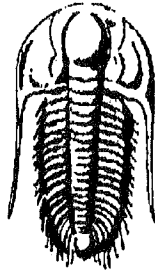


15-141-20406

23-8s-14w

IND



**TRILOBITE  
TESTING, INC.**

RECEIVED  
KANSAS CORPORATION COMMISSION

JAN 25 2010

CONSERVATION DIVISION  
WICHITA, KS

**DRILL STEM TEST REPORT**

Prepared For: **Bruce Oil Co LLC**

1704 Limestone Rd  
McPherson Ks 67460-6500

ATTN: Lonny Bruce

**23-8s-14w Osborne KS**

**Thibault #1**

Start Date: 2009.08.16 @ 20:30:03

End Date: 2009.08.17 @ 03:23:27

Job Ticket #: 35414                      DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Bruce Oil Co LLC

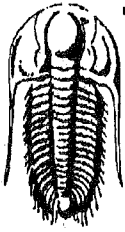
Thibault #1

23-8s-14w Osborne KS

DST # 1

Topeka

2009.08.16



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Bruce Oil Co LLC  
1704 Limestone Rd  
McPherson Ks 67460-6500  
ATTN: Lonny Bruce

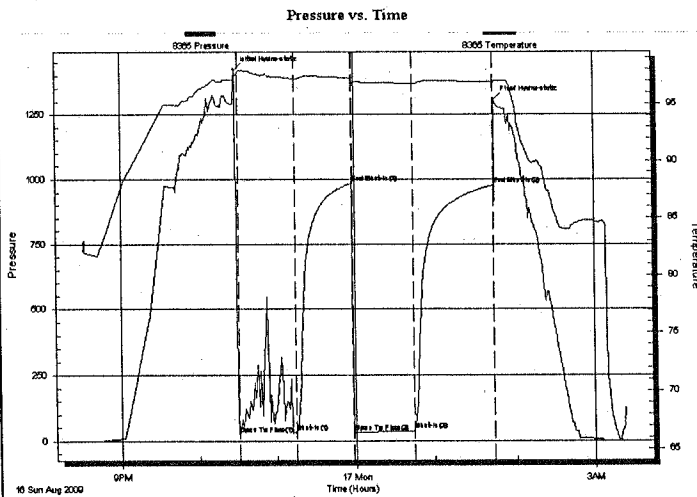
**Thibault #1**  
**23-8s-14w Osborne KS**  
Job Ticket: 35414      **DST#: 1**  
Test Start: 2009.08.16 @ 20:30:03

### GENERAL INFORMATION:

Formation: **Topeka**  
Deviated: **No** Whipstock: **ft (KB)**  
Time Tool Opened: 22:30:28  
Time Test Ended: 03:23:27  
Test Type: **Conventional Bottom Hole**  
Tester: **Ray Schwager**  
Unit No: **42**  
Interval: **2773.00 ft (KB) To 2793.00 ft (KB) (TVD)**  
Reference Elevations: **1835.00 ft (KB)**  
**1828.00 ft (CF)**  
Total Depth: **2793.00 ft (KB) (TVD)**  
Hole Diameter: **7.85 inches** Hole Condition: **KB to GR/CF: 7.00 ft**

**Serial #: 8365**      **Inside**  
Press@RunDepth: **38.79 psig @ 2774.01 ft (KB)**      Capacity: **7000.00 psig**  
Start Date: **2009.08.16**      End Date: **2009.08.17**      Last Calib.: **2009.08.17**  
Start Time: **20:30:03**      End Time: **03:23:27**      Time On Btm: **2009.08.16 @ 22:27:58**  
Time Off Btm: **2009.08.17 @ 01:44:57**

**TEST COMMENT:** IFP-w k bl thru-out surface to 1/2"bl  
FFP-w k surface bl  
Times-45-45-45-60



### PRESSURE SUMMARY

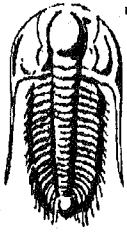
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1421.29	97.38	Initial Hydro-static
3	26.53	97.80	Open To Flow (1)
47	32.14	97.20	Shut-in(1)
90	985.59	97.26	End Shut-in(1)
91	33.20	96.89	Open To Flow (2)
137	38.79	96.76	Shut-in(2)
196	977.83	96.88	End Shut-in(2)
197	1307.87	96.97	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
0.00	65'GIP	0.00
55.00	MGO 5%G45%M50%O	0.77

