Home Office: Great Bend, Kansas

P. O. Box 793 SWift 3-7903

Company Pickrell Drilling Company Lease & Well No. Schadel #B-1

Elevation 2222 Kelly Bushings Formation Cherokee Sand Ticket Number 7775

Date March 18,1967 Sec. 6 Twp. 20s Range 20w County Pawnee State Kansas

Test Approved by Ralph W. Ruwwe Western Representative Dean Blagrave

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Formation Test No. 1 O.K. X Misrun Interval Tested From 4270' to 4286' Total Depth 4286'

Size Main Hole 7 7/8 Rat Hole none Conv. X B.T. Damaged Yes X No Conv. X B.T. Damaged Yes X No

Packer Depth 4265 Ft. Size 6 3/4 Packer Depth 4270 Ft. Size 6 3/4

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

Packer Depth Ft. Size

Tool Size 5½ OD Tool Jt. Size 4½ FH Anchor Length 16 Ft. Size 5½ OD

RECORDERS Depth 4277 Ft. Clock No. 6892 Depth 4280 Ft. Clock No. 6774

Top Make Amerada Cap. 4150 No. 2606 Inside Outside Bottom Make Amerada Cap. 4300 No. 1567 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 7:58A M

Tool Open I.F.P. From 8:00A M to 8:10A M Hr. 10 Min. From (B) 31 P.S.I. To (C) 31 P.S.I.

Tool Closed I.C.I.P. From 8:10A M. to 8:40 M. Hr. 30 Min. (D) 33 P.S.I.

Tool Open F.F.P. From 8:40 M. to 9:40 M. 1 Hr. Min. From (E) 31 P.S.I. To (F) 31 P.S.I.

Tool Closed F.C.I.P. From 9:40 M. to 10:10 M. Hr. 30 Min. (G) 31 P.S.I.

Initial Hydrostatic Pressure (A) 2275 P.S.I. Final Hydrostatic Pressure (H) 2264 P.S.I.

SURFACE INFORMATION	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
	1/4 In.		M.	
			M.	
			M.	

BLOW Weak for 10 minutes. Bottom Choke Size 3/4 In.

Did Well Flow Yes XX No Recovery Total Ft. 5' drilling mud with few oil specks

Mud

Reversed Out Yes X No Mud Type starch Viscosity 48 Weight 10.0 Maximum Temp. 114 °F

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

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

Length Drill Pipe ft. I.D. Drill Pipe in Length Weight Pipe 915 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars none ft.

I. D. Drill Collars in. Length D.S.T. Tool 34 ft.

Remarks Flushed tool at 20 minutes.

WESTERN TESTING CO., INC.
Pressure Data

Date March 18, 1967 Test Ticket No. 7775

Recorder No. 2606 Capacity 4150 Location 4277 Ft.

Clock No. 6892 Elevation 2222 Kelly Bushings Well Temperature 114 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2275 P.S.I.	Opened Tool	7:58 A M	
B First Initial Flow Pressure	31 P.S.I.	First Flow Pressure	1 0 Mins.	10 Mins.
C First Final Flow Pressure	31 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	33 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	31 P.S.I.	Final Closed-in Pressure	Mins.	Mins.
F Second Final Flow Pressure	31 P.S.I.			
G Final Closed-in Pressure	31 P.S.I.			
H Final Hydrostatic Mud	2264 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	31
P 2 5	31
P 3 10	31
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.

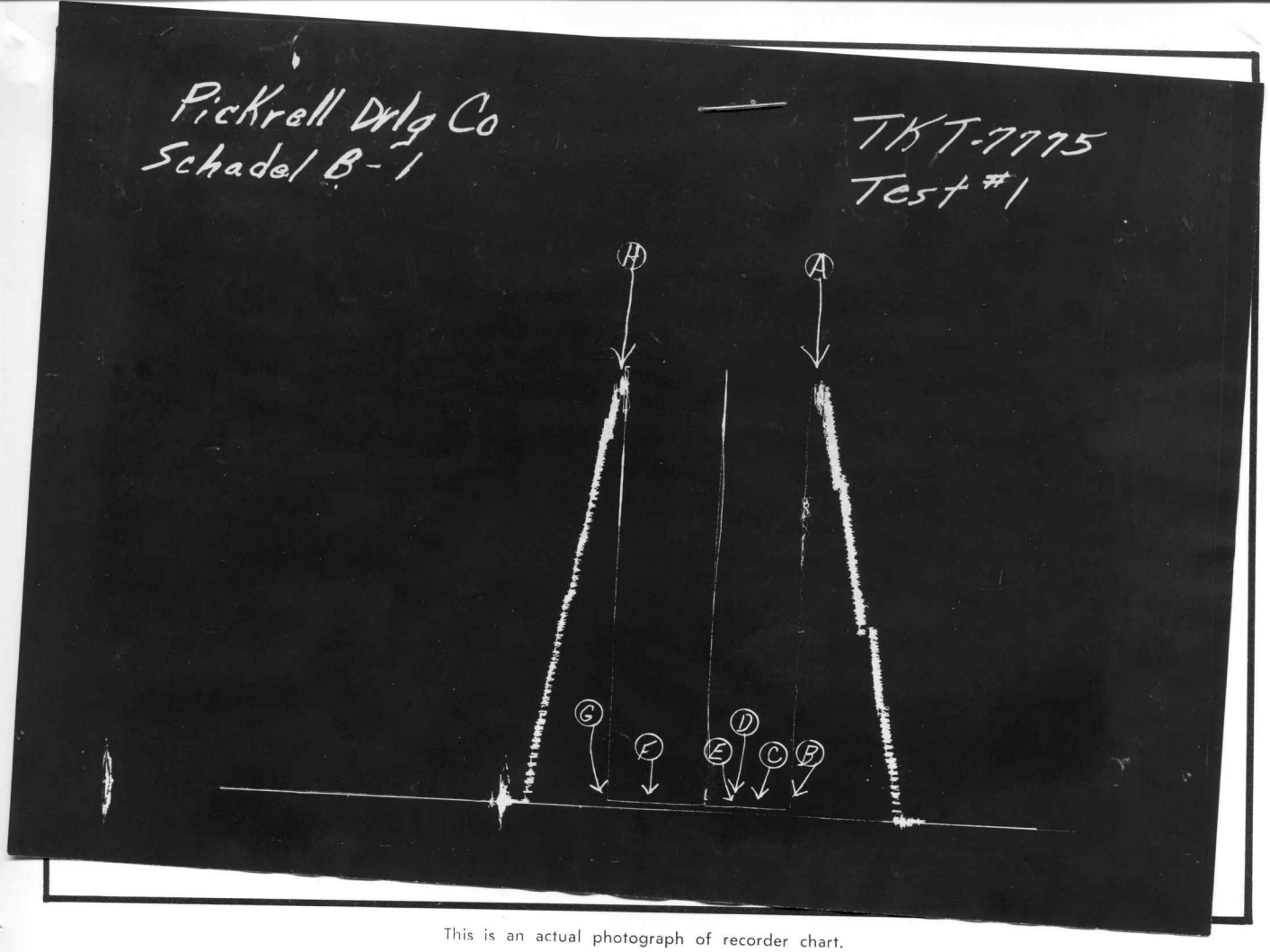
Point Minutes	Press.
0	31
3	31
6	31
9	31
12	31
15	31
18	31
21	31
24	32
27	32
30	33

