

OPERATOR'S FILE COPY

FORMATION TEST REPORT



HOME OFFICE: GREAT BEND, KANSAS
P. O. BOX 793 SWIFT 3-7903

COMPANY K & E Drig. Co.

LEASE AND WELL NO. Schubach

A#1

SEC 12

TWN 34

SEC 12

TWN 34

WELL FILE



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

Company K & E Drlg. Co. Lease & Well No. Schubach A#1

Elevation 1481 Derrick Floor Formation Mississippi Effective Pay 10 Ft. Ticket No. 10073

Date 11-17-67 Sec. 12 Twp. 34 Range 12 County Barber State Kansas

Test Approved by George N. Mulder Western Representative Leon Elmore

Formation Test No. 1 O.K. ☒ Misrun ☐ Interval Tested From 4627' to 4655' Total Depth 4655'

Size Main Hole 7 7/8 Rat Hole ☐ Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No Conv. ☐ B.T. ☒ Damaged ☐ Yes ☒ No

Packer Depth 4622 Ft. Size 6 3/4 Packer Depth 4627 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" FH Anchor Length 28 Ft. Size 5 1/2" od

RECORDERS Depth 4646 Ft. Clock No. 6799 Depth 4649 Ft. Clock No. 6897

Top Make Kuster Cap. 4500 No. 3085 Inside Outside Bottom Make Kuster Cap. 4400 No. 2603 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 12:19 P. M

Tool Open I.F.P. From 12:22 M. to 12:37 P. Hr. 15 Min. From (B) 49 P.S.I. To (C) 49 P.S.I.

Tool Closed I.C.I.P. From 12:37 M. to 1:22 P.M. Hr. 45 Min. (D) 191 P.S.I.

Tool Open F.F.P. From 1:22 M. to 2:52 P.M. 1 Hr. 30 Min. From (E) 51 P.S.I. To (F) 53 P.S.I.

Tool Closed F.C.I.P. From 2:52 M. to 3:37 P.M. Hr. 45 Min. (G) 511 P.S.I.

Initial Hydrostatic Pressure (A) 2531 P.S.I. Final Hydrostatic Pressure (H) 2495 P.S.I.

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

INFORMATION ☐ M. ☐ M. ☐ M.

BLOW Good throughout. Bottom Choke Size 3/4 In.

Did Well Flow ☒ Yes ☐ No Recovery Total Ft. 65 feet gas cut mud; 2335 feet gas in pipe.

Reversed Out ☒ Yes ☐ No Mud Type starch Viscosity 51 Weight 9.6 Water Loss 10 cc. Maximum Temp. 124 °F

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Jars: Size 4 1/2" OD Make WTC Ser. No. 405

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

Length Drill Pipe 4263 ft. I.D. Drill Pipe ☐ in. Length Weight Pipe ☐ ft. I.D. Weight Pipe ☐ in. Length Drill Collars 337 ft.

I. D. Drill Collars 2 1/4 in. Length D.S.T. Tool 55 ft.

Remarks

WESTERN TESTING CO., INC.

Pressure Data

Date 11-17-67 Test Ticket No. 10073
Recorder No. 3085 Capacity 4500 Location 4646 Ft.
Clock No. 6799 Elevation 1481 Derrick Floor Well Temperature 124 °F

