



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Mai Oil Operations

8411 Preston Rd Ste 800
Dallas TX 75225+5520

ATTN: Allen Bangert

Ludwig #1

28-17s-14w Barton, KS

Job Ticket: 039734

DST#: 1

Test Start: 2011.08.17 @ 14:18:34

GENERAL INFORMATION:

Formation: **LKC-A-B-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:46:04

Time Test Ended: 17:17:34

Interval: **3136.00 ft (KB) To 3166.00 ft (KB) (TVD)**

Total Depth: 3166.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Jeff Brown

Unit No: 44

Reference Elevations: 1898.00 ft (KB)

1890.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8321 Inside

Press@RunDepth: psig @ 3138.00 ft (KB)

Start Date: 2011.08.17

End Date:

2011.08.17

Start Time: 14:18:35

End Time:

17:16:34

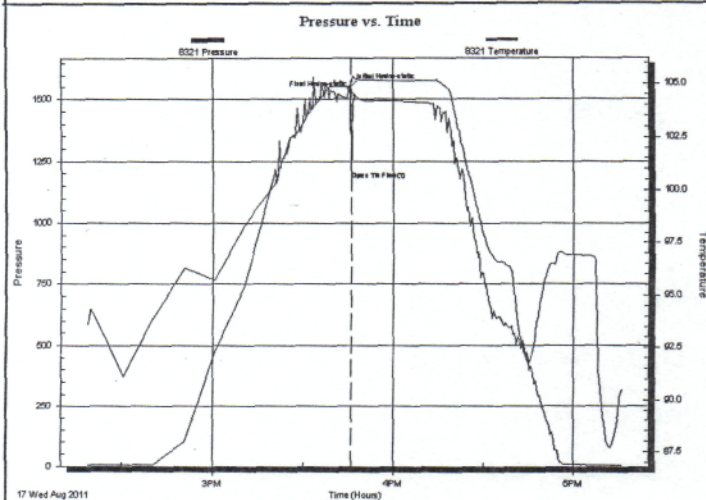
Capacity: 8000.00 psig

Last Calib.: 2011.08.17

Time On Btmr: 2011.08.17 @ 15:45:34

Time Off Btmr: 2011.08.17 @ 15:47:04

TEST COMMENT: Ms-Run



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1548.93	104.89	Initial Hydro-static
1	1172.22	104.96	Open To Flow (1)
2	1514.71	105.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud	0.14

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

Mai Oil Operations

8411 Preston Rd Ste 800
Dallas TX 75225+5520

ATTN: Allen Bangert

Ludwig #1

28-17s-14w Barton,KS

Job Ticket: 039735

DST#: 2

Test Start: 2011.08.17 @ 21:04:59

GENERAL INFORMATION:

Formation: **LKC-A-B-C**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 22:08:59

Time Test Ended: 02:27:59

Interval: **3152.00 ft (KB) To 3166.00 ft (KB) (TVD)**

Total Depth: **3166.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Test Type: **Conventional Bottom Hole**

Tester: **Jeff Brown**

Unit No: **44**

Reference Elevations: **1898.00 ft (KB)**

1890.00 ft (CF)

KB to GR/CF: **8.00 ft**

Serial #: 8321

Inside

Press@RunDepth: **41.42 psig @ 3153.00 ft (KB)**

Start Date: **2011.08.17**

End Date:

2011.08.18

Start Time: **21:05:00**

End Time:

