WESTERN TESTERS

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

Company Pickrell Drlg. Co. Lease & Well No. Schadel B#5

Elevation 2217 Kelly Bushings Formation Mississippian Effective Pay 10 Ft. Ticket No. 10746

Date 12-17-67 Sec. 6 Twp. 20s Range 20w County Pawnee State Kansas

Test Approved by Ralph W. Ruwwe Western Representative W. M. Nething

Formation Test No. 1 O.K. X Misrun ____ Interval Tested From 4347' to 4357' Total Depth 4357'

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

Packer Depth 4347 Ft. Size 6 3/4 Packer Depth 4342 Ft. Size 6 3/4

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

Packer Depth ____ Ft. Size ____

Tool Size 5½"OD Tool Jt. Size 4½"FH Anchor Length 10 Ft. Size 5½"OD

RECORDERS Depth 4350 Ft. Clock No. 6800 Depth 4353 Ft. Clock No. 9103

Top Make Kuster Cap. 4150 No. 2604 Inside Outside Bottom Make Kuster Cap. 4250 No. 1051 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 7:26 P. M

Tool Open I.F.P. From 7:28 M. to 7:40 P M. Hr. 12 Min. From (B) 12 P.S.I. To (C) 11 P.S.I.

Tool Closed I.C.I.P. From 7:40 M. to 8:10 P M. Hr. 30 Min. (D) 1305 P.S.I.

Tool Open F.F.P. From 8:10 M. to 10:10P M. Hr. 120 Min. From (E) 19 P.S.I. To (F) 40 P.S.I.

Tool Closed F.C.I.P. From 10:10 M. to 11:10 P M. Hr. 60 Min. (G) 1223 P.S.I.

Initial Hydrostatic Pressure (A) 2372 P.S.I. Final Hydrostatic Pressure (H) 2341 P.S.I.

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

BLOW Weak decreasing to very weak blow Bottom Choke Size 3/4 In.

Did Well Flow ____ Yes X No Recovery Total Ft. 60 feet gas in pipe: 50 feet clean oil; 60 feet muddy water (oil 37° @ 60°).

Reversed Out ____ Yes X No Mud Type starch Viscosity 68 Weight 10.3 Water Loss 10.4 cc. Maximum Temp. 121 °F

EXTRA EQUIPMENT: Dual Packers dual Safety Joint ____ Jars: Size ____ Make ____ Ser. No. ____

Type Circ. Sub. plug Did Tool Plug? no Where? ____ Did Packer Hold? yes

Length Drill Pipe 3334 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 998 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ____ ft.

I. D. Drill Collars ____ in. Length D.S.T. Tool 30 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 12-17-67 Test Ticket No. 10746

Recorder No. 2604 Capacity 4150 Location 4350 Ft.

Clock No. 6800 Elevation 2217 Kelly Bushings Well Temperature 121 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2372 P.S.I.		Opened Tool	7:26 P. M	
B	First Initial Flow Pressure	12 P.S.I.		First Flow Pressure	12 Mins.	13 Mins.
C	First Final Flow Pressure	11 P.S.I.		Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1305 P.S.I.		Second Flow Pressure	120 Mins.	119 Mins.
E	Second Initial Flow Pressure	19 P.S.I.		Final Closed-in Pressure	60 Mins.	60 Mins.
F	Second Final Flow Pressure	40 P.S.I.				
G	Final Closed-in Pressure	1223 P.S.I.				
H	Final Hydrostatic Mud	2341 P.S.I.				

PRESSURE BREAKDOWN

First Flow Press.
Breakdown: 2 Inc.
of 5 mins. and a
final inc. of 3 Min.

Point	Mins.	Press.
P 1	0	12
P 2	5	12
P 3	10	11
P 4	13	11
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 -- Min.

