Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Abercrombie Drilling Inc. Lease & Well No. Metcalf #1

Elevation 2456 Kelly Bushing Formation Kansas City Effective Pay - Ft. Ticket No. 24464

Date 10-20-75 Sec. 22 Twp. 1S Range 27W County Decatur State Kansas

Test Approved by Jack. K. Wharton Western Representative Don Burgett

Formation Test No. 1 O.K. X Misrun - Interval Tested From 3120' to 3165' Total Depth 3165'

Size Main Hole 77/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 3115 Ft. Size 63/4 Bottom Packer Depth 3120 Ft. Size 63/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 5½OD Tool Joint Size 4½FH Anchor Length 45 Ft. Size 5½OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 3157 Ft. Clock No. 6893 Depth 3160 Ft. Clock No. 10412

Top Make Kuster Cap. 4500 No. 3086 Inside Outside Bottom Make Kuster Cap. 4000 No. 3351 Inside Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 11:27 PM

Tool Open I.F.P. From 11:30 PM. to 12:00AM. - Hr. 30 Min. From (B) 30 P.S.I. To (C) 31 P.S.I.

Tool Closed I.C.I.P. From 12:00M. to 12:45AM. - Hr. 45 Min (D) 1026 P.S.I.

Tool Open F.F.P. From 12:45AM. to 1:45 M. - Hr. 60 Min. From (E) 55 P.S.I. To (F) 60 P.S.I.

Tool Closed F.C.I.P. From 1:45AM. to 2:30AM. - Hr. 45 Min. (G) 970 P.S.I.

Initial Hydrostatic Pressure (A) 1615 P.S.I. Final Hydrostatic Pressure (H) 1592 P.S.I. Maximum Temp. 117

INFORMATION

BLOW Weak steady blow throughout test

Did Well Flow - Yes X No Recovery Total Ft. 100' Muddy salt water

Reversed Out - Yes X No Mud Type chem Viscosity 37 Weight 9.7 Water Loss 12. cc. Chlorides 1700 P.P.M.

EXTRA EQUIPMENT: Type Circ. Sub. pin Safety Joint no Jars: Size - In. Make - Ser. No. -

Dual Packer yes Did Packers Hold? yes Did Tool Plug? no Where? -

DRILLING CONTRACTOR Abercrombie Drlg. Inc. Length Drill Pipe? 2144 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½FH In.

Length Weight Pipe 921 Ft. I.D. Weight Pipe 2.5 In. Tool Joint Size 3½IF In. Length Drill Collars - Ft. I.D. Drill Collars - In.

Tool Joint Size - In. Length D.S.T. Tool 65 Ft.

Remarks:

WESTERN TESTING CO., INC.
Pressure Data

Date 10-20-75 Test Ticket No. 24464

Recorder No. 3086 Capacity 4500 Location 3157 Ft.

Clock No. 6893 Elevation 2456 Kelly Bushing Well Temperature 117 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1615	P.S.I.	Open Tool	11:27 P M	
B	First Initial Flow Pressure	30	P.S.I.	First Flow Pressure	30 Mins.	35 Mins.
C	First Final Flow Pressure	31 1026	P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	1026	P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	55	P.S.I.	Final Closed-in Pressure	45 Mins.	48 Mins.
F	Second Final Flow Pressure	60	P.S.I.			
G	Final Closed-in Pressure	970	P.S.I.			
H	Final Hydrostatic Mud	1592	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 7 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	30
P 2 5	31
P 3 10	31
P 4 15	31
P 5 20	31
P 6 25	31
P 7 30	31
P 8 35	31
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

