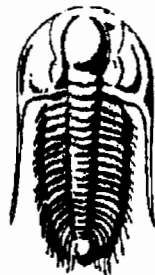


15-039-21103

26-4s-30w

IND

KX



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Great Plains Energy Inc.**

PO Box 292
Wahoo, NE 68066 - 0292

ATTN: Richard Bell

26 4s 30w Decatur KS

Sauvage Family #4

Start Date: 2009.08.16 @ 12:19:00

End Date: 2009.08.16 @ 19:33:30

Job Ticket #: 34518

DST #: 1

15-039-21103-0000

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Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Great Plains Energy Inc.

Sauvage Family #4

26 4s 30w Decatur KS

DST # 1

LKC "B"

2009.08.16



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Great Plains Energy Inc.

PO Box 292
Wahoo, NE 68066 - 0292

ATTN: Richard Bell

Sauvage Family #4

26 4s 30w Decatur KS

Job Ticket: 34518 **DST#: 1**

Test Start: 2009.08.16 @ 12:19:00

GENERAL INFORMATION:

Formation: **LKC "B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:00:00

Time Test Ended: 19:33:30

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 46

Interval: **3953.00 ft (KB) To 3975.00 ft (KB) (TVD)**

Total Depth: 3975.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2855.00 ft (KB)

2850.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8366

Inside

Press@RunDepth: 143.28 psig @ 3954.00 ft (KB)

Start Date: 2009.08.16

End Date:

2009.08.16

Start Time: 12:19:05

End Time:

19:33:29

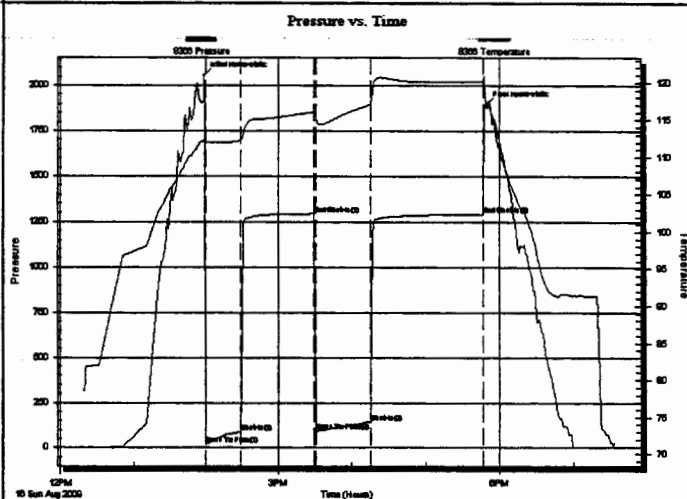
Capacity: 7000.00 psig

Last Calib.: 2009.08.16

Time On Btrr: 2009.08.16 @ 13:59:00

Time Off Btrr: 2009.08.16 @ 17:48:30

TEST COMMENT: IF: Blow built to 7 3/4"
ISI: Bled off, No blow back
FF: Blow started @ 3 min., built to 10"
FSI: Bled off, No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2054.62	112.20	Initial Hydro-static
1	19.61	111.95	Open To Flow (1)
31	89.25	112.17	Shut-In (1)
91	1294.42	116.07	End Shut-In (1)
92	92.52	115.27	Open To Flow (2)
136	143.28	117.02	Shut-In (2)
228	1292.60	120.14	End Shut-In (2)
230	1893.36	117.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
295.00	Water 97%w, 3%m	3.01
0.00	RW = .140 ohms @ 75.5 deg F	0.00
0.00	Chlorides = 50,000 ppm	0.00

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Great Plains Energy Inc.

