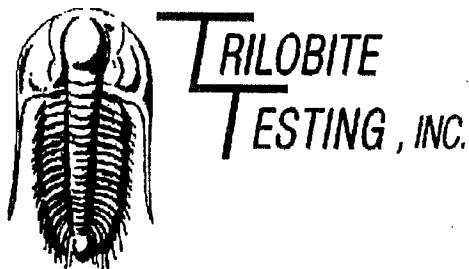


15-141-20422

1-9s-12w



### DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil Inc.**

PO Box 550  
Hays KS 67601

ATTN: Bill Ree

**1 9s 12w Osborne, KS**

**Brummer #1**

Start Date: 2011.02.07 @ 07:10:02

End Date: 2011.02.07 @ 13:07:02

Job Ticket #: 41776                      DST #: 1

1-9-12w

Dreiling Oil Inc.  
 Brummer #1  
 1 9s 12w Osborne, KS  
 US 1 # 1  
 Lansing A  
 2011.02.07

RECEIVED

APR 19 2011

KCC WICHITA

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



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Dreiling Oil Inc.  
PO Box 550  
Hays KS 67601  
ATTN: Bill Ree

**Brummer #1**  
**1 9s 12w Osborne, KS**  
Job Ticket: 41776      **DST#: 1**  
Test Start: 2011.02.07 @ 07:10:02

**Mud and Cushion Information**

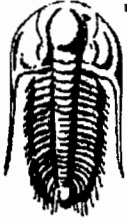
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 63.00 sec/qt	Cushion Volume: bbl		
Water Loss: in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
5.00	sl oil cut mud 5% oil 95% mud	0.025

Total Length: 5.00 ft      Total Volume: 0.032 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:



**TRILOBITE TESTING, INC**

**DRILL STEM TEST REPORT**

Dreiling Oil Inc.  
 PO Box 550  
 Hays KS 67601  
 ATTN: Bill Ree

**Brummer #1**  
**1 9s 12w Osborne, KS**  
 Job Ticket: 41776      **DST#: 1**  
 Test Start: 2011.02.07 @ 07:10:02

**GENERAL INFORMATION:**

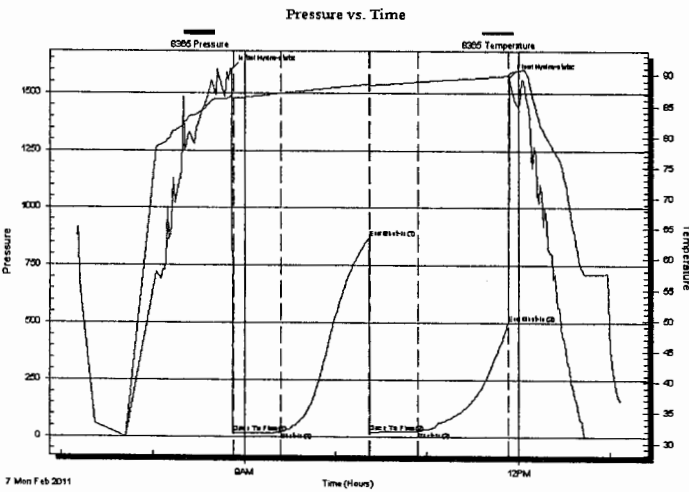
Formation: **Lansing A**  
 Deviated: **No Whipstock:**      **ft (KB)**  
 Time Tool Opened: **08:51:02**  
 Time Test Ended: **13:07:02**  
 Interval: **3050.00 ft (KB) To 3091.00 ft (KB) (TVD)**  
 Total Depth: **3091.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Good**  
 Test Type: **Conventional Bottom Hole**  
 Tester: **Paul Simpson**  
 Unit No: **41**  
 Reference Elevations: **1879.00 ft (KB)**  
**1872.00 ft (CF)**  
 KB to GR/CF: **7.00 ft**

