



15-051-20661

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

10-145-20w

Company **Abercrombie Drilling Inc.** Lease & Well No. **Gottshalk #1**

Elevation **2301 Kelly Bushings** Formation **Kansas City** Effective Pay \_\_\_\_\_ Ft. Ticket No. **13935**

Date **8-10-70** Sec. **10** Twp. **14S** Range **20W** County **E111s** State **Kansas**

Test Approved by **Jack K. Wharton** Western Representative **Don Fisher**

Formation Test No. **1** O.K.  Misrun \_\_\_\_\_ Interval Tested From **3643'** to **3703'** Total Depth **3703'**

Size Main Hole **6 3/4"** Rat Hole \_\_\_\_\_ Conv.  B.T. \_\_\_\_\_ Damaged Yes  No  Conv.  B.T. \_\_\_\_\_ Damaged Yes  No

Packer Depth **3638** Ft. Size **5 1/2"** Packer Depth **3643** Ft. Size **6"**

Straddle Yes \_\_\_\_\_ No  Conv. \_\_\_\_\_ B.T. \_\_\_\_\_ Damaged Yes \_\_\_\_\_ No \_\_\_\_\_

Tool Size **4 1/2" O.D.** Tool Jt. Size **3 1/2" I.F.** Anchor Length **60** Ft. Size **4 1/2" O.D.**

RECORDERS Depth **3693** Ft. Clock No. **6895** Depth **3696** Ft. Clock No. **6774**

Top Make **Amerada** Cap. **4150** No. **2606** ~~Inside~~ Outside Bottom Make **Amerada** Cap. **4300** No. **1567** ~~Inside~~ Outside

Below Straddle: Depth \_\_\_\_\_ Clock No. \_\_\_\_\_ Outside \_\_\_\_\_ Inside \_\_\_\_\_

Top Make \_\_\_\_\_ Cap. \_\_\_\_\_ No. \_\_\_\_\_ Outside \_\_\_\_\_ Bottom Make \_\_\_\_\_ Cap. \_\_\_\_\_ No. \_\_\_\_\_ Outside \_\_\_\_\_

Time Set Packer **9:38** **A.M.**

Tool Open I.F.P. From **9:39** M. to **9:54 A.M.** Hr. **15** Min. From (B) **54** P.S.I. To (C) **108** P.S.I.

Tool Closed I.C.I.P. From **9:54** M. to **10:24 A.M.** Hr. **30** Min. (D) **958** P.S.I.

Tool Open F.F.P. From **10:24** M. to **11:24 A.M.** **1** Hr. Min. From (E) **145** P.S.I. To (F) **328** P.S.I.

Tool Closed F.C.I.P. From **11:24** M. to **11:54 A.M.** Hr. **30** Min. (G) **934** P.S.I.

Initial Hydrostatic Pressure (A) **2041** P.S.I. Final Hydrostatic Pressure (H) **2017** P.S.I.

SURFACE Size Choke **1/4** In. Max. Press. P.S.I. \_\_\_\_\_ Time \_\_\_\_\_ Description of Flow \_\_\_\_\_

INFORMATION \_\_\_\_\_ M. \_\_\_\_\_

\_\_\_\_\_ M. \_\_\_\_\_

\_\_\_\_\_ M. \_\_\_\_\_

BLOW **Strong** Bottom Choke Size **3/4** In.

Did Well Flow Yes  No \_\_\_\_\_ Recovery Total Ft. **600 feet muddy water**

\_\_\_\_\_

Reversed Out Yes  No \_\_\_\_\_ Mud Type **Starch** Viscosity **42** Weight **10.2** Water Loss **12.4** 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? **Yes** Where? \_\_\_\_\_

Length Drill Pipe **1879** ft. I.D. Drill Pipe **2.5** in. Length Weight Pipe **1714** ft. I.D. Weight Pipe **2.5** in. Length Drill Collars **3016** ft.

I. D. Drill Collars **2.5** in. Length D.S.T. Tool **80** ft.

Remarks \_\_\_\_\_

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

Date 8-10-70 Recorder No. 2606 Capacity 4150 Test Ticket No. 13935  
 Clock No. 6895 Elevation 2301 Kelly Bushings Location \_\_\_\_\_ Ft. 3693  
 Well Temperature 115 °F

Point	Pressure		Time Given	A.	M	Time Computed
A Initial Hydrostatic Mud	<u>2041</u>	P.S.I.	<u>9:38</u>			
B First Initial Flow Pressure	<u>54</u>	P.S.I.				<u>15</u> Mins.
C First Final Flow Pressure	<u>108</u>	P.S.I.				<u>30</u> Mins.
D Initial Closed-in Pressure	<u>958</u>	P.S.I.				<u>60</u> Mins.
E Second Initial Flow Pressure	<u>145</u>	P.S.I.				<u>30</u> Mins.
F Second Final Flow Pressure	<u>328</u>	P.S.I.				
G Final Closed-in Pressure	<u>934</u>	P.S.I.				
H Final Hydrostatic Mud	<u>2017</u>	P.S.I.				

