



DRILL STEM TEST REPORT

Prepared For: **Bach Oil Productions**

PO Box 723
Alma NE 68920-0723

ATTN: Bob Peterson

Knape #2

18-1s-18w Phillips,KS

Start Date: 2012.09.27 @ 23:53:00

End Date: 2012.09.28 @ 07:01:00

Job Ticket #: 49317 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Bach Oil Productions
PO Box 723
Alma NE 68920-0723
ATTN: Bob Peterson

18-1s-18w Phillips,KS

Knappe #2

Job Ticket: 49317

DST#: 1

Test Start: 2012.09.27 @ 23:53:00

GENERAL INFORMATION:

Formation: **LKC " D-F "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:44:00

Time Test Ended: 07:01:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jim Svaty

Unit No: 39

Interval: 3386.00 ft (KB) To 3456.00 ft (KB) (TVD)

Reference Elevations: 2151.00 ft (KB)

Total Depth: 3456.00 ft (KB) (TVD)

2147.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 4.00 ft

Serial #: 8372 Outside

Press @ Run Depth: 205.96 psig @ 3390.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.27 End Date: 2012.09.28

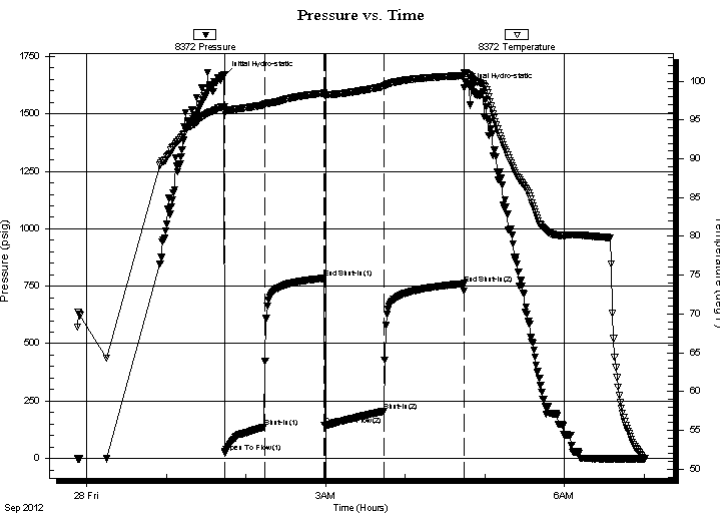
Last Calib.: 2012.09.28

Start Time: 23:53:05 End Time: 07:00:40

Time On Btm: 2012.09.28 @ 01:43:50

Time Off Btm: 2012.09.28 @ 04:44:30

TEST COMMENT: 30-IFP- BOB in 22 min
45-ISIP- Weak Surface Blow in 30 min Died Back in 17 min
45-FFP- Surface Blow Building to 9" in 30 min
60-FSIP- Weak Surface Blow in 2 min Died Back in 20 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1667.95	96.74	Initial Hydro-static
1	25.23	95.89	Open To Flow (1)
30	136.55	96.94	Shut-In(1)
75	784.41	98.45	End Shut-In(1)
76	144.76	98.18	Open To Flow (2)
120	205.96	99.32	Shut-In(2)
181	761.23	100.71	End Shut-In(2)
181	1615.54	101.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
177.00	MCW 15% _m 85% _w	0.87
62.00	O&WCM 5% _o 35% _w 60% _m	0.87
31.00	OCM 5% _o 95% _m	0.43
93.00	OCM 45% _o 55% _m	1.30
55.00	GCO 10g 90% _o	0.77

Gas Rates

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



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TOOL DIAGRAM

Bach Oil Productions
PO Box 723
Alma NE 68920-0723
ATTN: Bob Peterson

18-1s-18w Phillips,KS
Knape #2
Job Ticket: 49317 **DST#: 1**
Test Start: 2012.09.27 @ 23:53:00

