



DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating Inc**

PO Box 86
Plainville KS 67663

ATTN: Marc Downing

Faulkner #14-2

14-8s-22w Graham,KS

Start Date: 2013.09.11 @ 18:42:23

End Date: 2013.09.11 @ 23:36:23

Job Ticket #: 041763 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.18 @ 09:16:55



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041763

DST#: 1

ATTN: Marc Downing

Test Start: 2013.09.11 @ 18:42:23

GENERAL INFORMATION:

Formation: **LKC-A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:25:00

Time Test Ended: 23:36:23

Test Type: Conventional Bottom Hole (Initial)

Tester: Jeff Brown

Unit No: 67

Interval: 3354.00 ft (KB) To 3375.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3375.00 ft (KB) (TVD)

2117.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8679 Inside

Press @ Run Depth: psig @ 3357.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.11

End Date: 2013.09.11

Last Calib.: 2013.09.11

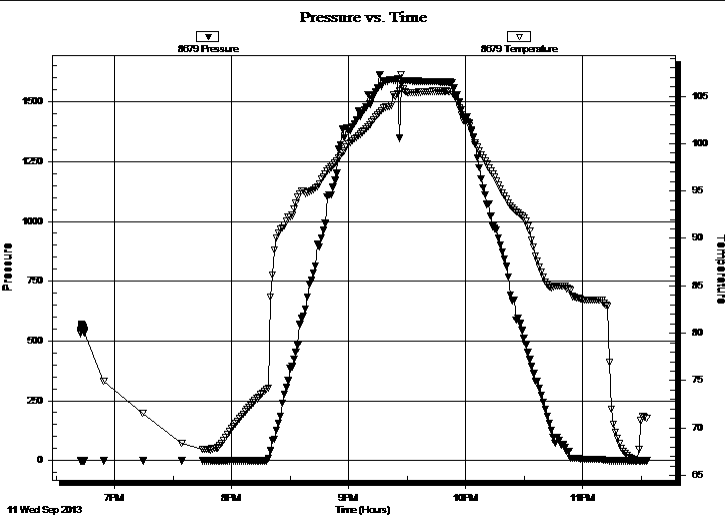
Start Time: 18:42:24

End Time: 23:33:23

Time On Btm:

Time Off Btm:

TEST COMMENT: MIS-RUN 16' of fill in the hole



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

ATTN: Marc Downing

Job Ticket: 041763

DST#: 1

Test Start: 2013.09.11 @ 18:42:23

GENERAL INFORMATION:

Formation: **LKC-A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:25:00

Time Test Ended: 23:36:23

Test Type: Conventional Bottom Hole (Initial)

Tester: Jeff Brown

Unit No: 67

Interval: 3354.00 ft (KB) To 3375.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3375.00 ft (KB) (TVD)

2117.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6625 Outside

Press @ Run Depth: psig @ 3357.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.11

End Date:

2013.09.11

Last Calib.:

2013.09.11

Start Time: 18:42:27

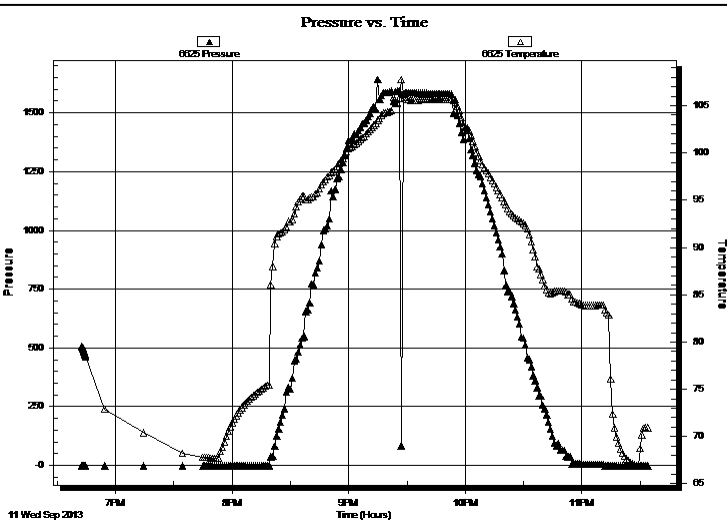
End Time:

23:34:26

Time On Btm:

Time Off Btm:

TEST COMMENT: MIS-RUN 16' of fill in the hole



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041763

DST#: 1

ATTN: Marc Downing

Test Start: 2013.09.11 @ 18:42:23

Tool Information

Drill Pipe:	Length: 3342.00 ft	Diameter: 3.80 inches	Volume: 46.88 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	40000.00 lb
			<u>Total Volume: 46.88 bbl</u>	Tool Chased	16.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial	30000.00 lb
Depth to Top Packer:	3354.00 ft			Final	34000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	21.00 ft				
Tool Length:	41.00 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			3335.00	
Shut In Tool	5.00			3340.00	
Hydraulic tool	5.00			3345.00	
Packer	4.00			3349.00	20.00 Bottom Of Top Packer
Packer	5.00			3354.00	
Stubb	1.00			3355.00	
Perforations	2.00			3357.00	
Recorder	0.00	6625	Outside	3357.00	
Recorder	0.00	8679	Inside	3357.00	
Perforations	15.00			3372.00	
Bullnose	3.00			3375.00	21.00 Bottom Packers & Anchor

Total Tool Length: 41.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041763

DST#: 1

ATTN: Marc Downing

Test Start: 2013.09.11 @ 18:42:23

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: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl

Total Length: ft Total Volume: bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

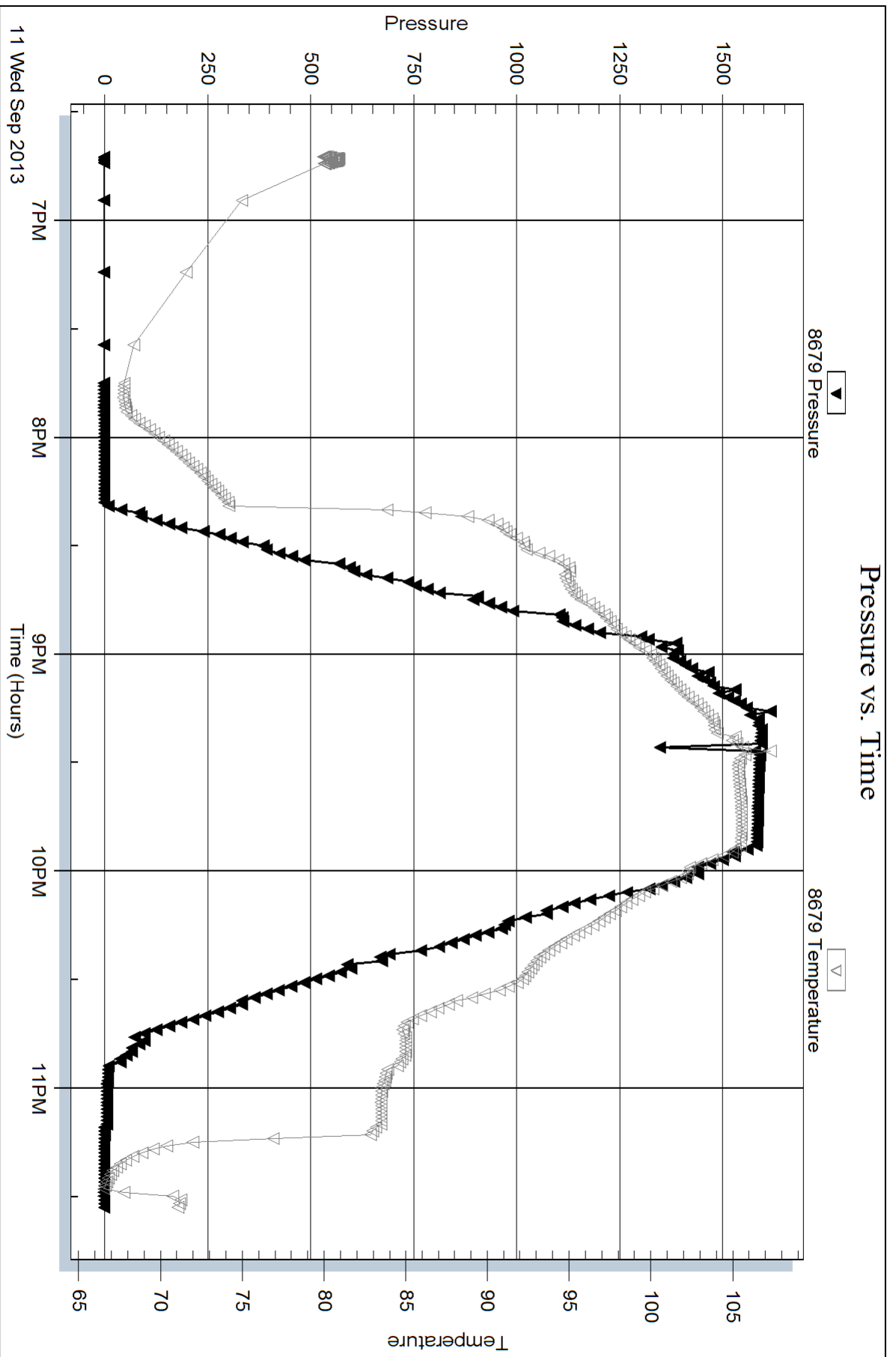
Serial #: 8679

Inside

H&C Oil Operating Inc

Faulkner #14-2

DST Test Number: 1

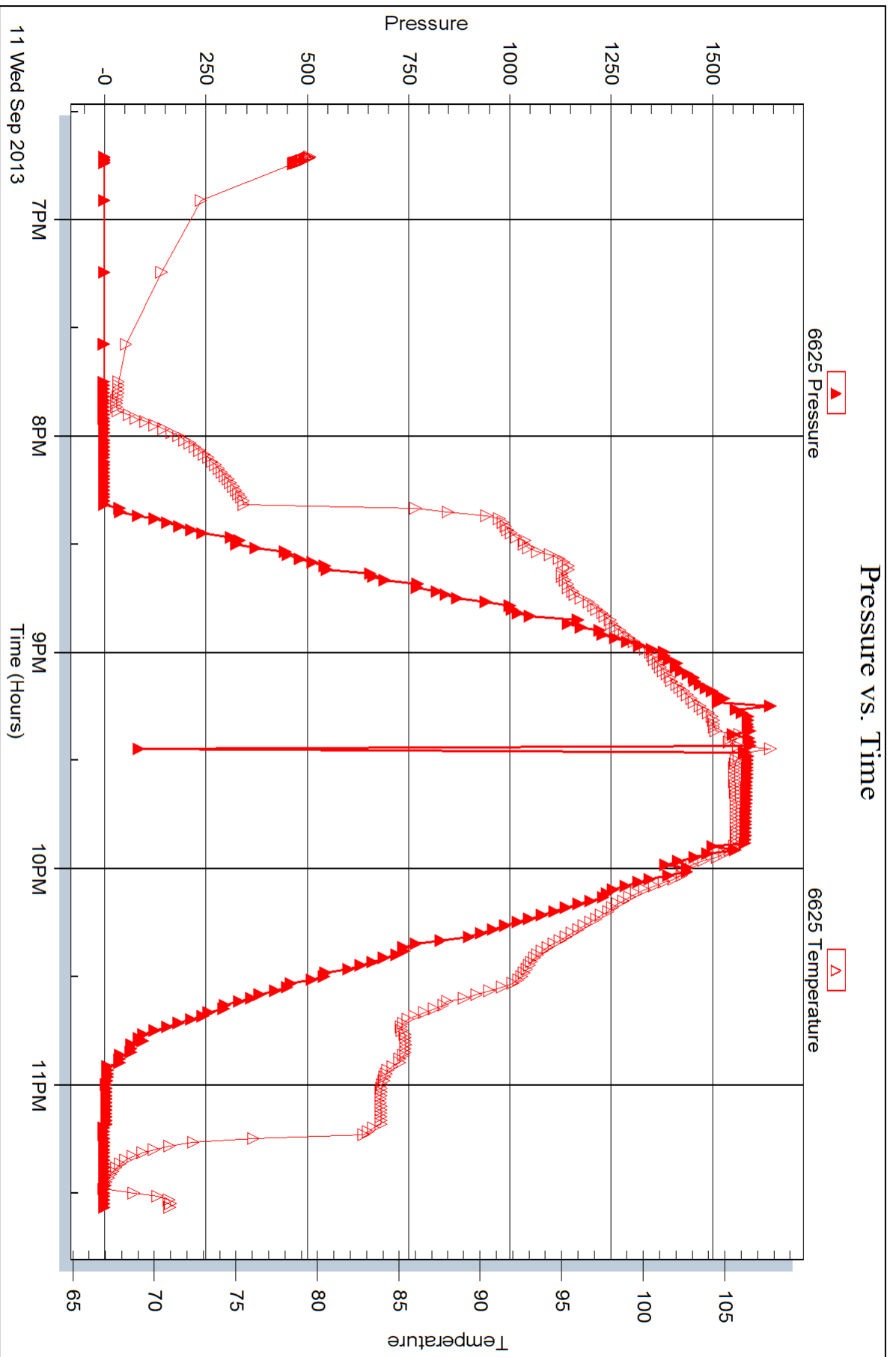


Serial #: 6625

Outside H&C Oil Operating Inc

Faulkner #14-2

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 041763

Printed: 2013.09.18 @ 09:16:57



DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating Inc**

PO Box 86
Plainville KS 67663

ATTN: Marc Downing

Faulkner #14-2

14-8s-22w Graham,KS

Start Date: 2013.09.12 @ 04:52:09

End Date: 2013.09.12 @ 11:20:39

Job Ticket #: 041764 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.18 @ 09:16:26



