



## DRILL STEM TEST REPORT

Prepared For: **Enterprise, Inc.**

2708 Barclay Dr.  
Hays, KS 67601

ATTN: Jerry Green

### **Sauvage #2-3**

#### **2-5s-30w Decatur,KS**

Start Date: 2013.11.14 @ 12:12:00

End Date: 2013.11.14 @ 18:41:30

Job Ticket #: 55194                      DST #: 1

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

Printed: 2013.11.19 @ 11:41:34

Enterprise, Inc. 2-5s-30w Decatur,KS Sauvage #2-3 DST # 1 Toronto - LKC "A-B" 2013.11.14



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55194

**DST#: 1**

ATTN: Jerry Green

Test Start: 2013.11.14 @ 12:12:00

## GENERAL INFORMATION:

Formation: **Toronto - LKC "A-B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:07:50

Time Test Ended: 18:41:30

Test Type: Conventional Straddle (Initial)

Tester: Kevin Mack

Unit No: 66

**Interval: 3900.00 ft (KB) To 3983.00 ft (KB) (TVD)**

Reference Elevations: 2875.00 ft (KB)

Total Depth: 3983.00 ft (KB) (TVD)

2870.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8874**

**Inside**

Press@RunDepth: 251.03 psig @ 3901.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.14

End Date:

2013.11.14

Last Calib.:

2013.11.14

Start Time: 12:13:00

End Time:

18:41:30

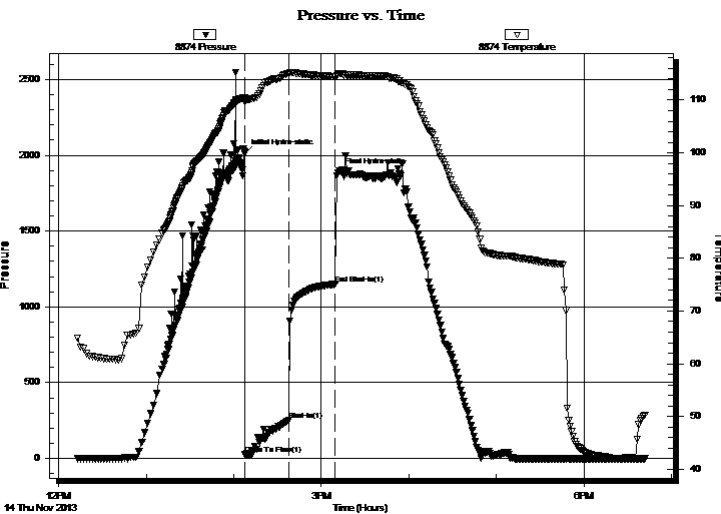
Time On Btm:

2013.11.14 @ 14:07:30

Time Off Btm:

2013.11.14 @ 15:11:30

TEST COMMENT: 30 - IF- 1/2" Blow built to 3/4" in 5 min. Then rushed to BOB in 10 min.  
30 - ISI- No Return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2011.56	110.45	Initial Hydro-static
1	28.47	109.74	Open To Flow (1)
30	251.03	115.07	Shut-In(1)
62	1149.11	114.47	End Shut-In(1)
64	1883.39	114.83	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
126.00	MW 20M 80W	1.77
189.00	MW 30M 70W	2.65
146.00	WM 80M 20W	2.05
0.00	Show of oil spots in tool	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55194

**DST#: 1**

ATTN: Jerry Green

Test Start: 2013.11.14 @ 12:12:00

## GENERAL INFORMATION:

Formation: **Toronto - LKC "A-B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:07:50

Time Test Ended: 18:41:30

Test Type: Conventional Straddle (Initial)

Tester: Kevin Mack

Unit No: 66

**Interval: 3900.00 ft (KB) To 3983.00 ft (KB) (TVD)**

Total Depth: 3983.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2875.00 ft (KB)

2870.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8653 Outside**

Press@RunDepth: psig @ 3901.00 ft (KB)

Start Date: 2013.11.14

End Date: 2013.11.14

Start Time: 12:13:00

End Time: 18:40:00

Capacity: 8000.00 psig

Last Calib.: 2013.11.14

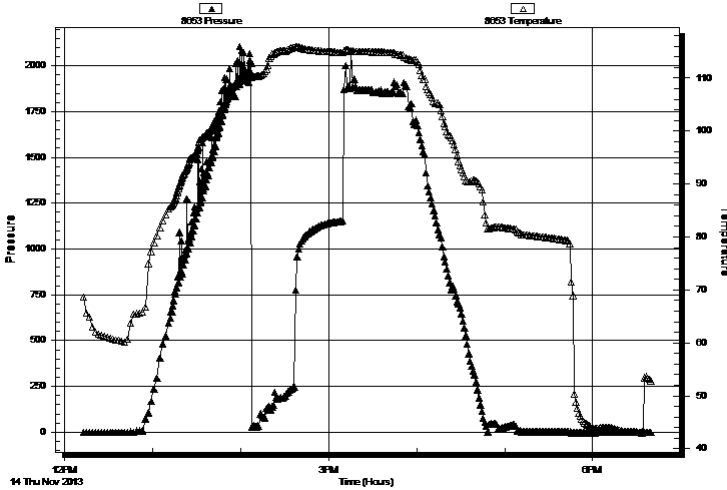
Time On Btm:

Time Off Btm:

TEST COMMENT: 30 - IF- 1/2" Blow built to 3/4" in 5 min. Then rushed to BOB in 10 min.

30 - IS- No Return

Pressure vs. Time



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
126.00	MW 20M 80W	1.77
189.00	MW 30M 70W	2.65
146.00	WM 80M 20W	2.05
0.00	Show of oil spots in tool	0.00

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55194

**DST#: 1**

ATTN: Jerry Green

Test Start: 2013.11.14 @ 12:12:00

## Tool Information

Drill Pipe:	Length: 3887.00 ft	Diameter: 3.80 inches	Volume: 54.52 bbl	Tool Weight:	2500.00 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: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	130000.0 lb
			<u>Total Volume: 54.52 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial	45000.00 lb
Depth to Top Packer:	3900.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	4201.00 ft				
Interval between Packers:	301.00 ft				
Tool Length:	329.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments: set off jars twice and pulled to 130,000 lbs. to come off bottom...  
Rig is going in to re-condition hole for another straddle test.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3873.00	
Shut In Tool	5.00			3878.00	
Hydraulic tool	5.00			3883.00	
Jars	5.00			3888.00	
Safety Joint	3.00			3891.00	
Packer	5.00			3896.00	28.00 Bottom Of Top Packer
Packer	4.00			3900.00	
Stubb	1.00			3901.00	
Recorder	0.00	8653	Outside	3901.00	
Recorder	0.00	8874	Inside	3901.00	
Stubb	1.00			3902.00	
Packer - Shale	0.00			3902.00	
Perforations	7.00			3909.00	
Change Over Sub	1.00			3910.00	
Drill Pipe	62.00			3972.00	
Change Over Sub	1.00			3973.00	
Perforations	6.00			3979.00	
Blank Off Sub	1.00			3980.00	
Packer - Shale	4.00			3984.00	
Stubb	1.00			3985.00	
Perforations	23.00			4008.00	
Change Over Sub	1.00			4009.00	
Recorder	0.00	8520	Below	4009.00	
Drill Pipe	186.00			4195.00	
Change Over Sub	1.00			4196.00	
Bullnose	5.00			4201.00	301.00 Bottom Packers & Anchor

**Total Tool Length: 329.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55194

**DST#: 1**

ATTN: Jerry Green

Test Start: 2013.11.14 @ 12:12:00

### 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:

50000 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
126.00	MW 20M 80W	1.767
189.00	MW 30M 70W	2.651
146.00	WM 80M 20W	2.048
0.00	Show of oil spots in tool	0.000

