



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

Company Graves Drilling Company Lease & Well No. Schneider #1
Elevation 1734 Derrick Floor Formation Toronto Ticket Number 6258
Date July 30, 1966 Sec. 11 Twp. 15 Range 12w County Russell State Kansas
Test Approved by Edgar E. Smith Western Representative W. M. Nething

Formation Test No. 1 O.K. ☒ Misrun Interval Tested From 2800' to 2825' Total Depth 2825'
Size Main Hole 7 7/8 Rat Hole Conv. B.T. ☒ Damaged Yes ☒ No Conv. B.T. ☒ Damaged Yes ☒ No
Packer Depth 2800 Ft. Size 6 3/4 Packer Depth 2795 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 25 Ft. Size 5 1/2 OD
RECORDERS Depth 2808 Ft. Clock No. 6800 Depth 2811 Ft. Clock No. 4964
Top Make Amerada Cap. 4150 No. 2604 Inside Outside Bottom Make Amerada Cap. 4250 No. 1051 Inside Outside
Below Straddle: Depth Clock No. Inside Outside Depth Ft. Clock No. Inside Outside
Top Make Cap. No. Inside Outside Bottom Make Cap. No. Inside Outside

Time Set Packer 4:41 A M
Tool Open I.F.P. From 4:46 M to 4:56 M Hr. 10 Min. From (B) 42 P.S.I. To (C) 44 P.S.I.
Tool Closed I.C.I.P. From 4:56 M. to 5:26 M. Hr. 30 Min. (D) 202 P.S.I.
Tool Open F.F.P. From 5:26 M. to 6:26 M. Hr. 60 Min. From (E) 65 P.S.I. To (F) 68 P.S.I.
Tool Closed F.C.I.P. From 6:26 M. to 6:56 M. Hr. 30 Min. (G) 136 P.S.I.
Initial Hydrostatic Pressure (A) 1411 P.S.I. Final Hydrostatic Pressure (H) 1400 P.S.I.

SURFACE Size Choke 1/2 In. Max. Press. P.S.I. Time Description of Flow
INFORMATION M.
M.
M.

BLOW Fair blow throughout test. Bottom Choke Size 3/4 In.
Did Well Flow Yes ☒ No Recovery Total Ft. 420' gas in pipe; 90' very slightly oil and gas cut mud

Mud
Reversed Out Yes ☒ No Mud Type starch Viscosity 36 Weight 9.5 Maximum Temp. 99 °F

EXTRA EQUIPMENT: Dual Packers dual Safety Joint Jars: Size Make Ser. No.

Type Circ. Sub. plug Did Tool Plug? Where? Did Packer Hold? yes

Length Drill Pipe 2205 ft. I.D. Drill Pipe 3.8 in Length Weight Pipe 585 ft. I.D. Weight Pipe 2.7 in Length Drill Collars ft.

I. D. Drill Collars in Length D.S.T. Tool 45 ft.

Remarks

WESTERN TESTING CO., INC.

