



## DRILL STEM TEST REPORT

Prepared For: **Herman L Loeb LLC**

PO Box 838  
Lawrenceville, IL 62439

ATTN: Jon Christensen

### **Thompson C #2-16**

#### **16-33s-13w**

Start Date: 2014.01.01 @ 16:20:22

End Date: 2014.01.02 @ 02:55:22

Job Ticket #: 51913                      DST #: 1

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

Printed: 2014.01.08 @ 10:18:22



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Herman L Loeb LLC  
 PO Box 838  
 Lawrenceville, IL 62439  
 ATTN: Jon Christensen

**16-33s-13w**  
**Thompson C #2-16**  
 Job Ticket: 51913      **DST#: 1**  
 Test Start: 2014.01.01 @ 16:20:22

## GENERAL INFORMATION:

Formation: **KC Swope**  
 Deviated: No Whipstock:                      ft (KB)  
 Time Tool Opened: 20:32:22  
 Time Test Ended: 02:55:22  
 Interval: **4525.00 ft (KB) To 4550.00 ft (KB) (TVD)**  
 Total Depth: 4550.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Leal Cason  
 Unit No: 74  
 Reference Elevations: 1820.00 ft (KB)  
 1811.00 ft (CF)  
 KB to GR/CF: 9.00 ft

## Serial #: 6798

Inside

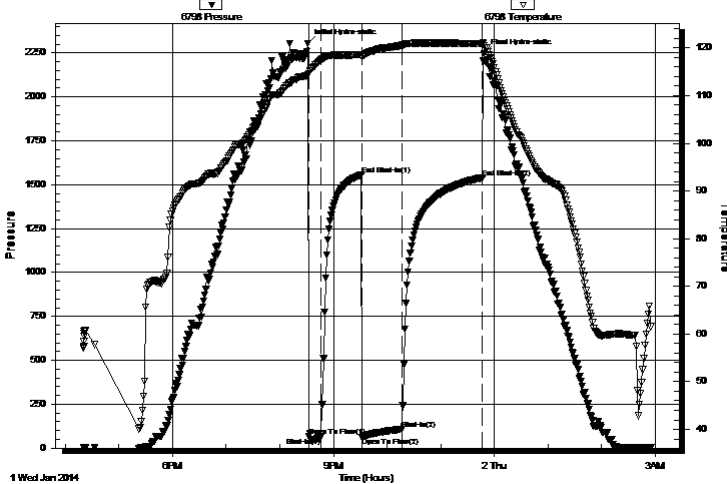
Press@RunDepth: 108.62 psig @ 4526.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2014.01.01      End Date: 2014.01.02      Last Calib.: 2014.01.02  
 Start Time: 16:20:23      End Time: 02:55:22      Time On Btm: 2014.01.01 @ 20:31:07  
 Time Off Btm: 2014.01.01 @ 23:48:37

TEST COMMENT: IF: Fair Blow , BOB in 4 minutes  
 IS: Blow Back Built to 1/2 inch  
 FF: Strong Blow , BOB in 45 seconds  
 FS: 1/2 inch Blow Back

## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2303.36	114.27	Initial Hydro-static
2	65.69	114.64	Open To Flow (1)
15	61.71	117.46	Shut-In(1)
61	1557.51	118.59	End Shut-In(1)
61	59.72	118.23	Open To Flow (2)
106	108.62	120.50	Shut-In(2)
196	1540.93	120.98	End Shut-In(2)
198	2245.58	120.55	Final Hydro-static

Pressure vs. Time



## Recovery

Length (ft)	Description	Volume (bbl)
0.00	1550 GIP	0.00
120.00	SOMCW 2%O 14%M 84%W	0.59
122.00	SOCM 2%O 98%M	0.90

## Gas Rates

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



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# DRILL STEM TEST REPORT

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 ATTN: Jon Christensen

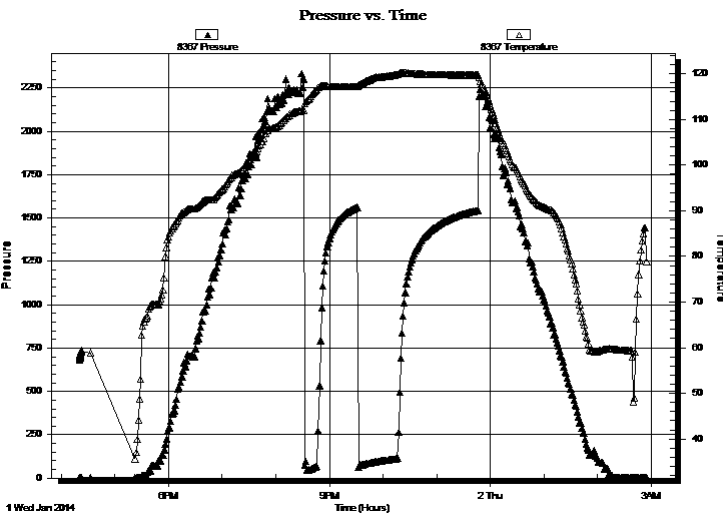
**16-33s-13w**  
**Thompson C #2-16**  
 Job Ticket: 51913 **DST#: 1**  
 Test Start: 2014.01.01 @ 16:20:22

## GENERAL INFORMATION:

Formation: **KC Swope**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 20:32:22 Tester: Leal Cason  
 Time Test Ended: 02:55:22 Unit No: 74  
 Interval: **4525.00 ft (KB) To 4550.00 ft (KB) (TVD)** Reference Elevations: 1820.00 ft (KB)  
 Total Depth: 4550.00 ft (KB) (TVD) 1811.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 9.00 ft

**Serial #: 8367 Outside**  
 Press@RunDepth: psig @ 4526.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.01.01 End Date: 2014.01.02 Last Calib.: 2014.01.02  
 Start Time: 16:20:23 End Time: 02:55:37 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** IF: Fair Blow , BOB in 4 minutes  
 IS: Blow Back Built to 1/2 inch  
 FF: Strong Blow , BOB in 45 seconds  
 FS: 1/2 inch Blow Back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery		
Length (ft)	Description	Volume (bbl)
0.00	1550 GIP	0.00
120.00	SOMCW 2%O 14%M 84%W	0.59
122.00	SOCM 2%O 98%M	0.90

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Herman L Loeb LLC  
 PO Box 838  
 Lawrenceville, IL 62439  
 ATTN: Jon Christensen

