



DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt, Inc.**

P.O. Box 47
Great Bend KS 67530

ATTN: Brad Rine

Cooper #1-12

12-7s-32w Thomas,KS

Start Date: 2014.10.25 @ 23:25:00

End Date: 2014.10.26 @ 04:16:30

Job Ticket #: 58341 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.10.31 @ 11:58:38



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Carmen Schmitt, Inc.
P.O. Box 47
Great Bend KS 67530
ATTN: Brad Rine

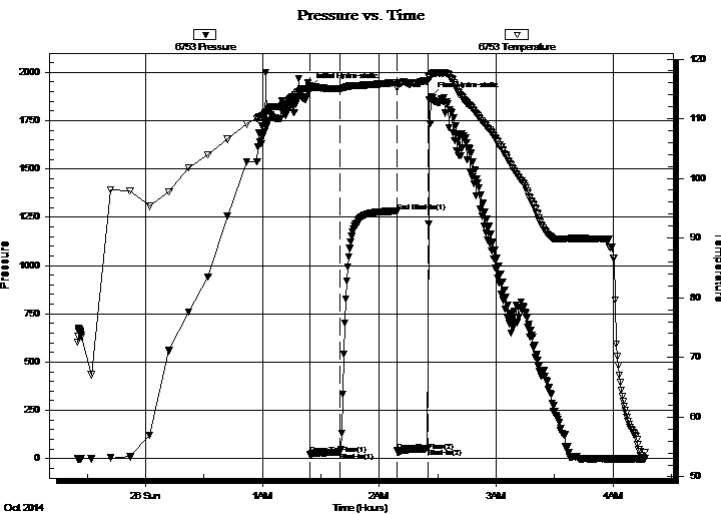
12-7s-32w Thomas,KS
Cooper #1-12
Job Ticket: 58341 **DST#: 1**
Test Start: 2014.10.25 @ 23:25:00

GENERAL INFORMATION:

Formation: **Toronto**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:24:30
Time Test Ended: 04:16:30
Interval: **3943.00 ft (KB) To 3985.00 ft (KB) (TVD)**
Total Depth: 3985.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Initial)
Tester: Royal Fisher
Unit No: 54
Reference Elevations: 3007.00 ft (KB)
2996.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6753 Inside
Press@RunDepth: 33.22 psig @ 3944.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.10.25 End Date: 2014.10.26 Last Calib.: 2014.10.26
Start Time: 23:25:05 End Time: 04:16:29 Time On Btm: 2014.10.26 @ 01:24:15
Time Off Btm: 2014.10.26 @ 02:26:30

TEST COMMENT: 15 - IF - Surface blow slowly built to 1/2"
30 - ISI - No Return
15 - FF - No Surface blow , pulled tool after final open



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1923.70	115.51	Initial Hydro-static
1	21.29	114.96	Open To Flow (1)
16	33.22	115.03	Shut-In(1)
45	1277.59	116.07	End Shut-In(1)
45	39.92	115.25	Open To Flow (2)
61	51.91	116.22	Shut-In(2)
63	1876.39	117.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	OSM - 100M - Oil Spots	0.07

Gas Rates

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



**TRILOBITE
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DRILL STEM TEST REPORT

Carmen Schmitt, Inc.
P.O. Box 47
Great Bend KS 67530
ATTN: Brad Rine

12-7s-32w Thomas,KS
Cooper #1-12
Job Ticket: 58341 **DST#: 1**
Test Start: 2014.10.25 @ 23:25:00

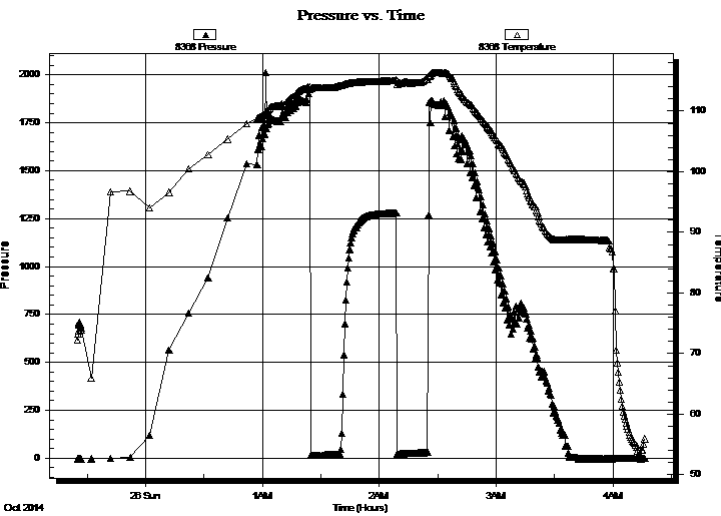
GENERAL INFORMATION:

Formation: **Toronto**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:24:30
Time Test Ended: 04:16:30
Interval: **3943.00 ft (KB) To 3985.00 ft (KB) (TVD)**
Total Depth: 3985.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Initial)
Tester: Royal Fisher
Unit No: 54
Reference Elevations: 3007.00 ft (KB)
2996.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8368

Press@RunDepth: psig @ ft (KB) Capacity: 8000.00 psig
Start Date: 2014.10.25 End Date: 2014.10.26 Last Calib.: 2014.10.26
Start Time: 23:25:05 End Time: 04:16:29 Time On Btm:
Time Off Btm:

TEST COMMENT: 15 - IF - Surface blow slowly built to 1/2"
30 - ISI - No Return
15 - FF - No Surface blow , pulled tool after final open



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
15.00	OSM - 100M - Oil Spots	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt, Inc.

12-7s-32w Thomas,KS

P.O. Box 47
Great Bend KS 67530

Cooper #1-12

Job Ticket: 58341

DST#: 1

ATTN: Brad Rine

Test Start: 2014.10.25 @ 23:25:00

Tool Information

Drill Pipe:	Length: 3693.77 ft	Diameter: 3.80 inches	Volume: 51.81 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: 233.34 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 78000.00 lb
			<u>Total Volume: 52.96 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.11 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	3943.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	69.00 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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Shut In Tool	5.00			3921.00	
Hydraulic tool	5.00			3926.00	
Jars	5.00			3931.00	
Safety Joint	3.00			3934.00	
Packer	4.00			3938.00	27.00 Bottom Of Top Packer
Packer	5.00			3943.00	
Stubb	1.00			3944.00	
Recorder	0.00	6753	Inside	3944.00	
Recorder	0.00	8368	Outside	3944.00	
Perforations	37.00			3981.00	
Bullnose	4.00			3985.00	42.00 Bottom Packers & Anchor

Total Tool Length: 69.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt, Inc.

12-7s-32w Thomas,KS

P.O. Box 47
Great Bend KS 67530

Cooper #1-12

Job Ticket: 58341

DST#: 1

ATTN: Brad Rine

Test Start: 2014.10.25 @ 23:25:00

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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	OSM - 100M - Oil Spots	0.074

