



DRILL STEM TEST REPORT

Prepared For: **Alan Vonfeldt**

PO Box 611
Russell, KS 67665

ATTN: Steve Reed

Michaelis #2

33-14S-13W Russell,KS

Start Date: 2014.09.08 @ 22:25:52

End Date: 2014.09.09 @ 05:38:52

Job Ticket #: 60901 DST #: 1

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

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

Printed: 2014.09.12 @ 14:29:55

Alan Vonfeldt

33-14S-13W Russell,KS

Michaelis #2

DST # 1

Toronto- LKC"C"

2014.09.08



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Alan Vonfeldt

33-14S-13W Russell,KS

PO Box 611
Russell, KS 67665

Michaelis #2

Job Ticket: 60901

DST#: 1

ATTN: Steve Reed

Test Start: 2014.09.08 @ 22:25:52

GENERAL INFORMATION:

Formation: **Toronto- LKC"C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:07:22

Time Test Ended: 05:38:52

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan Lonsdale

Unit No: 62

Interval: **2795.00 ft (KB) To 2917.00 ft (KB) (TVD)**

Reference Elevations: 1725.00 ft (KB)

Total Depth: 2917.00 ft (KB) (TVD)

1718.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8651

Inside

Press@RunDepth: 242.64 psig @ 2796.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.09.08

End Date:

2014.09.09

Last Calib.: 2014.09.09

Start Time: 22:25:53

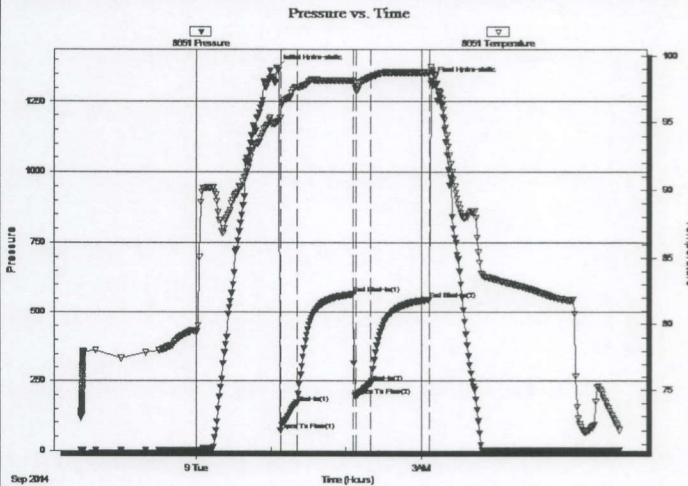
End Time:

05:38:52

Time On Btm: 2014.09.09 @ 01:04:22

Time Off Btm: 2014.09.09 @ 03:07:52

TEST COMMENT: 15- IF- BOB 2 mins
45- IS- Weak surface blow died after 20 mins
15- FF- BOB 1 min
45- FS- BOB 8 mins GTS w hile bleeding off



PRESSURE SUMMARY

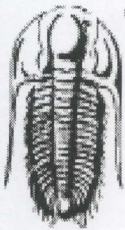
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1371.42	95.04	Initial Hydro-static
3	70.81	95.29	Open To Flow (1)
16	170.47	97.65	Shut-In(1)
62	565.27	98.13	End Shut-In(1)
64	195.08	97.38	Open To Flow (2)
76	242.64	98.42	Shut-In(2)
122	547.02	98.73	End Shut-In(2)
124	1324.91	98.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
64.00	M	0.87
322.00	VGSWOCM, 45%G 35%O 5%W 15%M	4.40
0.00	2411' GIP	0.00

Gas Rates

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



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Russell, KS 67665
ATTN: Steve Reed

