



## DRILL STEM TEST REPORT

Prepared For: **Bach Oil Production**

PO Box 723  
Alma NE 68920-0723

ATTN: Bob Petersen

### **Oxbow Unit # 1**

#### **11-1s-19w Phillips,KS**

Start Date: 2013.08.23 @ 18:24:00

End Date: 2013.08.24 @ 01:18:00

Job Ticket #: 50462                      DST #: 1

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.08.26 @ 15:49:43



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Bach Oil Production

**11-1s-19w Phillips,KS**

PO Box 723  
Alma NE 68920-0723

**Oxbow Unit # 1**

Job Ticket: 50462

**DST#: 1**

ATTN: Bob Petersen

Test Start: 2013.08.23 @ 18:24:00

## GENERAL INFORMATION:

Formation: **LKC " A - E "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:25:30

Time Test Ended: 01:18:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jim Svaty

Unit No: 54

**Interval: 3248.00 ft (KB) To 3330.00 ft (KB) (TVD)**

Reference Elevations: 2009.00 ft (KB)

Total Depth: 3330.00 ft (KB) (TVD)

2004.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8289 Outside**

Press @ Run Depth: 82.53 psig @ 3249.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.23

End Date:

2013.08.24

Last Calib.: 2013.08.24

Start Time: 18:24:02

End Time:

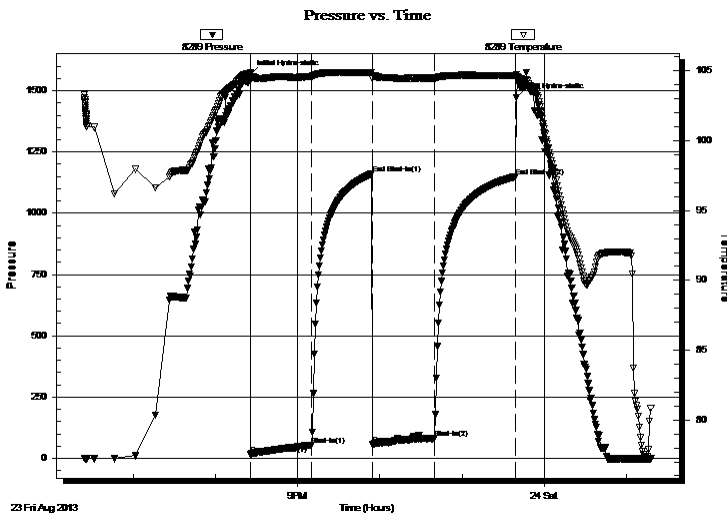
01:18:00

Time On Btm: 2013.08.23 @ 20:25:15

Time Off Btm: 2013.08.23 @ 23:39:45

**TEST COMMENT:** 45-IFP- Surface Blow Building to 2 1/4"  
45-ISIP- No Blow  
45-FFP- Weak Surface Blow in 25 min.  
60-FSIP- No Blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1565.01	104.85	Initial Hydro-static
1	17.62	104.35	Open To Flow (1)
45	55.10	104.60	Shut-In(1)
89	1161.23	104.89	End Shut-In(1)
90	57.20	104.48	Open To Flow (2)
135	82.53	104.46	Shut-In(2)
194	1150.27	104.67	End Shut-In(2)
195	1472.61	104.73	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
130.00	Mud 100%	1.73

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bach Oil Production

**11-1s-19w Phillips,KS**

PO Box 723  
Alma NE 68920-0723

**Oxbow Unit # 1**

Job Ticket: 50462

**DST#: 1**

ATTN: Bob Petersen

Test Start: 2013.08.23 @ 18:24:00

## Tool Information

Drill Pipe:	Length: 3120.00 ft	Diameter: 2.25 inches	Volume: 15.34 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 3.80 inches	Volume: 1.68 bbl	Weight to Pull Loose:	50000.00 lb
			<u>Total Volume: 17.02 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	49000.00 lb
Depth to Top Packer:	3248.00 ft			Final	49000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	82.00 ft				
Tool Length:	110.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

## Tool Description

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3221.00	
Shut In Tool	5.00			3226.00	
Hydraulic tool	5.00			3231.00	
Jars	5.00			3236.00	
Safety Joint	2.00			3238.00	
Packer	5.00			3243.00	28.00 Bottom Of Top Packer
Packer	5.00			3248.00	
Stubb	1.00			3249.00	
Recorder	0.00	8789	Inside	3249.00	
Recorder	0.00	8289	Outside	3249.00	
Perforations	14.00			3263.00	
Change Over Sub	1.00			3264.00	
Blank Spacing	62.00			3326.00	
Change Over Sub	1.00			3327.00	
Bullnose	3.00			3330.00	82.00 Bottom Packers & Anchor

**Total Tool Length: 110.00**



**TRILOBITE**  
TESTING, INC.

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Bach Oil Production

**11-1s-19w Phillips,KS**

PO Box 723  
Alma NE 68920-0723

**Oxbow Unit # 1**

Job Ticket: 50462

**DST#: 1**

ATTN: Bob Petersen

Test Start: 2013.08.23 @ 18:24:00

## 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: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.37 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 4.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
130.00	Mud 100%	1.732

