



Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Messman-Rinehart Oil Co. Lease & Well No. Berland #1
Elevation _____ Formation Arbuckle Effective Pay _____ Ft. Ticket No. 14758
Date 11-25-70 Sec. 28 Twp. 8S Range 20W County Rooks State Kansas
Test Approved by J. G. Klein Western Representative Harold Schmidt
Formation Test No. 1 O.K. ☒ Misrun _____ Interval Tested From 3533' to 3556' Total Depth 3604'
Size Main Hole 8 3/4" Rat Hole _____ Conv. ☒ B.T. ☒ Damaged Yes ☒ No Conv. ☒ B.T. ☒ Damaged Yes ☒ No
Top Packer Depth 3528 Ft. Size 7 1/2" Packer Depth 3533 Ft. Size 7 1/2"
Straddle Yes ☒ No _____ Conv. ☒ B.T. ☒ Damaged Yes ☒ No
Packer Depth 3556 Ft. Size 7 1/2"
Tool Size 5 1/2" O.D. Tool Jt. Size 4 1/2" F.H. Anchor Length 23 Ft. Size 5 1/2" O.D.
RECORDERS Depth 3548 Ft. Clock No. 10434 Depth 3551 Ft. Clock No. 6893
Top Make Kuster Cap. 4200 No. 3354 Inside Inside Bottom Make Kuster Cap. 4150 No. 1558 Inside Inside
Below Straddle: Depth 3563 Clock No. 153 Inside Inside Depth 3566 Ft. Clock No. 106 Inside Inside
Top Make WTC Cap. _____ No. 10 Inside Inside Bottom Make WTC Cap. _____ No. 26 Inside Inside
Time Set Packer 12:49 P. M.
Tool Open I.F.P. From 12:50 M. to 1:00P. M. Hr. 10 Min. From (B) 30 P.S.I. To (C) 31 P.S.I.
Tool Closed I.C.I.P. From 1:00 M. to 1:30P. M. Hr. 30 Min. (D) 63 P.S.I.
Tool Open F.F.P. From 1:30 M. to 2:30P. M. Hr. 60 Min. From (E) 33 P.S.I. To (F) 35 P.S.I.
Tool Closed F.C.I.P. From 2:30 M. to 3:15P. M. Hr. 45 Min. (G) 45 P.S.I.
Initial Hydrostatic Pressure (A) 1868 P.S.I. Final Hydrostatic Pressure (H) 1859 P.S.I.
SURFACE Size Choke 3/8 In. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____
BLOW Initial flow weak for 10 min. - final flow very weak for one min. Bottom Choke Size 3/4 In.
Did Well Flow Yes ☒ No _____ Recovery Total Ft. 30 feet drilling mud
Reversed Out Yes ☒ No Mud Type Starch Viscosity 48 Weight 9.8 Water Loss 12.1 cc. Maximum Temp. 93 °F
Type Circ. Sub. Plug Did Tool Plug? No Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers Yes Safety Joint No Did Packer Hold? Yes Where? 3533
Length Drill Pipe 3063 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 450 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars 60 ft.
I. D. Drill Collars 2.7 in. Length D.S.T. Tool 91 ft.
Remarks _____

