Home Office: Wichita, Kansas 67201
P.O. Box 1599 (316) 262-5861

Company A. L. Abercrombie, Inc. Lease & Well No. Oborny #5

Elevation 1986 Ground Level Formation - Effective Pay - Ft. Ticket No. 10096

Date 2/27/81 Sec. 25 Twp. 18S Range 18W County Rush State Kansas

Test Approved by ? Western Representative John Crister

Formation Test No. 1 Interval Tested from 3384 ft. to 3402 ft. Total Depth 3402 ft.

Packer Depth 3379 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3384 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3394 ft. Recorder Number 2608 Cap. 4150

Bottom Recorder Depth (Outside) 3399 ft. Recorder Number 3085 Cap. 4500

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Abercrombie Drilling Rig #5 Drill Collar Length 187 I. D. 2.76 in.

Mud Type Starch Viscosity 57 Weight Pipe Length 349 I. D. 2.25 in.

Weight 10.2 Water Loss 8.0 cc. Drill Pipe Length 2790 I. D. 3.8 in.

Chlorides 104,000 P.P.M. Test Tool Length 22 ft. Tool Size 5½ in.

Jars: Make - Serial Number - Anchor Length 18 ft. Size 5½ in.

Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½XH in.

Blow: Initial flow period had a surge, no blow. Final flow period no blow. Flushed tool. Goo surge. Blow 3 minutes then died.

Recovered 6 ft. of oil specked mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 4:35 ~~A.M.~~ P.M. Time Started Off Bottom - A.M. P.M. Maximum Temperature 103

Initial Hydrostatic Pressure (A) 1868 P.S.I.

Initial Flow Period Minutes 30 (B) 69 P.S.I. to (C) 44 P.S.I.

Initial Closed In Period Minutes 42 (D) 129 P.S.I.

Final Flow Period Minutes 45 (E) 73 P.S.I. to (F) 47 P.S.I.

Final Closed In Period Minutes 48 (G) 76 P.S.I.

Final Hydrostatic Pressure (H) 1854 P.S.I.

WTC

WESTERN TESTING CO., INC.
Pressure Data

Date 2/27/81 Test Ticket No. 10096

Recorder No. 2608 Capacity 4150 Location 3394 Ft.

Clock No. - Elevation 1986 Ground Level Well Temperature 103 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1868	P.S.I.
B	First Initial Flow Pressure	69	P.S.I.
C	First Final Flow Pressure	44	P.S.I.
D	Initial Closed-in Pressure	129	P.S.I.
E	Second Initial Flow Pressure	73	P.S.I.
F	Second Final Flow Pressure	47	P.S.I.
G	Final Closed-in Pressure	76	P.S.I.
H	Final Hydrostatic Mud	1854	P.S.I.

	Time Given	Time Computed
Open Tool	4:35A M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	45 Mins.	42 Mins.
Second Flow Pressure	45 Mins.	45 Mins.
Final Closed-in Pressure	45 Mins.	48 Mins.

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	69
P 2 5	56
P 3 10	50
P 4 15	47
P 5 20	46
P 6 25	44
P 7 30	44
P 8	
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.

