



DRILL STEM TEST REPORT

Prepared For: **Charter Energy**

PO Box 252
Great Bend KS 67530

ATTN: Kurt Talbott

Wells #1

18-20s-15w Barton,KS

Start Date: 2014.04.06 @ 20:00:00

End Date: 2014.04.07 @ 05:06:30

Job Ticket #: 57601 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.04.10 @ 11:43:37



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

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

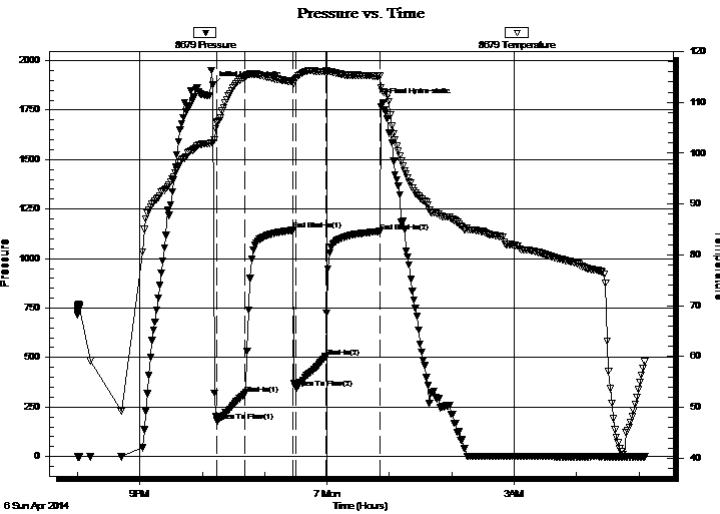
18-20s-15w Barton,KS
Wells #1
 Job Ticket: 57601 **DST#: 1**
 Test Start: 2014.04.06 @ 20:00:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 22:14:00
 Time Test Ended: 05:06:30
 Interval: **3714.00 ft (KB) To 3776.00 ft (KB) (TVD)**
 Total Depth: 3776.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Bob Hamel
 Unit No: 67
 Reference Elevations: 2077.00 ft (KB)
 2070.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8679 Inside
 Press@RunDepth: 504.72 psig @ 3750.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.04.06 End Date: 2014.04.07 Last Calib.: 2014.04.06
 Start Time: 20:00:01 End Time: 05:06:30 Time On Btm: 2014.04.06 @ 22:10:00
 Time Off Btm: 2014.04.07 @ 00:54:00

TEST COMMENT: I.F. - 30 - BOB in 15 secs GTS in 6 min
 I.S.I. - 45 - BOB in 3 min
 F.F. - 30 - BOB immediately - gauged gas
 F.S.I. - 45 - Weak surface blow back died in 27 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1876.18	102.13	Initial Hydro-static
4	180.33	105.89	Open To Flow (1)
31	315.84	115.10	Shut-In(1)
77	1142.84	114.21	End Shut-In(1)
80	347.46	114.59	Open To Flow (2)
109	504.72	116.13	Shut-In(2)
161	1136.70	115.15	End Shut-In(2)
164	1786.88	112.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
126.00	S,O,S,M,W, 40% MUD 60%WTR. FEW OIL 1.77CS	
329.00	S,W,C,H,M,C,G,O, 5% W.30%M.30%G.354.62	
615.00	S,M,C,G,O 5%MUD 20%GAS 75%OIL	8.63
323.00	CLEAN OIL 100%	4.53
0.00	2,331' G.I.P.	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	8.00	35.06
Last Gas Rate	0.13	9.00	8.65
Max. Gas Rate	0.13	9.00	8.65



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

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

18-20s-15w Barton, KS
Wells #1
 Job Ticket: 57601 **DST#: 1**
 Test Start: 2014.04.06 @ 20:00:00

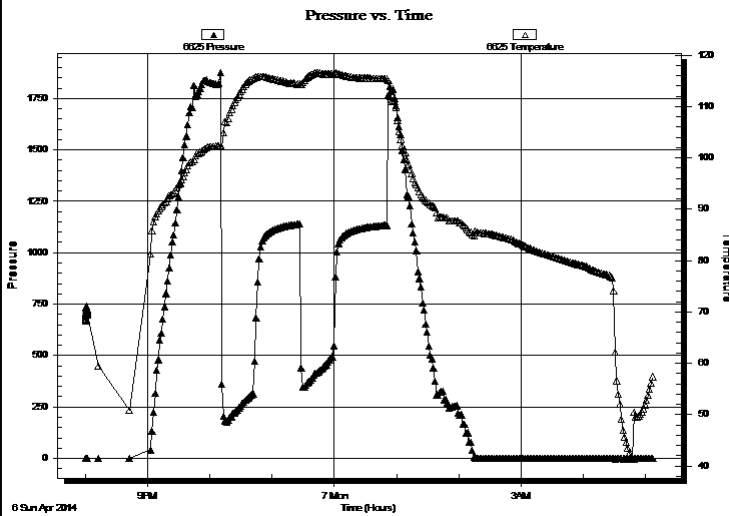
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 22:14:00
 Time Test Ended: 05:06:30
 Interval: **3714.00 ft (KB) To 3776.00 ft (KB) (TVD)**
 Total Depth: 3776.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Bob Hamel
 Unit No: 67
 Reference Elevations: 2077.00 ft (KB)
 2070.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 6625 Outside

Press@RunDepth: psig @ 3750.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.04.06 End Date: 2014.04.07 Last Calib.: 2014.04.07
 Start Time: 20:00:01 End Time: 05:08:00 Time On Btm:
 Time Off Btm:

TEST COMMENT: I.F. - 30 - BOB in 15 secs GTS in 6 min
 I.S.I. - 45 - BOB in 3 min
 F.F. - 30 - BOB immediately - gauged gas
 F.S.I. - 45 - Weak surface blow back died in 27 min



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
126.00	S,O,S,M,W, 40% MUD 60%WTR. FEW OIL.1.77CS	
329.00	S,W,C,H,M,C,G,O, 5% W.30%M.30%G.354.62	
615.00	S,M,C,G,O 5%MUD 20%GAS 75%OIL	8.63
323.00	CLEAN OIL 100%	4.53
0.00	2,331' G.I.P.	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	8.00	35.06
Last Gas Rate	0.13	9.00	8.65
Max. Gas Rate	0.13	9.00	8.65



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy

18-20s-15w Barton,KS

PO Box 252
Great Bend KS 67530

Wells #1

Job Ticket: 57601

DST#: 1

ATTN: Kurt Talbott

Test Start: 2014.04.06 @ 20:00:00

Tool Information

Drill Pipe:	Length: 3730.00 ft	Diameter: 3.80 inches	Volume: 52.32 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	58000.00 lb
			<u>Total Volume: 52.32 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	36.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3714.00 ft			Final	52000.00 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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3695.00	
Shut In Tool	5.00			3700.00	
Hydraulic tool	5.00			3705.00	
Packer	4.00			3709.00	20.00 Bottom Of Top Packer
Packer	5.00			3714.00	
Stubb	1.00			3715.00	
Perforations	2.00			3717.00	
Change Over Sub	1.00			3718.00	
Drill Pipe	31.00			3749.00	
Change Over Sub	1.00			3750.00	
Recorder	0.00	6625	Outside	3750.00	
Recorder	0.00	8679	Inside	3750.00	
Perforations	22.00			3772.00	
Bullnose	4.00			3776.00	62.00 Bottom Packers & Anchor

