



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

Comp. S.

Company Abercrombie Drilling Company Lease & Well No. Helm #1
Elevation 2473 Kelly Bushings Formation Lansing Effective Pay _____ Ft. Ticket No. 17376
Date 3-18-73 Sec. 2 Twp. 1S Range 26W County Decatur State Kansas
Test Approved by Jack K. Wharton Western Representative Kenneth Cheney

Formation Test No. 1 O.K. ☒ Misrun _____ Interval Tested From 3329' to 3350' Total Depth 3350'
Size Main Hole 6 3/4" Rat Hole _____ Conv. _____ B.T. ☒ Damaged _____ Yes ☒ No Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No
Packer Depth 3324 Ft. Size 5 1/2" Packer Depth 3329 Ft. Size 5 1/2"
Straddle _____ Yes _____ No ☒ Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____
Tool Size 4 1/2" O.D. Tool Jt. Size 4" & 4 1/2" F.H. Anchor Length 21 Ft. Size 4 1/2" O.D.

RECORDERS Depth 3344 Ft. Clock No. 9727 Depth 3346 Ft. Clock No. 9725
Top Make Kuster Cap 4150 No. 2604 ~~Inside~~ Outside Bottom Make Kuster Cap 4150 No. 1567 ~~Inside~~ Outside
Below Straddle: Depth _____ Clock No. _____ Outside _____ Depth _____ Ft. Clock No. _____ Outside _____
Top Make _____ Cap _____ No. _____ Outside _____ Bottom Make _____ Cap _____ No. _____ Outside _____

Time Set Packer 5:34 P.M.
Tool Open I.F.P. From 5:35 M. to 5:40P. M. Hr. 5 Min. From (B) 38 P.S.I. To (C) 27 P.S.I.
Tool Closed I.C.I.P. From 5:40 M. to 6:10P. M. Hr. 30 Min. (D) 583 P.S.I.
Tool Open F.F.P. From 6:10 M. to 6:40P. M. Hr. 30 Min. From (E) 53 P.S.I. To (F) 21 P.S.I.
Tool Closed F.C.I.P. From 6:40 M. to 7:10P. M. Hr. 30 Min. (G) 191 P.S.I.
Initial Hydrostatic Pressure (A) 1705 P.S.I. Final Hydrostatic Pressure (H) 1676 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 5 min. Bottom Choke Size 3/4 In.
Did Well Flow _____ Yes ☒ No _____ Recovery Total Ft. 5 feet mud

Reversed Out _____ Yes ☒ No _____ Mud Type Salt Viscosity 44 Weight 9.9 Water Loss 8.0 cc. Maximum Temp. 98 °F
Type Circ. Sub. Plug Safety Joint No Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers Yes Did Packer Hold? Yes Did Tool Plug? No Where? _____
Length Drill Pipe 2231 ft. I.D. Drill Pipe 2.7 in. Length Weight Pipe 1078 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.
I.D. Drill Collars _____ in. Length D.S.T. Tool 41 ft.

Remarks _____

WESTERN TESTING CO., INC.

Pressure Data

Date 3-18-73 Test Ticket No. 17376
 Recorder No. 2604 Capacity 4150 Location 3344 Ft.
 Clock No. 9727 Elevation 2473 Kelly Bushings Well Temperature 98 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1705</u>	P.S.I.	<u>5:34 P.</u>	<u>M</u>
B First Initial Flow Pressure	<u>38</u>	P.S.I.	<u>5</u> Mins.	<u>5</u> Mins.
C First Final Flow Pressure	<u>27</u>	P.S.I.	<u>30</u> Mins.	<u>27</u> Mins.
D Initial Closed-in Pressure	<u>583</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>53</u>	P.S.I.	<u>30</u> Mins.	<u>27</u> Mins.
F Second Final Flow Pressure	<u>21</u>	P.S.I.		
G Final Closed-in Pressure	<u>191</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1676</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>1</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>9</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>38</u>	<u>0</u>	<u>27</u>	<u>0</u>	<u>53</u>	<u>0</u>	<u>21</u>
P 2 <u>5</u>	<u>27</u>	<u>3</u>	<u>31</u>	<u>5</u>	<u>29</u>	<u>3</u>	<u>31</u>
P 3		<u>6</u>	<u>58</u>	<u>10</u>	<u>25</u>	<u>6</u>	<u>38</u>
P 4		<u>9</u>	<u>111</u>	<u>15</u>	<u>24</u>	<u>9</u>	<u>48</u>
P 5		<u>12</u>	<u>198</u>	<u>20</u>	<u>22</u>	<u>12</u>	<u>61</u>
P 6		<u>15</u>	<u>285</u>	<u>25</u>	<u>21</u>	<u>15</u>	<u>78</u>
P 7		<u>18</u>	<u>377</u>	<u>30</u>	<u>21</u>	<u>18</u>	<u>97</u>
P 8		<u>21</u>	<u>465</u>			<u>21</u>	<u>123</u>
P 9		<u>24</u>	<u>535</u>			<u>24</u>	<u>153</u>
P10		<u>27</u>	<u>583</u>			<u>27</u>	<u>191</u>
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							



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Company Abercrombie Drilling Company Lease & Well No. Helm #1
Elevation 2473 Kelly Bushings Formation Kansas City Effective Pay 8 Ft. Ticket No. 17377
Date 3-20-73 Sec. 2 Twp. 1S Range 26W County Decatur State Kansas
Test Approved by Jack K. Wharton Western Representative Kenneth Cheney

Formation Test No. 2 O.K. ☒ Misrun ☐ Interval Tested From 3296' to 3304' Total Depth 3627'

Size Main Hole 6 3/4" Rat Hole ☐ Conv. ☐ B.T. ☒ Damaged ☐ Yes ☒ No Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No

Top Packer Depth 3291 Ft. Size 5 1/2" Packer Depth 3296 Ft. Size 5 1/2"

Straddle ☐ Yes ☒ No ☐ Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No

Packer Depth 3304 Ft. Size 5 1/2"

Tool Size 4 1/2" O.D. Tool Jt. Size 4" & 4 1/2" F.H. Anchor Length 8 Ft. Size 4 1/2" O.D.

