WESTERN TEST SERVICE

Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Abercrombie Drlg. Co.Inc. Lease & Well No. Peel - Pratt # 1

Elevation 2381 Kelly Bushing Formation Topeka Effective Pay Ft. Ticket No. 10526

Date 3-20-68 Sec. 13 Twp. 6s Range 23w County Graham State Kansas

Test Approved by Jack Wharton Western Representative Gordon Young

Formation Test No. 1 O.K. X Misrun Interval Tested From 3525' to 3561' Total Depth 3625'

Size Main Hole 6 3/4 Rat Hole Conv. B.T. X Damaged Yes X No Conv. X B.T. Damaged Yes X No

Packer Depth 3520 Ft. Size 5 1/2 Packer Depth 3525 Ft. Size 5 1/2

Straddle X Yes X No Conv. X B.T. Damaged Yes X No

Packer Depth 3561 Ft. Size 5 1/ 2

Tool Size 4½"OD Tool Jt. Size 4"FH 3½"IF Anchor Length 36 Ft. Size 4½"OD

RECORDERS Depth 3543 Ft. Clock No. 6860 Depth 3546 Ft. Clock No. 8377

Top Make Kuster Cap. 6150 No. 969 Inside ~~Outside~~ Bottom Make Kuster Cap. 4200 No. 1559 Inside Outside

Below Straddle: Depth 3622 Clock No. 9102 Inside ~~Outside~~ Depth Ft. Clock No. Inside Outside

Top Make Kuster Cap. 4150 No. 2605 Inside Outside Bottom Make Cap. No. Inside Outside

Time Set Packer M

Tool Open I.F.P. From 5:13 M. to 5:18 P M. Hr. 5 Min. From (B) 14 P.S.I. To (C) 109 P.S.I.

Tool Closed I.C.I.P. From 5:18 M. to 5:48 P M. Hr. 30 Min. (D) 1292 P.S.I.

Tool Open F.F.P. From 5:48 M. to 6:48 P M. 1 Hr. -- Min. From (E) 146 P.S.I. To (F) 710 P.S.I.

Tool Closed F.C.I.P. From 6:48 M. to 7:18 P M. Hr. 30 Min. (G) 1211 P.S.I.

Initial Hydrostatic Pressure (A) 1913 P.S.I. Final Hydrostatic Pressure (H) 1896 P.S.I.

SURFACE INFORMATION	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
	3/4 In.		M.	
			M.	
			M.	

BLOW Strong Bottom Choke Size 3/4 In.

Did Well Flow Yes X No Recovery Total Ft. 1400 feet total: 360 feet muddy water with scum of oil
1040 feet salt water.

Reversed Out X Yes No Mud Type Chem. Viscosity 38 Weight 10. Water Loss 8.2 cc. Maximum Temp. 104 °F

Type Circ. Sub. plug Did Tool Plug? no Jars: Size Make Ser. No.

EXTRA EQUIPMENT: Dual Packers yes Safety Joint Did Packer Hold? Where?

Length Drill Pipe 2330 ft. I.D. Drill Pipe 2.7 in. Length Weight Pipe 1260 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ft.

I. D. Drill Collars in. Length D.S.T. Tool 52 ft.

Remarks Plugs didn't break on circ. sub. - bar in weight pipe. Read outside recorder.

WESTERN TESTING CO., INC.
Pressure Data

Date 3-20-68 | Test Ticket No. 10526

Recorder No. 1559 | Capacity 4200 | Location 3546 Ft.

Clock No. 3546 | Elevation 2381 Kelly Bushing | Well Temperature 104 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1913	P.S.I.	Opened Tool 5:13 P M	
B First Initial Flow Pressure	14	P.S.I.	First Flow Pressure 5 Mins.	5 Mins.
C First Final Flow Pressure	109	P.S.I.	Initial Closed-in Pressure 30 Mins.	32 Mins.
D Initial Closed-in Pressure	1292	P.S.I.	Second Flow Pressure 60 Mins.	60 Mins.
E Second Initial Flow Pressure	146	P.S.I.	Final Closed-in Pressure 30 Mins.	32 Mins.
F Second Final Flow Pressure	710	P.S.I.		
G Final Closed-in Pressure	1211	P.S.I.		
H Final Hydrostatic Mud	1896	P.S.I.		