Total Length: 130.00 ft      Total Volume: 1.732 bbl

Num Fluid Samples: 0

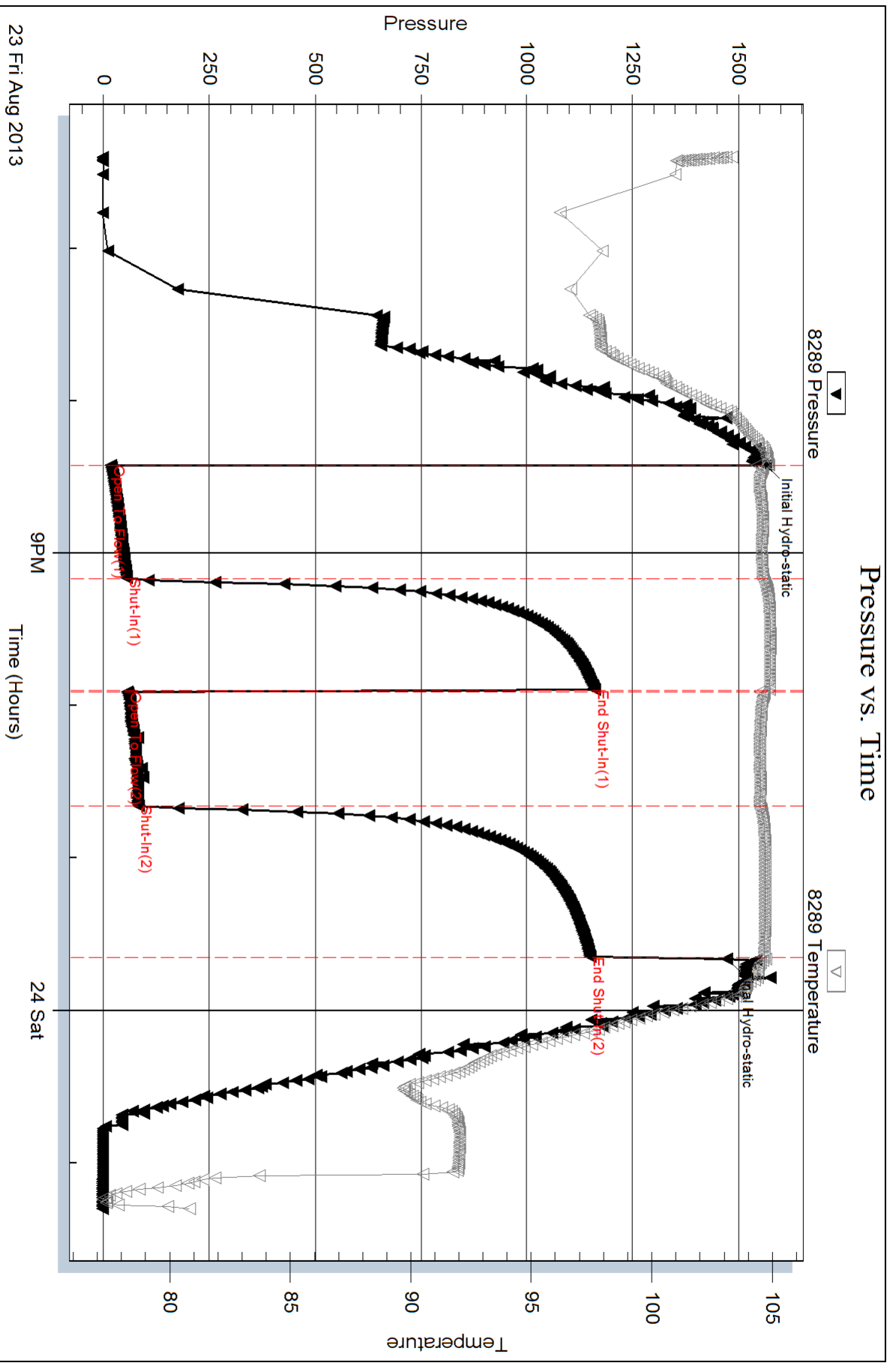
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