Tool Information

Drill Pipe:	Length: 3199.00 ft	Diameter: 3.80 inches	Volume: 44.87 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: 177.00 ft	Diameter: 2.25 inches	Volume: 0.87 bbl	Weight to Pull Loose:	48000.00 lb
			<u>Total Volume: 45.74 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial	44000.00 lb
Depth to Top Packer:	3386.00 ft			Final	46000.00 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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Shut In Tool	5.00			3363.00	
Hydraulic tool	5.00			3368.00	
Jars	5.00			3373.00	
Safety Joint	3.00			3376.00	
Packer	5.00			3381.00	28.00 Bottom Of Top Packer
Packer	5.00			3386.00	
Stubb	1.00			3387.00	
Perforations	2.00			3389.00	
Change Over Sub	1.00			3390.00	
Recorder	0.00	8372	Outside	3390.00	
Recorder	0.00	8017	Inside	3390.00	
Blank Spacing	62.00			3452.00	
Change Over Sub	1.00			3453.00	
Bullnose	3.00			3456.00	70.00 Bottom Packers & Anchor

Total Tool Length: 98.00



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FLUID SUMMARY

Bach Oil Productions
PO Box 723
Alma NE 68920-0723
ATTN: Bob Peterson

18-1s-18w Phillips,KS
Knape #2
Job Ticket: 49317 **DST#: 1**
Test Start: 2012.09.27 @ 23:53:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 36 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 66.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.58 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 800.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
177.00	MCW 15% <i>m</i> 85% <i>w</i>	0.870
62.00	O&WCM 5% <i>o</i> 35% <i>w</i> 60% <i>m</i>	0.870
31.00	OCM 5% <i>o</i> 95% <i>m</i>	0.435
93.00	OCM 45% <i>o</i> 55% <i>m</i>	1.305
55.00	GCO 10 <i>g</i> 90% <i>o</i>	0.772

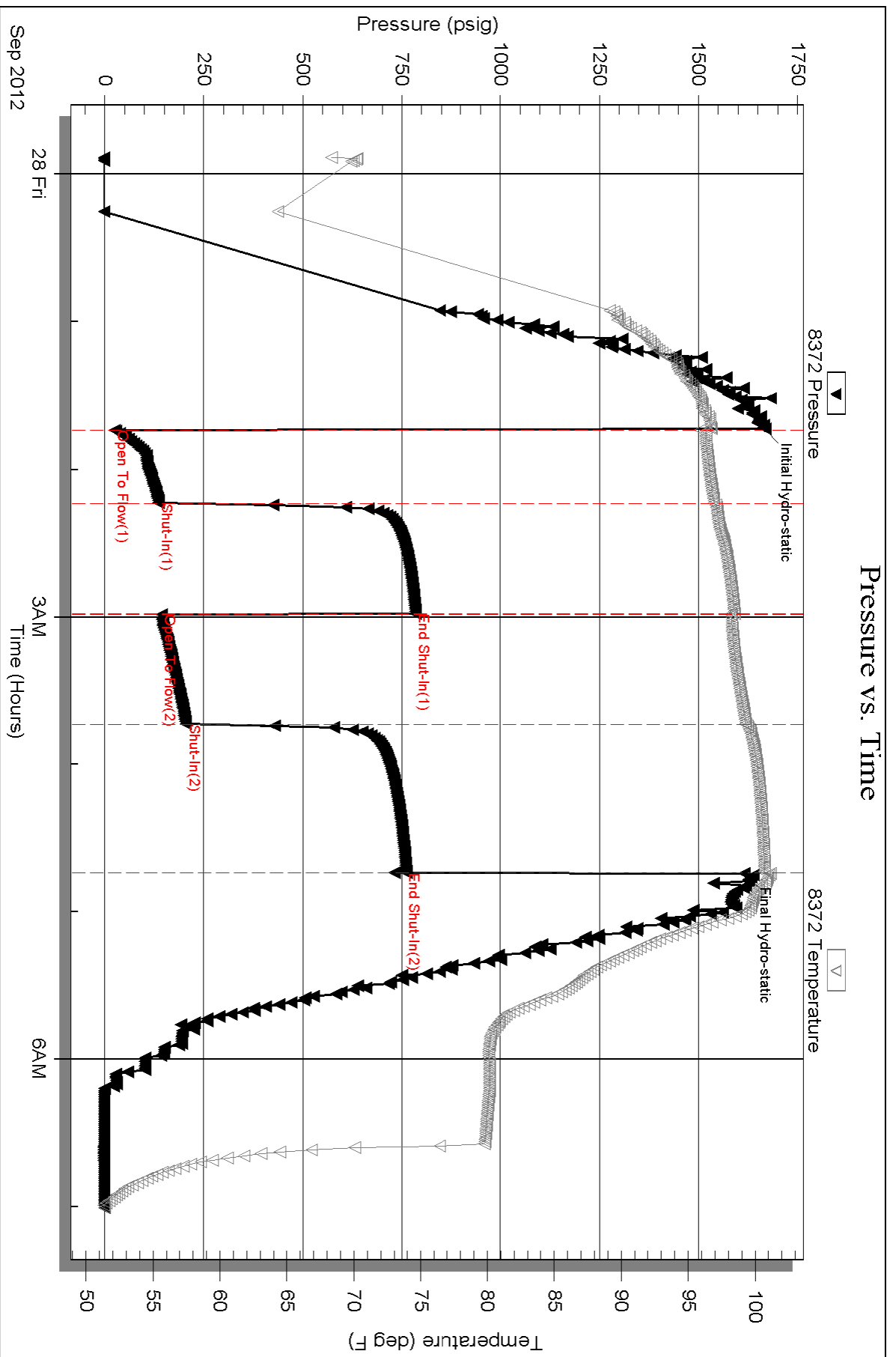
Total Length: 418.00 ft Total Volume: 4.252 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Serial #: 8372

