



Home Office: Wichita, Kansas 67201
P.O. Box 1599 (316) 262-5861

Company Mull Drilling Company, Inc. Lease & Well No. Fitzgerald #1
Elevation 3312 Ground Level Formation Lansing "D" Effective Pay - Ft. Ticket No. 9806
Date 12/10/81 Sec. 33 Twp. 11S Range 26W County Logan State Kansas
Test Approved by Dallas Donner Western Representative Roger Lisenby
Formation Test No. 1 Interval Tested from 4184 ft. to 4226 ft. Total Depth 4226 ft.
Packer Depth 4179 ft. Size 6 5/8 in. Packer Depth = ft. Size = in.
Packer Depth 4184 ft. Size 6 5/8 in. Packer Depth = ft. Size = in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4217 ft. Recorder Number 13266 Cap. 4000
Bottom Recorder Depth (Outside) 4220 ft. Recorder Number 13265 Cap. 3975
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Blue Goose Drlg. Rig #2 Drill Collar Length 243 I. D. 2 3/4 in.
Mud Type starch Viscosity 40 Weight Pipe Length - I. D. - in.
Weight 9.6 Water Loss 12.8 cc. Drill Pipe Length 3920 I. D. 3.8 in.
Chlorides 36,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.
Jars: Make - Serial Number - Anchor Length 42 ft. Size 5 1/2 in.
Did Well Flow? - Reversed Out - 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: Initial flow period weak increasing blow to one inch in bucket. Final flow period no blow; flushed tool; weak decreasing blow died in 35 minutes.

Recovered 90 ft. of mud 10% water
Recovered ft. of Chlorides 41,000 ppm
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks: Slid tool four feet to bottom

Time Set Packer(s) 2:14 A.M. Time Started Off Bottom 5:29 P.M. Maximum Temperature 124°
Initial Hydrostatic Pressure 2155 P.S.I.
Initial Flow Period 30 Minutes (B) 85 P.S.I. to (C) 85 P.S.I.
Initial Closed In Period 45 Minutes (D) 1113 P.S.I.
Final Flow Period 60 Minutes (E) 100 P.S.I. to (F) 100 P.S.I.
Final Closed In Period 60 Minutes (G) 1016 P.S.I.
Final Hydrostatic Pressure 2143 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 12/10/81 Test Ticket No. 9806
 Recorder No. 13266 Capacity 4000 Location 4217 Ft.
 Clock No. - Elevation 3312 Ground Level Well Temperature 124 °F

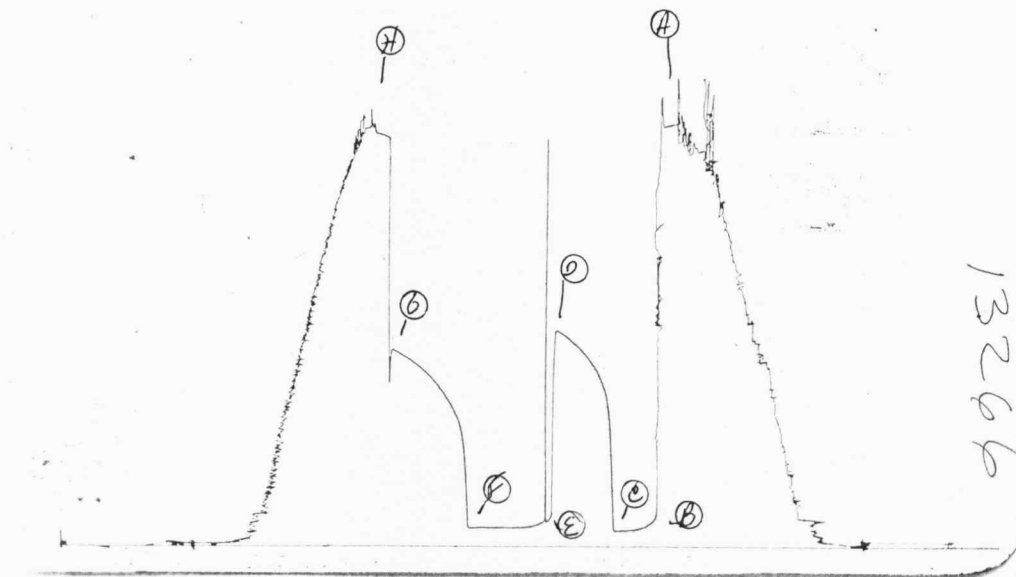
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2155	P.S.I.	2:14A	M
B First Initial Flow Pressure	85	P.S.I.	30	Mins. 30 Mins.
C First Final Flow Pressure	85	P.S.I.	45	Mins. 45 Mins.
D Initial Closed-in Pressure	1113	P.S.I.	60	Mins. 60 Mins.
E Second Initial Flow Pressure	134	P.S.I.	60	Mins. 60 Mins.
F Second Final Flow Pressure	100	P.S.I.		
G Final Closed-in Pressure	1016	P.S.I.		
H Final Hydrostatic Mud	2143	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>	85	<u>0</u>	85	<u>0</u>	134	<u>0</u>	100
P 2 <u>5</u>	85	<u>3</u>	305	<u>5</u>	FLUSHED TOOL	<u>3</u>	447
P 3 <u>10</u>	85	<u>6</u>	614	<u>10</u>	119	<u>6</u>	596
P 4 <u>15</u>	85	<u>9</u>	770	<u>15</u>	108	<u>9</u>	668
P 5 <u>20</u>	85	<u>12</u>	840	<u>20</u>	103	<u>12</u>	711
P 6 <u>25</u>	85	<u>15</u>	891	<u>25</u>	101	<u>15</u>	746
P 7 <u>30</u>	85	<u>18</u>	931	<u>30</u>	100	<u>18</u>	780
P 8 _____		<u>21</u>	960	<u>35</u>	100	<u>21</u>	810
P 9 _____		<u>24</u>	986	<u>40</u>	100	<u>24</u>	839
P10 _____		<u>27</u>	1012	<u>45</u>	100	<u>27</u>	862
P11 _____		<u>30</u>	1034	<u>50</u>	100	<u>30</u>	885
P12 _____		<u>33</u>	1052	<u>55</u>	100	<u>33</u>	905
P13 _____		<u>36</u>	1070	<u>60</u>	100	<u>36</u>	925
P14 _____		<u>39</u>	1089			<u>39</u>	941
P15 _____		<u>42</u>	1102			<u>42</u>	958
P16 _____		<u>45</u>	1113			<u>45</u>	972
P17 _____						<u>48</u>	984
P18 _____						<u>51</u>	997
P19 _____						<u>54</u>	1008
P20 _____						<u>57</u>	1016
						<u>60</u>	1016

