

Company Montgomery Drilling Program #7 Lease & Well No. Eilers #2
Elevation 2057 Kelly Bushing Topeka Formation ----- Effective Pay ----- Ft. Ticket No. 4307
Date 3/14/80 Sec. 27 Twp. 10S Range 18W County Rooks State Kansas
Test Approved by E. McNeil Western Representative James Ricketts

Formation Test No. 1 Interval Tested from 3200 ft. to 3240 ft. Total Depth 3240 ft.

Packer Depth 3200 ft. Size 6 3/4 in. Packer Depth 3195 ft. Size 6 3/4 in.

Packer Depth -- ft. Size -- in. Packer Depth -- ft. Size -- in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 3205 ft. Recorder Number 1134 Cap. 4500

Bottom Recorder Depth (Outside) 3242 ft. Recorder Number 1049 Cap. 3000

Below Straddle Recorder Depth -- ft. Recorder Number -- Cap. --

Drilling Contractor Helbert Drilling Rig #1 Drill Collar Length 57 I. D. 2.25 in.

Mud Type salt-starch Viscosity 35 Weight Pipe Length 1198 I. D. 2.70 in.

Weight 9.7 Water Loss 6.0 cc. Drill Pipe Length 2945 I. D. 3.25 in.

Chlorides 46,000 P.P.M. Test Tool Length 21 ft. Tool Size 5.25 in.

Jars: Make -- Serial Number -- Anchor Length 40 ft. Size 5.25 in.

Did Well Flow? No Reversed Out No Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Weak; died in seven minutes. Flushed tool, no help.

Recovered 90 ft. of drilling mud

Recovered ----- ft. of -----

Recovered ----- ft. of -----

Recovered ----- ft. of -----

Recovered ----- ft. of -----

Remarks: -----

Time Set Packer(s) 11:04 ~~P.M.~~ A.M. Time Started Off Bottom 12:24 ~~P.M.~~ A.M. Maximum Temperature 102°

Initial Hydrostatic Pressure ----- (A) 1653 P.S.I.

Initial Flow Period ----- Minutes 30 (B) 83 P.S.I. to (C) 72 P.S.I.

Initial Closed In Period ----- Minutes 45 (D) 996 P.S.I.

Final Flow Period ----- Minutes 10 (E) 117 P.S.I. to (F) 83 P.S.I.

Final Closed In Period ----- Minutes -- (G) Not taken P.S.I.

Final Hydrostatic Pressure ----- (H) 1615 P.S.I.

WESTERN TESTING CO., INC. **Pressure Data**

Date 3/14/80 Test Ticket No. 4307
 Recorder No. 1134 Capacity 4500 Location 3205 Ft.
 Clock No. ----- Elevation 2057 Kelly Bushing Well Temperature 102 °F

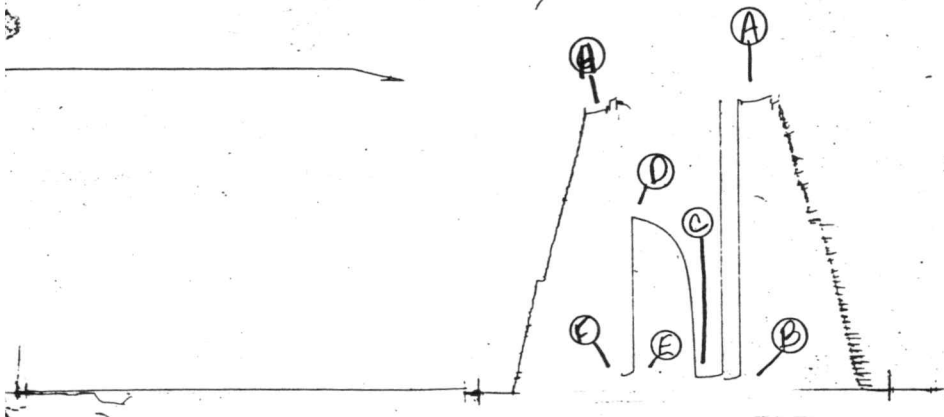
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1653</u> P.S.I.	Open Tool	<u>11:04A</u> M	
B First Initial Flow Pressure	<u>83</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>72</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>996</u> P.S.I.	Second Flow Pressure	<u>5</u> Mins.	<u>10</u> Mins.
E Second Initial Flow Pressure	<u>117</u> P.S.I.	Final Closed-in Pressure	<u>-</u> Mins.	<u>--</u> Mins.
F Second Final Flow Pressure	<u>83</u> P.S.I.			
G Final Closed-in Pressure	<u>Not taken</u> P.S.I.			
H Final Hydrostatic Mud	<u>1615</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>15</u> Inc.		Breakdown: <u>2</u> Inc.		Breakdown: <u>0</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>83</u>	<u>0</u>	<u>72</u>	<u>0</u>	<u>117</u>		
P 2 <u>5</u>	<u>65</u>	<u>3</u>	<u>413</u>	<u>5</u>	<u>92</u>		
P 3 <u>10</u>	<u>56</u>	<u>6</u>	<u>624</u>	<u>10</u>	<u>83</u>		
P 4 <u>15</u>	<u>85</u>	<u>9</u>	<u>724</u>				
P 5 <u>20</u>	<u>76</u>	<u>12</u>	<u>791</u>				
P 6 <u>25</u>	<u>74</u>	<u>15</u>	<u>840</u>				
P 7 <u>30</u>	<u>72</u>	<u>18</u>	<u>871</u>				
P 8		<u>21</u>	<u>898</u>				
P 9		<u>24</u>	<u>920</u>				
P10		<u>27</u>	<u>936</u>				
P11		<u>30</u>	<u>953</u>				
P12		<u>33</u>	<u>962</u>				
P13		<u>36</u>	<u>973</u>				
P14		<u>39</u>	<u>982</u>				
P15		<u>42</u>	<u>989</u>				
P16		<u>45</u>	<u>996</u>				
P17							
P18							
P19							
P20							