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

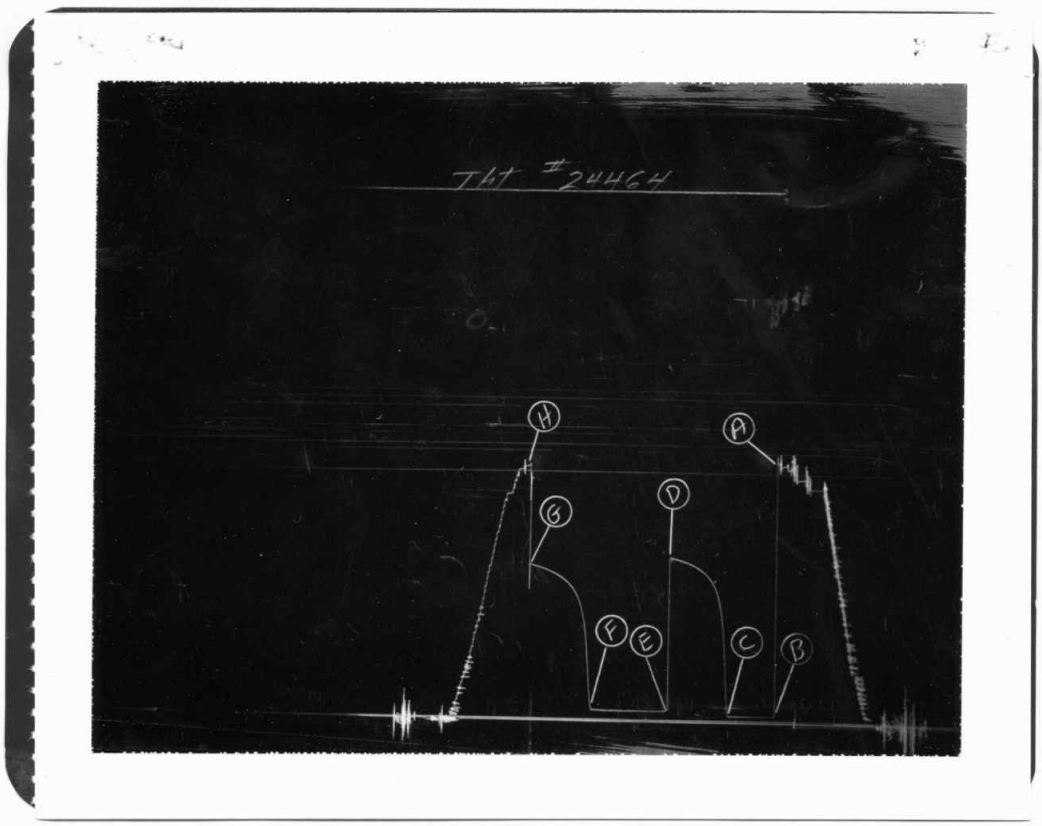
Point Minutes	Press.
0	31
3	399
6	674
9	792
12	853
15	893
18	922
21	942
24	958
27	973
30	985
33	995
36	1003
39	1012
42	1017
45	1026

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	55
5	56
10	57
15	57
20	57
25	57
30	57
35	57
40	57
45	57
50	58
55	59
60	60

Final Shut-In
Breakdown: 16 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	60
3	325
6	590
9	701
12	767
15	810
18	839
21	865
24	885
27	901
30	915
33	927
36	937
39	946
42	955
45	961
48	970



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1624	1615	PSI
(B)	First Initial Flow Pressure	35	30	PSI
(C)	First Final Flow Pressure	35	31	PSI
(D)	Initial Closed-in Pressure	1032	1026	PSI
(E)	Second Initial Flow Pressure	59	55	PSI
(F)	Second Final Flow Pressure	71	60	PSI
(G)	Final Closed-in Pressure	974	970	PSI
(H)	Final Hydrostatic Mud	1612	1592	PSI

COMPANY Abercrombie Drilling Inc. LEASE AND WELL NO. Metcalf #1 SEC. 22 TWP. 1S RGE. 27W TEST NO. 1 DATE 10-20-75

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Abercrombie Drilling Inc. Lease & Well No. Metcalf #1

Elevation 2456 Kelly Bushing Formation Kansas City Effective Pay - Ft. Ticket No. 24465

Date 10-21-75 Sec. 22 Twp. 1S Range 27W County Decatur State Kansas

Test Approved by Jack K. Wharton Western Representative Don Burgett

Formation Test No. 2 O.K. X Misrun - Interval Tested From 3164' to 3210' Total Depth 3210'

Size Main Hole 7 7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 3159 Ft. Size 6 3/4 Bottom Packer Depth 3164 Ft. Size 6 3/4