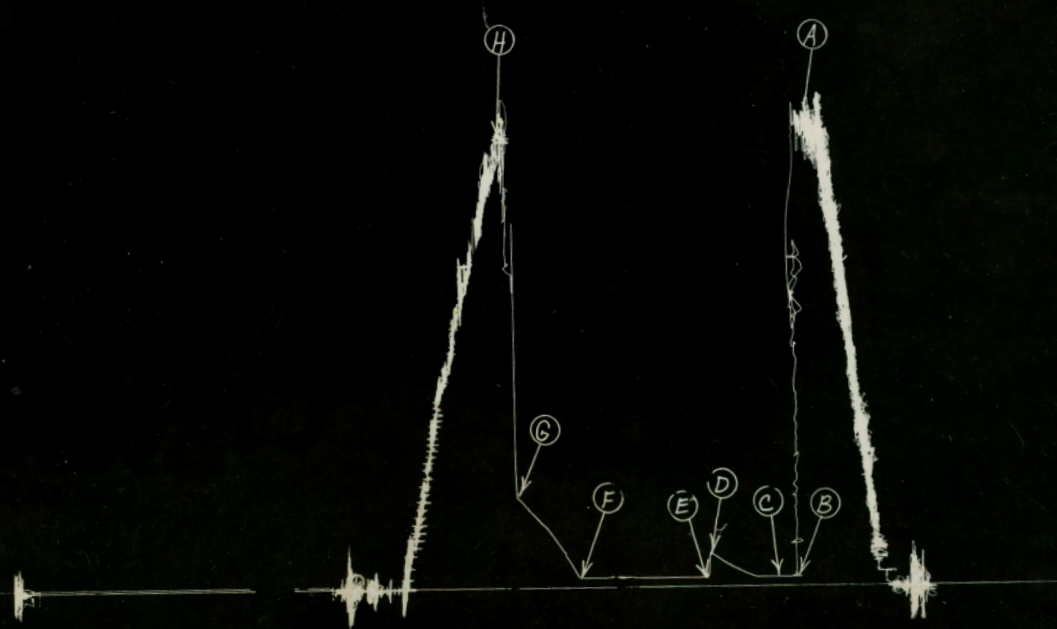
Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2531</u> P.S.I.	<u>12:22 P.</u> M	
B First Initial Flow Pressure	<u>49</u> P.S.I.	<u>15</u> Mins.	<u>15</u> Mins.
C First Final Flow Pressure	<u>49</u> P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>191</u> P.S.I.	<u>90</u> Mins.	<u>88</u> Mins.
E Second Initial Flow Pressure	<u>51</u> P.S.I.	<u>45</u> Mins.	<u>43</u> Mins.
F Second Final Flow Pressure	<u>53</u> P.S.I.		
G Final Closed-in Pressure	<u>511</u> P.S.I.		
H Final Hydrostatic Mud	<u>2495</u> P.S.I.		

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>3</u> Inc.		Breakdown: <u>15</u> Inc.		Breakdown: <u>17</u> Inc.		Breakdown: <u>14</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>3</u> Min.		final inc. of <u>1</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>49</u>	<u>0</u>	<u>49</u>	<u>0</u>	<u>51</u>	<u>0</u>	<u>53</u>
P 2 <u>5</u>	<u>49</u>	<u>3</u>	<u>49</u>	<u>5</u>	<u>51</u>	<u>3</u>	<u>91</u>
P 3 <u>10</u>	<u>49</u>	<u>6</u>	<u>49</u>	<u>10</u>	<u>51</u>	<u>6</u>	<u>134</u>
P 4 <u>15</u>	<u>49</u>	<u>9</u>	<u>49</u>	<u>15</u>	<u>51</u>	<u>9</u>	<u>179</u>
P 5		<u>12</u>	<u>49</u>	<u>20</u>	<u>51</u>	<u>12</u>	<u>215</u>
P 6		<u>15</u>	<u>51</u>	<u>25</u>	<u>51</u>	<u>15</u>	<u>253</u>
P 7		<u>18</u>	<u>62</u>	<u>30</u>	<u>52</u>	<u>18</u>	<u>289</u>
P 8		<u>21</u>	<u>76</u>	<u>35</u>	<u>52</u>	<u>21</u>	<u>320</u>
P 9		<u>24</u>	<u>88</u>	<u>40</u>	<u>52</u>	<u>24</u>	<u>346</u>
P10		<u>27</u>	<u>101</u>	<u>45</u>	<u>52</u>	<u>27</u>	<u>370</u>
P11		<u>30</u>	<u>114</u>	<u>50</u>	<u>52</u>	<u>30</u>	<u>394</u>
P12		<u>33</u>	<u>126</u>	<u>55</u>	<u>52</u>	<u>33</u>	<u>423</u>
P13		<u>36</u>	<u>143</u>	<u>60</u>	<u>52</u>	<u>36</u>	<u>447</u>
P14		<u>39</u>	<u>160</u>	<u>65</u>	<u>52</u>	<u>39</u>	<u>481</u>
P15		<u>42</u>	<u>174</u>	<u>70</u>	<u>53</u>	<u>42</u>	<u>497</u>
P16		<u>45</u>	<u>191</u>	<u>75</u>	<u>53</u>	<u>43</u>	<u>511</u>
P17				<u>80</u>	<u>53</u>		
P18				<u>85</u>	<u>53</u>		
P19				<u>88</u>	<u>53</u>		
P20							

K. & E. DrLg Co.
Schupbach A-#1

T.KT# 10073
Test# 1



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2634	2531	PSI
(B) First Initial Flow Pressure	47	49	PSI
(C) First Final Flow Pressure	47	49	PSI
(D) Initial Closed-in Pressure	191	191	PSI
(E) Second Initial Flow Pressure	59	51	PSI
(F) Second Final Flow Pressure	59	53	PSI
(G) Final Closed-in Pressure	513	511	PSI
(H) Final Hydrostatic Mud	2611	2495	PSI

OPERATOR'S FILE COPY

FORMATION TEST REPORT

COMPANY K & E Drilling Co.

