



DRILL STEM TEST REPORT

Prepared For: **Charter Energy, Inc.**

PO Box 252
Great Bend, KS 67530

ATTN: Kurt Talbott

Leiker A #1

26-15s-18w Ellis, KS

Start Date: 2014.09.23 @ 01:23:33

End Date: 2014.09.23 @ 08:32:03

Job Ticket #: 60911 DST #: 1

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

Printed: 2014.09.26 @ 08:52:55



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Charter Energy, Inc.
 PO Box 252
 Great Bend, KS 67530
 ATTN: Kurt Talbott

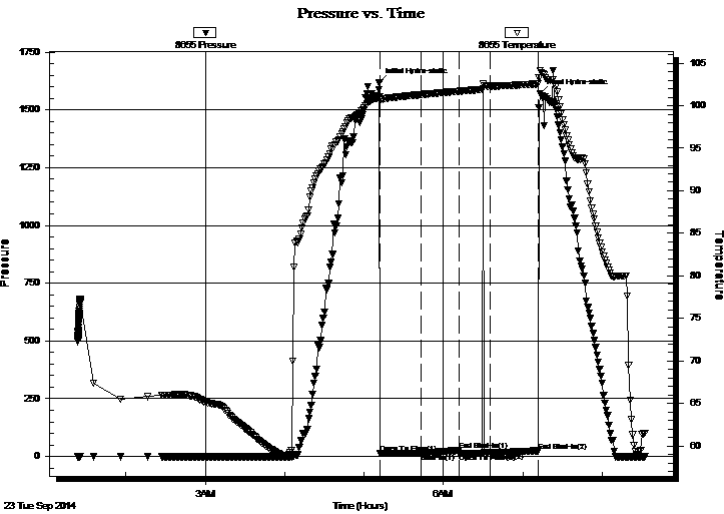
26-15s-18w Ellis, KS
Leiker A #1
 Job Ticket: 60911 **DST#: 1**
 Test Start: 2014.09.23 @ 01:23:33

GENERAL INFORMATION:

Formation: **LKC "A-F"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:12:03
 Time Test Ended: 08:32:03
 Interval: **3238.00 ft (KB) To 3320.00 ft (KB) (TVD)**
 Total Depth: 3320.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Brannan Lonsdale
 Unit No: 62
 Reference Elevations: 1972.00 ft (KB)
 1965.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8655 Outside
 Press@RunDepth: 17.27 psig @ 3239.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.09.23 End Date: 2014.09.23 Last Calib.: 2014.09.23
 Start Time: 01:23:34 End Time: 08:32:03 Time On Btm: 2014.09.23 @ 05:11:33
 Time Off Btm: 2014.09.23 @ 07:13:03

TEST COMMENT: 30- IF- Built to 3/4" in 7mins & maintained throughout
 30- IS- No blow
 30- FF- No blow Flushed tool half way through
 30- FS- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1618.26	101.09	Initial Hydro-static
1	12.62	100.75	Open To Flow (1)
32	14.52	101.30	Shut-In(1)
60	26.46	101.70	End Shut-In(1)
61	14.89	101.70	Open To Flow (2)
84	17.27	102.29	Shut-In(2)
120	24.42	102.56	End Shut-In(2)
122	1569.52	104.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	M	0.14

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy, Inc.

26-15s-18w Ellis, KS

PO Box 252
Great Bend, KS 67530

Leiker A #1

Job Ticket: 60911

DST#: 1

ATTN: Kurt Talbott

Test Start: 2014.09.23 @ 01:23:33

Tool Information

Drill Pipe:	Length: 3232.00 ft	Diameter: 3.75 inches	Volume: 44.15 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: 51000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3238.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	82.00 ft			
Tool Length:	102.00 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			3219.00	
Shut In Tool	5.00			3224.00	
Hydraulic tool	5.00			3229.00	
Packer	5.00			3234.00	20.00 Bottom Of Top Packer
Packer	4.00			3238.00	
Stubb	1.00			3239.00	
Recorder	0.00	8651	Inside	3239.00	
Recorder	0.00	8655	Outside	3239.00	
Perforations	12.00			3251.00	
Change Over Sub	1.00			3252.00	
Drill Pipe	64.00			3316.00	
Change Over Sub	1.00			3317.00	
Bullnose	3.00			3320.00	82.00 Bottom Packers & Anchor

Total Tool Length: 102.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy, Inc.

26-15s-18w Ellis, KS

PO Box 252
Great Bend, KS 67530

Leiker A #1

Job Ticket: 60911

DST#: 1

ATTN: Kurt Talbott

Test Start: 2014.09.23 @ 01:23:33

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: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	M	0.137

Total Length: 10.00 ft Total Volume: 0.137 bbl

Num Fluid Samples: 0

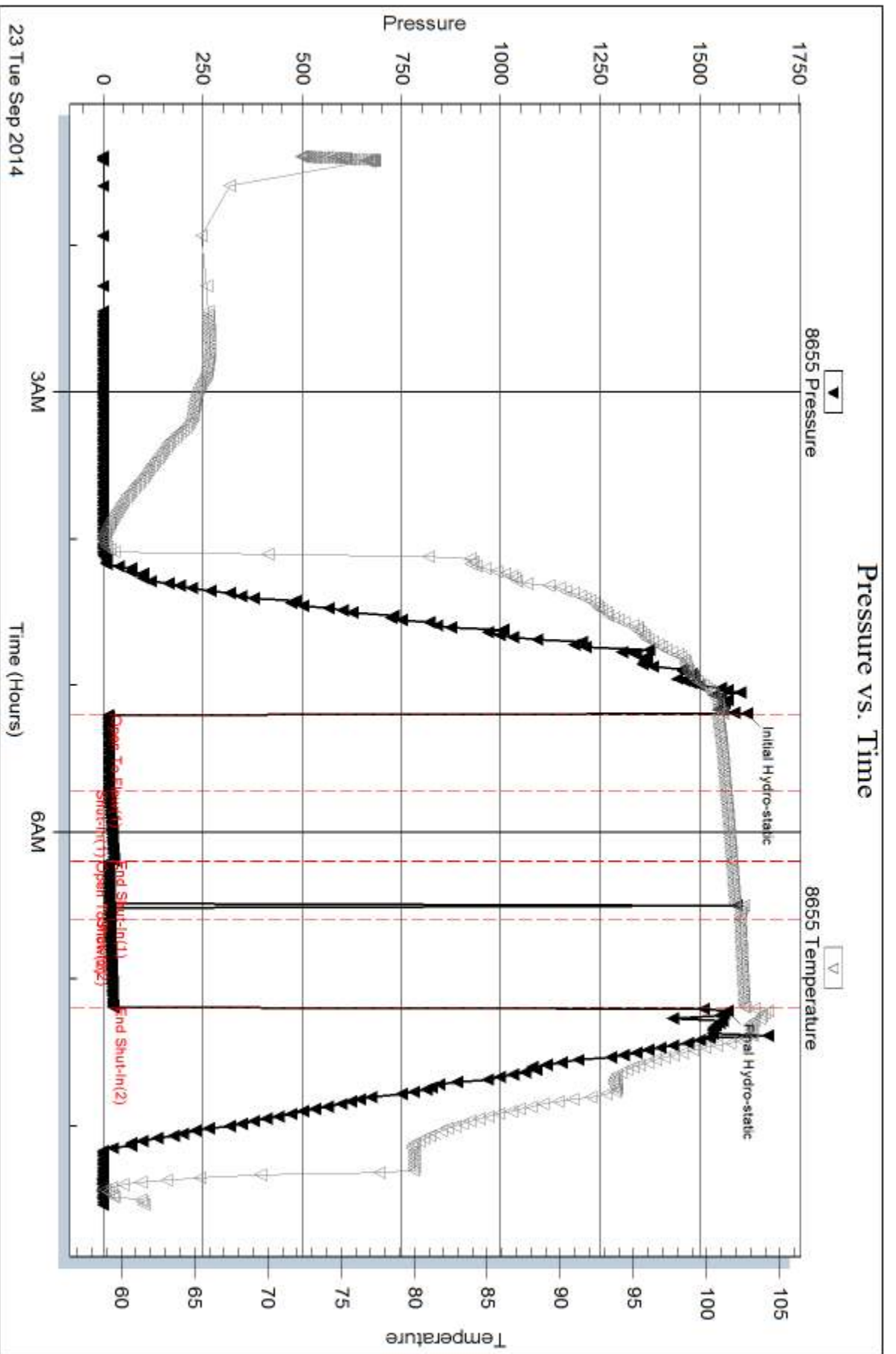
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



