

Company Pickrell Drilling Company Lease & Well No. Matson Est. #2
Elevation - Formation Mississippi Effective Pay - Ft. Ticket No. 14306
Date 10/ 28/81 Sec. 31 Twp. 29S Range 6W County Kingman State Kansas
Test Approved by Bill Klaver Western Representative Louis Spencer
Formation Test No. 1 Interval Tested from 4122 ft. to 4132 ft. Total Depth 4132 ft.
Packer Depth 4117 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4122 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) - ft. Recorder Number 1560 Cap. 4500
Bottom Recorder Depth (Outside) - ft. Recorder Number 11019 Cap. 4500
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Pickrell Drilling Rig #10 Drill Collar Length - I. D. - in.
Mud Type premix Viscosity 43 Weight Pipe Length 560 I. D. 3 in.
Weight 9.0 Water Loss 10.8 cc. Drill Pipe Length 3542 I. D. 3.8 in.
Chlorides 14,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.
Jars: Make - Serial Number - Anchor Length 10 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 3 1/2 in.

Blow: Weak blow one inch in bucket on initial flow period. No blow on final flow period.

Recovered 90 ft. of mud

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks:

Tried to flush tool at beginning of second flow period.

Time Set Packer(s) 4:13 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 7:43 ~~P.M.~~ ^{A.M.} Maximum Temperature 116°
Initial Hydrostatic Pressure 2063 P.S.I. (A)
Initial Flow Period 30 Minutes (B) 120 P.S.I. to (C) 173 P.S.I.
Initial Closed In Period 60 Minutes (D) 1275 P.S.I.
Final Flow Period 60 Minutes (E) 90 P.S.I. to (F) 577 P.S.I.
Final Closed In Period 57 Minutes (G) 1705 P.S.I.
Final Hydrostatic Pressure 2025 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 10/28/81 Recorder No. 1560 Capacity 4500 Test Ticket No. 14306
 Clock No. -- Elevation ---- Location -- Ft. --
 Well Temperature 116 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2063 P.S.I.	Open Tool	4:13A M	
B First Initial Flow Pressure	120 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	173 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	1275 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	90 P.S.I.	Final Closed-in Pressure	60 Mins.	57 Mins.
F Second Final Flow Pressure	577 P.S.I.	ALL PRESSURES QUESTIONABLE DUE TO PLUGGING		
G Final Closed-in Pressure	1705 P.S.I.			
H Final Hydrostatic Mud	2025 P.S.I.			

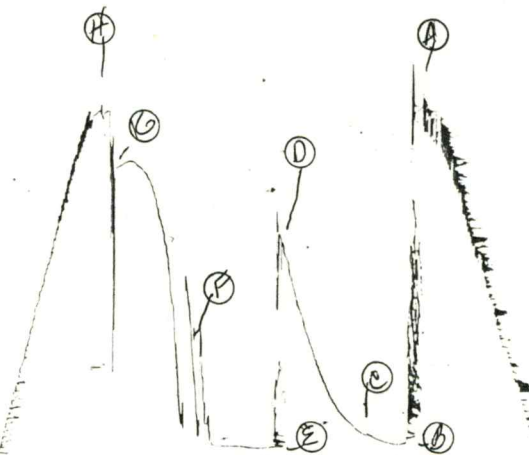
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>12</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 0	120	0	173	0	90	0	577
P 2 5	120	3	187	5	90	3	883
P 3 10	123	6	203	10	90	6	1081
P 4 15	130	9	229	15	90	9	282
P 5 20	144	12	252	20	95	12	599
P 6 25	162	15	275	25	100	15	914
P 7 30	173	18	303	30	101	18	1124
P 8		21	343	35	101	21	1284
P 9		24	380	40	101	24	1394
P10		27	431	45	108	27	1493
P11		30	486	50	229	30	1581
P12		33	543	55	155	33	1635
P13		36	613	60	577	36	1676
P14		39	685			39	1703
P15		42	752			42	1721
P16		45	845			45	1743
P17		48	905			48	1743
P18		51	989			51	1732
P19		54	1074			54	1718
P20		57	1185			57	1705
		60	1275				

~~7560~~ 7560

TR+ #14306

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Company Pickrell Drilling Company Lease & Well No. Matson Est. #2
Elevation - Formation Mississippi Effective Pay - Ft. Ticket No. 14307
Date 10/ 28/81 Sec. 31 Twp. 29S Range 6W County Kingman State Kansas
Test Approved by Bill Klaver Western Representative Louis Spencer
Formation Test No. 2 Interval Tested from 4126 ft. to 4147 ft. Total Depth 4147 ft.
Packer Depth 4121 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4126 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4132 ft. Recorder Number 1560 Cap. 4500
Bottom Recorder Depth (Outside) 4135 ft. Recorder Number 11019 Cap. 4500
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Pickrell Drilling Rig #10 Drill Collar Length - I. D. - in.
Mud Type premix Viscosity 44 Weight Pipe Length 560 I. D. 3 in.
Weight 9.1 Water Loss 12.6 cc. Drill Pipe Length - I. D. 3.8 in.
Chlorides 12,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.
Jars: Make - Serial Number - Anchor Length 21 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 3 1/2 in.

