15-095-20062

WESTERN

21-29s-8w

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

Company Pickrell Drlg. Co. Lease & Well No. Hageman E#1

Elevation 1648 Kelly Bushing Formation Mississippian Effective Pay Ft. Ticket No. 10049

Date 1-12-68 Sec. 21 Twp. 29s Range 8w County Kingman State Kansas

Test Approved by Dan Bowles Western Representative George Tew

Formation Test No. 1 O.K. x Misrun Interval Tested From 4223' to 4245' Total Depth 4245'

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

Packer Depth 4223 Ft. Size 6 3/4 Packer Depth 4218 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 22 Ft. Size 5½"OD

RECORDERS Depth 4237 Ft. Clock No. 6896 Depth 4240 Ft. Clock No. 6866

Top Make Kuster Cap. 4500 No. 3086 Inside ~~Outside~~ Bottom Make Kuster Cap. 4300 No. 1566 ~~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 1:07 P. M

Tool Open I.F.P. From 1:10 M. to 1:20 P M. Hr. 10 Min. From (B) 92 P.S.I. To (C) 111 P.S.I.

Tool Closed I.C.I.P. From 1:20 M. to 1:50 P M. Hr. 30 Min. (D) 1542 P.S.I.

Tool Open F.F.P. From 1:50 M. to 3:20 P M. 1 Hr. 30 Min. From (E) 137 P.S.I. To (F) 511 P.S.I.

Tool Closed F.C.I.P. From 3:20 M. to 4:20 P M. 1 Hr. -- Min. (G) 1504 P.S.I.

Initial Hydrostatic Pressure (A) 2286 P.S.I. Final Hydrostatic Pressure (H) 2269 P.S.I.

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

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

Did Well Flow Yes x No Recovery Total Ft. 990 feet muddy to slightly muddy salt water with spots of oil.

Reversed Out Yes x No Mud Type starch Viscosity 52 Weight 10.2 Water Loss 8.6 cc. Maximum Temp. 127 °F

Type Circ. Sub. plug Did Tool Plug? no Jars: Size Make Ser. No.

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where?

Length Drill Pipe 3333 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 42 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 1-12-68 Test Ticket No. 10049

Recorder No. 3086 Capacity 4500 Location 4237 Ft.

Clock No. 6896 Elevation 1648 Kelly Bushing Well Temperature 127 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2286 P.S.I.	Opened Tool	1:07 P. M	
B First Initial Flow Pressure	92 P.S.I.	First Flow Pressure	10 Mins.	9 Mins.
C First Final Flow Pressure	111 P.S.I.	Initial Closed-in Pressure	30 Mins.	32 Mins.
D Initial Closed-in Pressure	1542 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	137 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	511 P.S.I.			
G Final Closed-in Pressure	1504 P.S.I.			
H Final Hydrostatic Mud	2269 P.S.I.			