02:26:59

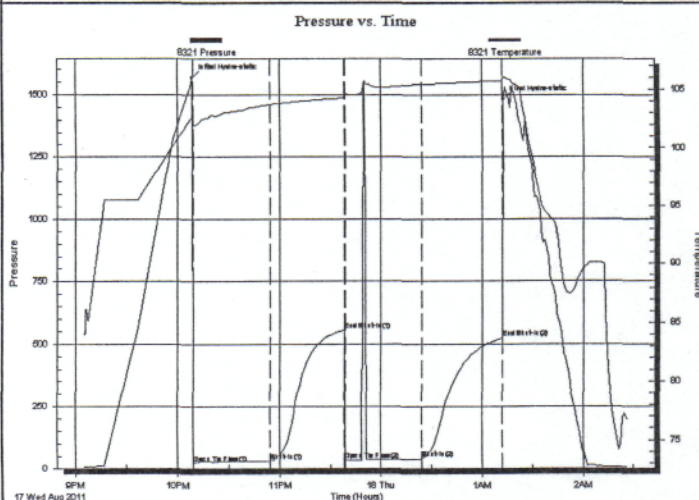
Capacity: **8000.00 psig**

Last Calib.: **2011.08.18**

Time On Btm: **2011.08.17 @ 22:08:29**

Time Off Btm: **2011.08.18 @ 01:12:29**

TEST COMMENT: IFP-Weak blow built to 3 1/8 in
ISI-Dead no blow back
FFP-Weak blow built to 1/2 in
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1566.56	102.50	Initial Hydro-static
1	22.09	101.97	Open To Flow (1)
46	30.72	103.70	Shut-In(1)
90	554.47	104.26	End Shut-In(1)
91	33.33	104.37	Open To Flow (2)
136	41.42	105.45	Shut-In(2)
184	522.70	105.70	End Shut-In(2)
184	1480.66	106.01	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	VM with oil spots 7%W93%M	0.70

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TESTING, INC.

DRILL STEM TEST REPORT

Mai Oil Operations

8411 Preston Rd Ste 800
Dallas TX 75225+5520

ATTN: Allen Bangert

Ludwig #1

28-17s-14w Barton, KS

Job Ticket: 039736

DST#: 3

Test Start: 2011.08.18 @ 09:48:28

GENERAL INFORMATION:

Formation: **LKC-E-F-G**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:07:28

Time Test Ended: 13:54:28

Test Type: Conventional Bottom Hole

Tester: Jeff Brown

Unit No: 44

Interval: **3190.00 ft (KB) To 3232.00 ft (KB) (TVD)**

Total Depth: 3232.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1898.00 ft (KB)

1890.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8321

Inside

Press@RunDepth: 23.77 psig @ 3196.00 ft (KB)

Start Date: 2011.08.18

End Date:

2011.08.18

Start Time: 09:48:29

End Time:

13:54:28

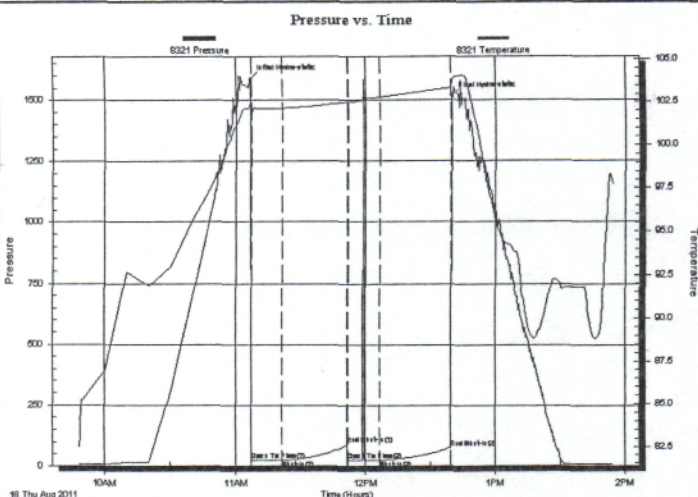
Capacity: 8000.00 psig

Last Calib.: 2011.08.18

Time On Btm: 2011.08.18 @ 11:06:58

Time Off Btm: 2011.08.18 @ 12:39:28

TEST COMMENT: IFF-Weak surface blow
ISI-Dead no blow back
FFP-Dead no blow
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1586.38	102.41	Initial Hydro-static
1	22.08	101.88	Open To Flow (1)
15	22.27	102.15	Shut-In(1)
45	88.53	102.52	End Shut-In(1)
45	24.48	102.48	Open To Flow (2)
60	23.77	102.81	Shut-In(2)
92	75.93	103.35	End Shut-In(2)
93	1517.21	103.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud	0.07

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
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DRILL STEM TEST REPORT

Mai Oil Operations

8411 Preston Rd Ste 800
Dallas TX 75225+5520

ATTN: Allen Bangert

Ludwig #1

28-17s-14w Barton,KS

Job Ticket: 039737

DST#: 4

Test Start: 2011.08.18 @ 23:20:39

GENERAL INFORMATION:

Formation: **LKC-H-I-J**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 00:43:39

Time Test Ended: 04:32:09

Test Type: **Conventional Bottom Hole**

Tester: **Jeff Brown**

Unit No: **44**

Interval: **3278.00 ft (KB) To 3326.00 ft (KB) (TVD)**

Total Depth: **3326.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **1898.00 ft (KB)**

1890.00 ft (CF)

KB to GR/CF: **8.00 ft**

Serial #: 8321

Inside

Press@RunDepth: **30.39 psig @ 3285.00 ft (KB)**

Start Date: **2011.08.18**

End Date:

2011.08.19

Start Time: **23:20:40**

End Time:

04:32:09

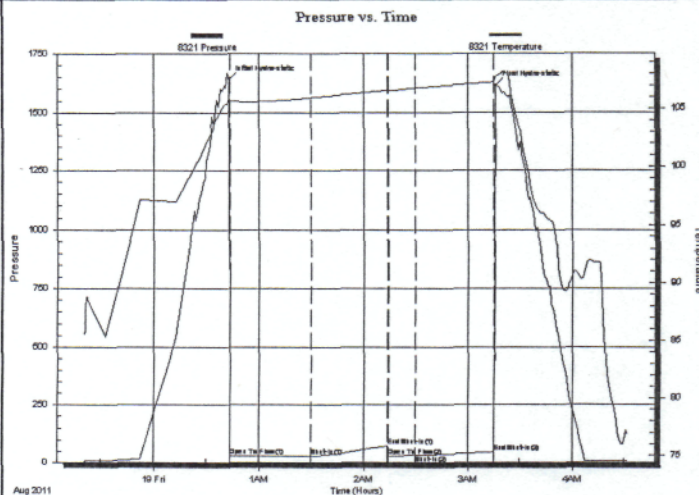
Capacity: **8000.00 psig**

Last Calib.: **2011.08.19**

Time On Btm: **2011.08.19 @ 00:43:09**

Time Off Btm: **2011.08.19 @ 03:16:09**

TEST COMMENT: IFF-Weak blow built to 1 1/4 in died back to 3/4 in
ISI-Dead no blow back
FFP-Dead no blow
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1639.38	105.72	Initial Hydro-static
1	26.67	105.58	Open To Flow (1)
47	26.51	105.94	Shut-In(1)
91	72.19	106.59	End Shut-In(1)
92	29.03	106.58	Open To Flow (2)
107	30.39	106.77	Shut-In(2)
152	46.47	107.31	End Shut-In(2)
153	1613.60	107.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud	0.21

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Mai Oil Operations

8411 Preston Rd Ste 800
Dallas TX 75225+5520

ATTN: Allen Bangert

Ludwig #1

28-17s-14w Barton,KS

Job Ticket: 039738

DST#: 5

Test Start: 2011.08.19 @ 13:07:54

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened:

Time Test Ended: 15:30:54

Interval: 3378.00 ft (KB) To 3390.00 ft (KB) (TVD)

Total Depth: 3390.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Jeff Brown

Unit No: 44

Reference Elevations: 1898.00 ft (KB)

1890.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8321

Inside

Press@RunDepth: psig @ 3379.00 ft (KB)

Start Date: 2011.08.19

End Date:

2011.08.19

Start Time: 13:07:55

End Time:

15:30:54

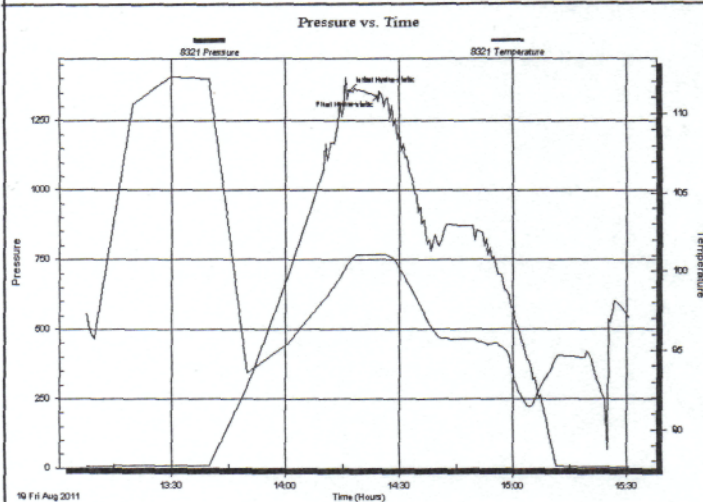
Capacity: 8000.00 psig

Last Calib.: 2011.08.19

Time On Btmr 2011.08.19 @ 14:16:54

Time Off Btmr 2011.08.19 @ 14:24:54

TEST COMMENT: Stacked out on a bridge @ 2750-Mis-Run



PRESSURE SUMMARY

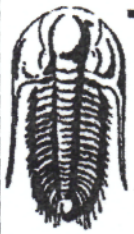
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1355.93	100.58	Initial Hydro-static
8	1349.31	101.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

Mai Oil Operations
8411 Preston Rd Ste 800
Dallas TX 75225+5520
ATTN: Allen Bangert