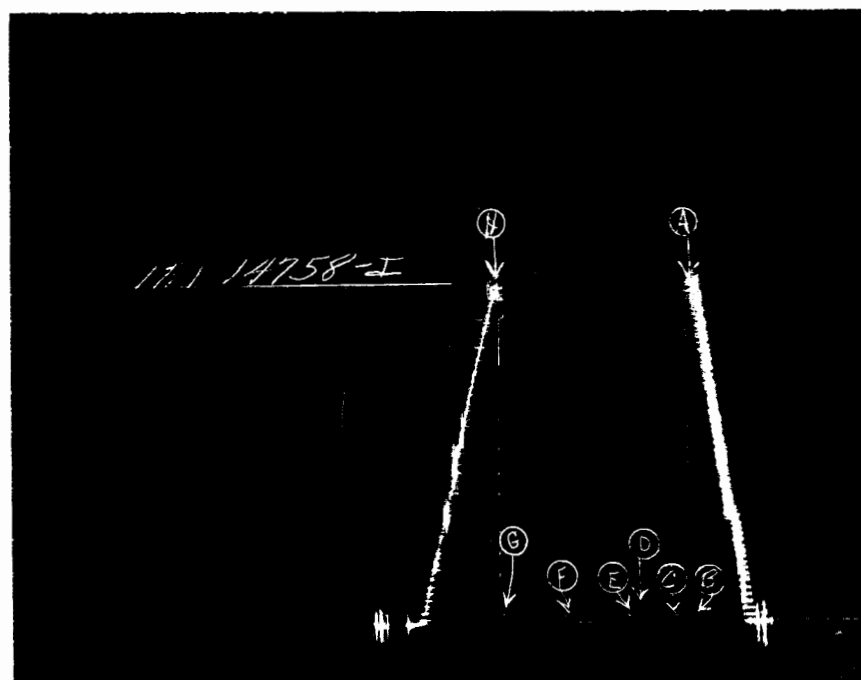
WESTERN TESTING CO., INC.
Pressure Data

Date 11-25-70 Test Ticket No. 14758
Recorder No. 3354 Capacity 4200 Location 3548 Ft.
Clock No. 10434 Elevation Not available Well Temperature 93 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1868</u>	P.S.I.	<u>12:49 P.M.</u>	
B First Initial Flow Pressure	<u>30</u>	P.S.I.	<u>10</u> Mins.	<u>10</u> Mins.
C First Final Flow Pressure	<u>31</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>63</u>	P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>33</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>35</u>	P.S.I.		
G Final Closed-in Pressure	<u>45</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1859</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>2</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>12</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 _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>30</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>33</u>	<u>0</u>	<u>35</u>
P 2 <u>5</u>	<u>30</u>	<u>3</u>	<u>33</u>	<u>5</u>	<u>33</u>	<u>3</u>	<u>35</u>
P 3 <u>10</u>	<u>31</u>	<u>6</u>	<u>38</u>	<u>10</u>	<u>33</u>	<u>6</u>	<u>36</u>
P 4 _____		<u>9</u>	<u>42</u>	<u>15</u>	<u>33</u>	<u>9</u>	<u>36</u>
P 5 _____		<u>12</u>	<u>46</u>	<u>20</u>	<u>33</u>	<u>12</u>	<u>38</u>
P 6 _____		<u>15</u>	<u>50</u>	<u>25</u>	<u>33</u>	<u>15</u>	<u>40</u>
P 7 _____		<u>18</u>	<u>52</u>	<u>30</u>	<u>33</u>	<u>18</u>	<u>41</u>
P 8 _____		<u>21</u>	<u>56</u>	<u>35</u>	<u>33</u>	<u>21</u>	<u>42</u>
P 9 _____		<u>24</u>	<u>59</u>	<u>40</u>	<u>34</u>	<u>24</u>	<u>43</u>
P10 _____		<u>27</u>	<u>61</u>	<u>45</u>	<u>34</u>	<u>27</u>	<u>44</u>
P11 _____		<u>30</u>	<u>63</u>	<u>50</u>	<u>35</u>	<u>30</u>	<u>44</u>
P12 _____				<u>55</u>	<u>35</u>	<u>33</u>	<u>44</u>
P13 _____				<u>60</u>	<u>35</u>	<u>36</u>	<u>44</u>
P14 _____						<u>39</u>	<u>45</u>
P15 _____						<u>42</u>	<u>45</u>
P16 _____						<u>45</u>	<u>45</u>
P17 _____							
P18 _____							
P19 _____							
P20 _____							



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1858	1868	PSI
(B) First Initial Flow Pressure	40	30	PSI
(C) First Final Flow Pressure	42	31	PSI
(D) Initial Closed-in Pressure	71	63	PSI
(E) Second Initial Flow Pressure	42	33	PSI
(F) Second Final Flow Pressure	44	35	PSI
(G) Final Closed-in Pressure	52	45	PSI
(H) Final Hydrostatic Mud	1856	1859	PSI



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Company Messman-Rinehart Oil Co. Lease & Well No. Berland #1
Elevation 2088 Kelly Bushings Formation Kansas City Effective Pay _____ Ft. Ticket No. 14759
Date 11-26-70 Sec. 28 Twp. 8S Range 20W County Rooks State Kansas
Test Approved by J. G. Klein Western Representative Harold Schmidt
Formation Test No. 2 O.K. ☒ Misrun _____ Interval Tested From 3402' to 3436' Total Depth 3604'
Size Main Hole 8 3/4" Rat Hole _____ Conv. _____ B.T. ☒ Damaged _____ Yes ☒ No Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No
Top Packer Depth 3397 Ft. Size 7 1/2" Packer Depth 3402 Ft. Size 7 1/2"
Straddle _____ Yes ☒ No _____ Conv. _____ B.T. ☒ Damaged _____ Yes ☒ No
Packer Depth 3436 Ft. Size 7 1/2"
Tool Size 5 1/2" O.D. Tool Jt. Size 4 1/2" F.H. Anchor Length 34 Ft. Size 5 1/2" O.D.
RECORDERS Depth 3529 Ft. Clock No. 10434 Depth 3532 Ft. Clock No. 6893
Top Make Kuster Cap. 4200 No. 3354 Inside Outside Bottom Make Kuster Cap. 4150 No. 1558 ~~Inside~~ Outside
Below Straddle: Depth 3597 Clock No. 153 Inside Outside Depth 3599 Ft. Clock No. 106 Inside Outside
Top Make WTC Cap. _____ No. 10 Inside Outside Bottom Make WTC Cap. _____ No. 26 ~~Inside~~ Outside
Time Set Packer 12:01 A_M
Tool Open I.F.P. From 12:02 M. to 12:12A_M Hr. 10 Min. From (B) 44 P.S.I. To (C) 44 P.S.I.
Tool Closed I.C.I.P. From 12:12 M. to 12:42A_M Hr. 30 Min. (D) 64 P.S.I.
Tool Open F.F.P. From 12:42 M. to 1:42A_M Hr. 60 Min. From (E) 45 P.S.I. To (F) 45 P.S.I.
Tool Closed F.C.I.P. From 1:42 M. to 2:27A_M Hr. 45 Min. (G) 51 P.S.I.
Initial Hydrostatic Pressure (A) 1817 P.S.I. Final Hydrostatic Pressure (H) 1812 P.S.I.
SURFACE Size Choke 3/8 In. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____
BLOW Weak for 10 min. Bottom Choke Size 3/4 In.
Did Well Flow _____ Yes ☒ No _____ Recovery Total Ft. 20 feet drilling mud
Reversed Out _____ Yes ☒ No _____ Mud Type Starch Viscosity 49 Weight 10.0 Water Loss 16.3 cc. Maximum Temp. 92 °F
Type Circ. Sub. Plug Did Tool Plug? No Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers Yes Safety Joint No Did Packer Hold? Yes Where? 3402
Length Drill Pipe 2932 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 450 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars 60 ft.
I. D. Drill Collars 2.7 in. Length D.S.T. Tool 222 ft.
Remarks _____