### Gas Rates

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



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bruce Oil Co LLC  
1704 Limestone Rd  
McPherson Ks 67460-6500  
ATTN: Lonny Bruce

**Thibault #1**  
**23-8s-14w Osborne KS**  
Job Ticket: 35414      DST#: 1  
Test Start: 2009.08.16 @ 20:30:03

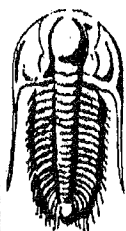
**Tool Information**

Drill Pipe:	Length: 2774.00 ft	Diameter: 3.80 inches	Volume: 38.91 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 38.91 bbl</u>	Tool Chased 8.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	2773.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.02 ft			
Tool Length:	48.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2746.00	
Shut In Tool	5.00			2751.00	
Hydraulic tool	5.00			2756.00	
Jars	5.00			2761.00	
Safety Joint	2.00			2763.00	
Packer	5.00			2768.00	28.00      Bottom Of Top Packer
Packer	5.00			2773.00	
Stubb	1.00			2774.00	
Recorder	0.01	8365	Inside	2774.01	
Recorder	0.01	6625	Outside	2774.02	
Perforations	16.00			2790.02	
Bullnose	3.00			2793.02	20.02      Bottom Packers & Anchor

**Total Tool Length: 48.02**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Bruce Oil Co LLC  
1704 Limestone Rd  
McPherson Ks 67460-6500  
ATTN: Lonny Bruce

**Thibault #1**  
**23-8s-14w Osborne KS**  
Job Ticket: 35414      **DST#: 1**  
Test Start: 2009.08.16 @ 20:30:03

## 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: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.14 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	65'GIP	0.000
55.00	MGO 5%G45%M50%O	0.772

Total Length: 55.00 ft      Total Volume: 0.772 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