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041764

DST#: 2

ATTN: Marc Downing

Test Start: 2013.09.12 @ 04:52:09

GENERAL INFORMATION:

Formation: **LKC-A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:18:09

Time Test Ended: 11:20:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Jeff Brown

Unit No: 67

Interval: 3354.00 ft (KB) To 3375.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3375.00 ft (KB) (TVD)

2117.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6625 Outside

Press @ Run Depth: 42.74 psig @ 3357.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.12 End Date: 2013.09.12

Last Calib.: 2013.09.12

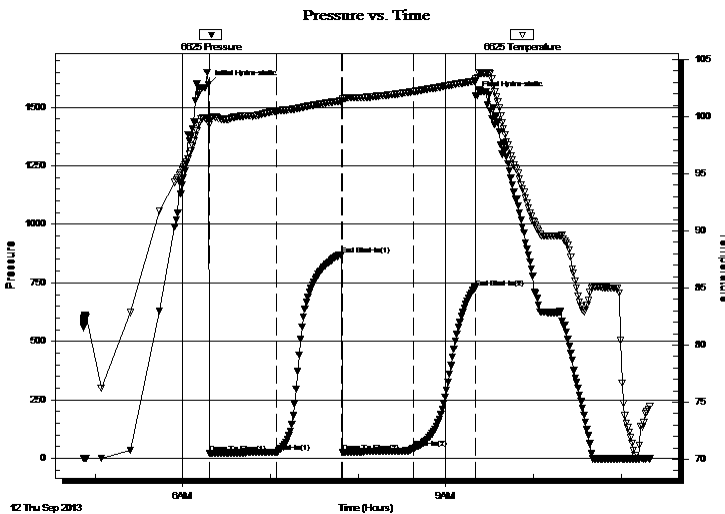
Start Time: 04:52:10 End Time: 11:19:39

Time On Btm: 2013.09.12 @ 06:17:39

Time Off Btm: 2013.09.12 @ 09:20:39

TEST COMMENT: IFP=Fair blow built to 4 in
ISI=Dead no blow back
FFP=Weak blow built to 3/4 in
FSI=Dead no blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1596.27	99.83	Initial Hydro-static
1	22.37	99.32	Open To Flow (1)
47	27.14	100.50	Shut-In(1)
91	870.09	101.38	End Shut-In(1)
92	26.80	101.38	Open To Flow (2)
141	42.74	102.21	Shut-In(2)
183	730.19	103.12	End Shut-In(2)
183	1549.45	103.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
31.00	Mud w ith a scum of oil	0.43
10.00	Gassy Oil 5%G 95%O	0.14

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041764

DST#: 2

ATTN: Marc Downing

Test Start: 2013.09.12 @ 04:52:09

GENERAL INFORMATION:

Formation: **LKC-A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:18:09

Time Test Ended: 11:20:39

Interval: 3354.00 ft (KB) To 3375.00 ft (KB) (TVD)

Total Depth: 3375.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Reset)

Tester: Jeff Brown

Unit No: 67

Reference Elevations: 2124.00 ft (KB)

2117.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8679

Inside

Press @ Run Depth: psig @ 3357.00 ft (KB)

Start Date: 2013.09.12

End Date:

2013.09.12

Start Time: 04:52:28

End Time:

11:18:27

Capacity: 8000.00 psig

Last Calib.:

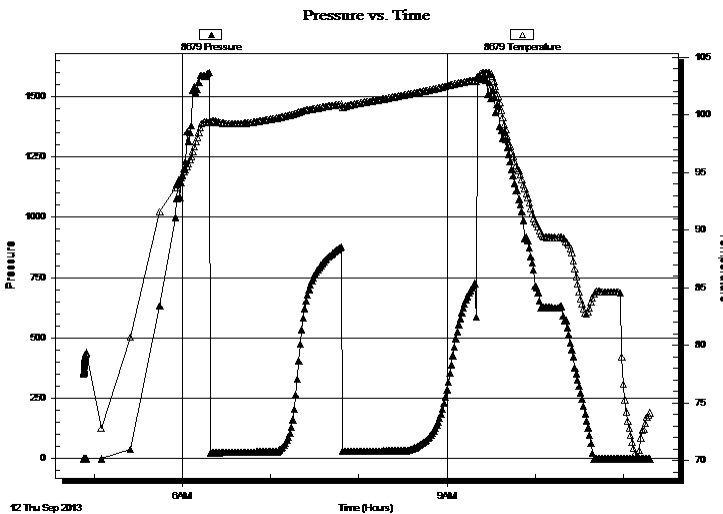
2013.09.12

Time On Btm:

Time Off Btm:

TEST COMMENT: IFP=Fair blow built to 4 in
ISI=Dead no blow back
FFP=Weak blow built to 3/4 in
FSI=Dead no blow back

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
31.00	Mud with a scum of oil	0.43
10.00	Gassy Oil 5%G 95%O	0.14

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041764

DST#: 2

ATTN: Marc Downing

Test Start: 2013.09.12 @ 04:52:09

Tool Information

Drill Pipe:	Length: 3342.00 ft	Diameter: 3.80 inches	Volume: 46.88 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	40000.00 lb
			<u>Total Volume: 46.88 bbl</u>	Tool Chased	4.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial	30000.00 lb
Depth to Top Packer:	3354.00 ft			Final	31000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	21.00 ft				
Tool Length:	41.00 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			3335.00	
Shut In Tool	5.00			3340.00	
Hydraulic tool	5.00			3345.00	
Packer	4.00			3349.00	20.00 Bottom Of Top Packer
Packer	5.00			3354.00	
Stubb	1.00			3355.00	
Perforations	2.00			3357.00	
Recorder	0.00	6625	Outside	3357.00	
Recorder	0.00	8679	Inside	3357.00	
Perforations	15.00			3372.00	
Bullnose	3.00			3375.00	21.00 Bottom Packers & Anchor

Total Tool Length: 41.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041764

DST#: 2

ATTN: Marc Downing

Test Start: 2013.09.12 @ 04:52:09

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: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
31.00	Mud with a scum of oil	0.435
10.00	Gassy Oil 5%G 95%O	0.140

Total Length: 41.00 ft Total Volume: 0.575 bbl

Num Fluid Samples: 0

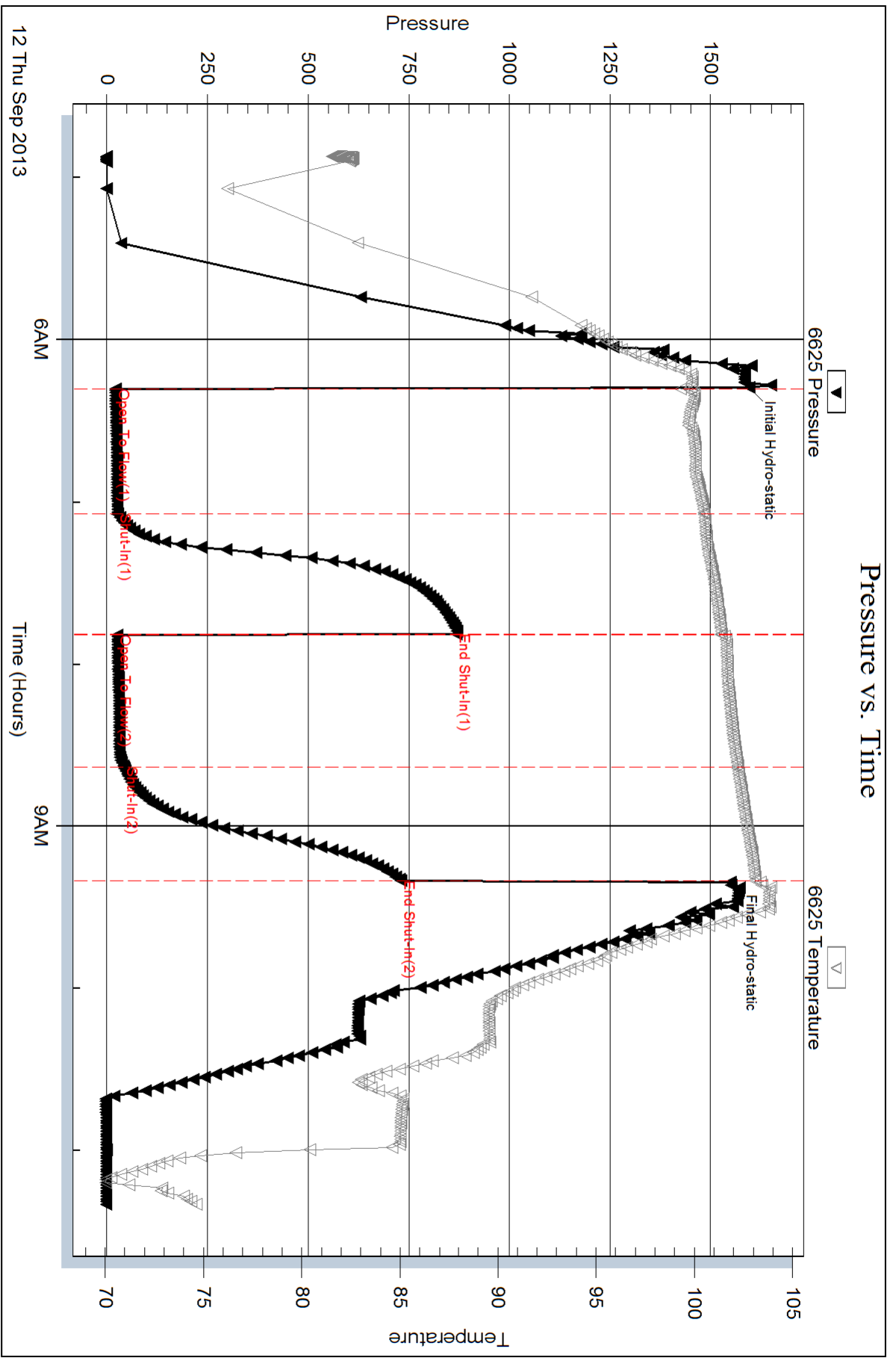
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