Total Length: 15.00 ft Total Volume: 0.074 bbl

Num Fluid Samples: 0

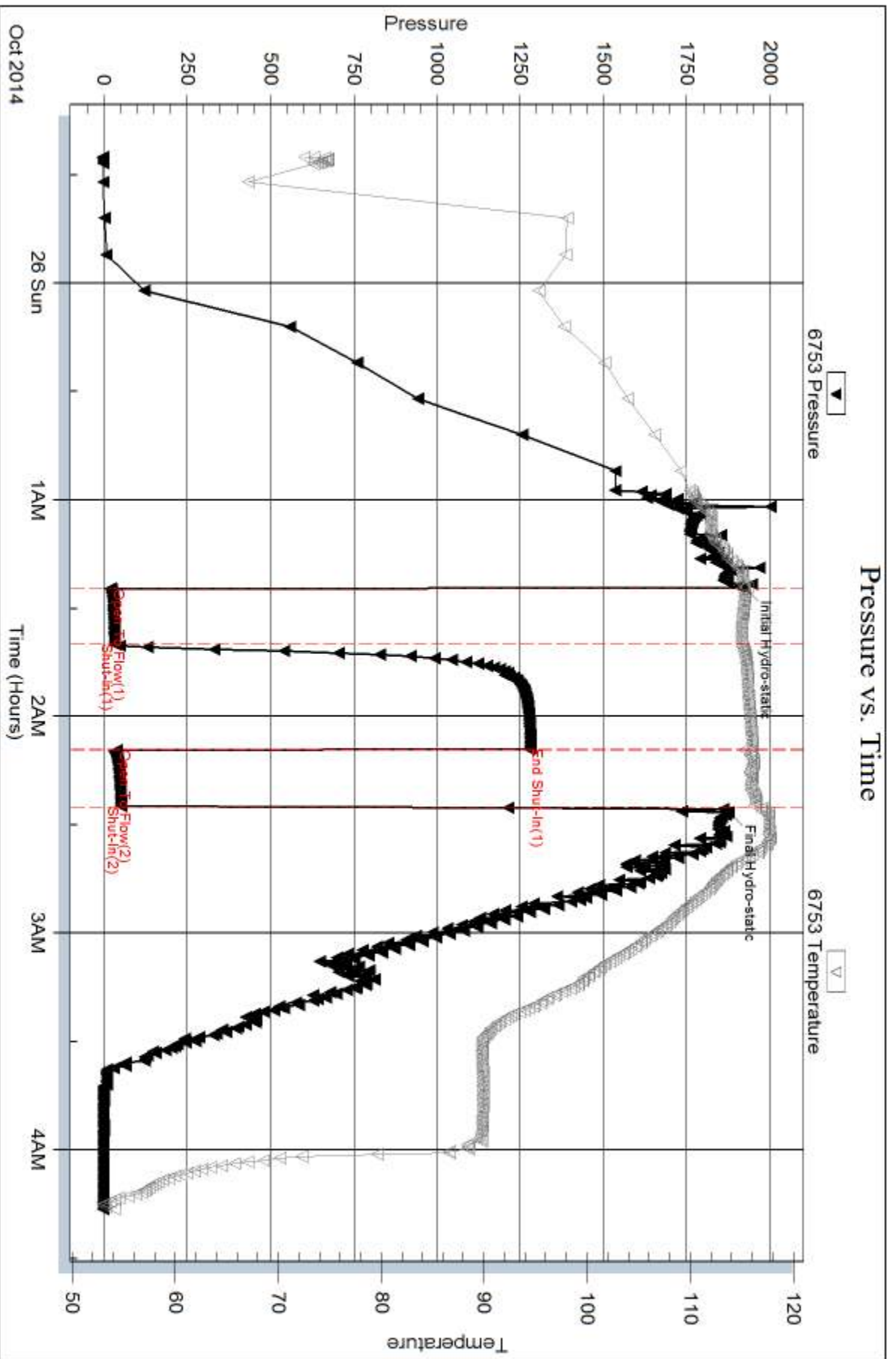
Num Gas Bombs: 0

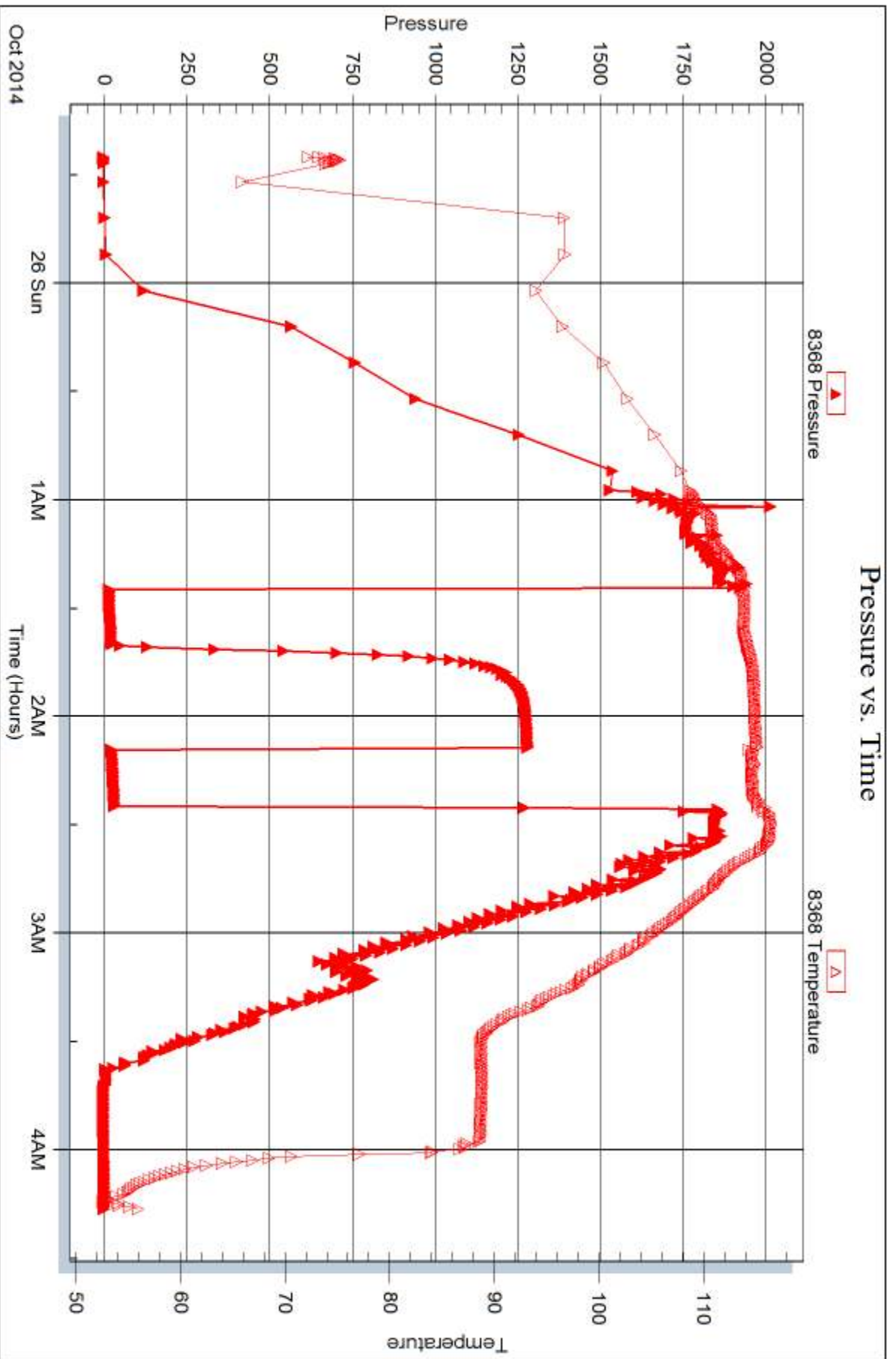
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt, Inc.**

P.O. Box 47
Great Bend KS 67530

ATTN: Brad Rine

Cooper #1-12

12-7s-32w Thomas,KS

Start Date: 2014.10.26 @ 10:29:00

End Date: 2014.10.26 @ 15:31:45

Job Ticket #: 58342 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.10.31 @ 11:58:17



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Carmen Schmitt, Inc.
 P.O. Box 47
 Great Bend KS 67530
 ATTN: Brad Rine

12-7s-32w Thomas,KS
Cooper #1-12
 Job Ticket: 58342 **DST#: 2**
 Test Start: 2014.10.26 @ 10:29:00

GENERAL INFORMATION:

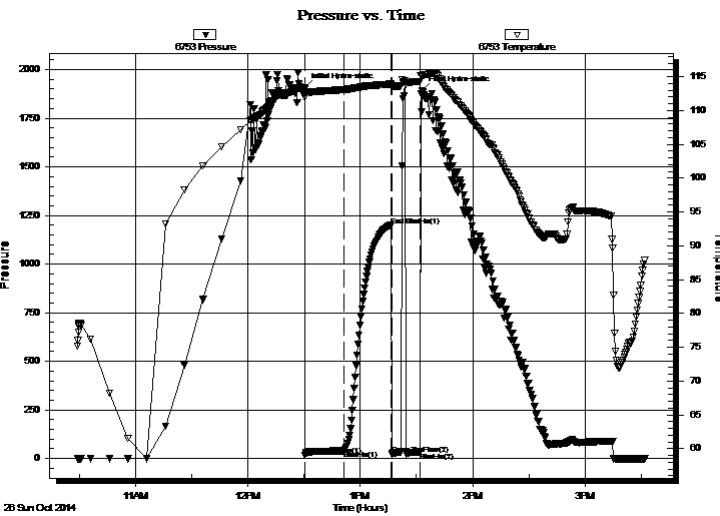
Formation: **LKC 'A'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:30:30
 Time Test Ended: 15:31:45
Interval: 3978.00 ft (KB) To 4000.00 ft (KB) (TVD)
 Total Depth: 4000.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Royal Fisher
 Unit No: #54
 Reference Elevations: 3007.00 ft (KB)
 2996.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 6753

Inside

Press@RunDepth: 40.00 psig @ 3979.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.10.26 End Date: 2014.10.26 Last Calib.: 2014.10.26
 Start Time: 10:29:05 End Time: 15:31:44 Time On Btm: 2014.10.26 @ 12:30:15
 Time Off Btm: 2014.10.26 @ 13:33:00

TEST COMMENT: 15 - IF - Surface started w ith a weak blow then died in 7 min.
 30 - ISI - No Return
 15 - FF - No Surface blow , flushed tool 5 mins. in, still no blow , then pulled tool after final open



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1906.57	113.18	Initial Hydro-static
1	15.61	111.92	Open To Flow (1)
21	40.00	113.09	Shut-In(1)
46	1197.86	113.91	End Shut-In(1)
47	21.99	113.55	Open To Flow (2)
62	34.49	114.32	Shut-In(2)
63	1890.89	115.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud - 100M	0.02

Gas Rates

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



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DRILL STEM TEST REPORT

Carmen Schmitt, Inc.
 P.O. Box 47
 Great Bend KS 67530
 ATTN: Brad Rine

12-7s-32w Thomas,KS
Cooper #1-12
 Job Ticket: 58342 **DST#: 2**
 Test Start: 2014.10.26 @ 10:29:00

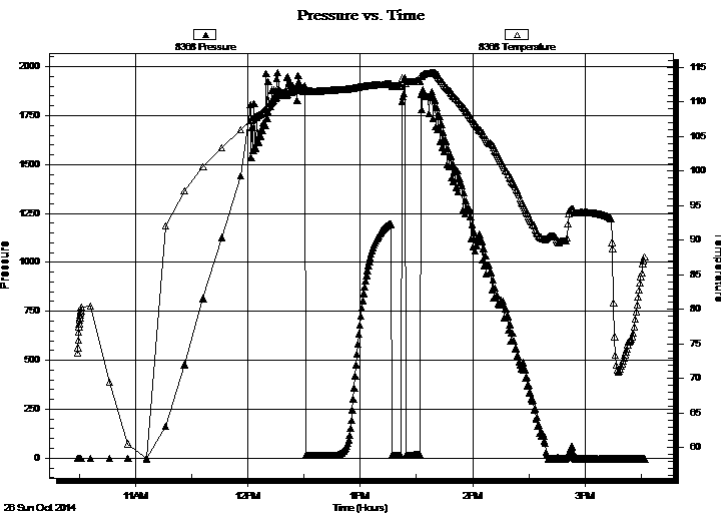
GENERAL INFORMATION:

Formation: **LKC 'A'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:30:30
 Time Test Ended: 15:31:45
Interval: 3978.00 ft (KB) To 4000.00 ft (KB) (TVD)
 Total Depth: 4000.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Royal Fisher
 Unit No: #54
 Reference Elevations: 3007.00 ft (KB)
 2996.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8368

Press@RunDepth: psig @ ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.10.26 End Date: 2014.10.26 Last Calib.: 2014.10.26
 Start Time: 10:29:05 End Time: 15:31:44 Time On Btm:
 Time Off Btm:

TEST COMMENT: 15 - IF - Surface started w ith a weak blow then died in 7 min.
 30 - ISI - No Return
 15 - FF - No Surface blow , flushed tool 5 mins. in, still no blow , then pulled tool after final open



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud - 100M	0.02

Gas Rates

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



**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt, Inc.

12-7s-32w Thomas,KS

P.O. Box 47
Great Bend KS 67530

Cooper #1-12

Job Ticket: 58342

DST#: 2

ATTN: Brad Rine

Test Start: 2014.10.26 @ 10:29:00

Tool Information

Drill Pipe:	Length: 3725.30 ft	Diameter: 3.80 inches	Volume: 52.26 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: 233.34 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 53.41 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.64 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	3978.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	49.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3956.00	
Hydraulic tool	5.00			3961.00	
Jars	5.00			3966.00	
Safety Joint	3.00			3969.00	
Packer	4.00			3973.00	27.00 Bottom Of Top Packer
Packer	5.00			3978.00	
Stubb	1.00			3979.00	
Recorder	0.00	6753	Inside	3979.00	
Recorder	0.00	8368	Outside	3979.00	
Perforations	17.00			3996.00	
Bullnose	4.00			4000.00	22.00 Bottom Packers & Anchor

Total Tool Length: 49.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt, Inc.

