



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

20-95-230

Company Abercrombie Drilling Co., Inc. Lease & Well No. Ernst #1
Elevation 2418 Ground Level Formation Kansas City Effective Pay _____ Ft. Ticket No. 10520
Date 7-3-68 Sec. 20 Twp. 9s Range 23w County Graham State Kansas
Test Approved by Jack K. Whatton Western Representative Gerrell Veatch
Formation Test No. 1 O.K. ☒ Misrun _____ Interval Tested From 3779' to 3817' Total Depth 3817'
Size Main Hole 6 1/4 Rat Hole _____ Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No
Top Packer Depth 3775 Ft. Size 5 1/2 Packer Depth 3779 Ft. Size 5 1/2
Straddle _____ Yes _____ No ☒ Conv. _____ B.T. _____ Damaged _____ Yes _____ No
Packer Depth _____ Ft. Size _____
Tool Size 4 1/2"OD Tool Jt. Size 3 1/2" IF Anchor Length 38 Ft. Size 4 1/2"OD
RECORDERS Depth 3784 Ft. Clock No. 4964 Depth 3789 Ft. Clock No. 6860
Top Make Kuster Cap. 4150 No. 2607 ~~Inside~~ Outside Bottom Make Kuster Cap. 4150 No. 969 ~~Inside~~ Outside
Below Straddle: Depth _____ Clock No. _____ Inside Depth _____ Ft. Clock No. _____ Outside
Top Make _____ Cap. _____ No. _____ Inside Bottom Make _____ Cap. _____ No. _____ Outside
Time Set Packer 3:12 P. M
Tool Open I.F.P. From 3:15 M. to 3:30P M. Hr. 15 Min. From (B) 8 P.S.I. To (C) 18 P.S.I.
Tool Closed I.C.I.P. From 3:30 M. to 4:00P M. Hr. 30 Min. (D) 920 P.S.I.
Tool Open F.F.P. From 4:00 M. to 4:20P M. Hr. 20 Min. From (E) 27 P.S.I. To (F) 40 P.S.I.
Tool Closed F.C.I.P. From 4:20 M. to 4:50P M. Hr. 30 Min. (G) 868 P.S.I.
Initial Hydrostatic Pressure (A) 2012 P.S.I. Final Hydrostatic Pressure (H) 1993 P.S.I.
SURFACE Size Choke 3/8 In. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____
BLOW Weak blow for 15 minutes Bottom Choke Size 3/4 In.
Did Well Flow _____ Yes ☒ No _____ Recovery Total Ft. 60 feet drilling mud with with spots of oil on top
Reversed Out _____ Yes ☒ No _____ Mud Type Starch Viscosity 39 Weight 10 Water Loss 14.6 cc. Maximum Temp. 113 °F
Type Circ. Sub. Plug Did Tool Plug? No Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers Yes Safety Joint No Did Packer Hold? Yes Where? _____
Length Drill Pipe 2524 ft. I.D. Drill Pipe 2.8 in. Length Weight Pipe 1235 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.
I. D. Drill Collars _____ in. Length D.S.T. Tool 58 ft.
Remarks _____

WESTERN TESTING CO., INC. Pressure Data

Date 7-3-68 Test Ticket No. 10520
Recorder No. 2607 Capacity 4150 Location 3784 Ft.
Clock No. 4964 Elevation 2418 Ground Level Well Temperature 113 °F

