WESTERN TESTERS

Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Pickrell Drilling Company Lease & Well No. Campbell #2

Elevation 1502 Derrick Floor Ticket Number 4078

Date Sept. 12,1964 Sec. 33 Twp. 29s Range 6w County Kingman State Kansas

Test Approved by Ralph W. Ruwwe Western Representative George Tew

Formation Test No. 1 O.K. x Misrun ____ Interval Tested From 3266 to 3276' Total Depth 3272'

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

Packer Depth 3266 Ft. Size 6 3/4 Packer Depth 3261 Ft. Size 6 3/4

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

Packer Depth ____ Ft Size ____

Tool Size 5½ O. D. Tool Jt. Size 4½ F. H. Anchor Length 6 Ft. Size 5½ O. D.

RECORDERS Depth 3255 Ft Clock No. 6861 Depth 3269 Ft. Clock No. 109

Top Make Amerada Cap. 4200 No. 1558 Inside ~~Outside~~ Bottom Make Western Cap. 4000 No. 60 ~~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 11:27 P. M

Tool Open I.F.P. From 11:30 M to 11:35 M Hr. 5 Min. From (B) 33 P.S.I. To (C) 33 P.S.I.

Tool Closed I.C.I.P. From 11:35 P.M. to 12:05 M. Hr. 30 Min. (D) 1321 P.S.I.

Tool Open F.F.P. From 12:05 P M. to 1:20 P M. 1 Hr. 15 Min. From (E) 40 P.S.I. To (F) 122 P.S.I.

Tool Closed F.C.I.P. From 1:20 P.M. to 1:50 P M. Hr. 30 Min. (G) 1286 P.S.I.

Inital Hydrostatic Pressure (A) 1740 P.S.I. Final Hydrostatic Pressure (H) 1708 P.S.I.

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

____ ____ ____ M. ____

____ ____ ____ M. ____

____ ____ ____ M. ____

BLOW Good blow throughout. Gas to surface in 50 minutes Bottom Choke Size 3/4 in.

Did Well Flow x Yes ____ No Recovery Total Ft. 320' - 220' clean oil - 90' muddy oil - 10' oil cut mud Mud

Reversed Out ____ Yes x No Mud Type starch Viscosity 51 Weight 9.2 Maximum Temp. 131 °F

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

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

Length Drill Pipe 2371 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 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

WHELAN PRINTERS

WESTERN TESTING CO., INC.
Pressure Data

Date: September 12, 1964

Test Ticket No.: 4078

Recorder No.: 1558 Capacity: 4200 Location: 3255 Ft.

Clock No.: 6861 Elevation: 1502 Derrick Floor Well Temperature: 111 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1740	P.S.I.
B	First Initial Flow Pressure	33	P.S.I.
C	First Final Flow Pressure	33	P.S.I.
D	Initial Closed-in Pressure	1321	P.S.I.
E	Second Initial Flow Pressure	40	P.S.I.
F	Second Final Flow Pressure	122	P.S.I.
G	Final Closed-in Pressure	1286	P.S.I.
H	Final Hydrostatic Mud	1708	P.S.I.

	Time Given	Time Computed
Opened Tool	11:27 P. M	
First Flow Pressure	5 Mins.	5 Mins.
Initial Closed-in Pressure	30 Mins.	33 Mins.
Second Flow Pressure	75 Mins.	80 Mins.
Final Closed-in Pressure	30 Mins.	36 Mins.

PRESSURE BREAKDOWN

First Flow Press.

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

Point Mins.	Press.
P 1 0	33
P 2 5	33
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: 11 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	33
3	354
6	962
9	1269
12	1294
15	1304
18	1309
21	1312
24	1315
27	1317
30	1319
33	1321

Second Flow Pressure

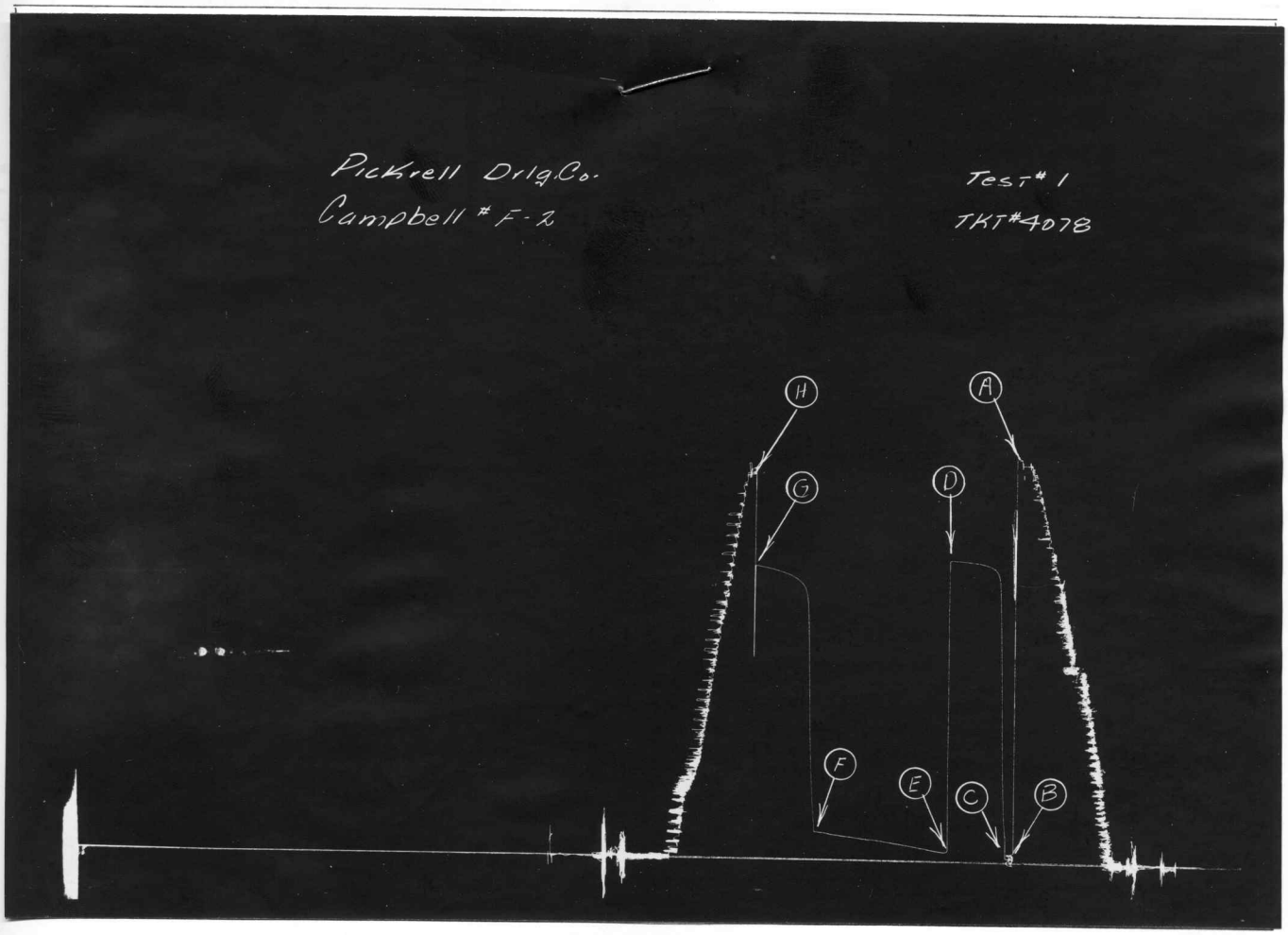
Breakdown: 16 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	40
5	43
10	48
15	54
20	63
25	69
30	75
35	80
40	86
45	90
50	94
55	96
60	103
65	108
70	113
75	118
80	122

