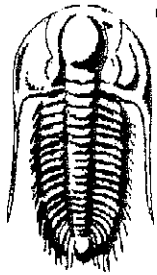


35-4-30W

15-039-21004



**TRILOBITE  
TESTING, INC.**

Great Plains Energy Inc

**DRILL STEM TEST REPORT**

Prepared For: **Great Plains Energy Inc** ✓  
PO Box 292  
Wahoo NE 68066

Sauvage #6

ATTN: Richard Bell

**35 4 30 Decatur KS** ✓

35 4 30 Decatur KS

**Sauvage #6** ✓

Start Date: 2007.07.06 @ 10:37:36 ✓

End Date: 2007.07.06 @ 16:35:30 ✓

Job Ticket #: 27712 DST #: 1

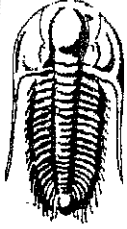
DST # 1

*15-039-21004 ✓  
SE SW NW NE  
1050 FNL 2000 FEL*

Toronto

2007.07.06

Trilobite Testing, Inc  
PO Box 362 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

ATTN: Richard Bell

**Sauvage #6**

**35 4 30 Decatur KS**

Job Ticket: 27712

DST#: 1

Test Start: 2007.07.06 @ 10:37:36

## GENERAL INFORMATION:

Formation: **Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:07:01

Time Test Ended: 16:35:30

Test Type: Conventional Bottom Hole

Tester: Shane McBride

Unit No: 40

Interval: **3884.00 ft (KB) To 3926.00 ft (KB) (TVD)**

Total Depth: 3926.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2850.00 ft (KB) ✓

2845.00 ft (CF) ✓

KB to GR/CF: 5.00 ft

**Serial #: 6667** Inside

Press@RunDepth: 26.90 psig @ 3885.00 ft (KB)

Start Date: 2007.07.06

End Date:

2007.07.06

Capacity: 7000.00 psig

Last Calib.: 2007.07.06

Start Time: 10:37:36

End Time:

16:35:30

Time On Btm: 2007.07.06 @ 12:06:46

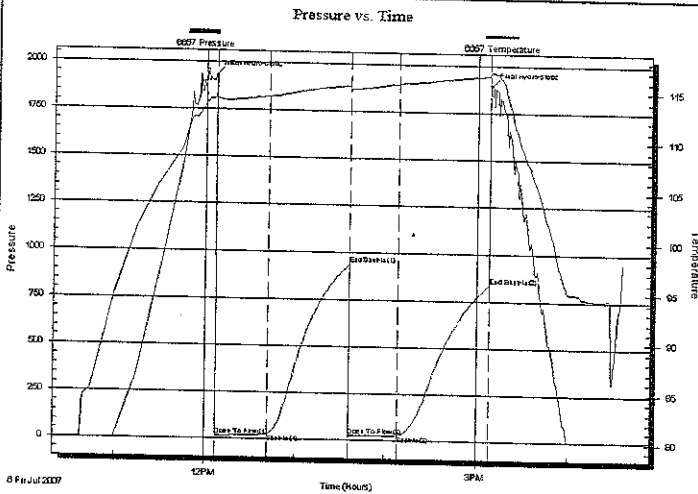
Time Off Btm: 2007.07.06 @ 15:09:00

TEST COMMENT: Weak blow died in 5 min.

No return

No blow

No return



## PRESSURE SUMMARY

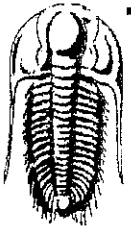
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1933.41	114.67	Initial Hydro-static
1	17.13	114.06	Open To Flow (1)
35	24.98	114.33	Shut-In (1)
90	938.83	115.51	End Shut-In (1)
90	25.72	114.92	Open To Flow (2)
122	26.90	115.72	Shut-In (2)
182	839.98	116.62	End Shut-In (2)
183	1896.63	117.02	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
3.00	100%M	0.01