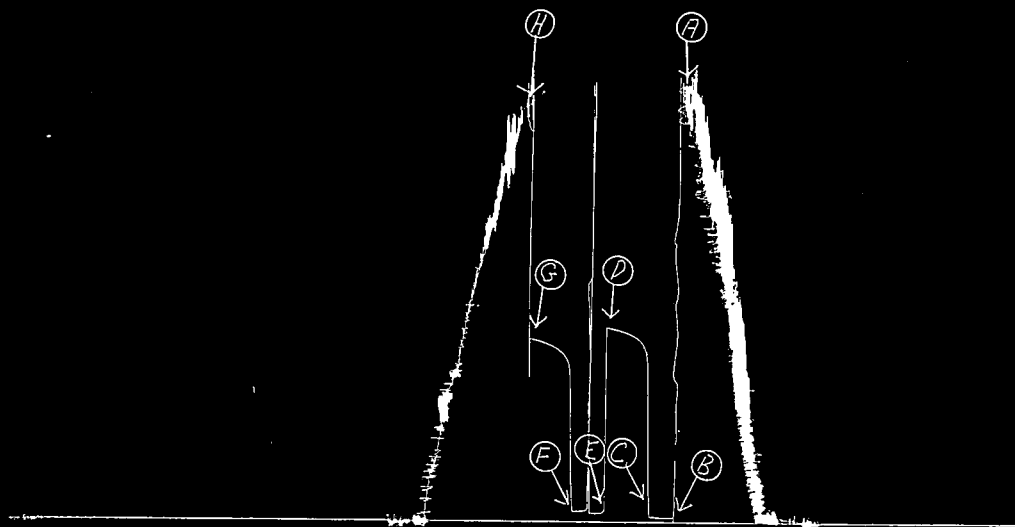
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2012</u> P.S.I.	Opened Tool	<u>3:12 P.M.</u>	
B First Initial Flow Pressure	<u>8</u> P.S.I.	First Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins.
C First Final Flow Pressure	<u>18</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>920</u> P.S.I.	Second Flow Pressure	<u>20</u> Mins.	<u>20</u> Mins.
E Second Initial Flow Pressure	<u>27</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>29</u> Mins.
F Second Final Flow Pressure	<u>40</u> P.S.I.			
G Final Closed-in Pressure	<u>868</u> P.S.I.			
H Final Hydrostatic Mud	<u>1993</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>10</u> Inc.		Breakdown: <u>4</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> </u> Min.		final inc. of <u> </u> Min.		final inc. of <u> </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>8</u>	<u>0</u>	<u>18</u>	<u>0</u>	<u>27</u>	<u>0</u>	<u>40</u>
P 2 <u>5</u>	<u>10</u>	<u>3</u>	<u>328</u>	<u>5</u>	<u>27</u>	<u>3</u>	<u>330</u>
P 3 <u>10</u>	<u>14</u>	<u>6</u>	<u>841</u>	<u>10</u>	<u>27</u>	<u>6</u>	<u>787</u>
P 4 <u>15</u>	<u>18</u>	<u>9</u>	<u>864</u>	<u>15</u>	<u>40</u>	<u>9</u>	<u>807</u>
P 5 <u> </u>	<u> </u>	<u>12</u>	<u>878</u>	<u>20</u>	<u>40</u>	<u>12</u>	<u>826</u>
P 6 <u> </u>	<u> </u>	<u>15</u>	<u>891</u>	<u> </u>	<u> </u>	<u>15</u>	<u>836</u>
P 7 <u> </u>	<u> </u>	<u>18</u>	<u>897</u>	<u> </u>	<u> </u>	<u>18</u>	<u>845</u>
P 8 <u> </u>	<u> </u>	<u>21</u>	<u>905</u>	<u> </u>	<u> </u>	<u>21</u>	<u>851</u>
P 9 <u> </u>	<u> </u>	<u>24</u>	<u>912</u>	<u> </u>	<u> </u>	<u>24</u>	<u>859</u>
P10 <u> </u>	<u> </u>	<u>27</u>	<u>916</u>	<u> </u>	<u> </u>	<u>27</u>	<u>864</u>
P11 <u> </u>	<u> </u>	<u>30</u>	<u>920</u>	<u> </u>	<u> </u>	<u>29</u>	<u>868</u>
P12 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P13 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P14 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P15 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P16 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P17 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P18 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P19 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
P20 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

ABERCROMBIE DRILLING INC.
ERNST #1

T.K.T 10520
TEST #1





TIGHT HOLE

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

Company **Abercrombie Drilling Co. Inc.** Lease & Well No. **Ernst #1**
Elevation **2418 Ground Level** Formation **Kansas City** Effective Pay _____ Ft. Ticket No. **10521**
Date **7-4-68** Sec. **20** Twp. **9s** Range **23w** County **Graham** State **Kansas**
Test Approved by **Jack K. Wharton** Western Representative **Gerrell Veatch**

Formation Test No. **2** O.K. ☒ Misrun _____ Interval Tested From **3814'** to **3903'** Total Depth **3903'**
Size Main Hole **6 1/4** Rat Hole _____ Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No Conv. _____ B.T. _____ Damaged _____ Yes ☒ No
Top Packer Depth **3810** Ft. Size **5 1/2** Packer Depth **3814** Ft. Size **5 1/2**
Straddle _____ Yes _____ No ☒ Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____
Tool Size **4 1/2" OD** Tool Jt. Size **3 1/2 IF** Anchor Length **89** Ft. Size **4 1/2" OD 1 Stand D.C.**

RECORDERS Depth **3820** Ft. Clock No. **4964** Depth **3825** Ft. Clock No. **6860**
Top Make **Kuster** Cap. **4150** No. **2607** Inside _____ Outside _____
Bottom Make **Kuster** Cap. **4150** No. **969** Inside _____ Outside _____
Below Straddle: Depth _____ Clock No. _____ Inside _____ Outside _____
Top Make _____ Cap. _____ No. _____ Inside _____ Outside _____
Bottom Make _____ Cap. _____ No. _____ Inside _____ Outside _____

