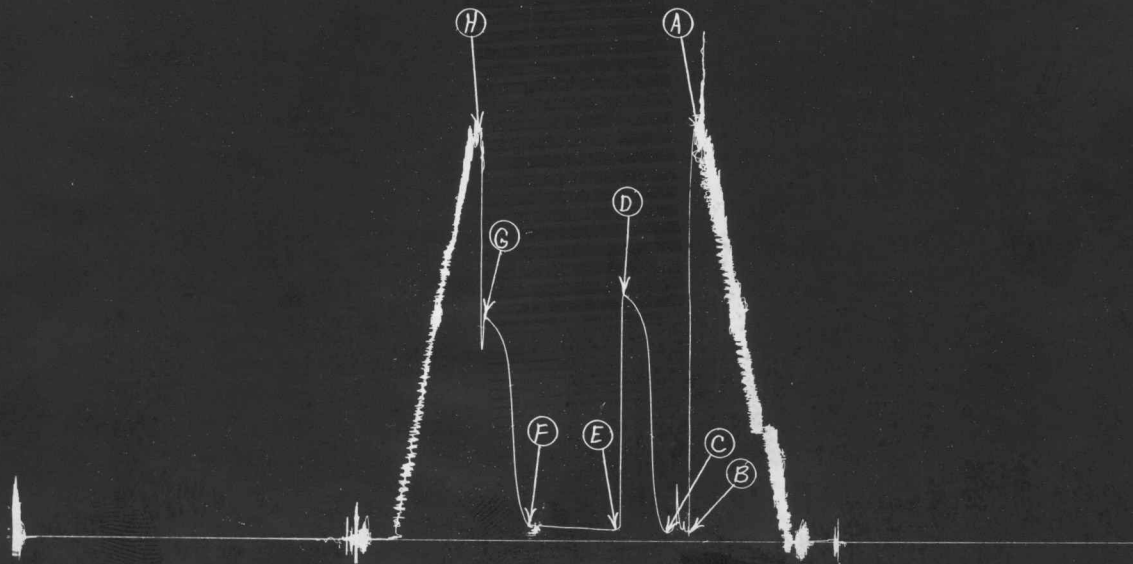


Pickrell DrLg. Co.
Keough #1

TKT#7343
Test#1





Home Office: Great Bend, Kansas
P. O. Box 793 SWift 3-7903

Company **Pickard Drilling Company** Lease & Well No. **Keough #1**
Elevation **2182 Kelly Bushings** Formation **Kansas City** Ticket Number **7343**
Date **Oct. 24, 1966** Sec. **15** Twp. **16s** Range **20w** County **Rush** State **Kansas**
Test Approved by **Harold Steincamp** Western Representative **Kenneth Cheney**

Formation Test No. **1** O.K. ☒ Misrun Interval Tested From **3558'** to **3582'** Total Depth **3582'**
Size Main Hole **7 7/8** Rat Hole Conv. ☒ B.T. ☒ Damaged Yes ☒ No Conv. ☒ B.T. ☒ Damaged Yes ☒ No
Top Packer Depth **3554** Ft. Size **6 3/4** Packer Depth **3558** Ft. Size **6 3/4**
Straddle Yes ☒ No Conv. ☒ B.T. ☒ Damaged Yes ☒ No
Packer Depth ☒ Ft. Size ☒

Tool Size **5 1/2 OD** Tool Jt. Size **4 1/2 FH** Anchor Length **24** Ft. Size **5 1/2 OD**
RECORDERS Depth **3575** Ft. Clock No. **6899** Depth **3577** Ft. Clock No. **8367**
Top Make **Kuster** Cap. **4150** No. **2608** Inside ☒ Outside ☒ Bottom Make **Kuster** Cap. **4200** No. **1558** 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 **8:13 A** M
Tool Open I.F.P. From **8:15** M to **8:30** M Hr. **15** Min. From (B) **22** P.S.I. To (C) **42** P.S.I.
Tool Closed I.C.I.P. From **8:30** M. to **9:00** M. Hr. **30** Min. (D) **1151** P.S.I.
Tool Open F.F.P. From **9:00** M. to **10:00** M. Hr. **1** Min. From (E) **54** P.S.I. To (F) **70** P.S.I.
Tool Closed F.C.I.P. From **10:00** M. to **10:30** M. Hr. **30** Min. (G) **1045** P.S.I.
Initial Hydrostatic Pressure (A) **1970** P.S.I. Final Hydrostatic Pressure (H) **1951** P.S.I.

