

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

Company Mercury Drilling Company Lease & Well No. Hayes #1
Elevation Not Available Ticket Number 3037
Date 3-17-63 Sec. 1 Twp. 28S Range 10W County Kingman State Kansas
Test Approved by Bill Iversen Western Representative Guy M. Knipe

Formation Test No. 1 O.K. ☒ Misrun Interval Tested From 1566' to 1630' Total Depth 1630'
Size Main Hole 7 7/8" Rat Hole Conv. ☒ B.T. ☒ Damaged Yes ☒ No Conv. ☒ B.T. ☒ Damaged Yes ☒ No
Packer Depth 1563 Ft. Size 6 3/4" Packer Depth 1566 Ft. Size 6 3/4"
Straddle Yes ☒ No ☒ Conv. ☒ B.T. ☒ Damaged Yes ☒ No
Packer Depth 1563 Ft. Size 6 3/4"
Tool Size 5 1/2" OD Tool Jt. Size 4 1/2" FH Anchor Length 64 Ft. Size 4 1/2" OD 31' DP 5 1/2" OD 33' Erf.

RECORDERS Depth 1617 Ft. Clock No. 4763 Depth 1620 Ft. Clock No. 101
Top Make Amerada Cap. 4200# No. 1559 Inside Outside Bottom Make Western Cap. 4000# No. 59 Inside Outside
Below Straddle: Depth 1617 Clock No. 4763 Inside Outside Depth 1620 Ft. Clock No. 101 Inside Outside
Top Make Amerada Cap. 4200# No. 1559 Inside Outside Bottom Make Western Cap. 4000# No. 59 Inside Outside

Time Set Packer 1:36 P M
Tool Open I.F.P. From 1:40P M to 1:45P M - Hr. 5 Min. From (B) 52 P.S.I. To (C) 52 P.S.I.
Tool Closed I.C.I.P. From 1:45P M. to 2:15P M. - Hr. 30 Min. (D) 127 P.S.I.
Tool Open F.F.P. From 2:15P M. to 3:15P M. 1 Hr. - Min. From (E) 54 P.S.I. To (F) 60 P.S.I.
Tool Closed F.C.I.P. From 3:15P M. to 3:45P M. - Hr. 30 Min. (G) 103 P.S.I.
Initial Hydrostatic Pressure (A) 845 P.S.I. Final Hydrostatic Pressure (H) 834 P.S.I.

SURFACE Size Choke 3/4 In. Max. Press. P.S.I. Time Description of Flow
INFORMATION Weak blow 9 mins. - died - Flushed tool - Weak blow 2 mins. Bottom Choke Size 3/4 in.

BLOW Weak blow 9 mins. - died - Flushed tool - Weak blow 2 mins. Bottom Choke Size 3/4 in.
Did Well Flow Yes ☒ No Recovery Total Ft. 25' Watery Mud

Reversed Out Yes ☒ No Mud Type Starch Viscosity 38 Weight 10.3 Maximum Temp. 80 °F
EXTRA EQUIPMENT: Dual Packers Yes Safety Joint Yes Jars: Size 4 1/2" OD Make Bowen Ser. No. 192
Type Circ. Sub. Plug Did Tool Plug? No Where? Yes Did Packer Hold? Yes
Length Drill Pipe 311 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 1227 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars 91.90 ft. I. D. Drill Collars 31' D.P. in anchor

Remarks

WESTERN TESTING CO., INC.

Pressure Data

Date 3-17-64 Test Ticket No. 3037
 Recorder No. 1559 Capacity 4200# Location 1617 Ft.
 Clock No. 4763 Elevation Not Available Well Temperature 80 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>845</u> P.S.I.	Opened Tool	<u>1:36 P</u>	<u>1:36 PM</u>
B First Initial Flow Pressure	<u>52</u> P.S.I.	First Flow Pressure	<u>5</u> Mins.	<u>5</u> Mins.
C First Final Flow Pressure	<u>52</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>127</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>54</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
F Second Final Flow Pressure	<u>60</u> P.S.I.			
G Final Closed-in Pressure	<u>103</u> P.S.I.			
H Final Hydrostatic Mud	<u>834</u> P.S.I.			

