

Company Mid Continent Energy, Inc. Lease & Well No. Warren #1
Elevation -- Formation Cottonwood Effective Pay -- Ft. Ticket No. 1547
Date 3/12/79 Sec. 26 Twp. 33S Range 17W County Commanche State Kansas
Test Approved by Gary Holstin Western Representative Jim Wondra

Formation Test No. 1 Interval Tested from 2833' ft. to 2850' ft. Total Depth 2850' ft.
Packer Depth 2828 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 2833 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 2840 ft. Recorder Number 2607 Cap. 4150
Bottom Recorder Depth (Outside) 2843 ft. Recorder Number 3351 Cap. 4000
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Slawson Drilling Rig #2 Drill Collar Length 413 I. D. 2 1/4 in.
Mud Type Premix Viscosity 36 Weight Pipe Length - I. D. - in.
Weight 9.2 Water Loss 55.8 cc. Drill Pipe Length 2396 I. D. 3.8 in.
Chlorides 40,000 P.P.M. Test Tool Length 24' in. Tool Size 5 1/2 OD in.
Jars: Make == Serial Number == Anchor Length 17' ft. Size 5 1/2 OD in.
Did Well Flow? No Reversed Out Yes 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 flow periods.

Recovered 120 ft. of mud (specks of oil)
Recovered 1890 ft. of salt water (260,000 ppm)
Recovered - ft. of -
Recovered - ft. of -
Recovered - ft. of -

Remarks: Tool slid 25' after opening.

Time Set Packer(s) 12:30 ~~A.M.~~ P.M. Time Started Off Bottom 4:15 ~~A.M.~~ P.M. Maximum Temperature 97
Initial Hydrostatic Pressure (A) 1411 P.S.I.
Initial Flow Period Minutes 30 (B) 468 P.S.I. to (C) 1063 P.S.I.
Initial Closed In Period Minutes 60 (D) 1092 P.S.I.
Final Flow Period Minutes 45 (E) 787 P.S.I. to (F) 983 P.S.I.
Final Closed In Period Minutes 90 (G) 1140 P.S.I.
Final Hydrostatic Pressure (H) 1316 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 3/12/79 Test Ticket No. 1547
 Recorder No. 2607 Capacity 4150 Location 2840 Ft.
 Clock No. -- Elevation -- Well Temperature 97 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1411 P.S.I.	Open Tool	12:30A M	
B First Initial Flow Pressure	468 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	1063 P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins.
D Initial Closed-in Pressure	1092 P.S.I.	Second Flow Pressure	45 Mins.	40 Mins.
E Second Initial Flow Pressure	787 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	983 P.S.I.			
G Final Closed-in Pressure	1140 P.S.I.			
H Final Hydrostatic Mud	1316 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>8</u> Inc.		Breakdown: <u>30</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>468</u>	<u>0</u>	<u>1063</u>	<u>0</u>	<u>787</u>	<u>0</u>	<u>983</u>
P 2 <u>5</u>	<u>515</u>	<u>3</u>	<u>1077</u>	<u>5</u>	<u>789</u>	<u>3</u>	<u>1073</u>
P 3 <u>10</u>	<u>585</u>	<u>6</u>	<u>1085</u>	<u>10</u>	<u>816</u>	<u>6</u>	<u>1088</u>
P 4 <u>15</u>	<u>621</u>	<u>9</u>	<u>1093</u>	<u>15</u>	<u>856</u>	<u>9</u>	<u>1098</u>
P 5 <u>20</u>	<u>675</u>	<u>12</u>	<u>1099</u>	<u>20</u>	<u>889</u>	<u>12</u>	<u>1105</u>
P 6 <u>25</u>	<u>1017</u>	<u>15</u>	<u>1107</u>	<u>25</u>	<u>918</u>	<u>15</u>	<u>1111</u>
P 7 <u>30</u>	<u>1063</u>	<u>18</u>	<u>1170</u>	<u>30</u>	<u>946</u>	<u>18</u>	<u>1115</u>
P 8		<u>21</u>	<u>1112</u>	<u>35</u>	<u>967</u>	<u>21</u>	<u>1117</u>
P 9		<u>24</u>	<u>1115</u>	<u>40</u>	<u>983</u>	<u>24</u>	<u>1119</u>
P10		<u>27</u>	<u>1119</u>			<u>27</u>	<u>1121</u>
P11		<u>30</u>	<u>1123</u>			<u>30</u>	<u>1123</u>
P12		<u>33</u>	<u>1123</u>			<u>33</u>	<u>1125</u>
P13		<u>36</u>	<u>1124</u>			<u>36</u>	<u>1127</u>
P14		<u>39</u>	<u>1125</u>			<u>39</u>	<u>1129</u>
P15		<u>42</u>	<u>1126</u>			<u>42</u>	<u>1131</u>
P16		<u>45</u>	<u>1127</u>			<u>45</u>	<u>1132</u>
P17		<u>48</u>	<u>1127</u>			<u>48</u>	<u>1132</u>
P18		<u>51</u>	<u>1127</u>			<u>51</u>	<u>1132</u>
P19		<u>54</u>	<u>1096</u>			<u>54</u>	<u>1132</u>
P20		<u>57</u>	<u>1092</u>			<u>57</u>	<u>1132</u>
						<u>60</u>	<u>1132</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 3/12/79