Blow: Initial flow period good blow; off bottom of bucket in two minutes.

Recovered 40 ft. of very slightly oil cut mud 2% oil
Recovered 186 ft. of oil cut mud 12% oil Chlorides 28,000 ppm
Recovered - ft. of -
Recovered - ft. of -
Recovered - ft. of -
Remarks: -

Time Set Packer(s) 7:55 A.M. P.M. Time Started Off Bottom 12:25 A.M. P.M. Maximum Temperature 116°
Initial Hydrostatic Pressure 1995 P.S.I.
Initial Flow Period 30 Minutes (B) 116 P.S.I. to (C) 116 P.S.I.
Initial Closed In Period 60 Minutes (D) 955 P.S.I.
Final Flow Period 90 Minutes (E) 130 P.S.I. to (F) 132 P.S.I.
Final Closed In Period 90 Minutes (G) 964 P.S.I.
Final Hydrostatic Pressure 1995 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 10/28/81 Test Ticket No. 14307
 Recorder No. 1560 Capacity 4500 Location 4132 Ft.
 Clock No. - Elevation --- Well Temperature 116 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1995	P.S.I.	7:55P	M
B First Initial Flow Pressure	116	P.S.I.	30	Mins.
C First Final Flow Pressure	116	P.S.I.	60	Mins.
D Initial Closed-in Pressure	955	P.S.I.	90	Mins.
E Second Initial Flow Pressure	130	P.S.I.	90	Mins.
F Second Final Flow Pressure	132	P.S.I.		
G Final Closed-in Pressure	964	P.S.I.		
H Final Hydrostatic Mud	1995	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>18</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>116</u>	<u>0</u>	<u>116</u>	<u>0</u>	<u>130</u>	<u>0</u>	<u>132</u>
P 2 <u>5</u>	<u>116</u>	<u>3</u>	<u>139</u>	<u>5</u>	<u>130</u>	<u>3</u>	<u>188</u>
P 3 <u>10</u>	<u>116</u>	<u>6</u>	<u>197</u>	<u>10</u>	<u>130</u>	<u>6</u>	<u>248</u>
P 4 <u>15</u>	<u>116</u>	<u>9</u>	<u>269</u>	<u>15</u>	<u>130</u>	<u>9</u>	<u>313</u>
P 5 <u>20</u>	<u>116</u>	<u>12</u>	<u>333</u>	<u>20</u>	<u>130</u>	<u>12</u>	<u>359</u>
P 6 <u>25</u>	<u>116</u>	<u>15</u>	<u>390</u>	<u>25</u>	<u>130</u>	<u>15</u>	<u>410</u>
P 7 <u>30</u>	<u>116</u>	<u>18</u>	<u>450</u>	<u>30</u>	<u>130</u>	<u>18</u>	<u>454</u>
P 8		<u>21</u>	<u>511</u>	<u>35</u>	<u>130</u>	<u>21</u>	<u>498</u>
P 9		<u>24</u>	<u>568</u>	<u>40</u>	<u>130</u>	<u>24</u>	<u>534</u>
P10		<u>27</u>	<u>606</u>	<u>45</u>	<u>130</u>	<u>27</u>	<u>572</u>
P11		<u>30</u>	<u>653</u>	<u>50</u>	<u>130</u>	<u>30</u>	<u>608</u>
P12		<u>33</u>	<u>697</u>	<u>55</u>	<u>130</u>	<u>33</u>	<u>640</u>
P13		<u>36</u>	<u>736</u>	<u>60</u>	<u>130</u>	<u>36</u>	<u>671</u>
P14		<u>39</u>	<u>774</u>	<u>65</u>	<u>131</u>	<u>39</u>	<u>698</u>
P15		<u>42</u>	<u>805</u>	<u>70</u>	<u>132</u>	<u>42</u>	<u>723</u>
P16		<u>45</u>	<u>835</u>	<u>75</u>	<u>132</u>	<u>45</u>	<u>746</u>
P17		<u>48</u>	<u>866</u>	<u>80</u>	<u>132</u>	<u>48</u>	<u>768</u>
P18		<u>51</u>	<u>890</u>	<u>85</u>	<u>132</u>	<u>51</u>	<u>788</u>
P19		<u>54</u>	<u>910</u>	<u>90</u>	<u>132</u>	<u>54</u>	<u>809</u>
P20		<u>57</u>	<u>932</u>			<u>57</u>	<u>827</u>
		<u>60</u>	<u>955</u>			<u>60</u>	<u>842</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 10/28/81 Test Ticket No. 14307
 Recorder No. 1560 Capacity 4500 Location 4132 Ft.
 Clock No. - Elevation --- Well Temperature 116 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1995 P.S.I.	Open Tool	7:55P	M
B First Initial Flow Pressure	116 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	116 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	955 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	130 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	132 P.S.I.			
G Final Closed-in Pressure	964 P.S.I.			
H Final Hydrostatic Mud	1995 P.S.I.			