TK #9806

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This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2139	2155
(B) First Initial Flow Pressure	81	85
(C) First Final Flow Pressure	81	85
(D) Initial Closed-in Pressure	1097	1113
(E) Second Initial Flow Pressure	91	134
(F) Second Final Flow Pressure	91	100
(G) Final Closed-in Pressure	998	1016
(H) Final Hydrostatic Mud	2129	2134

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Company Mull Drilling Company, Inc. Lease & Well No. Fitzgerald #1
Elevation 3312 Ground Level Formation Lansing Effective Pay - Ft. Ticket No. 9807
Date 12/11/81 Sec. 33 Twp. 11S Range 36W County Logan State Kansas
Test Approved by Dallas Donner Western Representative Joady Hurtt-Roger Lisenby

Formation Test No. 2 Interval Tested from 4280 ft. to 4320 ft. Total Depth 4320 ft.
Packer Depth 4275 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Packer Depth 4280 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4313 ft. Recorder Number 13266 Cap. 4000
Bottom Recorder Depth (Outside) 4316 ft. Recorder Number 13265 Cap. 3975
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Blue Goose Drlg. Rig #2 Drill Collar Length 304 I. D. 2 1/4 in.
Mud Type starch Viscosity 46 Weight Pipe Length - I. D. - in.
Weight 9.4 Water Loss 6.4 cc. Drill Pipe Length 3955 I. D. 3.8 in.
Chlorides 35,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.
Jars: Make - Serial Number - Anchor Length 40 ft. Size 5 1/2 in.
Did Well Flow? - Reversed Out - 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 blow; one inch in bucket on initial flow period. Weak blow; died in sixteen minutes; flushed tool - no blow on final flow period.

Recovered 20 ft. of mud with oil spots
Recovered - ft. of -
Recovered - ft. of -
Recovered - ft. of -
Recovered - ft. of -

Remarks: -

Time Set Packer(s) 4:23 A.M. P.M. Time Started Off Bottom 9:08 A.M. P.M. Maximum Temperature 125°
Initial Hydrostatic Pressure 2209 (A) P.S.I.
Initial Flow Period 30 Minutes (B) 77 P.S.I. to (C) 63 P.S.I.
Initial Closed In Period 42 Minutes (D) 1175 P.S.I.
Final Flow Period 30 Minutes (E) 82 P.S.I. to (F) 69 P.S.I.
Final Closed In Period 57 Minutes (G) 1130 P.S.I.
Final Hydrostatic Pressure 2189 (H) P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