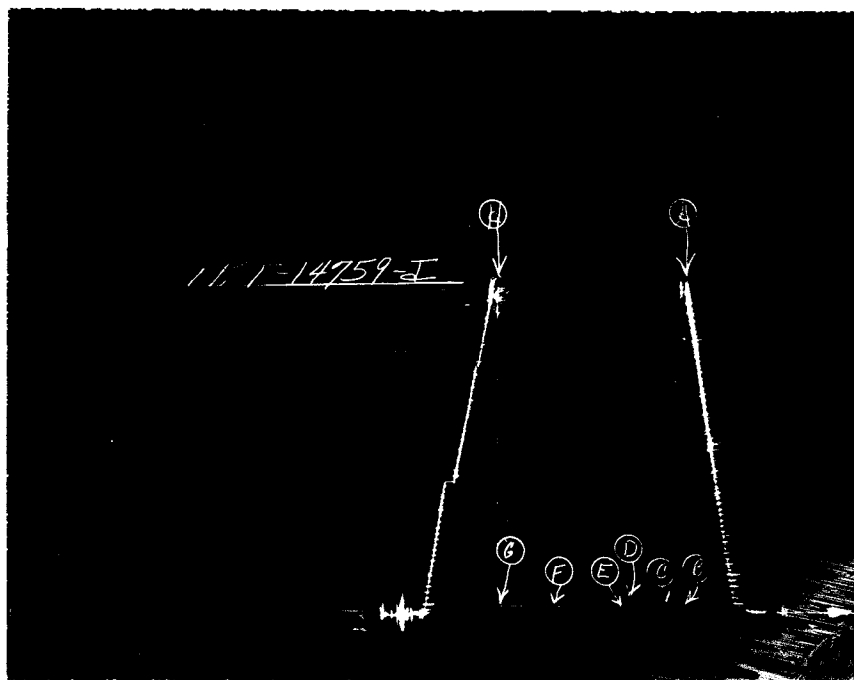
WESTERN TESTING CO., INC.
Pressure Data

Date 11-26-70 Test Ticket No. 14759
 Recorder No. 3354 Capacity 4200 Location 3529 Ft.
 Clock No. 10434 Elevation 2088 Kelly Bushings Well Temperature 92 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1817</u> P.S.I.	<u>12:01</u> A.M.	
B First Initial Flow Pressure	<u>44</u> P.S.I.	<u>10</u> Mins.	<u>10</u> Mins.
C First Final Flow Pressure	<u>44</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>64</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>45</u> P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>45</u> P.S.I.		
G Final Closed-in Pressure	<u>51</u> P.S.I.		
H Final Hydrostatic Mud	<u>1812</u> P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>2</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>12</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 _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>44</u>	<u>0</u>	<u>44</u>	<u>0</u>	<u>45</u>	<u>0</u>	<u>45</u>
P 2 <u>5</u>	<u>44</u>	<u>3</u>	<u>45</u>	<u>5</u>	<u>45</u>	<u>3</u>	<u>45</u>
P 3 <u>10</u>	<u>44</u>	<u>6</u>	<u>46</u>	<u>10</u>	<u>45</u>	<u>6</u>	<u>46</u>
P 4 _____		<u>9</u>	<u>48</u>	<u>15</u>	<u>45</u>	<u>9</u>	<u>47</u>
P 5 _____		<u>12</u>	<u>50</u>	<u>20</u>	<u>45</u>	<u>12</u>	<u>48</u>
P 6 _____		<u>15</u>	<u>53</u>	<u>25</u>	<u>45</u>	<u>15</u>	<u>48</u>
P 7 _____		<u>18</u>	<u>56</u>	<u>30</u>	<u>45</u>	<u>18</u>	<u>48</u>
P 8 _____		<u>21</u>	<u>58</u>	<u>35</u>	<u>45</u>	<u>21</u>	<u>48</u>
P 9 _____		<u>24</u>	<u>60</u>	<u>40</u>	<u>45</u>	<u>24</u>	<u>48</u>
P10 _____		<u>27</u>	<u>62</u>	<u>45</u>	<u>45</u>	<u>27</u>	<u>49</u>
P11 _____		<u>30</u>	<u>64</u>	<u>50</u>	<u>45</u>	<u>30</u>	<u>49</u>
P12 _____				<u>55</u>	<u>45</u>	<u>33</u>	<u>49</u>
P13 _____				<u>60</u>	<u>45</u>	<u>36</u>	<u>49</u>
P14 _____						<u>39</u>	<u>49</u>
P15 _____						<u>42</u>	<u>50</u>
P16 _____						<u>45</u>	<u>51</u>
P17 _____							
P18 _____							
P19 _____							
P20 _____							



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1815	1817	PSI
(B) First Initial Flow Pressure	42	44	PSI
(C) First Final Flow Pressure	44	44	PSI
(D) Initial Closed-in Pressure	65	64	PSI
(E) Second Initial Flow Pressure	44	45	PSI
(F) Second Final Flow Pressure	44	45	PSI
(G) Final Closed-in Pressure	56	51	PSI
(H) Final Hydrostatic Mud	1813	1812	PSI



