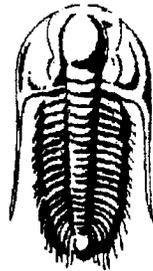


15-039-21075

9-1s-27w

KCP

IND



**TRILOBITE
TESTING, INC.**

LIBRARY

DRILL STEM TEST REPORT

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

PO Box 292
Wahoo, NE 68066-0292

ATTN: Richard Bell

9 1s 27w Decatur KS

Hanchera #1

Start Date: 2008.10.24 @ 04:35:00

End Date: 2008.10.24 @ 11:16:02

Job Ticket #: 33437 DST #: 1

15-039-21075-0000

RECEIVED
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KCC WICHITA

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Great Plains Energy Inc.

Hanchera #1

9 1s 27w Decatur KS

DST # 1

LKC "A - B"

2008.10.24



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Great Plains Energy Inc.

PO Box 292
Wahoo, NE 68066-0292

ATTN: Richard Bell

Hanchera #1

9 1s 27w Decatur KS

Job Ticket: 33437

DST#: 1

Test Start: 2008.10.24 @ 04:35:00

GENERAL INFORMATION:

Formation: **LKC "A - B"**

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

Time Tool Opened: 06:36:33

Time Test Ended: 11:16:02

Test Type: **Conventional Bottom Hole**

Tester: **James Winder**

Unit No: **30**

Interval: **3245.00 ft (KB) To 3324.00 ft (KB) (TVD)**

Total Depth: **3324.00 ft (KB) (TVD)**

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

Reference Elevations: **2583.00 ft (KB)**

2578.00 ft (CF)

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

Serial #: 8166

Inside

Press@RunDepth: **993.55 psig @ 3246.00 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2008.10.24**

End Date:

2008.10.24

Last Calib.: **2008.10.24**

Start Time: **04:35:05**

End Time:

11:16:03

Time On Btm: **2008.10.24 @ 06:36:03**

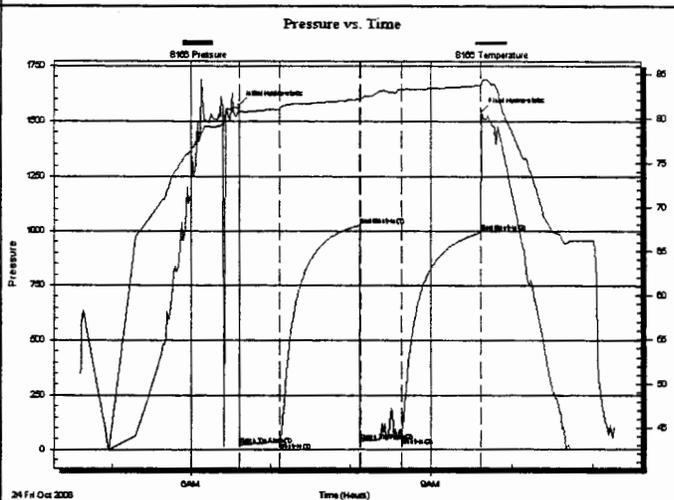
Time Off Btm: **2008.10.24 @ 09:38:03**

TEST COMMENT: IF: Weak blow, built to 1 1/4"

IS: Bled off, No blow back

FF: Very weak surface blow for a couple min. then dead

FSI: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1573.93	81.16	Initial Hydro-static
1	22.02	80.73	Open To Flow (1)
31	35.12	81.03	Shut-In(1)
91	1027.53	82.12	End Shut-In(1)
91	39.76	81.81	Open To Flow (2)
122	57.41	83.28	Shut-In(2)
181	993.55	83.67	End Shut-In(2)
182	1544.81	84.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	Mud 100%	0.30

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Great Plains Energy Inc.