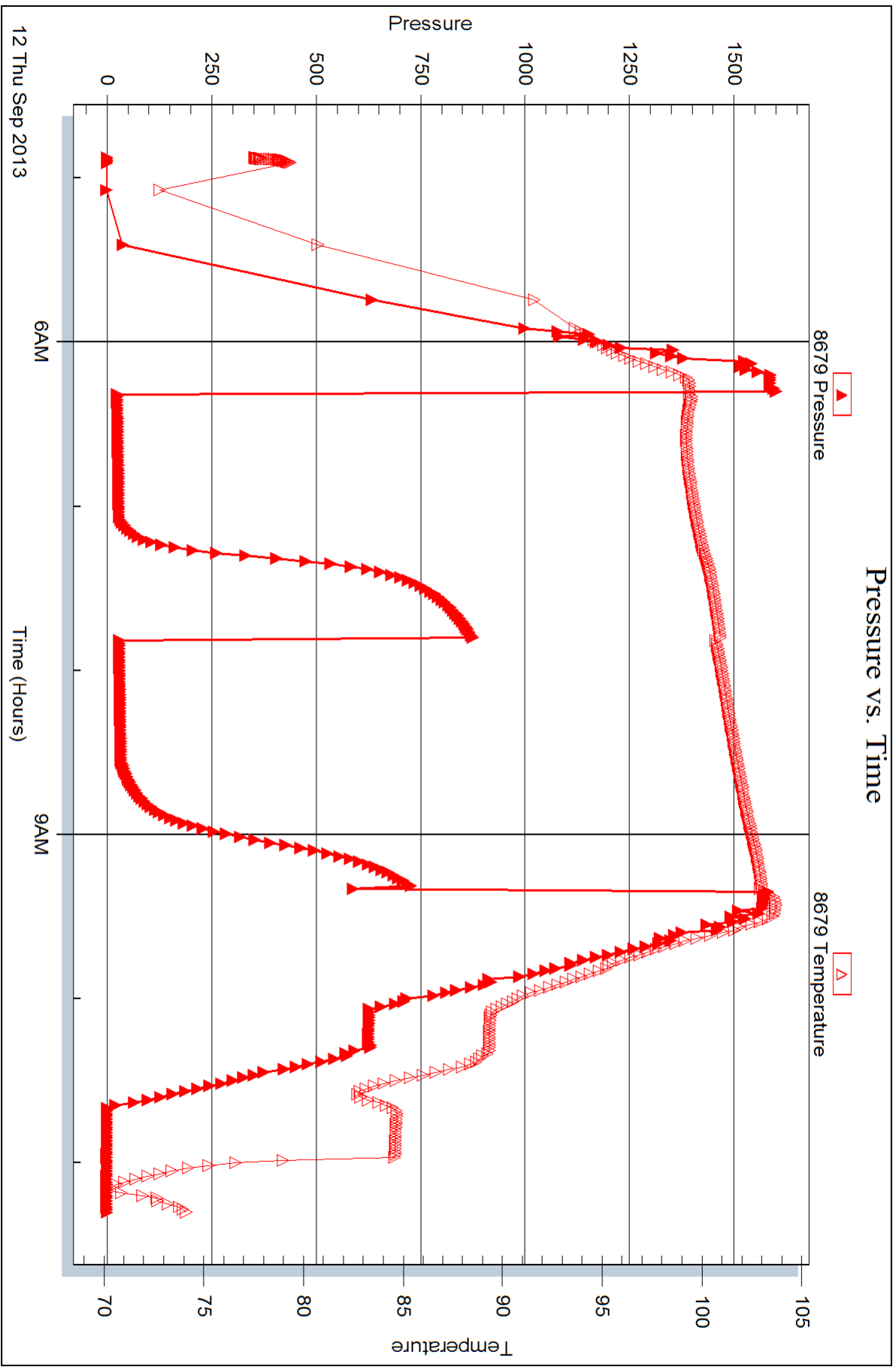
Serial #: 8679

Inside

H&C Oil Operating Inc

Faulkner #14-2

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating Inc**

PO Box 86
Plainville KS 67663

ATTN: Marc Downing

Faulkner #14-2

14-8s-22w Graham,KS

Start Date: 2013.09.12 @ 18:17:49

End Date: 2013.09.13 @ 01:20:19

Job Ticket #: 041765 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.18 @ 09:15:56



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041765

DST#: 3

ATTN: Marc Downing

Test Start: 2013.09.12 @ 18:17:49

GENERAL INFORMATION:

Formation: **LKC-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:25:19

Time Test Ended: 01:20:19

Test Type: Conventional Bottom Hole (Reset)

Tester: Jeff Brown

Unit No: 67

Interval: 3383.00 ft (KB) To 3406.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3406.00 ft (KB) (TVD)

2117.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6625 Outside

Press @ Run Depth: 49.72 psig @ 3384.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.12

End Date:

2013.09.13

Last Calib.:

2013.09.13

Start Time: 18:17:50

End Time:

01:20:19

Time On Btm:

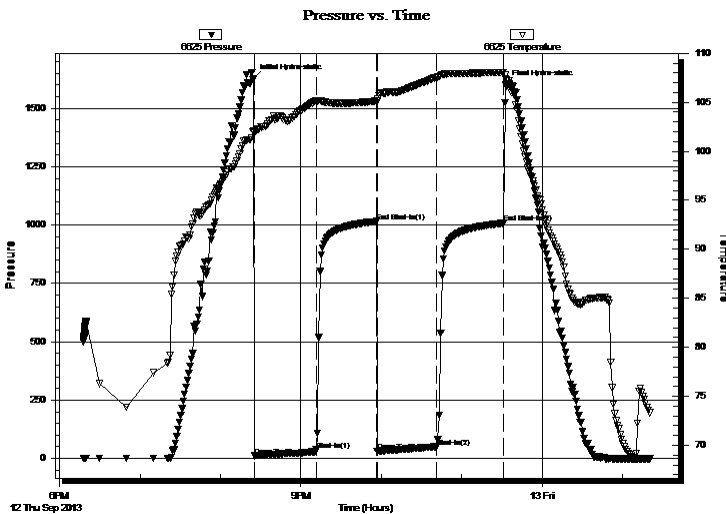
2013.09.12 @ 20:24:49

Time Off Btm:

2013.09.12 @ 23:32:49

TEST COMMENT: IFP=Fair blow built to 5-1/2 in
ISI=Dead no blow back
FFP=Fair blow built to 4-1/2 in
FSI=Dead no blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1627.99	102.05	Initial Hydro-static
1	11.07	101.90	Open To Flow (1)
47	36.69	105.16	Shut-In(1)
92	1015.60	105.12	End Shut-In(1)
92	31.43	105.12	Open To Flow (2)
137	49.72	107.56	Shut-In(2)
187	1008.07	108.05	End Shut-In(2)
188	1600.16	107.40	Final Hydro-static

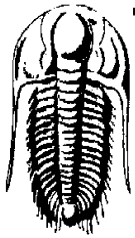
Recovery

Length (ft)	Description	Volume (bbl)
63.00	MW with oil spots 15%M 85%W	0.88
15.00	WM with oil spots 20%W 80%M	0.21

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041765 **DST#: 3**

ATTN: Marc Downing

Test Start: 2013.09.12 @ 18:17:49

GENERAL INFORMATION:

Formation: **LKC-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:25:19

Time Test Ended: 01:20:19

Test Type: Conventional Bottom Hole (Reset)

Tester: Jeff Brown

Unit No: 67

Interval: 3383.00 ft (KB) To 3406.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3406.00 ft (KB) (TVD)

2117.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8679 Inside

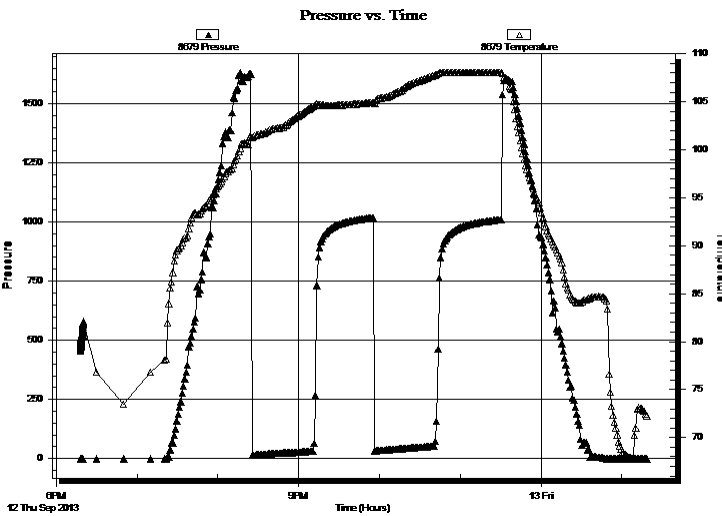
Press @RunDepth: psig @ 3384.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.12 End Date: 2013.09.13 Last Calib.: 2013.09.13

Start Time: 18:18:00 End Time: 01:18:59 Time On Btm: Time Off Btm:

TEST COMMENT: IFP=Fair blow built to 5-1/2 in
ISI=Dead no blow back
FFP=Fair blow built to 4-1/2 in
FSI=Dead no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
63.00	MW with oil spots 15%M 85%W	0.88
15.00	WM with oil spots 20%W 80%M	0.21

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041765

DST#: 3

ATTN: Marc Downing

Test Start: 2013.09.12 @ 18:17:49

Tool Information

Drill Pipe:	Length: 3374.00 ft	Diameter: 3.80 inches	Volume: 47.33 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 34000.00 lb
			<u>Total Volume: 47.33 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 28000.00 lb
Depth to Top Packer:	3383.00 ft			Final 29000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	43.00 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			3364.00	
Shut In Tool	5.00			3369.00	
Hydraulic tool	5.00			3374.00	
Packer	4.00			3378.00	20.00 Bottom Of Top Packer
Packer	5.00			3383.00	
Stubb	1.00			3384.00	
Recorder	0.00	6625	Outside	3384.00	
Recorder	0.00	8679	Inside	3384.00	
Perforations	19.00			3403.00	
Bullnose	3.00			3406.00	23.00 Bottom Packers & Anchor
Total Tool Length:	43.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041765

DST#: 3

ATTN: Marc Downing

Test Start: 2013.09.12 @ 18:17:49

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: 45.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
63.00	MW w ith oil spots 15%M 85%W	0.884
15.00	WM w ith oil spots 20%W 80%M	0.210

