

**TRILOBITE TESTING, INC**

**DRILL STEM TEST REPORT**

OCT 27 2010

CONFIDENTIAL

Mai Oil Operations Inc.  
8411 Preston Rd. Ste. 800  
Dallas Tx 75225

**Kelly Maneth#2**  
**27-17s-15w Barton Ks**  
Job Ticket: 039248      DST#: 2  
Test Start: 2010.08.23 @ 15:38:59

ATTN: Kitt Noah

**GENERAL INFORMATION:**

Formation: **LKC E - F**  
Deviated: **No Whipstock:**      ft (KB)  
Time Tool Opened: 17:12:29  
Time Test Ended: 22:34:14

Test Type: **Conventional Bottom Hole**  
Tester: **Gary Pevoteaux**  
Unit No: **39**

Interval: **3337.00 ft (KB) To 3374.00 ft (KB) (TVD)**  
Total Depth: **3374.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2007.00 ft (KB)**  
**1999.00 ft (CF)**  
KB to GR/CF: **8.00 ft**

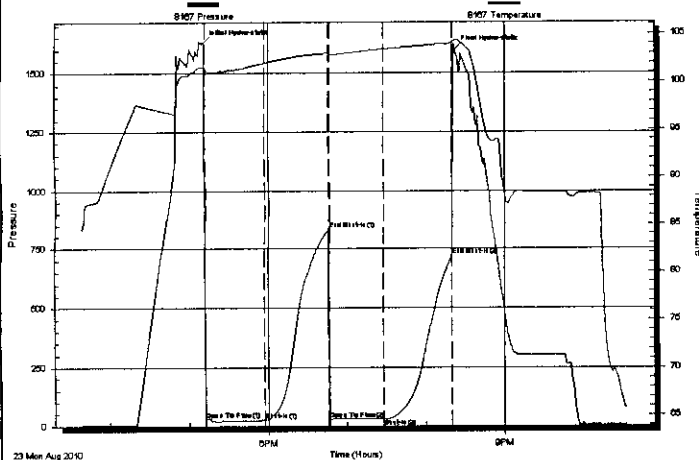
**Serial #: 8167**      **Inside**

Press@RunDepth: **31.90 psig @ 3338.00 ft (KB)**  
Start Date: **2010.08.23**      End Date: **2010.08.23**  
Start Time: **15:39:04**      End Time: **22:34:13**

Capacity: **8000.00 psig**  
Last Calib.: **2010.08.23**  
Time On Btm: **2010.08.23 @ 17:10:59**  
Time Off Btm: **2010.08.23 @ 20:21:44**

TEST COMMENT: IF:Weak blow . 1/4 - 2".  
IS:No blow .  
FF:Weak blow . 1/4 - 2 1/4".  
FS:No blow .

Pressure vs. Time



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1624.67	101.45	Initial Hydro-static
2	28.30	100.73	Open To Flow (1)
47	25.43	101.96	Shut-In(1)
95	833.85	102.97	End Shut-In(1)
96	26.77	102.79	Open To Flow (2)
137	31.90	103.39	Shut-In(2)
189	718.75	103.95	End Shut-In(2)
191	1596.60	104.26	Final Hydro-static

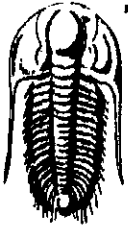
**Recovery**

Length (ft)	Description	Volume (bbl)
50.00	OCWM 14%o 28%w 58%m	0.70
0.00	70 ft.of GIP	0.00

**Gas Rates**

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

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**DRILL STEM TEST REPORT**

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Mai Oil Operations Inc.  
8411 Preston Rd. Ste. 800  
Dallas Tx 75225  
ATTN: Kitt Noah

