15-135-20094

WESTERN TESTERS

22-16s-21w

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

Company Walters Drlg. Co. Lease & Well No. Elmore A#1

Elevation 2322 Kelly Bushings Formation Cherokee Effective Pay 12 Ft. Ticket No. 10403

Date 12-11-67 Sec. 22 Twp. 16s Range 21w County Ness State Kansas

Test Approved by Don Beauchamp Western Representative Dean Blagrave

Formation Test No. 1 O.K. X Misrun Interval Tested From 4191' to 4207' Total Depth 4207'

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

Packer Depth 4186 Ft. Size 6 3/4 Packer Depth 4191 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 16 Ft. Size 5½"OD

RECORDERS Depth 4198 Ft. Clock No. 8475 Depth 4201 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 2:48 P. M

Tool Open I.F.P. From 2:50 M. to 2:55 P M. Hr. 5 Min. From (B) 166 P.S.I. To (C) 160 P.S.I.

Tool Closed I.C.I.P. From 2:55 M. to 3:15 P M. Hr. 20 Min. (D) 1128 P.S.I.

Tool Open F.F.P. From 3:15 M. to 3:35 P M. Hr. 20 Min. From (E) 226 P.S.I. To (F) 497 P.S.I.

Tool Closed F.C.I.P. From 3:35 M. to 3:55 P M. Hr. 20 Min. (G) 1091 P.S.I.

Initial Hydrostatic Pressure (A) 2209 P.S.I. Final Hydrostatic Pressure (H) 2188 P.S.I.

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

BLOW Strong throughout. Bottom Choke Size 3/4 In.

Did Well Flow Yes X No Recovery Total Ft. 760 feet gas in pipe:
1310 feet clean gassy oil (33° gravity corrected)

Reversed Out Yes No Mud Type starch Viscosity 45 Weight 9.8 Watet Loss 13 cc. Maximum Temp. 119 °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 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe none ft. I.D. Weight Pipe -- in. Length Drill Collars none ft.

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

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 12-11-67 Test Ticket No. 10403

Recorder No. 2606 Capacity 4150 Location 4198 Ft.

Clock No. 8475 Elevation 2322 Kelly Bushings Well Temperature 119 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2209 P.S.I.	Opened Tool	2:50 P. M.	
B	First Initial Flow Pressure	166 P.S.I.	First Flow Pressure	5 Mins.	5 Mins.
C	First Final Flow Pressure	166 P.S.I.	Initial Closed-in Pressure	20 Mins.	20 Mins.
D	Initial Closed-in Pressure	1128 P.S.I.	Second Flow Pressure	20 Mins.	20 Mins.
E	Second Initial Flow Pressure	226 P.S.I.	Final Closed-in Pressure	20 Mins.	20 Mins.
F	Second Final Flow Pressure	497 P.S.I.			
G	Final Closed-in Pressure	1091 P.S.I.			
H	Final Hydrostatic Mud	2188 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	166
P 2 5	166
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: 6 Inc.
of 3 mins. and a
final inc. of 2 Min.

