



## DRILL STEM TEST REPORT

Prepared For: **Charter Energy Inc**

PO Box 252  
Great Bend, KS 67530-0252

ATTN: Kurt Talbott

### **Lewis #1**

#### **7-1s-29w Gove, KS**

Start Date: 2014.10.24 @ 01:16:10

End Date: 2014.10.24 @ 08:40:55

Job Ticket #: 59093                      DST #: 1

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

Printed: 2014.10.30 @ 14:22:37

Charter Energy Inc  
7-1s-29w Gove, KS  
Lewis #1  
DST # 1  
LKC A-E  
2014.10.24



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Charter Energy Inc  
 PO Box 252  
 Great Bend, KS 67530-0252  
 ATTN: Kurt Talbott

**7-1s-29w Gove, KS**  
**Lewis #1**  
 Job Ticket: 59093 **DST#: 1**  
 Test Start: 2014.10.24 @ 01:16:10

## GENERAL INFORMATION:

Formation: **LKC A-E**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 03:29:40  
 Time Test Ended: 08:40:55  
 Interval: **3814.00 ft (KB) To 3910.00 ft (KB) (TVD)**  
 Total Depth: 3910.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shane McBride  
 Unit No: 55  
 Reference Elevations: 2753.00 ft (KB)  
 2747.00 ft (CF)  
 KB to GR/CF: 6.00 ft

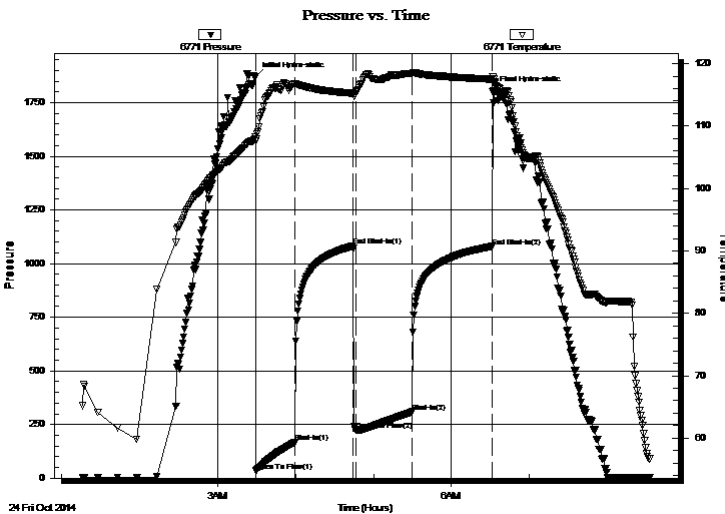
## Serial #: 6771

Inside

Press@RunDepth: 309.02 psig @ 3815.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.10.24 End Date: 2014.10.24 Last Calib.: 2014.10.24  
 Start Time: 01:16:10 End Time: 08:32:55 Time On Btm: 2014.10.24 @ 03:29:10  
 Time Off Btm: 2014.10.24 @ 06:31:55

TEST COMMENT: B.O.B. in 8 min.  
 No return  
 B.O.B. in 14 min.  
 No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1871.98	108.24	Initial Hydro-static
1	33.58	107.90	Open To Flow (1)
30	164.98	116.75	Shut-In(1)
75	1081.71	115.25	End Shut-In(1)
78	224.79	115.41	Open To Flow (2)
121	309.02	118.44	Shut-In(2)
182	1079.93	117.52	End Shut-In(2)
183	1805.97	117.81	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
90.00	m c w /oil show on top 2" in 35m 65w	1.26
180.00	s m c w /oil scum 15m 85w	2.52
300.00	w ater w /oil scum 100w	4.21

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Charter Energy Inc

**7-1s-29w Gove, KS**

PO Box 252  
Great Bend, KS 67530-0252

**Lewis #1**

Job Ticket: 59093

**DST#: 1**

ATTN: Kurt Talbott

Test Start: 2014.10.24 @ 01:16:10

## Tool Information

Drill Pipe:	Length: 3800.00 ft	Diameter: 3.80 inches	Volume: 53.30 bbl	Tool Weight: 1500.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 53.30 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 57000.00 lb
Depth to Top Packer:	3814.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	96.00 ft			
Tool Length:	116.00 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			3795.00	
Shut In Tool	5.00			3800.00	
Hydraulic tool	5.00			3805.00	
Packer	5.00			3810.00	20.00 Bottom Of Top Packer
Packer	4.00			3814.00	
Stubb	1.00			3815.00	
Recorder	0.00	6771	Inside	3815.00	
Recorder	0.00	8844	Outside	3815.00	
Anchor	25.00			3840.00	
Change Over Sub	1.00			3841.00	
Drill Pipe	63.00			3904.00	
Change Over Sub	1.00			3905.00	
Bullnose	5.00			3910.00	96.00 Bottom Packers & Anchor

**Total Tool Length: 116.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Charter Energy Inc

**7-1s-29w Gove, KS**

PO Box 252  
Great Bend, KS 67530-0252

**Lewis #1**

Job Ticket: 59093

**DST#: 1**

ATTN: Kurt Talbott

Test Start: 2014.10.24 @ 01:16:10

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.73 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	m c w /oil show on top 2" in 35m 65w	1.262
180.00	s m c w /oil scum 15m 85w	2.525
300.00	w ater w /oil scum 100w	4.208

Total Length: 570.00 ft      Total Volume: 7.995 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw .198 @ 55\*f = 48,000 chlor

