



## DRILL STEM TEST REPORT

Prepared For: **Bach Oil Production**

PO Box 723  
Alma, NE 68920-0723

ATTN: Jason Bach

### **McClain Unit #1**

### **21-1s-17w Phillips,KS**

Start Date: 2012.11.24 @ 16:50:18

End Date: 2012.11.25 @ 00:03:27

Job Ticket #: 51501                      DST #: 1

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
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**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Bach Oil Production  
 PO Box 723  
 Alma, NE 68920-0723  
 ATTN: Jason Bach

**21-1s-17w Phillips,KS**

**McClain Unit #1**

Job Ticket: 51501      **DST#: 1**  
 Test Start: 2012.11.24 @ 16:50:18

## GENERAL INFORMATION:

Formation: **LKC**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 18:42:43  
 Time Test Ended: 00:03:27  
 Interval: **3532.00 ft (KB) To 3622.00 ft (KB) (TVD)**  
 Total Depth: 3749.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Straddle (Initial)  
 Tester: Ray Schwager  
 Unit No: 42  
 Reference Elevations: 2212.00 ft (KB)  
 2207.00 ft (CF)  
 KB to GR/CF: 5.00 ft

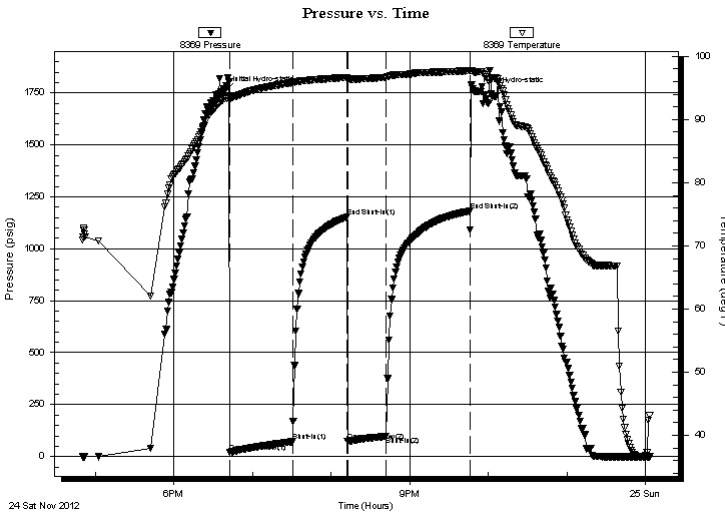
## Serial #: 8369

Inside

Press @ Run Depth: 97.43 psig @ 3534.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2012.11.24      End Date: 2012.11.25      Last Calib.: 2012.11.25  
 Start Time: 16:50:18      End Time: 00:03:27      Time On Btm: 2012.11.24 @ 18:39:13  
 Time Off Btm: 2012.11.24 @ 21:50:27

TEST COMMENT: 45-IFP-w k to a fr bl 1/2" to 3 3/4" bl  
 45-ISIP-no bl  
 30-FFP-w k bl thru-out 1/4" to 1/2" bl  
 60-FSIP-no bl

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1760.76	93.33	Initial Hydro-static
4	19.16	93.01	Open To Flow (1)
52	72.10	95.83	Shut-In(1)
93	1153.10	96.65	End Shut-In(1)
94	73.87	96.33	Open To Flow (2)
123	97.43	96.66	Shut-In(2)
187	1181.20	97.73	End Shut-In(2)
192	1757.72	97.53	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
150.00	Mud	0.74