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Great Plains Energy Inc

**Sauvage #6**

PO Box 292  
Wahoo NE 68066

**35 4 30 Decatur KS**

Job Ticket: 27712

DST#: 1

ATTN: Richard Bell

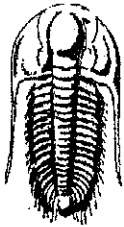
Test Start: 2007.07.06 @ 10:37:36

### Tool Information

Drill Pipe:	Length: 3752.00 ft	Diameter: 3.80 inches	Volume: 52.63 bbl	Tool Weight: 1500.00 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 53.22 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3884.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	69.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3858.00	
Shut In Tool	5.00			3863.00	
Hydraulic tool	5.00			3868.00	
Jars	5.00			3873.00	
Safety Joint	2.00			3875.00	
Packer	5.00			3880.00	27.00 Bottom Of Top Packer
Packer	4.00		Inside	3884.00	
Stubb	1.00			3885.00	
Recorder	0.00	6667	Inside	3885.00	
Perforations	3.00			3888.00	
Change Over Sub	1.00			3889.00	
Drill Pipe	31.00			3920.00	
Change Over Sub	1.00			3921.00	
Recorder	0.00	11058	Inside	3921.00	
Bullnose	5.00			3926.00	42.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>69.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Great Plains Energy Inc

**Sauvage #6**

PO Box 292  
Wahoo NE 68066

**35 4 30 Decatur KS**

Job Ticket: 27712

**DST#: 1**

ATTN: Richard Bell

Test Start: 2007.07.06 @ 10:37:36

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.77 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	100%M	0.015

Total Length: 3.00 ft      Total Volume: 0.015 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

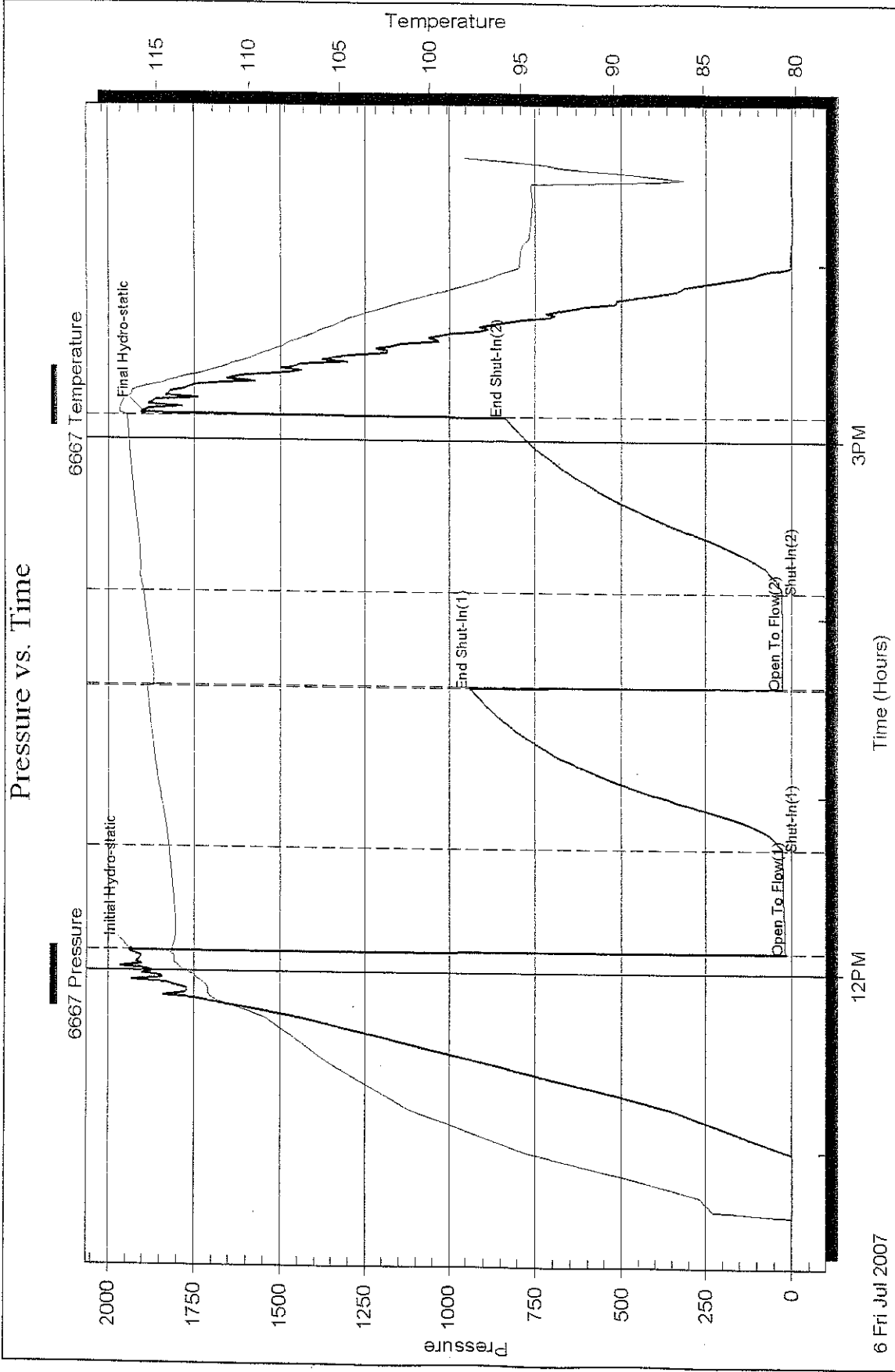
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