1139

PK#4307
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Company Montgomery Drilling Program #7 Lease & Well No. Eilers #2
Elevation 2057 Kelly Bushing Formation Toronto & Lansing Effective Pay ----- Ft. Ticket No. 4308
Date 3/15/80 Sec. 27 Twp. 10S Range 18W County Rooks State Kansas

Test Approved by E. McNeil Western Representative Randy Lackey

Formation Test No. 2 Interval Tested from 3282 ft. to 3325 ft. Total Depth 3325 ft.
Packer Depth 3278 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 3282 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3287 ft. Recorder Number 1134 Cap. 4500 PSI
Bottom Recorder Depth (Outside) 3322 ft. Recorder Number 1049 Cap. 3000 PSI
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Helberg Drilling Rig #1 Drill Collar Length 57 I. D. 2.26 in.
Mud Type salt- & starch Viscosity 38 Weight Pipe Length 1198 I. D. 2.76 in.
Weight 9.2 Water Loss 10.3 cc. Drill Pipe Length 3035 I. D. 3.8 in.
Chlorides 40,000 P.P.M. Test Tool Length 23 ft. Tool Size 5 1/2 in.
Jars: Make None Serial Number - Anchor Length 43 ft. Size 5 1/2 in.
Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Very weak , died seventeen minutes into Initial Flow Period. Died on
second opening. Flushed tool twice, died in one minute.

15 mud
Recovered 15 ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks:

Time Set Packer(s) 6:15 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 8:45 ~~P.M.~~ ^{A.M.} Maximum Temperature 103°
Initial Hydrostatic Pressure 1698 (A) P.S.I.
Initial Flow Period 30 Minutes (B) 47 P.S.I. to (C) 18 P.S.I.
Initial Closed In Period 45 Minutes (D) 567 P.S.I.
Final Flow Period 30 Minutes (E) 59 P.S.I. to (F) 30 P.S.I.
Final Closed In Period 45 Minutes (G) 82 P.S.I.
Final Hydrostatic Pressure 1671 (H) P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 3/15/80 Recorder No. 1134 Capacity 4500 Test Ticket No. 4308
 Clock No. - Elevation 2057 Kelly Bushing Location 3287 Ft. 103
 Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1698</u> P.S.I.	Open Tool	<u>6:15A</u> M	
B First Initial Flow Pressure	<u>47</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>35</u> Mins.
C First Final Flow Pressure	<u>18</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>567</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>59</u> P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>48</u> Mins.
F Second Final Flow Pressure	<u>30</u> P.S.I.			
G Final Closed-in Pressure	<u>82</u> P.S.I.			
H Final Hydrostatic Mud	<u>1671</u> P.S.I.			