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bach Oil Production

**21-1s-17w Phillips,KS**

PO Box 723  
Alma, NE 68920-0723

**McClain Unit #1**

Job Ticket: 51501

**DST#: 1**

ATTN: Jason Bach

Test Start: 2012.11.24 @ 16:50:18

## Tool Information

Drill Pipe:	Length: 3330.00 ft	Diameter: 3.80 inches	Volume: 46.71 bbl	Tool Weight: 2200.00 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: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 47.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3532.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	3622.00 ft			
Interval between Packers:	90.00 ft			
Tool Length:	250.00 ft			
Number of Packers:	2	Diameter: 6.85 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3505.00	
Shut In Tool	5.00			3510.00	
Hydraulic tool	5.00			3515.00	
Jars	5.00			3520.00	
Safety Joint	2.00			3522.00	
Packer	5.00			3527.00	28.00 Bottom Of Top Packer
Packer	5.00			3532.00	
Stubb	1.00			3533.00	
Perforations	1.00			3534.00	
Recorder	0.00	8369	Inside	3534.00	
Recorder	0.00	8700	Outside	3534.00	
Blank Spacing	64.00			3598.00	
Perforations	20.00			3618.00	
Blank Off Sub	1.00			3619.00	
Blank Spacing	3.00			3622.00	90.00 Tool Interval
Packer	5.00			3627.00	
Stubb	1.00			3628.00	
Recorder	0.00	8374	Below	3628.00	
Blank Spacing	123.00			3751.00	
Bullnose	3.00			3754.00	132.00 Bottom Packers & Anchor

**Total Tool Length: 250.00**



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**FLUID SUMMARY**

Bach Oil Production  
PO Box 723  
Alma, NE 68920-0723  
ATTN: Jason Bach

**21-1s-17w Phillips,KS**  
**McClain Unit #1**  
Job Ticket: 51501      **DST#: 1**  
Test Start: 2012.11.24 @ 16:50:18

## 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:	ppm
Viscosity: 62.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.39 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 800.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	Mud	0.738

Total Length: 150.00 ft      Total Volume: 0.738 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