Hanchera #1

PO Box 292
Wahoo, NE 68066-0292

9 1s 27w Decatur KS

Job Ticket: 33437

DST#: 1

ATTN: Richard Bell

Test Start: 2008.10.24 @ 04:35:00

Tool Information

Drill Pipe:	Length: 2683.00 ft	Diameter: 3.80 inches	Volume: 37.64 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: 547.00 ft	Diameter: 2.25 inches	Volume: 2.69 bbl	Weight to Pull Loose: 75000.00 lb
		Total Volume: 40.33 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	3245.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	79.00 ft			
Tool Length:	99.00 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			3230.00	
Hydraulic tool	5.00			3235.00	
Packer	5.00			3240.00	20.00 Bottom Of Top Packer
Packer	5.00			3245.00	
Stubb	1.00			3246.00	
Recorder	0.00	8166	Inside	3246.00	
Recorder	0.00	8356	Inside	3246.00	
Perforations	10.00			3256.00	
Blank Spacing	64.00			3320.00	
Perforations	1.00			3321.00	
Bullnose	3.00			3324.00	79.00 Bottom Packers & Anchor

Total Tool Length: 99.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy Inc.

Hanchera #1

PO Box 292
Wahoo, NE 68066-0292

9 1s 27w Decatur KS

Job Ticket: 33437 **DST#: 1**

ATTN: Richard Bell

Test Start: 2008.10.24 @ 04:35:00

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: 5.98 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 700.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	Mud 100%	0.305

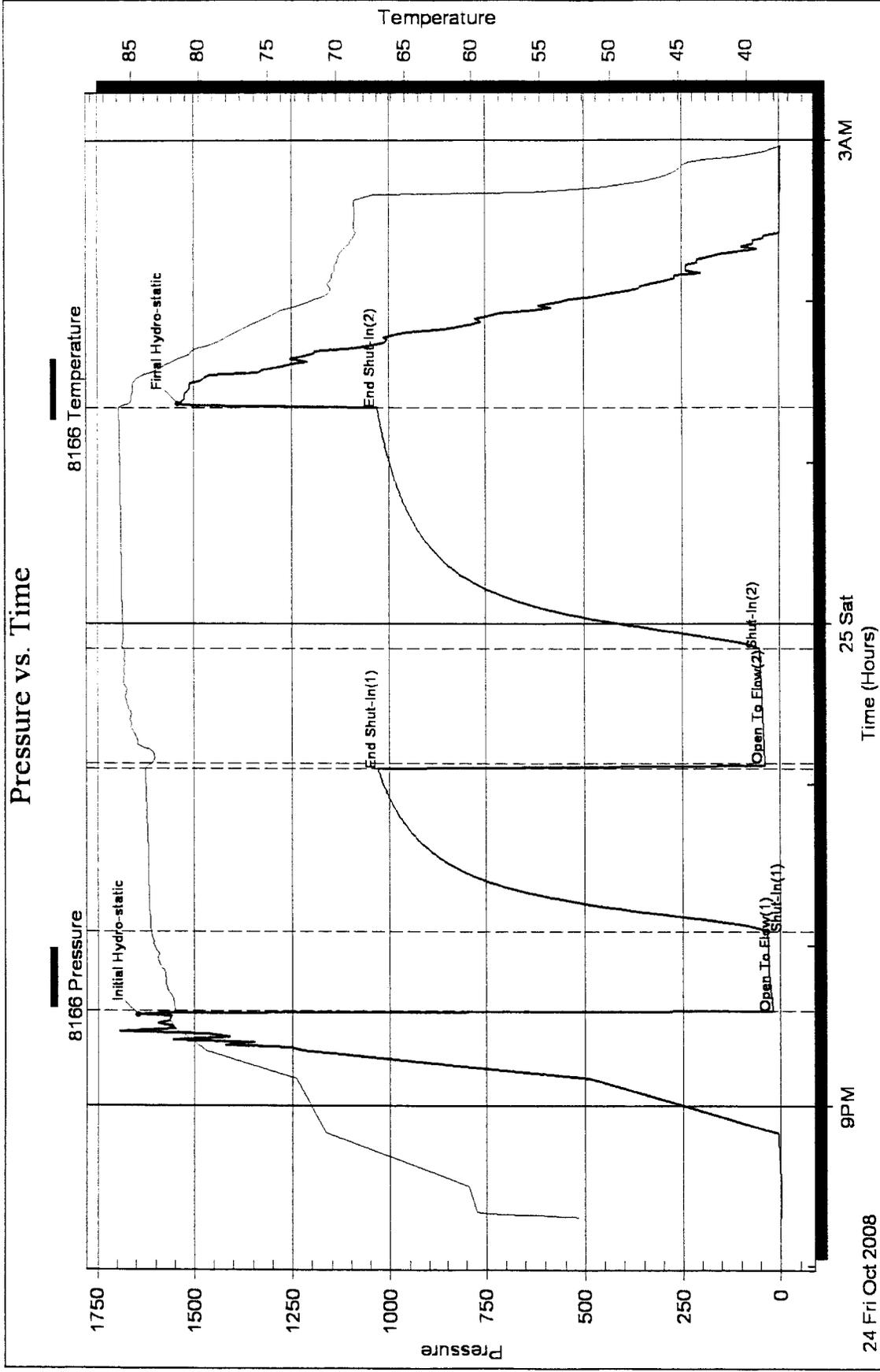
Total Length: 62.00 ft Total Volume: 0.305 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