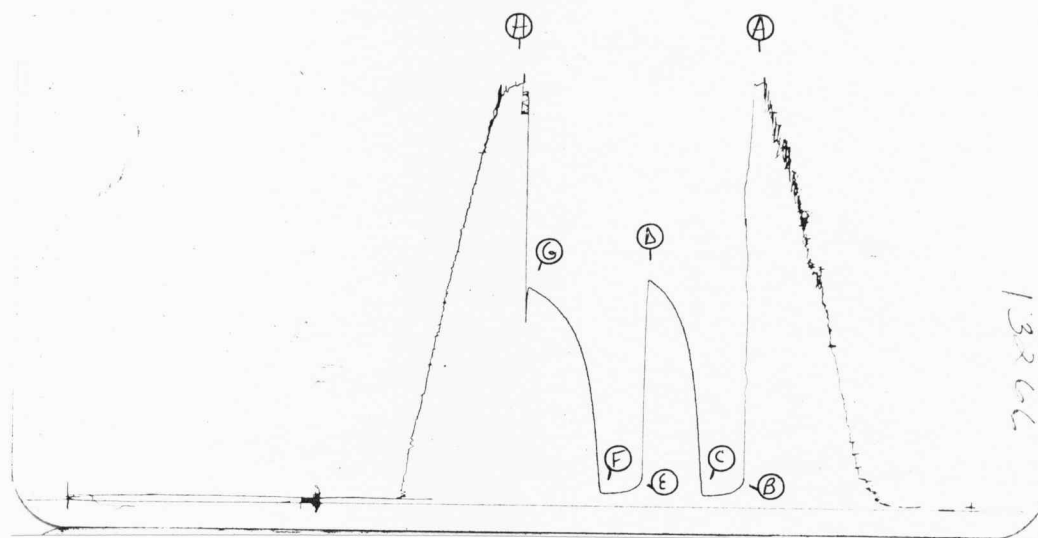
Date 12/11/81 Test Ticket No. 9807
 Recorder No. 13266 Capacity 4000 Location 4313 Ft.
 Clock No. -- Elevation 3312 Ground Level Well Temperature 125 °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	2209 P.S.I.	Open Tool	4:23A	M
B First Initial Flow Pressure	77 P.S.I.	First Flow Pressure	30	30 Mins.
C First Final Flow Pressure	63 P.S.I.	Initial Closed-in Pressure	45	42 Mins.
D Initial Closed-in Pressure	1175 P.S.I.	Second Flow Pressure	30	30 Mins.
E Second Initial Flow Pressure	82 P.S.I.	Final Closed-in Pressure	60	57 Mins.
F Second Final Flow Pressure	69 P.S.I.			
G Final Closed-in Pressure	1130 P.S.I.			
H Final Hydrostatic Mud	2189 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>14</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>77</u>	<u>0</u>	<u>63</u>	<u>0</u>	<u>82</u>	<u>0</u>	<u>69</u>
P 2 <u>5</u>	<u>77</u>	<u>3</u>	<u>344</u>	<u>5</u>	<u>82</u>	<u>3</u>	<u>254</u>
P 3 <u>10</u>	<u>77</u>	<u>6</u>	<u>590</u>	<u>10</u>	<u>82</u>	<u>6</u>	<u>459</u>
P 4 <u>15</u>	<u>70</u>	<u>9</u>	<u>734</u>	<u>15</u>	<u>75</u>	<u>9</u>	<u>614</u>
P 5 <u>20</u>	<u>66</u>	<u>12</u>	<u>842</u>	<u>20</u>	<u>71</u>	<u>12</u>	<u>711</u>
P 6 <u>25</u>	<u>64</u>	<u>15</u>	<u>916</u>	<u>25</u>	<u>69</u>	<u>15</u>	<u>786</u>
P 7 <u>30</u>	<u>63</u>	<u>18</u>	<u>966</u>	<u>30</u>	<u>69</u>	<u>18</u>	<u>846</u>
P 8		<u>21</u>	<u>1014</u>			<u>21</u>	<u>892</u>
P 9		<u>24</u>	<u>1054</u>			<u>24</u>	<u>930</u>
P10		<u>27</u>	<u>1082</u>			<u>27</u>	<u>966</u>
P11		<u>30</u>	<u>1114</u>			<u>30</u>	<u>988</u>
P12		<u>33</u>	<u>1131</u>			<u>33</u>	<u>1013</u>
P13		<u>36</u>	<u>1151</u>			<u>36</u>	<u>1038</u>
P14		<u>39</u>	<u>1167</u>			<u>39</u>	<u>1056</u>
P15		<u>42</u>	<u>1175</u>			<u>42</u>	<u>1072</u>
P16						<u>45</u>	<u>1086</u>
P17						<u>48</u>	<u>1102</u>
P18						<u>51</u>	<u>1114</u>
P19						<u>54</u>	<u>1126</u>
P20						<u>57</u>	<u>1130</u>

TKT # 9807
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This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2219	2209
(B) First Initial Flow Pressure	71	77
(C) First Final Flow Pressure	60	63
(D) Initial Closed-in Pressure	1177	1175
(E) Second Initial Flow Pressure	71	82
(F) Second Final Flow Pressure	60	69
(G) Final Closed-in Pressure	1127	1130
(H) Final Hydrostatic Mud	2189	2189



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Company Mull Drilling Company, Inc. Lease & Well No. Fitzgerald #1
Elevation 3312 Ground Level Formation - Effective Pay - Ft. Ticket No. 9808
Date 12/ 12/81 Sec. 33 Twp. 11S Range 36W County Logan State Kansas
Test Approved by Dallas Donner Western Representative Roger Lisenby-Joady Hurtt

Formation Test No. 3 Interval Tested from 4436 ft. to 4562 ft. Total Depth 4562 ft.
Packer Depth 4431 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Packer Depth 4436 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4460 ft. Recorder Number 13266 Cap. 4000
Bottom Recorder Depth (Outside) 4463 ft. *Recorder Number 13265 Cap. 3975
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Blue Goose Drlg. Rig #2 Drill Collar Length 275 I. D. 2 3/4 in.
Mud Type starch Viscosity 63 Weight Pipe Length - I. D. - in.
Weight 9.2 Water Loss 13.6 cc. Drill Pipe Length 4140 I. D. 3.8 in.
Chlorides 43,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.
Jars: Make - Serial Number - Anchor Length 126 ft. Size 5 1/2 in. 3 D.C.
Did Well Flow? - Reversed Out - 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: Initial flow period weak increasing blow to seven inches in bucket. Final flow period weak increasing blow to nine inches in bucket.