PRESSURE BREAKDOWN

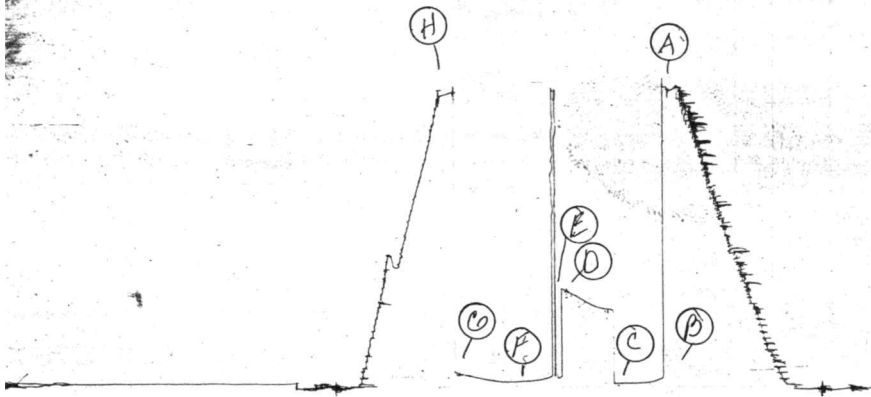
First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>15</u> Inc.		Breakdown: <u>7</u> Inc.		Breakdown: <u>16</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> 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>47</u>	<u>0</u>	<u>18</u>	<u>0</u>	<u>59</u>	<u>0</u>	<u>50</u>
P 2 <u>5</u>	<u>36</u>	<u>3</u>	<u>449</u>	<u>5</u> flushed tool		<u>3</u>	<u>27</u>
P 3 <u>10</u>	<u>25</u>	<u>6</u>	<u>451</u>	<u>10</u>	<u>62</u>	<u>6</u>	<u>27</u>
P 4 <u>15</u>	<u>23</u>	<u>9</u>	<u>454</u>	<u>15</u>	<u>40</u>	<u>9</u>	<u>27</u>
P 5 <u>20</u>	<u>21</u>	<u>12</u>	<u>458</u>	<u>20</u>	<u>35</u>	<u>12</u>	<u>27</u>
P 6 <u>25</u>	<u>20</u>	<u>15</u>	<u>464</u>	<u>25</u>	<u>31</u>	<u>15</u>	<u>27</u>
P 7 <u>30</u>	<u>19</u>	<u>18</u>	<u>475</u>	<u>30</u>	<u>30</u>	<u>18</u>	<u>33</u>
P 8 <u>35</u>	<u>18</u>	<u>21</u>	<u>488</u>			<u>21</u>	<u>36</u>
P 9		<u>24</u>	<u>502</u>			<u>24</u>	<u>40</u>
P10		<u>27</u>	<u>519</u>			<u>27</u>	<u>43</u>
P11		<u>30</u>	<u>531</u>			<u>30</u>	<u>49</u>
P12		<u>33</u>	<u>539</u>			<u>33</u>	<u>53</u>
P13		<u>36</u>	<u>547</u>			<u>36</u>	<u>59</u>
P14		<u>39</u>	<u>554</u>			<u>39</u>	<u>63</u>
P15		<u>42</u>	<u>560</u>			<u>42</u>	<u>67</u>
P16		<u>45</u>	<u>567</u>			<u>45</u>	<u>75</u>
P17						<u>48</u>	<u>82</u>
P18							
P19							
P20							

DST# 2

T-1134

T-4308

W#4308
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Company Montgomery Drilling Program #7 Lease & Well No. Eilers #2
Elevation 2057 Kelly Bushing Lansing 90/Zone Effective Pay ---- Ft. Ticket No. 4309
Date 3/15/16/80 27 Sec. 10S Range 18W County Rooks State Kansas
Test Approved by E. McNeil Western Representative Randy Lackey

Formation Test No. 3 Interval Tested from 3328 ft. to 3370 ft. Total Depth 3370 ft.
Packer Depth 3323 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 3328 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
Top Recorder Depth (Inside) 3336 ft. Recorder Number 1134 Cap. 4500 PSI
Bottom Recorder Depth (Outside) 3367 ft. Recorder Number 1049 Cap. 3000 PSI
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Helberg Drilling Rig #1 Drill Collar Length 57 I. D. 2.26 in.
Mud Type salt & starch Viscosity 39 Weight Pipe Length 1198 I. D. 2.76 in.
Weight 9.8 Water Loss 13.0 cc. Drill Pipe Length 3125 I. D. 3.8 in.
Chlorides 50,000 P.P.M. Test Tool Length 23 ft. Tool Size 5 1/2 in.
Jars: Make None Serial Number - Anchor Length 42 ft. Size 5 1/2 in.
Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Very weak building to strong eight minutes into Initial Flow Period.
Very weak building to strong twenty minutes into Final Flow Period.

