

Company Beren Corporation Lease & Well No. Ballentine #2
Elevation 2078 Kelly Bushing Formation Lansing Effective Pay - Ft. Ticket No. 13055
Date 10/9/81 Sec. 1 Twp. 27S Range 16W County Kiowa State Kansas
Test Approved by Robert C. Lewellyn Western Representative Jim Wondra
Formation Test No. 1 Interval Tested from 4136 ft. to 4157 ft. Total Depth 4157 ft.
Packer Depth 4131 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4136 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4147 ft. Recorder Number 2607 Cap. 4150
Bottom Recorder Depth (Outside) 4150 ft. Recorder Number 3351 Cap. 4000
Below Straddle Recorder Depth = ft. Recorder Number = Cap. =
Drilling Contractor Sterling Drlg. Rig #5 Drill Collar Length 280 I. D. 2 1/4 in.
Mud Type drispac Viscosity 34 Weight Pipe Length 455 I. D. 2.7 in.
Weight 9.5 Water Loss 29.6 cc. Drill Pipe Length 3380 I. D. 3.8 in.
Chlorides 20,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
Jars: Make - Serial Number -- Anchor Length 21 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: Weak increased to fair blow on initial flow period. Fair blow throughout final flow period.

Recovered 725 ft. of salt water (135,000 ppm chlorides)

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 11:00 A.M. Time Started Off Bottom 3:45 P.M. Maximum Temperature 120°
Initial Hydrostatic Pressure 2099 (A) P.S.I.
Initial Flow Period 30 Minutes (B) 93 P.S.I. to (C) 123 P.S.I.
Initial Closed In Period 48 Minutes (D) 1481 * P.S.I.
Final Flow Period 120 Minutes (E) 227 P.S.I. to (F) 355 P.S.I.
Final Closed In Period 96 Minutes (G) 1483 P.S.I.
Final Hydrostatic Pressure 2032 (H) P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 10/9/81 Recorder No. 2607 Capacity 4150 Test Ticket No. 13055
 Clock No. -- Elevation 2078 Kelly Bushing Location 4147 Ft. --
 Well Temperature 120 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	2099 P.S.I.	11:00P	M
B First Initial Flow Pressure	93 P.S.I.	30 Mins.	30 Mins.
C First Final Flow Pressure	123 P.S.I.	45 Mins.	48 Mins.
D Initial Closed-in Pressure	1481 * P.S.I.	120 Mins.	120 Mins.
E Second Initial Flow Pressure	227 P.S.I.	90 Mins.	96 Mins.
F Second Final Flow Pressure	355 P.S.I.		
G Final Closed-in Pressure	1483 P.S.I.		
H Final Hydrostatic Mud	2032 P.S.I.		

* Pressures questionable due to tool being picked up too high.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	93	0	123	0	227	0	355
P 2 5	93	3	820	5	227	3	812
P 3 10	93	6	1437*	10	227	6	1293
P 4 15	96	9	1433*	15	227	9	1367
P 5 20	105	12	1436*	20	227	12	1394
P 6 25	115	15	1443*	25	230	15	1412
P 7 30	123	18	1449*	30	234	18	1423
P 8		21	1454*	35	236	21	1432
P 9		24	1459*	40	239	24	1441
P 10		27	1464*	45	249	27	1448
P 11		30	1469*	50	254	30	1453
P 12		33	1472*	55	259	33	1456
P 13		36	1475*	60	268	36	1458
P 14		39	1477*	65	275	39	1462
P 15		42	1479*	70	284	42	1465
P 16		45	1481*	75	291	45	1468
P 17		48	1481*	80	300	48	1470
P 18				85	308	51	1472
P 19				90	315	54	1473
P 20				95	324	57	1474
				100	332	60	1475

WESTERN TESTING CO., INC.

Pressure Data

Date 10/9/81 Test Ticket No. 13055
 Recorder No. 2607 Capacity 4150 Location 4147 Ft.
 Clock No. -- Elevation 2078 Kelly Bushing Well Temperature 120 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2099</u> P.S.I.	<u>11:00P</u> M	
B First Initial Flow Pressure	<u>93</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>123</u> P.S.I.	<u>45</u> Mins.	<u>48</u> Mins.
D Initial Closed-in Pressure	<u>1481 *</u> P.S.I.	<u>120</u> Mins.	<u>120</u> Mins.
E Second Initial Flow Pressure	<u>227</u> P.S.I.	<u>90</u> Mins.	<u>96</u> Mins.
F Second Final Flow Pressure	<u>355</u> P.S.I.		
G Final Closed-in Pressure	<u>1483</u> P.S.I.		
H Final Hydrostatic Mud	<u>2032</u> P.S.I.		

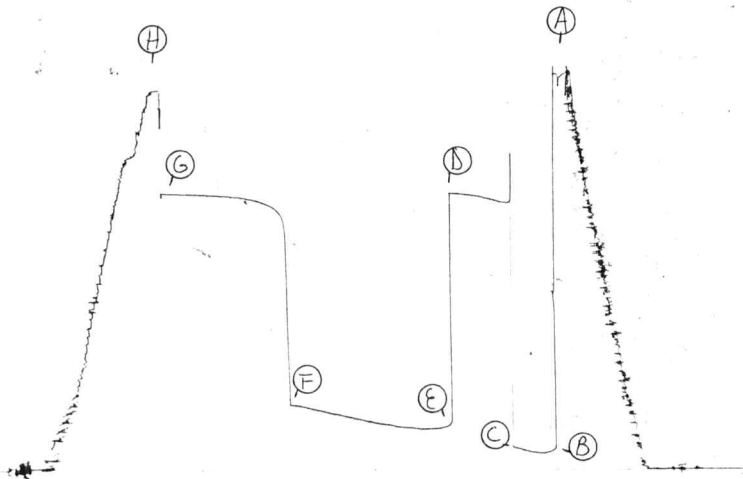
* Pressures questionable due to tool being picked up too high.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
Breakdown: <u>6</u> Inc.		Breakdown: <u>16</u> Inc.		Breakdown: <u>24</u> Inc.		Breakdown: <u>32</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.	
P 1				105	341	63	1476
P 2				110	349	66	1477
P 3				115	354	69	1478
P 4				120	355	72	1479
P 5						75	1480
P 6						78	1481
P 7						81	1482
P 8						84	1483
P 9						87	1483
P10						90	1483
P11						93	1483
P12						96	1483
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TKT # 13055

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Company Beren Corporation Lease & Well No. Ballentine #2
 Elevation 2078 Kelly Bushing Formation Lansing Effective Pay - Ft. Ticket No. 13056
 Date 10/9/81 Sec. 1 Twp. 27S Range 16W County Kiowa State Kansas
 Test Approved by Robert C Lewellyn Western Representative Jim Wondra
 Formation Test No. 2 Interval Tested from 4196 ft. to 4215 ft. Total Depth 4215 ft.
 Packer Depth 4191 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 4196 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 4205 ft. Recorder Number 2607 Cap. 4150
 Bottom Recorder Depth (Outside) 4208 ft. Recorder Number 3351 Cap. 4000
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Sterling Rig #5 Drill Collar Length 280 I. D. 2 1/4 in.
 Mud Type Drispac Viscosity 46 Weight Pipe Length 455 I. D. 2.7 in.
 Weight 9.3 Water Loss 17.4 cc. Drill Pipe Length 3460 I. D. 3.8 in.
 Chlorides 22,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 19 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: Very weak blow throughout initial flow period. No blow on final flow period.