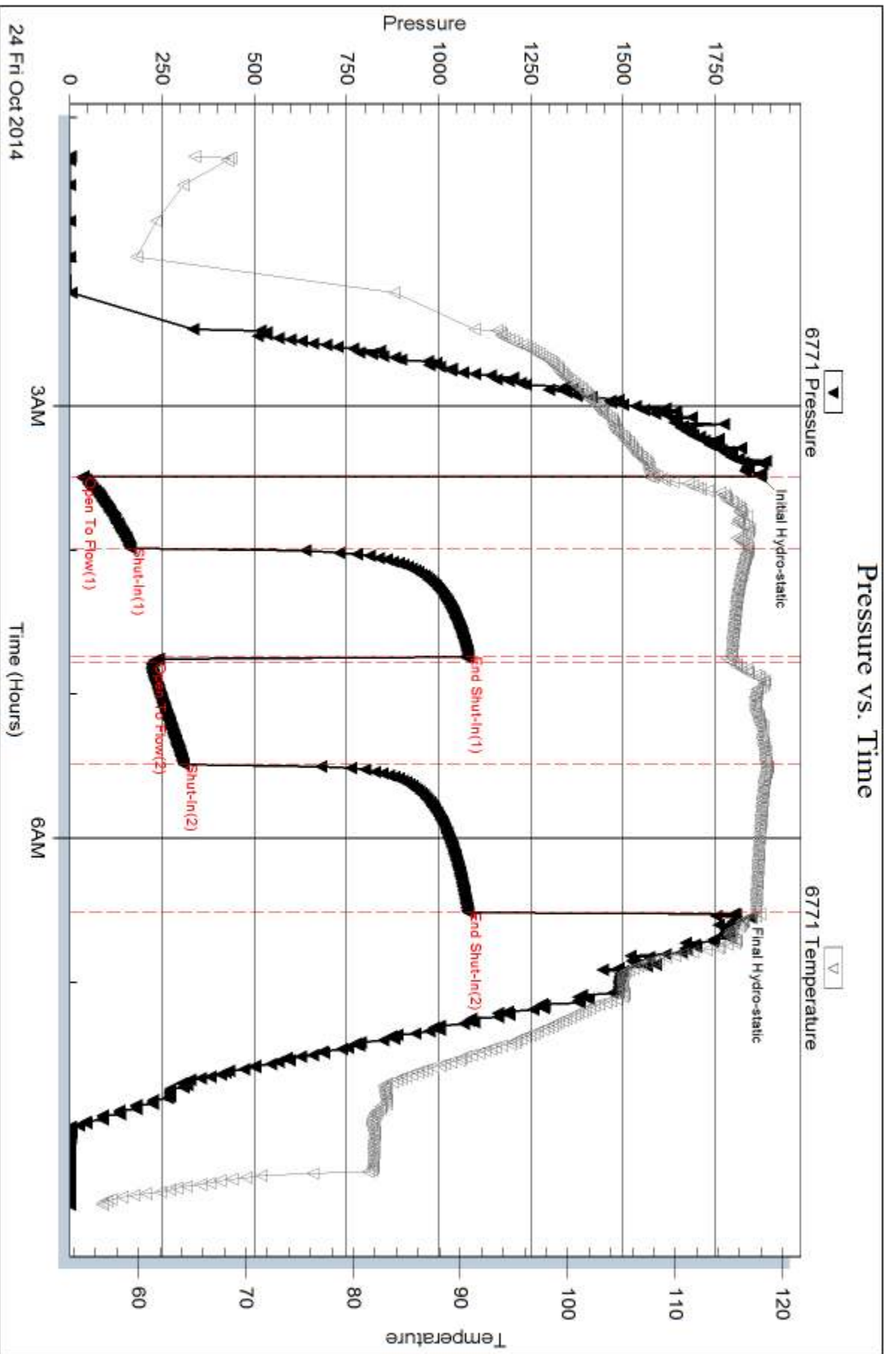
Serial #: 6771

Inside

Charter Energy Inc

Lew is #1

DST Test Number: 1

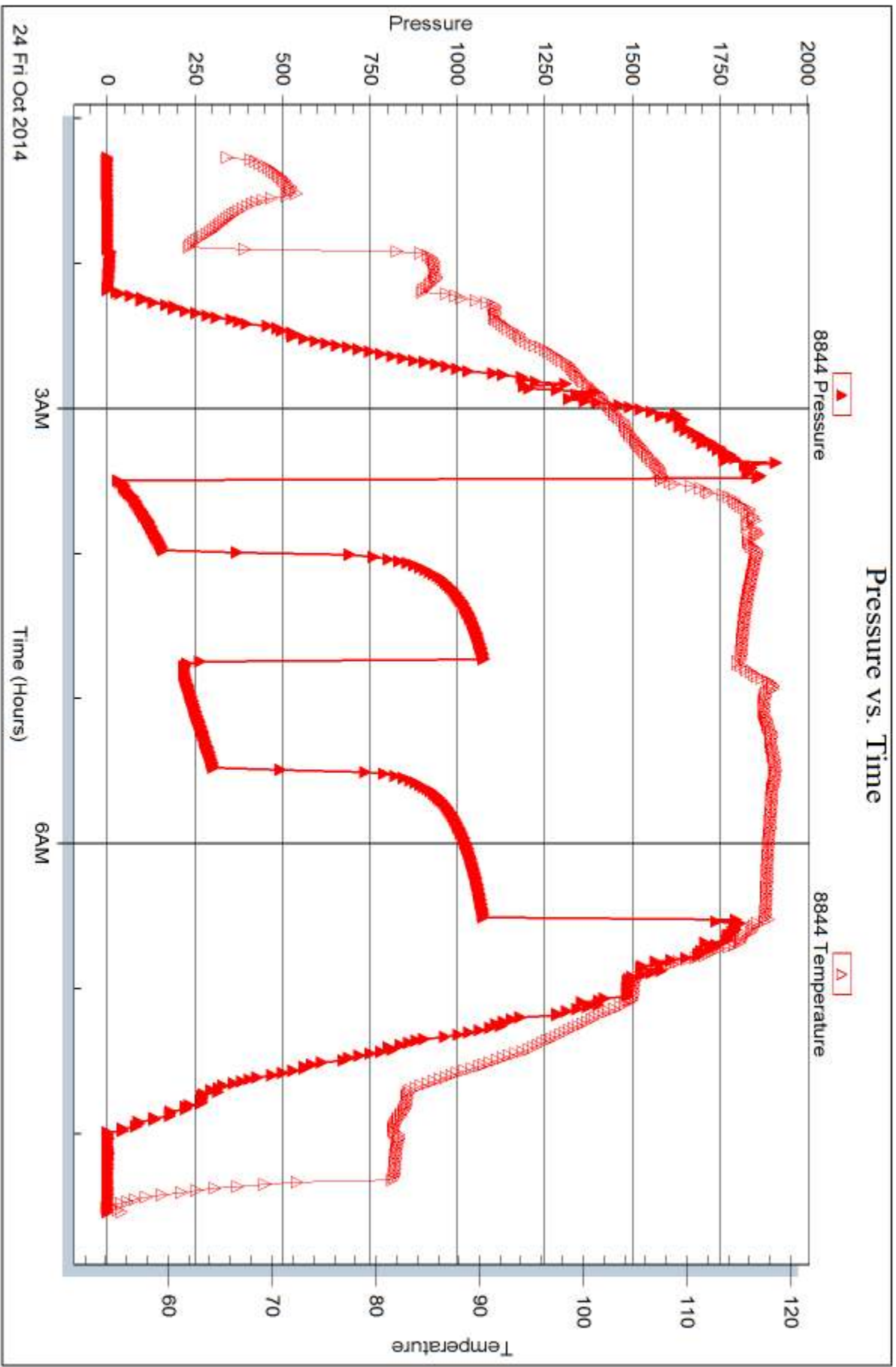


Serial #: 8844

Outside Charter Energy Inc

Lewis #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 59093

Printed: 2014, 10:30 @ 14:22:38



## DRILL STEM TEST REPORT

Prepared For: **Charter Energy Inc**

PO Box 252  
Great Bend, KS 67530-0252

ATTN: Kurt Talbott

### **Lewis #1**

### **7-1s-29w Gove, KS**

Start Date: 2014.10.25 @ 05:30:20

End Date: 2014.10.25 @ 11:42:05

Job Ticket #: 59094                      DST #: 2

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

Printed: 2014.10.30 @ 14:21:55

Charter Energy Inc  
7-1s-29w Gove, KS  
Lewis #1  
DST # 2  
LKC H-L  
2014.10.25









**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Charter Energy Inc  
 PO Box 252  
 Great Bend, KS 67530-0252  
 ATTN: Kurt Talbott

**7-1s-29w Gove, KS**  
**Lewis #1**  
 Job Ticket: 59094      **DST#: 2**  
 Test Start: 2014.10.25 @ 05:30:20

**Tool Information**

Drill Pipe:	Length: 3950.00 ft	Diameter: 3.80 inches	Volume: 55.41 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 55.41 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 59000.00 lb
Depth to Top Packer:	3952.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	163.00 ft			
Tool Length:	183.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Change Over Sub	1.00			3933.00	
Shut In Tool	5.00			3938.00	
Hydraulic tool	5.00			3943.00	
Packer	5.00			3948.00	20.00      Bottom Of Top Packer
Packer	4.00			3952.00	
Stubb	1.00			3953.00	
Recorder	0.00	6771	Inside	3953.00	
Recorder	0.00	8844	Outside	3953.00	
Anchor	30.00			3983.00	
Change Over Sub	1.00			3984.00	
Drill Pipe	125.00			4109.00	
Change Over Sub	1.00			4110.00	
Bullnose	5.00			4115.00	163.00      Bottom Packers & Anchor