Ludwig #1
28-17s-14w Barton, KS
Job Ticket: 039739 **DST#: 6**
Test Start: 2011.08.19 @ 23:15:26

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: **No** Whipstock: **ft (KB)**
Time Tool Opened: 00:46:26
Time Test Ended: 04:21:56

Test Type: **Conventional Bottom Hole**
Tester: **Jeff Brown**
Unit No: **44**

Interval: **3378.00 ft (KB) To 3390.00 ft (KB) (TVD)**
Total Depth: **3390.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **1898.00 ft (KB)**
1890.00 ft (CF)
KB to GR/CF: **8.00 ft**

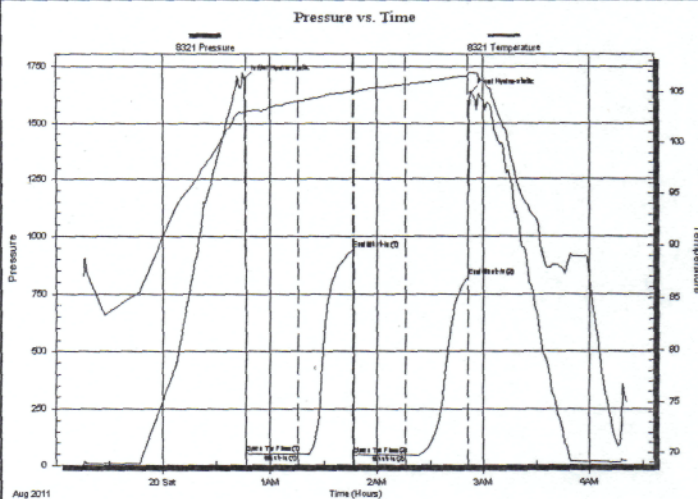
Serial #: 8321

Inside

Press@RunDepth: **44.64 psig @ 3379.00 ft (KB)**
Start Date: **2011.08.19** End Date: **2011.08.20**
Start Time: **23:15:27** End Time: **04:20:56**

Capacity: **8000.00 psig**
Last Calib.: **2011.08.20**
Time On Btm: **2011.08.20 @ 00:45:56**
Time Off Btm: **2011.08.20 @ 02:52:56**

TEST COMMENT: IFF-Weak blow built to 3 in
ISI-Dead
FFP-Weak blow built to 1 1/2 in
FSI-Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1694.21	102.96	Initial Hydro-static
1	55.22	102.86	Open To Flow (1)
30	48.60	104.10	Shut-In(1)
61	944.21	105.07	End Shut-In(1)
61	45.93	104.87	Open To Flow (2)
90	44.64	105.74	Shut-In(2)
126	826.64	106.54	End Shut-In(2)
127	1635.20	106.91	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	OCM 17% O83%M	0.35
5.00	Free Oil	0.07

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Mai Oil Operations

8411 Preston Rd Ste 800
Dallas TX 75225+5520

ATTN: Allen Bangert

Ludwig #1

28-17s-14w Barton,KS

Job Ticket: 039740

DST#: 7

Test Start: 2011.08.20 @ 11:40:07

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:06:37

Time Test Ended: 17:34:37

Test Type: Conventional Bottom Hole

Tester: Jeff Brown

Unit No: 44

Interval: **3388.00 ft (KB) To 3400.00 ft (KB) (TVD)**

Total Depth: 3400.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1898.00 ft (KB)

1890.00 ft (CF)

KB to GRVCF: 8.00 ft

Serial #: 8321

Inside

Press@RunDepth: 51.61 psig @ 3389.00 ft (KB)

Start Date: 2011.08.20

End Date:

2011.08.20

Start Time: 11:40:08

End Time:

17:33:37

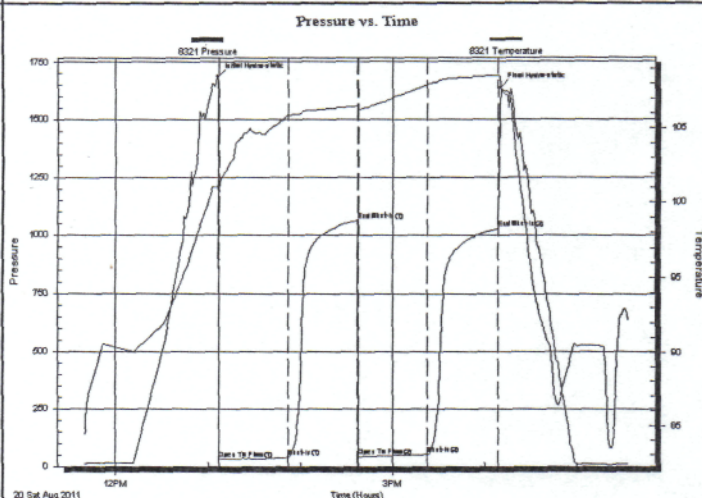
Capacity: 8000.00 psig

Last Calib.: 2011.08.20

Time On Btmr 2011.08.20 @ 13:06:07

Time Off Btmr 2011.08.20 @ 16:10:07

TEST COMMENT: IFP-Fair blow built to 8 1/2 in
ISI-Dead no blow back
FFP-Good blow built to 11 in
FSI-Dead no blow back