Recovered 90 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 5:30 ~~A.M.~~ P.M. Time Started Off Bottom 8:00 ~~A.M.~~ P.M. Maximum Temperature 120
 Initial Hydrostatic Pressure (A) 2120 P.S.I.
 Initial Flow Period Minutes 35 (B) 93 P.S.I. to (C) 73 P.S.I.
 Initial Closed In Period Minutes 48 (D) 1450 P.S.I.
 Final Flow Period Minutes 30 (E) 112 P.S.I. to (F) 96 P.S.I.
 Final Closed In Period Minutes 45 (G) 1428 P.S.I.
 Final Hydrostatic Pressure (H) 2110 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

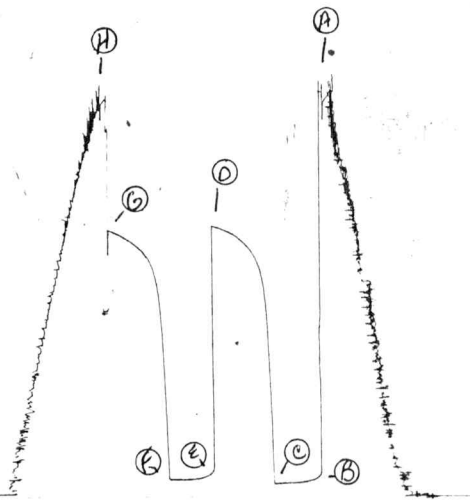
Date 10/9/81 Recorder No. 2607 Capacity 4150 Test Ticket No. 13056
 Location 4205 Ft. Clock No. - Elevation 2078 Kelly Bushing Well Temperature 120 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2120</u> P.S.I.	<u>5:30P</u>	<u>M</u>
B First Initial Flow Pressure	<u>93</u> P.S.I.	<u>30</u> Mins.	<u>35</u> Mins.
C First Final Flow Pressure	<u>73</u> P.S.I.	<u>45</u> Mins.	<u>48</u> Mins.
D Initial Closed-in Pressure	<u>1450</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>112</u> P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>96</u> P.S.I.		
G Final Closed-in Pressure	<u>1428</u> P.S.I.		
H Final Hydrostatic Mud	<u>2110</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>16</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>93</u>	<u>0</u>	<u>73</u>	<u>0</u>	<u>112</u>	<u>0</u>	<u>96</u>
P 2 <u>5</u>	<u>93</u>	<u>3</u>	<u>460</u>	<u>5</u>	<u>112</u>	<u>3</u>	<u>371</u>
P 3 <u>10</u>	<u>84</u>	<u>6</u>	<u>847</u>	<u>10</u>	<u>100</u>	<u>6</u>	<u>772</u>
P 4 <u>15</u>	<u>79</u>	<u>9</u>	<u>1109</u>	<u>15</u>	<u>98</u>	<u>9</u>	<u>1042</u>
P 5 <u>20</u>	<u>77</u>	<u>12</u>	<u>1217</u>	<u>20</u>	<u>96</u>	<u>12</u>	<u>1176</u>
P 6 <u>25</u>	<u>76</u>	<u>15</u>	<u>1270</u>	<u>25</u>	<u>96</u>	<u>15</u>	<u>1245</u>
P 7 <u>30</u>	<u>74</u>	<u>18</u>	<u>1309</u>	<u>30</u>	<u>96</u>	<u>18</u>	<u>1286</u>
P 8 <u>35</u>	<u>73</u>	<u>21</u>	<u>1336</u>	<u>35</u>		<u>21</u>	<u>1316</u>
P 9		<u>24</u>	<u>1362</u>			<u>24</u>	<u>1336</u>
P 10		<u>27</u>	<u>1380</u>			<u>27</u>	<u>1353</u>
P 11		<u>30</u>	<u>1399</u>			<u>30</u>	<u>1368</u>
P 12		<u>33</u>	<u>1411</u>			<u>33</u>	<u>1380</u>
P 13		<u>36</u>	<u>1422</u>			<u>36</u>	<u>1396</u>
P 14		<u>39</u>	<u>1431</u>			<u>39</u>	<u>1408</u>
P 15		<u>42</u>	<u>1441</u>			<u>42</u>	<u>1417</u>
P 16		<u>45</u>	<u>1448</u>			<u>45</u>	<u>1428</u>
P 17		<u>48</u>	<u>1450</u>				
P 18							
P 19							
P 20							

PKT # 13056
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Company Beren Corporation Lease & Well No. Ballentine #2
 Elevation 2078 Kelly Bushing Formation Lansing Effective Pay - Ft. Ticket No. 13057
 Date 10/10/81 Sec. 1 Twp. 27S Range 16W County Kiowa State Kansas
 Test Approved by Robert C Lewellyn Western Representative Jim Wondra
 Formation Test No. 3 Interval Tested from 4250 ft. to 4290 ft. Total Depth 4290 ft.
 Packer Depth 4245 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 4250 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 4280 ft. Recorder Number 2607 Cap. 4150
 Bottom Recorder Depth (Outside) 4283 ft. Recorder Number 3351 Cap. 4000
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Sterling Rig #5 Drill Collar Length 280 I. D. 2 1/4 in.
 Mud Type Drispac Viscosity 58 Weight Pipe Length 455 I. D. 2.7 in.
 Weight 9.4 Water Loss 12.8 cc. Drill Pipe Length 3494 I. D. 3.8 in.
 Chlorides 20,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 40 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: Very weak blow died in 27 minutes on initial flow period. No blow on final flow period.

Recovered 60 ft. of drilling mud
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 10:30 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 12:30 ~~P.M.~~ ^{A.M.} Maximum Temperature 121
 Initial Hydrostatic Pressure (A) 2184 P.S.I.
 Initial Flow Period Minutes 30 (B) 105 P.S.I. to (C) 84 P.S.I.
 Initial Closed In Period Minutes 30 (D) 470 P.S.I.
 Final Flow Period Minutes 30 (E) 121 P.S.I. to (F) 95 P.S.I.
 Final Closed In Period Minutes 33 (G) 358 P.S.I.
 Final Hydrostatic Pressure (H) 2162 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 10/10/81 Recorder No. 2607 Capacity 4150 Test Ticket No. 13057
 Clock No. - Elevation 2078 Kelly Bushing Location 4280 Ft. -
 Well Temperature 121 °F