**PRESSURE BREAKDOWN**

**First Flow Pressure**  
Breakdown: 3 Inc. of 5 mins. and a final inc. of 1 Min.

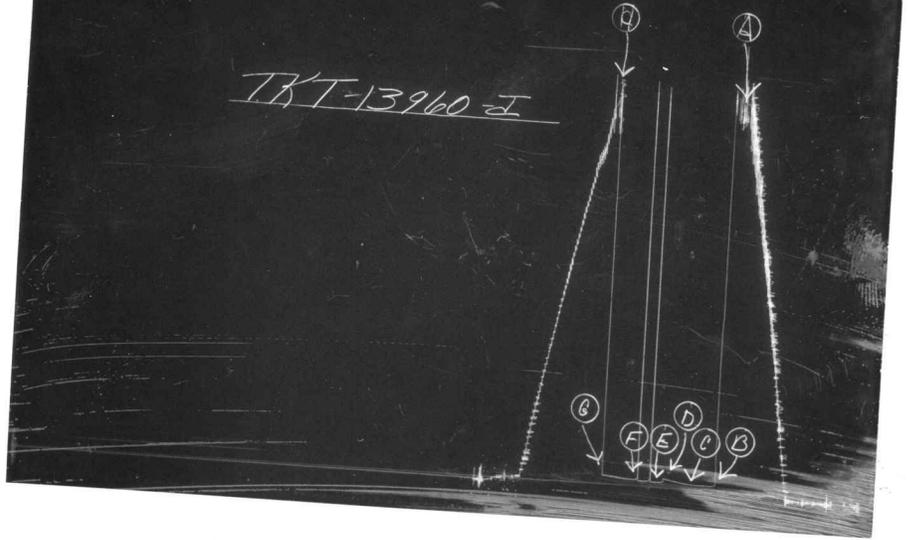
**Initial Shut-In**  
Breakdown: 10 Inc. of 3 mins. and a final inc. of \_\_\_\_\_ Min.

**Second Flow Pressure**  
Breakdown: 12 Inc. of 5 mins. and a final inc. of \_\_\_\_\_ Min.

**Final Shut-In**  
Breakdown: 10 Inc. of 3 mins. and a final inc. of \_\_\_\_\_ Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>54</u>	<u>0</u>	<u>108</u>	<u>0</u>	<u>145</u>	<u>0</u>	<u>328</u>
P 2 <u>5</u>	<u>62</u>	<u>3</u>	<u>802</u>	<u>5</u>	<u>149</u>	<u>3</u>	<u>848</u>
P 3 <u>10</u>	<u>81</u>	<u>6</u>	<u>879</u>	<u>10</u>	<u>166</u>	<u>6</u>	<u>877</u>
P 4 <u>15</u>	<u>97</u>	<u>9</u>	<u>910</u>	<u>15</u>	<u>178</u>	<u>9</u>	<u>896</u>
P 5 <u>16</u>	<u>108</u>	<u>12</u>	<u>927</u>	<u>20</u>	<u>197</u>	<u>12</u>	<u>908</u>
P 6 _____		<u>15</u>	<u>937</u>	<u>25</u>	<u>214</u>	<u>15</u>	<u>916</u>
P 7 _____		<u>18</u>	<u>943</u>	<u>30</u>	<u>232</u>	<u>18</u>	<u>921</u>
P 8 _____		<u>21</u>	<u>950</u>	<u>35</u>	<u>249</u>	<u>21</u>	<u>927</u>
P 9 _____		<u>24</u>	<u>953</u>	<u>40</u>	<u>266</u>	<u>24</u>	<u>929</u>
P10 _____		<u>27</u>	<u>956</u>	<u>45</u>	<u>280</u>	<u>27</u>	<u>933</u>
P11 _____		<u>30</u>	<u>958</u>	<u>50</u>	<u>295</u>	<u>30</u>	<u>934</u>
P12 _____				<u>55</u>	<u>312</u>		
P13 _____				<u>60</u>	<u>328</u>		
P14 _____							
P15 _____							
P16 _____							
P17 _____							
P18 _____							
P19 _____							
P20 _____							

TKT-13960-I





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

10-145-200

Company **Abercrombie Drilling Inc.** Lease & Well No. **Gottshalk #1**

Elevation **2301 Kelly Bushings** Formation **Kansas City** Effective Pay \_\_\_\_\_ Ft. Ticket No. **13960**

Date **8-11-70** Sec. **10** Twp. **14S** Range **20W** County **E111s** State **Kansas**

Test Approved by **Jack K. Wharton** Western Representative **Don Fisher**

Formation Test No. **2** O.K.  Misrun \_\_\_\_\_ Interval Tested From **3700'** to **3745'** Total Depth **3745'**

Size Main Hole **6 3/4"** Rat Hole \_\_\_\_\_ Conv.  B.T. \_\_\_\_\_ Damaged Yes  No Conv.  B.T. \_\_\_\_\_ Damaged Yes  No