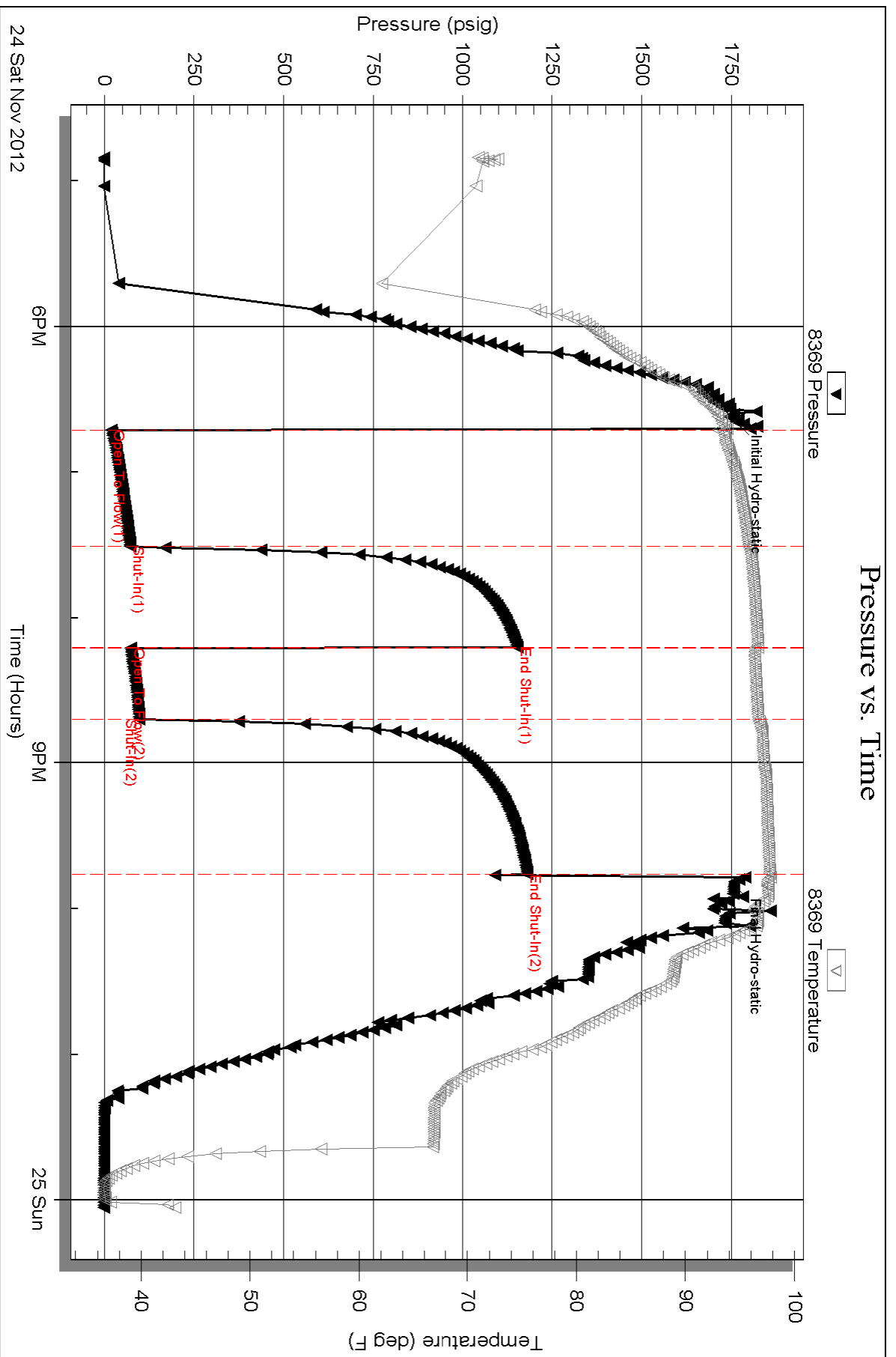
Serial #: 8369

Inside

Bach Oil Production

McClain Unit #1