Total Length: 78.00 ft Total Volume: 1.094 bbl

Num Fluid Samples: 0

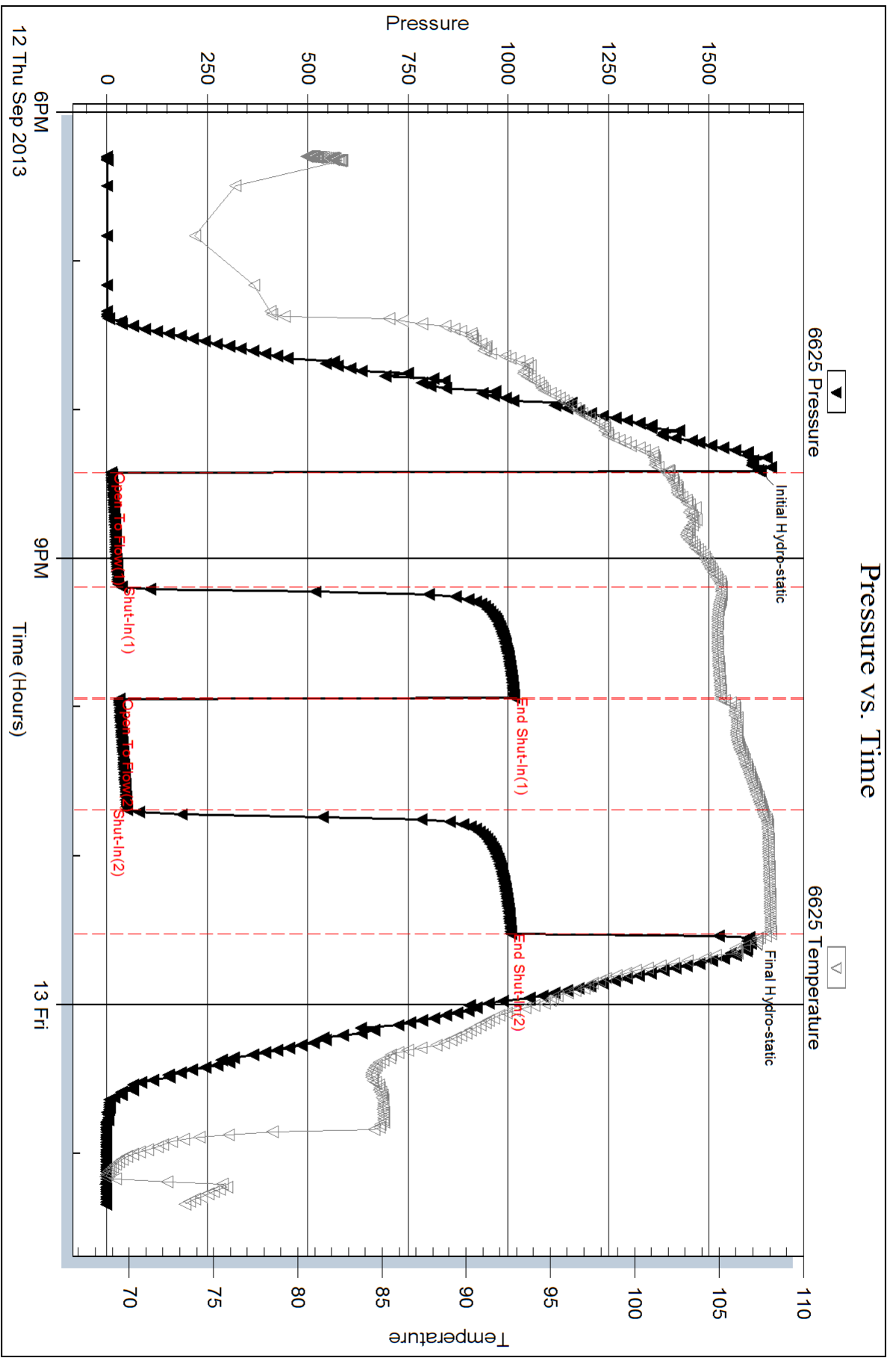
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



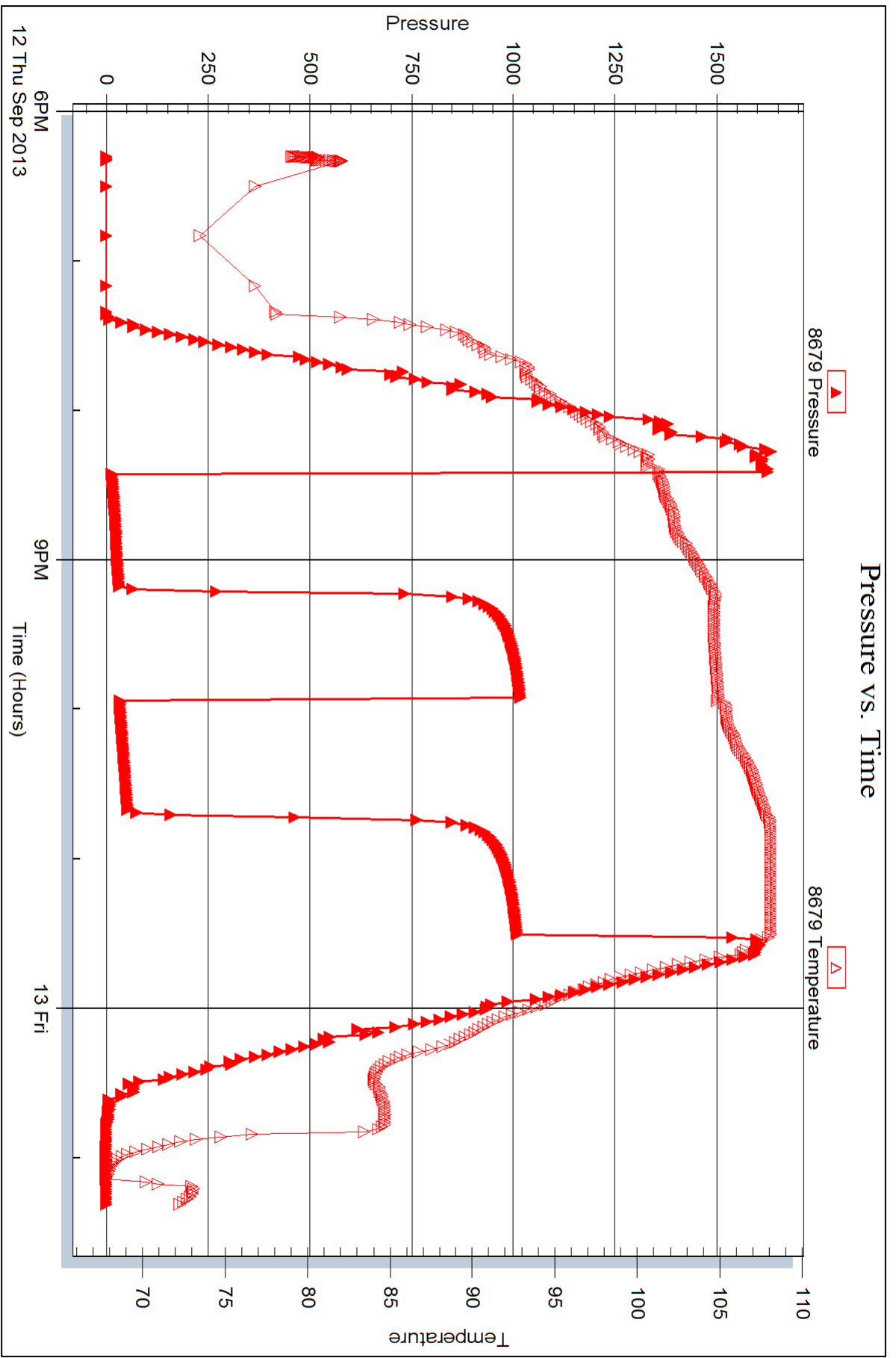
Serial #: 8679

Inside

H&C Oil Operating Inc

Faulkner #14-2

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 041765

Printed: 2013.09.18 @ 09:15:58



DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating Inc**

PO Box 86
Plainville KS 67663

ATTN: Marc Downing

Faulkner #14-2

14-8s-22w Graham,KS

Start Date: 2013.09.13 @ 09:54:12

End Date: 2013.09.13 @ 16:33:42

Job Ticket #: 041766 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.18 @ 09:15:22



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041766

DST#: 4

ATTN: Marc Downing

Test Start: 2013.09.13 @ 09:54:12

GENERAL INFORMATION:

Formation: **LKC-E & F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:37:12

Time Test Ended: 16:33:42

Test Type: Conventional Bottom Hole (Reset)

Tester: Jeff Brown

Unit No: 67

Interval: 3424.00 ft (KB) To 3450.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3450.00 ft (KB) (TVD)

2117.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6625 Outside

Press @ Run Depth: 126.67 psig @ 3428.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.13

End Date: 2013.09.13

Last Calib.: 2013.09.13

Start Time: 09:54:13

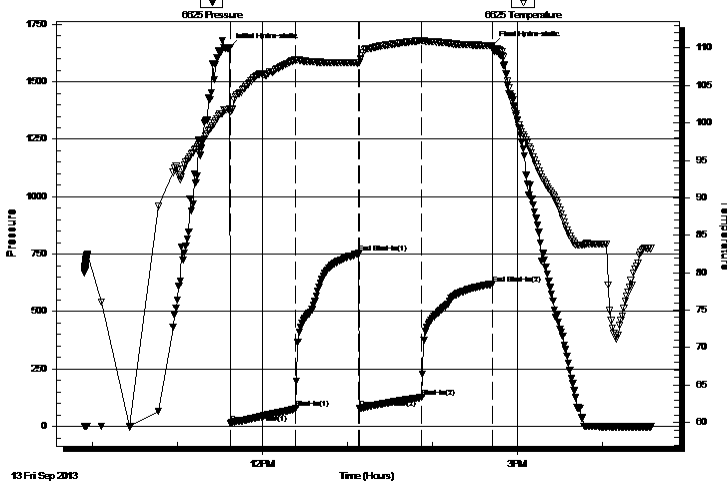
End Time: 16:33:42

Time On Btm: 2013.09.13 @ 11:36:42

Time Off Btm: 2013.09.13 @ 14:42:12

TEST COMMENT: IFP=Good blow BOB in 25 min
ISI=Dead no blow back
FFP=Weak blow built to 1 in died back to a 1/4 in
FSI=Dead no blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1649.13	101.80	Initial Hydro-static
1	14.04	101.47	Open To Flow (1)
47	78.99	108.43	Shut-In(1)
91	752.86	107.99	End Shut-In(1)
92	77.88	108.07	Open To Flow (2)
136	126.67	110.99	Shut-In(2)
185	618.87	110.29	End Shut-In(2)
186	1656.22	109.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
253.00	MW 20%M 80%W	3.55

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil Operating Inc

14-8s-22w Graham,KSPO Box 86
Plainville KS 67663**Faulkner #14-2**

ATTN: Marc Downing

Job Ticket: 041766

DST#: 4

Test Start: 2013.09.13 @ 09:54:12

GENERAL INFORMATION:

Formation: **LKC-E & F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:37:12

Time Test Ended: 16:33:42

Test Type: Conventional Bottom Hole (Reset)

Tester: Jeff Brown

Unit No: 67

Interval: **3424.00 ft (KB) To 3450.00 ft (KB) (TVD)**

Total Depth: 3450.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2124.00 ft (KB)

2117.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8679**Inside**

Press @ Run Depth: psig @ 3428.00 ft (KB)

Start Date: 2013.09.13

End Date: 2013.09.13

Start Time: 09:54:07

End Time: 16:32:36

Capacity: 8000.00 psig

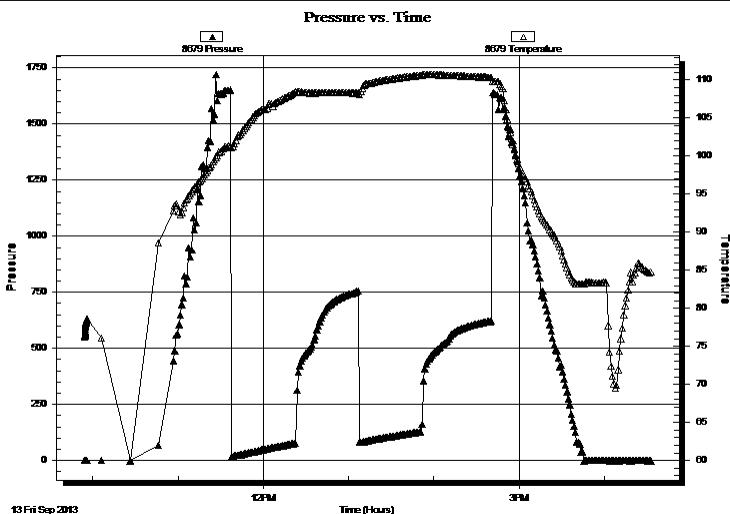
Last Calib.: 2013.09.13

Time On Btm:

Time Off Btm:

TEST COMMENT: IFP=Good blow BOB in 25 min
ISI=Dead no blow back
FFP=Weak blow built to 1 in died back to a 1/4 in
FSI=Dead no blow back

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
253.00	MW 20%M 80%W	3.55

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041766

DST#: 4

ATTN: Marc Downing

Test Start: 2013.09.13 @ 09:54:12

Tool Information

Drill Pipe:	Length: 3437.00 ft	Diameter: 3.80 inches	Volume: 48.21 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 35000.00 lb
			<u>Total Volume: 48.21 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial 28000.00 lb
Depth to Top Packer:	3424.00 ft			Final 30000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	46.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			3405.00	
Shut In Tool	5.00			3410.00	
Hydraulic tool	5.00			3415.00	
Packer	4.00			3419.00	20.00 Bottom Of Top Packer
Packer	5.00			3424.00	
Stubb	1.00			3425.00	
Perforations	3.00			3428.00	
Recorder	0.00	6625	Outside	3428.00	
Recorder	0.00	8679	Inside	3428.00	
Perforations	19.00			3447.00	
Bullnose	3.00			3450.00	26.00 Bottom Packers & Anchor

