



## DRILL STEM TEST REPORT

Prepared For: **Younger Energy Co.**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207

ATTN: Keith Reavis

### **Schartz #1-34**

#### **34-21s-15w Pawnee,KS**

Start Date: 2013.12.06 @ 06:35:24

End Date: 2013.12.06 @ 15:17:54

Job Ticket #: 55432                      DST #: 1

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

Printed: 2013.12.11 @ 14:52:19



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Younger Energy Co.

**34-21s-15w Pawnee, KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55432

**DST#: 1**

Test Start: 2013.12.06 @ 06:35:24

## GENERAL INFORMATION:

Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened:  
 Tester: Brannan L  
 Time Test Ended: 15:17:54  
 Unit No: 70  
 Interval: **3824.00 ft (KB) To 3872.00 ft (KB) (TVD)**  
 Reference Elevations: 1978.00 ft (KB)  
 Total Depth: 3872.00 ft (KB) (TVD)  
 1967.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Fair  
 KB to GR/CF: 11.00 ft

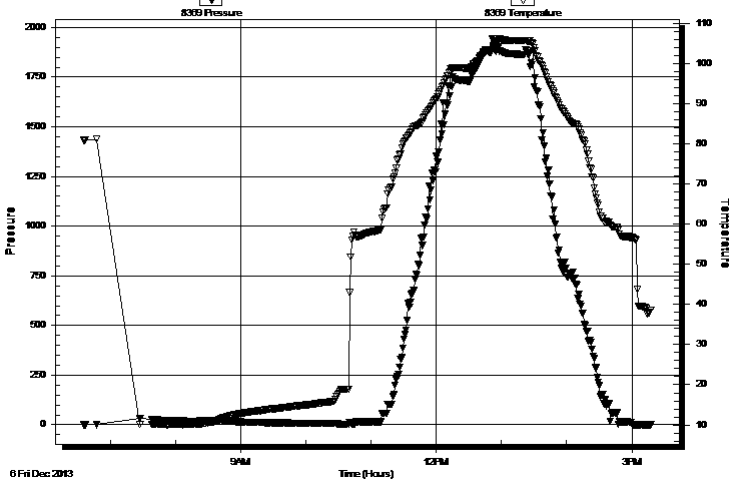
**Serial #: 8369**

**Inside**

Press@RunDepth: psig @ 3831.00 ft (KB)  
 Capacity: 8000.00 psig  
 Start Date: 2013.12.06  
 End Date: 2013.12.06  
 Last Calib.: 2013.12.06  
 Start Time: 06:35:29  
 End Time: 15:17:54  
 Time On Btm:  
 Time Off Btm:

TEST COMMENT: Packer Failure

Pressure vs. Time



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
200.00	M	1.11

## Gas Rates

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



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

## DRILL STEM TEST REPORT

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**34-21s-15w Pawnee, KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55432

**DST#: 1**

Test Start: 2013.12.06 @ 06:35:24

### GENERAL INFORMATION:

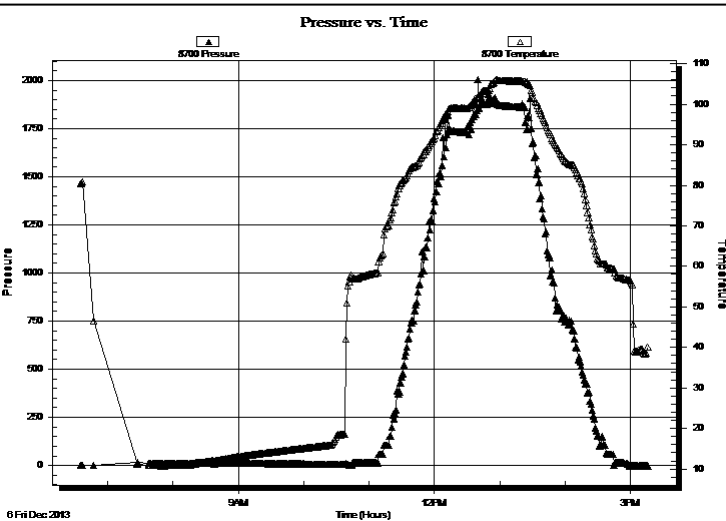
Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened:  
 Time Test Ended: 15:17:54  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Brannan L  
 Unit No: 70  
**Interval: 3824.00 ft (KB) To 3872.00 ft (KB) (TVD)**  
 Reference Elevations: 1978.00 ft (KB)  
 Total Depth: 3872.00 ft (KB) (TVD) 1967.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

**Serial #: 8700**

**Outside**

Press@RunDepth: psig @ 3831.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.12.06 End Date: 2013.12.06 Last Calib.: 2013.12.06  
 Start Time: 06:35:04 End Time: 15:15:44 Time On Btm:  
 Time Off Btm:

TEST COMMENT: Packer Failure



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
200.00	M	1.11

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Younger Energy Co.

**34-21s-15w Pawnee, KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55432

**DST#: 1**

Test Start: 2013.12.06 @ 06:35:24

## Tool Information

Drill Pipe:	Length: 3631.00 ft	Diameter: 3.75 inches	Volume: 49.60 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 77000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 73000.00 lb
Depth to Top Packer:	3824.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.00 ft			
Tool Length:	75.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3798.00	
Shut In Tool	5.00			3803.00	
Hydraulic tool	5.00			3808.00	
Jars	5.00			3813.00	
Safety Joint	2.00			3815.00	
Packer	5.00			3820.00	27.00 Bottom Of Top Packer
Packer	4.00			3824.00	
Stubb	1.00			3825.00	
Perforations	5.00			3830.00	
Change Over Sub	1.00			3831.00	
Recorder	0.00	8369	Inside	3831.00	
Recorder	0.00	8700	Outside	3831.00	
Drill Pipe	32.00			3863.00	
Change Over Sub	1.00			3864.00	
Perforations	5.00			3869.00	
Bullnose	3.00			3872.00	48.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>75.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Younger Energy Co.

**34-21s-15w Pawnee,KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55432

**DST#: 1**

Test Start: 2013.12.06 @ 06:35:24

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 7.98 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 4700.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
200.00	M	1.106

Total Length: 200.00 ft      Total Volume: 1.106 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

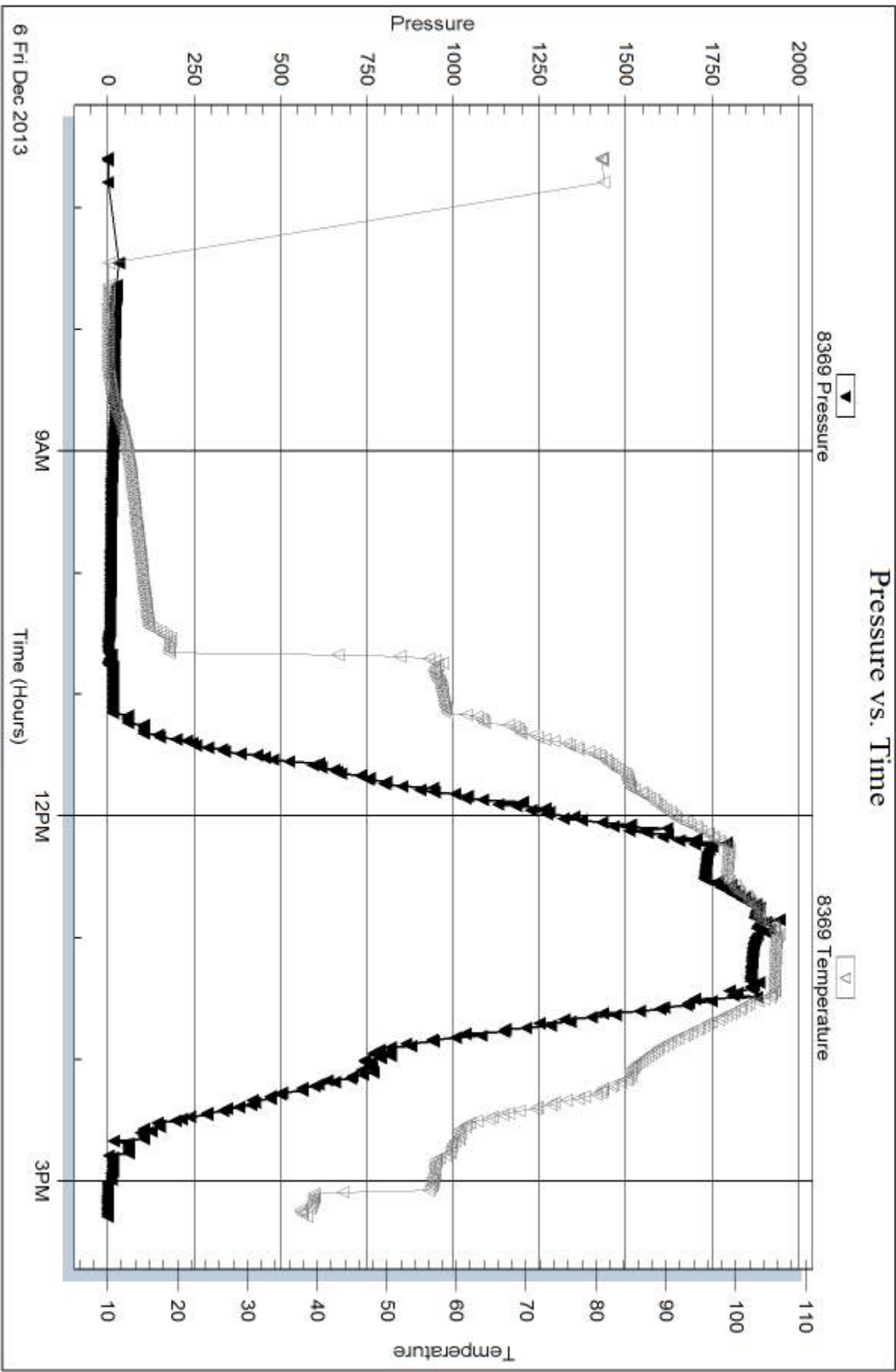
Serial #: 8369

Inside

Younger Energy Co.

