



DRILL STEM TEST REPORT

Prepared For: **Bach Oil Production**

PO Box 723
Alma NE 68920

ATTN: Bob Peterson

Beyerlein Unit #1

7-3s-18w Phillips,KS

Start Date: 2012.11.08 @ 20:50:00

End Date: 2012.11.09 @ 03:58:00

Job Ticket #: 043004 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.12.31 @ 13:35:18



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Bach Oil Production

7-3s-18w Phillips,KS

PO Box 723
Alma NE 68920

Beyerlein Unit #1

Job Ticket: 043004

DST#: 1

ATTN: Bob Peterson

Test Start: 2012.11.08 @ 20:50:00

GENERAL INFORMATION:

Formation: **LKC-C-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:11:00

Time Test Ended: 03:58:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Chuck Kreuzer Jr

Unit No: 61

Interval: 3315.00 ft (KB) To 3400.00 ft (KB) (TVD)

Reference Elevations: 2044.00 ft (KB)

Total Depth: 3400.00 ft (KB) (TVD)

2039.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8791

Inside

Press @ Run Depth: 41.86 psig @ 3318.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.11.08

End Date:

2012.11.09

Last Calib.: 2012.11.09

Start Time: 20:50:01

End Time:

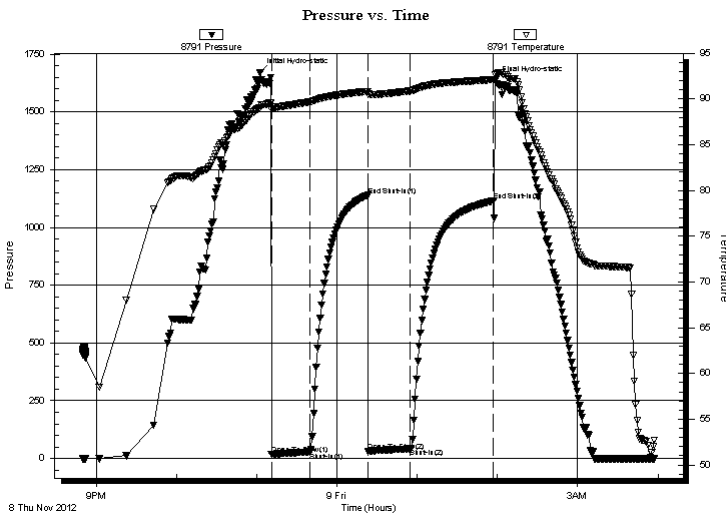
03:58:00

Time On Btm: 2012.11.08 @ 23:02:30

Time Off Btm: 2012.11.09 @ 01:58:30

TEST COMMENT: IF: Weak surface blow over 30 mins.
IS: No blow back over 45 mins.
FF: Weak surface blow, Died in 20 mins.
FS: No blow back over 60 mins.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1670.95	89.07	Initial Hydro-static
9	16.74	88.82	Open To Flow (1)
38	28.97	89.67	Shut-In(1)
81	1139.20	90.82	End Shut-In(1)
81	31.47	90.51	Open To Flow (2)
113	41.86	90.86	Shut-In(2)
175	1114.96	92.11	End Shut-In(2)
176	1637.39	92.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	vsosm-4%o96%m	0.20

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Bach Oil Production

7-3s-18w Phillips,KS

PO Box 723
Alma NE 68920

Beyerlein Unit #1

Job Ticket: 043004

DST#: 1

ATTN: Bob Peterson

Test Start: 2012.11.08 @ 20:50:00

Tool Information

Drill Pipe:	Length: 3129.00 ft	Diameter: 3.80 inches	Volume: 43.89 bbl	Tool Weight: 2000.00 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: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 44.80 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3315.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	113.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3292.00	
Hydraulic tool	5.00			3297.00	
Jars	5.00			3302.00	
Safety Joint	3.00			3305.00	
Packer	5.00			3310.00	28.00 Bottom Of Top Packer
Packer	5.00			3315.00	
Stubb	1.00			3316.00	
Perforations	1.00			3317.00	
Change Over Sub	1.00			3318.00	
Recorder	0.00	8791	Inside	3318.00	
Recorder	0.00	8651	Outside	3318.00	
Drill Pipe	64.00			3382.00	
Change Over Sub	1.00			3383.00	
Perforations	14.00			3397.00	
Bullnose	3.00			3400.00	85.00 Bottom Packers & Anchor