Recovered 30 ft. of 95% oil;3% water;2% mud (too thick to get gravity)
Recovered 60 ft. of 87% oil;6% water;7% mud
Recovered 60 ft. of 92% oil;5% water;3% mud
Recovered 60 ft. of 82% oil;15% gas;2% water;1% mud
Recovered 60 ft. of 80% oil;10% gas;5% water;5% mud
Recovered 60' of 79% oil;10% gas;6% water;5% mud

TOTAL RECOVERY 330 feet of slightly gassy frothy mud specked oil.

* READ BOTTOM RECORDER

Time Set Packer(s) 9:30 ~~A.M.~~ P.M. Time Started Off Bottom 12:45 ~~A.M.~~ P.M. Maximum Temperature 128°
Initial Hydrostatic Pressure (A) 2287 P.S.I.
Initial Flow Period Minutes 30 (B) 84 P.S.I. to (C) 96 P.S.I.
Initial Closed In Period Minutes 45 (D) 1249 P.S.I.
Final Flow Period Minutes 60 (E) 155 P.S.I. to (F) 171 P.S.I.
Final Closed In Period Minutes 60 (G) 1190 P.S.I.
Final Hydrostatic Pressure (H) 2228 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 12/12/81 Recorder No. 13265 Capacity 3975 Test Ticket No. 9808
 Location 4463 Ft. Clock No. -- Elevation 3312 Ground Level Well Temperature 128 °F

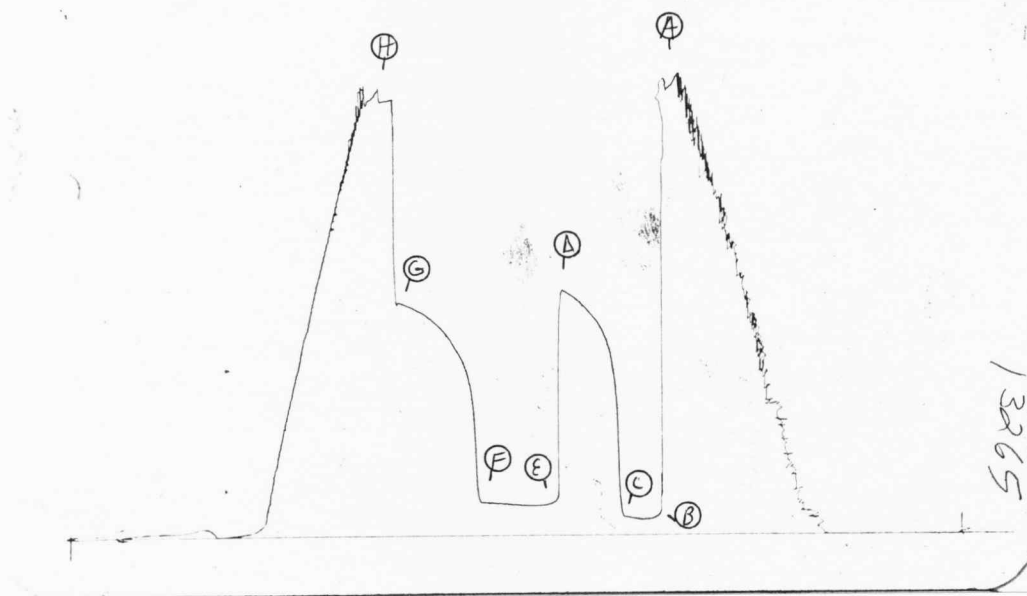
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2287	P.S.I.	9:30P	M
B First Initial Flow Pressure	84	P.S.I.	30	Mins. 30 Mins.
C First Final Flow Pressure	96	P.S.I.	45	Mins. 45 Mins.
D Initial Closed-in Pressure	1249	P.S.I.	60	Mins. 60 Mins.
E Second Initial Flow Pressure	155	P.S.I.	60	Mins. 60 Mins.
F Second Final Flow Pressure	171	P.S.I.		
G Final Closed-in Pressure	1190	P.S.I.		
H Final Hydrostatic Mud	2228	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>84</u>	<u>0</u>	<u>96</u>	<u>0</u>	<u>155</u>	<u>0</u>	<u>171</u>
P 2 <u>5</u>	<u>84</u>	<u>3</u>	<u>704</u>	<u>5</u>	<u>155</u>	<u>3</u>	<u>689</u>
P 3 <u>10</u>	<u>84</u>	<u>6</u>	<u>857</u>	<u>10</u>	<u>155</u>	<u>6</u>	<u>810</u>
P 4 <u>15</u>	<u>84</u>	<u>9</u>	<u>964</u>	<u>15</u>	<u>155</u>	<u>9</u>	<u>868</u>
P 5 <u>20</u>	<u>89</u>	<u>12</u>	<u>1020</u>	<u>20</u>	<u>155</u>	<u>12</u>	<u>917</u>
P 6 <u>25</u>	<u>95</u>	<u>15</u>	<u>1065</u>	<u>25</u>	<u>156</u>	<u>15</u>	<u>949</u>
P 7 <u>30</u>	<u>96</u>	<u>18</u>	<u>1099</u>	<u>30</u>	<u>160</u>	<u>18</u>	<u>984</u>
P 8		<u>21</u>	<u>1123</u>	<u>35</u>	<u>162</u>	<u>21</u>	<u>1016</u>
P 9		<u>24</u>	<u>1148</u>	<u>40</u>	<u>164</u>	<u>24</u>	<u>1045</u>
P10		<u>27</u>	<u>1170</u>	<u>45</u>	<u>167</u>	<u>27</u>	<u>1065</u>
P11		<u>30</u>	<u>1190</u>	<u>50</u>	<u>169</u>	<u>30</u>	<u>1085</u>
P12		<u>33</u>	<u>1210</u>	<u>55</u>	<u>170</u>	<u>33</u>	<u>1105</u>
P13		<u>36</u>	<u>1224</u>	<u>60</u>	<u>171</u>	<u>36</u>	<u>1121</u>
P14		<u>39</u>	<u>1237</u>			<u>39</u>	<u>1136</u>
P15		<u>42</u>	<u>1249</u>			<u>42</u>	<u>1146</u>
P16		<u>45</u>	<u>1249</u>			<u>45</u>	<u>1156</u>
P17						<u>48</u>	<u>1167</u>
P18						<u>51</u>	<u>1178</u>
P19						<u>54</u>	<u>1184</u>
P20						<u>57</u>	<u>1190</u>
						<u>60</u>	<u>1190</u>