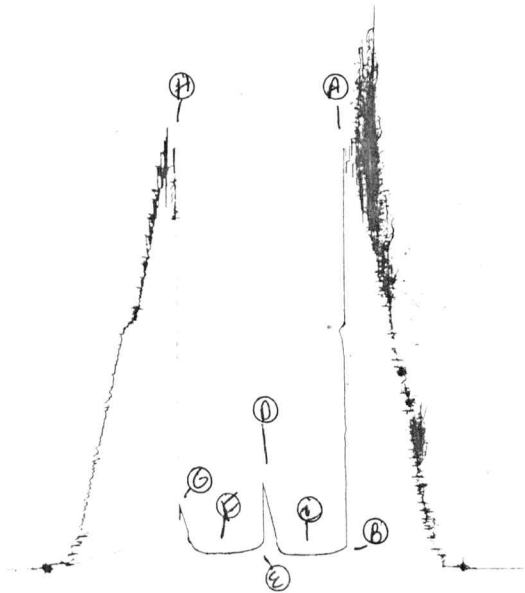
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2184</u>	P.S.I.	<u>10:30A</u>	<u>M</u>
B First Initial Flow Pressure	<u>105</u>	P.S.I.	<u>30</u>	<u>30</u>
C First Final Flow Pressure	<u>84</u>	P.S.I.	<u>30</u>	<u>30</u>
D Initial Closed-in Pressure	<u>470</u>	P.S.I.	<u>30</u>	<u>30</u>
E Second Initial Flow Pressure	<u>121</u>	P.S.I.	<u>30</u>	<u>33</u>
F Second Final Flow Pressure	<u>95</u>	P.S.I.		
G Final Closed-in Pressure	<u>358</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2162</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>11</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>105</u>	<u>0</u>	<u>84</u>	<u>0</u>	<u>121</u>	<u>0</u>	<u>95</u>
P 2 <u>5</u>	<u>105</u>	<u>3</u>	<u>84</u>	<u>5</u>	<u>121</u>	<u>3</u>	<u>95</u>
P 3 <u>10</u>	<u>93</u>	<u>6</u>	<u>84</u>	<u>10</u>	<u>109</u>	<u>6</u>	<u>95</u>
P 4 <u>15</u>	<u>89</u>	<u>9</u>	<u>84</u>	<u>15</u>	<u>104</u>	<u>9</u>	<u>95</u>
P 5 <u>20</u>	<u>87</u>	<u>12</u>	<u>86</u>	<u>20</u>	<u>98</u>	<u>12</u>	<u>95</u>
P 6 <u>25</u>	<u>84</u>	<u>15</u>	<u>87</u>	<u>25</u>	<u>95</u>	<u>15</u>	<u>98</u>
P 7 <u>30</u>	<u>84</u>	<u>18</u>	<u>97</u>	<u>30</u>	<u>95</u>	<u>18</u>	<u>108</u>
P 8		<u>21</u>	<u>135</u>			<u>21</u>	<u>123</u>
P 9		<u>24</u>	<u>250</u>			<u>24</u>	<u>161</u>
P10		<u>27</u>	<u>341</u>			<u>27</u>	<u>246</u>
P11		<u>30</u>	<u>470</u>			<u>30</u>	<u>313</u>
P12						<u>33</u>	<u>358</u>
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TKT #13057

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Company Beren Corporation Lease & Well No. Ballentine #2
Elevation 2078 Kelly Bushing Pawnee Effective Pay - Ft. Ticket No. 13058
Date 10/11/81 Sec. 1 Twp. 27S Range 16W County Kiowa State Kansas
Test Approved by Robert C Lewellyn Western Representative Jim Wondra

Formation Test No. 4 Interval Tested from 4284 ft. to 4405 ft. Total Depth 4405 ft.

Packer Depth 4279 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4284 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4301 ft. Recorder Number 2607 Cap. 4105

Bottom Recorder Depth (Outside) 4304 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Sterling Rig #5 Drill Collar Length 190 I. D. 2 1/4 in.

Mud Type Drispac Viscosity 47 Weight Pipe Length 455 I. D. 2.7 in.

Weight 9.4 Water Loss 11.2 cc. Drill Pipe Length 3618 I. D. 3.8 in.

Chlorides 22,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.

Jars: Make - Serial Number - Anchor Length 121 ft. Size 5 1/2 OD in.

Did Well Flow? Yes 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: Strong blow throughout test. Gas to surface in 52 minutes on final flow period

Too small to measure.

Recovered 150 ft. of oil & gas cut mud

Recovered 70 ft. of gas cut mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 5:00 A.M. Time Started Off Bottom 9:45 P.M. Maximum Temperature 122

Initial Hydrostatic Pressure (A) 2224 P.S.I.

Initial Flow Period Minutes 35 (B) 127 P.S.I. to (C) 115 P.S.I.

Initial Closed In Period Minutes 45 (D) 777 P.S.I.

Final Flow Period Minutes 120 (E) 169 P.S.I. to (F) 711* P.S.I.

Final Closed In Period Minutes 93 (G) 969 P.S.I.

Final Hydrostatic Pressure (H) 2224 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 10/11/81 Recorder No. 2607 Capacity 4150 Test Ticket No. 13058
 Location 4301 Ft. Clock No. - Elevation 2078 Kelly Bushing Well Temperature 122 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	2224 P.S.I.	5:00A	M
B First Initial Flow Pressure	127 P.S.I.	30 Mins.	35 Mins.
C First Final Flow Pressure	115 P.S.I.	45 Mins.	45 Mins.
D Initial Closed-in Pressure	777 P.S.I.	120 Mins.	120 Mins.
E Second Initial Flow Pressure	169 P.S.I.	90 Mins.	93 Mins.
F Second Final Flow Pressure	711* P.S.I.		
G Final Closed-in Pressure	969 P.S.I.		
H Final Hydrostatic Mud	2224 P.S.I.		

*Pressures questionable due to tool being plugged

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>24</u> Inc.		Breakdown: <u>31</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 0	127	0	115	0	169	0	711*
P 2 5	127	3	127	5	169	3	729
P 3 10	120	6	169	10	169	6	748
P 4 15	116	9	229	15	169	9	768
P 5 20	115	12	292	20	167	12	785
P 6 25	115	15	345	25	165	15	800
P 7 30	115	18	400	30	164	18	816
P 8 35	115	21	451	35	164	21	829
P 9		24	504	40	165	24	841
P10		27	548	45	165	27	852
P11		30	594	50	165	30	861
P12		33	638	55	165	33	869
P13		36	671	60	168	36	879
P14		39	714	65	175*	39	886
P15		42	754	70	190*	42	893
P16		45	777	75	222*	45	899
P17				80	258*	48	904
P18				85	322*	51	908
P19				90	392*	54	914
P20				95	455*	57	917
				100	517*	60	923

WESTERN TESTING CO., INC.

Pressure Data

Date 10/11/81 Test Ticket No. 13058

Recorder No. 2607 Capacity 4150 Location 4301 Ft.