Sauvage Family #4

PO Box 292
Wahoo, NE 68066 - 0292

26 4s 30w Decatur KS

Job Ticket: 34518

DST#: 1

ATTN: Richard Bell

Test Start: 2009.08.16 @ 12:19:00

Tool Information

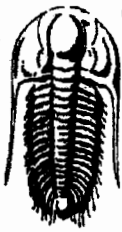
Drill Pipe:	Length: 3807.00 ft	Diameter: 3.80 inches	Volume: 53.40 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 68000.00 lb
		Total Volume: 54.01 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3953.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	49.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			3931.00	
HYD S.I. Tool	5.00			3936.00	
Jars	5.00			3941.00	
Safety Joint	2.00			3943.00	
Packer	5.00			3948.00	27.00 Bottom Of Top Packer
Packer	5.00			3953.00	
Shale Packer	0.00			3953.00	
Stubb	1.00			3954.00	
Recorder	0.00	8366	Inside	3954.00	
Recorder	0.00	8320	Inside	3954.00	
Perforations	18.00			3972.00	
Bullnose	3.00			3975.00	22.00 Bottom Packers & Anchor

Total Tool Length: 49.00

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy Inc.

Sauvage Family #4

PO Box 292
Wahoo, NE 68066 - 0292

26 4s 30w Decatur KS

ATTN: Richard Bell

Job Ticket: 34518

DST#: 1

Test Start: 2009.08.16 @ 12:19:00

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:

50000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
295.00	Water 97%w, 3%w	3.008
0.00	RW = .140 ohms @ 75.5 deg F	0.000
0.00	Chlorides = 50,000 ppm	0.000

Total Length: 295.00 ft

Total Volume: 3.008 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

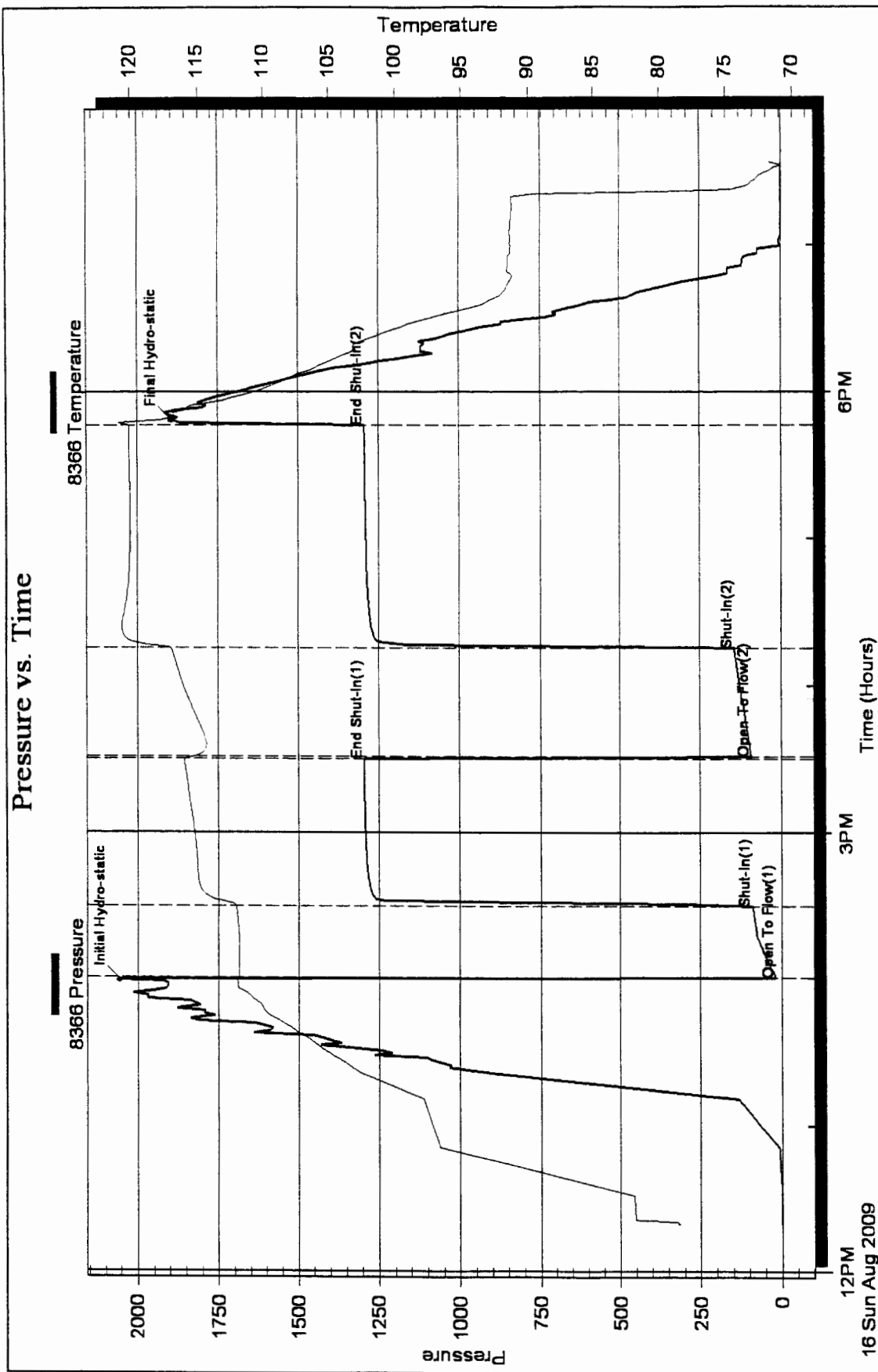
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Great Plains Energy Inc.**