TKT # 9808

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This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2297	2287	PSI
(B) First Initial Flow Pressure	80	84	PSI
(C) First Final Flow Pressure	90	96	PSI
(D) Initial Closed-in Pressure	1228	1249	PSI
(E) Second Initial Flow Pressure	151	155	PSI
(F) Second Final Flow Pressure	161	171	PSI
(G) Final Closed-in Pressure	1188	1190	PSI
(H) Final Hydrostatic Mud	2218	2228	PSI



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Company Mull Drilling Company, Inc. Lease & Well No. Fitzgerald #1
Elevation 3312 Ground Level Formation - Effective Pay - Ft. Ticket No. 9809
Date 12/ 14/81 Sec. 33 Twp. 11S Range 36W County Logan State Kansas
Test Approved by Dallas Donner Western Representative Roger Lisenby-Joady Hurtt

Formation Test No. 4 Interval Tested from 4563 ft. to 4625 ft. Total Depth 4625 ft.

Packer Depth 4558 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Packer Depth 4563 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4582 ft. Recorder Number 13266 Cap. 4000

Bottom Recorder Depth (Outside) 4585 ft. *Recorder Number 13265 Cap. 3975

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

Drilling Contractor Blue Goose Drlg. Rig #2 Drill Collar Length 274 I. D. 2 1/4 in.

Mud Type starch Viscosity 52 Weight Pipe Length - I. D. - in.

Weight 9.5 Water Loss 11.2 cc. Drill Pipe Length 4268 I. D. 3.8 in.

Chlorides 40,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make - Serial Number - Anchor Length 62 ft. Size 5 1/2 in. 1 D.C.

Did Well Flow? - Reversed Out - 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: Initial flow period weak steady blow one half inch in bucket. Final flow period no blow
flushed tool ; very weak blow and died in twenty-two minutes.

Recovered 20 ft. of mud

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks: -

Time Set Packer(s) 1:32 ~~A.M.~~ ~~P.M.~~ Time Started Off Bottom 4:17 ~~A.M.~~ ~~P.M.~~ Maximum Temperature 128°

Initial Hydrostatic Pressure 2370 (A) 2370 P.S.I.

Initial Flow Period 30 Minutes (B) 73 P.S.I. to (C) 73 P.S.I.

Initial Closed In Period 45 Minutes (D) 809 P.S.I.

Final Flow Period 30 Minutes (E) 146 P.S.I. to (F) 80 P.S.I.

Final Closed In Period 60 Minutes (G) 734 P.S.I.

Final Hydrostatic Pressure 2280 (H) 2280 P.S.I.

WESTERN TESTING CO., INC.