Total Length: 461.00 ft

Total Volume: 6.466 bbl

Num Fluid Samples: 0

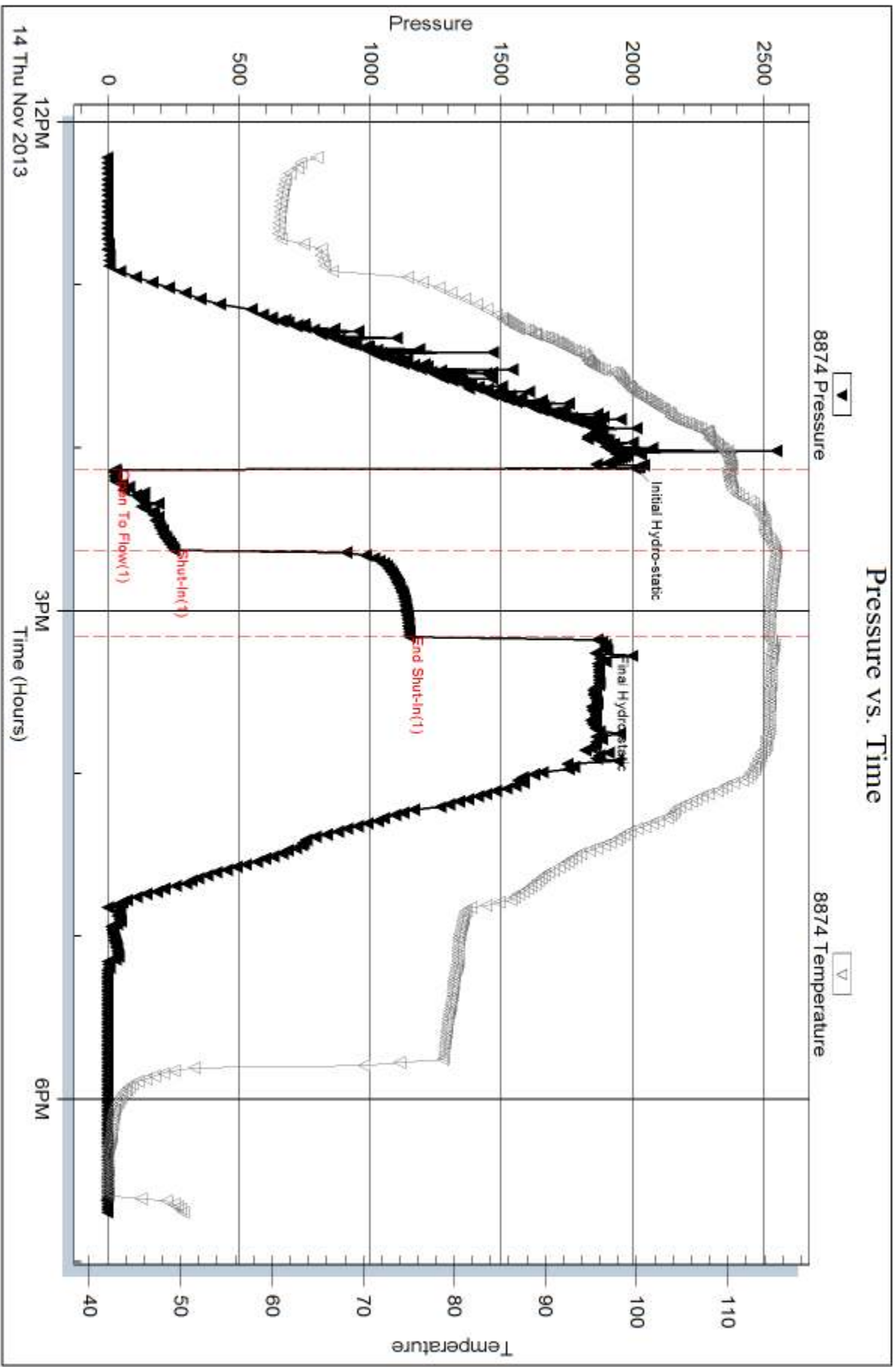
Num Gas Bombs: 0

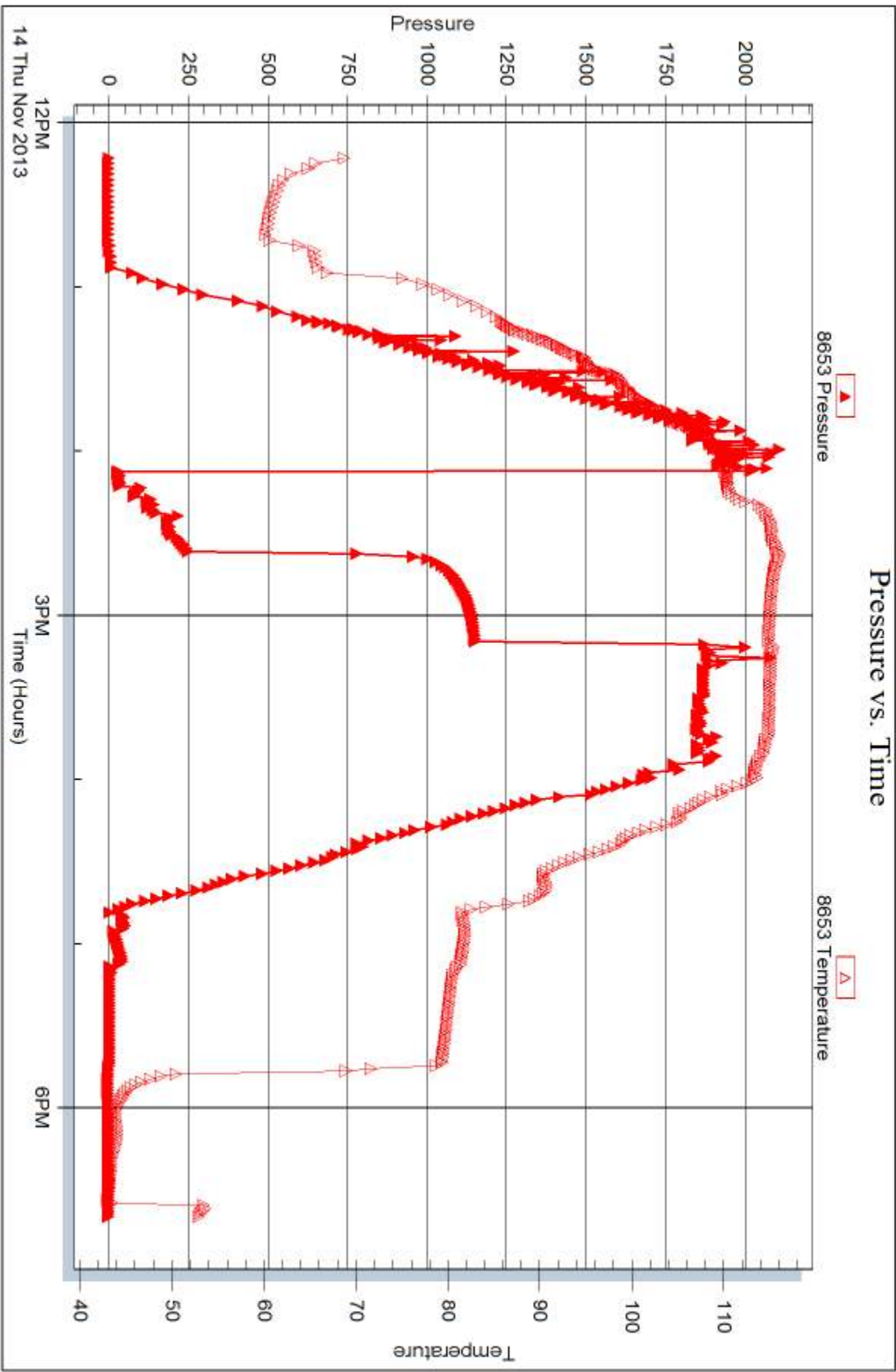
Serial #:

Laboratory Name:

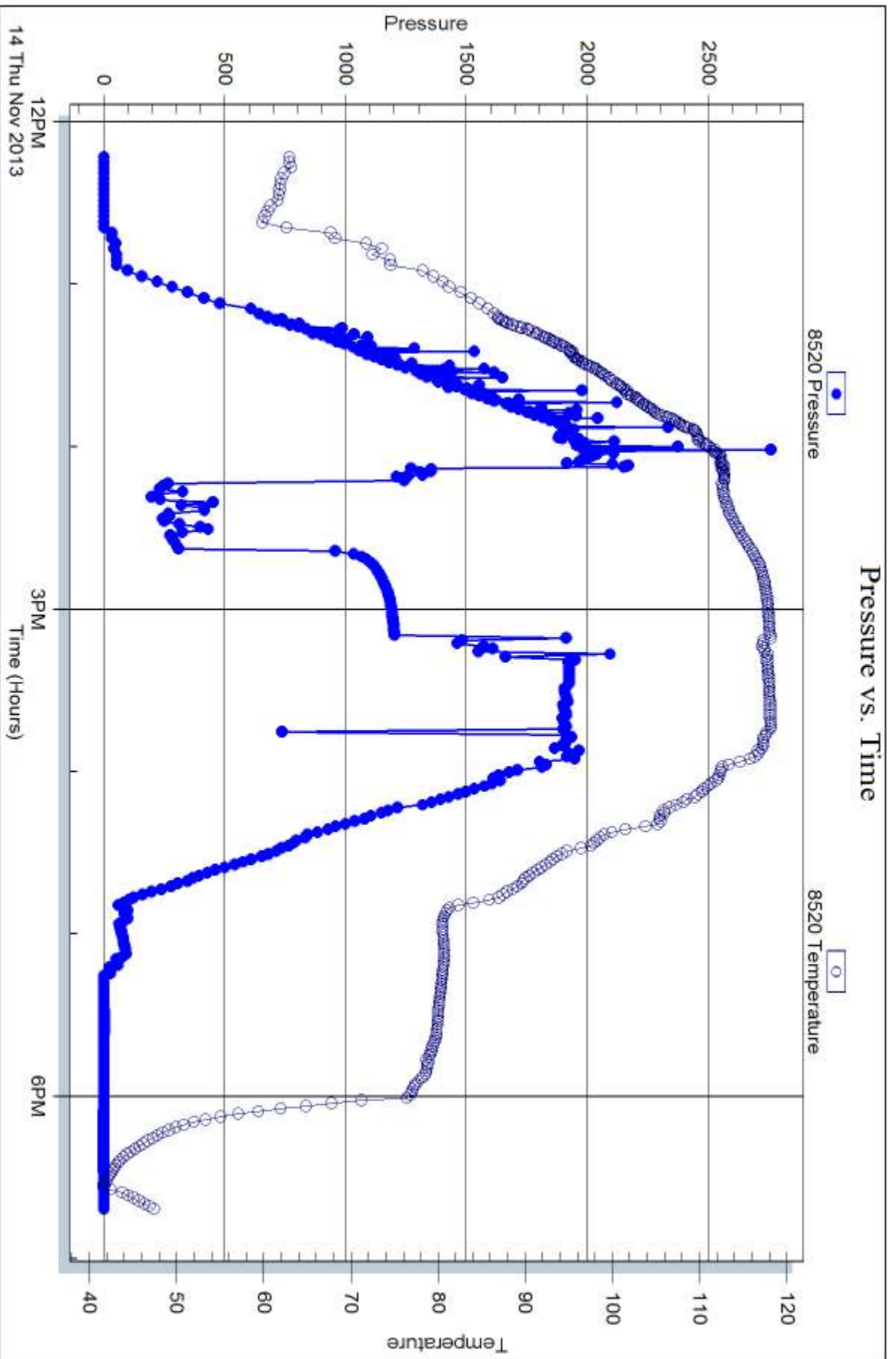
Laboratory Location:

Recovery Comments: RW .19 @ 54 = 50,000ppm











## DRILL STEM TEST REPORT

Prepared For: **Enterprise, Inc.**

2708 Barclay Dr.  
Hays, KS 67601

ATTN: Jerry Green

### **Sauvage #2-3**

#### **2-5s-30w Decatur,KS**

Start Date: 2013.11.14 @ 22:50:00

End Date: 2013.11.15 @ 08:46:30

Job Ticket #: 55195                      DST #: 2

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

Printed: 2013.11.19 @ 11:40:53



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55195

**DST#: 2**

ATTN: Jerry Green

Test Start: 2013.11.14 @ 22:50:00

## GENERAL INFORMATION:

Formation: **Toronto - LKC "A,B,C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:08:30

Time Test Ended: 08:46:30

Test Type: Conventional Straddle (Initial)

Tester: Kevin Mack

Unit No: 66

**Interval: 3900.00 ft (KB) To 4024.00 ft (KB) (TVD)**

Reference Elevations: 2875.00 ft (KB)

Total Depth: 4200.00 ft (KB) (TVD)

2870.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8874**

**Inside**

Press@RunDepth: 530.08 psig @ 3901.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.14

End Date:

2013.11.15

Last Calib.:

2013.11.15

Start Time: 22:51:00

End Time:

08:46:30

Time On Btm:

2013.11.15 @ 03:07:00

Time Off Btm:

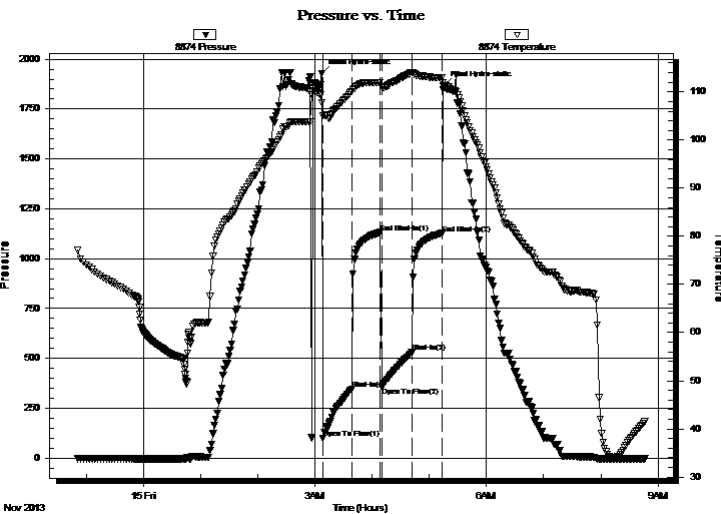
2013.11.15 @ 05:15:00

TEST COMMENT: 30 - IF- BOB in 3 1/2 min.

30 - IS- No Return

30 - FF- BoB in 5 min.

30 - FS- No Return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1929.03	107.81	Initial Hydro-static
2	100.37	105.10	Open To Flow (1)
32	347.70	110.04	Shut-In(1)
62	1131.40	111.89	End Shut-In(1)
63	355.76	111.09	Open To Flow (2)
95	530.08	114.01	Shut-In(2)
126	1126.59	112.93	End Shut-In(2)
128	1865.71	111.36	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
126.00	MW 20M 80W	1.77
315.00	MW 30M 70W	4.42
630.00	MW 50M 50W	8.84
262.00	WM 70M 30W	3.68

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55195

**DST#: 2**

ATTN: Jerry Green

Test Start: 2013.11.14 @ 22:50:00

## GENERAL INFORMATION:

Formation: **Toronto - LKC "A,B,C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:08:30

Time Test Ended: 08:46:30

Test Type: Conventional Straddle (Initial)

Tester: Kevin Mack

Unit No: 66

**Interval: 3900.00 ft (KB) To 4024.00 ft (KB) (TVD)**

Total Depth: 4200.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2875.00 ft (KB)

2870.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8653 Outside**

Press@RunDepth: psig @ 3901.00 ft (KB)

Start Date: 2013.11.14

End Date:

2013.11.15

Start Time: 22:51:00

End Time:

08:44:30

Capacity: 8000.00 psig

Last Calib.:

2013.11.15

Time On Btm:

Time Off Btm:

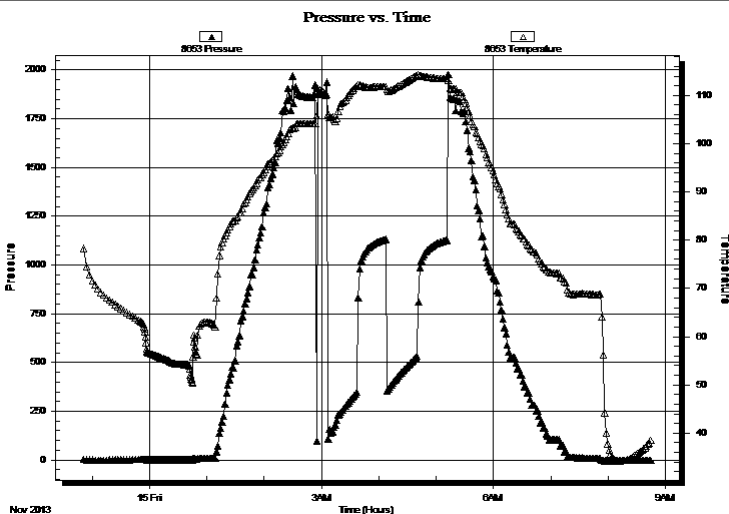
TEST COMMENT: 30 - IF- BOB in 3 1/2 min.

30 - IS- No Return

30 - FF- BoB in 5 min.

30 - FS- No Return

## PRESSURE SUMMARY



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

## Recovery

Length (ft)	Description	Volume (bbl)
126.00	MW 20M 80W	1.77
315.00	MW 30M 70W	4.42
630.00	MW 50M 50W	8.84
262.00	WM 70M 30W	3.68

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Enterprise, Inc.

**2-5s-30w Decatur,KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55195

**DST#: 2**

ATTN: Jerry Green

Test Start: 2013.11.14 @ 22:50:00

### GENERAL INFORMATION:

Formation: **Toronto - LKC "A,B,C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:08:30

Time Test Ended: 08:46:30

Test Type: Conventional Straddle (Initial)

Tester: Kevin Mack

Unit No: 66

**Interval: 3900.00 ft (KB) To 4024.00 ft (KB) (TVD)**

Total Depth: 4200.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2875.00 ft (KB)

2870.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8520 Below (Straddle)**

Press@RunDepth: psig @ 4039.00 ft (KB)

Start Date: 2013.11.14

End Date: 2013.11.15

Capacity: 8000.00 psig

Last Calib.: 2013.11.15

Start Time: 22:51:00

End Time: 08:43:30

Time On Btm:

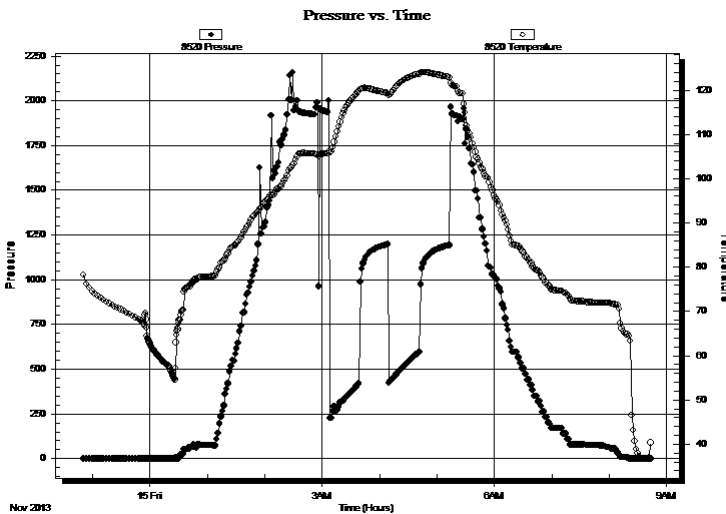
Time Off Btm:

TEST COMMENT: 30 - IF- BOB in 3 1/2 min.

30 - ISI- No Return

30 - FF- BoB in 5 min.

30 - FS- No Return



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
126.00	MW 20M 80W	1.77
315.00	MW 30M 70W	4.42
630.00	MW 50M 50W	8.84
262.00	WM 70M 30W	3.68

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55195

**DST#: 2**

ATTN: Jerry Green

Test Start: 2013.11.14 @ 22:50:00

## Tool Information

Drill Pipe:	Length: 3888.00 ft	Diameter: 3.80 inches	Volume: 54.54 bbl	Tool Weight:	2500.00 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: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 54.54 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	45000.00 lb
Depth to Top Packer:	3900.00 ft			Final	55000.00 lb
Depth to Bottom Packer:	4200.00 ft				
Interval between Packers:	300.00 ft				
Tool Length:	328.00 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			3873.00	
Shut In Tool	5.00			3878.00	
Hydraulic tool	5.00			3883.00	
Jars	5.00			3888.00	
Safety Joint	3.00			3891.00	
Packer	5.00			3896.00	28.00 Bottom Of Top Packer
Packer	4.00			3900.00	
Stubb	1.00			3901.00	
Packer - Shale	0.00			3901.00	
Recorder	0.00	8653	Outside	3901.00	
Recorder	0.00	8874	Inside	3901.00	
Perforations	17.00			3918.00	
Change Over Sub	1.00			3919.00	
Drill Pipe	93.00			4012.00	
Change Over Sub	1.00			4013.00	
Perforations	6.00			4019.00	
Blank Off Sub	1.00			4020.00	
Packer - Shale	4.00			4024.00	
Stubb	1.00			4025.00	
Perforations	13.00			4038.00	
Change Over Sub	1.00			4039.00	
Recorder	0.00	8520	Below	4039.00	
Drill Pipe	155.00			4194.00	
Change Over Sub	1.00			4195.00	
Bullnose	5.00			4200.00	300.00 Bottom Packers & Anchor

**Total Tool Length: 328.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55195

**DST#: 2**

ATTN: Jerry Green

Test Start: 2013.11.14 @ 22:50:00

### 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:

50000 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
126.00	MW 20M 80W	1.767
315.00	MW 30M 70W	4.419
630.00	MW 50M 50W	8.837
262.00	WM 70M 30W	3.675