Total Tool Length: 46.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041766

DST#: 4

ATTN: Marc Downing

Test Start: 2013.09.13 @ 09:54:12

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
253.00	MW 20%M 80%W	3.549

Total Length: 253.00 ft Total Volume: 3.549 bbl

Num Fluid Samples: 0

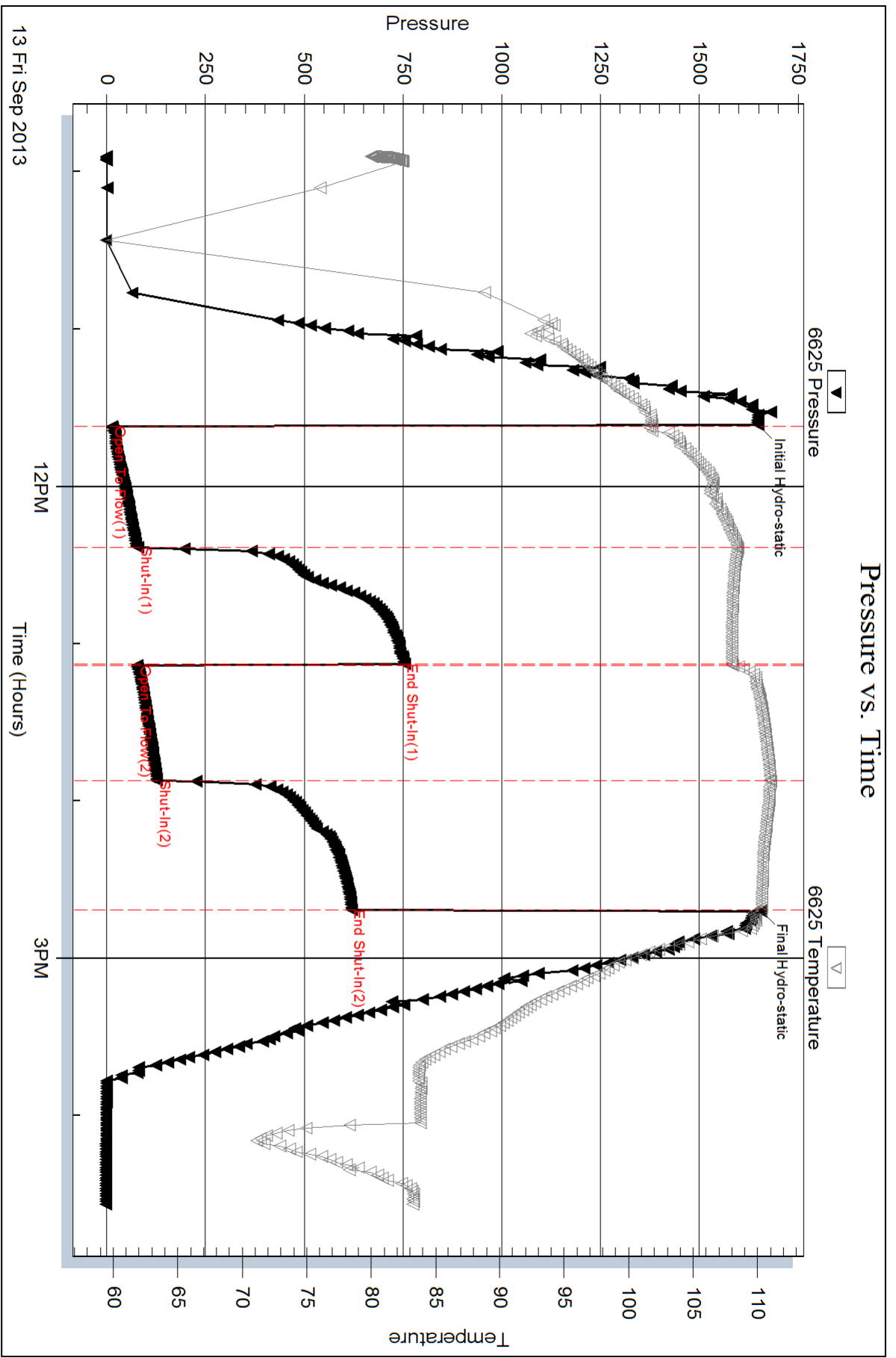
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



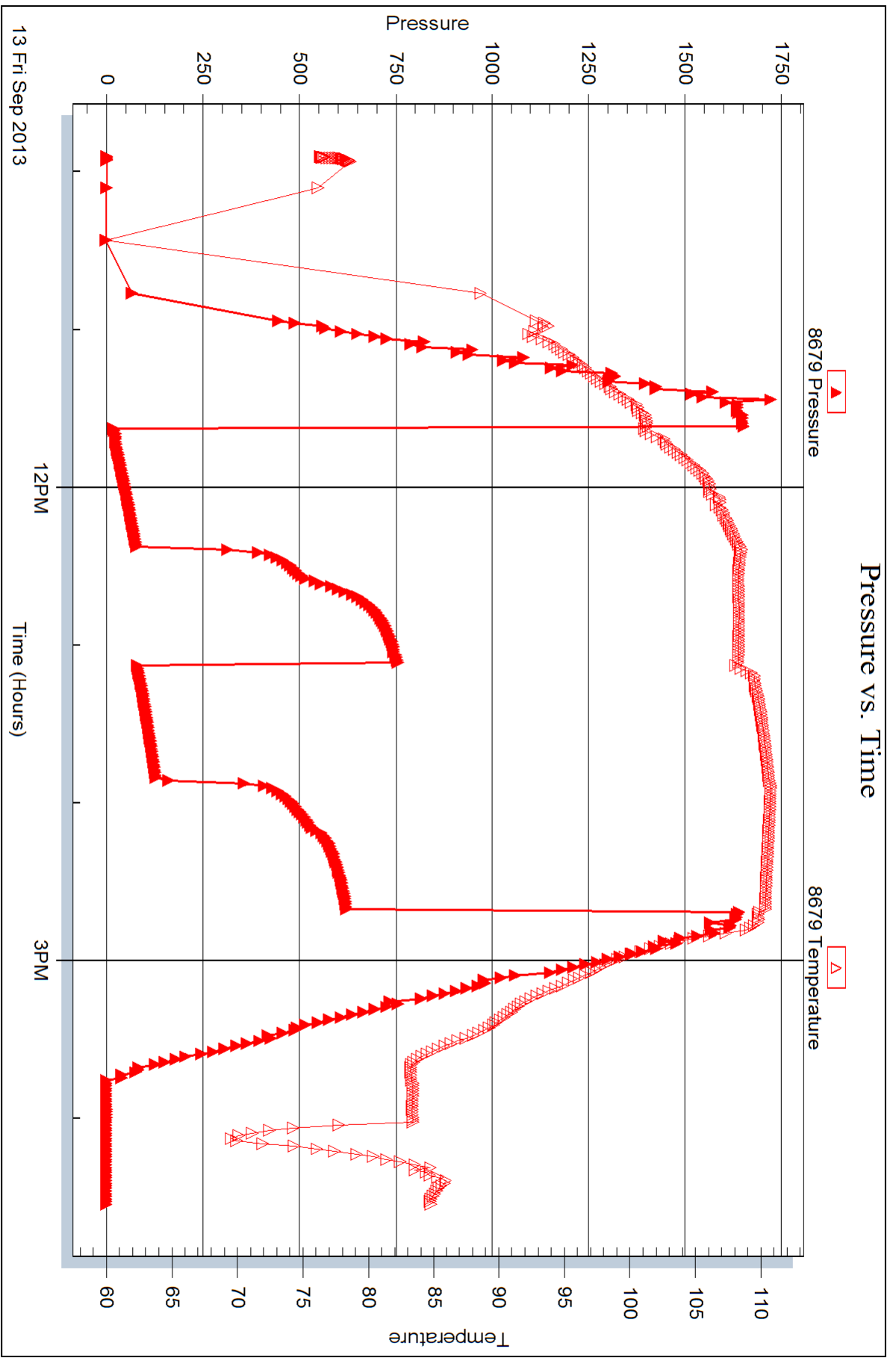
Serial #: 8679

Inside

H&C Oil Operating Inc

Faulkner #14-2

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 041766

Printed: 2013.09.18 @ 09:15:23



DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating Inc**

PO Box 86
Plainville KS 67663

ATTN: Marc Downing

Faulkner #14-2

14-8s-22w Graham,KS

Start Date: 2013.09.14 @ 02:27:55

End Date: 2013.09.14 @ 07:48:55

Job Ticket #: 041767 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.18 @ 09:14:44



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041767

DST#: 5

ATTN: Marc Downing

Test Start: 2013.09.14 @ 02:27:55

GENERAL INFORMATION:

Formation: **LKC-H-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:55:55

Time Test Ended: 07:48:55

Test Type: Conventional Bottom Hole (Reset)

Tester: Jeff Brown

Unit No: 67

Interval: 3479.00 ft (KB) To 3541.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3541.00 ft (KB) (TVD)

2117.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6625 Outside

Press @ Run Depth: 30.42 psig @ 3516.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.14

End Date:

2013.09.14

Last Calib.:

2013.09.14

Start Time: 02:27:56

End Time:

07:46:55

Time On Btm:

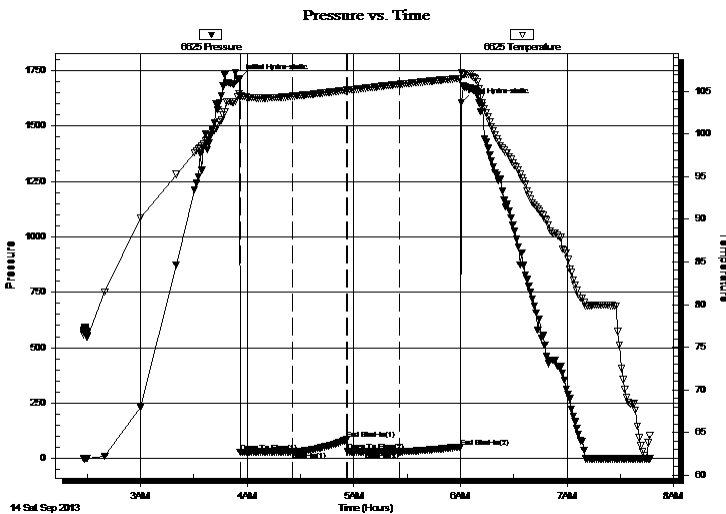
2013.09.14 @ 03:55:25

Time Off Btm:

2013.09.14 @ 06:00:25

TEST COMMENT: IFP=Weak blow built to 1 in
ISI=Dead no blow back
FFP=Deade no blow
FSI=Dead no blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1712.61	104.71	Initial Hydro-static
1	28.68	104.48	Open To Flow (1)
30	30.17	104.41	Shut-In(1)
61	85.01	105.13	End Shut-In(1)
61	30.16	105.14	Open To Flow (2)
90	30.42	105.81	Shut-In(2)
125	51.70	106.51	End Shut-In(2)
125	1605.09	107.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	OCM 10%O 90%M	0.04

* Recovery from multiple tests

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

ATTN: Marc Downing

Job Ticket: 041767

DST#: 5

Test Start: 2013.09.14 @ 02:27:55

GENERAL INFORMATION:

Formation: **LKC-H-J**

Deviated: No Whipstock: ft (KB)

Test Type: Conventional Bottom Hole (Reset)

Time Tool Opened: 03:55:55

Tester: Jeff Brown

Time Test Ended: 07:48:55

Unit No: 67

Interval: 3479.00 ft (KB) To 3541.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3541.00 ft (KB) (TVD)

2117.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8679 Inside

Press @ Run Depth: psig @ 3516.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.14 End Date: 2013.09.14