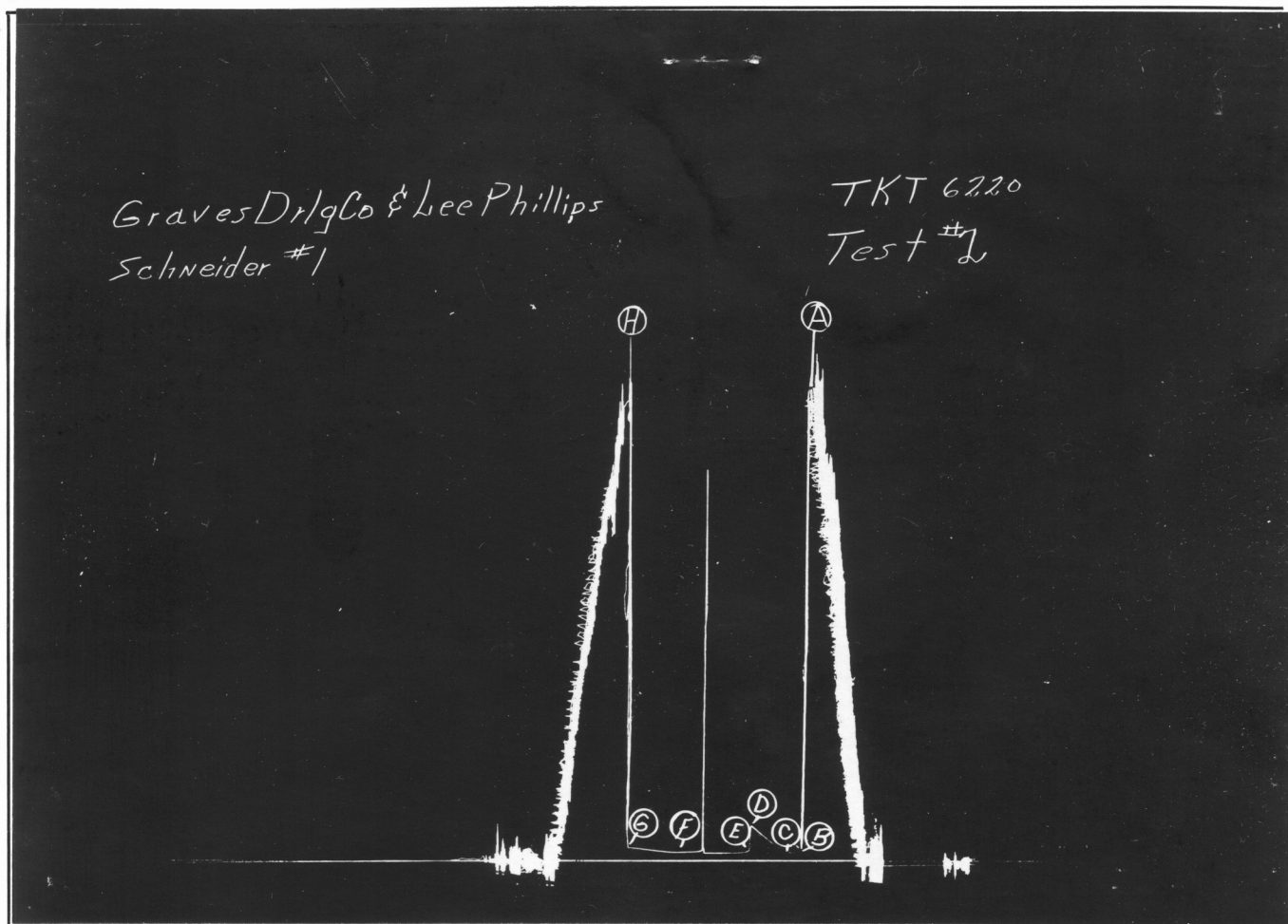
Pressure Data

Date July 30, 1966 Test Ticket No. 6258
 Recorder No. 2604 Capacity 4150 Location 2808 Ft.
 Clock No. 6800 Elevation 1734 Derrick Floor Well Temperature 99 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1411</u> P.S.I.	<u>4:41</u> AM	
B First Initial Flow Pressure	<u>42</u> P.S.I.	<u>10</u> Mins.	<u>18</u> Mins.
C First Final Flow Pressure	<u>44</u> P.S.I.	<u>30</u> Mins.	<u>31</u> Mins.
D Initial Closed-in Pressure	<u>202</u> P.S.I.	<u>60</u> Mins.	<u>59</u> Mins.
E Second Initial Flow Pressure	<u>65</u> P.S.I.	<u>30</u> Mins.	<u>38</u> Mins.
F Second Final Flow Pressure	<u>68</u> P.S.I.		
G Final Closed-in Pressure	<u>136</u> P.S.I.		
H Final Hydrostatic Mud	<u>1400</u> P.S.I.		