Packer Depth **3695** Ft. Size **5 1/2"** Packer Depth **3700** Ft. Size **6"**

Straddle \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Conv. \_\_\_\_\_ B.T. \_\_\_\_\_ Damaged Yes \_\_\_\_\_ No \_\_\_\_\_

Packer Depth \_\_\_\_\_ Ft. Size \_\_\_\_\_

Tool Size **4 1/2" O.D.** Tool Jr. Size **3 1/2" I.F.** Anchor Length **45** Ft. Size **4 1/2" O.D.**

RECORDERS Depth **3737** Ft. Clock No. **8475** Depth **3740** Ft. Clock No. **6806**

Top Make **Amerada** Cap. **4000** No. **3351** Inside ~~Outside~~ Bottom Make **Amerada** Cap. **4150** No. **2604** ~~Inside~~ Outside

Below Straddle: Depth \_\_\_\_\_ Clock No. \_\_\_\_\_ Inside \_\_\_\_\_ Outside \_\_\_\_\_

Top Make \_\_\_\_\_ Cap. \_\_\_\_\_ No. \_\_\_\_\_ Inside \_\_\_\_\_ Outside \_\_\_\_\_

Time Set Packer **12:39 A.M.**

Tool Open I.F.P. From **12:40** M. to **12:50A.M.** Hr. **10** Min. From (B) **24** P.S.I. To (C) **24** P.S.I.

Tool Closed I.C.I.P. From **12:50** M. to **1:20A.M.** Hr. **30** Min. (D) **51** P.S.I.

Tool Open F.F.P. From **1:20** M. to **1:40A.M.** Hr. **20** Min. From (E) **28** P.S.I. To (F) **29** P.S.I.

Tool Closed F.C.I.P. From **1:40M.** to **2:10A.M.** Hr. **30** Min. (G) **41** P.S.I.

Initial Hydrostatic Pressure (A) **2079** P.S.I. Final Hydrostatic Pressure (H) **2030** P.S.I.

SURFACE Size Choke **1/4** In. Max. Press. P.S.I. \_\_\_\_\_ Time \_\_\_\_\_ Description of Flow \_\_\_\_\_

INFORMATION \_\_\_\_\_ M. \_\_\_\_\_

\_\_\_\_\_ M. \_\_\_\_\_

\_\_\_\_\_ M. \_\_\_\_\_

BLOW **None** Bottom Choke Size **3/4** In.

Did Well Flow Yes  No \_\_\_\_\_ Recovery Total Ft. **12 feet mud**

Reversed Out Yes  No Mud Type **Starch** Viscosity **42** Weight **10.1** Water Loss **12.5** 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 **1683** ft. I.D. Drill Pipe **2.5** in. Length Weight Pipe **1997** ft. I.D. Weight Pipe **2.5** in. Length Drill Collars \_\_\_\_\_ ft.

I. D. Drill Collars \_\_\_\_\_ in. Length D.S.T. Tool **65** ft.

Remarks **Flushed tool at 1:30 & 1:40**

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

Date 8-11-70 Recorder No. 3351 Capacity 4000 Test Ticket No. 13960  
 Clock No. 8475 Elevation 2301 Kelly Bushings Location 3737 Ft.       
 Well Temperature 116 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2079</u> P.S.I.	Open Tool	<u>12:39 A.</u> M	
B First Initial Flow Pressure	<u>24</u> P.S.I.	First Flow Pressure	<u>10</u> Mins.	<u>10</u> Mins.
C First Final Flow Pressure	<u>24</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>51</u> P.S.I.	Second Flow Pressure	<u>20</u> Mins.	<u>20</u> Mins.
E Second Initial Flow Pressure	<u>28</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>29</u> P.S.I.			
G Final Closed-in Pressure	<u>41</u> P.S.I.			
H Final Hydrostatic Mud	<u>2030</u> P.S.I.			

**PRESSURE BREAKDOWN**

**First Flow Pressure**  
Breakdown: 2 Inc.  
of 5 mins. and a  
final inc. of      Min.

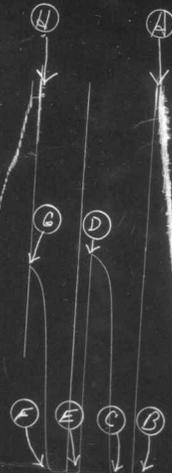
**Initial Shut-In**  
Breakdown: 10 Inc.  
of 3 mins. and a  
final inc. of      Min.