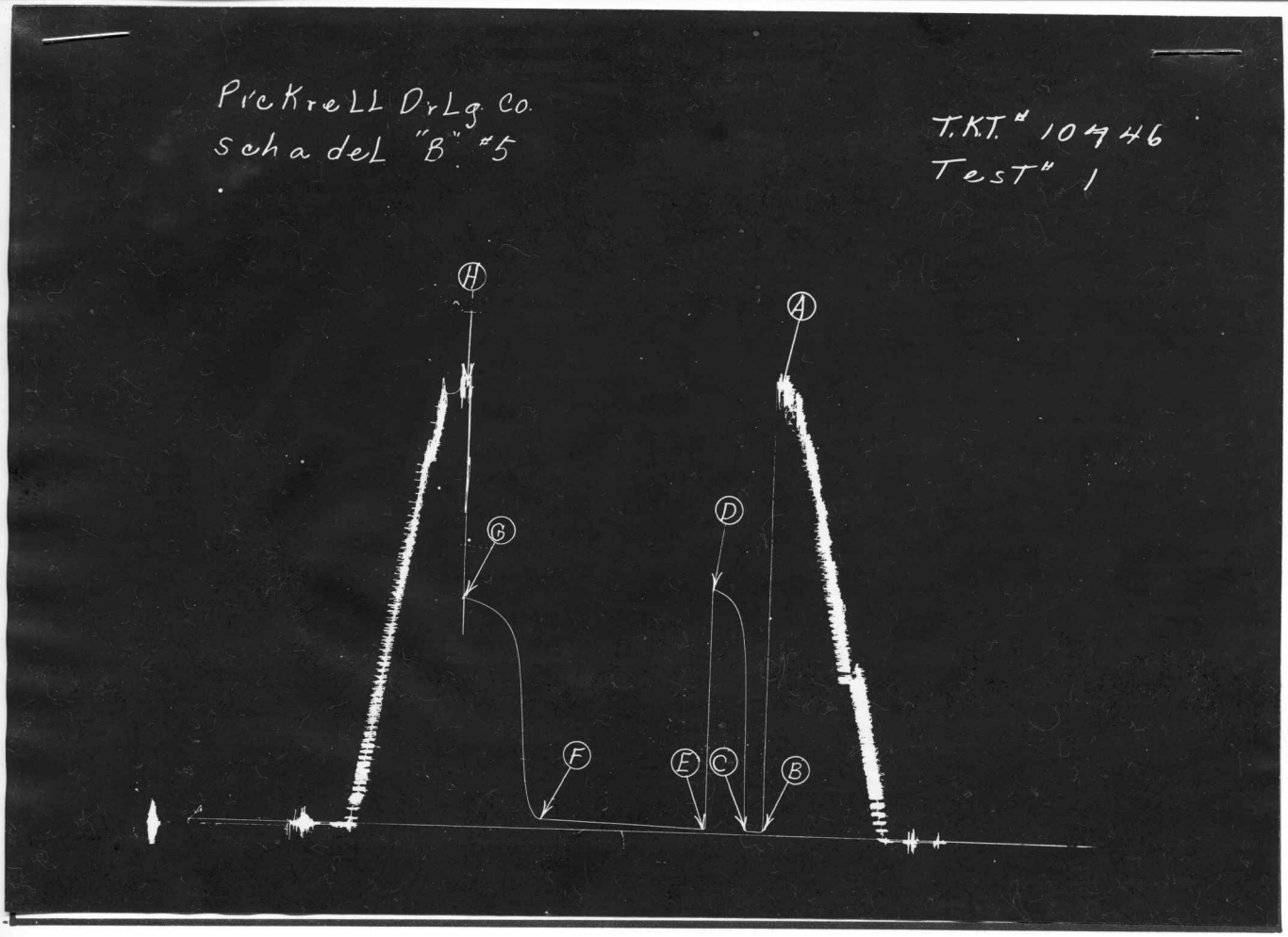
Point Minutes	Press.
0	11
3	213
6	958
9	1112
12	1181
15	1221
18	1248
21	1271
24	1285
27	1294
30	1305

Second Flow Pressure
Breakdown: 23 Inc.
of 5 mins. and a
final inc. of 4 Min.

