

Home Office: Great Bend, Kansas
P. O. Box 793 Swift 3-7903

Company Pickrell Drilling Company Lease & Well No. Cheney #A-1
Elevation 2444 Kelly Bushings Formation Kansas City Ticket Number 7631
Date June 17, 1966 Sec. 28 Twp. 14s Range 27w County Gove State Kansas
Test Approved by Ralph W. Runwe Western Representative Dean Blagrave

Formation Test No. 1 O.K. Misrun Interval Tested From 3893' to 3923' Total Depth 3923'
Size Main Hole 7 7/8 Rat Hole none Conv. B.T. Damaged Yes No Conv. B.T. Damaged Yes No
Packer Depth 3888 Ft. Size 6 3/4 Packer Depth 3893 Ft. Size 6 3/4
Straddle Yes No Conv. B.T. Damaged Yes No
Packer Depth _____ Ft. Size _____

Tool Size 5 1/2 OD Tool Jt. Size 4 1/2 FH Anchor Length 30 Ft. Size 5 1/2 OD

RECORDERS Depth 3912 Ft. Clock No. 6892 Depth 3915 Ft. Clock No. 6774
Top Make Amerada Cap. 4150 No. 2606 Inside Outside Bottom Make Amerada Cap. 4300 No. 1567 Inside Outside
Below Straddle: Depth _____ Clock No. _____ Inside Outside Depth _____ Ft. Clock No. _____ Inside Outside
Top Make _____ Cap. _____ No. _____ Outside Bottom Make _____ Cap. _____ No. _____ Inside Outside

Time Set Packer 9:23 P M
Tool Open I.F.P. From 9:25 M to 9:30 M Hr. 5 Min. From (B) 53 P.S.I. To (C) 55 P.S.I.
Tool Closed I.C.I.P. From 9:30 M. to 10:00 M. Hr. 30 Min. (D) 1297 P.S.I.
Tool Open F.F.P. From 10:00 M. to 11:00 M. 1 Hr. Min. From (E) 56 P.S.I. To (F) 63 P.S.I.
Tool Closed F.C.I.P. From 11:00 M. to 11:30 M. Hr. 30 Min. (G) 1025 P.S.I.
Initial Hydrostatic Pressure (A) 2060 P.S.I. Final Hydrostatic Pressure (H) 2023 P.S.I.

SURFACE Size Choke 1/4 In. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____

BLOW Weak for 5 minutes. Bottom Choke Size 3/4 In.
Did Well Flow Yes No Recovery Total Ft. 15' mud with oil specks

Reversed Out Yes No Mud Type starch Viscosity 46 Weight 9.6 Maximum Temp. 123 °F

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Jars: Size no Make _____ Ser. No. _____