Total Tool Length: 82.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy

18-20s-15w Barton,KS

PO Box 252
Great Bend KS 67530

Wells #1

Job Ticket: 57601

DST#: 1

ATTN: Kurt Talbott

Test Start: 2014.04.06 @ 20:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

65000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.37 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
126.00	S,O,S,M,W, 40% MUD 60%WTR. FEW OIL SPI	1.767
329.00	S,W,C,H,M,C,G,O, 5% W.30%M.30%G.35%O	4.615
615.00	S,M,C,G,O 5%MUD 20%GAS 75%OIL	8.627
323.00	CLEAN OIL 100%	4.531
0.00	2,331' G.I.P.	0.000

Total Length: 1393.00 ft Total Volume: 19.540 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 37.8 @ 60 DEG. R.W. = .20 OHMS @ 42 DEG.

Serial #: 8679

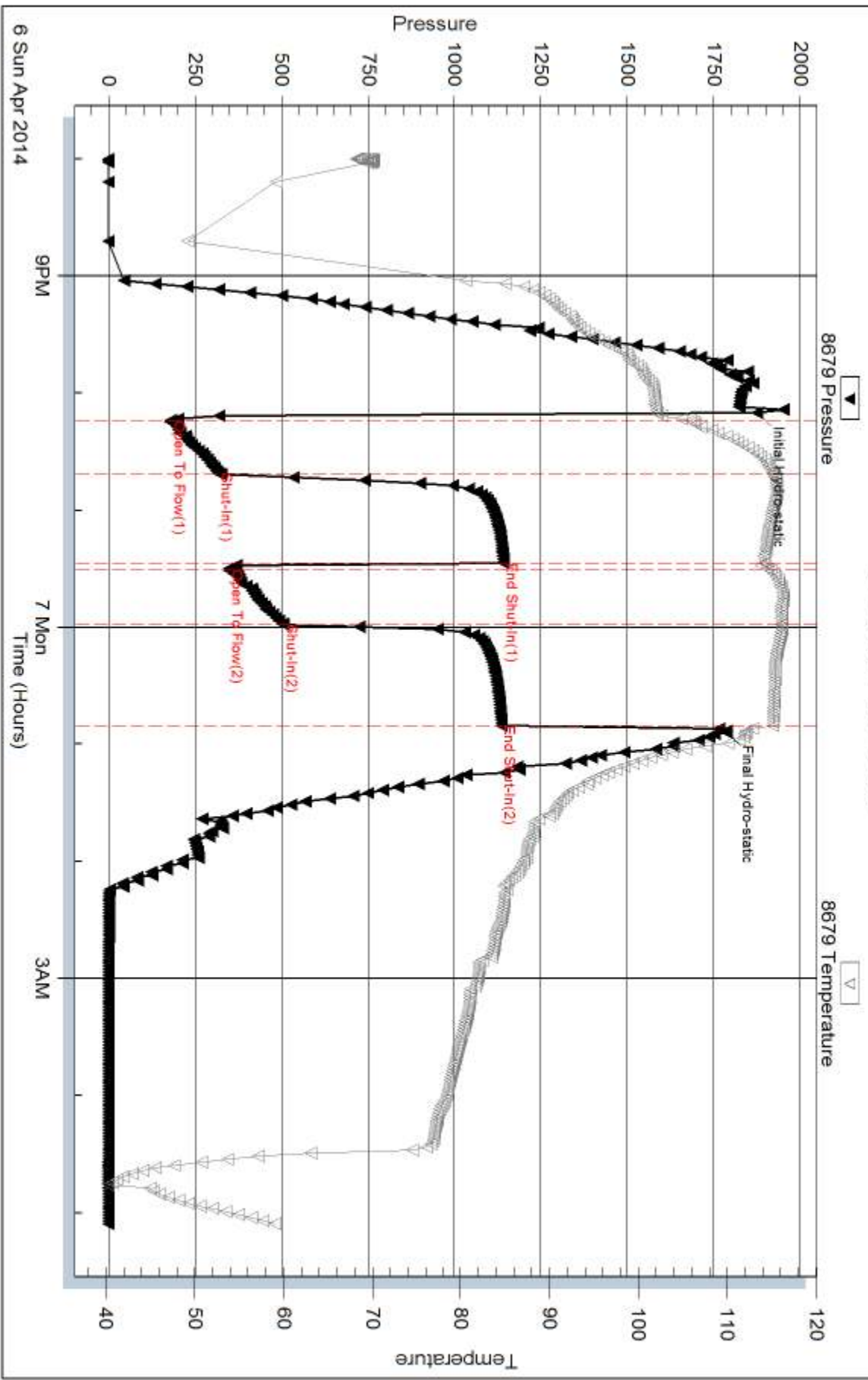
Inside

Charter Energy

Wells #1

DST Test Number: 1

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 57601

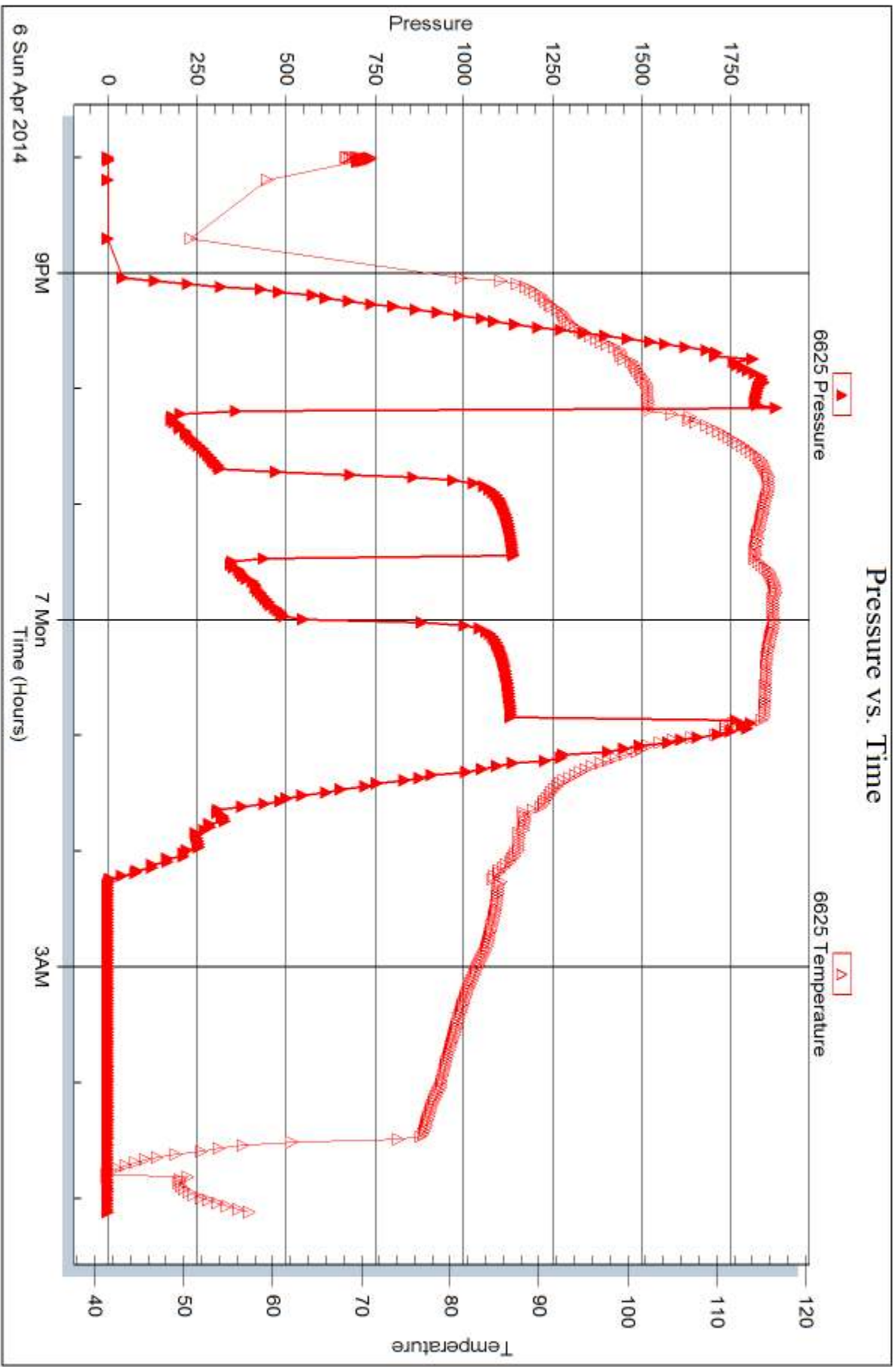
Printed: 2014.04.10 @ 11:43:39

Serial #: 6625

Outside Charter Energy

Wells #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 57601

Printed: 2014.04.10 @ 11:43:39



DRILL STEM TEST REPORT

Prepared For: **Charter Energy**

PO Box 252
Great Bend KS 67530

ATTN: Kurt Talbott

Wells #1

18-20s-15w Barton,KS

Start Date: 2014.04.07 @ 11:20:00

End Date: 2014.04.07 @ 18:10:57

Job Ticket #: 57602 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.04.10 @ 11:43:13



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

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

18-20s-15w Barton,KS
Wells #1
Job Ticket: 57602 **DST#: 2**
Test Start: 2014.04.07 @ 11:20:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 12:41:27
Time Test Ended: 18:10:57
Interval: **3783.00 ft (KB) To 3792.00 ft (KB) (TVD)**
Total Depth: 3792.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 2077.00 ft (KB)