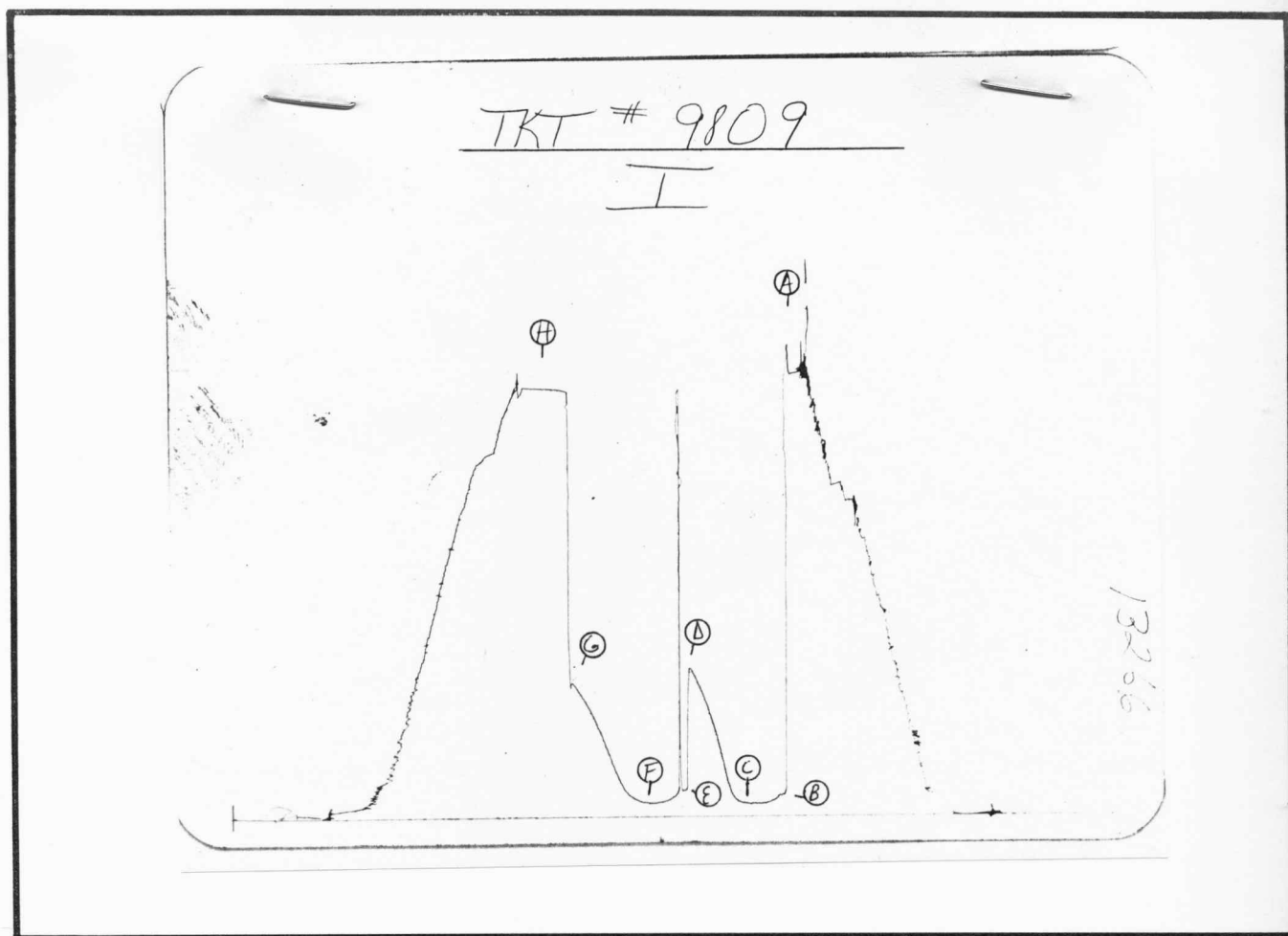
Pressure Data

Date 12/14/81 Test Ticket No. 9809
 Recorder No. 13266 Capacity 4000 Location 4582 Ft.
 Clock No. - Elevation 3312 Ground Level Well Temperature 128 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2370 P.S.I.	Open Tool	1:32A M	
B First Initial Flow Pressure	73 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	73 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	809 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	146 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	80 P.S.I.			
G Final Closed-in Pressure	734 P.S.I.			
H Final Hydrostatic Mud	2280 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>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>73</u>	<u>0</u>	<u>73</u>	<u>0</u>	<u>146</u>	<u>0</u>	<u>80</u>
P 2 <u>5</u>	<u>73</u>	<u>3</u>	<u>77</u>	<u>5</u>	FLUSHED TOOL	<u>3</u>	<u>82</u>
P 3 <u>10</u>	<u>73</u>	<u>6</u>	<u>84</u>	<u>10</u>	<u>114</u>	<u>6</u>	<u>88</u>
P 4 <u>15</u>	<u>73</u>	<u>9</u>	<u>102</u>	<u>15</u>	<u>93</u>	<u>9</u>	<u>99</u>
P 5 <u>20</u>	<u>73</u>	<u>12</u>	<u>140</u>	<u>20</u>	<u>83</u>	<u>12</u>	<u>112</u>
P 6 <u>25</u>	<u>73</u>	<u>15</u>	<u>210</u>	<u>25</u>	<u>78</u>	<u>15</u>	<u>128</u>
P 7 <u>30</u>	<u>73</u>	<u>18</u>	<u>301</u>	<u>30</u>	<u>80</u>	<u>18</u>	<u>151</u>
P 8		<u>21</u>	<u>388</u>			<u>21</u>	<u>191</u>
P 9		<u>24</u>	<u>467</u>			<u>24</u>	<u>240</u>
P10		<u>27</u>	<u>531</u>			<u>27</u>	<u>285</u>
P11		<u>30</u>	<u>589</u>			<u>30</u>	<u>346</u>
P12		<u>33</u>	<u>649</u>			<u>33</u>	<u>402</u>
P13		<u>36</u>	<u>705</u>			<u>36</u>	<u>461</u>
P14		<u>39</u>	<u>750</u>			<u>39</u>	<u>506</u>
P15		<u>42</u>	<u>792</u>			<u>42</u>	<u>552</u>
P16		<u>45</u>	<u>809</u>			<u>45</u>	<u>596</u>
P17						<u>48</u>	<u>634</u>
P18						<u>51</u>	<u>668</u>
P19						<u>54</u>	<u>700</u>
P20						<u>57</u>	<u>728</u>
						<u>60</u>	<u>734</u>