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

Point Minutes	Press.
0	31
5	31
10	31
15	31
20	31
25	31
30	31
36	31
40	31
45	31
50	31
55	31
60	31

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

Point Minutes	Press.
0	31
3	31
6	31
9	31
12	31
15	31
18	31
21	31
24	31
27	31
30	31



This is an actual photograph of recorder chart.

POINT		PRESSURE
(A)	Initial Hydrostatic Mud	2275 PSI
(B)	First Initial Flow Pressure	31 PSI
(C)	First Final Flow Pressure	31 PSI
(D)	Initial Closed-in Pressure	33 PSI
(E)	Second Initial Flow Pressure	31 PSI
(F)	Second Final Flow Pressure	31 PSI
(G)	Final Closed-in Pressure	31 PSI
(H)	Final Hydrostatic Mud	2264 PSI

COMPANY PICKRELL DRILLING CO. LEASE AND WELL NO. SCHADEL #B-1 SEC. 6 TWP. 20S RGE. 20W TEST NO. 1 DATE 3-18-6

WESTERN TESTERS

Home Office: Great Bend, Kansas

P. O. Box 793 SWift 3-7903

Company Pickrell Drilling Company Lease & Well No. Schadel #8-1

Elevation 2222 Kelly Bushings Formation ### Ticket Number 7776

Date March 18,1967 Sec. 6 Twp. 20s Range 20w County Pawnee State Kansas

Test Approved by Ralph W. Ruwwe Western Representative Dean Blagrave

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Formation Test No. 2 O.K. x Misrun ____ Interval Tested From 4318' to 4338' Total Depth 4338'

Size Main Hole 7 7/8 Rat Hole none Conv. x B.T. ____ Damaged ____ Yes x No Conv. x B.T. ____ Damaged ____ Yes x No

Packer Depth 4313 Ft. Size 6 3/4 Packer Depth 4318 Ft. Size 6 3/4

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

Packer Depth ____ Ft. Size ____

Tool Size 5½ OD Tool Jt. Size 4½ FH Anchor Length 20 Ft. Size 5½ OD

RECORDERS Depth 4329 Ft. Clock No. 6892 Depth 4332 Ft. Clock No. 6774

Top Make Amerada Cap. 4150 No. 2606 Inside Outside Bottom Make Amerada Cap. 4300 No. 1567 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 11:53 P M

Tool Open I.F.P. From 11:55 M to 12:05 M Hr. 10 Min. From (B) 49 P.S.I. To (C) 49 P.S.I.

Tool Closed I.C.I.P. From 12:05A M. to 12:35 A M. Hr. 30 Min. (D) 87 P.S.I.

Tool Open F.F.P. From 12:35A M. to 1:35A M. 1 Hr. ____ Min. From (E) 56 P.S.I. To (F) 60 P.S.I.

Tool Closed F.C.I.P. From 1:35A M. to 2:05A M. Hr. 30 Min. (G) 60 P.S.I.

Initial Hydrostatic Pressure (A) 2351 P.S.I. Final Hydrostatic Pressure (H) 2267 P.S.I.

SURFACE INFORMATION	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
	1/4 In.		M.	
			M.	
			M.	

BLOW Weak for 10 minutes. Bottom Choke Size 3/4 In.

Did Well Flow ____ Yes x No Recovery Total Ft. 10' drilling mud

Mud

Reversed Out ____ Yes x No Mud Type starch Viscosity 45 Weight 10. Maximum Temp. 114 °F

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

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

Length Drill Pipe ____ ft. I.D. Drill Pipe ____ in Length Weight Pipe 915 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars none ft.

I. D. Drill Collars ____ in. Length D.S.T. Tool 38 ft.

Remarks Flushed tool @ 20 & 40 minutes.

WESTERN TESTING CO., INC.
Pressure Data

Date: March 18, 1967 | Test Ticket No.: 7776

Recorder No.: 2606 | Capacity: 4150 | Location: 4329 Ft.

Clock No.: 6892 | Elevation: 2222 Kelly Bushings | Well Temperature: 114 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2351 P.S.I.		Opened Tool	11:53 P M	
B	First Initial Flow Pressure	49 P.S.I.		First Flow Pressure	10 Mins.	10 Mins.
C	First Final Flow Pressure	49 P.S.I.		Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	87 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	56 P.S.I.		Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	60 P.S.I.				
G	Final Closed-in Pressure	60 P.S.I.				
H	Final Hydrostatic Mud	2267 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	49
P 2 5	49
P 3 10	49
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.