**16-33s-13w**  
**Thompson C #2-16**  
 Job Ticket: 51913      **DST#: 1**  
 Test Start: 2014.01.01 @ 16:20:22

**Tool Information**

Drill Pipe:	Length: 4298.00 ft	Diameter: 3.80 inches	Volume: 60.29 bbl	Tool Weight: 2100.00 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: 209.00 ft	Diameter: 2.25 inches	Volume: 1.03 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 61.32 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 88000.00 lb
Depth to Top Packer:	4525.00 ft			Final 88000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	46.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Shut In Tool	5.00			4509.00	
Hydraulic tool	5.00			4514.00	
Safety Joint	2.00			4516.00	
Packer	5.00			4521.00	21.00      Bottom Of Top Packer
Packer	4.00			4525.00	
Stubb	1.00			4526.00	
Recorder	0.00	6798	Inside	4526.00	
Recorder	0.00	8367	Outside	4526.00	
Perforations	21.00			4547.00	
Bullnose	3.00			4550.00	25.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>46.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Herman L Loeb LLC  
PO Box 838  
Lawrenceville, IL 62439  
ATTN: Jon Christensen

**16-33s-13w**  
**Thompson C #2-16**  
Job Ticket: 51913      **DST#: 1**  
Test Start: 2014.01.01 @ 16:20:22

## 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:	96000 ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.98 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 0.02 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	1550 GIP	0.000
120.00	SOMCW 2%O 14%M 84%W	0.590
122.00	SOCM 2%O 98%M	0.901

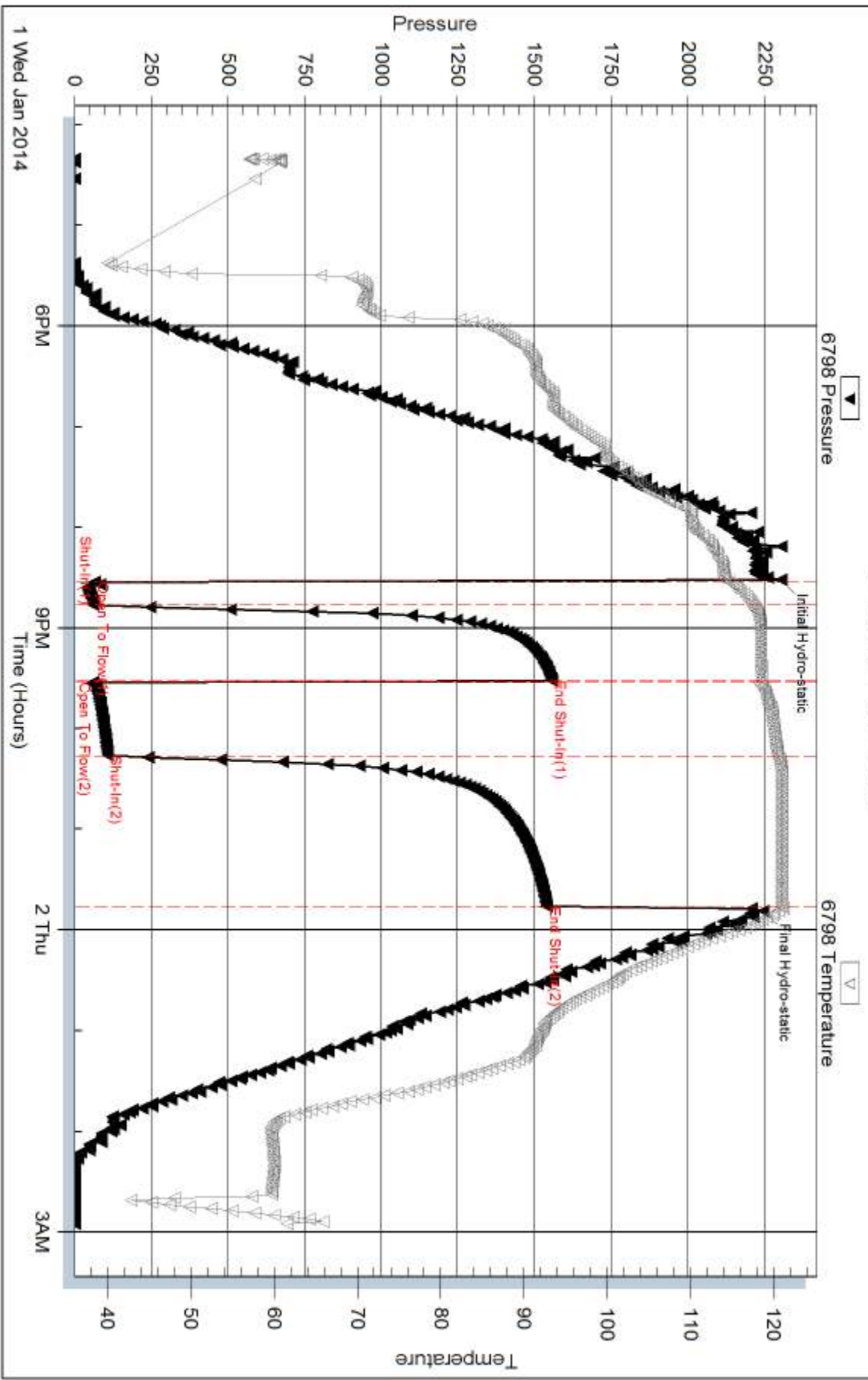
Total Length: 242.00 ft      Total Volume: 1.491 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments: RW was .2 @ 28 degrees