PRESSURE BREAKDOWN

First Flow Press.
Breakdown: 1 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	14
P 2 5	109
P 3	
P 4	
P 5	
P 6	
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 2 Min.

Point Minutes	Press.
0	109
3	1058
6	1186
9	1228
12	1249
15	1259
18	1269
21	1277
24	1282
27	1286
30	1290
32	1292

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

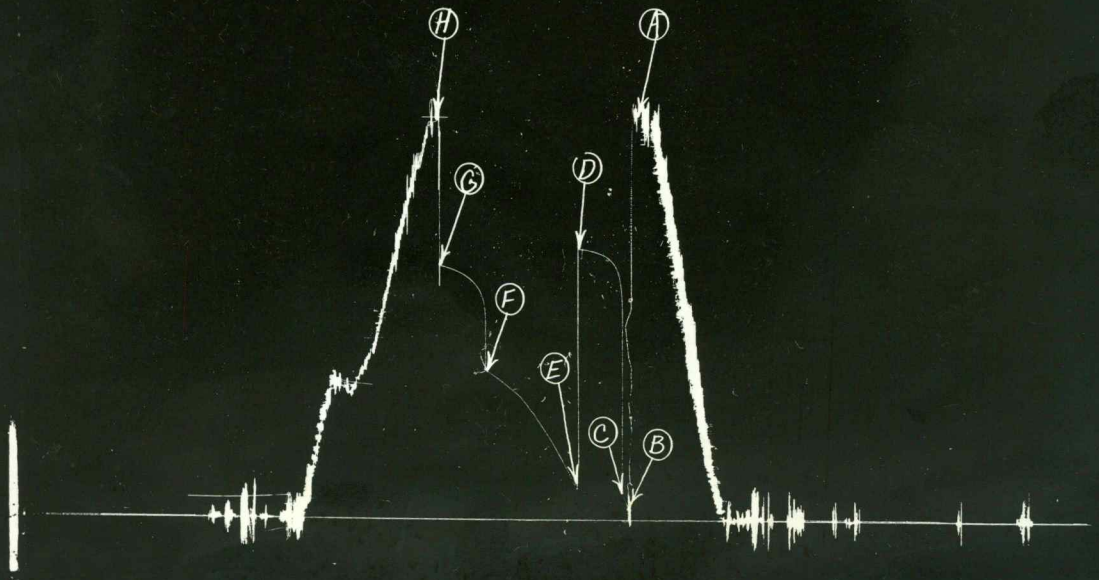
Point Minutes	Press.
0	146
5	201
10	272
15	336
20	397
25	455
30	506
35	554
40	595
45	627
50	654
55	685
60	710