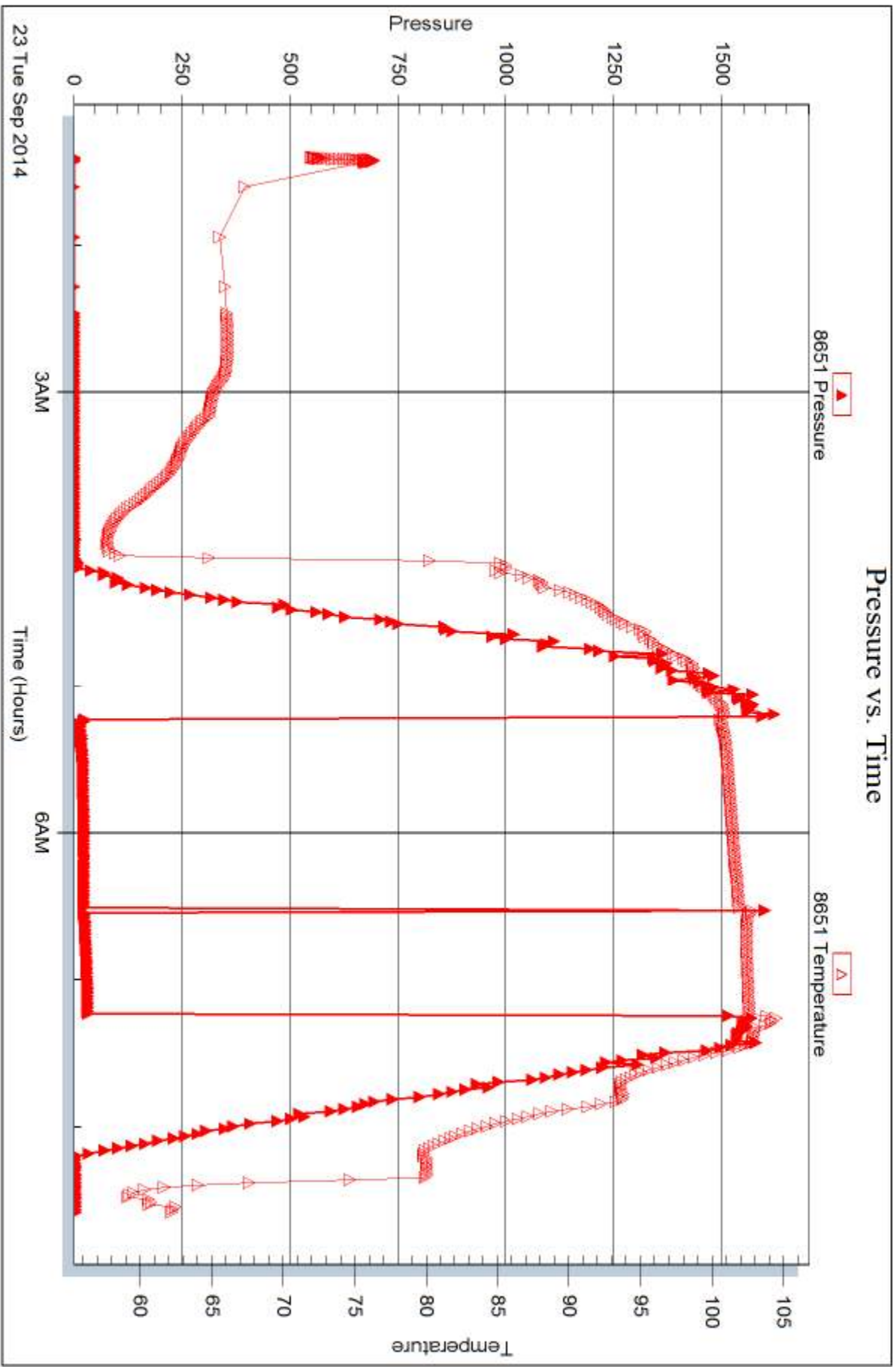
Serial #: 8651

Inside

Charter Energy, Inc.

Leiker A #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 60911

Printed: 2014.09.26 @ 08:52:56



DRILL STEM TEST REPORT

Prepared For: **Charter Energy, Inc.**

PO Box 252
Great Bend, KS 67530

ATTN: Kurt Talbott

Leiker A #1

26-15s-18w Ellis, KS

Start Date: 2014.09.23 @ 21:28:06

End Date: 2014.09.24 @ 02:15:36

Job Ticket #: 60912 DST #: 2

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

Printed: 2014.09.26 @ 08:52:31

Charter Energy, Inc. 26-15s-18w Ellis, KS Leiker A #1 DST # 2 LKC "H-K" 2014.09.23



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy, Inc.

26-15s-18w Ellis, KS

PO Box 252
Great Bend, KS 67530

Leiker A #1

Job Ticket: 60912

DST#: 2

ATTN: Kurt Talbott

Test Start: 2014.09.23 @ 21:28:06

Tool Information

Drill Pipe:	Length: 3389.00 ft	Diameter: 3.75 inches	Volume: 46.30 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:	49000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3384.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	91.00 ft				
Tool Length:	111.00 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			3365.00	
Shut In Tool	5.00			3370.00	
Hydraulic tool	5.00			3375.00	
Packer	5.00			3380.00	20.00 Bottom Of Top Packer
Packer	4.00			3384.00	
Stubb	1.00			3385.00	
Recorder	0.00	8651	Inside	3385.00	
Recorder	0.00	8655	Outside	3385.00	
Perforations	22.00			3407.00	
Change Over Sub	1.00			3408.00	
Drill Pipe	63.00			3471.00	
Change Over Sub	1.00			3472.00	
Bullnose	3.00			3475.00	91.00 Bottom Packers & Anchor

Total Tool Length: 111.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy, Inc.