Straddle - Conv. - B.T. - Damaged - Yes - No - Packer Depth - Ft. Size -

Tool Size 5½ OD Tool Joint Size 4½ FH Anchor Length 46 Ft. Size 5½ OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 3203 Ft. Clock No. 6893 Depth 3206 Ft. Clock No. 10412

Top Make Kuster Cap. 4500 No. 3086 ~~Outside~~ Inside Bottom Make Kuster Cap. 4000 No. 3351 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - Outside Inside Depth - Ft. Rec. No. - Clock No. - Outside Inside

Time Set Packer 1:27 P M

Tool Open I.F.P. From 1:30 P M. to 2:00P M. - Hr. 30 Min. From (B) 33 P.S.I. To (C) 70 P.S.I.

Tool Closed I.C.I.P. From 2:00P M. to 2:45P M. - Hr. 45 Min (D) 1058 P.S.I.

Tool Open F.F.P. From 2:45 P M. to 3:45P M. - Hr. 60 Min. From (E) 100 P.S.I. To (F) 161 P.S.I.

Tool Closed F.C.I.P. From 3:45P M. to 4:45P M. - Hr. 60 Min. (G) 1050 P.S.I.

Initial Hydrostatic Pressure (A) 1654 P.S.I. Final Hydrostatic Pressure (H) 1640 P.S.I. Maximum Temp. 118

INFORMATION

BLOW W Weak increasing to good, on initial period. Weak blow on final flow period.

Did Well Flow - Yes X No Recovery Total Ft. 365' water cut drilling mud.

Reversed Out - Yes X No Mud Type chem Viscosity 43 Weight 9.8 Water Loss 11.2 cc. Chlorides 17,000P.P.M.

EXTRA EQUIPMENT: Type Circ. Sub. pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer yes Did Packers Hold? yes Did Tool Plug? no Where? -

DRILLING CONTRACTOR Abercrombie Drlg. Inc. Length Drill Pipe? 2223 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½ FH In.

Length Weight Pipe 921 Ft. I.D. Weight Pipe 2.5 In. Tool Joint Size 3½ IF In. Length Drill Collars - Ft. I.D. Drill Collars - In.

Tool Joint Size - In. Length D.S.T. Tool 66 Ft.

Remarks:

WESTERN TESTING CO., INC.
Pressure Data

Date 10-21-75 Test Ticket No. 24465

Recorder No. 3086 Capacity 4500 Location 3203 Ft.

Clock No. 6893 Elevation 2456 Kelly Bushing Well Temperature 118 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1654 P.S.I.	Open Tool	1:27 PM	
B First Initial Flow Pressure	33 P.S.I.	First Flow Pressure	30 Mins.	33 Mins.
C First Final Flow Pressure	70 P.S.I.	Initial Closed-in Pressure	45 Mins.	42 Mins.
D Initial Closed-in Pressure	1058 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	100 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	161 P.S.I.			
G Final Closed-in Pressure	1050 P.S.I.			
H Final Hydrostatic Mud	1640 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 3 Min.

Point Mins.	Press.
P 1 0	33
P 2 5	33
P 3 10	34
P 4 15	43
P 5 20	52
P 6 25	62
P 7 30	67
P 8 33	70
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 14 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	70
3	793
6	887
9	932
12	958
15	983
18	995
21	1009
24	1021
27	1030
30	1038
33	1045
36	1051
39	1056
42	1058

