



DRILL STEM TEST REPORT

Prepared For: **Baird Oil Company, LLC**

PO Box 428
Logan, KS 67646

ATTN: Richard Bell

Esslinger Ranch #1

17-3s-22w Norton,KS

Start Date: 2012.09.22 @ 13:33:07

End Date: 2012.09.22 @ 19:20:22

Job Ticket #: 47869 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.10.01 @ 14:22:24



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Baird Oil Company, LLC

17-3s-22w Norton, KS

PO Box 428
Logan, KS 67646

Esslinger Ranch #1

ATTN: Richard Bell

Job Ticket: 47869

DST#: 1

Test Start: 2012.09.22 @ 13:33:07

GENERAL INFORMATION:

Formation: **LKC-"E-F"**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 14:57:22

Time Test Ended: 19:20:22

Test Type: Conventional Bottom Hole (Initial)

Tester: Jason McLemore

Unit No: 54

Interval: 3616.00 ft (KB) To 3640.00 ft (KB) (TVD)

Reference Elevations: 2419.00 ft (KB)

Total Depth: 3640.00 ft (KB) (TVD)

2414.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8366

Inside

Press @ Run Depth: 76.33 psig @ 3618.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.22 End Date: 2012.09.22

Last Calib.: 2012.09.22

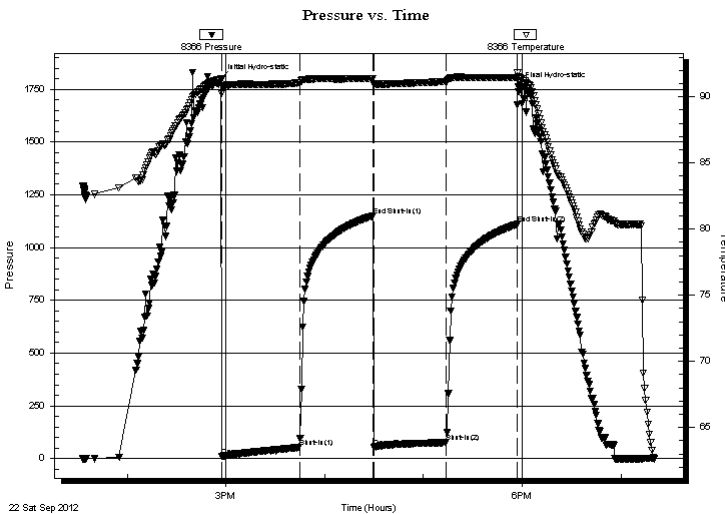
Start Time: 13:33:09 End Time: 19:20:22

Time On Btm: 2012.09.22 @ 14:57:07

Time Off Btm: 2012.09.22 @ 17:57:37

TEST COMMENT: IFP-Weak Blow , Built to 1/2"
ISI-Dead
FFP-Weak Blow , Built to 1/8"
FSI-Dead

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1801.99	91.27	Initial Hydro-static
1	9.52	90.27	Open To Flow (1)
48	52.58	91.06	Shut-In(1)
93	1150.43	91.38	End Shut-In(1)
93	54.83	90.94	Open To Flow (2)
137	76.33	91.18	Shut-In(2)
180	1110.43	91.47	End Shut-In(2)
181	1763.78	91.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
130.00	Muddy Water W/Odor, Oil Scum in Tool	0.69

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Baird Oil Company, LLC

17-3s-22w Norton, KS

PO Box 428
Logan, KS 67646

Esslinger Ranch #1

Job Ticket: 47869

DST#: 1

ATTN: Richard Bell

Test Start: 2012.09.22 @ 13:33:07

Tool Information

Drill Pipe:	Length: 3494.00 ft	Diameter: 3.80 inches	Volume: 49.01 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 46000.00 lb
			<u>Total Volume: 49.62 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3616.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	45.00 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			3596.00	
Shut In Tool	5.00			3601.00	
Hydraulic tool	5.00			3606.00	
Packer	5.00			3611.00	21.00 Bottom Of Top Packer
Packer	5.00			3616.00	
Stubb	1.00			3617.00	
Perforations	1.00			3618.00	
Recorder	0.00	8366	Inside	3618.00	
Recorder	0.00	8289	Outside	3618.00	
Perforations	19.00			3637.00	
Bullnose	3.00			3640.00	24.00 Bottom Packers & Anchor