Final Shut-In

Breakdown: 12 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	122
3	375
6	768
9	1188
12	1223
15	1238
18	1248
21	1257
24	1263
27	1273
30	1277
33	1282
36	1286



This is an actual photograph of recorder chart.

POINT		PRESSURE
(A)	Initial Hydrostatic Mud	1740 PSI
(B)	First Initial Flow Pressure	33 PSI
(C)	First Final Flow Pressure	33 PSI
(D)	Initial Closed-in Pressure	1321 PSI
(E)	Second Initial Flow Pressure	40 PSI
(F)	Second Final Flow Pressure	122 PSI
(G)	Final Closed-in Pressure	1286 PSI
(H)	Final Hydrostatic Mud	1708 PSI

COMPANY Pickrell Drilling LEASE AND WELL NO. Campbell #2 "F" SEC. 33 TWP. 29S RGE. 6W TEST NO. 1 DATE 9-12-64

Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Pickrell Drilling Company Lease & Well No. Campbell F#2

Elevation 1502 Derrick Floor Ticket Number 4079

Date Sept. 13,1964 Sec. 33 Twp. 29s Range 6w County Kingman State Kansas

Test Approved by Ralph W. Ruwwe Western Representative George Tew

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Formation Test No. 2 O.K. x Misrun ____ Interval Tested From 3272 to 3278' Total Depth 3278'

Size Main Hole 7 5/8 Rat Hole None Conv. x B.T. ____ Damaged ____ Yes x No Conv. ____ B.T. x Damaged ____ Yes x No

Packer Depth ____ Ft. Size ____ Packer Depth ____ Ft. Size ____

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

Packer Depth ____ Ft Size ____

Tool Size 5½ O. D. Tool Jt. Size 4½ F. H. Anchor Length 6 Ft. Size 5½ O. D.

RECORDERS Depth 3260 Ft Clock No. 6861 Depth 3275 Ft. Clock No. 109

Top Make Amerada Cap. 4200 No. 1558 Inside Outside Bottom Make Western Cap. 4000 No. 60 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 11:30 A. M

Tool Open I.F.P. From 11:34 A M. to 11:39 A M. Hr. 5 Min. From (B) 14 P.S.I. To (C) 14 P.S.I.

Tool Closed I.C.I.P. From 11:39 A M. to 12:09 M. Hr. 30 Min. (D) 516 P.S.I.

Tool Open F.F.P. From 12:09 M. to 1:09 A M. 1 Hr. ____ Min. From (E) 18 P.S.I. To (F) 18 P.S.I.

Tool Closed F.C.I.P. From 1:09 A M. to 1:39 A M. Hr. 30 Min. (G) 46 P.S.I.

Inital Hydrostatic Pressure (A) 1778 P.S.I. Final Hydrostatic Pressure (H) 1760 P.S.I.

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

____ ____ ____ M. ____

____ ____ ____ M. ____

____ ____ ____ M. ____

BLOW Weak to dead in forty minutes Bottom Choke Size 3/4 in.

Did Well Flow ____ Yes x No Recovery Total Ft. 30' mud with speeks of oil

Mud

Reversed Out ____ Yes x No Mud Type starch Viscosity 51 Weight 9.2 Maximum Temp. 112 °F

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

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

Length Drill Pipe 2377 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 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

WHELAN PRINTERS

WESTERN TESTING CO., INC.
Pressure Data

Date: September 13, 1964 — Test Ticket No. 4079

Recorder No. 1558 — Capacity 4200 — Location 3260 Ft.

Clock No. 6861 — Elevation 1502 Derrick Floor — Well Temperature 112 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1778	P.S.I.		
B	First Initial Flow Pressure	14	P.S.I.		
C	First Final Flow Pressure	14	P.S.I.		
D	Initial Closed-in Pressure	516	P.S.I.		
E	Second Initial Flow Pressure	18	P.S.I.		
F	Second Final Flow Pressure	18	P.S.I.		
G	Final Closed-in Pressure	46	P.S.I.		
H	Final Hydrostatic Mud	1760	P.S.I.		

	Time Given	Time Computed
Opened Tool	11:30 A. M	
First Flow Pressure	5 Mins.	5 Mins.
Initial Closed-in Pressure	30 Mins.	33 Mins.
Second Flow Pressure	60 Mins.	60 Mins.
Final Closed-in Pressure	30 Mins.	30 Mins.