**Kelly Maneth#2**  
**27-17s-15w Barton Ks**  
Job Ticket: 039249      **DST#: 3**  
Test Start: 2010.08.24 @ 13:02:29

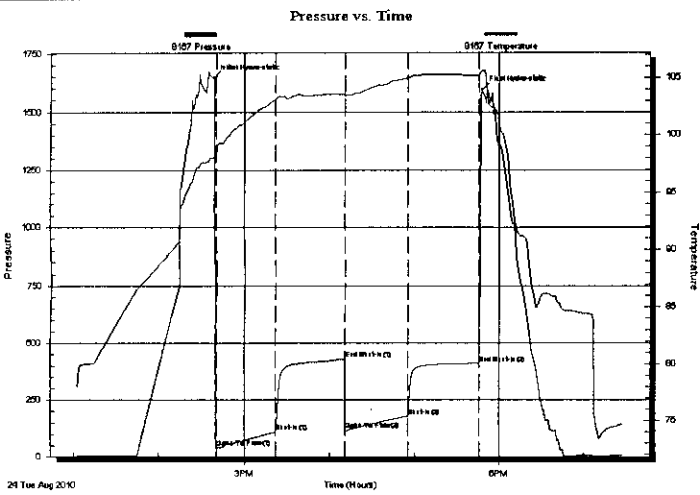
**CONFIDENTIAL**

**GENERAL INFORMATION:**

Formation: LKC H,I,J  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 14:40:14  
Time Test Ended: 19:28:14  
Test Type: Conventional Bottom Hole  
Tester: Gary Pevoteaux  
Unit No: 39  
Interval: 3417.00 ft (KB) To 3475.00 ft (KB) (TVD)  
Reference Elevations: 2007.00 ft (KB)  
Total Depth: 3475.00 ft (KB) (TVD) 1999.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

**Serial #: 8167**      **Inside**  
Press@RunDepth: 178.49 psig @ 3418.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2010.08.24      End Date: 2010.08.24      Last Calib.: 2010.08.24  
Start Time: 13:02:34      End Time: 19:28:13      Time On Btm: 2010.08.24 @ 14:38:29  
Time Off Btm: 2010.08.24 @ 17:47:44

**TEST COMMENT:** IF: Strong blow . B.O.B. in 3 mins.  
IS: Fair blow .back 1 - 6".  
FF: Strong blow . B.O.B. in 3 1/2 mins.  
FS: Strong blow back .B.O.B. /GTS in 1 min.



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1645.27	98.08	Initial Hydro-static
2	41.71	97.73	Open To Flow (1)
44	109.81	103.09	Shut-In(1)
93	431.20	103.56	End Shut-In(1)
93	118.82	103.42	Open To Flow (2)
137	178.49	104.95	Shut-In(2)
188	410.88	105.13	End Shut-In(2)
190	1595.01	105.56	Final Hydro-static

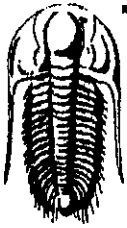
**Recovery**

Length (ft)	Description	Volume (bbl)
62.00	SOC,MV 2%o 13%m 85%w	0.87
154.00	GM&OCW 30%g 9%m 11%o 50%w	2.16
162.00	GM&WCO 23%g 9%m 29%w 39%o	2.27

**Gas Rates**

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

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# DRILL STEM TEST REPORT

Mai Oil Operations Inc.  
8411 Preston Rd. Ste. 800  
Dallas Tx 75225  
ATTN: Kitt Noah

**Kelly Maneth#2**  
**27-17s-15w Barton Ks**  
Job Ticket: 039250      DST#: 4  
Test Start: 2010.08.25 @ 06:17:28

## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: **No** Whipstock:      ft (KB)  
Time Tool Opened: 09:11:28  
Time Test Ended: 14:11:28

Test Type: **Conventional Bottom Hole**  
Tester: **Gary Pevoteaux**  
Unit No: **39**

Interval: **3514.00 ft (KB) To 3560.00 ft (KB) (TVD)**  
Total Depth: **3560.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2007.00 ft (KB)**  
**1999.00 ft (CF)**  
KB to GR/CF: **8.00 ft**