### Pressure vs. Time

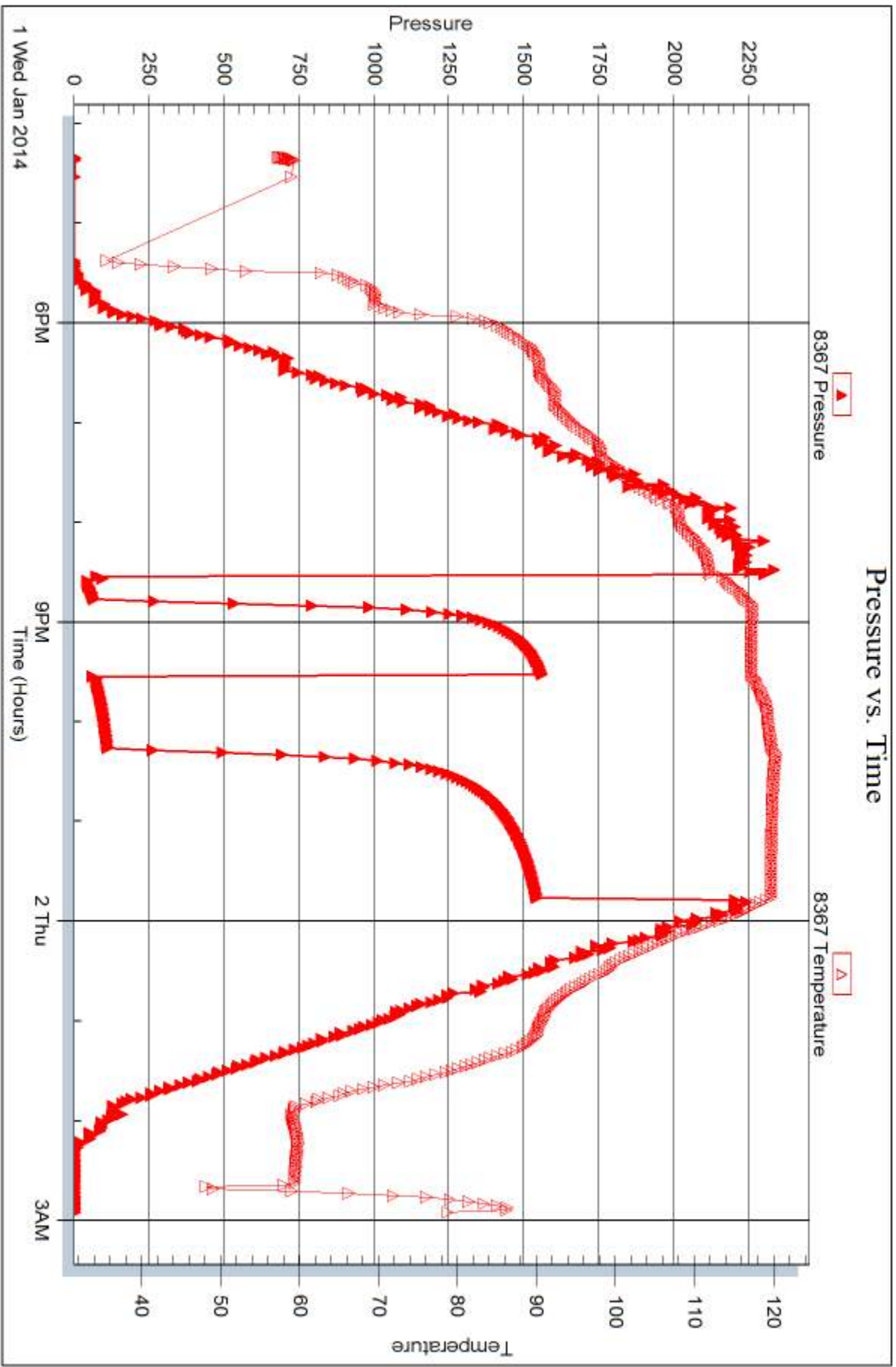


Serial #: 8367

Outside Herman L Loeb LLC

Thompson C#2-16

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Herman L Loeb LLC**

PO Box 838  
Lawrenceville, IL 62439

ATTN: Jon Christensen

### **Thompson C #2-16**

#### **16-33s-13w**

Start Date: 2014.01.03 @ 01:25:06

End Date: 2014.01.03 @ 11:50:06

Job Ticket #: 51914                      DST #: 2

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

Printed: 2014.01.08 @ 10:17:52

Herman L Loeb LLC  
16-33s-13w  
Thompson C #2-16  
DST # 2  
Conglomerate  
2014.01.03





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Herman L Loeb LLC  
 PO Box 838  
 Lawrenceville, IL 62439  
 ATTN: Jon Christensen

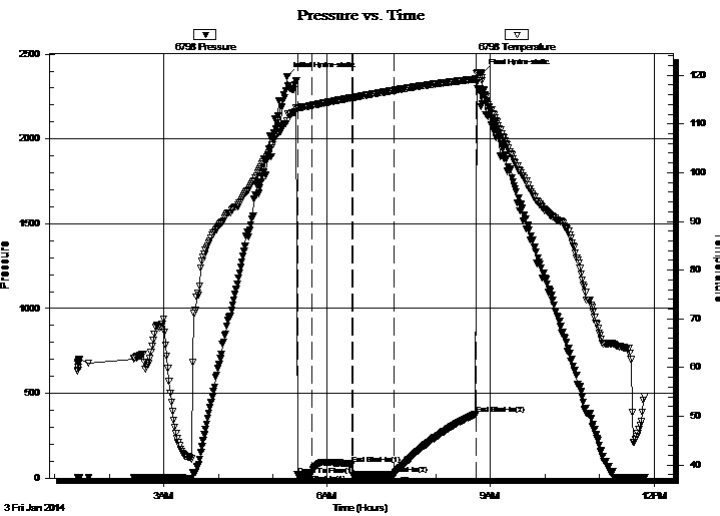
**16-33s-13w**  
**Thompson C #2-16**  
 Job Ticket: 51914 **DST#: 2**  
 Test Start: 2014.01.03 @ 01:25:06

## GENERAL INFORMATION:

Formation: **Conglomerate**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:27:21  
 Time Test Ended: 11:50:06  
 Interval: **4668.00 ft (KB) To 4700.00 ft (KB) (TVD)**  
 Total Depth: 4700.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Leal Cason  
 Unit No: 74  
 Reference Elevations: 1820.00 ft (KB)  
 1811.00 ft (CF)  
 KB to GR/CF: 9.00 ft

**Serial #: 6798 Inside**  
 Press@RunDepth: 23.29 psig @ 4669.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.01.03 End Date: 2014.01.03 Last Calib.: 2014.01.03  
 Start Time: 01:25:07 End Time: 11:50:06 Time On Btm: 2014.01.03 @ 05:15:51  
 Time Off Btm: 2014.01.03 @ 08:50:21

**TEST COMMENT:** IF: Fair Blow , Built to 6 inches  
 IS: Blow Back Built to 3 inches  
 FF: Fair Blow , Built to 6 inches  
 FS: 1 inch Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2367.95	110.55	Initial Hydro-static
12	17.39	113.32	Open To Flow (1)
27	20.05	113.77	Shut-In(1)
72	82.18	115.40	End Shut-In(1)
73	18.55	115.40	Open To Flow (2)
118	23.29	116.89	Shut-In(2)
208	378.65	119.21	End Shut-In(2)
215	2387.36	119.50	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	2316 GIP	0.00
15.00	VSOCM-1% O +99%M	0.07

\* Recovery from multiple tests

## Gas Rates

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



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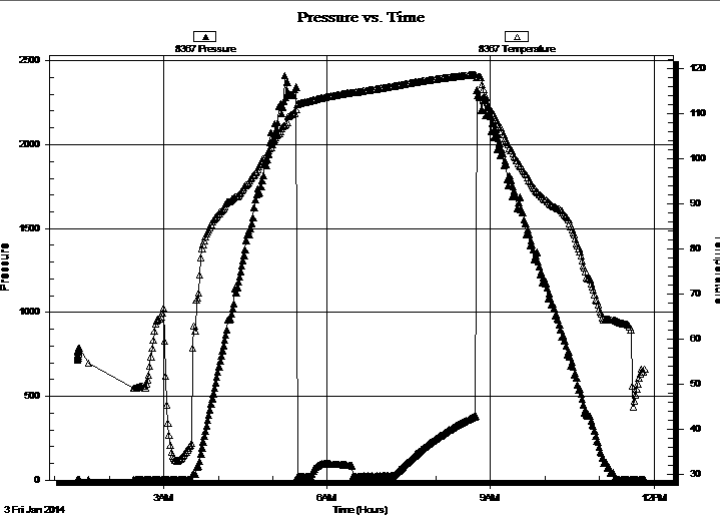
**16-33s-13w**  
**Thompson C #2-16**  
Job Ticket: 51914 **DST#: 2**  
Test Start: 2014.01.03 @ 01:25:06