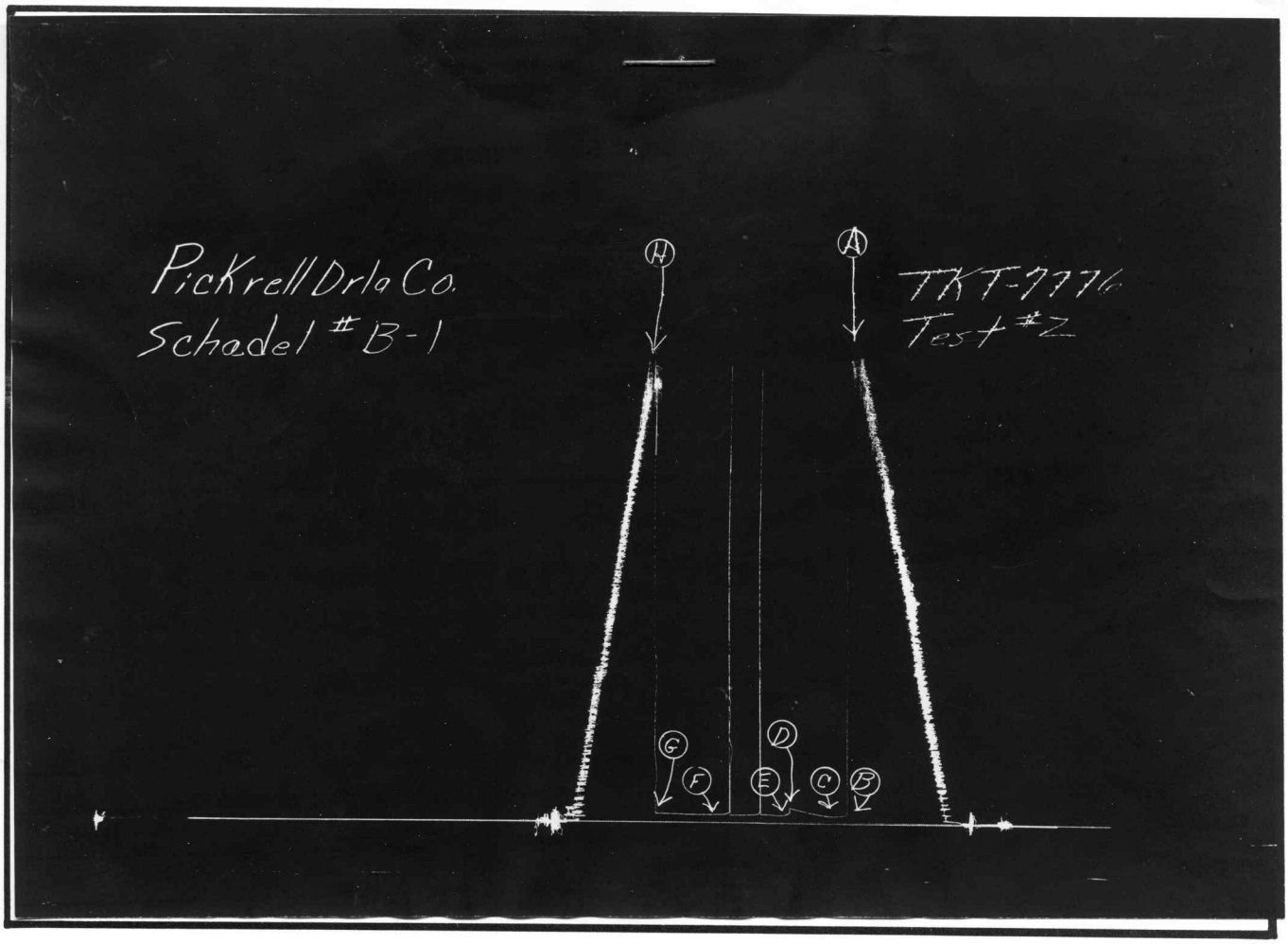
Point Minutes	Press.
0	49
3	50
6	53
9	56
12	59
15	63
18	66
21	68
24	73
27	80
30	87

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

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

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

Point Minutes	Press.
0	60
3	60
6	60
9	60
12	60
15	60
18	60
21	60
24	60
27	60
30	60



This is an actual photograph of recorder chart.

POINT		PRESSURE
(A)	Initial Hydrostatic Mud	2351 PSI
(B)	First Initial Flow Pressure	49 PSI
(C)	First Final Flow Pressure	49 PSI
(D)	Initial Closed-in Pressure	87 PSI
(E)	Second Initial Flow Pressure	56 PSI
(F)	Second Final Flow Pressure	60 PSI
(G)	Final Closed-in Pressure	60 PSI
(H)	Final Hydrostatic Mud	2267 PSI

COMPANY PICKRELL DRILLING COMPANY LEASE AND WELL NO. SCHADEL #B-1 SEC. 6 TWP. 20s RGE. 20w TEST NO. 2 DATE 3-18-

WESTERN TESTERS

Home Office: Great Bend, Kansas

P. O. Box 793 SWift 3-7903

Company Pickrell Drilling Company Lease & Well No. Schadel #B-1

Elevation 2222 Kelly Bushings Formation Mississippi Ticket Number 7777

Date March 19,1967 Sec. 6 Twp. 20s Range 20w County Pawnee State Kansas

Test Approved by Ralph W. Ruwwe Western Representative Dean Blagrave

Formation Test No. 3 O.K. x Misrun Interval Tested From 4345' to 4355' Total Depth 4355'

Size Main Hole 7 7/8 Rat Hole none Conv. x B.T. Damaged Yes x No Conv. x B.T. Damaged Yes x No

Packer Depth 4340 Ft. Size 6 3/4 Packer Depth 4345 Ft. Size 6 3/4

Straddle Yes x No 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 4349 Ft. Clock No. 6892 Depth 4352 Ft. Clock No. 6778

Top Make Amerada Cap. 4150 No. 2606 Inside Outside Bottom Make Amerada Cap. 4300 No. 1567 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 1:53 P M

Tool Open I.F.P. From 1:55P M to 2:05 M Hr. 10 Min. From (B) 47 P.S.I. To (C) 47 P.S.I.

Tool Closed I.C.I.P. From 2:05P M. to 2:35 M. Hr. 30 Min. (D) 1271 P.S.I.

Tool Open F.F.P. From 2:35P M. to 3:35 M. 1 Hr. Min. From (E) 52 P.S.I. To (F) 61 P.S.I.

Tool Closed F.C.I.P. From 3:35P M. to 4:05 M. Hr. 30 Min. (G) 1045 P.S.I.

Initial Hydrostatic Pressure (A) 2300 P.S.I. Final Hydrostatic Pressure (H) 2340 P.S.I.

SURFACE INFORMATION

Size Choke	In.	Max. Press. P.S.I.	Time	Description of Flow
1/4			M.	
			M.	
			M.	

BLOW Weak for 10minutes.

Bottom Choke Size 3/4 In.

Did Well Flow x Yes No Recovery Total Ft. 10' slightly oil cut mud;1' free oil

Reversed Out x Yes No Mud Type starch Viscosity 49 Weight 10/0 Mud

Maximum Temp. 114 °F

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

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

Length Drill Pipe ft. I.D. Drill Pipe in Length Weight Pipe 915 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars none ft.

I. D. Drill Collars in. Length D.S.T. Tool 28 ft.

Remarks Flushed @ 20 & 40 minutes.

WESTERN TESTING CO., INC.
Pressure Data

Date: March 19,1967 | Test Ticket No.: 7777

Recorder No.: 2606 | Capacity: 4150 | Location: 4349 Ft.

Clock No.: 6892 | Elevation: 2222 Kelly Bushings | Well Temperature: 114 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2300	P.S.I.
B	First Initial Flow Pressure	47	P.S.I.
C	First Final Flow Pressure	47	P.S.I.
D	Initial Closed-in Pressure	1271	P.S.I.
E	Second Initial Flow Pressure	52	P.S.I.
F	Second Final Flow Pressure	61	P.S.I.
G	Final Closed-in Pressure	1045	P.S.I.
H	Final Hydrostatic Mud	2340	P.S.I.

