



Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Rex & Morris Drilling Co. Lease & Well No. Helen #1
Elevation 1510 Rotary Bush. (est.) Formation Bartlesville Effective Pay - Ft. Ticket No. 24601
Date 4-29-77 Sec. 2 Twp. 27S Range 7E County Butler State Kansas
Test Approved by Joseph E. Moreland, Jr. Western Representative Bill Baker
Formation Test No. 1 O.K. X Misrun - Interval Tested From 2677' to 2690' Total Depth 2690'
Size Main Hole 7 7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No
Top Packer Depth 2672 Ft. Size 6 3/4 Bottom Packer Depth 2677 Ft. Size 6 3/4
Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -
Tool Size 5 1/2 OD Tool Joint Size 4 1/2 FH Anchor Length 13 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.
RECORDERS Depth 2683 Ft. Clock No. 10167 Depth 2686 Ft. Clock No. 8474
Top Make Kuster Cap. 4500 No. 3085 Inside Outside = Bottom Make Kuster Cap. 3200 No. 1561 Inside Outside =
Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside
Time Set Packer 5:28A. M
Tool Open I.F.P. From 5:30A M. to 6:00A M. - Hr. 30 Min. From (B) 10 P.S.I. To (C) 10 P.S.I.
Tool Closed I.C.I.P. From 6:00A M. to 6:30A M. - Hr. 30 Min (D) 897 P.S.I.
Tool Open F.F.P. From 6:30A M. to 7:00A M. - Hr. 30 Min. From (E) 33 P.S.I. To (F) 20 P.S.I.
Tool Closed F.C.I.P. From 7:00A M. to 7:30A M. - Hr. 30 Min. (G) 839 P.S.I.
Initial Hydrostatic Pressure (A) 1342 P.S.I. Final Hydrostatic Pressure (H) 1324 P.S.I. Maximum Temp. 108

INFORMATION

BLOW Very weak blow died in 15 minutes.

Did Well Flow - Yes X No Recovery Total Ft. 5' of drilling mud.

Reversed Out. - Yes X No Mud Type Chem Viscosity 58 Weight 9.4 Water Loss 11.2 cc. Chlorides 1500 PPM

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR Triangle Drlg. Co. (#1) Length Drill Pipe? 2600 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In. ^{H-9}

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 90 Ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4 1/2 H-90 In. Length D.S.T. Tool 33 Ft.

Remarks:

WESTERN TESTING CO., INC.

Pressure Data

Date 4-29-77

Test Ticket No. 24601

Recorder No. 3085

Capacity 4500

Location 2683

Clock No. 10167

Elevation 1510 Rotary Bushing (est.)

Well Temperature 108

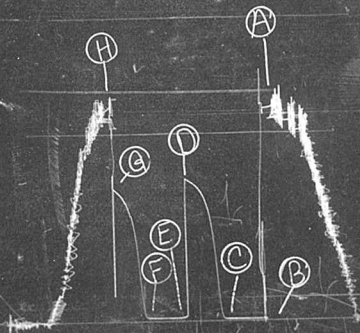
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1342</u> P.S.I.	Open Tool	<u>5:28A.</u> M	
B First Initial Flow Pressure	<u>10</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>10</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>897</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>33</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
F Second Final Flow Pressure	<u>20</u> P.S.I.			
G Final Closed-in Pressure	<u>839</u> P.S.I.			
H Final Hydrostatic Mud	<u>1324</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>9</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>10</u>	<u>0</u>	<u>10</u>	<u>0</u>	<u>33</u>	<u>0</u>	<u>20</u>
P 2 <u>5</u>	<u>10</u>	<u>3</u>	<u>67</u>	<u>5</u>	<u>19</u>	<u>3</u>	<u>79</u>
P 3 <u>10</u>	<u>10</u>	<u>6</u>	<u>337</u>	<u>10</u>	<u>19</u>	<u>6</u>	<u>289</u>
P 4 <u>15</u>	<u>10</u>	<u>9</u>	<u>553</u>	<u>15</u>	<u>20</u>	<u>9</u>	<u>523</u>
P 5 <u>20</u>	<u>10</u>	<u>12</u>	<u>683</u>	<u>20</u>	<u>20</u>	<u>12</u>	<u>655</u>
P 6 <u>25</u>	<u>10</u>	<u>15</u>	<u>767</u>	<u>25</u>	<u>20</u>	<u>15</u>	<u>717</u>
P 7 <u>30</u>	<u>10</u>	<u>18</u>	<u>815</u>	<u>30</u>	<u>20</u>	<u>18</u>	<u>769</u>
P 8		<u>21</u>	<u>846</u>			<u>21</u>	<u>802</u>
P 9		<u>24</u>	<u>870</u>			<u>24</u>	<u>825</u>
P10		<u>27</u>	<u>886</u>			<u>27</u>	<u>839</u>
P11		<u>30</u>	<u>897</u>				
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