PRESSURE SUMMARY

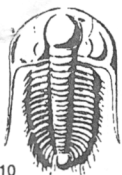
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1686.67	101.20	Initial Hydro-static
1	32.04	100.73	Open To Flow (1)
46	38.94	105.88	Shut-In(1)
91	1063.21	106.50	End Shut-In(1)
91	43.86	106.29	Open To Flow (2)
136	51.61	107.92	Shut-In(2)
183	1028.36	108.54	End Shut-In(2)
184	1638.96	107.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
43.00	MCO 40%M60%O	0.60
30.00	Free Oil	0.42
0.00	157 GIP	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mct/d)
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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED

AUG 22 2011

Test Ticket

NO. 039734

16197

Well Name & No. Ludwig #1 BY: _____ Test No. 1 Date 8-17-11
 Company Maj Oil Operations Elevation 1894 KB 1884 GL _____
 Address 8411 Preston RD Ste 800 Dallas TX 75225 + 5520
 Co. Rep / Geo. Steve Murphy Rig Southwind Rig #3
 Location: Sec. 28 Twp. 17S Rge. 14W Co. Barton State KS

Interval Tested 3136-3146 Zone Tested LKC-A-B-C
 Anchor Length 30 Drill Pipe Run 3147 Mud Wt. 8.9
 Top Packer Depth 3131 Drill Collars Run 0 Vis 47
 Bottom Packer Depth 3136 Wt. Pipe Run 0 WL 12.0
 Total Depth 3146 Chlorides 7500 ppm System LCM TR

Blow Description IFP

ISI-
FFP-
FSI-

Mis-Run

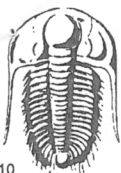
Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>mud</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1549 ☒ Test 925 T-On Location 10:36/12:36
 (B) First Initial Flow 1172 ☐ Jars _____ T-Started 14:18
 (C) First Final Flow _____ ☐ Safety Joint _____ T-Open 15:36
 (D) Initial Shut-In _____ ☐ Circ Sub _____ T-Pulled 15:37
 (E) Second Initial Flow _____ ☐ Hourly Standby _____ T-Out 17:17
 (F) Second Final Flow _____ ☒ Mileage 102 RT 142 Comments Landed 10' High
 (G) Final Shut-In _____ ☐ Sampler _____ Mis-Run
 (H) Final Hydrostatic 1515 ☐ Straddle _____ ☐ Ruined Shale Packer _____

Initial Open Mis-Run ☐ Ruined Packer _____
 Initial Shut-In _____ ☐ Extra Copies _____
 Final Flow _____ ☐ Extra Recorder _____ Sub Total 0
 Final Shut-In _____ ☐ Day Standby _____ Total 1067.80
☐ Accessibility _____ MP/DST Disc't _____
 Sub Total 1067.80

Approved By _____ Our Representative Jeff Brown
 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

RECEIVED

AUG 22 2011

Test Ticket

NO. 039735

4/10

BY:

Well Name & No. Maj Oil Operations Ludwig #1 Test No. 2 Date 8-17-11
 Company Maj Oil Operations Elevation 1894 KB 1886 GL
 Address 7411 Preston RD Ste 800 Dallas TX 75225+5520
 Co. Rep / Geo. Steve Murphy Rig Southwind Rig #3
 Location: Sec. 28 Twp. 17 S Rge. 14 W Co. Barton State KS

Interval Tested 3152 - 3146 Zone Tested LKC-A-B-C
 Anchor Length 14' Drill Pipe Run 3147 Mud Wt. 9.2
 Top Packer Depth 3147 Drill Collars Run 0 Vis 61
 Bottom Packer Depth 3152 Wt. Pipe Run 0 WL 11.2
 Total Depth 3146 Chlorides 7200 ppm System LCM 0