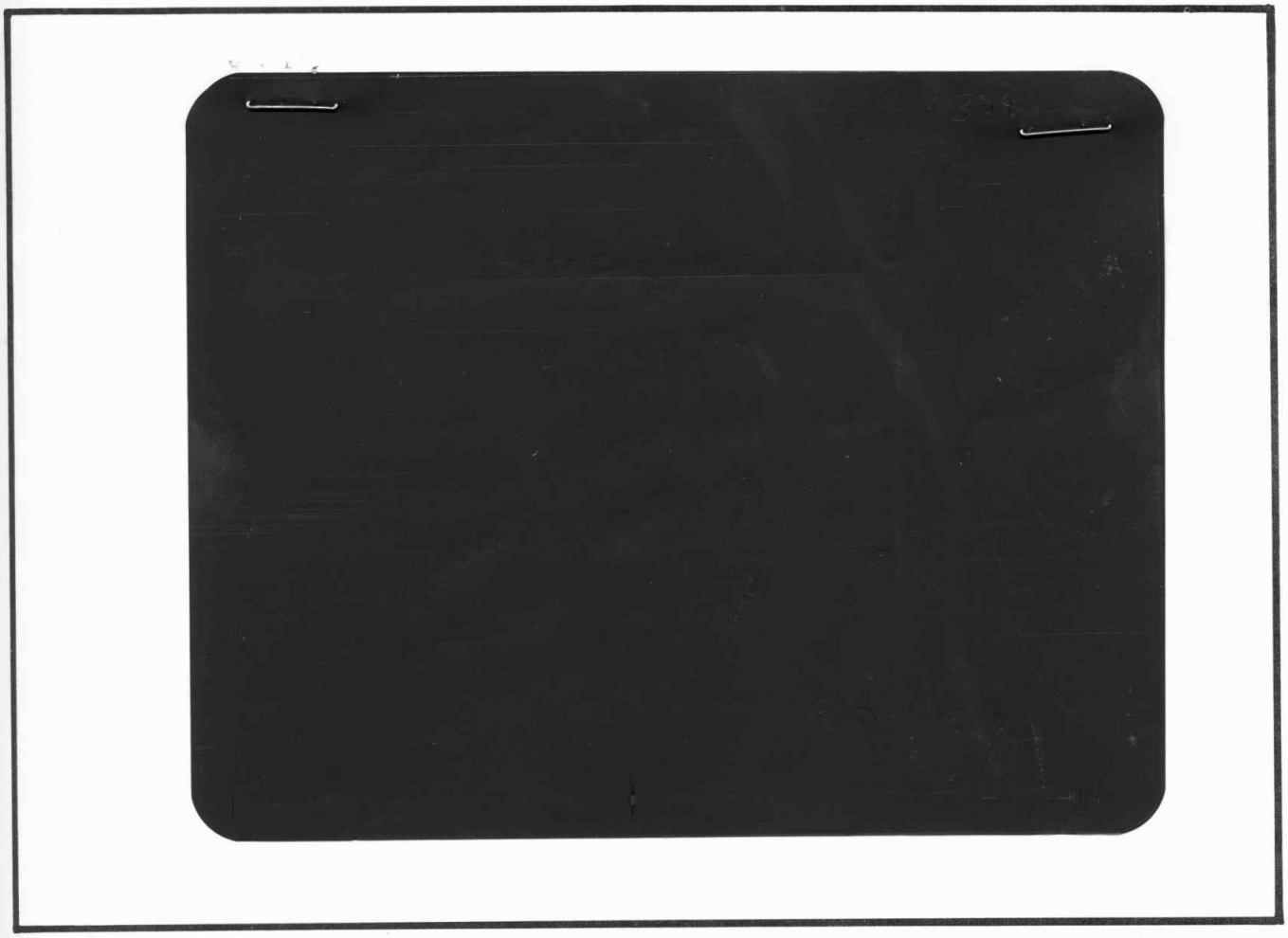
Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	100
5	100
10	100
15	107
20	112
25	119
30	125
35	133
40	140
45	147
50	153
55	159
60	161

Final Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	161
3	737
6	844
9	886
12	917
15	938
18	956
21	969
24	981
27	990
30	1000
33	1007
36	1014
39	1020
42	1025
45	1031
48	1035
51	1039
54	1044
57	1048
60	1050

COMPANY Abercrombie Drilling Inc. LEASE AND WELL NO. Metcalf #1 SEC. 22 TWP. 1S RGE. 27W TEST NO. 2 DATE 10-21-75



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1647	1654	PSI
(B)	First Initial Flow Pressure	35	33	PSI
(C)	First Final Flow Pressure	64	70	PSI
(D)	Initial Closed-in Pressure	1055	1058	PSI
(E)	Second Initial Flow Pressure	100	100	PSI
(F)	Second Final Flow Pressure	153	161	PSI
(G)	Final Closed-in Pressure	1044	1050	PSI
(H)	Final Hydrostatic Mud	1635	1640	PSI

WESTERN TESTERS

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Abercrombie Drilling Inc. Lease & Well No. Metcalf #1

