

**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **H & B Petroleum Corp**

Box 277  
Ellinwood, KS 67526

ATTN: Al Hammersmith

**7-10-19 Rooks,KS**

**Ouderkirk # 14**

Start Date: 2010.11.16 @ 09:40:03

End Date: 2010.11.16 @ 16:25:03

Job Ticket #: 040961      DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

H & B Petroleum Corp

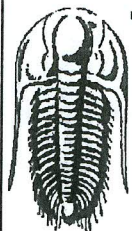
Ouderkirk # 14

7-10-19 Rooks,KS

DST # 1

Topeka

2010.11.16



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

H & B Petroleum Corp

**Ouderkirk # 14**

Box 277  
Ellinwood, KS 67526

**7-10-19 Rooks,KS**

Job Ticket: 040961      DST#: 1

ATTN: Al Hammersmith

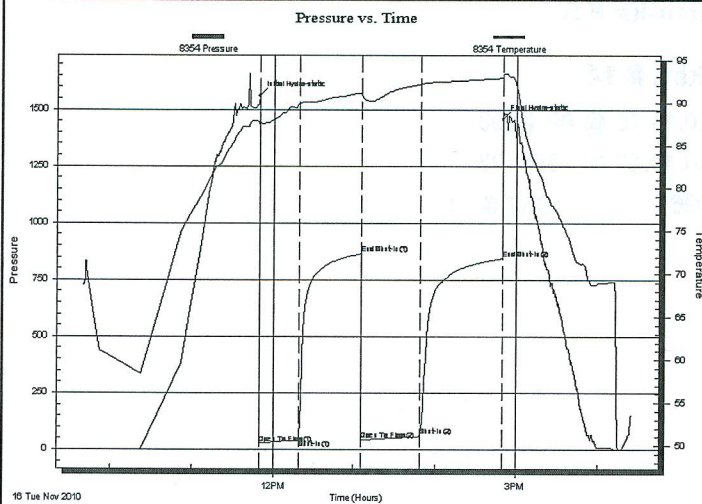
Test Start: 2010.11.16 @ 09:40:03

## GENERAL INFORMATION:

Formation: **Topeka**  
 Deviated: **No** Whipstock:                      ft (KB)  
 Test Type: **Conventional Bottom Hole**  
 Time Tool Opened: **11:49:33**  
 Tester: **Dan Bangle**  
 Time Test Ended: **16:25:03**  
 Unit No: **38**  
 Interval: **3236.00 ft (KB) To 3273.00 ft (KB) (TVD)**  
 Reference Elevations: **2233.00 ft (KB)**  
 Total Depth: **3273.00 ft (KB) (TVD)**  
**2227.00 ft (CF)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Good**  
 KB to GR/CF: **6.00 ft**

**Serial #: 8354**      **Inside**  
 Press@RunDepth: **59.17 psig @ 3237.00 ft (KB)**      Capacity: **8000.00 psig**  
 Start Date: **2010.11.16**      End Date: **2010.11.16**      Last Calib.: **2010.11.16**  
 Start Time: **09:40:04**      End Time: **16:25:03**      Time On Btm: **2010.11.16 @ 11:49:18**  
 Time Off Btm: **2010.11.16 @ 14:49:48**

**TEST COMMENT:** IF-Slid tool 8' to bottom - lost 10'-15' of mud - Weak blow building to 3/4"  
 FF-Weak building to 1/4"



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1562.36	87.77	Initial Hydro-static
1	27.27	87.34	Open To Flow (1)
31	41.54	89.87	Shut-In(1)
76	863.40	91.12	End Shut-In(1)
77	42.90	90.86	Open To Flow (2)
120	59.17	92.18	Shut-In(2)
181	842.46	92.88	End Shut-In(2)
181	1459.04	93.16	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
90.00	Mdy Wtr w/oil show in top tool	1.26