Recovered 625 ft. of muddy water
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks:

Time Set Packer(s) 9:15 ~~A.M.~~ P.M. Time Started Off Bottom 12:15 ~~A.M.~~ P.M. Maximum Temperature 103°
Initial Hydrostatic Pressure (A) 1718 P.S.I.
Initial Flow Period Minutes 30 (B) 46 P.S.I. to (C) 134 P.S.I.
Initial Closed In Period Minutes 48 (D) 927 P.S.I.
Final Flow Period Minutes 60 (E) 225 P.S.I. to (F) 343 P.S.I.
Final Closed In Period Minutes 45 (G) 874 P.S.I.
Final Hydrostatic Pressure (H) 1693 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 3/15/80 Recorder No. 1134 Capacity 4500 Test Ticket No. 4309
 Clock No. ----- Elevation 2057 Kelly Bushing Location 3336 Ft. 103 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1718</u> P.S.I.	Open Tool	<u>9:15A</u> M	
B First Initial Flow Pressure	<u>46</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>134</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>48</u> Mins.
D Initial Closed-in Pressure	<u>927</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>225</u> P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>323</u> P.S.I.			
G Final Closed-in Pressure	<u>874</u> P.S.I.			
H Final Hydrostatic Mud	<u>1693</u> P.S.I.			

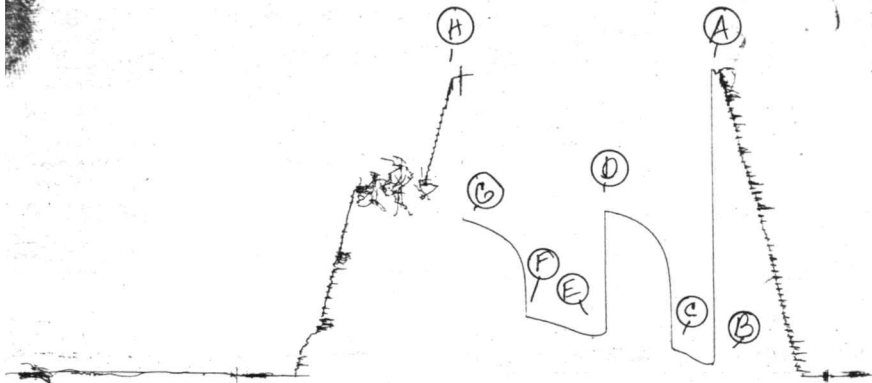
PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Initial Shut-In Breakdown: <u>16</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Final Shut-In Breakdown: <u>15</u> Inc. of <u>3</u> mins. and a 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>46</u>	<u>0</u>	<u>134</u>	<u>0</u>	<u>225</u>	<u>0</u>	<u>323</u>
P 2 <u>5</u>	<u>46</u>	<u>3</u>	<u>624</u>	<u>5</u>	<u>214</u>	<u>3</u>	<u>624</u>
P 3 <u>10</u>	<u>59</u>	<u>6</u>	<u>704</u>	<u>10</u>	<u>212</u>	<u>6</u>	<u>682</u>
P 4 <u>15</u>	<u>78</u>	<u>9</u>	<u>748</u>	<u>15</u>	<u>218</u>	<u>9</u>	<u>717</u>
P 5 <u>20</u>	<u>102</u>	<u>12</u>	<u>782</u>	<u>20</u>	<u>232</u>	<u>12</u>	<u>748</u>
P 6 <u>25</u>	<u>116</u>	<u>15</u>	<u>811</u>	<u>25</u>	<u>247</u>	<u>15</u>	<u>765</u>
P 7 <u>30</u>	<u>134</u>	<u>18</u>	<u>832</u>	<u>30</u>	<u>261</u>	<u>18</u>	<u>783</u>
P 8		<u>21</u>	<u>849</u>	<u>35</u>	<u>275</u>	<u>21</u>	<u>797</u>
P 9		<u>24</u>	<u>864</u>	<u>40</u>	<u>287</u>	<u>24</u>	<u>811</u>
P10		<u>27</u>	<u>875</u>	<u>45</u>	<u>299</u>	<u>27</u>	<u>824</u>
P11		<u>30</u>	<u>888</u>	<u>50</u>	<u>308</u>	<u>30</u>	<u>835</u>
P12		<u>33</u>	<u>898</u>	<u>55</u>	<u>319</u>	<u>33</u>	<u>843</u>
P13		<u>36</u>	<u>905</u>	<u>60</u>	<u>323</u>	<u>36</u>	<u>853</u>
P14		<u>39</u>	<u>912</u>			<u>39</u>	<u>861</u>
P15		<u>42</u>	<u>918</u>			<u>42</u>	<u>868</u>
P16		<u>45</u>	<u>924</u>			<u>45</u>	<u>874</u>
P17		<u>48</u>	<u>927</u>				
P18							
P19							
P20							