**Total Tool Length: 183.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Charter Energy Inc

**7-1s-29w Gove, KS**

PO Box 252  
Great Bend, KS 67530-0252

**Lewis #1**

Job Ticket: 59094

**DST#: 2**

ATTN: Kurt Talbott

Test Start: 2014.10.25 @ 05:30:20

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.92 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
90.00	g s o c m 10%g 3%o 87%m	1.262
60.00	g s w & o c m 40g 10w 25o 25m	0.842
60.00	g m & w c o 40g 30o 15m 15w	0.842
0.00	270' gas in pipe	0.000

Total Length: 210.00 ft

Total Volume: 2.946 bbl

Num Fluid Samples: 0

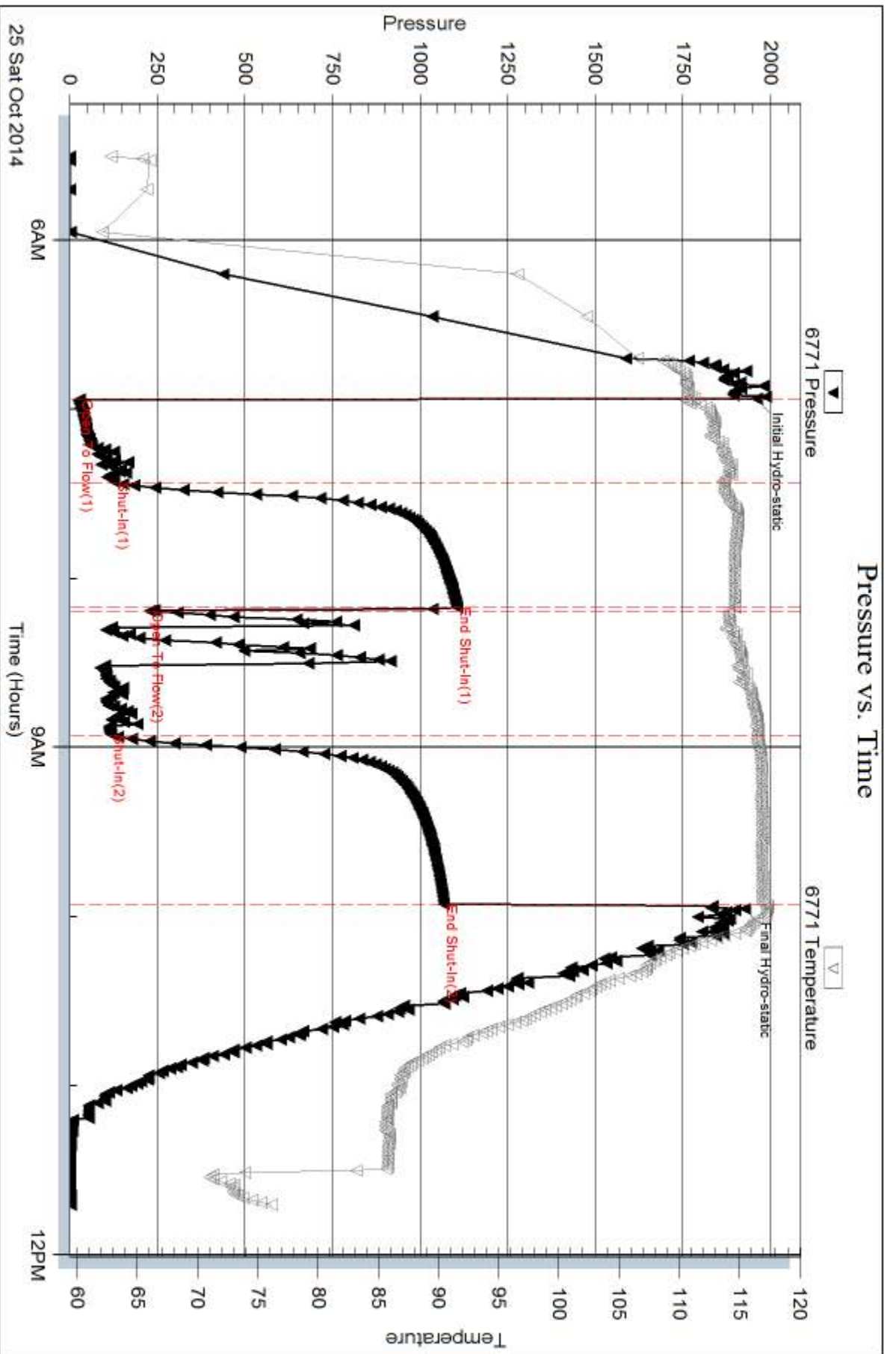
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