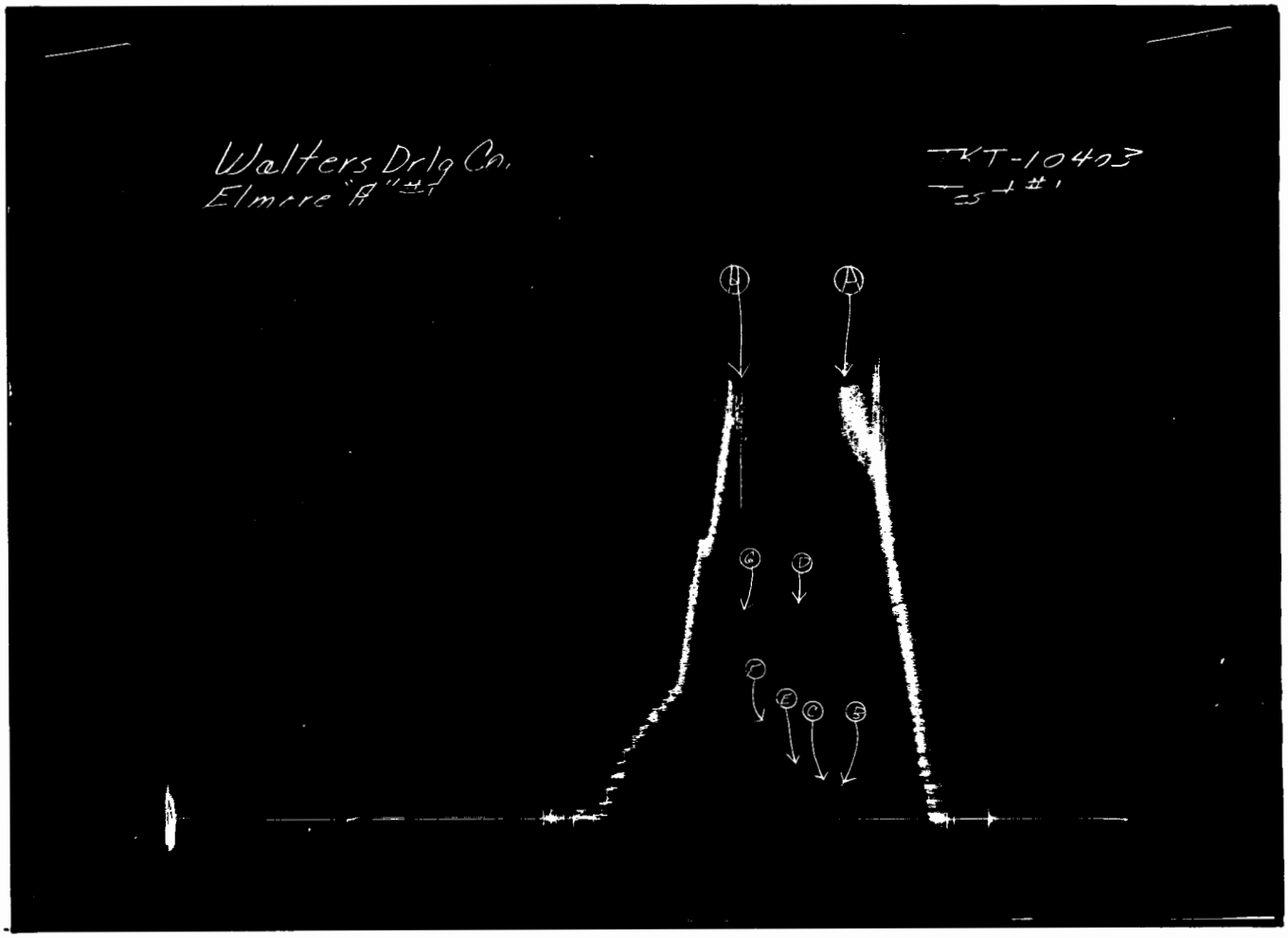
Point Minutes	Press.
0	166
3	989
6	1053
9	1082
12	1101
15	1113
18	1122
20	1128

Second Flow Pressure
Breakdown: 4 Inc.
of 5 20 mins. and a
final inc. of -- Min.

Point Minutes	Press.
0	226
5	280
10	368
15	445
20	497

Final Shut-In
Breakdown: 4 Inc.
of 5 mins. and a
final inc. of -- Min.

Point Minutes	Press.
0	497
3	952
6	1002
9	1033
12	1055
15	1072
18	1080
20	1091



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2209	2209	PSI
(B)	First Initial Flow Pressure	156	166	PSI
(C)	First Final Flow Pressure	166	166	PSI
(D)	Initial Closed-in Pressure	1122	1128	PSI
(E)	Second Initial Flow Pressure	239	226	PSI
(F)	Second Final Flow Pressure	500	497	PSI
(G)	Final Closed-in Pressure	1091	1091	PSI
(H)	Final Hydrostatic Mud	2188	2188	PSI