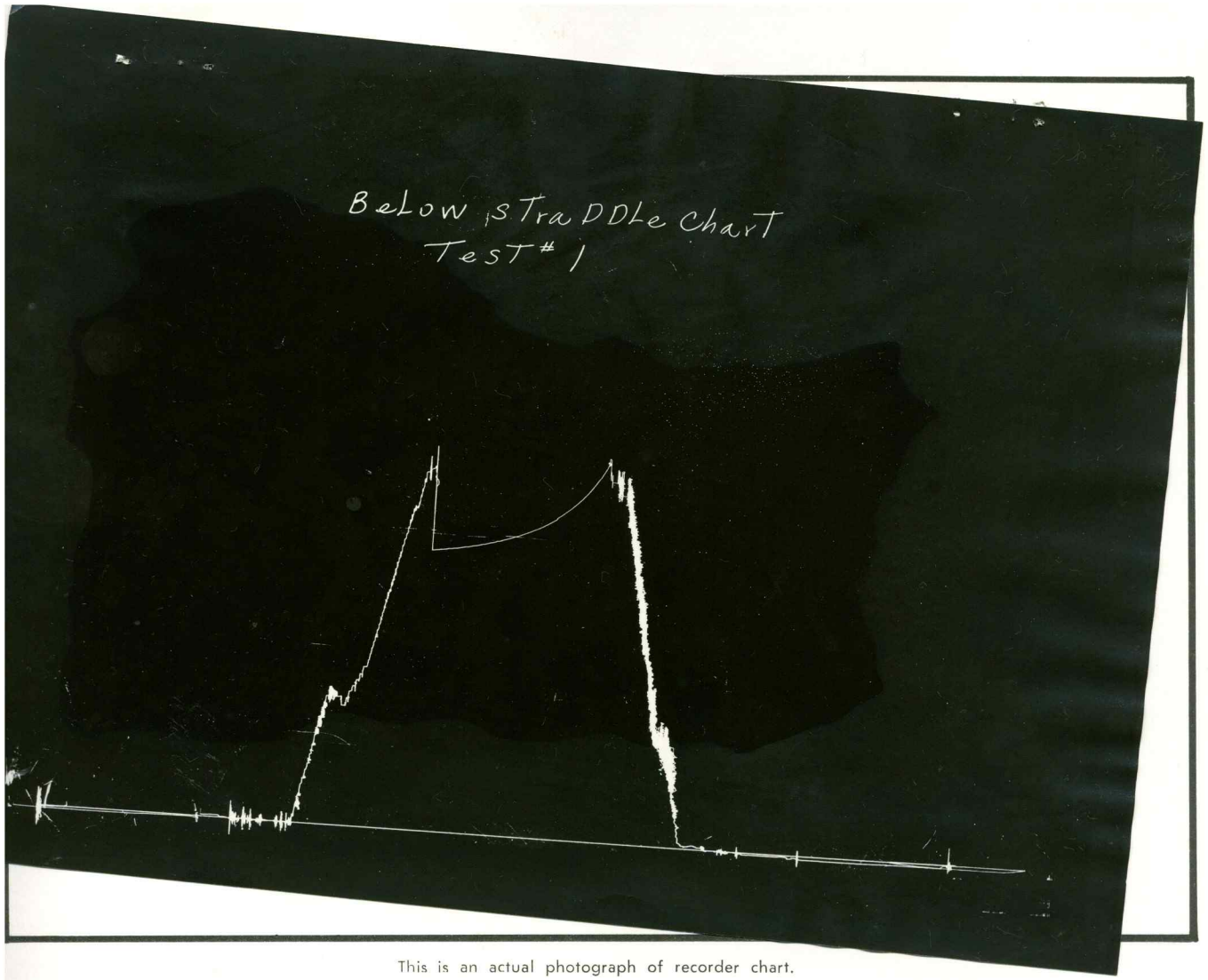
Final Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 2 Min.

Point Minutes	Press.
0	710
3	1048
6	1098
9	1127
12	1148
15	1161
18	1175
21	1186
24	1194
27	1201
30	1207
32	1211

A Bercombie Drlg. Co. Inc.
Peel - Pratt #1

T.K.T. # 10526
(STraddle) Test # 1





This is an actual photograph of recorder chart.

COMPANY Abercrombie Drlg. Co. Inc. LEASE AND WELL NO. Reed-Pratt # 1 SEC. 13 TWP. 6s RGE. 23w TEST NO. 1 DATE 3-20-68

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1905	1913	PSI
(B)	First Initial Flow Pressure	10	14	PSI
(C)	First Final Flow Pressure	104	109	PSI
(D)	Initial Closed-in Pressure	1284	1292	PSI
(E)	Second Initial Flow Pressure	140	146	PSI
(F)	Second Final Flow Pressure	710	710	PSI
(G)	Final Closed-in Pressure	1211	1211	PSI
(H)	Final Hydrostatic Mud	1894	1896	PSI

WESTERN TESTERS

Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Abercrombie Drlg. Co.Inc. Lease & Well No. Peel-Pratt # 1

Elevation 2381 Kelly Bushing Formation Kansas City Effective Pay Ft. Ticket No. 10527

Date 3-21-68 Sec. 13 Twp. 6s Range 23W County Graham State Kansas

Test Approved by Jack K. Wharton Western Representative Gordon Young

Formation Test No. 2 O.K. X Misrun Interval Tested From 3680' to 3705' Total Depth 3705'

Size Main Hole 6 3/4 Rat Hole Conv. B.T. X Damaged Yes X No Conv. X B.T. Damaged Yes X No

Packer Depth 3675 Ft. Size 5 1/2 Packer Depth 3680 Ft. Size 5 1/2

Straddle Yes No Conv. B.T. Damaged Yes No

Packer Depth Ft. Size

Tool Size 4½"OD Tool Jt. Size 4"FH 3½"IF Anchor Length 25 Ft. Size 4½"OD

RECORDERS Depth 3697 Ft. Clock No. 9102 Depth 3700 Ft. Clock No. 8377

Top Make Kuster Cap. 4150 No. 2605 Inside Outside Bottom Make Kuster Cap. 4200 No. 1559 Inside Outside

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

Top Make Cap. No. Inside Outside Bottom Make Cap. No. Inside Outside

Time Set Packer 6:11 P. M

Tool Open I.F.P. From 6:13 M. to 6:18 P M. Hr. 5 Min. From (B) 40 P.S.I. To (C) 91 P.S.I.