**Second Flow Pressure**  
Breakdown: 4 Inc.  
of 5 mins. and a  
final inc. of      Min.

**Final Shut-In**  
Breakdown: 10 Inc.  
of 3 mins. and a  
final inc. of      Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>24</u>	<u>0</u>	<u>24</u>	<u>0</u>	<u>28</u>	<u>0</u>	<u>29</u>
P 2 <u>5</u>	<u>24</u>	<u>3</u>	<u>25</u>	<u>5</u>	<u>28</u>	<u>3</u>	<u>32</u>
P 3 <u>10</u>	<u>24</u>	<u>6</u>	<u>26</u>	<u>10</u>	<u>28</u>	<u>6</u>	<u>32</u>
P 4 <u>    </u>	<u>    </u>	<u>9</u>	<u>27</u>	<u>15</u>	<u>29</u>	<u>9</u>	<u>33</u>
P 5 <u>    </u>	<u>    </u>	<u>12</u>	<u>28</u>	<u>20</u>	<u>29</u>	<u>12</u>	<u>34</u>
P 6 <u>    </u>	<u>    </u>	<u>15</u>	<u>31</u>	<u>    </u>	<u>    </u>	<u>15</u>	<u>35</u>
P 7 <u>    </u>	<u>    </u>	<u>18</u>	<u>34</u>	<u>    </u>	<u>    </u>	<u>18</u>	<u>36</u>
P 8 <u>    </u>	<u>    </u>	<u>21</u>	<u>39</u>	<u>    </u>	<u>    </u>	<u>21</u>	<u>37</u>
P 9 <u>    </u>	<u>    </u>	<u>24</u>	<u>43</u>	<u>    </u>	<u>    </u>	<u>24</u>	<u>38</u>
P10 <u>    </u>	<u>    </u>	<u>27</u>	<u>48</u>	<u>    </u>	<u>    </u>	<u>27</u>	<u>40</u>
P11 <u>    </u>	<u>    </u>	<u>30</u>	<u>51</u>	<u>    </u>	<u>    </u>	<u>30</u>	<u>41</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>

TKT-13961-J



10-145-20w



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

Company **Abercrombie Drilling Inc.** Lease & Well No. **Gottshalk #1**  
Elevation **2301 Kelly Bushings** Formation **Kansas City** Effective Pay \_\_\_\_\_ Ft. Ticket No. **13961**  
Date **8-11-70** Sec. **10** Twp. **14S** Range **20W** County **Ellis** State **Kansas**  
Test Approved by **Jack K. Wharton** Western Representative **Don Fisher**

Formation Test No. **3** O.K.  Misrun \_\_\_\_\_ Interval Tested From **3750'** to **3790'** Total Depth **3790'**  
Size Main Hole **6 3/4"** Rat Hole \_\_\_\_\_ Conv.  B.T. \_\_\_\_\_ Damaged Yes  No Conv.  B.T. \_\_\_\_\_ Damaged Yes  No  
Packer Depth **3745** Ft. Size **5 1/2"** Packer Depth **3750** Ft. Size **6"**  
Straddle Yes \_\_\_\_\_ No  Conv. \_\_\_\_\_ B.T. \_\_\_\_\_ Damaged Yes \_\_\_\_\_ No

Tool Size **4 1/2" O.D.** Tool Jt. Size **3 1/2" I.F.** Anchor Length **40** Ft. Size **4 1/2" O.D.**  
Packer Depth \_\_\_\_\_ Ft. Size \_\_\_\_\_

RECORDERS Depth **3782** Ft. Clock No. **8475** Depth **3785** Ft. Clock No. **6806**  
Top Make **Amerada** Cap. **4000** No. **3351** ~~Inside~~ ~~Outside~~ Bottom Make **Amerada** Cap. **4150** No. **2604** ~~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 **4:25** P.M.  
Tool Open I.F.P. From **4:26** M. to **4:39** P.M. Hr. **13** Min. From (B) **76** P.S.I. To (C) **61** P.S.I.  
Tool Closed I.C.I.P. From **4:39** M. to **5:09** P.M. Hr. **30** Min. (D) **1179** P.S.I.  
Tool Open F.F.P. From **5:09** M. to **5:29** P.M. Hr. **20** Min. From (E) **76** P.S.I. To (F) **62** P.S.I.  
Tool Closed F.C.I.P. From **5:29** M. to **5:59** P.M. Hr. **30** Min. (G) **1086** P.S.I.  
Initial Hydrostatic Pressure (A) **1971** P.S.I. Final Hydrostatic Pressure (H) **1940** P.S.I.

SURFACE Size Choke **1/4** In. Max. Press. P.S.I. \_\_\_\_\_ Time \_\_\_\_\_ Description of Flow \_\_\_\_\_  
INFORMATION \_\_\_\_\_ M. \_\_\_\_\_  
\_\_\_\_\_ M. \_\_\_\_\_  
\_\_\_\_\_ M. \_\_\_\_\_

BLOW **Weak for 13 minutes of initial flow than stopped** Bottom Choke Size **3/4** In.  
Did Well Flow Yes  No \_\_\_\_\_ Recovery Total Ft. **15 feet muddy water**

Reversed Out Yes  No \_\_\_\_\_ Mud Type **Starch** Viscosity **40** Weight **10.0** Water Loss **10.0** 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? **Yes** Where? \_\_\_\_\_  
Length Drill Pipe **1683** ft. I.D. Drill Pipe **2.5** in. Length Weight Pipe **2047** ft. I.D. Weight Pipe **2.5** in. Length Drill Collars \_\_\_\_\_ ft.  
I. D. Drill Collars \_\_\_\_\_ in. Length D.S.T. Tool **60** ft.