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Company **Messman-Rinehart Oil Co.** Lease & Well No. **Berland #1**
Elevation **2088 Kelly Bushings** Formation **Arbuckle** Effective Pay **11** Ft. Ticket No. **14763**
Date **11-25-70** Sec. **28** Twp. **8S** Range **20W** County **Rooks** State **Kansas**
Test Approved by **J. G. Klein** Western Representative **Harold J. Schmidt**
Formation Test No. **6** O.K. ☒ Misrun ☐ Interval Tested From **3580'** to **3591'** Total Depth **3604'**
Size Main Hole **8 3/4"** Rat Hole ☐ Conv. ☐ B.T. ☒ Damaged ☐ Yes ☒ No Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No
Top Packer Depth **3575** Ft. Size **7 1/2"** Packer Depth **3580** Ft. Size **7 1/2"**
Straddle ☐ Yes ☒ No ☐ Conv. ☐ B.T. ☒ Damaged ☐ Yes ☒ No
Packer Depth **3591** Ft. Size **7 1/2"**
Tool Size **5 1/2" O.D.** Tool Jt. Size **4 1/2" F.H.** Anchor Length **11** Ft. Size **5 1/2" O.D.**
RECORDERS Depth **3585** Ft. Clock No. **10434** Depth **3588** Ft. Clock No. **6893**
Top Make **Kuster** Cap. **4200** No. **3354** Inside ☒ Outside ☐ Bottom Make **Kuster** Cap. **4150** No. **1558** Inside ☒ Outside ☐
Below Straddle: Depth **3596** Clock No. **153** Inside ☒ Outside ☐ Depth **3600** Ft. Clock No. **106** Inside ☒ Outside ☐
Top Make **WTC** Cap. **4000** No. **10** Inside ☒ Outside ☐ Bottom Make **WTC** Cap. **4000** No. **26** Inside ☒ Outside ☐
Time Set Packer **2:07** P. M.
Tool Open I.F.P. From **2:08** M. to **2:23P.M.** Hr. **15** Min. From (B) **126** P.S.I. To (C) **126** P.S.I.
Tool Closed I.C.I.P. From **2:23** M. to **2:53P.M.** Hr. **30** Min. (D) **1115** P.S.I.
Tool Open F.F.P. From **2:53** M. to **4:53P.M.** **2** Hr. Min. From (E) **141** P.S.I. To (F) **221** P.S.I.
Tool Closed F.C.I.P. From **4:53** M. to **5:38P.M.** Hr. **45** Min. (G) **1109** P.S.I.
Initial Hydrostatic Pressure (A) **1836** P.S.I. Final Hydrostatic Pressure (H) **1820** P.S.I.
SURFACE Size Choke **3/8** In. Max. Press. P.S.I. Time Description of Flow
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____
BLOW **Weak thru out** Bottom Choke Size **3/4** In.
Did Well Flow ☒ Yes ☐ No Recovery Total Ft. **240 feet of mud & water**
180 feet water
Reversed Out ☒ Yes ☐ No Mud Type **Starch** Viscosity **49** Weight **10** Water Loss **16.3** cc. Maximum Temp. _____ °F
Type Circ. Sub. **Plug** Did Tool Plug? **No** Jars: Size Make Ser. No.
EXTRA EQUIPMENT: Dual Packers **Yes** Safety Joint **No** Did Packer Hold? **Yes** Where? **3580**
Length Drill Pipe **3056** ft. I.D. Drill Pipe **2.8** in. Length Weight Pipe **450** ft. I.D. Weight Pipe **2.7** in. Length Drill Collars **60** ft.
I. D. Drill Collars **2.7** in. Length D.S.T. Tool **46** ft.
Remarks **Clock stopped on inside recorder.**

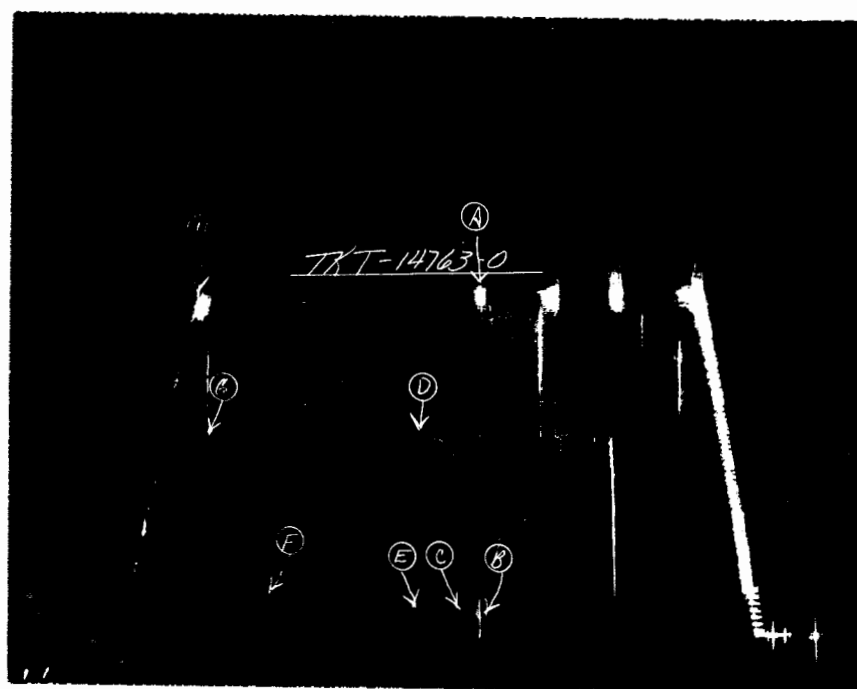
WESTERN TESTING CO., INC.
Pressure Data

Date 11-25-70 Test Ticket No. 14763
 Recorder No. 1558 Capacity 4150 Location 3588 Ft.
 Clock No. 6893 Elevation 2088 Kelly Bushings Well Temperature ? °F