SURFACE Size Choke **3/8** In. Max. Press. P.S.I. Time Description of Flow
INFORMATION ☒ M. ☒ M. ☒ M.

BLOW **Good.** Bottom Choke Size ☒ In.
Did Well Flow Yes ☒ No Recovery Total Ft. **150' heavy oil and gas cut mud; 510' gas in pipe**

Reversed Out Yes ☒ No Mud Type **starch** Viscosity **40** Weight **10.0** Maximum Temp. **110** °F
EXTRA EQUIPMENT: Dual Packers **yes** Safety Joint Jars: Size Make Ser. No.
Type Circ. Sub. **plug** Did Tool Plug? **no** Where? Did Packer Hold? **yes**
Length Drill Pipe **2593** ft. I.D. Drill Pipe **3.8** in Length Weight Pipe **945** ft. I.D. Weight Pipe **2.7** in Length Drill Collars **44** ft.
I. D. Drill Collars in Length D.S.T. Tool **44** ft.

Remarks

WESTERN TESTING CO., INC.

Pressure Data

Date **October 24, 1966** Recorder No. **2608** Capacity **4150** Test Ticket No. **7343**
 Clock No. **6899** Elevation **2182 Kelly Bushings** Location **3575** Ft.
 Well Temperature **110** °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1970	P.S.I.	8:13A	
B First Initial Flow Pressure	22	P.S.I.	15	15
C First Final Flow Pressure	42	P.S.I.	30	30
D Initial Closed-in Pressure	1151	P.S.I.	60	60
E Second Initial Flow Pressure	54	P.S.I.	30	30
F Second Final Flow Pressure	70	P.S.I.		
G Final Closed-in Pressure	1045	P.S.I.		
H Final Hydrostatic Mud	1951	P.S.I.		

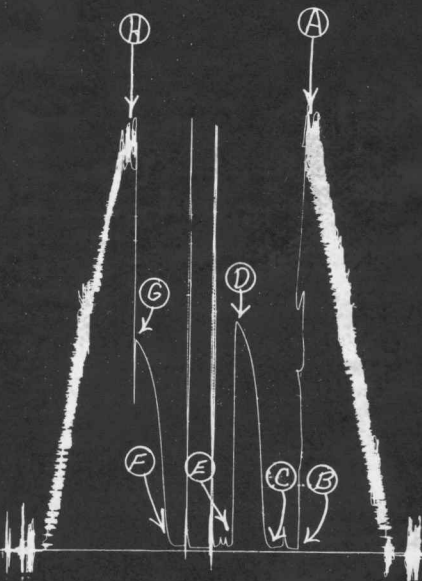
Opened Tool
 First Flow Pressure
 Initial Closed-in Pressure
 Second Flow Pressure
 Final Closed-in Pressure

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 3 Inc.		Breakdown: 10 Inc.		Breakdown: 12 Inc.		Breakdown: 10 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of ■ Min.		final inc. of ■ Min.		final inc. of ■ Min.		final inc. of ■ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	22	0	42	0	54	0	70
P 2 5	54	3	62	5	54	3	93
P 3 10	43	6	131	10	54	6	162
P 4 15	42	9	295	15	54	9	297
P 5		12	805	20	56	12	565
P 6		15	1012	25	88	15	846
P 7		18	1095	30	60	18	937
P 8		21	1124	35	60	21	981
P 9		24	1138	40	62	24	112
P10		27	1142	45	64	27	1028
P11		30	1151	50	66	30	1045
P12				55	67		
P13				60	70		
P14							
P15							
P16							
P17							
P18							
P19							
P20							

