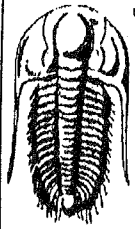


14-17s-15w

15-009-25416

CONFIDENTIAL

JUL 22 2010



**TRILOBITE TESTING, INC**

### DRILL STEM TEST REPORT

Mai Oil Operations, Inc.

**Axman-Helfrich #1**

P.O.Box 33  
Russell, Kansas 67665

**14-17s-15w Barton KS**

ATTN: Kitt Noah

Job Ticket: 36873

DST#: 1

Test Start: 2010.05.14 @ 21:24:06

**KCC**

#### GENERAL INFORMATION:

Formation: **Lansing/K.C. "E-F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:48:36

Time Test Ended: 03:14:06

Interval: **3334.00 ft (KB) To 3364.00 ft (KB) (TVD)**

Total Depth: 3364.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

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KCC WICHITA

Test Type: Conventional Bottom Hole

Tester: Jerry Adams

Unit No: 45

Reference Elevations: 1991.00 ft (KB)

1983.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 6798**

**Inside**

Press@RunDepth: 25.59 psig @ 3335.00 ft (KB)

Start Date: 2010.05.14

End Date:

2010.05.15

Start Time: 21:24:07

End Time:

03:14:06

Capacity: 8000.00 psig

Last Calib.: 2010.05.15

Time On Btmr: 2010.05.14 @ 22:47:06

Time Off Btmr: 2010.05.15 @ 01:55:36

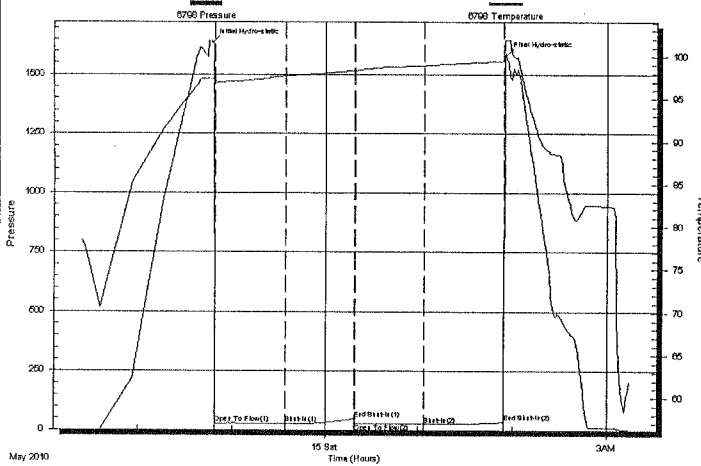
TEST COMMENT: IF:Weak blow . Built to 1 1/4".

ISI:No blow .

FF:Weak blow . Built to 2".

FSI:No blow .

Pressure vs. Time



#### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1634.07	97.39	Initial Hydro-static
2	29.31	97.01	Open To Flow (1)
47	27.68	97.69	Shut-In(1)
91	47.66	98.32	End Shut-In(1)
92	26.90	98.31	Open To Flow (2)
137	25.59	98.90	Shut-In(2)
187	34.25	99.49	End Shut-In(2)
189	1581.91	101.85	Final Hydro-static

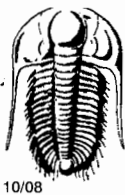
#### Recovery

Length (ft)	Description	Volume (bbl)
20.00	SOCM 5%o 95% m	0.28

#### Gas Rates

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

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# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

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## Test Ticket

NO. 36873 14246

BY: \_\_\_\_\_

Well Name & No. Azman-Helfrich #1 Test No. 1 Date 5-14-10  
 Company Mai Oil Operations, Inc. Elevation 1991 KB 1983 GL  
 Address P.O. Box 33 Russell, Kansas 67665  
 Co. Rep / Geo. Kitt Noah Rig Southwind #3  
 Location: Sec. 14 Twp. 17S Rge. 15W Co. Barton State Ks.

Interval Tested 3334-3364 Zone Tested Lansing/K.C. "E-F"  
 Anchor Length 30 Drill Pipe Run 3346 Mud Wt. 9.1  
 Top Packer Depth 3329 Drill Collars Run 0 Vis 57  
 Bottom Packer Depth 3334 Wt. Pipe Run 0 WL 8.8  
 Total Depth 3364 Chlorides 5,000 ppm System LCM 0  
 Blow Description IF: Weak blow. Built to 1/4"  
ISI: No blow.  
FF: Weak blow. Built to 2"  
FSI: No blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>50cm</u>		<u>5</u>		<u>95</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 20 BHT 99 Gravity NIC API RW N/A @ —°F Chlorides — ppm