26-15s-18w Ellis, KS

PO Box 252
Great Bend, KS 67530

Leiker A #1

Job Ticket: 60912

DST#: 2

ATTN: Kurt Talbott

Test Start: 2014.09.23 @ 21:28:06

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: 7.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	M	0.205

Total Length: 15.00 ft Total Volume: 0.205 bbl

Num Fluid Samples: 0

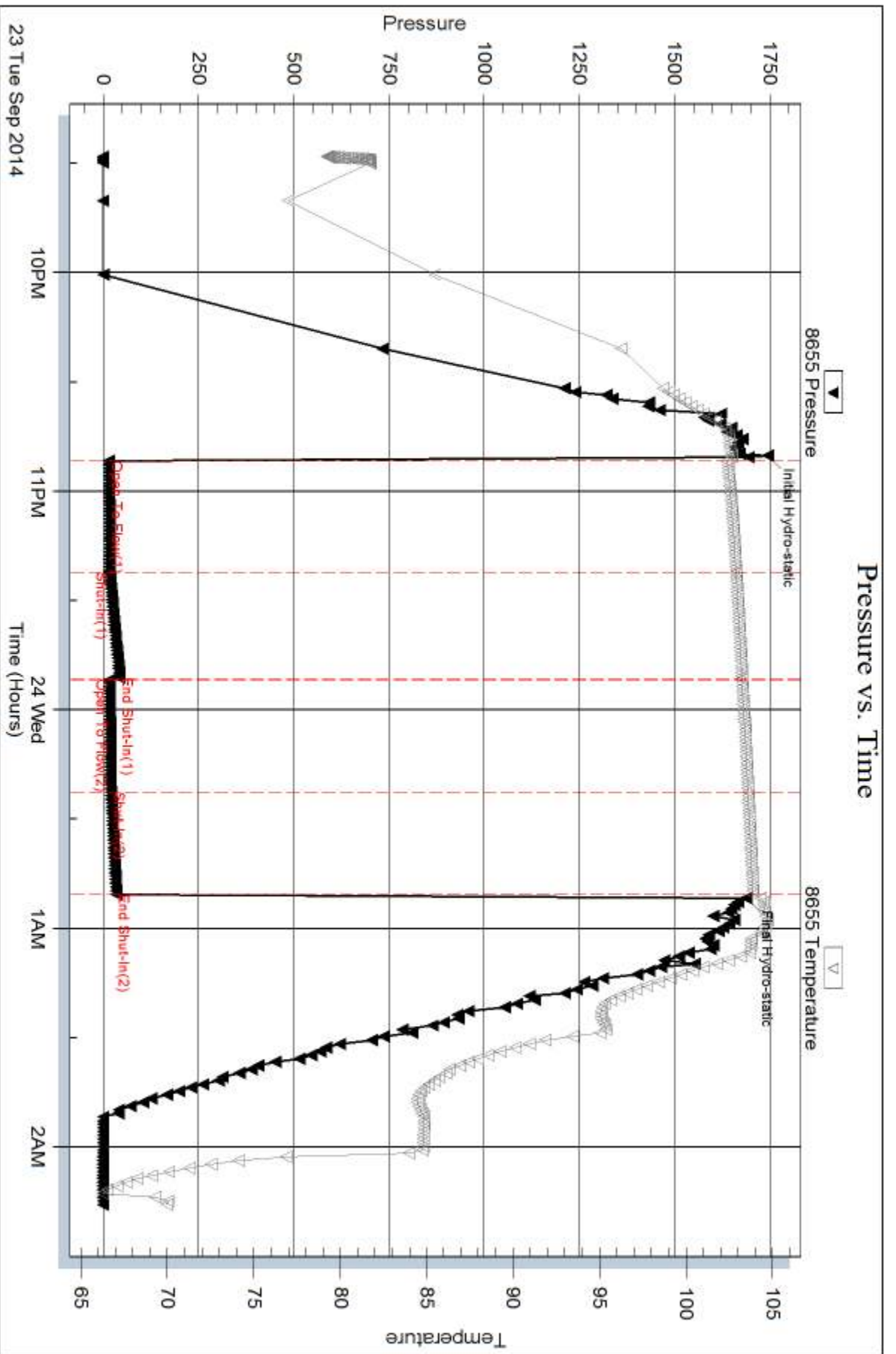
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



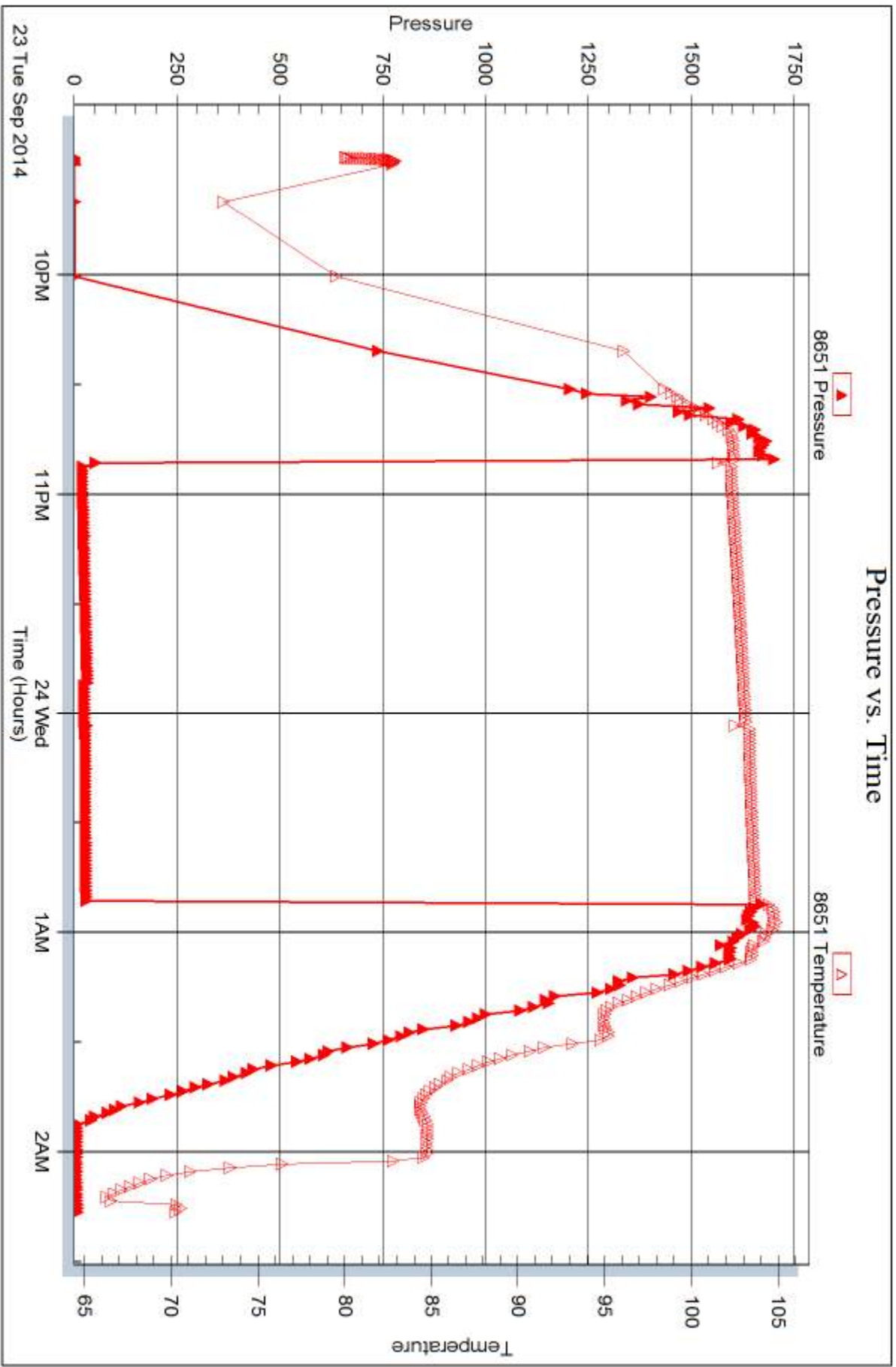
Serial #: 8651

Inside

Charter Energy, Inc.

