



DRILL STEM TEST REPORT

Prepared For: **Bach Oil Production**

PO Box 723
Alma NE 68920-0723

ATTN: Jason Bach

Kenneth #1

9-2s-19w Phillips,KS

Start Date: 2013.09.22 @ 06:30:38

End Date: 2013.09.22 @ 13:14:02

Job Ticket #: 54813 DST #: 1

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

Printed: 2013.09.23 @ 15:15:30



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

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

9-2s-19w Phillips,KS
Kenneth #1
Job Ticket: 54813 **DST#: 1**
Test Start: 2013.09.22 @ 06:30:38

Tool Information

Drill Pipe:	Length: 3332.00 ft	Diameter: 3.80 inches	Volume: 46.74 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: 120.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 46.74 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3450.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.00 ft			
Tool Length:	98.00 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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Change Over Sub	1.00			3423.00	
Shut In Tool	5.00			3428.00	
Hydraulic tool	5.00			3433.00	
Jars	5.00			3438.00	
Safety Joint	2.00			3440.00	
Packer	5.00			3445.00	28.00 Bottom Of Top Packer
Packer	5.00			3450.00	
Stubb	1.00			3451.00	
Perforations	5.00			3456.00	
Blank Spacing	33.00			3489.00	
Recorder	0.00	8369	Inside	3489.00	
Recorder	0.00	8700	Outside	3489.00	
Perforations	28.00			3517.00	
Bullnose	3.00			3520.00	70.00 Bottom Packers & Anchor

Total Tool Length: 98.00



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FLUID SUMMARY

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

9-2s-19w Phillips,KS
Kenneth #1
Job Ticket: 54813 **DST#: 1**
Test Start: 2013.09.22 @ 06:30:38

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: 72000 ppm	
Viscosity: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.38 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 500.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

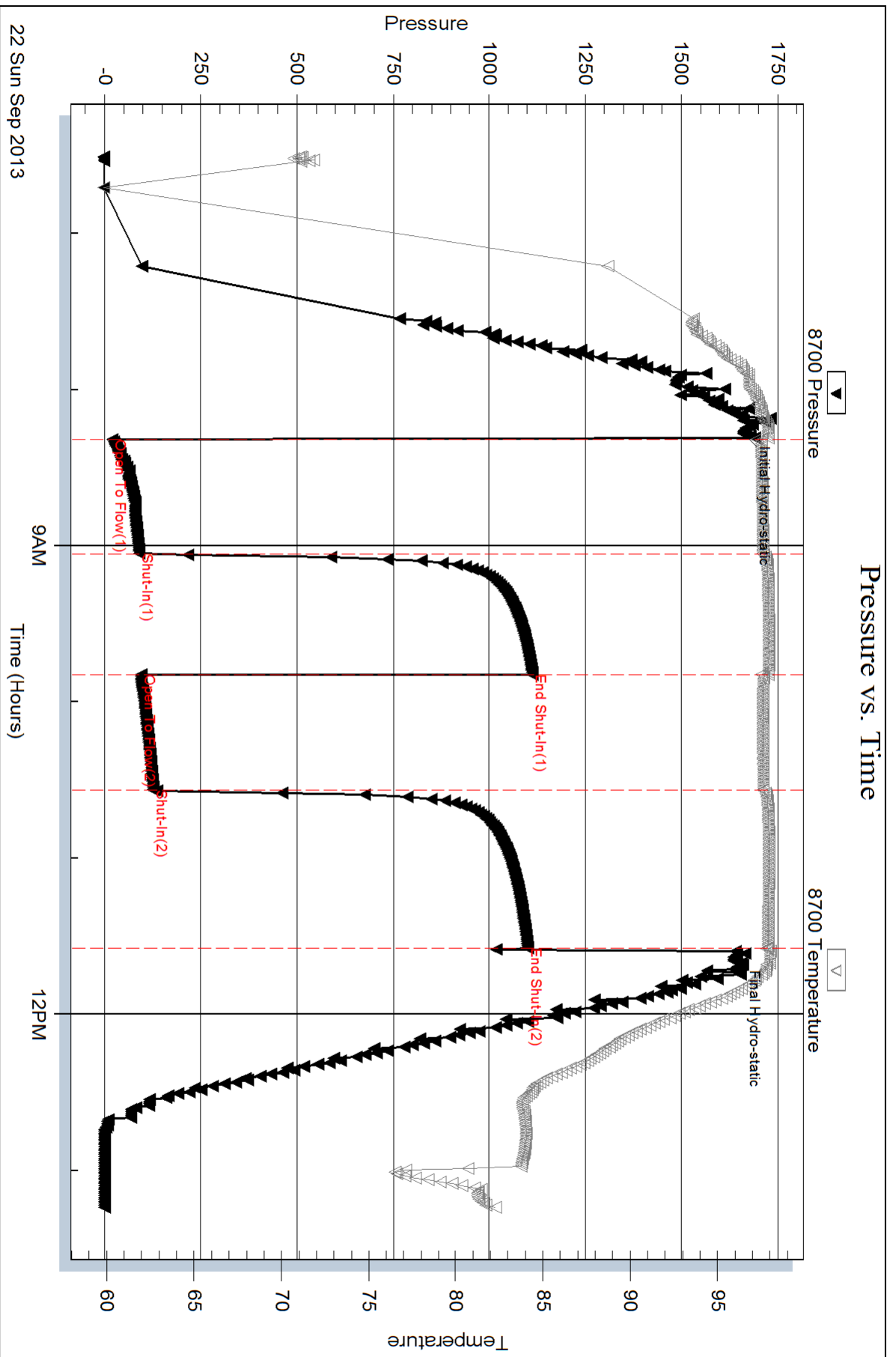
Length ft	Description	Volume bbl
120.00	MW w/show of oil	0.000
60.00	SOCWM 1%O49%W50%M	0.842
65.00	SOCWM 5%O10%W85%M	0.912