DST#3

T-4309

TKL # 4309
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Company Montgomery Drilling Program #7 Lease & Well No. Eilers #2
Elevation 2057 Kelly Bushing Formation Lansing 'G' Zone Effective Pay -- Ft. Ticket No. 4310
Date 3/16/80 Sec. 27 Twp. 10S Range 18W County Rooks State Kansas
Test Approved by E. McNeil Western Representative Randy Lackey

Formation Test No. 4 Interval Tested from 3383 ft. to 3420 ft. Total Depth 3420 ft.

Packer Depth 3378 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3383 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3389 ft. Recorder Number 1134 Cap. 4500 PSI

Bottom Recorder Depth (Outside) 3417 ft. Recorder Number 1049 Cap. 3000 PSI

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Helberg Drilling Rig #1 Drill Collar Length 57 I. D. 2.26 in.

Mud Type salt & starch Viscosity 38 Weight Pipe Length 1198 I. D. 2.76 in.

Weight 9.8 Water Loss 14.8 cc. Drill Pipe Length 2155 I. D. 3.8 in.

Chlorides 43,000 P.P.M. Test Tool Length 23 ft. Tool Size 5 1/2 in.

Jars: Make None Serial Number - Anchor Length 37 ft. Size 5 1/2 in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Very weak, died in five minutes; flushed tool, very weak building to fair by end of Initial flow period. Very weak building to fair forty-five minutes into Final Flow Period.

Recovered - ft. of

Recovered 35 ft. of oil

Recovered 400 ft. of very slightly oil cut muddy water

Recovered - ft. of

Recovered - ft. of

Remarks: Initial Flow Period and Initial Shut-In should have been thirty minutes open 45 minutes shut-in--was delayed because of rig break-downs.

Time Set Packer(s) 4:15 ~~A.M.~~ P.M. Time Started Off Bottom 7:56 ~~A.M.~~ P.M. Maximum Temperature 104°

Initial Hydrostatic Pressure (A) 1768 P.S.I.

Initial Flow Period Minutes 25 (B) 41 P.S.I. to (C) 55 P.S.I.

Initial Closed In Period Minutes 54 (D) 700 P.S.I.

Final Flow Period Minutes 90 (E) 122 P.S.I. to (F) 200 P.S.I.

Final Closed In Period Minutes 45 (G) 613 P.S.I.

Final Hydrostatic Pressure (H) 1725 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 3/16/80 Recorder No. 1134 Capacity 4500 Test Ticket No. 4310
 Clock No. ----- Elevation 2057 Kelly Bushing Location 3389 Ft. 104
 Well Temperature °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1768</u> P.S.I.	Open Tool	<u>4:15P</u>	<u>M</u>
B First Initial Flow Pressure	<u>41</u> P.S.I.	First Flow Pressure	<u>38</u> Mins.	<u>25</u> Mins.
C First Final Flow Pressure	<u>55</u> P.S.I.	Initial Closed-in Pressure	<u>53</u> Mins.	<u>54</u> Mins.
D Initial Closed-in Pressure	<u>700</u> P.S.I.	Second Flow Pressure	<u>90</u> Mins.	<u>90</u> Mins.
E Second Initial Flow Pressure	<u>122</u> P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>200</u> P.S.I.			
G Final Closed-in Pressure	<u>613</u> P.S.I.			
H Final Hydrostatic Mud	<u>1725</u> P.S.I.			