12-7s-32w Thomas,KS

P.O. Box 47
Great Bend KS 67530

Cooper #1-12

Job Ticket: 58342

DST#: 2

ATTN: Brad Rine

Test Start: 2014.10.26 @ 10:29:00

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 560.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud - 100M	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

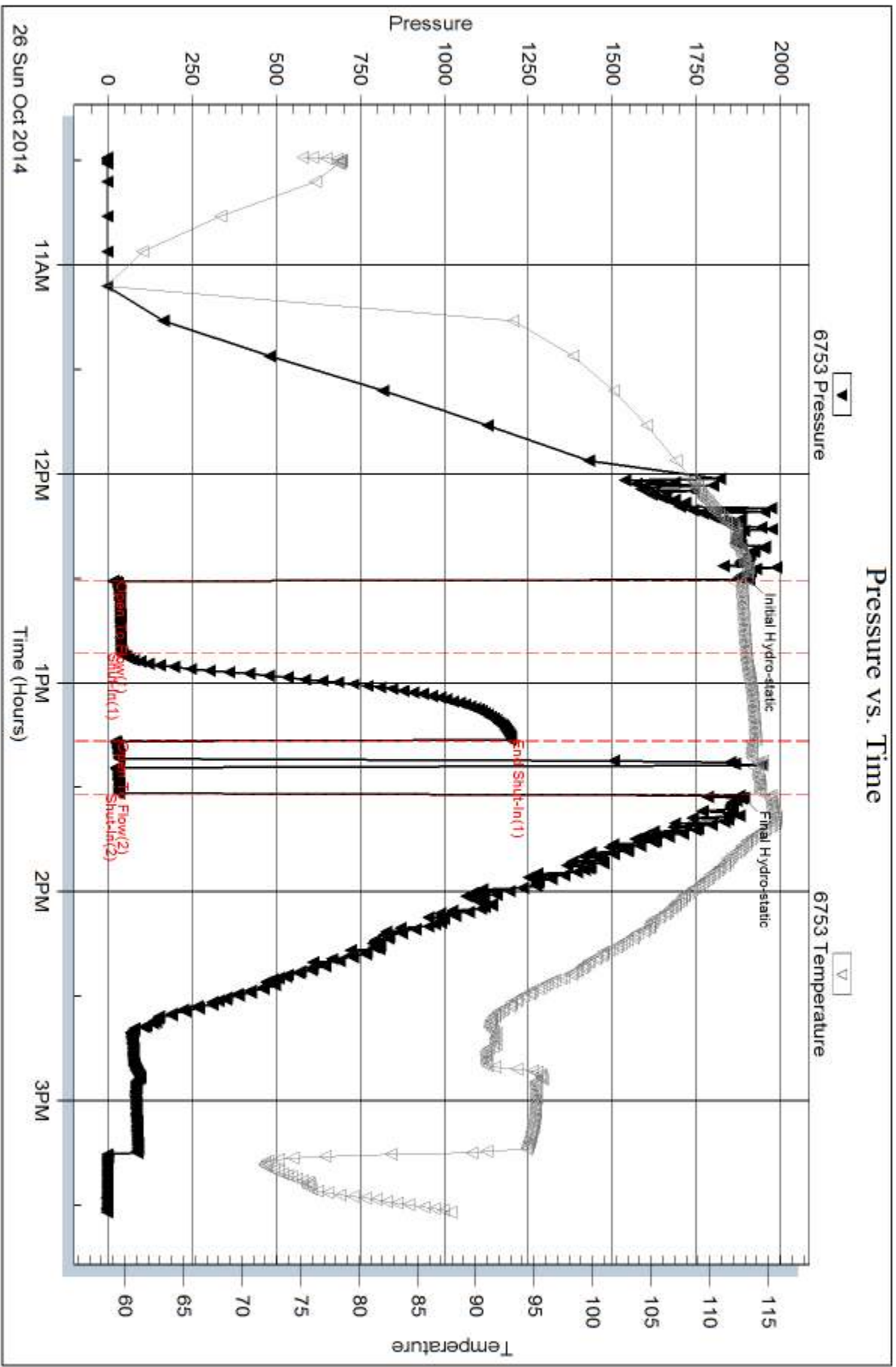
Num Gas Bombs: 0

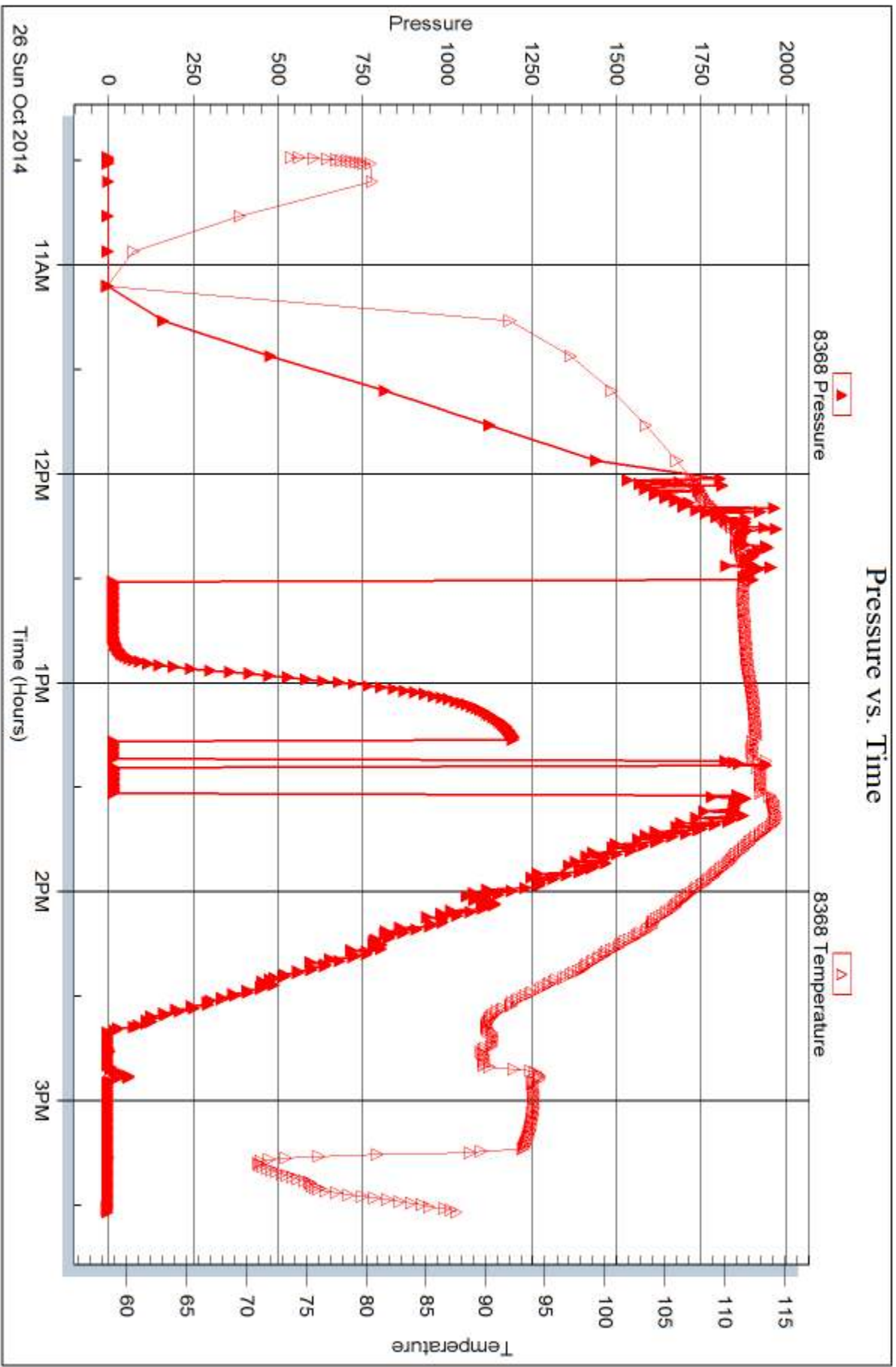
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt, Inc.**

P.O. Box 47
Great Bend KS 67530

ATTN: Brad Rine

Cooper #1-12

12-7s-32w Thomas,KS

Start Date: 2014.10.27 @ 08:50:00

End Date: 2014.10.27 @ 14:03:30

Job Ticket #: 58343 DST #: 3

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.10.31 @ 11:57:57



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Carmen Schmitt, Inc.
 P.O. Box 47
 Great Bend KS 67530
 ATTN: Brad Rine

12-7s-32w Thomas,KS
Cooper #1-12
 Job Ticket: 58343 **DST#: 3**
 Test Start: 2014.10.27 @ 08:50:00

GENERAL INFORMATION:

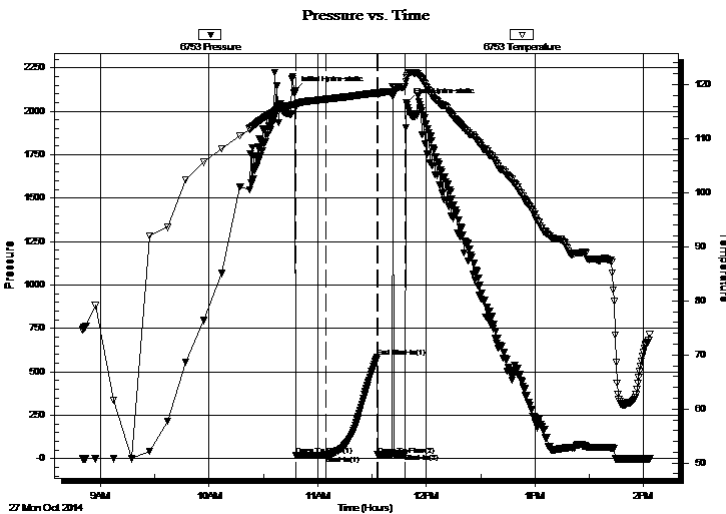
Formation: **LKC - 'I, J'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:47:45
 Time Test Ended: 14:03:30
Interval: 4138.00 ft (KB) To 4182.00 ft (KB) (TVD)
 Total Depth: 4182.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Royal Fisher
 Unit No: 54
 Reference Elevations: 3007.00 ft (KB)
 2996.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 6753

Outside

Press@RunDepth: 19.50 psig @ 4139.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.10.27 End Date: 2014.10.27 Last Calib.: 2014.10.27
 Start Time: 08:50:05 End Time: 14:03:29 Time On Btm: 2014.10.27 @ 10:47:30
 Time Off Btm: 2014.10.27 @ 11:49:00

TEST COMMENT: 15 - IF - Surface blow built to 1/4"
 30 - ISI - No Return
 15 - FF - No Surface blow flushed tool 5 mins. in blow bubbled a few times then died



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2117.43	116.36	Initial Hydro-static
1	17.11	115.77	Open To Flow (1)
17	19.50	117.28	Shut-In(1)
46	585.31	118.47	End Shut-In(1)
46	21.87	118.15	Open To Flow (2)
61	27.91	119.64	Shut-In(2)
62	2051.41	121.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM - 100M - Oil spots	0.02

Gas Rates

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



**TRILOBITE
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DRILL STEM TEST REPORT

Carmen Schmitt, Inc.
P.O. Box 47
Great Bend KS 67530
ATTN: Brad Rine

12-7s-32w Thomas,KS
Cooper #1-12
Job Ticket: 58343 **DST#: 3**
Test Start: 2014.10.27 @ 08:50:00

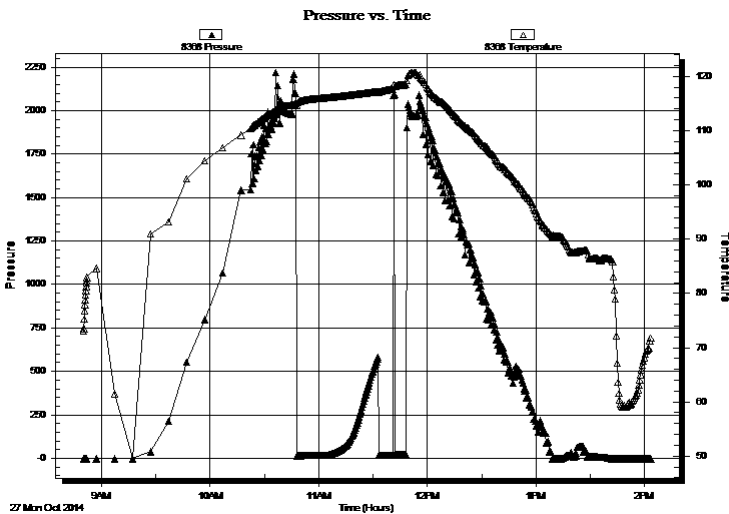
GENERAL INFORMATION:

Formation: **LKC - 'I, J'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:47:45
Time Test Ended: 14:03:30
Interval: **4138.00 ft (KB) To 4182.00 ft (KB) (TVD)**
Total Depth: 4182.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Initial)
Tester: Royal Fisher
Unit No: 54
Reference Elevations: 3007.00 ft (KB)
2996.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8368

Press@RunDepth: psig @ ft (KB) Capacity: 8000.00 psig
Start Date: 2014.10.27 End Date: 2014.10.27 Last Calib.: 2014.10.27
Start Time: 08:50:05 End Time: 14:03:29 Time On Btm:
Time Off Btm:

TEST COMMENT: 15 - IF - Surface blow built to 1/4"
30 - ISI - No Return
15 - FF - No Surface blow flushed tool 5 mins. in blow bubbled a few times then died



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM - 100M - Oil spots	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt, Inc.

12-7s-32w Thomas,KS

P.O. Box 47
Great Bend KS 67530

Cooper #1-12

Job Ticket: 58343

DST#: 3

ATTN: Brad Rine

Test Start: 2014.10.27 @ 08:50:00

Tool Information

Drill Pipe:	Length: 3880.66 ft	Diameter: 3.80 inches	Volume: 54.44 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: 233.34 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 72000.00 lb
			<u>Total Volume: 55.59 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	4138.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.00 ft			
Tool Length:	71.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4116.00	
Hydraulic tool	5.00			4121.00	
Jars	5.00			4126.00	
Safety Joint	3.00			4129.00	
Packer	4.00			4133.00	27.00 Bottom Of Top Packer
Packer	5.00			4138.00	
Stubb	1.00			4139.00	
Recorder	0.00	8368	Inside	4139.00	
Recorder	0.00	6753	Outside	4139.00	
Perforations	6.00			4145.00	
Change Over Sub	1.00			4146.00	
Drill Pipe	31.00			4177.00	
Change Over Sub	1.00			4178.00	
Bullnose	4.00			4182.00	44.00 Bottom Packers & Anchor

Total Tool Length: 71.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt, Inc.

12-7s-32w Thomas,KS

P.O. Box 47
Great Bend KS 67530

Cooper #1-12

Job Ticket: 58343

DST#: 3

ATTN: Brad Rine

Test Start: 2014.10.27 @ 08:50:00

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:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbf

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
5.00	OSM - 100M - Oil spots	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbf