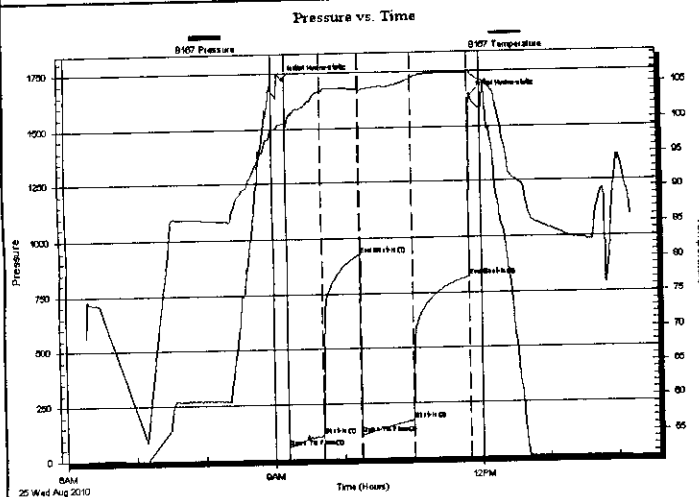
### Serial #: 8167

Inside

Press@RunDepth: **171.65 psig @ 3515.00 ft (KB)**  
Start Date: **2010.08.25** End Date: **2010.08.25**  
Start Time: **06:17:33** End Time: **14:11:27**

Capacity: **8000.00 psig**  
Last Calib.: **2010.08.25**  
Time On Btm: **2010.08.25 @ 09:08:58**  
Time Off Btm:

TEST COMMENT: IF: Strong blow . B.O.B. in 9 mins.  
IS: Weak blow back 1 - 3".  
FF: Strong blow . B.O.B. in 9 1/2 mins.  
FSI: Weak blow back 1 - 2".



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1722.95	99.50	Initial Hydro-static
3	53.57	99.12	Open To Flow (1)
33	107.25	104.05	Shut-In(1)
66	928.13	104.38	End Shut-In(1)
66	112.68	104.15	Open To Flow (2)
111	171.65	105.75	Shut-In(2)
161	823.65	106.43	End Shut-In(2)
163	1642.15	106.44	Initial Hydro-static

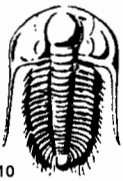
## Recovery

Length (ft)	Description	Volume (bbl)
125.00	GMCO 26%g 11%m 63%o	1.75
125.00	GMCO 20%g 27%m 53%o	1.75
175.00	CGO 18%g 82%o	2.45
0.00	195 ft. of GIP	0.00

## 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. 039247 14713

4/10

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

Well Name & No. Kelly Maneth #2 Test No. 1 Date 8-23-10

Company Mai Oil Operations Inc. Elevation 2007 KB 1999 GL

Address 8411 Preston Rel. Ste. 800, Dallas Tx. 75225

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

Location: Sec. 27 Twp. 17S Rge. 15W Co. Barton State Ko.

Interval Tested 3294-3320' Zone Tested LKC B-C

Anchor Length 26' Drill Pipe Run 3286' Mud Wt. 9.0

Top Packer Depth 3289' Drill Collars Run 0 Vis 59

Bottom Packer Depth 3294' Wt. Pipe Run 0 WL 8.8cc

Total Depth 3320' Chlorides 4,000 ppm System LCM 0

Blow Description IF: Strong blow. W.O.B. in 2 mins. IST: Walk below. 1/2"

FF: Strong blow. B.O.B. in 4 1/2 mins. FST: Walk below (surface)

Rec	Feet of	%gas	%oil	%water	%mud
<u>290</u>	<u>GI P</u>				
<u>70</u>	<u>SOC MW</u>		<u>1</u>	<u>76</u>	<u>23</u>
<u>250</u>	<u>MW/w o specs</u>			<u>94</u>	<u>6</u>
<u>870</u>	<u>SW</u>				

Rec Total 1190 Fluid BHT 107° Gravity N/A API RW .075 @ 75 ° F Chlorides 96,000 ppm

(A) Initial Hydrostatic 1612  Test 1125<sup>00</sup> T-On Location 0007

(B) First Initial Flow 56  Jars \_\_\_\_\_ T-Started 0116

(C) First Final Flow 310  Safety Joint \_\_\_\_\_ T-Open 0312

(D) Initial Shut-In 1024  Circ Sub \_\_\_\_\_ T-Pulled 0543

(E) Second Initial Flow 327  Hourly Standby \_\_\_\_\_ T-Out 0754

(F) Second Final Flow 604  Mileage 92 FROM HAYS 115<sup>00</sup> Comments \_\_\_\_\_