Clock No. - Elevation 2078 Kelly Bushing Well Temperature 122 °F

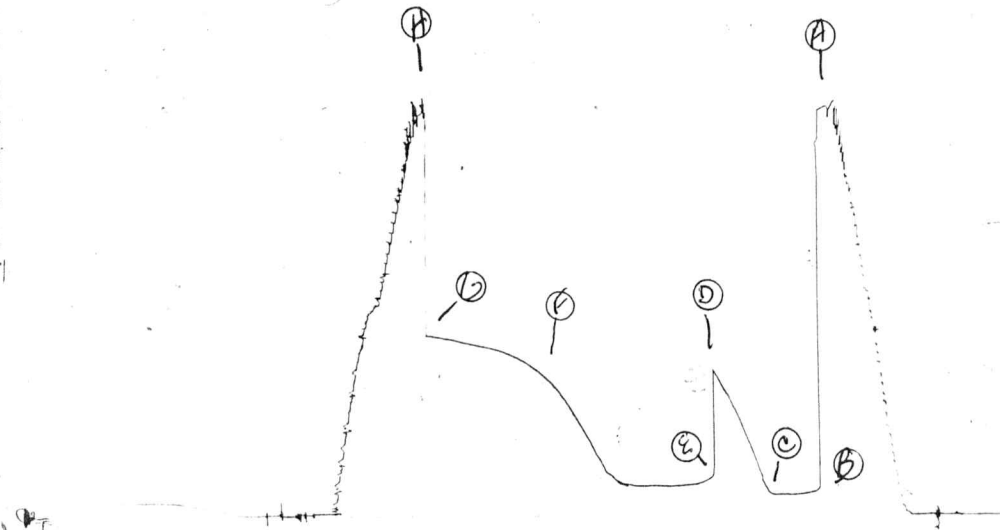
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2224</u> P.S.I.	Open Tool	<u>5:00A</u>	<u>M</u>
B First Initial Flow Pressure	<u>127</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>35</u> Mins.
C First Final Flow Pressure	<u>115</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>777</u> P.S.I.	Second Flow Pressure	<u>120</u> Mins.	<u>120</u> Mins.
E Second Initial Flow Pressure	<u>169</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>93</u> Mins.
F Second Final Flow Pressure	<u>711*</u> P.S.I.			
G Final Closed-in Pressure	<u>969</u> P.S.I.			
H Final Hydrostatic Mud	<u>2224</u> P.S.I.			

*Pressures questionable due to tool being plugged

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>24</u> Inc.		Breakdown: <u>31</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				105	571*	63	928
P 2				110	623*	66	933
P 3				115	671*	69	937
P 4				120	711*	72	944
P 5						75	948
P 6						78	952
P 7						81	956
P 8						84	960
P 9						87	964
P10						90	967
P11						93	969
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

PKT # 13058
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Company Beren Corporation Lease & Well No. Ballentine #2
Elevation 2078 Kelly Bushing Cherokee Effective Pay - Ft. Ticket No. 13059
Date 10/12/81 Sec. 1 Twp. 27S Range 16W County Kiowa State Kansas
Test Approved by Robert C Lewellyn Western Representative Jim Wondra
Formation Test No. 5 Interval Tested from 4424 ft. to 4465 ft. Total Depth 4465 ft.
Packer Depth 4419 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4424 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4455 ft. Recorder Number 2607 Cap. 4150
Bottom Recorder Depth (Outside) 4458 ft. Recorder Number 3351 Cap. 4000
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Sterling Rig #5 Drill Collar Length 280 I. D. 2 1/4 in.
Mud Type Drispac Viscosity 47 Weight Pipe Length 455 I. D. 2.7 in.
Weight 9.4 Water Loss 11.2 cc. Drill Pipe Length 3668 I. D. 3.8 in.
Chlorides 22,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
Jars: Make - Serial Number - Anchor Length 41 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: Strong blow throughout test.

Recovered 95 ft. of slightly oil & gas cut mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 11:25 ~~A.M.~~ P.M. Time Started Off Bottom 4:40 ~~A.M.~~ P.M. Maximum Temperature 122
Initial Hydrostatic Pressure 2211 (A) 2211 P.S.I.
Initial Flow Period 35 Minutes (B) 116 P.S.I. to (C) 95 P.S.I.
Initial Closed In Period 42 Minutes (D) 356 P.S.I.
Final Flow Period 120 Minutes (E) 108 P.S.I. to (F) 90 P.S.I.
Final Closed In Period 120 Minutes (G) 394 P.S.I.
Final Hydrostatic Pressure 2184 (H) 2184 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 10/12/81

Recorder No. 2607 Capacity 4150 Test Ticket No. 13059

Clock No. - Elevation 2078 Kelly Bushing Location 4455 Ft.

Well Temperature 122 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2211</u> P.S.I.	Open Tool	<u>11:25P</u>	<u>M</u>
B First Initial Flow Pressure	<u>116</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>35</u> Mins.
C First Final Flow Pressure	<u>95</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>42</u> Mins.
D Initial Closed-in Pressure	<u>356</u> P.S.I.	Second Flow Pressure	<u>120</u> Mins.	<u>120</u> Mins.
E Second Initial Flow Pressure	<u>108</u> P.S.I.	Final Closed-in Pressure	<u>120</u> Mins.	<u>120</u> Mins.
F Second Final Flow Pressure	<u>90</u> P.S.I.			
G Final Closed-in Pressure	<u>394</u> P.S.I.			
H Final Hydrostatic Mud	<u>2184</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>14</u> Inc.		Breakdown: <u>24</u> Inc.		Breakdown: <u>40</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>116</u>	<u>0</u>	<u>95</u>	<u>0</u>	<u>108</u>	<u>0</u>	<u>90</u>
P 2 <u>5</u>	<u>116</u>	<u>3</u>	<u>104</u>	<u>5</u>	<u>108</u>	<u>3</u>	<u>91</u>
P 3 <u>10</u>	<u>101</u>	<u>6</u>	<u>120</u>	<u>10</u>	<u>108</u>	<u>6</u>	<u>95</u>
P 4 <u>15</u>	<u>97</u>	<u>9</u>	<u>142</u>	<u>15</u>	<u>106</u>	<u>9</u>	<u>104</u>
P 5 <u>20</u>	<u>95</u>	<u>12</u>	<u>161</u>	<u>20</u>	<u>103</u>	<u>12</u>	<u>110</u>
P 6 <u>25</u>	<u>95</u>	<u>15</u>	<u>180</u>	<u>25</u>	<u>99</u>	<u>15</u>	<u>123</u>
P 7 <u>30</u>	<u>95</u>	<u>18</u>	<u>205</u>	<u>30</u>	<u>96</u>	<u>18</u>	<u>137</u>
P 8 <u>35</u>	<u>95</u>	<u>21</u>	<u>227</u>	<u>35</u>	<u>95</u>	<u>21</u>	<u>150</u>
P 9		<u>24</u>	<u>248</u>	<u>40</u>	<u>95</u>	<u>24</u>	<u>162</u>
P10		<u>27</u>	<u>271</u>	<u>45</u>	<u>95</u>	<u>27</u>	<u>174</u>
P11		<u>30</u>	<u>292</u>	<u>50</u>	<u>94</u>	<u>30</u>	<u>185</u>
P12		<u>33</u>	<u>311</u>	<u>55</u>	<u>94</u>	<u>33</u>	<u>197</u>
P13		<u>36</u>	<u>328</u>	<u>60</u>	<u>93</u>	<u>36</u>	<u>203</u>
P14		<u>39</u>	<u>345</u>	<u>65</u>	<u>93</u>	<u>39</u>	<u>207</u>
P15		<u>42</u>	<u>356</u>	<u>70</u>	<u>93</u>	<u>42</u>	<u>214</u>
P16				<u>75</u>	<u>92</u>	<u>45</u>	<u>224</u>
P17				<u>80</u>	<u>92</u>	<u>48</u>	<u>233</u>
P18				<u>85</u>	<u>93</u>	<u>51</u>	<u>240</u>
P19				<u>90</u>	<u>94</u>	<u>54</u>	<u>252</u>
P20				<u>95</u>	<u>94</u>	<u>57</u>	<u>259</u>
				<u>100</u>	<u>94</u>	<u>60</u>	<u>269</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 10/12/81 Test Ticket No. 13059
 Recorder No. 2607 Capacity 4150 Location 4455 Ft.
 Clock No. - Elevation 2078 Kelly Bushing Well Temperature 122 °F