Point	Pressure		Time Given	P.	M	Time Computed
A Initial Hydrostatic Mud	<u>1836</u>	P.S.I.	<u>2:07</u>			
B First Initial Flow Pressure	<u>126</u>	P.S.I.		<u>15</u>		<u>15</u>
C First Final Flow Pressure	<u>126</u>	P.S.I.		<u>30</u>		<u>30</u>
D Initial Closed-in Pressure	<u>1115</u>	P.S.I.		<u>120</u>		<u>120</u>
E Second Initial Flow Pressure	<u>141</u>	P.S.I.		<u>45</u>		<u>45</u>
F Second Final Flow Pressure	<u>221</u>	P.S.I.				
G Final Closed-in Pressure	<u>1109</u>	P.S.I.				
H Final Hydrostatic Mud	<u>1820</u>	P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>3</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>24</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 _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>126</u>	<u>0</u>	<u>126</u>	<u>0</u>	<u>141</u>	<u>0</u>	<u>221</u>
P 2 <u>5</u>	<u>126</u>	<u>3</u>	<u>870</u>	<u>5</u>	<u>143</u>	<u>3</u>	<u>905</u>
P 3 <u>10</u>	<u>126</u>	<u>6</u>	<u>1029</u>	<u>10</u>	<u>145</u>	<u>6</u>	<u>1016</u>
P 4 <u>15</u>	<u>126</u>	<u>9</u>	<u>1068</u>	<u>15</u>	<u>149</u>	<u>9</u>	<u>1056</u>
P 5 _____		<u>12</u>	<u>1089</u>	<u>20</u>	<u>153</u>	<u>12</u>	<u>1073</u>
P 6 _____		<u>15</u>	<u>1098</u>	<u>25</u>	<u>156</u>	<u>15</u>	<u>1085</u>
P 7 _____		<u>18</u>	<u>1109</u>	<u>30</u>	<u>160</u>	<u>18</u>	<u>1091</u>
P 8 _____		<u>21</u>	<u>1112</u>	<u>35</u>	<u>164</u>	<u>21</u>	<u>1098</u>
P 9 _____		<u>24</u>	<u>1113</u>	<u>40</u>	<u>168</u>	<u>24</u>	<u>1102</u>
P10 _____		<u>27</u>	<u>1114</u>	<u>45</u>	<u>171</u>	<u>27</u>	<u>1103</u>
P11 _____		<u>30</u>	<u>1115</u>	<u>50</u>	<u>175</u>	<u>30</u>	<u>1104</u>
P12 _____				<u>55</u>	<u>178</u>	<u>33</u>	<u>1105</u>
P13 _____				<u>60</u>	<u>181</u>	<u>36</u>	<u>1106</u>
P14 _____				<u>65</u>	<u>185</u>	<u>39</u>	<u>1107</u>
P15 _____				<u>70</u>	<u>189</u>	<u>42</u>	<u>1108</u>
P16 _____				<u>75</u>	<u>194</u>	<u>45</u>	<u>1109</u>
P17 _____				<u>80</u>	<u>198</u>		
P18 _____				<u>85</u>	<u>202</u>		
P19 _____				<u>90</u>	<u>206</u>		
P20 _____				<u>95</u>	<u>209</u>		
				<u>100</u>	<u>212</u>		
				<u>105</u>	<u>215</u>		
				<u>110</u>	<u>217</u>		
				<u>115</u>	<u>219</u>		
				<u>120</u>	<u>221</u>		



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1856	1836	PSI
(B) First Initial Flow Pressure	122	126	PSI
(C) First Final Flow Pressure	126	126	PSI
(D) Initial Closed-in Pressure	1112	1115	PSI
(E) Second Initial Flow Pressure	147	141	PSI
(F) Second Final Flow Pressure	221	221	PSI
(G) Final Closed-in Pressure	1110	1109	PSI
(H) Final Hydrostatic Mud	1854	1820	PSI



Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Messman-Rinehart Oil Co. Lease & Well No. Berland #1
Elevation 2088 Kelly Bushings Formation Arbuckle Effective Pay 47 Ft. Ticket No. 14765
Date 11-27-70 Sec. 28 Twp. 8S Range 20W County Rooks State Kansas
Test Approved by J. G. Klein Western Representative Harold Schmidt
Formation Test No. 8 O.K. ☒ Misrun ☐ Interval Tested From 3533' to 3580' Total Depth 3604'
Size Main Hole 8 3/4" Nat Hole ☐ Conv. ☐ B.T. ☒ Damaged ☐ Yes ☐ No Conv. ☒ B.T. ☐ Damaged ☐ Yes ☐ No
Top Packer Depth 3528 Ft. Size 7 1/2" Packer Depth 3533 Ft. Size 7 1/2"
Straddle ☐ Yes ☒ No ☐ Conv. ☐ B.T. ☒ Damaged ☐ Yes ☐ No
Packer Depth 3580 Ft. Size 7 1/2"
Tool Size 5 1/2" O.D. Tool Jt. Size 4 1/2" F.H. Anchor Length 47 Ft. Size 5 1/2" O.D.
RECORDERS Depth 3563 Ft. Clock No. 5665 Depth 3566 Ft. Clock No. 6893
Top Make Kuster Cap. 4200 No. 3354 ~~Inside~~ Outside Bottom Make Kuster Cap. 4150 No. 1558 ~~Inside~~ Outside
Below Straddle: Depth 3599 Clock No. 153 ~~Inside~~ Outside Depth 3601 Ft. Clock No. 106 ~~Inside~~ Outside
Top Make WTC Cap. 4000 No. 10 ~~Inside~~ Outside Bottom Make WTC Cap. 4000 No. 26 ~~Inside~~ Outside
Time Set Packer 11:41 A. M.
Tool Open I.F.P. From 11:42 M. to 11:52A M. Hr. 10 Min. From (B) 59 P.S.I. To (C) 67 P.S.I.
Tool Closed I.C.I.P. From 11:52 M. to 12:22A M. Hr. 30 Min. (D) 940 P.S.I.
Tool Open F.F.P. From 12:22 M. to 2:22P M. Hr. 120 Min. From (E) 84 P.S.I. To (F) 178 P.S.I.
Tool Closed F.C.I.P. From 2:22 M. to 3:12P M. Hr. 50 Min. (G) 701 P.S.I.
Initial Hydrostatic Pressure (A) 1890 P.S.I. Final Hydrostatic Pressure (H) 1876 P.S.I.
SURFACE Size Choke 3/8 In. Max. Press. P.S.I. Time Description of Flow
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____
BLOW Initial flow weak to fair - final flow fair thru out Bottom Choke Size 3/4 In.
Did Well Flow ☒ Yes ☐ No Recovery Total Ft. 240 feet watery mud
Reversed Out ☒ Yes ☐ No Mud Type Starch Viscosity 40 Weight 9.8 Water Loss 14.8 cc. Maximum Temp. _____ °F
Type Circ. Sub. Plug Did Tool Plug? NO Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers Yes Safety Joint NO Did Packer Hold? Yes Where? 3533
Length Drill Pipe 3002 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 450 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars 60 ft.
I. D. Drill Collars 2.7 in. Length D.S.T. Tool 92 ft.
Remarks _____