Time Set Packer **8:37 A.M.**
Tool Open I.F.P. From **8:40** M. to **8:45A.** M. Hr. **5** Min. From (B) **40** P.S.I. To (C) **54** P.S.I.
Tool Closed I.C.I.P. From **8:45** M. to **9:15A.** M. Hr. **30** Min. (D) **970** P.S.I.
Tool Open F.F.P. From **9:15** M. to **10:15A.** M. Hr. **60** Min. From (E) **86** P.S.I. To (F) **292** P.S.I.
Tool Closed F.C.I.P. From **10:15** M. to **10:45A.** M. Hr. **30** Min. (G) **889** P.S.I.
Initial Hydrostatic Pressure (A) **2052** P.S.I. Final Hydrostatic Pressure (H) **2027** P.S.I.

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

BLOW **Good blow thru out test** Bottom Choke Size **3/4** In.
Did Well Flow _____ Yes ☒ No _____ Recovery Total Ft. **630 feet - 600 feet gas in pipe - 150 feet heavy oil and gas cut mud - 120 feet slightly muddy oil - 60 feet very heavy oil with gas cut mud - 240 feet salt water - 60 feet water cut mud.**

Reversed Out _____ Yes ☒ No _____ Mud Type **Starch** Viscosity **39** Weight **10** Water Loss **14** cc. Maximum Temp. **115** °F
Type Circ. Sub. **Plug** Did Tool Plug? **No** Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers **Yes** Safety Joint **No** Did Packer Hold? _____ Where? _____
Length Drill Pipe **2559** ft. I.D. Drill Pipe **2.8** in. Length Weight Pipe **1235** ft. I.D. Weight Pipe **2.7** in. Length Drill Collars _____ ft.
I. D. Drill Collars _____ in. Length D.S.T. Tool **109** ft.

Remarks

WESTERN TESTING CO., INC. **Pressure Data**

Date 7-4-68 Test Ticket No. 10521
 Recorder No. 2607 Capacity 4150 Location 3820 Ft.
 Clock No. 4964 Elevation 2418 Ground Level Well Temperature 115 °F

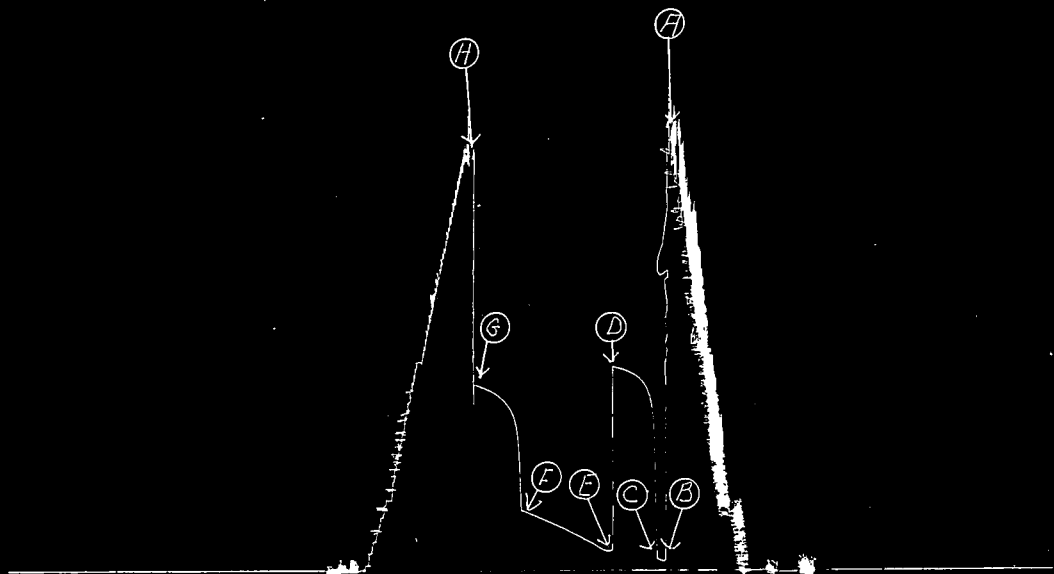
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2052</u> P.S.I.	Opened Tool	<u>8:37 A.</u> M	
B First Initial Flow Pressure	<u>40</u> P.S.I.	First Flow Pressure	<u>5</u> Mins.	<u>5</u> Mins.
C First Final Flow Pressure	<u>54</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>970</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>86</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>292</u> P.S.I.			
G Final Closed-in Pressure	<u>889</u> P.S.I.			
H Final Hydrostatic Mud	<u>2027</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>10</u> Inc.		Breakdown: <u>12</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 _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>40</u>	<u>0</u>	<u>54</u>	<u>0</u>	<u>86</u>	<u>0</u>	<u>292</u>
P 2 <u>5</u>	<u>54</u>	<u>3</u>	<u>705</u>	<u>5</u>	<u>92</u>	<u>3</u>	<u>674</u>
P 3 <u>10</u>		<u>6</u>	<u>845</u>	<u>10</u>	<u>116</u>	<u>6</u>	<u>747</u>
P 4 <u>15</u>		<u>9</u>	<u>885</u>	<u>15</u>	<u>141</u>	<u>9</u>	<u>782</u>
P 5 <u>20</u>		<u>12</u>	<u>908</u>	<u>20</u>	<u>160</u>	<u>12</u>	<u>809</u>
P 6 <u>25</u>		<u>15</u>	<u>926</u>	<u>25</u>	<u>192</u>	<u>15</u>	<u>841</u>
P 7 _____		<u>18</u>	<u>941</u>	<u>30</u>	<u>207</u>	<u>18</u>	<u>851</u>
P 8 _____		<u>21</u>	<u>951</u>	<u>35</u>	<u>222</u>	<u>21</u>	<u>864</u>
P 9 _____		<u>24</u>	<u>958</u>	<u>40</u>	<u>239</u>	<u>24</u>	<u>872</u>
P 10 _____		<u>27</u>	<u>964</u>	<u>45</u>	<u>260</u>	<u>27</u>	<u>878</u>
P 11 _____		<u>30</u>	<u>970</u>	<u>50</u>	<u>273</u>	<u>30</u>	<u>889</u>
P 12 _____				<u>55</u>	<u>285</u>		
P 13 _____				<u>60</u>	<u>292</u>		
P 14 _____							
P 15 _____							
P 16 _____							
P 17 _____							
P 18 _____							
P 19 _____							
P 20 _____							