Total Length: 1333.00 ft      Total Volume: 18.698 bbl

Num Fluid Samples: 0

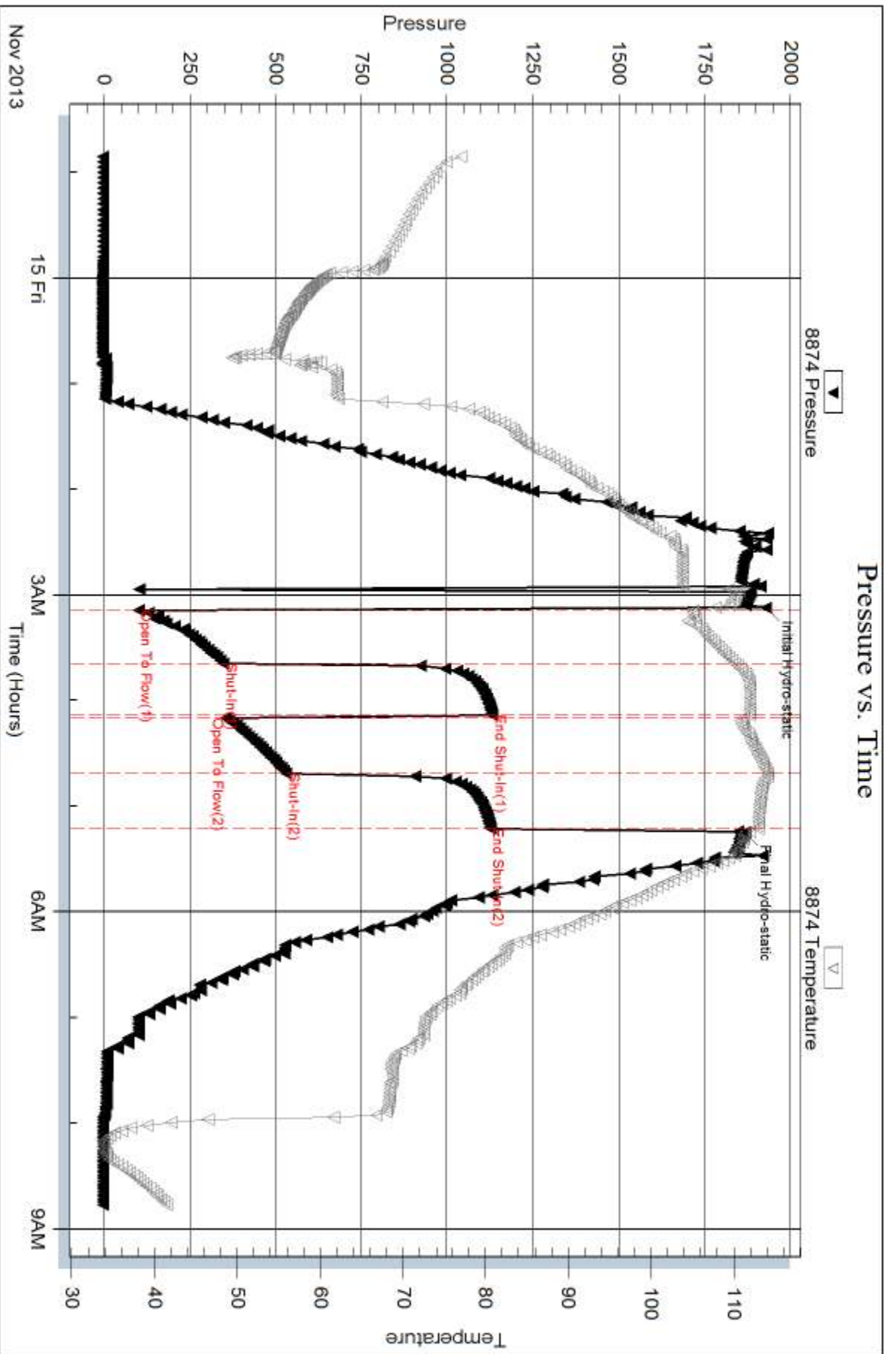
Num Gas Bombs: 0

Serial #:

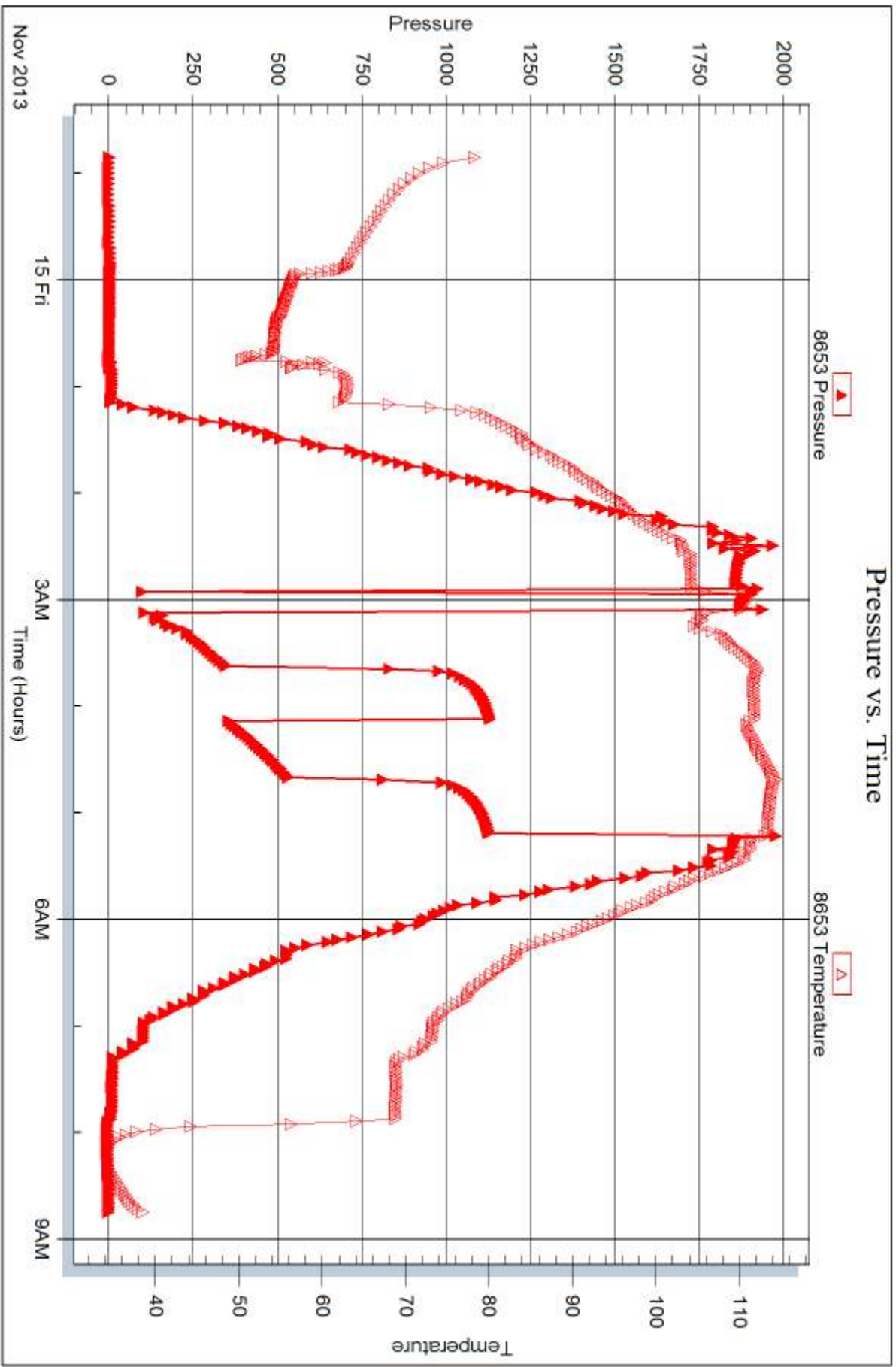
Laboratory Name:

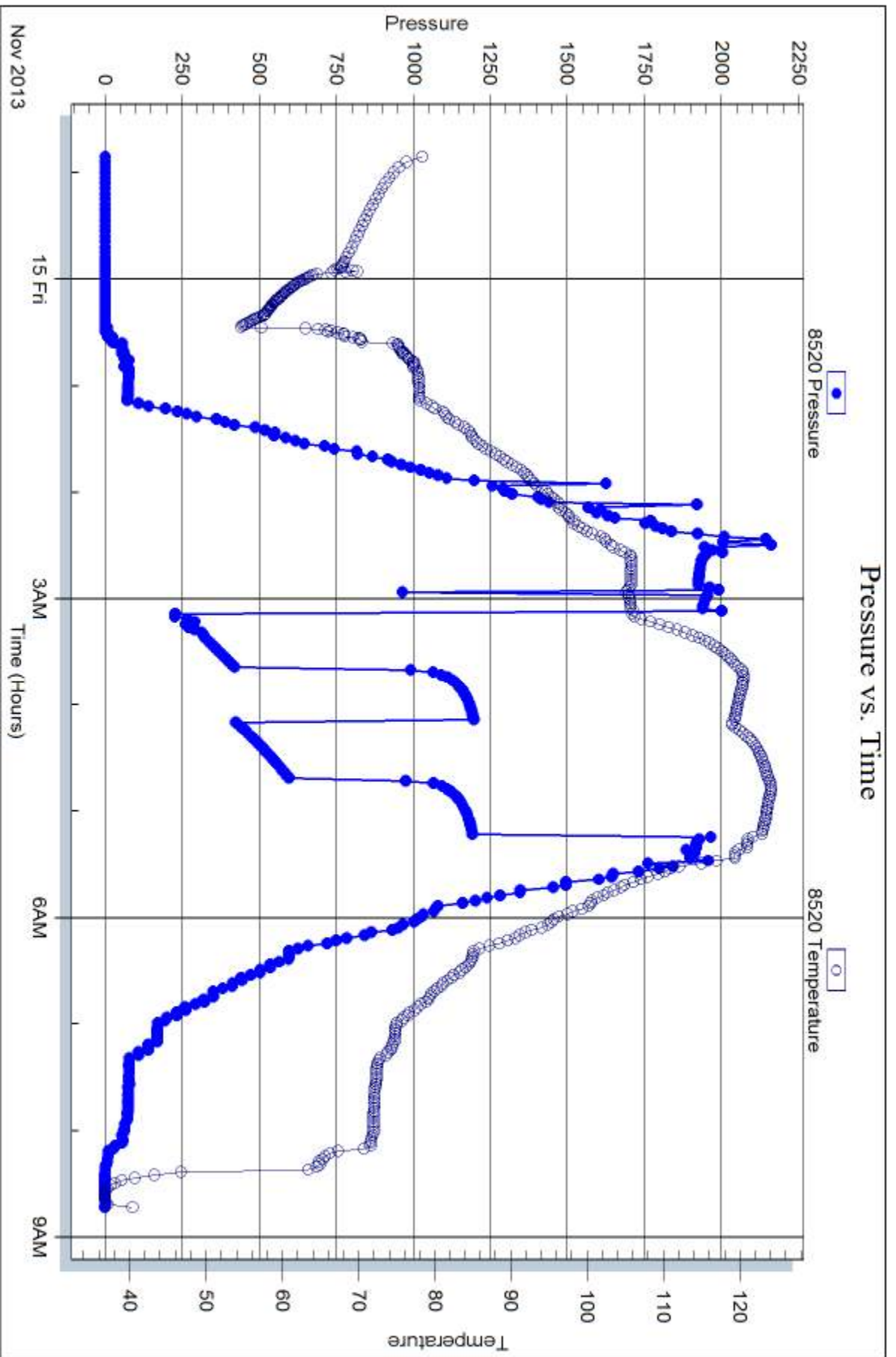
Laboratory Location:

Recovery Comments: RW = .19 @ 54 DEG = 50000PPM











## DRILL STEM TEST REPORT

Prepared For: **Enterprise, Inc.**

2708 Barclay Dr.  
Hays, KS 67601

ATTN: Jerry Green

### **Sauvage #2-3**

#### **2-5s-30w Decatur,KS**

Start Date: 2013.11.15 @ 00:00:00

End Date:

Job Ticket #: 55196

DST #: 3

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

Printed: 2013.11.19 @ 11:40:17



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55196

**DST#: 3**

ATTN: Jerry Green

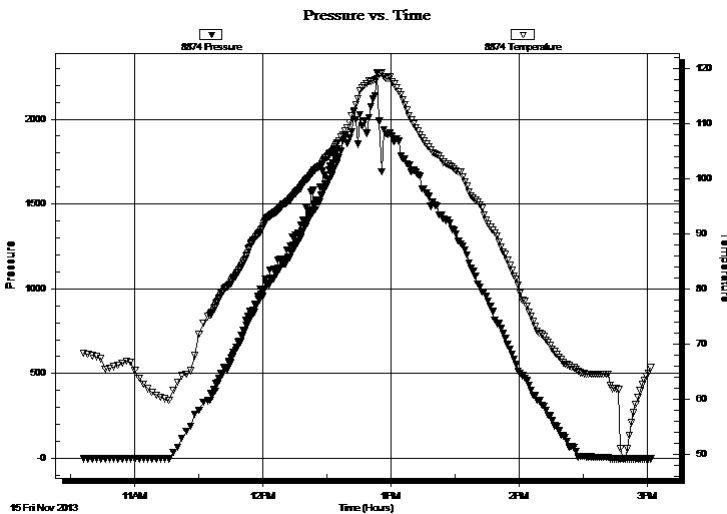
Test Start: 2013.11.15 @ 00:00:00

## GENERAL INFORMATION:

Formation: **LKC "K-L"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened:  
 Time Test Ended:  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Kevin Mack  
 Unit No: 66  
 Interval: **4110.00 ft (KB) To 4200.00 ft (KB) (TVD)**  
 Total Depth: 4200.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Reference Elevations: 2875.00 ft (KB)  
 2870.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8874 Inside**  
 Press@RunDepth: psig @ 4111.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.11.15 End Date: 2013.11.15 Last Calib.: 2013.11.16  
 Start Time: 10:36:00 End Time: 15:01:30 Time On Btm:  
 Time Off Btm:

TEST COMMENT: Tool hit several hard bridges going in the hole. Tripped out to recondition hole for DST #4



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55196

**DST#: 3**

ATTN: Jerry Green

Test Start: 2013.11.15 @ 00:00:00

### GENERAL INFORMATION:

Formation: **LKC "K-L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened:

Time Test Ended:

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 66

**Interval: 4110.00 ft (KB) To 4200.00 ft (KB) (TVD)**

Reference Elevations: 2875.00 ft (KB)

Total Depth: 4200.00 ft (KB) (TVD)

2870.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8653 Outside**

Press@RunDepth: psig @ 4111.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.15

End Date:

2013.11.15

Last Calib.:

2013.11.16

Start Time: 10:36:00

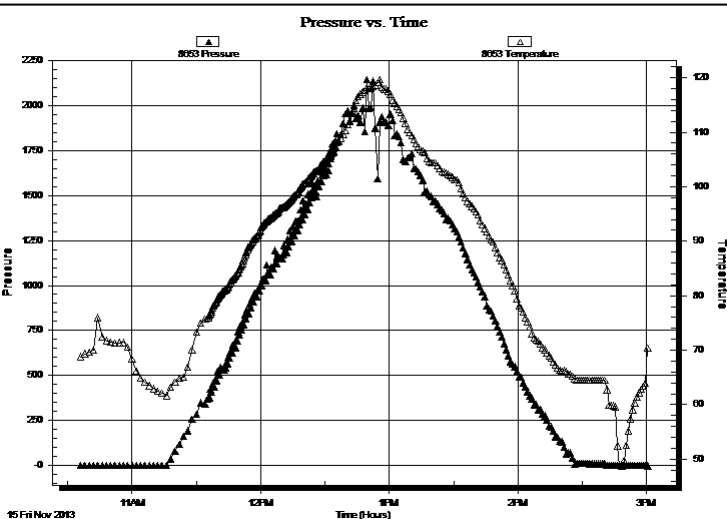
End Time:

15:00:30

Time On Btm:

Time Off Btm:

TEST COMMENT: Tool hit several hard bridges going in the hole. Tripped out to recondition hole for DST #4



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55196

**DST#: 3**

ATTN: Jerry Green

Test Start: 2013.11.15 @ 00:00:00

## Tool Information

Drill Pipe:	Length: 4083.00 ft	Diameter: 3.80 inches	Volume: 57.27 bbl	Tool Weight: 2500.00 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: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 57.27 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	1.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	4110.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	90.00 ft			
Tool Length:	118.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4083.00	
Shut In Tool	5.00			4088.00	
Hydraulic tool	5.00			4093.00	
Jars	5.00			4098.00	
Safety Joint	3.00			4101.00	
Packer	5.00			4106.00	28.00 Bottom Of Top Packer
Packer	4.00			4110.00	
Stubb	1.00			4111.00	
Recorder	0.00	8653	Outside	4111.00	
Recorder	0.00	8874	Inside	4111.00	
Perforations	20.00			4131.00	
Change Over Sub	1.00			4132.00	
Drill Pipe	62.00			4194.00	
Change Over Sub	1.00			4195.00	
Bullnose	5.00			4200.00	90.00 Bottom Packers & Anchor

**Total Tool Length: 118.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55196

**DST#: 3**

ATTN: Jerry Green

Test Start: 2013.11.15 @ 00:00:00

### 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: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.58 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl

Total Length:                      ft

Total Volume:                      bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

