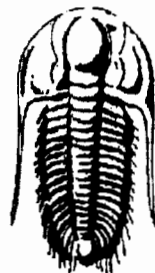


15-039-21091

36-4s-30w

KG

IND



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Great Plains Energy**

PO Box 292
Wahoo NE 68066

ATTN: Richard Bell

36 4s 30w Decatur KS

Wasson Bros.Frms.#9

Start Date: 2009.03.23 @ 02:54:18

End Date: 2009.03.23 @ 10:24:48

Job Ticket #: 34456

DST #: 1

15-039-21091-0000

RECEIVED

SEP 17 2009

KCC WICHITA

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Great Plains Energy

Wasson Bros.Frms.#9

36 4s 30w Decatur KS

DST # 1

LKC-A

2009.03.23



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Great Plains Energy

PO Box 292
Wahoo NE 68066

ATTN: Richard Bell

Wasson Bros.Frms.#9

36 4s 30w Decatur KS

Job Ticket: 34456

DST#: 1

Test Start: 2009.03.23 @ 02:54:18

GENERAL INFORMATION:

Formation: LKC-A

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:35:48

Time Test Ended: 10:24:48

Test Type: Conventional Bottom Hole

Tester: Chuck Kreutzer Jr.

Unit No: 30

Interval: 3912.00 ft (KB) To 3930.00 ft (KB) (TVD)

Total Depth: 3930.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2845.00 ft (KB)

2841.00 ft (CF)

KB to GR/CF: 4.00 ft

Serial #: 8166

Inside

Press@RunDepth: 356.74 psig @ 3913.00 ft (KB)

Start Date: 2009.03.23

End Date:

2009.03.23

Start Time: 02:54:23

End Time:

10:24:47

Capacity: 7000.00 psig

Last Calib.: 2009.03.23

Time On Btm: 2009.03.23 @ 04:33:18

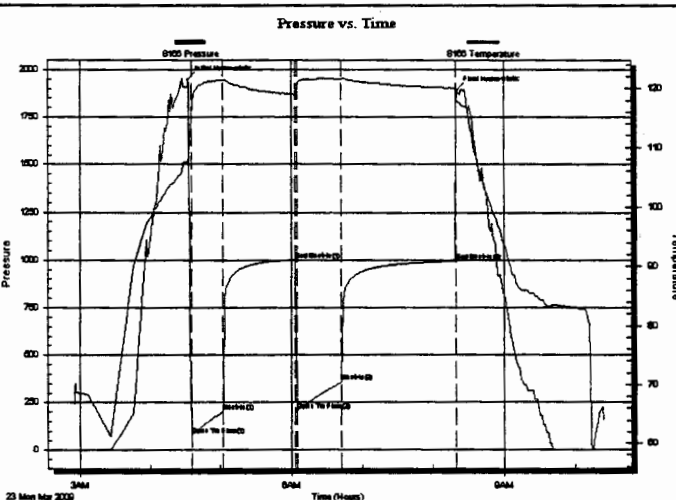
Time Off Btm: 2009.03.23 @ 08:20:48

TEST COMMENT: IF: Strong blow BOB in 8 mins.

IS: Bled off for 3 mins. Weak blow after 8 mins, Never built past surface. Died after 20 mins.

FF: Strong blow, BOB in 12 mins.

FS: Bled off for 3mins. No blow back.



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1948.17	107.38	Initial Hydro-static
3	78.34	114.94	Open To Flow (1)
29	201.22	121.36	Shut-In(1)
91	1001.99	118.92	End Shut-In(1)
92	206.61	120.02	Open To Flow (2)
130	356.74	121.58	Shut-In(2)
226	993.98	120.01	End Shut-In(2)
228	1892.10	117.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
744.00	muddy water-90%w 10%w with light oil	9.33

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Great Plains Energy

Wasson Bros.Frms.#9

PO Box 292
Wahoo NE 68066

36 4s 30w Decatur KS

Job Ticket: 34456

DST#: 1

ATTN: Richard Bell

Test Start: 2009.03.23 @ 02:54:18

Tool Information

Drill Pipe:	Length: 3786.00 ft	Diameter: 3.80 inches	Volume: 53.11 bbl	Tool Weight:	2800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	26000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	51000.00 lb
		Total Volume:	53.71 bbl	Tool Chased	5.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3912.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	18.00 ft				
Tool Length:	46.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3889.00	
Hydraulic tool	5.00			3894.00	
Jars	5.00			3899.00	
Safety Joint	3.00			3902.00	
Packer	5.00			3907.00	28.00 Bottom Of Top Packer
Packer	5.00			3912.00	
Stubb	1.00			3913.00	
Recorder	0.00	8166	Inside	3913.00	
Recorder	0.00	8356	Inside	3913.00	
Perforations	14.00			3927.00	
Bullnose	3.00			3930.00	18.00 Bottom Packers & Anchor