PO Box 292
Wahoo, NE 68066-0292

ATTN: Richard Bell

9 1s 27w Decatur KS

Hanchera #1

Start Date: 2008.10.24 @ 20:18:00

End Date: 2008.10.25 @ 02:57:30

Job Ticket #: 33483 DST #: 2

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Great Plains Energy Inc.

Hanchera #1

9 1s 27w Decatur KS

DST # 2

LKC "C/D, E, G"

2008.10.24



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Great Plains Energy Inc.

PO Box 292
Wahoo, NE 68066-0292

ATTN: Richard Bell

Hanchera #1

9 1s 27w Decatur KS

Job Ticket: 33483

DST#: 2

Test Start: 2008.10.24 @ 20:18:00

GENERAL INFORMATION:

Formation: LKC "C/D, E, G"
Deviated: No Whipstock ft (KB)
Time Tool Opened: 21:35:30
Time Test Ended: 02:57:30

Test Type: Conventional Bottom Hole
Tester: James Winder
Unit No: 30

Interval: 3298.00 ft (KB) To 3390.00 ft (KB) (TVD)
Total Depth: 3390.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2583.00 ft (KB)
2578.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8166

Inside

Press@RunDepth: 1029.96 psig @ 3299.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2008.10.24

End Date:

2008.10.25

Last Calib.: 2008.10.25

Start Time: 20:18:05

End Time:

02:57:29

Time On Btrm: 2008.10.24 @ 21:34:00

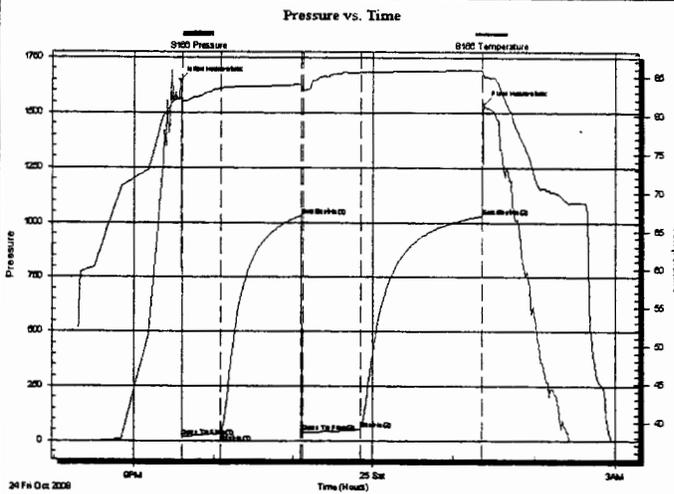
Time Off Btrm: 2008.10.25 @ 01:21:59

TEST COMMENT: IF: Weak blow, built to 1 3/4"

ISI: Bled off, No blow back

FF: Weak blow, built to 1"

FSI: Bled off, No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1645.37	82.18	Initial Hydro-static
2	17.61	81.81	Open To Flow (1)
31	30.90	83.53	Shut-In(1)
92	1029.07	83.97	End Shut-In(1)
94	36.90	83.45	Open To Flow (2)
137	50.81	85.65	Shut-In(2)
227	1029.96	85.90	End Shut-In(2)
228	1540.91	85.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	WCM 70%w, 30%w	0.30
0.00	RW = .745 @ 43 deg F	0.00
0.00	Chlorides = 15,000 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.