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

H & B Petroleum Corp

**Ouderkirk # 14**

Box 277  
Ellinwood, KS 67526

**7-10-19 Rooks,KS**

Job Ticket: 040961

DST#: 1

ATTN: Al Hammersmith

Test Start: 2010.11.16 @ 09:40:03

**Tool Information**

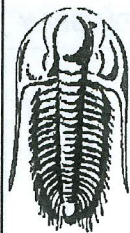
Drill Pipe:	Length: 3213.00 ft	Diameter: 3.80 inches	Volume: 45.07 bbl	Tool Weight:	3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	65000.00 lb
			<b>Total Volume: 45.07 bbl</b>	Tool Chased	8.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3236.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	37.00 ft				
Tool Length:	65.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

**Tool Description**

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3209.00	
Shut In Tool	5.00			3214.00	
Hydraulic tool	5.00			3219.00	
Jars	5.00			3224.00	
Safety Joint	3.00			3227.00	
Packer	5.00			3232.00	28.00 Bottom Of Top Packer
Packer	4.00			3236.00	
Stubb	1.00			3237.00	
Recorder	0.00	8354	Inside	3237.00	
Recorder	0.00	8653	Outside	3237.00	
Perforations	33.00			3270.00	
Bullnose	3.00			3273.00	37.00 Bottom Packers & Anchor

**Total Tool Length: 65.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

H & B Petroleum Corp

**Ouderkirk # 14**

Box 277  
Ellinwood, KS 67526

**7-10-19 Rooks,KS**

Job Ticket: 040961

DST#: 1

ATTN: Al Hammersmith

Test Start: 2010.11.16 @ 09:40:03

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

60000 ppm

Viscosity: 40.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.57 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	Mdy Wtr w /oil show in top tool	1.262

Total Length: 90.00 ft      Total Volume: 1.262 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

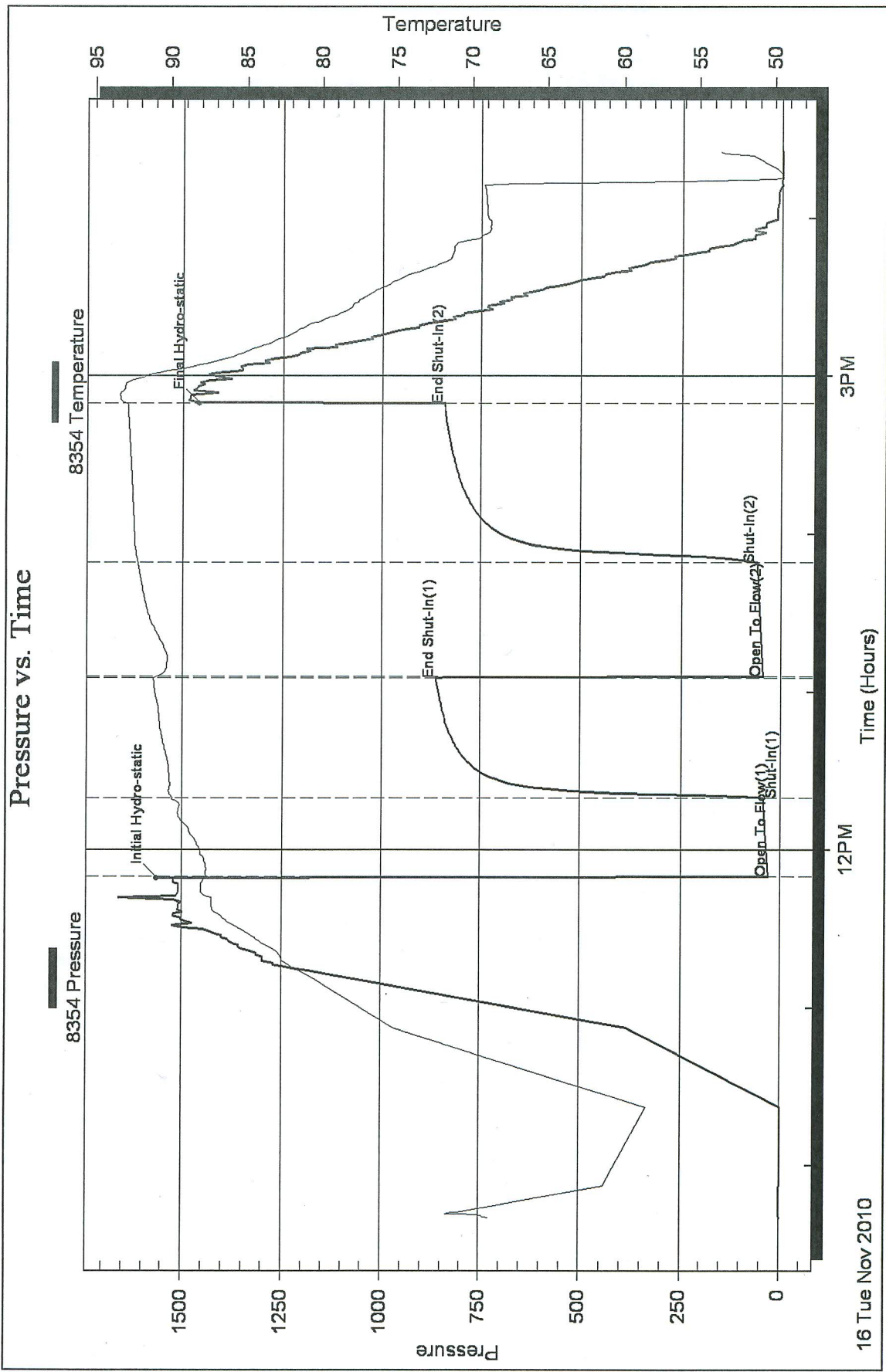
Serial #:

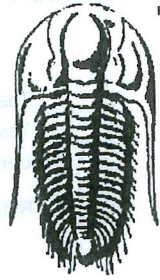
Laboratory Name:

Laboratory Location:

Recovery Comments: Rw .13 @ 70 = 60000ppm

# Pressure vs. Time





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## DRILL STEM TEST REPORT

Prepared For: **H & B Petroleum Corp**

Box 277  
Ellinwood, KS 67526

ATTN: Al Hammersmith

**7-10-19 Rooks,KS**

**Ouderkirk # 14**

Start Date: 2010.11.17 @ 17:35:44

End Date: 2010.11.18 @ 00:33:44

Job Ticket #: 040962      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

H & B Petroleum Corp

Ouderkirk # 14

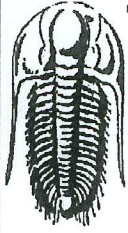
7-10-19 Rooks,KS

DST # 2

B-F

LKC

2010.11.17



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

H & B Petroleum Corp

Ouderkirk # 14

Box 277  
Ellinwood, KS 67526

7-10-19 Rooks, KS

Job Ticket: 040962

DST#: 2

ATTN: Al Hammersmith

Test Start: 2010.11.17 @ 17:35:44

### GENERAL INFORMATION:

Formation: **B-F LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:23:59

Time Test Ended: 00:33:44

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 38

Interval: **3484.00 ft (KB) To 3560.00 ft (KB) (TVD)**

Total Depth: 3560.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2233.00 ft (KB)

2227.00 ft (CF)

KB to GR/CF: 6.00 ft

**Serial #: 8354**

Inside

Press@RunDepth: 174.73 psig @ 3487.00 ft (KB)

Start Date: 2010.11.17

End Date: 2010.11.18

Start Time: 17:35:45

End Time: 00:33:44

Capacity: 8000.00 psig

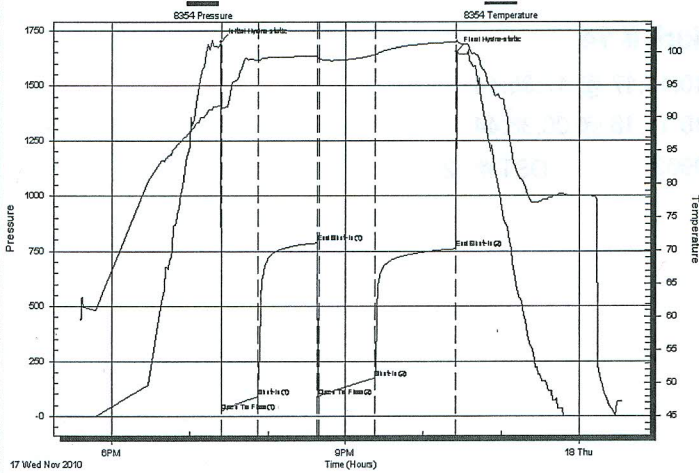
Last Calib.: 2010.11.18

Time On Btm: 2010.11.17 @ 19:23:44

Time Off Btm: 2010.11.17 @ 22:25:29

**TEST COMMENT:** IF-Strong B-B in 13 min  
ISI-Weak surface blow died in 20 min  
FF-Strong B-B in 15 min  
FSI-Weak steady surface blow

