

Company Beren Corporation Lease & Well No. Ballentine #1
Elevation 2078 Kelly Bushing Cherokee Sand & Mississippi Effective Pay --- Ft. Ticket No. 5503
Date 2/26/80 Sec. 1 Twp. 27S Range 16W County Kiowa State Kansas
Test Approved by R. B. Gebbart, Jr. Western Representative Vernon Wondra

Formation Test No. 1 Interval Tested from 4460 ft. to 4517 ft. Total Depth 4517 ft.

Packer Depth 4455 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4460 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4473 ft. Recorder Number 10979 Cap. 4100

Bottom Recorder Depth (Outside) 4476 ft. Recorder Number 1563 Cap. 4200

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

Drilling Contractor Sterling Drilling Co. Rig #1 Drill Collar Length 291 I. D. 2 1/4 in.

Mud Type premix-driscopac Viscosity 47 Weight Pipe Length 456 I. D. 2.7 in.

Weight 8.9 Water Loss 10.2 cc. Drill Pipe Length 3692 I. D. 3.8 in.

Chlorides 6,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.

Jars: Make -- Serial Number -- Anchor Length 57 ft. Size 5 1/2 OD 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: Fair blow throughout first opening. Good blow throughout second opening.

Recovered 240 ft. of mud

Recovered ft. of ft.

Recovered ft. of ft.

Recovered ft. of ft.

Recovered ft. of ft.

Remarks:

Time Set Packer(s) 8:00 ~~A.M.~~ P.M. Time Started Off Bottom 11:15 ~~A.M.~~ P.M. Maximum Temperature 125°

Initial Hydrostatic Pressure 2109 P.S.I.

Initial Flow Period 30 Minutes (B) 69 P.S.I. to (C) 76 P.S.I.

Initial Closed In Period 45 Minutes (D) 1051 P.S.I.

Final Flow Period 60 Minutes (E) 143 P.S.I. to (F) 117 P.S.I.

Final Closed In Period 60 Minutes (G) 844 P.S.I.

Final Hydrostatic Pressure 2080 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