LEASE AND WELL NO. Schubach A#1

SEC. 12 TWP. 34 RGE. 12 TFEET NO. 2 DATE 11.



HOME OFFICE: GREAT BEND, KANSAS
P. O. BOX 793 SWIFT 3-7903

WELL FILE ↗



Home Office: Great Bend, Kansas

P. O. Box 793

(316) 793-7903

Company K & E Drlg. Co. Lease & Well No. Schubach A#1
Elevation 1481 Derrick Floor Formation Mississippi Effective Pay 10 Ft. Ticket No. 10074
Date 11-18-67 Sec. 12 Twp. 34 Range 12 County Barber State Kansas
Test Approved by George N. Mueller Western Representative Leon Elmore

Formation Test No. 2 O.K. ☒ Misrun Interval Tested From 4655' to 4680' Total Depth 4680'
Size Main Hole 7 7/8 Rat Hole Conv. ☒ B.T. Damaged Yes ☒ No Conv. B.T. ☒ Damaged Yes ☒ No
Packer Depth 4650 Ft. Size 6 3/4 Packer Depth 4655 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" FH Anchor Length 25 Ft. Size 5 1/2" OD

RECORDERS Depth 4673 Ft. Clock No. 6799 Depth 4676 Ft. Clock No. 6897
Top Make Kuster Cap. 4500 No. 3085 Inside Outside Bottom Make Kuster Cap. 4400 No. 2603 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 6:57 A. M
Tool Open I.F.P. From 6:59 M. to 7:14 A M. Hr. 15 Min. From (B) 51 P.S.I. To (C) 51 P.S.I.
Tool Closed I.C.I.P. From 7:14 M. to 7:59 A M. Hr. 45 Min. (D) 117 P.S.I.
Tool Open F.F.P. From 7:59 M. to 9:29 A M. 1 Hr. 30 Min. From (E) 54 P.S.I. To (F) 54 P.S.I.
Tool Closed F.C.I.P. From 9:29 M. to 10:14 AM. Hr. 45 Min. (G) 101 P.S.I.
Initial Hydrostatic Pressure (A) 2569 P.S.I. Final Hydrostatic Pressure (H) 2542 P.S.I.

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

BLOW Fair. Bottom Choke Size 3/4 In.
Did Well Flow Yes ☒ No Recovery Total Ft. 60 feet mud(gas cut); 240 feet gas in pipe.

Reversed Out Yes ☒ No Mud Type starch Viscosity 50 Weight 9.8 Water Loss 14.4 cc. Maximum Temp. 124 °F
EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Jars: Size 4 1/2" OD Make WTC Ser. No. 405
Type Circ. Sub. plug Did Tool Plug? no Where? Did Packer Hold? yes
Length Drill Pipe 4288 ft. I.D. Drill Pipe 3 in. Length Weight Pipe ft. I.D. Weight Pipe in. Length Drill Collars 337 ft.
I. D. Drill Collars 2 1/4 in. Length D.S.T. Tool 52 ft.

Remarks

WESTERN TESTING CO., INC.

Pressure Data

Date 11-18-67 Test Ticket No. 10074
 Recorder No. 3085 Capacity 4500 Location 4673 Ft.
 Clock No. 6799 Elevation 1481 Derrick Floor Well Temperature 124 °F

