



## DRILL STEM TEST REPORT

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

113 W. Main  
PO Box 428  
Logan Ks. 67646

ATTN: Rich Bell

**3 4s 21w Norton KS**

**Anna #2-3**

Start Date: 2011.06.03 @ 19:00:00

End Date: 2011.06.03 @ 23:26:00

Job Ticket #: 040817      DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Baird Oil Company, LLC.

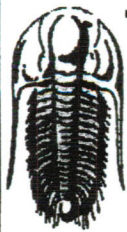
Anna #2-3

3 4s 21w Norton KS

DST # 1

LKC-A

2011.06.03



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Baird Oil Company, LLC.

**Anna #2-3**

113 W. Main  
PO Box 428  
Logan Ks. 67646  
ATTN: Rich Bell

**3 4s 21w Norton KS**

Job Ticket: 040817      DST#: 1

Test Start: 2011.06.03 @ 19:00:00

## GENERAL INFORMATION:

Formation: **LKC-A**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 20:50:00  
Time Test Ended: 23:26:00

Test Type: Conventional Bottom Hole  
Tester: Chuck Kreutzer Jr.  
Unit No: 36

Interval: **3400.00 ft (KB) To 3422.00 ft (KB) (TVD)**  
Total Depth: 3422.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches      Hole Condition: Good

Reference Elevations: 2168.00 ft (KB)  
2163.00 ft (CF)  
KB to GR/CF: 5.00 ft

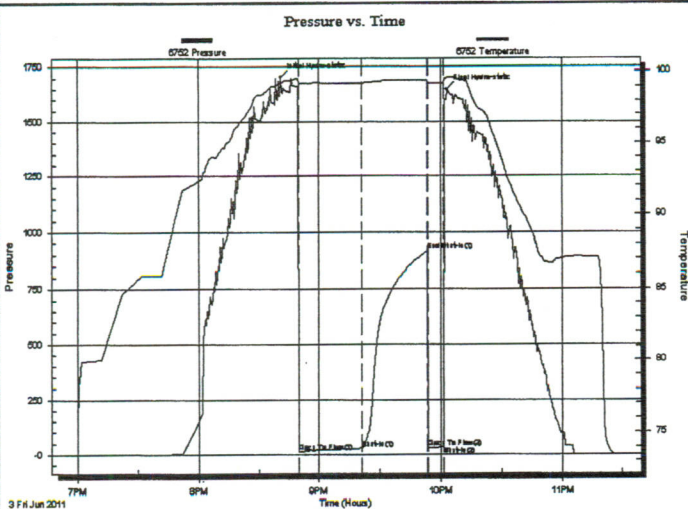
## Serial #: 6752

Inside

Press@RunDepth: 28.91 psig @ 3401.00 ft (KB)  
Start Date: 2011.06.03      End Date: 2011.06.03  
Start Time: 19:00:05      End Time: 23:25:59

Capacity: 8000.00 psig  
Last Calib.: 2011.06.03  
Time On Btrm: 2011.06.03 @ 20:41:00  
Time Off Btrm: 2011.06.03 @ 22:03:00

**TEST COMMENT:** IF: Weak blow, Built to 1 1/4 in. over 30 mins.  
IS: No blow back over 30 mins.  
FF: No blow over 5 mins.  
---Pulled tool----



## PRESSURE SUMMARY

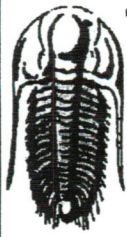
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1703.45	99.26	Initial Hydro-static
9	12.06	99.28	Open To Flow (1)
40	28.91	99.23	Shut-In(1)
73	914.90	99.40	End Shut-In(1)
73	32.11	99.24	Open To Flow (2)
81	34.16	99.22	Shut-In(2)
82	1649.65	99.61	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud	0.05

## Gas Rates

Choke (Inches)	Pressure (psig)	Gas Rate (Mscfd)



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Baird Oil Company, LLC.