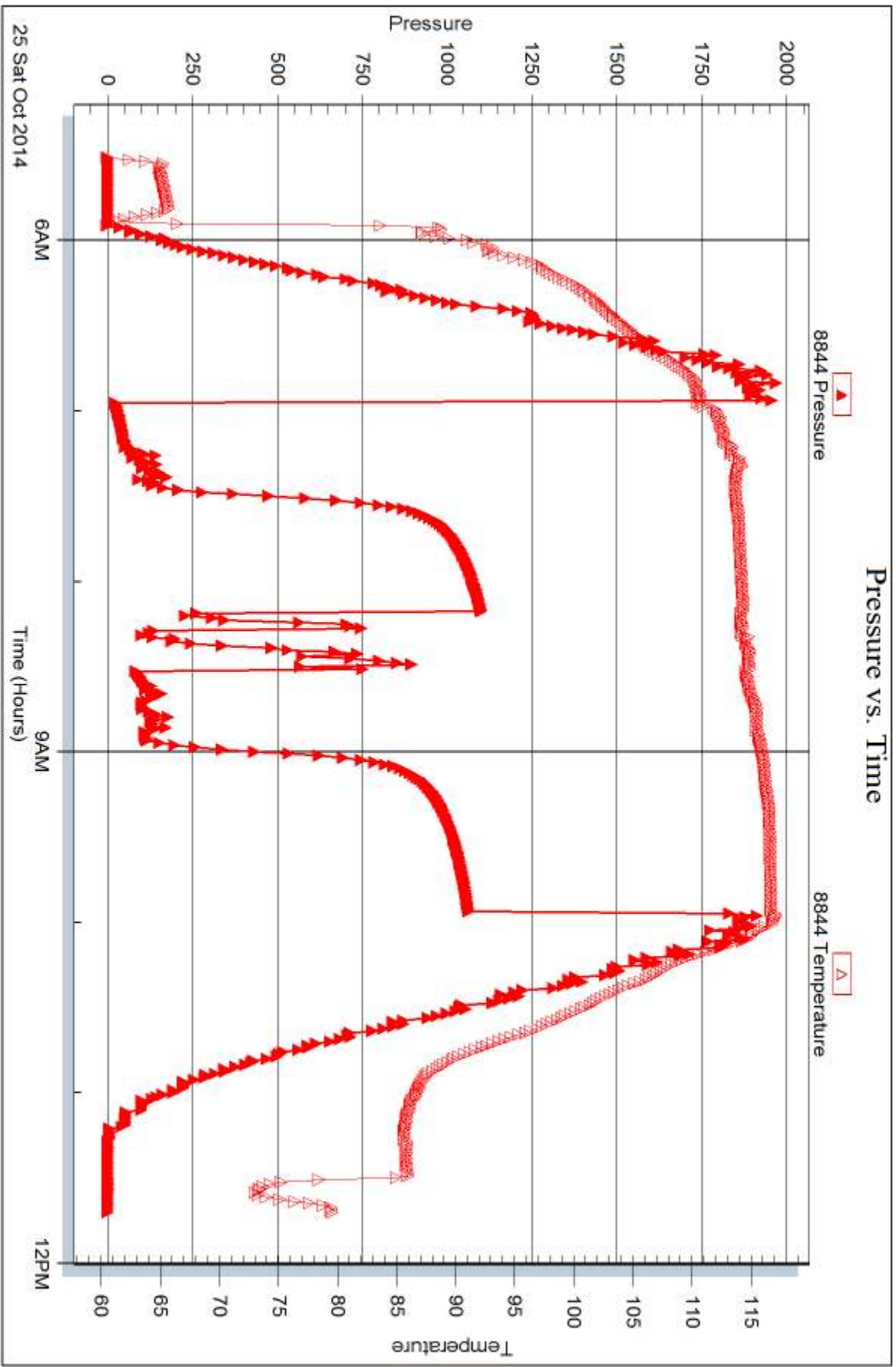


Serial #: 8844

Outside Charter Energy Inc

Lew is #1

DST Test Number: 2





## DRILL STEM TEST REPORT

Prepared For: **Charter Energy Inc**

PO Box 252  
Great Bend, KS 67530-0252

ATTN: Kurt Talbott

### **Lewis #1**

### **7-1s-29w Gove, KS**

Start Date: 2014.10.26 @ 14:56:06

End Date: 2014.10.26 @ 22:25:51

Job Ticket #: 59095                      DST #: 3

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

Printed: 2014.10.30 @ 14:07:18



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Charter Energy Inc  
PO Box 252  
Great Bend, KS 67530-0252  
ATTN: Kurt Talbott

**7-1s-29w Gove, KS**  
**Lewis #1**  
Job Ticket: 59095      **DST#: 3**  
Test Start: 2014.10.26 @ 14:56:06

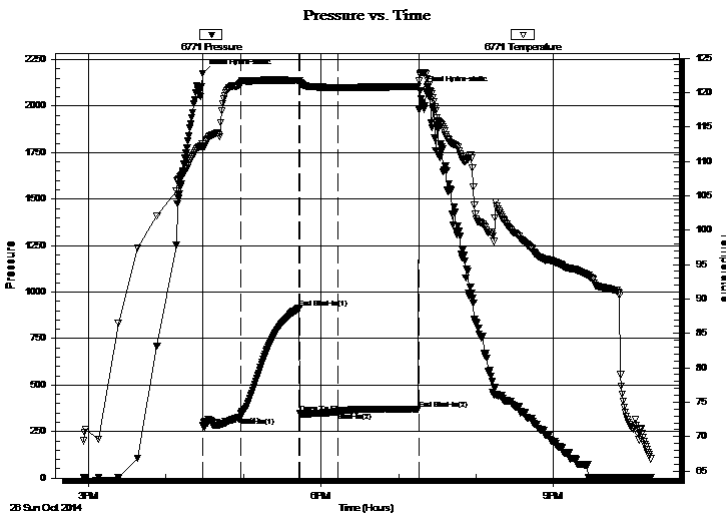
## GENERAL INFORMATION:

Formation: **Pawnee - Cherokee**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 16:28:36  
Time Test Ended: 22:25:51  
Interval: **4214.00 ft (KB) To 4355.00 ft (KB) (TVD)**  
Total Depth: 4355.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Shane McBride  
Unit No: 55  
Reference Elevations: 2753.00 ft (KB)  
2747.00 ft (CF)  
KB to GR/CF: 6.00 ft

**Serial #: 6771 Inside**  
Press@RunDepth: 355.85 psig @ 4215.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2014.10.26 End Date: 2014.10.26 Last Calib.: 2014.10.26  
Start Time: 14:56:06 End Time: 22:15:51 Time On Btm: 2014.10.26 @ 16:28:21  
Time Off Btm: 2014.10.26 @ 19:16:36

**TEST COMMENT:** B.O.B. in 2 min.  
Bled off for 9 min. return to B.O.B. in 3 1/2 min.  
B.O.B. @ open  
Bled off for 12 min. return to B.O.B. in 34 min.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2176.23	112.52	Initial Hydro-static
1	284.13	111.95	Open To Flow (1)
30	328.84	121.33	Shut-In(1)
75	916.37	121.69	End Shut-In(1)
76	347.78	121.37	Open To Flow (2)
105	355.85	120.73	Shut-In(2)
168	371.92	120.88	End Shut-In(2)
169	2084.79	122.60	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
360.00	c g o 40g 60o	3.92
240.00	g m c o 30g 15m 55o	3.37
180.00	g o c m 20g 15o 65m	2.52
90.00	g s o c m 20g 10o 70m	1.26
0.00	1290' gas in pipe	0.00

## 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

**7-1s-29w Gove, KS**

PO Box 252  
Great Bend, KS 67530-0252

**Lewis #1**

Job Ticket: 59095

**DST#: 3**

ATTN: Kurt Talbott

Test Start: 2014.10.26 @ 14:56:06

## Tool Information

Drill Pipe:	Length: 4088.00 ft	Diameter: 3.80 inches	Volume: 57.34 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 57.95 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4214.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	141.00 ft			
Tool Length:	161.00 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			4195.00	
Shut In Tool	5.00			4200.00	
Hydraulic tool	5.00			4205.00	
Packer	5.00			4210.00	20.00 Bottom Of Top Packer
Packer	4.00			4214.00	
Stubb	1.00			4215.00	
Recorder	0.00	6771	Inside	4215.00	
Recorder	0.00	8844	Outside	4215.00	
Anchor	7.00			4222.00	
Change Over Sub	1.00			4223.00	
Drill Pipe	126.00			4349.00	
Change Over Sub	1.00			4350.00	
Bullnose	5.00			4355.00	141.00 Bottom Packers & Anchor

**Total Tool Length: 161.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Charter Energy Inc

**7-1s-29w Gove, KS**

PO Box 252  
Great Bend, KS 67530-0252

**Lewis #1**

Job Ticket: 59095

**DST#: 3**

ATTN: Kurt Talbott

Test Start: 2014.10.26 @ 14:56:06

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.75 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
360.00	c g o 40g 60o	3.920
240.00	g m c o 30g 15m 55o	3.367
180.00	g o c m 20g 15o 65m	2.525
90.00	g s o c m 20g 10o 70m	1.262
0.00	1290' gas in pipe	0.000