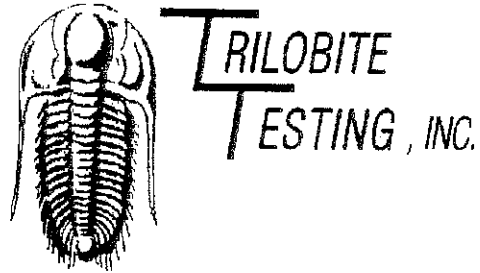
### Pressure vs. Time



6 Fri Jul 2007

12PM

3PM



## DRILL STEM TEST REPORT

Prepared For: **Great Plains Energy Inc**

PO Box 292  
Wahoo NE 68066

ATTN: Richard Bell

**35 4 30 Decatur KS**

**Sauvage #6**

Start Date: 2007.07.06 @ 23:52:06

End Date: 2007.07.07 @ 07:21:30

Job Ticket #: 27713                      DST #: 2

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

Great Plains Energy Inc

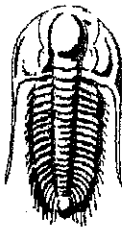
Sauvage #6

35 4 30 Decatur KS

DST # 2

B

2007.07.06



**TRILOBITE TESTING, INC**

**DRILL STEM TEST REPORT**

Great Plains Energy Inc

**Sauvage #6**

PO Box 292  
Wahoo NE 68066

**35 4 30 Decatur KS**

ATTN: Richard Bell

Job Ticket: 27713

**DST#: 2**

Test Start: 2007.07.06 @ 23:52:06

**GENERAL INFORMATION:**

Formation: **B**  
 Deviated: **No** Whipstock: **ft (KB)**  
 Time Tool Opened: 01:47:16  
 Time Test Ended: 07:21:30

Test Type: **Conventional Bottom Hole**  
 Tester: **Shane McBride**  
 Unit No: **40**

Interval: **3947.00 ft (KB) To 3965.00 ft (KB) (TVD)**  
 Total Depth: **3965.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2850.00 ft (KB)**  
**2845.00 ft (CF)**  
 KB to GR/CF: **5.00 ft**