ABECROMBIE DRILLING INC
ERNST #1

T.K.T 10521
TEST #2



20-95-230



TIGHT HOLE

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

Company Abercrombie Drilling Inc. Lease & Well No. Ernst #1
Elevation 2418 Ground Level Formation Kansas City Effective Pay _____ Ft. Ticket No. 10522
Date 7-4-68 Sec. 20 Twp. 9s Range 23W County Graham State Kansas
Test Approved by Jack K. Wharton Western Representative Gerrell Veatch

Formation Test No. 3 O.K. ☒ Misrun _____ Interval Tested From 3814' to 3838' Total Depth 3903'
Size Main Hole 6 1/4 at Hole _____ Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No Conv. _____ B.T. _____ Damaged _____ Yes _____ No
Packer Depth 3814 Ft. Size 5 1/2 Packer Depth _____ Ft. Size _____
Straddle _____ Yes ☒ No _____ Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No

Packer Depth 3838 Ft. Size 5 1/2
Tool Size 4 1/2" OD Tool Jt. Size 3 1/2" IF Anchor Length 24 Ft. Size 4 1/2" OD

RECORDERS Depth 3819 Ft. Clock No. 4964 Depth 3824 Ft. Clock No. 6860
Top Make Kuster Cap. 4150 No. 2607 Inside Outside Bottom Make Kuster Cap. 4150 No. 969 Inside Outside
Below Straddle: Depth 3897 Clock No. 109 Inside Outside Depth 3900 Ft. Clock No. 120 Inside Outside
Top Make WTC Cap. 4000 No. 26 Inside Outside Bottom Make WTC Cap. 4000 No. 57 Inside Outside

Time Set Packer 2:58 P. M.
Tool Open I.F.P. From 3:00 M. to 3:05P. Hr. 5 Min. From (B) 14 P.S.I. To (C) 23 P.S.I.
Tool Closed I.C.I.P. From 3:05 M. to 3:35P. Hr. 30 Min. (D) 928 P.S.I.
Tool Open F.F.P. From 3:35 M. to 4:35P. Hr. 60 Min. From (E) 52 P.S.I. To (F) 124 P.S.I.
Tool Closed F.C.I.P. From 4:35 M. to 5:05P. Hr. 30 Min. (G) 847 P.S.I.
Initial Hydrostatic Pressure (A) 2014 P.S.I. Final Hydrostatic Pressure (H) 2004 P.S.I.

SURFACE	Size Choke <u>3/8</u> In.	Max. Press. P.S.I.	Time	Description of Flow
INFORMATION			M.	
			M.	
			M.	