2070.00 ft (CF)
KB to GR/CF: 7.00 ft
Test Type: Conventional Bottom Hole (Reset)
Tester: Bob Hamel
Unit No: 67

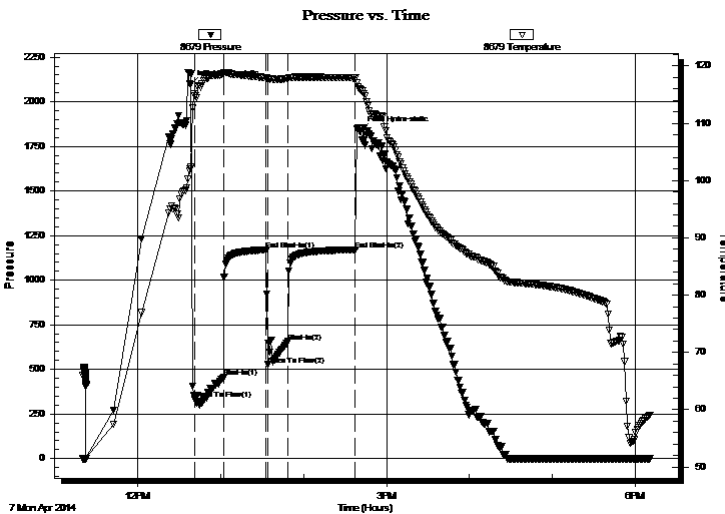
Serial #: 8679

Inside

Press@RunDepth: 655.29 psig @ 3788.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.04.07 End Date: 2014.04.07 Last Calib.: 2014.04.07
Start Time: 11:20:01 End Time: 18:10:56 Time On Btm: 2014.04.07 @ 12:37:57
Time Off Btm: 2014.04.07 @ 14:41:27

TEST COMMENT: I.F. - 20 - BOB in 10 sec GTS in 1 min
I.S.I. - 30 - BOB in 7 min
F.F. - 15 - BOB instantly - gauged gas
F.S.I. - 45 - BOB in 5 min

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2096.08	102.04	Initial Hydro-static
4	334.50	114.82	Open To Flow (1)
24	454.54	118.63	Shut-In(1)
55	1171.00	117.95	End Shut-In(1)
56	526.59	117.53	Open To Flow (2)
71	655.29	117.81	Shut-In(2)
120	1171.27	117.91	End Shut-In(2)
124	1837.01	115.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
441.00	WATER	6.19
252.00	S,M,C,W, 5% MUD 95% WATER	3.53
126.00	S,W,C,M,C,G,O, 5%WTR 10%MD 30%GS	1.77
756.00	CLEAN OIL 100%	10.60
0.00	GTS	0.00

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	12.00	41.41
Last Gas Rate	0.13	8.00	8.27
Max. Gas Rate	0.25	12.00	41.41



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

18-20s-15w Barton, KS
Wells #1
Job Ticket: 57602 **DST#: 2**
Test Start: 2014.04.07 @ 11:20:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:41:27
 Time Test Ended: 18:10:57

Test Type: Conventional Bottom Hole (Reset)
 Tester: Bob Hamel
 Unit No: 67

Interval: 3783.00 ft (KB) To 3792.00 ft (KB) (TVD)
 Total Depth: 3792.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

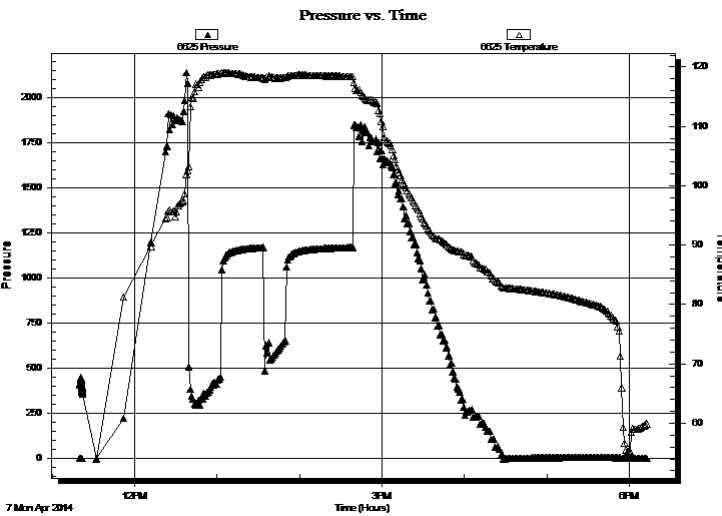
Reference Elevations: 2077.00 ft (KB)
 2070.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 6625 Outside