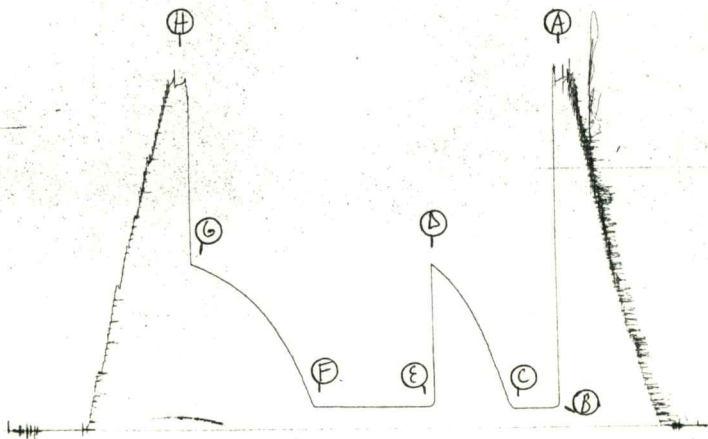
PRESSURE BREAKDOWN

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	860
P 2						66	872
P 3						69	887
P 4						72	900
P 5						75	912
P 6						78	923
P 7						81	935
P 8						84	946
P 9						87	957
P10						90	964
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TKT # 14307

1560

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Company Pickrell Drilling Company Lease & Well No. Matson Est. #2
 Elevation - Formation Mississippi Effective Pay - Ft. Ticket No. 14308
 Date 10/29 /81 Sec. 31 Twp. 29S Range 6W County Kingman State Kansas
 Test Approved by Bill Klaver Western Representative Louis Spencer
 Formation Test No. 3 Interval Tested from 4145 ft. to 4162 ft. Total Depth 4162 ft.
 Packer Depth 4140 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 4145 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 4150 ft. Recorder Number 1560 Cap. 4500
 Bottom Recorder Depth (Outside) 4153 ft. Recorder Number 11019 Cap. 4500
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Pickrell Drilling Rig #10 Drill Collar Length - I. D. - in.
 Mud Type premix Viscosity 46 Weight Pipe Length 560 I. D. 3 in.
 Weight 9.1 Water Loss 12.4 cc. Drill Pipe Length 3565 I. D. 3.8 in.
 Chlorides 12,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.
 Jars: Make - Serial Number - Anchor Length 17 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 3 1/2 in.

Blow: Good blow on initial flow period. Gas to surface fifty minutes into final flow period. See attached sheet for gas measurements.

Recovered 220 ft. of oil cut mud (gas) oil 10%
 Recovered 120 ft. of oil cut muddy water Gassy oil 10% water 40%
 Recovered - ft. of Chlorides 50,000 ppm
 Recovered - ft. of -
 Recovered - ft. of -

Remarks: -

Time Set Packer(s) 1:05 ~~AM~~ P.M. Time Started Off Bottom 5:35 ~~AM~~ P.M. Maximum Temperature 115°
 Initial Hydrostatic Pressure 2062 P.S.I. (A)
 Initial Flow Period 30 Minutes (B) 189 P.S.I. to (C) 189 P.S.I.
 Initial Closed In Period 60 Minutes (D) 1204 P.S.I.
 Final Flow Period 90 Minutes (E) 173 P.S.I. to (F) 188 P.S.I.
 Final Closed In Period 87 Minutes (G) 1152 P.S.I.
 Final Hydrostatic Pressure 2007 P.S.I. (H)

GAS FLOW REPORT

Date 10/29/81 Ticket 14308 Company Pickrell Drilling Company
 Well Name and No. Matson East. #2 Dst No. 3 Interval Tested 4145'-4162'
 County Kingman State Kansas Sec. 31 Twp. 29S Rg. 6W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
PRE FLOW						

Gas to surface at fifty minutes on final **SECOND FLOW** flow period.

50 min.	20" of water	1/4" orifice	7,510 CFPD
60 min.	20" of water	1/4" orifice	5,600 CFPD
70 min.	20" of water	1/4" orifice	5,600 CFPD
80 min.	20" of water	1/4" orifice	5,600 CFPD
90 min.	20" of water	1/4" orifice	5,600 CFPD

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced 10/29/81

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Pickrell Drilling Company
 Authorized by Bill Klaver

WESTERN TESTING CO., INC.