Total Tool Length: 45.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Baird Oil Company, LLC

17-3s-22w Norton, KS

PO Box 428
Logan, KS 67646

Esslinger Ranch #1

Job Ticket: 47869

DST#: 1

ATTN: Richard Bell

Test Start: 2012.09.22 @ 13:33:07

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:

23000 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
130.00	Muddy Water W/Odor, Oil Scum in Tool	0.694

Total Length: 130.00 ft

Total Volume: 0.694 bbl

Num Fluid Samples: 0

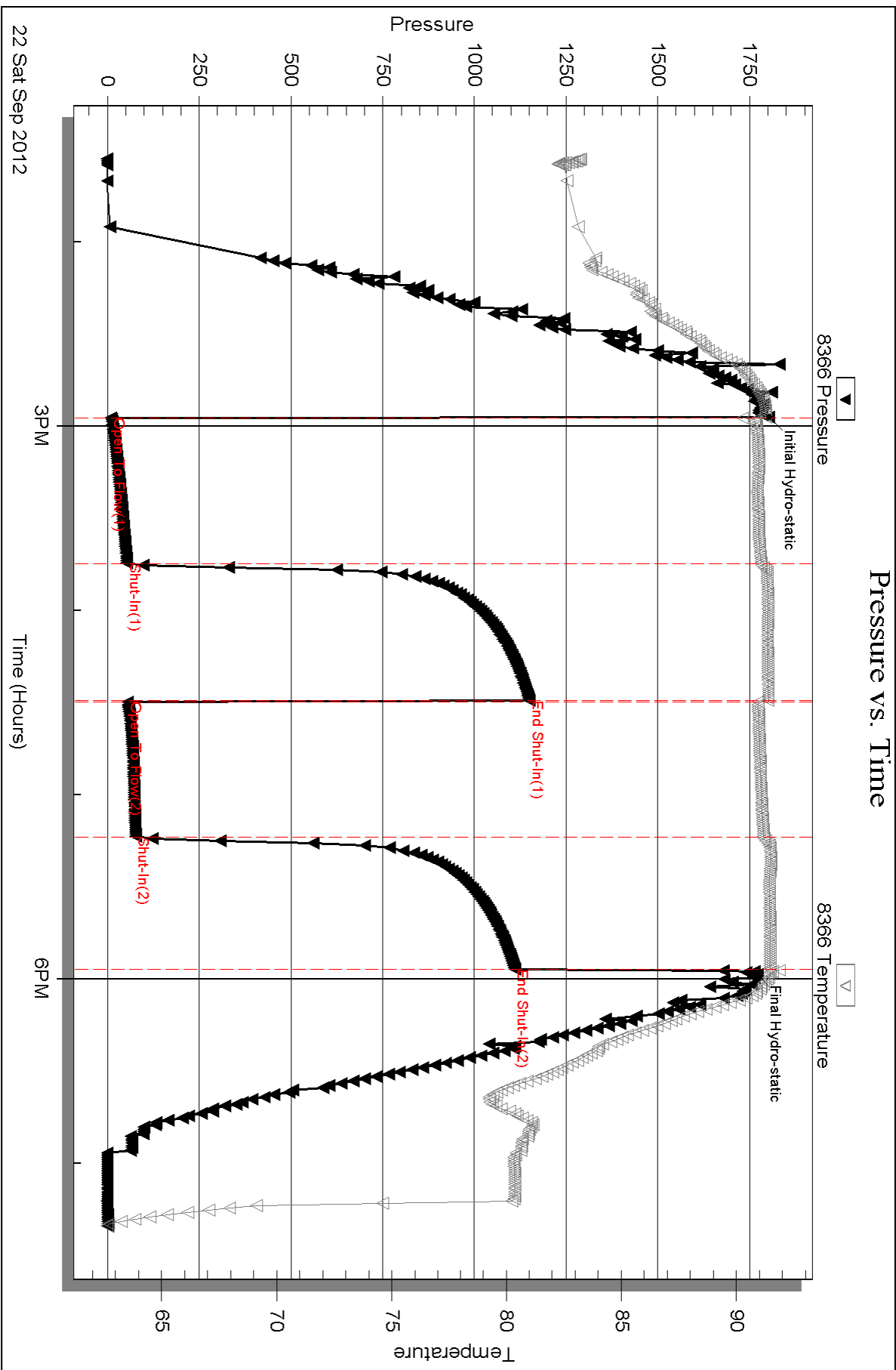
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Baird Oil Company, LLC**

