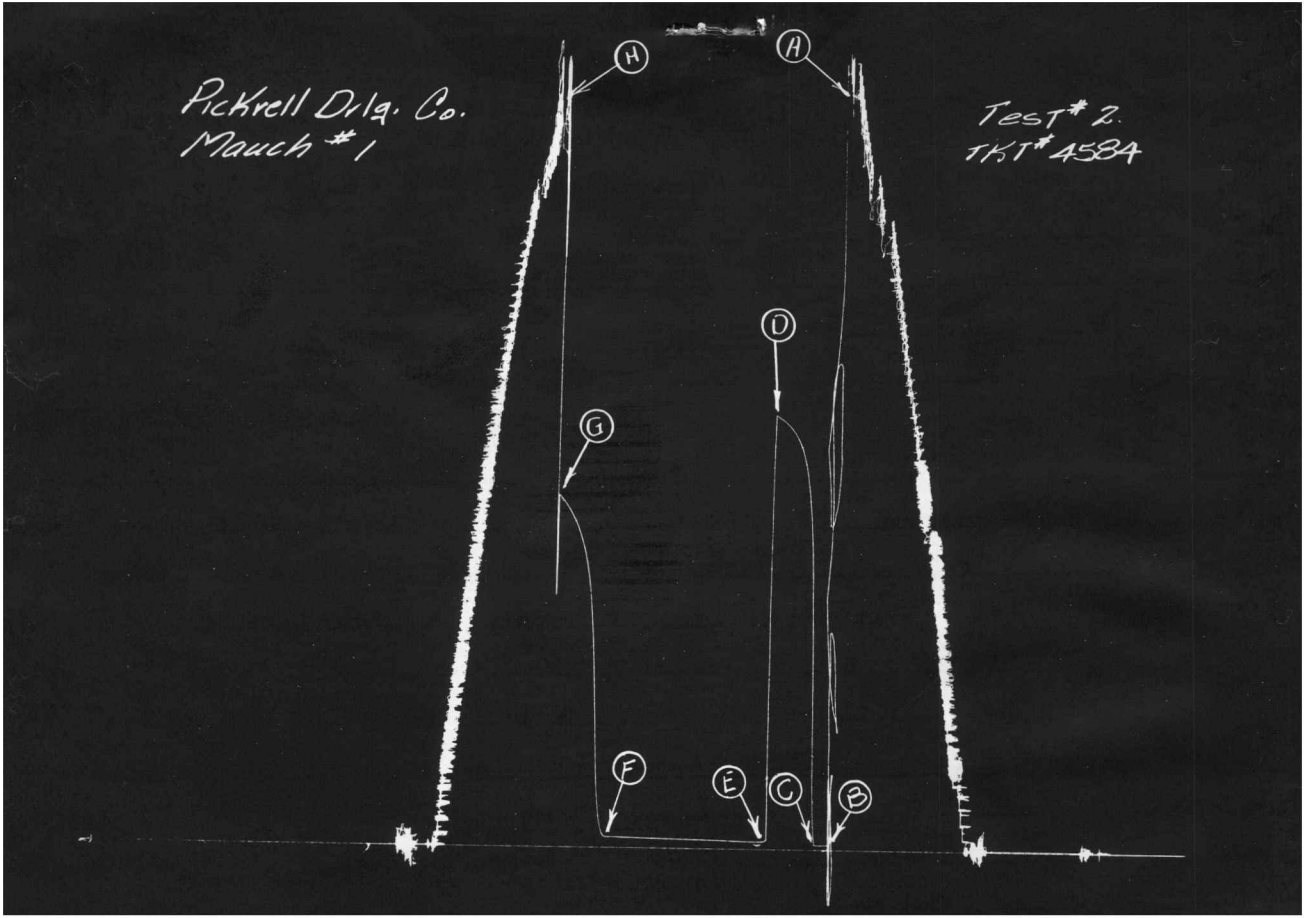

Pickrell Drlg. Co.
Mauch #1
Test # 2.
TKT # 4584
H
A
D
G
F
E
C
B

Home Office: Great Bend, Kansas

P. O. Box 793 SWift 3-7903

Company Pickrell Drilling Company Lease & Well No. Mauch #1

Elevation 2280 ? Formation Mississippi Ticket Number 4583

Date Nov. 12, 1965 Sec. 16 Twp. 20 Range 23 County Ness State Kansas

Test Approved by Dan Bowles Western Representative Ernest Luckert

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Formation Test No. 1 O.K. x Misrun ____ Interval Tested From 4411' to 4425' Total Depth 4425'