Num Fluid Samples: 0

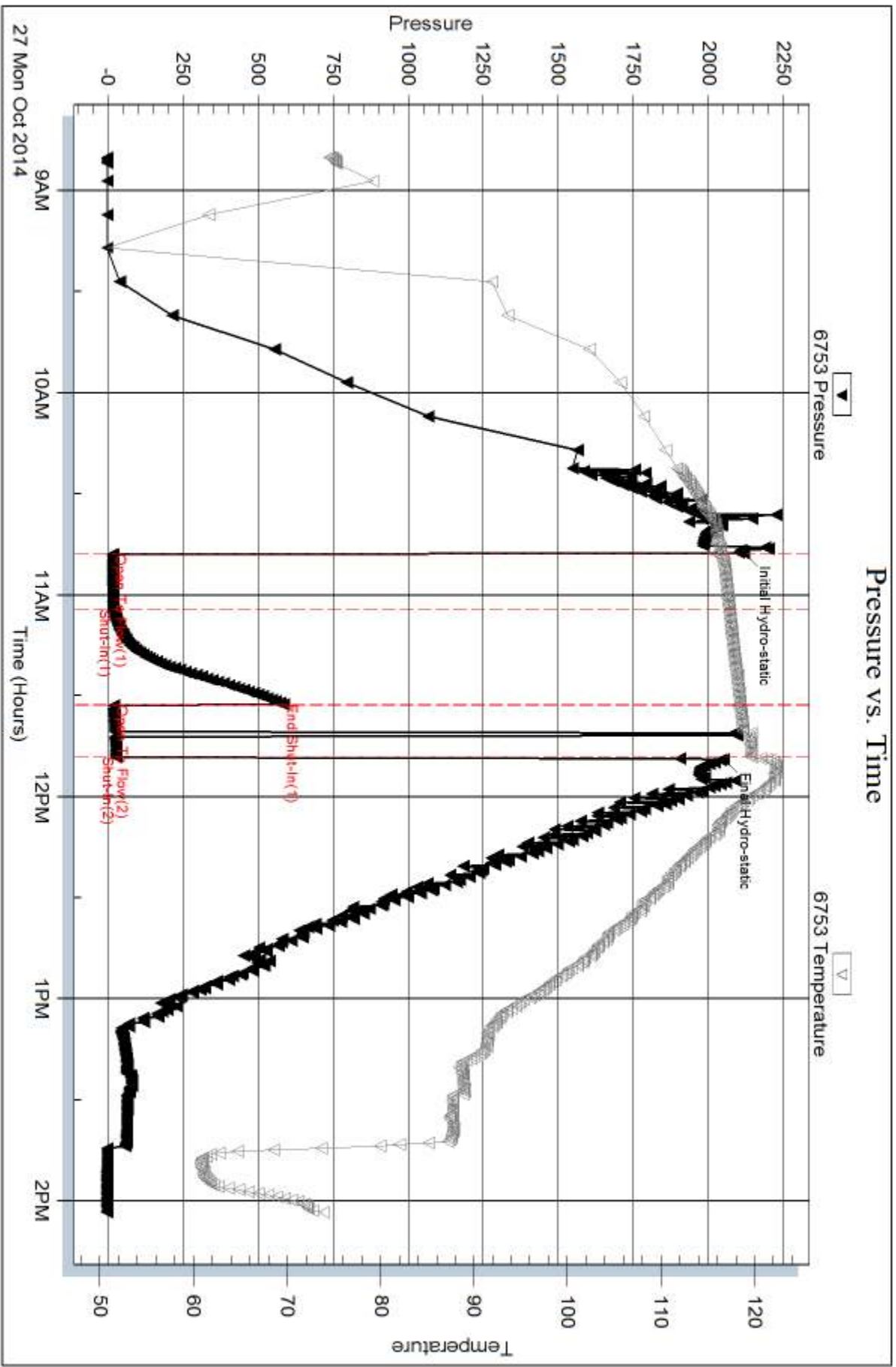
Num Gas Bombs: 0

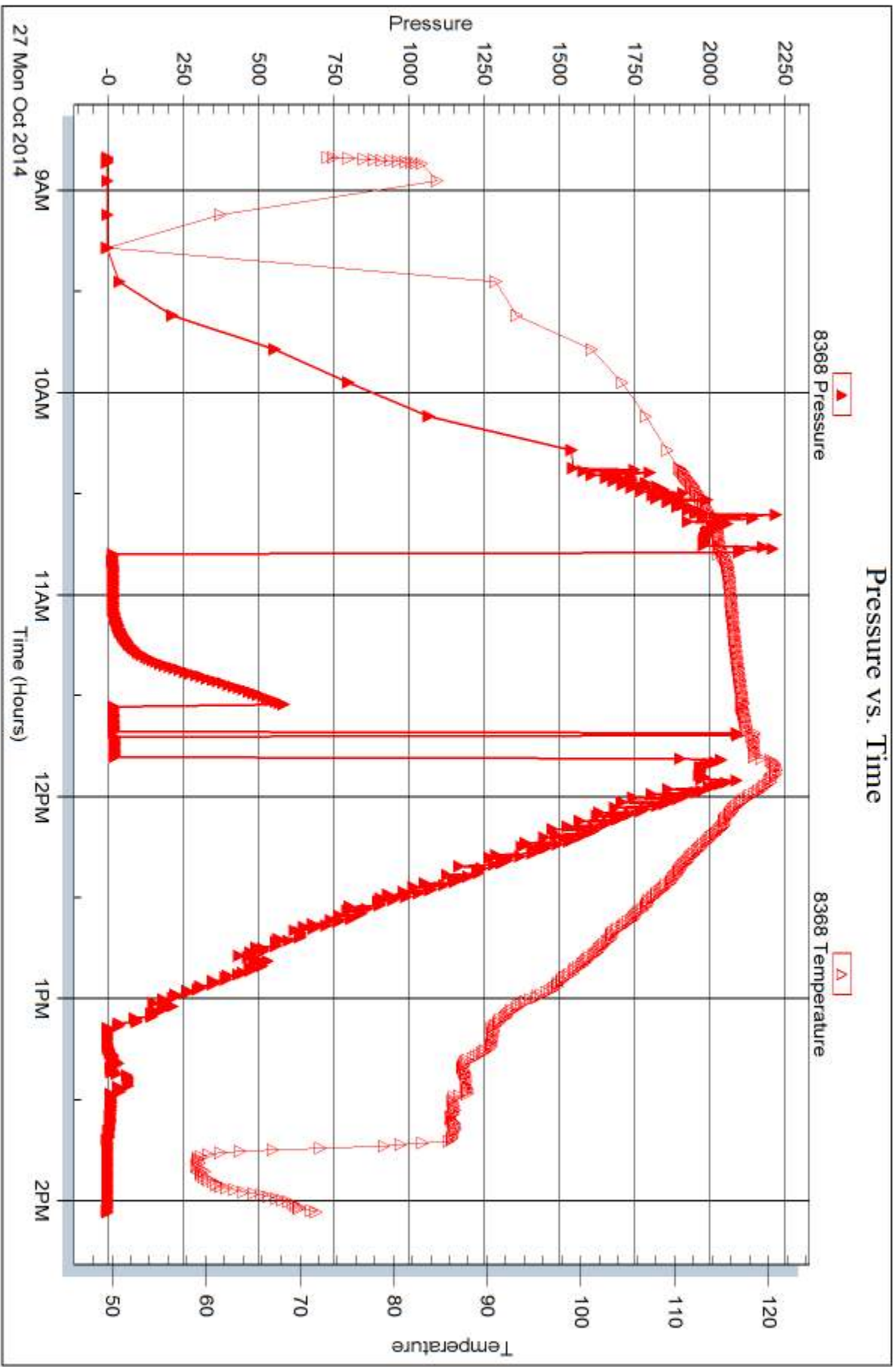
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt, Inc.**

P.O. Box 47
Great Bend KS 67530

ATTN: Brad Rine

Cooper #1-12

12-7s-32w Thomas,KS

Start Date: 2014.10.28 @ 15:37:00

End Date: 2014.10.28 @ 20:58:45

Job Ticket #: 58344 DST #: 4

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.10.31 @ 11:57:34

Carmen Schmitt, Inc.

12-7s-32w Thomas,KS

Cooper #1-12

DST # 4

Pawnee, Ft. Scott, C

2014.10.28



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Carmen Schmitt, Inc.
P.O. Box 47
Great Bend KS 67530
ATTN: Brad Rine

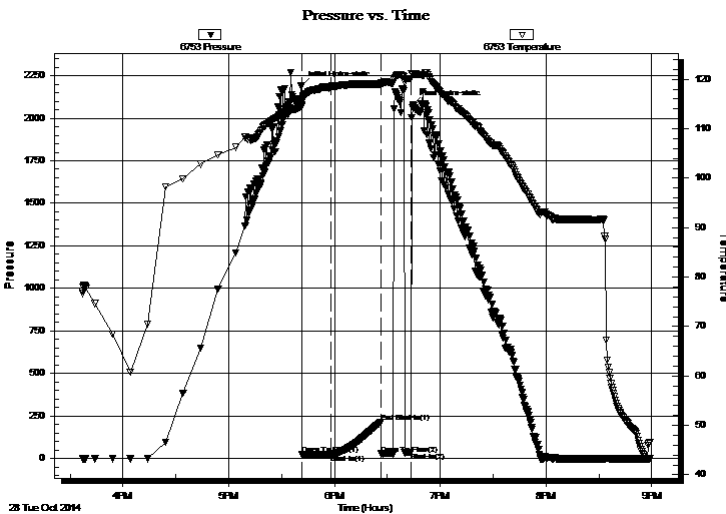
12-7s-32w Thomas,KS
Cooper #1-12
Job Ticket: 58344 **DST#: 4**
Test Start: 2014.10.28 @ 15:37:00

GENERAL INFORMATION:

Formation: **Pawnee, Ft. Scott, C**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:41:30
 Time Test Ended: 20:58:45
 Interval: **4270.00 ft (KB) To 4440.00 ft (KB) (TVD)**
 Total Depth: 4440.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Royal Fisher
 Unit No: #54
 Reference Elevations: 3007.00 ft (KB)
 2996.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 6753 Outside
 Press@RunDepth: 25.90 psig @ 4271.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.10.28 End Date: 2014.10.28 Last Calib.: 2014.10.28
 Start Time: 15:37:05 End Time: 20:58:44 Time On Btm: 2014.10.28 @ 17:41:15
 Time Off Btm: 2014.10.28 @ 18:44:30

TEST COMMENT: 15 - IF - Surface blow built to 1/4"
 30 - ISI - No Return
 15 - FF - No Surface blow , flushed tool, blow bubbled a few times then died, pulled tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2192.98	114.78	Initial Hydro-static
1	23.31	114.50	Open To Flow (1)
17	25.90	118.43	Shut-In(1)
45	213.16	118.92	End Shut-In(1)
46	27.64	119.05	Open To Flow (2)
63	37.15	120.09	Shut-In(2)
64	2081.04	120.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud - 100M	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt, Inc.

12-7s-32w Thomas,KS

P.O. Box 47
Great Bend KS 67530

Cooper #1-12

Job Ticket: 58344

DST#: 4

ATTN: Brad Rine

Test Start: 2014.10.28 @ 15:37:00

Tool Information

Drill Pipe:	Length: 4039.66 ft	Diameter: 3.80 inches	Volume: 56.67 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: 233.34 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 57.82 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4270.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	170.00 ft			
Tool Length:	197.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4248.00	
Hydraulic tool	5.00			4253.00	
Jars	5.00			4258.00	
Safety Joint	3.00			4261.00	
Packer	4.00			4265.00	27.00 Bottom Of Top Packer
Packer	5.00			4270.00	
Stubb	1.00			4271.00	
Recorder	0.00	8368	Inside	4271.00	
Recorder	0.00	6753	Outside	4271.00	
Perforations	6.00			4277.00	
Change Over Sub	1.00			4278.00	
Drill Pipe	157.00			4435.00	
Change Over Sub	1.00			4436.00	
Bullnose	4.00			4440.00	170.00 Bottom Packers & Anchor

Total Tool Length: 197.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt, Inc.

12-7s-32w Thomas,KS

P.O. Box 47
Great Bend KS 67530

Cooper #1-12

Job Ticket: 58344

DST#: 4

ATTN: Brad Rine

Test Start: 2014.10.28 @ 15:37:00

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: 54.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
5.00	Mud - 100M	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbf

Num Fluid Samples: 0

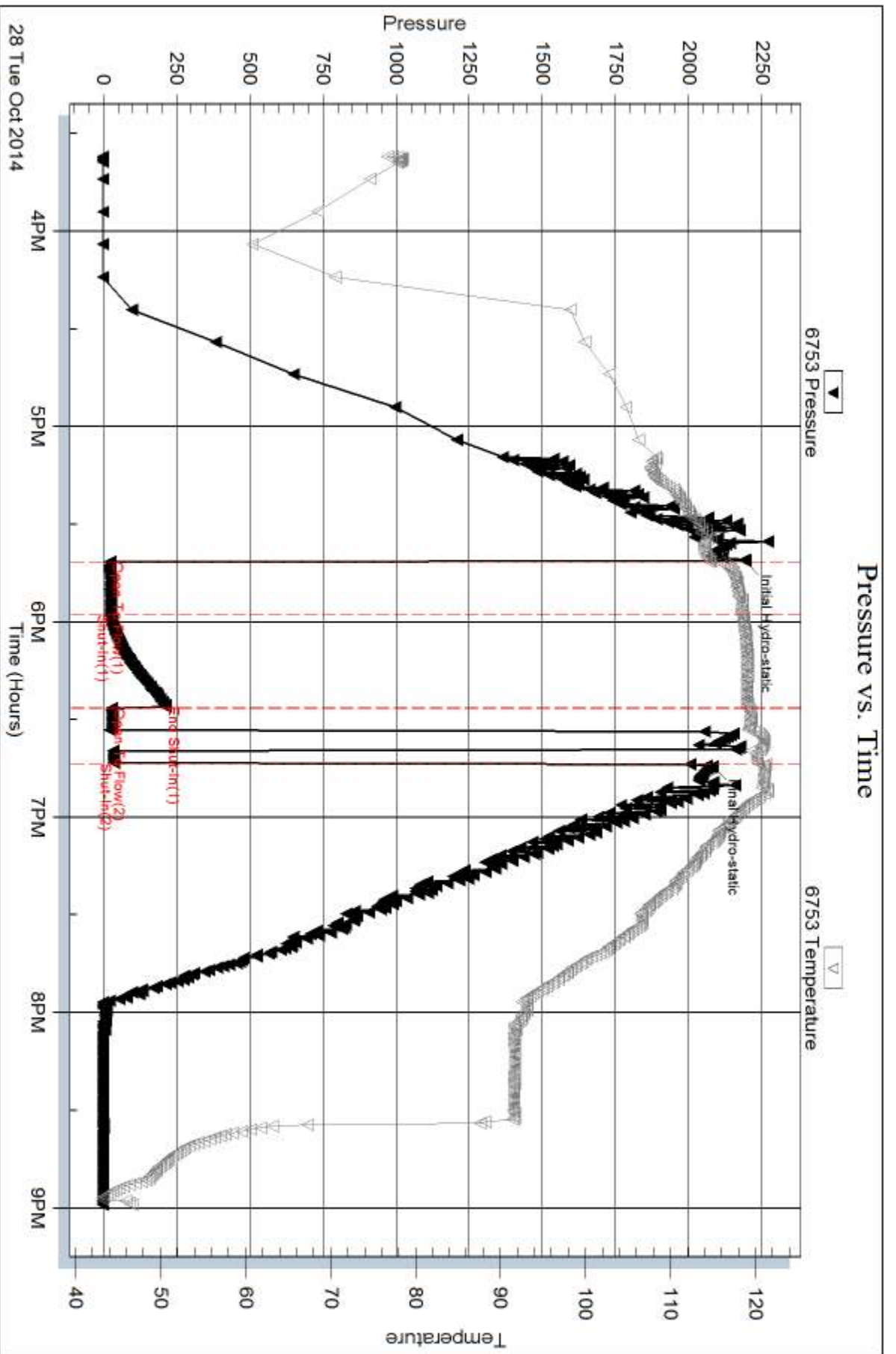
Num Gas Bombs: 0

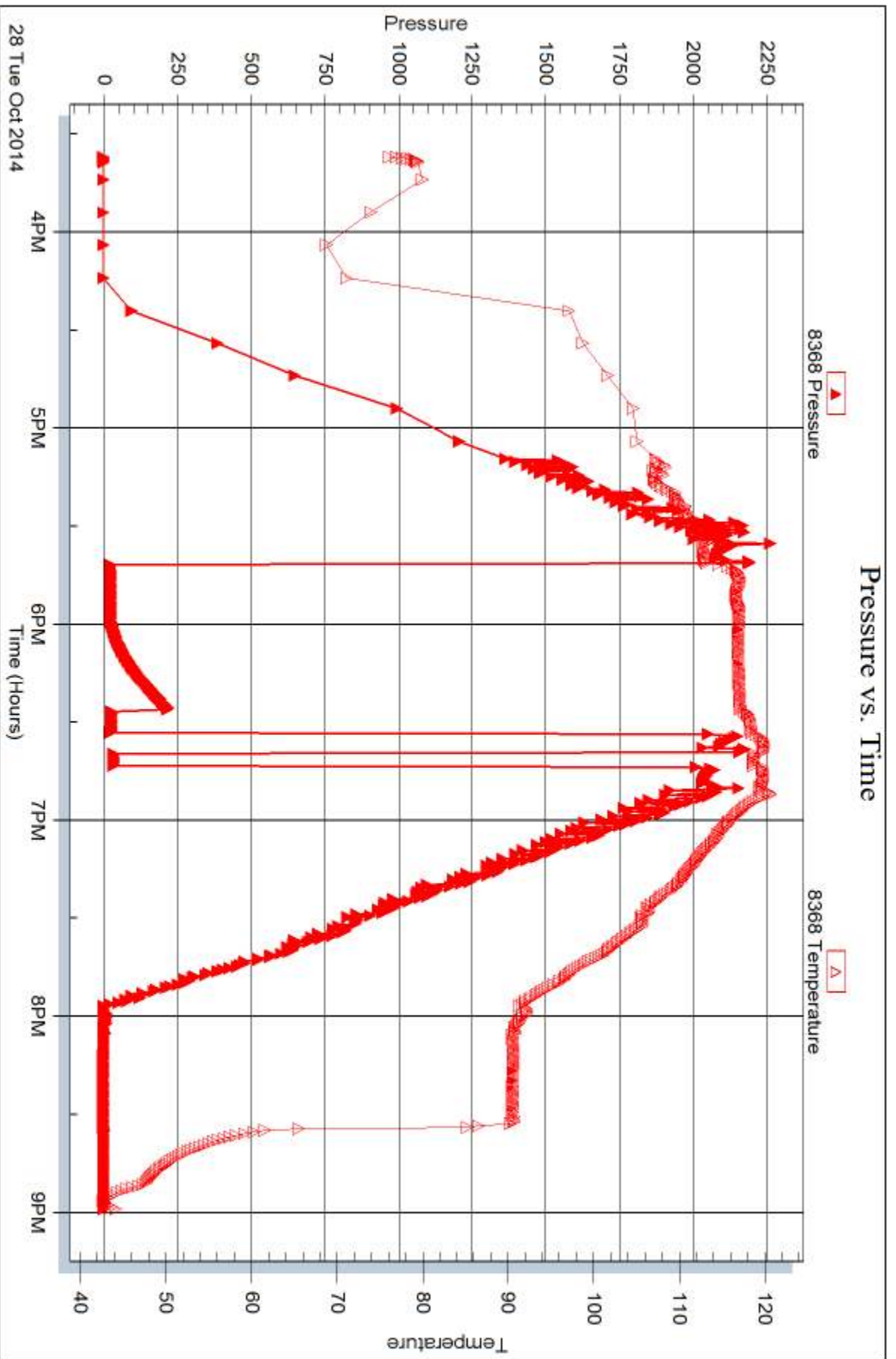
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt, Inc.**

P.O. Box 47
Great Bend KS 67530

ATTN: Brad Rine

Cooper #1-12

12-7s-32w Thomas,KS

Start Date: 2014.10.29 @ 06:44:00

End Date: 2014.10.29 @ 13:51:30

Job Ticket #: 58345 DST #: 5

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.10.31 @ 11:56:59



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Carmen Schmitt, Inc.
P.O. Box 47
Great Bend KS 67530
ATTN: Brad Rine

12-7s-32w Thomas,KS
Cooper #1-12
Job Ticket: 58345 **DST#: 5**
Test Start: 2014.10.29 @ 06:44:00

GENERAL INFORMATION:

Formation: **Cherokee Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:47:30
Time Test Ended: 13:51:30
Interval: **4442.00 ft (KB) To 4500.00 ft (KB) (TVD)**
Total Depth: 4500.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Initial)
Tester: Royal Fisher
Unit No: #54
Reference Elevations: 3007.00 ft (KB)
2996.00 ft (CF)
KB to GR/CF: 11.00 ft

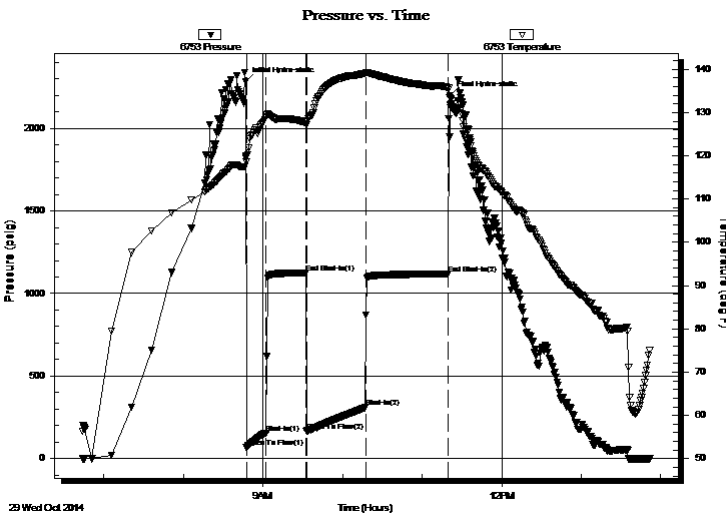
Serial #: 6753

Outside

Press@RunDepth: 308.90 psig @ 4443.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.10.29 End Date: 2014.10.29 Last Calib.: 2014.10.29
Start Time: 06:44:05 End Time: 13:51:29 Time On Btm: 2014.10.29 @ 08:47:15
Time Off Btm: 2014.10.29 @ 11:21:00

TEST COMMENT: 15 - IF - Surface blow built to 8 1/2"
30 - ISI - No Return
45 - FF - Surface blow built to bottom of the bucket in 24 mins.
60 - FSI - No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2283.66	119.90	Initial Hydro-static
1	65.54	118.69	Open To Flow (1)
16	153.51	129.05	Shut-In(1)
46	1124.44	127.74	End Shut-In(1)
46	164.95	127.17	Open To Flow (2)
90	308.90	138.98	Shut-In(2)
152	1118.88	135.72	End Shut-In(2)
154	2197.91	131.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
189.00	MW - 5M - 95W	0.93
189.00	MW - 10M - 90W	2.25
126.00	MW - 45M - 55W	1.77
94.00	WM - 55M - 45W	1.32

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Carmen Schmitt, Inc.

12-7s-32w Thomas,KS

P.O. Box 47
Great Bend KS 67530

Cooper #1-12

Job Ticket: 58345

DST#: 5

ATTN: Brad Rine

Test Start: 2014.10.29 @ 06:44:00

GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:47:30

Time Test Ended: 13:51:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Royal Fisher

Unit No: #54

Interval: 4442.00 ft (KB) To 4500.00 ft (KB) (TVD)

Total Depth: 4500.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3007.00 ft (KB)

2996.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8368

Press@RunDepth: psig @ ft (KB)

Start Date: 2014.10.29 End Date: 2014.10.29

Start Time: 06:44:05 End Time: 13:51:29

Capacity: 8000.00 psig

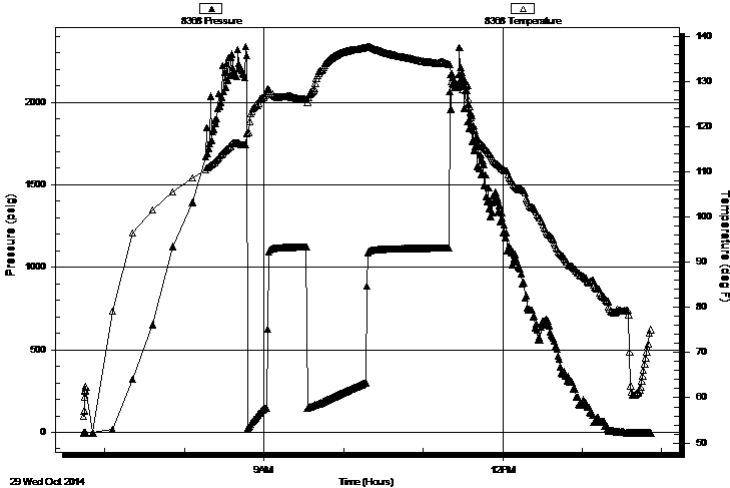
Last Calib.: 2014.10.29

Time On Btm:

Time Off Btm:

TEST COMMENT: 15 - IF - Surface blow built to 8 1/2"
30 - ISI - No Return
45 - FF - Surface blow built to bottom of the bucket in 24 mins.
60 - FSI - No Return

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
189.00	MW - 5M - 95W	0.93
189.00	MW - 10M - 90W	2.25
126.00	MW - 45M - 55W	1.77
94.00	WM - 55M - 45W	1.32

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt, Inc.