PO Box 428
Logan, KS 67646

ATTN: Richard Bell

Esslinger Ranch #1

17-3s-22w Norton,KS

Start Date: 2012.09.23 @ 05:05:44

End Date: 2012.09.23 @ 09:49:59

Job Ticket #: 47870 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.10.01 @ 14:21:37



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Baird Oil Company, LLC

17-3s-22w Norton, KS

PO Box 428
Logan, KS 67646

Esslinger Ranch #1

ATTN: Richard Bell

Job Ticket: 47870

DST#: 2

Test Start: 2012.09.23 @ 05:05:44

GENERAL INFORMATION:

Formation: **LKC-"K"**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 07:26:44

Time Test Ended: 09:49:59

Test Type: Conventional Bottom Hole (Reset)

Tester: Jason McLemore

Unit No: 54

Interval: 3686.00 ft (KB) To 3736.00 ft (KB) (TVD)

Reference Elevations: 2419.00 ft (KB)

Total Depth: 3736.00 ft (KB) (TVD)

2414.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8366

Inside

Press @ Run Depth: 33.31 psig @ 3723.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.23

End Date:

2012.09.23

Last Calib.:

2012.10.23

Start Time: 05:05:46

End Time:

09:49:59

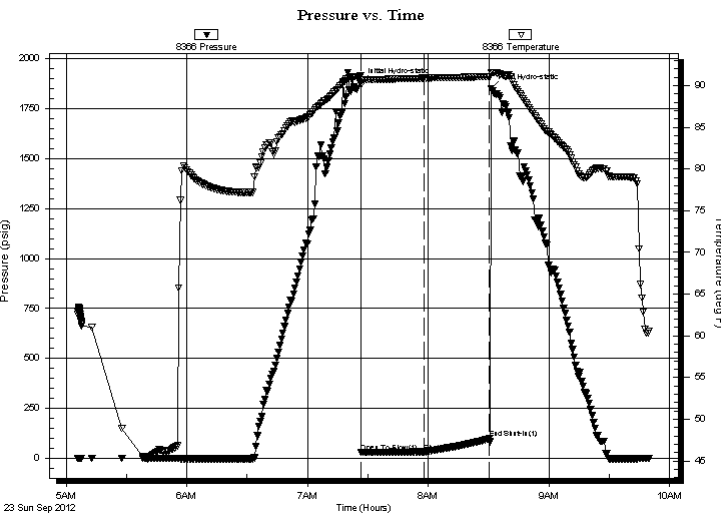
Time On Btm:

2012.09.23 @ 07:26:29

Time Off Btm:

2012.09.23 @ 08:31:14

TEST COMMENT: IFP-Weak Surface Blow, Died in 20 Min.
ISI-Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1880.95	91.20	Initial Hydro-static
1	30.73	90.14	Open To Flow (1)
32	33.31	90.91	Shut-In(1)
64	98.66	91.09	End Shut-In(1)
65	1848.01	91.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	HOCM-50%O-50%M	0.00

Gas Rates

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

* Recovery from multiple tests



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Baird Oil Company, LLC

17-3s-22w Norton, KS

PO Box 428
Logan, KS 67646

Esslinger Ranch #1

Job Ticket: 47870

DST#: 2

ATTN: Richard Bell

Test Start: 2012.09.23 @ 05:05:44

Tool Information

Drill Pipe:	Length: 3555.00 ft	Diameter: 3.80 inches	Volume: 49.87 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 48000.00 lb
			<u>Total Volume: 50.48 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3686.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	50.00 ft			
Tool Length:	71.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3666.00	
Shut In Tool	5.00			3671.00	
Hydraulic tool	5.00			3676.00	
Packer	5.00			3681.00	21.00 Bottom Of Top Packer
Packer	5.00			3686.00	
Stubb	1.00			3687.00	
Perforations	3.00			3690.00	
Change Over Sub	1.00			3691.00	
Blank Spacing	31.00			3722.00	
Change Over Sub	1.00			3723.00	
Recorder	0.00	8366	Inside	3723.00	
Recorder	0.00	8289	Outside	3723.00	
Perforations	10.00			3733.00	
Bullnose	3.00			3736.00	50.00 Bottom Packers & Anchor