PO Box 292
Wahoo, NE 68066 - 0292

ATTN: Richard Bell

26 4s 30w Decatur KS

Sauvage Family #4

Start Date: 2009.08.17 @ 04:19:00

End Date: 2009.08.17 @ 10:51:00

Job Ticket #: 34519

DST #: 2

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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 Inc.

PO Box 292
Wahoo, NE 68066 - 0292

ATTN: Richard Bell

Sauvage Family #4

26 4s 30w Decatur KS

Job Ticket: 34519 DST#: 2

Test Start: 2009.08.17 @ 04:19:00

GENERAL INFORMATION:

Formation: **LKC "F - G"**

Deviated: **No** Whipstock: ft (KB)

Time Tool Opened: 06:13:30

Time Test Ended: 10:51:00

Test Type: **Conventional Bottom Hole**

Tester: **James Winder**

Unit No: **46**

Interval: **3993.00 ft (KB) To 4028.00 ft (KB) (TVD)**

Total Depth: **4028.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2855.00 ft (KB)**

2850.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8366 **Inside**

Press@RunDepth: **19.03 psig @ 3994.00 ft (KB)**

Start Date: **2009.08.17**

End Date:

2009.08.17

Start Time: **04:19:05**

End Time:

10:50:59

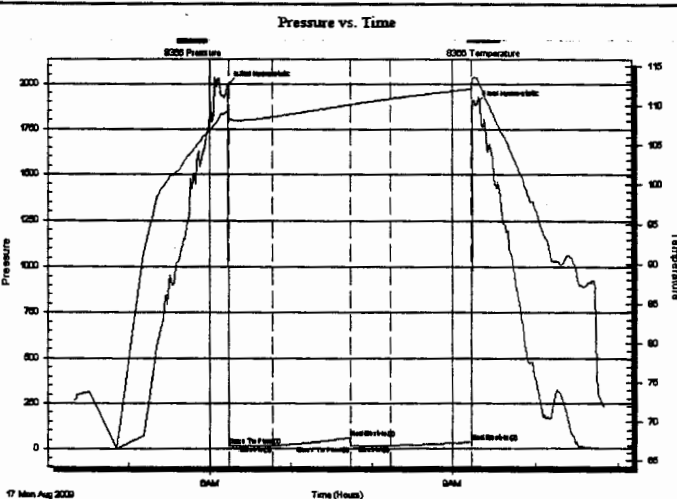
Capacity: **7000.00 psig**

Last Calib.: **2009.08.17**

Time On Btm: **2009.08.17 @ 06:13:00**

Time Off Btm: **2009.08.17 @ 09:16:30**

TEST COMMENT: IF: Blow built to 1/2", died back to just over 1/4"
IS: Bled off, No blow back
FF: No blow
FS: No blow back