DST Test Number: 1



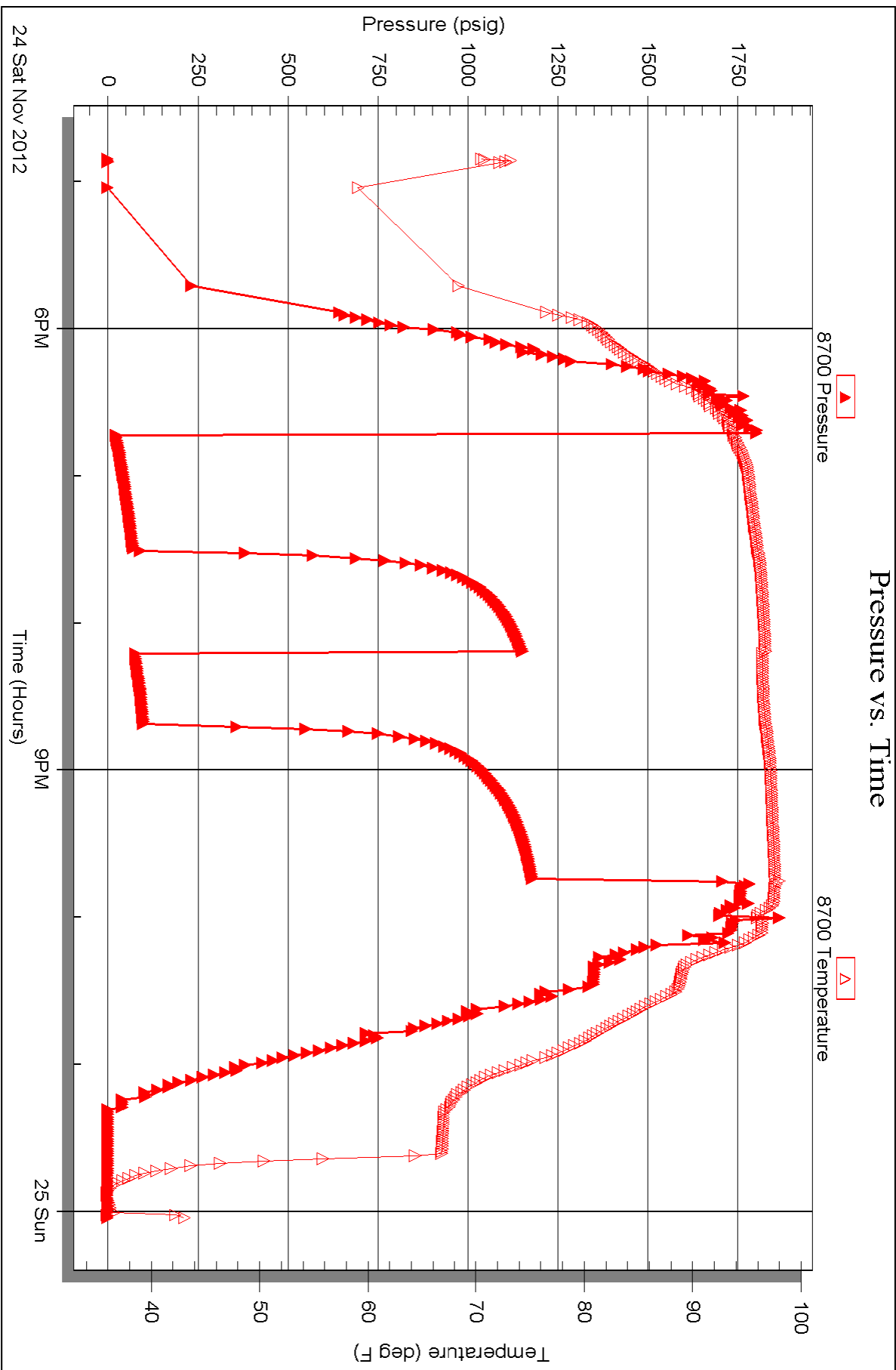
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Outside