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>2</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>11</u> Inc.		Breakdown: <u>10</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>=</u> Min.		final inc. of <u>1</u> Min.		final inc. of <u>4</u> Min.		final inc. of <u>=</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>42</u>	<u>0</u>	<u>44</u>	<u>0</u>	<u>65</u>	<u>0</u>	<u>68</u>
P 2 <u>5</u>	<u>44</u>	<u>3</u>	<u>57</u>	<u>5</u>	<u>65</u>	<u>3</u>	<u>72</u>
P 3 <u>10</u>	<u>44</u>	<u>6</u>	<u>74</u>	<u>10</u>	<u>65</u>	<u>6</u>	<u>76</u>
P 4		<u>9</u>	<u>95</u>	<u>15</u>	<u>65</u>	<u>9</u>	<u>82</u>
P 5		<u>12</u>	<u>110</u>	<u>20</u>	<u>65</u>	<u>12</u>	<u>89</u>
P 6		<u>15</u>	<u>123</u>	<u>25</u>	<u>65</u>	<u>15</u>	<u>97</u>
P 7		<u>18</u>	<u>136</u>	<u>30</u>	<u>65</u>	<u>18</u>	<u>106</u>
P 8		<u>21</u>	<u>153</u>	<u>35</u>	<u>65</u>	<u>21</u>	<u>114</u>
P 9		<u>24</u>	<u>169</u>	<u>40</u>	<u>65</u>	<u>24</u>	<u>121</u>
P 10		<u>27</u>	<u>185</u>	<u>45</u>	<u>65</u>	<u>27</u>	<u>129</u>
P 11		<u>30</u>	<u>198</u>	<u>50</u>	<u>66</u>	<u>30</u>	<u>136</u>
P 12		<u>31</u>	<u>202</u>	<u>55</u>	<u>67</u>		
P 13				<u>59</u>	<u>68</u>		
P 14							
P 15							
P 16							
P 17							
P 18							
P 19							
P 20							



This is an actual photograph of recorder chart.

POINT	PRESSURE
(A) Initial Hydrostatic Mud	1736 PSI
(B) First Initial Flow Pressure	38 PSI
(C) First Final Flow Pressure	38 PSI
(D) Initial Closed-in Pressure	133 PSI
(E) Second Initial Flow Pressure	41 PSI
(F) Second Final Flow Pressure	43 PSI
(G) Final Closed-in Pressure	57 PSI
(H) Final Hydrostatic Mud	1708 PSI



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

Company Graves Drilling Company & Lee Phillips Lease & Well No. Schneider #1
Elevation 1736 Kelly Bushings Formation Arbuckle Ticket Number 6220
Date July 31, 1966 Sec. 11 Twp. 15 Range 12w County Russell State Kansas
Test Approved by E. E. Smith Western Representative Guy M. Knipe

Formation Test No. 2 O.K. ☒ Misrun Interval Tested From 3159' 3188' Total Depth 3188'
Size Main Hole 7 7/8 Rat Hole Conv. B.T. ☒ Damaged Yes ☒ No Conv. ☒ B.T. Damaged Yes ☒ No
Packer Depth 3154 Ft. Size 6 3/4 Packer Depth 3159 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 29 Ft. Size 5 1/2 OD

RECORDERS Depth 3180 Ft. Clock No. 6806 Depth 3183 Ft. Clock No. 8476
Top Make Kuster Cap. 3150 No. 1562 ~~Inside~~ Outside Bottom Make Kuster Cap. 3150 No. 1564 ~~Inside~~ Outside
Below Straddle: Depth Clock No. Inside Depth Ft. Clock No. Inside
Top Make Cap. No. Outside Bottom Make Cap. No. Outside

Time Set Packer 7:43 P M
Tool Open I.F.P. From 7:44 M to 7:50 M Hr. 6 Min. From (B) 38 P.S.I. To (C) 38 P.S.I.
Tool Closed I.C.I.P. From 7:50 M. to 8:20 M. Hr. 30 Min. (D) 133 P.S.I.
Tool Open F.F.P. From 8:20 M. to 9:13 M. Hr. 53 Min. From (E) 41 P.S.I. To (F) 43 P.S.I.
Tool Closed F.C.I.P. From 9:13 M. to 9:43 M. Hr. 30 Min. (G) 57 P.S.I.
Initial Hydrostatic Pressure (A) 1736 P.S.I. Final Hydrostatic Pressure (H) 1708 P.S.I.