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

Packer Depth 4411 Ft. Size 6 3/4 Packer Depth 4406' Ft. Size 6 3/4

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

Packer Depth ____ Ft. Size ____

Tool Size 5½ OD Tool Jt. Size 4½ FH Anchor Length 14 Ft. Size 5½ OD

RECORDERS Depth 4414 Ft. Clock No. 6774 Depth 4417= Ft. Clock No. 149

Top Make Kuster Cap. 3150 No. 1563 Inside ~~Outside~~ Bottom Make Western Cap. 4000 No. 58 ~~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 ____ M

Tool Open I.F.P. From 7:50 M to 7:57 M Hr. 7 Min. From (B) 20 P.S.I. To (C) 20 P.S.I.

Tool Closed I.C.I.P. From 7:57 M. to 8:27 M. Hr. 30 Min. (D) 1344 P.S.I.

Tool Open F.F.P. From 8:27 M. to 9:57 M. 1 Hr. 30 Min. From (E) 29 P.S.I. To (F) 48 P.S.I.

Tool Closed F.C.I.P. From 9:57 M. to 10:27 M. Hr. 30 Min. (G) 921 P.S.I.

Initial Hydrostatic Pressure (A) 2444 P.S.I. Final Hydrostatic Pressure (H) 2423 P.S.I.

SURFACE INFORMATION	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
	1/2 In.		M.	
			M.	
			M.	

BLOW Very weak for fifty minutes. Intermittently for fifteen minutes. Bottom Choke Size 3/4 In.

Did Well Flow ____ Yes x No Recovery Total Ft. 2' free oil on top fluid

63' oil cut mud Mud

Reversed Out ____ Yes x No Mud Type starch Viscosity 44 Weight 10.1 Maximum Temp. 117 °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 3372 ft. I.D. Drill Pipe 3.7 in Length Weight Pipe 1020 ft. I.D. Weight Pipe 2.6 in. Length Drill Collars ____ ft.

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

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date November 12, 1965 — Test Ticket No. 4583

Recorder No. 1563 — Capacity 3150 — Location 4414 Ft.

Clock No. 6774 — Elevation 2280? — Well Temperature 117 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2444 P.S.I.	Opened Tool	7:48 AM	
B First Initial Flow Pressure	20 P.S.I.	First Flow Pressure	7 Mins.	7 Mins.
C First Final Flow Pressure	20 P.S.I.	Initial Closed-in Pressure	30 Mins.	29 Mins.
D Initial Closed-in Pressure	1344 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	29 P.S.I.	Final Closed-in Pressure	30 Mins.	27 Mins.
F Second Final Flow Pressure	48 P.S.I.			
G Final Closed-in Pressure	921 P.S.I.			
H Final Hydrostatic Mud	2423 P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.
Breakdown: 1 Inc. of 5 mins. and a final inc. of 2 Min.

Point Mins.	Press.
P 1 0	20
P 2 5	2-
P 3 7	20
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: 9 Inc. of 3 mins. and a final inc. of 0 Min.