Outside Bach Oil Productions

Knape #2

DST Test Number: 1



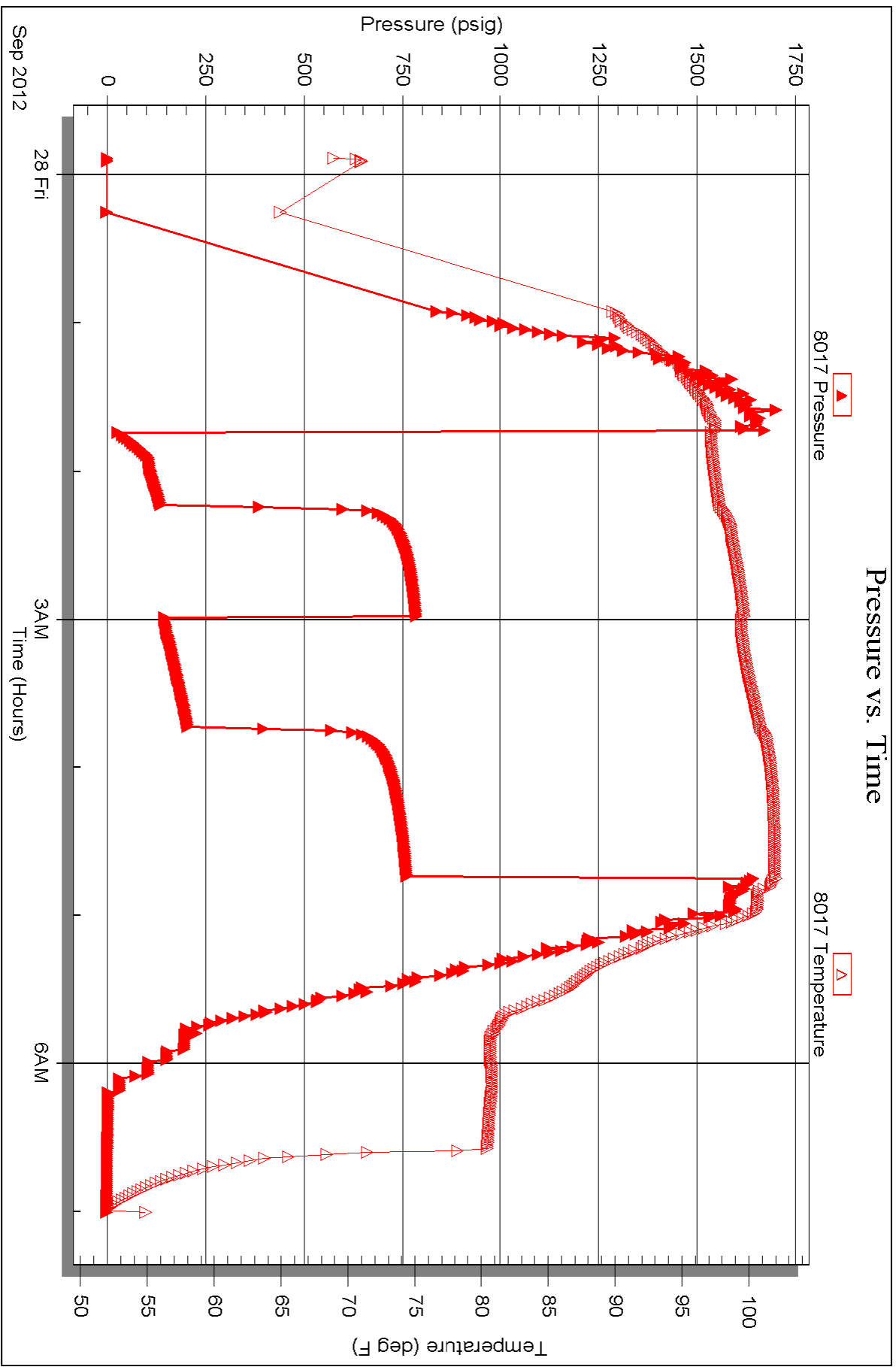
Serial #: 8017

Inside

Bach Oil Productions

Knape #2

DST Test Number: 1





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 49317

Well Name & No. Knape # 2 Test No. 1 Date 9-27-12
 Company Bach Oil Productions Elevation 2151 KB 2147 GL
 Address P.O. Box 723 Alma NE, 68920-0723
 Co. Rep / Geo. Bob Peterson 316 833 6000 Rig MURFIN # 8
 Location: Sec. 18 Twp. 13 Rge. 18 W Co. Phillips State KS

Interval Tested 3386-3456 Zone Tested LKC "B-F"
 Anchor Length 70 Drill Pipe Run 3199 Mud Wt. 8.7
 Top Packer Depth 3381 Drill Collars Run 177 Vis 66
 Bottom Packer Depth 3386 Wt. Pipe Run 0 WL 6.6
 Total Depth 3456 Chlorides 800 ppm System LCM 2 1/2

Blow Description TFP - BOB in 22 min
ISIP - Weak Surface Blow in 3 min Died Back in 17 min
FFP - Surface Blow Building to 9 in in 30 min
FSTIP - Weak Surface Blow in 2 min Died Back in 20 min.

Rec	Feet of	%gas	%oil	%water	%mud
<u>177</u>	<u>mcw</u>		<u>85</u>	<u>15</u>	