Blow Description FP-Weak Blow Built TO 3 1/8 IN

ISI-Dead No Blow Back

FP-Weak Blow Built TO 1/2 IN

ISI-Dead No Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>50</u>	<u>WM with oil spots</u>			<u>7</u>	<u>93</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 50 BHT 104 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1567
 (B) First Initial Flow 22
 (C) First Final Flow 31
 (D) Initial Shut-In 554
 (E) Second Initial Flow 33
 (F) Second Final Flow 41
 (G) Final Shut-In 523
 (H) Final Hydrostatic 1481

☒ Test 1125
☐ Jars _____
☐ Safety Joint _____
☐ Circ Sub _____
☐ Hourly Standby _____
☒ Mileage _____
☐ Sampler _____
☐ Straddle _____
☐ Shale Packer _____
☐ Extra Packer _____
☐ Extra Recorder _____
☐ Day Standby _____
☐ Accessibility _____
 Sub Total 1125

T-On Location 20:52
 T-Started 21:04
 T-Open 22:09
 T-Pulled 1:09
 T-Out 2:27
 Comments _____

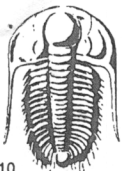
Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45

☐ Ruined Shale Packer _____
☐ Ruined Packer _____
☐ Extra Copies _____
 Sub Total 0
 Total 1125
 MP/DST Disc't _____

Approved By _____

Our Representative Jeff Brown

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

RECEIVED

AUG 22 2011

Test Ticket

NO. 039736

4/10

Well Name & No. Ludwig #1 Test No. 3 Date 8-18-11
 Company Mai Oil operations Elevation 1894 KB 1886 GL
 Address 8411 Preston RD Ste 800 Dallas TX 75225+5520
 Co. Rep / Geo. Steve Murphy Rig Southwind Rig #3
 Location: Sec. 28 Twp. 17 S Rge. 14 W Co. Barton State KS

Interval Tested 3190-3232 Zone Tested LKC-E-F-G
 Anchor Length 42 Drill Pipe Run 3179 Mud Wt. 9.2
 Top Packer Depth 3185 Drill Collars Run 0 Vis 61
 Bottom Packer Depth 3190 Wt. Pipe Run 0 WL 11.2
 Total Depth 3232 Chlorides 7200 ppm System LCM 0

Blow Description IFP-Weak Surface Blow
ISI-Dead No Blow Back
IFP-Dead No Blow
ISI-Dead No Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>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 5 BHT 103 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic	<u>15 810</u>	☒ Test	<u>1125</u>	T-On Location	<u>9:04</u>
(B) First Initial Flow	<u>22</u>	☐ Jars		T-Started	<u>9:48</u>
(C) First Final Flow	<u>22</u>	☐ Safety Joint		T-Open	<u>11:07</u>
(D) Initial Shut-In	<u>89</u>	☐ Circ Sub		T-Pulled	<u>12:37</u>
(E) Second Initial Flow	<u>24</u>	☐ Hourly Standby		T-Out	<u>13:54</u>
(F) Second Final Flow	<u>24</u>	☒ Mileage	<u>102 RT 142.80</u>	Comments	
(G) Final Shut-In	<u>740</u>	☐ Sampler			
(H) Final Hydrostatic	<u>1517</u>	☐ Straddle		☐ Ruined Shale Packer	

Initial Open 15
 Initial Shut-In 30
 Final Flow 15
 Final Shut-In 30

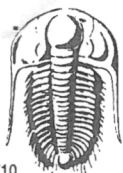
☐ Shale Packer
☐ Extra Packer
☐ Extra Recorder
☐ Day Standby
☐ Accessibility
☐ Ruined Packer
☐ Extra Copies
 Sub Total 0
 Total 1267.80
 MP/DST Disc't _____

Approved By _____

Our Representative

Jeff Brown

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

RECEIVED
AUG 22 2011

Test Ticket

NO. 039737

Well Name & No. Ludwig #1 BY: _____ Test No. 84 Date 8-18-11
Company Maj. oil operations Elevation 1894 KB 1884 GL _____
Address 8411 Preston RD STE 800 Dallas TX 75225+5520
Co. Rep / Geo. Steve Murphy Rig Southwind R'g #3
Location: Sec. 28 Twp. 17S Rge. 14W Co. Barton State KS

Interval Tested 3278-3326 Zone Tested LHC-H-I-J
Anchor Length 48 Drill Pipe Run 3274 Mud Wt. 9.4
Top Packer Depth 3273 Drill Collars Run 0 Vis 48
Bottom Packer Depth 3278 Wt. Pipe Run 0 WL 12.2
Total Depth 3326 Chlorides 9000 ppm System LCM TR