Total Length: 870.00 ft

Total Volume: 11.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

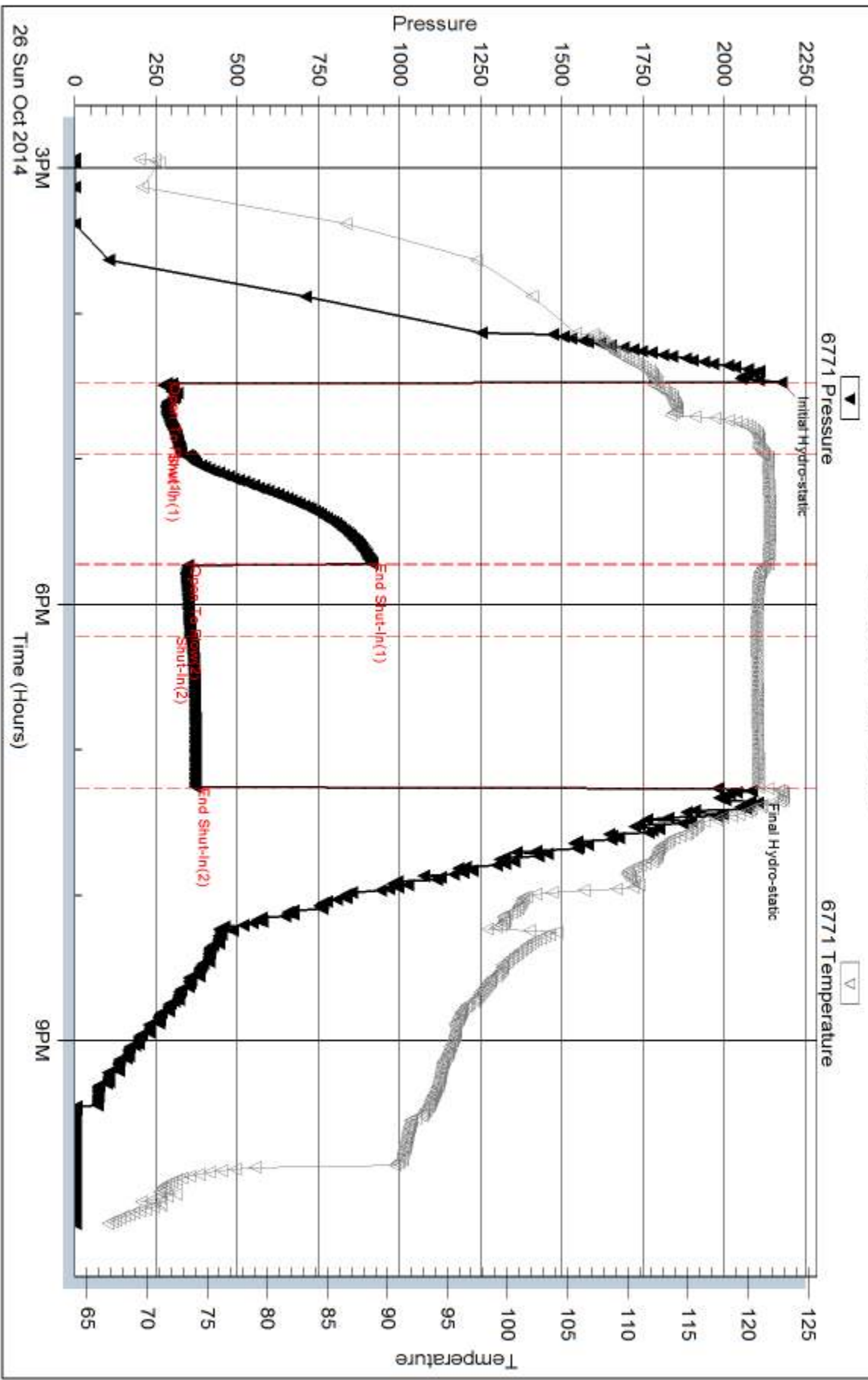
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

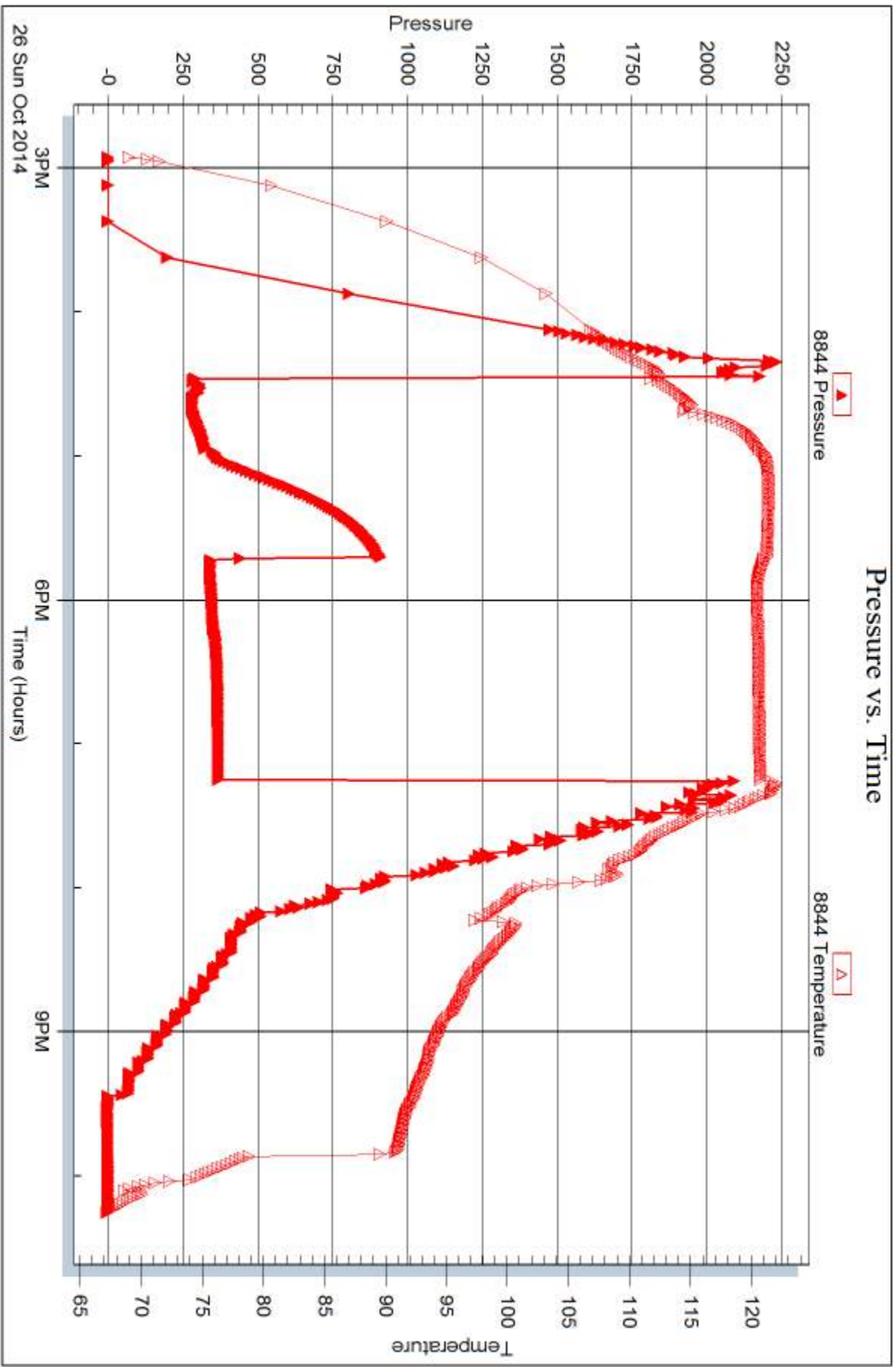


Serial #: 8844

Outside Charter Energy Inc

Lewis #1

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 59095

Printed: 2014, 10:30 @ 14:07:19



## DRILL STEM TEST REPORT

Prepared For: **Charter Energy Inc**

PO Box 252  
Great Bend, KS 67530-0252

ATTN: Kurt Talbott

**Lewis #1**

**7-1s-29w Gove, KS**

Start Date: 2014.10.27 @ 10:55:17

End Date: 2014.10.27 @ 17:20:17

Job Ticket #: 59096                      DST #: 4

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

Printed: 2014.10.30 @ 14:04:40



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Charter Energy Inc  
 PO Box 252  
 Great Bend, KS 67530-0252  
 ATTN: Kurt Talbott

**7-1s-29w Gove, KS**  
**Lewis #1**  
 Job Ticket: 59096 **DST#: 4**  
 Test Start: 2014.10.27 @ 10:55:17

## GENERAL INFORMATION:

Formation: **Johnson, Miss**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 12:44:02  
 Time Test Ended: 17:20:17  
 Interval: **4347.00 ft (KB) To 4425.00 ft (KB) (TVD)**  
 Total Depth: 4425.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Shane McBride  
 Unit No: 55  
 Reference Elevations: 2753.00 ft (KB)  
 2747.00 ft (CF)  
 KB to GR/CF: 6.00 ft