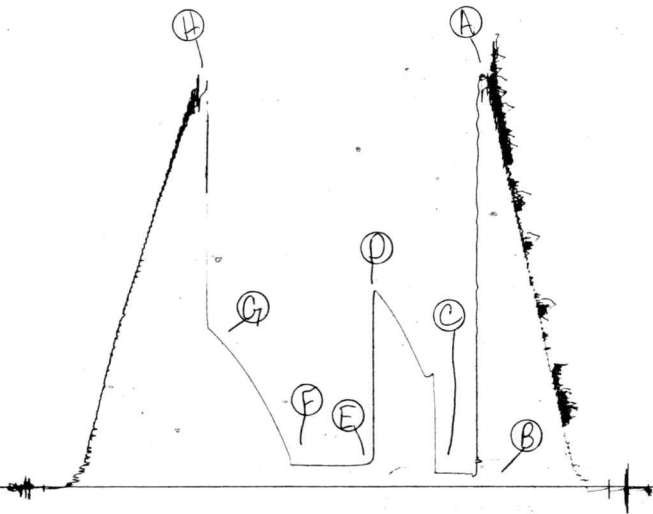
Date 2/26/80 Test Ticket No. 5503
 Recorder No. 10979 Capacity 4100 Location 4473 Ft.
 Clock No. ----- Elevation 2078 Kelly Bushing Well Temperature 125 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2109 P.S.I.	Open Tool	8:00P M	
B First Initial Flow Pressure	69 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	76 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	1051 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	143 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	117 P.S.I.			
G Final Closed-in Pressure	844 P.S.I.			
H Final Hydrostatic Mud	2080 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>12</u> Inc.		Breakdown: <u>20</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>69</u>	<u>0</u>	<u>76</u>	<u>0</u>	<u>143</u>	<u>0</u>	<u>117</u>
P 2 <u>5</u>	<u>71</u>	<u>3</u>	<u>604</u>	<u>5</u>	<u>122</u>	<u>3</u>	<u>195</u>
P 3 <u>10</u>	<u>72</u>	<u>6</u>	<u>591</u>	<u>10</u>	<u>117</u>	<u>6</u>	<u>248</u>
P 4 <u>15</u>	<u>73</u>	<u>9</u>	<u>607</u>	<u>15</u>	<u>116</u>	<u>9</u>	<u>296</u>
P 5 <u>20</u>	<u>74</u>	<u>12</u>	<u>648</u>	<u>20</u>	<u>116</u>	<u>12</u>	<u>342</u>
P 6 <u>25</u>	<u>75</u>	<u>15</u>	<u>694</u>	<u>25</u>	<u>116</u>	<u>15</u>	<u>389</u>
P 7 <u>30</u>	<u>76</u>	<u>18</u>	<u>740</u>	<u>30</u>	<u>116</u>	<u>18</u>	<u>431</u>
P 8 <u> </u>	<u> </u>	<u>21</u>	<u>783</u>	<u>35</u>	<u>116</u>	<u>21</u>	<u>473</u>
P 9 <u> </u>	<u> </u>	<u>24</u>	<u>823</u>	<u>40</u>	<u>116</u>	<u>24</u>	<u>506</u>
P10 <u> </u>	<u> </u>	<u>27</u>	<u>863</u>	<u>45</u>	<u>116</u>	<u>27</u>	<u>544</u>
P11 <u> </u>	<u> </u>	<u>30</u>	<u>900</u>	<u>50</u>	<u>116</u>	<u>30</u>	<u>579</u>
P12 <u> </u>	<u> </u>	<u>33</u>	<u>933</u>	<u>55</u>	<u>116</u>	<u>33</u>	<u>610</u>
P13 <u> </u>	<u> </u>	<u>36</u>	<u>967</u>	<u>60</u>	<u>117</u>	<u>36</u>	<u>642</u>
P14 <u> </u>	<u> </u>	<u>39</u>	<u>994</u>	<u> </u>	<u> </u>	<u>39</u>	<u>673</u>
P15 <u> </u>	<u> </u>	<u>42</u>	<u>1023</u>	<u> </u>	<u> </u>	<u>42</u>	<u>700</u>
P16 <u> </u>	<u> </u>	<u>45</u>	<u>1051</u>	<u> </u>	<u> </u>	<u>45</u>	<u>727</u>
P17 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>48</u>	<u>752</u>
P18 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>51</u>	<u>777</u>
P19 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>54</u>	<u>798</u>
P20 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>57</u>	<u>821</u>
						<u>60</u>	<u>844</u>

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Company Beren Corporation Lease & Well No. Ballentine #1
Elevation 2078 Kelly Bushing Mississippi Effective Pay ---- Ft. Ticket No. 5504
Date 2/27/80 Sec. 1 Twp. 27S Range 16W County Kiowa State Kansas
Test Approved by R. B. Gebbart, Jr. Western Representative Vernon Wondra

Formation Test No. 2 Interval Tested from 4517 ft. to 4540 ft. Total Depth 4540 ft.

Packer Depth 4512 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4517 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4530 ft. Recorder Number 10979 Cap. 4100

Bottom Recorder Depth (Outside) 4533 ft. Recorder Number 1563 Cap. 4200

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

Drilling Contractor Sterling Drilling Co. Rig #1 Drill Collar Length 291 I. D. 2 1/4 in.

Mud Type premix-driscap Viscosity 82 Weight Pipe Length 456 I. D. 2.7 in.

Weight 8.9 Water Loss 8.8 cc. Drill Pipe Length 3749 I. D. 3.8 in.

Chlorides 8,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.

Jars: Make - Serial Number - Anchor Length 23 ft. Size 5 1/2 OD 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.

Very weak blow throughout both flow periods.

Blow:

Recovered 70 ft. of mud

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks:

Time Set Packer(s) 2:45 ~~AM~~ P.M. Time Started Off Bottom 5:15 ~~AM~~ P.M. Maximum Temperature 123°

Initial Hydrostatic Pressure 2119 P.S.I. (A)

Initial Flow Period 30 Minutes (B) 63 P.S.I. to (C) 24 P.S.I.

Initial Closed In Period 45 Minutes (D) 227 P.S.I.

Final Flow Period 30 Minutes (E) 78 P.S.I. to (F) 40 P.S.I.

Final Closed In Period 45 Minutes (G) 153 P.S.I.