12-7s-32w Thomas,KS

P.O. Box 47
Great Bend KS 67530

Cooper #1-12

Job Ticket: 58345

DST#: 5

ATTN: Brad Rine

Test Start: 2014.10.29 @ 06:44:00

Tool Information

Drill Pipe:	Length: 4195.63 ft	Diameter: 3.80 inches	Volume: 58.85 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: 233.34 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 60.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.97 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4442.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	85.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4420.00	
Hydraulic tool	5.00			4425.00	
Jars	5.00			4430.00	
Safety Joint	3.00			4433.00	
Packer	4.00			4437.00	27.00 Bottom Of Top Packer
Packer	5.00			4442.00	
Stubb	1.00			4443.00	
Recorder	0.00	8368	Inside	4443.00	
Recorder	0.00	6753	Outside	4443.00	
Perforations	20.00			4463.00	
Change Over Sub	1.00			4464.00	
Drill Pipe	31.00			4495.00	
Change Over Sub	1.00			4496.00	
Bullnose	4.00			4500.00	58.00 Bottom Packers & Anchor

Total Tool Length: 85.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt, Inc.

12-7s-32w Thomas,KS

P.O. Box 47
Great Bend KS 67530

Cooper #1-12

Job Ticket: 58345

DST#: 5

ATTN: Brad Rine

Test Start: 2014.10.29 @ 06:44:00

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:

32000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
189.00	MW - 5M - 95W	0.929
189.00	MW - 10M - 90W	2.247
126.00	MW - 45M - 55W	1.767
94.00	WM - 55M - 45W	1.319

Total Length: 598.00 ft

Total Volume: 6.262 bbl

Num Fluid Samples: 0

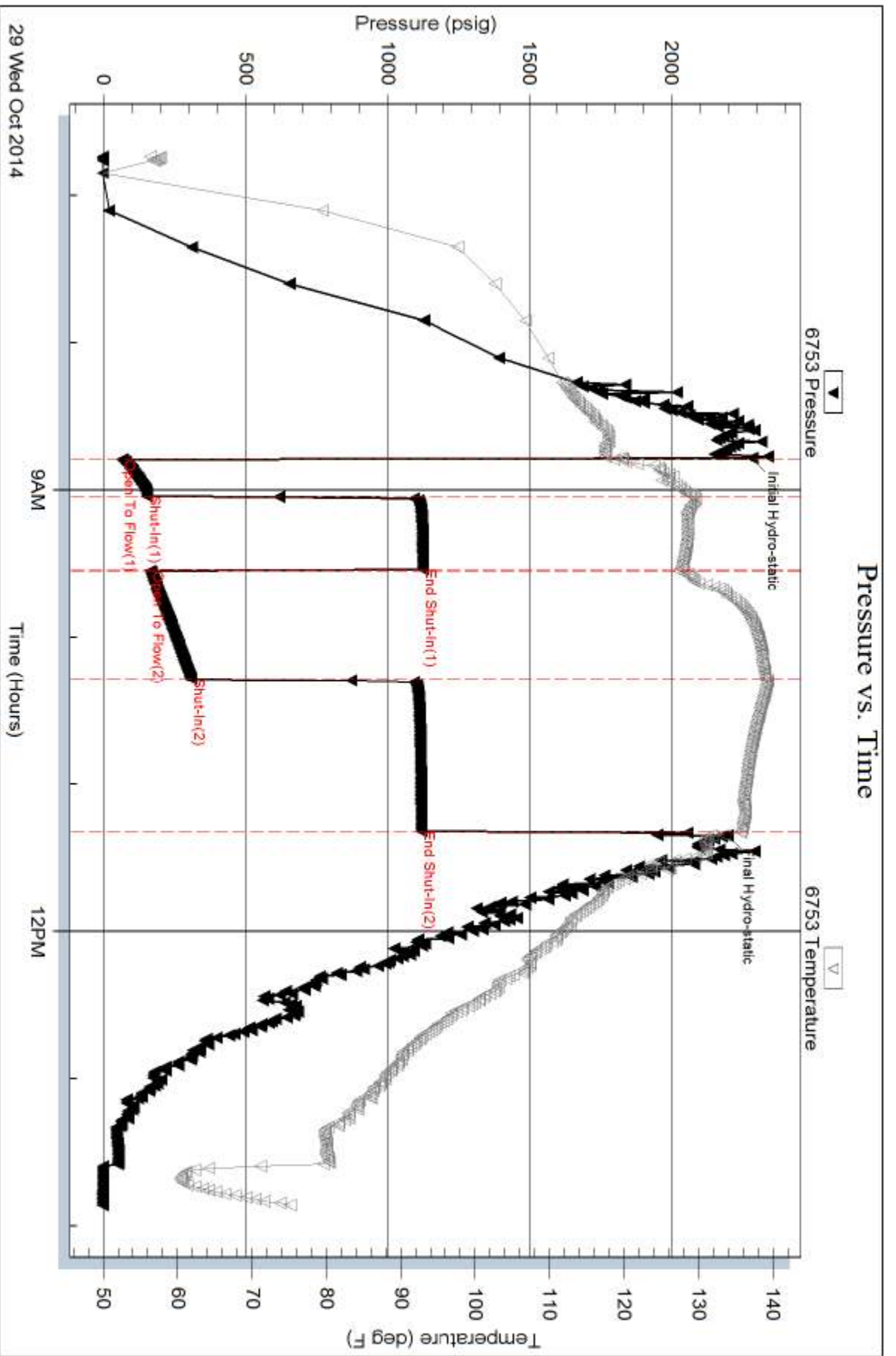
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

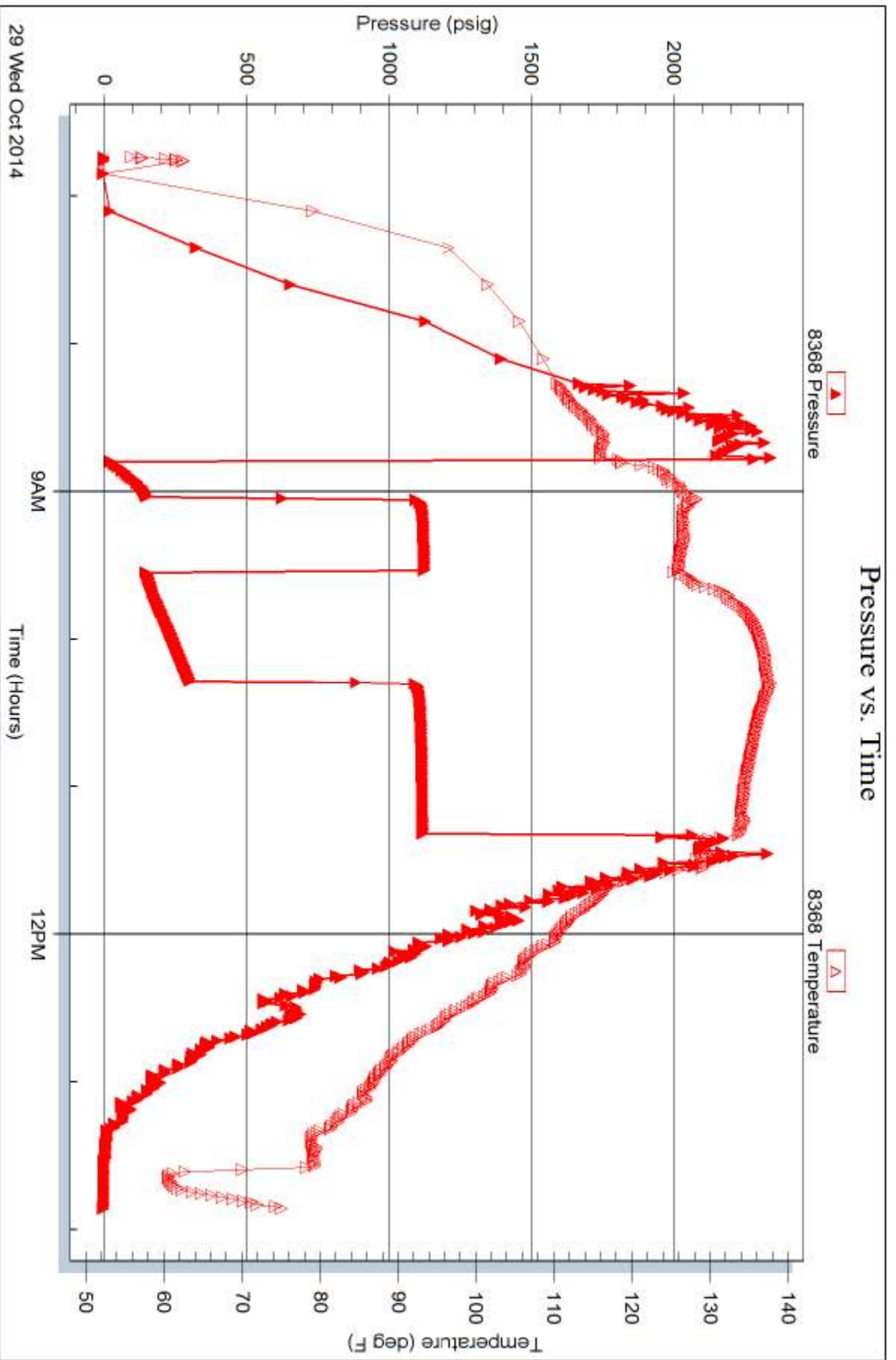


Serial #: 8368

Carmen Schmitt, Inc.