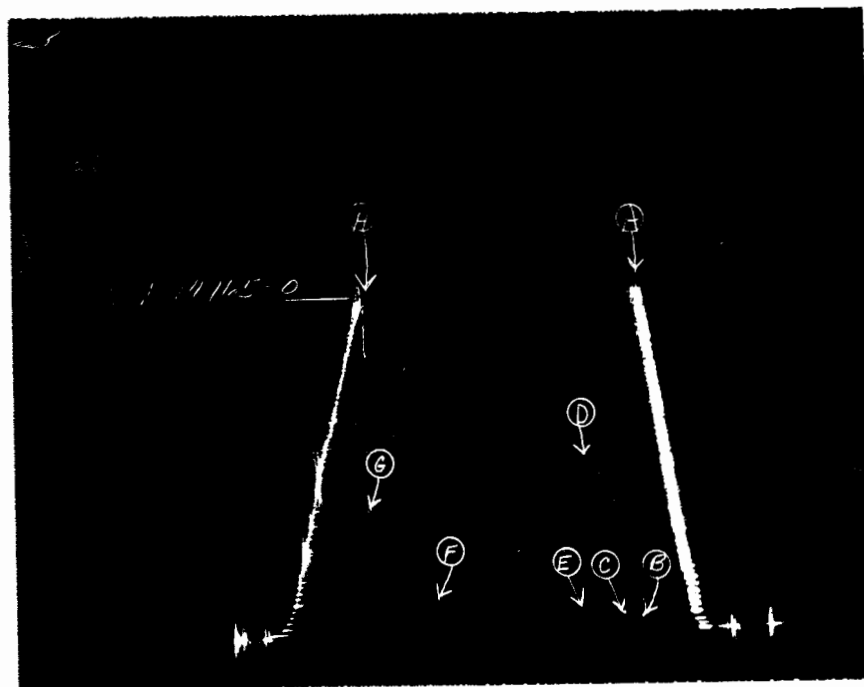
WESTERN TESTING CO., INC.
Pressure Data

Date 11-27-70 Test Ticket No. 14765
 Recorder No. 3354 Capacity 4200 Location 3563 Ft.
 Clock No. 5665 Elevation 2088 Kelly Bushings Well Temperature ? °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1890</u> P.S.I.	Open Tool	<u>11:41</u> A.M.	
B First Initial Flow Pressure	<u>59</u> P.S.I.	First Flow Pressure	<u>10</u> Mins.	<u>10</u> Mins.
C First Final Flow Pressure	<u>67</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>940</u> P.S.I.	Second Flow Pressure	<u>120</u> Mins.	<u>120</u> Mins.
E Second Initial Flow Pressure	<u>84</u> P.S.I.	Final Closed-in Pressure	<u>50</u> Mins.	<u>47</u> Mins.
F Second Final Flow Pressure	<u>178</u> P.S.I.			
G Final Closed-in Pressure	<u>701</u> P.S.I.			
H Final Hydrostatic Mud	<u>1876</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>2</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>24</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 _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of <u>2</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>59</u>	<u>0</u>	<u>67</u>	<u>0</u>	<u>84</u>	<u>0</u>	<u>178</u>
P 2 <u>5</u>	<u>63</u>	<u>3</u>	<u>578</u>	<u>5</u>	<u>84</u>	<u>3</u>	<u>352</u>
P 3 <u>10</u>	<u>67</u>	<u>6</u>	<u>727</u>	<u>10</u>	<u>90</u>	<u>6</u>	<u>415</u>
P 4 _____		<u>9</u>	<u>797</u>	<u>15</u>	<u>97</u>	<u>9</u>	<u>455</u>
P 5 _____		<u>12</u>	<u>835</u>	<u>20</u>	<u>102</u>	<u>12</u>	<u>489</u>
P 6 _____		<u>15</u>	<u>863</u>	<u>25</u>	<u>107</u>	<u>15</u>	<u>518</u>
P 7 _____		<u>18</u>	<u>886</u>	<u>30</u>	<u>112</u>	<u>18</u>	<u>546</u>
P 8 _____		<u>21</u>	<u>907</u>	<u>35</u>	<u>118</u>	<u>21</u>	<u>567</u>
P 9 _____		<u>24</u>	<u>921</u>	<u>40</u>	<u>121</u>	<u>24</u>	<u>586</u>
P10 _____		<u>27</u>	<u>930</u>	<u>45</u>	<u>124</u>	<u>27</u>	<u>605</u>
P11 _____		<u>30</u>	<u>940</u>	<u>50</u>	<u>129</u>	<u>30</u>	<u>622</u>
P12 _____				<u>55</u>	<u>133</u>	<u>33</u>	<u>637</u>
P13 _____				<u>60</u>	<u>136</u>	<u>36</u>	<u>656</u>
P14 _____				<u>65</u>	<u>139</u>	<u>39</u>	<u>669</u>
P15 _____				<u>70</u>	<u>143</u>	<u>42</u>	<u>685</u>
P16 _____				<u>75</u>	<u>147</u>	<u>45</u>	<u>698</u>
P17 _____				<u>80</u>	<u>151</u>	<u>47</u>	<u>701</u>
P18 _____				<u>85</u>	<u>155</u>		
P19 _____				<u>90</u>	<u>160</u>		
P20 _____				<u>95</u>	<u>163</u>		
				<u>100</u>	<u>166</u>		
				<u>105</u>	<u>170</u>		
				<u>110</u>	<u>175</u>		
				<u>115</u>	<u>177</u>		
				<u>120</u>	<u>178</u>		



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1879	1890	PSI
(B) First Initial Flow Pressure	61	59	PSI
(C) First Final Flow Pressure	73	67	PSI
(D) Initial Closed-in Pressure	938	940	PSI
(E) Second Initial Flow Pressure	90	84	PSI
(F) Second Final Flow Pressure	173	178	PSI
(G) Final Closed-in Pressure	698	701	PSI
(H) Final Hydrostatic Mud	1877	1876	PSI



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Company Messman-Rinehart Oil Co. Lease & Well No. Berland #1
Elevation 2088 Kelly Bushings Formation Kansas City Effective Pay _____ Ft. Ticker No. 14767
Date 11-28-70 Sec. 28 Twp. 8S Range 20W County Rooks State Kansas
Test Approved by J. G. Klein Western Representative Harold Schmidt
Formation Test No. 10 O.K. ☒ Misrun _____ Interval Tested From 3223' to 3319 Total Depth 3604
Size Main Hole 8 3/4" Rat Hole _____ Conv. _____ B.T. ☒ Damaged _____ Yes ☒ No Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No
Top Packer Depth 3218 Ft. Size 7 1/2" Packer Depth 3223 Ft. Size 7 1/2"
Straddle _____ Yes ☒ No _____ Conv. _____ B.T. ☒ Damaged _____ Yes ☒ No
Packer Depth 3319 Ft. Size 7 1/2"
Tool Size 5 1/2" O.D. Tool Jt. Size 4 1/2" F.H. Anchor Length 96 Ft. Size 5 1/2" O.D.
RECORDERS Depth 3309 Ft. Clock No. 5665 Depth 3312 Ft. Clock No. 6893
Top Make Kuster Cap. 4200 No. 3354 Inside Outside Bottom Make Kuster Cap. 4150 No. 1558 Inside Outside
Below Straddle: Depth 3599 Clock No. 153 Inside Outside Depth 3602 Ft. Clock No. 106 Inside Outside
Top Make WTC Cap. 4000 No. 10 Inside Outside Bottom Make WTC Cap. 4000 No. 26 Inside Outside
Time Set Packer 4:26 A. M
Tool Open I.F.P. From 4:27 M. to 4:37A. M. Hr. 10 Min. From (B) 145 P.S.I. To (C) 348 P.S.I.
Tool Closed I.C.I.P. From 4:37 M. to 5:07A. M. Hr. 30 Min. (D) 1267 P.S.I.
Tool Open F.F.P. From 5:07 M. to 6:07A. M. Hr. 60 Min. From (E) 405 P.S.I. To (F) 1012 P.S.I.
Tool Closed F.C.I.P. From 6:07 M. to 6:52A. M. Hr. 45 Min. (G) 1257 P.S.I.
Initial Hydrostatic Pressure (A) 1758 P.S.I. Final Hydrostatic Pressure (H) 1739 P.S.I.
SURFACE Size Choke 3/8 In. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____
BLOW Strong Bottom Choke Size 3/4 In.
Did Well Flow _____ Yes ☒ No _____ Recovery Total Ft. 1940 feet water
Reversed Out ☒ Yes _____ No _____ Mud Type Starch Viscosity 40 Weight 9.8 Water Loss 14.8 cc. Maximum Temp. _____ °F
Type Circ. Sub. Plug Did Tool Plug? No Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers Yes Safety Joint No Did Packer Hold? Yes Where? 3223
Length Drill Pipe 2752 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 450 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.
I. D. Drill Collars _____ in. Length D.S.T. Tool 402 ft.
Remarks _____