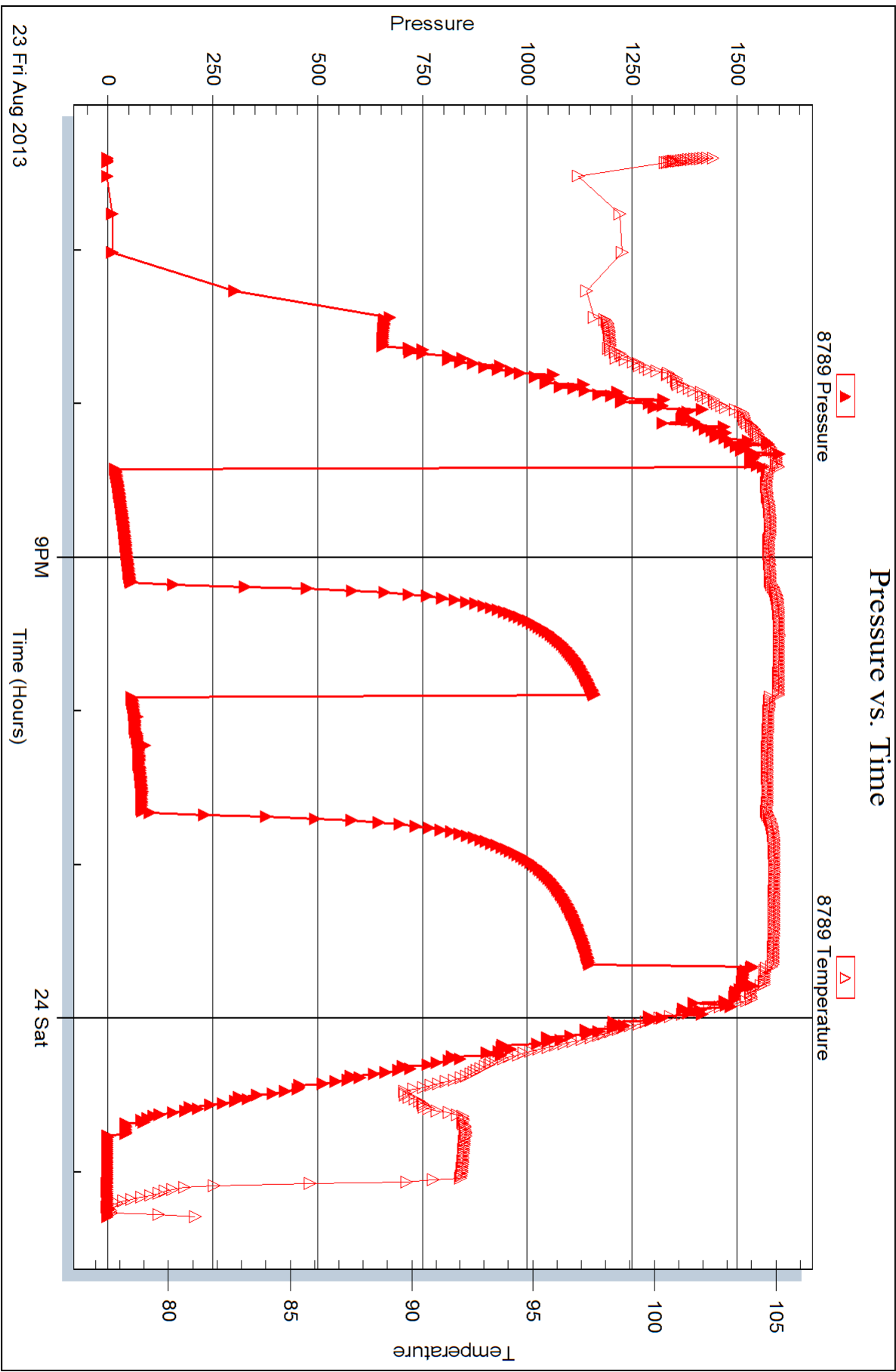
Serial #: 8789

Inside

Bach Oil Production

Oxbow Unit # 1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 50462

Printed: 2013.08.26 @ 15:49:45



## DRILL STEM TEST REPORT

Prepared For: **Bach Oil Production**

PO Box 723  
Alma NE 68920-0723

ATTN: Bob Petersen

### **Oxbow Unit # 1**

### **11-1s-19w Phillips,KS**

Start Date: 2013.08.24 @ 07:07:00

End Date: 2013.08.24 @ 13:43:00

Job Ticket #: 50463                      DST #: 2

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.08.26 @ 15:49:12

Bach Oil Production  
11-1s-19w Phillips,KS  
Oxbow Unit # 1  
DST # 2  
LKC "F & G"  
2013.08.24





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Bach Oil Production

**11-1s-19w Phillips,KS**

PO Box 723  
Alma NE 68920-0723

**Oxbow Unit # 1**

Job Ticket: 50463

**DST#: 2**

ATTN: Bob Petersen

Test Start: 2013.08.24 @ 07:07:00

## GENERAL INFORMATION:

Formation: **LKC "F & G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:21:00

Time Test Ended: 13:43:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 54

**Interval: 3315.00 ft (KB) To 3365.00 ft (KB) (TVD)**

Reference Elevations: 2009.00 ft (KB)

Total Depth: 3365.00 ft (KB) (TVD)

2004.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8289 Outside**

Press @ Run Depth: 56.67 psig @ 3316.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.24 End Date: 2013.08.24

Last Calib.: 2013.08.24

Start Time: 07:07:02 End Time: 13:43:00

Time On Btm: 2013.08.24 @ 09:20:45

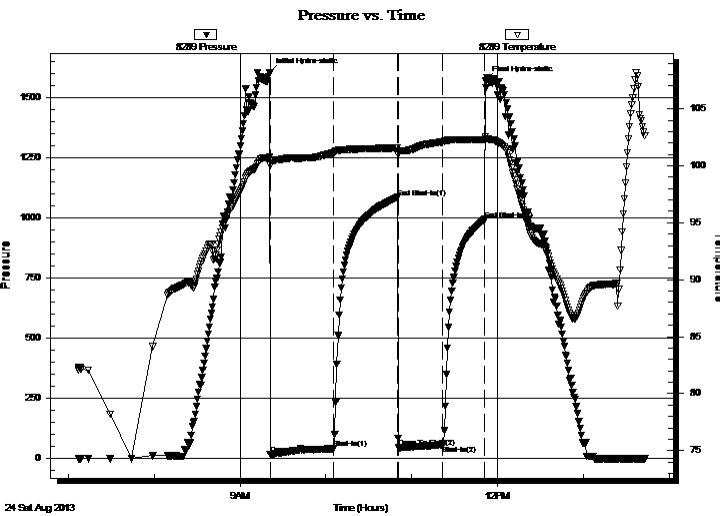
Time Off Btm: 2013.08.24 @ 11:51:30

**TEST COMMENT:** 45-IFP- Very Weak to Surface Blow in 25 min. Building to 1/2"

45-ISIP- No Blow

30-FFP- No Blow

30-FSIP- No Blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1604.38	100.75	Initial Hydro-static
1	16.22	100.06	Open To Flow (1)
45	40.67	101.12	Shut-In(1)
90	1085.26	101.57	End Shut-In(1)
90	45.90	101.25	Open To Flow (2)
121	56.67	102.08	Shut-In(2)
151	993.46	102.27	End Shut-In(2)
151	1569.90	102.52	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
70.00	WCM 40%w 60%m Show of Oil	0.98

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bach Oil Production

**11-1s-19w Phillips,KS**

PO Box 723  
Alma NE 68920-0723

**Oxbow Unit # 1**

Job Ticket: 50463

**DST#: 2**

ATTN: Bob Petersen

Test Start: 2013.08.24 @ 07:07:00

## Tool Information

Drill Pipe:	Length: 3182.00 ft	Diameter: 2.25 inches	Volume: 15.65 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 3.80 inches	Volume: 1.68 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 17.33 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	3315.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	50.00 ft			
Tool Length:	78.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3288.00	
Shut In Tool	5.00			3293.00	
Hydraulic tool	5.00			3298.00	
Jars	5.00			3303.00	
Safety Joint	2.00			3305.00	
Packer	5.00			3310.00	28.00 Bottom Of Top Packer
Packer	5.00			3315.00	
Stubb	1.00			3316.00	
Recorder	0.00	8789	Inside	3316.00	
Recorder	0.00	8289	Outside	3316.00	
Perforations	14.00			3330.00	
Change Over Sub	1.00			3331.00	
Blank Spacing	30.00			3361.00	
Change Over Sub	1.00			3362.00	
Bullnose	3.00			3365.00	50.00 Bottom Packers & Anchor