Type Circ. Sub. plug Did Tool Plug? no Where? _____ Did Packer Hold? yes

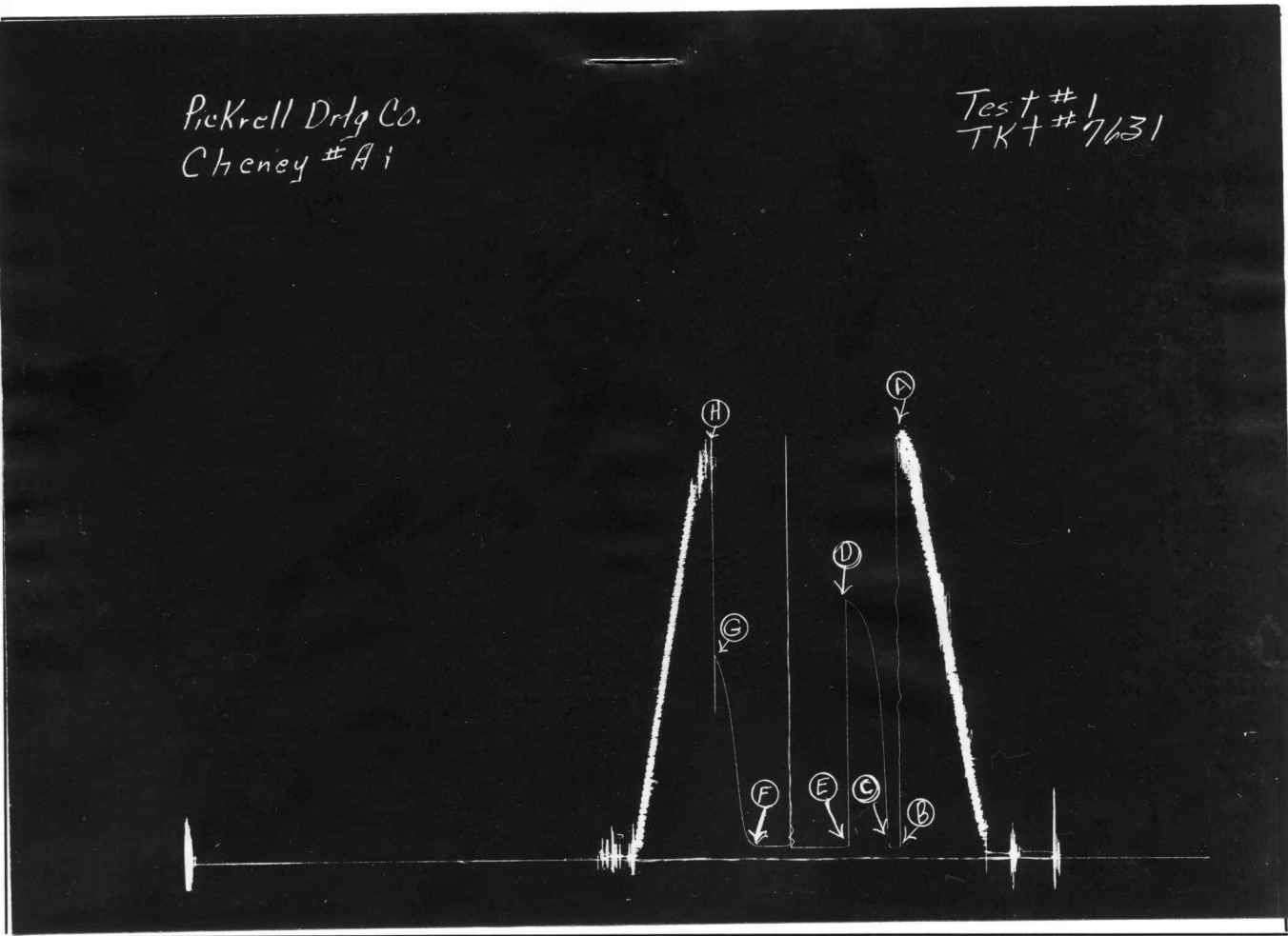
Length Drill Pipe _____ ft. I.D. Drill Pipe _____ in Length Weight Pipe 1035 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars none ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool 48 ft.

Remarks Flushed tool at 40 minutes.

Pickrell Drtg Co.
Cheney #A1

Test # 1
TK # 7631



This is an actual photograph of recorder chart.

| POINT | PRESSURE | |
|--|----------|-----|
| (A) Initial Hydrostatic Mud | 2060 | PSI |
| (B) First Initial Flow Pressure | 53 | PSI |
| (C) First Final Flow Pressure | 55 | PSI |
| (D) Initial Closed-in Pressure | 1297 | PSI |
| (E) Second Initial Flow Pressure | 56 | PSI |
| (F) Second Final Flow Pressure | 63 | PSI |
| (G) Final Closed-in Pressure | 1025 | PSI |
| (H) Final Hydrostatic Mud | 2023 | PSI |

COMPANY

PICKRELL DRILLING CO.

LEASE AND WELL NO.

CHENEY #A-1

SEC.

28

TWP.

14S

RGE.

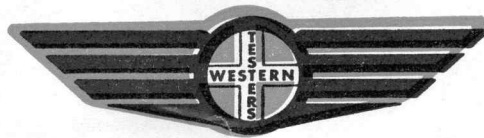
27W

TEST NO.

1

DATE

6-17-



Home Office: Great Bend, Kansas
P. O. Box 793 Swift 3-7903

Pickrell Drilling Company

Cheney #A-1

Company 2444 Kelly Bushings Lease & Well No. Ft. Scott
Elevation 7 7/8 Formation 14s Ticker Number 6732
Date June 19, 1966 Sec. 28 Twp. 14s Range 27w County Gove State Kansas
Test Approved by Ralph W. Ruwwe Western Representative Dean Blagrave

Formation Test No. 2 O.K. Misrun Interval Tested From 4120' to 4180' Total Depth 4180'
Size Main Hole 7 7/8 Rat Hole none Conv. B.T. Damaged Yes No Conv. B.T. Damaged Yes No
Packer Depth 4115 Ft. Size 6 3/4 Packer Depth 4120 Ft. Size 6 3/4
Straddle Yes No Conv. B.T. Damaged Yes No