**Anna #2-3**

113 W. Main  
PO Box 428  
Logan Ks. 67646  
ATTN: Rich Bell

**3 4s 21w Norton KS**

Job Ticket: 040817

**DST#: 1**

Test Start: 2011.06.03 @ 19:00:00

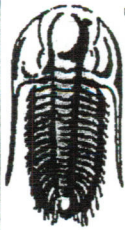
### Tool Information

Drill Pipe:	Length: 3267.00 ft	Diameter: 3.80 inches	Volume: 45.83 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume: 46.42 bbl		Tool Chased 2.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3400.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	42.00 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			3385.00	
Hydraulic tool	5.00			3390.00	
Packer	5.00			3395.00	20.00 Bottom Of Top Packer
Packer	5.00			3400.00	
Stubb	1.00			3401.00	
Recorder	0.00	6752	Inside	3401.00	
Recorder	0.00	8651	Outside	3401.00	
Perforations	18.00			3419.00	
Bullnose	3.00			3422.00	22.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>42.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Baird Oil Company, LLC.

**Anna #2-3**

113 W. Main  
PO Box 428  
Logan Ks. 67646  
ATTN: Rich Bell

**3 4s 21w Norton KS**

Job Ticket: 040817      **DST#: 1**

Test Start: 2011.06.03 @ 19:00:00

## 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: 68.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.99 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 600.00 ppm			
Filter Cake: 2.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	mud	0.049

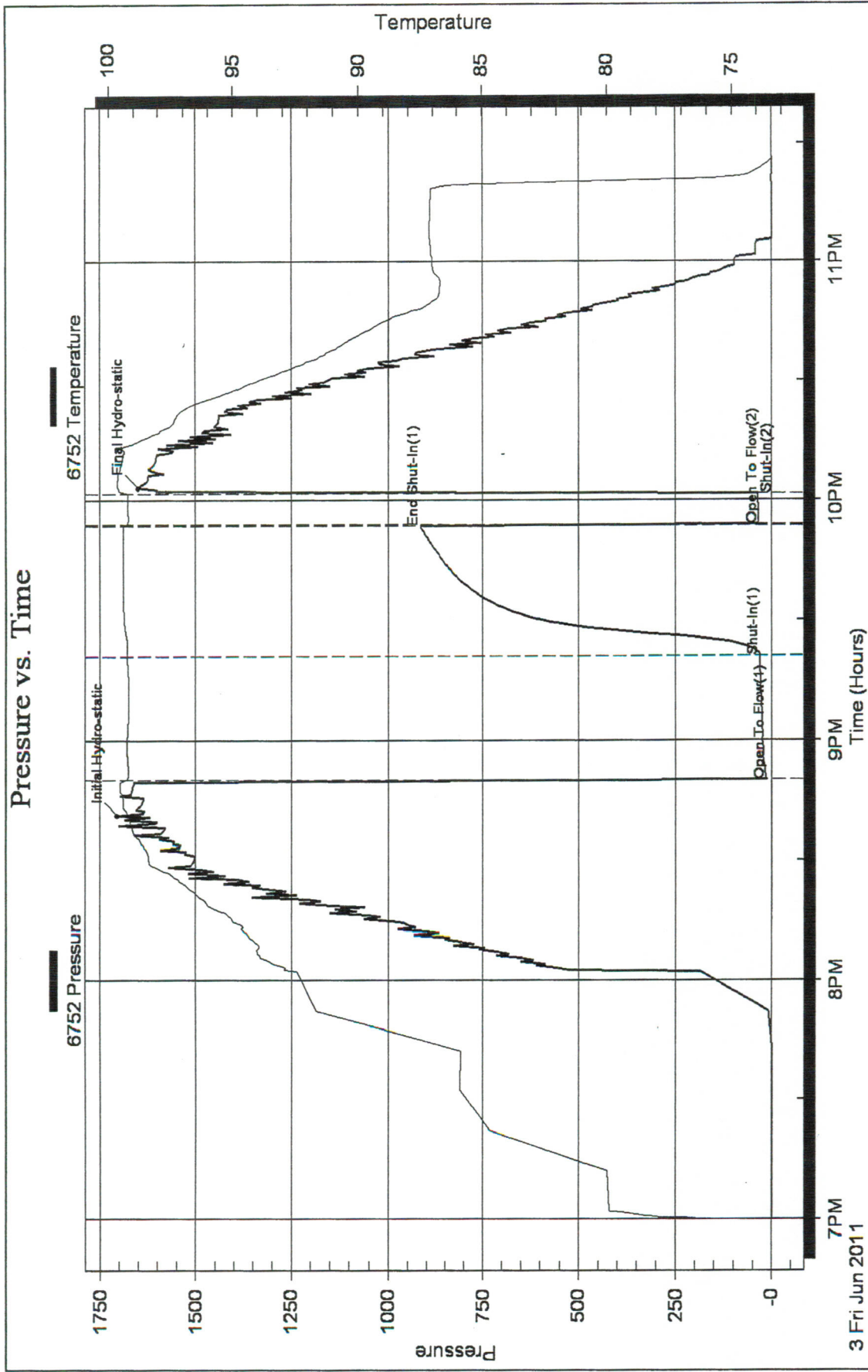
Total Length: 10.00 ft      Total Volume: 0.049 bbl