## GENERAL INFORMATION:

Formation: **Conglomerate**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:27:21  
 Time Test Ended: 11:50:06  
**Interval: 4668.00 ft (KB) To 4700.00 ft (KB) (TVD)**  
 Total Depth: 4700.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Leal Cason  
 Unit No: 74  
 Reference Elevations: 1820.00 ft (KB)  
 1811.00 ft (CF)  
 KB to GR/CF: 9.00 ft

**Serial #: 8367** **Outside**  
 Press@RunDepth: psig @ 4669.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.01.03 End Date: 2014.01.03 Last Calib.: 2014.01.03  
 Start Time: 01:25:07 End Time: 11:50:06 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** IF: Fair Blow , Built to 6 inches  
 IS: Blow Back Built to 3 inches  
 FF: Fair Blow , Built to 6 inches  
 FS: 1 inch Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	2316 GIP	0.00
15.00	VSOCM-1% O +99%M	0.07

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Herman L Loeb LLC  
 PO Box 838  
 Lawrenceville, IL 62439  
 ATTN: Jon Christensen

**16-33s-13w**  
**Thompson C #2-16**  
 Job Ticket: 51914      **DST#: 2**  
 Test Start: 2014.01.03 @ 01:25:06

**Tool Information**

Drill Pipe:	Length: 4457.00 ft	Diameter: 3.80 inches	Volume: 62.52 bbl	Tool Weight: 2100.00 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: 209.00 ft	Diameter: 2.25 inches	Volume: 1.03 bbl	Weight to Pull Loose: 100000.0 lb
			<u>Total Volume: 63.55 bbl</u>	Tool Chased: ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 89000.00 lb
Depth to Top Packer:	4668.00 ft			Final 89000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	53.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Shut In Tool	5.00			4652.00	
Hydraulic tool	5.00			4657.00	
Safety Joint	2.00			4659.00	
Packer	5.00			4664.00	21.00      Bottom Of Top Packer
Packer	4.00			4668.00	
Stubb	1.00			4669.00	
Recorder	0.00	6798	Inside	4669.00	
Recorder	0.00	8367	Outside	4669.00	
Perforations	28.00			4697.00	
Bullnose	3.00			4700.00	32.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>53.00</b>				



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

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 PO Box 838  
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 ATTN: Jon Christensen

**16-33s-13w**  
**Thompson C #2-16**  
 Job Ticket: 51914      **DST#: 2**  
 Test Start: 2014.01.03 @ 01:25:06

## 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:	ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.98 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 0.02 inches			

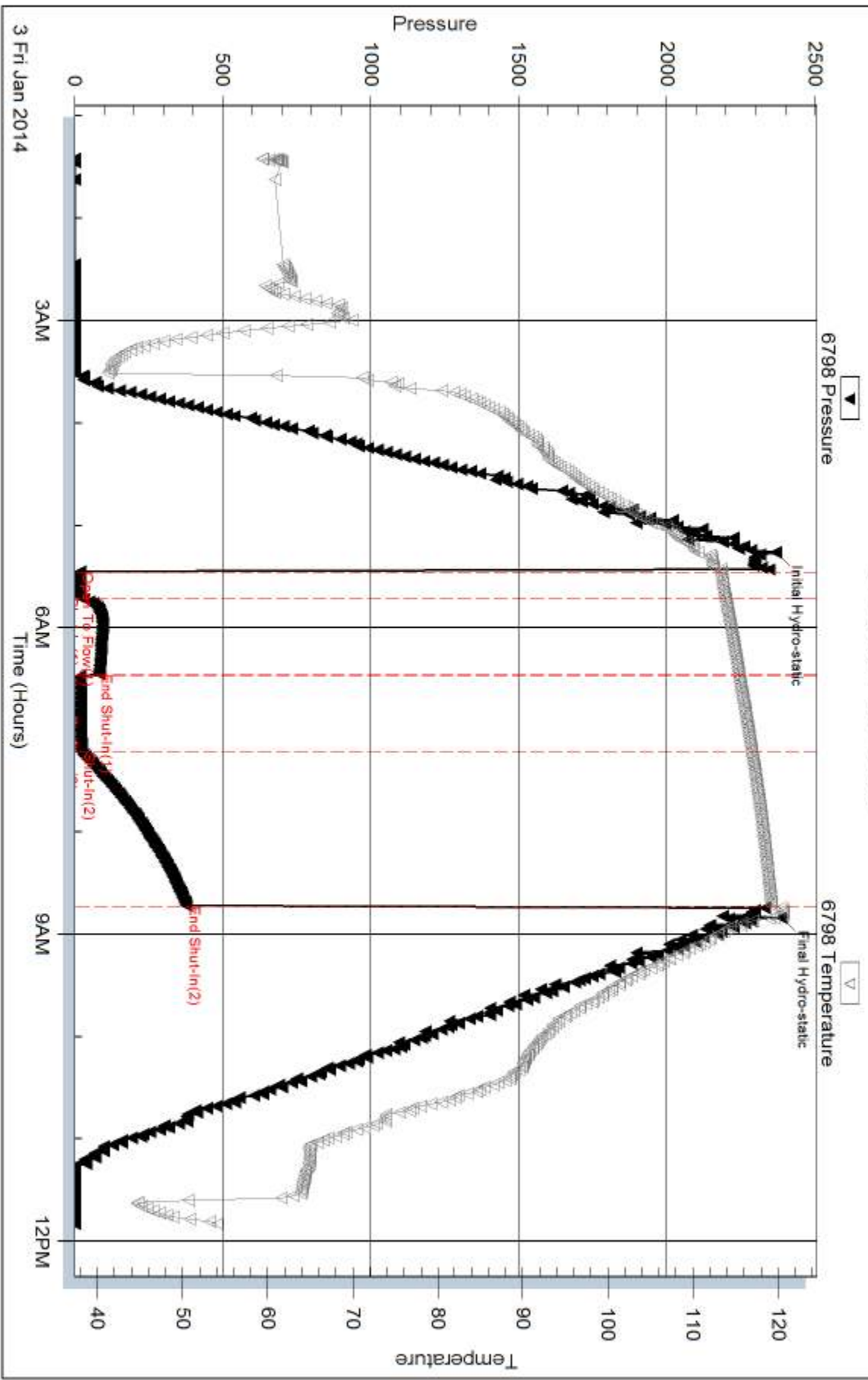
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	2316 GIP	0.000
15.00	VSOCM-1% O +99%M	0.074