Press@RunDepth: psig @ 3788.00 ft (KB)
 Start Date: 2014.04.07 End Date: 2014.04.07
 Start Time: 11:20:01 End Time: 18:12:30

Capacity: 8000.00 psig
 Last Calib.: 2014.04.07
 Time On Btm:
 Time Off Btm:

TEST COMMENT: I.F. - 20 - BOB in 10 sec GTS in 1 min
 I.S.I. - 30 - BOB in 7 min
 F.F. - 15 - BOB instantly - gauged gas
 F.S.I. - 45 - BOB in 5 min



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
441.00	WATER	6.19
252.00	S,M,C,W, 5% MUD 95% WATER	3.53
126.00	S,W,C,M,C,G,O, 5%WTR 10%MD 30%GS	1.77
756.00	CLEAN OIL 100%	10.60
0.00	GTS	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	12.00	41.41
Last Gas Rate	0.13	8.00	8.27
Max. Gas Rate	0.25	12.00	41.41

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy

18-20s-15w Barton,KS

PO Box 252
Great Bend KS 67530

Wells #1

Job Ticket: 57602

DST#: 2

ATTN: Kurt Talbott

Test Start: 2014.04.07 @ 11:20:00

Tool Information

Drill Pipe:	Length: 3794.00 ft	Diameter: 3.80 inches	Volume: 53.22 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 56000.00 lb
			<u>Total Volume: 53.22 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3783.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	29.00 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			3764.00	
Shut In Tool	5.00			3769.00	
Hydraulic tool	5.00			3774.00	
Packer	4.00			3778.00	20.00 Bottom Of Top Packer
Packer	5.00			3783.00	
Stubb	1.00			3784.00	
Perforations	4.00			3788.00	
Recorder	0.00	6625	Outside	3788.00	
Recorder	0.00	8679	Inside	3788.00	
Bullnose	4.00			3792.00	9.00 Bottom Packers & Anchor
Total Tool Length:	29.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy

18-20s-15w Barton,KS

PO Box 252
Great Bend KS 67530

Wells #1

Job Ticket: 57602

DST#: 2

ATTN: Kurt Talbott

Test Start: 2014.04.07 @ 11:20:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36.8 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

55000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
441.00	WATER	6.186
252.00	S,M,C,W, 5% MUD 95% WATER	3.535
126.00	S,W,C,M,C,G,O, 5%WTR 10%MD 30%GS 55%	1.767
756.00	CLEAN OIL 100%	10.605
0.00	GTS	0.000

Total Length: 1575.00 ft Total Volume: 22.093 bbl

Num Fluid Samples: 0

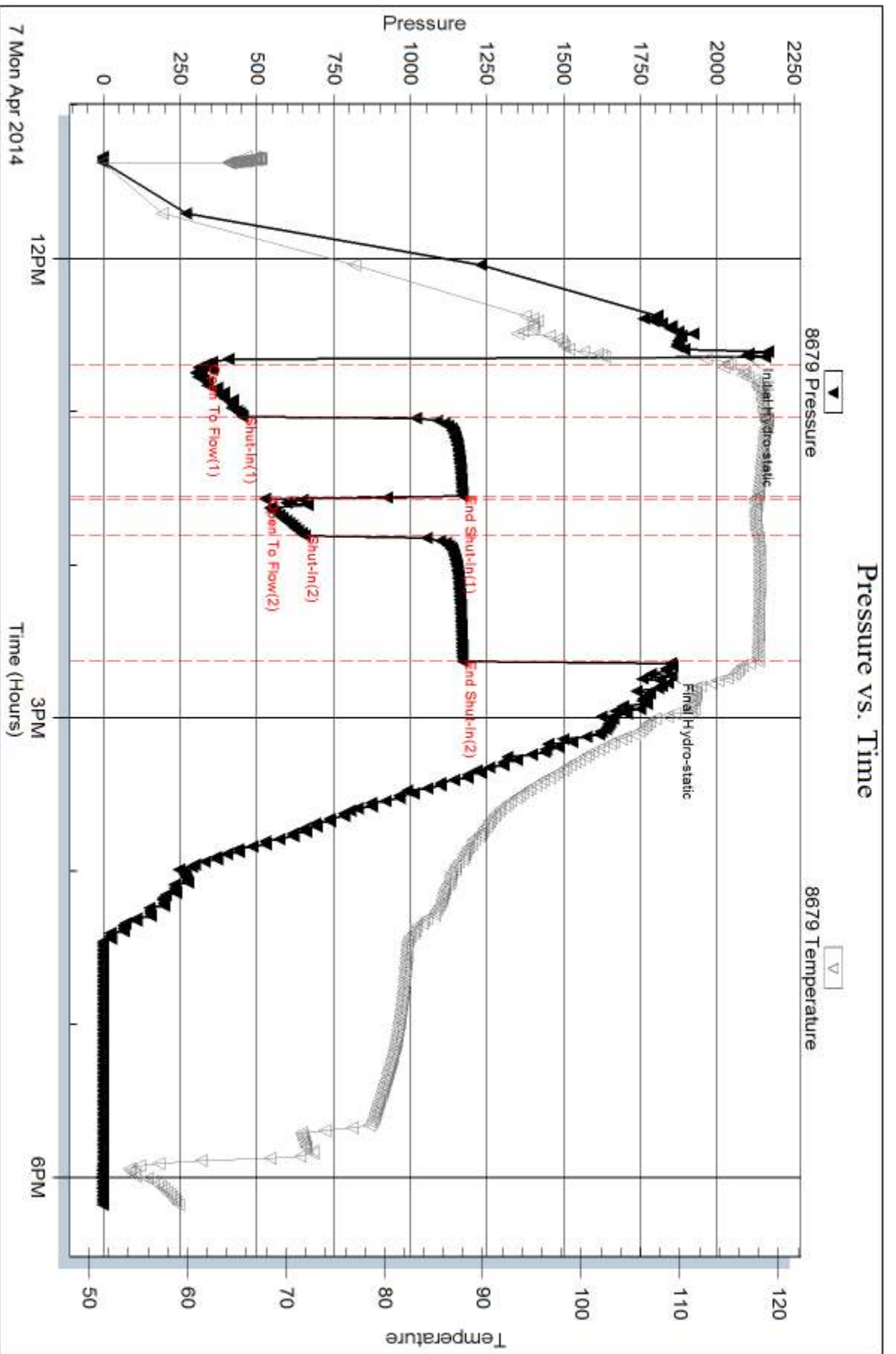
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: OIL GRAVITY = 36.8 @ 60 DEG. R.W. = .17 OHMS @ 59.8 DEG.

