breakdown: <u>11</u> increments of <u>5</u> mins. and a final increment of <u>-</u> mins.		
Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$
C 1 0	15		C 0	15		D 0	18	
5	169		5	15		5	44	
10	583		C-1 7	15		10	98	
15	955		Initial Shut-In			15	220	
20	1213		C-2	15		20	388	
25	1400		10	15		25	582	
30	1543		15	15		30	768	
35	1651		20	15		35	916	
40	1746		25	15		40	1048	
45	1819		30	15		45	1158	
50	1878		35	15		50	1260	
55	1929		40	16		E 55	1338	
B 57	1952		45	16				
			50	17				
			55	17				
			60	18				
			65	18				
			70	18				
			D 73	18				

# JOHNSTON TESTERS, INC.

Pressure Data

Field Report No. 64147 II

Recorder No.	T-467	Outside	
Capacity (P.S.I.C.)	3000		
Recorder Depth	5986'		
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.	104		
A Initial Hydrostatic Mud	2978	/	
B Initial Shut-in	*1952		
C Initial Flow	15		
D Final Flow	18		
E Final Shut-in	*1338		
F Final Hydrostatic Mud	2981	/	
Remarks:	C-1 15		
	C-2 15		

\*Shut in pressure did not reach static reservoir pressure.