Total Length: 15.00 ft      Total Volume: 0.074 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time



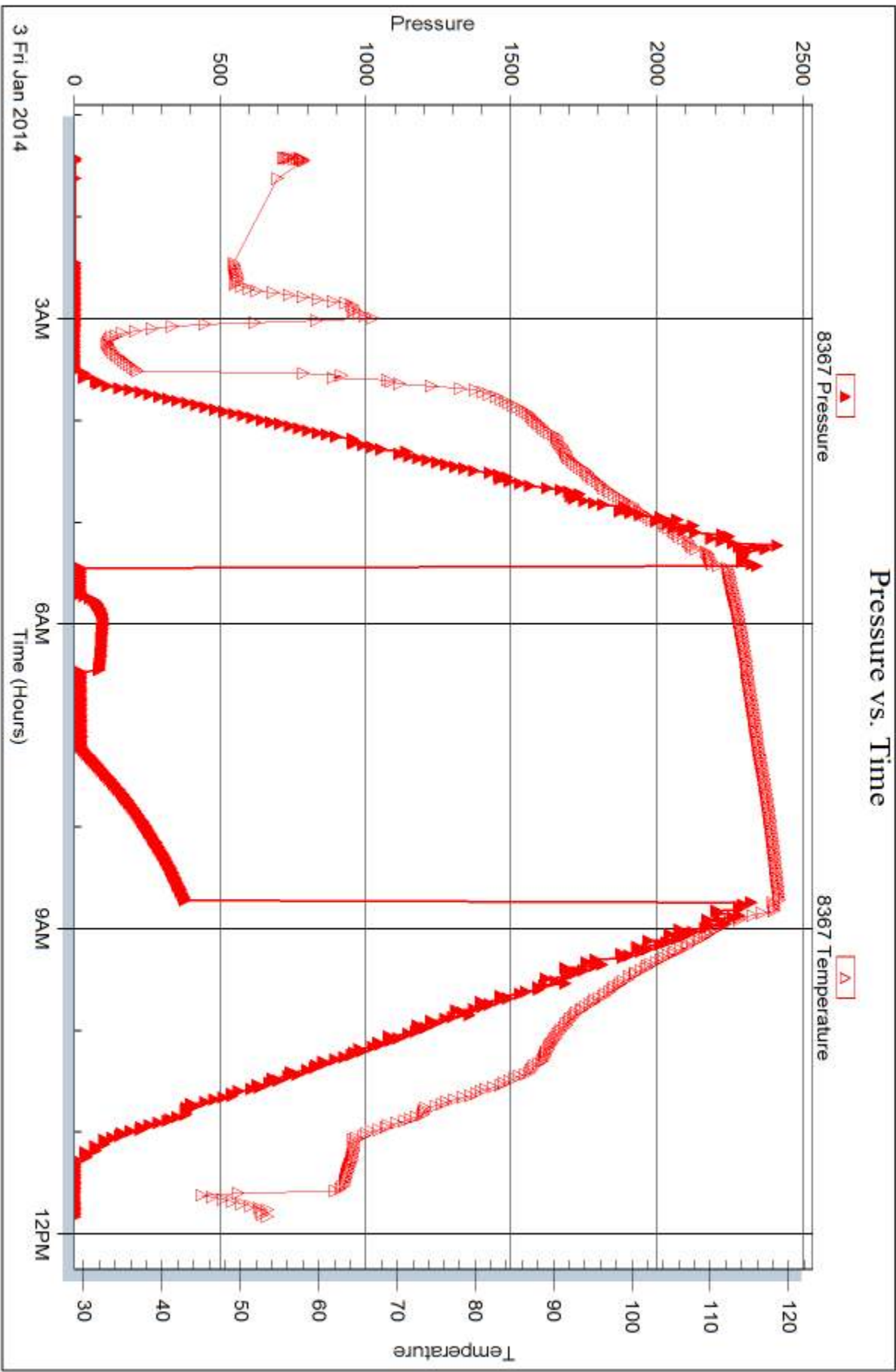
Serial #: 8367

Outside

Herman L Loeb LLC

Thompson C#2-16

DST Test Number: 2





## DRILL STEM TEST REPORT

Prepared For: **Herman L Loeb LLC**

PO Box 838  
Lawrenceville, IL 62439

ATTN: Jon Christensen

**Thompson C #2-16**

**16-33s-13w**

Start Date: 2014.01.05 @ 06:58:37

End Date: 2014.01.05 @ 15:33:22

Job Ticket #: 51915                      DST #: 3

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

Printed: 2014.01.08 @ 10:17:09



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Herman L Loeb LLC  
 PO Box 838  
 Lawrenceville, IL 62439  
 ATTN: Jon Christensen

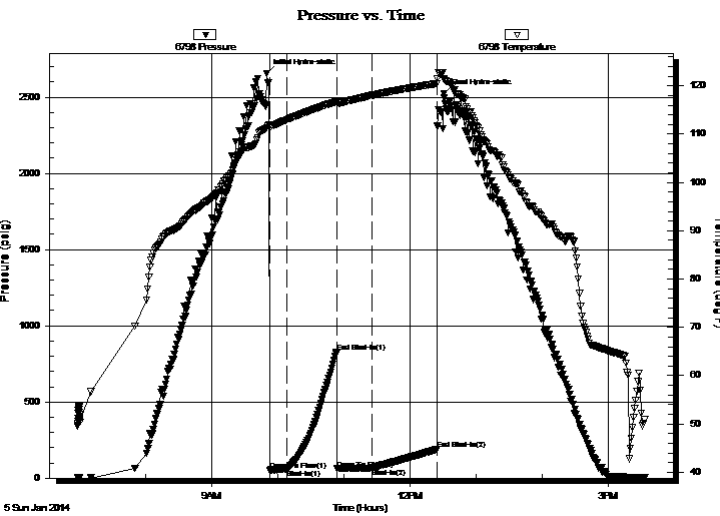
**16-33s-13w**  
**Thompson C #2-16**  
 Job Ticket: 51915 **DST#: 3**  
 Test Start: 2014.01.05 @ 06:58:37

## GENERAL INFORMATION:

Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 09:52:52  
 Tester: Leal Cason  
 Time Test Ended: 15:33:22  
 Unit No: 74  
 Interval: **5000.00 ft (KB) To 5040.00 ft (KB) (TVD)**  
 Reference Elevations: 1820.00 ft (KB)  
 Total Depth: 5040.00 ft (KB) (TVD)  
 1811.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Good  
 KB to GR/CF: 9.00 ft