Tool Closed I.C.I.P. From 6:18 M. to 6:48 P M. Hr. 30 Min. (D) 1286 P.S.I.

Tool Open F.F.P. From 6:48 M. to 7:48 P M. 1 Hr. -- Min. From (E) 146 P.S.I. To (F) 740 P.S.I.

Tool Closed F.C.I.P. From 7:48 M. to 8:18 P M. Hr. 30 Min. (G) 1271 P.S.I.

Initial Hydrostatic Pressure (A) 1974 P.S.I. Final Hydrostatic Pressure (H) 1960 P.S.I.

SURFACE INFORMATION	Size Choke 3/4 In.	Max. Press. P.S.I.	Time	Description of Flow
			M.	
			M.	
			M.	

BLOW Strong. Bottom Choke Size 3/4 In.

Did Well Flow Yes X No Recovery Total Ft. 1500 feet salt water.

Reversed Out X Yes No Mud Type Chem. Viscosity 50 Weight 10. Water Loss 8.2 cc. Maximum Temp. 110 °F

Type Circ. Sub. plug Did Tool Plug? no Jars: Size Make Ser. No.

EXTRA EQUIPMENT: Dual Packers yes Safety Joint Did Packer Hold? yes Where?

Length Drill Pipe 2504 ft. I.D. Drill Pipe 2.7 in. Length Weight Pipe 1230 ft. I.D. Weight Pipe 2.25 in. Length Drill Collars ft.

I. D. Drill Collars in. Length D.S.T. Tool 46 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 3-21-68 | Test Ticket No. 10527

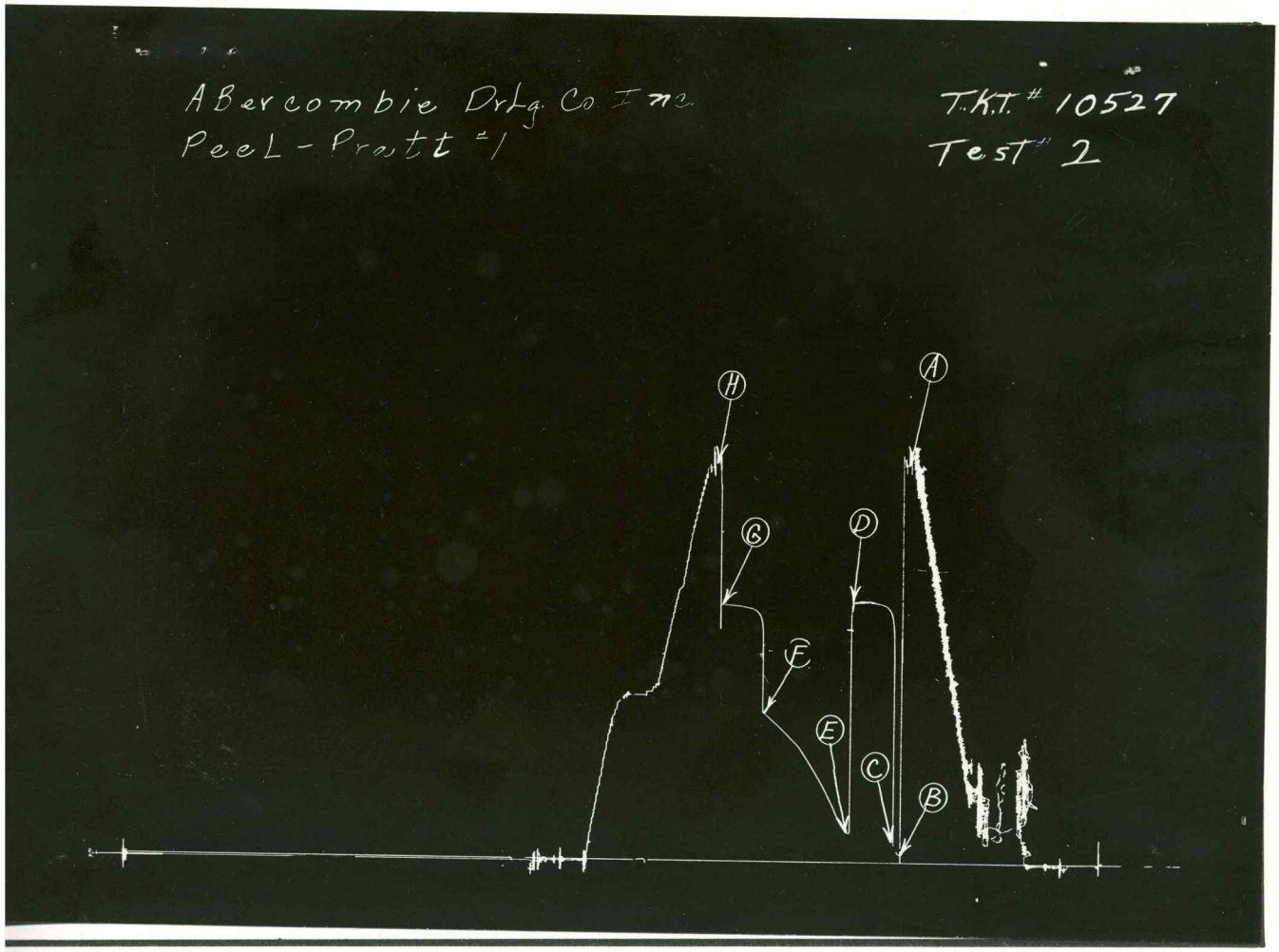
Recorder No. 2605 | Capacity 4150 | Location 3697 Ft.