**Total Tool Length: 78.00**



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Bach Oil Production

**11-1s-19w Phillips,KS**

PO Box 723  
Alma NE 68920-0723

**Oxbow Unit # 1**

Job Ticket: 50463

**DST#: 2**

ATTN: Bob Petersen

Test Start: 2013.08.24 @ 07:07:00

**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:

18000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 3.00 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
70.00	WCM 40%w 60%m Show of Oil	0.982

Total Length: 70.00 ft      Total Volume: 0.982 bbl

Num Fluid Samples: 0

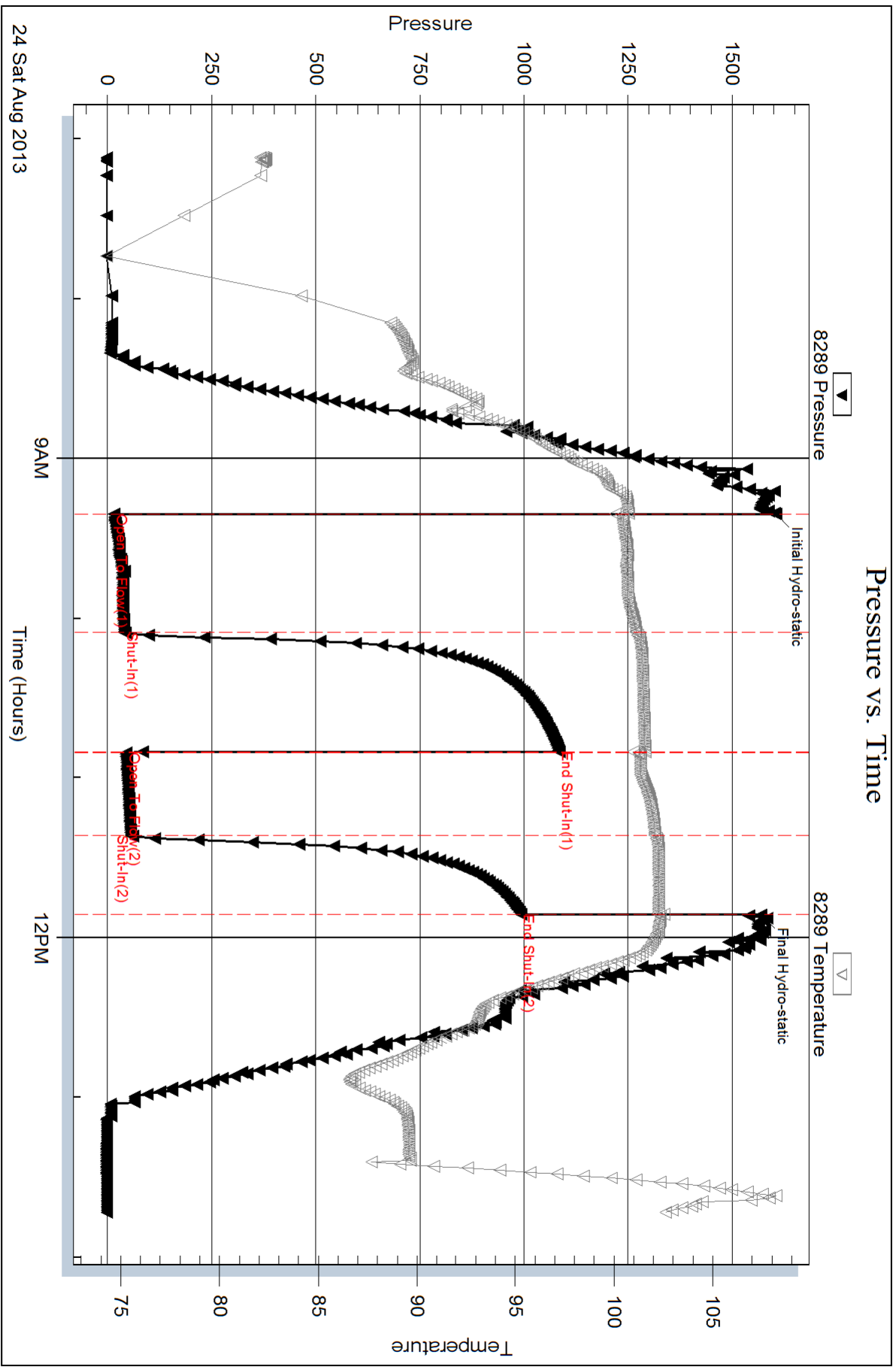
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .282 @ 89