	Time Given	Time Computed
Opened Tool	11:53 P M	
First Flow Pressure	10 Mins.	10 Mins.
Initial Closed-in Pressure	30 Mins.	30 Mins.
Second Flow Pressure	60 Mins.	60 Mins.
Final Closed-in Pressure	30 Mins.	30 Mins.

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	47
P 2	5	47
P 3	10	47
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.

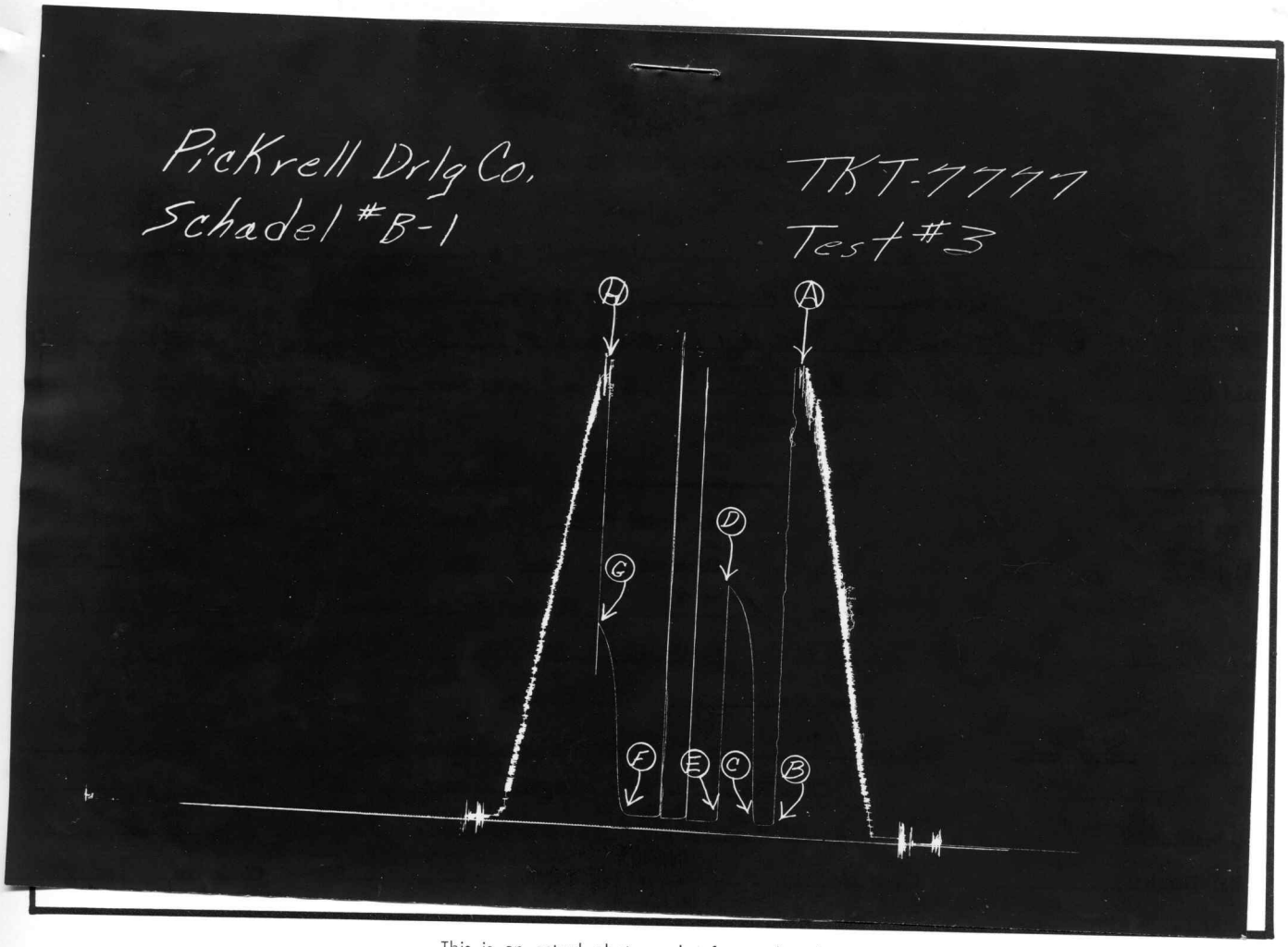
Point Minutes	Press.
0	47
3	145
6	491
9	816
12	991
15	1091
18	1161
21	1202
24	1235
27	1258
30	1271

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

Point Minutes	Press.
0	52
5	52
10	52
15	52
20	52
25	58
30	58
35	58
40	58
45	61
50	61
55	61
60	61

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

Point Minutes	Press.
0	61
3	70
6	99
9	208
12	443
15	696
18	831
21	914
24	970
27	1013
30	1045



This is an actual photograph of recorder chart.

POINT		PRESSURE
(A)	Initial Hydrostatic Mud	2300 PSI
(B)	First Initial Flow Pressure	47 PSI
(C)	First Final Flow Pressure	47 PSI
(D)	Initial Closed-in Pressure	1271 PSI
(E)	Second Initial Flow Pressure	52 PSI
(F)	Second Final Flow Pressure	61 PSI
(G)	Final Closed-in Pressure	1045 PSI
(H)	Final Hydrostatic Mud	2340 PSI

COMPANY PICKRELL DRILLING CO. LEASE AND WELL NO. SCHADEL #B-1 SEC. 6 TWP. 20s RGE. 20w TEST NO. 3 DATE 3-19

WESTERN TESTERS

Home Office: Great Bend, Kansas

P. O. Box 793 SWift 3-7903

Company Pickrell Drilling Company Lease & Well No. Schadel #B-1

Elevation 2222 Kelly Bushings Formation Mississippi Ticket Number 7778

Date March 20,1967 Sec. 6 Twp. 20s Range 20w County Pawnee State Kansas

Test Approved by Ralph W. Ruwwe Western Representative Dean Blagrave

Formation Test No. 4 O.K. x Misrun ____ Interval Tested From 4355' to 4361' Total Depth 4361'

Size Main Hole 7 7/8 Rat Hole none Conv. x B.T. x Damaged ____ Yes x No Conv. x B.T. ____ Damaged ____ Yes x No

Packer Depth 4350 Ft. Size 6 3/4 Packer Depth 4355 Ft. Size 6 3/4

Straddle ____ Yes x No ____ 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 4344 Ft. Clock No. 6892 Depth 4358 Ft. Clock No. 6774

Top Make Amerada Cap. 4150 No. 2606 Inside ____ Outside ____ Bottom Make Amerada Cap. 4300 No. 1567 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 2:08A M

Tool Open I.F.P. From 2:10A M to 2:20 M Hr. 10 Min. From (B) 41 P.S.I. To (C) 35 P.S.I.