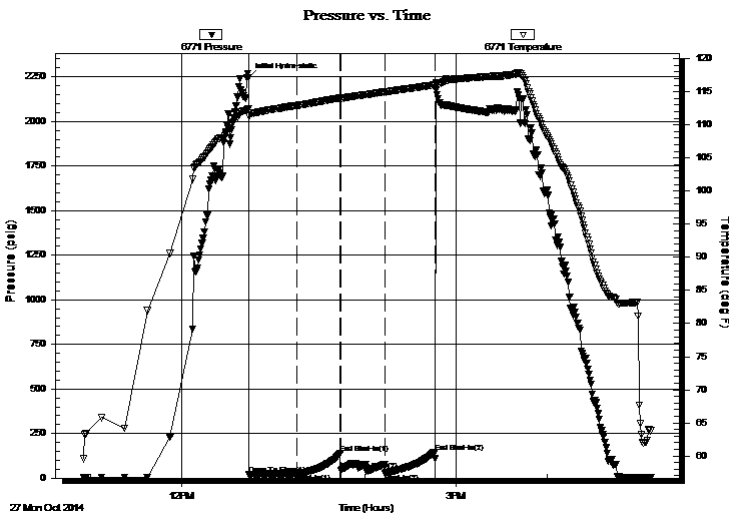
## Serial #: 6771

Inside

Press@RunDepth: 26.81 psig @ 4348.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.10.27 End Date: 2014.10.27 Last Calib.: 2014.10.27  
 Start Time: 10:55:17 End Time: 17:08:17 Time On Btm: 2014.10.27 @ 12:43:47  
 Time Off Btm: 2014.10.27 @ 14:46:47

TEST COMMENT: 1/2" blow died in 29 min.  
 No return  
 No blow  
 No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2245.69	112.49	Initial Hydro-static
1	20.54	111.31	Open To Flow (1)
32	24.95	112.90	Shut-In(1)
60	139.11	114.07	End Shut-In(1)
61	43.93	114.02	Open To Flow (2)
90	26.81	114.96	Shut-In(2)
122	144.51	116.01	End Shut-In(2)
123	2175.97	116.31	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
3.00	mud w/oil spots 100%m	0.01

\* 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 67530-0252  
 ATTN: Kurt Talbott

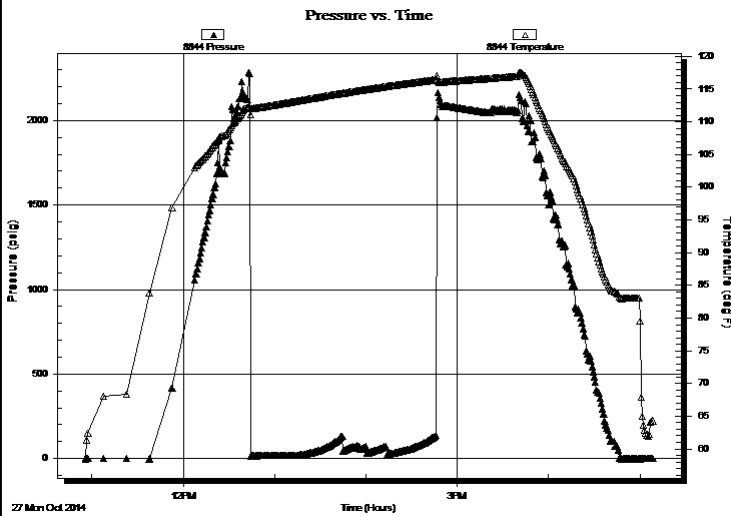
**7-1s-29w Gove, KS**  
**Lewis #1**  
 Job Ticket: 59096 **DST#: 4**  
 Test Start: 2014.10.27 @ 10:55:17

## GENERAL INFORMATION:

Formation: **Johnson, Miss**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 12:44:02  
 Time Test Ended: 17:20:17  
 Interval: **4347.00 ft (KB) To 4425.00 ft (KB) (TVD)**  
 Total Depth: 4425.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Shane McBride  
 Unit No: 55  
 Reference Elevations: 2753.00 ft (KB)  
 2747.00 ft (CF)  
 KB to GR/CF: 6.00 ft

**Serial #: 8844 Outside**  
 Press@RunDepth: psig @ 4348.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.10.27 End Date: 2014.10.27 Last Calib.: 2014.10.27  
 Start Time: 10:55:52 End Time: 17:08:37 Time On Btm:  
 Time Off Btm:

TEST COMMENT: 1/2" blow died in 29 min.  
 No return  
 No blow  
 No return



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
3.00	mud w/oil spots 100%m	0.01

\* 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

**7-1s-29w Gove, KS**

PO Box 252  
Great Bend, KS 67530-0252

**Lewis #1**

Job Ticket: 59096

**DST#: 4**

ATTN: Kurt Talbott

Test Start: 2014.10.27 @ 10:55:17

## Tool Information

Drill Pipe:	Length: 4150.00 ft	Diameter: 3.80 inches	Volume: 58.21 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: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 59.12 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 71000.00 lb
Depth to Top Packer:	4347.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	78.00 ft			
Tool Length:	98.00 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			4328.00	
Shut In Tool	5.00			4333.00	
Hydraulic tool	5.00			4338.00	
Packer	5.00			4343.00	20.00 Bottom Of Top Packer
Packer	4.00			4347.00	
Stubb	1.00			4348.00	
Recorder	0.00	6771	Inside	4348.00	
Recorder	0.00	8844	Outside	4348.00	
Anchor	7.00			4355.00	
Change Over Sub	1.00			4356.00	
Drill Pipe	63.00			4419.00	
Change Over Sub	1.00			4420.00	
Bullnose	5.00			4425.00	78.00 Bottom Packers & Anchor

**Total Tool Length: 98.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Charter Energy Inc

**7-1s-29w Gove, KS**

PO Box 252  
Great Bend, KS 67530-0252

**Lewis #1**

Job Ticket: 59096

**DST#: 4**

ATTN: Kurt Talbott

Test Start: 2014.10.27 @ 10:55:17

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	mud w/oil spots 100%m	0.015

Total Length: 3.00 ft      Total Volume: 0.015 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