Blow Description IP-Weak Built To 1 1/4 IN Died Back To 3/4 IN
ISI-Dead No Blow Back
FFP-Dead No Blow
FSI-Dead No Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
15	Mud			100	
		%gas	%oil	%water	%mud
		%gas	%oil	%water	%mud
		%gas	%oil	%water	%mud
		%gas	%oil	%water	%mud

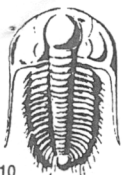
Rec Total 115 BHT 107 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm
(A) Initial Hydrostatic 1639 ☒ Test 1125 T-On Location 22:22
(B) First Initial Flow 27 ☐ Jars _____ T-Started 23:20
(C) First Final Flow 27 ☐ Safety Joint _____ T-Open 00:44
(D) Initial Shut-In 72 ☐ Circ Sub _____ T-Pulled 3:15
(E) Second Initial Flow 29 ☐ Hourly Standby _____ T-Out 4:32
(F) Second Final Flow 30 ☒ Mileage 102 RT 142.80 Comments _____
(G) Final Shut-In 46 ☐ Sampler _____
(H) Final Hydrostatic 1614 ☐ Straddle _____

Initial Open 45 ☐ Shale Packer _____ ☐ Ruined Shale Packer _____
Initial Shut-In 45 ☐ Extra Packer _____ ☐ Ruined Packer _____
Final Flow 15 ☐ Extra Recorder _____ ☐ Extra Copies _____
Final Shut-In 45 ☐ Day Standby _____ Sub Total 0
Sub Total 1267.80 Total 1267.80 MP/DST Disc't _____
Sub Total 1267.80

Approved By _____

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TESTING INC.**

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AUG 22 2011
BY: _____

Test Ticket

NO. 039738

Well Name & No. <u>Ludwig #1</u>	Test No. <u>5</u>	Date <u>8-19-11</u>
Company <u>Mai Oil Operations</u>	Elevation <u>1898</u>	KB <u>1890</u> GL
Address <u>8411 Preston RD STE 800 Dallas TX 75225-5520</u>		
Co. Rep / Geo. <u>Steve Murphy</u>	Rig <u>Southwind Rig #3</u>	
Location: Sec. <u>28</u> Twp. <u>17S</u> Rge. <u>14W</u> Co. <u>Barton</u> State <u>KS</u>		

Interval Tested <u>3378-3390</u>	Zone Tested <u>Arbuckle</u>
Anchor Length <u>12</u>	Drill Pipe Run <u>3368</u>
Top Packer Depth <u>3373</u>	Drill Collars Run <u>0</u>
Bottom Packer Depth <u>3378</u>	Wt. Pipe Run <u>0</u>
Total Depth <u>3390</u>	Chlorides <u>8400</u> ppm System LCM <u>TR</u>

Blow Description ISA- MIS Run Stacked out on A Bridge
FL-
BS-

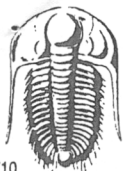
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____

Rec Total _____ BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic _____	☒ Test <u>925</u>	T-On Location <u>12:24</u>
(B) First Initial Flow _____	☐ Jars _____	T-Started <u>13:07</u>
(C) First Final Flow _____	☐ Safety Joint _____	T-Open _____
(D) Initial Shut-In _____	☐ Circ Sub _____	T-Pulled _____
(E) Second Initial Flow _____	☐ Hourly Standby _____	T-Out <u>15:30</u>
(F) Second Final Flow _____	☒ Mileage <u>102.0 142.80</u>	Comments <u>Stacked out on</u>
(G) Final Shut-In _____	☐ Sampler _____	<u>A Bridge @ 2750</u>
(H) Final Hydrostatic _____	☐ Straddle _____	<u>Mis Run</u>

Initial Open <u>Mis-Run</u>	☐ Ruined Shale Packer _____
Initial Shut-In _____	☐ Ruined Packer _____
Final Flow _____	☐ Extra Copies _____
Final Shut-In _____	Sub Total <u>0</u>
	Total <u>1067.80</u>
	MP/DST Disc't _____
Sub Total <u>1067.80</u>	

Approved By _____ Our Representative Jeff Brown
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RECEIVED
AUG 22 2011