Schantz #1-34

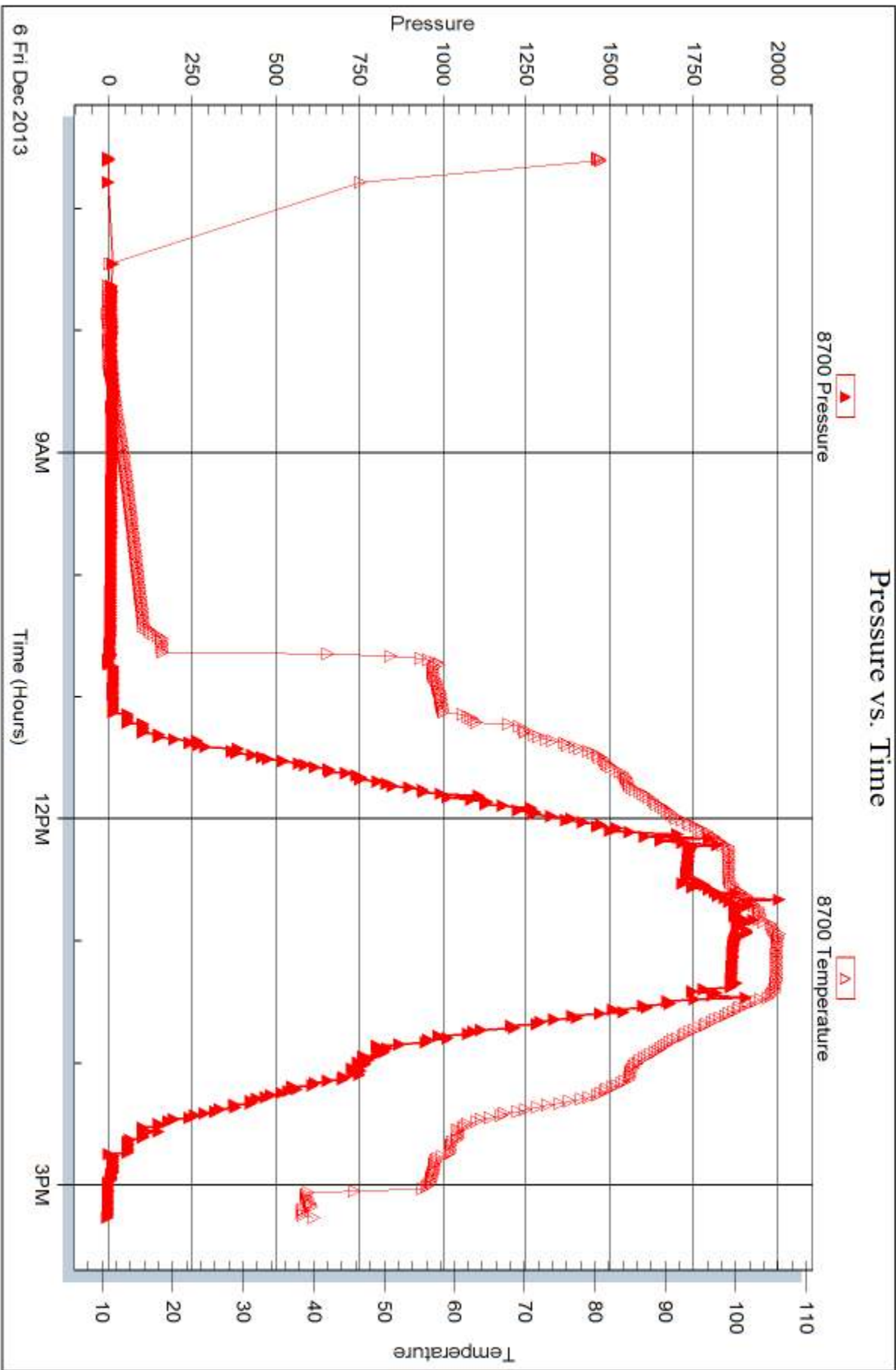
DST Test Number: 1



Tribble Testing, Inc

Ref. No: 55432

Printed: 2013.12.11 @ 14:52:22





## DRILL STEM TEST REPORT

Prepared For: **Younger Energy Co.**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207

ATTN: Keith Reavis

### **Schartz #1-34**

#### **34-21s-15w Pawnee,KS**

Start Date: 2013.12.06 @ 15:38:30

End Date: 2013.12.07 @ 04:40:30

Job Ticket #: 55433                      DST #: 2

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

Printed: 2013.12.11 @ 14:51:51





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Younger Energy Co.

**34-21s-15w Pawnee, KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55433

**DST#: 2**

Test Start: 2013.12.06 @ 15:38:30

## GENERAL INFORMATION:

Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 21:59:15  
 Tester: Brannan L  
 Time Test Ended: 04:40:30  
 Unit No: 70  
 Interval: **3714.00 ft (KB) To 3872.00 ft (KB) (TVD)**  
 Reference Elevations: 1978.00 ft (KB)  
 Total Depth: 3872.00 ft (KB) (TVD)  
 1967.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Fair  
 KB to GR/CF: 11.00 ft

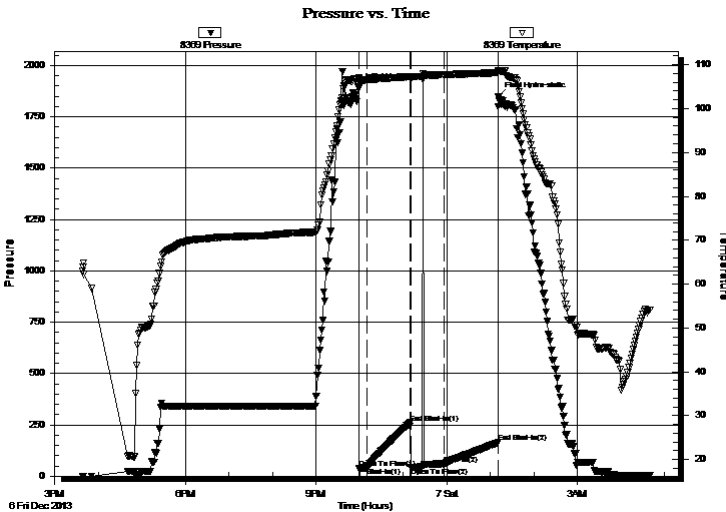
## Serial #: 8369

Inside

Press@RunDepth: 59.87 psig @ 3737.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.12.06 End Date: 2013.12.07 Last Calib.: 2013.12.07  
 Start Time: 15:38:35 End Time: 04:40:30 Time On Btm: 2013.12.06 @ 21:59:00  
 Time Off Btm: 2013.12.07 @ 01:11:15

TEST COMMENT: 10- IF- Built to 1/2"  
 60- IS- No blow  
 45- FF- No blow Flushed tool @ 15 mins Built to 1/4"  
 75- FS- No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1894.65	106.98	Initial Hydro-static
1	37.28	106.06	Open To Flow (1)
11	40.71	106.58	Shut-In(1)
70	259.40	107.27	End Shut-In(1)
72	43.19	107.21	Open To Flow (2)
117	59.87	107.73	Shut-In(2)
192	163.47	108.19	End Shut-In(2)
193	1848.96	108.68	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	M	0.15

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Younger Energy Co.

**34-21s-15w Pawnee, KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55433

**DST#: 2**

Test Start: 2013.12.06 @ 15:38:30

## Tool Information

Drill Pipe:	Length: 3508.00 ft	Diameter: 3.75 inches	Volume: 47.92 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 78000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 73000.00 lb
Depth to Top Packer:	3714.00 ft			Final 73000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	158.00 ft			
Tool Length:	185.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3688.00	
Shut In Tool	5.00			3693.00	
Hydraulic tool	5.00			3698.00	
Jars	5.00			3703.00	
Safety Joint	2.00			3705.00	
Packer	5.00			3710.00	27.00 Bottom Of Top Packer
Packer	4.00			3714.00	
Stubb	1.00			3715.00	
Perforations	21.00			3736.00	
Change Over Sub	1.00			3737.00	
Recorder	0.00	8369	Inside	3737.00	
Recorder	0.00	8700	Outside	3737.00	
Drill Pipe	126.00			3863.00	
Change Over Sub	1.00			3864.00	
Perforations	5.00			3869.00	
Bullnose	3.00			3872.00	158.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>185.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Younger Energy Co.