**Serial #: 8365**

**Outside**

Press@RunDepth: **19.64 psig @ 3056.00 ft (KB)**      Capacity: **8000.00 psig**  
 Start Date: **2011.02.07**      End Date: **2011.02.07**      Last Calib.: **2011.02.07**  
 Start Time: **07:10:03**      End Time: **13:07:02**      Time On Btm: **2011.02.07 @ 08:51:02**  
 Time Off Btm: **2011.02.07 @ 11:54:02**

**TEST COMMENT:** **IF-weak 1/4" blow building to 3/4"**  
**FF weak surface blow throughout opening.**



**PRESSURE SUMMARY**

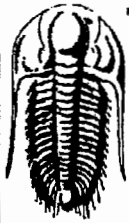
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1597.59	86.58	Initial Hydro-static
1	16.12	86.32	Open To Flow (1)
33	19.64	87.08	Shut-In(1)
92	870.01	88.51	End Shut-In(1)
92	22.18	88.23	Open To Flow (2)
124	26.00	88.93	Shut-In(2)
182	499.15	89.88	End Shut-In(2)
183	1567.04	90.28	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
5.00	sl oil cut mud 5% oil 95% mud	0.02

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Dreiling Oil Inc.

**Brummer #1**

PO Box 550  
Hays KS 67601

**1 9s 12w Osborne, KS**

Job Ticket: 41776

**DST#: 1**

ATTN: Bill Ree

Test Start: 2011.02.07 @ 07:10:02

**Tool Information**

Drill Pipe:	Length: 3013.00 ft	Diameter: 3.80 inches	Volume: 42.26 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: 20000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 45000.00 lb
		Total Volume: 42.41 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 41000.00 lb
Depth to Top Packer:	3050.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	61.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

**Tool Description**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3035.00	
Hydraulic tool	5.00			3040.00	
Packer	5.00			3045.00	20.00 Bottom Of Top Packer
Packer	5.00			3050.00	
Stubb	1.00			3051.00	
Perforations	4.00			3055.00	
Change Over Sub	1.00			3056.00	
Recorder	0.00	8372	Inside	3056.00	
Recorder	0.00	8365	Outside	3056.00	
Blank Spacing	31.00			3087.00	
Change Over Sub	1.00			3088.00	
Bullnose	3.00			3091.00	41.00 Bottom Packers & Anchor