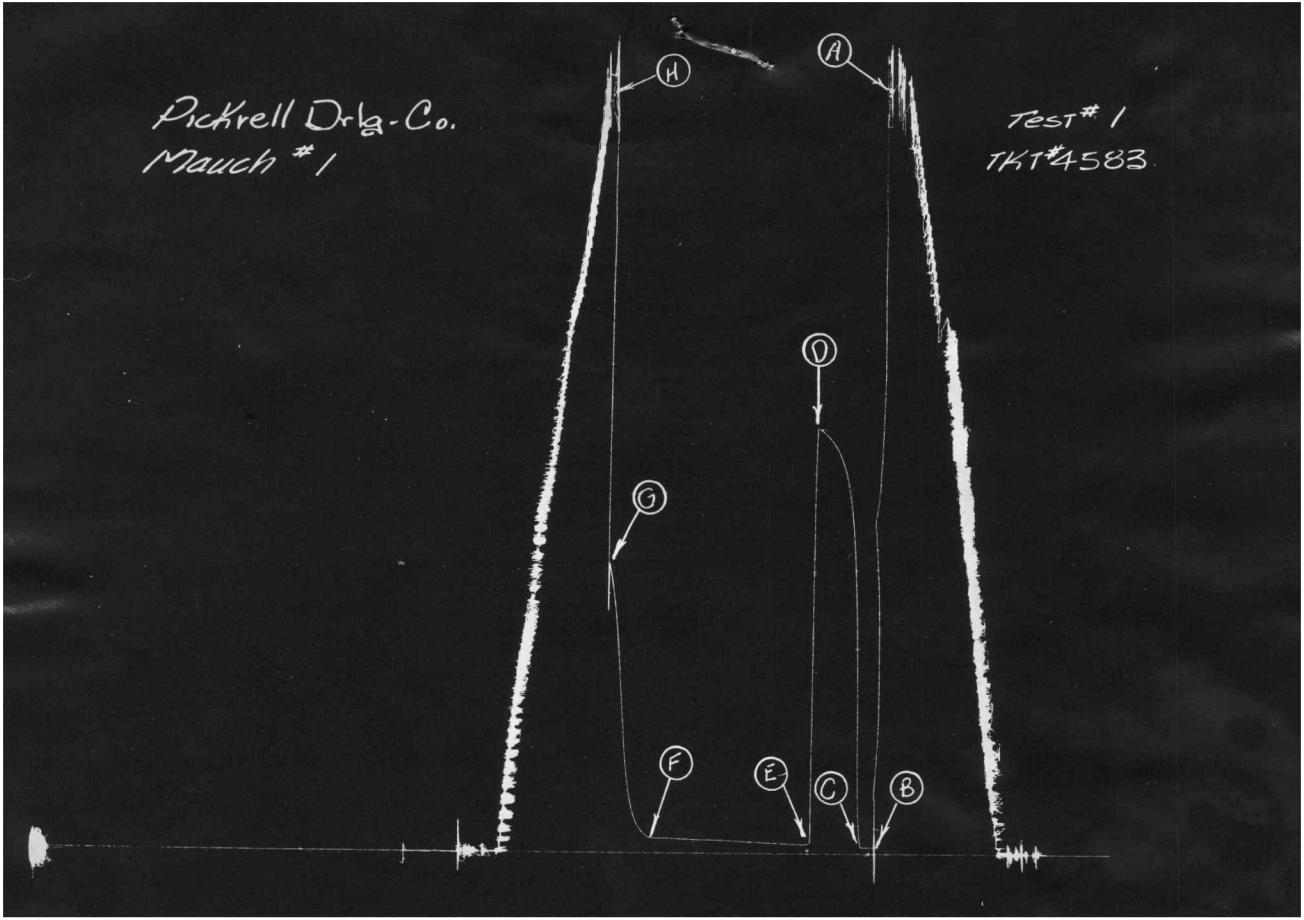
Point Minutes	Press.
0	20
3	431
6	1036
9	1148
12	1225
15	1270
18	1298
21	1316
24	1330
27	1344

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

Point Minutes	Press.
0	29
5	30
10	31
15	32
20	33
25	34
30	35
35	37
40	39
45	40
50	41
55	42
60	43
65	44
70	45
75	46
80	46
85	47
90	48

Final Shut-In
Breakdown: 9 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	48
3	57
6	74
9	102
12	156
15	275
18	464
21	657
24	822
27	921


Pickrell Drlg. Co.
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Home Office: Great Bend, Kansas