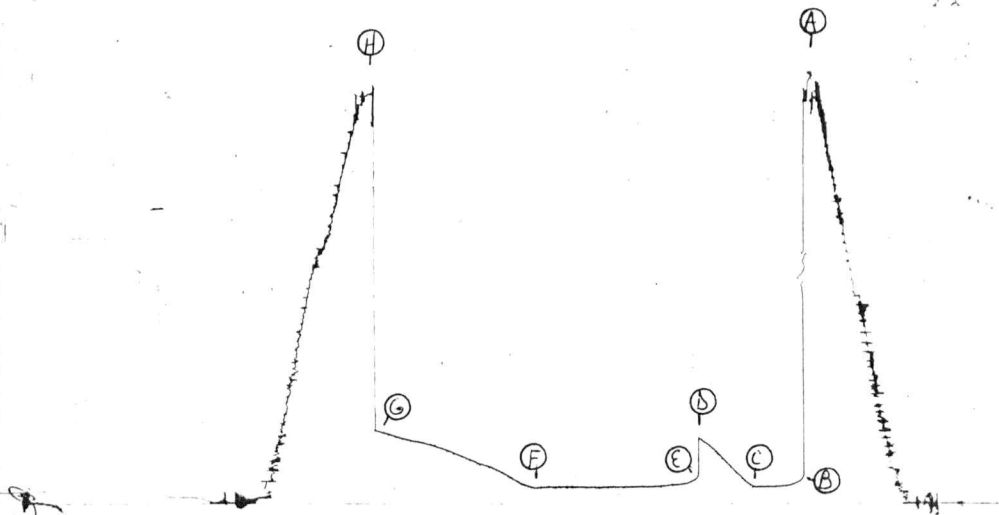
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2211	P.S.I.	11:25P	M
B First Initial Flow Pressure	116	P.S.I.	30	Mins.
C First Final Flow Pressure	95	P.S.I.	45	Mins.
D Initial Closed-in Pressure	356	P.S.I.	120	Mins.
E Second Initial Flow Pressure	108	P.S.I.	120	Mins.
F Second Final Flow Pressure	90	P.S.I.		
G Final Closed-in Pressure	394	P.S.I.		
H Final Hydrostatic Mud	2184	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>14</u> Inc.		Breakdown: <u>24</u> Inc.		Breakdown: <u>40</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				105	94	63	277
P 2				110	94	66	287
P 3				115	92	69	293
P 4				120	90	72	301
P 5						75	309
P 6						78	318
P 7						81	322
P 8						84	328
P 9						87	333
P10						90	337
P11						93	342
P12						96	347
P13						99	352
P14						102	357
P15						105	364
P16						108	371
P17						111	377
P18						114	385
P19						117	390
P20						120	394

TKT # 13059

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Company Beren Corporation Lease & Well No. Ballentine #2
Elevation 2078 Kelly Bushing Formation Cherokee Effective Pay - Ft. Ticket No. 13060
Date 10/12/81 Sec. 1 Twp. 27S Range 16W County Kiowa State Kansas
Test Approved by Robert C Lewellyn Western Representative Jim Wondra
Formation Test No. 6 Interval Tested from 4428 ft. to 4490 ft. Total Depth 4490 ft.
Packer Depth 4423 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4428 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4448 ft. Recorder Number 2607 Cap. 4150
Bottom Recorder Depth (Outside) 4451 ft. Recorder Number 3351 Cap. 4000
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Sterling Rig #5 Drill Collar Length 280 I. D. 2 1/4 in.
Mud Type Drispac Viscosity 50 Weight Pipe Length 455 I. D. 2.7 in.
Weight 9.1 Water Loss 15.8 cc. Drill Pipe Length 3672 I. D. 3.8 in.
Chlorides 25,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
Jars: Make - Serial Number - Anchor Length 62 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: Weak blow throughout initial flow period. Fair blow throughout final flow period.