**Total Tool Length: 61.00**

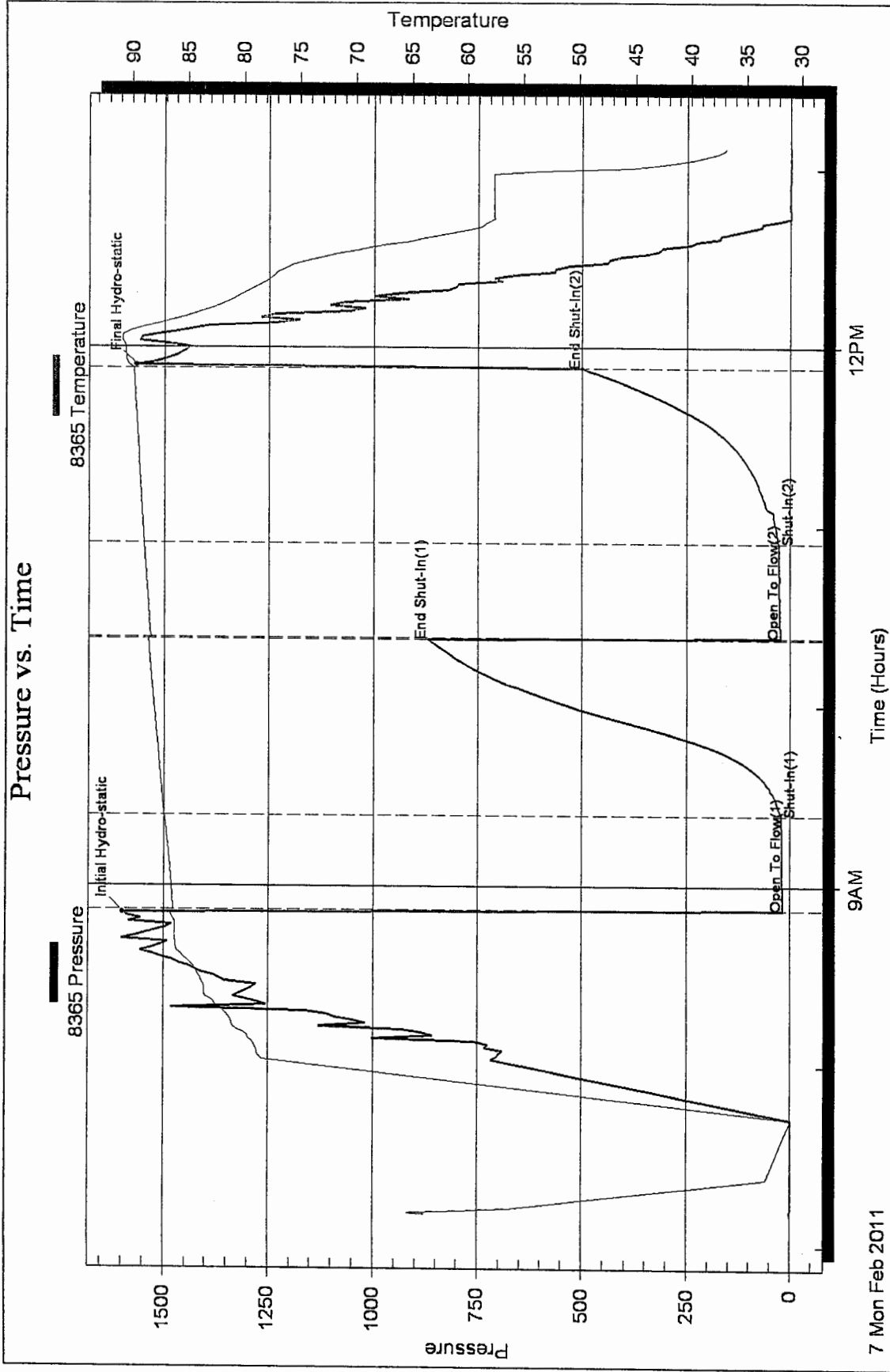
Serial #: 8365

Outside

Drelling Oil Inc.

1 9s 12w Osborne, KS

DST Test Number: 1

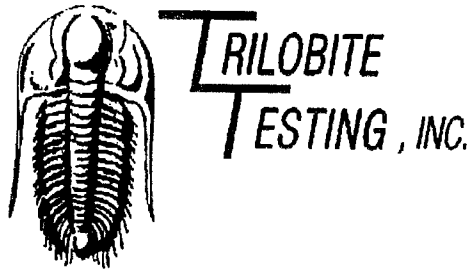


7 Mon Feb 2011

9AM

Time (Hours)

12PM



## DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil Inc.**

PO Box 550  
Hays KS 67601

ATTN: Bill Ree

**1 9s 12w Osborne, KS**

**Brummer #1**

Start Date: 2011.02.07 @ 20:33:23

End Date: 2011.02.08 @ 03:07:53

Job Ticket #: 41777                      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



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

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Dreiling Oil Inc.

**Brummer #1**

PO Box 550  
Hays KS 67601

**1 9s 12w Osborne, KS**

Job Ticket: 41777

**DST#: 2**

ATTN: Bill Ree

Test Start: 2011.02.07 @ 20:33:23

**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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.95 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

**Recovery Information**

**Recovery Table**

Length ft	Description	Volume bbl
40.00	mud	0.279

Total Length: 40.00 ft

Total Volume: 0.322 bbl

Num Fluid Samples: 0

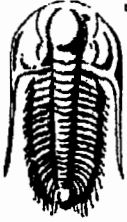
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Dreiling Oil Inc.