**34-21s-15w Pawnee,KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55433

**DST#: 2**

Test Start: 2013.12.06 @ 15:38:30

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 48.00 sec/qt  
Water Loss: 7.98 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 4700.00 ppm  
Filter Cake: inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: deg API  
Water Salinity: ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	M	0.148

Total Length: 30.00 ft      Total Volume: 0.148 bbl

Num Fluid Samples: 0

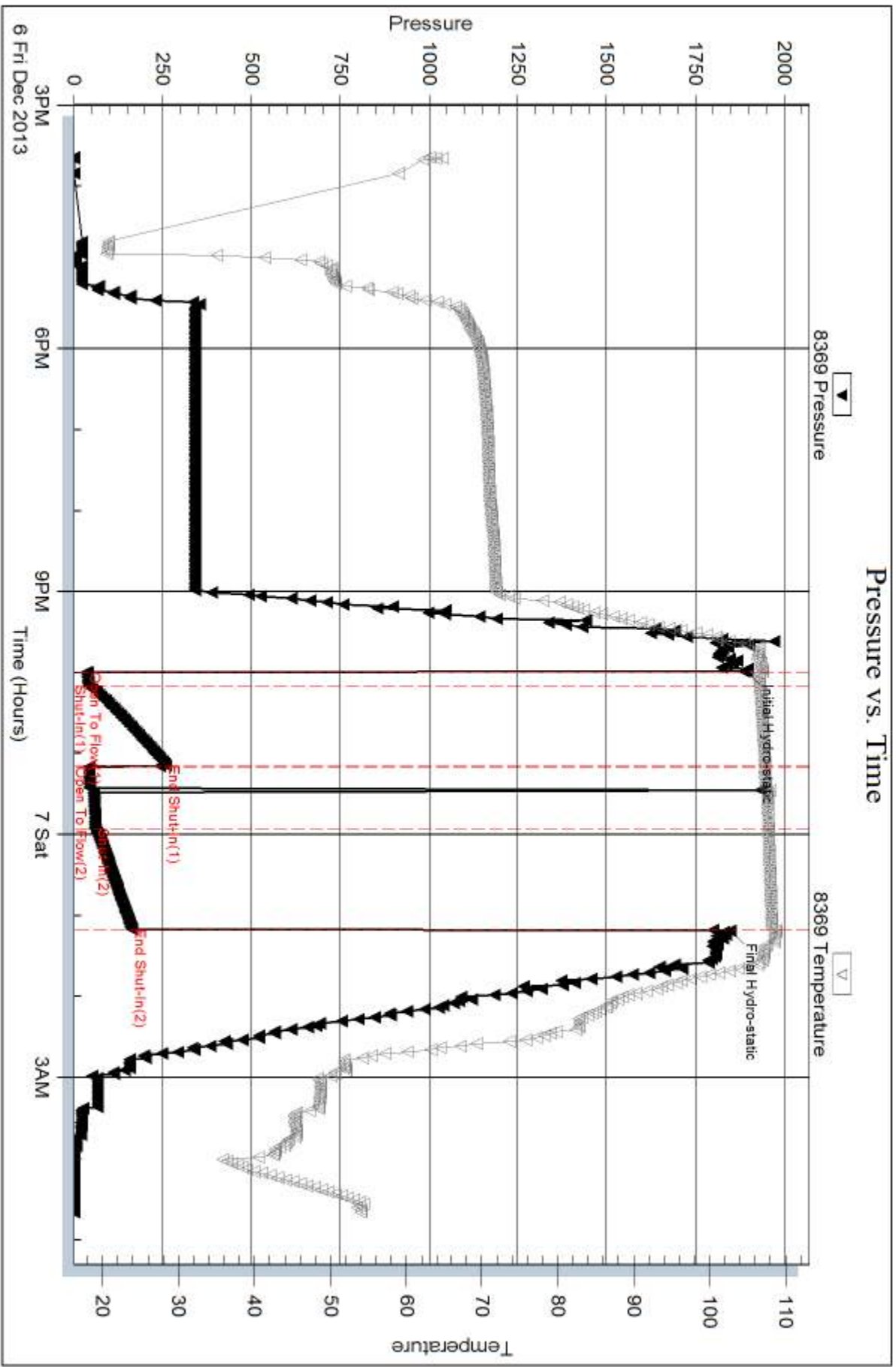
Num Gas Bombs: 0

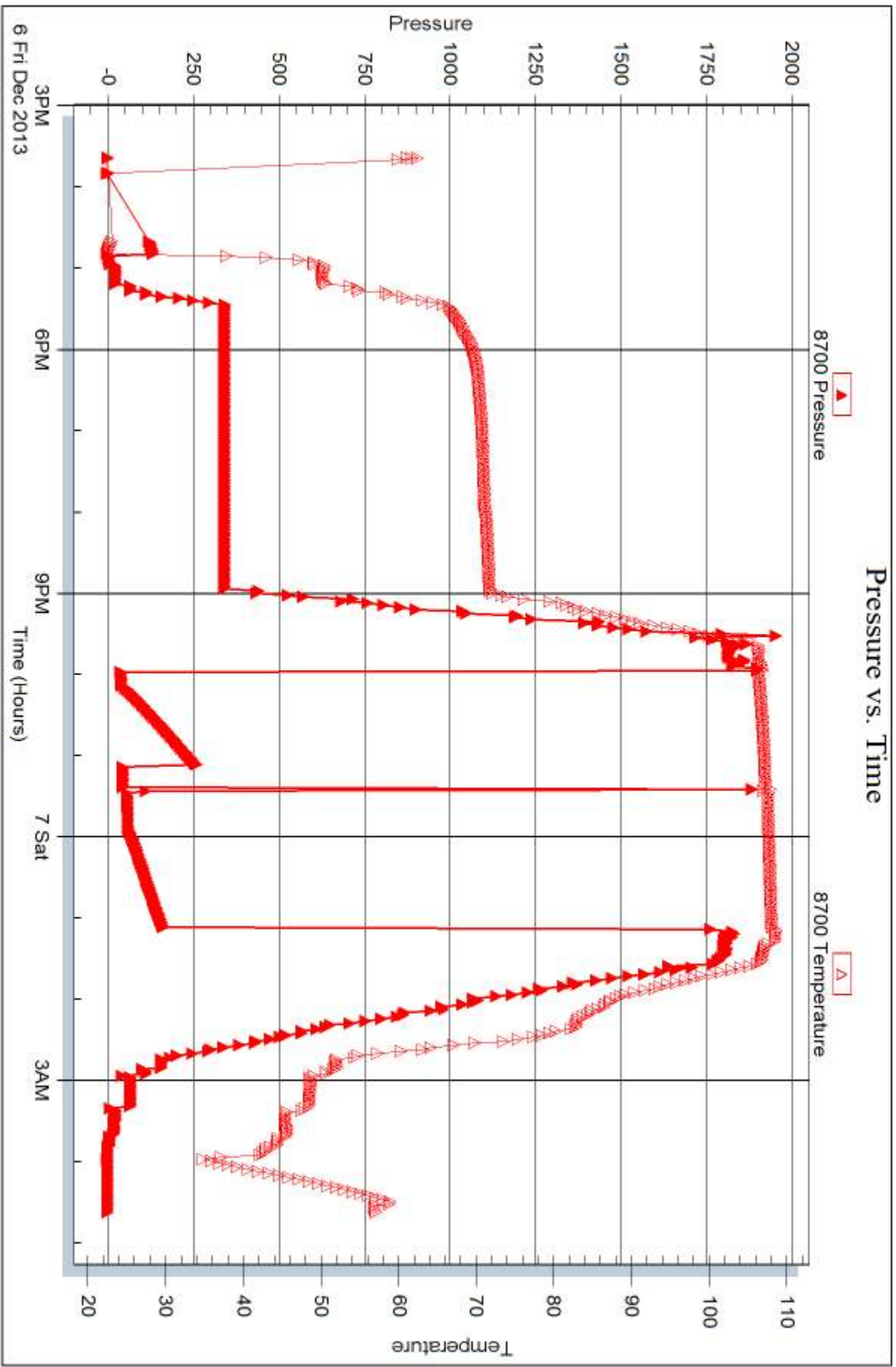
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Younger Energy Co.**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207

ATTN: Keith Reavis

### **Schartz #1-34**

#### **34-21s-15w Pawnee,KS**

Start Date: 2013.12.08 @ 03:37:44

End Date: 2013.12.08 @ 12:07:29

Job Ticket #: 55434                      DST #: 3

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

Printed: 2013.12.11 @ 14:51:21



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Younger Energy Co.  
9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**34-21s-15w Pawnee, KS**

**Schartz #1-34**

Job Ticket: 55434

**DST#: 3**

Test Start: 2013.12.08 @ 03:37:44

## GENERAL INFORMATION:

Formation: **Simpson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened:

Time Test Ended: 12:07:29

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan L

Unit No: 70

**Interval: 3850.00 ft (KB) To 3918.00 ft (KB) (TVD)**

Reference Elevations: 1978.00 ft (KB)

Total Depth: 3918.00 ft (KB) (TVD)

1967.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8700 Outside**

Press@RunDepth: psig @ 3877.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.12.08

End Date: 2013.12.08

Last Calib.: 2013.12.08

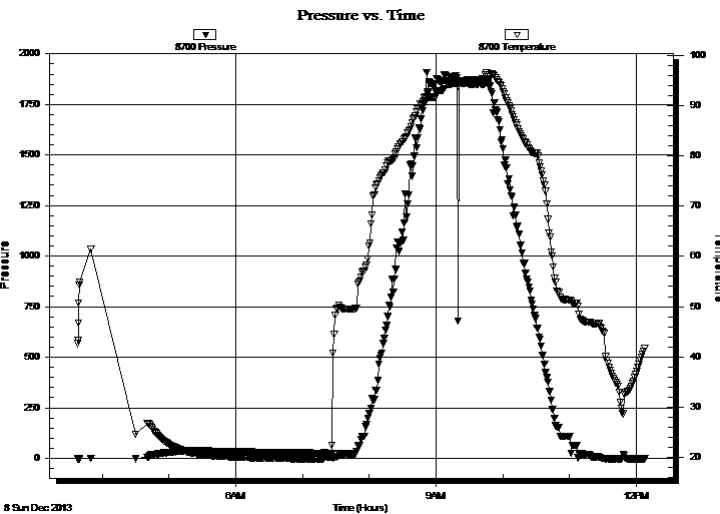
Start Time: 03:37:49

End Time: 12:07:28

Time On Btm:

Time Off Btm:

TEST COMMENT: Packer Failure



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
200.00	M	1.11

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Younger Energy Co.