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	14
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: 11 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	14
3	18
6	27
9	33
12	48
15	80
18	122
21	177
24	221
27	278
30	350
33	516

Second Flow Pressure

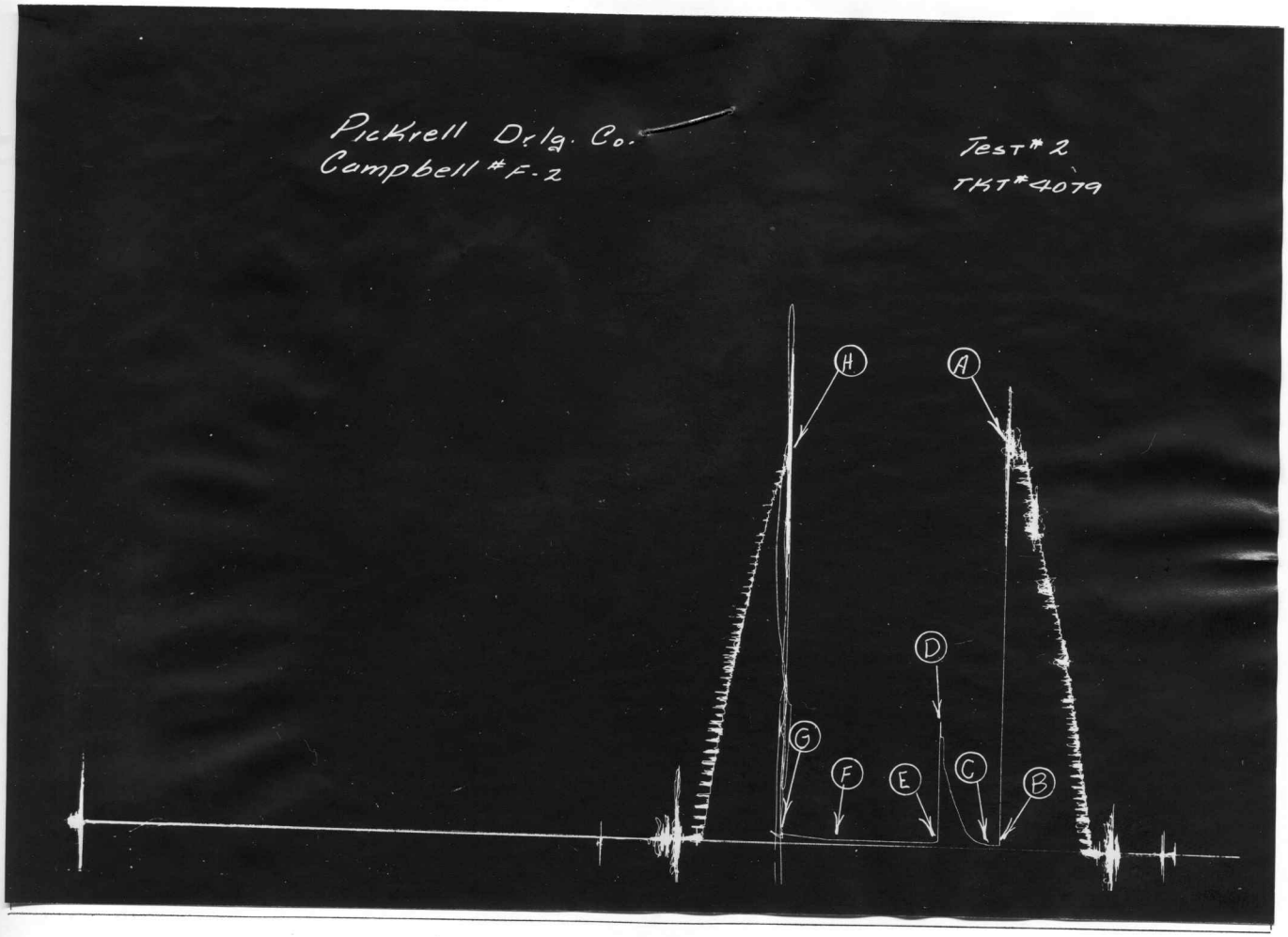
Breakdown: 12 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	18
5	18
10	18
15	18
20	18
25	18
30	18
35	18
40	18
45	18
50	18
55	18
60	18

Final Shut-In

Breakdown: 10 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	18
3	21
6	25
9	29
12	33
15	35
18	37
21	40
24	42
27	44
30	46



This is an actual photograph of recorder chart.

POINT		PRESSURE
(A)	Initial Hydrostatic Mud	1778 PSI
(B)	First Initial Flow Pressure	14 PSI
(C)	First Final Flow Pressure	14 PSI
(D)	Initial Closed-in Pressure	516 PSI
(E)	Second Initial Flow Pressure	18 PSI
(F)	Second Final Flow Pressure	18 PSI
(G)	Final Closed-in Pressure	46 PSI
(H)	Final Hydrostatic Mud	1760 PSI

COMPANY Pickrell Drilling LEASE AND WELL NO. Campbell #F-2 SEC. 33 TWP. 29s RGE. 6w TEST NO. 2 DATE 9-13-64

Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Pickrell Drilling Company Lease & Well No. Campbell #F-2

Elevation 1502 Derrick Floor Ticket Number 4080

Date Sept. 14, 1964 Sec. 33 Twp. 29s Range 6w County Kingman State Kansas

Test Approved by Ralph Ruwwe Western Representative George Tew

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Formation Test No. 3 O.K. X Misrun ____ Interval Tested From 3585' to 3602' Total Depth 3602'

Size Main Hole 7 5/8 Rat Hole None Conv. X B.T. ____ Damaged ____ Yes X No Conv. ____ B.T. X Damaged ____ Yes X No

Packer Depth 3585 Ft. Size 6 3/4 Packer Depth 3580 Ft. Size 6 3/4

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

Packer Depth ____ Ft Size ____

Tool Size 5½ O. D. Tool Jt. Size 4½ F. H. Anchor Length 17 Ft. Size 5½ O. D.