Final Hydrostatic Pressure 2080 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 2/27/80 Test Ticket No. 5504
 Recorder No. 10979 Capacity 4100 Location 4530 Ft.
 Clock No. - Elevation 2078 Kelly Bushing Well Temperature 123 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2119	P.S.I.	2:45P	M
B First Initial Flow Pressure	63	P.S.I.	30	Mins. 30 Mins.
C First Final Flow Pressure	24	P.S.I.	45	Mins. 45 Mins.
D Initial Closed-in Pressure	227	P.S.I.	30	Mins. 30 Mins.
E Second Initial Flow Pressure	78	P.S.I.	45	Mins. 45 Mins.
F Second Final Flow Pressure	40	P.S.I.		
G Final Closed-in Pressure	153	P.S.I.		
H Final Hydrostatic Mud	2080	P.S.I.		

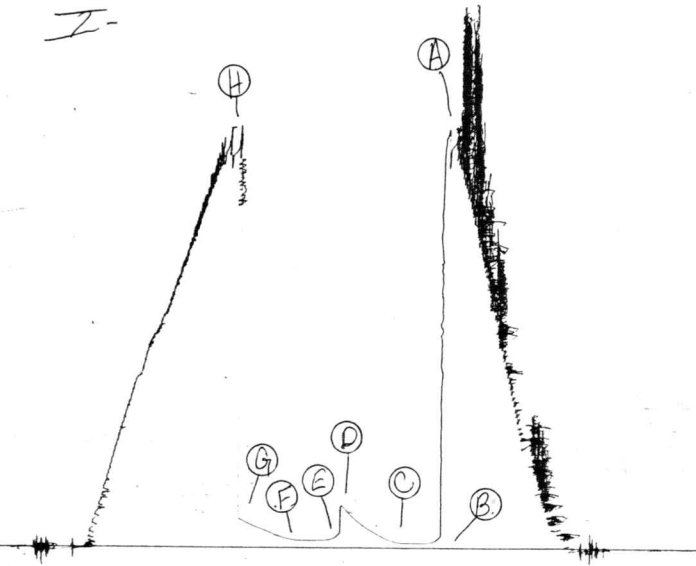
PRESSURE BREAKDOWN

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>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>63</u>	<u>0</u>	<u>24</u>	<u>0</u>	<u>78</u>	<u>0</u>	<u>40</u>
P 2 <u>5</u>	<u>34</u>	<u>3</u>	<u>29</u>	<u>5</u>	<u>48</u>	<u>3</u>	<u>42</u>
P 3 <u>10</u>	<u>24</u>	<u>6</u>	<u>36</u>	<u>10</u>	<u>42</u>	<u>6</u>	<u>48</u>
P 4 <u>15</u>	<u>24</u>	<u>9</u>	<u>44</u>	<u>15</u>	<u>40</u>	<u>9</u>	<u>55</u>
P 5 <u>20</u>	<u>24</u>	<u>12</u>	<u>53</u>	<u>20</u>	<u>40</u>	<u>12</u>	<u>61</u>
P 6 <u>25</u>	<u>24</u>	<u>15</u>	<u>65</u>	<u>25</u>	<u>40</u>	<u>15</u>	<u>67</u>
P 7 <u>30</u>	<u>24</u>	<u>18</u>	<u>78</u>	<u>30</u>	<u>40</u>	<u>18</u>	<u>76</u>
P 8		<u>21</u>	<u>90</u>			<u>21</u>	<u>84</u>
P 9		<u>24</u>	<u>101</u>			<u>24</u>	<u>92</u>
P10		<u>27</u>	<u>116</u>			<u>27</u>	<u>101</u>
P11		<u>30</u>	<u>130</u>			<u>30</u>	<u>109</u>
P12		<u>33</u>	<u>147</u>			<u>33</u>	<u>118</u>
P13		<u>36</u>	<u>168</u>			<u>36</u>	<u>128</u>
P14		<u>39</u>	<u>191</u>			<u>39</u>	<u>139</u>
P15		<u>42</u>	<u>216</u>			<u>42</u>	<u>149</u>
P16		<u>45</u>	<u>227</u>			<u>45</u>	<u>153</u>
P17							
P18							
P19							
P20							