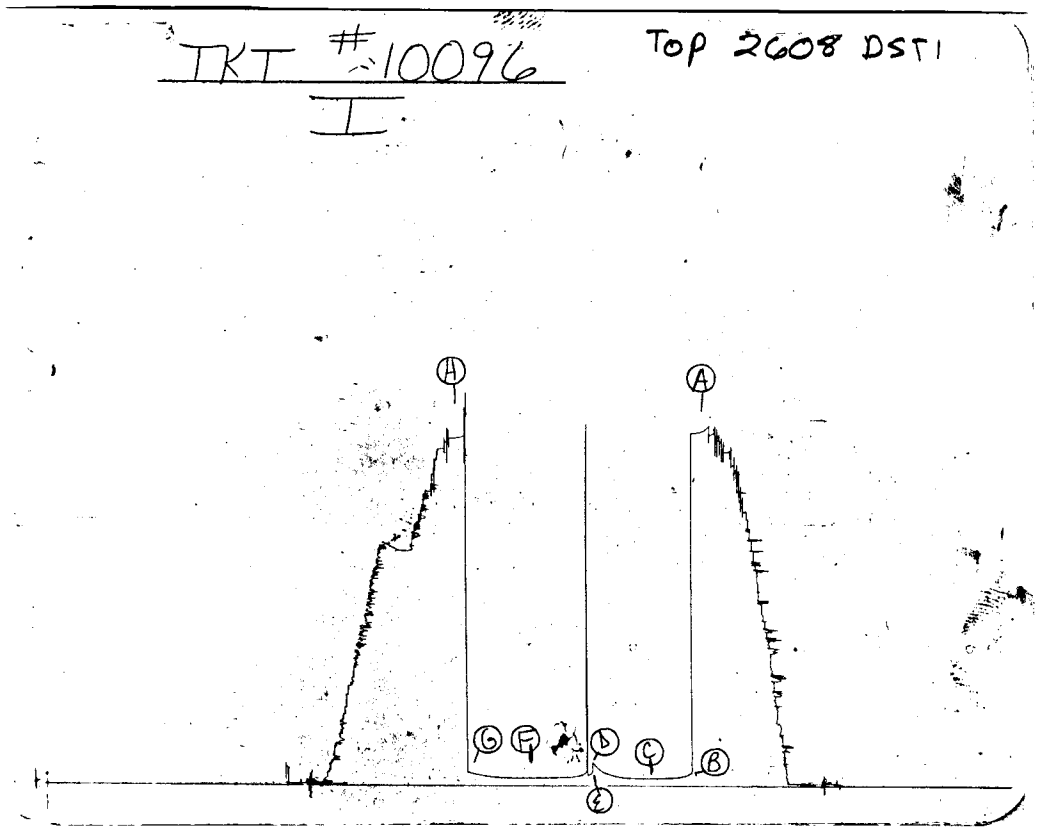
Point Minutes	Press.
0	44
3	44
6	44
9	44
12	44
15	45
18	46
21	48
24	51
27	56
30	64
33	71
36	81
39	100
42	129

Second Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	73
	Flushed Tool
5	75
10	58
15	50
20	49
25	48
30	47
35	47
40	47
45	47

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

Point Minutes	Press.
0	47
3	46
6	46
9	46
12	46
15	46
18	47
21	48
24	48
27	49
30	52
33	54
36	57
39	62
42	67
45	72
48	76



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1868	1868	PSI
(B)	First Initial Flow Pressure	42	69	PSI
(C)	First Final Flow Pressure	42	44	PSI
(D)	Initial Closed-in Pressure	135	129	PSI
(E)	Second Initial Flow Pressure	42	73	PSI
(F)	Second Final Flow Pressure	42	47	PSI
(G)	Final Closed-in Pressure	83	76	PSI
(H)	Final Hydrostatic Mud	1847	1854	PSI

COMPANY A. L. Abercrombie, Inc. LEASE AND WELL NO. Oborny #5 SEC. 25 TWP. 18S RGE. 18W TEST NO. 1 DATE 2/27/81

WESTERN TESTERS

Home Office: Wichita, Kansas 67201

P.O. Box 1599 (316) 262-5861

Company A. L. Abercrombie, Inc. Lease & Well No. Oborny #5

Elevation 1986 Ground Level Formation Arbuckle Effective Pay - Ft. Ticket No. 10097

Date 3/1/81 Sec. 25 Twp. 18S Range 18W County Rush State Kansas

Test Approved by Allen S. M---- Western Representative John Critser

Formation Test No. 2 Interval Tested from 3705 ft. to 3753 ft. Total Depth 3753 ft.

Packer Depth 3700 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3705 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3745 ft. Recorder Number 2608 Cap. 4150

Bottom Recorder Depth (Outside) 3750 ft. Recorder Number 3085 Cap. 4500

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Abercrombie Drilling Rig #5 Drill Collar Length 187 I. D. 2.76 in.