Tool Size 5 1/2 OD Tool Jt. Size 4 1/2 FH Anchor Length 60 Ft. Size 5 1/2 OD
RECORDERS Depth 4135 Ft. Clock No. 6892 Depth 4138 Ft. Clock No. 6774
Top Make Amerada Cap. 4150 No. 2606 Inside Outside Bottom Make Amerada Cap. 4300 No. 1567 Inside Outside
Below Straddle: Depth _____ Clock No. _____ Inside _____ Outside _____
Top Make _____ Cap. _____ No. _____ Inside _____ Outside _____

Time Set Packer 1:33 A
Tool Open I.F.P. From 1:35 M to 1:40 M Hr. 5 Min. From (B) 52 P.S.I. To (C) 52 P.S.I.
Tool Closed I.C.I.P. From 1:40 M. to 2:10 M. Hr. 30 Min. (D) 1071 P.S.I.
Tool Open F.F.P. From 2:10 M. to 3:10 M. Hr. 1 Min. From (E) 57 P.S.I. To (F) 64 P.S.I.
Tool Closed F.C.I.P. From 3:10 M. to 3:40 M. Hr. 30 Min. (G) 131 P.S.I.
Initial Hydrostatic Pressure (A) 2207 P.S.I. Final Hydrostatic Pressure (H) 2185 P.S.I.

SURFACE Size Choke 1/4 In. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____

BLOW Weak for 5 minutes Bottom Choke Size 3/4 In.
Did Well Flow Yes No Recovery Total Ft. 10' mud with 11 specks.

Reversed Out Yes No Mud Type starch Viscosity 47 Weight 9.7 Maximum Temp. 127 °F

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Jars: Size no Make _____ Ser. No. _____

Type Circ. Sub. plug Did Tool Plug? no Where? _____ Did Packer Hold? yes

Length Drill Pipe _____ ft. I.D. Drill Pipe _____ in Length Weight Pipe 1035 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars none ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool 78 ft.

Remarks Flushed at 40 minutes.

WESTERN TESTING CO., INC.
Pressure Data

Date June 19, 1966

Test Ticket No. 7632

Recorder No. 2606 Capacity 4150 Location 4135 Ft.