P. O. Box 793 SWift 3-7903

Company Pickrell Drilling Company Lease & Well No. Mauch #1

Elevation 2280 ? Formation Mississippi Ticket Number 4584

Date Nov.12,1965 Sec. 16 Twp. 20 Range 23 County Ness State Kansas

Test Approved by Dan Bowles Western Representative Ernest Luckert

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Formation Test No. 2 O.K. X Misrun ____ Interval Tested From 4425' to 4435' Total Depth 4435'

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

Packer Depth 4425 Ft. Size 6 3/4 Packer Depth 4420 Ft. Size 6 3/4

Straddle ____ Yes ____ 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 4428 Ft. Clock No. 6774 Depth 4431 Ft. Clock No. 147

Top Make Kuster Cap. 3150 No. 1563 Inside Outside Bottom Make Western Cap. 4000 No. 58 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 8:17 P M

Tool Open I.F.P. From 8:20 M to 8:25 M Hr. 5 Min. From (B) 13 P.S.I. To (C) 13 P.S.I.

Tool Closed I.C.I.P. From 8:25 M. to 8:55 M. Hr. 30 Min. (D) 1380 P.S.I.

Tool Open F.F.P. From 8:55 M. to 10:25 M. 1 Hr. 30 Min. From (E) 23 P.S.I. To (F) 33 P.S.I.

Tool Closed F.C.I.P. From 10:25 M. to 10:55 M. Hr. 30 Min. (G) 1120 P.S.I.

Initial Hydrostatic Pressure (A) 2428 P.S.I. Final Hydrostatic Pressure (H) 2407 P.S.I.

SURFACE INFORMATION

Size Choke	Max. Press. P.S.I.	Time	Description of Flow
1/2 In.		M.	
		M.	
		M.	

BLOW Very very weak for 30 minutes, intermitted for remainder of test. Bottom Choke Size 3/4 In.

Did Well Flow ____ Yes X No Recovery Total Ft. 30' mud with a few spots of oil on top of tool

Mud

Reversed Out ____ Yes X No Mud Type starch Viscosity 45 Weight 10.2 Maximum Temp. 118 °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 3386 ft. I.D. Drill Pipe 3.7 in Length Weight Pipe 1020 ft. I.D. Weight Pipe 2.6 in. Length Drill Collars ____ ft.

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

Remarks

WESTERN TESTING CO., INC.

Pressure Data

Date: November 12, 1965 | Test Ticket No.: 4584

Recorder No.: 1563 | Capacity: 3150 | Location: 4428 Ft.

Clock No.: 6774 | Elevation: 2280? | Well Temperature: 118 °F

Point		Pressure		Time Given		Time Computed	
A	Initial Hydrostatic Mud	2428	P.S.I.	Opened Tool	8:17P M		
B	First Initial Flow Pressure	13	P.S.I.	First Flow Pressure	5 Mins.	5	Mins.
C	First Final Flow Pressure	13	P.S.I.	Initial Closed-in Pressure	30 Mins.	27	Mins.
D	Initial Closed-in Pressure	1380	P.S.I.	Second Flow Pressure	90 Mins.	90	Mins.
E	Second Initial Flow Pressure	23	P.S.I.	Final Closed-in Pressure	30 Mins.	29	Mins.
F	Second Final Flow Pressure	33	P.S.I.				
G	Final Closed-in Pressure	1120	P.S.I.				
H	Final Hydrostatic Mud	2407	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: 9 Inc. of 3 mins. and a final inc. of 0 Min.

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

Final Shut-In
Breakdown: 9 Inc. of 3 mins. and a final inc. of 2 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	13	0	13	0	23	0	33
P 2 5	13	3	976	5	23	3	103
P 3		6	1225	10	24	6	412
P 4		9	1270	15	24	9	824
P 5		12	1301	20	25	12	935
P 6		15	1330	25	25	15	995
P 7		18	1349	30	26	18	1037
P 8		21	1361	35	26	21	1069
P 9		24	1376	40	27	24	1093
P10		27	1380	45	27	27	1113
P11				50	28	29	1120
P12				55	28		
P13				60	29		
P14				65	30		
P15				70	30		
P16				75	31		
P17				80	32		
P18				85	32		
P19				90	33		
P20							