CHENEY TESTING COMPANY

P. O. BOX 3 HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	PETROLEUM INC.	Test No.	1
Well Name & Number	Mudd F-1	Zone Tested	K.C. (F)
Company Address	Wichita, Kansas	Date	10-7-82
Comp. Rep.	Kenneth Johnson	Tester	Steven Holdren
Contractor	DNB	Elevation	1824 K.B.
Location: Sec. 9 Twp. 15 Rge. 15w Co. Russell State Kansas		Est. Feet of Pay	

Recorder No. 13366 Type AK-1 Range 3850 PSI

Recorder Depth 3137

(A) Initial Hydrostatic Mud 1724 PSI

(B) First Initial Flow Pressure 48 PSI

(C) First Final Flow Pressure 48 PSI

(D) Initial Closed-in Pressure 290 PSI

(E) Second Initial Flow Pressure 58 PSI

(F) Second Final Flow Pressure 58 PSI

(G) Final Closed-in Pressure 232 PSI

(H) Final Hydrostatic Mud 1676 PSI

Temperature 104

Mud Weight 9.9 Viscosity 40

Fluid Loss 15.4

Interval Tested 3117-3143

Anchor Length 26'

Top Packer Depth 3112

Bottom Packer Depth 3117

Total Depth 3143

Drill Pipe Size 4½ X.H.

Wt. Pipe I. D. 3.25 Ft. Run 659

Recovery—Total Feet 70'

Recorder No. 10290 Type AK-1 Range 4250 PSI

Recorder Depth 3140

Tool Open Before I. S. I. 60 Mins.

Initial Shut-in 60 Mins.

Flow Period 60 Mins.

Final Shut-in 60 Mins.

Surface Choke Size 1"

Bottom Choke Size ¾"

Main Hole Size 7⅞"

Rubber Size 6¾"

Tool Open @ 1:45 P.M.

Blow Weak Blow 1st Open, Increasing To

Remarks ½" To 1½" Deep In 15 Min. Then Decreasing To Surface.

2nd Open- Increasing Blow 1" Deep To 3 Deep.

Tool Length- 21' Plus Anchor Of 26'.

Well Chlorides- 61,000 PPM

Sample Chlorides- 64,000 PPM

Drill Collar I. D. _____ Ft. Run _____

Recovered 70 Feet Of Oil Cut Mud. (91% Mud, 9% Oil)

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Extra Equipment None Price of Job $600.00

CHENEY TESTING COMPANY
Pressure Data

Date 10-7-82 Test Ticket No. 6548

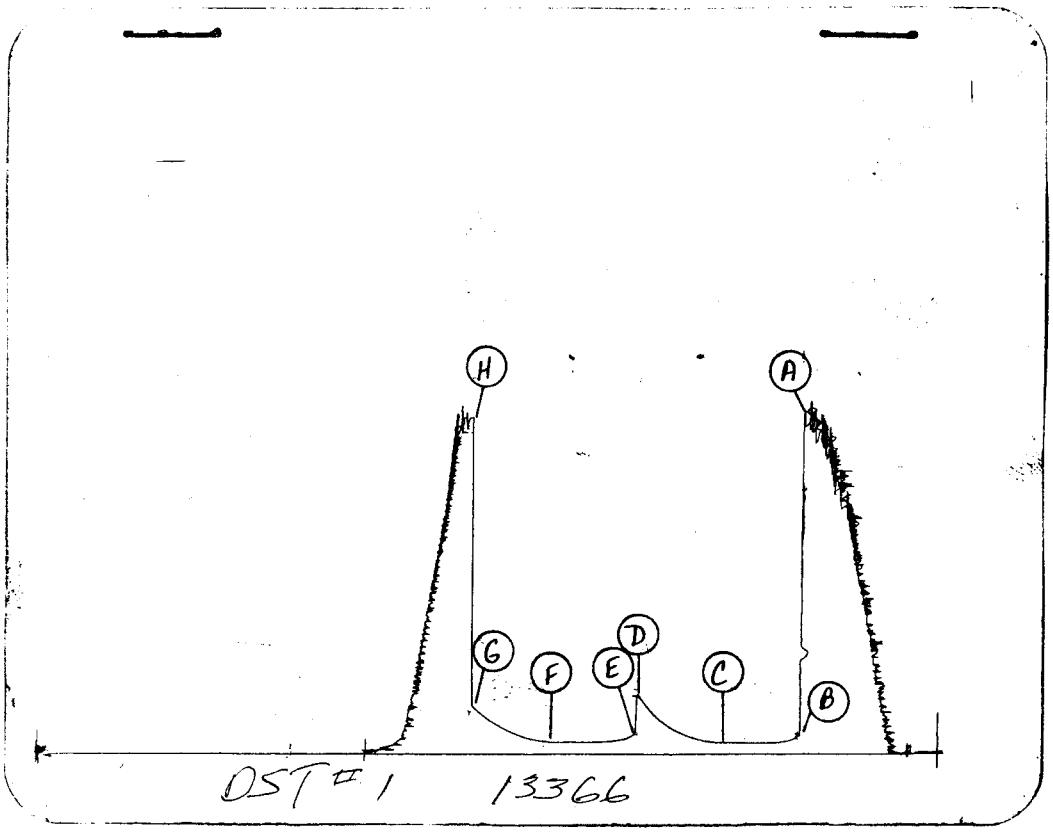
Recorder No. 13366 Capacity 3850 Location 3137 F