Leiker A #1

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 60912

Printed: 2014.09.26 @ 08:52:33



DRILL STEM TEST REPORT

Prepared For: **Charter Energy, Inc.**

PO Box 252
Great Bend, KS 67530

ATTN: Kurt Talbott

Leiker A #1

26-15s-18w Ellis, KS

Start Date: 2014.09.24 @ 16:17:59

End Date: 2014.09.24 @ 21:38:59

Job Ticket #: 60913 DST #: 3

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

Printed: 2014.09.26 @ 08:50:27



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Charter Energy, Inc.
PO Box 252
Great Bend, KS 67530
ATTN: Kurt Talbott

26-15s-18w Ellis, KS

Leiker A #1

Job Ticket: 60913

DST#: 3

Test Start: 2014.09.24 @ 16:17:59

GENERAL INFORMATION:

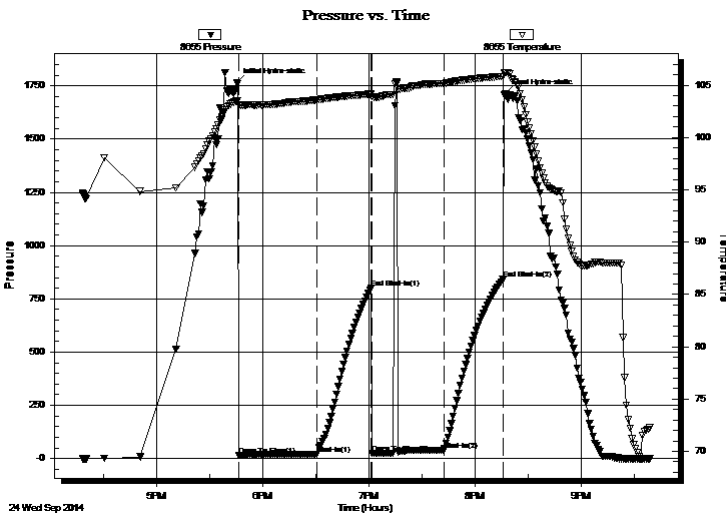
Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 17:46:29
 Tester: Brannan Lonsdale
 Time Test Ended: 21:38:59
 Unit No: 62
 Interval: **3482.00 ft (KB) To 3567.00 ft (KB) (TVD)**
 Reference Elevations: 1972.00 ft (KB)
 Total Depth: 3567.00 ft (KB) (TVD)
 1965.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 7.00 ft

Serial #: 8655 Outside

Press@RunDepth: 39.26 psig @ 3483.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.09.24 End Date: 2014.09.24 Last Calib.: 2014.09.24
 Start Time: 16:18:00 End Time: 21:38:59 Time On Btm: 2014.09.24 @ 17:44:59
 Time Off Btm: 2014.09.24 @ 20:16:59

TEST COMMENT: 45- IF- Slowly built to 3/4"
 30- IS- No blow
 45- FF- No blow Flushed tool Weak surface blow died in 7 mins
 30- FS- No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1764.52	103.51	Initial Hydro-static
2	15.37	103.09	Open To Flow (1)
46	20.76	103.58	Shut-In(1)
76	798.88	104.15	End Shut-In(1)
77	24.82	103.93	Open To Flow (2)
117	39.26	105.16	Shut-In(2)
151	841.22	105.84	End Shut-In(2)
152	1711.25	106.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
55.00	M	0.75

* Recovery from multiple tests

Gas Rates

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



DRILL STEM TEST REPORT

Charter Energy, Inc.
 PO Box 252
 Great Bend, KS 67530
 ATTN: Kurt Talbott

26-15s-18w Ellis, KS
Leiker A #1
 Job Ticket: 60913 **DST#: 3**
 Test Start: 2014.09.24 @ 16:17:59

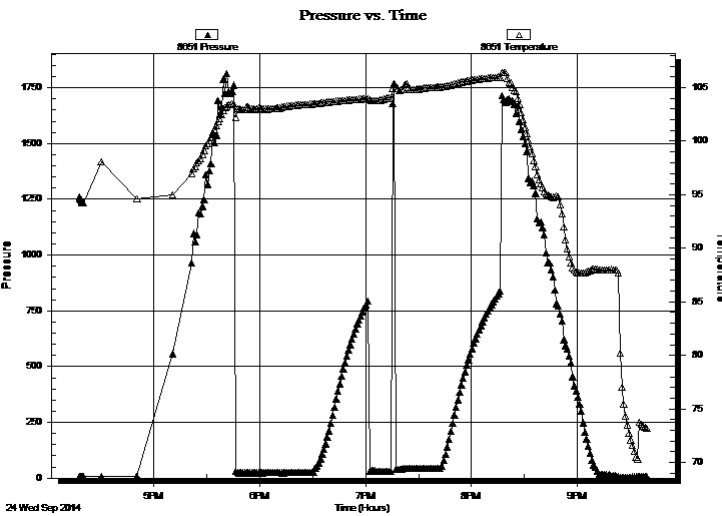
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 17:46:29
 Tester: Brannan Lonsdale
 Time Test Ended: 21:38:59
 Unit No: 62
Interval: 3482.00 ft (KB) To 3567.00 ft (KB) (TVD)
 Reference Elevations: 1972.00 ft (KB)
 Total Depth: 3567.00 ft (KB) (TVD)
 1965.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 7.00 ft

Serial #: 8651 Inside

Press@RunDepth: psig @ 3483.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.09.24 End Date: 2014.09.24 Last Calib.: 2014.09.24
 Start Time: 16:17:49 End Time: 21:39:48 Time On Btm:
 Time Off Btm:

TEST COMMENT: 45- IF- Slowly built to 3/4"
 30- IS- No blow
 45- FF- No blow Flushed tool Weak surface blow died in 7 mins
 30- FS- No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
55.00	M	0.75

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy, Inc.

26-15s-18w Ellis, KS

PO Box 252
Great Bend, KS 67530

Leiker A #1

Job Ticket: 60913

DST#: 3

ATTN: Kurt Talbott

Test Start: 2014.09.24 @ 16:17:59

Tool Information

Drill Pipe:	Length: 3485.00 ft	Diameter: 3.75 inches	Volume: 47.61 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: 51000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3482.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	105.00 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			3463.00	
Shut In Tool	5.00			3468.00	
Hydraulic tool	5.00			3473.00	
Packer	5.00			3478.00	20.00 Bottom Of Top Packer
Packer	4.00			3482.00	
Stubb	1.00			3483.00	
Recorder	0.00	8651	Inside	3483.00	
Recorder	0.00	8655	Outside	3483.00	
Perforations	15.00			3498.00	
Change Over Sub	1.00			3499.00	
Drill Pipe	64.00			3563.00	
Change Over Sub	1.00			3564.00	
Bullnose	3.00			3567.00	85.00 Bottom Packers & Anchor

Total Tool Length: 105.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy, Inc.