BLOW Good blow thru out test. Bottom Choke Size 3/4 In.
Did Well Flow _____ Yes ☒ No _____ Recovery Total Ft. 1440 feet gas in pipe - 120 feet Heavy oil and gas cut mud - 180 feet muddy and gas cut oil

Reversed Out _____ Yes ☒ No _____ Mud Type Starckj Viscosity 38 Weight 10 Water Loss 14 cc. Maximum Temp. 115 °F
Type Circ. Sub. Plug Did Tool Plug? No Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers 1 & 1 Safety Joint No Did Packer Hold? _____ Where? _____
Length Drill Pipe _____ ft. I.D. Drill Pipe 2.8 in. Length Weight Pipe 1235 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.
I. D. Drill Collars _____ in. Length D.S.T. Tool 114 ft. with 65 feet tail pipe

Remarks

WESTERN TESTING CO., INC. Pressure Data

Date 7-4-68 Test Ticket No. 10522
Recorder No. 2607 Capacity 4150 Location 3819 Ft.
Clock No. 4964 Elevation 2418 Ground Level Well Temperature 115 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2014</u> P.S.I.	Opened Tool	<u>2:58 P.</u> M	
B First Initial Flow Pressure	<u>14</u> P.S.I.	First Flow Pressure	<u>5</u> Mins.	<u>5</u> Mins.
C First Final Flow Pressure	<u>23</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>28</u> Mins.
D Initial Closed-in Pressure	<u>928</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>58</u> Mins.
E Second Initial Flow Pressure	<u>52</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>29</u> Mins.
F Second Final Flow Pressure	<u>124</u> P.S.I.			
G Final Closed-in Pressure	<u>847</u> P.S.I.			
H Final Hydrostatic Mud	<u>2004</u> P.S.I.			

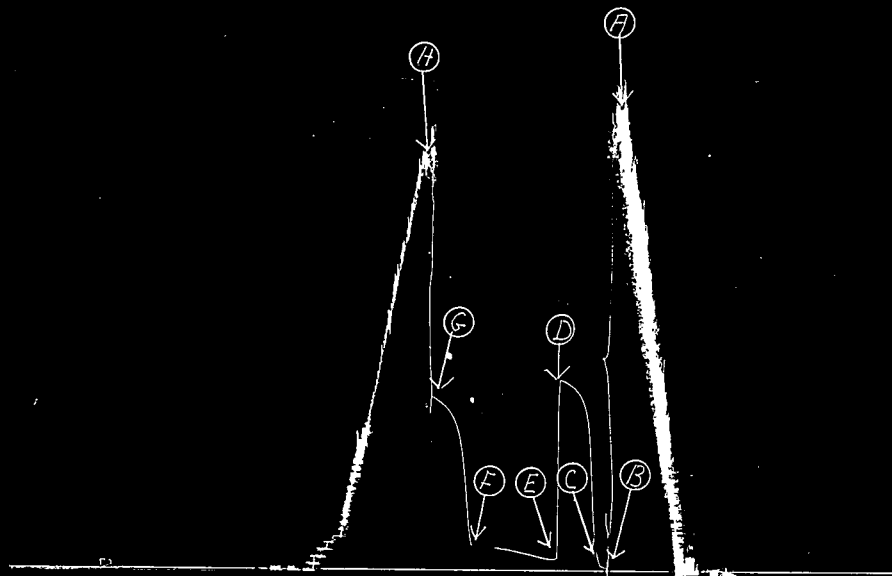
PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>1</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>11</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> </u> Min.		final inc. of <u>1</u> Min.		final inc. of <u>3</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>14</u>	<u>0</u>	<u>23</u>	<u>0</u>	<u>52</u>	<u>0</u>	<u>124</u>
P 2 <u>5</u>	<u>23</u>	<u>3</u>	<u>129</u>	<u>5</u>	<u>54</u>	<u>3</u>	<u>239</u>
P 3 <u>10</u>		<u>6</u>	<u>394</u>	<u>10</u>	<u>59</u>	<u>6</u>	<u>516</u>
P 4 <u>15</u>		<u>9</u>	<u>708</u>	<u>15</u>	<u>69</u>	<u>9</u>	<u>643</u>
P 5 <u>20</u>		<u>12</u>	<u>814</u>	<u>20</u>	<u>80</u>	<u>12</u>	<u>718</u>
P 6 <u>25</u>		<u>15</u>	<u>862</u>	<u>25</u>	<u>88</u>	<u>15</u>	<u>762</u>
P 7 <u> </u>		<u>18</u>	<u>885</u>	<u>30</u>	<u>95</u>	<u>18</u>	<u>791</u>
P 8 <u> </u>		<u>21</u>	<u>903</u>	<u>35</u>	<u>101</u>	<u>21</u>	<u>814</u>
P 9 <u> </u>		<u>24</u>	<u>916</u>	<u>40</u>	<u>107</u>	<u>24</u>	<u>828</u>
P10 <u> </u>		<u>27</u>	<u>924</u>	<u>45</u>	<u>112</u>	<u>27</u>	<u>841</u>
P11 <u> </u>		<u>28</u>	<u>928</u>	<u>50</u>	<u>118</u>	<u>29</u>	<u>847</u>
P12 <u> </u>				<u>55</u>	<u>120</u>		
P13 <u> </u>				<u>58</u>	<u>124</u>		
P14 <u> </u>							
P15 <u> </u>							
P16 <u> </u>							
P17 <u> </u>							
P18 <u> </u>							
P19 <u> </u>							
P20 <u> </u>							