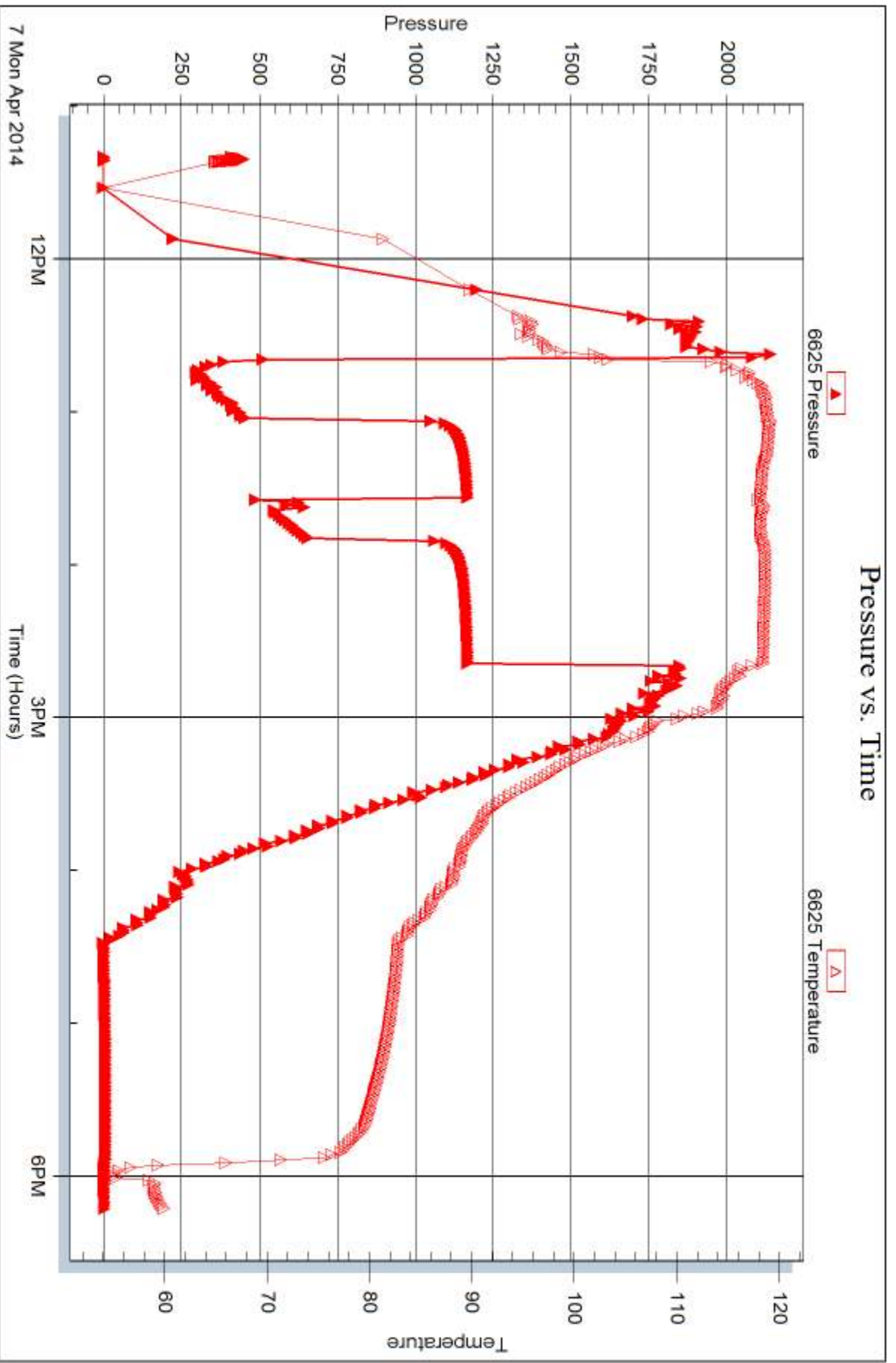


Serial #: 6625

Outside Charter Energy

Wells #1

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 57602

Printed: 2014.04.10 @ 11:43:16



DRILL STEM TEST REPORT

Prepared For: **Charter Energy**

PO Box 252
Great Bend KS 67530

ATTN: Kurt Talbott

Wells #1

18-20s-15w Barton,KS

Start Date: 2014.04.07 @ 00:19:00

End Date: 2014.04.08 @ 08:04:30

Job Ticket #: 57603 DST #: 3

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.04.10 @ 11:42:41



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

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

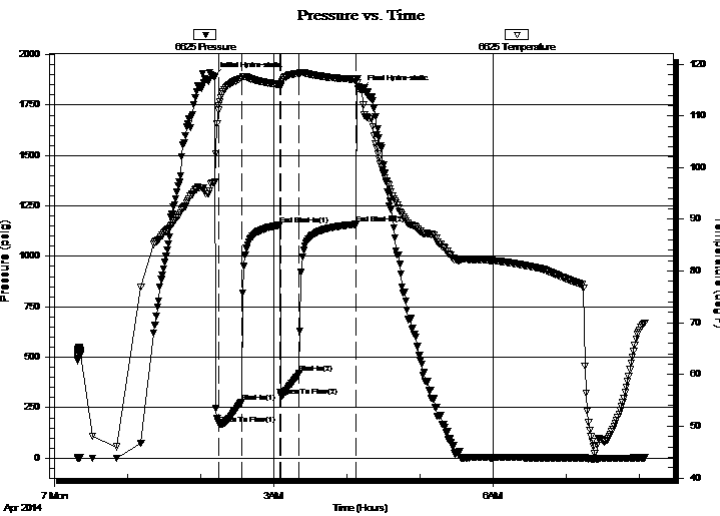
18-20s-15w Barton,KS
Wells #1
 Job Ticket: 57603 **DST#: 3**
 Test Start: 2014.04.07 @ 00:19:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:15:00
 Time Test Ended: 08:04:30
 Interval: **3791.00 ft (KB) To 3810.00 ft (KB) (TVD)**
 Total Depth: 3810.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Bob Hamel
 Unit No: 67
 Reference Elevations: 2077.00 ft (KB)
 2070.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 6625 Outside
 Press@RunDepth: 420.05 psig @ 3793.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.04.07 End Date: 2014.04.07 Last Calib.: 2014.04.07
 Start Time: 00:19:01 End Time: 08:04:30 Time On Btm: 2014.04.07 @ 02:11:00
 Time Off Btm: 2014.04.07 @ 04:11:30

TEST COMMENT: I.F. - 20 - BOB immediately GTS in 30 sec
 I.S.I. - 30 - BOB in 1 min
 F.F. - 15 - BOB in 45 sec
 F.S.I. - 45 - BOB in 1 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1890.04	97.11	Initial Hydro-static
4	170.09	112.00	Open To Flow (1)
23	277.94	117.21	Shut-In(1)
54	1155.14	116.04	End Shut-In(1)
55	308.61	116.14	Open To Flow (2)
70	420.05	118.19	Shut-In(2)
117	1158.71	117.05	End Shut-In(2)
121	1828.16	115.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
189.00	WATER 100%	2.65
126.00	S,M,C,H,W,C,G,O 5%MD 20%WTR 25%OIL	1.77
630.00	CLEAN OIL 100%	8.84
0.00	2583' G.I.P.	0.00