26-15s-18w Ellis, KS

PO Box 252
Great Bend, KS 67530

Leiker A #1

Job Ticket: 60913

DST#: 3

ATTN: Kurt Talbott

Test Start: 2014.09.24 @ 16:17:59

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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
55.00	M	0.751

Total Length: 55.00 ft Total Volume: 0.751 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

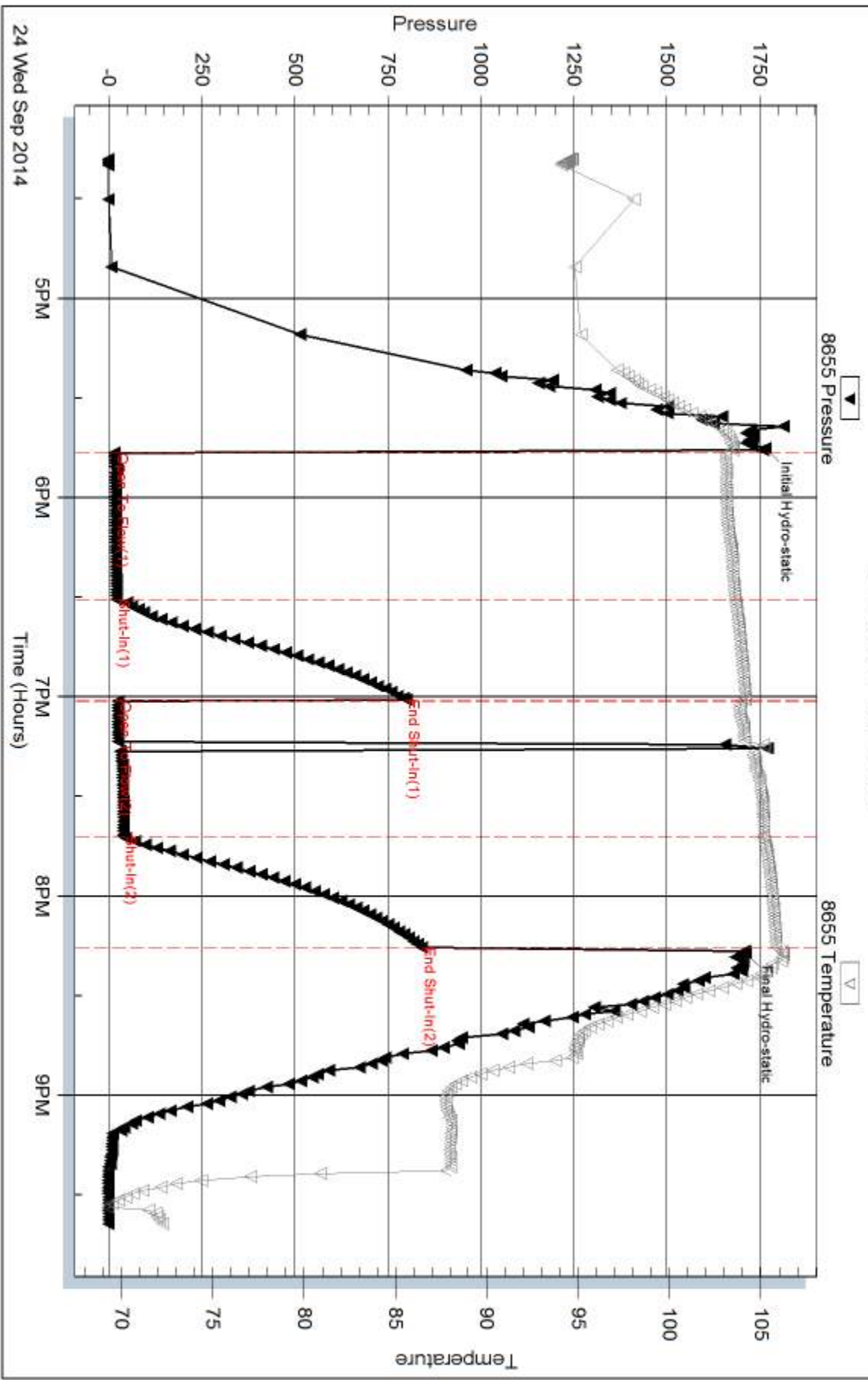
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



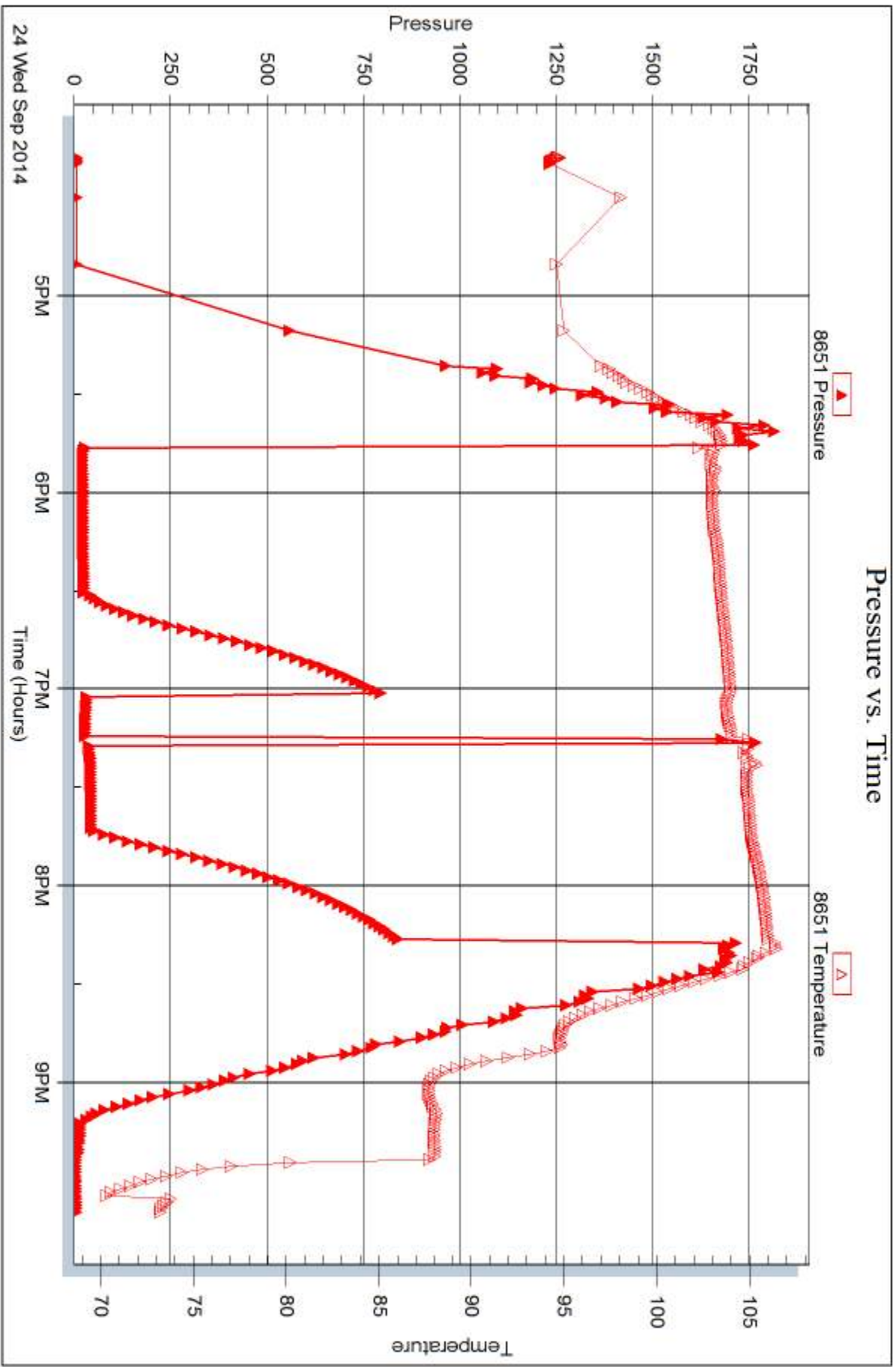
Serial #: 8651

Inside

Charter Energy, Inc.