Total Length: 245.00 ft Total Volume: 1.754 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW .1 @ 75F





DRILL STEM TEST REPORT

Prepared For: **Bach Oil Production**

PO Box 723
Alma NE 68920-0723

ATTN: Jason Bach

Kenneth #1

9-2s-19w Phillips,KS

Start Date: 2013.09.23 @ 06:50:52

End Date: 2013.09.23 @ 12:26:16

Job Ticket #: 54814 DST #: 2

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

Printed: 2013.09.23 @ 15:15:02



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

9-2s-19w Phillips,KS
Kenneth #1
 Job Ticket: 54814 **DST#: 2**
 Test Start: 2013.09.23 @ 06:50:52

GENERAL INFORMATION:

Formation: **LKC**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 08:24:47
 Tester: Ray Schwager
 Time Test Ended: 12:26:16
 Unit No: 70
Interval: 3570.00 ft (KB) To 3586.00 ft (KB) (TVD)
 Reference Elevations: 2217.00 ft (KB)
 Total Depth: 3686.00 ft (KB) (TVD) 2212.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

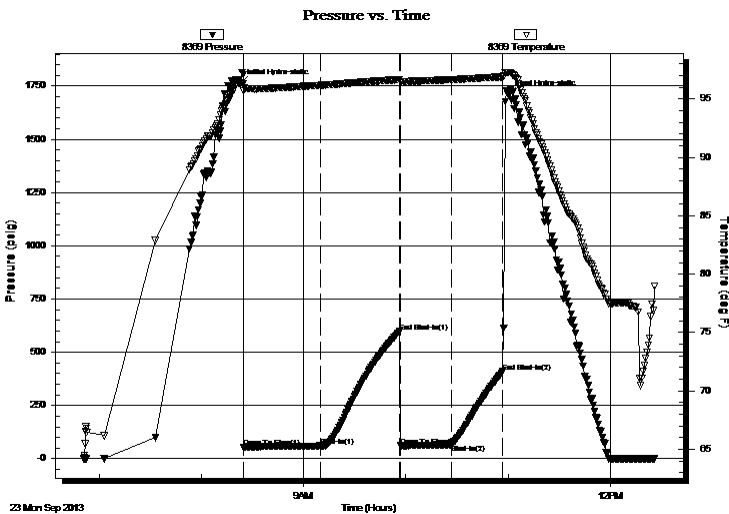
Serial #: 8369

Inside

Press @ Run Depth: 69.72 psig @ 3669.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.09.23 End Date: 2013.09.23 Last Calib.: 2013.09.23
 Start Time: 06:50:52 End Time: 12:26:16 Time On Btm: 2013.09.23 @ 08:23:02
 Time Off Btm: 2013.09.23 @ 11:00:17

TEST COMMENT: 45-IFP-w k bl thru-out 1/8" to surface bl
 45-ISIP-no bl
 30-FFP-no bl
 30-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1761.79	96.33	Initial Hydro-static
2	54.04	95.69	Open To Flow (1)
47	60.20	96.18	Shut-In(1)
94	596.96	96.66	End Shut-In(1)
94	60.50	96.52	Open To Flow (2)
124	69.72	96.66	Shut-In(2)
154	408.21	96.90	End Shut-In(2)
158	1709.58	97.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	SOCM 3%O97%M	0.00

* Recovery from multiple tests

Gas Rates

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



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TOOL DIAGRAM

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

9-2s-19w Phillips,KS
Kenneth #1
Job Ticket: 54814 **DST#: 2**
Test Start: 2013.09.23 @ 06:50:52

Tool Information

Drill Pipe:	Length: 3426.00 ft	Diameter: 3.80 inches	Volume: 48.06 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: 120.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	65000.00 lb
			<u>Total Volume: 48.06 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3570.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	116.00 ft				
Tool Length:	144.00 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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Change Over Sub	1.00			3543.00	
Shut In Tool	5.00			3548.00	
Hydraulic tool	5.00			3553.00	
Jars	5.00			3558.00	
Safety Joint	2.00			3560.00	
Packer	5.00			3565.00	28.00 Bottom Of Top Packer
Packer	5.00			3570.00	
Stubb	1.00			3571.00	
Perforations	3.00			3574.00	
Blank Spacing	95.00			3669.00	
Recorder	0.00	8369	Inside	3669.00	
Recorder	0.00	8700	Outside	3669.00	
Perforations	14.00			3683.00	
Bullnose	3.00			3686.00	116.00 Bottom Packers & Anchor

Total Tool Length: 144.00



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Kenneth #1
Job Ticket: 54814 **DST#: 2**
Test Start: 2013.09.23 @ 06:50:52

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: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.77 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	SOCM 3%O97%M	0.000

Total Length: 5.00 ft Total Volume: bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8369