PRESSURE SUMMARY

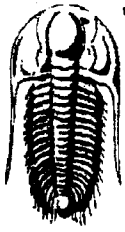
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1990.91	109.07	Initial Hydro-static
1	18.90	108.44	Open To Flow (1)
33	18.43	108.49	Shut-In (1)
91	61.90	110.05	End Shut-In (1)
92	18.86	110.05	Open To Flow (2)
121	19.03	110.81	Shut-In (2)
181	38.86	112.06	End Shut-In (2)
184	1885.11	113.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
8.00	OCM 96% m, 4% o	0.04

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 Inc.

Sauvage Family #4

PO Box 292
Wahoo, NE 68066 - 0292

26 4s 30w Decatur KS

Job Ticket: 34519

DST#: 2

ATTN: Richard Bell

Test Start: 2009.08.17 @ 04:19:00

Tool Information

Drill Pipe:	Length: 3862.00 ft	Diameter: 3.80 inches	Volume: 54.17 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:	25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose:	56000.00 lb
		Total Volume:	54.78 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3993.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	35.00 ft				
Tool Length:	62.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			3971.00	
HYD S.I. Tool	5.00			3976.00	
Jars	5.00			3981.00	
Safety Joint	2.00			3983.00	
Packer	5.00			3988.00	27.00 Bottom Of Top Packer
Packer	5.00			3993.00	
Shale Packer	0.00			3993.00	
Stubb	1.00			3994.00	
Recorder	0.00	8366	inside	3994.00	
Recorder	0.00	8320	inside	3994.00	
Perforations	31.00			4025.00	
Bullnose	3.00			4028.00	35.00 Bottom Packers & Anchor

Total Tool Length: 62.00

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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy Inc.

Sauvage Family #4

PO Box 292
Wahoo, NE 68066 - 0292

26 4s 30w Decatur KS

Job Ticket: 34519

DST#: 2

ATTN: Richard Bell

Test Start: 2009.08.17 @ 04:19:00

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:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
8.00	OCM 96% _m , 4% _o	0.039