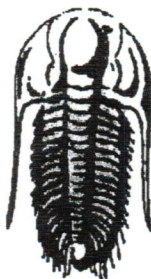
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

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

113 W. Main  
PO Box 428  
Logan Ks. 67646

ATTN: Rich Bell

**3 4s 21w Norton KS**

**Anna #2-3**

Start Date: 2011.06.04 @ 05:15:00

End Date: 2011.06.04 @ 09:11:00

Job Ticket #: 040818      DST #: 2

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Baird Oil Company, LLC.

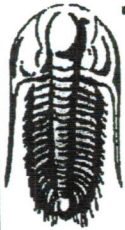
Anna #2-3

3 4s 21w Norton KS

DST # 2

LKC-C

2011.06.04



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Baird Oil Company, LLC.

**Anna #2-3**

113 W. Main  
PO Box 428  
Logan Ks. 67646  
ATTN: Rich Bell

**3 4s 21w Norton KS**

Job Ticket: 040818      **DST#: 2**

Test Start: 2011.06.04 @ 05:15:00

## GENERAL INFORMATION:

Formation: **LKC-C**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 06:58:30  
Time Test Ended: 09:11:00

Test Type: Conventional Bottom Hole  
Tester: Chuck Kreutzer Jr.  
Unit No: 36

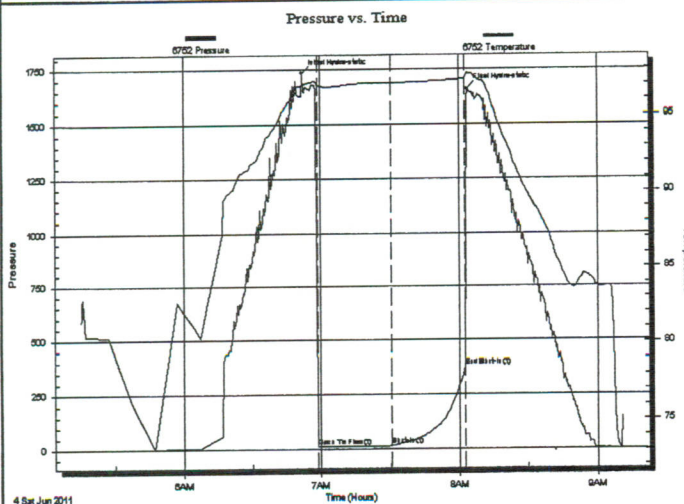
Interval: **3428.00 ft (KB) To 3448.00 ft (KB) (TVD)**  
Total Depth: 3448.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2168.00 ft (KB)  
2163.00 ft (CF)  
KB to GR/CF: 5.00 ft

**Serial #: 6752**      Inside  
Press@RunDepth: 17.06 psig @ 3429.00 ft (KB)  
Start Date: 2011.06.04      End Date: 2011.06.04  
Start Time: 05:15:05      End Time: 09:11:00