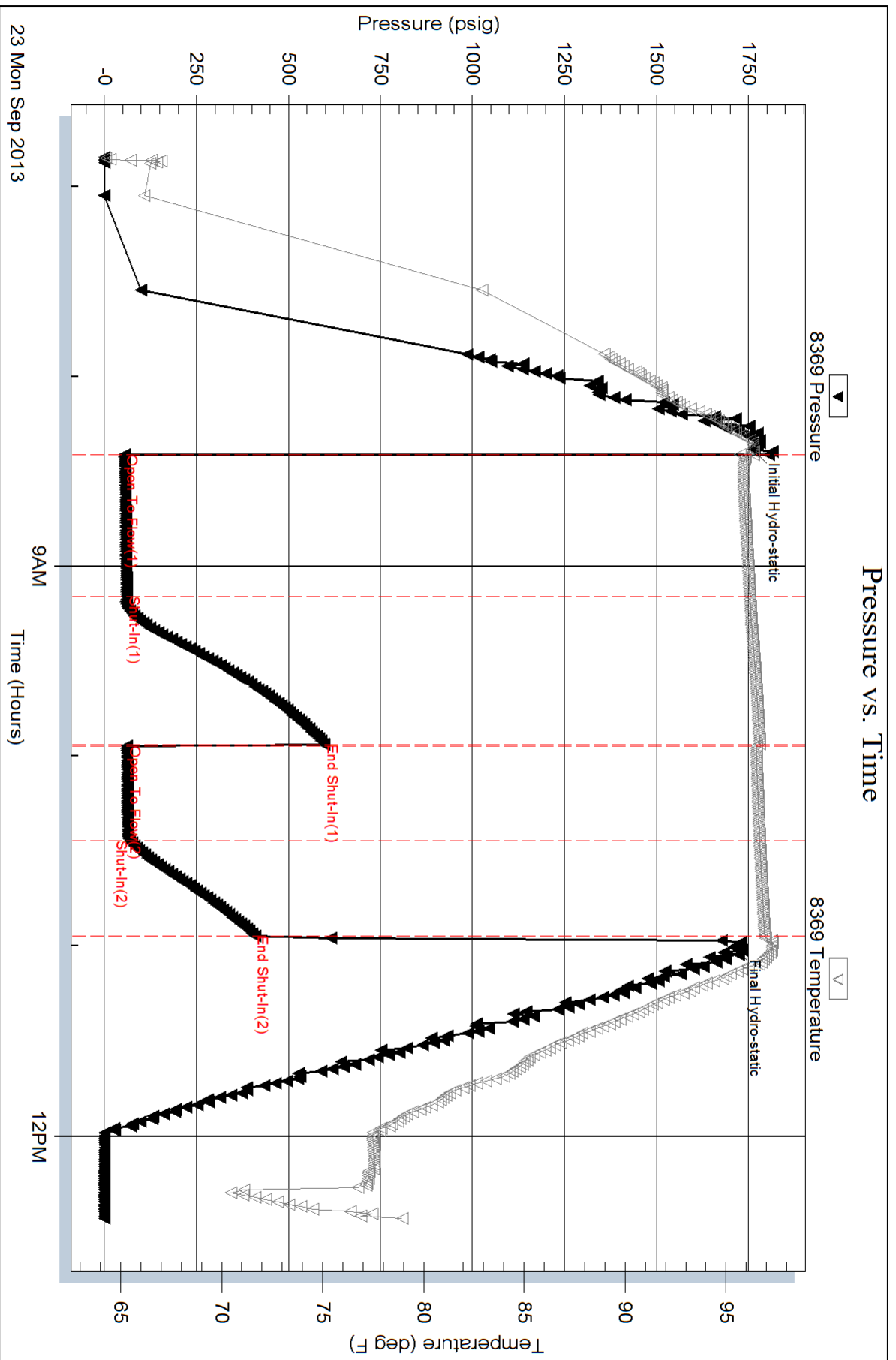
Inside

Bach Oil Production

Kenneth #1

DST Test Number: 2

Pressure vs. Time

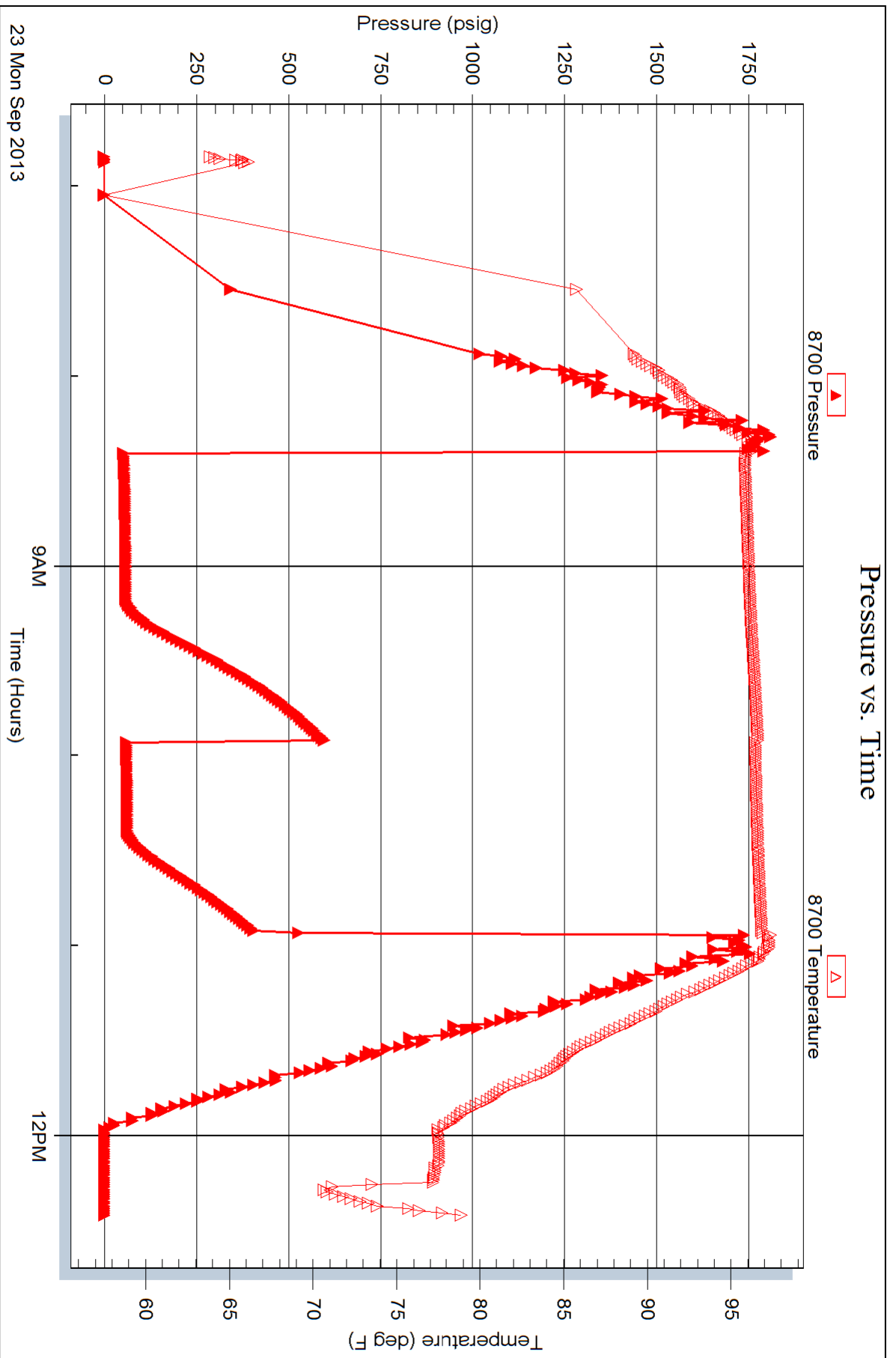


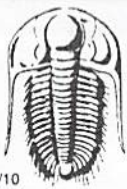
Serial #: 8700

Outside Bach Oil Production

Kenneth #1

DST Test Number: 2





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54813

Well Name & No. Kenneth #1 Test No. 1 Date 9-22-13
 Company BACK OIL PRODUCTION Elevation 2212 KB 2212 GL
 Address PO Box 723 ALMA, NE. 68920-0723
 Co. Rep / Geo. Bob Peterson Rig MURFIN rig 24
 Location: Sec. 9 Twp. 2^s Rge. 19^w Co. Phillips State Ko