DST Test Number: 1

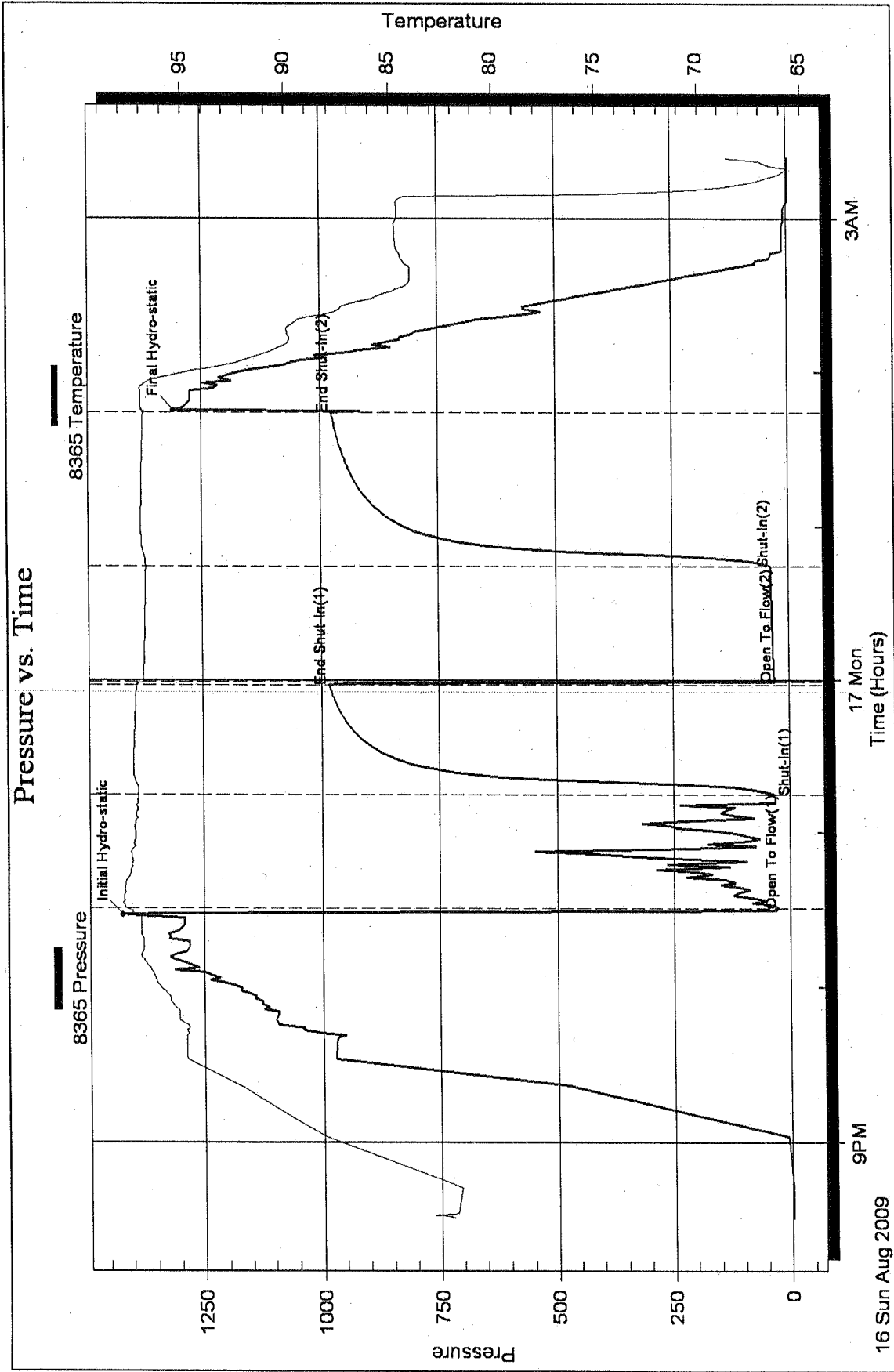
23-8s-14w Osborne KS

Bruce Oil Co LLC

Inside

Serial #: 8365

### Pressure vs. Time



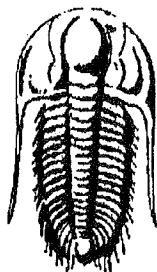
3AM

17 Mon

9PM

Time (Hours)

16 Sun Aug 2009



**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Bruce Oil Co LLC**

1704 Limestone Rd  
McPherson Ks 67460-6500

ATTN: Lonny Bruce

**23-8s-14w Osborne KS**

### Thibault #1

Start Date: 2009.08.17 @ 23:46:06

End Date: 2009.08.18 @ 06:50:30

Job Ticket #: 35415                      DST #: 2

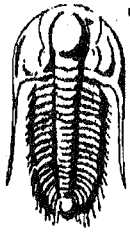
Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

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JAN 25 2010  
CONSERVATION DIVISION  
WICHITA, KS





**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Bruce Oil Co LLC  
1704 Limestone Rd  
McPherson Ks 67460-6500  
ATTN: Lonny Bruce

**Thibault #1**  
**23-8s-14w Osborne KS**  
Job Ticket: 35415      **DST#: 2**  
Test Start: 2009.08.17 @ 23:46:06

**Tool Information**

Drill Pipe:	Length: 3055.00 ft	Diameter: 3.80 inches	Volume: 42.85 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 42.85 bbl</u>	Tool Chased 10.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3057.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.02 ft			
Tool Length:	54.02 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			3030.00	
Shut In Tool	5.00			3035.00	
Hydraulic tool	5.00			3040.00	
Jars	5.00			3045.00	
Safety Joint	2.00			3047.00	
Packer	5.00			3052.00	28.00 Bottom Of Top Packer
Packer	5.00			3057.00	
Stubb	1.00			3058.00	
Recorder	0.01	8365	Inside	3058.01	
Recorder	0.01	6625	Outside	3058.02	
Perforations	22.00			3080.02	
Bullnose	3.00			3083.02	26.02 Bottom Packers & Anchor

**Total Tool Length: 54.02**





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Bruce Oil Co LLC  
1704 Limestone Rd  
McPherson Ks 67460-6500  
ATTN: Lonny Bruce

**Thibault #1**  
**23-8s-14w Osborne KS**  
Job Ticket: 35415      DST#: 2  
Test Start: 2009.08.17 @ 23:46:06

## 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: 78000 ppm	
Viscosity: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.13 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	MW 15%M85%W w/show of oil in tool	1.403

Total Length: 100.00 ft      Total Volume: 1.403 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: RW .1 @ 78F

Serial #: 8365

Inside

Bruce Oil Co LLC

23-8s-14w Osborne KS

DST Test Number: 2

### Pressure vs. Time