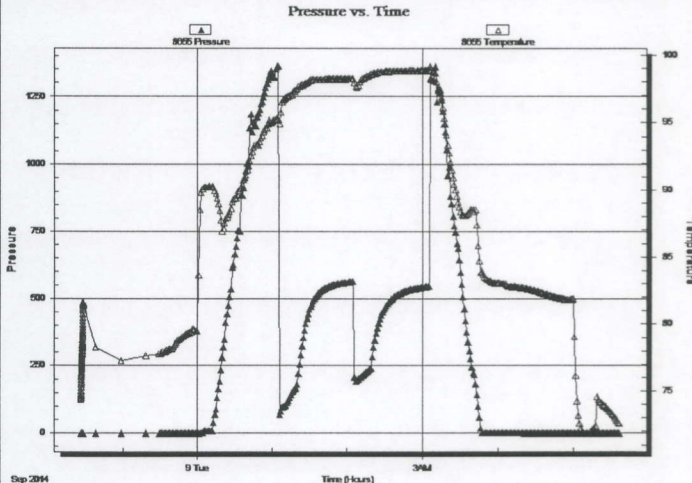
33-14S-13W Russell,KS
Michaelis #2
Job Ticket: 60901 **DST#: 1**
Test Start: 2014.09.08 @ 22:25:52

GENERAL INFORMATION:

Formation: Toronto- LKC"C"	Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock: ft (KB)	Tester: Brannan Lonsdale
Time Tool Opened: 01:07:22	Unit No: 62
Time Test Ended: 05:38:52	Reference Elevations: 1725.00 ft (KB)
Interval: 2795.00 ft (KB) To 2917.00 ft (KB) (TVD)	1718.00 ft (CF)
Total Depth: 2917.00 ft (KB) (TVD)	KB to GR/CF: 7.00 ft
Hole Diameter: 7.88 inches	Hole Condition: Fair

Serial #: 8655	Outside	Capacity: 8000.00 psig
Press@RunDepth: psig @ 2796.00 ft (KB)	Start Date: 2014.09.08	Last Calib.: 2014.09.09
Start Time: 22:25:41	End Date: 2014.09.09	Time On Btm:
	End Time: 05:37:10	Time Off Btm:

TEST COMMENT: 15- IF- BOB 2 mins
45- IS- Weak surface blow died after 20 mins
15- FF- BOB 1 min
45- FS- BOB 8 mins GTS w hile bleeding off



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
64.00	M	0.87
322.00	VGSWOCM, 45%G 35%O 5%W 15%M	4.40
0.00	2411' GIP	0.00

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Alan Vonfeldt

33-14S-13W Russell,KS

PO Box 611
Russell, KS 67665

Michaelis #2

Job Ticket: 60901

DST#: 1

ATTN: Steve Reed

Test Start: 2014.09.08 @ 22:25:52

Tool Information

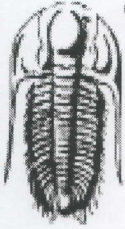
Drill Pipe:	Length: 2797.00 ft	Diameter: 3.75 inches	Volume: 38.21 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 54000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	2795.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	122.00 ft			
Tool Length:	142.00 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			2776.00	
Shut In Tool	5.00			2781.00	
Hydraulic tool	5.00			2786.00	
Packer	5.00			2791.00	20.00 Bottom Of Top Packer
Packer	4.00			2795.00	
Stubb	1.00			2796.00	
Recorder	0.00	8651	Inside	2796.00	
Recorder	0.00	8655	Outside	2796.00	
Perforations	19.00			2815.00	
Change Over Sub	1.00			2816.00	
Drill Pipe	97.00			2913.00	
Change Over Sub	1.00			2914.00	
Bullnose	3.00			2917.00	122.00 Bottom Packers & Anchor

Total Tool Length: 142.00



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FLUID SUMMARY

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33-14S-13W Russell,KS

PO Box 611
Russell, KS 67665

Michaelis #2

Job Ticket: 60901

DST#: 1

ATTN: Steve Reed

Test Start: 2014.09.08 @ 22:25:52

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:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2250.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
64.00	M	0.874
322.00	VGSWOCM, 45%G 35%O 5%W 15%M	4.399
0.00	2411' GIP	0.000

Total Length: 386.00 ft Total Volume: 5.273 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8651