Clock No. 9102 | Elevation 2381 Kelly Bushing | Well Temperature 110 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1974 P.S.I.	Opened Tool	6:13 P. M	
B	First Initial Flow Pressure	40 P.S.I.	First Flow Pressure	5 Mins.	5 Mins.
C	First Final Flow Pressure	91 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1286 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	146 P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	740 P.S.I.			
G	Final Closed-in Pressure	1271 P.S.I.			
H	Final Hydrostatic Mud	1960 P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 1 Inc.		Breakdown: 10 Inc.		Breakdown: 12 Inc.		Breakdown: 10 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 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	40	0	91	0	146	0	740
P 2 5	91	3	1209	5	171	3	1215
P 3		6	1254	10	249	6	1242
P 4		9	1273	15	330	9	1252
P 5		12	1281	20	398	12	1258
P 6		15	1283	25	457	15	1263
P 7		18	1285	30	519	18	1267
P 8		21	1286	35	570	21	1269
P 9		24	1286	40	612	24	1270
P10		27	1286	45	645	27	1271
P11		30	1286	50	680	30	1271
P12				55	715		
P13				60	740		
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1985	1974	PSI
(B)	First Initial Flow Pressure	42	40	PSI
(C)	First Final Flow Pressure	89	91	PSI
(D)	Initial Closed-in Pressure	1285	1286	PSI
(E)	Second Initial Flow Pressure	148	146	PSI
(F)	Second Final Flow Pressure	746	740	PSI
(G)	Final Closed-in Pressure	1270	1271	PSI
(H)	Final Hydrostatic Mud	1964	1960	PSI

COMPANY Abercrombie Drlg. Co.Inc. LEASE AND WELL NO. Peel - Pratt # 1 SEC. 13 TWP. 6s RGE. 23w TEST NO. 2 DATE 3-21-68

WESTERN TESTERS

Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Abercrombie Drlg. Co.Inc. Lease & Well No. Peel-Pratt # 1

Elevation 2381 Kelly Bushing Formation Kansas City Effective Pay ____ Ft. Ticket No. 10528

Date 3-22-68 Sec. 13 Twp. 6s Range 23w County Graham State Kansas

Test Approved by Jack K. Wharton Western Representative Gordon Young

Formation Test No. 3 O.K. x Misrun ____ Interval Tested From 3774' to 3782' Total Depth 3782'

Size Main Hole 6 3/4 Rat Hole ____ Conv. ____ B.T. x Damaged ____ Yes x No Conv. x B.T. ____ Damaged x Yes ____ No