Total Tool Length: 46.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy

Wasson Bros.Frms.#9

PO Box 292
Wahoo NE 68066

36 4s 30w Decatur KS

Job Ticket: 34456

DST#: 1

ATTN: Richard Bell

Test Start: 2009.03.23 @ 02:54:18

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: 90000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: 0.09 ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
744.00	muddy water-90%w 10%m with light oil skim	9.325

Total Length: 744.00 ft

Total Volume: 9.325 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

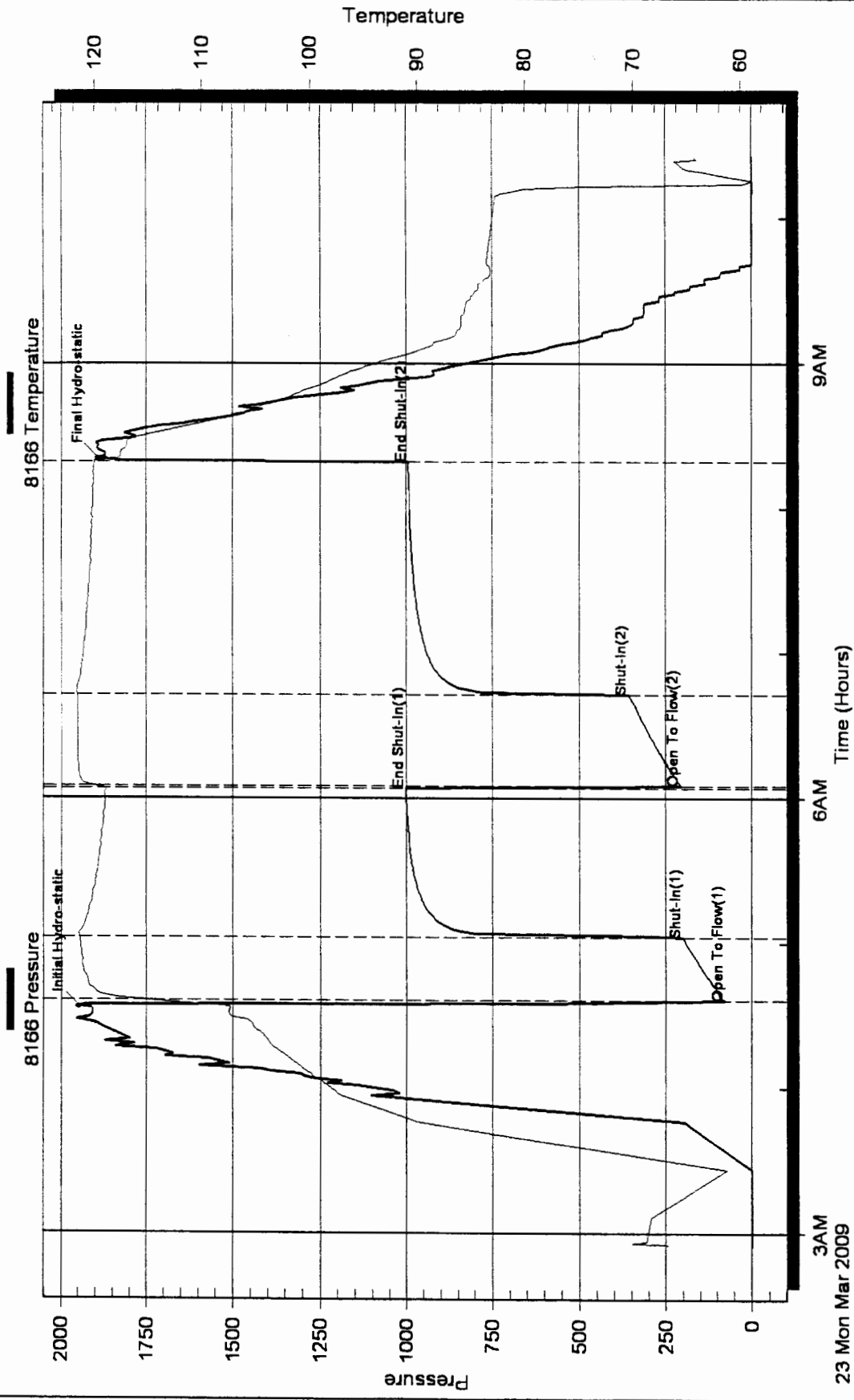
Serial #:

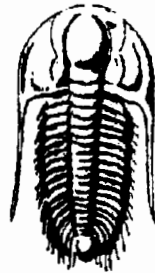
Laboratory Name:

Laboratory Location:

Recovery Comments: RW .094 @ 68F = 90000 ppm chlorides

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Great Plains Energy**

PO Box 292
Wahoo NE 68066

ATTN: Richard Bell

36 4s 30w Decatur KS

Wasson Bros.Frms.#9

Start Date: 2009.03.23 @ 20:30:00

End Date: 2009.03.24 @ 04:00:30

Job Ticket #: 34457 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Great Plains Energy

PO Box 292
Wahoo NE 68066

ATTN: Richard Bell

Wasson Bros.Frms.#9

36 4s 30w Decatur KS

Job Ticket: 34457

DST#: 2

Test Start: 2009.03.23 @ 20:30:00

GENERAL INFORMATION:

Formation: LKC-G

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:09:30

Time Test Ended: 04:00:30

Test Type: Conventional Bottom Hole

Tester: Chuck Kreutzer Jr.