**34-21s-15w Pawnee, KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55434

**DST#: 3**

Test Start: 2013.12.08 @ 03:37:44

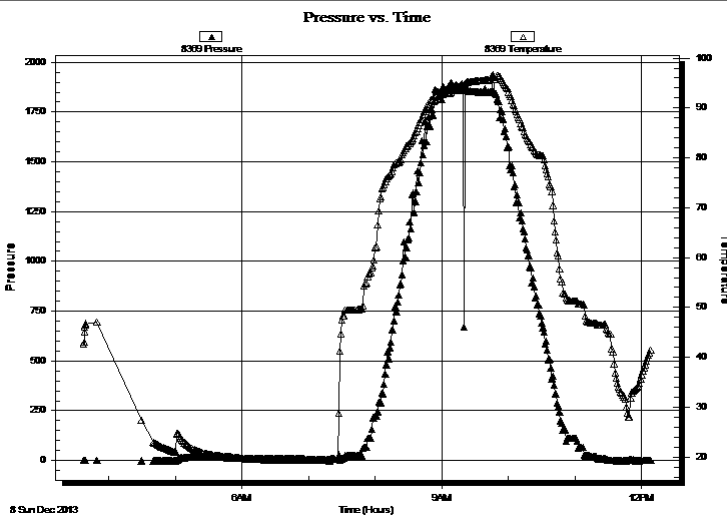
## GENERAL INFORMATION:

Formation: **Simpson**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened:  
Time Test Ended: 12:07:29  
Interval: **3850.00 ft (KB) To 3918.00 ft (KB) (TVD)**  
Total Depth: 3918.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Brannan L  
Unit No: 70  
Reference Elevations: 1978.00 ft (KB)  
1967.00 ft (CF)  
KB to GR/CF: 11.00 ft

**Serial #: 8369** Inside

Press@RunDepth: psig @ 3877.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2013.12.08 End Date: 2013.12.08 Last Calib.: 2013.12.08  
Start Time: 03:37:22 End Time: 12:08:31 Time On Btm:  
Time Off Btm:

TEST COMMENT: Packer Failure



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
200.00	M	1.11

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Younger Energy Co.

**34-21s-15w Pawnee, KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55434

**DST#: 3**

Test Start: 2013.12.08 @ 03:37:44

## Tool Information

Drill Pipe:	Length: 3665.00 ft	Diameter: 3.75 inches	Volume: 50.07 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	3850.00 ft			Final 77000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	95.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3824.00	
Shut In Tool	5.00			3829.00	
Hydraulic tool	5.00			3834.00	
Jars	5.00			3839.00	
Safety Joint	2.00			3841.00	
Packer	5.00			3846.00	27.00 Bottom Of Top Packer
Packer	4.00			3850.00	
Stubb	1.00			3851.00	
Perforations	25.00			3876.00	
Change Over Sub	1.00			3877.00	
Recorder	0.00	8369	Inside	3877.00	
Recorder	0.00	8700	Outside	3877.00	
Drill Pipe	32.00			3909.00	
Change Over Sub	1.00			3910.00	
Perforations	5.00			3915.00	
Bullnose	3.00			3918.00	68.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>95.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Younger Energy Co.

**34-21s-15w Pawnee,KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55434

**DST#: 3**

Test Start: 2013.12.08 @ 03:37:44

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 42.00 sec/qt

Water Loss: 8.79 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 3300.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
200.00	M	1.106

Total Length: 200.00 ft      Total Volume: 1.106 bbl

Num Fluid Samples: 0

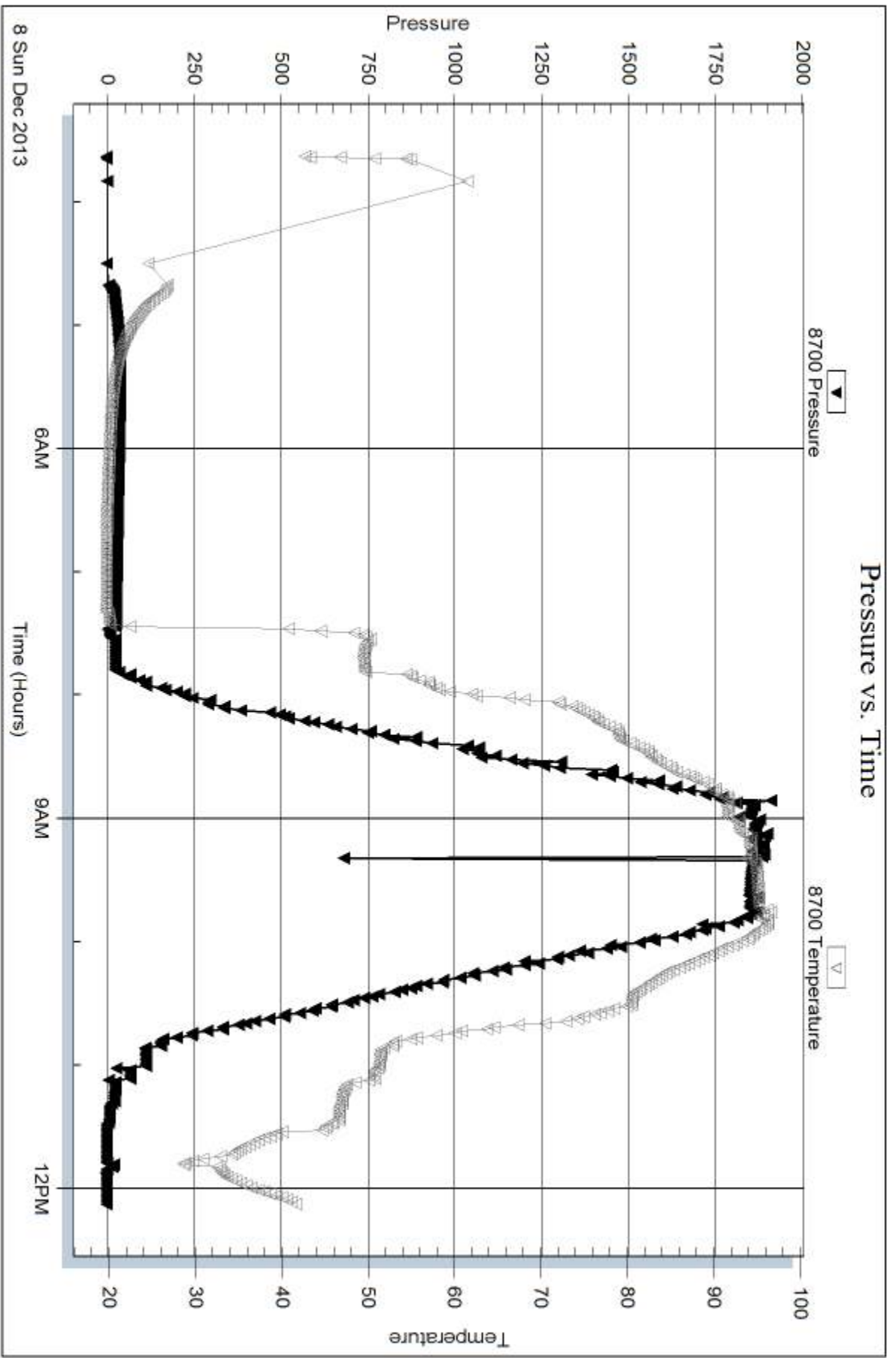
Num Gas Bombs: 0

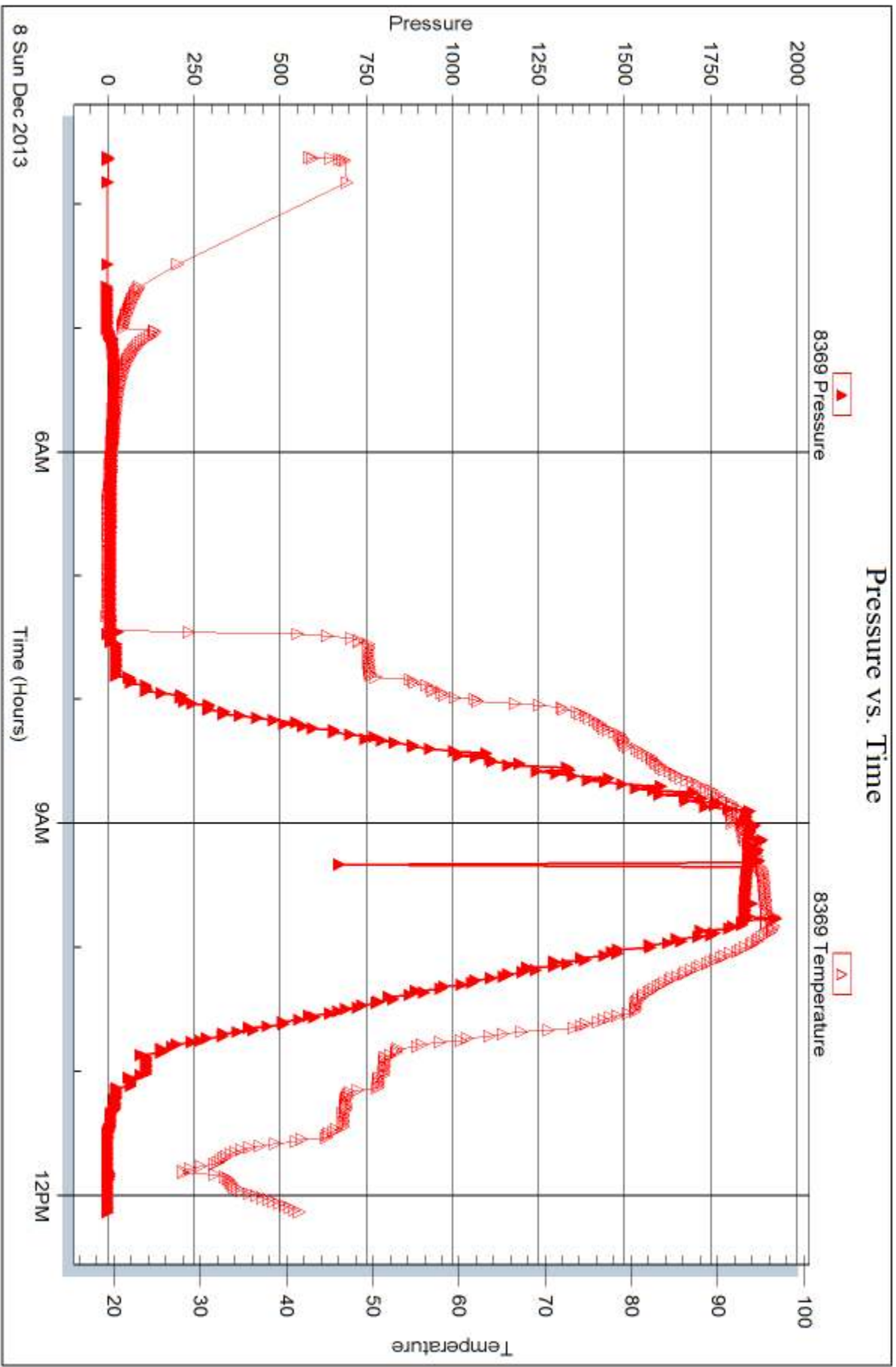
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Younger Energy Co.**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207

ATTN: Keith Reavis

### **Schartz #1-34**

#### **34-21s-15w Pawnee,KS**

Start Date: 2013.12.08 @ 12:31:24

End Date: 2013.12.08 @ 21:12:24

Job Ticket #: 55435                      DST #: 4

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

Printed: 2013.12.11 @ 14:50:48



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Younger Energy Co.