Hanchera #1

PO Box 292
Wahoo, NE 68066-0292

9 1s 27w Decatur KS

Job Ticket: 33483

DST#: 2

ATTN: Richard Bell

Test Start: 2008.10.24 @ 20:18:00

Tool Information

Drill Pipe: Length: 2746.00 ft Diameter: 3.80 inches Volume: 38.52 bbl
 Heavy Wt. Pipe: Length: 0.00 ft Diameter: 0.00 inches Volume: 0.00 bbl
 Drill Collar: Length: 547.00 ft Diameter: 2.25 inches Volume: 2.69 bbl
 Total Volume: 41.21 bbl

Tool Weight: 2000.00 lb
 Weight set on Packer: 25000.00 lb
 Weight to Pull Loose: 72000.00 lb
 Tool Chased 0.00 ft
 String Weight: Initial 68000.00 lb
 Final 68000.00 lb

Drill Pipe Above KB: 15.00 ft
 Depth to Top Packer: 3298.00 ft
 Depth to Bottom Packer: ft
 Interval between Packers: 92.00 ft
 Tool Length: 112.00 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			3283.00	
Hydraulic tool	5.00			3288.00	
Packer	5.00			3293.00	20.00 Bottom Of Top Packer
Packer	5.00			3298.00	
Stubb	1.00			3299.00	
Recorder	0.00	8166	Inside	3299.00	
Recorder	0.00	8356	Inside	3299.00	
Perforations	23.00			3322.00	
Blank Spacing	64.00			3386.00	
Perforations	1.00			3387.00	
Bullnose	3.00			3390.00	92.00 Bottom Packers & Anchor

Total Tool Length: 112.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy Inc.

Hanchera #1

PO Box 292
Wahoo, NE 68066-0292

9 1s 27w Decatur KS

Job Ticket: 33483 **DST#: 2**

ATTN: Richard Bell

Test Start: 2008.10.24 @ 20:18:00

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:	55.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	5.98 in ³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	700.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