RECORDERS Depth 3594 Ft Clock No. 6861 Depth 3597 Ft. Clock No. 105

Top Make Amerada Cap. 4200 No. 1558 Inside Outside Bottom Make Western Cap. 4000 No. 60 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 9:12 P. M

Tool Open I.F.P. From 9:15 P M to 9:20 M Hr. 5 Min. From (B) 115 P.S.I. To (C) 118 P.S.I.

Tool Closed I.C.I.P. From 9:20P M. to 9:50 M. Hr. 30 Min. (D) 1483 P.S.I.

Tool Open F.F.P. From 9:50 P M. to 10:50 M. 1 Hr. Min. From (E) 183 P.S.I. To (F) 474 P.S.I.

Tool Closed F.C.I.P. From 10:50 M. to 11:20 M. Hr. 30 Min. (G) 1290 P.S.I.

Inital Hydrostatic Pressure (A) 1955 P.S.I. Final Hydrostatic Pressure (H) 1934 P.S.I.

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

BLOW Strong blow for 5 minutes. Gas to surface in 4 minutes, decreasing to good blow. Bottom Choke Size 3/4 in.

Did Well Flow X Yes ____ No Recovery Total Ft. 1260 ~~- 20' heavy oil and gas cut mud - 60' watery oil and gas cut mud - 340' watery oil - 540' oily water - 300' water~~ Mud

Reversed Out ____ Yes X No Mud Type starch Viscosity 50 Weight 9.9 Maximum Temp. 130 °F

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

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

Length Drill Pipe 2695 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ____ ft.

I. D. Drill Collars ____ in. Length D. S. T. Tool 37 ft.

Remarks

WHELAN PRINTERS

WESTERN TESTING CO., INC.
Pressure Data

Date September 14, 1964 — Test Ticket No. 4080

Recorder No. 1564 — Capacity 4200 — Location 3594 Ft.

Clock No. 6861 — Elevation 1502 Derrick Floor — Well Temperature 130 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1955 P.S.I.	Opened Tool	9:12 P. M	
B	First Initial Flow Pressure	115 P.S.I.	First Flow Pressure	5 Mins.	5 Mins.
C	First Final Flow Pressure	118 P.S.I.	Initial Closed-in Pressure	30 Mins.	36 Mins.
D	Initial Closed-in Pressure	1483 P.S.I.	Second Flow Pressure	60 Mins.	62 Mins.
E	Second Initial Flow Pressure	183 P.S.I.	Final Closed-in Pressure	30 Mins.	38 Mins.
F	Second Final Flow Pressure	474 P.S.I.			
G	Final Closed-in Pressure	1290 P.S.I.			
H	Final Hydrostatic Mud	1934 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	115
P 2 5	118
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: 12 Inc. of 3 mins. and a final inc. of 0 Min.

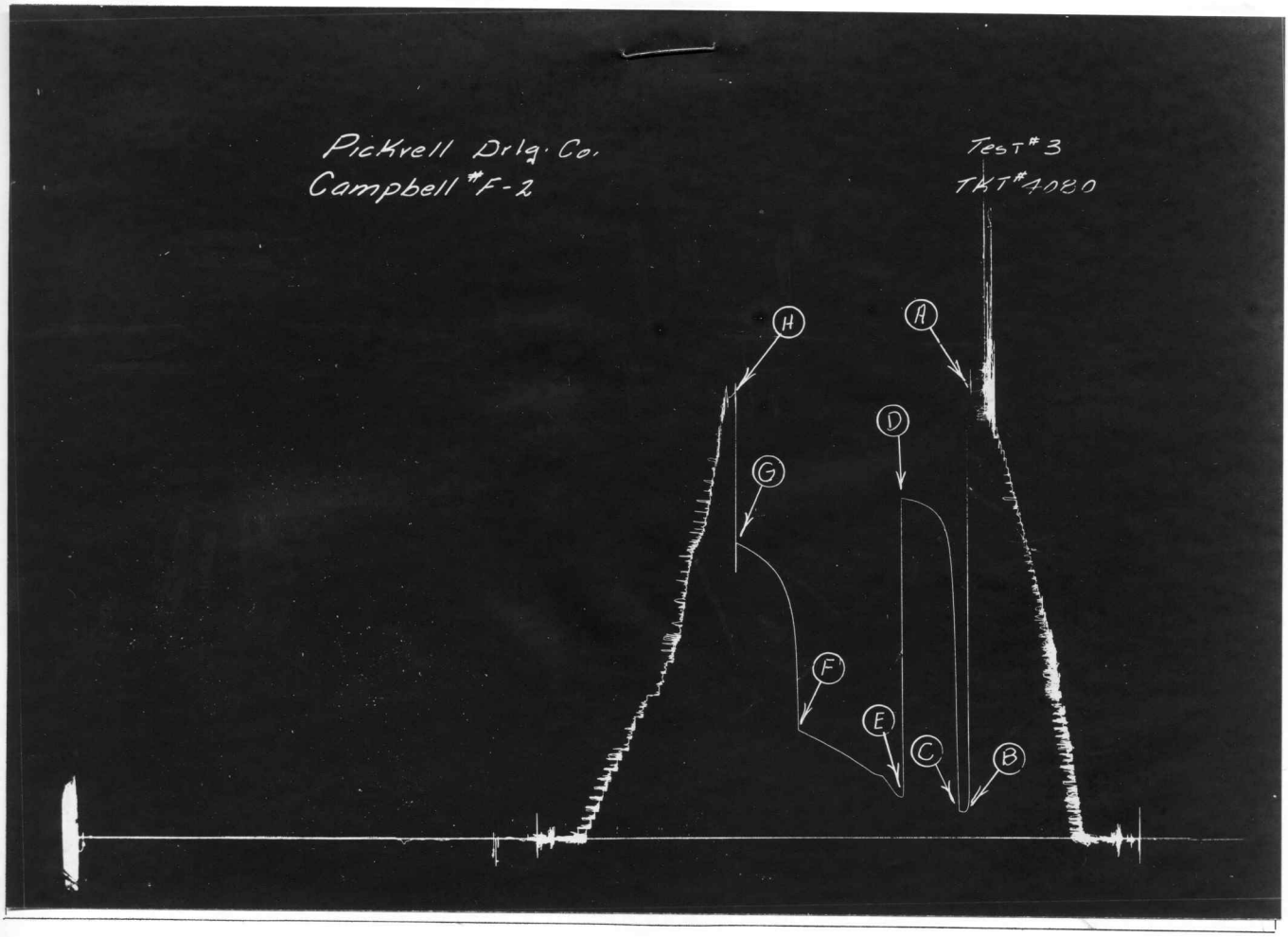
Point Minutes	Press.
0	118
3	516
6	954
9	1221
12	1338
15	1388
18	1424
21	1441
24	1455
27	1464
30	1472
33	1479
36	1483