Cooper #1-12

DST Test Number: 5

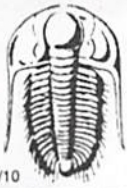


29 Wed Oct 2014

Trilobite Testing, Inc

Ref. No: 58345

Printed: 2014, 10, 31 @ 11:57:00



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 58341

Well Name & No. Cooper #1-12 Test No. 1 Date 10-25-14
 Company Carmen Schmitt, Inc. Elevation 3007 KB 2996 GL
 Address P.O. Box 47 Great Bend KS 67530
 Co. Rep / Geo. Brad Rine Rig Martin 22
 Location: Sec. 12 Twp. 7S Rge. 32 W Co. Thomas State KS

Interval Tested 3943-3985 Zone Tested Toronto
 Anchor Length 42' Drill Pipe Run 3693.77' Mud Wt. 9.0
 Top Packer Depth 3938 Drill Collars Run 233.34' Vis 58
 Bottom Packer Depth 3943 Wt. Pipe Run ⊖ WL 6.0
 Total Depth 3985 Chlorides 600 ppm System LCM 14#
 Blow Description IF-Surface blow ~~stably~~ slowly built to 1/2"
ISI- No Return
FF- No Surface blow, pulled tool after open.
FSI-

Rec	Feet of	%gas	%oil	%water	%mud
<u>15'</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 15' BHT 116°F Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1923 Test 1150 T-On Location 10:34pm
 (B) First Initial Flow 21 Jars 250 T-Started 11:25pm
 (C) First Final Flow 33 Safety Joint 75 T-Open 1:24am
 (D) Initial Shut-In 1277 Circ Sub N/C T-Pulled 2:24am
 (E) Second Initial Flow 39 Hourly Standby _____ T-Out 4:17am
 (F) Second Final Flow 51 Mileage 80 RT 124 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 1876 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1599
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1599

Approved By _____ Our Representative Ryan Justice

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. 58342

Well Name & No. Cooper #1-12 Test No. 2 Date 10-26-14
 Company Carmen Schmitt, Inc. Elevation 3007 KB 2996 GL
 Address P.O. Box 47 Great Bend KS 67530
 Co. Rep / Geo. Brad Rine Rig Murfin #22
 Location: Sec. 12 Twp. 7S Rge. 32 W Co. Thomas State KS

Interval Tested 3978-4000 Zone Tested Lans-'A'
 Anchor Length 22' Drill Pipe Run 3725.30' Mud Wt. 9.1
 Top Packer Depth 3973 Drill Collars Run 233.34' Vis 50
 Bottom Packer Depth 3978 Wt. Pipe Run 0 WL 6.0
 Total Depth 4000 Chlorides 560 ppm System LCM 10#
 Blow Description IF - Surface blow started with a weak blow then died in 7 min.
ISI - No return
FF - No surface blow, flushed tool 5 mins. in, still no surface blow.
FSI -

Rec	Feet of	%gas	%oil	%water	%mud
<u>5'</u>	<u>Mud</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 5' BHT 114°F Gravity 1150 API RW 124 @ 114 °F Chlorides 560 ppm

(A) Initial Hydrostatic 1906 Test 1150 T-On Location 9:50am
 (B) First Initial Flow 15 Jars 250 T-Started 10:29am
 (C) First Final Flow 40 Safety Joint 75 T-Open 12:31pm
 (D) Initial Shut-In 1197 Circ Sub N/C T-Pulled 1:31pm
 (E) Second Initial Flow 21 Hourly Standby _____ T-Out 3:32 pm
 (F) Second Final Flow 34 Mileage 80 R/T 124 Comments pulled tool at the
end of the final flow
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 1890 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 15 Extra Recorder _____ Sub Total 0
 Initial Shut-In 30 Day Standby _____ Total 1599
 Final Flow 15 Accessibility _____ MP/DST Disc't _____
 Final Shut-In _____ Sub Total 1599

Approved By _____ Our Representative Brad Rine
 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.

Test Ticket

NO. 58343

arkway • Hays, Kansas 67601

Well Cooper #1-12 Test No. 3 Date 10-27-14
 Company Carmen Schmitt, Inc. Elevation 3007 KB 2996 GL
 Address P.O. Box 47 Great Bend Ks 67530
 Co. Rep / Geo. Brad Rine Rig Martin #22
 Location: Sec. 12 Twp. 75 Rge. 32 W Co. Thomas State KS

Interval Tested 4138 - 4182 Zone Tested LKC - 'I, J'
 Anchor Length ~~4133~~ 44' Drill Pipe Run 3880.66' Mud Wt. 9.2
 Top Packer Depth ~~4133~~ 4133 Drill Collars Run 233.34' Vis 52
 Bottom Packer Depth 4138 Wt. Pipe Run 0 WL 6.4
 Total Depth 4182 Chlorides 600 ppm System LCM 8#
 Blow Description IF - Surface blow built to 1/4"
ISI - No Return
FF - No surface blow flushed tool bubbled then died

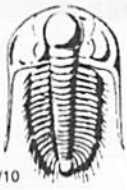
Rec	Feet of	%gas	%oil	%water	%mud
<u>5'</u>	<u>OSM</u>	<u>Spots</u>		<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5' BHT 119°F Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2117 Test 1250 T-On Location 7:55 am
 (B) First Initial Flow 17 Jars 250 T-Started 8:50 am
 (C) First Final Flow 19 Safety Joint 75 T-Open 10:48 am
 (D) Initial Shut-In 585 Circ Sub N/C T-Pulled 11:48 am
 (E) Second Initial Flow 21 Hourly Standby _____ T-Out 2:04 pm
 (F) Second Final Flow 27 Mileage 80 R/T 124 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 2057 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1699
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1699

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. 58344

Well Name & No. Cooper #1-12 Test No. 4 Date 10-28-14
 Company Carmen Schmitt, Inc. Elevation 3007 KB 2996 GL
 Address P.O. Box 47 Great Bend Ks 67530
 Co. Rep / Geo. Brad Rine Rig Murkin #22
 Location: Sec. 12 Twp. 7S Rge. 32W Co. Thomas State Ks

Interval Tested 4270 - 4440 Zone Tested Pawnee, Ft. Scott, Cherokee
 Anchor Length 170' Drill Pipe Run 4039.666' Mud Wt. 9.4
 Top Packer Depth 4265 Drill Collars Run 233.34' Vis 54
 Bottom Packer Depth 4270 Wt. Pipe Run 0 WL 7.2
 Total Depth 4440 Chlorides 1000 ppm System LCM 8#
 Blow Description IF - Surface blow built to 1/4"
ISI - No Return
FF - No Surface blow, flushed tool, bubbled then died, pulled tool

Rec	Feet of	%gas	%oil	%water	%mud
<u>5'</u>	<u>Mud</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 5' BHT 120°F Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2192</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>3:05 pm</u>
(B) First Initial Flow <u>23</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>3:37 pm</u>
(C) First Final Flow <u>25</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>5:41 pm</u>
(D) Initial Shut-In <u>213</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>6:41 pm</u>
(E) Second Initial Flow <u>27</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>8:59 pm</u>
(F) Second Final Flow <u>37</u>	<input checked="" type="checkbox"/> Mileage <u>80 R/T</u> 124	Comments _____
(G) Final Shut-In _____	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>2081</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>15</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	Sub Total <u>33.33</u>
Final Flow <u>15</u>	<input type="checkbox"/> Extra Recorder _____	Total <u>1732.33</u>
Final Shut-In _____	<input type="checkbox"/> Day Standby <u>1d 1h</u>	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility _____	
	Sub Total <u>1699</u>	

Approved By _____ Our Representative Royal Foster
 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.

TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 58345

Well Name & No. Cooper #1-12 Test No. 5 Date 10-29-14
 Company Carmen Schmitt, Inc. Elevation 3007 KB 2996 GL
 Address P.O. Box 47 Great Bend KS 67530
 Co. Rep / Geo. Bragd Rine Rig Murfin #22
 Location: Sec. 12 Twp. 7S Rge. 32 W Co. Thomas State KS

Interval Tested 4442-4500 Zone Tested Cherokee Sand
 Anchor Length 58' Drill Pipe Run 4195.63' Mud Wt. 9.4
 Top Packer Depth 4437 Drill Collars Run 233.34' Vis 54
 Bottom Packer Depth 4442 Wt. Pipe Run 0 WL 7.2
 Total Depth 4500 Chlorides 1000 ppm System LCM 8#
 Blow Description IF - Surface blow built to 8 1/2"
ISI - No Return
FF - Surface blow built to bottom of the bucket in 24 min.
FST - No Return

Rec	Feet of	%gas	%oil	%water	%mud
94'	WM		45	55	
126'	mw		55	45	
189'	mw		90	10	
189'	mw		95	5	

Rec Total 598' BHT 135°F Gravity _____ API RW .202 @ 77 °F Chlorides 32,000 ppm

(A) Initial Hydrostatic <u>2283</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>6:20 am</u>
(B) First Initial Flow <u>65</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>6:44 am</u>
(C) First Final Flow <u>153</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>8:47 am</u>
(D) Initial Shut-In <u>1124</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>11:17 am</u>
(E) Second Initial Flow <u>1164</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>1:51 pm</u>
(F) Second Final Flow <u>308</u>	<input checked="" type="checkbox"/> Mileage <u>80 R/T 124</u>	Comments <u>Picked up tool</u>
(G) Final Shut-In <u>1118</u>	<input type="checkbox"/> Sampler _____	<u>10-30-14 on location @ 8:55 am</u>
(H) Final Hydrostatic <u>2197</u>	<input type="checkbox"/> Straddle _____	<u>waited on orders left @ 10:52 am</u>

Initial Open 15
 Initial Shut-In 30
 Final Flow 45
 Final Shut-In 60

Sub Total 1699

Approved By _____ Our Representative _____

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