PRESSURE BREAKDOWN

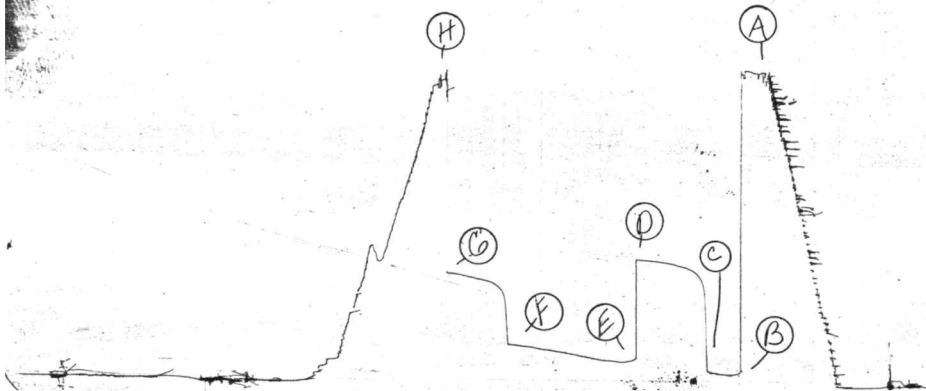
First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>5</u> Inc.		Breakdown: <u>18</u> Inc.		Breakdown: <u>18</u> Inc.		Breakdown: <u>15</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</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>41</u>	<u>0</u>	<u>55</u>	<u>0</u>	<u>122</u>	<u>0</u>	<u>200</u>
P 2 <u>5</u>	<u>37</u>	<u>3</u>	<u>549</u>	<u>5</u>	<u>111</u>	<u>3</u>	<u>479</u>
P 3 <u>10</u>	<u>36</u>	<u>6</u>	<u>602</u>	<u>10</u>	<u>108</u>	<u>6</u>	<u>528</u>
P 4 <u>15</u>	<u>40</u>	<u>9</u>	<u>628</u>	<u>15</u>	<u>111</u>	<u>9</u>	<u>548</u>
P 5 <u>20</u>	<u>49</u>	<u>12</u>	<u>642</u>	<u>20</u>	<u>113</u>	<u>12</u>	<u>564</u>
P 6 <u>25</u>	<u>55</u>	<u>15</u>	<u>653</u>	<u>25</u>	<u>118</u>	<u>15</u>	<u>571</u>
P 7 <u> </u>	<u> </u>	<u>18</u>	<u>660</u>	<u>30</u>	<u>125</u>	<u>18</u>	<u>576</u>
P 8 <u> </u>	<u> </u>	<u>21</u>	<u>665</u>	<u>35</u>	<u>132</u>	<u>21</u>	<u>581</u>
P 9 <u> </u>	<u> </u>	<u>24</u>	<u>671</u>	<u>40</u>	<u>140</u>	<u>24</u>	<u>585</u>
P10 <u> </u>	<u> </u>	<u>27</u>	<u>677</u>	<u>45</u>	<u>149</u>	<u>27</u>	<u>591</u>
P11 <u> </u>	<u> </u>	<u>30</u>	<u>682</u>	<u>50</u>	<u>156</u>	<u>30</u>	<u>595</u>
P12 <u> </u>	<u> </u>	<u>33</u>	<u>686</u>	<u>55</u>	<u>161</u>	<u>33</u>	<u>604</u>
P13 <u> </u>	<u> </u>	<u>36</u>	<u>688</u>	<u>60</u>	<u>169</u>	<u>36</u>	<u>607</u>
P14 <u> </u>	<u> </u>	<u>39</u>	<u>692</u>	<u>65</u>	<u>174</u>	<u>39</u>	<u>611</u>
P15 <u> </u>	<u> </u>	<u>42</u>	<u>694</u>	<u>70</u>	<u>179</u>	<u>42</u>	<u>612</u>
P16 <u> </u>	<u> </u>	<u>45</u>	<u>695</u>	<u>75</u>	<u>187</u>	<u>45</u>	<u>613</u>
P17 <u> </u>	<u> </u>	<u>48</u>	<u>696</u>	<u>80</u>	<u>192</u>	<u> </u>	<u> </u>
P18 <u> </u>	<u> </u>	<u>51</u>	<u>698</u>	<u>85</u>	<u>198</u>	<u> </u>	<u> </u>
P19 <u> </u>	<u> </u>	<u>54</u>	<u>700</u>	<u>90</u>	<u>200</u>	<u> </u>	<u> </u>
P20 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

DST#4

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Company Montgomery Drilling Program #7 Lease & Well No. Eilers #2
Elevation 2057 Kelly Bushing, Kansas City 180 Zone ----- Ft. Ticket No. 4311
Date 3/17/80 Sec. 27 Twp. 10S Range 18W County Rooks State Kansas
Test Approved by E. McNeil Western Representative Randy Lackey

Formation Test No. 5 Interval Tested from 3442 ft. to 3485 ft. Total Depth 3485 ft.
Packer Depth 3437 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 3442 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3451 ft. Recorder Number 1134 Cap. 4500 PSI
Bottom Recorder Depth (Outside) 3482 ft. Recorder Number 1049 Cap. 3000 PSI
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Helberg Drilling Rig #1 Drill Collar Length 57 I. D. 2.26 in.
Mud Type salt & starch Viscosity 42 Weight Pipe Length 1198 I. D. 2.76 in.
Weight 9.8 Water Loss 13.6 cc. Drill Pipe Length 2245 I. D. 3.8 in.
Chlorides 47,000 P.P.M. Test Tool Length 23 ft. Tool Size 5 1/2 in.
Jars: Make None Serial Number - Anchor Length 43 ft. Size 5 1/2 in.
Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Very weak died in twenty-two minutes. Flushed tool, died in seven minutes. Died rest of Initial Flow Period. Died at start of Final Flow Period. Flushed tool died nine minutes. Died rest of Final Flow Period.