Pickrell Drlg Co.
Keough #B-1

TKT 7344
Test #1





Home Office: Great Bend, Kansas
P. O. Box 793 Swift 3-7903

Company **Pickrell Drilling Company** Lease & Well No. **Keough #B-1**
Elevation **2182 Kelly Bushings** Formation **Kansas City** Ticket Number **7344**
Date **Oct. 24, 1966** Sec. **15** Twp. **16s** Range **20w** County **Rush** State **Kansas**
Test Approved by **Harold Steincamp** Western Representative **Kenneth Cheney**

Formation Test No. **2** O.K. ☒ Misrun Interval Tested From **3604'** to **3622'** Total Depth **3622'**
Size Main Hole **7 7/8** Rat Hole Conv. ☒ B.T. ☒ Damaged Yes ☒ No Conv. ☒ B.T. ☒ Damaged Yes ☒ No
Top Packer Depth **3600** Ft. Size **6 3/4** Packer Depth **3604** Ft. Size **6 3/4**
Straddle Yes ☒ No Conv. ☒ B.T. ☒ Damaged Yes ☒ No

Packer Depth _____ Ft. Size _____
Tool Size **5 1/2 OD** Tool Jt. Size **4 1/2 FH** Anchor Length **18** Ft. Size **5 1/2 OD**

RECORDERS Depth **3597** Ft. Clock No. **6899** Depth **3600** Ft. Clock No. **8376**
Top Make **Kuster** Cap. **4150** No. **2608** Inside **Kuster** Cap. **4200** No. **1558** Inside

Below Straddle: Depth _____ Clock No. _____ Inside _____
Top Make _____ Cap. _____ No. _____ Outside _____

Time Set Packer **9:18 P** M

Tool Open I.F.P. From **9:20** M to **9:35** M Hr. **15** Min. From (B) **14** P.S.I. To (C) **18** P.S.I.

Tool Closed I.C.I.P. From **9:35** M. to **10:05** M. Hr. **30** Min. (D) **1076** P.S.I.

Tool Open F.F.P. From **10:05** M. to **10:35** M. Hr. **30** Min. From (E) **18** P.S.I. To (F) **22** P.S.I.

Tool Closed F.C.I.P. From **10:35** M. to **11:05** M. Hr. **30** Min. (G) **987** P.S.I.

Initial Hydrostatic Pressure (A) **1981** P.S.I. Final Hydrostatic Pressure (H) **1960** P.S.I.

SURFACE Size Choke **3/8** In. Max. Press. P.S.I. Time Description of Flow

INFORMATION _____ M. _____

_____ M. _____

_____ M. _____

BLOW **WEak for ten minutes.** Bottom Choke Size **3/4** In.

Did Well Flow Yes ☒ No Recovery Total Ft. **20' mud with spots of oil**

_____ Mud

Reversed Out Yes ☒ No Mud Type **starch** Viscosity **43** Weight **10.0** Maximum Temp. **106** °F

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

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

Length Drill Pipe **2632** ft. I.D. Drill Pipe **3.8** in Length Weight Pipe **945** ft. I.D. Weight Pipe **2.7** in Length Drill Collars _____ ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool **45** ft.

Remarks **Flushed tool twice.**

WESTERN TESTING CO., INC.

Pressure Data

October 24, 1966

7844

Date

Test Ticket No.

Recorder No. 2608

Capacity 4150

Location 3597 Ft.

Clock No. 6899

Elevation 2182 Kelly Bushings

Well Temperature 106 °F

Point

Pressure

Time Given

Time Computed

A Initial Hydrostatic Mud 1981 P.S.I.
 B First Initial Flow Pressure 14 P.S.I.
 C First Final Flow Pressure 18 P.S.I.
 D Initial Closed-in Pressure 1076 P.S.I.
 E Second Initial Flow Pressure 18 P.S.I.
 F Second Final Flow Pressure 22 P.S.I.
 G Final Closed-in Pressure 987 P.S.I.
 H Final Hydrostatic Mud 1960 P.S.I.

Opened Tool 9:18 P M
 First Flow Pressure 15 Mins. 15 Mins.
 Initial Closed-in Pressure 30 Mins. 29 Mins.
 Second Flow Pressure 30 Mins. 30 Mins.
 Final Closed-in Pressure 30 Mins. 30 Mins.

PRESSURE BREAKDOWN

First Flow Press.