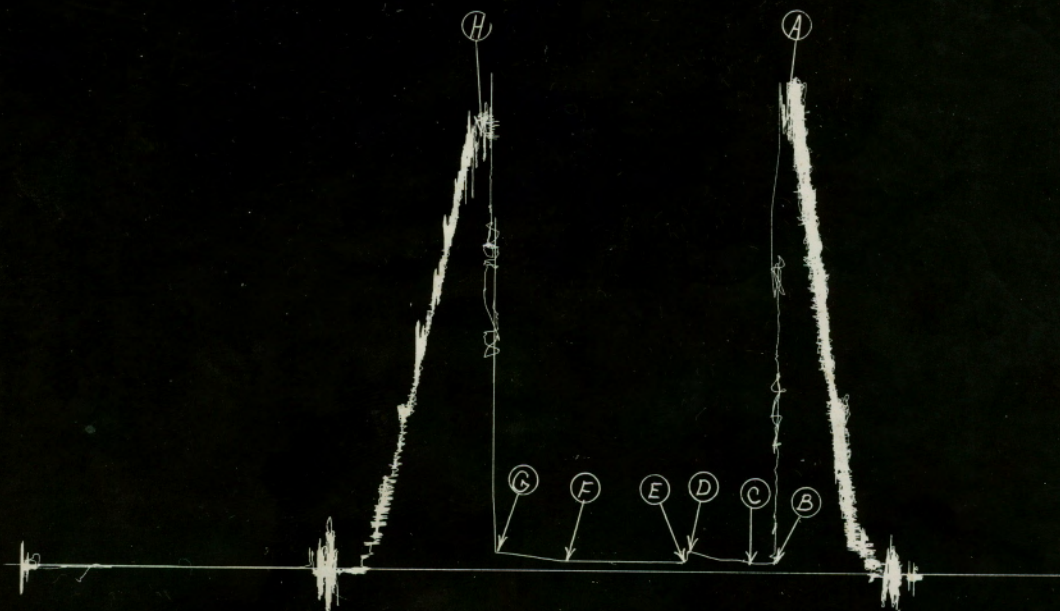
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2569</u> P.S.I.	Opened Tool	<u>6:59 A.M.</u>	
B First Initial Flow Pressure	<u>51</u> P.S.I.	First Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins.
C First Final Flow Pressure	<u>51</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>44</u> Mins.
D Initial Closed-in Pressure	<u>117</u> P.S.I.	Second Flow Pressure	<u>90</u> Mins.	<u>88</u> Mins.
E Second Initial Flow Pressure	<u>54</u> P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>54</u> P.S.I.			
G Final Closed-in Pressure	<u>101</u> P.S.I.			
H Final Hydrostatic Mud	<u>2542</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>3</u> Inc.		Breakdown: <u>14</u> Inc.		Breakdown: <u>17</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 <u>0</u> Min.		final inc. of <u>2</u> Min.		final inc. of <u>3</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>51</u>	<u>0</u>	<u>51</u>	<u>0</u>	<u>54</u>	<u>0</u>	<u>54</u>
P 2 <u>5</u>	<u>51</u>	<u>3</u>	<u>57</u>	<u>5</u>	<u>54</u>	<u>3</u>	<u>57</u>
P 3 <u>10</u>	<u>51</u>	<u>6</u>	<u>62</u>	<u>10</u>	<u>54</u>	<u>6</u>	<u>62</u>
P 4 <u>15</u>	<u>51</u>	<u>9</u>	<u>67</u>	<u>15</u>	<u>54</u>	<u>9</u>	<u>65</u>
P 5		<u>12</u>	<u>69</u>	<u>20</u>	<u>54</u>	<u>12</u>	<u>68</u>
P 6		<u>15</u>	<u>69</u>	<u>25</u>	<u>54</u>	<u>15</u>	<u>71</u>
P 7		<u>18</u>	<u>71</u>	<u>30</u>	<u>54</u>	<u>18</u>	<u>76</u>
P 8		<u>21</u>	<u>73</u>	<u>35</u>	<u>54</u>	<u>21</u>	<u>79</u>
P 9		<u>24</u>	<u>77</u>	<u>40</u>	<u>54</u>	<u>24</u>	<u>83</u>
P10		<u>27</u>	<u>81</u>	<u>45</u>	<u>54</u>	<u>27</u>	<u>87</u>
P11		<u>30</u>	<u>86</u>	<u>50</u>	<u>54</u>	<u>30</u>	<u>90</u>
P12		<u>33</u>	<u>93</u>	<u>55</u>	<u>54</u>	<u>33</u>	<u>93</u>
P13		<u>36</u>	<u>100</u>	<u>60</u>	<u>54</u>	<u>36</u>	<u>95</u>
P14		<u>39</u>	<u>105</u>	<u>65</u>	<u>54</u>	<u>39</u>	<u>97</u>
P15		<u>42</u>	<u>112</u>	<u>70</u>	<u>54</u>	<u>42</u>	<u>99</u>
P16		<u>44</u>	<u>117</u>	<u>75</u>	<u>54</u>	<u>45</u>	<u>101</u>
P17				<u>80</u>	<u>54</u>		
P18				<u>85</u>	<u>54</u>		
P19				<u>88</u>	<u>54</u>		
P20							

K & E DrLg. Co.
Schupbach A-1

T.K.T. # 10074
Test # 2



This is an actual photograph of recorder chart.

POINT	PRESSURE		PSI
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2451	2569	PSI
(B) First Initial Flow Pressure	59	51	PSI
(C) First Final Flow Pressure	59	51	PSI
(D) Initial Closed-in Pressure	119	117	PSI
(E) Second Initial Flow Pressure	59	54	PSI
(F) Second Final Flow Pressure	59	54	PSI
(G) Final Closed-in Pressure	95	101	PSI
(H) Final Hydrostatic Mud	2440	2542	PSI