Remarks **Flushed 10 minutes on final flow pressure**

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

Date 8-11-70

Test Ticket No. 13961

Recorder No. 3351 Capacity 4000

Location 3782 Ft.

Clock No. 8475 Elevation 2301 Kelly Bushings

Well Temperature 115 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1971</u>	P.S.I.	<u>4:25 P.</u>	<u>M</u>
B First Initial Flow Pressure	<u>76</u>	P.S.I.	<u>13</u> Mins.	<u>14</u> Mins.
C First Final Flow Pressure	<u>61</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>1179</u>	P.S.I.	<u>20</u> Mins.	<u>20</u> Mins.
E Second Initial Flow Pressure	<u>76</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>62</u>	P.S.I.		
G Final Closed-in Pressure	<u>1086</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1940</u>	P.S.I.		

**PRESSURE BREAKDOWN**

First Flow Pressure  
Breakdown: 2 Inc.  
of 5 mins. and a  
final inc. of 4 Min.

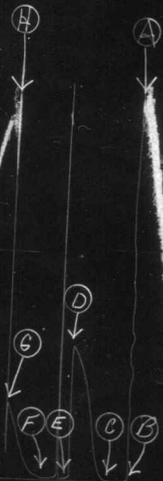
Initial Shut-In  
Breakdown: 10 Inc.  
of 3 mins. and a  
final inc. of      Min.

Second Flow Pressure  
Breakdown: 4 Inc.  
of 5 mins. and a  
final inc. of      Min.

Final Shut-In  
Breakdown: 10 Inc.  
of 3 mins. and a  
final inc. of      Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>76</u>	<u>0</u>	<u>61</u>	<u>0</u>	<u>76</u>	<u>0</u>	<u>62</u>
P 2 <u>5</u>	<u>62</u>	<u>3</u>	<u>158</u>	<u>5</u>	<u>71</u>	<u>3</u>	<u>96</u>
P 3 <u>10</u>	<u>61</u>	<u>6</u>	<u>457</u>	<u>10</u>	<u>71</u>	<u>6</u>	<u>206</u>
P 4 <u>14</u>	<u>61</u>	<u>9</u>	<u>798</u>	<u>15</u>	<u>63</u>	<u>9</u>	<u>446</u>
P 5 <u>    </u>	<u>    </u>	<u>12</u>	<u>992</u>	<u>20</u>	<u>62</u>	<u>12</u>	<u>734</u>
P 6 <u>    </u>	<u>    </u>	<u>15</u>	<u>1076</u>	<u>    </u>	<u>    </u>	<u>15</u>	<u>882</u>
P 7 <u>    </u>	<u>    </u>	<u>18</u>	<u>1116</u>	<u>    </u>	<u>    </u>	<u>18</u>	<u>976</u>
P 8 <u>    </u>	<u>    </u>	<u>21</u>	<u>1142</u>	<u>    </u>	<u>    </u>	<u>21</u>	<u>1024</u>
P 9 <u>    </u>	<u>    </u>	<u>24</u>	<u>1160</u>	<u>    </u>	<u>    </u>	<u>24</u>	<u>1052</u>
P10 <u>    </u>	<u>    </u>	<u>27</u>	<u>1174</u>	<u>    </u>	<u>    </u>	<u>27</u>	<u>1073</u>
P11 <u>    </u>	<u>    </u>	<u>30</u>	<u>1179</u>	<u>    </u>	<u>    </u>	<u>30</u>	<u>1086</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>

TKT-13962-0





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

10-145-20w

Company **Abercrombie Drilling Inc.** Lease & Well No. **Gottshalk #1**  
Elevation **2301 Kelly Bushings** Formation **Arbuckle** Effective Pay \_\_\_\_\_ Ft. Ticket No. **13962**  
Date **8-13-70** Sec. **10** Twp. **14S** Range **20W** County **Ellis** State **Kansas**  
Test Approved by **Jack K. Wharton** Western Representative **Don Fisher**

Formation Test No. **4** O.K.  Misrun \_\_\_\_\_ Interval Tested From **3900'** to **3942'** Total Depth **3942'**  
Size Main Hole **6 3/4"** Rat Hole \_\_\_\_\_ Conv.  B.T. \_\_\_\_\_ Damaged \_\_\_\_\_ Yes \_\_\_\_\_ No Conv.  B.T. \_\_\_\_\_ Damaged \_\_\_\_\_ Yes \_\_\_\_\_ No  
Packer Depth **3895** Ft. Size **5 1/2"** Packer Depth **3900** Ft. Size **6"**  
Straddle \_\_\_\_\_ Yes \_\_\_\_\_ No  Conv. \_\_\_\_\_ B.T. \_\_\_\_\_ Damaged \_\_\_\_\_ Yes \_\_\_\_\_ No

Packer Depth \_\_\_\_\_ Ft. Size \_\_\_\_\_  
Tool Size **4 1/2" O.D.** Tool Jt. Size **3 1/2" I.F.** Anchor Length **42** Ft. Size **4 1/2" O.D.**