Recovered 30 ft. of mud
Recovered - ft. of -
Recovered - ft. of -
Recovered - ft. of -
Recovered - ft. of -

Remarks: Final shut-in ran into fifty-five minutes because of rig break down.

Time Set Packer(s) 11:30 A.M. P.M. Time Started Off Bottom 2:10 A.M. P.M. Maximum Temperature 105°
Initial Hydrostatic Pressure (A) 1806 P.S.I.
Initial Flow Period Minutes 30 (B) 44 P.S.I. to (C) 49 P.S.I.
Initial Closed In Period Minutes 45 (D) 582 P.S.I.
Final Flow Period Minutes 30 (E) 64 P.S.I. to (F) 41 P.S.I.
Final Closed In Period Minutes 57 (G) 588 P.S.I.
Final Hydrostatic Pressure (H) 1781 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 3/17/80 Recorder No. 1134 Capacity 4500 Test Ticket No. 4311
 Clock No. ----- Elevation 2057 Kelly Bushing Location 3451 Ft. 105 °F
 Well Temperature

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1806</u> P.S.I.	Open Tool	<u>11:30A</u> M	
B First Initial Flow Pressure	<u>44</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>49</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>582</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>64</u> P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>57</u> Mins.
F Second Final Flow Pressure	<u>41</u> P.S.I.			
G Final Closed-in Pressure	<u>588</u> P.S.I.			
H Final Hydrostatic Mud	<u>1781</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>15</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>19</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>44</u>	<u>0</u>	<u>49</u>	<u>0</u>	<u>64</u>	<u>0</u>	<u>41</u>
P 2 <u>5</u>	<u>51</u>	<u>3</u>	<u>42</u>	<u>5</u>	<u>49</u>	<u>3</u>	<u>41</u>
P 3 <u>10</u>	<u>33</u>	<u>6</u>	<u>38</u>	<u>10</u>	<u>58</u>	<u>6</u>	<u>45</u>
P 4 <u>15</u>	<u>29</u>	<u>9</u>	<u>40</u>	<u>15</u>	<u>46</u>	<u>9</u>	<u>56</u>
P 5 <u>20</u>	<u>25</u>	<u>12</u>	<u>64</u>	<u>20</u>	<u>43</u>	<u>12</u>	<u>84</u>
P 6 <u>25</u>	<u>22</u>	<u>15</u>	<u>131</u>	<u>25</u>	<u>42</u>	<u>15</u>	<u>136</u>
P 7 <u>30</u>	<u>49</u>	<u>18</u>	<u>205</u>	<u>30</u>	<u>41</u>	<u>18</u>	<u>191</u>
P 8		<u>21</u>	<u>272</u>			<u>21</u>	<u>238</u>
P 9		<u>24</u>	<u>328</u>			<u>24</u>	<u>276</u>
P10		<u>27</u>	<u>377</u>			<u>27</u>	<u>305</u>
P11		<u>30</u>	<u>418</u>			<u>30</u>	<u>348</u>
P12		<u>33</u>	<u>463</u>			<u>33</u>	<u>386</u>
P13		<u>36</u>	<u>502</u>			<u>36</u>	<u>417</u>
P14		<u>39</u>	<u>536</u>			<u>39</u>	<u>446</u>
P15		<u>42</u>	<u>562</u>			<u>42</u>	<u>476</u>
P16		<u>45</u>	<u>582</u>			<u>45</u>	<u>504</u>
P17						<u>48</u>	<u>528</u>
P18						<u>51</u>	<u>549</u>
P19						<u>54</u>	<u>571</u>
P20						<u>57</u>	<u>588</u>

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TRK # 4311
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(B)

Company Montgomery Drilling Program #7 Lease & Well No. Eilers #2

Elevation 2057 Kelly Bushing Kansas City 200' Zone Formation ----- Effective Pay ----- Ft. Ticket No. 4312

Date 3/18/80 Sec. 27 Twp. 10S Range 18W County Rooks State Kansas

Test Approved by E. McNeil Western Representative Randy Lackey

Formation Test No. 6 Interval Tested from 3486 ft. to 3530 ft. Total Depth 3530 ft.