Packer Depth 3769 Ft. Size 5 1/2 Packer Depth 3774 Ft. Size 5 1/2

Straddle ____ Yes ____ No ____ Conv. ____ B.T. ____ Damaged ____ Yes ____ No

Packer Depth ____ Ft. Size ____

Tool Size 4½"OD Tool Jt. Size 4 "FH 3½"IF Anchor Length 8 Ft. Size 4½"OD

RECORDERS Depth 3761 Ft. Clock No. 9102 Depth 3775 Ft. Clock No. 8377

Top Make Kuster Cap. 4150 No. 2605 Inside ~~Outside~~ Bottom Make Kuster Cap. 4200 No. 1559 ~~Inside~~ Outside

Below Straddle: Depth ____ Clock No. ____ Inside Outside Depth ____ Ft. Clock No. ____ Inside Outside

Top Make ____ Cap. ____ No. ____ Inside Outside Bottom Make ____ Cap. ____ No. ____ Inside Outside

Time Set Packer 2:17 P. M

Tool Open I.F.P. From 2:19 M. to 2:27 P M. Hr. 8 Min. From (B) 16 P.S.I. To (C) 16 P.S.I.

Tool Closed I.C.I.P. From 2:27 M. to 2:57 P M. Hr. 30 Min. (D) 16 P.S.I.

Tool Open F.F.P. From 2:57 M. to 3:02 P M. Hr. 5 Min. From (E) 16 P.S.I. To (F) --- P.S.I.

Tool Closed F.C.I.P. From ____ M. to ____ M. Hr. ____ Min. (G) --- P.S.I.

Initial Hydrostatic Pressure (A) 2007 P.S.I. Final Hydrostatic Pressure (H) 1989 P.S.I.

SURFACE INFORMATION	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
	3/4 In.		M.	
			M.	
			M.	

BLOW Weak - died in 7 minutes on initial flow period Bottom Choke Size 3/ 4 In.

Did Well Flow ____ Yes ____ No Recovery Total Ft. 75 feet mud.

Reversed Out ____ Yes ____ No Mud Type Chem. Viscosity 47 Weight 10 Water Loss 10 cc. Maximum Temp. 106 °F

Type Circ. Sub. plug Did Tool Plug? no Jars: Size ____ Make ____ Ser. No. ____

EXTRA EQUIPMENT: Dual Packers yes Safety Joint ____ Did Packer Hold? yes Where? ____

Length Drill Pipe 2521 ft. I.D. Drill Pipe 2.7 in. Length Weight Pipe 1260 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ____ ft.

I. D. Drill Collars ____ in. Length D.S.T. Tool 32 ft.

Remarks Open tool final flow period - no blow- flush tool in 5 minutes - packer seats washed out on final flow period.

WESTERN TESTING CO., INC.
Pressure Data

Date 3-22-68 Test Ticket No. 10528

Recorder No. 2605 Capacity 4150 Location 3761 Ft.

Clock No. 9102 Elevation 2381 Kelly Bushing Well Temperature 106 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2007 P.S.I.	Opened Tool	2:19 P. M	
B	First Initial Flow Pressure	16 P.S.I.	First Flow Pressure	8 Mins.	8 Mins.
C	First Final Flow Pressure	16 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	16 P.S.I.	Second Flow Pressure	5 Mins.	5 Mins.
E	Second Initial Flow Pressure	16 P.S.I.	Final Closed-in Pressure	--- Mins.	--- Mins.
F	Second Final Flow Pressure	see remarks P.S.I.			
G	Final Closed-in Pressure	see remarks P.S.I.			
H	Final Hydrostatic Mud	1989 P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.
Breakdown: 1 Inc.
of 5 mins. and a
final inc. of 3 Min.

Point Mins.	Press.
P 1 0	16
P 2 5	16
P 3 8	16
P 4	
P 5	
P 6	
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	16
3	16
6	16
9	16
12	16
15	16
18	16
21	16
24	16
27	16
30	16

Second Flow Pressure
Breakdown: 1 Inc.
of 5 mins. and a
final inc. of 0 Min.