Unit No: 30

Interval: 3997.00 ft (KB) To 4025.00 ft (KB) (TVD)

Total Depth: 4025.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2845.00 ft (KB)

2841.00 ft (CF)

KB to GRVCF: 4.00 ft

Serial #: 8166

Inside

Press@RunDepth: 111.88 psig @ 3998.00 ft (KB)

Start Date: 2009.03.23

End Date: 2009.03.24

Start Time: 20:30:05

End Time: 04:00:29

Capacity: 7000.00 psig

Last Calib.: 2009.03.24

Time On Btrr: 2009.03.23 @ 22:08:30

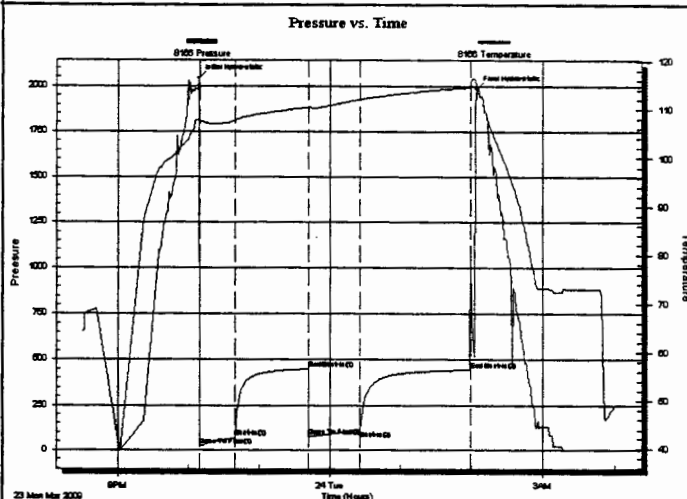
Time Off Btrr: 2009.03.24 @ 02:04:00

TEST COMMENT: IF: Strong blow, built to B.O.B in 13 mins.

IS: Bled off for 4 mins, Weak surface blow after 5 mins, built to 3/4 in. over 45 mins.

FF: Fair blow, B.O.B in 40 min.

FSI: Bled off for 4 mins. Weak s



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2042.26	107.97	Initial Hydro-static
1	22.70	107.09	Open To Flow (1)
31	71.87	107.85	Shut-In(1)
93	448.70	110.55	End Shut-In(1)
94	80.60	110.74	Open To Flow(2)
137	111.88	112.08	Shut-In(2)
231	443.79	114.61	End Shut-In(2)
236	1985.34	114.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	GOQM-10%g40%a50%m	0.30
433.00	GO-10%g90%o	5.52

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Great Plains Energy

PO Box 292
Wahoo NE 68066

ATTN: Richard Bell

Wasson Bros.Frms.#9

36 4s 30w Decatur KS

Job Ticket: 34457 DST#: 2

Test Start: 2009.03.23 @ 20:30:00

Tool Information

Drill Pipe:	Length: 3880.00 ft	Diameter: 3.80 inches	Volume: 54.43 bbl	Tool Weight:	2800.00 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: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	51000.00 lb
		Total Volume:	55.03 bbl	Tool Chased	2.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial	44000.00 lb
Depth to Top Packer:	3997.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	28.00 ft				
Tool Length:	56.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3974.00	
Hydraulic tool	5.00			3979.00	
Jars	5.00			3984.00	
Safety Joint	3.00			3987.00	
Packer	5.00			3992.00	28.00 Bottom Of Top Packer
Packer	5.00			3997.00	
Stubb	1.00			3998.00	
Recorder	0.00	8166	Inside	3998.00	
Recorder	0.00	8356	Inside	3998.00	
Perforations	24.00			4022.00	
Bullnose	3.00			4025.00	28.00 Bottom Packers & Anchor

Total Tool Length: 56.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy

Wasson Bros.Frms.#9

PO Box 292
Wahoo NE 68066

36 4s 30w Decatur KS

ATTN: Richard Bell

Job Ticket: 34457

DST#: 2

Test Start: 2009.03.23 @ 20:30:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

31 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
61.00	GOCM-10%g40%o50%m	0.300
433.00	GO-10%g90%o	5.518

Total Length: 494.00 ft

Total Volume: 5.818 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