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Company Rex & Morris Drilling Co. Lease & Well No. Helen #1
Elevation 1510 Rotary Bush. (est) Formation Mississippi Effective Pay - Ft. Ticket No. 24602
Date 4-29-77 Sec. 2 Twp. 27S Range 7E County Butler State Kansas
Test Approved by Joseph E. Moreland, Jr. Western Representative Bill Baker
Formation Test No. 2 O.K. ☒ Misrun ☐ Interval Tested From 2763' to 2770' Total Depth 2770'
Size Main Hole 7 7/8 Rat Hole ☐ Conv. ☐ B.T. ☒ Damaged ☐ Yes ☒ No Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No
Top Packer Depth 2758 Ft. Size 6 3/4 Bottom Packer Depth 2763 Ft. Size 6 3/4
Straddle ☐ Conv. ☐ B.T. ☐ Damaged ☐ Yes ☐ No Packer Depth - Ft. Size -
Tool Size 5 1/2 OD Tool Joint Size 4 1/2 FH Anchor Length 7 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.
RECORDERS Depth 2751 Ft. Clock No. 10167 Depth 2754 Ft. Clock No. 8474
Top Make Kuster Cap. 4500 No. 3085 ~~Inside~~ Outside Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ Outside
Below Straddle: Depth - Rec. No. - Clock No. - ~~Inside~~ Outside Depth - Ft. Rec. No. - Clock No. - ~~Inside~~ Outside
Time Set Packer 9:43P. M
Tool Open I.F.P. From 9:45P M. to 10:15P M. - Hr. 30 Min. From (B) 33 P.S.I. To (C) 42 P.S.I.
Tool Closed I.C.I.P. From 10:15M to 10:45P M. - Hr. 30 Min (D) 868 P.S.I.
Tool Open F.F.P. From 10:45P M. to 11:45P M. - Hr. 60 Min. From (E) 72 P.S.I. To (F) 74 P.S.I.
Tool Closed F.C.I.P. From 11:45M to 12:15AM - Hr. 30 Min. (G) 836 P.S.I.
Initial Hydrostatic Pressure (A) 1384 P.S.I. Final Hydrostatic Pressure (H) 1370 P.S.I. Maximum Temp. 112

INFORMATION

BLOW Weak blow increasing throughout test.

Did Well Flow ☐ Yes ☒ No Recovery Total Ft. 150' total recovery. 90' of muddy oil, 60' of muddy salt water.

Reversed Out. ☐ Yes ☒ No Mud Type Chem Viscosity 62 Weight 9.8 Water Loss 12.8 cc. Chlorides 800 PPM

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR Triangle Drlg. (#1) Length Drill Pipe? 2680 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In. ^{-H-90}

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 90 Ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4 1/2 XH In. Length D.S.T. Tool 34 Ft.

Remarks:

WESTERN TESTING CO., INC.

Pressure Data

Date 4-29-77 Test Ticket No. 24602
 Recorder No. 3085 Capacity 4500 Location 2751 Ft.
 Clock No. 10167 Elevation 1510 Rotary Bushing (est.) Well Temperature 112 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1384</u> P.S.I.	<u>9:43P.</u>	<u>M</u>
B First Initial Flow Pressure	<u>33</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>42</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>868</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>72</u> P.S.I.	<u>30</u> Mins.	<u>27</u> Mins.
F Second Final Flow Pressure	<u>74</u> P.S.I.		
G Final Closed-in Pressure	<u>836</u> P.S.I.		
H Final Hydrostatic Mud	<u>1370</u> P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>9</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>33</u>	<u>0</u>	<u>42</u>	<u>0</u>	<u>72</u>	<u>0</u>	<u>74</u>
P 2 <u>5</u>	<u>34</u>	<u>3</u>	<u>709</u>	<u>5</u>	<u>61</u>	<u>3</u>	<u>713</u>
P 3 <u>10</u>	<u>36</u>	<u>6</u>	<u>793</u>	<u>10</u>	<u>61</u>	<u>6</u>	<u>762</u>
P 4 <u>15</u>	<u>38</u>	<u>9</u>	<u>816</u>	<u>15</u>	<u>61</u>	<u>9</u>	<u>786</u>
P 5 <u>20</u>	<u>40</u>	<u>12</u>	<u>829</u>	<u>20</u>	<u>58</u>	<u>12</u>	<u>800</u>
P 6 <u>25</u>	<u>41</u>	<u>15</u>	<u>839</u>	<u>25</u>	<u>56</u>	<u>15</u>	<u>808</u>
P 7 <u>30</u>	<u>42</u>	<u>18</u>	<u>849</u>	<u>30</u>	<u>54</u>	<u>18</u>	<u>816</u>
P 8		<u>21</u>	<u>856</u>	<u>35</u>	<u>57</u>	<u>21</u>	<u>824</u>
P 9		<u>24</u>	<u>863</u>	<u>40</u>	<u>61</u>	<u>24</u>	<u>833</u>
P10		<u>27</u>	<u>867</u>	<u>45</u>	<u>67</u>	<u>27</u>	<u>836</u>
P11		<u>30</u>	<u>868</u>	<u>50</u>	<u>70</u>		
P12				<u>55</u>	<u>72</u>		
P13				<u>60</u>	<u>74</u>		
P14							
P15							
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P17							
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Tk#24602

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