Test Ticket No. 1547

Recorder No. 2607

Capacity 4150

Location 2840

Clock No. -- Elevation --

Well Temperature 97

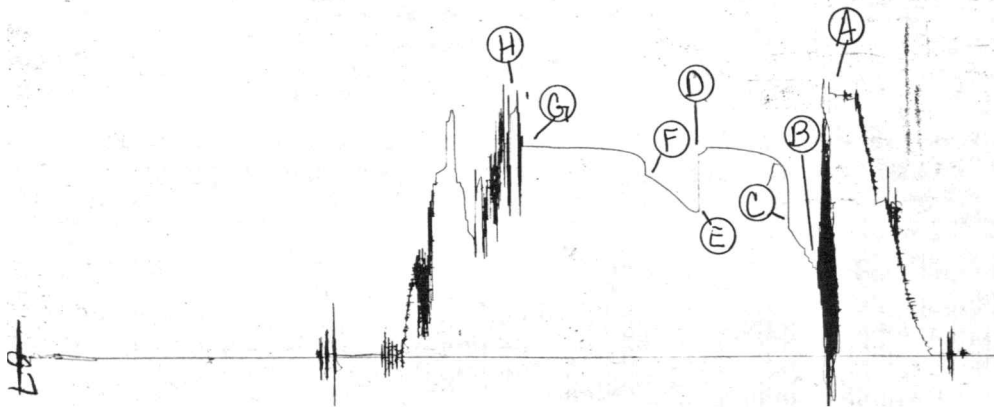
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1411</u> P.S.I.	Open Tool	<u>12:30A</u> M	
B First Initial Flow Pressure	<u>468</u> P.S.I.	First Flow Pressure	<u>30</u> Mins	<u>30</u> Min
C First Final Flow Pressure	<u>1063</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins	<u>57</u> Min
D Initial Closed-in Pressure	<u>1092</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins	<u>40</u> Min
E Second Initial Flow Pressure	<u>787</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins	<u>90</u> Min
F Second Final Flow Pressure	<u>983</u> P.S.I.			
G Final Closed-in Pressure	<u>1140</u> P.S.I.			
H Final Hydrostatic Mud	<u>1316</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>19</u> Inc.		Breakdown: <u>8</u> Inc.		Breakdown: <u>30</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>63</u>	<u>1132</u>
P 2						<u>66</u>	<u>1132</u>
P 3						<u>69</u>	<u>1134</u>
P 4						<u>72</u>	<u>1137</u>
P 5						<u>75</u>	<u>1138</u>
P 6						<u>78</u>	<u>1139</u>
P 7						<u>81</u>	<u>1139</u>
P 8						<u>84</u>	<u>1140</u>
P 9						<u>87</u>	<u>1140</u>
P10						<u>90</u>	<u>1140</u>
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TK+ # 1547