**34-21s-15w Pawnee, KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55435

**DST#: 4**

Test Start: 2013.12.08 @ 12:31:24

## GENERAL INFORMATION:

Formation: **Simpson Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:54:09

Time Test Ended: 21:12:24

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan L

Unit No: 70

**Interval: 3713.00 ft (KB) To 3918.00 ft (KB) (TVD)**

Reference Elevations: 1978.00 ft (KB)

Total Depth: 3918.00 ft (KB) (TVD)

1967.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8700 Outside**

Press@RunDepth: 161.43 psig @ 3716.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.12.08 End Date: 2013.12.08

Last Calib.: 2013.12.08

Start Time: 12:31:29 End Time: 21:12:24

Time On Btm: 2013.12.08 @ 14:52:24

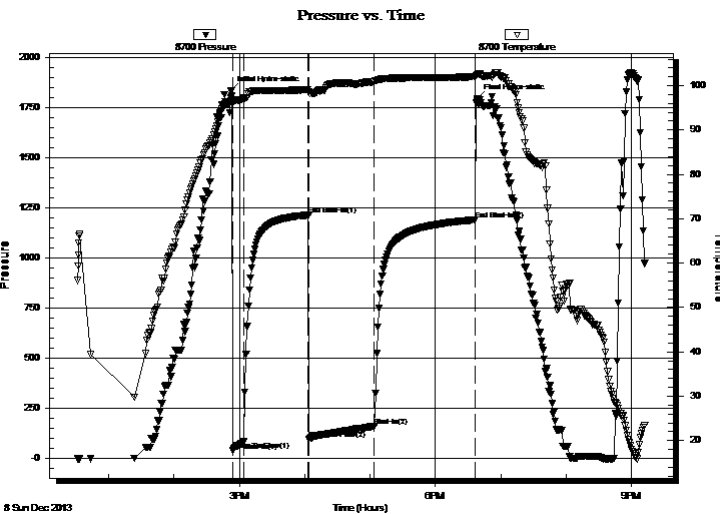
Time Off Btm: 2013.12.08 @ 18:38:39

**TEST COMMENT:** 10- IF- Built very quickly to 4" and then slowly to 6"

60- IS- No blow

60- FF- BOB 35 mins

90- FS- Surface blow died after 26 mins



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1834.63	96.66	Initial Hydro-static
2	40.52	96.14	Open To Flow (1)
12	82.04	97.16	Shut-In(1)
71	1215.02	99.09	End Shut-In(1)
72	93.56	98.60	Open To Flow (2)
132	161.43	100.96	Shut-In(2)
225	1191.38	102.03	End Shut-In(2)
227	1794.40	102.52	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
45.00	MCO, 80%O	0.22
285.00	OCM, 85%M	2.66
0.00	50' GIP	0.00

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Younger Energy Co.

**34-21s-15w Pawnee, KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55435

**DST#: 4**

Test Start: 2013.12.08 @ 12:31:24

## GENERAL INFORMATION:

Formation: **Simpson Sand**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 14:54:09  
Time Test Ended: 21:12:24  
**Interval: 3713.00 ft (KB) To 3918.00 ft (KB) (TVD)**  
Total Depth: 3918.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair

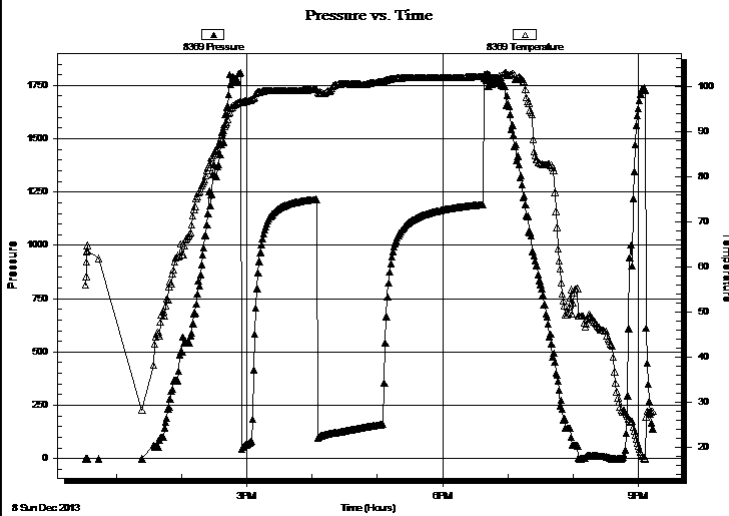
Test Type: Conventional Bottom Hole (Reset)  
Tester: Brannan L  
Unit No: 70  
Reference Elevations: 1978.00 ft (KB)  
1967.00 ft (CF)  
KB to GR/CF: 11.00 ft

## Serial #: 8369

Inside

Press@RunDepth: psig @ 3716.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2013.12.08 End Date: 2013.12.08 Last Calib.: 2013.12.08  
Start Time: 12:31:39 End Time: 21:13:49 Time On Btm:  
Time Off Btm:

TEST COMMENT: 10- IF- Built very quickly to 4" and then slowly to 6"  
60- IS- No blow  
60- FF- BOB 35 mins  
90- FS- Surface blow died after 26 mins



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
45.00	MCO, 80%O	0.22
285.00	OCM, 85%M	2.66
0.00	50' GIP	0.00

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Younger Energy Co.

**34-21s-15w Pawnee, KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55435

**DST#: 4**

Test Start: 2013.12.08 @ 12:31:24

## Tool Information

Drill Pipe:	Length: 3508.00 ft	Diameter: 3.75 inches	Volume: 47.92 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose:	90000.00 lb
			<u>Total Volume:</u>	Tool Chased	2.00 ft
				String Weight: Initial	76000.00 lb
Drill Pipe Above KB:	8.00 ft			Final	76000.00 lb
Depth to Top Packer:	3713.00 ft				
Depth to Bottom Packer:	ft				
Interval between Packers:	205.00 ft				
Tool Length:	232.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3687.00	
Shut In Tool	5.00			3692.00	
Hydraulic tool	5.00			3697.00	
Jars	5.00			3702.00	
Safety Joint	2.00			3704.00	
Packer	5.00			3709.00	27.00 Bottom Of Top Packer
Packer	4.00			3713.00	
Stubb	1.00			3714.00	
Perforations	1.00			3715.00	
Change Over Sub	1.00			3716.00	
Recorder	0.00	8369	Inside	3716.00	
Recorder	0.00	8700	Outside	3716.00	
Drill Pipe	189.00			3905.00	
Change Over Sub	1.00			3906.00	
Perforations	9.00			3915.00	
Bullnose	3.00			3918.00	205.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>232.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Younger Energy Co.

**34-21s-15w Pawnee,KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55435

**DST#: 4**

Test Start: 2013.12.08 @ 12:31:24

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 42.00 sec/qt  
Water Loss: 8.79 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 3300.00 ppm  
Filter Cake: inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: deg API  
Water Salinity: ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	MCO, 80%O	0.221
285.00	OCM, 85%M	2.661
0.00	50' GIP	0.000