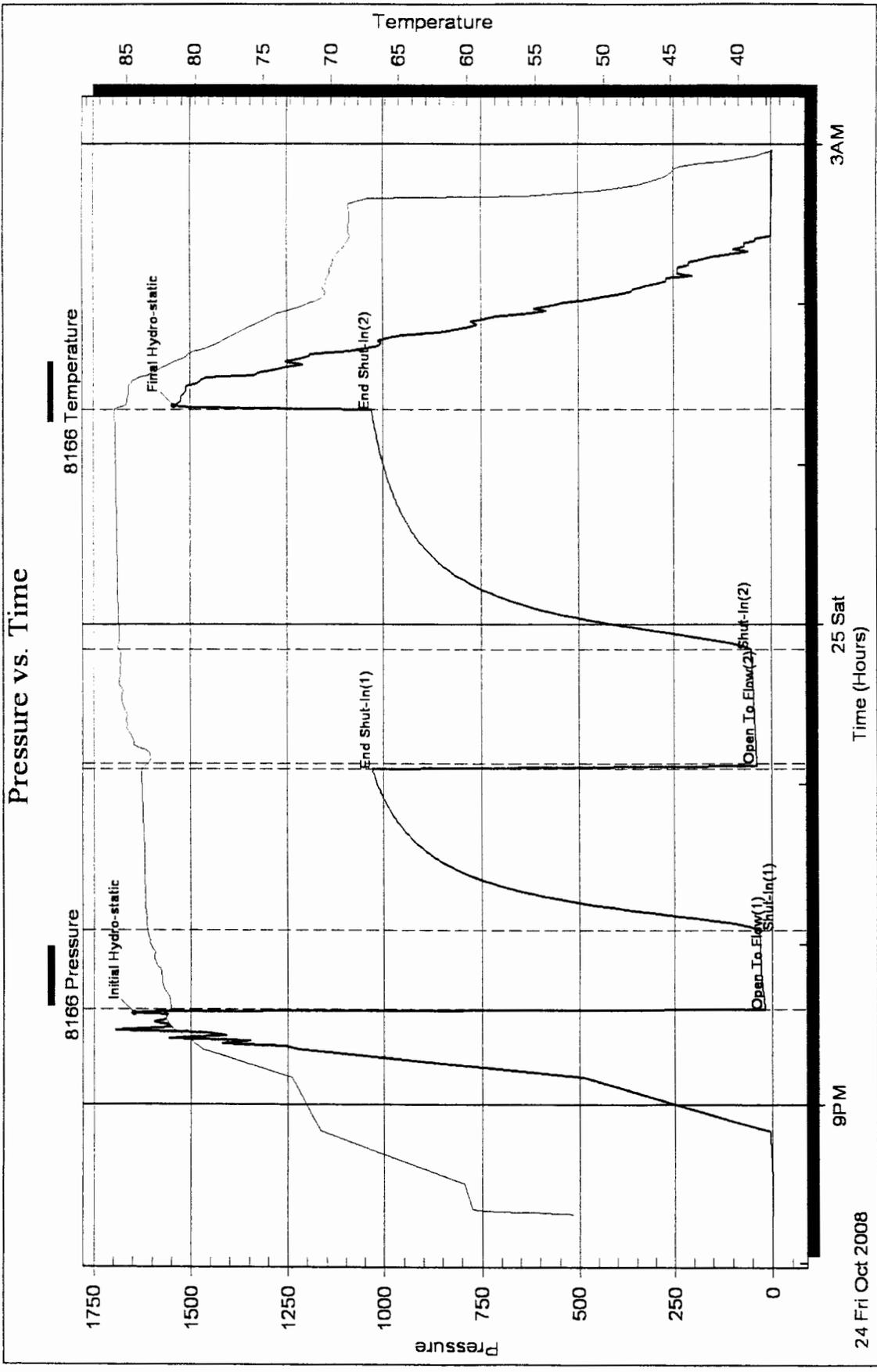
Length ft	Description	Volume bbl
62.00	WCM 70% _m , 30% _w	0.305
0.00	RW = .745 @ 43 deg F	0.000
0.00	Chlorides = 15,000 ppm	0.000

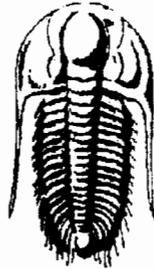
Total Length: 62.00 ft Total Volume: 0.305 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

PO Box 292
Wahoo, NE 68066-0292

ATTN: Richard Bell

9 1s 27w Decatur KS

Hanchera #1

Start Date: 2008.10.25 @ 12:15:00

End Date: 2008.10.25 @ 18:30:30

Job Ticket #: 33439

DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Great Plains Energy Inc.

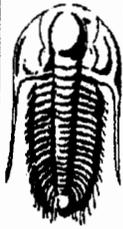
Hanchera #1

9 1s 27w Decatur KS

DST # 3

LKC "H-K"

2008.10.25



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Great Plains Energy Inc.