Clock No. 6892 Elevation 2444 Kelly Bushings Well Temperature 127 °F

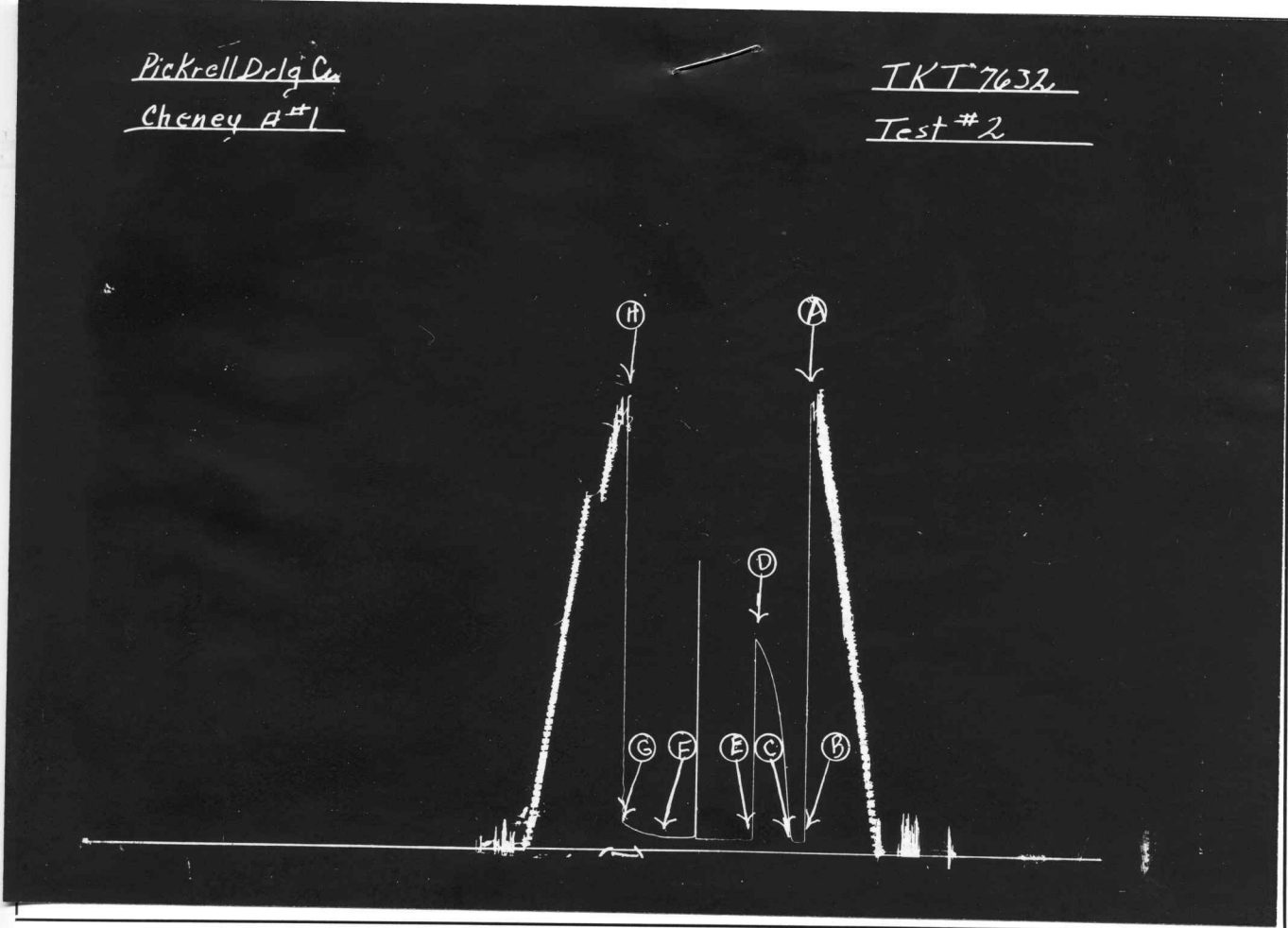
| Point | Pressure | Time Given | Time Computed |
|--------------------------------|--------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud | <u>2207</u> P.S.I. | <u>1:33</u> A M | |
| B First Initial Flow Pressure | <u>52</u> P.S.I. | <u>5</u> Mins. | <u>8</u> Mins. |
| C First Final Flow Pressure | <u>52</u> P.S.I. | <u>30</u> Mins. | <u>31</u> Mins. |
| D Initial Closed-in Pressure | <u>1071</u> P.S.I. | <u>60</u> Mins. | <u>60</u> Mins. |
| E Second Initial Flow Pressure | <u>57</u> P.S.I. | <u>30</u> Mins. | <u>28</u> Mins. |
| F Second Final Flow Pressure | <u>64</u> P.S.I. | | |
| G Final Closed-in Pressure | <u>131</u> P.S.I. | | |
| H Final Hydrostatic Mud | <u>2185</u> P.S.I. | | |

PRESSURE BREAKDOWN

| Point Mins. | First Flow Press. | Initial Shut-In | Second Flow Pressure | Final Shut-In | | | |
|-------------|--|---|--|--|-----------|---------------|------------|
| | Breakdown: <u>1</u> Inc. of <u>5</u> mins. and a final inc. of <u>3</u> Min. | Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>1</u> Min. | Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u> </u> Min. | Breakdown: <u>9</u> Inc. of <u>3</u> mins. and a final inc. of <u>1</u> Min. | | | |
| | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. |
| P 1 | <u>52</u> | <u>0</u> | <u>52</u> | <u>0</u> | <u>57</u> | <u>0</u> | <u>64</u> |
| P 2 | <u>52</u> | <u>3</u> | <u>139</u> | <u>5</u> | <u>57</u> | <u>3</u> | <u>66</u> |
| P 3 | <u>52</u> | <u>6</u> | <u>316</u> | <u>10</u> | <u>58</u> | <u>6</u> | <u>71</u> |
| P 4 | | <u>9</u> | <u>516</u> | <u>15</u> | <u>59</u> | <u>9</u> | <u>74</u> |
| P 5 | | <u>12</u> | <u>646</u> | <u>20</u> | <u>59</u> | <u>12</u> | <u>79</u> |
| P 6 | | <u>15</u> | <u>767</u> | <u>25</u> | <u>59</u> | <u>15</u> | <u>85</u> |
| P 7 | | <u>18</u> | <u>846</u> | <u>30</u> | <u>59</u> | <u>18</u> | <u>93</u> |
| P 8 | | <u>21</u> | <u>917</u> | <u>35</u> | <u>59</u> | <u>21</u> | <u>102</u> |
| P 9 | | <u>24</u> | <u>977</u> | <u>40</u> | <u>64</u> | <u>24</u> | <u>114</u> |
| P10 | | <u>27</u> | <u>1022</u> | <u>45</u> | <u>64</u> | <u>27</u> | <u>127</u> |
| P11 | | <u>30</u> | <u>1053</u> | <u>50</u> | <u>64</u> | <u>28</u> | <u>131</u> |
| P12 | | <u>31</u> | <u>1071</u> | <u>55</u> | <u>64</u> | | |
| P13 | | | | <u>60</u> | <u>64</u> | | |
| P14 | | | | | | | |
| P15 | | | | | | | |
| P16 | | | | | | | |
| P17 | | | | | | | |
| P18 | | | | | | | |
| P19 | | | | | | | |
| P20 | | | | | | | |