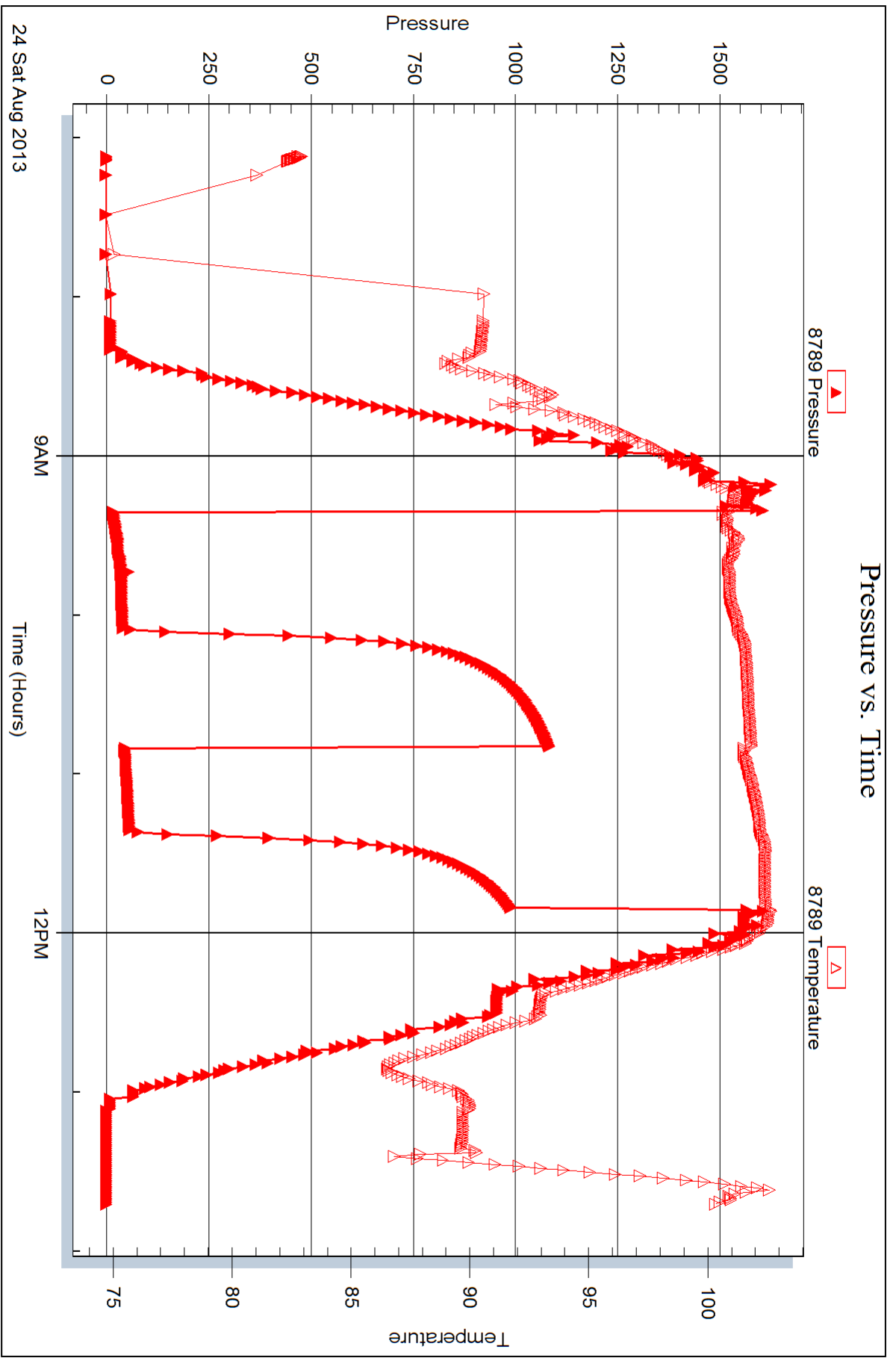
Serial #: 8789

Inside

Bach Oil Production

Oxbow Unit # 1

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 50463

Printed: 2013.08.26 @ 15:49:13



## DRILL STEM TEST REPORT

Prepared For: **Bach Oil Production**

PO Box 723  
Alma NE 68920-0723

ATTN: Bob Petersen

### **Oxbow Unit # 1**

#### **11-1s-19w Phillips,KS**

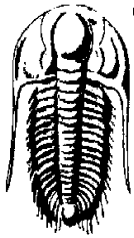
Start Date: 2013.08.25 @ 03:38:00

End Date: 2013.08.25 @ 09:52:00

Job Ticket #: 50464                      DST #: 3

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.08.26 @ 15:48:42



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Bach Oil Production

**11-1s-19w Phillips,KS**

PO Box 723  
Alma NE 68920-0723

**Oxbow Unit # 1**

ATTN: Bob Petersen

Job Ticket: 50464

**DST#: 3**

Test Start: 2013.08.25 @ 03:38:00

## GENERAL INFORMATION:

Formation: **LKC " I - TD "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:06:30

Time Test Ended: 09:52:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 54

**Interval: 3388.00 ft (KB) To 3500.00 ft (KB) (TVD)**

Total Depth: 3500.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2009.00 ft (KB)

2004.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8289 Outside**

Press @ Run Depth: 125.82 psig @ 3389.00 ft (KB)