Test Ticket

NO. 039739

4/10

BY: _____

Well Name & No. Ludwig #1 Test No. 40 Date 8-19-11

Company Mai Oil Operations Elevation 1898 KB 1890 GL _____

Address 8411 Preston RD STE 800 Dallas TX 75225+5520

Co. Rep / Geo. Steve Murphy Rig Southwind Rig #3

Location: Sec. 28 Twp. 17S Rge. 14W Co. Barton State KS

Interval Tested 3378-3390 Zone Tested Arbuckle

Anchor Length 12 Drill Pipe Run 33208 Mud Wt. 9.4

Top Packer Depth 3373 Drill Collars Run 0 Vis 50

Bottom Packer Depth 3378 Wt. Pipe Run 0 WL 10.2

Total Depth 3390 Chlorides 8400 ppm System LCM TR

Blow Description IFP-Weak Blow Built TO 3 IN

ISI-Dead

FFP-Weak Blow Built TO 1 1/2 IN

ISI-Dead

Rec	Feet of	%gas	%oil	%water	%mud
<u>25</u>	<u>OCM</u>	<u>17</u>	<u>17</u>	<u>83</u>	<u>83</u>
<u>5</u>	<u>oil</u>	<u>100</u>	<u>100</u>	<u>0</u>	<u>0</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 30 BHT 107 Gravity 38 API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1494 ☒ Test 1125' T-On Location 22:15

(B) First Initial Flow 55 ☒ Jars 250' T-Started 23:15

(C) First Final Flow 49 ☒ Safety Joint 75' T-Open 00:40

(D) Initial Shut-In 944 ☐ Circ Sub _____ T-Pulled 2:40

(E) Second Initial Flow 44 ☐ Hourly Standby _____ T-Out 4:21

(F) Second Final Flow 45 ☒ Mileage _____ Comments _____

(G) Final Shut-In 827 ☐ Sampler _____

(H) Final Hydrostatic 1435 ☐ Straddle _____ ☐ Ruined Shale Packer _____

Initial Open 30 ☐ Shale Packer _____ ☐ Ruined Packer _____

Initial Shut-In 30 ☐ Extra Packer _____ ☐ Extra Copies _____

Final Flow 30 ☐ Extra Recorder _____ Sub Total 0

Final Shut-In 30 ☐ Day Standby _____ Total 1450'

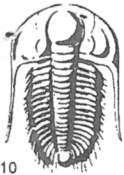
☐ Accessibility _____ MP/DST Disc't _____

Sub Total 1450'

Approved By _____

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RECEIVED
AUG 22 2011

Test Ticket

NO. 039740

BY:

Well Name & No. Ludwig #1 Test No. 7 Date 8-20-11
Company mai oil operations Elevation 1898 KB 1890 GL
Address 8411 Preston RD Ste 800 Dallas TX 75225+5520
Co. Rep / Geo. Steve Murphy Rig Southwind Rig #3
Location: Sec. 28 Twp. 17s Rge. 14 W Co. Barton State KS

Interval Tested 3388-3400 Zone Tested AR Buckle
Anchor Length 12 Drill Pipe Run 3398 Mud Wt. 9.2
Top Packer Depth 3383 Drill Collars Run 0 Vis 4.8
Bottom Packer Depth 3388 Wt. Pipe Run 0 WL 9.2
Total Depth 3400 Chlorides 8300 ppm System LCM TR

Blow Description IR Fir Blow Built To 8 1/2 IN

IR- Dead No Blow Back

FFP Good Blow Built To 11 IN

FFI- Dead No Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>43</u>	<u>mco</u>		<u>40%</u>	<u>90</u>	
<u>30</u>	<u>Free oil</u>		<u>100%</u>		
	<u>157 - CIP</u>				

Rec Total 73 BHT 109 Gravity 38 API RW @ ° F Chlorides ppm

(A) Initial Hydrostatic 1487
(B) First Initial Flow 32
(C) First Final Flow 39
(D) Initial Shut-In 1043
(E) Second Initial Flow 44
(F) Second Final Flow 52
(G) Final Shut-In 1028
(H) Final Hydrostatic 11039

☒ Test 1125
☐ Jars
☐ Safety Joint
☐ Circ Sub
☐ Hourly Standby
☒ Mileage 102 RT 142.80
☐ Sampler
☐ Straddle
☐ Shale Packer
☐ Extra Packer
☐ Extra Recorder
☐ Day Standby
☐ Accessibility
Sub Total 12107.80

T-On Location 11:09
T-Started 11:40
T-Open 13:07
T-Pulled 16:07
T-Out 17:34

Comments

☐ Ruined Shale Packer
☐ Ruined Packer

☐ Extra Copies

Sub Total 6

Total 12107.80

MP/DST Disc't

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

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