Total Length: 8.00 ft

Total Volume: 0.039 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

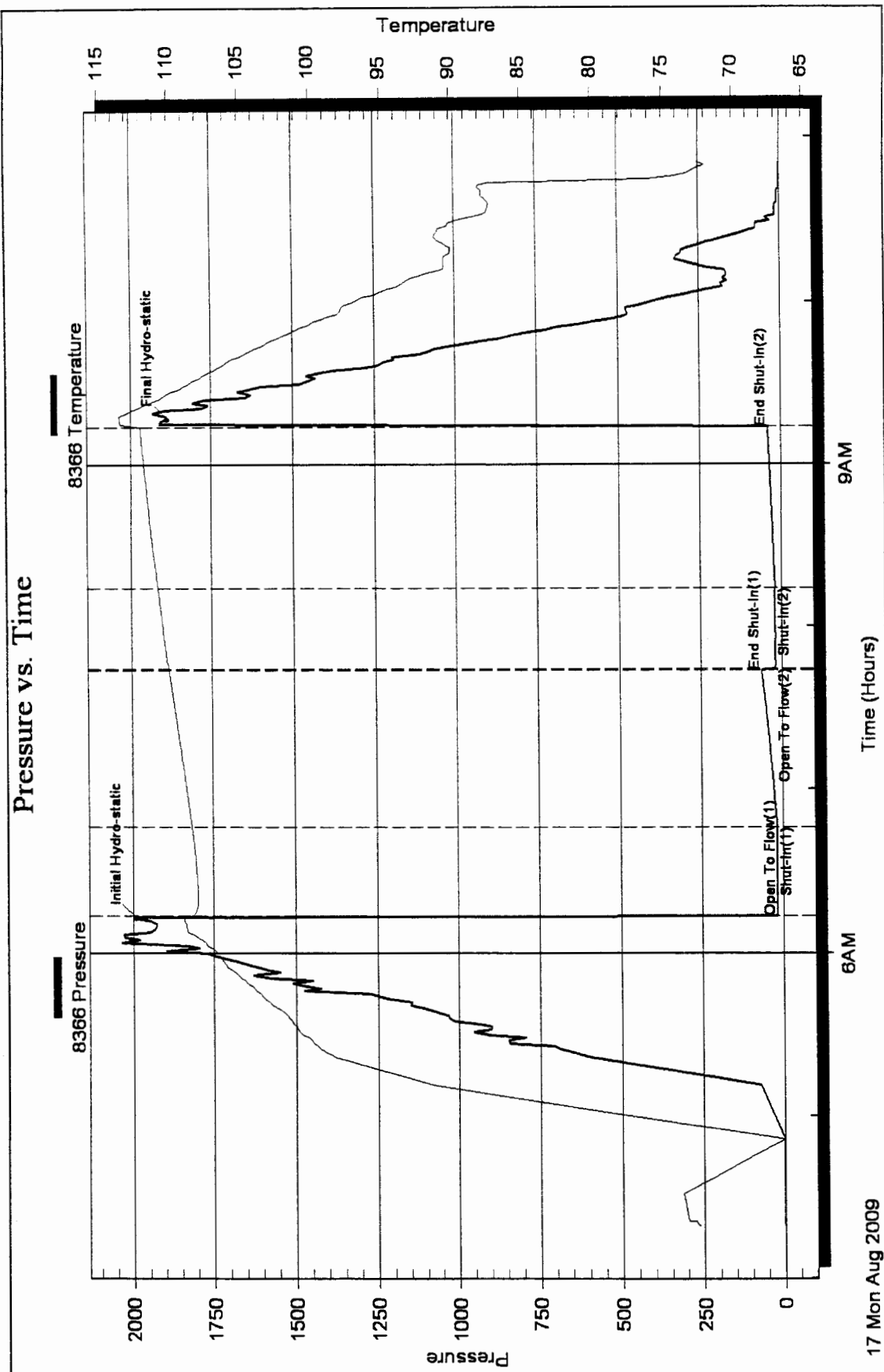
Serial #:

Laboratory Name:

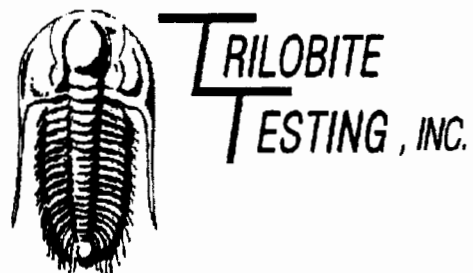
Laboratory Location:

Recovery Comments:

Pressure vs. Time



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DRILL STEM TEST REPORT

Prepared For: **Great Plains Energy Inc.**

PO Box 292
Wahoo, NE 68066 - 0292

ATTN: Richard Bell

26 4s 30w Decatur KS

Sauvage Family #4

Start Date: 2009.08.17 @ 22:21:00

End Date: 2009.08.18 @ 06:05:00

Job Ticket #: 34520 DST #: 3

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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 Inc.

PO Box 292
Wahoo, NE 68066 - 0292

ATTN: Richard Bell

Sauvage Family #4

26 4s 30w Decatur KS

Job Ticket: 34520

DST#: 3

Test Start: 2009.08.17 @ 22:21:00

GENERAL INFORMATION:

Formation: LKC "H - K"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:18:30

Time Test Ended: 06:05:00

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 46

Interval: 4037.00 ft (KB) To 4130.00 ft (KB) (TVD)

Total Depth: 4130.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2855.00 ft (KB)

2850.00 ft (CF)