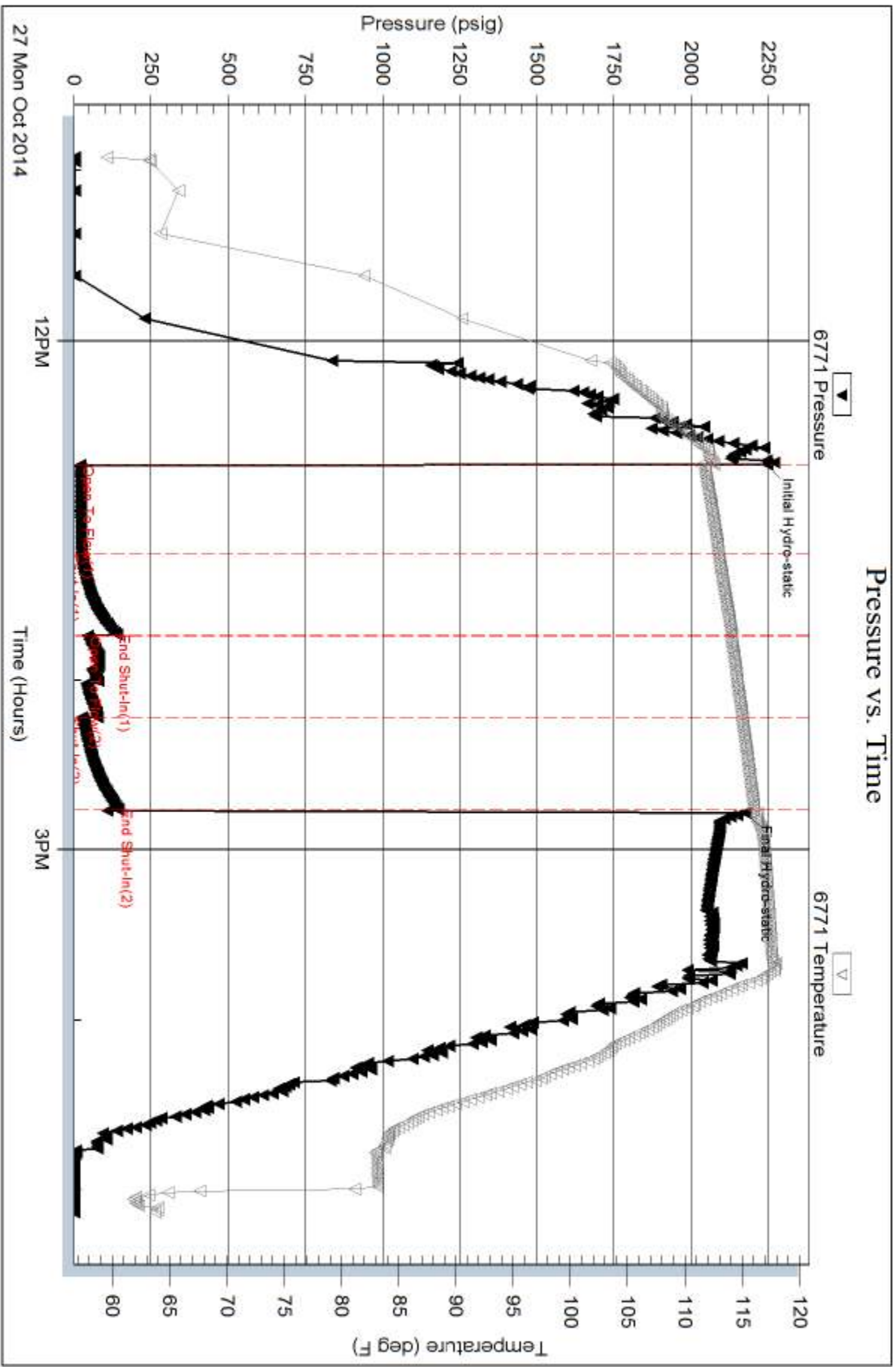
Serial #: 6771

Inside

Charter Energy Inc

Lew is #1

DST Test Number: 4

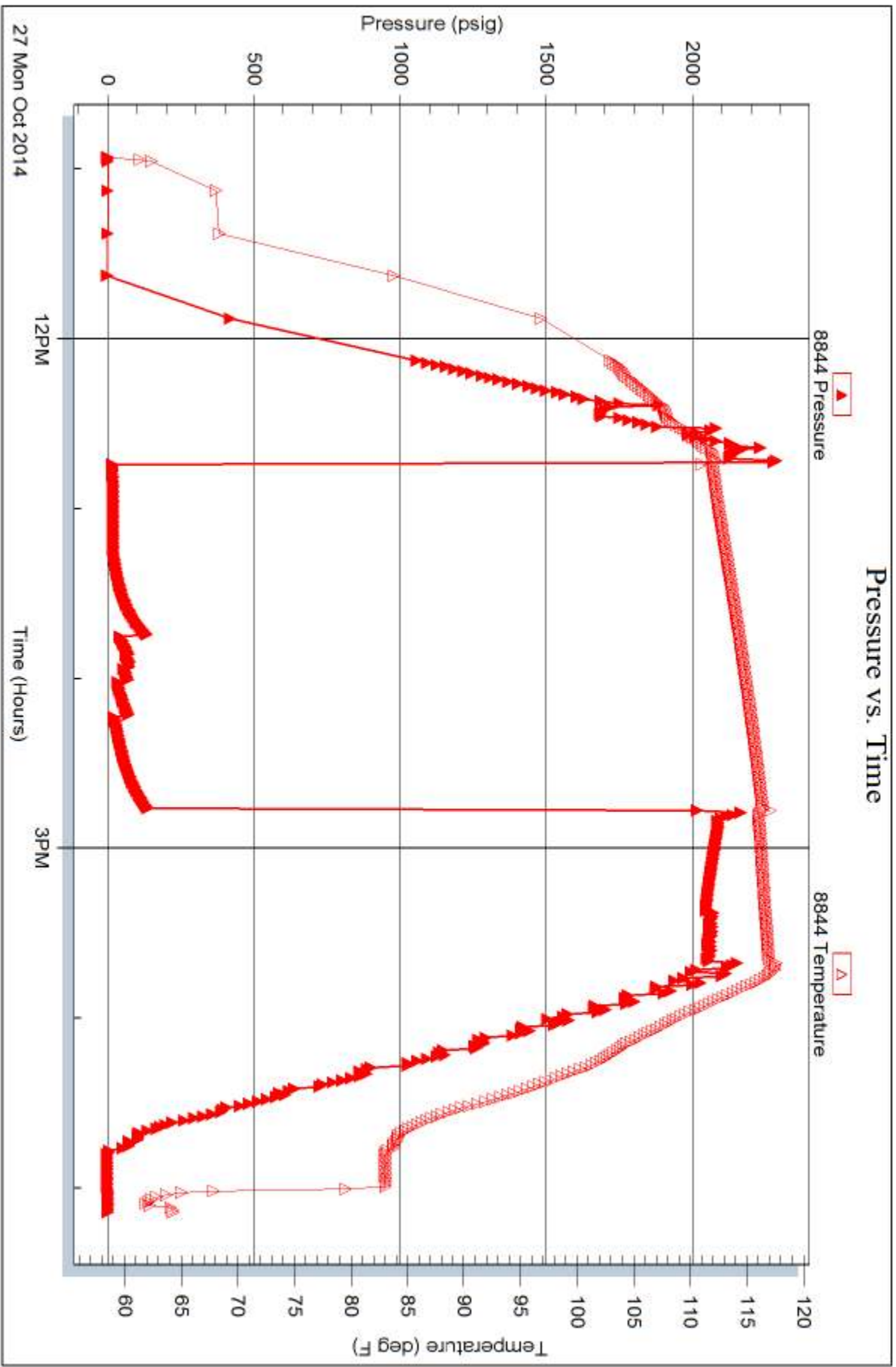


Serial #: 8844

Outside Charter Energy Inc

Lewis #1

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 59096

Printed: 2014, 10:30 @ 14:04:41



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 59093

Well Name & No. Lewins #1 Test No. #1 Date 10/24/14  
 Company Charter Energy Inc. Elevation 2753 KB 2747 GL  
 Address P.O. Box 252 Great Bend, Kas 67530 -0252  
 Co. Rep / Geo. Kurt Talbott Rig Royal #1  
 Location: Sec. 7 Twp. 13 Rge. 29 Co. Cove State Ks

Interval Tested 3814 3910 Zone Tested A - F  
 Anchor Length 96 Drill Pipe Run 3800 Mud Wt. 8.4  
 Top Packer Depth 3809 Drill Collars Run — Vis 56  
 Bottom Packer Depth 3814 Wt. Pipe Run — WL 8.8  
 Total Depth 3910 Chlorides 3000 ppm System LCM #1

Blow Description B.O.B. in 8min  
No return

B.O.B. in 14min.  
No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>90'</u>	<u>Mew (show of oil on top 2in)</u>	<u>SCUM</u>	<u>65%</u>	<u>35%</u>	
<u>180'</u>	<u>SMCW w/oil SCUM</u>	<u>SCUM</u>	<u>85%</u>	<u>15%</u>	
<u>300'</u>	<u>water</u>	<u>SCUM</u>	<u>100%</u>		
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