TRK # 5504

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Company Beren Corporation Lease & Well No. Ballentine #1
Elevation 2078 Kelly Bushing Kinderhook Formation Effective Pay --- Ft. Ticket No. 5505
Date 2/28/80 Sec. 1 Twp 27S Range 16W County Kiowa State Kansas
Test Approved by R. B. Gebbart, Jr. Western Representative Vernon Wondra
Formation Test No. 3 Interval Tested from 4563 ft. to 4587 ft. Total Depth 4587 ft.
Packer Depth 4558 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4563 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4577 ft. Recorder Number 10979 Cap. 4100
Bottom Recorder Depth (Outside) 4580 ft. Recorder Number 1563 Cap. 4200
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Sterling Drilling Co. Rig #1 Drill Collar Length 291 I. D. 2 1/4 in.
Mud Type premix-driscap Viscosity 82 Weight Pipe Length 456 I. D. 2.7 in.
Weight 8.9 Water Loss 8.8 cc. Drill Pipe Length 3795 I. D. 3.8 in.
Chlorides 8,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
Jars: Make -- Serial Number - Anchor Length 24 ft. Size 5 1/2 OD
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 blow throughout both flow periods.

Recovered 75 ft. of mud with few oil spots on top.

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 7:15 A.M. ~~P.M.~~ Time Started Off Bottom 9:45 A.M. ~~P.M.~~ Maximum Temperature 131°
Initial Hydrostatic Pressure (A) 2144 P.S.I.
Initial Flow Period Minutes 30 (B) 61 P.S.I. to (C) 25 P.S.I.
Initial Closed In Period Minutes 45 (D) 1035 P.S.I.
Final Flow Period Minutes 30 (E) 83 P.S.I. to (F) 45 P.S.I.
Final Closed In Period Minutes 45 (G) 917 P.S.I.
Final Hydrostatic Pressure (H) 2130 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 2/28/80 Test Ticket No. 5505
 Recorder No. 10979 Capacity 4100 Location 4577 Ft.
 Clock No. ----- Elevation 2078 Kelly Bushing Well Temperature 131 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2144	P.S.I.	7:15A	M
B First Initial Flow Pressure	61	P.S.I.	30	Mins.
C First Final Flow Pressure	25	P.S.I.	45	Mins.
D Initial Closed-in Pressure	1035	P.S.I.	30	Mins.
E Second Initial Flow Pressure	83	P.S.I.	45	Mins.
F Second Final Flow Pressure	45	P.S.I.		
G Final Closed-in Pressure	917	P.S.I.		
H Final Hydrostatic Mud	2130	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>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>61</u>	<u>0</u>	<u>25</u>	<u>0</u>	<u>83</u>	<u>0</u>	<u>45</u>
P 2 <u>5</u>	<u>38</u>	<u>3</u>	<u>34</u>	<u>5</u>	<u>59</u>	<u>3</u>	<u>58</u>
P 3 <u>10</u>	<u>27</u>	<u>6</u>	<u>55</u>	<u>10</u>	<u>48</u>	<u>6</u>	<u>90</u>
P 4 <u>15</u>	<u>25</u>	<u>9</u>	<u>101</u>	<u>15</u>	<u>45</u>	<u>9</u>	<u>134</u>
P 5 <u>20</u>	<u>25</u>	<u>12</u>	<u>181</u>	<u>20</u>	<u>45</u>	<u>12</u>	<u>197</u>
P 6 <u>25</u>	<u>25</u>	<u>15</u>	<u>292</u>	<u>25</u>	<u>45</u>	<u>15</u>	<u>288</u>
P 7 <u>30</u>	<u>25</u>	<u>18</u>	<u>420</u>	<u>30</u>	<u>45</u>	<u>18</u>	<u>399</u>
P 8		<u>21</u>	<u>550</u>			<u>21</u>	<u>492</u>
P 9		<u>24</u>	<u>652</u>			<u>24</u>	<u>573</u>
P10		<u>27</u>	<u>738</u>			<u>27</u>	<u>644</u>
P11		<u>30</u>	<u>808</u>			<u>30</u>	<u>708</u>
P12		<u>33</u>	<u>873</u>			<u>33</u>	<u>760</u>
P13		<u>36</u>	<u>929</u>			<u>36</u>	<u>810</u>
P14		<u>39</u>	<u>977</u>			<u>39</u>	<u>852</u>
P15		<u>42</u>	<u>1016</u>			<u>42</u>	<u>890</u>
P16		<u>45</u>	<u>1035</u>			<u>45</u>	<u>917</u>
P17							
P18							
P19							
P20							

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