Second Flow Pressure
Breakdown: 12 Inc. of 5 mins. and a final inc. of 2 Min.

Point Minutes	Press.
0	183
5	196
10	244
15	274
20	295
25	320
30	345
35	373
40	394
45	413
50	432
55	453
60	466
62	474

Final Shut-In
Breakdown: 12 Inc. of 3 mins. and a final inc. of 2 Min.

Point Minutes	Press.
0	474
3	941
6	1035
9	1102
12	1144
15	1173
18	1200
21	1215
24	1234
27	1250
30	1263
33	1273
36	1284
38	1290



This is an actual photograph of recorder chart.

POINT		PRESSURE
(A)	Initial Hydrostatic Mud	1955 PSI
(B)	First Initial Flow Pressure	115 PSI
(C)	First Final Flow Pressure	118 PSI
(D)	Initial Closed-in Pressure	1483 PSI
(E)	Second Initial Flow Pressure	183 PSI
(F)	Second Final Flow Pressure	474 PSI
(G)	Final Closed-in Pressure	1290 PSI
(H)	Final Hydrostatic Mud	1934 PSI

COMPANY Pickrell Drilling Co. LEASE AND WELL NO. Campbell #F-2 SEC. 33 TWP. 29s RGE. 6w TEST NO. 3 DATE 9-14-64

WESTERN TESTERS

Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Pickrell Drilling Company Lease & Well No. Campbell #F-2

Elevation 1502 Derrick Floor Ticket Number 4081

Date September 16, 1964 Sec. 33 Twp. 29s Range 6w County Kingman State Kansas

Test Approved by Ralph W. Ruwwe Western Representative George Tew

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Formation Test No. 4 O.K. x Misrun ____ Interval Tested From 3686' to 3700' Total Depth 3700'

Size Main Hole 7 5/8 Rat Hole None Conv. x B.T. ____ Damaged ____ Yes x No Conv. ____ B.T. x Damaged ____ Yes x No

Packer Depth 3686 Ft. Size 6 3/4 Packer Depth 3681 Ft. Size 6 3/4

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

Packer Depth ____ Ft Size ____

Tool Size 5½ O. D. Tool Jt. Size 4½ F. H. Anchor Length 14 Ft. Size 5½ O. D.

RECORDERS Depth 3693 Ft Clock No. 6861 Depth 3694 Ft. Clock No. 105

Top Make Amerada Cap. 4200 No. 1558 Inside ~~Outside~~ Bottom Make Western Cap. 4000 No. 60 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 3:45 A. M

Tool Open I.F.P. From 3:48 M to 3:53 M Hr. 5 Min. From (B) 54 P.S.I. To (C) 54 P.S.I.

Tool Closed I.C.I.P. From 3:53 A M. to 4:23 M. Hr. 30 Min. (D) 1175 P.S.I.

Tool Open F.F.P. From 4:23 A M. to 5:53 A M. 1 Hr. 30 Min. From (E) 73 P.S.I. To (F) 166 P.S.I.

Tool Closed F.C.I.P. From 5:53 A M. to 6:23 A M. Hr. 30 Min. (G) 1018 P.S.I.

Inital Hydrostatic Pressure (A) 1995 P.S.I. Final Hydrostatic Pressure (H) 1978 P.S.I.

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

____ ____ ____ M. ____

____ ____ ____ M. ____

____ ____ ____ M. ____

BLOW Strong blow throughout test Bottom Choke Size 3/4 in.

Did Well Flow ____ Yes x No Recovery Total Ft. 320' total - 1200' Gas in Pipe - 135' slightly oil cut mud 185' water Mud

Reversed Out ____ Yes x No Mud Type starch Viscosity 50 Weight 9.8 Maximum Temp. 129 °F

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

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

Length Drill Pipe 2796 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ____ ft.

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

Remarks

WHELAN PRINTERS

WESTERN TESTING CO., INC.
Pressure Data

Date September 16, 1964 Test Ticket No. 4081

Recorder No. 1558 Capacity 4200 Location 3691 Ft.

Clock No. 6861 Elevation 1502 Derrick Floor Well Temperature 129 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1995	P.S.I.	Opened Tool	3:45 A. M	
B	First Initial Flow Pressure	54	P.S.I.	First Flow Pressure	5 Mins.	5 Mins.
C	First Final Flow Pressure	54	P.S.I.	Initial Closed-in Pressure	30 Mins.	32 Mins.
D	Initial Closed-in Pressure	1175	P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E	Second Initial Flow Pressure	73	P.S.I.	Final Closed-in Pressure	30 Mins.	36 Mins.
F	Second Final Flow Pressure	166	P.S.I.			
G	Final Closed-in Pressure	1018	P.S.I.			
H	Final Hydrostatic Mud	1978	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	54
P 2 5	54
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	54
3	202
6	506
9	836
12	972
15	1048
18	1094
21	1127
24	1144
27	1158
30	1171
32	1175