Point Minutes	Press.
0	19
5	19
10	19
15	19
20	19
25	19
30	19
35	19
40	20
45	21
50	22
55	23
60	25
65	26
70	27
75	28
80	29
85	31
90	34
95	35
100	36
105	38
110	39
115	40
119	40

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

Point Minutes	Press.
0	40
3	61
6	97
9	174
12	345
15	658
18	888
21	987
24	1045
27	1085
30	1112
33	1135
36	1154
39	1165
42	1179
45	1190
48	1198
51	1205
54	1213
57	1219
60	1223



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2369	2372	PSI
(B)	First Initial Flow Pressure	11	12	PSI
(C)	First Final Flow Pressure	11	11	PSI
(D)	Initial Closed-in Pressure	1318	1305	PSI
(E)	Second Initial Flow Pressure	21	19	PSI
(F)	Second Final Flow Pressure	43	40	PSI
(G)	Final Closed-in Pressure	1234	1223	PSI
(H)	Final Hydrostatic Mud	2348	2341	PSI

COMPANY Pickrell Drlg. Co. LEASE AND WELL NO. Schadel B#5 SEC. 6 TWP. 20s RGE. 20w TEST NO. 1 DATE 12-17-67

WESTERN TESTERS

Home Office: Great Bend, Kansas

P. O. Box 793 (316) 793-7903

Company Pickrell Drlg. Co. Lease & Well No. Schadel B#5

Elevation 2217 Kelly Bushings Formation Mississippian Effective Pay 6 Ft. Ticket No. 10747

Date 12-18-67 Sec. 6 Twp. 20s Range 20w County Pawnee State Kansas

Test Approved by Ralph W. Ruwwe Western Representative W. M. Nething

Formation Test No. 2 O.K. X Misrun Interval Tested From 4357' to 4363' Total Depth 4363'

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

Packer Depth 4357 Ft. Size 6 3/4 Packer Depth 4352 Ft. Size 6 3/4

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

Packer Depth Ft. Size

Tool Size 5½"OD Tool Jt. Size 4½"FH Anchor Length 6 Ft. Size 5½"OD

RECORDERS Depth 4343 Ft. Clock No. 6800 Depth 4359 Ft. Clock No. 9103

Top Make Kuster Cap. 4150 No. 2604 Inside ~~Outside~~ Bottom Make Kuster Cap. 4250 No. 1051 ~~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 10:33 A. M

Tool Open I.F.P. From 10:35 M. to 10:47 AM. Hr. 12 Min. From (B) 12 P.S.I. To (C) 0 P.S.I.

Tool Closed I.C.I.P. From 10:47 M. to 11:17 AM. Hr. 30 Min. (D) 1236 P.S.I.

Tool Open F.F.P. From 11:17 M. to 12:37 PM. Hr. 80 Min. From (E) 10 P.S.I. To (F) 12 P.S.I.

Tool Closed F.C.I.P. From 12:37 M. to 1:37 P M. Hr. 60 Min. (G) 1219 P.S.I.

Initial Hydrostatic Pressure (A) 2348 P.S.I. Final Hydrostatic Pressure (H) 2301 P.S.I.

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

BLOW very weak blow 35 minutes. flushed tool - no help Bottom Choke Size 3/4 In.

Did Well Flow Yes X No Recovery Total Ft. 15 feet mud with scum of oil.

Reversed Out Yes X No Mud Type starch Viscosity 47 Weight 9.9 Water Loss 10.8 cc. Maximum Temp. 121 °F

EXTRA EQUIPMENT: Dual Packers dual Safety Joint Jars: Size Make Ser. No.

Type Circ. Sub. plug Did Tool Plug? no Where? Did Packer Hold? yes

Length Drill Pipe 3339 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 993 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ft.