Elevation 2456 Kelly Bushing Formation Kansas City Effective Pay - Ft. Ticket No 24466

Date 10-22-75 Sec. 22 Twp. 1S Range 27W County Decatur State Kansas

Test Approved by Jack K. Wharton Western Representative Don Burgett

Formation Test No. 3 O.K. X Misrun - Interval Tested From 3310' to 3340' Total Depth 3340'

Size Main Hole 7 7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 3305 Ft. Size 6 3/4 Bottom Packer Depth 3310 Ft. Size 6 3/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 5½ OD Tool Joint Size 4½ FH Anchor Length 30 Ft. Size 5½ OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 3333 Ft. Clock No. 6893 Depth 3336 Ft. Clock No. 10412

Top Make Kuster Cap. 4500 No. 3086 Inside / ~~Outside~~ Bottom Make Kuster Cap. 4000 No. 3351 - Inside / Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside / Outside Depth - Ft. Rec. No. - Clock No. - Inside / Outside

Time Set Packer 1:57 P M

Tool Open I.F.P. From 2:00P M. to 2:30P M. - Hr. 30 Min. From (B) 50 P.S.I. To (C) 161 P.S.I.

Tool Closed I.C.I.P. From 2:30P M. to 3:15P M. - Hr. 45 Min (D) 946 P.S.I.

Tool Open F.F.P. From 3:15P M. to 5:30 PM. - Hr. 135 Min. From (E) 213 P.S.I. To (F) 368 P.S.I.

Tool Closed F.C.I.P. From 5:30P M. to 6:30 PM. - Hr. 60 Min. (G) 823 P.S.I.

Initial Hydrostatic Pressure (A) 1774 P.S.I. Final Hydrostatic Pressure (H) 1762 P.S.I. Maximum Temp. 119

INFORMATION

BLOW Good blow throughout the test.

Did Well Flow - Yes X No Recovery Total Ft. 765' Gassy oil (29 gravity corrected), 120' very heavy oil cut mud.

Reversed Out - Yes X No Mud Type chem Viscosity 47 Weight 9.9 Water Loss 12.4 cc. Chlorides 2100 P.P.M.

EXTRA EQUIPMENT: Type Circ. Sub. pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer yes Did Packers Hold? yes Did Tool Plug? no Where? -

DRILLING CONTRACTOR Abercrombie Drlg. Inc. Length Drill Pipe? 2369 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½ FH In.

Length Weight Pipe 921 Ft. I.D. Weight Pipe 2.5 In. Tool Joint Size 3½ IF In. Length Drill Collars - Ft. I.D. Drill Collars - In.

Tool Joint Size - In. Length D.S.T. Tool 50 Ft.

Remarks:

WESTERN TESTING CO., INC.
Pressure Data

Date 10-22-75 Test Ticket No. 24466

Recorder No. 3086 Capacity 4500 Location 3333 Ft.

Clock No. 6893 Elevation 2456 Kelly Bushing Well Temperature 119 °F

Point	Pressure		Time Given	Time Computed
Initial Hydrostatic Mud	1774 P.S.I.	Open Tool	1:47P M	
First Initial Flow Pressure	50 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
First Final Flow Pressure	161 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
Initial Closed-in Pressure	946 P.S.I.	Second Flow Pressure	135 Mins.	120 Mins.
Second Initial Flow Pressure	213 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
Second Final Flow Pressure	368 P.S.I.			
Final Closed-in Pressure	823 P.S.I.			
Final Hydrostatic Mud	1762 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
1 0	50
2 5	57
3 10	78
4 15	102
5 20	123
6 25	133
7 30	161
8	
9	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
0	