Second Flow Pressure

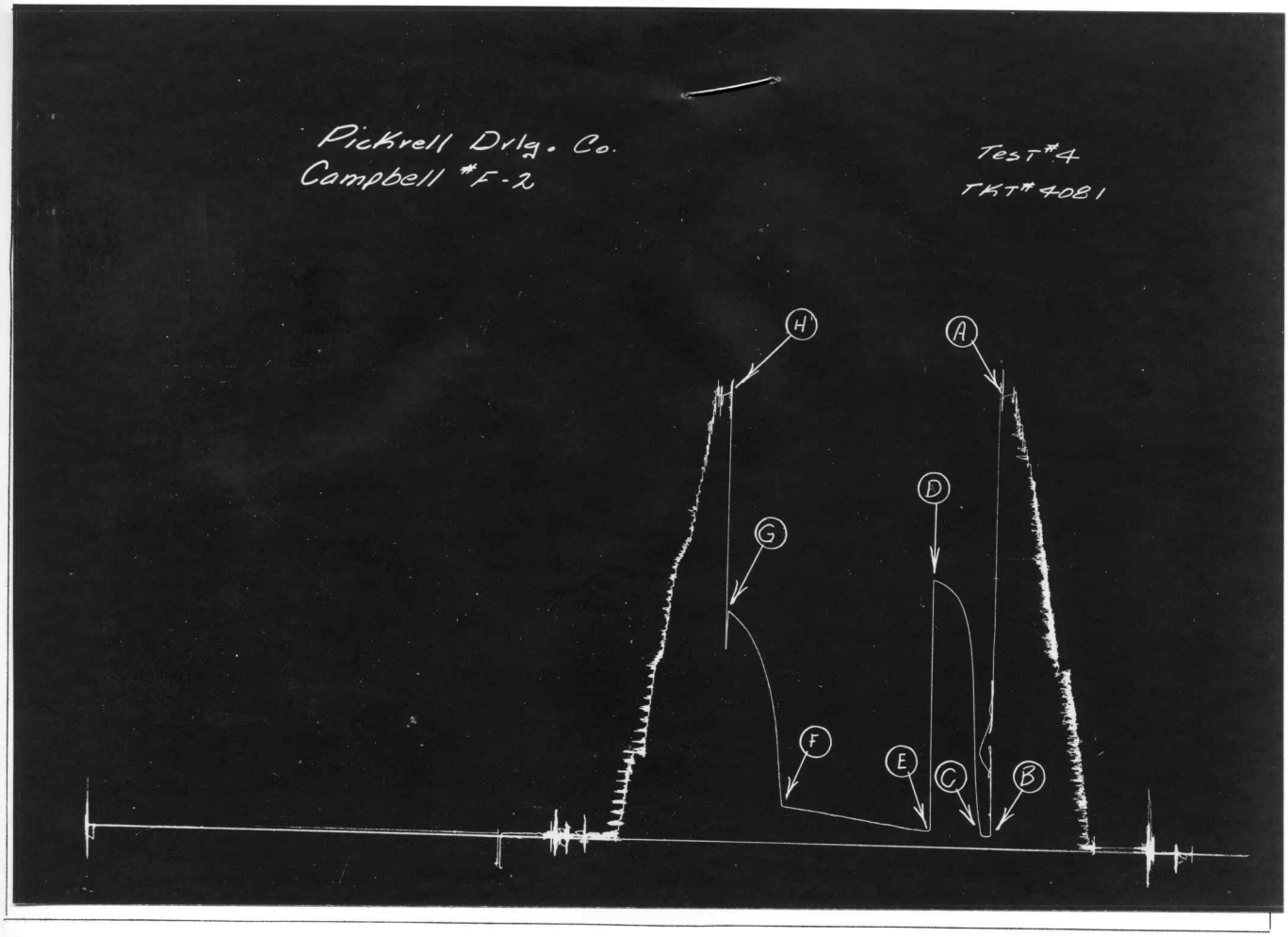
Breakdown: 18 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	73
5	75
10	78
15	82
20	88
25	96
30	10.
35	107
40	111
45	118
50	124
55	130
60	137
65	143
70	149
75	153
80	158
85	164
90	166

Final Shut-In

Breakdown: 12 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	166
3	394
6	587
9	693
12	764
15	824
18	870
21	908
24	939
27	966
30	987
33	1006
36	1018



This is an actual photograph of recorder chart.

POINT		PRESSURE	
(A)	Initial Hydrostatic Mud	1995	PSI
(B)	First Initial Flow Pressure	54	PSI
(C)	First Final Flow Pressure	54	PSI
(D)	Initial Closed-in Pressure	1175	PSI
(E)	Second Initial Flow Pressure	73	PSI
(F)	Second Final Flow Pressure	166	PSI
(G)	Final Closed-in Pressure	1018	PSI
(H)	Final Hydrostatic Mud	1978	PSI

COMPANY Pickrell Drilling Co. LEASE AND WELL NO. Campbell F-2 SEC. 33 TWP. 29s RGE. 6w TEST NO. 4 DATE 9-16-64

WESTERN TESTERS

Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Pickrell Drilling Company Lease & Well No. Campbell #F-2

Elevation 1502 Derrick Floor Ticket Number 4082

Date Sept. 16, 1964 Sec. 33 Twp. 29 s Range 6w County Kingman State Kansas

Test Approved by Ralph W. Ruwwe Western Representative George Tew

Formation Test No. 5 O.K. x Misrun ____ Interval Tested From 3723' to 3736' Total Depth 3736'

Size Main Hole 7 5/8 Rat Hole None Conv. x B.T. ____ Damaged ____ Yes x No Conv. ____ B.T. x Damaged ____ Yes x No

Packer Depth 3723 Ft. Size 6 3/4 Packer Depth 3718 Ft. Size 6 3/4

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

Packer Depth ____ Ft Size ____

Tool Size 5½ O. D. Tool Jt. Size 4½ F. H. Anchor Length 13 Ft. Size 5½ O. D.