Total Tool Length: 71.00



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FLUID SUMMARY

Baird Oil Company, LLC

17-3s-22w Norton, KS

PO Box 428
Logan, KS 67646

Esslinger Ranch #1

Job Ticket: 47870

DST#: 2

ATTN: Richard Bell

Test Start: 2012.09.23 @ 05:05:44

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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	HOCM-50%O-50%M	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Mud with Oil Spots, Oil in Tool Itself When Dumped

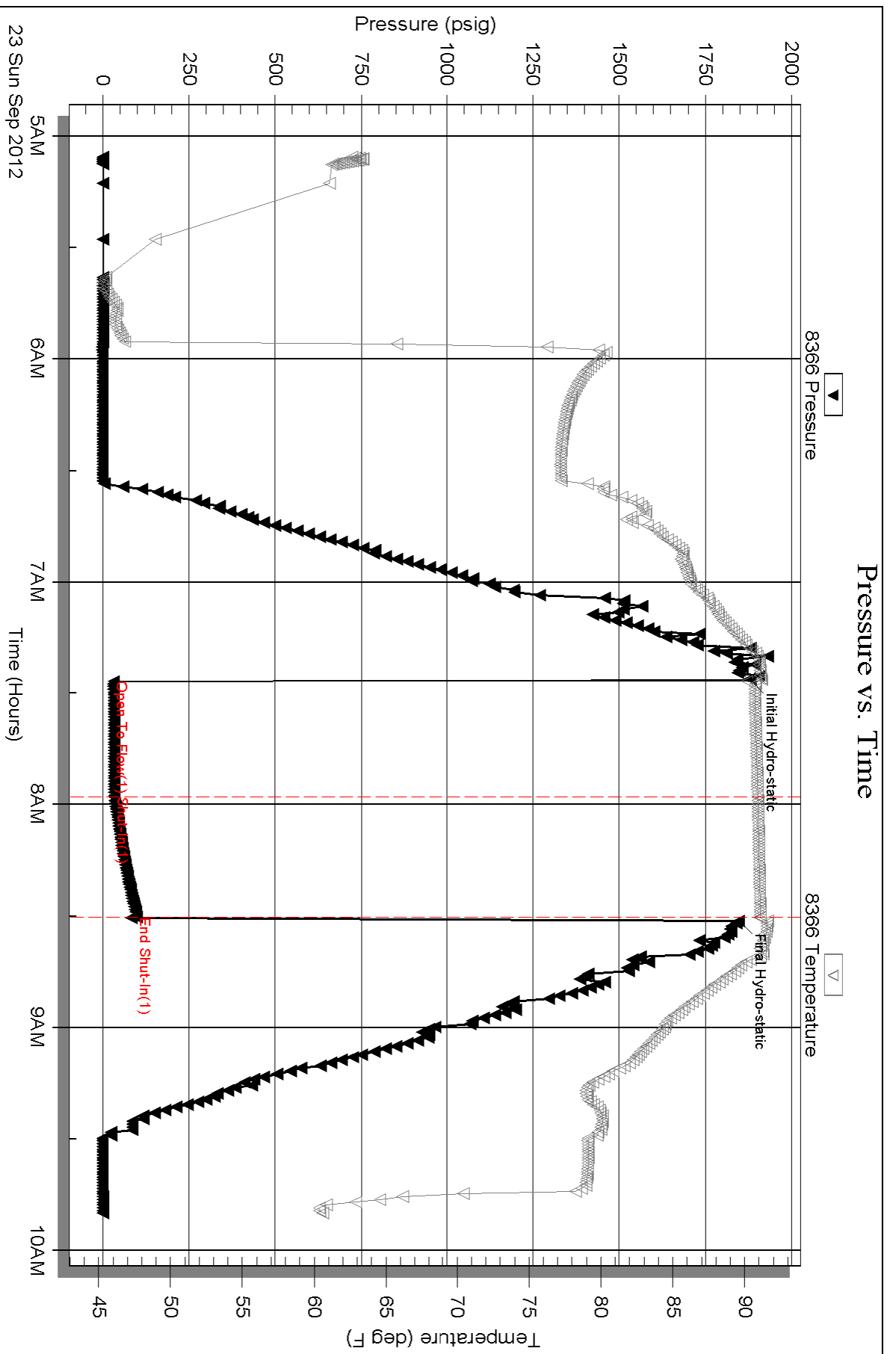
Serial #: 8366

Inside

Baird Oil Company, LLC

Esslinger Ranch #1

DST Test Number: 2

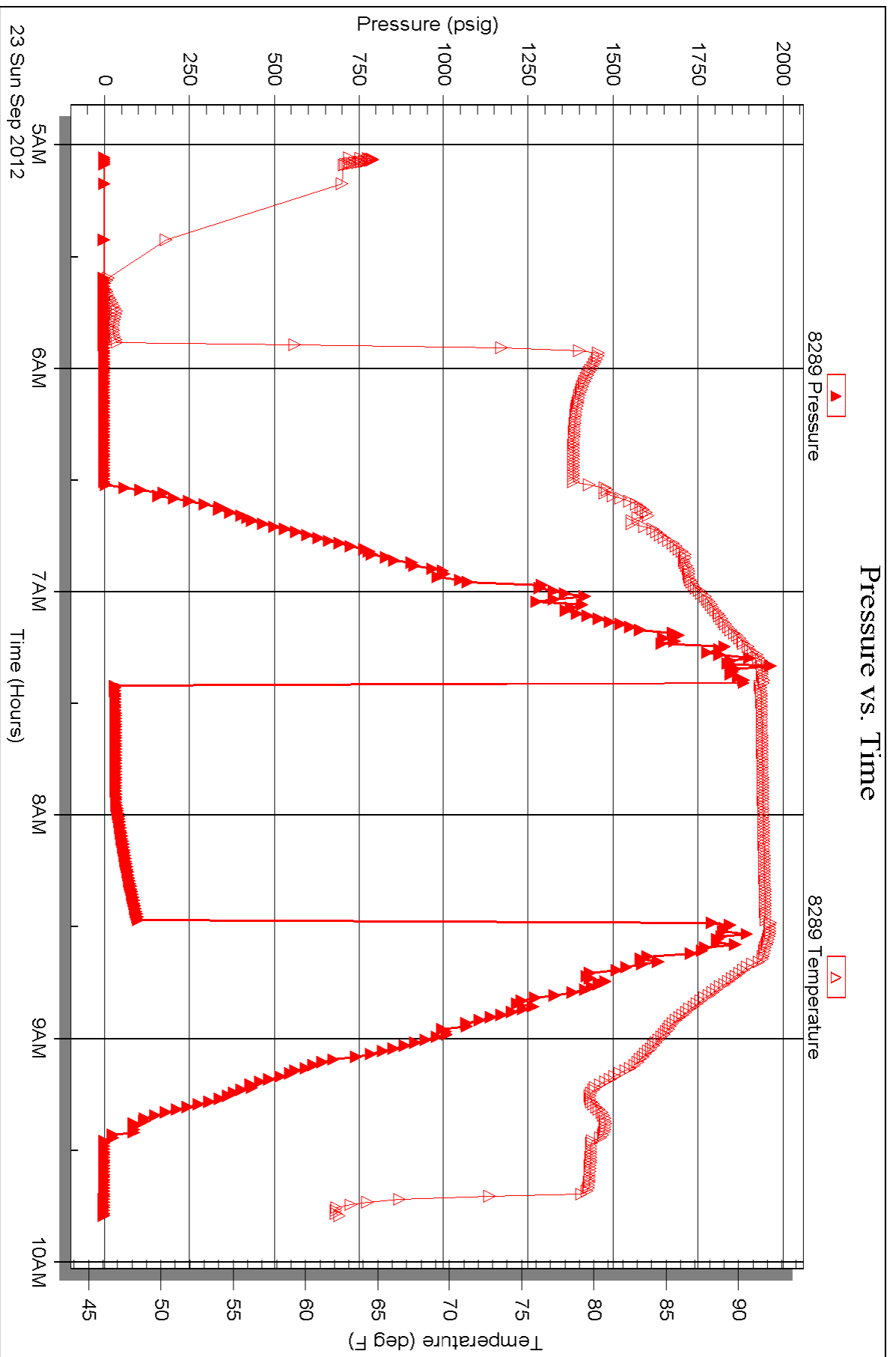


Serial #: 8289

Outside Baird Oil Company, LLC

Esslinger Ranch #1

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 47870

Printed: 2012.10.01 @ 14:21:42



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47869

Well Name & No. Esslinger Ranch #1-17 Test No. 1 Date 9-22-12
 Company Baied Oil Company, LLC Elevation 2419 KB 2414 GL
 Address PO Box 428, Logan, KS. 67646
 Co. Rep / Geo. Richard Bell Rig WW#8
 Location: Sec. 17 Twp. 3S Rge. 22w Co. Norton State Ks

Interval Tested 3616-3640 Zone Tested LKC-'E-F'
 Anchor Length 24' Drill Pipe Run 3494 Mud Wt. 9.2
 Top Packer Depth 3611 Drill Collars Run 124 Vis 58