Capacity: 8000.00 psig  
Last Calib.: 2011.06.04  
Time On Btm: 2011.06.04 @ 06:52:00  
Time Off Btm: 2011.06.04 @ 08:03:30

**TEST COMMENT:** IF: Weak blow, Built to 1/8 in. Died back to surface over 30 mins.  
IS: No blow back over 30 mins.



## PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1731.52	96.91	Initial Hydro-static
7	12.28	96.96	Open To Flow (1)
39	17.06	97.05	Shut-In(1)
71	376.40	97.32	End Shut-In(1)
72	1657.04	97.70	Final Hydro-static

## Recovery

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

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Baird Oil Company, LLC.

**Anna #2-3**

113 W. Main  
PO Box 428  
Logan Ks. 67646  
ATTN: Rich Bell

**3 4s 21w Norton KS**

Job Ticket: 040818      **DST#: 2**

Test Start: 2011.06.04 @ 05:15:00

**Tool Information**

Drill Pipe:	Length: 3298.00 ft	Diameter: 3.80 inches	Volume: 46.26 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	55000.00 lb
		Total Volume: 46.85 bbl		Tool Chased	2.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	44000.00 lb
Depth to Top Packer:	3428.00 ft			Final	44000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	20.00 ft				
Tool Length:	40.00 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			3413.00	
Hydraulic tool	5.00			3418.00	
Packer	5.00			3423.00	20.00      Bottom Of Top Packer
Packer	5.00			3428.00	
Stubb	1.00			3429.00	
Recorder	0.00	6752	Inside	3429.00	
Recorder	0.00	8651	Outside	3429.00	
Perforations	16.00			3445.00	
Bullnose	3.00			3448.00	20.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>40.00</b>				





**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Baird Oil Company, LLC.

**Anna #2-3**

113 W. Main  
PO Box 428  
Logan Ks. 67646  
ATTN: Rich Bell

**3 4s 21w Norton KS**

Job Ticket: 040818      **DST#: 2**

Test Start: 2011.06.04 @ 05:15:00

### 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: 68.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.99 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 600.00 ppm			
Filter Cake: 2.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud-100%	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 #: 6752