Pressure Data

Date 10/29/81 Recorder No. 1560 Capacity 4500 Test Ticket No. 14308 Location 4150 Ft.
 Clock No. - Elevation --- Well Temperature 115 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2062	P.S.I.	1:05P	M
B First Initial Flow Pressure	189	P.S.I.	30	30
C First Final Flow Pressure	189	P.S.I.	60	60
D Initial Closed-in Pressure	1204	P.S.I.	90	90
E Second Initial Flow Pressure	173	P.S.I.	90	87
F Second Final Flow Pressure	188	P.S.I.		
G Final Closed-in Pressure	1152	P.S.I.		
H Final Hydrostatic Mud	2007	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>18</u> Inc.		Breakdown: <u>29</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>189</u>	<u>0</u>	<u>189</u>	<u>0</u>	<u>173</u>	<u>0</u>	<u>188</u>
P 2 <u>5</u>	<u>189</u>	<u>3</u>	<u>403</u>	<u>5</u>	<u>173</u>	<u>3</u>	<u>370</u>
P 3 <u>10</u>	<u>189</u>	<u>6</u>	<u>565</u>	<u>10</u>	<u>173</u>	<u>6</u>	<u>514</u>
P 4 <u>15</u>	<u>189</u>	<u>9</u>	<u>696</u>	<u>15</u>	<u>173</u>	<u>9</u>	<u>619</u>
P 5 <u>20</u>	<u>189</u>	<u>12</u>	<u>795</u>	<u>20</u>	<u>173</u>	<u>12</u>	<u>698</u>
P 6 <u>25</u>	<u>189</u>	<u>15</u>	<u>872</u>	<u>25</u>	<u>173</u>	<u>15</u>	<u>757</u>
P 7 <u>30</u>	<u>189</u>	<u>18</u>	<u>932</u>	<u>30</u>	<u>173</u>	<u>18</u>	<u>813</u>
P 8		<u>21</u>	<u>980</u>	<u>35</u>	<u>173</u>	<u>21</u>	<u>853</u>
P 9		<u>24</u>	<u>1018</u>	<u>40</u>	<u>173</u>	<u>24</u>	<u>890</u>
P10		<u>27</u>	<u>1050</u>	<u>45</u>	<u>173</u>	<u>27</u>	<u>923</u>
P11		<u>30</u>	<u>1074</u>	<u>50</u>	<u>173</u>	<u>30</u>	<u>948</u>
P12		<u>33</u>	<u>1101</u>	<u>55</u>	<u>173</u>	<u>33</u>	<u>971</u>
P13		<u>36</u>	<u>1119</u>	<u>60</u>	<u>175</u>	<u>36</u>	<u>993</u>
P14		<u>39</u>	<u>1135</u>	<u>65</u>	<u>176</u>	<u>39</u>	<u>1011</u>
P15		<u>42</u>	<u>1151</u>	<u>70</u>	<u>176</u>	<u>42</u>	<u>1029</u>
P16		<u>45</u>	<u>1164</u>	<u>75</u>	<u>178</u>	<u>45</u>	<u>1044</u>
P17		<u>48</u>	<u>1175</u>	<u>80</u>	<u>181</u>	<u>48</u>	<u>1059</u>
P18		<u>51</u>	<u>1182</u>	<u>85</u>	<u>185</u>	<u>51</u>	<u>1072</u>
P19		<u>54</u>	<u>1196</u>	<u>90</u>	<u>188</u>	<u>54</u>	<u>1081</u>
P20		<u>57</u>	<u>1202</u>			<u>57</u>	<u>1091</u>
		<u>60</u>	<u>1204</u>			<u>60</u>	<u>1098</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 10/29/81 Test Ticket No. 14308
 Recorder No. 1560 Capacity 4500 Location 4150 Ft.
 Clock No. - Elevation --- Well Temperature 115 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2062 P.S.I.	Open Tool	1:05P	M
B First Initial Flow Pressure	189 P.S.I.	First Flow Pressure	30	30 Mins.
C First Final Flow Pressure	189 P.S.I.	Initial Closed-in Pressure	60	60 Mins.
D Initial Closed-in Pressure	1204 P.S.I.	Second Flow Pressure	90	90 Mins.
E Second Initial Flow Pressure	173 P.S.I.	Final Closed-in Pressure	90	87 Mins.
F Second Final Flow Pressure	188 P.S.I.			
G Final Closed-in Pressure	1152 P.S.I.			
H Final Hydrostatic Mud	2007 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>18</u> Inc.		Breakdown: <u>29</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						63	1107
P 2						66	1114
P 3						69	1122
P 4						72	1128
P 5						75	1135
P 6						78	1143
P 7						81	1149
P 8						84	1151
P 9						87	1152
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TKT # 14308

1760

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