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

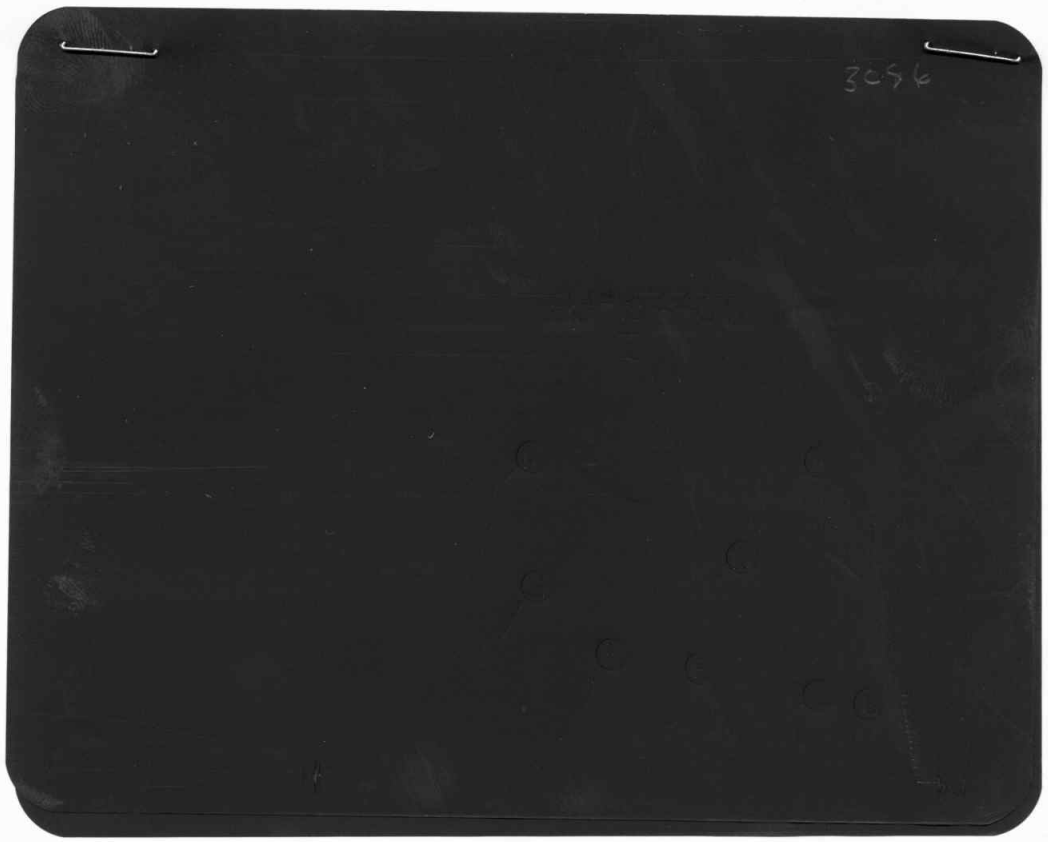
Point Minutes	Press.
0	161
3	549
6	700
9	772
12	804
15	832
18	853
21	874
24	888
27	900
30	909
33	918
36	925
39	932
42	939
45	946

Second Flow Pressure
Breakdown: 24 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	213
5 10	201
15 20	213
25	225
30 35	237
40	249
45 50	261
55	272
60 65	280
70	291
75 80	301
85	310
90 95	320
100	325
105 110	329
115	332
	336
	341
	346
	351
	358

Final Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	368
3	588
6	646
9	674
12	695
15	713
18	727
21	739
24	751
27	760
30	769
33	776
36	783
39	788
42	795
45	800
48	807
51	811
54	814
57 60	818
	823



This is an actual photograph of recorder chart.

COMPANY Abercrombie Drilling Inc. LEASE AND WELL NO. Metcalf #1 SEC. 22 TWP. 1S RGE. 27W TEST NO. 3 DATE 10-22-75

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1727	1774	PSI
(B)	First Initial Flow Pressure	42	50	PSI
(C)	First Final Flow Pressure	142	161	PSI
(D)	Initial Closed-in Pressure	939	946	PSI
(E)	Second Initial Flow Pressure	177	213	PSI
(F)	Second Final Flow Pressure	343	368	PSI
(G)	Final Closed-in Pressure	811	823	PSI
(H)	Final Hydrostatic Mud	1716	1762	PSI

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Abercrombie Drilling Inc. Lease & Well No. Metcalf #1

Elevation 2456 Kelly Bushing Formation Kansas City Effective Pay - Ft. Ticket No. 24467

Date 10-23-75 Sec. 22 Twp. 1S Range 27W County Decatur State Kansas

Test Approved by Jack K Wharton Western Representative Don Burgett

Formation Test No. 4 O.K. X Misrun - Interval Tested From 3359' to 3375' Total Depth 3375'