WESTERN TESTERS

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

Company Walters Drlg. Co. Lease & Well No. Elmore A#1

Elevation 2322 Kelly Bushings Formation Cherokee Effective Pay 7 Ft. Ticket No. 10404

Date 12-12-67 Sec. 22 Twp. 16s Range 21w County Ness State Kansas

Test Approved by Don Beauchamp Western Representative Dean Blagrave

Formation Test No. 2 O.K. X Misrun Interval Tested From 4216' to 4223' Total Depth 4223'

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

Packer Depth 4211 Ft. Size 6 3/4 Packer Depth 4216 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 7 Ft. Size 5½"OD

RECORDERS Depth 4205 Ft. Clock No. 8475 Depth 4219 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 4139 A. M

Tool Open I.F.P. From 4:41 M. to 4:51 AM. Hr. 10 Min. From (B) 37 P.S.I. To (C) 72 P.S.I.

Tool Closed I.C.I.P. From 4:51 M. to 5:11 AM. Hr. 20 Min. (D) 1140 P.S.I.

Tool Open F.F.P. From 5:11 M. to 5:56 AM. Hr. 45 Min. From (E) 106 P.S.I. To (F) 307 P.S.I.

Tool Closed F.C.I.P. From 5:56 M. to 6:26 AM. Hr. 30 Min. (G) 1138 P.S.I.

Initial Hydrostatic Pressure (A) 2196 P.S.I. Final Hydrostatic Pressure (H) 2186 P.S.I.

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

BLOW Good throughout. Bottom Choke Size 3/4 In.

Did Well Flow Yes X No Recovery Total Ft. 640 feet muddy salt water.

Reversed Out Yes No Mud Type starch Viscosity 52 Weight 10 Water Loss 7.2 cc. Maximum Temp. 119 °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 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe none ft. I.D. Weight Pipe - in. Length Drill Collars none ft.

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

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 12-12-67 Test Ticket No. 10404

Recorder No. 2606 Capacity 4150 Location 4205 Ft.

Clock No. 8475 Elevation 2322 Kelly Bushings Well Temperature 119 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2196 P.S.I.	Opened Tool	4:39 A. M	
B First Initial Flow Pressure	37 P.S.I.	First Flow Pressure	10 Mins.	10 Mins.
C First Final Flow Pressure	72 P.S.I.	Initial Closed-in Pressure	20 Mins.	22 Mins.
D Initial Closed-in Pressure	1140 P.S.I.	Second Flow Pressure	45 Mins.	43 Mins.
E Second Initial Flow Pressure	106 P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F Second Final Flow Pressure	307 P.S.I.			
G Final Closed-in Pressure	1138 P.S.I.			
H Final Hydrostatic Mud	2186 P.S.I.			