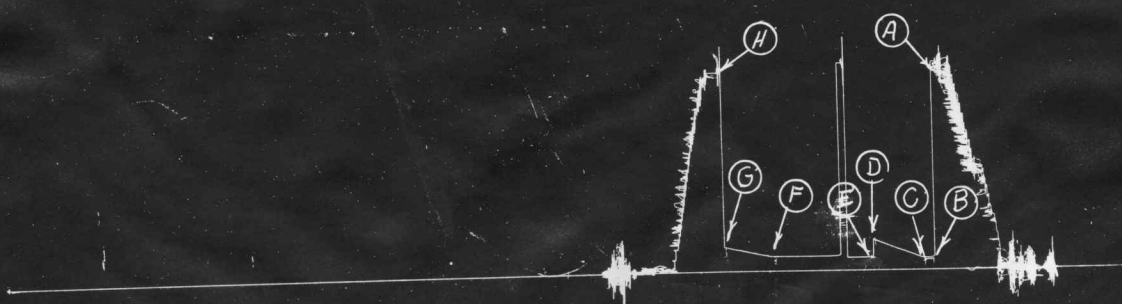
PRESSURE BREAKDOWN

First Flow Press. Breakdown: 1 Inc. of 5 mins. and a final inc. of - Min.
Initial Shut-In Breakdown: 10 Inc. of 3 mins. and a final inc. of - Min.
Second Flow Pressure Breakdown: 12 Inc. of 5 mins. and a final inc. of - Min.
Final Shut-In Breakdown: 9 Inc. of 3 mins. and a final inc. of - Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>52</u>	<u>0</u>	<u>52</u>	<u>0</u>	<u>54</u>	<u>0</u>	<u>60</u>
P 2 <u>5</u>	<u>52</u>	<u>3</u>	<u>56</u>	<u>5</u>	<u>54</u>	<u>3</u>	<u>62</u>
P 3		<u>6</u>	<u>66</u>	<u>10</u>	<u>54</u>	<u>6</u>	<u>68</u>
P 4		<u>9</u>	<u>75</u>	<u>15</u>	<u>54</u>	<u>9</u>	<u>73</u>
P 5		<u>12</u>	<u>83</u>	<u>20</u>	<u>54</u>	<u>12</u>	<u>79</u>
P 6		<u>15</u>	<u>89</u>	<u>25</u>	<u>60</u>	<u>15</u>	<u>85</u>
P 7		<u>18</u>	<u>98</u>	<u>30</u>	<u>60</u>	<u>18</u>	<u>91</u>
P 8		<u>21</u>	<u>106</u>	<u>35</u>	<u>60</u>	<u>21</u>	<u>96</u>
P 9		<u>24</u>	<u>114</u>	<u>40</u>	<u>60</u>	<u>24</u>	<u>99</u>
P10		<u>27</u>	<u>123</u>	<u>45</u>	<u>60</u>	<u>27</u>	<u>103</u>
P11		<u>30</u>	<u>127</u>	<u>50</u>	<u>60</u>		
P12				<u>55</u>	<u>60</u>		
P13				<u>60</u>	<u>60</u>		
P14							
P15							
P16							
P17							
P18							
P19							
P20							

Mercury Drilg. Co.
Hayes #1

TEST #1
TKT #3037



This is an actual photograph of recorder chart.

POINT

PRESSURE

(A) Initial Hydrostatic Mud	845	PSI
(B) First Initial Flow Pressure	52	PSI
(C) First Final Flow Pressure	52	PSI
(D) Initial Closed-in Pressure	127	PSI
(E) Second Initial Flow Pressure	54	PSI
(F) Second Final Flow Pressure	60	PSI
(G) Final Closed-in Pressure	103	PSI
(H) Final Hydrostatic Mud	834	PSI