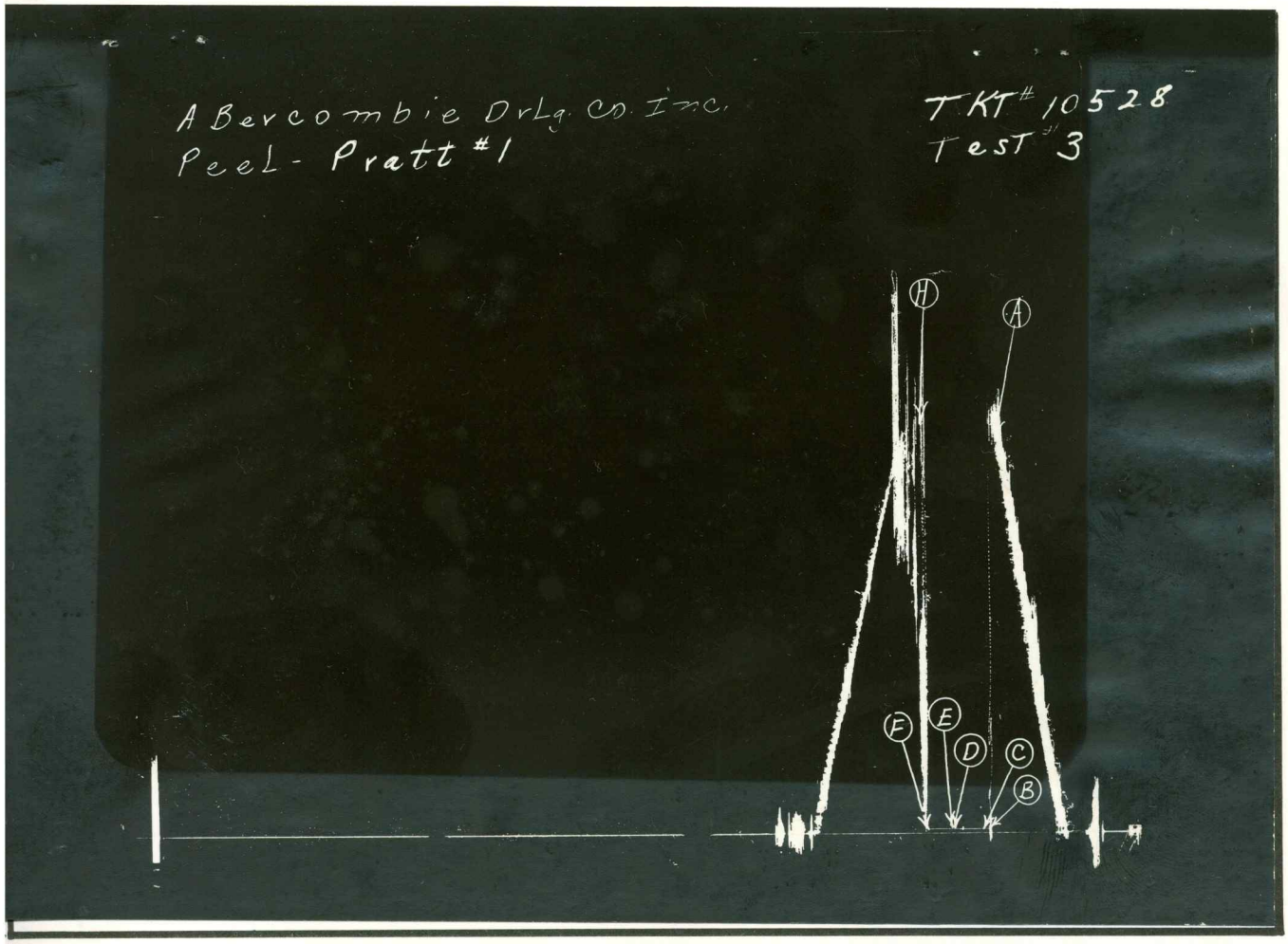
Point Minutes	Press.
0	16
5	16

See remarks

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

Point Minutes	Press.

see remarks



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2016	2007	PSI
(B)	First Initial Flow Pressure	15	16	PSI
(C)	First Final Flow Pressure	15	16	PSI
(D)	Initial Closed-in Pressure	15	16	PSI
(E)	Second Initial Flow Pressure	15	16	PSI
(F)	Second Final Flow Pressure	---	---	PSI
(G)	Final Closed-in Pressure	---	---	PSI
(H)	Final Hydrostatic Mud	1985	1989	PSI

COMPANY Abercrombie Drlg. Co. Inc. LEASE AND WELL NO. Peel-Pratt # 1 SEC. 13 TWP. 6s RGE. 23w TEST NO. 3 DATE 3-22-68