SURFACE Size Choke 3/4 In. Max. Press. P.S.I. Time Description of Flow
INFORMATION M.
M.
M.

BLOW Weak for four minutes. Died. Flushed tool 30 minutes after open, / few bubbles, died. 3/4 Bottom Choke Size 3/4 In.
Did Well Flow Yes ☒ No Recovery Total Ft. 10' drilling mud

Mud
Reversed Out Yes ☒ No Mud Type starch Viscosity 50 Weight 9.7 Maximum Temp. 105 °F

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

Type Circ. Sub. plug Did Tool Plug? Where? Did Packer Hold? yes

Length Drill Pipe 2554 ft. I.D. Drill Pipe 3.8 in Length Weight Pipe 585 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ft.

I. D. Drill Collars in. Length D.S.T. Tool 49 ft.

Remarks

WESTERN TESTING CO., INC.

Pressure Data

Date July 31, 1966 Test Ticket No. 6220

Recorder No. 1564 Capacity 3150 Location 3183 Ft.

Clock No. 8476 Elevation 1736 Kelly Bushings Well Temperature 105 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1736</u> P.S.I.	Opened Tool	<u>7:43</u> P _M	
B First Initial Flow Pressure	<u>38</u> P.S.I.	First Flow Pressure	<u>6</u> Mins.	<u>7</u> Mins.
C First Final Flow Pressure	<u>38</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>29</u> Mins.
D Initial Closed-in Pressure	<u>133</u> P.S.I.	Second Flow Pressure	<u>53</u> Mins.	<u>52</u> Mins.
E Second Initial Flow Pressure	<u>41</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>43</u> P.S.I.			
G Final Closed-in Pressure	<u>57</u> P.S.I.			
H Final Hydrostatic Mud	<u>1708</u> P.S.I.			

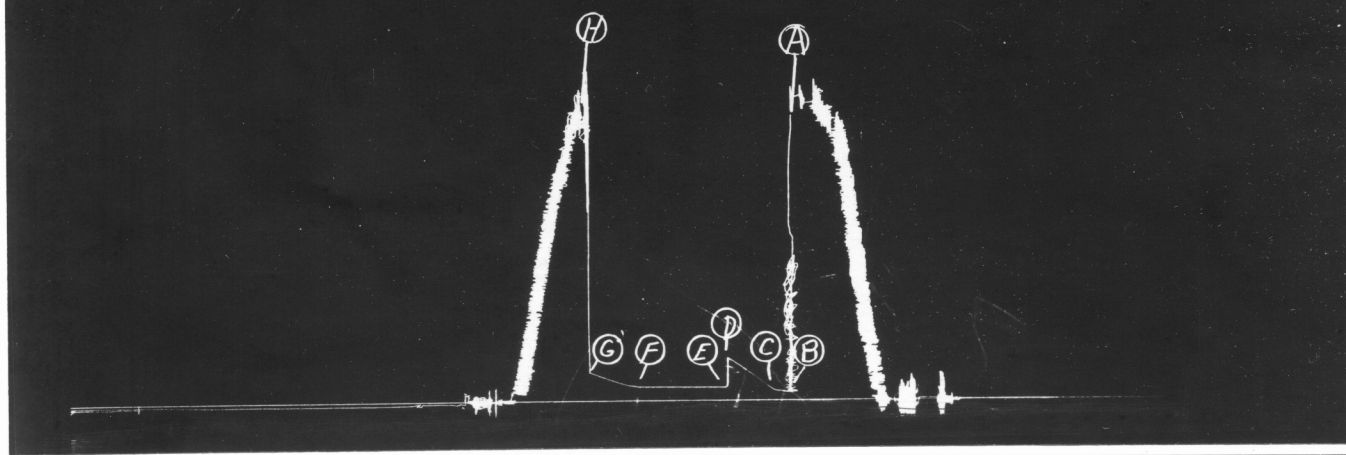
PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>1</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>10</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>7</u> Min.		final inc. of <u>2</u> Min.		final inc. of <u>2</u> 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>38</u>	<u>0</u>	<u>38</u>	<u>0</u>	<u>41</u>	<u>0</u>	<u>43</u>
P 2 <u>5</u>	<u>38</u>	<u>3</u>	<u>41</u>	<u>5</u>	<u>41</u>	<u>3</u>	<u>44</u>
P 3 <u>7</u>	<u>38</u>	<u>6</u>	<u>46</u>	<u>10</u>	<u>41</u>	<u>6</u>	<u>45</u>
P 4		<u>9</u>	<u>55</u>	<u>15</u>	<u>41</u>	<u>9</u>	<u>46</u>
P 5		<u>12</u>	<u>63</u>	<u>20</u>	<u>41</u>	<u>12</u>	<u>48</u>
P 6		<u>15</u>	<u>77</u>	<u>25</u>	<u>41</u>	<u>15</u>	<u>50</u>
P 7		<u>18</u>	<u>88</u>	<u>30</u>	<u>41</u>	<u>18</u>	<u>51</u>
P 8		<u>21</u>	<u>103</u>	<u>35</u>	<u>43</u>	<u>21</u>	<u>52</u>
P 9		<u>24</u>	<u>116</u>	<u>40</u>	<u>43</u>	<u>24</u>	<u>53</u>
P10		<u>27</u>	<u>128</u>	<u>45</u>	<u>43</u>	<u>27</u>	<u>55</u>
P11		<u>29</u>	<u>133</u>	<u>50</u>	<u>43</u>	<u>30</u>	<u>57</u>
P12				<u>52</u>	<u>43</u>		
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