Start Date: 2013.08.25

End Date: 2013.08.25

Start Time: 03:38:02

End Time: 09:52:00

Capacity: 8000.00 psig

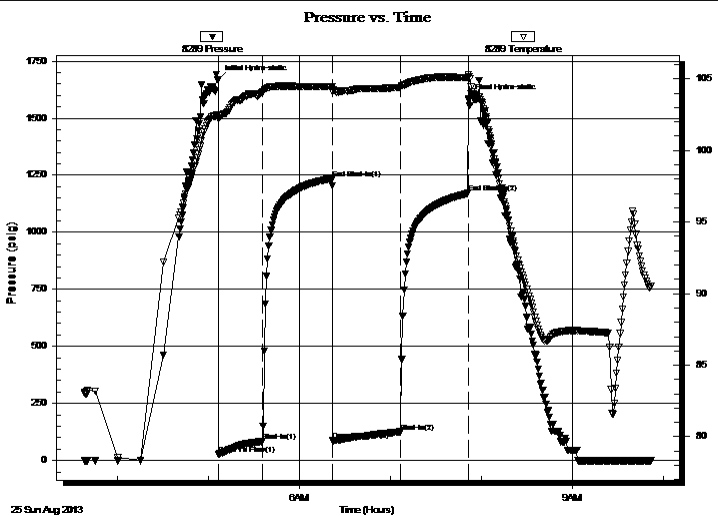
Last Calib.: 2013.08.25

Time On Btm: 2013.08.25 @ 05:06:00

Time Off Btm: 2013.08.25 @ 07:51:15

**TEST COMMENT:** 30-IFP- Surface Blow in 5 min. to BOB in 30 min.  
45-ISIP- No Blow  
45-FFP- Surface Blow in 1 min. to BOB in 38 min.  
45-FSIP- No Blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1670.02	102.50	Initial Hydro-static
1	27.65	102.21	Open To Flow (1)
30	83.54	104.06	Shut-In(1)
76	1236.25	104.46	End Shut-In(1)
76	88.99	104.10	Open To Flow (2)
121	125.82	104.41	Shut-In(2)
165	1171.09	105.10	End Shut-In(2)
166	1584.66	105.31	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	OCM 35%o 65%m	1.68
60.00	OCM 20%o 80%m	0.30
20.00	OCM 40%o 60%m	0.10
60.00	CO 100%	0.30

## Gas Rates

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

\* Recovery from multiple tests







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bach Oil Production

**11-1s-19w Phillips,KS**

PO Box 723  
Alma NE 68920-0723

**Oxbow Unit # 1**

Job Ticket: 50464

**DST#: 3**

ATTN: Bob Petersen

Test Start: 2013.08.25 @ 03:38:00

## Tool Information

Drill Pipe:	Length: 3243.00 ft	Diameter: 2.25 inches	Volume: 15.95 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 3.80 inches	Volume: 1.68 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 17.63 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3388.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	113.00 ft			
Tool Length:	141.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3361.00	
Shut In Tool	5.00			3366.00	
Hydraulic tool	5.00			3371.00	
Jars	5.00			3376.00	
Safety Joint	2.00			3378.00	
Packer	5.00			3383.00	28.00 Bottom Of Top Packer
Packer	5.00			3388.00	
Stubb	1.00			3389.00	
Recorder	0.00	8789	Inside	3389.00	
Recorder	0.00	8289	Outside	3389.00	
Perforations	14.00			3403.00	
Change Over Sub	1.00			3404.00	
Blank Spacing	93.00			3497.00	
Change Over Sub	1.00			3498.00	
Bullnose	3.00			3501.00	113.00 Bottom Packers & Anchor

**Total Tool Length: 141.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Bach Oil Production

**11-1s-19w Phillips,KS**

PO Box 723  
Alma NE 68920-0723

**Oxbow Unit # 1**

Job Ticket: 50464

**DST#: 3**

ATTN: Bob Petersen

Test Start: 2013.08.25 @ 03:38:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

23 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 3.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	OCM 35%o 65%m	1.683
60.00	OCM 20%o 80%m	0.295
20.00	OCM 40%o 60%m	0.098
60.00	CO 100%	0.295

Total Length: 260.00 ft

Total Volume: 2.371 bbl

Num Fluid Samples: 0

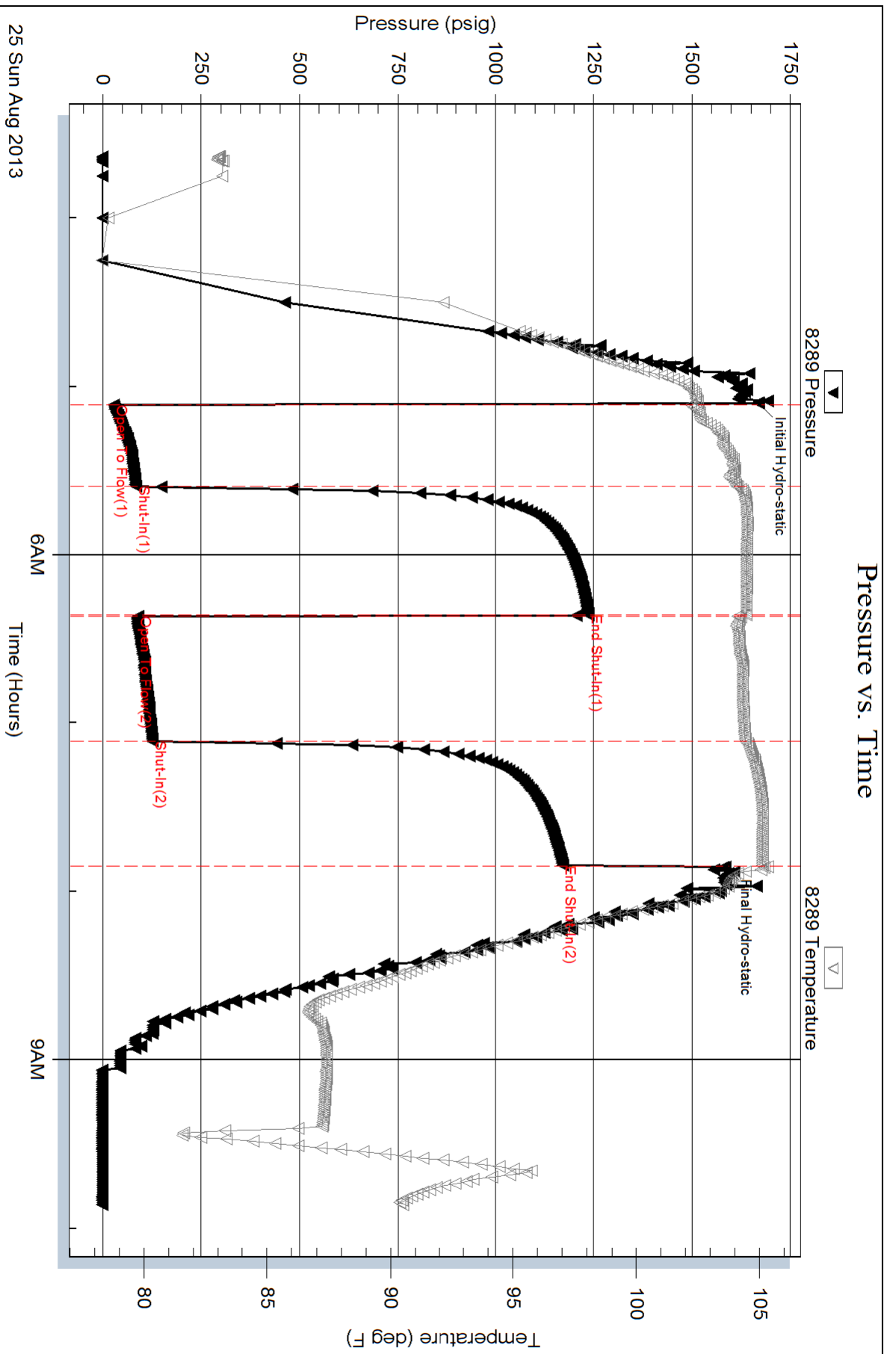
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



