



DRILL STEM TEST REPORT

Prepared For: **Bach Oil Production**

PO Box 723
Alma NE 68920-0723

ATTN: Bob Petersen

Johnny #1

2-1s-19w Phillips,KS

Start Date: 2014.05.23 @ 08:00:21

End Date: 2014.05.23 @ 15:13:45

Job Ticket #: 59301 DST #: 1

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

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Bach Oil Production

2-1s-19w Phillips,KS

PO Box 723
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DST#: 1

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Test Start: 2014.05.23 @ 08:00:21

GENERAL INFORMATION:

Formation: **LKC C-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:09:16

Time Test Ended: 15:13:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 70

Interval: 3265.00 ft (KB) To 3337.00 ft (KB) (TVD)

Reference Elevations: 1999.00 ft (KB)

Total Depth: 3337.00 ft (KB) (TVD)

1994.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8369

Inside

Press@RunDepth: 108.00 psig @ 3271.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.05.23

End Date:

2014.05.23

Last Calib.:

2014.05.23

Start Time: 08:00:21

End Time:

15:13:45

Time On Btm:

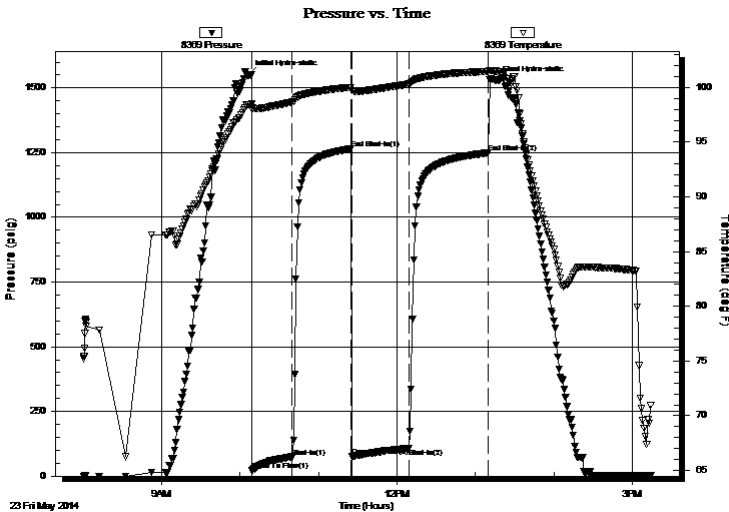
2014.05.23 @ 10:06:16

Time Off Btm:

2014.05.23 @ 13:15:15

TEST COMMENT: 30-IFP-w k to a gd 1/2" to 9" bl
45-ISIP-no bl
45-FFP-w k to strg in 35 min
60-FSIP-surface bl bk

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1549.84	98.43	Initial Hydro-static
3	22.34	98.01	Open To Flow (1)
34	74.59	98.67	Shut-In(1)
79	1264.64	100.01	End Shut-In(1)
80	75.37	99.70	Open To Flow (2)
123	108.00	100.30	Shut-In(2)
184	1249.02	101.44	End Shut-In(2)
189	1529.19	101.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	90'GIP	0.00
185.00	MGO 10%G40%M50%O	1.78
35.00	CO	0.49

Gas Rates

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



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TOOL DIAGRAM

Bach Oil Production

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Johnny #1

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DST#: 1

ATTN: Bob Petersen

Test Start: 2014.05.23 @ 08:00:21

Tool Information

Drill Pipe:	Length: 3177.00 ft	Diameter: 3.80 inches	Volume: 44.56 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: 90.00 ft	Diameter: 2.25 inches	Volume: 0.44 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 45.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3265.00 ft			Final 43000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	72.00 ft			
Tool Length:	101.00 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			3237.00	
Shut In Tool	5.00			3242.00	
Hydraulic tool	5.00			3247.00	
Jars	5.00			3252.00	
Safety Joint	3.00			3255.00	
Packer	5.00			3260.00	29.00 Bottom Of Top Packer
Packer	5.00			3265.00	
Stubb	1.00			3266.00	
Perforations	5.00			3271.00	
Recorder	0.00	8369	Inside	3271.00	
Recorder	0.00	8700	Outside	3271.00	
Blank Spacing	63.00			3334.00	
Bullnose	3.00			3337.00	72.00 Bottom Packers & Anchor

Total Tool Length: 101.00



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FLUID SUMMARY

Bach Oil Production

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Johnny #1

Job Ticket: 59301

DST#: 1

ATTN: Bob Petersen

Test Start: 2014.05.23 @ 08:00:21

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 53.00 sec/qt
Water Loss: 4.20 in³
Resistivity: ohm.m
Salinity: 200.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 33 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	90'GIP	0.000
185.00	MGO 10%G40%M50%O	1.775
35.00	CO	0.491

Total Length: 220.00 ft Total Volume: 2.266 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

