

Home Office: Great Bend, Kansas

P. O. Box 793 (316) 793-7903

Company Abercrombie Drilling Company Lease & Well No. Helm "B"
 Elevation 2487 Kelly Bushings Formation Kansas City Effective Pay _____ Ft. Ticket No. 20277
 Date 11-20-73 Sec. 2 Twp. 1S Range 26W County Decatur State Kansas
 Test Approved by Jack K. Wharton Western Representative Leon Elmore
 Formation Test No. 1 O.K. ☒ Misrun _____ Interval Tested From 3297' to 3340' Total Depth 3340'
 Size Main Hole 9" Rat Hole _____ Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No
 Top Packer Depth 3292 Ft. Size 7½" Bottom Packer Depth 3297 Ft. Size 7½"
 Straddle No Conv. _____ B.T. _____ Damaged _____ Yes _____ No Packer Depth _____ Ft. Size _____
 Tool Size 5½" O.D. Tool Joint Size 4½" F.H. Anchor Length 43 Ft. Size 5½" O.D. Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.
 RECORDERS Depth 3332 Ft. Clock No. 4763 Depth 3335 Ft. Clock No. 8377
 Top Make Kuster Cap. 4500 No. 3085 Inside _____ Outside _____ Bottom Make Kuster Cap. 4400 No. 2603 Inside _____ Outside _____
 Below Straddle: Depth _____ Rec. No. _____ Clock No. _____ Inside _____ Outside _____
 Time Set Packer 1:14 P. _____ M. _____
 Tool Open I.F.P. From 1:17 M. to 1:47P. M. Hr. 30 Min. From (B) 31 P.S.I. To (C) 31 P.S.I.
 Tool Closed I.C.I.P. From 1:47 M. to 2:17P. M. Hr. 30 Min (D) 239 P.S.I.
 Tool Open F.F.P. From 2:17 M. to 2:47P. M. Hr. 30 Min. From (E) 36 P.S.I. To (F) 36 P.S.I.
 Tool Closed F.C.I.P. From 2:47 M. to 3:17P. M. Hr. 30 Min. (G) 105 P.S.I.
 Initial Hydrostatic Pressure (A) 1766 P.S.I. Final Hydrostatic Pressure (H) 1750 P.S.I. Maximum Temp. 93

INFORMATION

BLOW Weak for 25 min. - diedDid Well Flow _____ Yes ☒ No _____ Recovery Total Ft. 15 feet oil cut mud

Reversed Out _____ Yes ☒ No _____ Mud Type Chem. Viscosity 46 Weight 10 Water Loss 8 cc. Chlorides 1,600
 EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint _____ No _____ Jars: Size _____ In. Make _____ Ser. No. _____
 Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? _____
 DRILLING CONTRACTOR Abercrombie Rig #10 Length Drill Pipe? 2040 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½" FH
 Length Weight Pipe 1237 Ft. I.D. Weight Pipe 2.7 In. Tool Joint Size 4F.H. Length Drill Collars _____ Ft. I.D. Drill Collars _____ In.
 Tool Joint Size _____ In. Length D.S.T. Tool 63 Ft.

Remarks:

WESTERN TESTING CO., INC.