Mud Type salt-clay-starch Viscosity 41 Weight Pipe Length 349 I. D. 2.25 in.

Weight 10.4 Water Loss 12.8 cc. Drill Pipe Length 3217 I. D. 3.8 in.

Chlorides 113,000 P.P.M. Test Tool Length 22 ft. Tool Size 5½ in.

Jars: Make - Serial Number - Anchor Length 48 ft. Size 5½ in.

Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½XH in.

Blow: Initial flow period, weak blow; one half inch in bucket;died in twenty-sever minutes. Final flow period no blow; flushed tool; good surge; no blow.

Recovered 15 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 3:50 ~~P.M.~~ A.M. Time Started Off Bottom 6:35 ~~P.M.~~ A.M. Maximum Temperature 106°

Initial Hydrostatic Pressure			(A) 2109	P.S.I.		
Initial Flow Period	Minutes 30	(B) 79	P.S.I. to	(C) 52	P.S.I.	
Initial Closed In Period	Minutes 42	(D) 51	P.S.I.			
Final Flow Period	Minutes 45	(E) 51	P.S.I. to	(F) 54	P.S.I.	
Final Closed In Period	Minutes 39	(G) 57	P.S.I.			
Final Hydrostatic Pressure		(H) 2067	P.S.I.			

WTC

WESTERN TESTING CO., INC.
Pressure Data

Date 3/1/81 Test Ticket No. 10097

Recorder No. 2608 Capacity 4150 Location 3745 Ft.

Clock No. -- Elevation 1986 Ground Level Well Temperature 106 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2109 P.S.I.	Open Tool	3:50A M	
B First Initial Flow Pressure	79 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	52 P.S.I.	Initial Closed-in Pressure	45 Mins.	42 Mins.
D Initial Closed-in Pressure	51 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
E Second Initial Flow Pressure	51 P.S.I.	Final Closed-in Pressure	45 Mins.	39 Mins.
F Second Final Flow Pressure	54 P.S.I.			
G Final Closed-in Pressure	57 P.S.I.			
H Final Hydrostatic Mud	2067 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	79
P 2 5	64
P 3 10	58
P 4 15	54
P 5 20	54
P 6 25	52
P 7 30	52
P 8	
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	52
3	52
6	52
9	52
12	52
15	51
18	51
21	51
24	51
27	51
30	51
33	51
36	51
39	51
42	51

Second Flow Pressure
Breakdown: 9 Inc. of 5 mins. and a final inc. of 0 Min.