Tool Closed I.C.I.P. From 2:20A M. to 2:50A M. Hr. 30 Min. (D) 1358 P.S.I.

Tool Open F.F.P. From 2:50A M. to 4:50 M. 2 Hr. Min. From (E) 43 P.S.I. To (F) 91 P.S.I.

Tool Closed F.C.I.P. From 4:50A M. to 5:50 M. 1 Hr. Min. (G) 1359 P.S.I.

Initial Hydrostatic Pressure (A) 2339 P.S.I. Final Hydrostatic Pressure (H) 2321 P.S.I.

SURFACE INFORMATION — Size Choke 1/4 In. | Max. Press. P.S.I. | Time | Description of Flow

____ ____ ____ M. ____

____ ____ ____ M. ____

____ ____ ____ M. ____

BLOW Weak increasing to good. Bottom Choke Size 3/4 In.

Did Well Flow ____ Yes x No Recovery Total Ft. 130' clean gassy oil; 60' very heavy oil cut mud

Reversed Out ____ Yes x No Mud Type starch Viscosity 51 Weight 10.0 Maximum Temp. 125 °F Mud

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

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

Length Drill Pipe ____ ft. I.D. Drill Pipe ____ in Length Weight Pipe 915 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars none ft.

I. D. Drill Collars ____ in. Length D.S.T. Tool 29 ft.

Remarks Sp. Gravith 37° corrected.

WESTERN TESTING CO., INC.
Pressure Data

Date: March 20,1967

Recorder No.: 2606 Capacity: 4150 Test Ticket No.: 7778

Clock No.: 6892 Elevation: 2222 Kelly Bushings Location: 4344 Ft.

Well Temperature: 125 °F

Point		Pressure		Time Given		Time Computed	
A	Initial Hydrostatic Mud	2339 P.S.I.	Opened Tool	2:08 A M			
B	First Initial Flow Pressure	41 P.S.I.	First Flow Pressure	10	Mins.	10	Mins.
C	First Final Flow Pressure	35 P.S.I.	Initial Closed-in Pressure	30	Mins.	30	Mins.
D	Initial Closed-in Pressure	1358 P.S.I.	Second Flow Pressure	120	Mins.	119	Mins.
E	Second Initial Flow Pressure	43 P.S.I.	Final Closed-in Pressure	60	Mins.	60	Mins.
F	Second Final Flow Pressure	91 P.S.I.					
G	Final Closed-in Pressure	1359 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	41
P 2 5	35
P 3 10	35
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	35
3	1198
6	1279
9	1308
12	1327
15	1337
18	1344
21	1350
24	1354
27	1356
30	1358

Second Flow Pressure

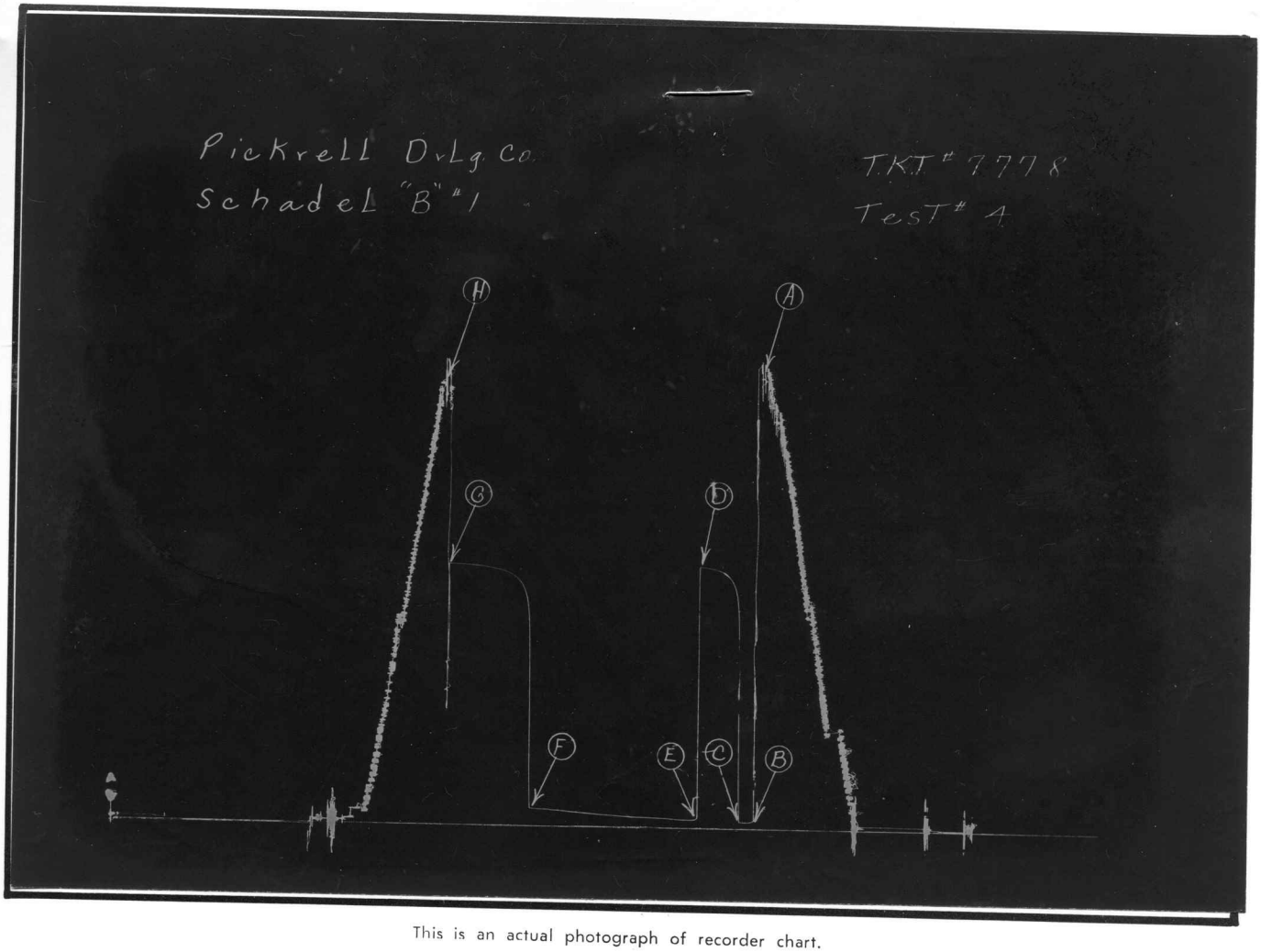
Breakdown: 23 Inc. of 5 mins. and a final inc. of 4 Min.