Breakdown: 3 Inc.
 of 5 mins. and a
 final inc. of 1 Min.

Initial Shut-In

Breakdown: 9 Inc.
 of 3 mins. and a
 final inc. of 2 Min.

Second Flow Pressure

Breakdown: 6 Inc.
 of 5 mins. and a
 final inc. of 1 Min.

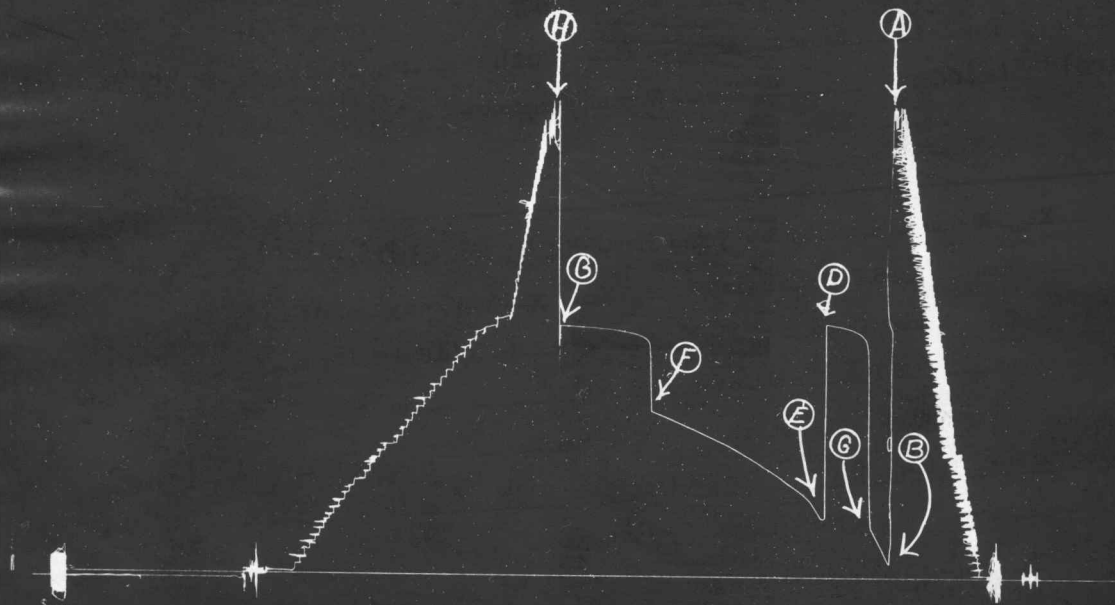
Final Shut-In

Breakdown: 10 Inc.
 of 3 mins. and a
 final inc. of 1 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	14	0	18	0	18	0	22
P 2 5	14	3	45	5	30	3	30
P 3 10	22	6	235	10	20	6	104
P 4 15	18	9	510	15	14	9	274
P 5		12	714	20	14	12	495
P 6		15	861	25	14	15	670
P 7		18	960	30	22	18	786
P 8		21	1016			21	861
P 9		24	1047			24	919
P10		27	1066			27	954
P11		29	1076			30	987
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

Pickrell Drlg Co.
Keough-B-1

TKT-6731
Test #3





Home Office: Great Bend, Kansas
P. O. Box 793 SWift 3-7903

Company Pickrell Drilling Company Lease & Well No. Keough #B-1
Elevation 2185 Kelly Bushings Formation Cherokee Sand Ticket Number 6731
Date Oct. 27, 1966 Sec. 15 Twp. 16 Range 20 County Rush State Kansas
Test Approved by Harold Steincamp Western Representative Dean Blagrove

Formation Test No. 3 O.K. ☒ Misrun ☐ Interval Tested From 3905' to 3923' Total Depth 3923'
Size Main Hole 7 7/8 Rat Hole Conv. B.T. ☒ Damaged Yes ☒ No Conv. ☒ B.T. Damaged Yes ☒ No
Packer Depth 3900 Ft. Size 6 3/4 Packer Depth 3905 Ft. Size 6 3/4
Straddle Yes ☒ No Conv. B.T. Damaged Yes No
Packer Depth Ft. Size