Total Tool Length: 113.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Bach Oil Production

7-3s-18w Phillips,KS

PO Box 723
Alma NE 68920

Beyerlein Unit #1

Job Ticket: 043004

DST#: 1

ATTN: Bob Peterson

Test Start: 2012.11.08 @ 20:50:00

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: 48.00 sec/qt

Cushion Volume: bbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	vsosm-4%o96%m	0.197

Total Length: 40.00 ft Total Volume: 0.197 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

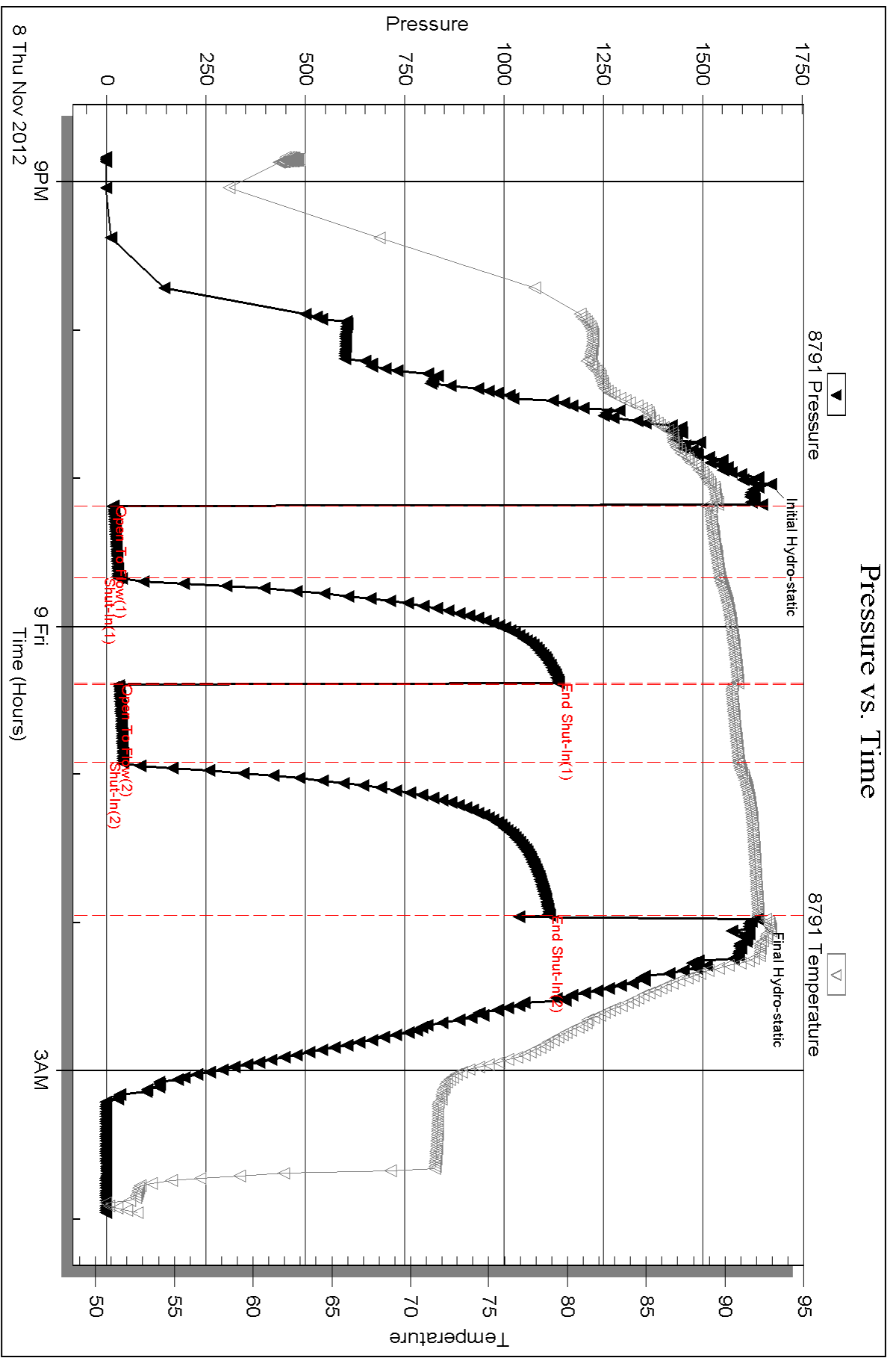
Serial #: 8791

Inside

Bach Oil Production

Beyerlein Unit #1

DST Test Number: 1



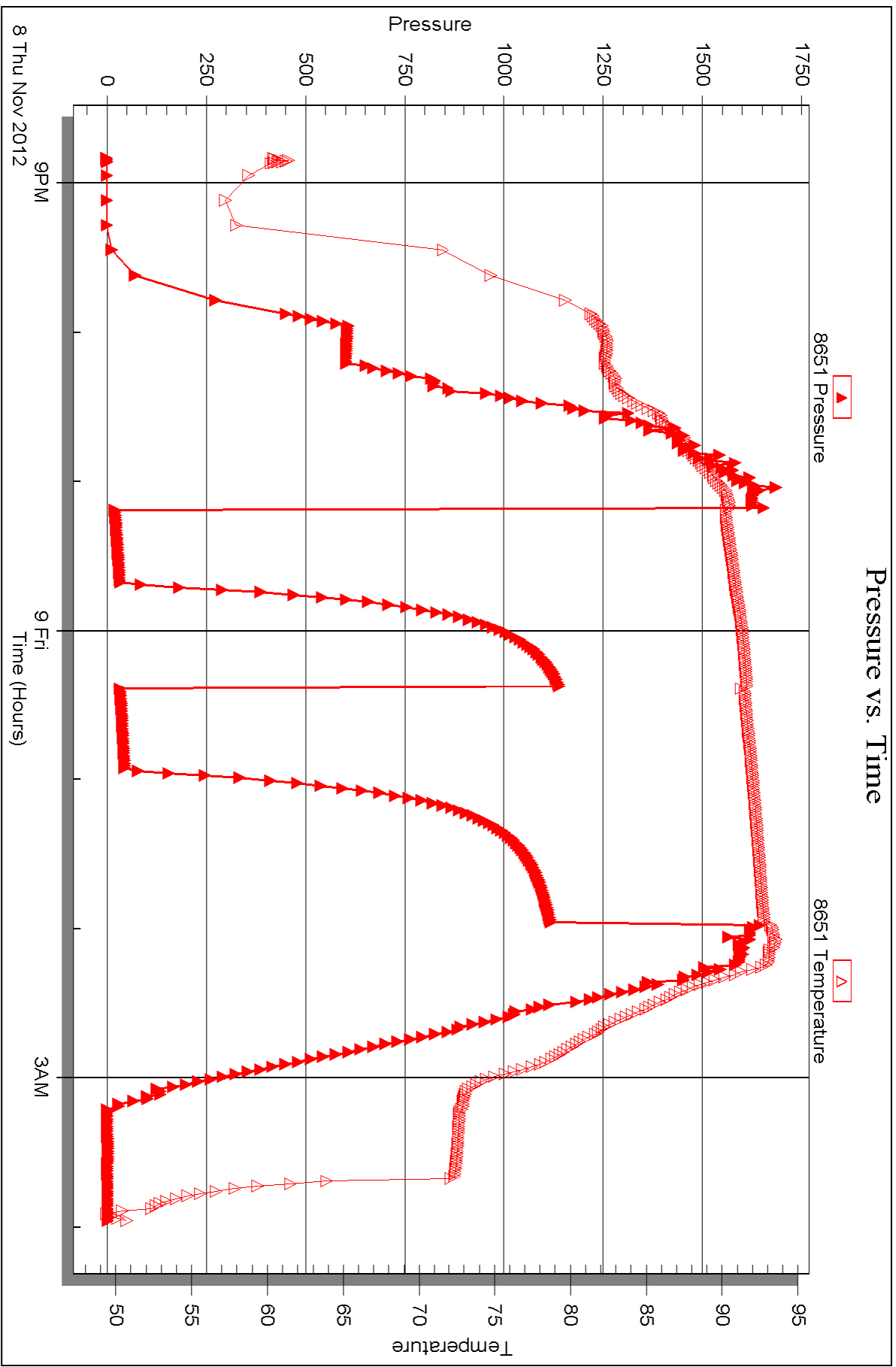
Serial #: 8651

Outside

Bach Oil Production

Beyerlein Unit #1

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Bach Oil Production**

PO Box 723
Alma NE 68920

ATTN: Bob Peterson

Beyerlein Unit #1

7-3s-18w Phillips,KS

Start Date: 2012.11.09 @ 13:55:01

End Date: 2012.11.09 @ 19:46:00

Job Ticket #: 043005 DST #: 2

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

Printed: 2012.12.31 @ 13:34:28



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Bach Oil Production