Pressure vs. Time



### PRESSURE SUMMARY

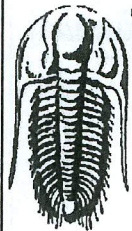
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1697.60	91.83	Initial Hydro-static
1	21.43	91.34	Open To Flow (1)
29	87.50	98.76	Shut-In(1)
75	787.33	99.32	End Shut-In(1)
76	89.90	99.02	Open To Flow (2)
120	174.73	99.54	Shut-In(2)
182	760.78	101.43	End Shut-In(2)
182	1654.34	101.73	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
120.00	SltlyOCMdyWtr 5%o 75%w 20%m	1.68
120.00	MCGsyO 5%g 65%o 30%m	1.68
60.00	SltlyMCGsyO 5%g 92%o 3%m	0.84
55.00	CGsyO 10%g 90%o	0.77

### Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



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## DRILL STEM TEST REPORT

TOOL DIAGRAM

H & B Petroleum Corp

Ouderkirk # 14

Box 277  
Ellinwood, KS 67526

7-10-19 Rooks, KS

Job Ticket: 040962

DST#: 2

ATTN: Al Hammersmith

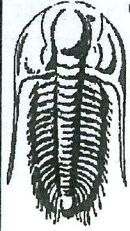
Test Start: 2010.11.17 @ 17:35:44

### Tool Information

Drill Pipe:	Length: 3459.00 ft	Diameter: 3.80 inches	Volume: 48.52 bbl	Tool Weight:	3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	50000.00 lb
			<b>Total Volume: 48.52 bbl</b>	Tool Chased	0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3484.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	76.00 ft				
Tool Length:	104.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3457.00	
Shut In Tool	5.00			3462.00	
Hydraulic tool	5.00			3467.00	
Jars	5.00			3472.00	
Safety Joint	3.00			3475.00	
Packer	5.00			3480.00	28.00 Bottom Of Top Packer
Packer	4.00			3484.00	
Stubb	1.00			3485.00	
Perforations	1.00			3486.00	
Change Over Sub	1.00			3487.00	
Recorder	0.00	8354	Inside	3487.00	
Recorder	0.00	8653	Outside	3487.00	
Drill Pipe	61.00			3548.00	
Change Over Sub	1.00			3549.00	
Perforations	8.00			3557.00	
Bullnose	3.00			3560.00	76.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>104.00</b>				



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Job Ticket: 040962

DST#: 2

ATTN: Al Hammersmith

Test Start: 2010.11.17 @ 17:35:44

**Mud and Cushion Information**

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 45.00 sec/qt  
Water Loss: 8.79 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 5000.00 ppm  
Filter Cake: inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: 32 deg API  
Water Salinity: 68000 ppm

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
120.00	SitlyOCMdyWtr 5%o 75%w 20%m	1.683
120.00	MCGsyO 5%g 65%o 30%m	1.683
60.00	SitlyMCGsyO 5%g 92%o 3%m	0.842
55.00	CGsyO 10%g 90%o	0.772