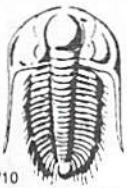
Rec Total 570' BHT 118° Gravity — API RW .198 @ 55 ° F Chlorides 48,000 ppm

(A) Initial Hydrostatic 1871  Test 1150 T-On Location 00:30  
 (B) First Initial Flow 33  Jars \_\_\_\_\_ T-Started 01:15  
 (C) First Final Flow 164  Safety Joint \_\_\_\_\_ T-Open 03:30  
 (D) Initial Shut-In 1081  Circ Sub N/C T-Pulled 06:30  
 (E) Second Initial Flow 224  Hourly Standby \_\_\_\_\_ T-Out 08:40  
 (F) Second Final Flow 309  Mileage 104 RT 161.20  
 (G) Final Shut-In 1079  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1805  Straddle \_\_\_\_\_

Initial Open 30  Shale Packer \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Initial Shut-In 45  Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Final Flow 45  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Final Shut-In 60  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1311.20  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1311.20

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. 59094

Well Name & No. Lewis #1 Test No. #2 Date 10/25/14  
 Company Charter Energy Inc. Elevation 2753 KB 2747 GL  
 Address P.O. Box 252 Great Bend, Ks 67530-0252  
 Co. Rep / Geo. Kurt Talbot Rig Royal #1  
 Location: Sec. 7 Twp. 13 Rge. 29 Co. Gove State Ks

Interval Tested 3952 4115 Zone Tested H-L  
 Anchor Length 143 Drill Pipe Run 3950 Mud Wt. 9.1  
 Top Packer Depth 3947 Drill Collars Run — Vis 51  
 Bottom Packer Depth 3952 Wt. Pipe Run — WL 10.0  
 Total Depth 4115 Chlorides 2500 ppm System LCM #1

Blow Description B.O.B. in 22 min  
No return  
B.O.B. in 35 min (Surging blow)

Weak surface return in 9 min, died in 20 min.

Rec	Feet of	%gas	%oil	%water	%mud
90	gsw 50cm	10	3		87
60	gsw 30cm	40	25	10	25
60	gm 3 wco	40	30	15	15

Rec Total 210' BHT 117' Gravity — API RW — @ —° F Chlorides — ppm

(A) Initial Hydrostatic 1940  Test 1250 T-On Location 05:25  
 (B) First Initial Flow 28  Jars — T-Started 05:30  
 (C) First Final Flow 128  Safety Joint — T-Open 06:57  
 (D) Initial Shut-In 1106  Circ Sub N/C T-Pulled 09:57  
 (E) Second Initial Flow 227  Hourly Standby — T-Out 11:45  
 (F) Second Final Flow 118  Mileage 109.05 161.20  
 (G) Final Shut-In 1068  Sampler —  
 (H) Final Hydrostatic 1926  Straddle —  
 Shale Packer —  
 Extra Packer —  
 Extra Recorder —  
 Day Standby —  
 Accessibility —

Ruined Shale Packer —  
 Ruined Packer —  
 Extra Copies —  
 Sub Total 0  
 Total 1411.20

Initial Open 30  
 Initial Shut-In 45  
 Final Flow 45  
 Final Shut-In 60  
 Approved By Kurt Talbot

Sub Total 1411.20  
 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. 59095

Well Name & No. Weyers #1 Test No. #3 Date 10/26/14  
 Company Charters Energy, Inc. Elevation 2753 KB 2747 GL  
 Address P.O. Box 252 Great Bend, KS 67530-0252  
 Co. Rep / Geo. Kurt Tubbett Rig Royal #1  
 Location: Sec. 7 Twp. 13 Rge. 29 Co. Gove State KS

Interval Tested 4214 4355 Zone Tested Fawcett, Ft. Scott, Cherokee  
 Anchor Length 141 Drill Pipe Run 4088' Mud Wt. 9.4  
 Top Packer Depth 4209 Drill Collars Run 124' Vis 57  
 Bottom Packer Depth 4214 Wt. Pipe Run — WL 8.8  
 Total Depth 4355 Chlorides 2500 ppm System LCM # 1/2

Blow Description B.O.B. in 2 min  
Bled off for 9 min. returned to B.O.B. in 3 1/2 min  
B.O.B. @ open  
Bled off for 12 min. return to B.O.B. in 34 min.

Rec	Feet of	%gas	%oil	%water	%mud
90'	g 50 cm	20	10	70	
180'	g 0 cm	20	15	65	
240'	g m 60	30	55	15	
360'	c 90	40	60		
	(1290' Gas in pipe)				

Rec Total 870' BHT 123° Gravity 35 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2176  Test 1250 T-On Location 14:30  
 (B) First Initial Flow 284  Jars T-Started 14:55  
 (C) First Final Flow 328  Safety Joint T-Open 14:26  
 (D) Initial Shut-In 916  Circ Sub N/C T-Pulled 19:11  
 (E) Second Initial Flow 347  Hourly Standby T-Out 10:45  
 (F) Second Final Flow 355  Mileage 104 RT 161.20 Comments  
 (G) Final Shut-In 372  Sampler  
 (H) Final Hydrostatic 2084  Straddle  Ruined Shale Packer

Initial Open 30  Extra Packer  Extra Copies  
 Initial Shut-In 45  Extra Recorder Sub Total 0  
 Final Flow 30  Day Standby Total 1411.20  
 Final Shut-In 60  Accessibility MP/DST Disc't

Approved By Kurt Tubbett 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. 59096

Well Name & No. Wells #1 Test No. #4 Date 10/27/14  
 Company Charter Energy Inc Elevation 2753 KB 2747 GL  
 Address P.O. Box 252 Great Bend, KS 67530-0252  
 Co. Rep / Geo. Hunt Abbott Rig Royal #1  
 Location: Sec. 7 Twp. 13 Rge. 29 Co. Gove State Ks

Interval Tested 4347 4425 Zone Tested Johnson, Miss  
 Anchor Length 78 Drill Pipe Run 4150 Mud Wt. 9.3  
 Top Packer Depth 4342 Drill Collars Run 18W Vis 52  
 Bottom Packer Depth 4347 Wt. Pipe Run — WL 8.9  
 Total Depth 4425 Chlorides 2200 ppm System LCM #1/2

Blow Description 1/2" in blow dried in 29 min.  
4/10 returned  
4/10 blow  
4/10 returned

Rec	Feet of	%gas	%oil	%water	%mud
3'	Heavy Mud w/oil spots	spots		100	
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 117° Gravity — API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic 2245  Test 1250 T-On Location 10:25  
 (B) First Initial Flow 20  Jars — T-Started 10:55  
 (C) First Final Flow 24  Safety Joint — T-Open 12:43  
 (D) Initial Shut-In 139  Circ Sub N/C T-Pulled 14:43  
 (E) Second Initial Flow 43  Hourly Standby — T-Out 17:20  
 (F) Second Final Flow 26  Mileage 104 @ 161.20 Comments Released and  
 (G) Final Shut-In 144  Sampler — @ 161.20 loaded tools @ 9:30 am  
 (H) Final Hydrostatic 2175  Straddle — 10/28/14.

Initial Open 30  Ruined Shale Packer —  
 Initial Shut-In 30  Ruined Packer —  
 Final Flow 30  Extra Packer —  
 Final Shut-In 30  Extra Recorder — Sub Total 0  
 Day Standby — Total 1572.40  
 Accessibility — MP/DST Disc't —  
 Sub Total 1572.40

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.