Pressure Data

Date 11-20-73 Test Ticket No. 20277
 Recorder No. 3085 Capacity 4500 Location 3332 Ft.
 Clock No. 4763 Elevation 2487 Kelly Bushings Well Temperature 93 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1766	P.S.I.	1:14 P.	M
B First Initial Flow Pressure	31	P.S.I.	30	Mins. 30
C First Final Flow Pressure	31	P.S.I.	30	Mins. 30
D Initial Closed-in Pressure	239	P.S.I.	30	Mins. 30
E Second Initial Flow Pressure	36	P.S.I.	30	Mins. 30
F Second Final Flow Pressure	36	P.S.I.	30	Mins. 30
G Final Closed-in Pressure	105	P.S.I.		
H Final Hydrostatic Mud	1750	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>6</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>31</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>36</u>	<u>0</u>	<u>36</u>
P 2 <u>5</u>	<u>31</u>	<u>3</u>	<u>34</u>	<u>5</u>	<u>36</u>	<u>3</u>	<u>40</u>
P 3 <u>10</u>	<u>31</u>	<u>6</u>	<u>40</u>	<u>10</u>	<u>36</u>	<u>6</u>	<u>46</u>
P 4 <u>15</u>	<u>31</u>	<u>9</u>	<u>47</u>	<u>15</u>	<u>36</u>	<u>9</u>	<u>51</u>
P 5 <u>20</u>	<u>31</u>	<u>12</u>	<u>59</u>	<u>20</u>	<u>36</u>	<u>12</u>	<u>54</u>
P 6 <u>25</u>	<u>31</u>	<u>15</u>	<u>77</u>	<u>25</u>	<u>36</u>	<u>15</u>	<u>59</u>
P 7 <u>30</u>	<u>31</u>	<u>18</u>	<u>101</u>	<u>30</u>	<u>36</u>	<u>18</u>	<u>64</u>
P 8		<u>21</u>	<u>127</u>			<u>21</u>	<u>74</u>
P 9		<u>24</u>	<u>158</u>			<u>24</u>	<u>83</u>
P10		<u>27</u>	<u>198</u>			<u>27</u>	<u>95</u>
P11		<u>30</u>	<u>239</u>			<u>30</u>	<u>105</u>
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							



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2-15-2007
Company Abercrombie Drilling Co. Lease & Well No. Helm "B"
Elevation 2487 Kelly Bushings Formation Kansas City Effective Pay _____ Ft. Ticket No. 20278
Date 11-21-73 Sec. 2 Twp. 1S Range 26W County Decatur State Kansas
Test Approved by Jack K. Wharton Western Representative Leon Elmore
Formation Test No. 2 O.K. ☒ Misrun _____ Interval Tested From 3448' to 3480' Total Depth 3480'
Size Main Hole 9 Rat Hole _____ Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No
Top Packer Depth 3443 Ft. Size 7½" Bottom Packer Depth 3448 Ft. Size 7½"
Straddle No Conv. _____ B.T. _____ Damaged _____ Yes _____ No Packer Depth _____ Ft. Size _____
Tool Size 5½" O.D. Tool Joint Size 4½" F.H. Anchor Length 32 Ft. Size 5½" Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.
RECORDERS Depth 3472 Ft. Clock No. 4763 Depth 3475 Ft. Clock No. 8377
Top Make Kuster Cap. 4500 No. 3085 Inside _____ Outside _____ Bottom Make Kuster Cap. 4400 No. 2603 Inside _____ Outside _____
Below Straddle: Depth _____ Rec. No. _____ Clock No. _____ Inside _____ Outside _____
Time Set Packer 1:44 P. M
Tool Open I.F.P. From 1:47 M. to 2:02P. M. Hr. 15 Min. From (B) 473 P.S.I. To (C) 1073 P.S.I.
Tool Closed I.C.I.P. From 2:02 M. to 2:47P. M. Hr. 45 Min (D) 1106 P.S.I.
Tool Open F.F.P. From 2:47 M. to 3:47P. M. Hr. 60 Min. From (E) 1103 P.S.I. To (F) 1106 P.S.I.
Tool Closed F.C.I.P. From 3:47 M. to 4:32P. M. Hr. 45 Min. (G) 1106 P.S.I.
Initial Hydrostatic Pressure (A) 1872 P.S.I. Final Hydrostatic Pressure (H) 1815 P.S.I. Maximum Temp. 95

INFORMATION

BLOW Very strong on initial flow
Died in 11 min. on final flow
Did Well Flow _____ Yes ☒ No _____ Recovery Total Ft. 2400 feet total - 2375 feet salt water - 35 feet mud