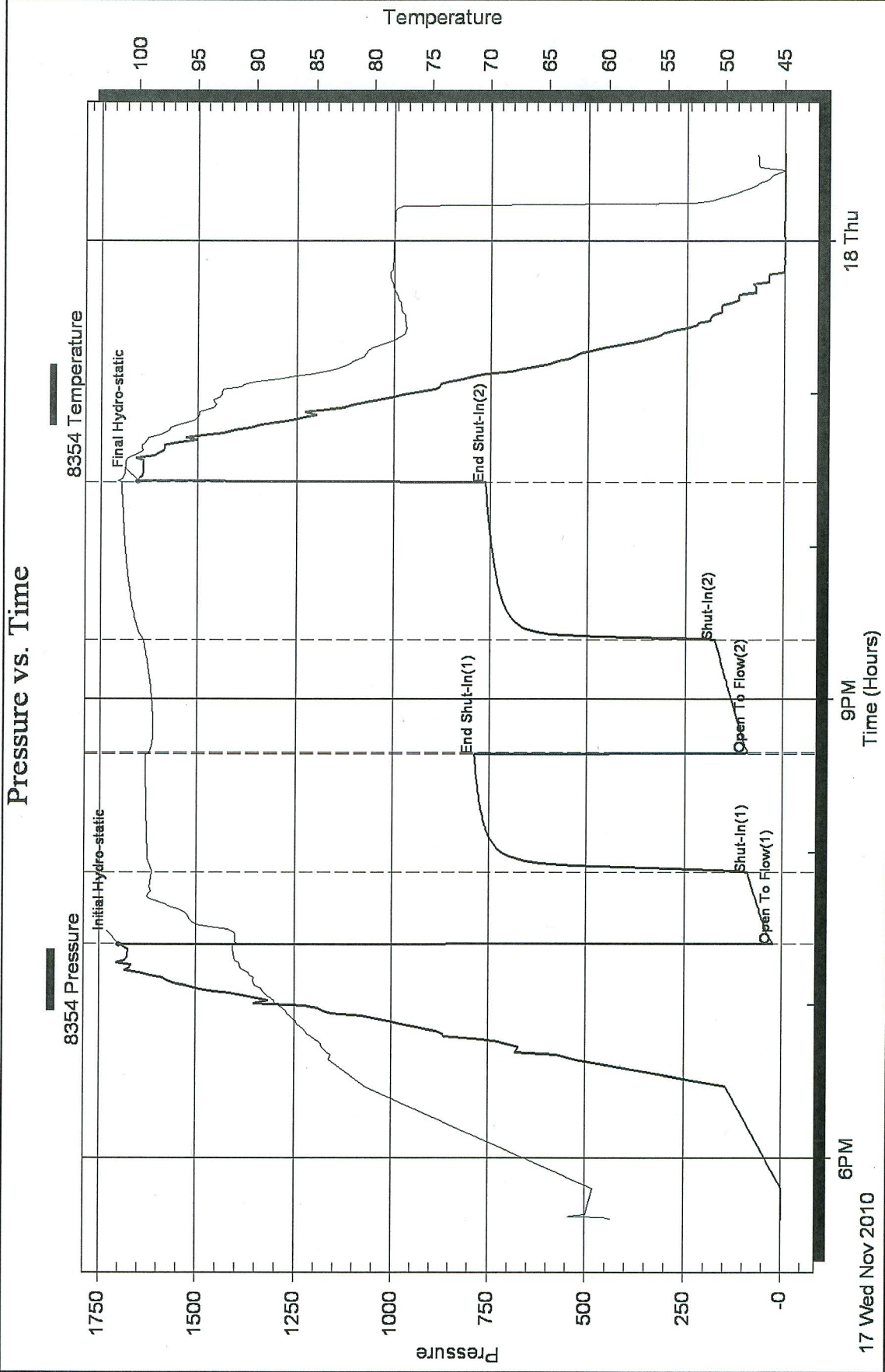
Total Length: 355.00 ft      Total Volume: 4.980 bbl

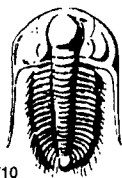
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments: Rw .09 @ 70 = 68000ppm

# Pressure vs. Time





# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 040961 15080

4/10

Well Name & No. Ouder Kirk # 14 Test No. 1 Date 11-15-10  
 Company H&B Petroleum Corp Elevation 2233 KB 2227 GL  
 Address Box 277 Ellinwood Ks. 67526  
 Co. Rep / Geo. Bob O'Dell Rig Southwind #4  
 Location: Sec. 7 Twp. 10 Rge. 19 Co. Rocks State Ks

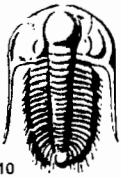
Interval Tested 3236 — 3273 Zone Tested Topeka  
 Anchor Length 37 Drill Pipe Run 3213 Mud Wt. 8.8  
 Top Packer Depth 3231 Drill Collars Run — Vis 40  
 Bottom Packer Depth 3236 Wt. Pipe Run — WL 9.6  
 Total Depth 3273 Chlorides 3,000 ppm System LCM 2#  
 Blow Description I.F. Slid Tool 8' to bottom - lost 10' 15" of mud  
weak-blow building to 3/4"  
F.F. Weak-building to 1/4"