**Serial #: 6798** **Inside**  
 Press@RunDepth: 67.53 psig @ 5001.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.01.05 End Date: 2014.01.05 Last Calib.: 2014.01.05  
 Start Time: 06:58:38 End Time: 15:33:22 Time On Btm: 2014.01.05 @ 09:50:22  
 Time Off Btm: 2014.01.05 @ 12:31:07

**TEST COMMENT:** IF: Weak 3/4 inch Blow  
 IS: No Blow Back  
 FF: Weak 1/4 inch Blow  
 FS: No Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2656.56	111.34	Initial Hydro-static
3	52.37	111.54	Open To Flow (1)
19	60.84	113.00	Shut-In(1)
64	827.53	116.74	End Shut-In(1)
64	60.72	116.47	Open To Flow (2)
95	67.53	118.01	Shut-In(2)
155	190.26	120.48	End Shut-In(2)
161	2525.76	121.44	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	SGCM 2%G 98%M	0.32

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

### DRILL STEM TEST REPORT

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PO Box 838  
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ATTN: Jon Christensen

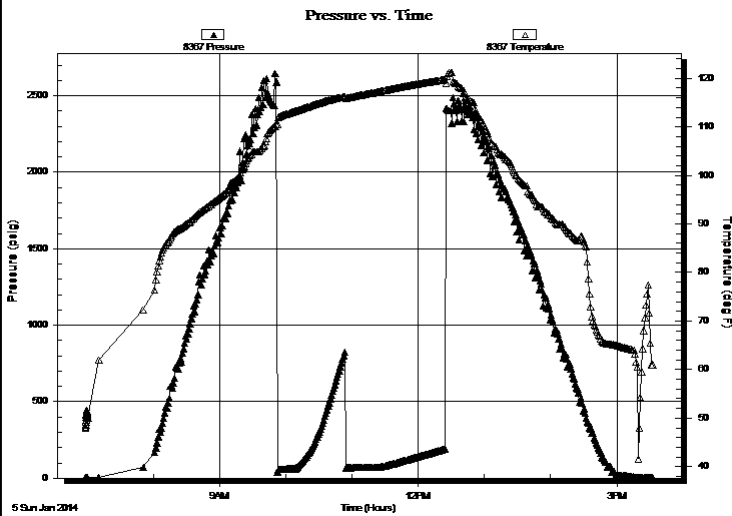
**16-33s-13w**  
**Thompson C #2-16**  
Job Ticket: 51915      **DST#: 3**  
Test Start: 2014.01.05 @ 06:58:37

**GENERAL INFORMATION:**

Formation: **Viola**  
Deviated: No Whipstock:                      ft (KB)      Test Type: Conventional Bottom Hole (Reset)  
Time Tool Opened: 09:52:52      Tester: Leal Cason  
Time Test Ended: 15:33:22      Unit No: 74  
  
Interval: **5000.00 ft (KB) To 5040.00 ft (KB) (TVD)**      Reference Elevations:      1820.00 ft (KB)  
Total Depth: 5040.00 ft (KB) (TVD)      1811.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Good      KB to GR/CF: 9.00 ft

**Serial #: 8367**      **Outside**  
Press@RunDepth:                      psig @ 5001.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2014.01.05      End Date: 2014.01.05      Last Calib.: 2014.01.05  
Start Time: 06:58:38      End Time: 15:33:07      Time On Btm:  
Time Off Btm:

TEST COMMENT: IF: Weak 3/4 inch Blow  
IS: No Blow Back  
FF: Weak 1/4 inch Blow  
FS: No Blow Back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

**Recovery**

Length (ft)	Description	Volume (bbl)
65.00	SGCM 2%G 98%M	0.32

**Gas Rates**

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Herman L Loeb LLC  
 PO Box 838  
 Lawrenceville, IL 62439  
 ATTN: Jon Christensen

**16-33s-13w**  
**Thompson C #2-16**  
 Job Ticket: 51915 **DST#: 3**  
 Test Start: 2014.01.05 @ 06:58:37

**Tool Information**

Drill Pipe:	Length: 4776.00 ft	Diameter: 3.80 inches	Volume: 66.99 bbl	Tool Weight: 2100.00 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: 209.00 ft	Diameter: 2.25 inches	Volume: 1.03 bbl	Weight to Pull Loose: 100000.0 lb
			<u>Total Volume: 68.02 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 95000.00 lb
Depth to Top Packer:	5000.00 ft			Final 95000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	61.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Shut In Tool	5.00			4984.00	
Hydraulic tool	5.00			4989.00	
Safety Joint	2.00			4991.00	
Packer	5.00			4996.00	21.00 Bottom Of Top Packer
Packer	4.00			5000.00	
Stubb	1.00			5001.00	
Recorder	0.00	6798	Inside	5001.00	
Recorder	0.00	8367	Outside	5001.00	
Perforations	2.00			5003.00	
Change Over Sub	1.00			5004.00	
Drill Pipe	32.00			5036.00	
Change Over Sub	1.00			5037.00	
Bullnose	3.00			5040.00	40.00 Bottom Packers & Anchor

**Total Tool Length: 61.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Herman L Loeb LLC  
 PO Box 838  
 Lawrenceville, IL 62439  
 ATTN: Jon Christensen

**16-33s-13w**  
**Thompson C #2-16**  
 Job Ticket: 51915      **DST#: 3**  
 Test Start: 2014.01.05 @ 06:58:37

## 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: 9.98 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 0.02 inches			