Hanchera #1

PO Box 292
Wahoo, NE 68066-0292

9 1s 27w Decatur KS

Job Ticket: 33439 **DST#: 3**

ATTN: Richard Bell

Test Start: 2008.10.25 @ 12:15:00

GENERAL INFORMATION:

Formation: **LKC "H-K"**
 Deviated: **No** Whipstock: **ft (KB)**
 Time Tool Opened: 13:40:30
 Time Test Ended: 18:30:30

Test Type: **Conventional Bottom Hole**
 Tester: **James Winder**
 Unit No: **30**

Interval: **3390.00 ft (KB) To 3490.00 ft (KB) (TVD)**
 Total Depth: **3490.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2583.00 ft (KB)**
2578.00 ft (CF)
 KB to GR/CF: **5.00 ft**

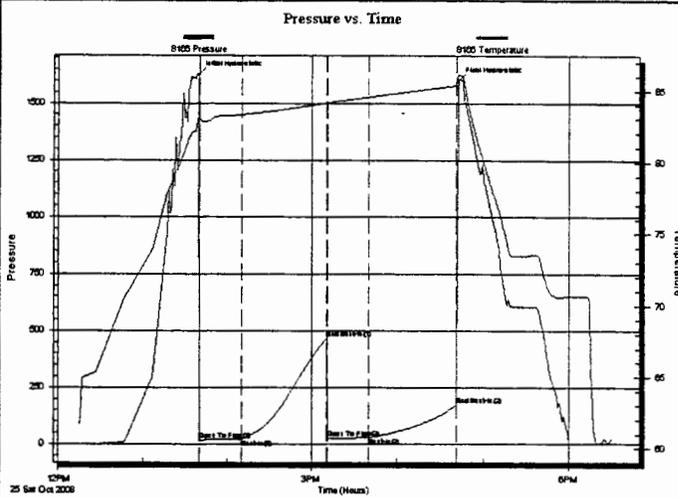
Serial #: 8166

Inside

Press@RunDepth: **27.41 psig @ 3391.00 ft (KB)**
 Start Date: **2008.10.25** End Date: **2008.10.25**
 Start Time: **12:15:05** End Time: **18:30:29**

Capacity: **7000.00 psig**
 Last Calib.: **2008.10.25**
 Time On Btm: **2008.10.25 @ 13:40:00**
 Time Off Btm: **2008.10.25 @ 16:42:29**

TEST COMMENT: IF: Weak blow, built to and stayed at 1/2"
 IS: Bled off, No blow back
 FF: On/Off surface blow for 15 min.
 FS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1625.76	83.31	Initial Hydro-static
1	16.84	83.00	Open To Flow (1)
31	22.10	83.30	Shut-in(1)
91	466.06	84.14	End Shut-in(1)
91	25.42	84.14	Open To Flow (2)
120	27.41	84.53	Shut-in(2)
182	171.19	85.38	End Shut-in(2)
183	1600.86	86.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	SOCM 93% _m , 6% _o , 1% _g	0.10

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Great Plains Energy Inc.

Hanchera #1

PO Box 292
Wahoo, NE 68066-0292

9 1s 27w Decatur KS

ATTN: Richard Bell

Job Ticket: 33439

DST#: 3

Test Start: 2008.10.25 @ 12:15:00

Tool Information

Drill Pipe:	Length: 2836.00 ft	Diameter: 3.80 inches	Volume: 39.78 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: 547.00 ft	Diameter: 2.25 inches	Volume: 2.69 bbl	Weight to Pull Loose: 84000.00 lb
			<u>Total Volume: 42.47 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3390.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	100.00 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
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Shut In Tool	5.00			3375.00	
Hydraulic tool	5.00			3380.00	
Packer	5.00			3385.00	20.00 Bottom Of Top Packer
Packer	5.00			3390.00	
Stubb	1.00			3391.00	
Recorder	0.00	8166	Inside	3391.00	
Recorder	0.00	8356	Inside	3391.00	
Perforations	29.00			3420.00	
Blank Spacing	64.00			3484.00	
Perforations	3.00			3487.00	
Bullnose	3.00			3490.00	100.00 Bottom Packers & Anchor

Total Tool Length: 120.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy Inc.

Hanchera #1

PO Box 292
Wahoo, NE 68066-0292

9 1s 27w Decatur KS

Job Ticket: 33439 DST#: 3

ATTN: Richard Bell

Test Start: 2008.10.25 @ 12:15:00

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: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.98 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 700.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	SOCM 93% _m , 6% _o , 1% _g	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time