Point Minutes	Press.
0	43
5	43
10	44
15	45
20	57
25	49
30	52
35	53
40	54
45	55
50	57
55	59
60	60
65	64
70	67
75	68
80	72
85	75
90	79
95	80
100	80
105	85
110	89
115	90
119	91

Final Shut-In

Breakdown: 20 Inc. of 3 mins. and a final inc. of = Min.

Point Minutes	Press.
0	91
3	1039
6	1227
9	1269
12	1292
15	1306
18	1319
21	1325
24	1331
27	1337
30	1341
33	1346
36	1350
39	1351
42	1352
45	1354
48	1356
51	1356
54	1357
57	1359
60	1359



This is an actual photograph of recorder chart.

POINT		PRESSURE
(A)	Initial Hydrostatic Mud	2339 PSI
(B)	First Initial Flow Pressure	41 PSI
(C)	First Final Flow Pressure	35 PSI
(D)	Initial Closed-in Pressure	1358 PSI
(E)	Second Initial Flow Pressure	43 PSI
(F)	Second Final Flow Pressure	91 PSI
(G)	Final Closed-in Pressure	1359 PSI
(H)	Final Hydrostatic Mud	2321 PSI

COMPANY PICKRELL DRILLING CO. LEASE AND WELL NO. SCHADEL #B-1 SEC. 6 TWP. 20S RGE. 20W TEST NO. 4 DATE 3-2

WESTERN TESTERS

Home Office: Great Bend, Kansas

P. O. Box 793 SWift 3-7903

Company Pickrell Drilling Company Lease & Well No. Schadel #B-1

Elevation 2222 Kelly Bushings Formation Mississippi Ticket Number 7779

Date March 20,1967 Sec. 6 Twp. 20s Range 20w County Pawnee State Kansas

Test Approved by Ralph W. Ruwwe Western Representative Dean Blagrave

---

Formation Test No. 5 O.K. X Misrun ____ Interval Tested From 4361' to 4367' Total Depth 4367'

Size Main Hole 7 7/8 Rat Hole none Conv. X B.T. ____ Damaged ____ Yes X No Conv. X B.T. ____ Damaged ____ Yes X No

Packer Depth 4356 Ft. Size 6 3/4 Packer Depth 4361 Ft. Size 6 3/4

Straddle ____ Yes X No ____ 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 4 350 Ft. Clock No. 6892 Depth 4364 Ft. Clock No. 6774

Top Make Amerada Cap. 4150 No. 2606 Inside Outside Bottom Make Amerada Cap. 4300 No. 1567 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

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Time Set Packer 3:38P M

Tool Open I.F.P. From 3:40 M to 3:50 M Hr. 10 Min. From (B) 35 P.S.I. To (C) 35 P.S.I.

Tool Closed I.C.I.P. From 3:50 M. to 4:20 M. Hr. 30 Min. (D) 1334 P.S.I.

Tool Open F.F.P. From 4:20 M. to 6:20 M. 2 Hr. ____ Min. From (E) 52 P.S.I. To (F) 110 P.S.I.

Tool Closed F.C.I.P. From 6:20P M. to 7:20 M. 1 Hr. ____ Min. (G) 1353 P.S.I.

Initial Hydrostatic Pressure (A) 2341 P.S.I. Final Hydrostatic Pressure (H) 2321 P.S.I.

SURFACE INFORMATION Size Choke 1/4 In. Max. Press. P.S.I. Time Description of Flow

____ ____ ____ M. ____

____ ____ ____ M. ____

____ ____ ____ M. ____

BLOW Weak increasing to good. Bottom Choke Size 3/4 In.

Did Well Flow ____ Yes X No Recovery Total Ft. 90' clean oil;120'very heavy oil cut mud

Mud

Reversed Out ____ Yes X No Mud Type starch Viscosity 54 Weight 9.9 Maximum Temp. 126 °F

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

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

Length Drill Pipe ____ ft. I.D. Drill Pipe ____ in Length Weight Pipe 915 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars none ft.

I. D. Drill Collars ____ in. Length D.S.T. Tool 29 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date March 20,1967 Test Ticket No. 7779

Recorder No. 2606 Capacity 4150 Location 4350 Ft.

Clock No. 6892 Elevation 2222 Kelly Bushings Well Temperature 126 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2341 P.S.I.	Opened Tool	3:38 P M	
B	First Initial Flow Pressure	35 P.S.I.	First Flow Pressure	10 Mins.	10 Mins.
C	First Final Flow Pressure	35 P.S.I.	Initial Closed-in Pressure	30 Mins.	32 Mins.
D	Initial Closed-in Pressure	1334 P.S.I.	Second Flow Pressure	120 Mins.	120 Mins.
E	Second Initial Flow Pressure	52 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F	Second Final Flow Pressure	110 P.S.I.			
G	Final Closed-in Pressure	1353 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	35
P 2 5	35
P 3 10	35
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.