Rec	Feet of	%gas	%oil	%water	%mud
<u>90</u>	<u>mdy wtr w/oil show - Top</u>				
	<u>Tool</u>				

Rec Total 90 BHT 92 Gravity API RW 1.3 @ 70 ° F Chlorides 60,000 ppm

(A) Initial Hydrostatic <u>1562</u>	<input type="checkbox"/> Test <u>1125'</u>	T-On Location <u>18:00-09:00</u>
(B) First Initial Flow <u>27</u>	<input type="checkbox"/> Jars <u>X 250'</u>	T-Started <u>20:00-09:40</u>
(C) First Final Flow <u>41</u>	<input type="checkbox"/> Safety Joint <u>X 75'</u>	T-Open <u>11:50</u>
(D) Initial Shut-In <u>863</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>14:50</u>
(E) Second Initial Flow <u>42</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>16:25</u>
(F) Second Final Flow <u>59</u>	<input type="checkbox"/> Mileage <u>82 RT 102.50</u>	Comments <u>Rig broke down</u>
(G) Final Shut-In <u>842</u>	<input type="checkbox"/> Sampler <u>205' X 2</u>	<u>Slid Tool 8' to bottom</u>
(H) Final Hydrostatic <u>1459</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>45</u>	<input type="checkbox"/> Day Standby	Total <u>1655'</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1655'</u>	

Approved By \_\_\_\_\_ Our Representative Dan Rangle  
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 040962

Well Name & No. Ouder Kirk #14 Test No. 2 Date 11-17-10  
 Company H+B Petroleum Corp Elevation 2233 KB 2227 GL  
 Address \_\_\_\_\_  
 Co. Rep / Geo. Bob O'Dell Rig Southwind #4  
 Location: Sec. 7 Twp. 10 Rge. 19 Co. Rooks State KS

Interval Tested 3484 — 3560 Zone Tested B-F LKC  
 Anchor Length 76 Drill Pipe Run \_\_\_\_\_ Mud Wt. 9  
 Top Packer Depth 3479 Drill Collars Run — Vis 45  
 Bottom Packer Depth 3484 Wt. Pipe Run — WL 8.8  
 Total Depth 3560 Chlorides 5200 ppm System LCM 1#

Blow Description I.F. STRONG B-B in 13 min.  
ISI-Weak surface blow - died in 20 min.  
E.F. STRONG B-B in 15 min.  
ESI-Weak steady surface blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>55</u>	<u>CGSYO</u>	<u>10</u>	<u>90</u>		
<u>60</u>	<u>SITLY MCGSYO</u>	<u>5</u>	<u>92</u>		<u>3</u>
<u>120</u>	<u>MCGSYO</u>	<u>5</u>	<u>65</u>		<u>30</u>
<u>120</u>	<u>SITLY OCMdy WTR</u>		<u>5</u>	<u>75</u>	<u>20</u>
<u>495</u>	<u>GIP</u>				

Rec Total 355 BHT Gravity 32 API RW .09 @ 70 ° F Chlorides 68,000 ppm

(A) Initial Hydrostatic <u>1697</u>	<input type="checkbox"/> Test <u>1125</u>	T-On Location <u>17:07</u>
(B) First Initial Flow <u>21</u>	<input type="checkbox"/> Jars <u>X 250</u>	T-Started <u>17:35</u>
(C) First Final Flow <u>87</u>	<input type="checkbox"/> Safety Joint <u>X 75</u>	T-Open <u>19:23</u>
(D) Initial Shut-In <u>787</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>22:23</u>
(E) Second Initial Flow <u>89</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>00:33</u>
(F) Second Final Flow <u>174</u>	<input type="checkbox"/> Mileage <u>82 RT 102.50</u>	Comments _____
(G) Final Shut-In <u>760</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1654</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	Total <u>1552.50</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1552.50</u>	

Approved By \_\_\_\_\_ Our Representative Dan Kangle

TriLOBITE TESTING Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.