



DRILL STEM TEST REPORT

Prepared For: **Mid-Continent Energy Corp.**

105 S. Broadway, Ste. 360
Wichita Ks. 67202

ATTN: Ben Landis

Fisher-Harter#1

31-24s-13w Stafford Ks.

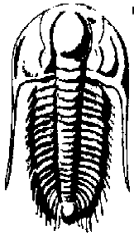
Start Date: 2014.04.26 @ 14:54:48

End Date: 2014.04.26 @ 23:53:18

Job Ticket #: 54204 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
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Printed: 2014.04.28 @ 22:06:27



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Mid-Continent Energy Corp.

31-24s-13w Stafford Ks.

105 S.Broadway, Ste.360
Wichita Ks.67202

Fisher-Harter#1

ATTN: Ben Landis

Job Ticket: 54204

DST#: 1

Test Start: 2014.04.26 @ 14:54:48

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:09:18

Time Test Ended: 23:53:18

Test Type: Conventional Bottom Hole (Initial)

Tester: Gary Pevoteaux

Unit No: 56

Interval: 3865.00 ft (KB) To 4004.00 ft (KB) (TVD)

Reference Elevations: 1950.00 ft (KB)

Total Depth: 4004.00 ft (KB) (TVD)

1940.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8352 Outside

Press@RunDepth: 114.64 psig @ 3866.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.04.26

End Date:

2014.04.26

Last Calib.:

2014.04.26

Start Time: 14:54:53

End Time:

23:53:18

Time On Btm:

2014.04.26 @ 17:07:03

Time Off Btm:

2014.04.26 @ 21:03:48

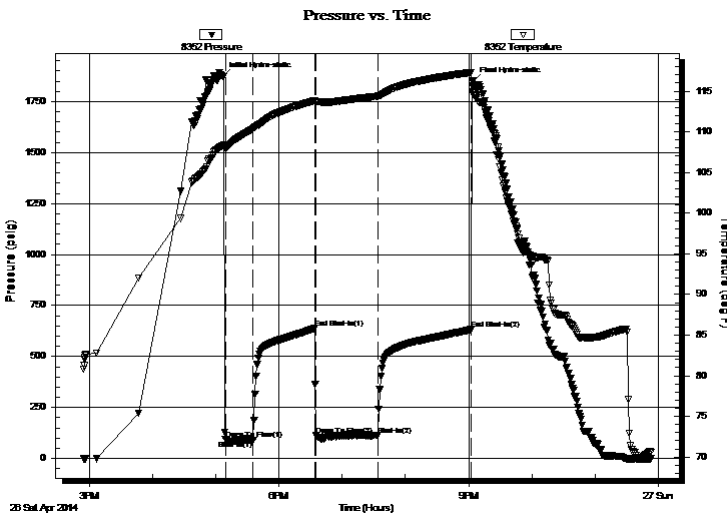
TEST COMMENT: IF:Strong blow . B.O.B. in 1 min. GTS in 7 mins.(see gas flow report)

IS:No blow .

FF:Strong blow . (see gas flow report)

FS:Weak blow . 1/4".

PRESSURE SUMMARY



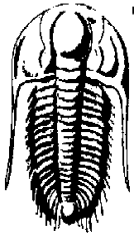
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1873.12	108.32	Initial Hydro-static
3	93.78	108.03	Open To Flow (1)
29	90.08	110.35	Shut-In(1)
88	638.61	113.84	End Shut-In(1)
88	112.79	113.65	Open To Flow (2)
147	114.64	114.37	Shut-In(2)
236	632.46	117.30	End Shut-In(2)
237	1848.06	114.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
95.00	Drig.mud	1.33
120.00	GCWM 8%g 18%w 74%w /Rw .3@66deg	1.68

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	12.00	178.09
Last Gas Rate	0.50	11.00	171.34
Max. Gas Rate	0.50	12.00	178.09



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TOOL DIAGRAM

Mid-Continent Energy Corp.

31-24s-13w Stafford Ks.

105 S.Broadway, Ste.360
Wichita Ks.67202

Fisher-Harter#1

Job Ticket: 54204

DST#: 1

ATTN: Ben Landis

Test Start: 2014.04.26 @ 14:54:48

Tool Information

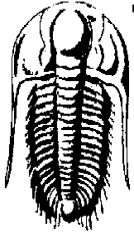
Drill Pipe:	Length: 3854.00 ft	Diameter: 3.80 inches	Volume: 54.06 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 86000.00 lb
			<u>Total Volume: 54.06 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	3865.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	139.00 ft			
Tool Length:	167.00 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			3838.00	
Shut In Tool	5.00			3843.00	
Hydraulic tool	5.00			3848.00	
Jars	5.00			3853.00	
Safety Joint	3.00			3856.00	
Packer	4.00			3860.00	28.00 Bottom Of Top Packer
Packer	5.00			3865.00	
Stubb	1.00			3866.00	
Recorder	0.00	8352	Outside	3866.00	
Recorder	0.00	8370	Inside	3866.00	
Perforations	6.00			3872.00	
Blank Spacing	124.00			3996.00	
Perforations	3.00			3999.00	
Bullnose	5.00			4004.00	139.00 Bottom Packers & Anchor

Total Tool Length: 167.00



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FLUID SUMMARY

Mid-Continent Energy Corp.