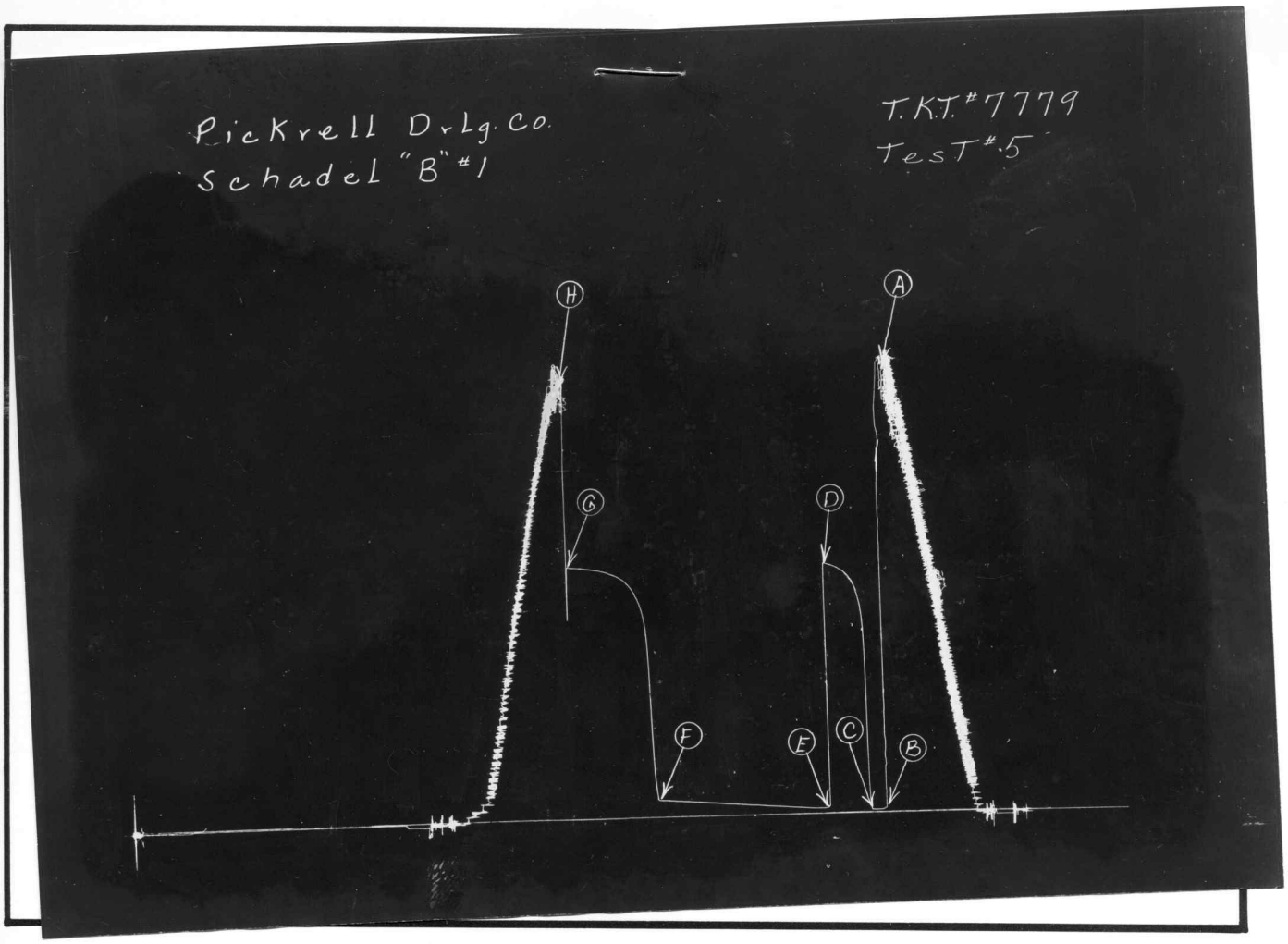
Point Minutes	Press.
0	35
3	514
6	1002
9	1134
12	1204
15	1248
18	1275
21	1296
24	1310
27	1321
30	1331
32	1334

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

Point Minutes	Press.
0	52
5	52
10	53
15	56
20	60
25	61
30	62
35	65
40	68
45	70
50	72
55	76
60	79
65	82
70	85
75	87
80	90
85	93
90	96
95	99
100	102
105	104
110	106
115	108
120	110

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

Point Minutes	Press.
0	110
3	412
6	914
9	1099
12	1165
15	1211
18	1246
21	1267
24	1285
27	1298
30	1308
33	1316
36	1325
39	1330
42	1335
45	1339
48	1342
51	1346
54	1349
57	1352
60	1353



This is an actual photograph of recorder chart.

POINT		PRESSURE
(A)	Initial Hydrostatic Mud	2341 PSI
(B)	First Initial Flow Pressure	35 PSI
(C)	First Final Flow Pressure	35 PSI
(D)	Initial Closed-in Pressure	1334 PSI
(E)	Second Initial Flow Pressure	52 PSI
(F)	Second Final Flow Pressure	110 PSI
(G)	Final Closed-in Pressure	1353 PSI
(H)	Final Hydrostatic Mud	2321 PSI

COMPANY PICKRELL DRILLING COMPANY LEASE AND WELL NO. SCHADEL #B-1 SEC. 6 TWP. 20s RGE. 20w TEST NO. 5 DATE 3-20-6

WESTERN TESTERS

Home Office: Great Bend, Kansas

P. O. Box 793 SWift 3-7903

Company Pickrell Drilling Company Lease & Well No. Schadel #B-1

Elevation 2222 Kelly Bushings Formation Mississippi Ticket Number 7780

Date March 21,1967 Sec. 6 Twp. 20s Range 20w County Pawnee State Kansas

Test Approved by Ralph W. Ruwwe Western Representative Dean Blagrave

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Formation Test No. 6 O.K. x Misrun ____ Interval Tested From 4367' to 4379' Total Depth 4379'

Size Main Hole 7 7/8 Rat Hole none Conv. x B.T. ____ Damaged ____ Yes x No Conv. x B.T. ____ Damaged x Yes ____ No

Packer Depth 4362 Ft. Size 6 3/4 Packer Depth 4367 Ft. Size 6 3/4

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

Packer Depth ____ Ft. Size ____

Tool Size 5½ OD Tool Jt. Size 4½ FH Anchor Length 12 Ft. Size 5½ OD

RECORDERS Depth 4372 Ft. Clock No. 6892 Depth 4375 Ft. Clock No. 6774

Top Make Amerada Cap. 4150 No. 2606 Inside ==Outside== Bottom Make Amerada Cap. 4300 No. 1567 ==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 5:52 A M

Tool Open I.F.P. From 5:55A M to 6:05 M Hr. 10 Min. From (B) 56 P.S.I. To (C) 72 P.S.I.

Tool Closed I.C.I.P. From 6:05A M. to 6:35 M. Hr. 30 Min. (D) 1380 P.S.I.

Tool Open F.F.P. From 6:35A M. to 8:35 M. 2 Hr. Min. From (E) 106 P.S.I. To (F) 402 P.S.I.

Tool Closed F.C.I.P. From 8:35A M. to 9:35A M. 1 Hr. Min. (G) 1378 P.S.I.

Initial Hydrostatic Pressure (A) 2341 P.S.I. Final Hydrostatic Pressure (H) 2332 P.S.I.

SURFACE INFORMATION Size Choke 1/4 In. Max. Press. P.S.I. Time Description of Flow

____ ____ ____ M. ____

____ ____ ____ M. ____

____ ____ ____ M. ____

BLOW Weak building to strong Bottom Choke Size 3/4 In.

Did Well Flow x Yes ____ No Recovery Total Ft. 720' clean oil;230' muddy oil;50' water.