Clock No. 19127 Elevation 1824 K.B. Well Temperature 104 °

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1719	P.S.I.	Open Tool	1:45 P.M	
B	First Initial Flow Pressure	54	P.S.I.	First Flow Pressure	60 Mins.	60 Min
C	First Final Flow Pressure	57	P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Min
D	Initial Closed-in Pressure	298	P.S.I.	Second Flow Pressure	60 Mins.	60 Min
E	Second Initial Flow Pressure	59	P.S.I.	Final Closed-in Pressure	60 Mins.	60 Min
F	Second Final Flow Pressure	59	P.S.I.			
G	Final Closed-in Pressure	232	P.S.I.			
H	Final Hydrostatic Mud	1671	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 20 Inc.		Breakdown: 19 Inc.		Breakdown: 20 Inc.		Breakdown: 20 Inc.	
of 3 mins. and a		of 3 mins. and a		of 3 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	54	0	57	0	59	0	59
P 2 3	54	3	60	3	59	3	61
P 3 6	54	6	63	6	59	6	63
P 4 9	54	9	65	9	59	9	65
P 5 12	54	12	69	12	59	12	69
P 6 15	55	15	76	15	59	15	72
P 7 18	55	18	82	18	59	18	77
P 8 21	55	21	89	21	59	21	82
P 9 24	55	24	96	24	59	24	89
P10 27	55	27	106	27	59	27	96
P11 30	55	30	116	30	59	30	105
P12 33	55	33	127	33	59	33	114
P13 36	55	36	142	36	59	36	125
P14 39	555	39	156	39	59	39	135
P15 42	56	42	171	42	59	42	147
P16 45	56	45	190	45	59	45	159
P17 48	57	48	213	48	59	48	172
P18 51	57	51	239	51	59	51	187
P19 54	57	54	266	54	59	54	203
P20 57	57	57	298	57	59	57	220
60	57			60	59	60	232



This is an actual photograph of *recorder* chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1724	1719	PSI
(B)	First Initial Flow Pressure	48	54	PSI
(C)	First Final Flow Pressure	48	57	PSI
(D)	Initial Closed-in Pressure	290	298	PSI
(E)	Second Initial Flow Pressure	58	59	PSI
(F)	Second Final Flow Pressure	58	59	PSI
(G)	Final Closed-in Pressure	232	232	PSI
(H)	Final Hydrostatic Mud	1676	1671	PSI

CHENEY TESTING COMPANY

P. O. BOX 3 HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Petroleum Inc.	Test No.	2
Well Name & Number	Mudd F-1	Zone Tested	Base K.C.
Company Address	Wichita, Kansas	Date	10-8-82
Comp. Rep.	Kenneth Johnson	Tester	Steven Holdren
Contractor	DNB Drlg. Co.	Elevation	1824 K.B.
Location: Sec. 9 Twp. 15 Rge. 15wCo. Russell State Kansas		Est. Feet of Pay	