RECORDERS Depth **3934** Ft. Clock No. **8475** Depth **3937** Ft. Clock No. **6806**  
Top Make **Amerada** Cap. **4000** No. **3351** Inside ~~Outside~~ Bottom Make **Amerada** Cap. **4150** No. **2604** ~~Inside~~ Outside  
Below Straddle: Depth \_\_\_\_\_ Clock No. \_\_\_\_\_ Inside \_\_\_\_\_ Outside \_\_\_\_\_  
Top Make \_\_\_\_\_ Cap. \_\_\_\_\_ No. \_\_\_\_\_ Inside \_\_\_\_\_ Outside \_\_\_\_\_  
Bottom Make \_\_\_\_\_ Cap. \_\_\_\_\_ No. \_\_\_\_\_ Inside \_\_\_\_\_ Outside \_\_\_\_\_

Time Set Packer **3:40** **A.M.**  
Tool Open I.F.P. From **3:41** M. to **3:56A.** M. Hr. **15** Min. From (B) **14** P.S.I. To (C) **14** P.S.I.  
Tool Closed I.C.I.P. From **3:56** M. to **4:26A.** M. Hr. **30** Min. (D) **780** P.S.I.  
Tool Open F.F.P. From **4:26** M. to **4:46A.** M. Hr. **20** Min. From (E) **18** P.S.I. To (F) **19** P.S.I.  
Tool Closed F.C.I.P. From **4:46** M. to **5:16A.** M. Hr. **30** Min. (G) **440** P.S.I.  
Initial Hydrostatic Pressure (A) **2054** P.S.I. Final Hydrostatic Pressure (H) **2047** P.S.I.

SURFACE Size Choke **1/4** In. Max. Press. P.S.I. \_\_\_\_\_ Time \_\_\_\_\_ Description of Flow \_\_\_\_\_  
INFORMATION \_\_\_\_\_ M. \_\_\_\_\_  
\_\_\_\_\_ M. \_\_\_\_\_  
\_\_\_\_\_ M. \_\_\_\_\_

BLOW **Weak** Bottom Choke Size **3/4** In.  
Did Well Flow \_\_\_\_\_ Yes  No \_\_\_\_\_ Recovery Total Ft. **20 feet mud**

Reversed Out \_\_\_\_\_ Yes  No \_\_\_\_\_ Mud Type **Starch** Viscosity **38** Weight **9.9** Water Loss **10.1** cc. Maximum Temp. **118** °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 **1683** ft. I.D. Drill Pipe **2.5** in. Length Weight Pipe **2197** ft. I.D. Weight Pipe **2.5** in. Length Drill Collars \_\_\_\_\_ ft.  
I. D. Drill Collars \_\_\_\_\_ in. Length D.S.T. Tool **62** ft.

Remarks **Flushed tool at 4:36**

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

Date 8-13-70

Test Ticket No. 13962

Recorder No. 3351 Capacity 4000

Location 3934 Ft.

Clock No. 8475 Elevation 2301 Kelly Bushings

Well Temperature 118 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2054</u> P.S.I.	Open Tool	<u>3:40</u> A.M.	
B First Initial Flow Pressure	<u>14</u> P.S.I.	First Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins.
C First Final Flow Pressure	<u>14</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>780</u> P.S.I.	Second Flow Pressure	<u>20</u> Mins.	<u>20</u> Mins.
E Second Initial Flow Pressure	<u>18</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>29</u> Mins.
F Second Final Flow Pressure	<u>19</u> P.S.I.			
G Final Closed-in Pressure	<u>440</u> P.S.I.			
H Final Hydrostatic Mud	<u>2047</u> P.S.I.			

**PRESSURE BREAKDOWN**

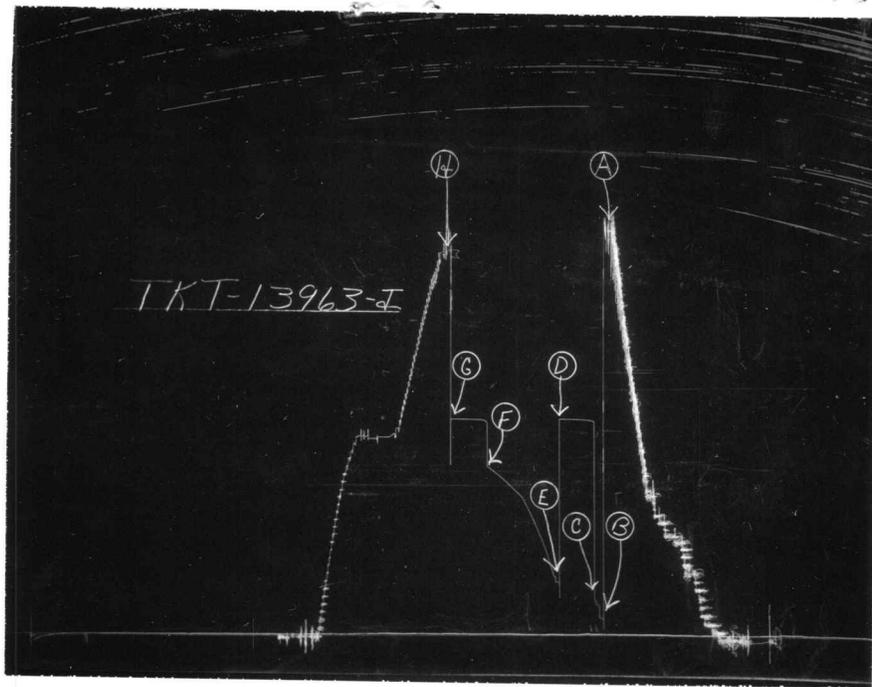
**First Flow Pressure**  
Breakdown: 3 Inc.  
of 5 mins. and a  
final inc. of      Min.