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Company Mid Continent Energy Exploration Lease & Well No. Warren #1
Elevation 1794 Kelly Bushing Formation Mississippi Effective Pay -- Ft. Ticket No. 1564
Date 3/18/79 Sec. 26 Twp. 33S Range 17W County Commanche State Kansas
Test Approved by Gary Holstin Western Representative Ron Emmons

Formation Test No. 2 Interval Tested from 5022 ft. to 5074 ft. Total Depth 5074 ft.

Packer Depth 5017 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 5022 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 5026 ft. Recorder Number 3660 Cap. 4000

Bottom Recorder Depth (Outside) 5029 ft. Recorder Number 1051 Cap. 4250

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

Drilling Contractor Slawson Drilling Rig #2 Drill Collar Length 362 I. D. 2 1/4 in.

Mud Type drispac Viscosity 47 Weight Pipe Length - I. D. - in.

Weight 9.2 Water Loss 12.3 cc. Drill Pipe Length - I. D. 3.8 in.

Chlorides 16,000 P.P.M. Test Tool Length 31' in. Tool Size 5 1/2 OD in.

Jars: Make WTC Serial Number 408 Anchor Length 52' ft. Size 5 1/2 OD in.

Did Well Flow? No Reversed Out Yes 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: MISRUN

Recovered 1778 ft. of mud

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks: SLID TOOL 25 feet OPENED TOOL WHEN SLIDGING: GOT TO BOTTOM, COULDN'T GET PACKER TO SEAT.
TRIED TO SET PACKER TWO TIMES THEN PULLED IT.

Time Set Packer(s) 7:30 ~~A.M.~~ P.M. Time Started Off Bottom 7:45 ~~A.M.~~ P.M. Maximum Temperature -

Initial Hydrostatic Pressure 2409 (A) - P.S.I.

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

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

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

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

Final Hydrostatic Pressure 2361 (H) - P.S.I.

5660

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(H) (A)



Company Mid Continent Energy Corporation Lease & Well No. Warren #1
 Elevation 1794 Kelly Bushing Formation Mississippi Effective Pay -- Ft. Ticket No. 1565
 Date 3/19/79 Sec. 26 Twp. 33S Range 17W County Commanche State Kansas
 Test Approved by Gary Holstin Western Representative Ron Emmons
 Formation Test No. 3 Interval Tested from 5030' ft. to 5074' ft. Total Depth 5074' ft.
 Packer Depth 5025 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 5030 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set --
 Top Recorder Depth (Inside) 5033 ft. Recorder Number 3660 Cap. 4000
 Bottom Recorder Depth (Outside) 5036 ft. Recorder Number 1051 Cap. 4250
 Below Straddle Recorder Depth -- ft. Recorder Number -- Cap. --
 Drilling Contractor Slawson Drilling Rig #2 Drill Collar Length 362 I. D. 2 1/4 in.
 Mud Type drispac Viscosity 49 Weight Pipe Length - I. D. - in.
 Weight 9.1 Water Loss 9.2 cc. Drill Pipe Length 4637 I. D. 3.8 in.
 Chlorides 19,000 P.P.M. Test Tool Length 31' in. Tool Size 5 1/2 OD in.
 Jars: Make WTC Serial Number 408 Anchor Length 44' 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 to strong both flow periods.

Recovered 125 ft. of slightly oil and gas cut mud 10% oil; 5% water ; 85% mud
 Recovered 124 ft. of oil and gas cut mud 25% oil; 10% water; 65% mud
 Recovered 124 ft. of heavy oil and gas cut mud
 Recovered 62 ft. of slightly oil and gas cut mud
 Recovered 2775 ft. of gas in pipe

Remarks: Slid tool 8 feet to bottom.