<u>62</u>	<u>04 WCM</u>		<u>5</u>	<u>35</u>	<u>60</u>
<u>31</u>	<u>0 CM</u>		<u>5</u>		<u>95</u>
<u>93</u>	<u>0 CM</u>		<u>45</u>		<u>55</u>
<u>55</u>	<u>200</u>	<u>10</u>	<u>90</u>		

Rec Total 418 BHT 100 Gravity 36 API RW @ ° F Chlorides ppm

(A) Initial Hydrostatic 1667 Test 1150 T-On Location 23:09
 (B) First Initial Flow 25 Jars 250 T-Started 23:53
 (C) First Final Flow 136 Safety Joint 75 T-Open 01:45
 (D) Initial Shut-In 784 Circ Sub T-Pulled 04:45
 (E) Second Initial Flow 144 Hourly Standby T-Out 07:01
 (F) Second Final Flow 205 Mileage ~~171 RT~~ Comments:
 (G) Final Shut-In 761 Sampler
 (H) Final Hydrostatic 1615 Straddle
 Shale Packer
 Shale Packer
 Extra Packer
 Extra Recorder
 Day Standby
 Accessibility
 Ruined Shale Packer
 Ruined Packer
 Extra Copies
 Initial Open 30
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 60
 Sub Total 0
 Total 1713.70
 MP/DST Disc't Thank You!
 Sub Total 1713.70

Approved By _____ Our Representative [Signature]

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285 639 5864