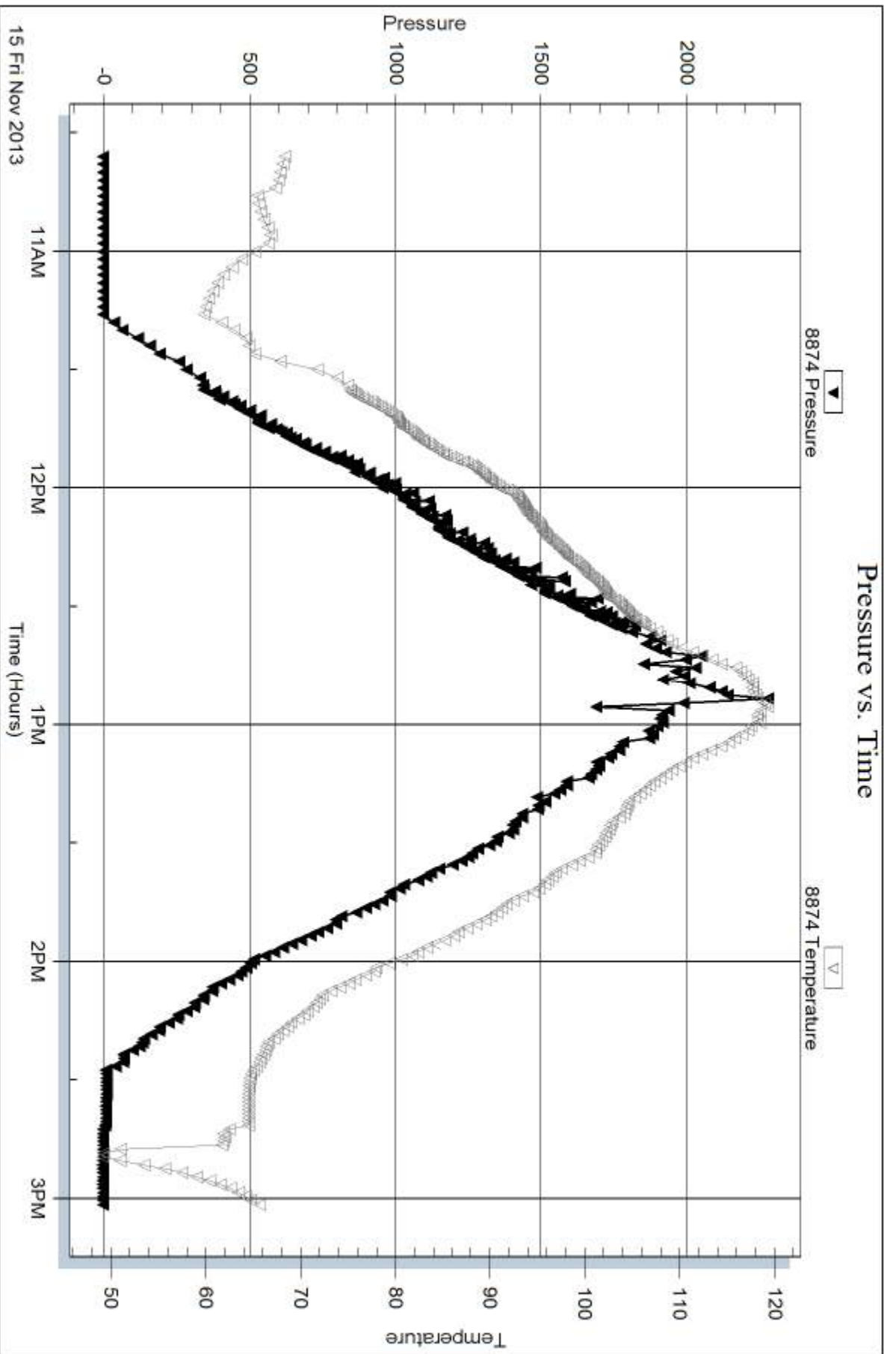
Serial #: 8874

Inside

Enterprise, Inc.

Sauvage #2-3

DST Test Number: 3

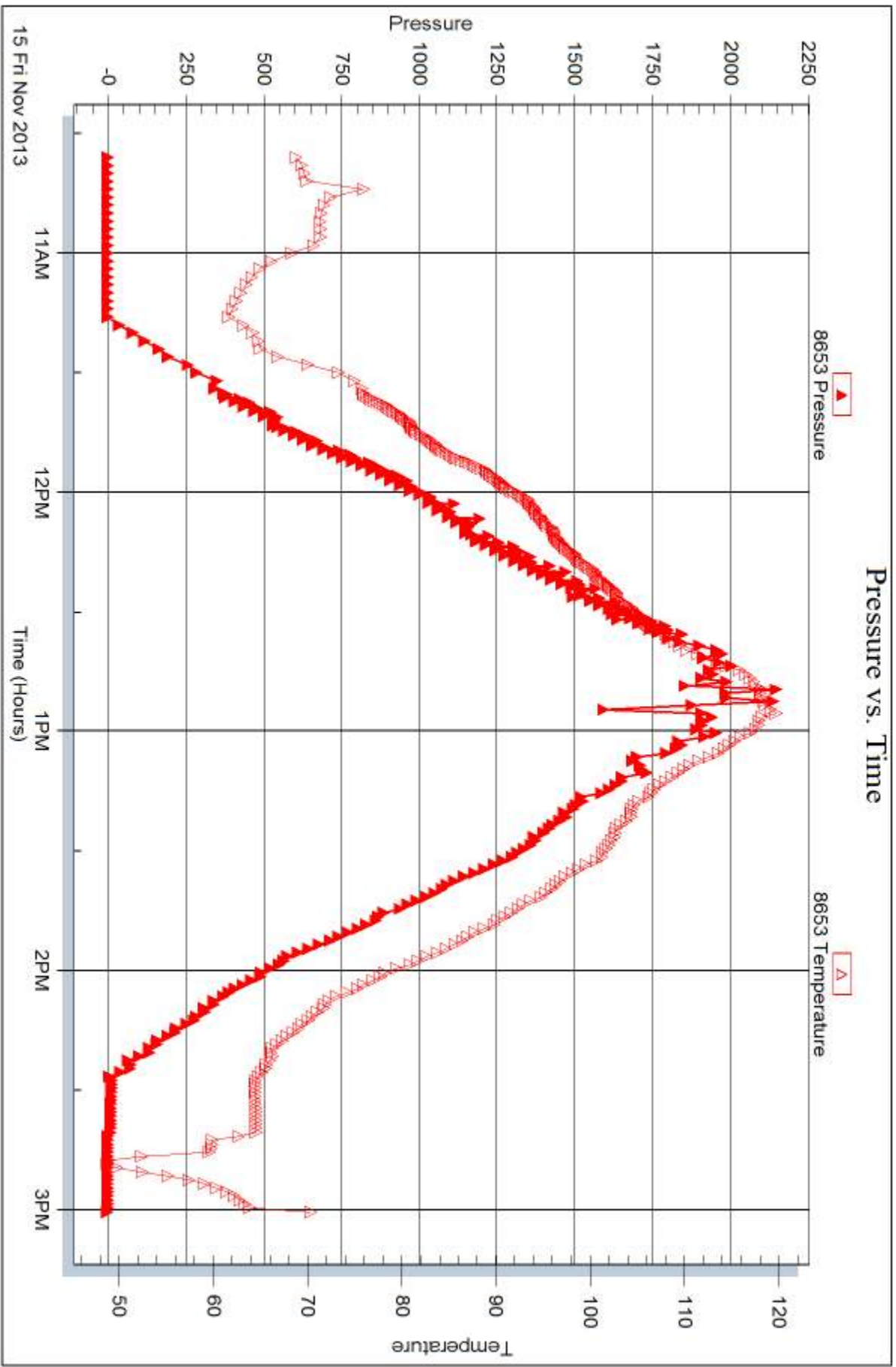


Triobite Testing, Inc

Ref. No: 55196

Printed: 2013.11.19 @ 11:40:20







## DRILL STEM TEST REPORT

Prepared For: **Enterprise, Inc.**

2708 Barclay Dr.  
Hays, KS 67601

ATTN: Jerry Green

### **Sauvage #2-3**

#### **2-5s-30w Decatur,KS**

Start Date: 2013.11.16 @ 01:35:00

End Date: 2013.11.16 @ 10:39:30

Job Ticket #: 55197                      DST #: 4

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

Printed: 2013.11.19 @ 11:38:32



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55197

**DST#: 4**

ATTN: Jerry Green

Test Start: 2013.11.16 @ 01:35:00

## GENERAL INFORMATION:

Formation: **LKC "K-L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:27:30

Time Test Ended: 10:39:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 66

**Interval: 4110.00 ft (KB) To 4200.00 ft (KB) (TVD)**

Reference Elevations: 2875.00 ft (KB)

Total Depth: 4200.00 ft (KB) (TVD)

2870.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8874 Inside**

Press@RunDepth: 42.52 psig @ 4111.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.16

End Date: 2013.11.16

Last Calib.: 2013.11.16

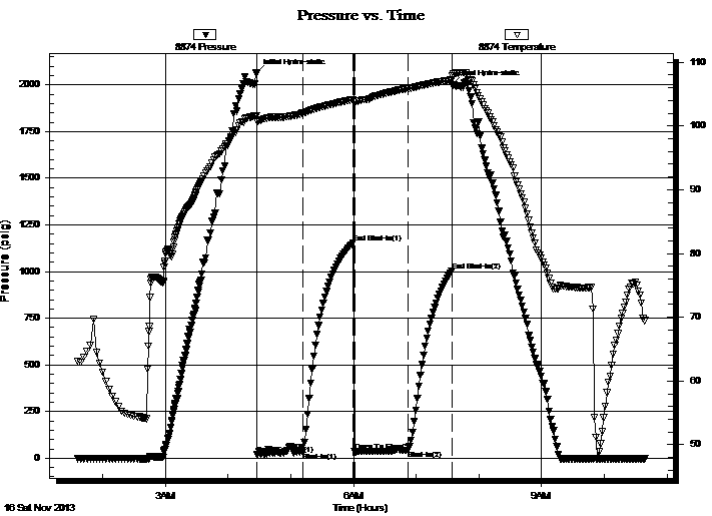
Start Time: 01:36:00

End Time: 10:39:30

Time On Btm: 2013.11.16 @ 04:27:00

Time Off Btm: 2013.11.16 @ 07:34:30

**TEST COMMENT:** 45 - IF- 1" Blow Built to 4"  
45 - IS- No Return  
45 - FF- Surface Blow started at 1 min. Built to 1 1/4"  
45 - FS- No Return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2062.96	101.66	Initial Hydro-static
1	20.65	100.79	Open To Flow (1)
44	31.57	102.02	Shut-In(1)
93	1152.09	104.18	End Shut-In(1)
94	34.45	103.89	Open To Flow (2)
145	42.52	105.84	Shut-In(2)
187	1002.62	107.23	End Shut-In(2)
188	2001.58	107.81	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
50.00	OSM 100M (oil spots)	0.70

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55197

**DST#: 4**

ATTN: Jerry Green

Test Start: 2013.11.16 @ 01:35:00

## GENERAL INFORMATION:

Formation: **LKC "K-L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:27:30

Time Test Ended: 10:39:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 66

**Interval: 4110.00 ft (KB) To 4200.00 ft (KB) (TVD)**

Total Depth: 4200.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2875.00 ft (KB)

2870.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8653 Outside**

Press@RunDepth: psig @ 4111.00 ft (KB)