Time Set Packer(s) 8:33 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 11:58 ~~P.M.~~ ^{A.M.} Thermometer Broken
 Initial Hydrostatic Pressure (A) 2429 P.S.I.
 Initial Flow Period Minutes 30 (B) 107 P.S.I. to (C) 105 P.S.I.
 Initial Closed In Period Minutes 60 (D) 873 P.S.I.
 Final Flow Period Minutes 45 (E) 117 P.S.I. to (F) 211 P.S.I.
 Final Closed In Period Minutes 60 (G) 504 P.S.I.
 Final Hydrostatic Pressure (H) 2423 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 3/19/79

Test Ticket No. 1565

Recorder No. 3660

Capacity 4000

Location 5033 Ft.

Clock No. -- Elevation 1794 Kelly Bushing

Well Temperature -- °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2429 P.S.I.	Open Tool	8:33A	M
B First Initial Flow Pressure	107 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	105 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	873 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
E Second Initial Flow Pressure	117 P.S.I.	Final Closed-in Pressure	70 Mins.	60 Mins.
F Second Final Flow Pressure	211 P.S.I.			
G Final Closed-in Pressure	504 P.S.I.			
H Final Hydrostatic Mud	2423 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>20</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: <u>9</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Final Shut-In Breakdown: <u>20</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>107</u>	<u>0</u>	<u>105</u>	<u>0</u>	<u>117</u>	<u>0</u>	<u>211</u>
P 2 <u>5</u>	<u>105</u>	<u>3</u>	<u>130</u>	<u>5</u>	<u>117</u>	<u>3</u>	<u>221</u>
P 3 <u>10</u>	<u>105</u>	<u>6</u>	<u>168</u>	<u>10</u>	<u>117</u>	<u>6</u>	<u>239</u>
P 4 <u>15</u>	<u>105</u>	<u>9</u>	<u>200</u>	<u>15</u>	<u>184</u>	<u>9</u>	<u>251</u>
P 5 <u>20</u>	<u>105</u>	<u>12</u>	<u>227</u>	<u>20</u>	<u>186</u>	<u>12</u>	<u>257</u>
P 6 <u>25</u>	<u>105</u>	<u>15</u>	<u>263</u>	<u>25</u>	<u>190</u>	<u>15</u>	<u>263</u>
P 7 <u>30</u>	<u>105</u>	<u>18</u>	<u>285</u>	<u>30</u>	<u>196</u>	<u>18</u>	<u>265</u>
P 8		<u>21</u>	<u>332</u>	<u>35</u>	<u>198</u>	<u>21</u>	<u>273</u>
P 9		<u>24</u>	<u>379</u>	<u>40</u>	<u>200</u>	<u>24</u>	<u>289</u>
P10		<u>27</u>	<u>427</u>	<u>45</u>	<u>211</u>	<u>27</u>	<u>294</u>
P11		<u>30</u>	<u>483</u>			<u>30</u>	<u>304</u>
P12		<u>33</u>	<u>526</u>			<u>33</u>	<u>330</u>
P13		<u>36</u>	<u>571</u>			<u>36</u>	<u>362</u>
P14		<u>39</u>	<u>629</u>			<u>39</u>	<u>391</u>
P15		<u>42</u>	<u>690</u>			<u>42</u>	<u>403</u>
P16		<u>45</u>	<u>716</u>			<u>45</u>	<u>415</u>
P17		<u>48</u>	<u>770</u>			<u>48</u>	<u>438</u>
P18		<u>51</u>	<u>810</u>			<u>51</u>	<u>451</u>
P19		<u>54</u>	<u>841</u>			<u>54</u>	<u>460</u>
P20		<u>57</u>	<u>857</u>			<u>57</u>	<u>468</u>
		<u>60</u>	<u>873</u>			<u>60</u>	<u>504</u>

3660

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