**Initial Shut-In**  
Breakdown: 10 Inc.  
of 3 mins. and a  
final inc. of      Min.

**Second Flow Pressure**  
Breakdown: 4 Inc.  
of 5 mins. and a  
final inc. of      Min.

**Final Shut-In**  
Breakdown: 9 Inc.  
of 3 mins. and a  
final inc. of 2 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>14</u>	<u>0</u>	<u>18</u>	<u>0</u>	<u>19</u>
P 2 <u>5</u>	<u>14</u>	<u>3</u>	<u>26</u>	<u>5</u>	<u>18</u>	<u>3</u>	<u>22</u>
P 3 <u>10</u>	<u>14</u>	<u>6</u>	<u>64</u>	<u>10</u>	<u>19</u>	<u>6</u>	<u>27</u>
P 4 <u>15</u>	<u>14</u>	<u>9</u>	<u>160</u>	<u>15</u>	<u>19</u>	<u>9</u>	<u>42</u>
P 5 <u>    </u>	<u>    </u>	<u>12</u>	<u>326</u>	<u>20</u>	<u>19</u>	<u>12</u>	<u>62</u>
P 6 <u>    </u>	<u>    </u>	<u>15</u>	<u>474</u>	<u>    </u>	<u>    </u>	<u>15</u>	<u>102</u>
P 7 <u>    </u>	<u>    </u>	<u>18</u>	<u>584</u>	<u>    </u>	<u>    </u>	<u>18</u>	<u>166</u>
P 8 <u>    </u>	<u>    </u>	<u>21</u>	<u>664</u>	<u>    </u>	<u>    </u>	<u>21</u>	<u>254</u>
P 9 <u>    </u>	<u>    </u>	<u>24</u>	<u>730</u>	<u>    </u>	<u>    </u>	<u>24</u>	<u>336</u>
P10 <u>    </u>	<u>    </u>	<u>27</u>	<u>758</u>	<u>    </u>	<u>    </u>	<u>27</u>	<u>410</u>
P11 <u>    </u>	<u>    </u>	<u>30</u>	<u>780</u>	<u>    </u>	<u>    </u>	<u>29</u>	<u>440</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>





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

10-145-201

Company **Abercrombie Drilling Inc.** Lease & Well No. **Gottshalk #1**

Elevation **2301 Kelly Bushings** Formation **Reagan Sand** Effective Pay \_\_\_\_\_ Ft. Ticket No. **13963**

Date **8-13-70** Sec. **10** Twp. **14S** Range **20W** County **Ellis** State **Kansas**

Test Approved by **Jack K. Wharton** Western Representative **Don Fisher**

Formation Test No. **5** O.K.  Misrun \_\_\_\_\_ Interval Tested From **3941'** to **3949'** Total Depth **3949'**

Size Main Hole **5 3/4"** Rat Hole \_\_\_\_\_ Conv.  B.T. Damaged Yes  No Conv.  B.T. Damaged Yes  No

Packer Depth **3936** Ft. Size **5 1/2"** Packer Depth **3941** Ft. Size **6"**

Straddle Yes \_\_\_\_\_ No  Conv. B.T. Damaged Yes \_\_\_\_\_ No

Packer Depth \_\_\_\_\_ Ft. Size \_\_\_\_\_

Tool Size **4 1/2" O.D.** Tool Jt. Size **3 1/2" I.F.** Anchor Length **8** Ft. Size **4 1/2" O.D.**

RECORDERS Depth **3934** Ft. Clock No. **8475** Depth **3944** Ft. Clock No. **6806**

Top Make **Amerada** Cap. **4000** No. **3351** ~~Inside~~ Outside Bottom Make **Amerada** Cap. **4150** No. **2604** ~~Inside~~ Outside

Below Straddle: Depth \_\_\_\_\_ Clock No. \_\_\_\_\_ Depth \_\_\_\_\_ Ft. Clock No. \_\_\_\_\_

Top Make \_\_\_\_\_ Cap. \_\_\_\_\_ No. \_\_\_\_\_ Outside Bottom Make \_\_\_\_\_ Cap. \_\_\_\_\_ No. \_\_\_\_\_ Outside

Time Set Packer **10:30** P.M.

Tool Open I.F.P. From **10:31** M. to **10:36P** M. Hr. **5** Min. From (B) **29** P.S.I. To (C) **160** P.S.I.