I. D. Drill Collars in. Length D.S.T. Tool 31 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 12-18-67 Test Ticket No. 10747

Recorder No. 2604 Capacity 4150 Location 4343 Ft.

Clock No. 6800 Elevation 2217 Kelly Bushings Well Temperature 121 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2348	P.S.I.	Opened Tool	10:33 A. M	
B	First Initial Flow Pressure	12	P.S.I.	First Flow Pressure	12 Mins.	12 Mins.
C	First Final Flow Pressure	0	P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1236	P.S.I.	Second Flow Pressure	80 Mins.	80 Mins.
E	Second Initial Flow Pressure	10	P.S.I.	Final Closed-in Pressure	60 Mins.	Mins.
F	Second Final Flow Pressure	12	P.S.I.			
G	Final Closed-in Pressure	1219	P.S.I.			
H	Final Hydrostatic Mud	2301	P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.
Breakdown: 2 Inc.
of 5 mins. and a
final inc. of 2 Min.

Point	Mins.	Press.
P 1	0	12
P 2	5	10
P 3	10	8
P 4	12	0
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: 9 Inc.
of 3 mins. and a
final inc. of -- Min.

Point Minutes	Press.
0	0
3	72
6	367
9	696
12	905
15	1031
18	1112
21	1160
24	1204
27	1236
30	