Recovered 40 ft. of Oil cut mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 3:15 ~~A.M.~~ P.M. Time Started Off Bottom 8:30 ~~A.M.~~ P.M. Maximum Temperature 122
Initial Hydrostatic Pressure (A) 2247 P.S.I.
Initial Flow Period Minutes 30 (B) 86 P.S.I. to (C) 86 P.S.I.
Initial Closed In Period Minutes 45 (D) 142 P.S.I.
Final Flow Period Minutes 120 (E) 104 P.S.I. to (F) 105 P.S.I.
Final Closed In Period Minutes 117 (G) 252 P.S.I.
Final Hydrostatic Pressure (H) 2226 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 10/12/81 Test Ticket No. 13060
 Recorder No. 2607 Capacity 4150 Location 4448 Ft.
 Clock No. - Elevation 2078 Kelly Bushing Well Temperature 122 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud <u>2247</u> P.S.I.	Open Tool	<u>3:15</u> M	
B First Initial Flow Pressure <u>86</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure <u>86</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure <u>142</u> P.S.I.	Second Flow Pressure	<u>120</u> Mins.	<u>120</u> Mins.
E Second Initial Flow Pressure <u>104</u> P.S.I.	Final Closed-in Pressure	<u>120</u> Mins.	<u>117</u> Mins.
F Second Final Flow Pressure <u>105</u> P.S.I.			
G Final Closed-in Pressure <u>252</u> P.S.I.			
H Final Hydrostatic Mud <u>2226</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>24</u> Inc.		Breakdown: <u>39</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>86</u>	<u>0</u>	<u>86</u>	<u>0</u>	<u>104</u>	<u>0</u>	<u>105</u>
P 2 <u>5</u>	<u>86</u>	<u>3</u>	<u>86</u>	<u>5</u>	<u>104</u>	<u>3</u>	<u>105</u>
P 3 <u>10</u>	<u>86</u>	<u>6</u>	<u>86</u>	<u>10</u>	<u>104</u>	<u>6</u>	<u>105</u>
P 4 <u>15</u>	<u>86</u>	<u>9</u>	<u>87</u>	<u>15</u>	<u>104</u>	<u>9</u>	<u>105</u>
P 5 <u>20</u>	<u>86</u>	<u>12</u>	<u>87</u>	<u>20</u>	<u>104</u>	<u>12</u>	<u>105</u>
P 6 <u>25</u>	<u>86</u>	<u>15</u>	<u>90</u>	<u>25</u>	<u>104</u>	<u>15</u>	<u>107</u>
P 7 <u>30</u>	<u>86</u>	<u>18</u>	<u>91</u>	<u>30</u>	<u>104</u>	<u>18</u>	<u>109</u>
P 8		<u>21</u>	<u>94</u>	<u>35</u>	<u>104</u>	<u>21</u>	<u>111</u>
P 9		<u>24</u>	<u>97</u>	<u>40</u>	<u>104</u>	<u>24</u>	<u>113</u>
P10		<u>27</u>	<u>101</u>	<u>45</u>	<u>104</u>	<u>27</u>	<u>115</u>
P11		<u>30</u>	<u>108</u>	<u>50</u>	<u>104</u>	<u>30</u>	<u>116</u>
P12		<u>33</u>	<u>116</u>	<u>55</u>	<u>104</u>	<u>33</u>	<u>120</u>
P13		<u>36</u>	<u>123</u>	<u>60</u>	<u>104</u>	<u>36</u>	<u>125</u>
P14		<u>39</u>	<u>131</u>	<u>65</u>	<u>104</u>	<u>39</u>	<u>129</u>
P15		<u>42</u>	<u>137</u>	<u>70</u>	<u>104</u>	<u>42</u>	<u>131</u>
P16		<u>45</u>	<u>142</u>	<u>75</u>	<u>104</u>	<u>45</u>	<u>133</u>
P17				<u>80</u>	<u>105</u>	<u>48</u>	<u>135</u>
P18				<u>85</u>	<u>106</u>	<u>51</u>	<u>137</u>
P19				<u>90</u>	<u>106</u>	<u>54</u>	<u>141</u>
P20				<u>95</u>	<u>106</u>	<u>57</u>	<u>144</u>
				<u>100</u>	<u>106</u>	<u>60</u>	<u>149</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 10/12/81 Recorder No. 2607 Capacity 4150 Test Ticket No. 13060
 Clock No. - Elevation 2078 Kelly Bushing Location 4448 Ft. -
 Well Temperature 122 °F

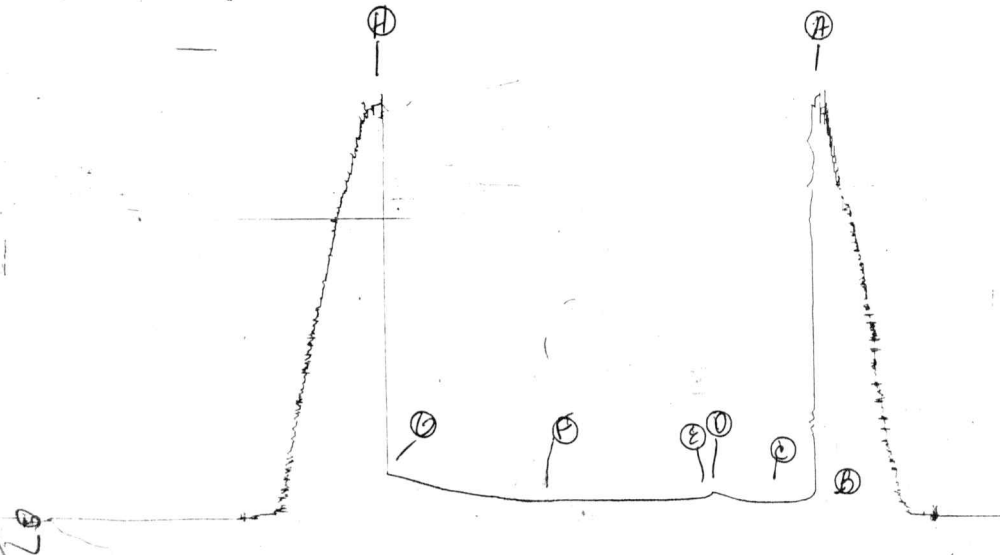
Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2247</u> P.S.I.	<u>3:15</u> M	
B First Initial Flow Pressure	<u>86</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>86</u> P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>142</u> P.S.I.	<u>120</u> Mins.	<u>120</u> Mins.
E Second Initial Flow Pressure	<u>104</u> P.S.I.	<u>120</u> Mins.	<u>117</u> Mins.
F Second Final Flow Pressure	<u>105</u> P.S.I.		
G Final Closed-in Pressure	<u>252</u> P.S.I.		
H Final Hydrostatic Mud	<u>2226</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>24</u> Inc.		Breakdown: <u>39</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>105</u>	<u>106</u>	<u>63</u>	<u>153</u>
P 2				<u>110</u>	<u>106</u>	<u>66</u>	<u>157</u>
P 3				<u>115</u>	<u>105</u>	<u>69</u>	<u>159</u>
P 4				<u>120</u>	<u>105</u>	<u>72</u>	<u>162</u>
P 5						<u>75</u>	<u>169</u>
P 6						<u>78</u>	<u>175</u>
P 7						<u>81</u>	<u>182</u>
P 8						<u>84</u>	<u>188</u>
P 9						<u>87</u>	<u>195</u>
P10						<u>90</u>	<u>201</u>
P11						<u>93</u>	<u>207</u>
P12						<u>96</u>	<u>214</u>
P13						<u>99</u>	<u>220</u>
P14						<u>102</u>	<u>227</u>
P15						<u>105</u>	<u>233</u>
P16						<u>108</u>	<u>238</u>
P17						<u>111</u>	<u>243</u>
P18						<u>114</u>	<u>249</u>
P19						<u>117</u>	<u>252</u>
P20							

TK # 13060

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Company Beren Corporation Lease & Well No. Ballentine #2
Elevation 2078 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 13061
Date 10/13/81 Sec. 1 Twp. 27S Range 16W County Kiowa State Kansas
Test Approved by Robert C Lewellyn Western Representative Jim Wondra
Formation Test No. 7 Interval Tested from 4505 ft. to 4527 ft. Total Depth 4527 ft.
Packer Depth 4500 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4505 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4517 ft. Recorder Number 2607 Cap. 4150
Bottom Recorder Depth (Outside) 4520 ft. Recorder Number 3351 Cap. 4000
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Sterling Rig #5 Drill Collar Length 280 I. D. 2 1/4 in.
Mud Type Drispac Viscosity 43 Weight Pipe Length 455 I. D. 2.7 in.
Weight 9.1 Water Loss 15.8 cc. Drill Pipe Length 3749 I. D. 3.8 in.
Chlorides 20,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
Jars: Make - Serial Number - Anchor Length 22 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: Strong blow throughout test.