7-3s-18w Phillips,KS

PO Box 723
Alma NE 68920

Beyerlein Unit #1

Job Ticket: 043005

DST#: 2

ATTN: Bob Peterson

Test Start: 2012.11.09 @ 13:55:01

GENERAL INFORMATION:

Formation: **LKC-**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:40:30
 Time Test Ended: 19:46:00
 Interval: **3440.00 ft (KB) To 3475.00 ft (KB) (TVD)**
 Total Depth: 3475.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Chuck Kreuzer Jr.
 Unit No: 61
 Reference Elevations: 2044.00 ft (KB)
 2039.00 ft (CF)
 KB to GR/CF: 5.00 ft

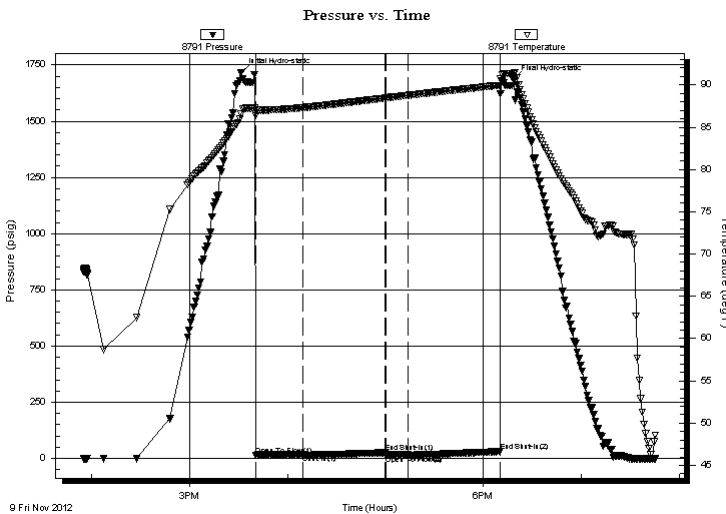
Serial #: 8791

Inside

Press @ Run Depth: 16.09 psig @ 3442.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.11.09 End Date: 2012.11.09 Last Calib.: 2012.11.09
 Start Time: 13:55:01 End Time: 19:46:00 Time On Btm: 2012.11.09 @ 15:31:30
 Time Off Btm: 2012.11.09 @ 18:19:00

TEST COMMENT: IF: Weak blow, Died in 20 mins.
 IS: No blow back.
 FF: No blow
 FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1716.94	86.53	Initial Hydro-static
9	13.91	86.40	Open To Flow (1)
38	16.40	87.31	Shut-In(1)
88	25.44	88.44	End Shut-In(1)
89	15.08	88.45	Open To Flow (2)
102	16.09	88.77	Shut-In(2)
159	30.54	89.96	End Shut-In(2)
168	1687.35	91.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud-100%m	0.02

* 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

7-3s-18w Phillips,KS

PO Box 723
Alma NE 68920

Beyerlein Unit #1

Job Ticket: 043005

DST#: 2

ATTN: Bob Peterson

Test Start: 2012.11.09 @ 13:55:01

Tool Information

Drill Pipe:	Length: 3256.00 ft	Diameter: 3.80 inches	Volume: 45.67 bbl	Tool Weight: 2000.00 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: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 50000.00 lb
			Total Volume: 46.58 bbl	Tool Chased 2.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3440.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	63.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3417.00	
Hydraulic tool	5.00			3422.00	
Jars	5.00			3427.00	
Safety Joint	3.00			3430.00	
Packer	5.00			3435.00	28.00 Bottom Of Top Packer
Packer	5.00			3440.00	
Stubb	1.00			3441.00	
Perforations	1.00			3442.00	
Recorder	0.00	8791	Inside	3442.00	
Recorder	0.00	8651	Outside	3442.00	
Perforations	30.00			3472.00	
Bullnose	3.00			3475.00	35.00 Bottom Packers & Anchor