Recorder No. 13366 Type AK-1 Range 3850 PSI

Recorder Depth 3259

(A) Initial Hydrostatic Mud 1810 PSI

(B) First Initial Flow Pressure 77 PSI

(C) First Final Flow Pressure 77 PSI

(D) Initial Closed-in Pressure 976 PSI

(E) Second Initial Flow Pressure 96 PSI

(F) Second Final Flow Pressure 135 PSI

(G) Final Closed-in Pressure 1034 PSI

(H) Final Hydrostatic Mud 1733 PSI

Temperature 104

Mud Weight 9.8 Viscosity 40

Fluid Loss 11.8

Interval Tested 3215-3265

Anchor Length 50

Top Packer Depth 3210

Bottom Packer Depth 3215

Total Depth 3265

Drill Pipe Size 4½ X.H.

Wt. Pipe I. D. 3.25 Ft. Run 659

Recovery—Total Feet 278

Recorder No. 10290 Type AK-1 Range 4250 PSI

Recorder Depth 3262

Tool Open Before I. S. I. 15 Mins.

Initial Shut-in 30 Mins.

Flow Period 60 Mins.

Final Shut-in 120 Mins.

Surface Choke Size 1"

Bottom Choke Size ¾"

Main Hole Size 7⅞"

Rubber Size 6¾"

Tool Open @ 4:55 P.M.

Blow 1st Open- Strong Increasing Blow Off

Remarks Off Bottom Of Bucket In 5 Min.

2nd Open- Blow Off Bottom Of Bucket In 2 Minutes.

Tool Length- 21' Plus The Anchor Length Of 50'.

Drill Collar I. D. ____ Ft. Run ____

Recovered 805 Feet Of Gas In Pipe

Recovered 30 Feet Of Mud Cut Oil Gassy- (42% Oil, 58% Mud)

Recovered 248 Feet Of Heavy Frothy Gassy Oil.

Recovered ____ Feet Of ____

Extra Equipment None Price of Job $600.00

CHENEY TESTING COMPANY
Pressure Data

Date 10-8-82 Test Ticket No. 6549

Recorder No. 13366 Capacity 3850 Location 3259 . F

Clock No. 19127 Elevation 1824 K.B. Well Temperature 104 °

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1805	P.S.I.	Open Tool	4:55 PM	
B	First Initial Flow Pressure	80	P.S.I.	First Flow Pressure	15 Mins.	15 Min
C	First Final Flow Pressure	80	P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Min
D	Initial Closed-in Pressure	978	P.S.I.	Second Flow Pressure	60 Mins.	60 Min
E	Second Initial Flow Pressure	101	P.S.I.	Final Closed-in Pressure	120 Mins.	120 Min
F	Second Final Flow Pressure	134	P.S.I.			
G	Final Closed-in Pressure	1034	P.S.I.			
H	Final Hydrostatic Mud	1728	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 5 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	80
P 2 3	80
P 3 6	80
P 4 9	80
P 5 12	80
P 6 15	80
P 7	
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