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2568	2370	PSI
(B) First Initial Flow Pressure	71	73	PSI
(C) First Final Flow Pressure	71	73	PSI
(D) Initial Closed-in Pressure	798	809	PSI
(E) Second Initial Flow Pressure	81	146	PSI
(F) Second Final Flow Pressure	71	80	PSI
(G) Final Closed-in Pressure	728	734	PSI
(H) Final Hydrostatic Mud	2278	2280	PSI



Home Office: Wichita, Kansas 67201

P.O. Box 1599

(316) 262-5861

Company Mull Drilling Company, Inc. Lease & Well No. Fitzgerald #1
Elevation 3312 Ground Level Formation Cherokee Effective Pay - Ft. Ticket No. 9810
Date 12/15/81 Sec. 33 Twp. 11S Range 36W County Logan State Kansas
Test Approved by Dallas Donner Western Representative Roger Lisenby-Joady Hurtt
Formation Test No. 5 Interval Tested from 4703 ft. to 4723 ft. Total Depth 4723 ft.
Packer Depth 4698 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Packer Depth 4703 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4712 ft. Recorder Number 13266 Cap. 4000
Bottom Recorder Depth (Outside) 4715 ft. Recorder Number 13265 Cap. 3975
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Blue Goose Dlr. Rig #2 Drill Collar Length 304 I. D. 2 1/4 in.
Mud Type starch Viscosity 66 Weight Pipe Length - I. D. - in.
Weight 9.6 Water Loss 12.0 cc. Drill Pipe Length 4378 I. D. 3.8 in.
Chlorides 42,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.
Jars: Make - Serial Number - Anchor Length 20 ft. Size 5 1/2 in.
Did Well Flow? - Reversed Out - 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 XH in.

Blow: Initial flow period weak steady blow one half inch in bucket. Final flow period weak blow died in three minutes; flushed tool - no blow.

Recovered 10 ft. of oil specked mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s)	<u>7:23</u>	<u>A.M.</u>	Time Started Off Bottom	<u>10:08</u>	<u>A.M.</u>	Maximum Temperature	<u>129°</u>
		P.M.			P.M.		
Initial Hydrostatic Pressure			(A)	<u>2434</u>		P.S.I.	
Initial Flow Period		Minutes	<u>30</u>	(B)	<u>54</u>	P.S.I. to (C)	<u>54</u> P.S.I.
Initial Closed In Period		Minutes	<u>42</u>	(D)	<u>65</u>	P.S.I.	
Final Flow Period		Minutes	<u>30</u>	(E)	<u>60</u>	P.S.I. to (F)	<u>58</u> P.S.I.
Final Closed In Period		Minutes	<u>54</u>	(G)	<u>67</u>	P.S.I.	
Final Hydrostatic Pressure			(H)	<u>2380</u>		P.S.I.	

WESTERN TESTING CO., INC.