Tool Closed I.C.I.P. From **10:36** M. to **11:06P** M. Hr. **30** Min. (D) **1154** P.S.I.

Tool Open F.F.P. From **11:06** M. to **12:06A.** M. **1** Hr. Min. From (E) **278** P.S.I. To (F) **898** P.S.I.

Tool Closed F.C.I.P. From **12:06** M. to **12:36A.** M. Hr. **30** Min. (G) **1153** P.S.I.

Initial Hydrostatic Pressure (A) **2118** P.S.I. Final Hydrostatic Pressure (H) **2090** P.S.I.

SURFACE Size Choke **1/4** In. Max. Press. P.S.I. \_\_\_\_\_ Time \_\_\_\_\_ Description of Flow \_\_\_\_\_

INFORMATION \_\_\_\_\_ M. \_\_\_\_\_

\_\_\_\_\_ M. \_\_\_\_\_

\_\_\_\_\_ M. \_\_\_\_\_

BLOW **Strong thru out** Bottom Choke Size **3/4** In.

Did Well Flow Yes  No \_\_\_\_\_ Recovery Total Ft. **2070 Salt water**

Reversed Out  Yes \_\_\_\_\_ No \_\_\_\_\_ Mud Type **Starch** Viscosity **41** Weight **10.0** Water Loss **10.6** cc. Maximum Temp. **125** °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 **1683** ft. I.D. Drill Pipe **2.5** in. Length Weight Pipe **2235** ft. I.D. Weight Pipe **2.5** in. Length Drill Collars \_\_\_\_\_ ft.

I. D. Drill Collars \_\_\_\_\_ in. Length D.S.T. Tool **31** ft.

Remarks **S11d 2 feet**

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

Date 8-13-70 Test Ticket No. 13963  
 Recorder No. 3351 Capacity 4000 Location 3934 Ft.  
 Clock No. 8475 Elevation 2301 Kelly Bushings Well Temperature 125 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<b>2118</b>	P.S.I.	<b>10:30 P.</b>	<b>M</b>
B First Initial Flow Pressure	<b>29</b>	P.S.I.	<b>5</b> Mins.	<b>5</b> Mins.
C First Final Flow Pressure	<b>160</b>	P.S.I.	<b>30</b> Mins.	<b>30</b> Mins.
D Initial Closed-in Pressure	<b>1154</b>	P.S.I.	<b>60</b> Mins.	<b>60</b> Mins.
E Second Initial Flow Pressure	<b>278</b>	P.S.I.	<b>30</b> Mins.	<b>30</b> Mins.
F Second Final Flow Pressure	<b>898</b>	P.S.I.		
G Final Closed-in Pressure	<b>1153</b>	P.S.I.		
H Final Hydrostatic Mud	<b>2090</b>	P.S.I.		

**PRESSURE BREAKDOWN**

**First Flow Pressure**  
 Breakdown: 1 Inc.  
 of 5 mins. and a  
 final inc. of      Min.

**Initial Shut-In**  
 Breakdown: 10 Inc.  
 of 3 mins. and a  
 final inc. of      Min.

**Second Flow Pressure**  
 Breakdown: 11 Inc.  
 of 5 mins. and a  
 final inc. of 1 Min.

**Final Shut-In**  
 Breakdown: 10 Inc.  
 of 3 mins. and a  
 final inc. of      Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>29</u>	<u>0</u>	<u>160</u>	<u>0</u>	<u>278</u>	<u>0</u>	<u>898</u>
P 2 <u>5</u>	<u>160</u>	<u>3</u>	<u>708</u>	<u>5</u>	<u>326</u>	<u>3</u>	<u>1146</u>
P 3		<u>6</u>	<u>1149</u>	<u>10</u>	<u>433</u>	<u>6</u>	<u>1148</u>
P 4		<u>9</u>	<u>1150</u>	<u>15</u>	<u>526</u>	<u>9</u>	<u>1148</u>
P 5		<u>12</u>	<u>1151</u>	<u>20</u>	<u>610</u>	<u>12</u>	<u>1149</u>
P 6		<u>15</u>	<u>1152</u>	<u>25</u>	<u>682</u>	<u>15</u>	<u>1150</u>
P 7		<u>18</u>	<u>1153</u>	<u>30</u>	<u>744</u>	<u>18</u>	<u>1151</u>
P 8		<u>21</u>	<u>1154</u>	<u>35</u>	<u>776</u>	<u>21</u>	<u>1152</u>
P 9		<u>24</u>	<u>1154</u>	<u>40</u>	<u>810</u>	<u>24</u>	<u>1152</u>
P10		<u>27</u>	<u>1154</u>	<u>45</u>	<u>840</u>	<u>27</u>	<u>1153</u>
P11		<u>30</u>	<u>1154</u>	<u>50</u>	<u>868</u>	<u>30</u>	<u>1153</u>
P12				<u>55</u>	<u>893</u>		
P13				<u>56</u>	<u>898</u>		
P14							
P15							
P16							
P17							
P18							
P19							
P20							