Reversed Out ☒ Yes _____ No _____ Mud Type Chem. Viscosity 62 Weight 10.3 Water Loss 7.8 cc. Chlorides 1,800
EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint No Jars: Size _____ In. Make _____ Ser. No. _____
Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? _____
DRILLING CONTRACTOR Abercrombie Rig #10 Length Drill Pipe? 2191 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½" F.H.
Length Weight Pipe 1237 Ft. I.D. Weight Pipe 2.7 In. Tool Joint Size 4" F.H. Length Drill Collars _____ Ft. I.D. Drill Collars _____ In.
Tool Joint Size _____ In. Length D.S.T. Tool 52 Ft.

Remarks:

WESTERN TESTING CO., INC.

Pressure Data

Date 11-21-73 Test Ticket No. 20278

Recorder No. 3085 Capacity 4500 Location 3472 Ft.

Clock No. 4763 Elevation 2487 Kelly Bushings Well Temperature 95 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1872</u> P.S.I.	<u>1:44</u> P. M.	
B First Initial Flow Pressure	<u>473</u> P.S.I.	<u>15</u> Mins.	<u>15</u> Mins.
C First Final Flow Pressure	<u>1073</u> P.S.I.	<u>45</u> Mins.	<u>44</u> Mins.
D Initial Closed-in Pressure	<u>1106</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>1103</u> P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>1106</u> P.S.I.		
G Final Closed-in Pressure	<u>1106</u> P.S.I.		
H Final Hydrostatic Mud	<u>1815</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>14</u> Inc.		Breakdown: <u>12</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>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>473</u>	<u>0</u>	<u>1073</u>	<u>0</u>	<u>1103</u>	<u>0</u>	<u>1106</u>
P 2 <u>5</u>	<u>813</u>	<u>3</u>	<u>1102</u>	<u>5</u>	<u>1106</u>	<u>3</u>	<u>1106</u>
P 3 <u>10</u>	<u>979</u>	<u>6</u>	<u>1104</u>	<u>10</u>	<u>1106</u>	<u>6</u>	<u>1106</u>
P 4 <u>15</u>	<u>1073</u>	<u>9</u>	<u>1106</u>	<u>15</u>	<u>1106</u>	<u>9</u>	<u>1106</u>
P 5		<u>12</u>	<u>1106</u>	<u>20</u>	<u>1106</u>	<u>12</u>	<u>1106</u>
P 6		<u>15</u>	<u>1106</u>	<u>25</u>	<u>1106</u>	<u>15</u>	<u>1106</u>
P 7		<u>18</u>	<u>1106</u>	<u>30</u>	<u>1106</u>	<u>18</u>	<u>1106</u>
P 8		<u>21</u>	<u>1106</u>	<u>35</u>	<u>1106</u>	<u>21</u>	<u>1106</u>
P 9		<u>24</u>	<u>1106</u>	<u>40</u>	<u>1106</u>	<u>24</u>	<u>1106</u>
P10		<u>27</u>	<u>1106</u>	<u>45</u>	<u>1106</u>	<u>27</u>	<u>1106</u>
P11		<u>30</u>	<u>1106</u>	<u>50</u>	<u>1106</u>	<u>30</u>	<u>1106</u>
P12		<u>33</u>	<u>1106</u>	<u>55</u>	<u>1106</u>	<u>33</u>	<u>1106</u>
P13		<u>36</u>	<u>1106</u>	<u>60</u>	<u>1106</u>	<u>36</u>	<u>1106</u>
P14		<u>39</u>	<u>1106</u>			<u>39</u>	<u>1106</u>
P15		<u>42</u>	<u>1106</u>			<u>42</u>	<u>1106</u>
P16		<u>44</u>	<u>1106</u>			<u>45</u>	<u>1106</u>
P17							
P18							
P19							
P20							