31-24s-13w Stafford Ks.

105 S.Broadway, Ste.360
Wichita Ks.67202

Fisher-Harter#1

Job Ticket: 54204

DST#: 1

ATTN: Ben Landis

Test Start: 2014.04.26 @ 14:54:48

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:

27000 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6300.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
95.00	Drig.mud	1.333
120.00	GCWM 8%g 18%w 74%w /Rw .3@66deg	1.683

Total Length: 215.00 ft

Total Volume: 3.016 bbl

Num Fluid Samples: 0

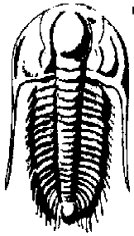
Num Gas Bombs: 1

Serial #: gp-1

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



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GAS RATES

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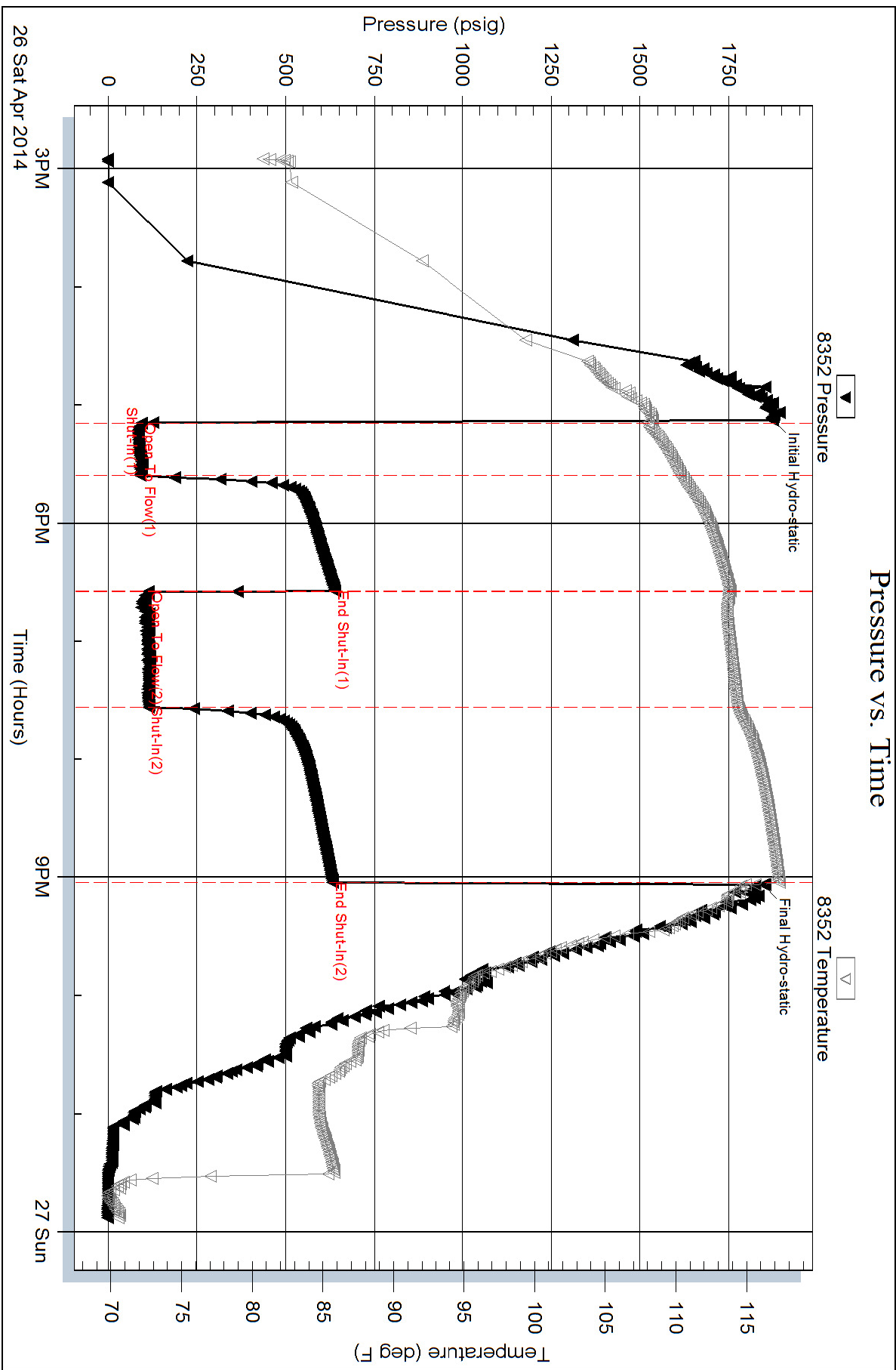
Test Start: 2014.04.26 @ 14:54:48

Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
1	10	0.50	12.00	178.09
1	10	0.50	12.00	178.09
1	20	0.50	11.00	171.34
1	30	0.50	11.00	171.34
2	10	0.50	11.00	171.34
2	20	0.50	11.00	171.34
2	30	0.50	11.00	171.34
2	40	0.50	11.00	171.34
2	50	0.50	11.00	171.34



Serial #: 8370

Inside

Mid-Continent Energy Corp.

Fisher-Harter#1

DST Test Number: 1