 Bottom Packer Depth 3614 Wt. Pipe Run 0 WL 6.4
 Total Depth 3640 Chlorides 1100 ppm System LCM 1#
 Blow Description IFP-Weak Blow, Built to 1/2"
ISI-Dead
FFP-Weak Blow, Built to 1/8"
FSD-Dead

Rec	Feet of	%gas	%oil	%water	%mud
<u>130</u>	<u>Muddy Water with odor &</u>		<u>70</u>	<u>30</u>	
	<u>oil scum in tool</u>				

Rec Total 130 BHT _____ Gravity _____ API RW 280 @ 70 °F Chlorides 23,000 ppm

(A) Initial Hydrostatic 1802 Test 1150 T-On Location 12:49
 (B) First Initial Flow 10 Jars _____ T-Started 13:31
 (C) First Final Flow 53 Safety Joint _____ T-Open 14:56
 (D) Initial Shut-In 1150 Circ Sub _____ T-Pulled 17:56
 (E) Second Initial Flow 55 Hourly Standby _____ T-Out 19:20
 (F) Second Final Flow 76 Mileage 188.1 90rt 139.50 Comments _____
 (G) Final Shut-In 1110 Sampler _____
 (H) Final Hydrostatic 1764 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 45 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1289.50
 Final Flow 45 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1289.50

Approved By _____ Our Representative Jason Mc Lane *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.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47870

Well Name & No. Esslinger Ranch #1-17 Test No. 2 Date 9-23-12
 Company Baird Oil Company, LLC Elevation 2419 KB 2414 GL