1501

Graves Drlg Co. & Lee Phillips
Schneider #1

TKT 6258
Test #1



This is an actual photograph of recorder chart.

POINT	PRESSURE
(A) Initial Hydrostatic Mud	1411 PSI
(B) First Initial Flow Pressure	42 PSI
(C) First Final Flow Pressure	44 PSI
(D) Initial Closed-in Pressure	202 PSI
(E) Second Initial Flow Pressure	65 PSI
(F) Second Final Flow Pressure	68 PSI
(G) Final Closed-in Pressure	136 PSI
(H) Final Hydrostatic Mud	1400 PSI

NOMENCLATURE

b	= Approximate Radius of Investigation	Feet
b¹	= Approximate Radius of Investigation (Net Pay Zone h ¹)	Feet
D.R.	= Damage Ratio	—
EI	= Elevation	Feet
GD	= B.T. Gauge Depth (From Surface Reference)	Feet
h	= Interval Tested	Feet
h¹	= Net Pay Thickness	Feet
K	= Permeability	md
K¹	= Permeability (From Net Pay Zone h ¹)	md
m	= Slope Extrapolated Pressure Plot (Psi ² /cycle Gas)	psi/cycle
OF¹	= Maximum Indicated Flow Rate	MCF/D
OF²	= Minimum Indicated Flow Rate	MCF/D
OF³	= Theoretical Open Flow Potential with/Damage Removed Max.	MCF/D
OF⁴	= Theoretical Open Flow Potential with/Damage Removed Min.	MCF/D
P^S	= Extrapolated Static Pressure	Psig.
P^F	= Final Flow Pressure	Psig.
P^{DT}	= Potentiometric Surface (Fresh Water*)	Feet
Q	= Average Adjusted Production Rate During Test	bbls/day
Q¹	= Theoretical Production w/Damage Removed	bbls/day
Q^g	= Measured Gas Production Rate	MCF/D
R	= Corrected Recovery	bbls
r^w	= Radius of Well Bore	Feet
t	= Flow Time	Minutes
t^D	= Total Flow Time	Minutes
T	= Temperature Rankine	°R
Z	= Compressibility Factor	—
u	= Viscosity Gas or Liquid	CP
Log	= Common Log	

* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.