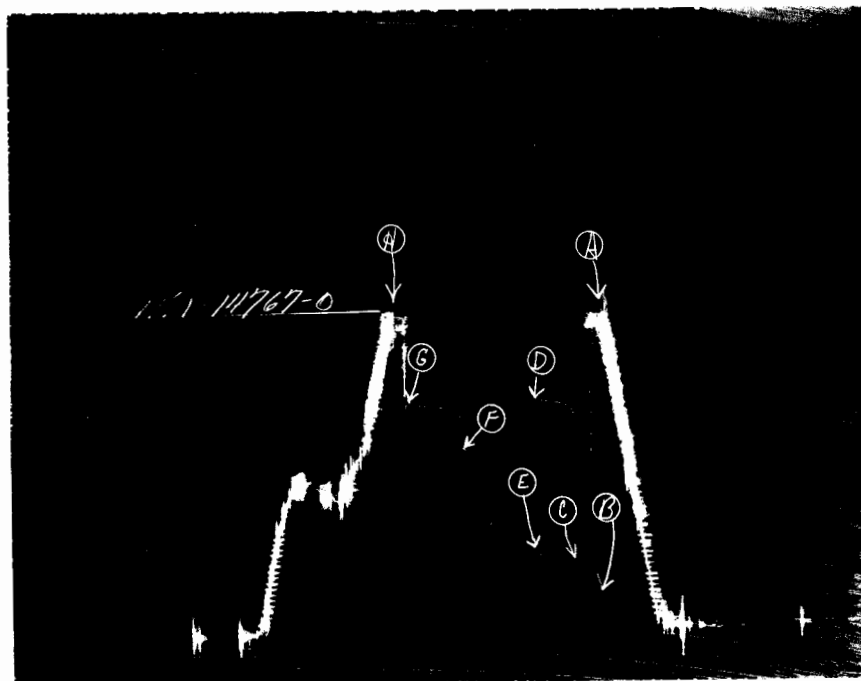
WESTERN TESTING CO., INC.
Pressure Data

Date 11-28-70 Test Ticket No. 14767
 Recorder No. 1558 Capacity 4150 Location 3312 Ft.
 Clock No. 6893 Elevation 2088 Kelly Bushings Well Temperature ? °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1758</u> P.S.I.	Open Tool	<u>4:26A.</u> M	
B First Initial Flow Pressure	<u>145</u> P.S.I.	First Flow Pressure	<u>10</u> Mins.	<u>10</u> Mins.
C First Final Flow Pressure	<u>348</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>1267</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>405</u> P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>1012</u> P.S.I.			
G Final Closed-in Pressure	<u>1257</u> P.S.I.			
H Final Hydrostatic Mud	<u>1739</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>2</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>12</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 _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>145</u>	<u>0</u>	<u>348</u>	<u>0</u>	<u>405</u>	<u>0</u>	<u>1012</u>
P 2 <u>5</u>	<u>253</u>	<u>3</u>	<u>1188</u>	<u>5</u>	<u>459</u>	<u>3</u>	<u>1206</u>
P 3 <u>10</u>	<u>348</u>	<u>6</u>	<u>1227</u>	<u>10</u>	<u>539</u>	<u>6</u>	<u>1222</u>
P 4 _____		<u>9</u>	<u>1240</u>	<u>15</u>	<u>604</u>	<u>9</u>	<u>1227</u>
P 5 _____		<u>12</u>	<u>1246</u>	<u>20</u>	<u>668</u>	<u>12</u>	<u>1234</u>
P 6 _____		<u>15</u>	<u>1242</u>	<u>25</u>	<u>924</u>	<u>15</u>	<u>1238</u>
P 7 _____		<u>18</u>	<u>1257</u>	<u>30</u>	<u>782</u>	<u>18</u>	<u>1242</u>
P 8 _____		<u>21</u>	<u>1259</u>	<u>35</u>	<u>826</u>	<u>21</u>	<u>1244</u>
P 9 _____		<u>24</u>	<u>1262</u>	<u>40</u>	<u>870</u>	<u>24</u>	<u>1246</u>
P10 _____		<u>27</u>	<u>1265</u>	<u>45</u>	<u>912</u>	<u>27</u>	<u>1249</u>
P11 _____		<u>30</u>	<u>1267</u>	<u>50</u>	<u>949</u>	<u>30</u>	<u>1252</u>
P12 _____				<u>55</u>	<u>985</u>	<u>33</u>	<u>1253</u>
P13 _____				<u>60</u>	<u>1012</u>	<u>36</u>	<u>1254</u>
P14 _____						<u>39</u>	<u>1255</u>
P15 _____						<u>42</u>	<u>1256</u>
P16 _____						<u>45</u>	<u>1257</u>
P17 _____							
P18 _____							
P19 _____							
P20 _____							



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1741	1758	PSI
(B) First Initial Flow Pressure	158	145	PSI
(C) First Final Flow Pressure	379	348	PSI
(D) Initial Closed-in Pressure	1286	1267	PSI
(E) Second Initial Flow Pressure	411	405	PSI
(F) Second Final Flow Pressure	1023	1012	PSI
(G) Final Closed-in Pressure	1276	1257	PSI
(H) Final Hydrostatic Mud	1739	1739	PSI