(A) Initial Hydrostatic 1634  Test 1125 T-On Location 1930  
 (B) First Initial Flow 29  Jars T-Started 2124  
 (C) First Final Flow 28  Safety Joint T-Open 2248  
 (D) Initial Shut-In 48  Circ Sub T-Pulled 0154  
 (E) Second Initial Flow 27  Hourly Standby T-Out 0314  
 (F) Second Final Flow 26  Mileage 142 R.T. 171.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 34  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1582  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 45  Day Standby \_\_\_\_\_ Sub Total 0  
 Initial Shut-In 45  Accessibility \_\_\_\_\_ Totr 1302.50  
 Final Flow 45 Sub Total 1302.50  
 Final Shut-In 45

Approved By Kitt Noah Our Representative Jerry Adams Thank You.

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**TRILOBITE TESTING, INC**

**DRILL STEM TEST REPORT**

Mai Oil Operations, Inc.  
 P.O.Box 33  
 Russell, Kansas 67665  
 ATTN: Kitt Noah

**Axman-Helfrich #1**  
**14-17s-15w Barton KS**  
 Job Ticket: 36874      DST#: 2  
 Test Start: 2010.05.15 @ 16:55:03

**GENERAL INFORMATION:**

Formation: **Lansing/KC. "H-J"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 18:13:33  
 Time Test Ended: 23:49:03

Test Type: Conventional Bottom Hole  
 Tester: Jerry Adams  
 Unit No: 45

Interval: **3406.00 ft (KB) To 3467.00 ft (KB) (TVD)**  
 Total Depth: 3467.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches-Hole Condition: Fair

Reference Elevations: 1991.00 ft (KB)  
 1983.00 ft (CF)  
 KB to GR/CF: 8.00 ft

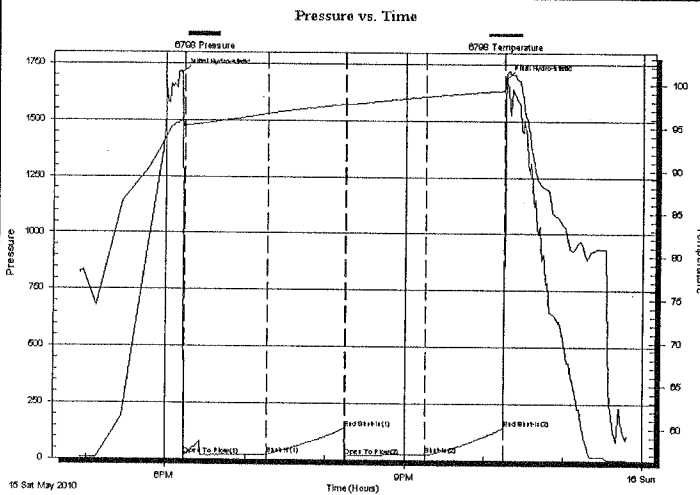
**Serial #: 6798**

**Inside**

Press@RunDepth: 23.51 psig @ 3411.00 ft (KB)  
 Start Date: 2010.05.15      End Date: 2010.05.15  
 Start Time: 16:55:04      End Time: 23:49:03

Capacity: 8000.00 psig  
 Last Calib.: 2010.05.15  
 Time On Btm: 2010.05.15 @ 18:12:03  
 Time Off Btm: 2010.05.15 @ 22:16:03

**TEST COMMENT:** IF:Weak blow . Built to 7".  
 IS:No blow .  
 FF:Weak blow . Built to 10".  
 FS:No blow .



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1709.85	95.64	Initial Hydro-static
2	18.02	94.87	Open To Flow (1)
64	20.03	96.53	Shut-In(1)
122	140.53	97.64	End Shut-In(1)
123	17.10	97.60	Open To Flow (2)
184	23.51	98.54	Shut-In(2)
243	144.28	99.29	End Shut-In(2)
244	1685.96	100.97	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
25.00	SGCOilyMud 10%g 40%o 50%m	0.35
0.00	295' GIP	0.00

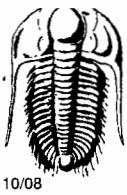
**Gas Rates**

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

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## Test Ticket

NO. 36874

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Well Name & No. Axman-Helfrich #1 BY: \_\_\_\_\_ Test No. 2 Date 5-15-10  
 Company Mai Oil Operations, Inc. Elevation 1991 KB 1983 GL \_\_\_\_\_  
 Address P.O. Box 33 Russell, Kansas 67665  
 Co. Rep / Geo. Kitt Noah Rig Southwind #3  
 Location: Sec. 14 Twp. 17S Rge. 15W Co. Barton State Ks