Pickrell Drilling Co.
Cheney #1

TKT 7632
Test #2



This is an actual photograph of recorder chart.

| POINT | PRESSURE | |
|--|----------|-----|
| (A) Initial Hydrostatic Mud | 2207 | PSI |
| (B) First Initial Flow Pressure | 52 | PSI |
| (C) First Final Flow Pressure | 52 | PSI |
| (D) Initial Closed-in Pressure | 1071 | PSI |
| (E) Second Initial Flow Pressure | 57 | PSI |
| (F) Second Final Flow Pressure | 64 | PSI |
| (G) Final Closed-in Pressure | 131 | PSI |
| (H) Final Hydrostatic Mud | 2185 | PSI |



Home Office: Great Bend, Kansas
P. O. Box 793 SWift 3-7903

Company Pickrell Drilling Company Lease & Well No. Cheney #A-1
Elevation 2444 Kelly Bushings Formation Mississippi Ticket Number 7633
Date June 19, 1966 Sec. 28 Twp. 14s Range 27w County Gove State Kansas
Test Approved by Ralph W. Ruwe Western Representative Dean Blagrave

Formation Test No. 3 O.K. Misrun _____ Interval Tested From 4248' to 4256' Total Depth 4256'
Size Main Hole 7 7/8 Rat Hole none Conv. B.T. _____ Damaged Yes No Conv. B.T. _____ Damaged Yes No
Packer Depth 4243 Ft. Size 6 3/4 Packer Depth 4248 Ft. Size 6 3/4
Straddle Yes No _____ Conv. _____ B.T. _____ Damaged Yes _____ No

Packer Depth _____ Ft. Size _____
Tool Size 5 1/2 OD Tool Jt. Size 4 1/2 FH Anchor Length 8 Ft. Size 5 1/2 OD

RECORDERS Depth 4237 Ft. Clock No. 6892 Depth 4251 Ft. Clock No. 6774
Top Make Amerada Cap. 4150 No. 2606 Inside _____ Outside _____ Bottom Make Amerada Cap. 4300 No. 1567 Inside _____ Outside _____
Below Straddle: Depth _____ Clock No. _____ Inside _____ Outside _____
Top Make _____ Cap. _____ No. _____ Inside _____ Outside _____ Bottom Make _____ Cap. _____ No. _____ Inside _____ Outside _____

Time Set Packer 7:23 P _____ M
Tool Open I.F.P. From 7:25 M to 7:30 M Hr. 5 Min. From (B) _____ P.S.I. To (C) 40 P.S.I.
Tool Closed I.C.I.P. From 7:30 M. to 8:00 M. Hr. 30 Min. (D) _____ P.S.I. 1120 P.S.I.
Tool Open F.F.P. From 8:00 M. to 9:30 M. 1 Hr. 30 Min. From (E) _____ P.S.I. To (F) 110 P.S.I.
Tool Closed F.C.I.P. From 9:30 M. to 10:00 M. Hr. 30 Min. (G) _____ P.S.I. 852 P.S.I.
Initial Hydrostatic Pressure (A) 2218 P.S.I. Final Hydrostatic Pressure (H) 2210 P.S.I.