Size Main Hole 7 7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged X Yes - No

Top Packer Depth 3356 Ft. Size 6 3/4 Bottom Packer Depth 3359 Ft. Size 6 3/4

Straddle - Conv. - B.T. - Damaged - Yes No Packer Depth - Ft. Size -

Tool Size 5½ OD Tool Joint Size 4½ FH Anchor Length 16 Ft. Size 5½ OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 3370 Ft. Clock No. 6893 Depth 3373 Ft. Clock No. 10412

Top Make Kuster Cap. 4500 No. 3086 Inside/Outside Bottom Make Kuster Cap. 4000 No. 3351 Inside/Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside/Outside Depth - Ft. Rec. No. - Clock No. - Inside/Outside

Time Set Packer 4:57 A M

Tool Open I.F.P. From 5:00 A M. to 5:30A M. - Hr. 30 Min. From (B) 23 P.S.I. To (C) 134 P.S.I.

Tool Closed I.C.I.P. From 5:30A M. to 6:15A M. - Hr. 45 Min (D) 900 P.S.I.

Tool Open F.F.P. From 6:15 A M. to 7:15A M. - Hr. 60 Min. From (E) 184 P.S.I. To (F) 429 P.S.I.

Tool Closed F.C.I.P. From 7:15A M. to 8:00A M. - Hr. 45 Min. (G) 748 P.S.I.

Initial Hydrostatic Pressure (A) 1785 P.S.I. Final Hydrostatic Pressure (H) 1728 P.S.I. Maximum Temp. 120

INFORMATION

BLOW Good blow throughout test.

Did Well Flow - Yes X No Recovery Total Ft. 240' very slightly oil and water cut drilling mud, 540' very slightly oil cut muddy water

Reversed Out - Yes X No Mud Type Chem Viscosity 47 Weight 9.9 Water Loss 12.4 cc. Chlorides 21,000 P.P.M.

EXTRA EQUIPMENT: Type Circ. Sub pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer yes Did Packers Hold? yes Did Tool Plug? no Where? --

DRILLING CONTRACTOR Abercrombie Drlg. Inc. Length Drill Pipe? 2418 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½ FH In.

Length Weight Pipe 921 Ft. I.D. Weight Pipe 2.5 In. Tool Joint Size 3½ IF In. Length Drill Collars - Ft. I.D. Drill Collars - In.

Tool Joint Size - In. Length D.S.T. Tool - Ft.

Remarks:

WESTERN TESTING CO., INC.
Pressure Data

Date 10-23-75 Test Ticket No. 24467

Recorder No. 3086 Capacity 4500 Location 3370 Ft.

Clock No. 6893 Elevation 2456 Kelly Bushing Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1785 P.S.I.	Open Tool	4:57A M	
B First Initial Flow Pressure	23 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	134 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	900 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	184 P.S.I.	Final Closed-in Pressure	45 Mins.	48 Mins.
F Second Final Flow Pressure	429 P.S.I.			
G Final Closed-in Pressure	748 P.S.I.			
H Final Hydrostatic Mud	1728 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	23
P 2 5	23
P 3 10	45
P 4 15	59
P 5 20	82
P 6 25	107
P 7 30	134
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