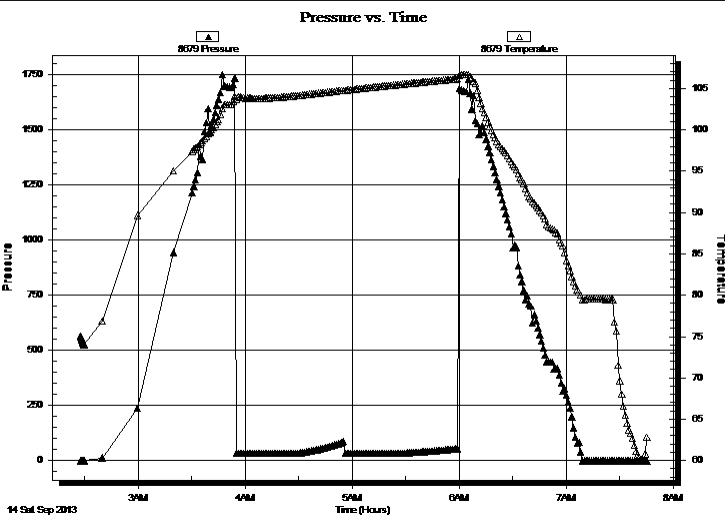
Last Calib.: 2013.09.14

Start Time: 02:27:41 End Time: 07:45:40

Time On Btm:

Time Off Btm:

TEST COMMENT: IFP=Weak blow built to 1 in
ISI=Dead no blow back
FFP=Deade no blow
FSI=Dead no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
3.00	OCM 10%O 90%M	0.04

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041767

DST#: 5

ATTN: Marc Downing

Test Start: 2013.09.14 @ 02:27:55

Tool Information

Drill Pipe:	Length: 3467.00 ft	Diameter: 3.80 inches	Volume: 48.63 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	34000.00 lb
			<u>Total Volume: 48.63 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial	28000.00 lb
Depth to Top Packer:	3479.00 ft			Final	28000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	62.00 ft				
Tool Length:	82.00 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			3460.00	
Shut In Tool	5.00			3465.00	
Hydraulic tool	5.00			3470.00	
Packer	4.00			3474.00	20.00 Bottom Of Top Packer
Packer	5.00			3479.00	
Stubb	1.00			3480.00	
Perforations	3.00			3483.00	
Change Over Sub	1.00			3484.00	
Drill Pipe	31.00			3515.00	
Change Over Sub	1.00			3516.00	
Recorder	0.00	6625	Outside	3516.00	
Recorder	0.00	8679	Inside	3516.00	
Perforations	22.00			3538.00	
Bullnose	3.00			3541.00	62.00 Bottom Packers & Anchor

Total Tool Length: 82.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041767

DST#: 5

ATTN: Marc Downing

Test Start: 2013.09.14 @ 02:27:55

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
3.00	OCM 10%O 90%M	0.042

Total Length: 3.00 ft Total Volume: 0.042 bbl

Num Fluid Samples: 0

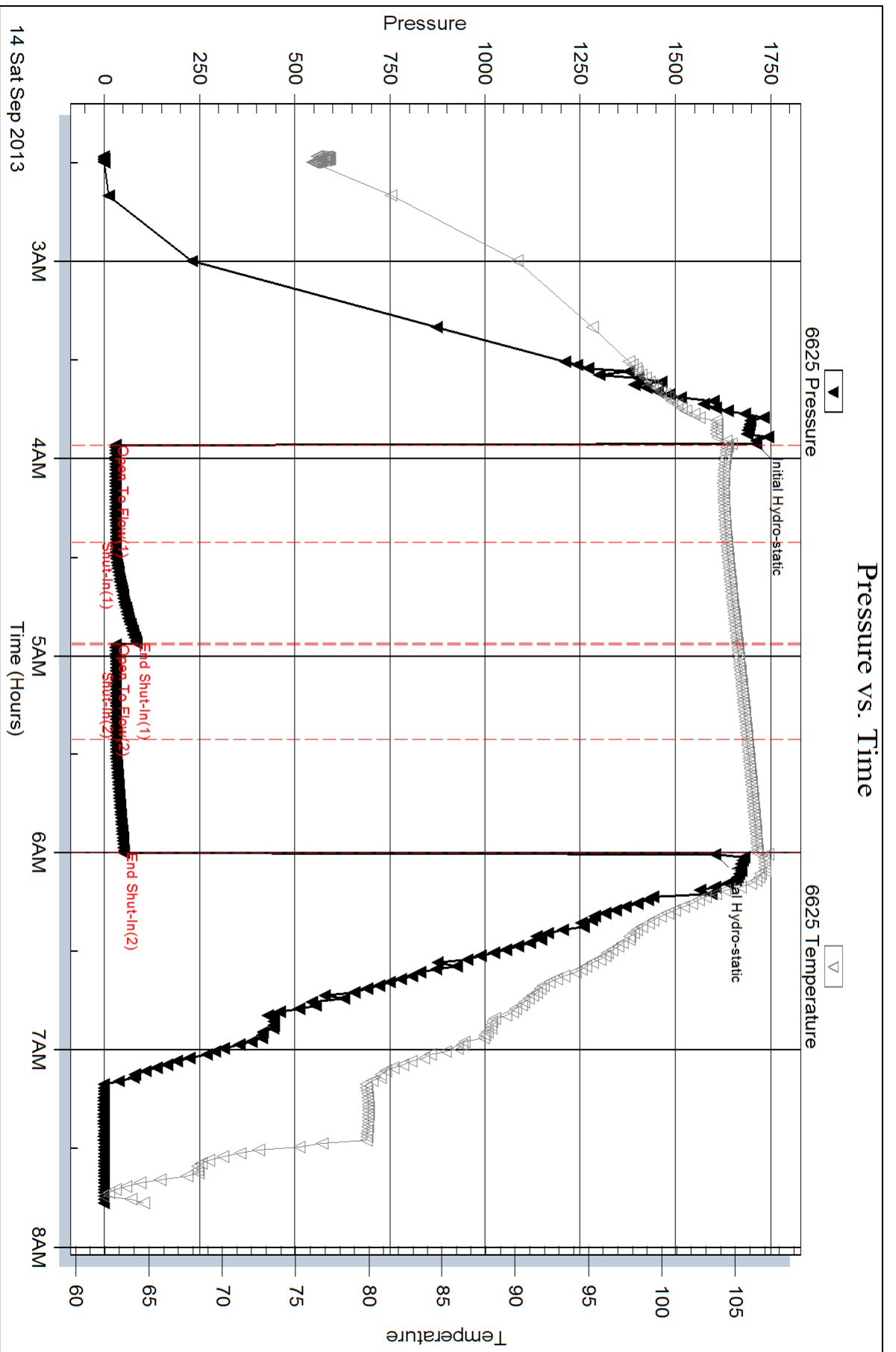
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



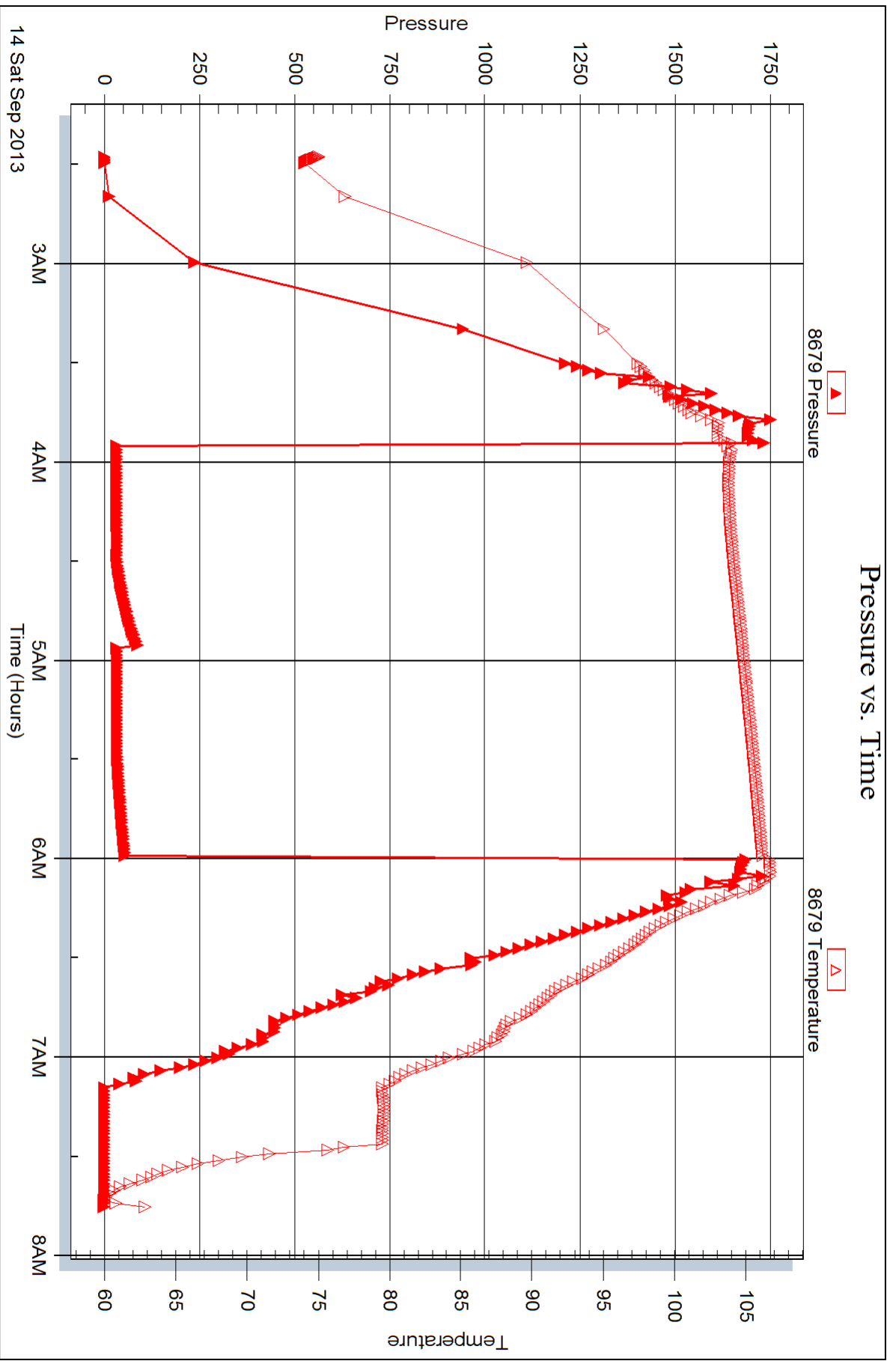
Serial #: 8679

Inside

H&C Oil Operating Inc

Faulkner #14-2

DST Test Number: 5





DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating Inc**

PO Box 86
Plainville KS 67663

ATTN: Marc Downing

Faulkner #14-2

14-8s-22w Graham,KS

Start Date: 2013.09.14 @ 14:00:09

End Date: 2013.09.14 @ 19:22:09

Job Ticket #: 041768 DST #: 6

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.18 @ 09:14:09



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041768

DST#: 6

ATTN: Marc Downing

Test Start: 2013.09.14 @ 14:00:09

GENERAL INFORMATION:

Formation: **LKC-K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:39:39
 Time Test Ended: 19:22:09
 Interval: **3539.00 ft (KB) To 3560.00 ft (KB) (TVD)**
 Total Depth: 3560.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jeff Brown
 Unit No: 67
 Reference Elevations: 2124.00 ft (KB)
 2117.00 ft (CF)
 KB to GR/CF: 7.00 ft