Total Length: 330.00 ft      Total Volume: 2.882 bbl

Num Fluid Samples: 0

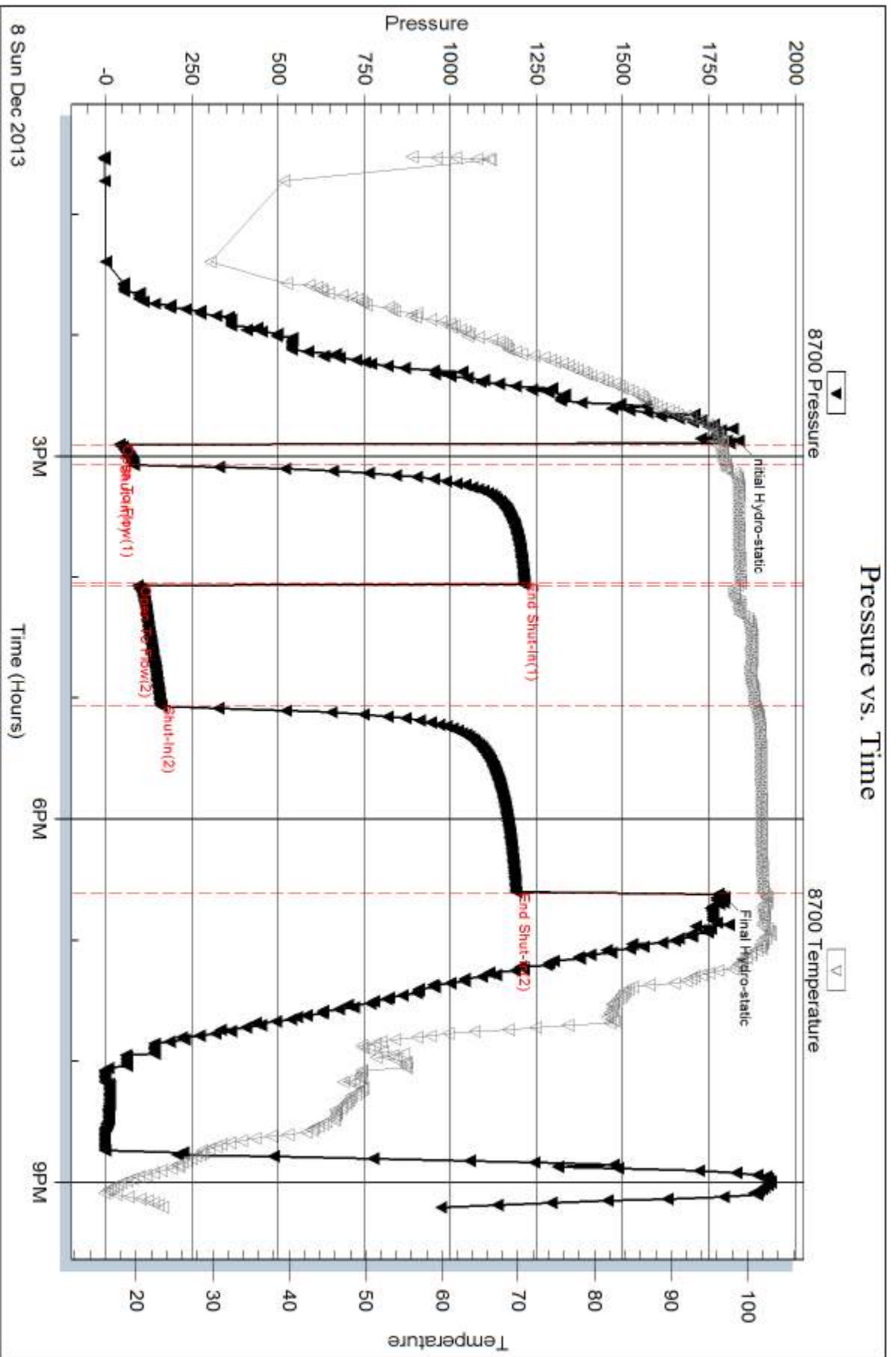
Num Gas Bombs: 0

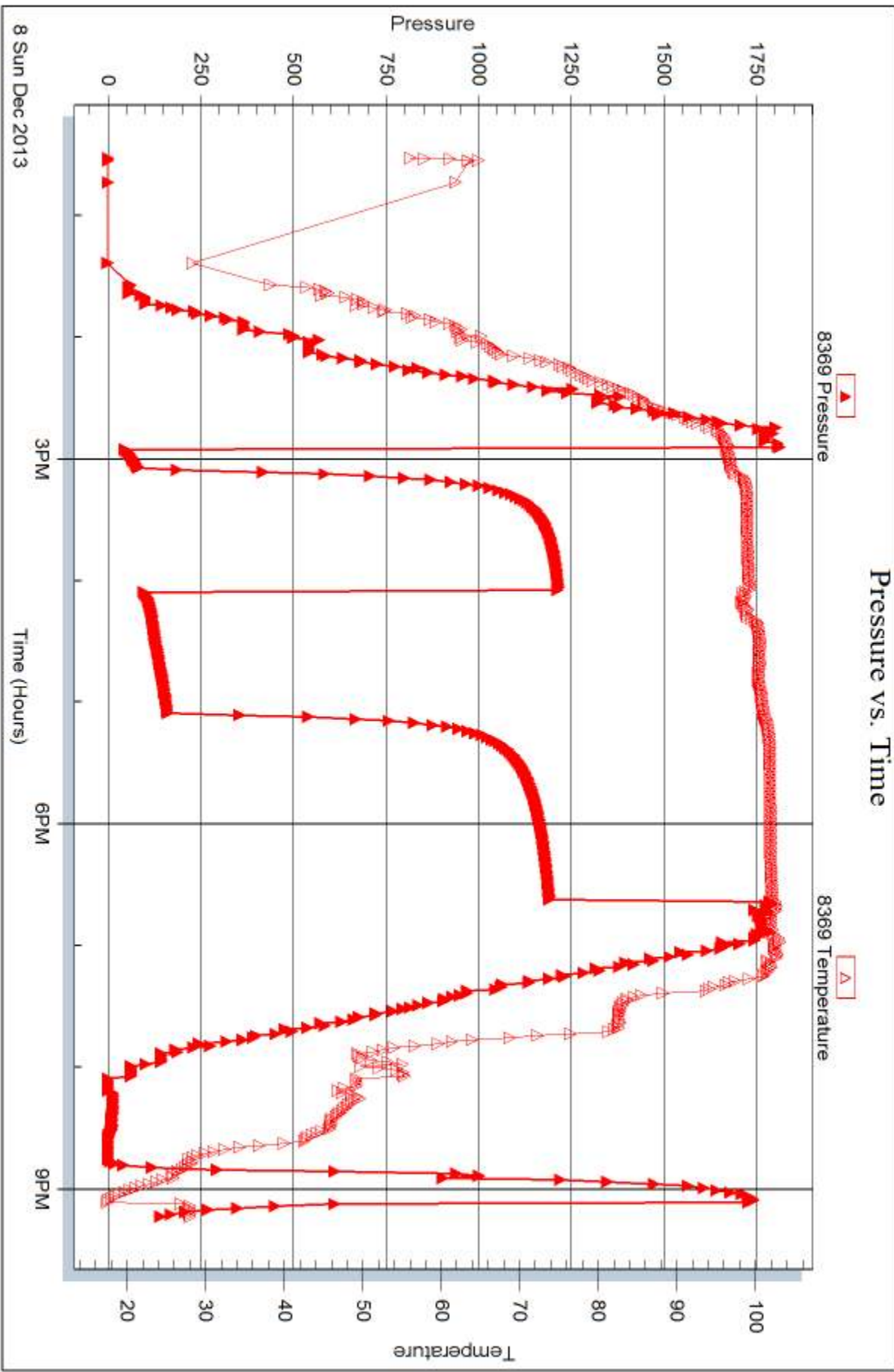
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Younger Energy Co.**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207

ATTN: Keith Reavis

### **Schartz #1-34**

#### **34-21s-15w Pawnee,KS**

Start Date: 2013.12.09 @ 13:02:44

End Date: 2013.12.10 @ 00:15:59

Job Ticket #: 55436                      DST #: 5

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

Printed: 2013.12.11 @ 14:50:04



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Younger Energy Co.

**34-21s-15w Pawnee, KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55436

**DST#: 5**

Test Start: 2013.12.09 @ 13:02:44

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened:

Time Test Ended: 00:15:59

**Interval: 3921.00 ft (KB) To 3926.00 ft (KB) (TVD)**

Total Depth: 3926.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan L

Unit No: 70

Reference Elevations: 1978.00 ft (KB)

1967.00 ft (CF)

KB to GR/CF: 11.00 ft

**Serial #: 8369**

**Inside**

Press@RunDepth: psig @ 3923.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.12.09 End Date: 2013.12.10

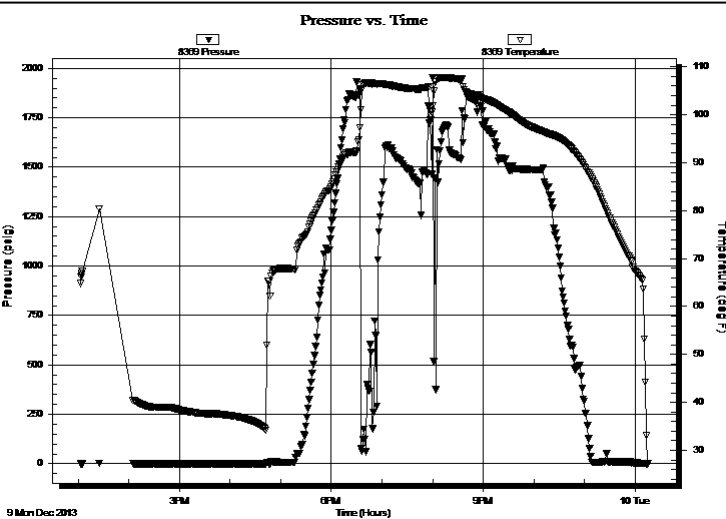
Last Calib.: 2013.12.10

Start Time: 13:02:49 End Time: 00:15:59

Time On Btm:

Time Off Btm:

**TEST COMMENT:** 10- IF- Built to 1/2"  
60- IS- No blow  
35- FF- No blow @ 10 mins Flushed tool No blow  
15- FS- No blow



## PRESSURE SUMMARY

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

## Recovery

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

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Younger Energy Co.

**34-21s-15w Pawnee, KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55436

**DST#: 5**

Test Start: 2013.12.09 @ 13:02:44

## Tool Information

Drill Pipe:	Length: 3728.00 ft	Diameter: 3.75 inches	Volume: 50.93 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume:</u>	Tool Chased	3.00 ft
			- bbl	String Weight: Initial	74000.00 lb
Drill Pipe Above KB:	15.00 ft			Final	74000.00 lb
Depth to Top Packer:	3921.00 ft				
Depth to Bottom Packer:	ft				
Interval between Packers:	5.00 ft				
Tool Length:	27.00 ft				
Number of Packers:	1	Diameter:	6.75 inches		
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3900.00	
Shut In Tool	5.00			3905.00	
Hydraulic tool	5.00			3910.00	
Jars	5.00			3915.00	
Safety Joint	2.00			3917.00	
Packer	4.00			3921.00	22.00 Bottom Of Top Packer
Stubb	1.00			3922.00	
Perforations	1.00			3923.00	
Recorder	0.00	8369	Inside	3923.00	
Recorder	0.00	8700	Outside	3923.00	
Bullnose	3.00			3926.00	5.00 Anchor Tool

**Total Tool Length: 27.00**





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Younger Energy Co.