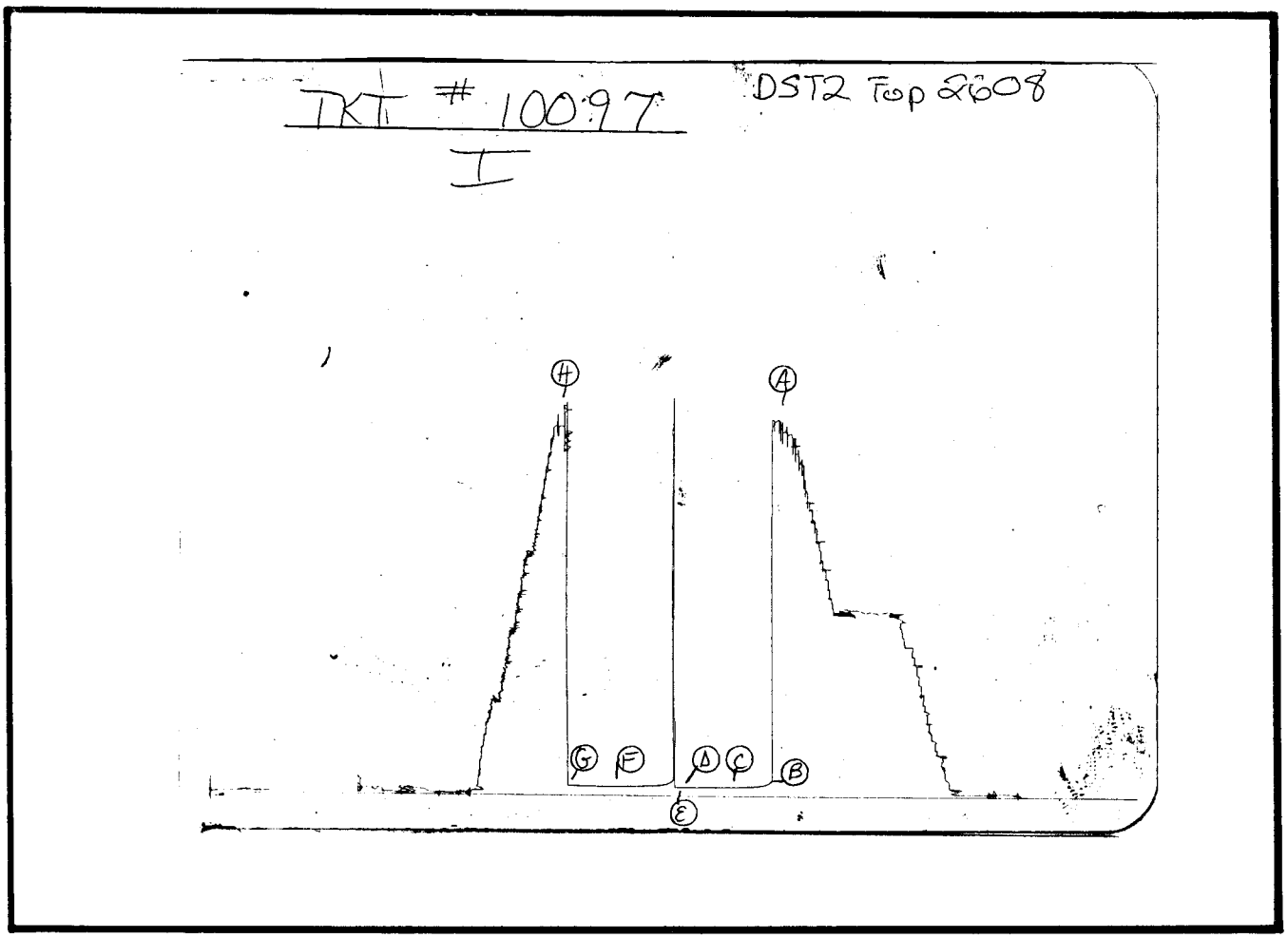
Point Minutes	Press.
0	51
5	73
10	62
15	58
20	57
25	56
30	55
35	55
40	54
45	54

flushed tool

Final Shut-In
Breakdown: 13 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	54
3	54
6	54
9	54
12	54
15	54
18	55
21	55
24	55
27	55
30	56
33	56
36	57
39	57

WTC - 4



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2119	2109	PSI
(B)	First Initial Flow Pressure	52	79	PSI
(C)	First Final Flow Pressure	52	52	PSI
(D)	Initial Closed-in Pressure	52	51	PSI
(E)	Second Initial Flow Pressure	62	51	PSI
(F)	Second Final Flow Pressure	62	54	PSI
(G)	Final Closed-in Pressure	62	57	PSI
(H)	Final Hydrostatic Mud	2067	2067	PSI

COMPANY A. L. ABERCROMBIE, INC. LEASE AND WELL NO. OBORNY #5 SEC. 25 TWP. 18S RGE. 18W TEST NO. 2 DATE 3/1/81

WESTERN TESTERS

Home Office: Wichita, Kansas 67201

P.O. Box 1599 (316) 262-5861

Company A. L. Abercrombie, Inc. Lease & Well No. Oborny #5

Elevation 1986 Ground Level Formation Arbuckle Effective Pay - Ft. Ticket No. 10098

Date 3/1/81 Sec. 25 Twp. 18S Range 18W County Rush State Kansas

Test Approved by Allen S. M---- Western Representative Jon Critser

Formation Test No. 3 Interval Tested from 3705 ft. to 3757 ft. Total Depth 3757 ft.