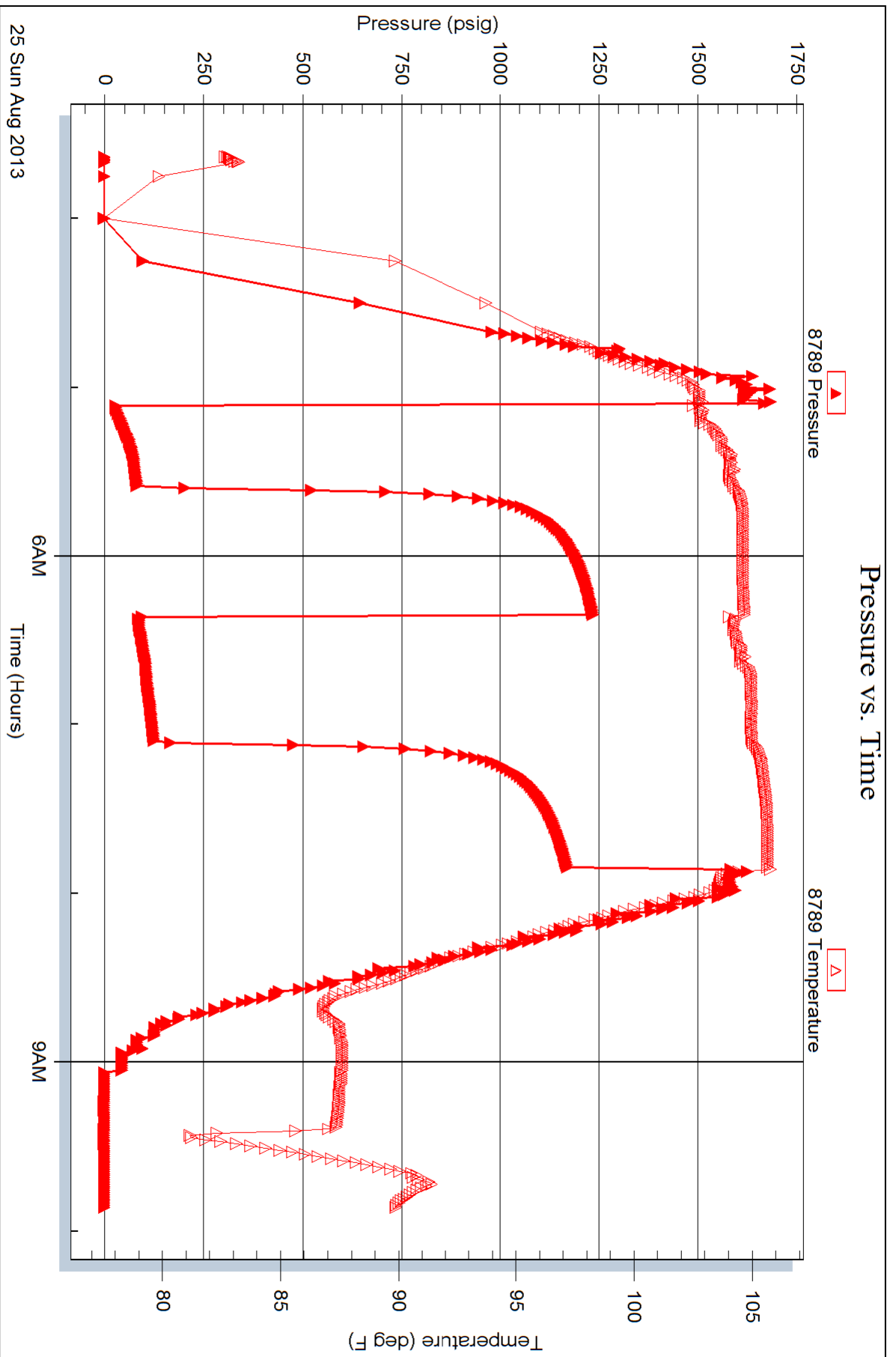
Serial #: 8789

Inside

Bach Oil Production

Oxbow Unit # 1

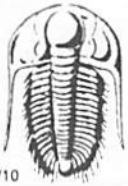
DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 50464

Printed: 2013.08.26 @ 15:48:44



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 50462

4/10

Well Name & No. Qxbow Unit #1 Test No. 1 Date 8-23-13  
 Company Bach Oil Production Elevation 2009 KB 2004 GL  
 Address P.O. Box 723 Alma NE. 68920-0723  
 Co. Rep / Geo. Bob Petersen Rig MurFin #24  
 Location: Sec. 11 Twp. 15 Rge. 19<sup>w</sup> Co. Phillips State KS