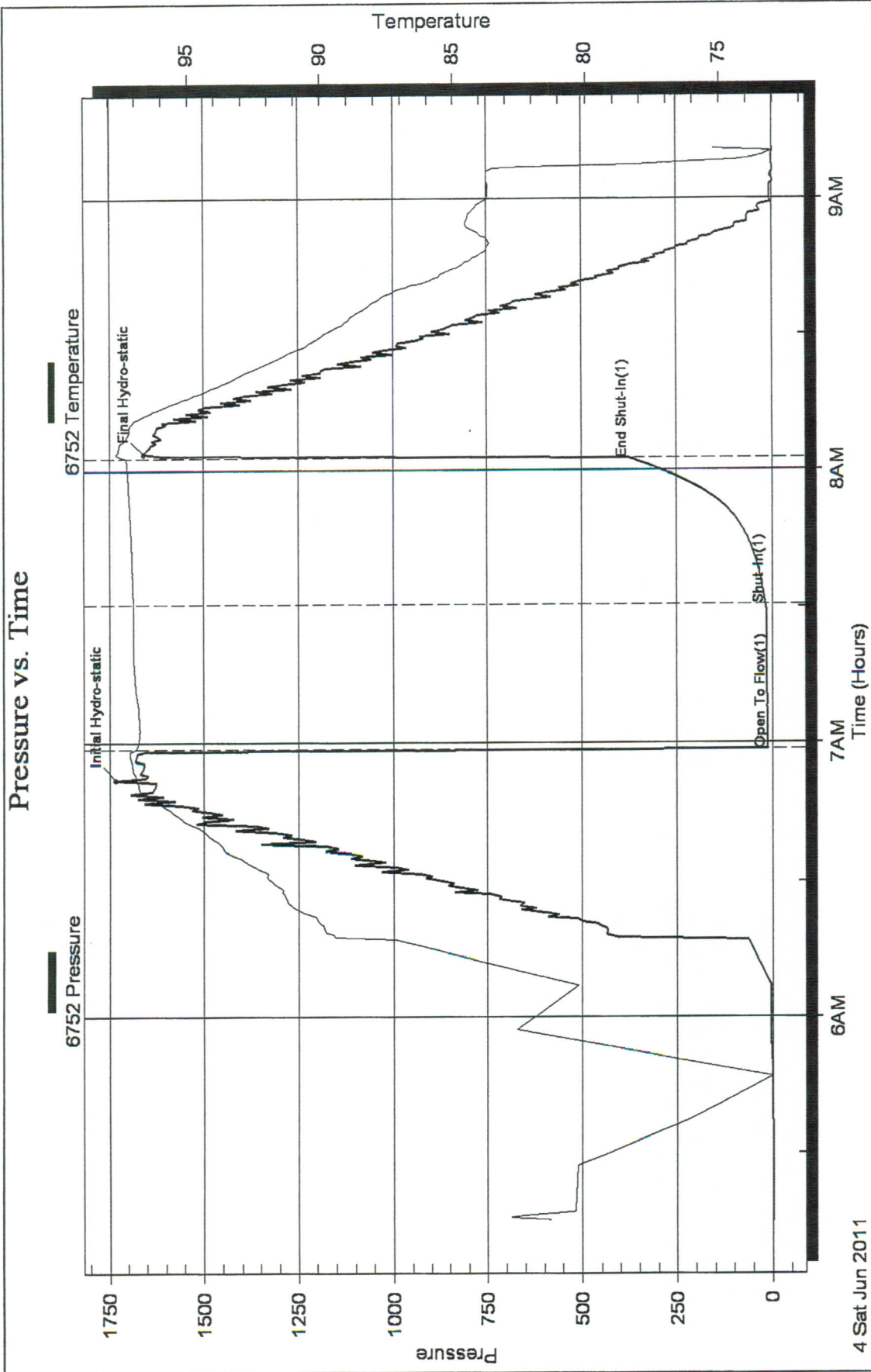
Inside

Baird Oil Company, LLC

3.4s 21w Norton KS

DST Test Number: 2

### Pressure vs. Time





## DRILL STEM TEST REPORT

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

113 W. Main  
PO Box 428  
Logan Ks. 67646

ATTN: Rich Bell

**3 4s 21w Norton KS**

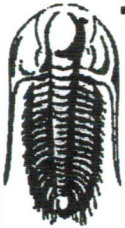
**Anna #2-3**

Start Date: 2011.06.05 @ 00:10:00

End Date: 2011.06.05 @ 05:53:30

Job Ticket #: 040819                      DST #: 3

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Baird Oil Company, LLC.

**Anna #2-3**

113 W. Main  
PO Box 428  
Logan Ks. 67646  
ATTN: Rich Bell

**3 4s 21w Norton KS**

Job Ticket: 040819      **DST#: 3**  
Test Start: 2011.06.05 @ 00:10:00

## GENERAL INFORMATION:

Formation: **LKC-I,J,K**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 01:58:30  
Time Test Ended: 05:53:30

Test Type: Conventional Bottom Hole  
Tester: Chuck Kreutzer Jr.  
Unit No: 36

Interval: **3533.00 ft (KB) To 3586.00 ft (KB) (TVD)**  
Total Depth: 3586.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2168.00 ft (KB)  
2163.00 ft (CF)  
KB to GR/CF: 5.00 ft