**34-21s-15w Pawnee,KS**

9415 E. Harry St.  
Ste. 403 Bldg. 400  
Wichita, KS 67207  
ATTN: Keith Reavis

**Schartz #1-34**

Job Ticket: 55436

**DST#: 5**

Test Start: 2013.12.09 @ 13:02:44

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 47.00 sec/qt

Water Loss: 8.39 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 4500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	M	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbl

Num Fluid Samples: 0

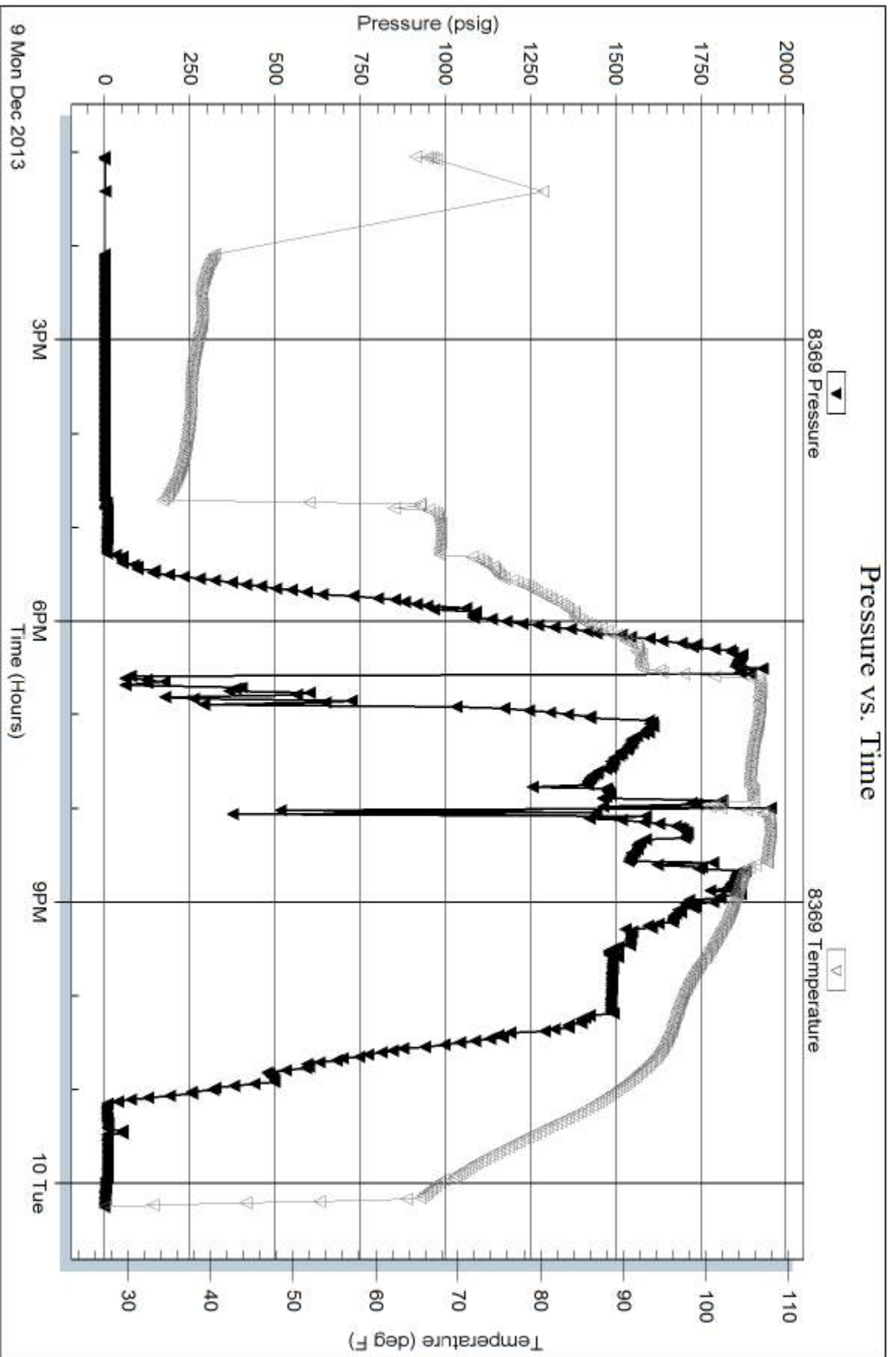
Num Gas Bombs: 0

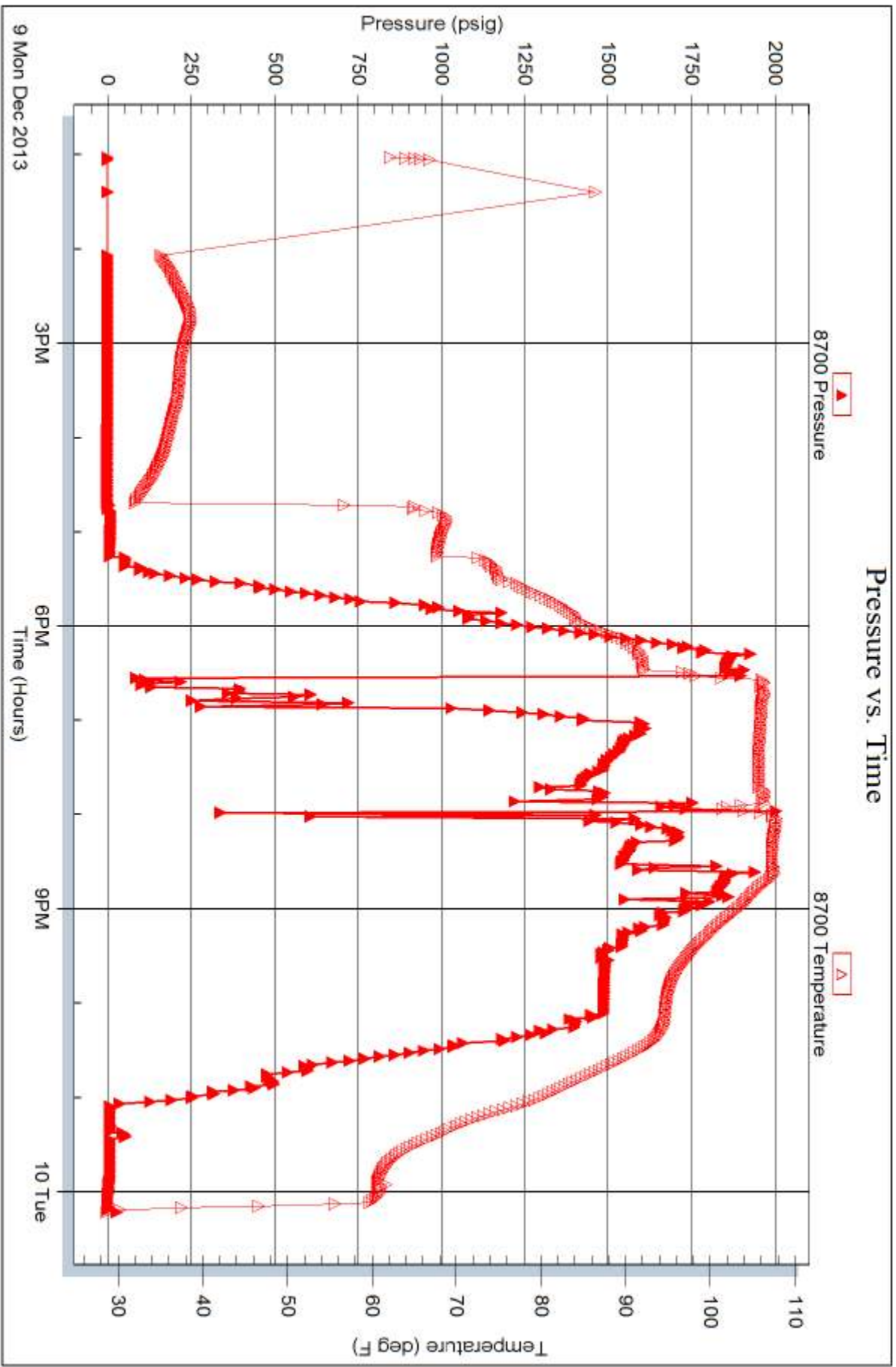
Serial #:

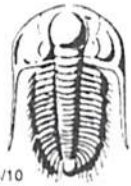
Laboratory Name:

Laboratory Location:

Recovery Comments:







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 55432

Well Name & No. Schartz #1-34 Test No. 1 Date 12/6/13  
 Company Younger Energy Co. Elevation 1978 KB 1967 GL  
 Address 9415 E. Harry St. Ste. 403 Bldg 400 Wichita, KS 67207  
 Co. Rep / Geo. Keith Reavis Rig Bruke #10  
 Location: Sec. 34 Twp. 21s Rge. 15w Co. Pawnee State KS

Interval Tested 3824-3872 Zone Tested Viola  
 Anchor Length 48' Drill Pipe Run 3631 Mud Wt. 9.2  
 Top Packer Depth 3819 Drill Collars Run 186 Vis 48  
 Bottom Packer Depth 3824 Wt. Pipe Run — WL 8.0  
 Total Depth 3872 Chlorides 4,700 ppm System LCM 3#