PO Box 550  
Hays KS 67601

ATTN: Bill Ree

**Brummer #1**

**1 9s 12w Osborne, KS**

Job Ticket: 41777      DST#: 2

Test Start: 2011.02.07 @ 20:33:23

### GENERAL INFORMATION:

Formation: **Lansing B**

Deviated: No Whipstock:                      ft (KB)

Time Tool Opened: 22:16:53

Time Test Ended: 03:07:53

Test Type: Conventional Bottom Hole

Tester: Paul Simpson

Unit No: 41

Interval: **3085.00 ft (KB) To 3120.00 ft (KB) (TVD)**

Total Depth: **3120.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: Good

Reference Elevations: **1879.00 ft (KB)**

**1872.00 ft (CF)**

KB to GR/CF: **7.00 ft**

**Serial #: 8365**

**Outside**

Press@RunDepth: **33.71 psig @ 3090.00 ft (KB)**

Capacity: **8000.00 psig**

Start Date: **2011.02.07**

End Date:

**2011.02.08**

Last Calib.: **2011.02.08**

Start Time: **20:33:24**

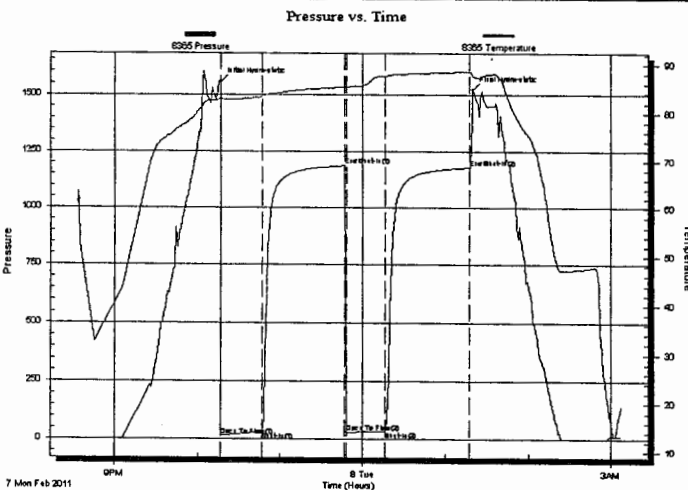
End Time:

**03:07:53**

Time On Btm: **2011.02.07 @ 22:16:23**

Time Off Btm: **2011.02.08 @ 01:19:53**

TEST COMMENT: IF- 1/2" blow building to 1"  
FF- surface blow building to 1/8"



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1553.68	83.21	Initial Hydro-static
1	14.75	82.93	Open To Flow (1)
31	31.08	83.51	Shut-In(1)
91	1185.25	85.51	End Shut-In(1)
92	31.25	85.42	Open To Flow (2)
121	33.71	87.61	Shut-In(2)
182	1178.02	88.64	End Shut-In(2)
184	1519.24	87.74	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
40.00	mud	0.28

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Dreiling Oil Inc.

**Brummer #1**

PO Box 550  
Hays KS 67601

**1 9s 12w Osborne, KS**

Job Ticket: 41777

**DST#: 2**

ATTN: Bill Ree

Test Start: 2011.02.07 @ 20:33:23

### Tool Information

Drill Pipe:	Length: 3044.00 ft	Diameter: 3.80 inches	Volume: 42.70 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: 22000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 42.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3085.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	35.00 ft			
Tool Length:	55.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