Start Date: 2013.11.16

End Date: 2013.11.16

Start Time: 01:36:00

End Time: 10:38:00

Capacity: 8000.00 psig

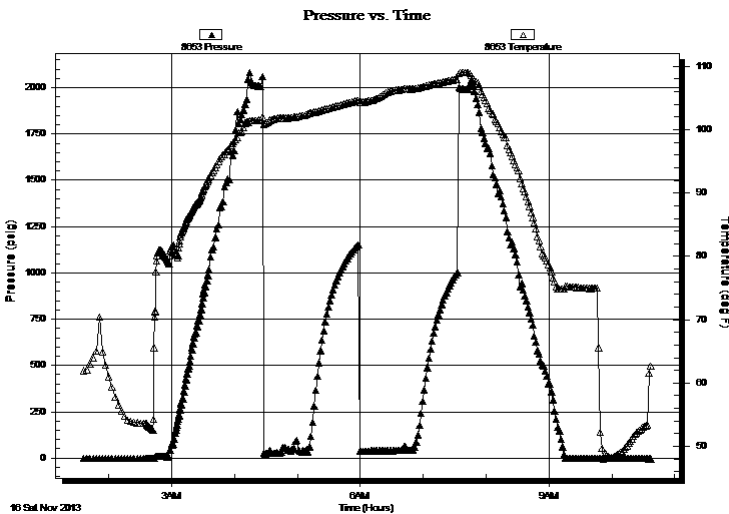
Last Calib.: 2013.11.16

Time On Btm:

Time Off Btm:

TEST COMMENT: 45 - IF- 1" Blow Built to 4"  
45 - IS- No Return  
45 - FF- Surface Blow started at 1 min. Built to 1 1/4"  
45 - FS- No Return

## PRESSURE SUMMARY



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

## Recovery

Length (ft)	Description	Volume (bbl)
50.00	OSM 100M (oil spots)	0.70

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55197

**DST#: 4**

ATTN: Jerry Green

Test Start: 2013.11.16 @ 01:35:00

## Tool Information

Drill Pipe:	Length: 4112.00 ft	Diameter: 3.80 inches	Volume: 57.68 bbl	Tool Weight:	2500.00 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: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 57.68 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	45000.00 lb
Depth to Top Packer:	4110.00 ft			Final	47000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	90.00 ft				
Tool Length:	118.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

## Tool Description

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4083.00	
Shut In Tool	5.00			4088.00	
Hydraulic tool	5.00			4093.00	
Jars	5.00			4098.00	
Safety Joint	3.00			4101.00	
Packer	5.00			4106.00	28.00 Bottom Of Top Packer
Packer	4.00			4110.00	
Stubb	1.00			4111.00	
Recorder	0.00	8653	Outside	4111.00	
Recorder	0.00	8874	Inside	4111.00	
Perforations	20.00			4131.00	
Change Over Sub	1.00			4132.00	
Drill Pipe	62.00			4194.00	
Change Over Sub	1.00			4195.00	
Bullnose	5.00			4200.00	90.00 Bottom Packers & Anchor

**Total Tool Length: 118.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Enterprise, Inc.

**2-5s-30w Decatur, KS**

2708 Barclay Dr.  
Hays, KS 67601

**Sauvage #2-3**

Job Ticket: 55197

**DST#: 4**

ATTN: Jerry Green

Test Start: 2013.11.16 @ 01:35:00

## 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: 59.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.58 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure: psig

Salinity: 400.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	OSM 100M (oil spots)	0.701

Total Length: 50.00 ft      Total Volume: 0.701 bbl

Num Fluid Samples: 0

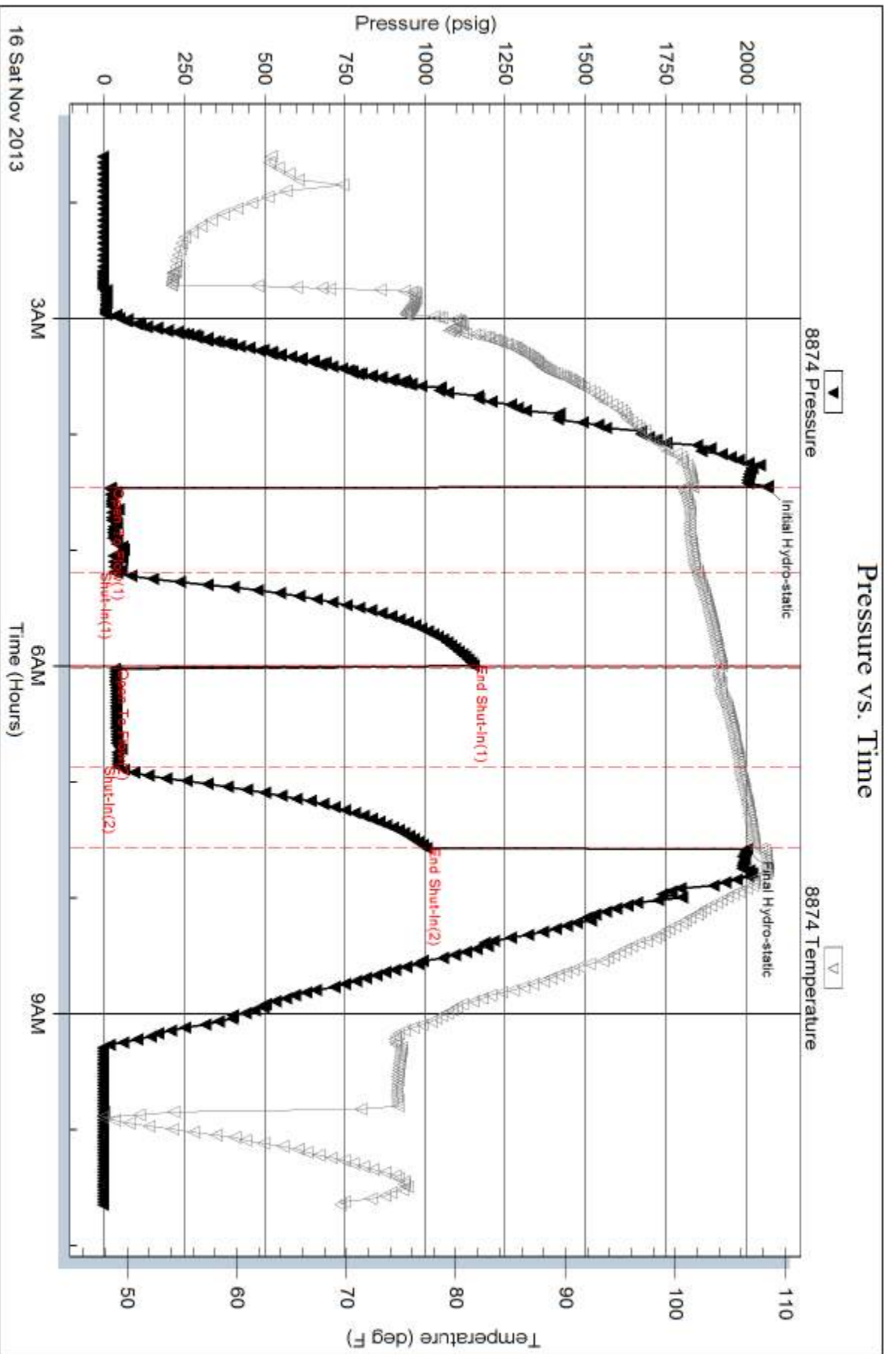
Num Gas Bombs: 0

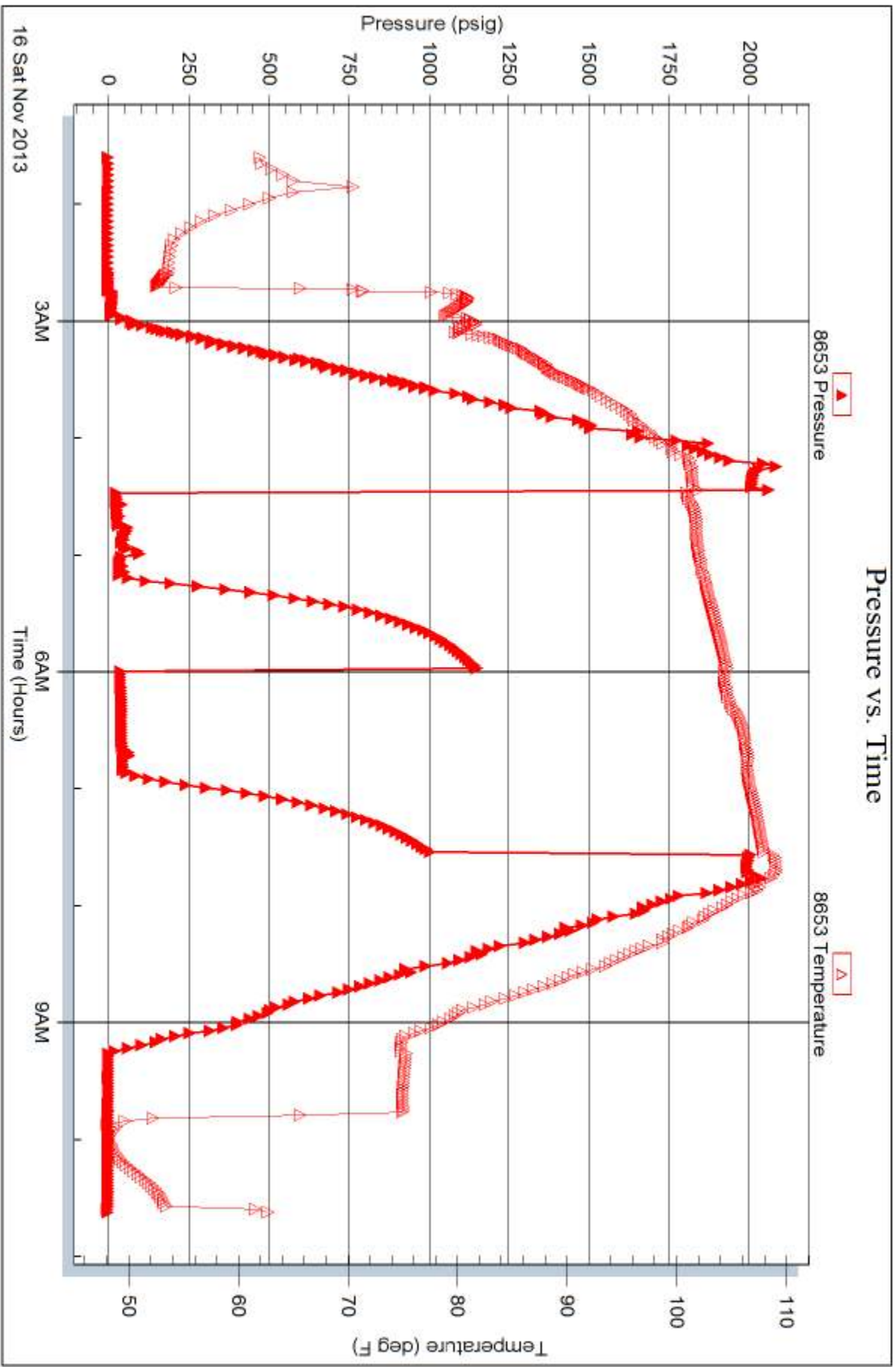
Serial #:

Laboratory Name:

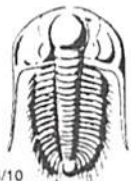
Laboratory Location:

Recovery Comments:









# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 55194

Well Name & No. Sawage #2-3 Test No. 1 Date 11-14-13  
 Company Enterprise, Inc. Elevation 2875 KB 2870 GL  
 Address 2708 Barclay Dr. Hays, KS 67601  
 Co. Rep / Geo. Jerry Green Rig White Knight #1  
 Location: Sec. 2 Twp. 5S Rge. 30W Co. Decatur State KS

Interval Tested 3900-3983 Zone Tested Toronto-LKC "A-B"  
 Anchor Length 83' Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.1  
 Top Packer Depth 3896 Drill Collars Run 0 Vis 59  
 Bottom Packer Depth 3900 - 3983 <sup>Shale Packer (stretcher)</sup> Wt. Pipe Run 0 WL 8.6  
 Total Depth 4200 Chlorides 400 ppm System LCM 1.5#

Blow Description IF-1/2" Blow built to 3/4" in 5 min. Then rushed to Bob in 10 min.  
ISI- NO Return  
FE- N/A  
FSI- N/A

Rec	Feet of	%gas	%oil	%water	%mud
<u>146</u>	<u>WM</u>		<u>20</u>	<u>80</u>	
<u>189</u>	<u>MW</u>		<u>70</u>	<u>30</u>	
<u>126</u>	<u>MW</u>		<u>20</u>	<u>80</u>	
	<u>Show of oil spots in tool</u>	<u>spots</u>			

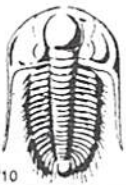
Rec Total 461 BHT 115 Gravity - API RW 19 @ 54 °F Chlorides 50,000 ppm

(A) Initial Hydrostatic 2011  Test 1050 T-On Location 10:15 AM  
 (B) First Initial Flow 28  Jars 250 T-Started 12:12 PM  
 (C) First Final Flow 251  Safety Joint 75 T-Open 2:08 PM  
 (D) Initial Shut-In 1149  Circ Sub N/C T-Pulled 3:08 PM  
 (E) Second Initial Flow -  Hourly Standby \_\_\_\_\_ T-Out 6:41 PM  
 (F) Second Final Flow -  Mileage 40RT 62 Comments Set Jars off twice  
 (G) Final Shut-In -  Sampler \_\_\_\_\_ and pulled to 13000K  
 (H) Final Hydrostatic 1883  Straddle 600 to come off bottom.  
 Shale Packer X2 500  Ruined Shale Packer X1 350

Initial Open 30  Ruined Packer \_\_\_\_\_  
 Initial Shut-In 30  Extra Copies \_\_\_\_\_  
 Final Flow -  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Shut-In -  Day Standby \_\_\_\_\_ Total 2887  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 2537

Approved By \_\_\_\_\_ 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. **55195**

Well Name & No. Sawbage #2-3 Test No. 2 Date 11-14-13  
 Company Enterprise, Inc. Elevation 2875 KB 2870 GL  
 Address 2708 Barclay Dr. Hays, KS 67601  
 Co. Rep / Geo. Jerry Green Rig White Knight #1  
 Location: Sec. 2 Twp. 5S Rge. 30W Co. Deccatur State KS

Interval Tested 3900-4024 Zone Tested Toronto - LKC "A,B,C,D"  
 Anchor Length 124' Drill Pipe Run 3888 Mud Wt. 9.1  
 Top Packer Depth 3896 Drill Collars Run 0 Vis 59  
 Bottom Packer Depth 3900-4024 (Shale Packer) (Straddle) Wt. Pipe Run 0 WL 8.6  
 Total Depth 4200 Chlorides 4000 ppm System LCM 1.5#

Blow Description IF-BoB in 3 1/2 min.  
ISI-NO Return  
FF-BoB in 5 min  
FSI-NO Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>262</u>	<u>WM</u>		<u>30</u>	<u>70</u>	
<u>630</u>	<u>MW</u>		<u>50</u>	<u>50</u>	
<u>315</u>	<u>MW</u>		<u>70</u>	<u>30</u>	
<u>126</u>	<u>MW</u>		<u>80</u>	<u>20</u>	
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1333 BHT III Gravity - API RW .19 @ 54 °F Chlorides 50,000 ppm  
 (A) Initial Hydrostatic 1929  Test 1050 T-On Location 10:15 PM  
 (B) First Initial Flow 1000  Jars 250 T-Started 10:50 PM  
 (C) First Final Flow 347  Safety Joint 75 T-Open 3:02 AM  
 (D) Initial Shut-In 1131  Circ Sub NIL T-Pulled 5:08 AM  
 (E) Second Initial Flow 355  Hourly Standby \_\_\_\_\_ T-Out 8:45 AM  
 (F) Second Final Flow 530  Mileage 40 RT Comments \_\_\_\_\_  
 (G) Final Shut-In 1126  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1865  Straddle 600  Ruined Shale Packer XI 350  
 Shale Packer X2 500  Ruined Packer \_\_\_\_\_

Initial Open 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Flow 30  Day Standby \_\_\_\_\_ Total 2825  
 Final Shut-In 30  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 2475

Approved By \_\_\_\_\_ Our Representative

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. 55196

Well Name & No. Savage #2-3 Test No. 3 Date 11-15-13  
 Company Enterprise, Inc. Elevation 2875 KB 2878 GL  
 Address 2708 Barclay Dr. Hays, KS 67601  
 Co. Rep / Geo. Jerry Green Rig White Knight #1  
 Location: Sec. 2 Twp. 5S Rge. 30W Co. Decatur State KS

Interval Tested 4110-4200 Zone Tested LKC "K-L"  
 Anchor Length 90' Drill Pipe Run - Mud Wt. 9.1  
 Top Packer Depth 4106 Drill Collars Run Ø Vis 59  
 Bottom Packer Depth 4110 Wt. Pipe Run Ø WL 8.6  
 Total Depth 4200 Chlorides 4000 ppm System LCM 1.5#

Blow Description IF-  
ISI-  
FF-  
FSI-

Rec	Feet of	%gas	%oil	%water	%mud

Rec Total \_\_\_\_\_ BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

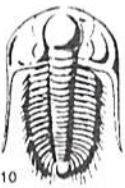
(A) Initial Hydrostatic \_\_\_\_\_  
 (B) First Initial Flow \_\_\_\_\_  
 (C) First Final Flow \_\_\_\_\_  
 (D) Initial Shut-In \_\_\_\_\_  
 (E) Second Initial Flow \_\_\_\_\_  
 (F) Second Final Flow \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  
 (H) Final Hydrostatic \_\_\_\_\_

Test 1050  
 Jars 250  
 Safety Joint 75  
 Circ Sub N/C  
 Hourly Standby \_\_\_\_\_  
 Mileage \_\_\_\_\_  
 Sampler \_\_\_\_\_  
 Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Sub Total 1375

T-On Location 10:50 PM 11-14-13  
 T-Started 10:35 AM 11-15-13  
 T-Open -  
 T-Pulled Ø 1:00 PM  
 T-Out - 3:02 PM  
 Comments Tool made it 100' from bottom. Hit several hard bridges. TOH to re-condition  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer X2 640  
 Extra Copies \_\_\_\_\_  
 Sub Total 0  
 Total 2015  
 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ 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. 55197

Well Name & No. Savage #2-3 Test No. 4 Date 11-16-13  
 Company Enterprise, Inc. Elevation 2875 KB 2870 GL  
 Address 2708 Barclay Dr. Hays, KS 67601  
 Co. Rep / Geo. Jerry Green Rig White Knight #1  
 Location: Sec. 2 Twp. 5S Rge. 30W Co. Decatur State KS

Interval Tested 4110-4200 Zone Tested LKC "K-L"  
 Anchor Length 90 Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.1  
 Top Packer Depth 4106 Drill Collars Run 0 Vis 59  
 Bottom Packer Depth 4110 Wt. Pipe Run 0 WL 8.6  
 Total Depth 4200 Chlorides 4000 ppm System LCM 1.5#

Blow Description IF - 1" Blow built to 4"  
ISI - NO Return  
FF - Weak Surface Blow started at 1 min. Built to 1 1/4"  
FSL - NO Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>50</u>	<u>OSM</u>	<u>SPOTS</u>		<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 50 BHT 107 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 2062  Test 1250 T-On Location 1:31 AM  
 (B) First Initial Flow 20  Jars 250 T-Started 1:35 AM  
 (C) First Final Flow 31  Safety Joint 75 T-Open 4:30 AM  
 (D) Initial Shut-In 1152  Circ Sub NIC T-Pulled 7:30 AM  
 (E) Second Initial Flow 34  Hourly Standby \_\_\_\_\_ T-Out 10:40 AM  
 (F) Second Final Flow 42  Mileage 40RT 62  
 (G) Final Shut-In 1002  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2001  Straddle \_\_\_\_\_

Initial Open 45  Ruined Shale Packer \_\_\_\_\_  
 Initial Shut-In 45  Ruined Packer \_\_\_\_\_  
 Final Flow 45  Extra Packer \_\_\_\_\_  
 Final Shut-In 45  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1637  
 Accessibility \_\_\_\_\_ MP/DST Disot \_\_\_\_\_  
 Sub Total 1637

Approved By \_\_\_\_\_ 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.