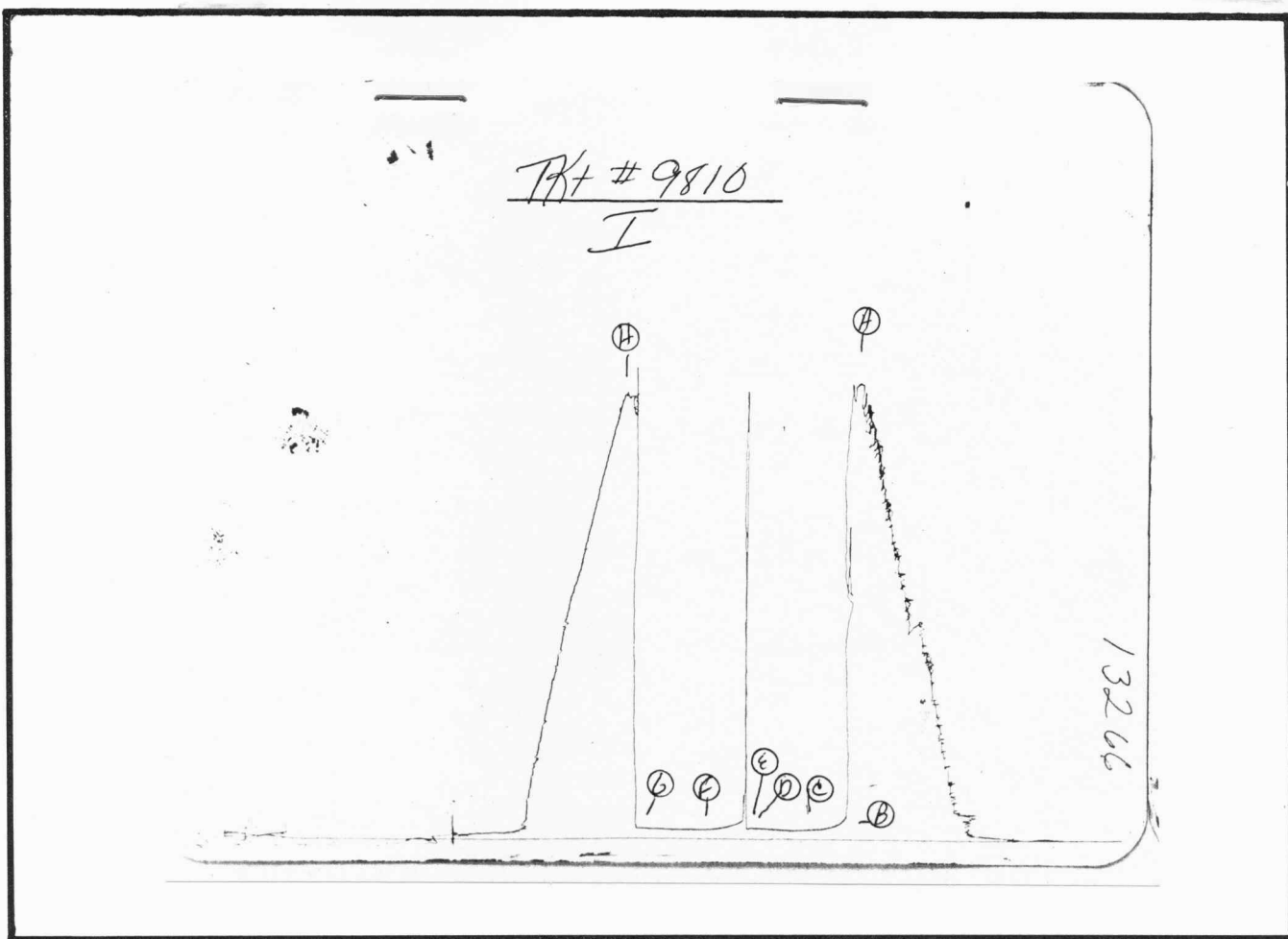
Pressure Data

Date 12/15/81 Recorder No. 13266 Capacity 4000 Test Ticket No. 9810
 Clock No. --- Elevation 3312 Ground Level Location 4712 Ft. 129
 Well Temperature --- °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2434 P.S.I.	Open Tool	7:23A	M
B First Initial Flow Pressure	54 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	54 P.S.I.	Initial Closed-in Pressure	45 Mins.	42 Mins.
D Initial Closed-in Pressure	65 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	60 P.S.I.	Final Closed-in Pressure	60 Mins.	54 Mins.
F Second Final Flow Pressure	58 P.S.I.			
G Final Closed-in Pressure	67 P.S.I.			
H Final Hydrostatic Mud	2380 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>14</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>18</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>54</u>	<u>0</u>	<u>54</u>	<u>0</u>	<u>60</u>	<u>0</u>	<u>58</u>
P 2 <u>5</u>	<u>54</u>	<u>3</u>	<u>54</u>	<u>5</u>	<u>99</u>	<u>3</u>	<u>58</u>
P 3 <u>10</u>	<u>54</u>	<u>6</u>	<u>53</u>	<u>10</u>	<u>81</u>	<u>6</u>	<u>58</u>
P 4 <u>15</u>	<u>54</u>	<u>9</u>	<u>52</u>	<u>15</u>	<u>71</u>	<u>9</u>	<u>58</u>
P 5 <u>20</u>	<u>54</u>	<u>12</u>	<u>53</u>	<u>20</u>	<u>64</u>	<u>12</u>	<u>58</u>
P 6 <u>25</u>	<u>54</u>	<u>15</u>	<u>54</u>	<u>25</u>	<u>60</u>	<u>15</u>	<u>59</u>
P 7 <u>30</u>	<u>54</u>	<u>18</u>	<u>55</u>	<u>30</u>	<u>58</u>	<u>18</u>	<u>59</u>
P 8		<u>21</u>	<u>56</u>			<u>21</u>	<u>59</u>
P 9		<u>24</u>	<u>57</u>			<u>24</u>	<u>59</u>
P10		<u>27</u>	<u>58</u>			<u>27</u>	<u>59</u>
P11		<u>30</u>	<u>60</u>			<u>30</u>	<u>60</u>
P12		<u>33</u>	<u>62</u>			<u>33</u>	<u>61</u>
P13		<u>36</u>	<u>63</u>			<u>36</u>	<u>62</u>
P14		<u>39</u>	<u>64</u>			<u>39</u>	<u>63</u>
P15		<u>42</u>	<u>65</u>			<u>42</u>	<u>64</u>
P16						<u>45</u>	<u>64</u>
P17						<u>48</u>	<u>65</u>
P18						<u>51</u>	<u>66</u>
P19						<u>54</u>	<u>67</u>
P20							



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2348	2434	PSI
(B) First Initial Flow Pressure	50	54	PSI
(C) First Final Flow Pressure	50	54	PSI
(D) Initial Closed-in Pressure	60	65	PSI
(E) Second Initial Flow Pressure	60	60	PSI
(F) Second Final Flow Pressure	60	58	PSI
(G) Final Closed-in Pressure	60	67	PSI
(H) Final Hydrostatic Mud	2338	2380	PSI