Total Tool Length: 63.00



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Bach Oil Production

7-3s-18w Phillips,KS

PO Box 723
Alma NE 68920

Beyerlein Unit #1

Job Ticket: 043005

DST#: 2

ATTN: Bob Peterson

Test Start: 2012.11.09 @ 13:55:01

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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud-100%m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

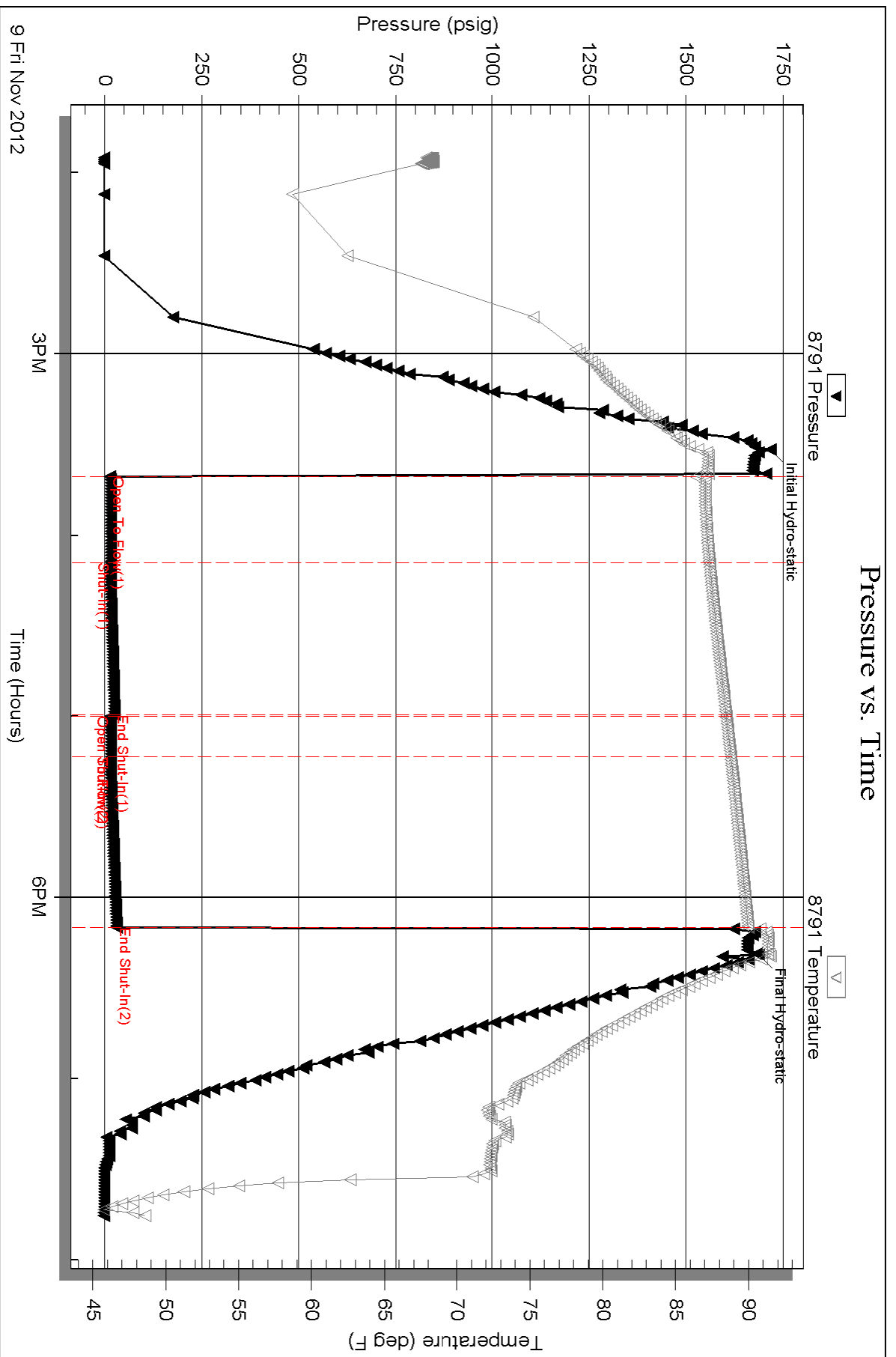
Serial #: 8791

Inside

Bach Oil Production