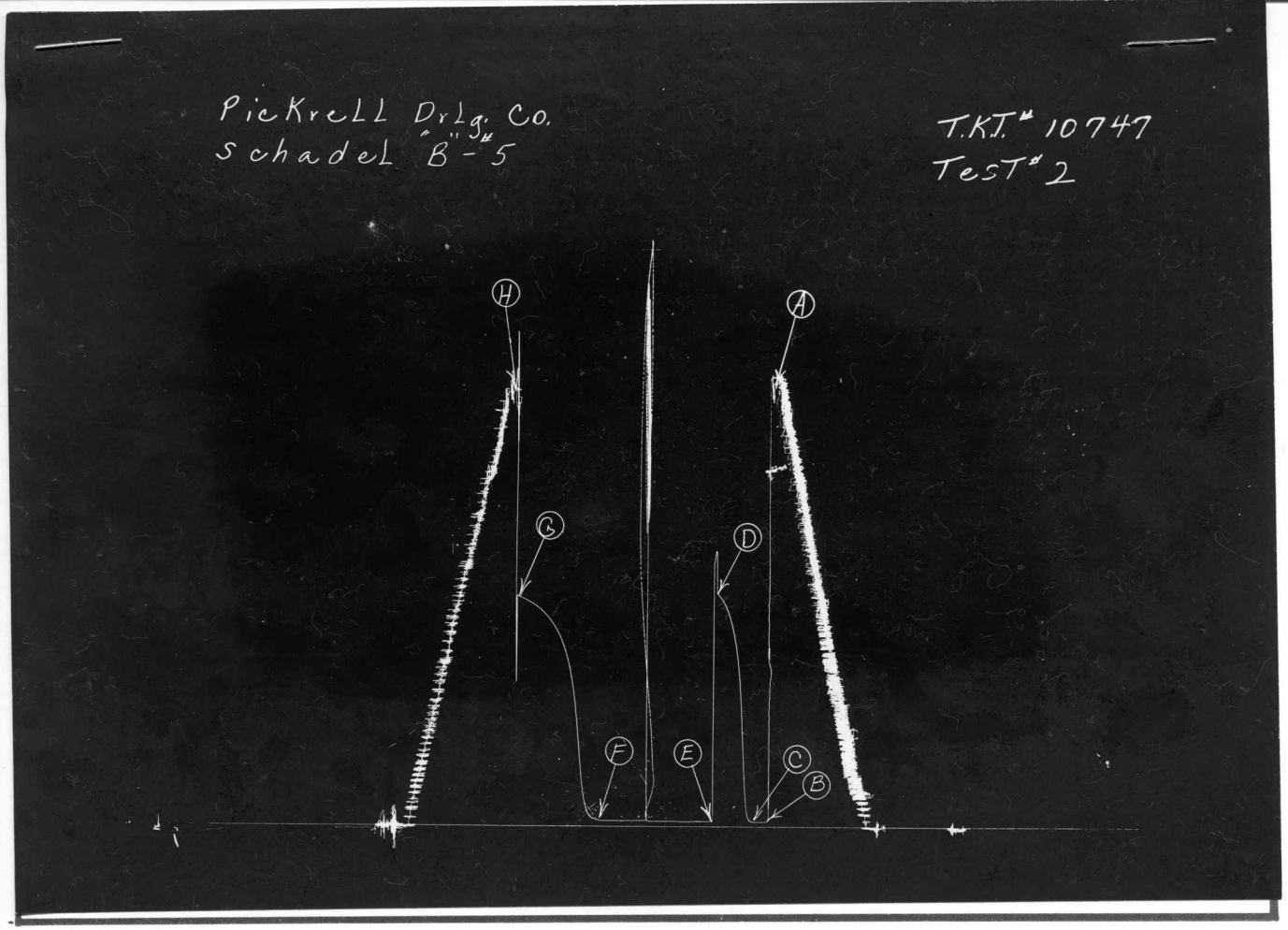
False PST. caused by tool movement

Second Flow Pressure
Breakdown: 16 Inc.
of 5 mins. and a
final inc. of -- Min.

Point Minutes	Press.
0	10
5	10
10	10
15	10
20	10
25	10
30	10
35	10
40	10
45	10
50	12
55	12
60	12
65	12
70	12
75	12
80	12

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

Point Minutes	Press.
0	12
3	19
6	40
9	80
12	196
15	416
18	631
21	767
24	869
27	945
30	1004
33	1045
36	1079
39	1100
42	1133
45	1154
48	1173
51	1186
54	1202
57	1216
60	1219



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud		2348	PSI
(B)	First Initial Flow Pressure	11	12	PSI
(C)	First Final Flow Pressure	11	0	PSI
(D)	Initial Closed-in Pressure	1234	1236	PSI
(E)	Second Initial Flow Pressure	11	10	PSI
(F)	Second Final Flow Pressure	11	12	PSI
(G)	Final Closed-in Pressure	1223	1219	PSI
(H)	Final Hydrostatic Mud		2301	PSI

COMPANY Pickrell Drlg. Co. LEASE AND WELL NO. Schadel B#5 SEC. 6 TWP. 20s RGE. 20w TEST NO. 2 DATE 12-18-67

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

Company Pickrell Drlg. Co. Lease & Well No. Schadel B#5

Elevation 2217 Kelly Bushings Formation Mississippian Effective Pay 10 Ft. Ticket No. 10748

Date 12-19-67 Sec. 6 Twp. 20s Range 20w County Pawnee State Kansas

Test Approved by Ralph W. Ruwwe Western Representative W. M. Nething

Formation Test No. 3 O.K. x Misrun Interval Tested From 4363' to 4373' Total Depth 4373'

Size Main Hole 7 7/8 t Hole Conv. B.T. x Damaged Yes x No Conv. B.T. x Damaged Yes x No

Packer Depth 4363 Ft. Size 6 3/4 Packer Depth 4358 Ft. Size 6 3/4

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

Packer Depth Ft. Size

Tool Size 5½"OD Tool Jt. Size 4½"FH Anchor Length 10 Ft. Size 5½"OD

RECORDERS Depth 4366 Ft. Clock No. 6800 Depth 4369 Ft. Clock No. 9103

Top Make Kuster Cap. 4150 No. 2604 Inside Outside Bottom Make Kuster Cap. 4250 No. 1051 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 12:40 A. M

Tool Open I.F.P. From 12:42 M. to 12:52 A M. Hr. 10 Min. From (B) 21 P.S.I. To (C) 21 P.S.I.