RECORDERS Depth 3286 Ft. Clock No. 9727 Depth 3300 Ft. Clock No. 9725

Top Make Kuster Cap. 4150 No. 2604 Inside Outside Bottom Make Kuster Cap. 4150 No. 1567 Inside Outside

Below Straddle: Depth 3314 Clock No. 104 Inside Outside Depth 3316 Ft. Clock No. 105 Inside Outside

Top Make WTC Cap. 4000 No. 26 Inside Outside Bottom Make WTC Cap. 4000 No. 25 Inside Outside

Time Set Packer 3:14 A.M.

Tool Open I.F.P. From 3:15 M. to 3:30A. M. Hr. 15 Min. From (B) 7 P.S.I. To (C) 25 P.S.I.

Tool Closed I.C.I.P. From 3:30 M. to 4:00A. M. Hr. 30 Min. (D) 1087 P.S.I.

Tool Open F.F.P. From 4:00 M. to 5:00A. M. 1 Hr. Min. From (E) 59 P.S.I. To (F) 70 P.S.I.

Tool Closed F.C.I.P. From 5:00 M. to 5:30A. M. Hr. 30 Min. (G) 1001 P.S.I.

Initial Hydrostatic Pressure (A) 1747 P.S.I. Final Hydrostatic Pressure (H) 1674 P.S.I.

SURFACE Size Choke 3/8 In. Max. Press. P.S.I. Time Description of Flow

INFORMATION _____ M. _____

_____ M. _____

_____ M. _____

BLOW Good to weak Bottom Choke Size 3/4 In.

Did Well Flow ☒ Yes ☐ No Recovery Total Ft. 100 feet water - 50 feet muddy water

Reversed Out ☒ Yes ☐ No Mud Type Salt Viscosity 48 Weight 9.9 Water Loss 8.0 cc. Maximum Temp. 103 °F

Type Circ. Sub. Plug Safety Joint No Jars: Size _____ Make _____ Ser. No. _____

EXTRA EQUIPMENT: Dual Packers Yes Did Packer Hold? Yes Did Tool Plug? No Where? -

Length Drill Pipe 2193 ft. I.D. Drill Pipe _____ in. Length Weight Pipe 1078 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.

I.D. Drill Collars _____ in. Length D.S.T. Tool 356 ft.

Remarks

WESTERN TESTING CO., INC.

Pressure Data

Date 3-20-73 Test Ticket No. 17377
 Recorder No. 2604 Capacity 4150 Location 3286 Ft.
 Clock No. 9727 Elevation 2473 Kelly Bushings Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1747</u> P.S.I.	Open Tool	<u>3:14 A.</u> M	
B First Initial Flow Pressure	<u>7</u> P.S.I.	First Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins.
C First Final Flow Pressure	<u>25</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>1087</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>55</u> Mins.
E Second Initial Flow Pressure	<u>59</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>70</u> P.S.I.			
G Final Closed-in Pressure	<u>1001</u> P.S.I.			
H Final Hydrostatic Mud	<u>1674</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>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>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>7</u>	<u>0</u>	<u>25</u>	<u>0</u>	<u>59</u>	<u>0</u>	<u>70</u>
P 2 <u>5</u>	<u>15</u>	<u>3</u>	<u>502</u>	<u>5</u>	<u>43</u>	<u>3</u>	<u>512</u>
P 3 <u>10</u>	<u>20</u>	<u>6</u>	<u>849</u>	<u>10</u>	<u>44</u>	<u>6</u>	<u>782</u>
P 4 <u>15</u>	<u>25</u>	<u>9</u>	<u>939</u>	<u>15</u>	<u>45</u>	<u>9</u>	<u>850</u>
P 5		<u>12</u>	<u>984</u>	<u>20</u>	<u>47</u>	<u>12</u>	<u>888</u>
P 6		<u>15</u>	<u>1017</u>	<u>25</u>	<u>51</u>	<u>15</u>	<u>920</u>
P 7		<u>18</u>	<u>1039</u>	<u>30</u>	<u>54</u>	<u>18</u>	<u>941</u>
P 8		<u>21</u>	<u>1057</u>	<u>35</u>	<u>57</u>	<u>21</u>	<u>960</u>
P 9		<u>24</u>	<u>1071</u>	<u>40</u>	<u>60</u>	<u>24</u>	<u>972</u>
P10		<u>27</u>	<u>1081</u>	<u>45</u>	<u>63</u>	<u>27</u>	<u>988</u>
P11		<u>30</u>	<u>1087</u>	<u>50</u>	<u>67</u>	<u>30</u>	<u>1001</u>
P12				<u>55</u>	<u>70</u>		
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							