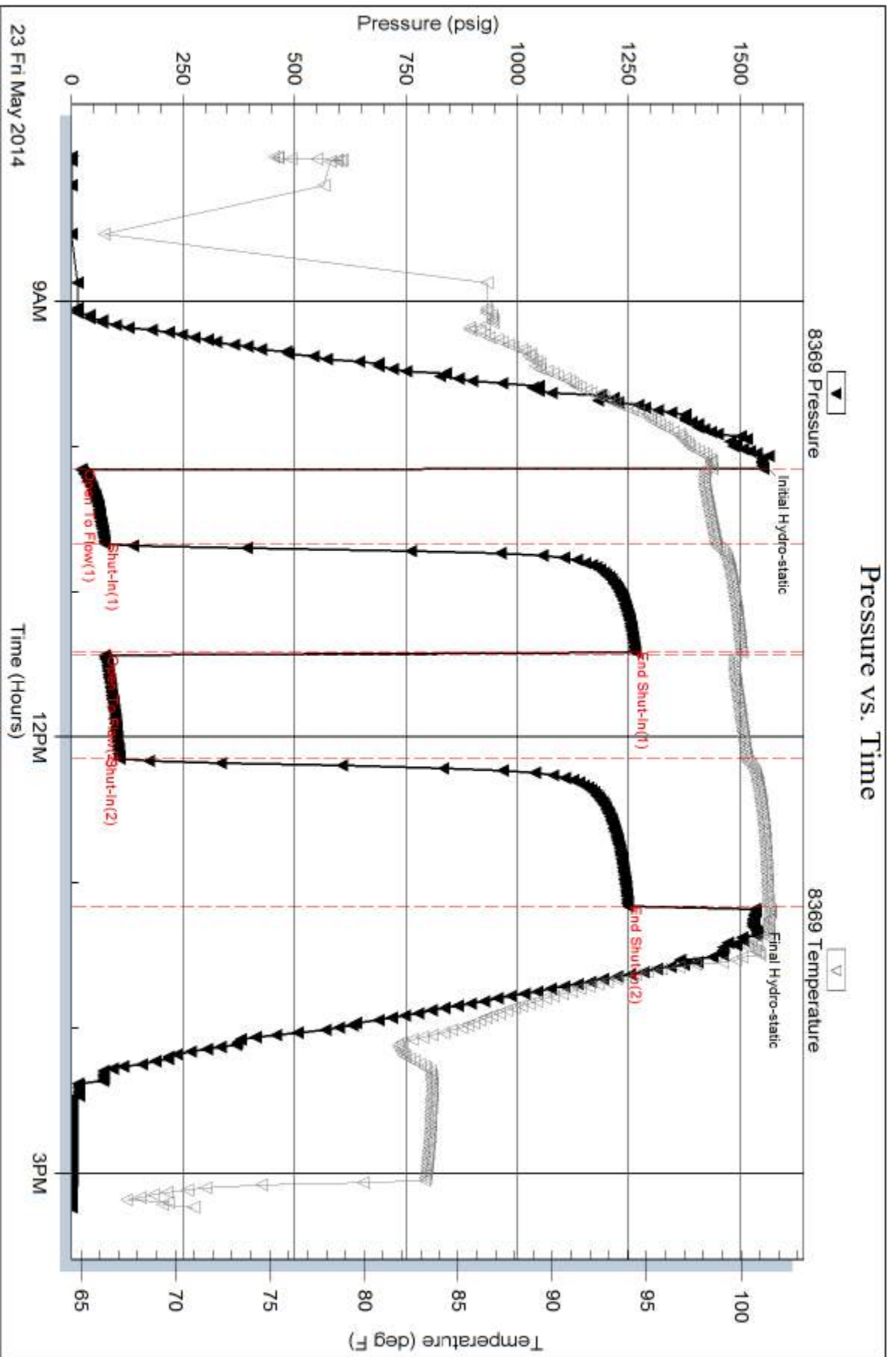
Serial #: 8369

Inside

Bach Oil Production

Johnny #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 59301

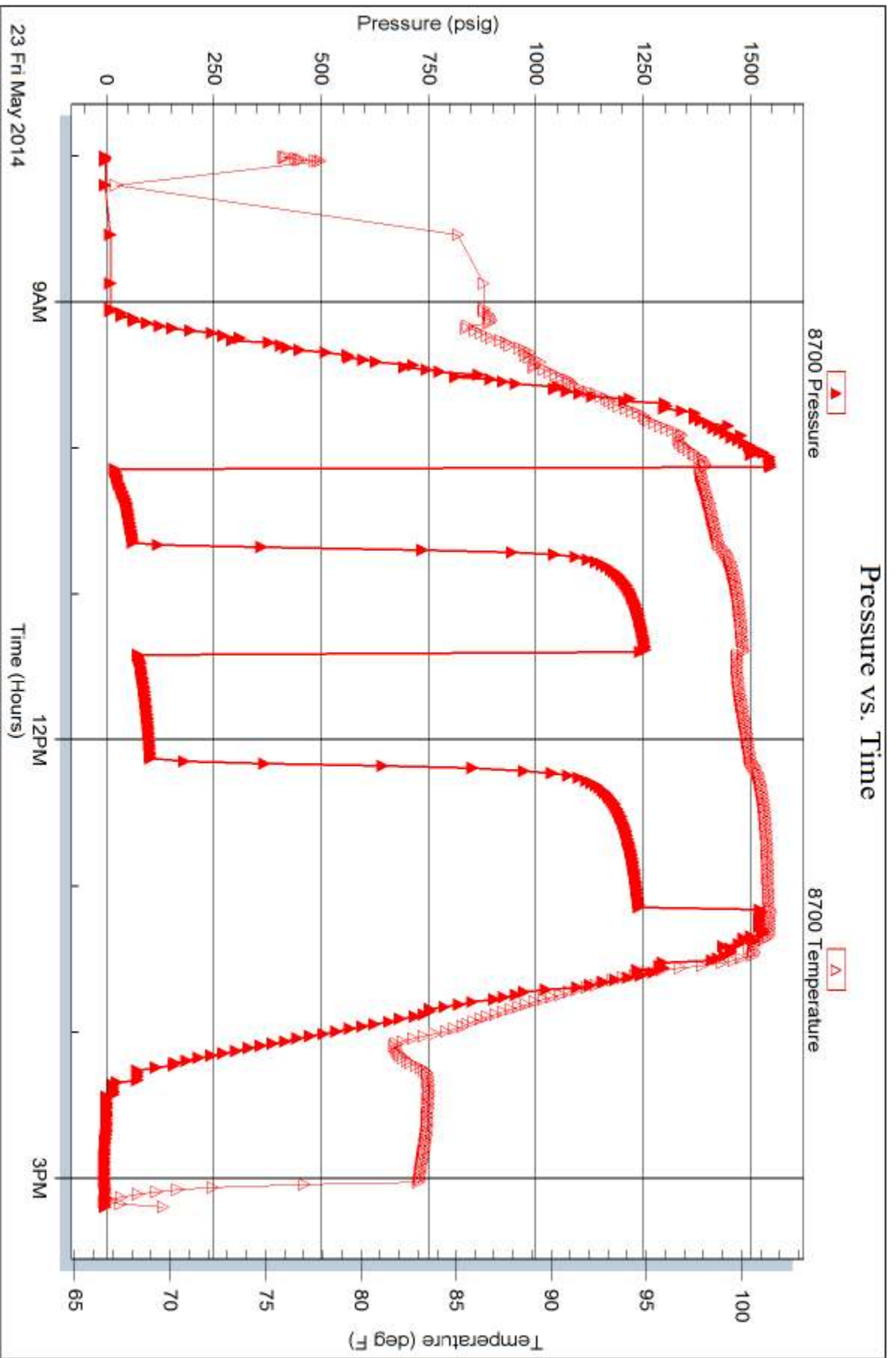
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Serial #: 8700

Outside Bach Oil Production

Johnny #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 59301

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 59301

Well Name & No. Johnny #1 Test No. 1 Date 5-23-14
 Company Bach Oil Production Elevation 1999 KB 1994 GL
 Address PO Box 723 ALMA, NE 68920-0723
 Co. Rep / Geo. Bob Petersen Rig MURFIN 24
 Location: Sec. 2 Twp. 1^s Rge. 19^w Co. Phillips State Ko

Interval Tested 3265-3337 Zone Tested LKC C-F
 Anchor Length 72 Drill Pipe Run 3177 Mud Wt. 8.8
 Top Packer Depth 3260 Drill Collars Run 90 Vis 53
 Bottom Packer Depth 3265 Wt. Pipe Run - WL 4.2
 Total Depth 3337 Chlorides 200 ppm System LCM 2^H

Blow Description IFP - WEAK TO A GOOD BLOW 1/2" TO 9" BLOW
ISIP - NO BLOW
FFP - WEAK TO STRONG IN 35 MIN
FSTIP - SURFACE BLOW BACK

Rec	Feet of	%gas	%oil	%water	%mud
<u>90</u>	<u>GIP</u>				
<u>185</u>	<u>MGO</u>	<u>10</u>	<u>50</u>		<u>40</u>
<u>35</u>	<u>CO</u>				

Rec Total 220 BHT 101 Gravity 33 API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 1549 Test 1150 T-On Location 0705
 (B) First Initial Flow 22 Jars 250 T-Started 0800
 (C) First Final Flow 74 Safety Joint 75 T-Open 1005
 (D) Initial Shut-In 1264 Circ Sub _____ T-Pulled 1305
 (E) Second Initial Flow 75 Hourly Standby _____ T-Out 1
 (F) Second Final Flow 108 Mileage 175 RT Comments _____
 (G) Final Shut-In 1249 Sampler 126rt 195.30 _____
 (H) Final Hydrostatic 1529 Straddle _____ Ruined Shale Packer _____

Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1670.30
 Final Flow 45 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 60 Sub Total 1670.30

Approved By [Signature] Our Representative RAY SCHWAGER THANK YOU

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