ABERCROMBIE DRILLING INC.
ERNST #1

T.K.T. 10522
TEST #3

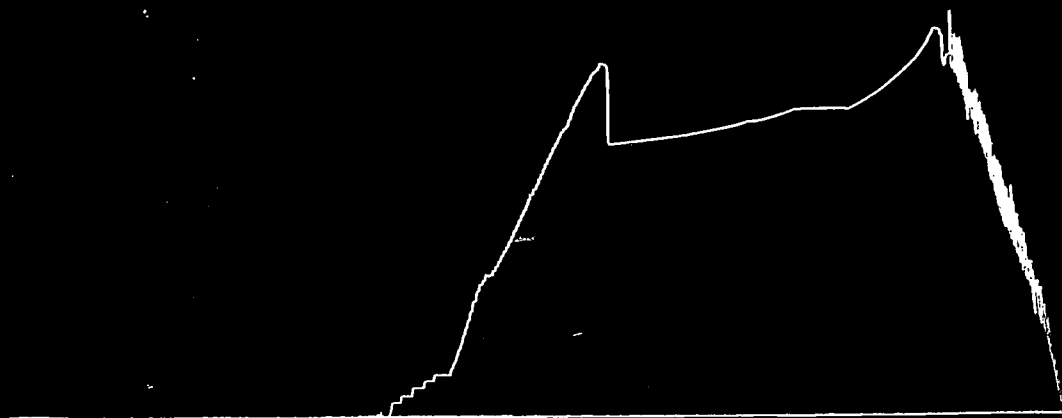
STRADDLE



ABERCROMBIE DRILLING INC.
ERNST #1

BLANK OFF

T.K.T 10522
TEST #3





TIGHT HOLE

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

Company Abercrombie Drilling Inc Lease & Well No. Ernst # 1
Elevation 2418 Ground Level Formation Kansas City Effective Pay. _____ Ft. Ticket No. 10523
Date 7-5-68 Sec. 20 Twp. 9s Range 23W County Graham State Kansas
Test Approved by Jack K. Wharton Western Representative Gerrell Veatch
Formation Test No. 4 O.K. ☒ Misrun ☐ Interval Tested From 3907' to 3925' Total Depth 3925'
Size Main Hole 6 1/4 Rat Hole _____ Conv. ☒ B.T. _____ Damaged Yes ☒ No Conv. ☒ B.T. _____ Damaged Yes ☒ No
Packer Depth 3903 Ft. Size 5 1/2 Packer Depth 3907 Ft. Size 5 1/2
Straddle Yes _____ No ☒ Conv. _____ B.T. _____ Damaged Yes _____ No

Packer Depth _____ Ft. Size _____
Tool Size 4 1/2" OD Tool Jt. Size 3 1/2" IF Anchor Length 18 Ft. Size 4 1/2" OD
RECORDERS Depth 3910 Ft. Clock No. 4964 Depth 3914 Ft. Clock No. 6860
Top Make Kuster Cap. 4150 No. 2607 Inside _____ Outside _____ Bottom Make Kuster Cap. 4150 No. 969 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 2:58 A M
Tool Open I.F.P. From 3:00 M. to 3:15 A.M. Hr. 15 Min. From (B) 10 P.S.I. To (C) 10 P.S.I.
Tool Closed I.C.I.P. From 3:15 M. to 3:45 A.M. Hr. 30 Min. (D) 88 P.S.I.
Tool Open F.F.P. From 3:45 M. to 4:05 A.M. Hr. 20 Min. From (E) 21 P.S.I. To (F) 27 P.S.I.
Tool Closed F.C.I.P. From 4:05 M. to 4:35 A.M. Hr. 30 Min. (G) 92 P.S.I.
Initial Hydrostatic Pressure (A) 2037 P.S.I. Final Hydrostatic Pressure (H) 2029 P.S.I.

SURFACE	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
INFORMATION	<u>3/8</u> In.		M.	
			M.	
			M.	