Interval Tested 3450-3520 Zone Tested LKC C-F
 Anchor Length 70 Drill Pipe Run 3332 Mud Wt. 9.2
 Top Packer Depth 3445 Drill Collars Run 120 Vis 52
 Bottom Packer Depth 3450 Wt. Pipe Run - WL 6.4
 Total Depth 3520 Chlorides 500 ppm System LCM 2#

Blow Description IFP - WEAK TO A GOOD BLOW, 1/4" TO 6 1/2" BLOW
ISIP - NO BLOW
FFP - WEAK TO A FAIR BLOW, SURFACE TO 3 1/2" BLOW
FSIP - NO BLOW

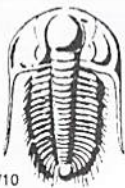
Rec	Feet of	%gas	%oil	%water	%mud
<u>65</u>	<u>50 CWM</u>	<u>5</u>	<u>10</u>	<u>85</u>	
<u>60</u>	<u>50 CWM</u>	<u>1</u>	<u>49</u>	<u>50</u>	
<u>120</u>	<u>MW w/show of oil</u>		<u>80</u>	<u>20</u>	

Rec Total 245 BHT _____ Gravity - API RW .1 @ 75 ° F Chlorides 72000 ppm
 (A) Initial Hydrostatic 1660 Test 1150 T-On Location 0525
 (B) First Initial Flow 20 Jars 250 T-Started 0630
 (C) First Final Flow 90 Safety Joint 75 T-Open 0820
 (D) Initial Shut-In 1113 Circ Sub _____ T-Pulled 1135
 (E) Second Initial Flow 95 Hourly Standby _____ T-Out 1319
 (F) Second Final Flow 127 Mileage 168 RT 124rt 192.20 Comments MOTEL
 (G) Final Shut-In 1101 Sampler _____
 (H) Final Hydrostatic 1636 Straddle _____
 Ruined Shale Packer _____
 Shale Packer _____
 Ruined Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 60
 Sub Total 0
 Total 1667.20
 MP/DST Disc't _____
 Sub Total 1667.20

Approved By _____ Our Representative RAY SCHWAGER THANK YOU

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. 54814

Well Name & No. Kenneth #1 Test No. 2 Date 9-23-13
 Company Back Oil Production Elevation 2217 KB 2212 GL
 Address PO Box 723 ALMA, NE 68920-0723
 Co. Rep / Geo. Bob Peterson Rig Murfin rig 24
 Location: Sec. 9 Twp. 2^s Rge. 19^w Co. Phillips State Ks

Interval Tested 3570-3686 Zone Tested LKC
 Anchor Length 116 Drill Pipe Run 3426 Mud Wt. 9.1
 Top Packer Depth 3565 Drill Collars Run 120 Vis 51
 Bottom Packer Depth 3570 Wt. Pipe Run — WL 8.8
 Total Depth 3686 Chlorides 1000 ppm System LCM 2#

Blow Description IFP - WEAK Blow thru-out 1/8" To surface Blow
ISIP - NO Blow
FFP - NO Blow
FSIP - NO Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>50cm</u>	<u>3</u>		<u>97</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 97' Gravity — API RW — @ —° F Chlorides — ppm

(A) Initial Hydrostatic <u>1761</u>	<input checked="" type="checkbox"/> Test 1150	T-On Location <u>0620</u>
(B) First Initial Flow <u>54</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>0650</u>
(C) First Final Flow <u>60</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>0820</u>
(D) Initial Shut-In <u>596</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>1050</u>
(E) Second Initial Flow <u>60</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1226</u>
(F) Second Final Flow <u>69</u>	<input checked="" type="checkbox"/> Mileage 192.20	Comments
(G) Final Shut-In <u>408</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1709</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
	<input type="checkbox"/> Day Standby	Total <u>1667.20</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't

Initial Open 45
 Initial Shut-In 45
 Final Flow 30
 Final Shut-In 30

Sub Total 1667.20

Approved By _____ Our Representative Ray Schwager *Thank you*

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.