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

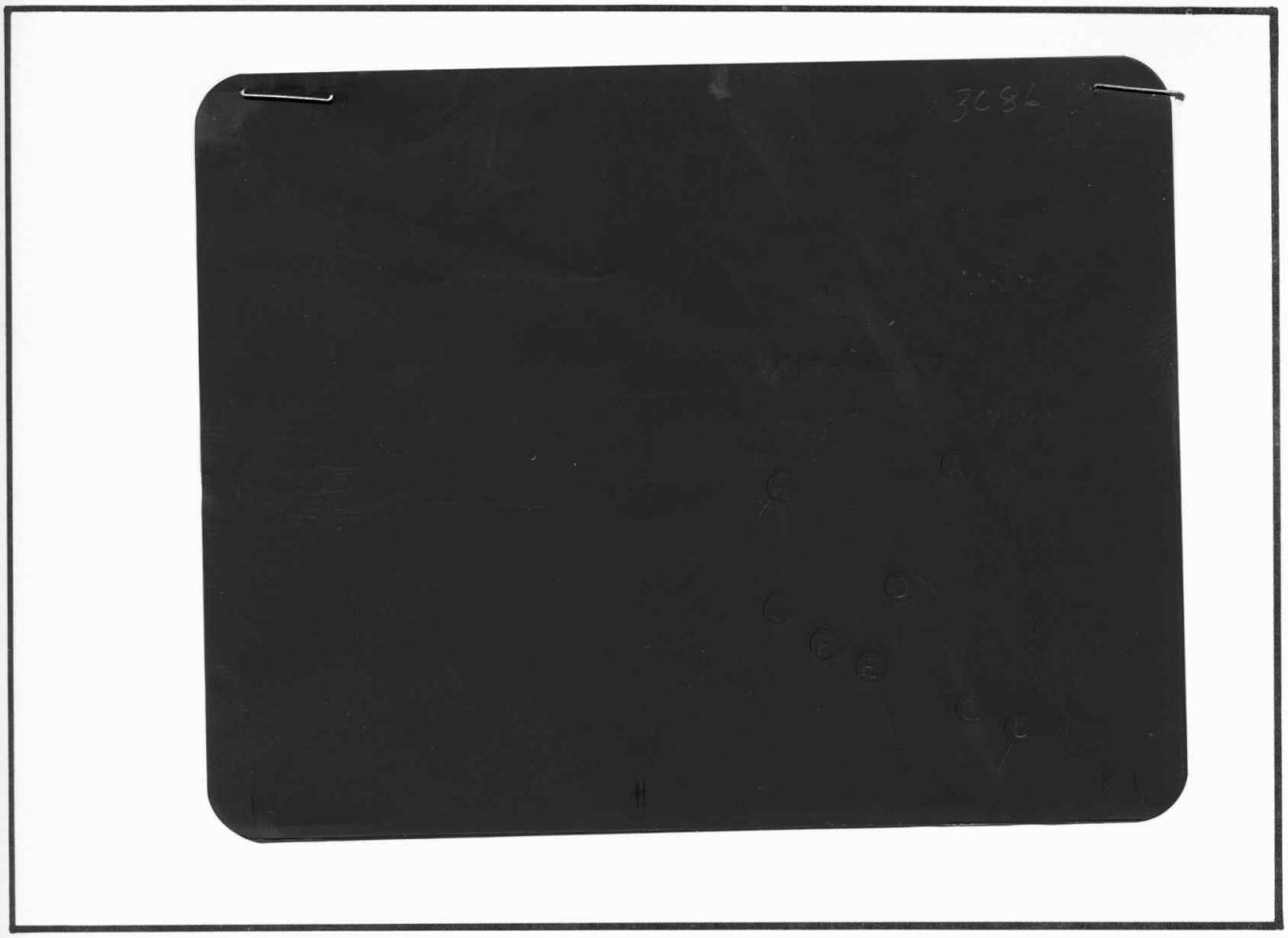
Point Minutes	Press.
0	134
3	452
6	549
9	616
12	669
15	710
18	746
21	778
24	802
27	823
30	843
33	859
36	872
39	886
42	895
45	900

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	184
5	223
10	258
15	287
20	309
25	331
30	350
35	365
40	382
45	396
50	410
55	422
60	429

Final Shut-In
Breakdown: 16 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	429
3	495
6	532
9	561
12	584
15	604
18	625
21	644
24	660
27	674
30	688
33	700
36	713
39	725
42	732
45	744
48	748



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1808	1785	PSI
(B)	First Initial Flow Pressure	23	23	PSI
(C)	First Final Flow Pressure	137	134	PSI
(D)	Initial Closed-in Pressure	916	900	PSI
(E)	Second Initial Flow Pressure	177	184	PSI
(F)	Second Final Flow Pressure	426	429	PSI
(G)	Final Closed-in Pressure	729	748	PSI
(H)	Final Hydrostatic Mud	1796	1728	PSI

COMPANY Abercrombie Drilling Inc. LEASE AND WELL NO. Metcalf #1 SEC. 22 TWP. 1S RGE. 27W TEST NO. 4 DATE 10-23-75