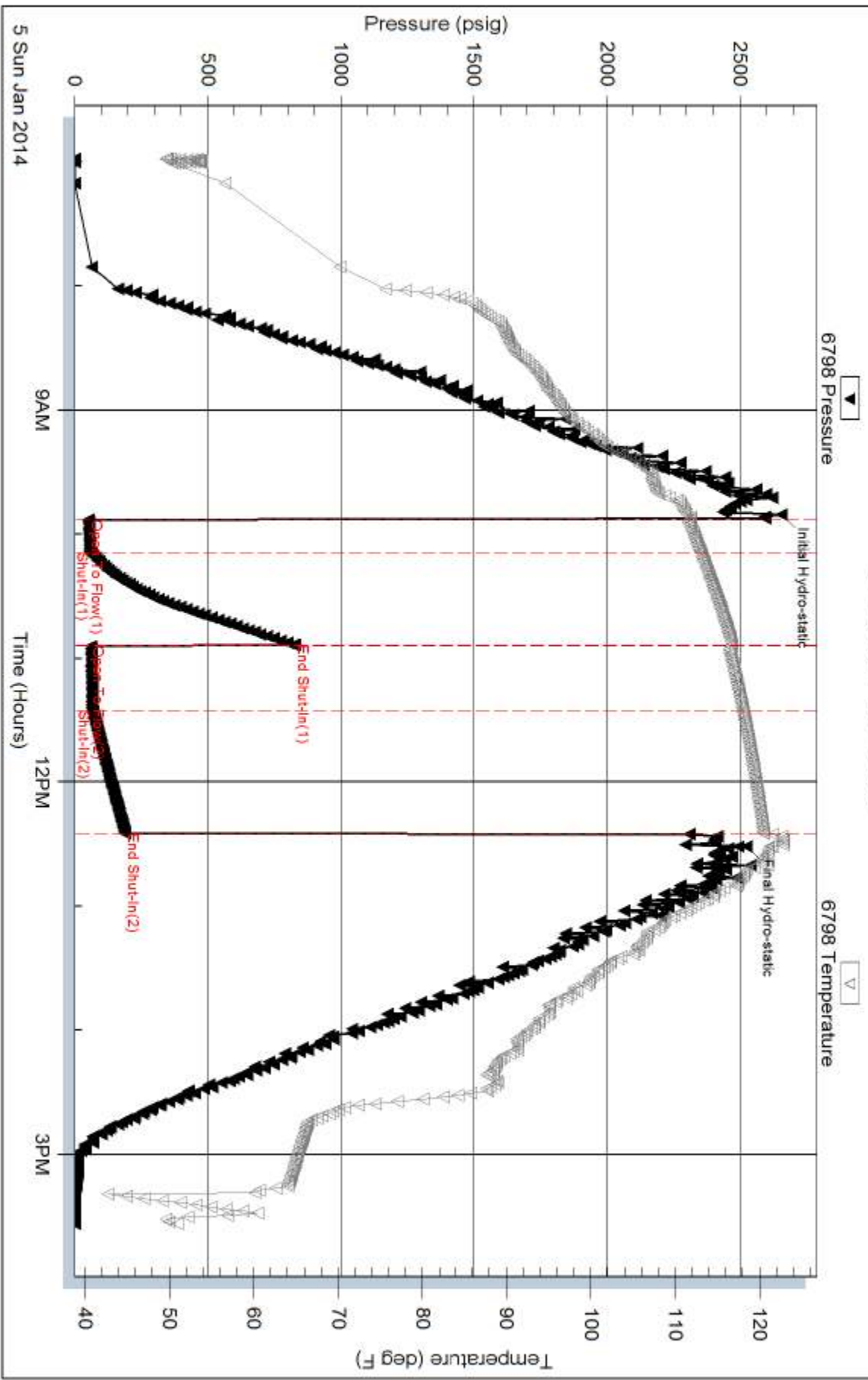
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	SGCM 2%G 98%M	0.320

Total Length: 65.00 ft      Total Volume: 0.320 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time

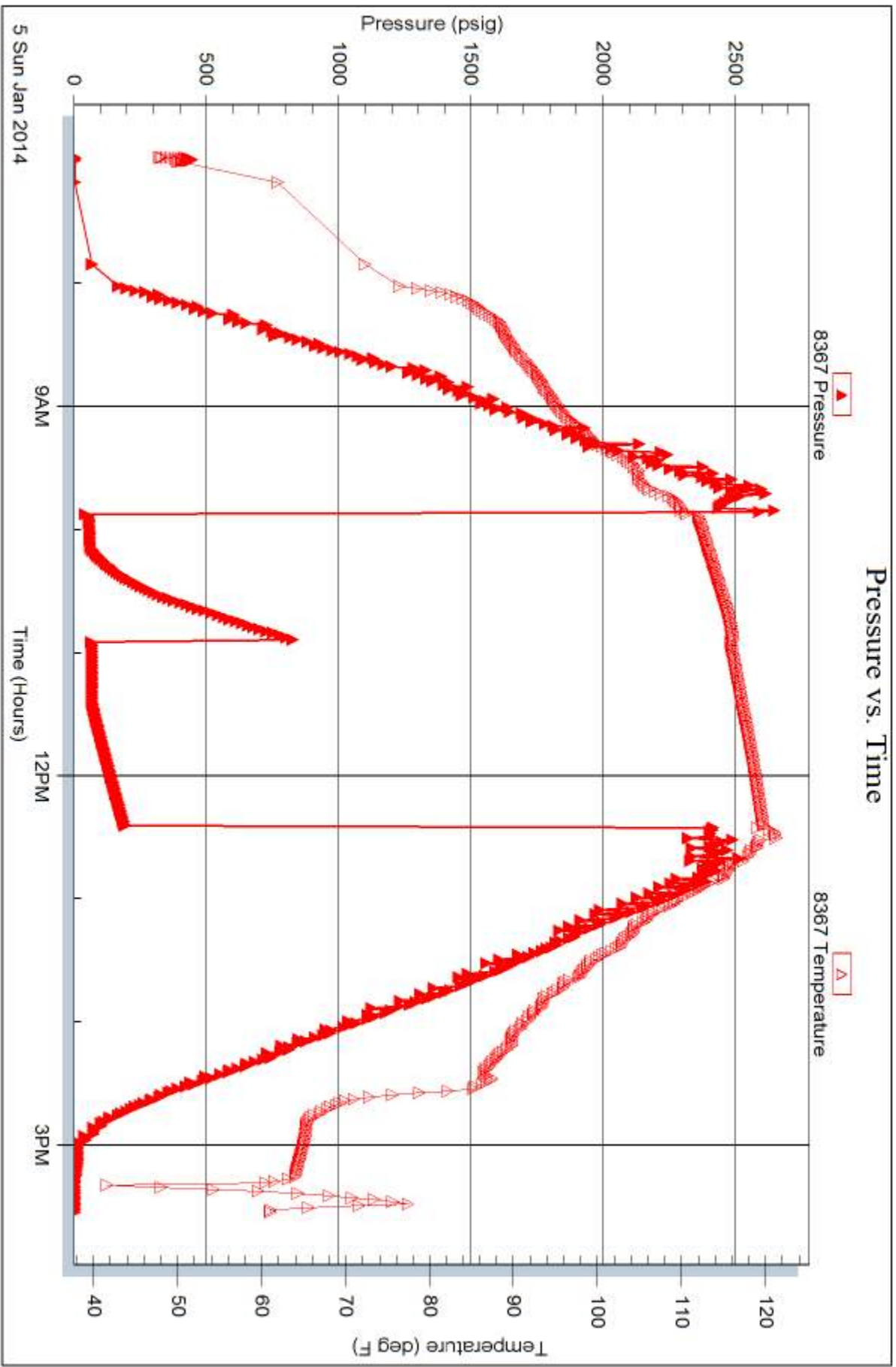


Serial #: 8367

Outside Herman L Loeb LLC

Thompson C#2-16

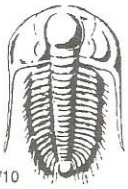
DST Test Number: 3



Triobite Testing, Inc

Ref. No: 51915

Printed: 2014.01.08 @ 10:17:11



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 51913

Well Name & No. Thompson C 2-16 Test No. 1 Date 01/01/14  
 Company Herman L. Loeb LLC Elevation 1720 KB 1811 GL  
 Address PO Box 838 Lawrenceville, IL 62439  
 Co. Rep / Geo. Jon Christensen Rig Sterling 4  
 Location: Sec. 16 Twp. 33S Rge. 13W Co. Barber State KS

