

**TRILOBITE TESTING, INC.**

## DRILL STEM TEST REPORT

Mai Oil Operations, Inc  
 8411 Preston Rd. STE 800  
 Dallas, TX. 75225  
 ATTN: Wyatt Urban

**27-11s-19w Ellis, Ks.**  
**Vine #10**  
 Job Ticket: 54449 **DST#: 1**  
 Test Start: 2013.10.12 @ 02:45:00

### GENERAL INFORMATION:

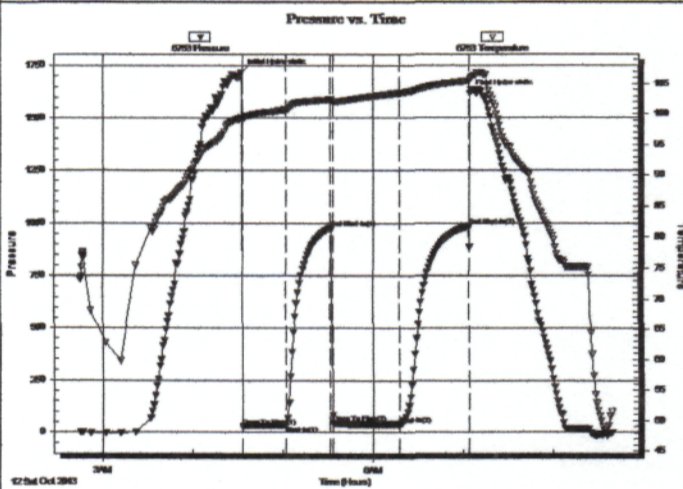
Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 04:33:00 Tester: Brett Dickinson/ Tim  
 Time Test Ended: 08:39:30 Unit No: 59  
 Interval: **3554.00 ft (KB) To 3636.00 ft (KB) (TVD)** Reference Elevations: 2134.00 ft (KB)  
 Total Depth: 3636.00 ft (KB) (TVD) 2126.00 ft (CF)  
 Hole Diameter: inches Hole Condition: Fair KB to GR/CF: 8.00 ft

### Serial #: 6753

Inside

Press@RunDepth: 39.56 psig @ 3559.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.10.12 End Date: 2013.10.12 Last Calib.: 2013.10.12  
 Start Time: 02:45:05 End Time: 08:39:29 Time On Btm: 2013.10.12 @ 04:32:30  
 Time Off Btm: 2013.10.12 @ 07:04:30

TEST COMMENT: IFP-30-Built to 2 1/4"  
 ISI-30-No blow back  
 FF-45-Blow built to 2 1/4"  
 FSI-45-No blow back



### PRESSURE SUMMARY

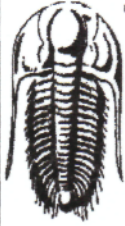
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1716.20	99.44	Initial Hydro-static
1	29.94	99.16	Open To Flow (1)
30	33.65	100.72	Shut-In(1)
59	976.62	102.42	End Shut-In(1)
61	44.68	102.08	Open To Flow (2)
105	39.56	103.48	Shut-In(2)
151	982.73	105.43	End Shut-In(2)
152	1616.34	105.68	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
5.00	VSOCM 5%Oil,95%Mud	0.07
20.00	OCM 20%Oil,80%MUD	0.28
5.00	SGO 5%Gas, 95% Oil	0.07

### Gas Rates

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



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 8411 Preston Rd. STE 800  
 Dallas, TX. 75225  
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**27-11s-19w Ellis, Ks.**  
**Vine #10**  
 Job Ticket: 54450      **DST#: 2**  
 Test Start: 2013.10.12 @ 14:00:00

**GENERAL INFORMATION:**

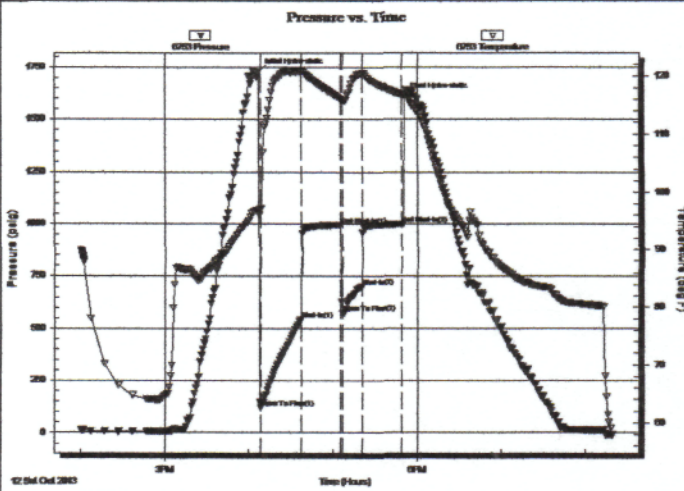
Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 16:08:30  
 Time Test Ended: 20:19:00  
 Interval: **3554.00 ft (KB) To 3643.00 ft (KB) (TVD)**  
 Total Depth: 3643.00 ft (KB) (TVD)  
 Hole Diameter: inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Brett Dickinson/ Tim  
 Unit No: 59  
 Reference Elevations: 2134.00 ft (KB)  
 2126.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 6753**

**Inside**

Press@RunDepth: 702.98 psig @ 3559.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2013.10.12      End Date: 2013.10.12      Last Calib.: 2013.10.12  
 Start Time: 14:00:05      End Time: 20:18:59      Time On Btmr: 2013.10.12 @ 16:07:00  
 Time Off Btmr: 2013.10.12 @ 17:51:00

TEST COMMENT: 30min IF-BOB in 2 min  
 30minSI-No blow  
 15minFF-BOB in 2 1/2 min  
 30minFSI-No blow



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1728.42	97.00	Initial Hydro-static
2	119.84	96.95	Open To Flow (1)
30	544.46	120.71	Shut-In(1)
59	995.94	116.13	End Shut-In(1)
60	574.05	115.94	Open To Flow (2)
74	702.98	120.44	Shut-In(2)
102	999.55	116.82	End Shut-In(2)
104	1611.33	116.80	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
200.00	GOMCW 10%G 20%O 40%W 30%M	2.81
310.00	SGOWCM 5%G 20%O 20%W 55%M	4.35
245.00	SGOMCW 5%G 20%O 55%W 20%M	3.44
620.00	SGMOCW 5%G 20%O 70%W 5%M	8.70
245.00	SOMCW 10%O 85%W 5%M	3.44

\* Recovery from multiple tests

**Gas Rates**

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