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	4.00	122.10
Last Gas Rate	0.25	10.00	38.23
Max. Gas Rate	0.25	10.00	38.23



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

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

18-20s-15w Barton, KS

Wells #1

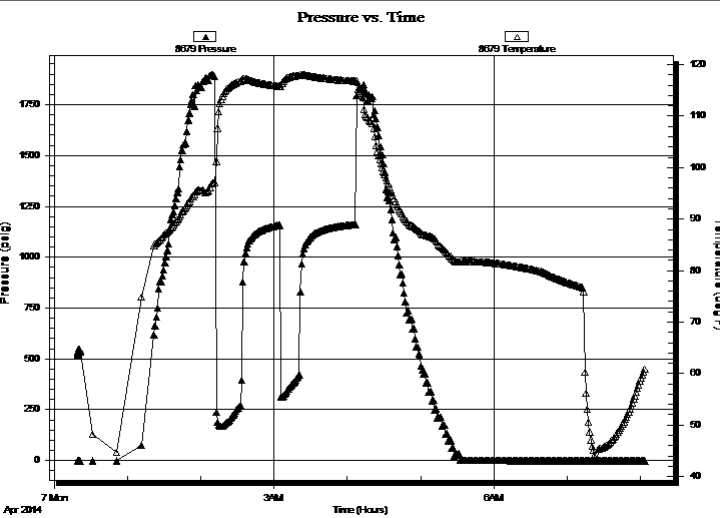
Job Ticket: 57603 **DST#: 3**
Test Start: 2014.04.07 @ 00:19:00

GENERAL INFORMATION:

Formation: Arbuckle		Test Type: Conventional Bottom Hole (Reset)
Deviated: No Whipstock: ft (KB)		Tester: Bob Hamel
Time Tool Opened: 02:15:00		Unit No: 67
Time Test Ended: 08:04:30		
Interval: 3791.00 ft (KB) To 3810.00 ft (KB) (TVD)		Reference Elevations: 2077.00 ft (KB)
Total Depth: 3810.00 ft (KB) (TVD)		2070.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Fair	KB to GR/CF: 7.00 ft

Serial #: 8679	Inside				
Press@RunDepth: psig @ 3793.00 ft (KB)		Capacity: 8000.00 psig			
Start Date: 2014.04.07	End Date: 2014.04.07	Last Calib.: 1899.12.30			
Start Time: 00:19:01	End Time: 08:03:30	Time On Btm:			
		Time Off Btm:			

TEST COMMENT: I.F. - 20 - BOB immediately GTS in 30 sec
I.S.I. - 30 - BOB in 1 min
F.F. - 15 - BOB in 45 sec
F.S.I. - 45 - BOB in 1 min



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

Recovery		
Length (ft)	Description	Volume (bbl)
189.00	WATER 100%	2.65
126.00	S,M,C,H,W,C,G,O 5%MD 20%WTR 25% (1.77%OIL)	
630.00	CLEAN OIL 100%	8.84
0.00	2583' G.I.P.	0.00

* Recovery from multiple tests

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	4.00	122.10
Last Gas Rate	0.25	10.00	38.23
Max. Gas Rate	0.25	10.00	38.23



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy

18-20s-15w Barton,KS

PO Box 252
Great Bend KS 67530

Wells #1

Job Ticket: 57603

DST#: 3

ATTN: Kurt Talbott

Test Start: 2014.04.07 @ 00:19:00

Tool Information

Drill Pipe:	Length: 3792.00 ft	Diameter: 3.80 inches	Volume: 53.19 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	58000.00 lb
			<u>Total Volume: 53.19 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3791.00 ft			Final	52000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	19.00 ft				
Tool Length:	39.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3776.00	
Change Over Sub	1.00			3777.00	
Hydraulic tool	5.00			3782.00	
Packer	4.00			3786.00	20.00 Bottom Of Top Packer
Packer	5.00			3791.00	
Stubb	1.00			3792.00	
Perforations	1.00			3793.00	
Recorder	0.00	6625	Outside	3793.00	
Recorder	0.00	8679	Inside	3793.00	
Perforations	13.00			3806.00	
Bullnose	4.00			3810.00	19.00 Bottom Packers & Anchor

Total Tool Length: 39.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy

18-20s-15w Barton,KS

PO Box 252
Great Bend KS 67530

Wells #1

Job Ticket: 57603

DST#: 3

ATTN: Kurt Talbott

Test Start: 2014.04.07 @ 00:19:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

41 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

55000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.96 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
189.00	WATER 100%	2.651
126.00	S,M,C,H,W,C,G,O 5%MD 20%WTR 25%G 50'	1.767
630.00	CLEAN OIL 100%	8.837
0.00	2583' G.I.P.	0.000

Total Length: 945.00 ft Total Volume: 13.255 bbl

Num Fluid Samples: 0

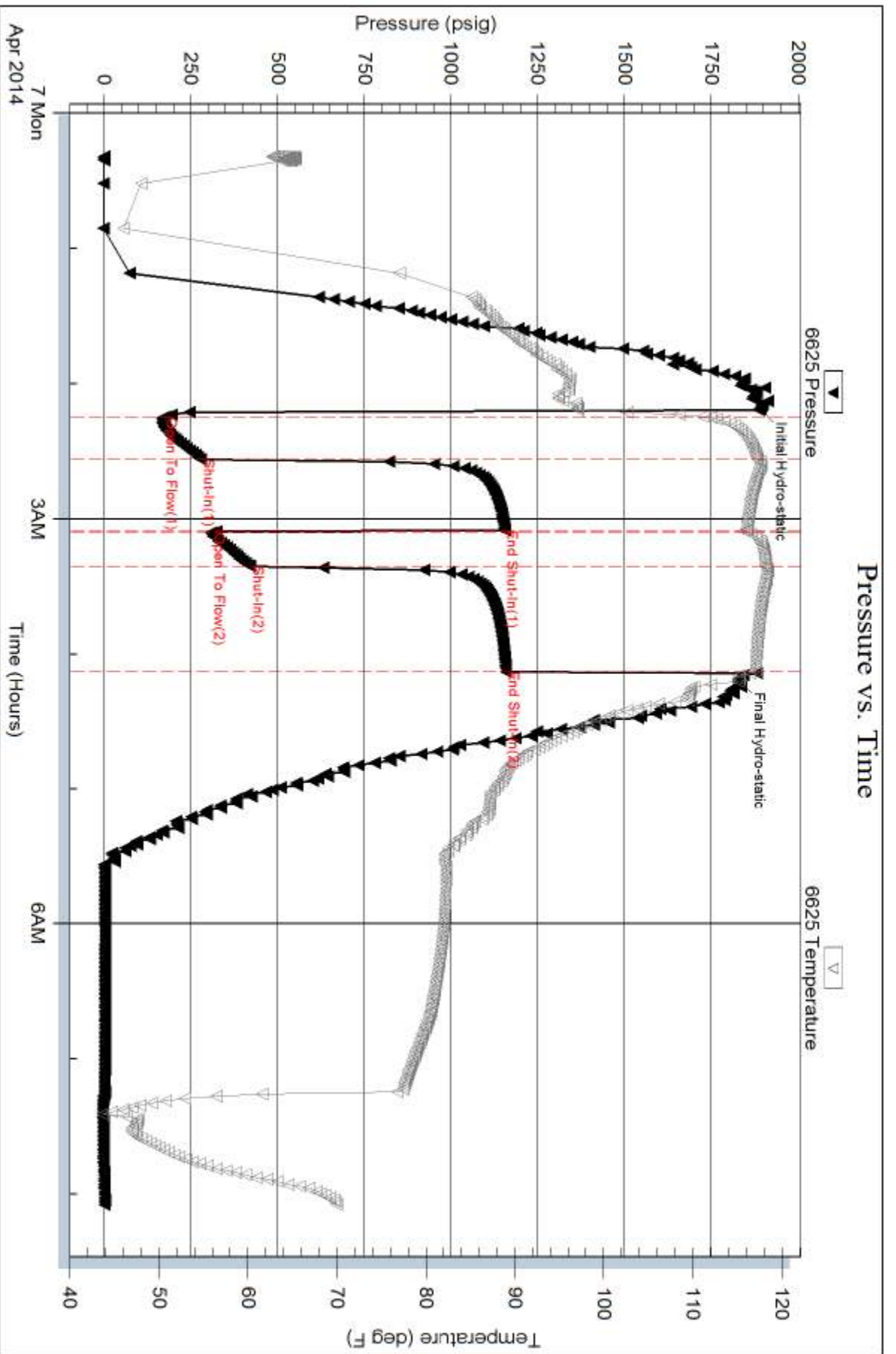
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: OIL GRAVITY = 41 @ 60 DEG. R.W. = .22 OHMS @ 45.2 DEG.