Leiker A #1

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 60913

Printed: 2014.09.26 @ 08:50:28



DRILL STEM TEST REPORT

Prepared For: **Charter Energy, Inc.**

PO Box 252
Great Bend, KS 67530

ATTN: Kurt Talbott

Leiker A #1

26-15s-18w Ellis, KS

Start Date: 2014.09.25 @ 01:45:53

End Date: 2014.09.25 @ 07:55:23

Job Ticket #: 60914 DST #: 4

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

Printed: 2014.09.26 @ 08:49:58



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Charter Energy, Inc.
 PO Box 252
 Great Bend, KS 67530
 ATTN: Kurt Talbott

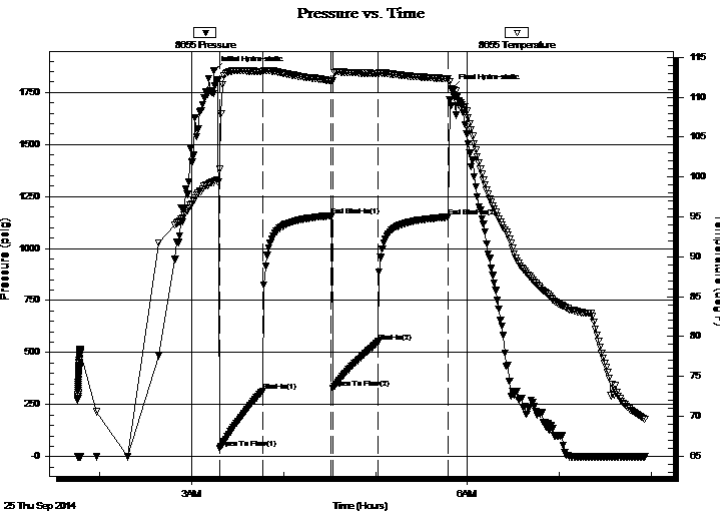
26-15s-18w Ellis, KS
Leiker A #1
 Job Ticket: 60914 **DST#: 4**
 Test Start: 2014.09.25 @ 01:45:53

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 03:18:23
 Tester: Brannan Lonsdale
 Time Test Ended: 07:55:23
 Unit No: 62
Interval: 3565.00 ft (KB) To 3573.00 ft (KB) (TVD)
 Reference Elevations: 1972.00 ft (KB)
 Total Depth: 3573.00 ft (KB) (TVD) 1965.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 7.00 ft

Serial #: 8655 Outside
 Press@RunDepth: 552.00 psig @ 3566.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.09.25 End Date: 2014.09.25 Last Calib.: 2014.09.25
 Start Time: 01:45:54 End Time: 07:55:23 Time On Btm: 2014.09.25 @ 03:14:53
 Time Off Btm: 2014.09.25 @ 05:49:53

TEST COMMENT: 30- IF- BOB 4 mins
 45- IS- No blow
 30- FF- BOB 3 mins
 45- FS- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1855.36	99.42	Initial Hydro-static
4	39.73	100.97	Open To Flow (1)
32	316.29	113.21	Shut-In(1)
76	1157.68	112.06	End Shut-In(1)
78	329.60	112.06	Open To Flow (2)
107	552.00	112.96	Shut-In(2)
153	1150.59	112.32	End Shut-In(2)
155	1768.66	110.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1200.00	SMW, 5%M 95%W	16.39

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Charter Energy, Inc.
PO Box 252
Great Bend, KS 67530
ATTN: Kurt Talbott

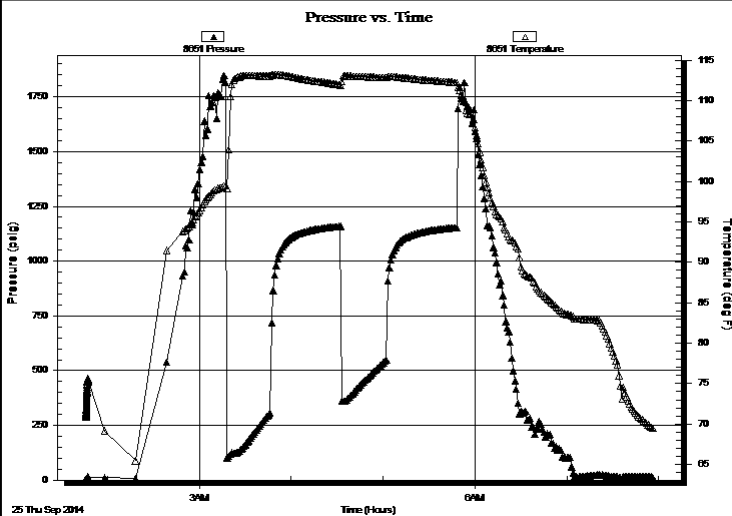
26-15s-18w Ellis, KS
Leiker A #1
Job Ticket: 60914 **DST#: 4**
Test Start: 2014.09.25 @ 01:45:53

GENERAL INFORMATION:

Formation: Arbuckle			
Deviated: No Whipstock:	ft (KB)	Test Type: Conventional Bottom Hole (Reset)	
Time Tool Opened: 03:18:23		Tester: Brannan Lonsdale	
Time Test Ended: 07:55:23		Unit No: 62	
Interval: 3565.00 ft (KB) To 3573.00 ft (KB) (TVD)		Reference Elevations: 1972.00 ft (KB)	
Total Depth: 3573.00 ft (KB) (TVD)		1965.00 ft (CF)	
Hole Diameter: 7.88 inches	Hole Condition: Fair	KB to GR/CF: 7.00 ft	

Serial #: 8651	Inside				
Press@RunDepth:	psig @	3566.00 ft (KB)	Capacity:	8000.00 psig	
Start Date:	2014.09.25	End Date:	2014.09.25	Last Calib.:	2014.09.25
Start Time:	01:45:37	End Time:	07:56:06	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: 30- IF- BOB 4 mins
45- IS- No blow
30- FF- BOB 3 mins
45- FS- No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
1200.00	SMW, 5%M 95%W	16.39

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy, Inc.

26-15s-18w Ellis, KS

PO Box 252
Great Bend, KS 67530

Leiker A #1

Job Ticket: 60914

DST#: 4

ATTN: Kurt Talbott

Test Start: 2014.09.25 @ 01:45:53

Tool Information

Drill Pipe:	Length: 3549.00 ft	Diameter: 3.75 inches	Volume: 48.48 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:	4.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3565.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 ft			
Tool Length:	28.00 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			3546.00	
Shut In Tool	5.00			3551.00	
Hydraulic tool	5.00			3556.00	
Packer	5.00			3561.00	20.00 Bottom Of Top Packer
Packer	4.00			3565.00	
Stubb	1.00			3566.00	
Recorder	0.00	8651	Inside	3566.00	
Recorder	0.00	8655	Outside	3566.00	
Perforations	4.00			3570.00	
Bullnose	3.00			3573.00	8.00 Bottom Packers & Anchor
Total Tool Length:	28.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy, Inc.