Interval Tested 3406-3467 Zone Tested Lansing/K.C. "H-J"  
 Anchor Length 61 Drill Pipe Run 3410 Mud Wt. 9.1  
 Top Packer Depth 3401 Drill Collars Run 0 Vis 57  
 Bottom Packer Depth 3406 Wt. Pipe Run 0 WL 9.6  
 Total Depth 3467 Chlorides 4,800 ppm System LCM 0  
 Blow Description FF: Weak blow. Built to 7"  
ZSI: No blow.  
FF: Weak blow. Built to 10"  
FST: No blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>25</u>	<u>SGCOily mud</u>	<u>10</u>	<u>40</u>	<u>50</u>	<u>0</u>
<u>0</u>	<u>295' GIP</u>				

Rec Total 25 BHT 99 Gravity N/L API RW N/A @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

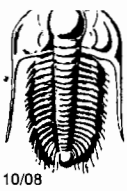
(A) Initial Hydrostatic 1710  Test 1125 T-On Location 1630  
 (B) First Initial Flow 18  Jars \_\_\_\_\_ T-Started 1655  
 (C) First Final Flow 20  Safety Joint \_\_\_\_\_ T-Open 1813  
 (D) Initial Shut-In 141  Circ Sub \_\_\_\_\_ T-Pulled 2214  
 (E) Second Initial Flow 17  Hourly Standby \_\_\_\_\_ T-Out 2349  
 (F) Second Final Flow 24  Mileage 46 R.T. 57.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 144  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1686  Straddle \_\_\_\_\_

Shale Packer \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Day Standby \_\_\_\_\_ Sub Total 0  
 Accessibility \_\_\_\_\_ Total 1182.50  
 Sub Total 1182.50

Approved By Kitt Noah Our Representative Gerry Adams Thank You.

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# TRILOBITE TESTING INC.

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## Test Ticket

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NO. 36875

Well Name & No. Axman-Helfrich #1 BY: Test No. 3 Date 5-16-10  
 Company Mai Oil Operations, Inc. Elevation 1991 KB 1983 GL  
 Address P.O. Box 33 Russell, Kansas 67665  
 Co. Rep / Geo. Kitt Noah Rig Southwind #3  
 Location: Sec. 14 Twp. 17S Rge. 15W Co. Barton State Ks.

Interval Tested 3502-3542 Zone Tested Conglomerate Sand  
 Anchor Length 40' Drill Pipe Run 3505 Mud Wt. 9.1  
 Top Packer Depth 3497 Drill Collars Run 0 Vis 55  
 Bottom Packer Depth 3502 Wt. Pipe Run 0 WL 9.2  
 Total Depth 3542 Chlorides 5,800 ppm System LCM 0

Blow Description IF: Weak 1/4" blow. Dead in 15 mins.  
ISI: No blow.  
FF: No blow. Came out of hole.  
FSI: N/A

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>Delg. Mud</u>				<u>100%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10 BHT 95 Gravity N/A API RW N/A @ —°F Chlorides — ppm

(A) Initial Hydrostatic 1738  Test 1125 T-On Location 1000  
 (B) First Initial Flow 23  Jars T-Started 1012  
 (C) First Final Flow 28  Safety Joint T-Open 1130  
 (D) Initial Shut-In 42  Circ Sub T-Pulled 1236  
 (E) Second Initial Flow 24  Hourly Standby T-Out 1353  
 (F) Second Final Flow N/A  Mileage 46 R.T. 5750 Comments \_\_\_\_\_  
 (G) Final Shut-In N/A  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1675  Straddle \_\_\_\_\_

Shale Packer \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Day Standby \_\_\_\_\_ Sub Total 0  
 Accessibility \_\_\_\_\_ Total 1182.50  
 Sub Total 1182.50

Approved By [Signature] Our Representative Jerry Adams Thank You.  
 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.

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**KCC**



**TRILOBITE TESTING, INC**

**DRILL STEM TEST REPORT**

Mai Oil Operations, Inc.  
 P.O.Box 33  
 Russell, Kansas 67665  
 ATTN: Kitt Noah