(G) Final Shut-In 1024  Sampler \_\_\_\_\_

(H) Final Hydrostatic 1536  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_

Initial Open 30  Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_

Initial Shut-In 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_

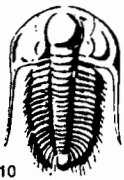
Final Flow 45  Extra Recorder \_\_\_\_\_ Sub Total \_\_\_\_\_

Final Shut-In 45  Day Standby \_\_\_\_\_ Total 1240<sup>00</sup>

Sub Total 1240<sup>00</sup>  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_

Approved By Kitt Noah Our Representative Gary P... [Signature]

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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## Test Ticket

No. 039248

4/10

Well Name & No. Kelly Mameth #2 Test No. 2 Date 8-23-10  
 Company Mai Oil Oper. Inc. Elevation 2007 KB 1999 GL  
 Address 8411 Preston Rd. Ste. 800, Dallas Tx. 75225  
 Co. Rep / Geo. Kitt Noah Rig Southwind Drilling #3  
 Location: Sec. 27 Twp. 17S Rge. 15W Co. Barton State Ks.

Interval Tested 3337 - 3374' Zone Tested LKc E-F  
 Anchor Length 37' Drill Pipe Run 3348 Mud Wt. 9.0  
 Top Packer Depth 3332' Drill Collars Run 0 Vis 60  
 Bottom Packer Depth 3337' Wt. Pipe Run 0 WL 8.8cc  
 Total Depth 3374' Chlorides 4,000 ppm System LCM 0  
 Blow Description IF: Weak blow. 1/4 - 2", ISI: No blow.

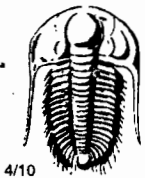
FF: Weak blow. 1/4" - 2 1/4", FSI: No blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>Gas in Pipe</u>				
<u>50</u>	<u>OCWM</u>	<u>14</u>	<u>25</u>	<u>58</u>	

Rec Total 50 third BHT 104 Gravity N/A API RW N.C. @ °F Chlorides 4,000 ppm  
 (A) Initial Hydrostatic 1625  Test 1125° T-On Location 1530  
 (B) First Initial Flow 28  Jars  T-Started 1538  
 (C) First Final Flow 25  Safety Joint  T-Open 1712  
 (D) Initial Shut-In 834  Circ Sub  T-Pulled 2017  
 (E) Second Initial Flow 27  Hourly Standby  T-Out 2234  
 (F) Second Final Flow 32  Mileage 92.1 115° Comments   
 (G) Final Shut-In 719  Sampler   
 (H) Final Hydrostatic 1597  Straddle   Ruined Shale Packer   
 Shale Packer   Ruined Packer   
 Extra Packer   Extra Copies   
 Extra Recorder  Sub Total   
 Day Standby  Total 1240°  
 Accessibility  MP/DST Disc't

Initial Open 45  
 Initial Shut-In 45  
 Final Flow 45  
 Final Shut-In 45

Approved By Kitt Noah Our Representative Carroll  
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## Test Ticket

No. 039249

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

Well Name & No. Kelly Month #2 Test No. 3 Date 8-24-10  
 Company Mai Oil Oper. Inc. Elevation 2007 KB 1999 GL  
 Address Dallas Tx, 75225  
 Co. Rep / Geo. Kitt Noah Rig Southwind Drly #3  
 Location: Sec. 27 Twp. 17<sup>s</sup> Rge. 15<sup>w</sup> Co. Barton State Ks.

Interval Tested 3417-3475' Zone Tested LKC HIS  
 Anchor Length 58' Drill Pipe Run 3410' Mud Wt. 9.1  
 Top Packer Depth 3412' Drill Collars Run 0 Vis 51  
 Bottom Packer Depth 3417' Wt. Pipe Run 0 WL 9.6 cc  
 Total Depth 3475' Chlorides 4700 ppm System LCM 0

Blow Description IF: Strong blow. B.O.B. in 3 mins. ISH: Fair below. 1-6".