26-15s-18w Ellis, KS

PO Box 252
Great Bend, KS 67530

Leiker A #1

Job Ticket: 60914

DST#: 4

ATTN: Kurt Talbott

Test Start: 2014.09.25 @ 01:45:53

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:

40000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1200.00	SMW, 5%M 95%W	16.393

Total Length: 1200.00 ft Total Volume: 16.393 bbl

Num Fluid Samples: 0

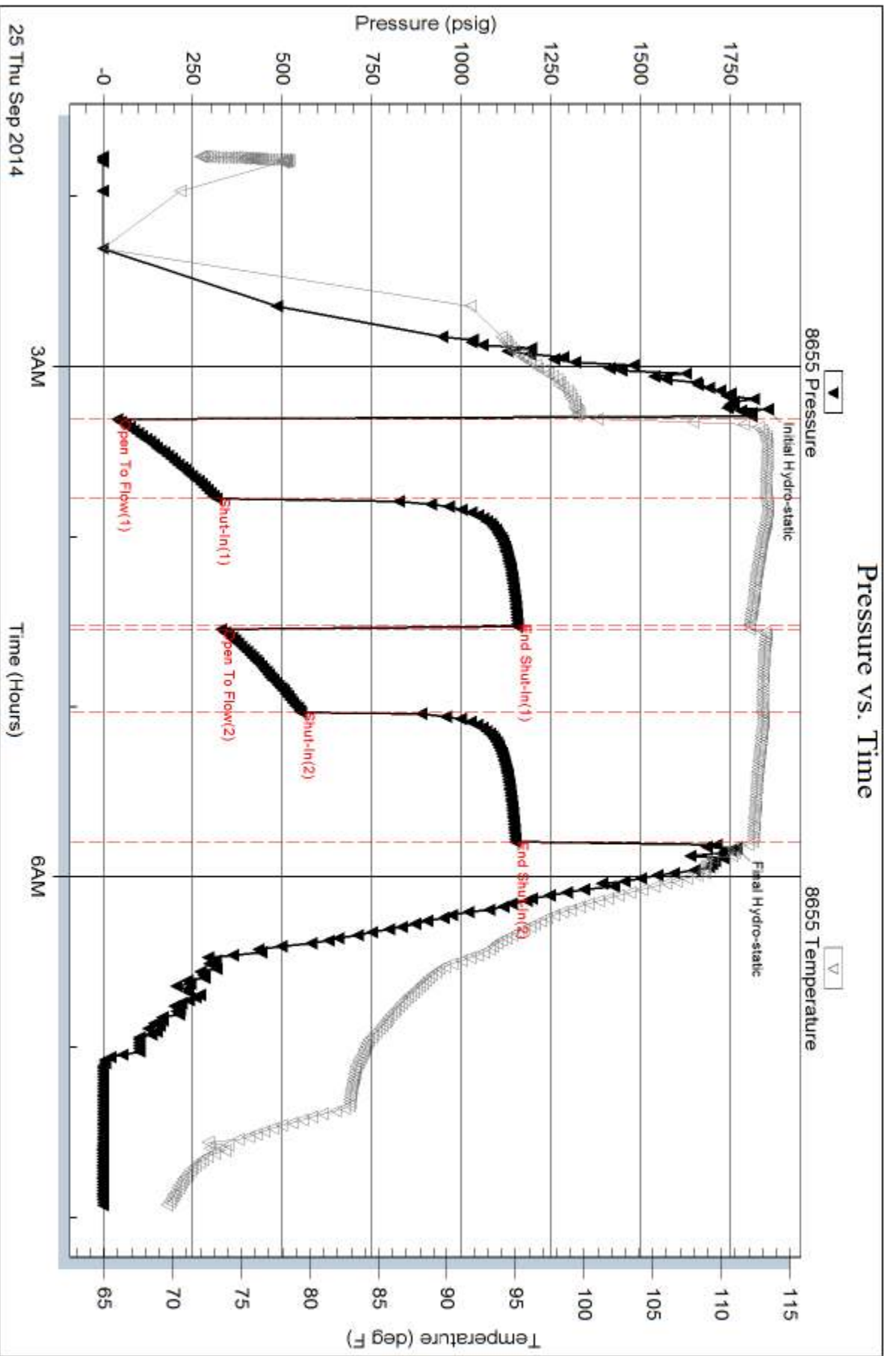
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



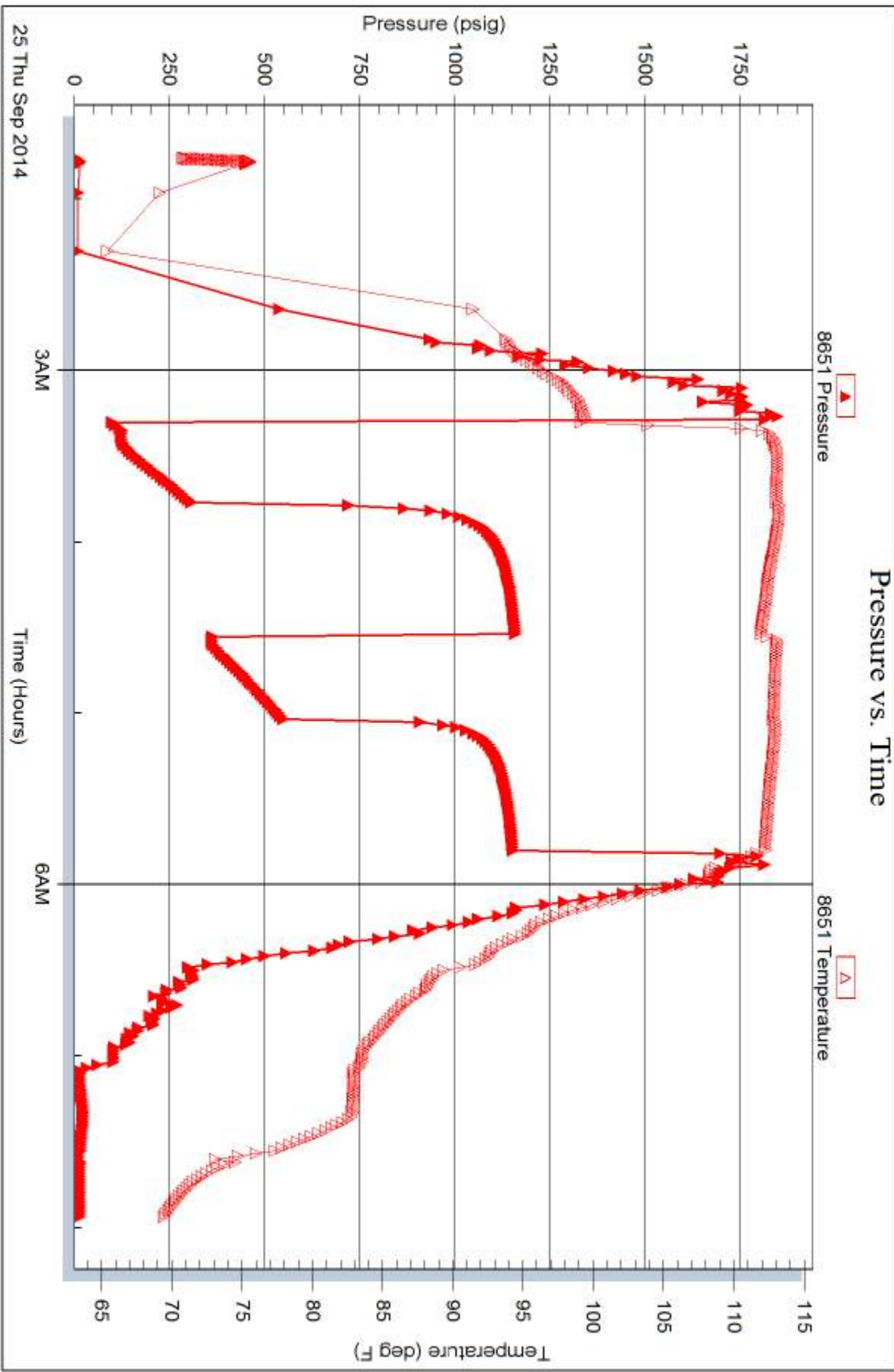
Serial #: 8651

Inside

Charter Energy, Inc.