KB to GR/CF: 5.00 ft -

Serial #: 8366

Inside

Press@RunDepth: 42.53 psig @ 4038.00 ft (KB)

Start Date: 2009.08.17

End Date:

2009.08.18

Start Time: 22:21:05

End Time:

06:04:59

Capacity: 7000.00 psig

Last Calib.: 2009.08.18

Time On Btm: 2009.08.18 @ 00:17:30

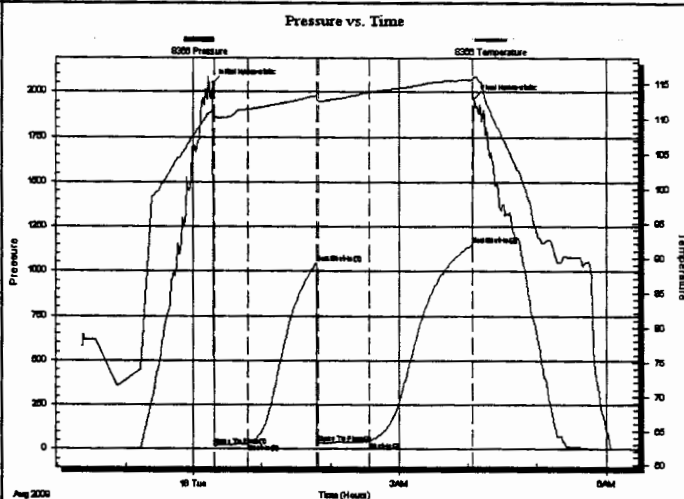
Time Off Btm: 2009.08.18 @ 04:05:30

TEST COMMENT: IF: Blow built to and blew at 1"

ISl: Bled off, No blow back

FF: Blow started @ 13 min., built to 1"

FSl: Bled off, No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2046.94	111.53	Initial Hydro-static
1	18.52	110.22	Open To Flow (1)
31	29.60	111.37	Shut-In (1)
91	1047.40	113.30	End Shut-In (1)
92	32.60	112.53	Open To Flow (2)
136	42.53	113.80	Shut-In (2)
227	1147.25	115.61	End Shut-In (2)
228	1963.83	115.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	OCM 72% m, 24% o, 4% g	0.30

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 Inc.

Sauvage Family #4

PO Box 292
Wahoo, NE 68066 - 0292

26 4s 30w Decatur KS

Job Ticket: 34520

DST#: 3

ATTN: Richard Bell

Test Start: 2009.08.17 @ 22:21:00

Tool Information

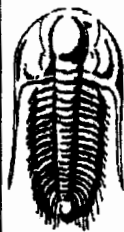
Drill Pipe:	Length: 3901.00 ft	Diameter: 3.80 inches	Volume: 54.72 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 56000.00 lb
		Total Volume:	55.33 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4037.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	93.00 ft			
Tool Length:	120.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			4015.00	
HYD S.I. Tool	5.00			4020.00	
Jars	5.00			4025.00	
Safety Joint	2.00			4027.00	
Packer	5.00			4032.00	27.00 Bottom Of Top Packer
Packer	5.00			4037.00	
Shale Packer	0.00			4037.00	
Stubb	1.00			4038.00	
Recorder	0.00	8366	Inside	4038.00	
Recorder	0.00	8320	Inside	4038.00	
Perforations	21.00			4059.00	
Blank Spacing	65.00			4124.00	
Perforations	3.00			4127.00	
Bullnose	3.00			4130.00	93.00 Bottom Packers & Anchor

Total Tool Length: 120.00

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TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy Inc.