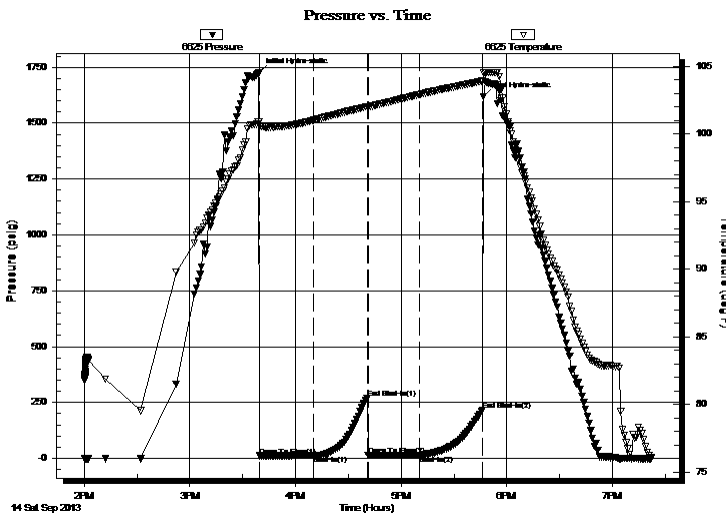
Serial #: 6625

Outside

Press @ Run Depth: 13.34 psig @ 3542.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.09.14 End Date: 2013.09.14 Last Calib.: 2013.09.14
 Start Time: 14:00:10 End Time: 19:22:09 Time On Btm: 2013.09.14 @ 15:39:09
 Time Off Btm: 2013.09.14 @ 17:46:39

TEST COMMENT: IFP=Weak blow built to 1/2 in
 ISI=Dead no blow back
 FFP=Dead no blow
 FSI=Dead bo blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1727.06	100.86	Initial Hydro-static
1	10.99	100.57	Open To Flow (1)
31	12.64	101.00	Shut-In(1)
62	269.91	102.01	End Shut-In(1)
62	12.54	102.00	Open To Flow (2)
91	13.34	102.90	Shut-In(2)
127	216.57	103.90	End Shut-In(2)
128	1619.30	104.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	SOCM 5%O 95%M	0.03

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil Operating Inc

PO Box 86
Plainville KS 67663

ATTN: Marc Downing

14-8s-22w Graham,KS

Faulkner #14-2

Job Ticket: 041768

DST#: 6

Test Start: 2013.09.14 @ 14:00:09

GENERAL INFORMATION:

Formation: **LKC-K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:39:39

Time Test Ended: 19:22:09

Test Type: Conventional Bottom Hole (Reset)

Tester: Jeff Brown

Unit No: 67

Interval: 3539.00 ft (KB) To 3560.00 ft (KB) (TVD)

Total Depth: 3560.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2124.00 ft (KB)

2117.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8679 Inside

Press @ Run Depth: psig @ 3542.00 ft (KB)

Start Date: 2013.09.14

End Date:

2013.09.14

Start Time: 14:00:55

End Time:

19:21:54

Capacity: 8000.00 psig

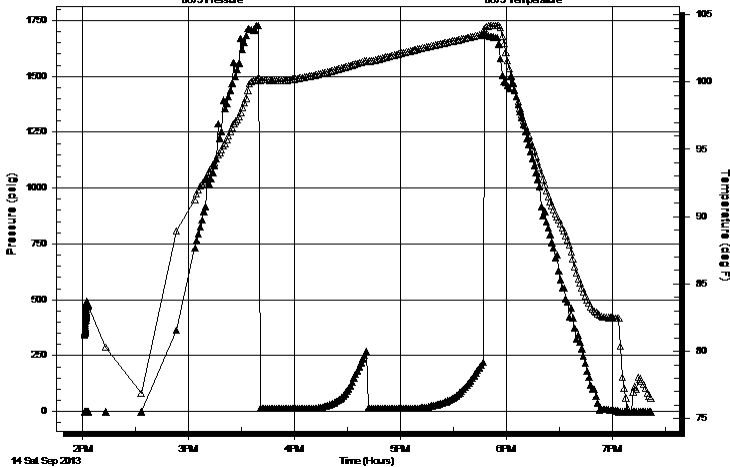
Last Calib.: 2013.09.14

Time On Btm:

Time Off Btm:

TEST COMMENT: IFP=Weak blow built to 1/2 in
ISI=Dead no blow back
FFP=Dead no blow
FSI=Dead no blow back

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
2.00	SOCM 5%O 95%M	0.03

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041768

DST#: 6

ATTN: Marc Downing

Test Start: 2013.09.14 @ 14:00:09

Tool Information

Drill Pipe:	Length: 3530.00 ft	Diameter: 3.80 inches	Volume: 49.52 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	35000.00 lb
			<u>Total Volume: 49.52 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial	28000.00 lb
Depth to Top Packer:	3539.00 ft			Final	28000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	21.00 ft				
Tool Length:	41.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			3520.00	
Shut In Tool	5.00			3525.00	
Hydraulic tool	5.00			3530.00	
Packer	4.00			3534.00	20.00 Bottom Of Top Packer
Packer	5.00			3539.00	
Stubb	1.00			3540.00	
Perforations	2.00			3542.00	
Recorder	0.00	6625	Outside	3542.00	
Recorder	0.00	8679	Inside	3542.00	
Perforations	15.00			3557.00	
Bullnose	3.00			3560.00	21.00 Bottom Packers & Anchor

Total Tool Length: 41.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating Inc

14-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Faulkner #14-2

Job Ticket: 041768

DST#: 6

ATTN: Marc Downing

Test Start: 2013.09.14 @ 14:00:09

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 57.94 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	SOCM 5%O 95%M	0.028

Total Length: 2.00 ft Total Volume: 0.028 bbl

Num Fluid Samples: 0

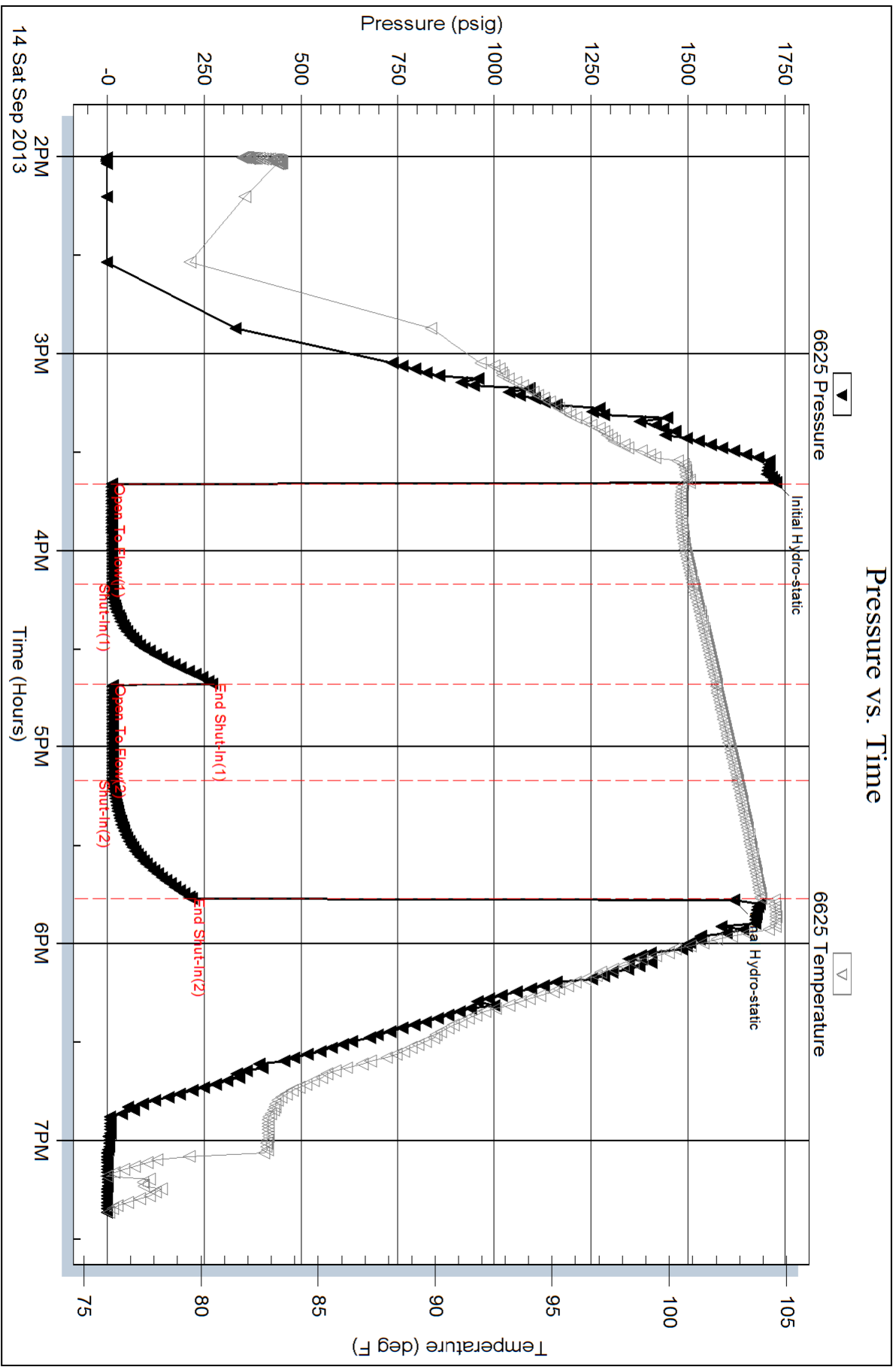
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



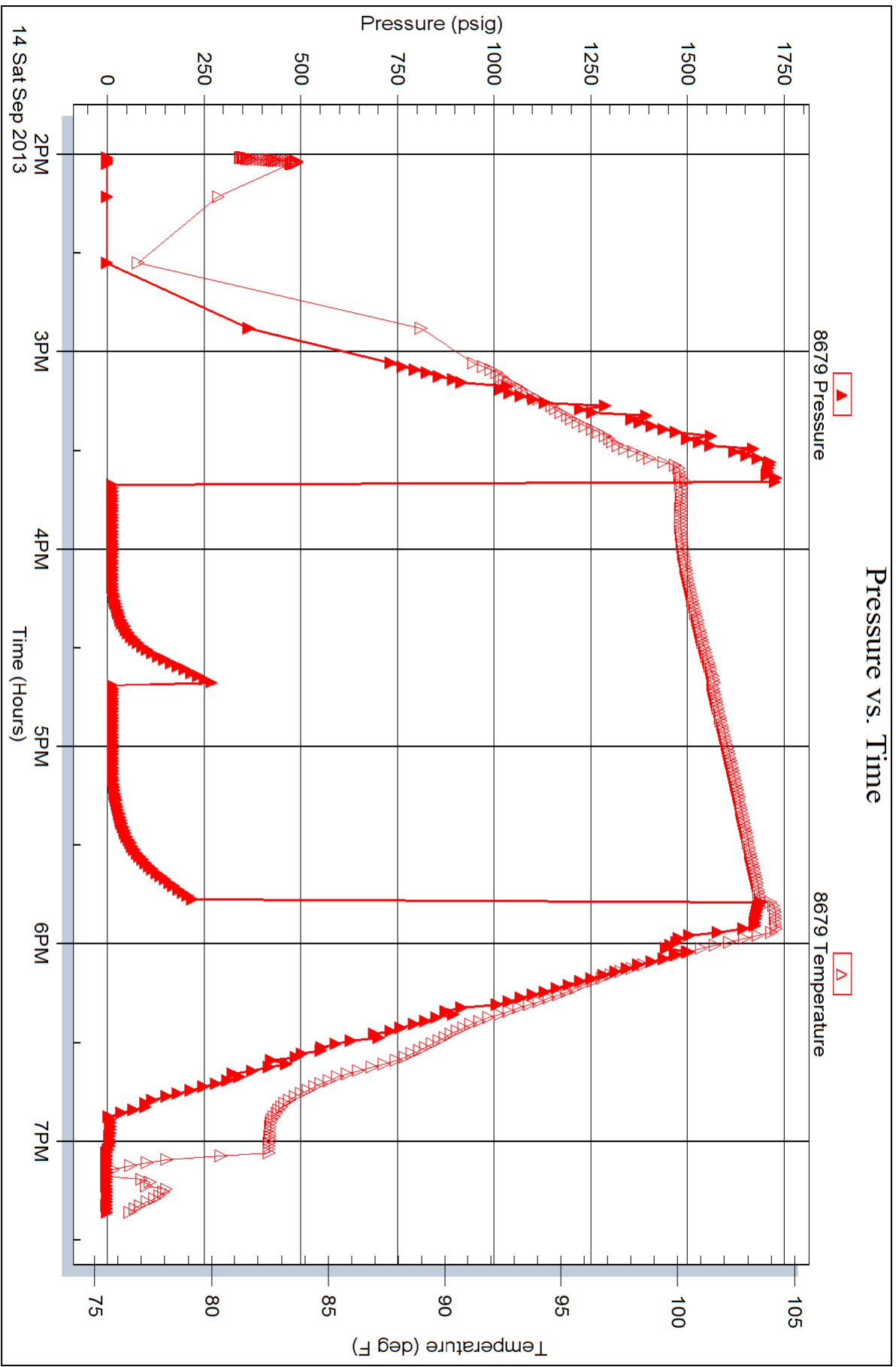
Serial #: 8679

Inside

H&C Oil Operating Inc

Faulkner #14-2

DST Test Number: 6





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 041763

Well Name & No. Faulkner 14-2 Test No. 1 Date 9-11-13
 Company H+C Oil Operating INC Elevation 2124 KB 2117 GL
 Address Po Box 86 Plainville KS 67463 + 0086
 Co. Rep / Geo. Marc Downing Rig American Eagle # 3
 Location: Sec. 14 Twp. 8 S Rge. 22 W Co. Graham State KS