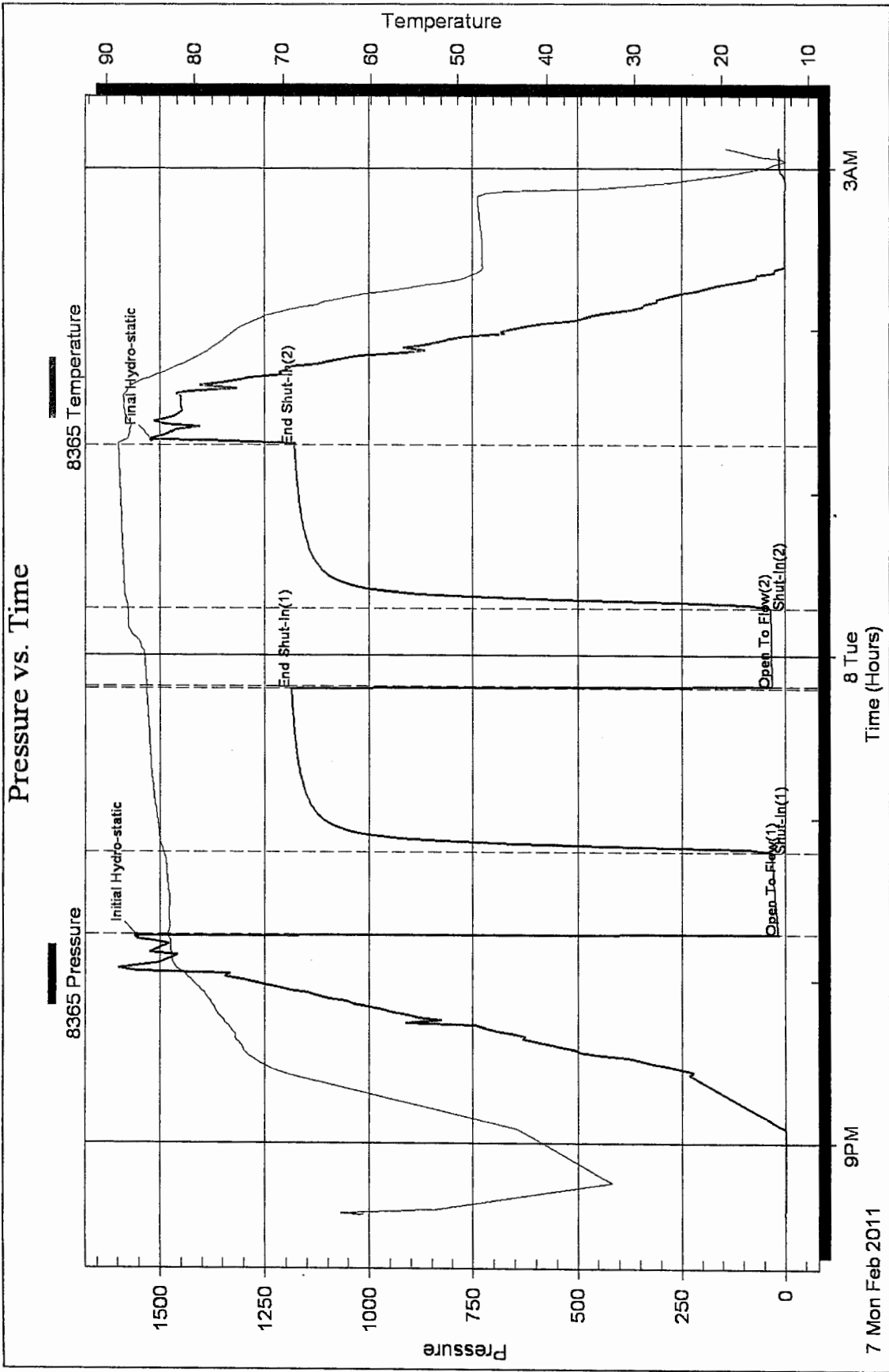
Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3070.00	
Hydraulic tool	5.00			3075.00	
Packer	5.00			3080.00	20.00 Bottom Of Top Packer
Packer	5.00			3085.00	
Stubb	1.00			3086.00	
Perforations	4.00			3090.00	
Recorder	0.00	8372	Inside	3090.00	
Recorder	0.00	8365	Outside	3090.00	
Perforations	27.00			3117.00	
Bullnose	3.00			3120.00	35.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>55.00</b>				

Serial #: 8365

Outside Drilling Oil Inc.

1 9s 12w Osborne, KS

DST Test Number: 2





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil Inc.**

PO Box 550  
Hays KS 67601

ATTN: Bill Ree

**1 9s 12w Osborne, KS**

**Brummer #1**

Start Date: 2011.02.08 @ 10:20:27

End Date: 2011.02.08 @ 18:42:57

Job Ticket #: 41778                      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**

**FLUID SUMMARY**

Dreiling Oil Inc.  
PO Box 550  
Hays KS 67601  
ATTN: Bill Ree

**Brummer #1**  
**1 9s 12w Osborne, KS**  
Job Ticket: 41778      **DST#: 3**  
Test Start: 2011.02.08 @ 10:20:27

**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:	83000 ppm
Viscosity: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.76 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
240.00	salt water with oil scum at top	3.084
0.00	.126@53 == 83,000	0.000

Total Length: 240.00 ft      Total Volume: 3.128 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Dreiling Oil Inc.