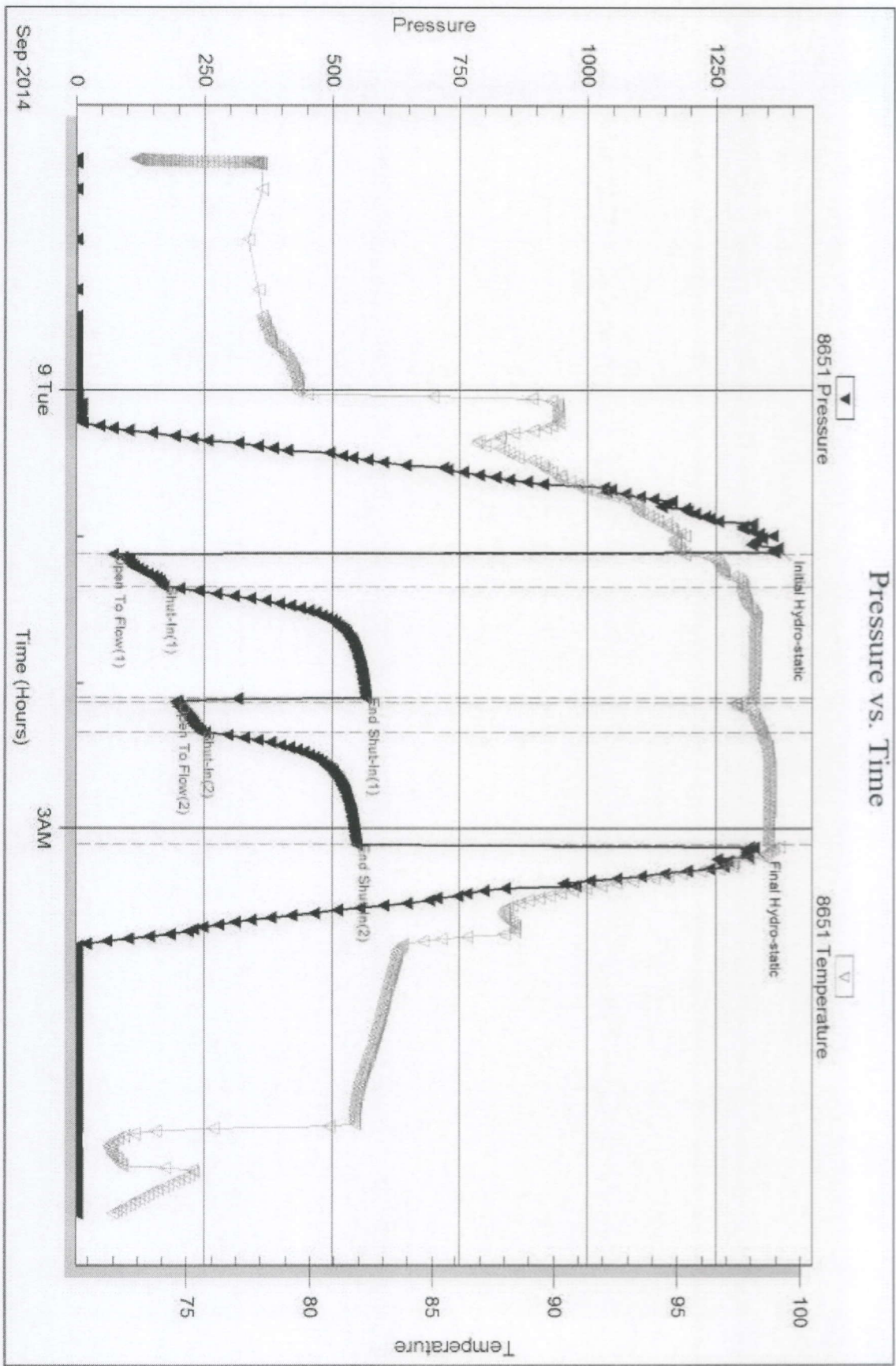
Inside

Alan Vorfeldt

Michaelis #2

DST Test Number: 1

Pressure vs. Time



Tribble Testing, Inc

Ref. No: 60901

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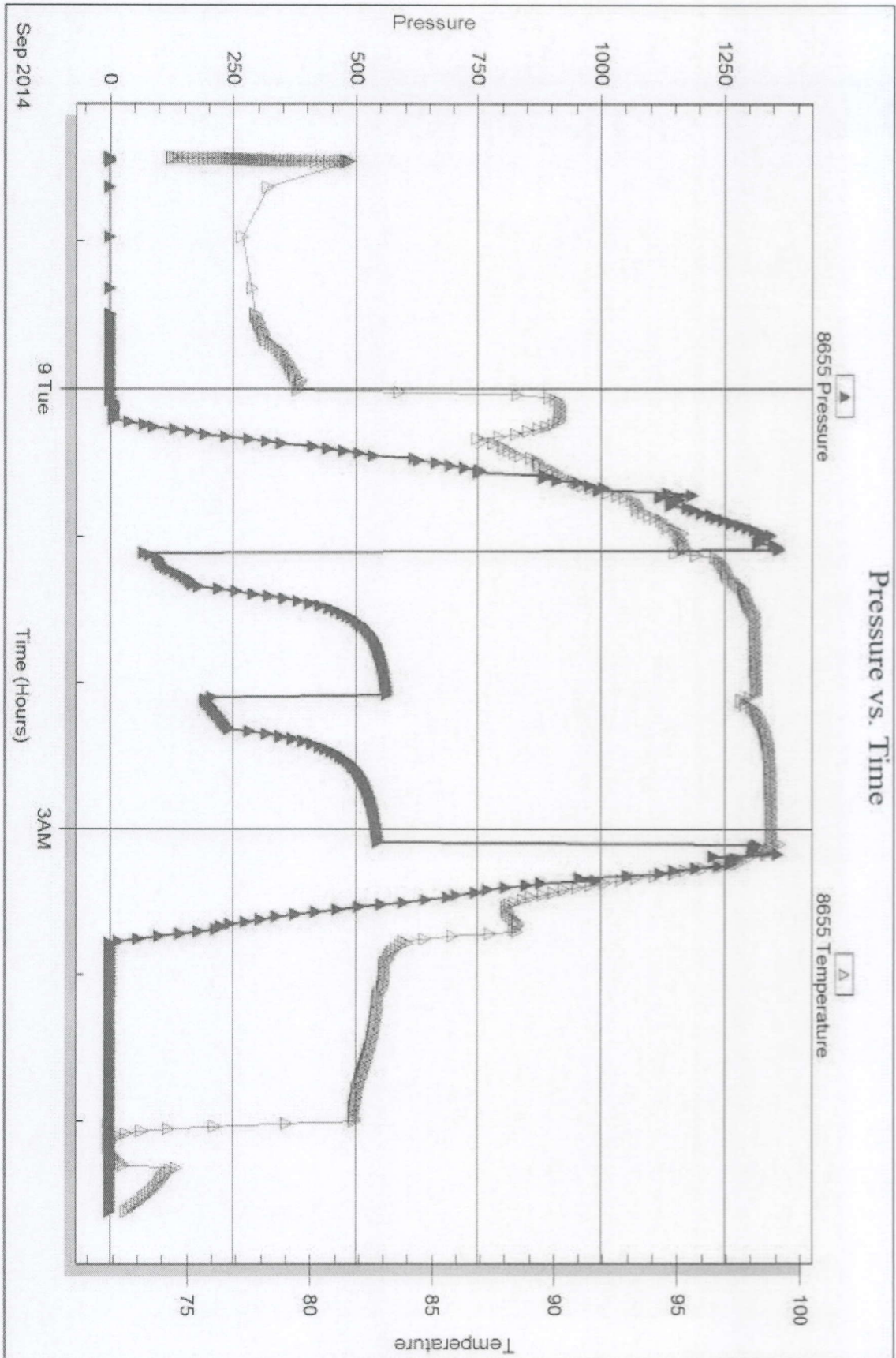
Serial #: 8655

Outside Alan Vorfeldt

Michaelis #2

DST Test Number: 1

Pressure vs. Time



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Ref. No: 60901

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