Beyerlein Unit #1

DST Test Number: 2



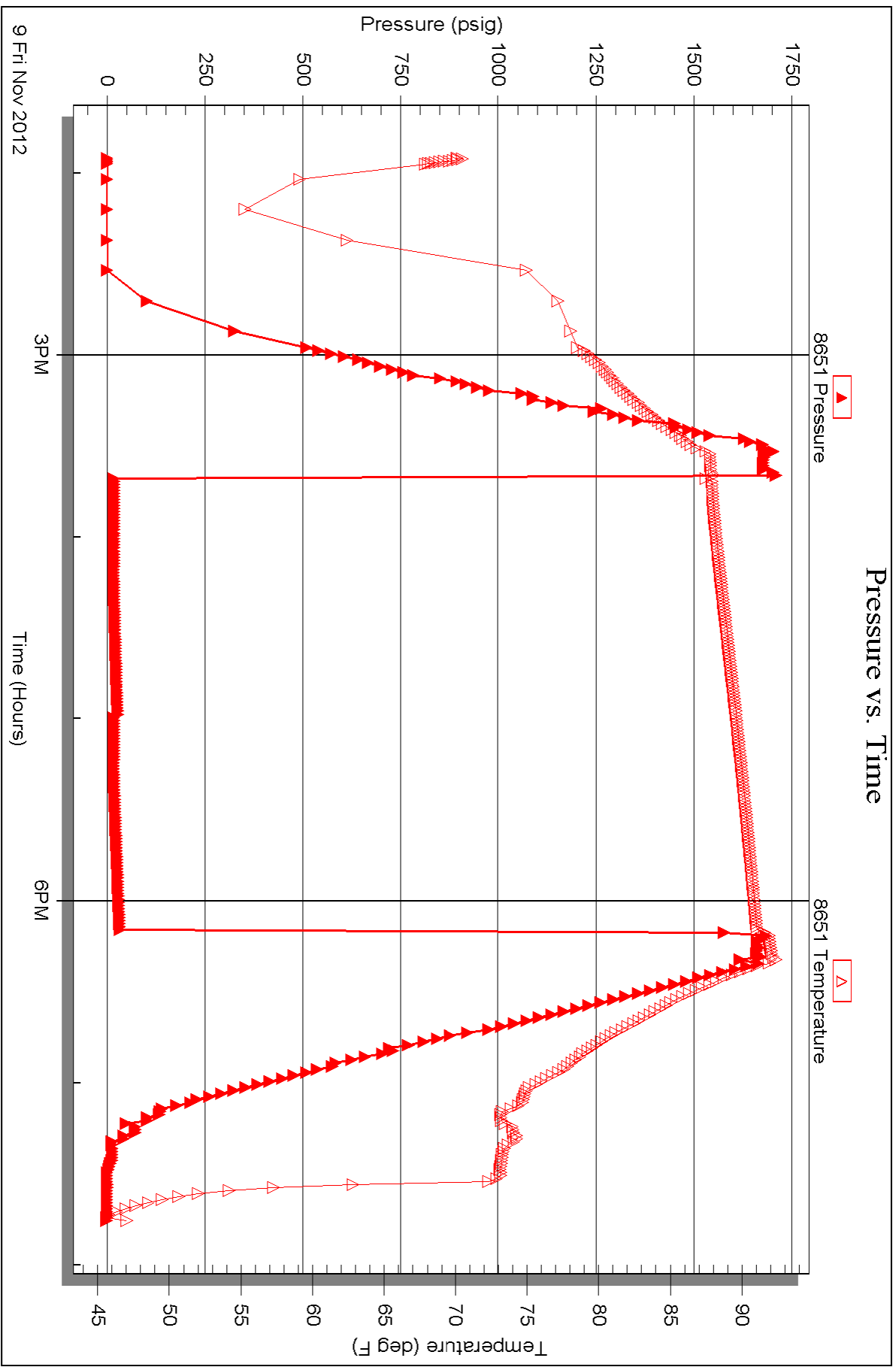
Serial #: 8651

Outside

Bach Oil Production

Beyerlein Unit #1

DST Test Number: 2





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 043004

4/10

Well Name & No. Beyelicin Unit #1 Test No. 1 Date 11-8-2012
 Company Bach, Oil Production Elevation 2044 KB 2039 GL
 Address P.O. Box 723 Alma NE 68920
 Co. Rep / Geo. Bob Peterson Rig Muffin #8
 Location: Sec. 7 Twp. 3 Rge. 18W Co. Phillips State KS