Packer Depth 3700 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3705 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3697 ft. Recorder Number 2608 Cap. 4150

Bottom Recorder Depth (Outside) 3702 ft. Recorder Number 3085 Cap. 4500

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Abercrombie Drilling Rig #5 Drill Collar Length 187 I. D. 2.76 in.

Mud Type starch-clay Viscosity 39 Weight Pipe Length 349 I. D. 2.25 in.

Weight 10.3 Water Loss 6.4 cc. Drill Pipe Length - I. D. 3.8 in.

Chlorides 98,000 P.P.M. Test Tool Length 22 ft. Tool Size 5½ in.

Jars: Make - Serial Number - Anchor Length 52 ft. Size 5½ in.

Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½XH in.

Blow: Strong blow throughout openings.

Recovered 2619 ft. of muddy salt water 70,000 chlorides ppm

Recovered ft. of (94% water; 6% mud)

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 3:55 ~~A.M.~~ P.M. Time Started Off Bottom 6:55 ~~A.M.~~ P.M. Maximum Temperature 114°

Initial Hydrostatic Pressure			(A)	2071	P.S.I.	
Initial Flow Period	Minutes	30	(B)	669	P.S.I. to (C)	967 P.S.I.
Initial Closed In Period	Minutes	45	(D)	1179	P.S.I.	
Final Flow Period	Minutes	60	(E)	1108	P.S.I. to (F)	1189 P.S.I.
Final Closed In Period	Minutes	39	(G)	1200	P.S.I.	
Final Hydrostatic Pressure			(H)	2025	P.S.I.	

WTC

WESTERN TESTING CO., INC.
Pressure Data

Date 3/1/81 Test Ticket No. 10098

Recorder No. 2608 Capacity 4150 Location 3697 Ft.

Clock No. -- Elevation 1986 Ground Level Well Temperature 114 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2071 P.S.I.		Open Tool	3:55P M	
B	First Initial Flow Pressure	669 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	967 P.S.I.		Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	1179 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	1108 P.S.I.		Final Closed-in Pressure	45 Mins.	39 Mins.
F	Second Final Flow Pressure	1189 P.S.I.				
G	Final Closed-in Pressure	1200 P.S.I.				
H	Final Hydrostatic Mud	2025 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	669
P 2 5	687
P 3 10	756
P 4 15	830
P 5 20	901
P 6 25	957
P 7 30	967
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	967
3	1048
6	1083
9	1106
12	1124
15	1135
18	1147
21	1153
24	1159
27	1164
30	1168
33	1172
36	1176
39	1177
42	1179
45	1179