SURFACE Size Choke 1/4 In. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____

BLOW Weak increasing to good Bottom Choke Size 3/4 In.
Did Well Flow Yes No _____ Recovery Total Ft. 130' clean oil; 120' muddy oil; 225' gas in pipe

Reversed Out Yes No _____ Mud Type starch Viscosity 52 Weight 9.8 Maximum Temp. 137 °F

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Jars: Size no Make _____ Ser. No. _____

Type Circ. Sub. plug Did Tool Plug? no Where? _____ Did Packer Hold? yes

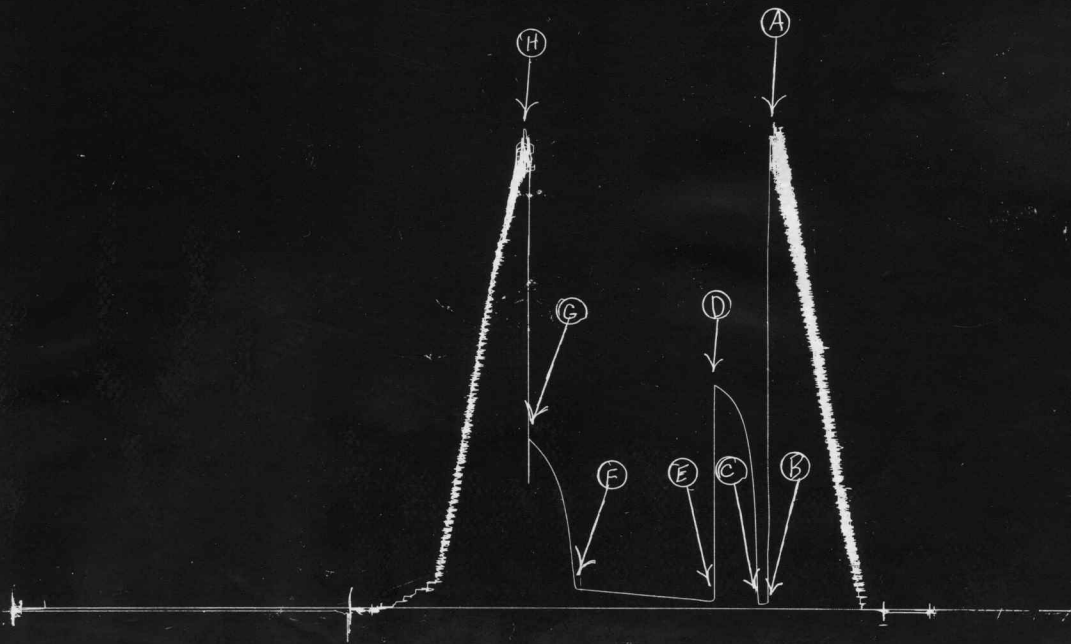
Length Drill Pipe _____ ft. I.D. Drill Pipe _____ in Length Weight Pipe 1035 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars none ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool 31 ft.

Remarks Sp. Gravity 40° Corrected.

Pickrell Drilling Co.
Cheney A-1

TKT 7633
Test #3



This is an actual photograph of recorder chart.

| POINT | PRESSURE | |
|--|----------|-----|
| (A) Initial Hydrostatic Mud | 2218 | PSI |
| (B) First Initial Flow Pressure | 35 | PSI |
| (C) First Final Flow Pressure | 40 | PSI |
| (D) Initial Closed-in Pressure | 1120 | PSI |
| (E) Second Initial Flow Pressure | 56 | PSI |
| (F) Second Final Flow Pressure | 110 | PSI |
| (G) Final Closed-in Pressure | 852 | PSI |
| (H) Final Hydrostatic Mud | 2210 | PSI |



Home Office: Great Bend, Kansas
P. O. Box 793 Swift 3-7903

Pickrell Drilling Company

Cheney #A-1

Company 2444 Kelly Bushings Lease & Well No. 7634
Elevation Mississippi Ticket Number
Date June 20, 1966 Sec. 28 Twp. 14s Range 27w County Gove State Kansas
Test Approved by Ralph W. Ruwwe Western Representative Dean Blagrave

Formation Test No. 4 O.K. Misrun Interval Tested From 4256' to 4266' Total Depth 4266'
Size Main Hole 7 7/8 Rat Hole none Conv. B.T. x Damaged Yes No Conv. B.T. x Damaged Yes No
Packer Depth 4251 Ft. Size 6 3/4 Packer Depth 4256 Ft. Size 6 3/4
Straddle Yes No Conv. B.T. Damaged Yes No

Tool Size 5 1/2 OD Tool Jt. Size 4 1/2 FH Anchor Length 10 Ft. Size 5 1/2 OD

RECORDERS Depth 4260 Ft. Clock No. 6892 Depth 4263 Ft. Clock No. 6774
Top Make Amerada Cap. 4150 No. 2606 Inside Outside Bottom Make Amerada Cap. 4300 No. 1567 Inside Outside
Below Straddle: Depth _____ Clock No. _____ Inside _____ Outside _____
Top Make _____ Cap. _____ No. _____ Inside _____ Outside _____
Bottom Make _____ Cap. _____ No. _____ Inside _____ Outside _____