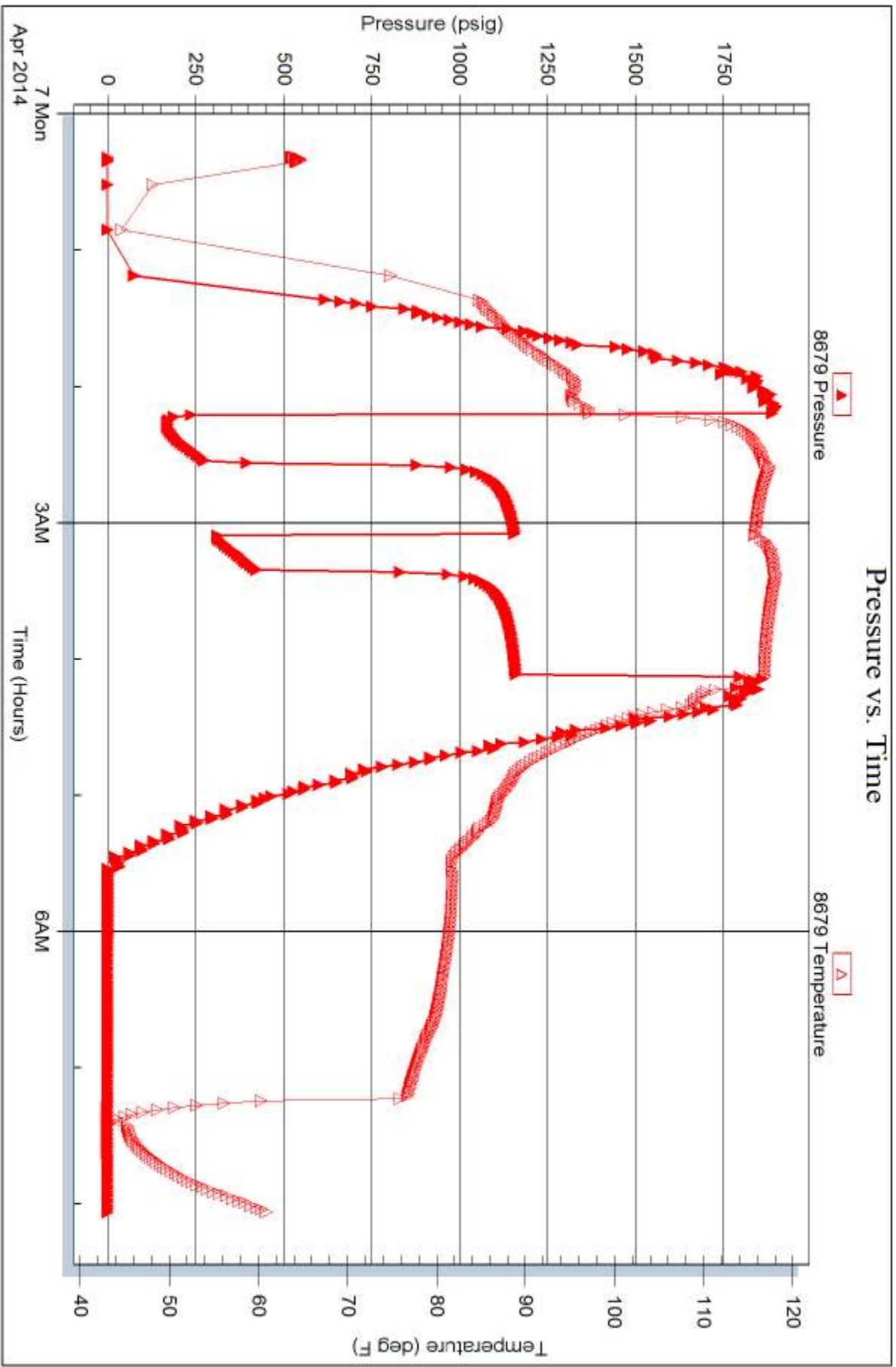
Serial #: 8679

Inside

Charter Energy

Wells #1

DST Test Number: 3





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 57601

Well Name & No. Wells #1 Test No. 1 Date 4-6-14
 Company Charter Energy Elevation 2077 KB 2070 GL
 Address P.O. Box 252 Great Bend KS 67530
 Co. Rep / Geo. Kurt Talbott Rig Royal Rig #2
 Location: Sec. 18 Twp. 20 S. Rge. 15 W. Co. Barton State KS

Interval Tested 3714-3776 Zone Tested Arbuckle
 Anchor Length 62 Drill Pipe Run 3730 Mud Wt. 9.3
 Top Packer Depth 3709 Drill Collars Run _____ Vis 51
 Bottom Packer Depth 3714 Wt. Pipe Run _____ WL 8.9
 Total Depth 3776 Chlorides 7.000 ppm System LCM 0

Blow Description I.F.-30-1" INT Blow Built to (B.O.B. in 15 sec) (6+5.6 min)
I.S.I.-45-B.O.B. 3 min. (Died in 20 min)
FF-30-B.O.B. start (after ten min was able to gauge gas)
E.S.I.-45-w.s.B.B. (Died in 27 min)