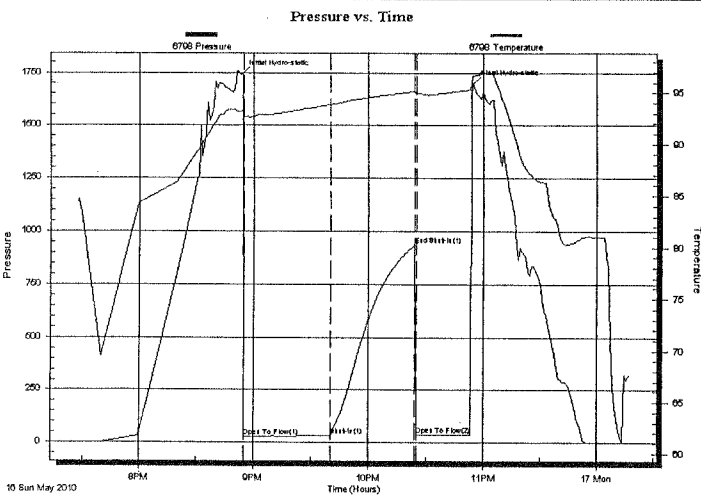
**Axman-Helfrich #1**  
**14-17s-15w Barton KS**  
 Job Ticket: 36901      **DST#: 4**  
 Test Start: 2010.05.16 @ 19:27:48

**GENERAL INFORMATION:**

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:54:48  
 Time Test Ended: 00:17:18  
 Test Type: Conventional Bottom Hole  
 Tester: Jerry Adams  
 Unit No: 45  
 Interval: **3501.00 ft (KB) To 3550.00 ft (KB) (TVD)**  
 Reference Elevations: 1991.00 ft (KB)  
 Total Depth: 3550.00 ft (KB) (TVD)      1983.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair      KB to GR/CF: 8.00 ft

**Serial #: 6798      Inside**  
 Press@RunDepth: 31.90 psig @ 3505.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2010.05.16      End Date: 2010.05.17      Last Calib.: 2010.05.17  
 Start Time: 19:27:49      End Time: 00:17:18      Time On Btm: 2010.05.16 @ 20:53:48  
 Time Off Btm: 2010.05.16 @ 22:54:48

**TEST COMMENT:** IF:Weak blow . Built to 1".  
 IS:No blow .  
 FF:No blow . Came out of hole.  
 FS:NA

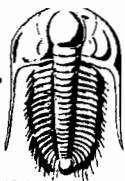


PRESSURE SUMMARY			
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1741.49	93.21	Initial Hydro-static
1	28.30	92.58	Open To Flow (1)
46	31.90	93.80	Shut-In(1)
91	934.28	95.11	End Shut-In(1)
92	37.27	94.86	Open To Flow (2)
121	1695.93	96.57	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
45.00	Drlg Mud 100%m	0.63

Gas Rates			
	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)

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# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

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## Test Ticket

NO. 36901

BY: \_\_\_\_\_

Well Name & No. Axman-Helfrich #1 Test No. 4 Date 5-16-10

Company Mai Oil Operations, Inc. Elevation 1991 KB 1883 GL \_\_\_\_\_

Address P.O. Box 33 Russell, Kansas 67665

Co. Rep / Geo. Kitt Noah Rig Southwind #3

Location: Sec. 14 Twp. 17S Rge. 15W Co. Barton State Ks.

Interval Tested 3501 - 3550 Zone Tested Arbuckle

Anchor Length 49 Drill Pipe Run 3506 Mud Wt. 9.1

Top Packer Depth 3496 Drill Collars Run 0 Vis 50

Bottom Packer Depth 3501 Wt. Pipe Run 0 WL 9.2

Total Depth 3550 Chlorides 5,800 ppm System LCM 0

Blow Description IF! Weak blow. Built to 1"  
ISI: No blow.  
FF! No blow. Came out of hole.  
FSI: N/A.

Rec	Feet of	%gas	%oil	%water	%mud
<u>45</u>	<u>Drlg. mud</u>			<u>100</u>	
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Rec Total 45 BHT 95 Gravity N/A API RW N/A @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1741  Test 1125 T-On Location 1900

(B) First Initial Flow 28  Jars \_\_\_\_\_ T-Started 1927

(C) First Final Flow 32  Safety Joint \_\_\_\_\_ T-Open 2054

(D) Initial Shut-In 934  Circ Sub \_\_\_\_\_ T-Pulled 2253

(E) Second Initial Flow 37  Hourly Standby \_\_\_\_\_ T-Out 2417

(F) Second Final Flow N/A  Mileage 46 R.T. 57.50 Comments \_\_\_\_\_

(G) Final Shut-In N/A  Sampler \_\_\_\_\_

(H) Final Hydrostatic 1696  Straddle \_\_\_\_\_

Initial Open 45  Shale Packer \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_

Initial Shut-In 45  Extra Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_

Final Flow 29  Extra Recorder \_\_\_\_\_  Extra Copies \_\_\_\_\_

Final Shut-In N/A  Day Standby \_\_\_\_\_ Sub Total 0

Accessibility \_\_\_\_\_ Total 1182.50

Sub Total 1182.50

Approved By Kitt Noah Our Representative Gerry Adams Thank You.

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