Time Set Packer 7:43 A M
Tool Open I.F.P. From 7:45 M to 7:50 M Hr. 5 Min. From (B) 58 P.S.I. To (C) 58 P.S.I.
Tool Closed I.C.I.P. From 7:50 M. to 8:20 M. Hr. 30 Min. (D) 1159 P.S.I.
Tool Open F.F.P. From 8:20 M. to 9:50 M. 1 Hr. 30 Min. From (E) 83 P.S.I. To (F) 216 P.S.I.
Tool Closed F.C.I.P. From 9:50 M. to 10:20 M. Hr. 30 Min. (G) 952 P.S.I.
Initial Hydrostatic Pressure (A) 2216 P.S.I. Final Hydrostatic Pressure (H) 2196 P.S.I.

SURFACE Size Choke 1/4 In. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____

BLOW Weak increasing to strong Bottom Choke Size 3/4 In.
Did Well Flow Yes No Recovery Total Ft. 400' clean gassy oil; 125' muddy oil; 325' gas in pipe

Reversed Out Yes No Mud Type starch Viscosity 51 Weight 9.9 Maximum Temp. 137 °F

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Jars: Size no Make _____ Ser. No. _____

Type Circ. Sub. plug Did Tool Plug? no Where? _____ Did Packer Hold? yes
Length Drill Pipe _____ ft. I.D. Drill Pipe 3.8 in Length Weight Pipe 1035 ft. I.D. Weight Pipe 2.7 in Length Drill Collars none ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool 28 ft.

Remarks _____

WESTERN TESTING CO., INC.

Pressure Data

Date June 20, 1966

Recorder No. 2606

Capacity 4150

Test Ticket No. 7634

Clock No. 6892

Elevation 2444 Kelly Bushings

Location 4260 Ft.

Well Temperature 137 °F

| Point | Pressure | | Time Given | Time Computed |
|--------------------------------|-------------|--------|-----------------|-----------------|
| A Initial Hydrostatic Mud | <u>2216</u> | P.S.I. | <u>7:43</u> A M | |
| B First Initial Flow Pressure | <u>58</u> | P.S.I. | <u>5</u> Mins. | <u>6</u> Mins. |
| C First Final Flow Pressure | <u>58</u> | P.S.I. | <u>30</u> Mins. | <u>33</u> Mins. |
| D Initial Closed-in Pressure | <u>1159</u> | P.S.I. | <u>90</u> Mins. | <u>88</u> Mins. |
| E Second Initial Flow Pressure | <u>83</u> | P.S.I. | <u>30</u> Mins. | <u>33</u> Mins. |
| F Second Final Flow Pressure | <u>216</u> | P.S.I. | | |
| G Final Closed-in Pressure | <u>952</u> | P.S.I. | | |
| H Final Hydrostatic Mud | <u>2196</u> | P.S.I. | | |

PRESSURE BREAKDOWN

First Flow Press.

Breakdown: 1 Inc.
of 5 mins. and a
final inc. of 1 Min.

Initial Shut-In

Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 8 Min.

Second Flow Pressure

Breakdown: 17 Inc.
of 5 mins. and a
final inc. of 3 Min.