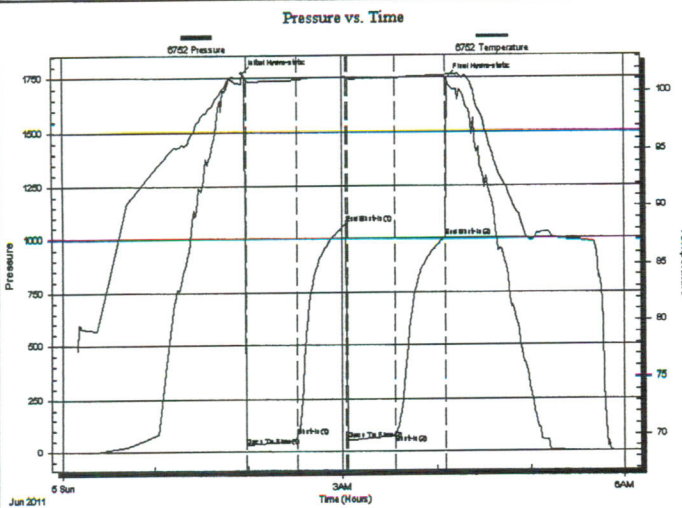
## Serial #: 6752

Inside

Press@RunDepth: 77.48 psig @ 3537.50 ft (KB)  
Start Date: 2011.06.05      End Date: 2011.06.05  
Start Time: 00:10:05      End Time: 05:53:29

Capacity: 8000.00 psig  
Last Calib.: 2011.06.05  
Time On Btm: 2011.06.05 @ 01:56:00  
Time Off Btm: 2011.06.05 @ 04:06:30

**TEST COMMENT:** IF: Weak blow, built to 1 in. over 30 mins.  
IS: No blow back over 30 mins.  
FF: No blow over 30 mins.  
FS: No blow back 30 mins.



## PRESSURE SUMMARY

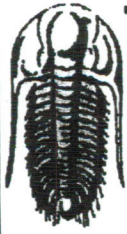
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1768.65	101.21	Initial Hydro-static
3	29.87	100.96	Open To Flow (1)
36	74.31	100.99	Shut-In(1)
67	1071.83	101.24	End Shut-In(1)
68	56.49	101.06	Open To Flow (2)
97	77.48	101.12	Shut-In(2)
130	1007.02	101.34	End Shut-In(2)
131	1743.54	101.45	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	HMCO-20% m80%o	0.30
2.00	oil-100%	0.01

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Baird Oil Company, LLC.

**Anna #2-3**

113 W. Main  
PO Box 428  
Logan Ks. 67646  
ATTN: Rich Bell

**3 4s 21w Norton KS**

Job Ticket: 040819

**DST#: 3**

Test Start: 2011.06.05 @ 00:10:00

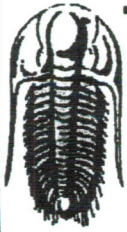
### Tool Information

Drill Pipe:	Length: 3422.00 ft	Diameter: 3.80 inches	Volume: 48.00 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 48.59 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3533.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	53.00 ft			
Tool Length:	73.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3518.00	
Hydraulic tool	5.00			3523.00	
Packer	5.00			3528.00	20.00 Bottom Of Top Packer
Packer	5.00			3533.00	
Stubb	1.00			3534.00	
Perforations	3.00			3537.00	
Change Over Sub	0.50			3537.50	
Recorder	0.00	6752	Inside	3537.50	
Recorder	0.00	8651	Outside	3537.50	
Blank Spacing	29.00			3566.50	
Change Over Sub	0.50			3567.00	
Perforations	16.00			3583.00	
Bullnose	3.00			3586.00	53.00 Bottom Packers & Anchor

**Total Tool Length: 73.00**



**TRILOBITE  
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## DRILL STEM TEST REPORT

**FLUID SUMMARY**

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**Anna #2-3**

113 W. Main  
PO Box 428  
Logan Ks. 67646  
ATTN: Rich Bell

**3 4s 21w Norton KS**

Job Ticket: 040819      **DST#: 3**

Test Start: 2011.06.05 @ 00:10:00

### 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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.39 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 900.00 ppm			
Filter Cake: 2.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	HMCO-20% m80%o	0.295
2.00	oil-100%	0.010

Total Length: 62.00 ft      Total Volume: 0.305 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

Serial #: 6752

Inside

Baird Oil Company, LLC.

3 4s 21w Norton KS

DST Test Number: 3

### Pressure vs. Time