RECORDERS Depth 3727 Ft Clock No. 6861 Depth 3730 Ft. Clock No. 105

Top Make Amerada Cap. 4200 No. 1558 Inside Outside Bottom Make Western Cap. 4000 No. 60 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 ~~XXX~~ 5:32 P. M

Tool Open I.F.P. From 5:35 P M to 5:40 P M Hr. 5 Min. From (B) 52 P.S.I. To (C) 52 P.S.I.

Tool Closed I.C.I.P. From 5:40 P M. to 6:10 P M. Hr. 30 Min. (D) 778 P.S.I.

Tool Open F.F.P. From 6:10 P M. to 7:10 P M. 1 Hr. ____ Min. From (E) 61 P.S.I. To (F) 73 P.S.I.

Tool Closed F.C.I.P. From 7:10 P M. to 7:40 P M. Hr. 30 Min. (G) 772 P.S.I.

Inital Hydrostatic Pressure (A) 2014 P.S.I. Final Hydrostatic Pressure (H) 2000 P.S.I.

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

____ ____ ____ M. ____

____ ____ ____ M. ____

____ ____ ____ M. ____

BLOW Strong throughout test.

Did Well Flow ____ Yes ____ No Recovery Total Ft. 130' ~~slightly oil and gas cut mud~~ Bottom Choke Size 3/4 in.

Reversed Out ____ Yes x No Mud Type starch Viscosity 47 Weight 9.6 Maximum Temp. 120 °F Mud

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

Type Circ. Sub. Plug Did Tool Plug? No Where? ____ Did Packer Hold? Yes

Length Drill Pipe 2833 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ____ ft.

I. D. Drill Collars ____ in. Length D. S. T. Tool 33 ft.

Remarks

WHELAN PRINTERS

WESTERN TESTING CO., INC.
Pressure Data

Date September 16, 1964 Test Ticket No. 4082

Recorder No. 1558 Capacity 4200 Location 3727 Ft.

Clock No. 6861 Elevation 1502 Derrick Floor Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2014	P.S.I.	Opened Tool	5:32 P. M
B First Initial Flow Pressure	52	P.S.I.	First Flow Pressure 5 Mins.	5 Mins.
C First Final Flow Pressure	52	P.S.I.	Initial Closed-in Pressure 30 Mins.	31 Mins.
D Initial Closed-in Pressure	778	P.S.I.	Second Flow Pressure 60 Mins.	58 Mins.
E Second Initial Flow Pressure	61	P.S.I.	Final Closed-in Pressure 30 Mins.	33 Mins.
F Second Final Flow Pressure	73	P.S.I.		
G Final Closed-in Pressure	772	P.S.I.		
H Final Hydrostatic Mud	2000	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	52
P 2 5	52
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 1 Min.

Point Minutes	Press.
0	52
3	84
6	177
9	265
12	369
15	453
18	556
21	631
24	697
27	735
30	770
31	778

Second Flow Pressure

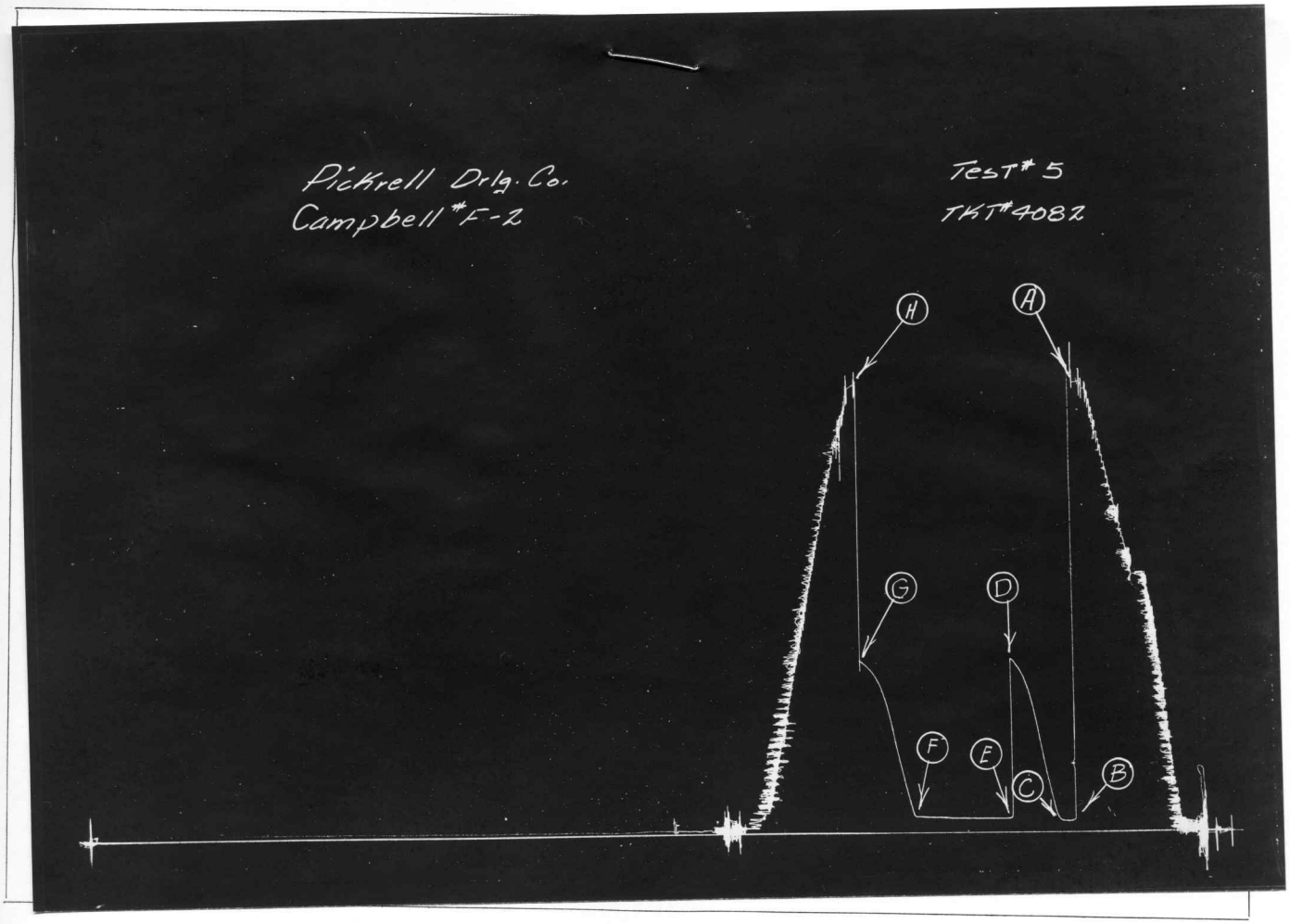
Breakdown: 11 Inc. of 5 mins. and a final inc. of 3 Min.