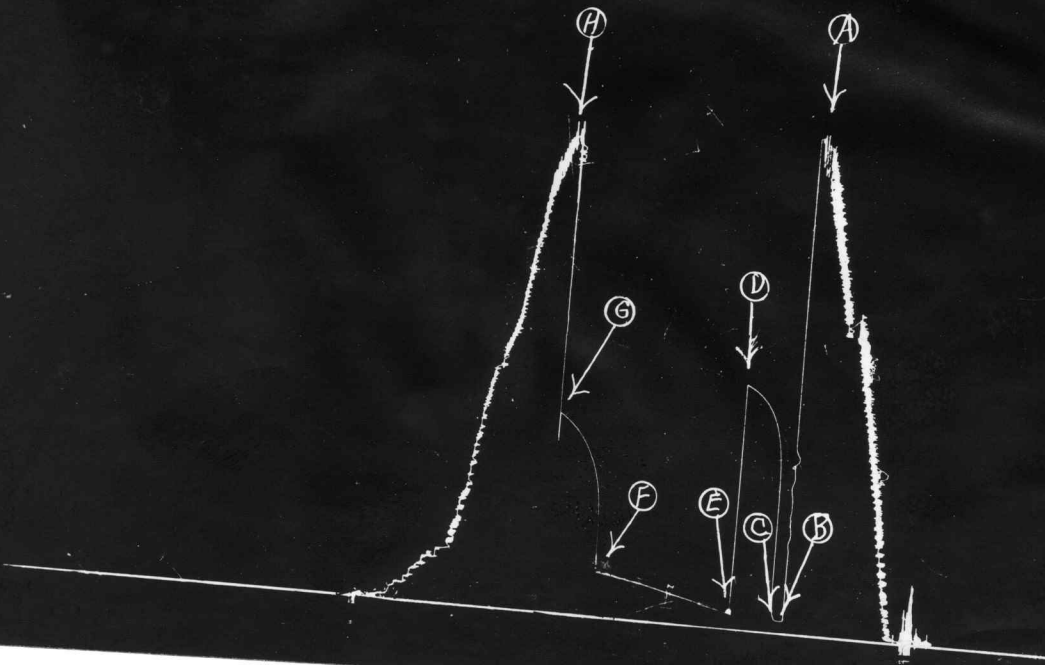
Final Shut-In

Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 8 Min.

| Point Mins. | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. |
|--------------|-----------|---------------|-------------|---------------|------------|---------------|------------|
| P 1 <u>0</u> | <u>58</u> | <u>0</u> | <u>58</u> | <u>0</u> | <u>83</u> | <u>0</u> | <u>216</u> |
| P 2 <u>5</u> | <u>58</u> | <u>3</u> | <u>106</u> | <u>5</u> | <u>84</u> | <u>3</u> | <u>539</u> |
| P 3 <u>6</u> | <u>58</u> | <u>6</u> | <u>582</u> | <u>10</u> | <u>87</u> | <u>6</u> | <u>649</u> |
| P 4 | | <u>9</u> | <u>866</u> | <u>15</u> | <u>97</u> | <u>9</u> | <u>719</u> |
| P 5 | | <u>12</u> | <u>972</u> | <u>20</u> | <u>108</u> | <u>12</u> | <u>769</u> |
| P 6 | | <u>15</u> | <u>1028</u> | <u>25</u> | <u>116</u> | <u>15</u> | <u>812</u> |
| P 7 | | <u>18</u> | <u>1066</u> | <u>30</u> | <u>124</u> | <u>18</u> | <u>844</u> |
| P 8 | | <u>21</u> | <u>1094</u> | <u>35</u> | <u>135</u> | <u>21</u> | <u>873</u> |
| P 9 | | <u>24</u> | <u>1117</u> | <u>40</u> | <u>145</u> | <u>24</u> | <u>896</u> |
| P10 | | <u>27</u> | <u>1134</u> | <u>45</u> | <u>152</u> | <u>27</u> | <u>914</u> |
| P11 | | <u>30</u> | <u>1149</u> | <u>50</u> | <u>162</u> | <u>30</u> | <u>931</u> |
| P12 | | <u>33</u> | <u>1159</u> | <u>55</u> | <u>170</u> | <u>33</u> | <u>952</u> |
| P13 | | | | <u>60</u> | <u>178</u> | | |
| P14 | | | | <u>65</u> | <u>185</u> | | |
| P15 | | | | <u>70</u> | <u>192</u> | | |
| P16 | | | | <u>75</u> | <u>201</u> | | |
| P17 | | | | <u>80</u> | <u>207</u> | | |
| P18 | | | | <u>85</u> | <u>214</u> | | |
| P19 | | | | <u>88</u> | <u>216</u> | | |
| P20 | | | | | | | |

Pickrell Drilling Co
Cheney A-#1

TKT # 7634
Test # 4



This is an actual photograph of recorder chart.

| POINT | PRESSURE | |
|--|----------|-----|
| (A) Initial Hydrostatic Mud | 2216 | PSI |
| (B) First Initial Flow Pressure | 58 | PSI |
| (C) First Final Flow Pressure | 58 | PSI |
| (D) Initial Closed-in Pressure | 1159 | PSI |
| (E) Second Initial Flow Pressure | 83 | PSI |
| (F) Second Final Flow Pressure | 216 | PSI |
| (G) Final Closed-in Pressure | 952 | PSI |
| (H) Final Hydrostatic Mud | 2196 | PSI |