Packer Depth 3481 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3486 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3495 ft. Recorder Number 1134 Cap. 4500 PSI

Bottom Recorder Depth (Outside) 3527 ft. Recorder Number 1049 Cap. 3000 PSI

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Helberg Drilling Co. Rig #1 Drill Collar Length 57 I. D. 2.26 in.

Mud Type salt & starch Viscosity 42 Weight Pipe Length 1198 I. D. 2.76 in.

Weight 9.8 Water Loss 13.6 cc. Drill Pipe Length 2275 I. D. 3.8 in.

Chlorides 47,000 P.P.M. Test Tool Length 23 ft. Tool Size 5 1/2 in.

Jars: Make None Serial Number - Anchor Length 44 ft. Size 5 1/2 in.

Did Well Flow? No Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Very weak, died eighteen minutes into Initial Flow Period. Flushed tool
died in five minutes. Died throughout Final Flow Period.

Recovered 15 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: READ OUTSIDE CHART

Time Set Packer(s)	<u>4:45</u>	<u>A.M.</u>	Time Started Off Bottom	<u>6:40</u>	<u>A.M.</u>	Maximum Temperature	<u>105°</u>
	<u>P.M.</u>			<u>P.M.</u>			
Initial Hydrostatic Pressure			(A)	<u>1923</u>		P.S.I.	
Initial Flow Period	<u>30</u>	Minutes	(B)	<u>73</u>		P.S.I. to (C)	<u>67</u> P.S.I.
Initial Closed In Period	<u>36</u>	Minutes	(D)	<u>532</u>		P.S.I.	
Final Flow Period	<u>10</u>	Minutes	(E)	<u>69</u>		P.S.I. to (F)	<u>69</u> P.S.I.
Final Closed In Period	<u>27</u>	Minutes	(G)	<u>380</u>		P.S.I.	
Final Hydrostatic Pressure			(H)	<u>1888</u>		P.S.I.	

WESTERN TESTING CO., INC.

Pressure Data

Date 3/18/80 Recorder No. 1049 Capacity 3000 Test Ticket No. 4312
 Clock No. ----- Elevation 2057 Kelly Bushing Location 3527 Ft.
 Well Temperature 105 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1923</u> P.S.I.	Open Tool	<u>4:45A</u> M	
B First Initial Flow Pressure	<u>73</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>67</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>36</u> Mins.
D Initial Closed-in Pressure	<u>532</u> P.S.I.	Second Flow Pressure	<u>10</u> Mins.	<u>10</u> Mins.
E Second Initial Flow Pressure	<u>69</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
F Second Final Flow Pressure	<u>69</u> P.S.I.			
G Final Closed-in Pressure	<u>380</u> P.S.I.			
H Final Hydrostatic Mud	<u>1888</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>12</u> Inc.		Breakdown: <u>2</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>73</u>	<u>0</u>	<u>67</u>	<u>0</u>	<u>69</u>	<u>0</u>	<u>69</u>
P 2 <u>5</u>	<u>66</u>	<u>3</u>	<u>100</u>	<u>5</u>	<u>69</u>	<u>3</u>	<u>91</u>
P 3 <u>10</u>	<u>67</u>	<u>6</u>	<u>147</u>	<u>10</u>	<u>69</u>	<u>6</u>	<u>119</u>
P 4 <u>15</u>	<u>67</u>	<u>9</u>	<u>203</u>			<u>9</u>	<u>155</u>
P 5 <u>20</u>	<u>67</u>	<u>12</u>	<u>254</u>			<u>12</u>	<u>201</u>
P 6 <u>25</u>	<u>67</u>	<u>15</u>	<u>304</u>			<u>15</u>	<u>238</u>
P 7 <u>30</u>	<u>67</u>	<u>18</u>	<u>337</u>			<u>18</u>	<u>282</u>
P 8		<u>21</u>	<u>368</u>			<u>21</u>	<u>313</u>
P 9		<u>24</u>	<u>397</u>			<u>21</u>	<u>354</u>
P10		<u>27</u>	<u>424</u>			<u>24</u>	<u>380</u>
P11		<u>30</u>	<u>458</u>			<u>27</u>	
P12		<u>33</u>	<u>494</u>				
P13		<u>36</u>	<u>532</u>				
P14							
P15							
P16							
P17							
P18							
P19							
P20							

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