Recovered 120 ft. of oil & gas cut mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Read outside chart

Time Set Packer(s) 7:50 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 1:05 ~~P.M.~~ ^{A.M.} Maximum Temperature 123
Initial Hydrostatic Pressure 2208 P.S.I. (A)
Initial Flow Period 30 Minutes (B) 38 P.S.I. to (C) 43 P.S.I.
Initial Closed In Period 57 Minutes (D) 610 P.S.I.
Final Flow Period 115 Minutes (E) 59 P.S.I. to (F) 78 P.S.I.
Final Closed In Period 111 Minutes (G) 1061 P.S.I.
Final Hydrostatic Pressure 2190 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 10/13/81

Test Ticket No. 13061

Recorder No. 3351

Capacity 4000

Location 4520 Ft.

Clock No. - Elevation 2078 Kelly Bushing

Well Temperature 123 °F

Point	Pressure	
A Initial Hydrostatic Mud	<u>2208</u>	P.S.I.
B First Initial Flow Pressure	<u>38</u>	P.S.I.
C First Final Flow Pressure	<u>43</u>	P.S.I.
D Initial Closed-in Pressure	<u>610</u>	P.S.I.
E Second Initial Flow Pressure	<u>59</u>	P.S.I.
F Second Final Flow Pressure	<u>78</u>	P.S.I.
G Final Closed-in Pressure	<u>1061</u>	P.S.I.
H Final Hydrostatic Mud	<u>2190</u>	P.S.I.

Open Tool

First Flow Pressure

Initial Closed-in Pressure

Second Flow Pressure

Final Closed-in Pressure

Time Given	Time Computed
<u>7:50A</u>	<u>M</u>
<u>30</u> Mins.	<u>30</u> Mins.
<u>45</u> Mins.	<u>57</u> Mins.
<u>120</u> Mins.	<u>115</u> Mins.
<u>120</u> Mins.	<u>111</u> Mins.

PRESSURE BREAKDOWN

First Flow Pressure

Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In

Breakdown: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure

Breakdown: 23 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In

Breakdown: 37 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>38</u>	<u>0</u>	<u>43</u>	<u>0</u>	<u>59</u>	<u>0</u>	<u>78</u>
P 2 <u>5</u>	<u>38</u>	<u>3</u>	<u>72</u>	<u>5</u>	<u>59</u>	<u>3</u>	<u>102</u>
P 3 <u>10</u>	<u>39</u>	<u>6</u>	<u>96</u>	<u>10</u>	<u>59</u>	<u>6</u>	<u>133</u>
P 4 <u>15</u>	<u>40</u>	<u>9</u>	<u>133</u>	<u>15</u>	<u>59</u>	<u>9</u>	<u>165</u>
P 5 <u>20</u>	<u>41</u>	<u>12</u>	<u>169</u>	<u>20</u>	<u>60</u>	<u>12</u>	<u>198</u>
P 6 <u>25</u>	<u>42</u>	<u>15</u>	<u>209</u>	<u>25</u>	<u>61</u>	<u>15</u>	<u>230</u>
P 7 <u>30</u>	<u>43</u>	<u>18</u>	<u>254</u>	<u>30</u>	<u>62</u>	<u>18</u>	<u>261</u>
P 8		<u>21</u>	<u>299</u>	<u>35</u>	<u>63</u>	<u>21</u>	<u>294</u>
P 9		<u>24</u>	<u>349</u>	<u>40</u>	<u>64</u>	<u>24</u>	<u>324</u>
P10		<u>27</u>	<u>404</u>	<u>45</u>	<u>65</u>	<u>27</u>	<u>357</u>
P11		<u>30</u>	<u>458</u>	<u>50</u>	<u>66</u>	<u>30</u>	<u>387</u>
P12		<u>33</u>	<u>517</u>	<u>55</u>	<u>67</u>	<u>33</u>	<u>421</u>
P13		<u>36</u>	<u>574</u>	<u>60</u>	<u>68</u>	<u>36</u>	<u>454</u>
P14		<u>39</u>	<u>635</u>	<u>65</u>	<u>69</u>	<u>39</u>	<u>484</u>
P15		<u>42</u>	<u>691</u>	<u>70</u>	<u>70</u>	<u>42</u>	<u>518</u>
P16		<u>45</u>	<u>744</u>	<u>75</u>	<u>71</u>	<u>45</u>	<u>549</u>
P17		<u>48</u>	<u>797</u>	<u>80</u>	<u>72</u>	<u>48</u>	<u>580</u>
P18		<u>51</u>	<u>843</u>	<u>85</u>	<u>73</u>	<u>51</u>	<u>610</u>
P19		<u>54</u>	<u>887</u>	<u>90</u>	<u>74</u>	<u>54</u>	<u>644</u>
P20		<u>57</u>	<u>910</u>	<u>95</u>	<u>75</u>	<u>57</u>	<u>674</u>

WESTERN TESTING CO., INC.

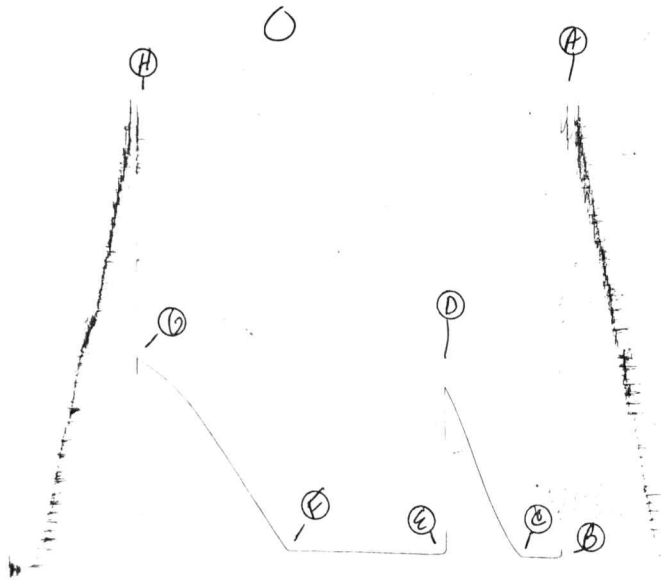
Pressure Data

Date 10/13/81 Test Ticket No. 13061
 Recorder No. 3351 Capacity 4000 Location 4520 Ft.
 Clock No. - Elevation 2078 Kelly Bushing Well Temperature 123 °F
 Point Pressure Time Given Time Computed
 A Initial Hydrostatic Mud 2208 P.S.I. Open Tool 7:50A M
 B First Initial Flow Pressure 38 P.S.I. First Flow Pressure 30 Mins. 30 Mins.
 C First Final Flow Pressure 43 P.S.I. Initial Closed-in Pressure 45 Mins. 57 Mins.
 D Initial Closed-in Pressure 610 P.S.I. Second Flow Pressure 120 Mins. 115 Mins.
 E Second Initial Flow Pressure 59 P.S.I. Final Closed-in Pressure 120 Mins. 111 Mins.
 F Second Final Flow Pressure 78 P.S.I.
 G Final Closed-in Pressure 1061 P.S.I.
 H Final Hydrostatic Mud 2190 P.S.I.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>19</u> Inc.		Breakdown: <u>23</u> Inc.		Breakdown: <u>37</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				105	77	63	733
P 2				110	78	66	763
P 3				115	78	69	793
P 4						72	818
P 5						75	844
P 6						78	867
P 7						81	888
P 8						84	912
P 9						87	932
P10						90	950
P11						93	968
P12						96	986
P13						99	1002
P14						102	1016
P15						105	1028
P16						108	1044
P17						111	1061
P18							
P19							
P20							