 Address PO Box 428, Logan, Ks. 67646
 Co. Rep / Geo. Richard Bell Rig WW #8
 Location: Sec. 17 Twp. 3s Rge. 22w Co. Norton State Ks

Interval Tested 3686-3736 Zone Tested K
 Anchor Length 50' Drill Pipe Run _____ Mud Wt. 9.2
 Top Packer Depth 3681 Drill Collars Run 124 Vis 58
 Bottom Packer Depth 3684 Wt. Pipe Run 0 WL 6.4
 Total Depth 3736 Chlorides 1100 ppm System LCM 1st
 Blow Description IFP - Weak surface Blow, Died in 20 min.
ISI - Dead, pull tool

Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>HUCM, Mud w/oil spots,</u>	<u>50</u>		<u>50</u>	
	<u>Oil in tool when dumped</u>				

Rec Total 1 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1881 Test 1150 T-On Location 4:54
 (B) First Initial Flow 31 Jars _____ T-Started 5:03
 (C) First Final Flow 33 Safety Joint _____ T-Open 7:25
 (D) Initial Shut-In 99 Circ Sub _____ T-Pulled 8:25
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 9:48
 (F) Second Final Flow _____ Mileage 139.50 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 1848 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

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

Sub Total 1289.50
 Total 1289.50
 MP/DST Disc't _____

Approved By _____ Our Representative Jaron McLenon *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.