Interval Tested 4525 - 4550 Zone Tested KC Swope  
 Anchor Length 25 Drill Pipe Run 4298 Mud Wt. 9.4  
 Top Packer Depth 4520 Drill Collars Run 209 Vis 52  
 Bottom Packer Depth 4525 Wt. Pipe Run 0 WL 10.0  
 Total Depth 4550 Chlorides 5000 ppm System LCM 3

Blow Description IF: Fair Blow, BOB in 4 minutes  
ISI: Blow Back Built to 1/2 inch  
FF: Strong Blow, BOB in 45 ~~seconds~~ seconds  
FSI: 1/2 inch Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>1550</u>	<u>GIP</u>				
<u>122</u>	<u>50CM</u>		<u>2</u>		<u>98</u>
<u>120</u>	<u>50MCW</u>		<u>2</u>	<u>84</u>	<u>14</u>

Rec Total 242 BHT 120 Gravity N/C API RW .2 @ 28 ° F Chlorides 96000 ppm

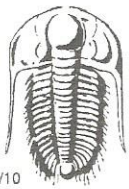
(A) Initial Hydrostatic 2303  Test 1250 T-On Location 14:15  
 (B) First Initial Flow 66  Jars \_\_\_\_\_ T-Started 16:20  
 (C) First Final Flow 62  Safety Joint 75 T-Open 20:32  
 (D) Initial Shut-In 1557  Circ Sub \_\_\_\_\_ T-Pulled 23:46  
 (E) Second Initial Flow 60  Hourly Standby 3 .75h 75 T-Out 02:55  
 (F) Second Final Flow 109  Mileage 120 186 Comments \_\_\_\_\_  
 (G) Final Shut-In 1541  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2246  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Initial Open 15  
 Initial Shut-In 45  
 Final Flow 45  
 Final Shut-In 90  
 Sub Total 1586  
 Total 1586  
 MP/DST Disc't \_\_\_\_\_

Approved By [Signature] Our Representative [Signature]

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.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 51914

4/10

Well Name & No. Thompson C 2-16 Test No. 2 Date 01/03/14  
 Company Herman L Loeb LLC Elevation 1820 KB 1811 GL  
 Address Po Box 838 Lawrenceville, IL 62439  
 Co. Rep / Geo. Jon Christensen Rig sterling 4  
 Location: Sec. 16 Twp. 33S Rge. 13W Co. Barber State KS

Interval Tested 4668 - 4700 Zone Tested conglomerate  
 Anchor Length 32 Drill Pipe Run 4457 Mud Wt. 9.3  
 Top Packer Depth 4663 Drill Collars Run 209 Vis 51  
 Bottom Packer Depth 4668 Wt. Pipe Run 0 WL 11.2  
 Total Depth 4700 Chlorides 5000 ppm System LCM 6

Blow Description IF: Fair Blow Built to 6 inches

ISI: Blow Back Built to 3 inches

FF: Fair Blow, Built to 6 inches

FSI: 1 inch Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>2316</u>	<u>GIP</u>				
<u>15</u>	<u>VSOCM</u>		<u>-1</u>	<u>+99</u>	

Rec Total 15 BHT 120 Gravity NIC API RW NIC @ NIC °F Chlorides NIC ppm

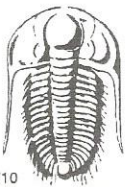
(A) Initial Hydrostatic <u>2368</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>00:00</u>
(B) First Initial Flow <u>17</u>	<input type="checkbox"/> Jars	T-Started <u>01:25</u>
(C) First Final Flow <u>20</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>05:27</u>
(D) Initial Shut-In <u>82</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>08:43</u>
(E) Second Initial Flow <u>18</u>	<input checked="" type="checkbox"/> Hourly Standby <u>2</u> .5h 50	T-Out <u>11:50</u>
(F) Second Final Flow <u>23</u>	<input checked="" type="checkbox"/> Mileage <u>120</u> 186	Comments
(G) Final Shut-In <u>379</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2387</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

Initial Open <u>15</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>96</u>	<input type="checkbox"/> Day Standby	Total <u>1561</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1561</u>	

Approved By

Our Representative

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 51915

Well Name & No. Thompson C2-16 Test No. 3 Date 01/05/14  
 Company Herman L Loeb LLC Elevation 1820 KB 1811 GL  
 Address PO Box 838 Lawrenceville IL 62439  
 Co. Rep / Geo. Jon Christensen Rig Sterling 4  
 Location: Sec. 16 Twp. 33S Rge. 13W Co. Barber State KS

Interval Tested 5000 - 5040 Zone Tested viola  
 Anchor Length 40 Drill Pipe Run 4776 Mud Wt. 9.3  
 Top Packer Depth 4995 Drill Collars Run 209 Vis 58  
 Bottom Packer Depth 5000 Wt. Pipe Run 0 WL 610.8  
 Total Depth 5040 Chlorides 6000 ppm System LCM 8#

Blow Description IF: weak 3/4 inch Blow  
IST: NO Blow Back  
FF: weak 1/4 inch Blow  
FSI: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>65</u>	<u>SGCM</u>	<u>2</u>		<u>98</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 65 BHT 120 Gravity N/C API RW N/C @ N/C F Chlorides N/C ppm

(A) Initial Hydrostatic <u>2656</u>	<input checked="" type="checkbox"/> Test <u>1350</u>	T-On Location <u>05:45</u>
(B) First Initial Flow <u>52</u>	<input type="checkbox"/> Jars	T-Started <u>06:58</u>
(C) First Final Flow <u>61</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>09:52</u>
(D) Initial Shut-In <u>827</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>12:25</u>
(E) Second Initial Flow <u>61</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>15:33</u>
(F) Second Final Flow <u>68</u>	<input checked="" type="checkbox"/> Mileage <u>120</u> <u>186</u>	Comments
(G) Final Shut-In <u>190</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2526</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

Initial Open <u>15</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>600</u>
Final Shut-In <u>60</u>	<input checked="" type="checkbox"/> Day Standby <u>3/4</u> <u>1d 18h</u>	Total <u>2211</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1611</u>	

Approved By [Signature] Our Representative [Signature]

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