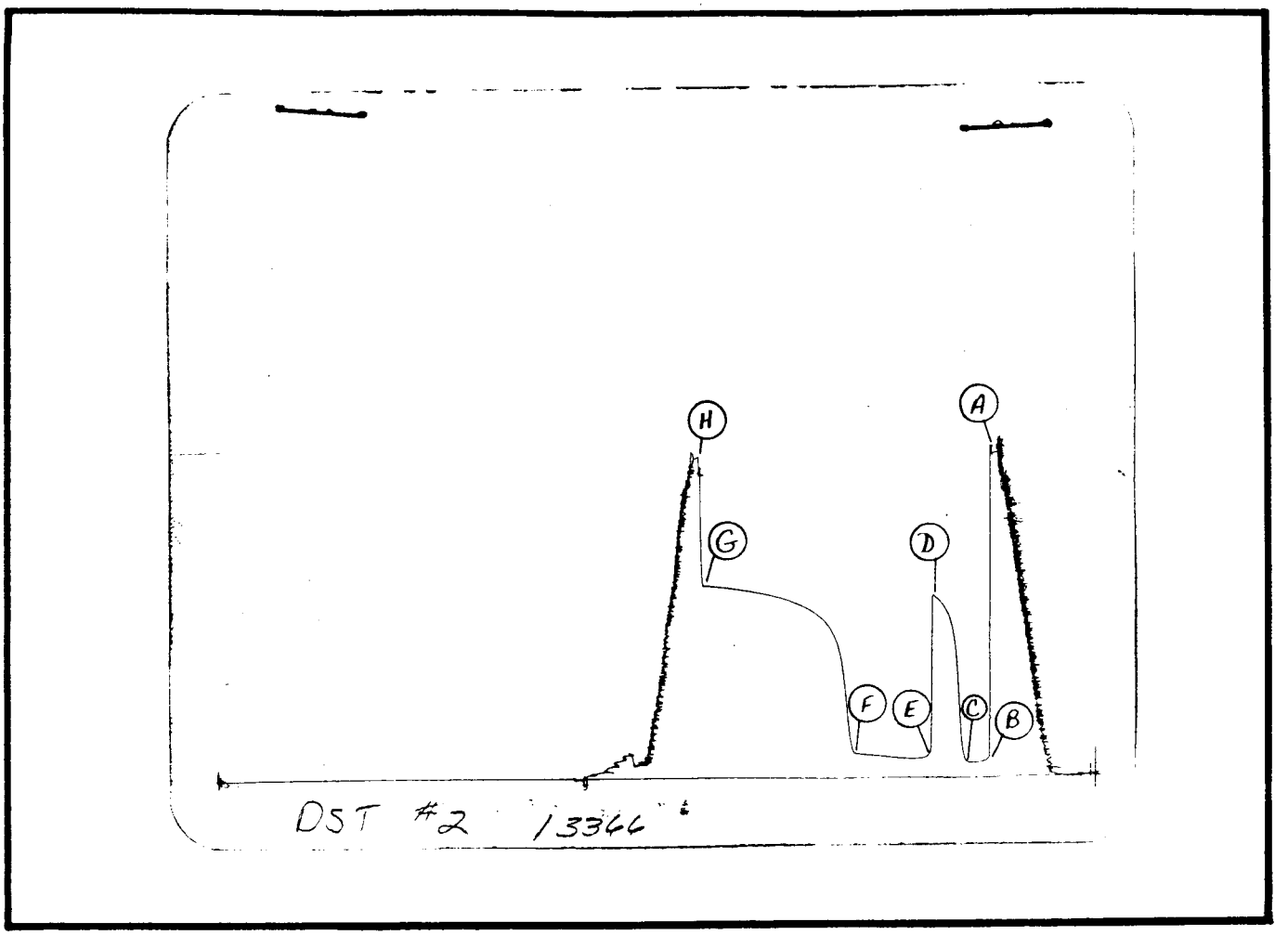
Point Minutes	Press.
0	80
3	92
6	182
9	507
12	749
15	846
18	898
21	931
24	954
27	972
30	978

Second Flow Pressure
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	101
3	101
6	101
9	102
12	102
15	103
18	103
21	104
24	106
27	108
30	110
33	112
36	115
39	117
42	119
45	121
48	122
51	125
54	126
57	129
60	134

Final Shut-In
Breakdown: 40 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	134
3	218
6	414
9	598
12	696
15	753
18	795
21	826
24	850
27	868
30	884
33	898
36	910
39	920
42	930
45	938
48	947
51	954
54	960
57	966
60	972
63	976
66	981
69	986
72	990
75	994
78	998
81	1001
84	1004
87	1008
90	1011
93	1015
96	1018
99	1020
102	1023
105	1025
108	1027
111	1029
114	1031
117	1033
120	1034



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1810	1805	PSI
(B)	First Initial Flow Pressure	77	80	PSI
(C)	First Final Flow Pressure	77	80	PSI
(D)	Initial Closed-in Pressure	976	978	PSI
(E)	Second Initial Flow Pressure	96	101	PSI
(F)	Second Final Flow Pressure	135	134	PSI
(G)	Final Closed-in Pressure	1034	1034	PSI
(H)	Final Hydrostatic Mud	1733	1728	PSI

CHENEY TESTING COMPANY

P. O. BOX 3 HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Petroleum Inc.	Test No.	3
Well Name & Number	Mudd F #1	Zone Tested	Marmaton
Company Address	Wichita,,Kansas	Date	10-9-82
Comp. Rep.	Kenneth Johnson	Tester	Steven Holdren
Contractor	DNB Drilling	Elevation	1824 K.B.
Location: Sec. 9 Twp. 15 Rge. 15w Co. Russell State Kansas		Est. Feet of Pay	