BLOW Very weak for 15 minutes Bottom Choke Size _____ In.
Did Well Flow Yes ☒ No _____ Recovery Total Ft. 15 feet drilling mud with spots oil

Reversed Out Yes ☒ No _____ Mud Type starch Viscosity 36 Weight 10 Water Loss 15.6 cc. Maximum Temp. 116 °F
Type Circ. Sub. plug Did Tool Plug? no Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where? _____
Length Drill Pipe 2672 ft. I.D. Drill Pipe 2.8 in. Length Weight Pipe 1235 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.
I. D. Drill Collars _____ in. Length D.S.T. Tool 38 ft.

Remarks
Flushed Tool

WESTERN TESTING CO., INC.

Pressure Data

Date 7-5-68 Test Ticket No. 10523
 Recorder No. 2607 Capacity 4150 Location 3910 Ft.
 Clock No. 4964 Elevation 2418 Ground Level Well Temperature 116 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2037</u> P.S.I.	Opened Tool	<u>2158</u> A M	
B First Initial Flow Pressure	<u>10</u> P.S.I.	First Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins.
C First Final Flow Pressure	<u>10</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>88</u> P.S.I.	Second Flow Pressure	<u>200</u> Mins.	<u>20</u> Mins.
E Second Initial Flow Pressure	<u>21</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>27</u> P.S.I.			
G Final Closed-in Pressure	<u>92</u> P.S.I.			
H Final Hydrostatic Mud	<u>2029</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>10</u> Inc.		Breakdown <u>4</u> Inc.		Breakdown: _____ 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 _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>10</u>	<u>0</u>	<u>10</u>	<u>0</u>	<u>21</u>	<u>0</u>	<u>27</u>
P 2 <u>5</u>	<u>10</u>	<u>3</u>	<u>10</u>	<u>5</u>	<u>21</u>	<u>3</u>	<u>27</u>
P 3 <u>10</u>	<u>10</u>	<u>6</u>	<u>12</u>	<u>10</u>	<u>21</u>	<u>6</u>	<u>37</u>
P 4 <u>15</u>	<u>10</u>	<u>9</u>	<u>21</u>	<u>15</u>	<u>27</u>	<u>9</u>	<u>46</u>
P 5 _____	_____	<u>12</u>	<u>27</u>	<u>20</u>	<u>27</u>	<u>12</u>	<u>52</u>
P 6 _____	_____	<u>15</u>	<u>33</u>	_____	_____	<u>15</u>	<u>59</u>
P 7 _____	_____	<u>18</u>	<u>42</u>	_____	_____	<u>18</u>	<u>65</u>
P 8 _____	_____	<u>21</u>	<u>48</u>	_____	_____	<u>21</u>	<u>78</u>
P 9 _____	_____	<u>24</u>	<u>59</u>	_____	_____	<u>24</u>	<u>84</u>
P 10 _____	_____	<u>27</u>	<u>69</u>	_____	_____	<u>27</u>	<u>88</u>
P 11 _____	_____	<u>30</u>	<u>88</u>	_____	_____	<u>30</u>	<u>92</u>
P 12 _____	_____	_____	_____	_____	_____	_____	_____
P 13 _____	_____	_____	_____	_____	_____	_____	_____
P 14 _____	_____	_____	_____	_____	_____	_____	_____
P 15 _____	_____	_____	_____	_____	_____	_____	_____
P 16 _____	_____	_____	_____	_____	_____	_____	_____
P 17 _____	_____	_____	_____	_____	_____	_____	_____
P 18 _____	_____	_____	_____	_____	_____	_____	_____
P 19 _____	_____	_____	_____	_____	_____	_____	_____
P 20 _____	_____	_____	_____	_____	_____	_____	_____