Reversed Out ____ Yes ____ No Mud Type starch Viscosity 48 Weight 10.0 Maximum Temp. 126 °F Mud

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

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

Length Drill Pipe ____ ft. I.D. Drill Pipe 3.7 in Length Weight Pipe 915 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars none ft.

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

Remarks Sp. gravity 35° corrected.

WESTERN TESTING CO., INC.
Pressure Data

Date March 21, 1967 Test Ticket No. 7780

Recorder No. 2606 Capacity 4150 Location 4372 Ft.

Clock No. 6892 Elevation 2222 Kelly Bushings Well Temperature 126 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2341 P.S.I.	Opened Tool	5:52A M	
B First Initial Flow Pressure	56 P.S.I.	First Flow Pressure	10 Mins.	10 Mins.
C First Final Flow Pressure	72 P.S.I.	Initial Closed-in Pressure	30 Mins.	31 Mins.
D Initial Closed-in Pressure	1380 P.S.I.	Second Flow Pressure	120 Mins.	118 Mins.
E Second Initial Flow Pressure	106 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	402 P.S.I.			
G Final Closed-in Pressure	1378 P.S.I.			
H Final Hydrostatic Mud	2332 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	56
P 2 5	62
P 3 10	72
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 1 Min.

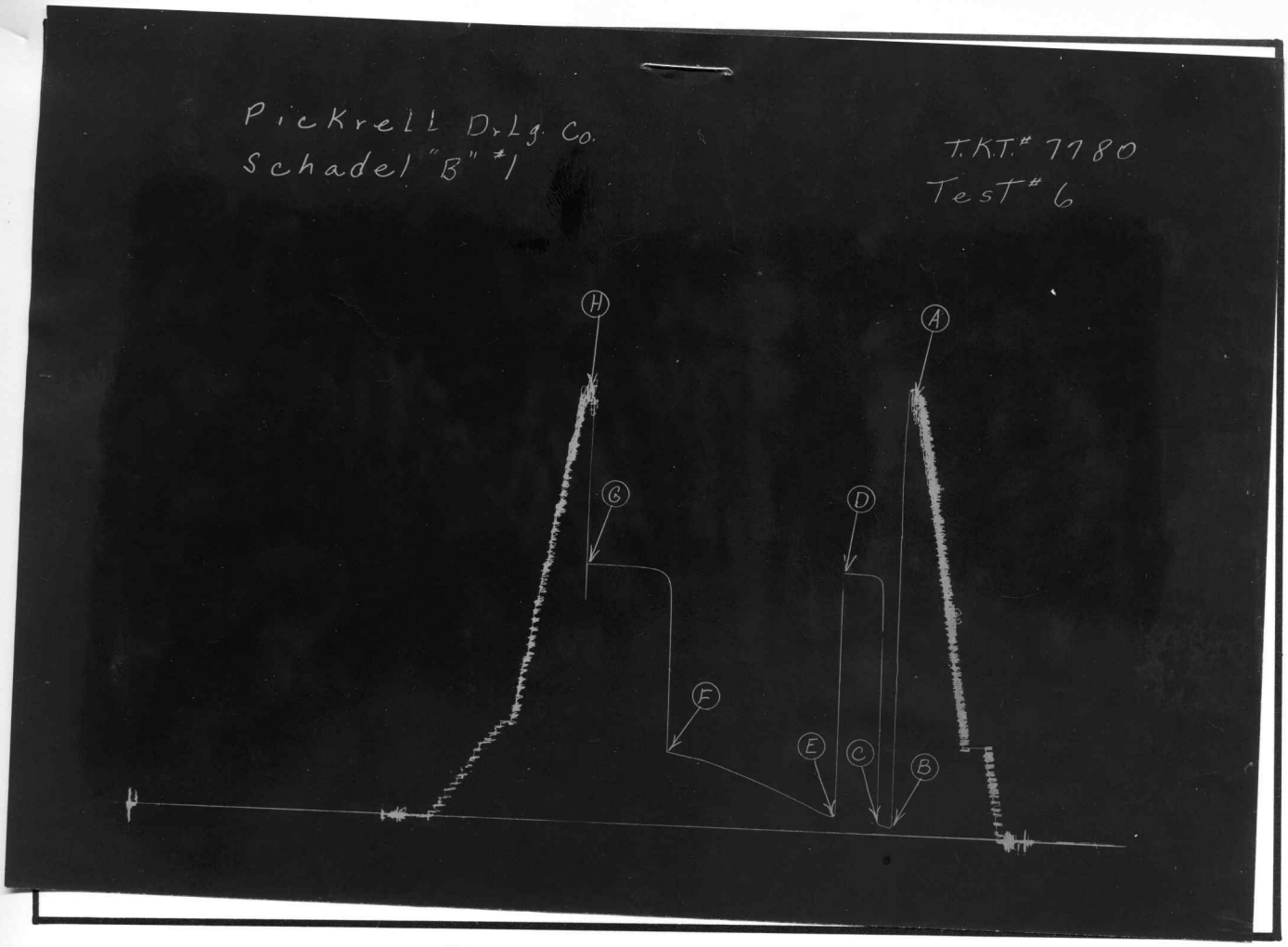
Point Minutes	Press.
0	72
3	954
6	1312
9	1362
12	1371
15	1373
18	1375
21	1377
24	1379
27	1379
30	1380
31	1380

Second Flow Pressure
Breakdown: 23 Inc.
of 5 mins. and a
final inc. of 3 Min.

Point Minutes	Press.
0	106
5	113
10	120
15	135
20	153
25	170
30	187
35	203
40	219
45	237
50	250
55	266
60	280
65	295
70	308
75	322
80	334
85	347
90	360
95	371
100	377
105	385
110	391
115	399
118	402

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

Point Minutes	Press.
0	402
3	1302
6	1339
9	1356
12	1362
15	1366
18	1371
21	1373
24	1374
27	1375
30	1375
33	1375
36	1376
39	1376
42	1377
45	1377
48	1377
51	1377
54	1377
57	1378
60	1378



This is an actual photograph of recorder chart.

POINT		PRESSURE	
(A)	Initial Hydrostatic Mud	2341	PSI
(B)	First Initial Flow Pressure	56	PSI
(C)	First Final Flow Pressure	72	PSI
(D)	Initial Closed-in Pressure	1380	PSI
(E)	Second Initial Flow Pressure	106	PSI
(F)	Second Final Flow Pressure	402	PSI
(G)	Final Closed-in Pressure	1378	PSI
(H)	Final Hydrostatic Mud	2332	PSI

COMPANY PICKRELL DRILLING CO. LEASE AND WELL NO. SCHADEL #B-1 SEC. 6 TWP. 20S RGE. 20W TEST NO. 6 DATE 3-21-