Recorder No. 13366 Type AK-1 Range 3850 PSI

Recorder Depth 3299

(A) Initial Hydrostatic Mud 1781 PSI

(B) First Initial Flow Pressure 38 PSI

(C) First Final Flow Pressure 38 PSI

(D) Initial Closed-in Pressure 619 PSI

(E) Second Initial Flow Pressure 48 PSI

(F) Second Final Flow Pressure 48 PSI

(G) Final Closed-in Pressure 532 PSI

(H) Final Hydrostatic Mud 1714 PSI

Temperature 104

Mud Weight 9.7 Viscosity 40

Fluid Loss 15.4

Interval Tested 3275-3305

Anchor Length 30'

Top Packer Depth 3270

Bottom Packer Depth 3275

Total Depth 3305

Drill Pipe Size 4½ X.H.

Wt. Pipe I. D. 3.25 Ft. Run 659

Recovery—Total Feet 60'

Recorder No. 10290 Type AK-1 Range 4250 PSI

Recorder Depth 3302

Tool Open Before I. S. I. 60 Mins.

Initial Shut-in 60 Mins.

Flow Period 30 Mins.

Final Shut-in 45 Mins.

Surface Choke Size 1"

Bottom Choke Size ¾"

Main Hole Size 7⅞"

Rubber Size 6¾"

Tool Open @ 9:30 A.M.

Blow 1st Open- Blow Increasing From 1"

Remarks to 1½" Then Decreasing to dead in 45 Minutes.

2nd Open- No Blow, Flushed Tool.

Tool Length- 21' Plus Anchor Of 30'

Well Chlorides- 57,000 PPM

Sample Chlorides- 57,000 PPM

Drill Collar I. D. _____ Ft. Run _____

Recovered 60' Feet Of Slighty Oil Specked Mud.

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Extra Equipment None Price of Job $600.00

CHENEY TESTING COMPANY
Pressure Data

Date 10-9-82 Test Ticket No. 6550

Recorder No. 13366 Capacity 3850 Location 3299

Clock No. 19127 Elevation 1824 K.B. Well Temperature 104

Point		Pressure	
A	Initial Hydrostatic Mud	1776	P.S.I.
B	First Initial Flow Pressure	31	P.S.I.
C	First Final Flow Pressure	31	P.S.I.
D	Initial Closed-in Pressure	625	P.S.I.
E	Second Initial Flow Pressure	37	P.S.I.
F	Second Final Flow Pressure	37	P.S.I.
G	Final Closed-in Pressure	542	P.S.I.
H	Final Hydrostatic Mud	1709	P.S.I.

	Time Given	Time Computed
Open Tool	9:30 A. M	
First Flow Pressure	60 Mins.	60 Mi
Initial Closed-in Pressure	60 Mins.	57 Mi
Second Flow Pressure	30 Mins.	30 Mi
Final Closed-in Pressure	45 Mins.	45 Mi