Bach Oil Production

McClain Unit #1

DST Test Number: 1



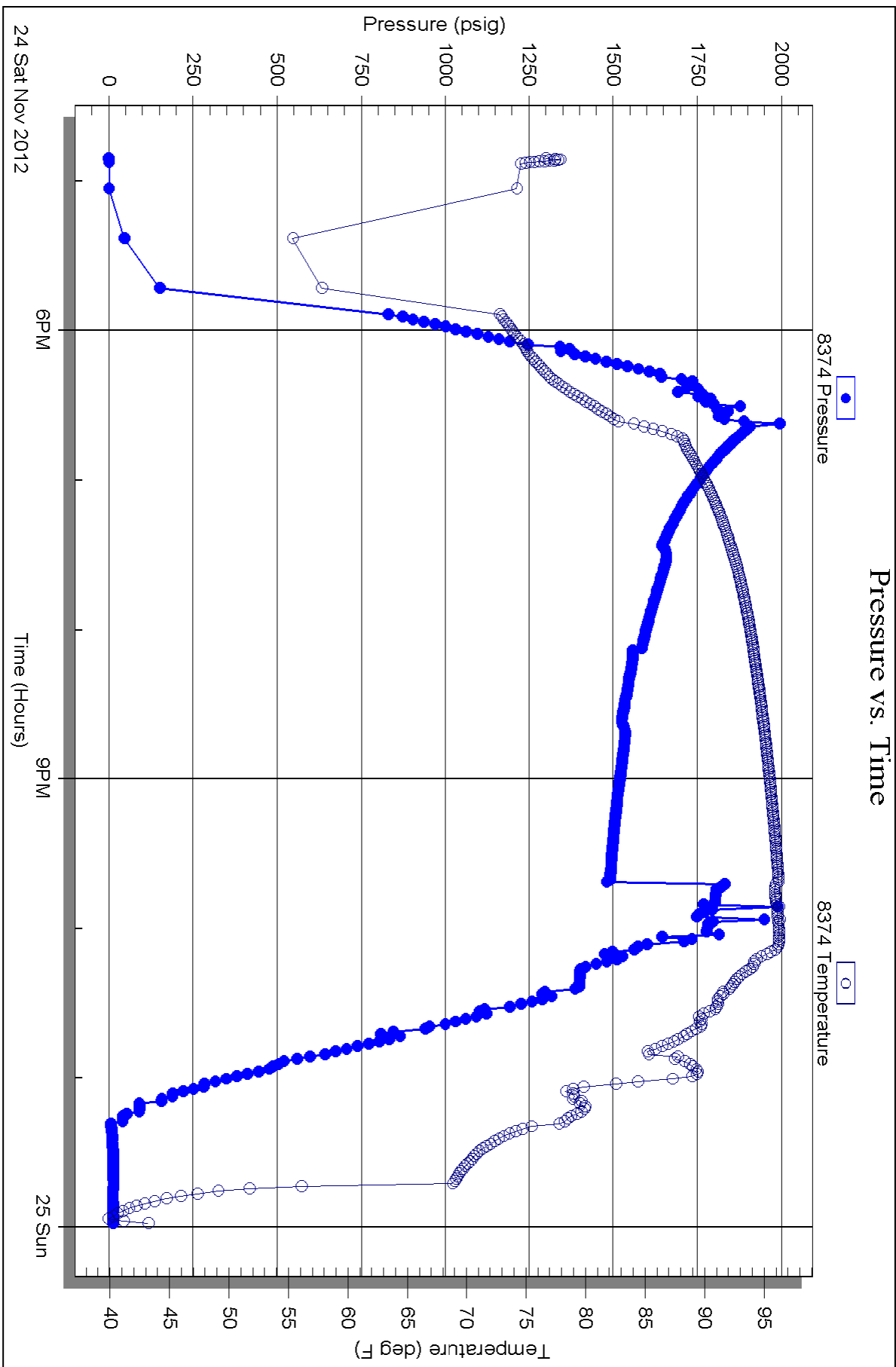


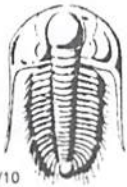
Serial #: 8374

Below (Stratate) PII Production

McClain Unit #1

DST Test Number: 1





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 51501

4/10

Well Name & No. McClain Unit #1 Test No. 1 Date 11-24-12  
 Company Back Oil Production Elevation 2212 KB 2207 GL  
 Address PO Box 723 ALMA, NE 68920-0723  
 Co. Rep / Geo. Bob Petersen Rig Murfinrig 8  
 Location: Sec. 21 Twp. 1<sup>s</sup> Rge. 17<sup>w</sup> Co. Phillips State Ks

Interval Tested 3532-3622 Zone Tested ~~3532-3622~~ LKC  
 Anchor Length 90 Drill Pipe Run 3330 Mud Wt. 9.3  
 Top Packer Depth 3532-3527 Drill Collars Run 180 Vis 62  
 Bottom Packer Depth 3622 Wt. Pipe Run — WL 6.4  
 Total Depth 3749 Chlorides 800 ppm System LCM 2#  
 Blow Description IFP - WEAK TO A FAIR BLOW 1/2" TO 3 3/4" BLOW  
ISIP - NO BLOW  
FFP - WEAK BLOW THRU-OUT  
FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>150</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 150 BHT 97 Gravity — API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic <u>1760</u>	<input checked="" type="checkbox"/> Test 1150	T-On Location <u>1545</u>
(B) First Initial Flow <u>19</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>1650</u>
(C) First Final Flow <u>72</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>1840</u>
(D) Initial Shut-In <u>1153</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>2140</u>
(E) Second Initial Flow <u>73</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0003</u>
(F) Second Final Flow <u>97</u>	<input checked="" type="checkbox"/> Mileage <u><del>174 RT</del></u> 150rt 232.50	Comments
(G) Final Shut-In <u>1181</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1757</u>	<input checked="" type="checkbox"/> Straddle 600	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>45</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>30</u>	<input type="checkbox"/> Day Standby	Total <u>2307.50</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>2307.50</u>	

Approved By \_\_\_\_\_ Our Representative RAY SCHWAGER *Thank you*

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