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

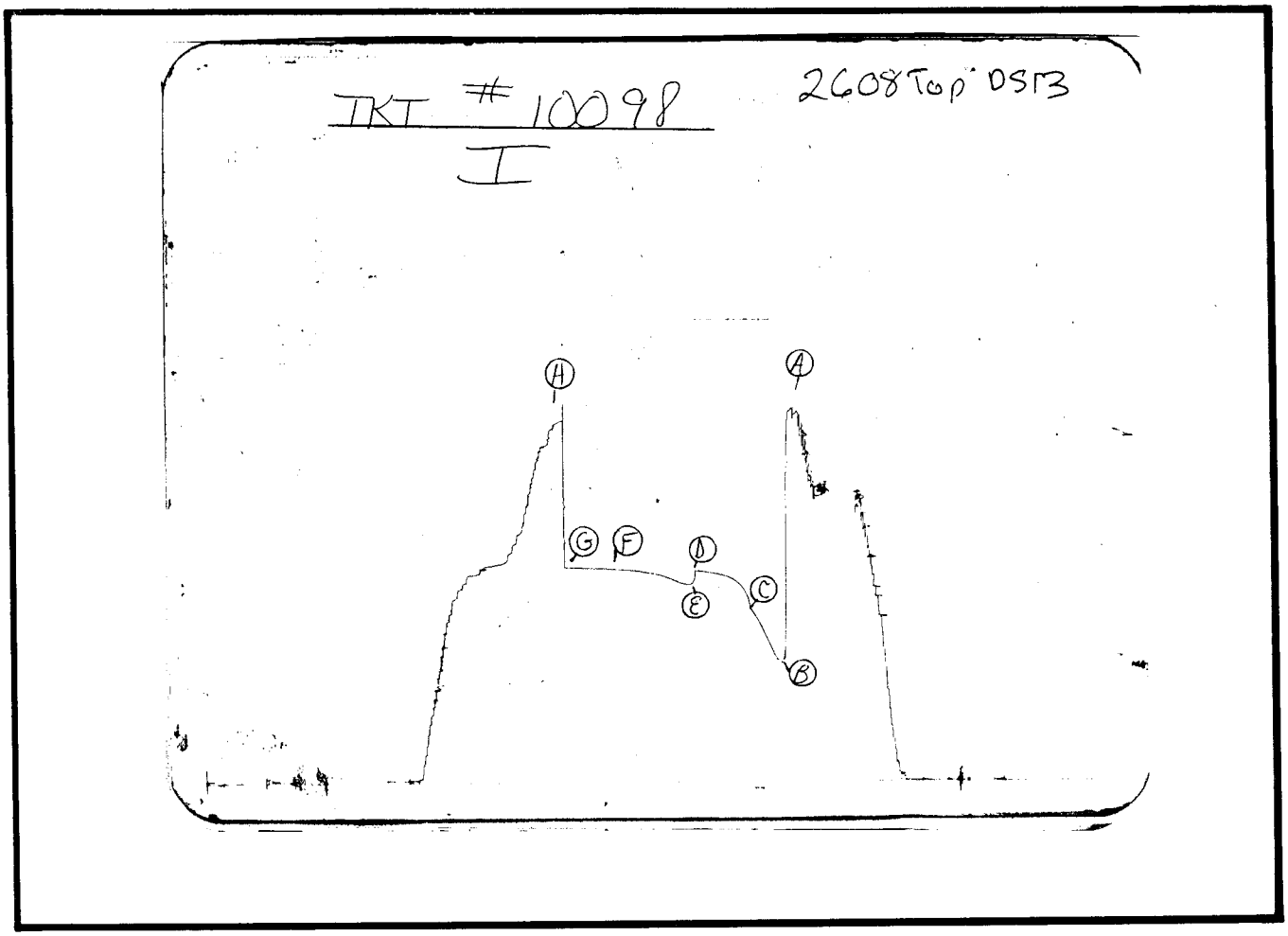
Point Minutes	Press.
0	1108
5	1106
10	1114
15	1128
20	1143
25	1155
30	1164
35	1170
40	1176
45	1182
50	1184
55	1187
60	1189

Final Shut-In
Breakdown: 13 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	1189
3	1190
6	1191
9	1192
12	1194
15	1196
18	1197
21	1198
24	1199
27	1199
30	1200
33	1200
36	1200
39	1200

WTC - 4

COMPANY A. L. ABERCROMBIE, INC. LEASE AND WELL NO. OBORNY #5 SEC. 25 TWP. 18S RGE. 18W TEST NO. 3 DATE 3/1/81



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2064	2071	PSI
(B)	First Initial Flow Pressure	669	669	PSI
(C)	First Final Flow Pressure	954	967	PSI
(D)	Initial Closed-in Pressure	1161	1179	PSI
(E)	Second Initial Flow Pressure	1089	1108	PSI
(F)	Second Final Flow Pressure	1130	1189	PSI
(G)	Final Closed-in Pressure	1141	1200	PSI
(H)	Final Hydrostatic Mud	2025	2025	PSI