Tool Closed I.C.I.P. From 12:52 M. to 1:22 A M. Hr. 30 Min. (D) 1311 P.S.I.

Tool Open F.F.P. From 1:22 M. to 3:22 A M. Hr. 120 Min. From (E) 42 P.S.I. To (F) 130 P.S.I.

Tool Closed F.C.I.P. From 3:22 M. to 4:22 A M. Hr. 60 Min. (G) 1267 P.S.I.

Initial Hydrostatic Pressure (A) 2351 P.S.I. Final Hydrostatic Pressure (H) 2321 P.S.I.

SURFACE INFORMATION

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

BLOW Weak to fair blow. Bottom Choke Size 3/4 In.

Did Well Flow Yes x No Recovery Total Ft. 180 feet gas in pipe: 140 feet clean oil (38° @ 70°) 150 feet muddy oil; 30 feet thin mud.

Reversed Out Yes x No Mud Type starch Viscosity 60 Weight 10.2 Water Loss 10.8 cc. Maximum Temp. 121 °F

EXTRA EQUIPMENT: Dual Packers dual Safety Joint Jars: Size Make Ser. No.

Type Circ. Sub. plug Did Tool Plug? no Where? Did Packer Hold? yes

Length Drill Pipe 3350 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 993 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ft.

I. D. Drill Collars in. Length D.S.T. Tool 30 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 12-19-67 Test Ticket No. 10748

Recorder No. 2604 Capacity 4150 Location 4366 Ft.

Clock No. 6800 Elevation 2217 Kelly Bushings Well Temperature 121 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2351 P.S.I.	Opened Tool	12:40 A M	
B First Initial Flow Pressure	21 P.S.I.	First Flow Pressure	10 Mins.	10 Mins.
C First Final Flow Pressure	21 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	1311 P.S.I.	Second Flow Pressure	120 Mins.	117 Mins.
E Second Initial Flow Pressure	42 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	136 P.S.I.			
G Final Closed-in Pressure	1267 P.S.I.			
H Final Hydrostatic Mud	2321 P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.
Breakdown: 2 = Inc.
of 5 mins. and a
final inc. of -- Min.

Point Mins.	Press.
P 1 0	21
P 2 5	21
P 3 10	21
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 -- Min.