PRESSURE BREAKDOWN

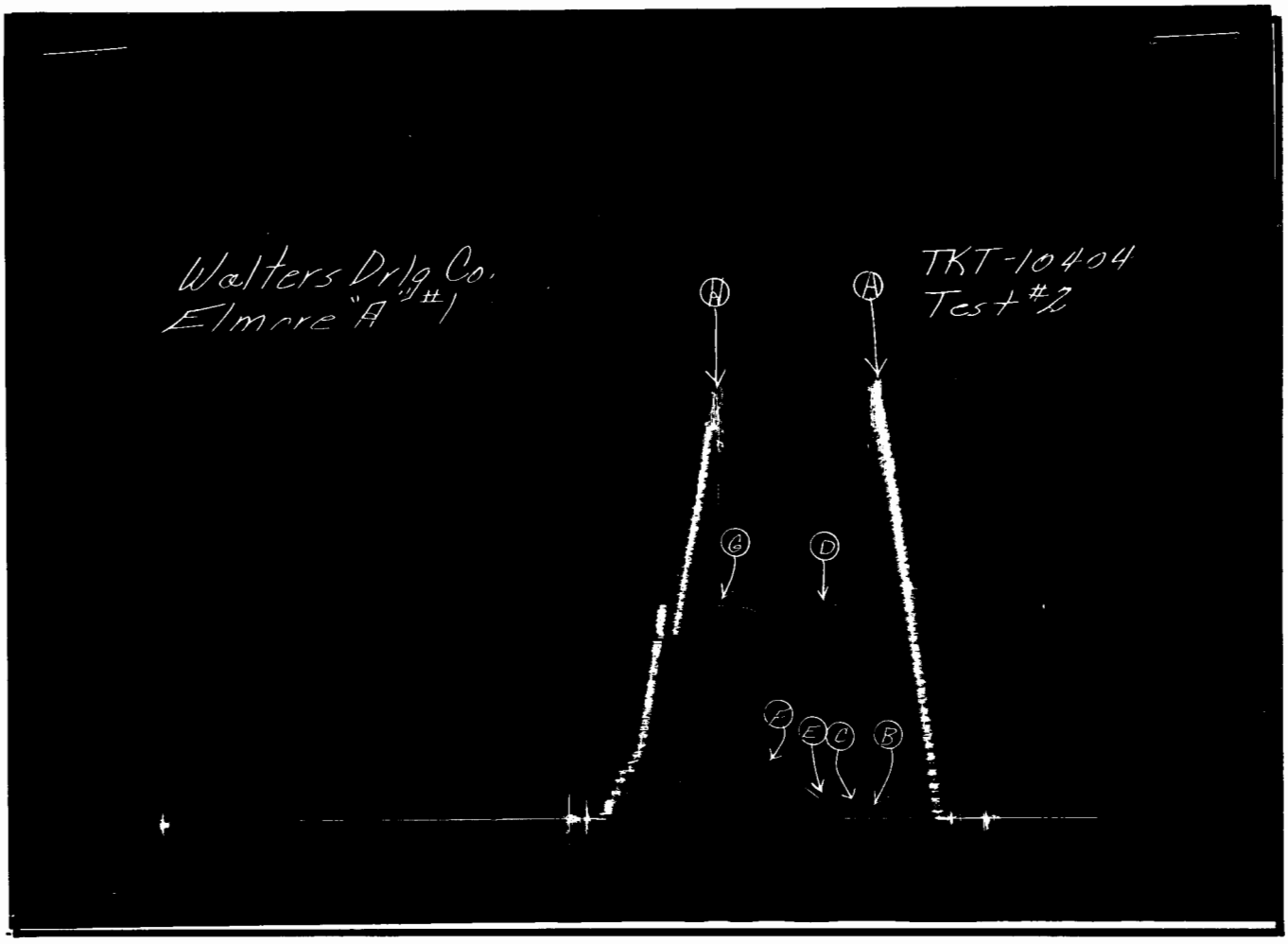
First Flow Press. Breakdown: 2 Inc. of 5 mins. and a final inc. of -- Min.

Initial Shut-In Breakdown: 7 Inc. of 3 mins. and a final inc. of 1 Min.

Second Flow Pressure Breakdown: 8 Inc. of 5 mins. and a final inc. of 3 Min.

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

	First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	0	37	0	72	0	106	0	307
P 2	5	47	3	736	5	110	3	885
P 3	10	72	6	1039	10	139	6	1079
P 4			9	1111	15	170	9	1107
P 5			12	1128	20	197	12	1117
P 6			15	1134	25	224	15	1124
P 7			18	1138	30	249	18	1128
P 8			21	1140	35	276	21	1132
P 9			22	1140	40	295	24	1134
P10					43	307	27	1136
P11							30	1138
P12								
P13								
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	2198	2196	PSI
(B)	First Initial Flow Pressure	31	37	PSI
(C)	First Final Flow Pressure	72	72	PSI
(D)	Initial Closed-in Pressure	1142	1140	PSI
(E)	Second Initial Flow Pressure	104	106	PSI
(F)	Second Final Flow Pressure	312	307	PSI
(G)	Final Closed-in Pressure	1142	1138	PSI
(H)	Final Hydrostatic Mud	2188	2186	PSI

2 SW NE