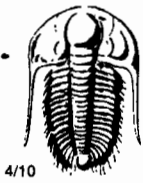
FF: Strong below. B.O.B. in 3 1/2 mins. FSI: Strong blow. 3.O.B. / GTS in 1 min.

Rec	Feet of	%gas	%oil	%water	%mud
162	GM E WCO	23	39	29	9
154	GM E O CW	30	11	50	9
62	SOC MW	.2	.2	85	13

Rec Total 378 fluid BHT 105 Gravity N/A API RW .07 @ 82° F Chlorides 99,000 ppm  
 (A) Initial Hydrostatic 1645  Test 1125° T-On Location 1240  
 (B) First Initial Flow 42  Jars \_\_\_\_\_ T-Started 1302  
 (C) First Final Flow 110  Safety Joint \_\_\_\_\_ T-Open 1440  
 (D) Initial Shut-In 431  Circ Sub \_\_\_\_\_ T-Pulled 1746  
 (E) Second Initial Flow 119  Hourly Standby \_\_\_\_\_ T-Out 1928  
 (F) Second Final Flow 172  Mileage 92 115° Comments \_\_\_\_\_  
 (G) Final Shut-In 411  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1597  Straddle \_\_\_\_\_  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_

Initial Open 45  
 Initial Shut-In 45  
 Final Flow 45  
 Final Shut-In 45  
 Sub Total 1240°  
 Total 1240°  
 MP/DST Disc't \_\_\_\_\_

Approved By Kitt Noah Our Representative [Signature]  
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## Test Ticket

NO. 039250

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Well Name & No. Kelly Maneth #2 BY: \_\_\_\_\_ Test No. 4 Date 8-25-10  
 Company Man Oil Oper Inc. Elevation 2007 KB 1999 GL \_\_\_\_\_  
 Address Dallas Tx. 75225  
 Co. Rep / Geo. Kurt Noah Rig Southwind Drily #3  
 Location: Sec. 27 Twp. 17S Rge. 15W Co. Barton State Ko

Interval Tested 3514 ~ 3560 Zone Tested Arbuckle  
 Anchor Length 46 Drill Pipe Run 3505 Mud Wt. 9.3  
 Top Packer Depth 3509' Drill Collars Run 0 Vis 58  
 Bottom Packer Depth 3514' Wt. Pipe Run 0 WL 9.6 cc  
 Total Depth 3560 Chlorides 6,300 ppm System LCM 0

Blow Description IF: Strong blow. B.O.B. in 9 mins. FSI: Weak blow. 1-3"

EF: Strong blow. B.O.B. in 9 1/2 mins. FSI: Weak blow. 1-2"

Rec	Feet of	%gas	%oil	%water	%mud
<u>195</u>	<u>BIP</u>				
<u>175</u>	<u>CGO</u>	<u>18</u>	<u>82</u>		
<u>125</u>	<u>GMCO</u>	<u>20</u>	<u>53</u>	<u>27</u>	
<u>125</u>	<u>GMCO</u>	<u>26</u>	<u>63</u>		<u>11</u>

Rec Total 425 Fluid BHT 106° Gravity 36.6 API RW N.C. @ ° F Chlorides 6300 ppm

(A) Initial Hydrostatic 1723  Test 1125.00 T-On Location 0610  
 (B) First Initial Flow 54  Jars \_\_\_\_\_ T-Started 0617  
 (C) First Final Flow 107  Safety Joint \_\_\_\_\_ T-Open 0911  
 (D) Initial Shut-In 928  Circ Sub \_\_\_\_\_ T-Pulled 1150  
 (E) Second Initial Flow 113  Hourly Standby \_\_\_\_\_ T-Out 1411  
 (F) Second Final Flow 172  Mileage (92) 115.00 Comments \_\_\_\_\_  
 (G) Final Shut-In 824  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1642  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_

Initial Open 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 30  Extra Recorder \_\_\_\_\_ Sub Total \_\_\_\_\_  
 Final Flow 45  Day Standby \_\_\_\_\_ Total 1240.00  
 Final Shut-In 45  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1240.00

Approved By Kurt Noah Our Representative Coay P. ...

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