**Brummer #1**

PO Box 550  
Hays KS 67601

**1 9s 12w Osborne, KS**

Job Ticket: 41778

**DST#: 3**

ATTN: Bill Ree

Test Start: 2011.02.08 @ 10:20:27

### GENERAL INFORMATION:

Formation: **Lasnsing C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:30:27

Time Test Ended: 18:42:57

Test Type: Conventional Bottom Hole

Tester: Paul Simpson

Unit No: 41

Interval: 3125.00 ft (KB) To 3140.00 ft (KB) (TVD)

Reference Elevations: 1879.00 ft (KB)

Total Depth: 3140.00 ft (KB) (TVD)

1872.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 8365**

**Outside**

Press@RunDepth: 131.07 psig @ 3137.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.02.08

End Date:

2011.02.08

Last Calib.:

2011.02.08

Start Time: 10:20:28

End Time:

18:42:57

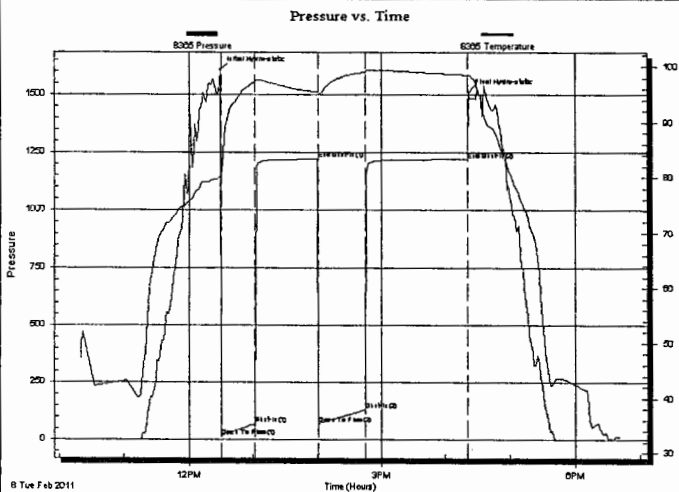
Time On Btm:

2011.02.08 @ 12:29:57

Time Off Btm:

2011.02.08 @ 16:21:57

**TEST COMMENT:** IF- weak blow built to bottom of bucket in 30 minutes  
IS- weak surface blow  
FF- weak blow built to bottom of bucket in 30 minutes  
FS- no blow



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1604.28	80.25	Initial Hydro-static
1	14.93	79.95	Open To Flow (1)
32	67.69	97.26	Shut-In(1)
91	1218.84	95.45	End Shut-In(1)
91	68.96	95.13	Open To Flow (2)
135	131.07	98.98	Shut-In(2)
231	1218.79	98.48	End Shut-In(2)
232	1509.91	98.46	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
240.00	salt water with oil scum at top	3.08
0.00	.126@53 == 83,000	0.00

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Dreiling Oil Inc.

**Brummer #1**

PO Box 550  
Hays KS 67601

**1 9s 12w Osborne, KS**

Job Ticket: 41778

**DST#: 3**

ATTN: Bill Ree

Test Start: 2011.02.08 @ 10:20:27

**Tool Information**

Drill Pipe:	Length: 3106.00 ft	Diameter: 3.80 inches	Volume: 43.57 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: 20000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 44000.00 lb
			<u>Total Volume: 43.72 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3125.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	35.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:  
due to extreme cold- weight indicator not working right

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3110.00	
Hydraulic tool	5.00			3115.00	
Packer	5.00			3120.00	20.00 Bottom Of Top Packer
Packer	5.00			3125.00	
Stubb	1.00			3126.00	
Perforations	11.00			3137.00	
Recorder	0.00	8372	Inside	3137.00	
Recorder	0.00	8365	Outside	3137.00	
Bullnose	3.00			3140.00	15.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>35.00</b>				