Sauvage Family #4

PO Box 292
Wahoo, NE 68066 - 0292

26 4s 30w Decatur KS

Job Ticket: 34520

DST#: 3

ATTN: Richard Bell

Test Start: 2009.08.17 @ 22:21:00

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:

ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.57 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
61.00	OCM 72% _m , 24% _o , 4% _g	0.300

Total Length: 61.00 ft

Total Volume: 0.300 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

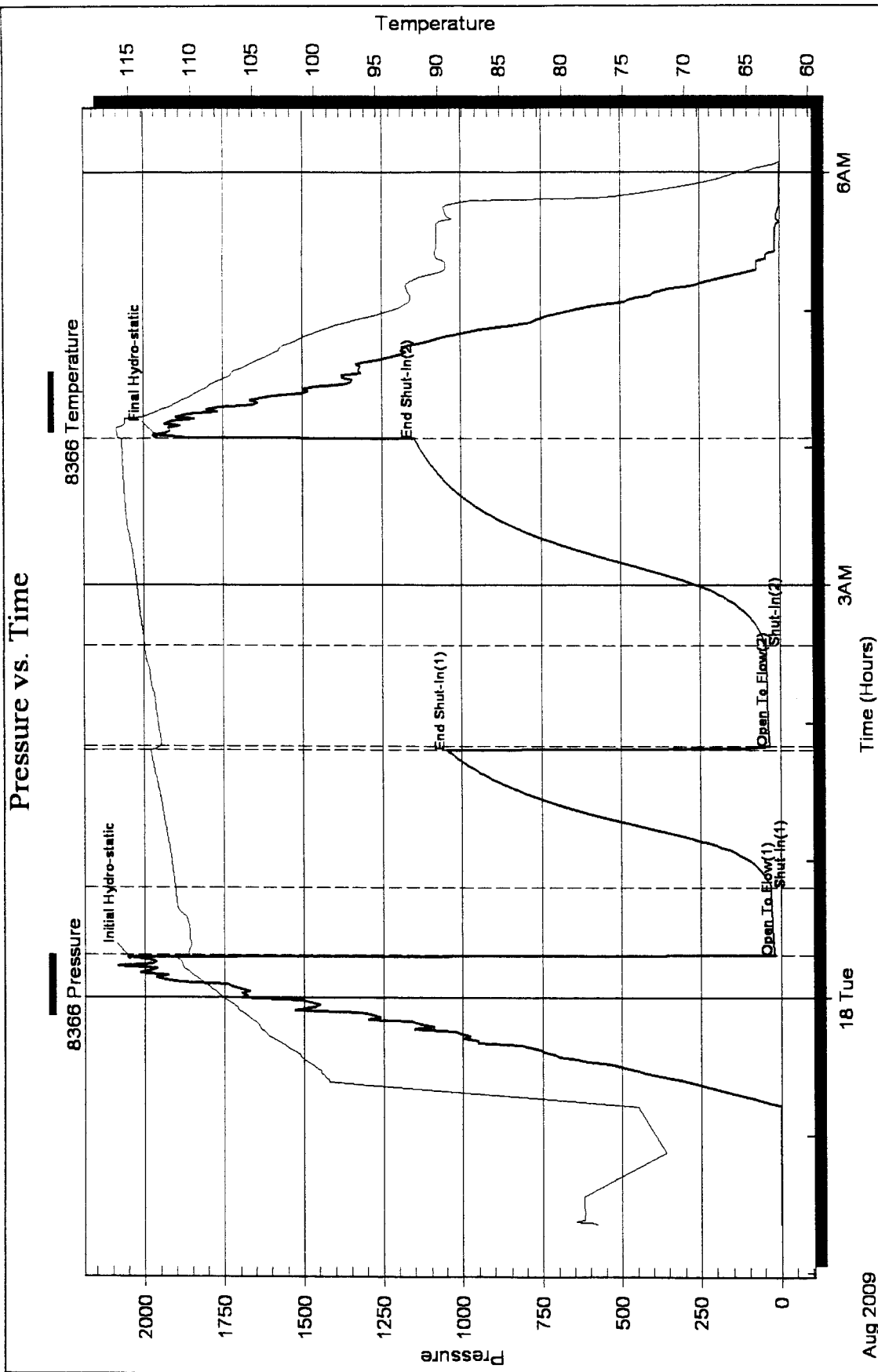
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



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