Tool Size 5 1/2 OD Tool Jt. Size 4 1/2 FH Anchor Length 18 Ft. Size 5 1/2 OD
RECORDERS Depth 3914 Ft. Clock No. 6894 Depth 3917 Ft. Clock No. 5665
Top Make Amerada Cap. 4400 No. 2603 Inside Bottom Make Kuster Cap. 4200 No. 1559 Outside
Below Straddle: Depth Clock No. Inside Depth Ft. Clock No. Inside
Top Make Cap. No. Outside Bottom Make Cap. No. Outside

Time Set Packer 12:03P M
Tool Open I.F.P. From 12:05 M to 12:20 M Hr. 15 Min. From (B) 86 P.S.I. To (C) 238 P.S.I.
Tool Closed I.C.I.P. From 12:20 M. to 12:50 M. Hr. 30 Min. (D) 1205 P.S.I.
Tool Open F.F.P. From 12:50P M. to 2:50A M. 2 Hr. Min. From (E) 292 P.S.I. To (F) 792 P.S.I.
Tool Closed F.C.I.P. From 2:50A M. to 3:50A M. 1 Hr. Min. (G) 1191 P.S.I.
Initial Hydrostatic Pressure (A) 2187 P.S.I. Final Hydrostatic Pressure (H) 2144 P.S.I.

SURFACE Size Choke 3/8 In. Max. Press. P.S.I. Time Description of Flow
INFORMATION M.
 M.
 M.

BLOW Strong throughout. Bottom Choke Size 3/4 In.
Did Well Flow Yes ☒ No Recovery Total Ft. 575' gas in pipe:1400' clean oil:725' muddy oil

Reversed Out Yes ☒ No Mud Type starch Viscosity 53 Weight 9.9 Maximum Temp. 118 °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 3.8 ft. I.D. Drill Pipe 1063 in Length Weight Pipe 2.7 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars none ft.
I. D. Drill Collars 36 in. Length D.S.T. Tool 36 ft.

Remarks

WESTERN TESTING CO., INC.

Pressure Data

Date **October 27, 1966**

Recorder No. **2603**

Capacity **4400**

Test Ticket No. **6731**

Clock No. **6894**

Elevation **2185 Kelly Bushings**

Location **3914** Ft.

Well Temperature **118** °F

Point	Pressure
A Initial Hydrostatic Mud	2187 P.S.I.
B First Initial Flow Pressure	86 P.S.I.
C First Final Flow Pressure	238 P.S.I.
D Initial Closed-in Pressure	1205 P.S.I.
E Second Initial Flow Pressure	292 P.S.I.
F Second Final Flow Pressure	792 P.S.I.
G Final Closed-in Pressure	1191 P.S.I.
H Final Hydrostatic Mud	2144 P.S.I.

Opened Tool

First Flow Pressure

Initial Closed-in Pressure

Second Flow Pressure

Final Closed-in Pressure

Time Given	Time Computed
12:05 P	14 Mins.
15 Mins.	32 Mins.
30 Mins.	120 Mins.
120 Mins.	60 Mins.

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 2 Inc.		Breakdown: 10 Inc.		Breakdown: 24 Inc.		Breakdown: 20 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 4 Min.		final inc. of 2 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	86	0	238	0	292	0	792
P 2 5	129	3	1037	5	316	3	1122
P 3 10	198	6	1133	10	363	6	1139
P 4 14	238	9	1155	15	401	9	1151
P 5		12	1171	20	431	12	1157
P 6		15	1177	25	453	15	1162
P 7		18	1186	30	479	18	1166
P 8		21	1193	35	504	21	1169
P 9		24	1196	40	524	24	1172
P 10		27	1199	45	548	27	1175
P 11		30	1202	50	568	30	1178
P 12		32	1205	55	591	33	1180
P 13				60	606	36	1181
P 14				65	623	39	1183
P 15				70	641	42	1185
P 16				75	659	45	1186
P 17				80	679	48	1188
P 18				85	697	51	1190
P 19				90	712	54	1190
P 20				95	727	57	1191
				100	738	60	1191
				105	751		
				110	769		
				115	781		
				120	792		