Blow Description \_\_\_\_\_  
Packer Failure

Rec	Feet of	%gas	%oil	%water	%mud
<u>200</u>	<u>M</u>				
_____	_____				
_____	_____				
_____	_____				
_____	_____				

Rec Total 200 BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic \_\_\_\_\_  Test 950 T-On Location 0615  
 (B) First Initial Flow \_\_\_\_\_  Jars 250 T-Started 0635  
 (C) First Final Flow \_\_\_\_\_  Safety Joint 75 T-Open 1255  
 (D) Initial Shut-In \_\_\_\_\_  Circ Sub \_\_\_\_\_ T-Pulled 1302  
 (E) Second Initial Flow \_\_\_\_\_  Hourly Standby \_\_\_\_\_ T-Out 1517  
 (F) Second Final Flow \_\_\_\_\_  Mileage 90rt 146 RT 139.50 Comments \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic \_\_\_\_\_  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open \_\_\_\_\_  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Initial Shut-In \_\_\_\_\_  Day Standby \_\_\_\_\_ Total 1414.50  
 Final Flow \_\_\_\_\_  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In \_\_\_\_\_ Sub Total 1414.50

Approved By \_\_\_\_\_ Our Representative Brannan L

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. 55433

Well Name & No. Schartz #1-34 Test No. 2 Date 12/6/13  
 Company Younger Energy Co Elevation 1978 KB 1967 GL  
 Address 9415 E. Harry St. Ste. 403 Bldg 400 Wichita, KS 67207  
 Co. Rep / Geo. Kath Reavis Rig Duke #10  
 Location: Sec. 34 Twp. 21s Rge. 15w Co. Pawnee State K.S

Interval Tested 3714-3872 Zone Tested Viola  
 Anchor Length 158' Drill Pipe Run 3508 Mud Wt. 9.2  
 Top Packer Depth 3709 Drill Collars Run 186 Vis 48  
 Bottom Packer Depth 3714 Wt. Pipe Run --- WL 8.0  
 Total Depth 3872 Chlorides 4,700 ppm System LCM 3#

Blow Description IF - 1/2"  
ISI - No blow  
FF - No blow flushed tool after 15 mins built to 1/4"  
FSI - No blow

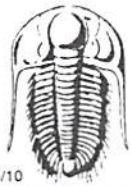
Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>M</u>				

Rec Total 30 BHT 108° Gravity --- API RW --- @ --- °F Chlorides --- ppm

(A) Initial Hydrostatic <u>1895</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1517</u>
(B) First Initial Flow <u>37</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1538</u>
(C) First Final Flow <u>41</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>2159</u>
(D) Initial Shut-In <u>259</u>	<input type="checkbox"/> Circ Sub <u>---</u>	T-Pulled <u>0109</u>
(E) Second Initial Flow <u>43</u>	<input checked="" type="checkbox"/> Hourly Standby <u>4h 400</u>	T-Out <u>0440</u>
(F) Second Final Flow <u>60</u>	<input checked="" type="checkbox"/> Mileage <u>146 RT</u>	Comments <u>---</u>
(G) Final Shut-In <u>163</u>	<input type="checkbox"/> Sampler <u>---</u>	
(H) Final Hydrostatic <u>1849</u>	<input type="checkbox"/> Straddle <u>---</u>	<input type="checkbox"/> Ruined Shale Packer <u>---</u>
Initial Open <u>10</u>	<input type="checkbox"/> Shale Packer <u>---</u>	<input type="checkbox"/> Ruined Packer <u>---</u>
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer <u>---</u>	<input type="checkbox"/> Extra Copies <u>---</u>
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder <u>---</u>	Sub Total <u>0</u>
Final Shut-In <u>75</u>	<input type="checkbox"/> Day Standby <u>---</u>	Total <u>1875</u>
	<input type="checkbox"/> Accessibility <u>---</u>	MP/DST Disc't <u>---</u>
	Sub Total <u>1875</u>	

Approved By \_\_\_\_\_ Our Representative Brannan L

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. 55434

Well Name & No. Schantz #1-34 Test No. 3 Date 12/8/13  
 Company Younger Energy Co. Elevation 1978 KB 1967 GL  
 Address 9415 E. Harry St. Ste. 403 Bldg. 400 Wichita, KS 67207  
 Co. Rep / Geo. Kath Reavis Rig Duke #10  
 Location: Sec. 34 Twp. 21s Rge. 15w Co. Pawnee State KS

Interval Tested 3850-3918 Zone Tested Simpson Sand  
 Anchor Length 68' Drill Pipe Run 3665 Mud Wt. 9.0  
 Top Packer Depth 3845 Drill Collars Run 186 Vis 42  
 Bottom Packer Depth 3850 Wt. Pipe Run --- WL 8.8  
 Total Depth 3918 Chlorides 3,300 ppm System LCM 1#

Blow Description PACKER FAILURE

Rec	Feet of	%gas	%oil	%water	%mud
<u>200</u>	<u>M</u>				

Rec Total 200 BHT --- Gravity --- API RW --- @ --- °F Chlorides --- ppm

(A) Initial Hydrostatic X Test 950 T-On Location 0325  
 (B) First Initial Flow X Jars 250 T-Started 0337  
 (C) First Final Flow X Safety Joint 75 T-Open 0913  
 (D) Initial Shut-In X Circ Sub --- T-Pulled 0938  
 (E) Second Initial Flow X Hourly Standby --- T-Out 1209  
 (F) Second Final Flow X Mileage 146 RT 139.50  
 (G) Final Shut-In X Sampler ---  
 (H) Final Hydrostatic X Straddle --- Ruined Shale Packer ---  
 Shale Packer --- Ruined Packer ---  
 Extra Packer --- Extra Copies ---  
 Extra Recorder --- Sub Total 0  
 Day Standby --- Total 1414.50  
 Accessibility --- MP/DST Disc't ---

Initial Open 10  
 Initial Shut-In X  
 Final Flow X  
 Final Shut-In X

Sub Total 1414.50

Approved By \_\_\_\_\_ Our Representative Brannon L

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. 55435

Well Name & No. Schartz #1-34 Test No. 4 Date 12/8/13  
 Company Younger Energy Co. Elevation 1978 KB 1967 GL  
 Address 1415 E Harry St. Ste. 403 Bldg. 400 Wichita, KS 67207  
 Co. Rep / Geo. Keith Reavis Rig Duke #10  
 Location: Sec. 34 Twp. 21s Rge. 15w Co. Pawnee State KS

Interval Tested 3713-3918 Zone Tested Simpson Sand  
 Anchor Length 205' Drill Pipe Run 3508 Mud Wt. 9.0  
 Top Packer Depth 3708 Drill Collars Run 186 Vis 42  
 Bottom Packer Depth 3713 Wt. Pipe Run \_\_\_\_\_ WL 8.8  
 Total Depth 3918 Chlorides 3300 ppm System LCM 1#

Blow Description IF - Built very quickly to 4" then slowly to 6"  
ISI - No blow  
FF - BOB 35 mins  
FSI - Surface blow died after 20 mins

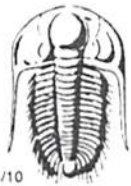
Rec	Feet of	%gas	%oil	%water	%mud
<u>45</u>	<u>MCO</u>	<u>30</u>		<u>20</u>	
<u>285</u>	<u>OCM</u>	<u>15</u>		<u>85</u>	
	<u>50' GID</u>				

Rec Total 330' BHT 102° Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>1835</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1209</u>
(B) First Initial Flow <u>41</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1231</u>
(C) First Final Flow <u>82</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1454</u>
(D) Initial Shut-In <u>1215</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>1834</u>
(E) Second Initial Flow <u>94</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>2113</u>
(F) Second Final Flow <u>161</u>	<input checked="" type="checkbox"/> Mileage <u>146 RT</u>	Comments _____
(G) Final Shut-In <u>1191</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1794</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>10</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Flow <u>60</u>	<input type="checkbox"/> Day Standby _____	Total <u>1475</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1475</u>	

Approved By \_\_\_\_\_ Our Representative Brannan L

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. 55436

Well Name & No. Schartz #1-34 Test No. 5 Date 12/9/13  
 Company Younger Energy Co. Elevation 1978 KB 1967 GL  
 Address 9415 E. Harry St. Ste. 403 Bldg. 400 Wichita, KS 67207  
 Co. Rep / Geo. Keith Beavis Rig Duke #10  
 Location: Sec. 34 Twp. 21s Rge. 15w Co. Pawnee State KS

Interval Tested 3921-3926 Zone Tested Arbuckle  
 Anchor Length 5' Drill Pipe Run 3728 Mud Wt. 9.0  
 Top Packer Depth \_\_\_\_\_ Drill Collars Run 186 Vis 47  
 Bottom Packer Depth 3921 Wt. Pipe Run \_\_\_\_\_ WL 8.4  
 Total Depth 3926 Chlorides 4,500 ppm System LCM 1#  
 Blow Description IF - Built to 1/2"  
ISI - No blow  
FF - No blow flushed tool No blow  
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>M</u>				
_____	_____				
_____	_____				
_____	_____				
_____	_____				

Rec Total 10' BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic \_\_\_\_\_  Test 950 T-On Location 1230  
 (B) First Initial Flow \_\_\_\_\_  Jars 250 T-Started 1302  
 (C) First Final Flow \_\_\_\_\_  Safety Joint 75 T-Open 1833  
 (D) Initial Shut-In Plugged  Circ Sub \_\_\_\_\_ T-Pulled 2033  
 (E) Second Initial Flow tool  Hourly Standby \_\_\_\_\_ T-Out 0015  
 (F) Second Final Flow \_\_\_\_\_  Mileage 146 RT 139.50 Comments \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic \_\_\_\_\_  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 10  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Initial Shut-In 60  Day Standby \_\_\_\_\_ Total 1414.50  
 Final Flow 35  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In 15 Sub Total 1414.50

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