TKT #13061



Company Beren Corporation Lease & Well No. Ballantine #2
Elevation - Formation Mississippi Effective Pay - Ft. Ticket No. 13062
Date 10/13/81 Sec. 1 Twp. 27S Range 16W County Kiowa State Kansas
Test Approved by Robert C. Lewellyn Western Representative Richard Howell
Formation Test No. 8 Interval Tested from 4527 ft. to 4547 ft. Total Depth 4547 ft.
Packer Depth 4522 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4527 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4530 ft. Recorder Number 3551 Cap. 4000
Bottom Recorder Depth (Outside) 4533 ft. Recorder Number 2607 Cap. 4150
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Sterling Drlg. Rig #5 Drill Collar Length 279 I. D. 2.2 in.
Mud Type drispac Viscosity 43 Weight Pipe Length 465 I. D. 3.2 in.
Weight 9.1 Water Loss 15.8 cc. Drill Pipe Length 3763 I. D. 3.8 in.
Chlorides 20,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.
Jars: Make - Serial Number - Anchor Length 20 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 in.

Blow: Weak throughout test.

Recovered 62 ft. of watery mud
Recovered 93 ft. of muddy water Chlorides 45,000 ppm
Recovered ft. of
Recovered ft. of
Recovered ft. of
Remarks: Read bottom chart.

Time Set Packer(s) 11:00 A.M. Time Started Off Bottom 3:45 A.M. Maximum Temperature 132°
Initial Hydrostatic Pressure 2257 P.S.I.
Initial Flow Period 30 Minutes (B) 150 P.S.I. to (C) 103 P.S.I.
Initial Closed In Period 45 Minutes (D) 1230 P.S.I.
Final Flow Period 120 Minutes (E) 169 P.S.I. to (F) 135 P.S.I.
Final Closed In Period 93 Minutes (G) 1339 P.S.I.
Final Hydrostatic Pressure 2183 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 10/13/81 Test Ticket No. 13062
 Recorder No. 2607 Capacity 4150 Location 4533 Ft.
 Clock No. - Elevation ---- Well Temperature 132 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2257 P.S.I.	Open Tool	11:00P	M
B First Initial Flow Pressure	150 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	103 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	1230 P.S.I.	Second Flow Pressure	120 Mins.	120 Mins.
E Second Initial Flow Pressure	169 P.S.I.	Final Closed-in Pressure	90 Mins.	93 Mins.
F Second Final Flow Pressure	135 P.S.I.			
G Final Closed-in Pressure	1339 P.S.I.			
H Final Hydrostatic Mud	2183 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>24</u> Inc.		Breakdown: <u>31</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>150</u>	<u>0</u>	<u>103</u>	<u>0</u>	<u>169</u>	<u>0</u>	<u>135</u>
P 2 <u>5</u>	<u>123</u>	<u>3</u>	<u>103</u>	<u>5</u>	<u>156</u>	<u>3</u>	<u>135</u>
P 3 <u>10</u>	<u>110</u>	<u>6</u>	<u>103</u>	<u>10</u>	<u>144</u>	<u>6</u>	<u>137</u>
P 4 <u>15</u>	<u>106</u>	<u>9</u>	<u>106</u>	<u>15</u>	<u>137</u>	<u>9</u>	<u>143</u>
P 5 <u>20</u>	<u>104</u>	<u>12</u>	<u>127</u>	<u>20</u>	<u>135</u>	<u>12</u>	<u>161</u>
P 6 <u>25</u>	<u>103</u>	<u>15</u>	<u>231</u>	<u>25</u>	<u>135</u>	<u>15</u>	<u>180</u>
P 7 <u>30</u>	<u>103</u>	<u>18</u>	<u>379</u>	<u>30</u>	<u>135</u>	<u>18</u>	<u>227</u>
P 8		<u>21</u>	<u>523</u>	<u>35</u>	<u>135</u>	<u>21</u>	<u>296</u>
P 9		<u>24</u>	<u>673</u>	<u>40</u>	<u>135</u>	<u>24</u>	<u>371</u>
P10		<u>27</u>	<u>800</u>	<u>45</u>	<u>135</u>	<u>27</u>	<u>475</u>
P11		<u>30</u>	<u>906</u>	<u>50</u>	<u>135</u>	<u>30</u>	<u>552</u>
P12		<u>33</u>	<u>1000</u>	<u>55</u>	<u>135</u>	<u>33</u>	<u>629</u>
P13		<u>36</u>	<u>1067</u>	<u>60</u>	<u>135</u>	<u>36</u>	<u>706</u>
P14		<u>39</u>	<u>1132</u>	<u>65</u>	<u>135</u>	<u>39</u>	<u>777</u>
P15		<u>42</u>	<u>1190</u>	<u>70</u>	<u>135</u>	<u>42</u>	<u>833</u>
P16		<u>45</u>	<u>1230</u>	<u>75</u>	<u>135</u>	<u>45</u>	<u>893</u>
P17				<u>80</u>	<u>135</u>	<u>48</u>	<u>946</u>
P18				<u>85</u>	<u>135</u>	<u>51</u>	<u>996</u>
P19				<u>90</u>	<u>135</u>	<u>54</u>	<u>1040</u>
P20				<u>95</u>	<u>135</u>	<u>57</u>	<u>1073</u>
				<u>100</u>	<u>135</u>	<u>60</u>	<u>1113</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 10/13/81 Test Ticket No. 13062
 Recorder No. 2607 Capacity 4150 Location 4533 Ft.
 Clock No. - Elevation ---- Well Temperature 132 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2257 P.S.I.	Open Tool	11:00P	M
B First Initial Flow Pressure	150 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	103 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	1230 P.S.I.	Second Flow Pressure	120 Mins.	120 Mins.
E Second Initial Flow Pressure	169 P.S.I.	Final Closed-in Pressure	90 Mins.	93 Mins.
F Second Final Flow Pressure	135 P.S.I.			
G Final Closed-in Pressure	1339 P.S.I.			
H Final Hydrostatic Mud	2183 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>24</u> Inc.		Breakdown: <u>31</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				105	135	63	1150
P 2				110	135	66	1178
P 3				115	135	69	1203
P 4				120	135	72	1226
P 5						75	1249
P 6						78	1268
P 7						81	1282
P 8						84	1297
P 9						87	1311
P10						90	1330
P11						93	1339
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

#2607 D5F28

TKT #13062

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