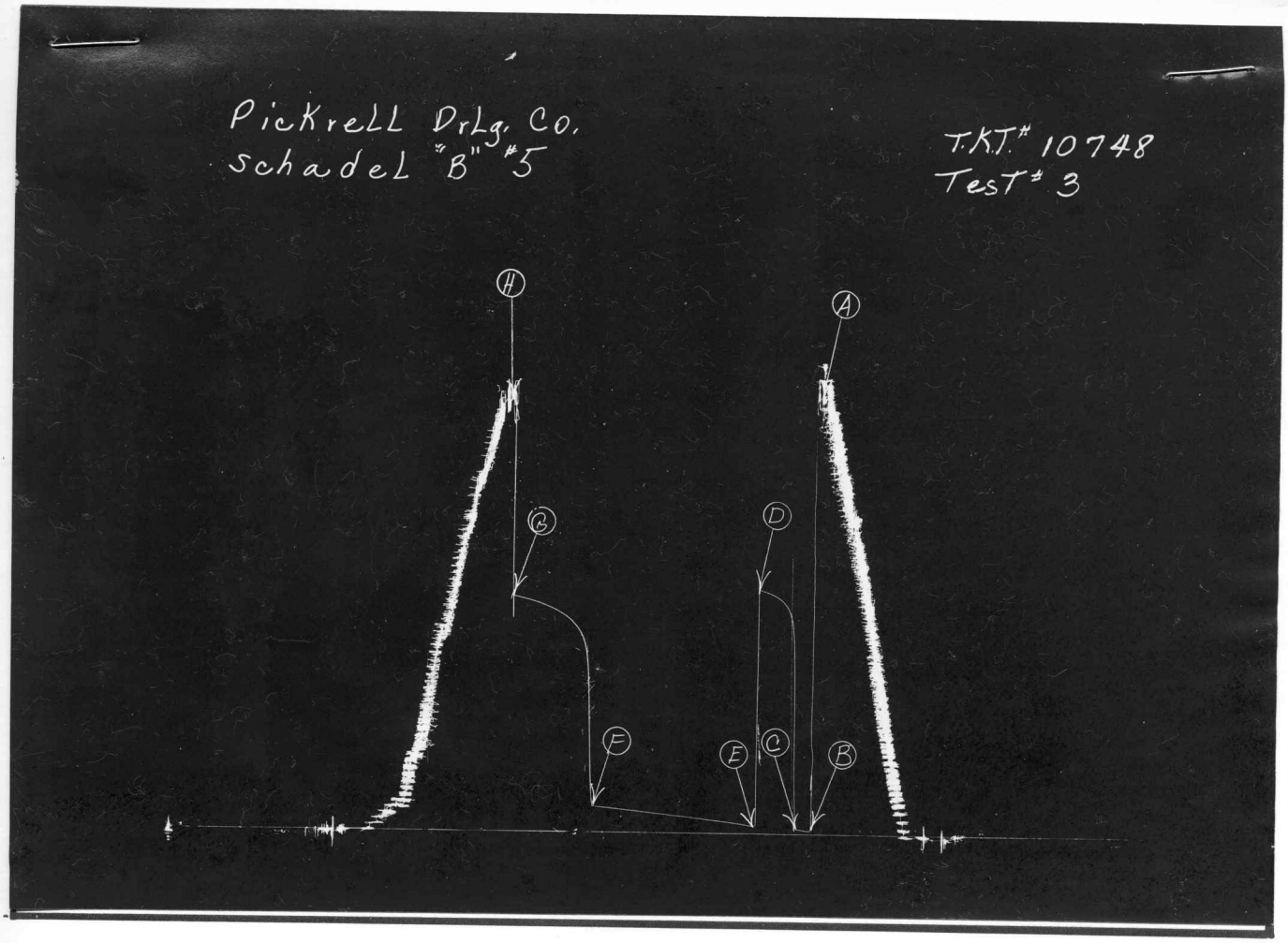
Point Minutes	Press.
0	21
3	514
6	1140
9	1213
12	1242
15	1261
18	1277
21	1288
24	1298
27	1305
30	1311

Second Flow Pressure
Breakdown: 23 Inc.
of 5 mins. and a
final inc. of 2 Min.

Point Minutes	Press.
0	42
5	43
10	45
15	48
20	51
25	57
30	63
35	68
40	74
45	79
50	85
55	88
60	91
65	95
70	100
75	105
80	110
85	114
90	117
95	121
100	125
105	129
110	132
115	135
117	136

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

Point Minutes	Press.
0	136
3	491
6	966
9	1048
12	1087
15	1119
18	1140
21	1158
24	1175
27	1188
30	1198
33	1210
36	1219
39	1227
42	1234
45	1240
48	1246
51	1252
54	1259
57	1263
60	1267



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2348	2351	PSI
(B)	First Initial Flow Pressure	21	21	PSI
(C)	First Final Flow Pressure	32	21	PSI
(D)	Initial Closed-in Pressure	1307	1311	PSI
(E)	Second Initial Flow Pressure	42	42	PSI
(F)	Second Final Flow Pressure	138	136	PSI
(G)	Final Closed-in Pressure	1276	1267	PSI
(H)	Final Hydrostatic Mud	2316	2321	PSI

COMPANY Pickrell Drlg. Co. LEASE AND WELL NO. Schadel B#5 SEC. 6 TWP. 20S RGE. 20W TEST NO. 3 DATE 12-19-6