Interval Tested 3248-3330 Zone Tested ARC "A-E."  
 Anchor Length 82 Drill Pipe Run 3120 Mud Wt. 8.9  
 Top Packer Depth 3243 Drill Collars Run 120 Vis 65  
 Bottom Packer Depth 3248 Wt. Pipe Run 9 WL 6.4  
 Total Depth 3330 Chlorides 400 ppm System LCM 4

Blow Description IFP - Surface Blow Building to 2 1/4 in.  
ISIP - No Blow  
FFP - Weak Surface Blow in 25 min.  
FSIP - No Blow

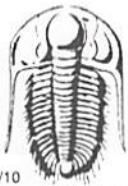
Rec	Feet of	%gas	%oil	%water	%mud
<u>130</u>	<u>cmud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 130 BHT 104 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>1565</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>17:43</u>
(B) First Initial Flow <u>17</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>18:29</u>
(C) First Final Flow <u>55</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>20:25</u>
(D) Initial Shut-In <u>1161</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>23:40</u>
(E) Second Initial Flow <u>57</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>01:18</u>
(F) Second Final Flow <u>82</u>	<input checked="" type="checkbox"/> Mileage <u>170 RT</u> 263.50	Comments _____
(G) Final Shut-In <u>1150</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>1472</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>45</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	Sub Total <u>0</u>
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Total <u>1738.50</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	MP/DS/Disct _____
	<input type="checkbox"/> Accessibility _____	
	Sub Total <u>1738.50</u>	

Approved By \_\_\_\_\_ Our Representative [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.  
785-639-5864





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 50463

Well Name & No. Oxbow Unit #1 Test No. 2 Date 8-24-13  
 Company Bach Oil Production Elevation 2009 KB 2004 GL  
 Address P.O. Box 723 Alma NE. 68920-0723  
 Co. Rep / Geo. Bob Peterson Rig Mur Fin #24  
 Location: Sec. 11 Twp. 1<sup>s</sup> Rge. 19<sup>w</sup> Co. Phillips State KS

Interval Tested 3315 - 3365 Zone Tested LKC "F+G"  
 Anchor Length 50 Drill Pipe Run 3182 Mud Wt. 9.1  
 Top Packer Depth 3310 Drill Collars Run 120 Vis 52  
 Bottom Packer Depth 3315 Wt. Pipe Run 0 WL 6.4  
 Total Depth 3365 Chlorides 500 ppm System LCM 3

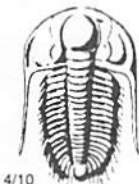
Blow Description IFP - Very Weak to Surface Blow in 25 min. Building to 1/2 in.  
ISIP - No Blow  
FFP - No Blow  
FSIP - No Blow

Rec	Feet of	Shaw of Oil	%gas	%oil	%water	%mud
<u>70</u>	<u>WCM</u>	<u>Shaw of Oil</u>		<u>40</u>	<u>60</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 70 BHT 102 Gravity \_\_\_\_\_ API RW 282 @ 89 °F Chlorides 18,000 ppm

(A) Initial Hydrostatic <u>1604</u>	<input checked="" type="checkbox"/> Test 1150	T-On Location <u>06:30</u>
(B) First Initial Flow <u>16</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>07:07</u>
(C) First Final Flow <u>40</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>09:21</u>
(D) Initial Shut-In <u>1085</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>11:51</u>
(E) Second Initial Flow <u>45</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>13:43</u>
(F) Second Final Flow <u>56</u>	<input checked="" type="checkbox"/> Mileage 263.50	Comments _____
(G) Final Shut-In <u>993</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1569</u>	<input type="checkbox"/> Straddle	<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>1738.50</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't _____
	Sub Total <u>1738.50</u>	

Approved By \_\_\_\_\_ Our Representative [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.



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 50464

Well Name & No. Oxbow Unit #1 Test No. 3 Date 8-25-13  
 Company Bach Oil Production Elevation 2009 KB 2004 GL  
 Address P.O. Box 723 Alma NE, 68920-0723  
 Co. Rep / Geo. Bob Petersen Rig Murfin #24  
 Location: Sec. 11 Twp. 1<sup>s</sup> Rge. 19<sup>w</sup> Co. Phillips State KS

Interval Tested 3387-3500 Zone Tested LKC - "I- TD"  
 Anchor Length 113 Drill Pipe Run 3243 Mud Wt. 9.1  
 Top Packer Depth 3382 Drill Collars Run 120 Vis 5.2  
 Bottom Packer Depth 3387 Wt. Pipe Run 0 WL 6.4  
 Total Depth 3500 Chlorides 500 ppm System LCM 3

Blow Description IFP - Surface Blow in 5min. to BOB in 30min  
ISIP - No Blow  
FFP - Surface Blow in 1min to BOB in 30min  
FSIP - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>120</u>	<u>OCM</u>	<u>35</u>		<u>65</u>	
<u>60</u>	<u>OCM</u>	<u>20</u>		<u>80</u>	
<u>20</u>	<u>OCM</u>	<u>40</u>		<u>60</u>	
<u>60</u>	<u>CO</u>	<u>100</u>			

Rec Total 260 BHT \_\_\_\_\_ Gravity 23 API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>1670</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>03:07</u>
(B) First Initial Flow <u>27</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>03:30</u>
(C) First Final Flow <u>83</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>05:06</u>
(D) Initial Shut-In <u>1236</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>07:51</u>
(E) Second Initial Flow <u>88</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>09:52</u>
(F) Second Final Flow <u>125</u>	<input checked="" type="checkbox"/> Mileage <u>263.50</u>	Comments _____
(G) Final Shut-In <u>1171</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1584</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____

Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>45</u>	<input type="checkbox"/> Day Standby _____	Total <u>1738.50</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1738.50</u>	

Approved By \_\_\_\_\_ Our Representative [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.