AMBERCROMBIE DRILLING INC.
ERNST #1

T.K.T 10523
TEST #4



20-93-13w



TIGHT HOLE

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

Company Abercrombie Drilling Inc Lease & Well No. Ernst # 1
Elevation 2418 Ground Level Formation Kansas City Effective Pay _____ Ft. Ticker No. 10524
Date 7-5-68 Sec. 20 Twp. 9s Range 23W County Graham State Kansas
Test Approved by Jack K. Wharton Western Representative Gerrell Veatch
Formation Test No 5 O.K. ☒ Misrun _____ Interval Tested From 3920' to 3942' Total Depth 3942'
Size Main Hole 6 1/4 Rat Hole _____ Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No Conv. ☒ B.T. _____ Damaged _____ Yes ☒ No
Packer Depth 3916 Ft. Size 5 1/2 Packer Depth 3920 Ft. Size 5 1/2
Straddle _____ Yes _____ No ☒ Conv. _____ B.T. _____ Damaged _____ Yes _____ No
Packer Depth _____ Ft. Size _____
Tool Size 4 1/2" OD Tool Jt. Size 3 1/2" IF Anchor Length 22 Ft. Size 4 1/2" OD
RECORDERS Depth 3925 Ft. Clock No. 4964 Depth 3930 Ft. Clock No. 6860
Top Make Kuster Cpl 54150 No. 2607 Inside Bottom Make Kuster Cap. 4150 No. 969 Inside
Below Straddle: Depth _____ Clock No. _____ Inside Depth _____ Ft. Clock No. _____ Inside
Top Make _____ Cap. _____ No. _____ Inside Bottom Make _____ Cap. _____ No. _____ Inside
Time Set Packer 1:48 P M
Tool Open I.E.P. From 1:50 M. to 3:20 P.M. Hr. 10 Min. From (B) 21 P.S.I. To (C) 21 P.S.I.
Tool Closed I.C.I.P. From 2:00 M. to 2:30 P.M. Hr. 30 Min. (D) 818 P.S.I.
Tool Open F.F.P. From 2:30 M. to 2:50 P.M. Hr. 20 Min. From (E) 27 P.S.I. To (F) 27 P.S.I.
Tool Closed F.C.I.P. From 2:50 M. to 3:20 P.M. Hr. 30 Min. (G) 413 P.S.I.
Initial Hydrostatic Pressure (A) 2080 P.S.I. Final Hydrostatic Pressure (H) 2061 P.S.I.
SURFACE Size Choke 3/8 In. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____
BLOW Very weak for 8 minutes Bottom Choke Size 3/4 In.
Did Well Flow Yes No _____ Recovery Total Ft. 10 feet drilling mud
Reversed Out Yes ☒ No _____ Mud Type starch Viscosity 40 Weight 10 Water Loss 7.6 cc. Maximum Temp. 116 °F
Type Circ. Sub. plug Did Tool Plug? no Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where? _____
Length Drill Pipe 2665 ft. I.D. Drill Pipe 2.8 in. Length Weight Pipe 1235 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.
I. D. Drill Collars _____ in. Length D.S.T. Tool 42 ft.
Remarks Flushed Tool

WESTERN TESTING CO., INC.

Pressure Data

Date 7-5-68 Test Ticket No. 10525
 Recorder No. 2607 Capacity 4150 Location 2925 Ft.
 Clock No. 4964 Elevation 2418 Ground Level Well Temperature 116 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	2080 P.S.I.	1:48 PM	
B First Initial Flow Pressure	21 P.S.I.	10 Mins.	10 Mins.
C First Final Flow Pressure	21 P.S.I.	30 Mins.	32 Mins.
D Initial Closed-in Pressure	2818 P.S.I.	20 Mins.	20 Mins.
E Second Initial Flow Pressure	27 P.S.I.	30 Mins.	32 Mins.
F Second Final Flow Pressure	27 P.S.I.		
G Final Closed-in Pressure	413 P.S.I.		
H Final Hydrostatic Mud	2061 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>4</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>2</u> Min.		final inc. of <u> </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>21</u>	<u>0</u>	<u>21</u>	<u>0</u>	<u>27</u>	<u>0</u>	<u>27</u>
P 2 <u>5</u>	<u>21</u>	<u>3</u>	<u>31</u>	<u>5</u>	<u>27</u>	<u>3</u>	<u>27</u>
P 3 <u>10</u>	<u>21</u>	<u>6</u>	<u>78</u>	<u>10</u>	<u>27</u>	<u>6</u>	<u>31</u>
P 4 <u>15</u>		<u>9</u>	<u>205</u>	<u>15</u>	<u>27</u>	<u>9</u>	<u>40</u>
P 5 <u>20</u>		<u>12</u>	<u>374</u>	<u>20</u>	<u>27</u>	<u>12</u>	<u>65</u>
P 6 <u>25</u>		<u>15</u>	<u>514</u>		<u>27</u>	<u>15</u>	<u>73</u>
P 7 <u> </u>		<u>18</u>	<u>614</u>			<u>18</u>	<u>97</u>
P 8 <u> </u>		<u>21</u>	<u>678</u>			<u>21</u>	<u>120</u>
P 9 <u> </u>		<u>24</u>	<u>735</u>			<u>24</u>	<u>167</u>
P 10 <u> </u>		<u>27</u>	<u>776</u>			<u>27</u>	<u>243</u>
P 11 <u> </u>		<u>30</u>	<u>807</u>			<u>30</u>	<u>332</u>
P 12 <u> </u>		<u>32</u>	<u>818</u>			<u>32</u>	<u>413</u>
P 13 <u> </u>							
P 14 <u> </u>							
P 15 <u> </u>							
P 16 <u> </u>							
P 17 <u> </u>							
P 18 <u> </u>							
P 19 <u> </u>							
P 20 <u> </u>							

ABERCROMBIE DRILLING INC.
ERNST #1

T.K.T 10524
TEST #5