Leiker A #1

DST Test Number: 4





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 60911

Well Name & No. Leiker A #1 Test No. 1 Date 9/23/14
 Company Charter Energy, Inc. Elevation 1970 KB 1965 GL
 Address PO Box 252 Great Bend, KS 67530
 Co. Rep / Geo. Kurt Talbot Rig Royal #1
 Location: Sec. 26 Twp. 15 S Rge. 18 W Co. Ellis State KS

Interval Tested 3238-3320 Zone Tested LKC "AF"
 Anchor Length 82' Drill Pipe Run 3232 Mud Wt. 8.7
 Top Packer Depth 3233 Drill Collars Run --- Vis 47
 Bottom Packer Depth 3238 Wt. Pipe Run --- WL 7.2
 Total Depth 3320 Chlorides 2200 ppm System LCM 2"

Blow Description IF - Built to 3/4" in 7 mins then maintained throughout
ISI - No blow
PF - No blow Flusted tool halfway through
FSI - No blow

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

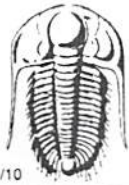
Rec Total 10' BHT 103° Gravity --- API RW --- @ --- °F Chlorides --- ppm

(A) Initial Hydrostatic 1618 Test 1150 T-On Location 0119
 (B) First Initial Flow 13 Jars --- T-Started 0124
 (C) First Final Flow 15 Safety Joint --- T-Open 0513
 (D) Initial Shut-In 26 Circ Sub --- T-Pulled 0713
 (E) Second Initial Flow 15 Hourly Standby --- T-Out 0834
 (F) Second Final Flow 17 Mileage 30 RT 46.50 Comments ---
 (G) Final Shut-In 24 Sampler ---
 (H) Final Hydrostatic 1570 Straddle --- Ruined Shale Packer ---
 Shale Packer --- Ruined Packer ---

Initial Open 30 Extra Packer --- Extra Copies ---
 Initial Shut-In 30 Extra Recorder --- Sub Total 0
 Final Flow 30 Day Standby --- Total 1196.50
 Final Shut-In 30 Accessibility --- MP/DST Disc't ---
 Sub Total 1196.50

Approved By _____ Our Representative Brannan Lonsdale

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. 60912

Well Name & No. Leiker A#1 Test No. 2 Date 9/23/14
 Company Charter Energy, Inc. Elevation 1972 KB 1965 GL
 Address PO Box 252 West Bondy, KS 67530
 Co. Rep / Geo. Kurt Talbott Rig Royal #1
 Location: Sec. 26 Twp. 15 S Rge. 18 W Co. Ellis State KS

Interval Tested 3384-3475 Zone Tested LKC "H-K"
 Anchor Length 91' Drill Pipe Run 3389 Mud Wt. 8.8
 Top Packer Depth 3379 Drill Collars Run — Vis 60
 Bottom Packer Depth 3384 Wt. Pipe Run — WL 2.4
 Total Depth 3475 Chlorides 2,500 ppm System LCM 2#

Blow Description IP - Surface blow died 27 mins
ISI - No blow
FF - No blow Pushed tool
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>M</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

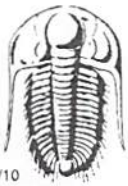
Rec Total 15' BHT 104° Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1744 Test 1150 T-On Location 2115
 (B) First Initial Flow 15 Jars — T-Started 2128
 (C) First Final Flow 17 Safety Joint — T-Open 2251
 (D) Initial Shut-In 42 Circ Sub — T-Pulled 0051 9/24
 (E) Second Initial Flow 17 Hourly Standby — T-Out 0216
 (F) Second Final Flow 20 Mileage 30 RT 46.50 Comments —
 (G) Final Shut-In 34 Sampler —
 (H) Final Hydrostatic 1689 Straddle — Ruined Shale Packer —
 Shale Packer — Ruined Packer —

Initial Open 30 Extra Packer — Extra Copies —
 Initial Shut-In 30 Extra Recorder — Sub Total 0
 Final Flow 30 Day Standby — Total 1196.50
 Final Shut-In 30 Accessibility — MP/DST Disc't —
 Sub Total 1196.50

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 60913

Well Name & No. Leiker A#1 Test No. 3 Date 9/24/14
 Company Charter Energy, Inc Elevation 1972 KB 1965 GL
 Address PO Box 252 Great Bend, KS 67530
 Co. Rep / Geo. Kurt Talbott Rig Royal #1
 Location: Sec. 26 Twp. 15 S Rge. 18 W Co. E/15 State KS

Interval Tested 3482-3567 Zone Tested Arbuckle
 Anchor Length 85' Drill Pipe Run 3485 Mud Wt. 9.0
 Top Packer Depth 3477 Drill Collars Run — Vis 5.5
 Bottom Packer Depth 3482 Wt. Pipe Run — WL 7.2
 Total Depth 3567 Chlorides 2,500 ppm System LCM 2*

Blow Description IF - slowly built to 3/4"
FSI - No blow
FF - No blow flushed tool weak surface blow died on 7mins
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>55'</u>	<u>M</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 55' BHT 106° Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1765 Test 1150 T-On Location 1610
 (B) First Initial Flow 15 Jars — T-Started 1618
 (C) First Final Flow 21 Safety Joint — T-Open 1747
 (D) Initial Shut-In 299 Circ Sub — T-Pulled 2017
 (E) Second Initial Flow 25 Hourly Standby — T-Out 2141
 (F) Second Final Flow 39 Mileage 30 RT 46.50 Comments —
 (G) Final Shut-In 841 Sampler —
 (H) Final Hydrostatic 1711 Straddle — Ruined Shale Packer —
 Shale Packer — Ruined Packer —

Initial Open 45 Extra Packer — Extra Copies —
 Initial Shut-In 30 Extra Recorder — Sub Total 0
 Final Flow 45 Day Standby — Total 1196.50
 Final Shut-In 30 Accessibility — MP/DST Disc't —
 Sub Total 1196.50

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 60914

Well Name & No. Leiker A#1 Test No. 4 Date 9/25/14
 Company Charter Energy, Inc. Elevation 1972 KB 1965 GL
 Address PO Box 252 Great Bend, KS 67530
 Co. Rep / Geo. Kurt Talbot Rig Royal #1
 Location: Sec. 26 Twp. 15 S Rge. 18 W Co. Ellis State KS

Interval Tested 3565-3573 Zone Tested Arbuckle
 Anchor Length 8' Drill Pipe Run 3549 Mud Wt. 9.0
 Top Packer Depth 3560 Drill Collars Run — Vis 55
 Bottom Packer Depth 3565 Wt. Pipe Run — WL 7.2
 Total Depth 3573 Chlorides 2500 ppm System LCM 2nd
 Blow Description IF - BOB 4mins
ISI - No blow
FP - BOB 3mins
FSD - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>1200</u>	<u>Feet of SMLW</u>			<u>95</u>	<u>5</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1200' BHT 112° Gravity — API RW 21 @ 59 °F Chlorides 40000 ppm
 (A) Initial Hydrostatic 1855 Test 1150 T-On Location 0135
 (B) First Initial Flow 40 Jars — T-Started 0146
 (C) First Final Flow 316 Safety Joint — T-Open 0318
 (D) Initial Shut-In 1158 Circ Sub — T-Pulled 0548
 (E) Second Initial Flow 330 Hourly Standby — T-Out 0757
 (F) Second Final Flow 552 Mileage 30 RT 46.50 Comments —
 (G) Final Shut-In 1151 Sampler —
 (H) Final Hydrostatic 1769 Straddle — Ruined Shale Packer —
 Shale Packer — Ruined Packer —
 Extra Packer — Extra Copies —
 Initial Open 30 Extra Recorder — Sub Total 0
 Initial Shut-In 45 Day Standby — Total 1196.50
 Final Flow 30 Accessibility — MP/DST Disc't —
 Final Shut-In 45 Sub Total 1196.50

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