Interval Tested 3354-3375 Zone Tested Lansing - A
 Anchor Length 21 Drill Pipe Run 3372 Mud Wt. 8.9
 Top Packer Depth 3349 Drill Collars Run 0 Vis 47
 Bottom Packer Depth 3354 Wt. Pipe Run 0 WL 6.8
 Total Depth 3375 Chlorides 1100 ppm System LCM 1

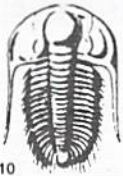
Blow Description IFP-
ISI-
FFP- Mis run 16 foot of fill in the hole
FST-

Rec	Feet of	%gas	%oil	%water	%mud
<u>140</u>	<u>MUD</u>				

Rec Total 140 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic _____ Test 950 _____ T-On Location 17:38
 (B) First Initial Flow _____ Jars _____ T-Started 18:42
 (C) First Final Flow _____ Safety Joint _____ T-Open 21:25
 (D) Initial Shut-In _____ Circ Sub _____ T-Pulled 21:40
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 23:36
 (F) Second Final Flow _____ Mileage 120 RT 186 _____ Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic _____ Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1136
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1136

Approved By _____ Our Representative Jeff Brown
 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.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 041764

Well Name & No. Faulkner 14-2 Test No. 2 Date 9-12-13
 Company H+C Oil Operating INC Elevation 2124 KB 2117 GL
 Address PO Box 86 Plainville KS 67663 + 0086
 Co. Rep / Geo. Marc Downing Rig American Eagle #3
 Location: Sec. 14 Twp. 8S Rge. 22W Co. Graham State KS

Interval Tested 3354-3375 Zone Tested LKC-A
 Anchor Length 21 Drill Pipe Run 3342 Mud Wt. 8.9
 Top Packer Depth 3349 Drill Collars Run 0 Vis 47
 Bottom Packer Depth 3354 Wt. Pipe Run 0 WL 6.8
 Total Depth 3375 Chlorides 1100 ppm System LCM 1

Blow Description FP-Fair Blow Built TO 4 IN
ISI-Dead NO Blow Back
FP-Weak Blow Built TO 3/4 IN
ISI-Dead NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>31</u>	<u>mud with A Scum of oil</u>				
<u>10</u>	<u>Gassy oil</u>	<u>5</u>	<u>95</u>		
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 41 BHT 103 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1596 Test 1150 T-On Location 4:48
 (B) First Initial Flow 22 Jars _____ T-Started 4:52
 (C) First Final Flow 27 Safety Joint _____ T-Open 6:19
 (D) Initial Shut-In 870 Circ Sub _____ T-Pulled 9:19
 (E) Second Initial Flow 27 Hourly Standby _____ T-Out 11:20
 (F) Second Final Flow 43 Mileage 186 Comments _____
 (G) Final Shut-In 730 Sampler _____
 (H) Final Hydrostatic 1549 Straddle _____

Initial Open 45 Ruined Shale Packer _____
 Initial Shut-In 45 Ruined Packer _____
 Final Flow 45 Extra Copies _____
 Final Shut-In 45 Extra Recorder _____
 Sub Total 0
 Total 1336
 MP/DST Disc't _____
 Sub Total 1336

Approved By _____ Our Representative Jeff Brown

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 041765

Well Name & No. Faulkner 14-2 Test No. 3 Date 9-12-13
 Company H+C oil operating INC Elevation 2124 KB 2117 GL
 Address PO Box 86 Plainville KS 67663 + 0086
 Co. Rep / Geo. Marc Downing Rig American Eagle #3
 Location: Sec. 14 Twp. 8S Rge. 22 W Co. Graham State KS

Interval Tested 3383 - 3406 Zone Tested LKC-C
 Anchor Length 23 Drill Pipe Run 3374 Mud Wt. 9.0
 Top Packer Depth 3378 Drill Collars Run 0 Vis 45
 Bottom Packer Depth 3383 Wt. Pipe Run 0 WL 7.8
 Total Depth 3406 Chlorides 1200 ppm System LCM 1

Blow Description FP-Fair Blow Built TO 5 1/2 IN
IS-Dead NO Blow Back
FP-Fair Blow Built TO 4 1/2 IN
IS-Dead NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>43</u>	<u>Feet of MW with oil spots</u>		<u>85</u>	<u>15</u>	
<u>15</u>	<u>Feet of WM with oil</u>		<u>20</u>	<u>80</u>	

Rec Total 78 BHT 108 Gravity API RW. 198 @ 67.9° F Chlorides 38,000 ppm

(A) Initial Hydrostatic 1628 Test 1150 T-On Location 17:52
 (B) First Initial Flow 11 Jars _____ T-Started 18:17
 (C) First Final Flow 37 Safety Joint _____ T-Open 20:25
 (D) Initial Shut-In 1016 Circ Sub _____ T-Pulled 23:25
 (E) Second Initial Flow 31 Hourly Standby _____ T-Out 1:20
 (F) Second Final Flow 50 Mileage 186 Comments _____
 (G) Final Shut-In 1008 Sampler _____
 (H) Final Hydrostatic 1600 Straddle _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Packer _____
 Extra Copies _____

Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45
 Sub Total 1336
 Total 1336
 MP/DST Disc't _____

Approved By _____ Our Representative Jeff Brown

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 041766

4/10

Well Name & No. Faulkner 14-2 Test No. 4 Date 9-13-13
 Company H & C Oil Operating INC Elevation 2124 KB 2117 GL
 Address Po Box 86 Plainville KS 67463 + 0086
 Co. Rep / Geo. Marc Downing Rig American Eagle #3
 Location: Sec. 14 Twp. 8s Rge. 22 W Co. Graham State KS

Interval Tested 3424-3450 Zone Tested LKC - E + F
 Anchor Length 26 Drill Pipe Run 3437 Mud Wt. 9.1
 Top Packer Depth 3419 Drill Collars Run 0 Vis 60
 Bottom Packer Depth 3424 Wt. Pipe Run 0 WL 5.8
 Total Depth 3450 Chlorides 1500 ppm System LCM 0

Blow Description FF- Good Blow Bob IN 25min
FF- Dead No Blow Back
FF- Weak Blow By: IT to 1 IN died back to a 1/4 IN
FF- Dead No Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>253</u>	<u>Feet of MW</u>			<u>80</u>	<u>20</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 253 BHT 110 Gravity API RW, 178 @ 79.5 F Chlorides 42,000 ppm
 (A) Initial Hydrostatic 1649 Test 1150 T-On Location _____
 (B) First Initial Flow 14 Jars _____ T-Started 9:54
 (C) First Final Flow 79 Safety Joint _____ T-Open 11:38
 (D) Initial Shut-In 753 Circ Sub _____ T-Pulled 14:38
 (E) Second Initial Flow 78 Hourly Standby _____ T-Out 16:38
 (F) Second Final Flow 127 Mileage _____ Comments _____
 (G) Final Shut-In 619 Sampler _____
 (H) Final Hydrostatic 1656 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____

Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45
 Sub Total 0
 Total 1150
 MP/DST Disc't _____
 Sub Total 1150

Approved By _____ Our Representative Jill Brown
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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 041767

Well Name & No. Faul Kner 14-2 Test No. 5 Date 9-14-13
 Company H+C oil operating Elevation 2124 KB 2117 GL
 Address Po Box 86 Plainville KS 67163 + 0086
 Co. Rep / Geo. Marc Downing Rig American Eagle #3
 Location: Sec. 14 Twp. 8S Rge. 22W Co. Graham State KS

Interval Tested 3479 - 3541 Zone Tested LKC - H-J
 Anchor Length 62 Drill Pipe Run 3467 Mud Wt. 9.1
 Top Packer Depth 3474 Drill Collars Run 0 Vis 600
 Bottom Packer Depth 3479 Wt. Pipe Run 0 WL 5.8
 Total Depth 3541 Chlorides 1500 ppm System LCM 0

Blow Description FF-Weak Blow Built To 1 IN
ISI-Dead No Blow Back
FF-Dead No Blow
FSI-Dead No Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>3'</u>	<u>CCM</u>		<u>10</u>		<u>90</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 3 BHT Gravity API RW @ °F Chlorides ppm

(A) Initial Hydrostatic 1713 Test 1150 T-On Location 2:15
 (B) First Initial Flow 29 Jars T-Started 2:27
 (C) First Final Flow 30 Safety Joint T-Open 3:55
 (D) Initial Shut-In 85 Circ Sub T-Pulled 5:55
 (E) Second Initial Flow 30 Hourly Standby T-Out 7:48
 (F) Second Final Flow 30 Mileage 186 Comments
 (G) Final Shut-In 52 Sampler
 (H) Final Hydrostatic 1605 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30

Sub Total 1336
 Total 1336
 MP/DST Disc't

Approved By _____ Our Representative Jeff Brown

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 041768

4/10

Well Name & No. Faulkner 14-2 Test No. Lo Date 9-14-13
 Company H+C oil operating Elevation 2124 KB 2117 GL
 Address PO Box 86 Plainville KS 67463 + 0086
 Co. Rep / Geo. Marc Downing Rig American Eagle #3
 Location: Sec. 14 Twp. 8S Rge. 22W Co. Graham State KS

Interval Tested 3539 - 3540 Zone Tested LKC - K
 Anchor Length 21 Drill Pipe Run 3530 Mud Wt. 9.2
 Top Packer Depth 3534 Drill Collars Run 0 Vis 200
 Bottom Packer Depth 3539 Wt. Pipe Run 0 WL 5.8
 Total Depth 3560 Chlorides 1500 ppm System LCM 0

Blow Description iff-weak Blow Built to 1/2 IN
ISI-Dead NO Blow Back
iff-Dead NO Blow
ISI-Dead NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>SOCM</u>		<u>5</u>		<u>95</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 2 BHT 104 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1726 Test 1150 T-On Location #12-0: 14:00
 (B) First Initial Flow 11 Jars _____ T-Started 14:00
 (C) First Final Flow 13 Safety Joint _____ T-Open 15:40
 (D) Initial Shut-In 270 Circ Sub _____ T-Pulled 17:40
 (E) Second Initial Flow 13 Hourly Standby _____ T-Out 19:22
 (F) Second Final Flow 13 Mileage 186 Comments _____
 (G) Final Shut-In 217 Sampler _____
 (H) Final Hydrostatic 1419 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 30 Day Standby _____ Total 1336
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 30 Sub Total 1336

Approved By _____ Our Representative Jeff Brown
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