PRESSURE BREAKDOWN

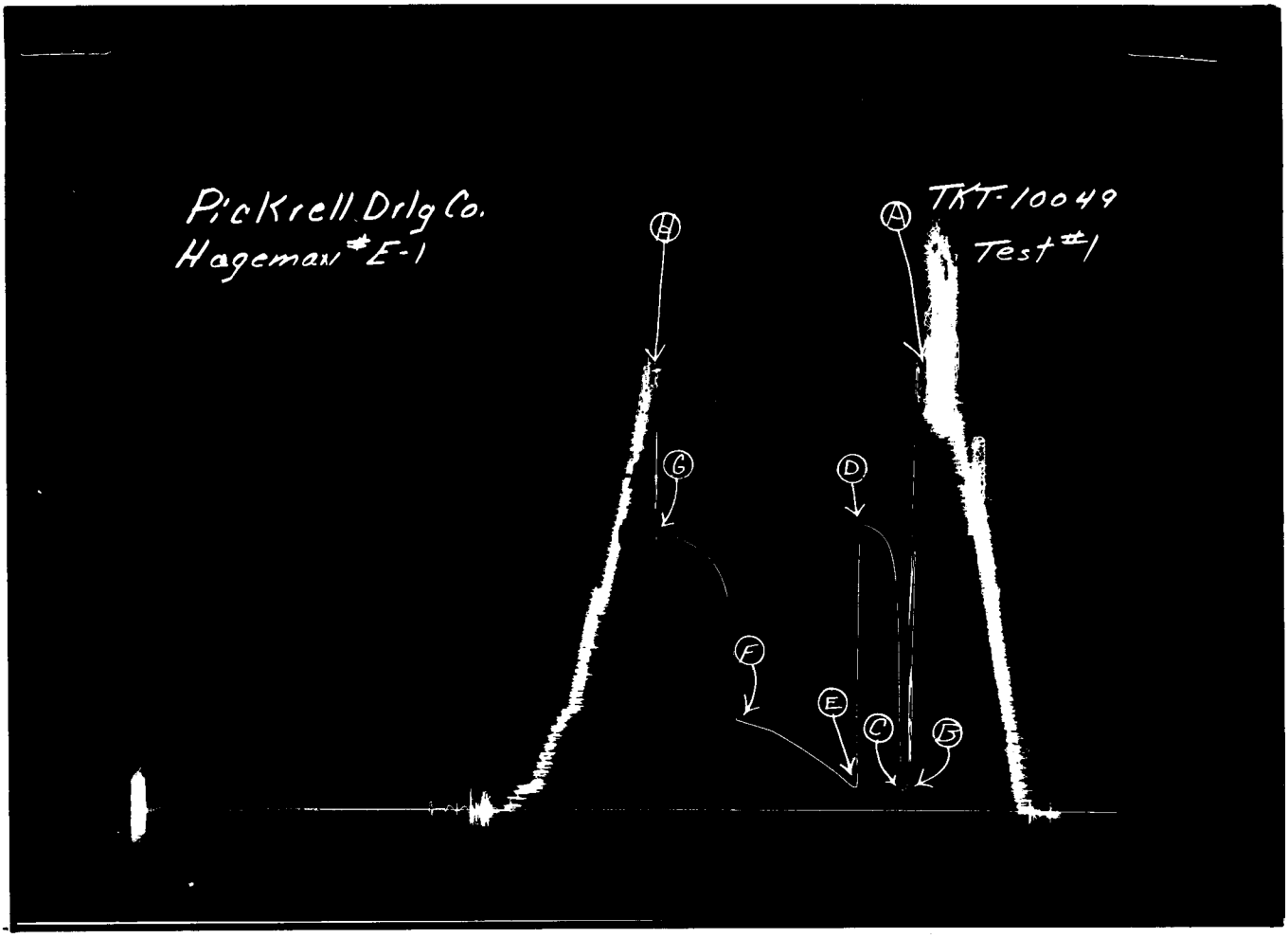
First Flow Press. Breakdown: 1 Inc. of 5 mins. and a final inc. of 4 Min.

Initial Shut-In Breakdown: 10 Inc. of 3 mins. and a final inc. of 2 Min.

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

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

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	92	0	111	0	137	0	511
P 2 5	plugging	3	590	5	156	3	762
P 3 9	111	6	1002	10	196	6	972
P 4		9	1355	15	217	9	1136
P 5		12	1430	20	253	12	1225
P 6		15	1462	25	279	15	1304
P 7		18	1488	30	305	18	1341
P 8		21	1506	35	329	21	1355
P 9		24	1520	40	350	24	1378
P10		27	1532	45	374	27	1399
P11		30	1539	50	398	30	1420
P12		32	1542	55	421	33	1434
P13				60	443	36	1441
P14				65	459	39	1451
P15				70	471	42	1460
P16				75	488	45	1469
P17				80	500	48	1478
P18				85	506	51	1486
P19				90	511	54	1493
P20						57	1502
						60	1504



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2290	2286	PSI
(B)	First Initial Flow Pressure	106	92	PSI
(C)	First Final Flow Pressure	106	111	PSI
(D)	Initial Closed-in Pressure	1555	1542	PSI
(E)	Second Initial Flow Pressure	130	137	PSI
(F)	Second Final Flow Pressure	510	511	PSI
(G)	Final Closed-in Pressure	1497	1504	PSI
(H)	Final Hydrostatic Mud	2280	2269	PSI