PRESSURE BREAKDOWN

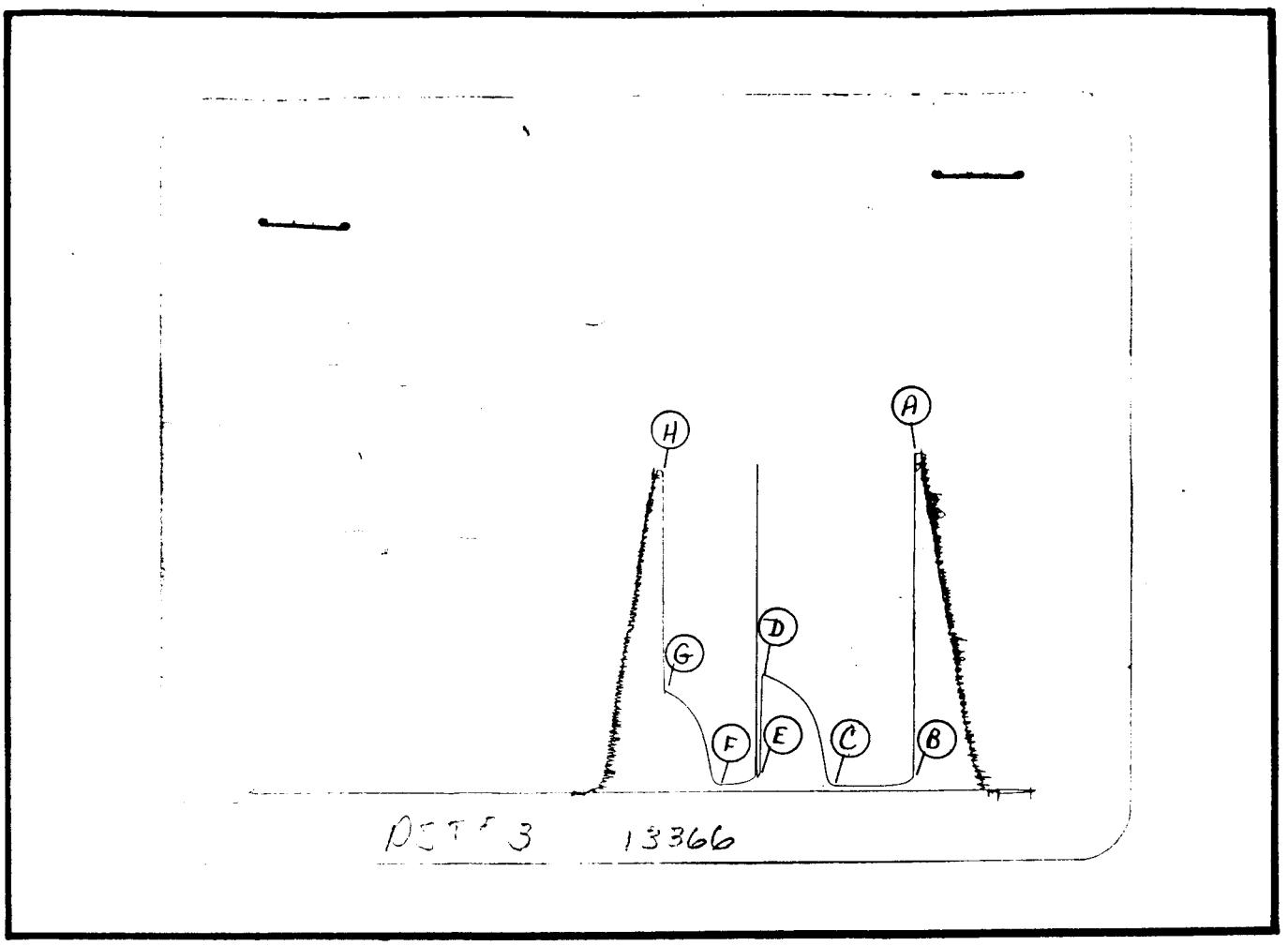
First Flow Pressure
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 15 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	First Flow Pressure Mins.	First Flow Pressure Press.	Initial Shut-In Minutes	Initial Shut-In Press.	Second Flow Pressure Minutes	Second Flow Pressure Press.	Final Shut-In Minutes	Final Shut-In Press.
P 1	0	31	0	31	0	37	0	37
P 2	3	31	3	37	3	37	3	42
P 3	6	31	6	68	6	37	6	61
P 4	9	31	9	179	9	37	9	142
P 5	12	31	12	287	12	37	12	244
P 6	15	31	15	365	15	37	15	321
P 7	18	31	18	412	18	37	18	370
P 8	21	31	21	450	21	37	21	406
P 9	24	31	24	480	24	37	24	436
P10	27	31	27	503	27	37	27	461
P11	30	31	30	523	30	37	30	480
P12	33	31	33	539			33	499
P13	36	31	36	554			36	513
P14	39	31	39	569			39	525
P15	42	31	42	580			42	537
P16	45	31	45	591			45	542
P17	48	31	48	601				
P18	51	31	51	610				
P19	54	31	54	619				
P20	57	31	57	625				
	60	31						



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1781	1776	PSI
(B)	First Initial Flow Pressure	38	31	PSI
(C)	First Final Flow Pressure	38	31	PSI
(D)	Initial Closed-in Pressure	619	625	PSI
(E)	Second Initial Flow Pressure	48	37	PSI
(F)	Second Final Flow Pressure	48	37	PSI
(G)	Final Closed-in Pressure	532	542	PSI
(H)	Final Hydrostatic Mud	1714	1709	PSI