Interval Tested 3315 3400 Zone Tested LKC-C-D
 Anchor Length 85 Drill Pipe Run 3129 Mud Wt. 8.6
 Top Packer Depth 3310 Drill Collars Run 186 Vis 48
 Bottom Packer Depth 3315 Wt. Pipe Run -0- WL 6.4
 Total Depth 3400 Chlorides 400 ppm System LCM 2#

Blow Description IF: Weak surface blow over 30 mins.
ISE: No blow back
FF weak surface blow, Dead in 20 mins.
FST: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>40</u>	<u>V50SM</u>		<u>4</u>		<u>96</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 40 BHT 92. Gravity 1150 API RW 232.50 @ 85°F Chlorides 400 ppm

(A) Initial Hydrostatic	<u>1671</u>	<input checked="" type="checkbox"/> Test	<u>1150</u>	T-On Location	<u>19:45</u>
(B) First Initial Flow	<u>17</u>	<input checked="" type="checkbox"/> Jars	<u>250</u>	T-Started	<u>20:50</u>
(C) First Final Flow	<u>29</u>	<input checked="" type="checkbox"/> Safety Joint	<u>75</u>	T-Open	<u>23:11</u>
(D) Initial Shut-In	<u>1199</u>	<input type="checkbox"/> Circ Sub		T-Pulled	<u>2:00</u>
(E) Second Initial Flow	<u>31</u>	<input type="checkbox"/> Hourly Standby		T-Out	<u>3:58</u>
(F) Second Final Flow	<u>42</u>	<input checked="" type="checkbox"/> Mileage	<u>8512 = BOX 1.55</u> <u>232.50</u>	Comments	
(G) Final Shut-In	<u>1115</u>	<input type="checkbox"/> Sampler			
(H) Final Hydrostatic	<u>1637</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>30</u>	<input type="checkbox"/> Extra Recorder		Sub Total	<u>0</u>
Final Shut-In	<u>60</u>	<input type="checkbox"/> Day Standby		Total	<u>1707.50</u>
		<input type="checkbox"/> Accessibility		MP/DST Disc't	
		Sub Total	<u>1707.50</u>		

Approved By _____ Our Representative Chuck Krutz Jr.
 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

Test Ticket

NO. 043005

4/10

Well Name & No. Beyeliein unit #1 Test No. 2 Date 11-9-2012
 Company Back oil Production Elevation 2044 KB 2039 GL
 Address P.O. Box 723 Alma Mo. 68420
 Co. Rep / Geo. BOB Peterson Rig MURFIN #8
 Location: Sec. 7 Twp. 3 Rge. 18W Co. Phillips State KS

Interval Tested 3440 3475 Zone Tested LKC-
 Anchor Length 35 Drill Pipe Run 3256 Mud Wt. 8.6
 Top Packer Depth 3435 Drill Collars Run 186 Vis 48
 Bottom Packer Depth 3440 Wt. Pipe Run - 0- WL 6.4
 Total Depth 3475 Chlorides 400 ppm System LCM 2#

Blow Description IF: weak blow died in 2mins.
ISI: No blow back
FF: No blow
FSI: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>mud</u>			<u>100</u>	

Rec Total 5 BHT 68 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1717</u>	<input checked="" type="checkbox"/> Test 1150	T-On Location <u>13:35</u>
(B) First Initial Flow <u>14</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>13:55</u>
(C) First Final Flow <u>16</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>15:46</u>
(D) Initial Shut-In <u>25</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>18:10</u>
(E) Second Initial Flow <u>15</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>19:46</u>
(F) Second Final Flow <u>16</u>	<input checked="" type="checkbox"/> Mileage <u>75 x 1.55 = 116.25</u> 232.50	Comments <u>Loaded tools 11-9-2012</u>
(G) Final Shut-In <u>31</u>	<input type="checkbox"/> Sampler	<u>a + 9:00</u>
(H) Final Hydrostatic <u>1687</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>20</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1707.50</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't _____
	Sub Total <u>1707.50</u>	

Approved By _____ Our Representative Chad [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.