Rec	Feet of	%gas	%oil	%water	%mud
<u>0</u>	<u>2331 G.I.P.</u>				
<u>323</u>	<u>clean oil</u>		<u>100</u>		
<u>615</u>	<u>S.M.C.G.O</u>	<u>20</u>	<u>75</u>		<u>5</u>
<u>329</u>	<u>S.W.C.H.M.C.G.O</u>	<u>30</u>	<u>35</u>	<u>5</u>	<u>30</u>
<u>126</u>	<u>S.O.S.M.W (Pewo, 15 sec)</u>			<u>60</u>	<u>40</u>

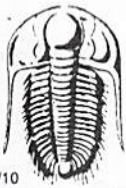
Rec Total 1393 BHT 112 Gravity 378 API RW .20 @ 42 °F Chlorides 65,000 ppm

(A) Initial Hydrostatic 1,876 Test 1150 T-On Location 7:30:00
 (B) First Initial Flow 180 Jars _____ T-Started 20:00:00
 (C) First Final Flow 316 Safety Joint _____ T-Open 22:19:00
 (D) Initial Shut-In 1,143 Circ Sub _____ T-Pulled 00:49:00
 (E) Second Initial Flow 347 Hourly Standby _____ T-Out 05:11:00
 (F) Second Final Flow 504 Mileage 120 RT 186 Comments H's Reached 8.0 P.M.
 (G) Final Shut-In 1,137 Sampler _____ Thank-you
 (H) Final Hydrostatic 1,787 Straddle _____ Ruined Shale Packer _____

Initial Open 30 Shale Packer _____ Ruined Packer _____
 Initial Shut-In 45 Extra Packer _____ Extra Copies _____
 Final Flow 30 Extra Recorder _____ Sub Total 0
 Final Shut-In 45 Day Standby _____ Total 1336
 Sub Total 1336 Accessibility _____ MP/DST Disc't _____

Approved By _____ Our Representative Butt

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. 57602

4/10

Well Name & No. Wells #1 Test No. 2 Date 4-7-14
 Company Charter energy Elevation 2077 KB 2076 GL
 Address P.O. Box 252 Great Bend KS. 67530
 Co. Rep / Geo. Kurt talbott Rig Royal Rig #2
 Location: Sec. 18 Twp. 20 S. Rge. 15 W. Co. Barton State KS.

Interval Tested 3783 - 3792 Zone Tested Arbuckle
 Anchor Length 9' Drill Pipe Run 3794 Mud Wt. 9.0
 Top Packer Depth 3778 Drill Collars Run — Vis 49
 Bottom Packer Depth 3783 Wt. Pipe Run — WL 8.0
 Total Depth 3792 Chlorides 7,500 ppm System LCM 0

Blow Description I.F.-20-B.O.B in 10 sec (GAS to surface in 1min.)
J.S.F-30-B.O.B B.B. in 7min (GAS to surface in 1min.)
F.F-15-B.O.B instant (gauged gas @ 5min)
F.S.I-45-B.O.B B.B. (gauged gas @ 5min)

Rec	Feet of	%gas	%oil	%water	%mud
<u>0</u>	<u>2,331 G.I.P</u>	<u>2,331</u>			
<u>756'</u>	<u>Clean oil</u>		<u>100</u>		
<u>126'</u>	<u>S,W,C,m,o,g,o</u>	<u>30</u>	<u>55</u>	<u>5</u>	<u>10</u>
<u>252'</u>	<u>S,M,C,W.</u>			<u>95</u>	<u>5</u>
<u>441'</u>	<u>W.</u>		<u>100</u>		

Rec Total 1,575 BHT 115° Gravity 36.8 API RW .17 @ 59.8° F Chlorides 55,000 ppm

(A) Initial Hydrostatic 2,096 Test 1150 T-On Location 10:50:00
 (B) First Initial Flow 335 Jars _____ T-Started 11:20:00
 (C) First Final Flow 455 Safety Joint _____ T-Open 12:34:00
 (D) Initial Shut-In 1,171 Circ Sub _____ T-Pulled 14:24:00
 (E) Second Initial Flow 527 Hourly Standby _____ T-Out 18:07:00
 (F) Second Final Flow 655 Mileage 120/R.+ 186 Comments _____
 (G) Final Shut-In 1,171 Sampler _____ "Thank-you"
 (H) Final Hydrostatic 1,837 Straddle _____ Ruined Shale Packer _____

Initial Open 20 Shale Packer _____ Ruined Packer _____
 Initial Shut-In 30 Extra Packer _____ Extra Copies _____
 Final Flow 15 Extra Recorder _____ Sub Total 0
 Final Shut-In 45 Day Standby _____ Total 1336
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1336

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 57603

Well Name & No. Wells #1 Test No. 3 Date 4-7-14
 Company Charter energy Elevation 2077 KB 2070 GL
 Address P.O. Box 252 Great Bend KS. 67530
 Co. Rep / Geo. Hunt talbott Rig Royal Rig #2
 Location: Sec. 18 Twp. 20 S. Rge. 15 W. Co. Barton State KS.

Interval Tested 3791 - 3,810 Zone Tested Arbuckle
 Anchor Length 19 Drill Pipe Run 3792 Mud Wt. 9.0
 Top Packer Depth 3786 Drill Collars Run — Vis 49
 Bottom Packer Depth 3791 Wt. Pipe Run — WL 8.0
 Total Depth 3810 Chlorides 7,500 ppm System LCM 0

Flow Description IF-20 - B.O.B. INSTANT. (Gas to surface 30 sec.)
S.I-30 - B.O.B. B.B. in 1 min
IF-15 - B.O.B. in 45 sec. (started gauging gas @ 10 min.)
S.I-45 - B.O.B. B.B. in 1 min.

Sec	Feet of	%gas	%oil	%water	%mud
<u>0</u>	<u>2583 G.I.P</u>	<u>100</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>630'</u>	<u>Clean oil</u>	<u>100</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>126</u>	<u>W. s, m.c, H, W, C, G, D</u>	<u>25</u>	<u>50</u>	<u>20</u>	<u>5</u>
<u>189</u>	<u>W.</u>	<u>100</u>	<u>0</u>	<u>0</u>	<u>0</u>

Rec Total 1,071 BHT 115 Gravity 41 API RW 122 @ 45.2°F Chlorides 55,000 ppm

- A) Initial Hydrostatic 1,890
- B) First Initial Flow 170
- C) First Final Flow 278
- D) Initial Shut-In 1,155
- E) Second Initial Flow 309
- F) Second Final Flow 420
- G) Final Shut-In 1,159
- H) Final Hydrostatic 1,828

- Test 1150
- Jars
- Safety Joint
- Circ Sub
- Hourly Standby
- Mileage 120/Rt. 372
- Sampler
- Straddle
- Shale Packer
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility
- Sub Total 1522

- T-On Location 23:40:00
- T-Started 00:19:00
- T-Open 02:13:00
- T-Pulled 09:03:00
- T-Out 08:04

Comments loaded tools 4/8 13:15
"Thank-you"

- Ruined Shale Packer
- Ruined Packer
- Extra Copies
- Sub Total 0
- Total 1522
- MP/DST Disc't

Initial Open 20
 Initial Shut-In 30
 Final Flow 15
 Final Shut-In 45

Our Representative Bob Hunt