Point Minutes	Press.
0	61
5	61
10	62
15	63
20	64
25	64
30	65
35	66
40	68
45	69
50	70
55	71
58	73

Final Shut-In

Breakdown: 11 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	73
3	162
6	236
9	322
12	419
15	529
18	606
21	670
24	705
27	735
30	757
33	772



This is an actual photograph of recorder chart.

POINT		PRESSURE
(A)	Initial Hydrostatic Mud	2014 PSI
(B)	First Initial Flow Pressure	52 PSI
(C)	First Final Flow Pressure	52 PSI
(D)	Initial Closed-in Pressure	778 PSI
(E)	Second Initial Flow Pressure	61 PSI
(F)	Second Final Flow Pressure	73 PSI
(G)	Final Closed-in Pressure	772 PSI
(H)	Final Hydrostatic Mud	2000 PSI

COMPANY Pickrell Drilling Co. LEASE AND WELL NO. Campbell F#2 SEC. 33 TWP. 29s RGE. 6W TEST NO. 5 DATE 9-16-64

Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Pickrell Drilling Company Lease & Well No. Campbell #F-2

Elevation 1502 Derrick Floor Ticket Number 4083

Date Sept. 17, 1964 Sec. 33 Twp. 29s Range 6w County Kingman State Kansas

Test Approved by Ralph W. Ruwwe Western Representative George Tew

Formation Test No. 6 O.K. x Misrun ____ Interval Tested From 3736' to 3741' Total Depth 3741'

Size Main Hole 7 5/8 Rat Hole None Conv. x B.T. ____ Damaged ____ Yes x No Conv. ____ B.T. x Damaged ____ Yes x No

Packer Depth 3736 Ft. Size 6 3/4 Packer Depth 3731 Ft. Size 6 3/4

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

Packer Depth ____ Ft Size ____

Tool Size 5½ O. D. Tool Jt. Size 4½ F. H. Anchor Length 5 Ft. Size 5½ O. D.

RECORDERS

	Depth	Clock No.	Cap.	No.	Inside / Outside
Top Make Amerada	3724 Ft	6861	4200	1558	
Bottom Make Western	3739 Ft.	105	4000	60	
Below Straddle: Top Make	Depth ____	Clock No. ____	Cap. ____	No. ____	
Bottom Make	Depth ____ Ft.	Clock No. ____	Cap. ____	No. ____	

Time Set Packer 3:25 A. M

Tool Open I.F.P. From 3:27 A M to 3:32 A M Hr. 5 Min. From (B) 12 P.S.I. To (C) 12 P.S.I.

Tool Closed I.C.I.P. From 3:32 A M. to 4:02 A M. Hr. 30 Min. (D) 827 P.S.I.

Tool Open F.F.P. From 4:02A M. to 5:02 A M. 1 Hr. ____ Min. From (E) 25 P.S.I. To (F) 61 P.S.I.

Tool Closed F.C.I.P. From 5:02 A M. to 5:32 A M. Hr. 30 Min. (G) 768 P.S.I.

Inital Hydrostatic Pressure (A) 1962 P.S.I. Final Hydrostatic Pressure (H) 1937 P.S.I.

SURFACE INFORMATION — Size Choke 3/4 In.

Max. Press. P.S.I.	Time	Description of Flow
	____ M.	
	____ M.	
	____ M.	

BLOW Strong throughout test Bottom Choke Size 3/4 in.

Did Well Flow ____ Yes x No Recovery Total Ft. 180' fluid total. - 2000' Gas In Pipe - 135' oil cut mud 45' salt water Mud

Reversed Out ____ Yes x No Mud Type Starch Viscosity 47 Weight 9.6 Maximum Temp. 124 °F

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

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

Length Drill Pipe 2841 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 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

WHELAN PRINTERS

WESTERN TESTING CO., INC.
Pressure Data

Date September 17, 1964 Test Ticket No. 4083

Recorder No. 1558 Capacity 4200 Location 3724 Ft.

Clock No. 6861 Elevation 1502 Derrick Floor Well Temperature 124 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1962	P.S.I.	Opened Tool 3:25 A. M.	
B First Initial Flow Pressure	12	P.S.I.	First Flow Pressure 5 Mins.	5 Mins.
C First Final Flow Pressure	12	P.S.I.	Initial Closed-in Pressure 30 Mins.	34 Mins.
D Initial Closed-in Pressure	827	P.S.I.	Second Flow Pressure 60 Mins.	60 Mins.
E Second Initial Flow Pressure	25	P.S.I.	Final Closed-in Pressure 30 Mins.	33 Mins.
F Second Final Flow Pressure	61	P.S.I.		
G Final Closed-in Pressure	768	P.S.I.		
H Final Hydrostatic Mud	1937	P.S.I.		

PRESSURE BREAKDOWN

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

Initial Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 1 Min.

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

Final Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	12	0	12	0	25	0	61
P 2 5	12	3	170	5	27	3	217
P 3		6	449	10	28	6	386
P 4		9	662	15	31	9	556
P 5		12	728	20	35	12	628
P 6		15	774	25	40	15	680
P 7		18	793	30	44	18	705
P 8		21	803	35	48	21	724
P 9		24	812	40	50	24	743
P10		27	818	45	52	27	753
P11		30	822	50	54	30	762
P12		33	826	55	57	33	768
P13		34	827	60	61		
P14							
P15							
P16							
P17							
P18							
P19							
P20							