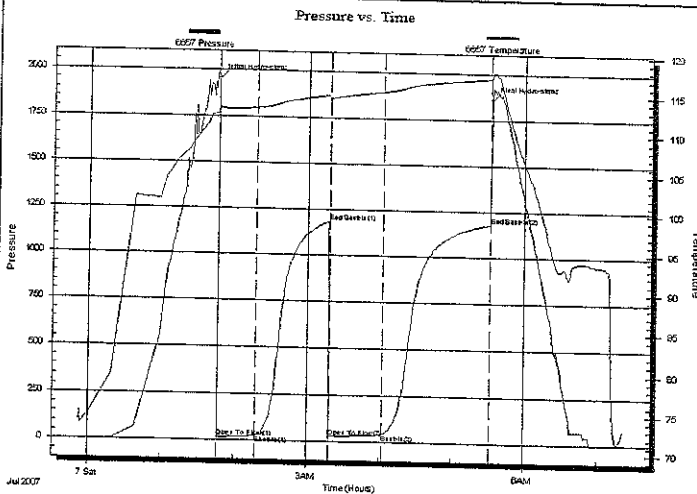
**Serial #: 6667**

**Inside**

Press@RunDepth: **42.85 psig @ 3948.00 ft (KB)**  
 Start Date: **2007.07.06** End Date: **2007.07.07**  
 Start Time: **23:52:06** End Time: **07:21:30**

Capacity: **7000.00 psig**  
 Last Calib.: **2007.07.07**  
 Time On Btm: **2007.07.07 @ 01:47:01**  
 Time Off Btm: **2007.07.07 @ 05:32:45**

TEST COMMENT: **2 1/2 " blow**  
**No return**  
**2 1/2 " blow**  
**No return**



**PRESSURE SUMMARY**

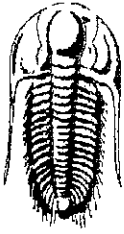
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1953.59	113.50	Initial Hydro-static
1	16.47	112.64	Open To Flow (1)
31	26.63	113.10	Shut-In (1)
90	1184.53	114.83	End Shut-In (1)
91	29.89	114.50	Open To Flow (2)
136	42.85	115.34	Shut-In (2)
226	1178.11	117.18	End Shut-In (2)
226	1859.78	117.33	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
35.00	Free Oil 100%O	0.17
30.00	HOCM 45%O 55%M	0.15

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Great Plains Energy Inc

**Sauvage #6**

PO Box 292  
Wahoo NE 68066

**35 4 30 Decatur KS**

ATTN: Richard Bell

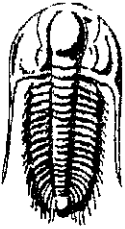
Job Ticket: 27713      DST#: 2

Test Start: 2007.07.06 @ 23:52:06

**Tool Information**

Drill Pipe:	Length: 3815.00 ft	Diameter: 3.80 inches	Volume: 53.51 bbl	Tool Weight: 1500.00 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 54.10 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3947.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	18.00 ft			
Tool Length:	45.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3921.00	
Shut In Tool	5.00			3926.00	
Hydraulic tool	5.00			3931.00	
Jars	5.00			3936.00	
Safety Joint	2.00			3938.00	
Packer	5.00			3943.00	27.00      Bottom Of Top Packer
Packer	4.00		inside	3947.00	
Stubb	1.00			3948.00	
Recorder	0.00	6667	inside	3948.00	
Perforations	12.00			3960.00	
Recorder	0.00	11058	inside	3960.00	
Bullnose	5.00			3965.00	18.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>45.00</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Great Plains Energy Inc

**Sauvage #6**

PO Box 292  
Wahoo NE 68066

**35 4 30 Decatur KS**

ATTN: Richard Bell

Job Ticket: 27713

DST#: 2

Test Start: 2007.07.06 @ 23:52:06

**Mud and Cushion Information**

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 55.00 sec/qt

Water Loss: 6.77 in<sup>3</sup>

Resistivity: 0.00 ohm.m

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API: 28 deg API

Water Salinity: 0 ppm

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
35.00	Free Oil 100%O	0.172
30.00	HOCM 45%O 55%M	0.148

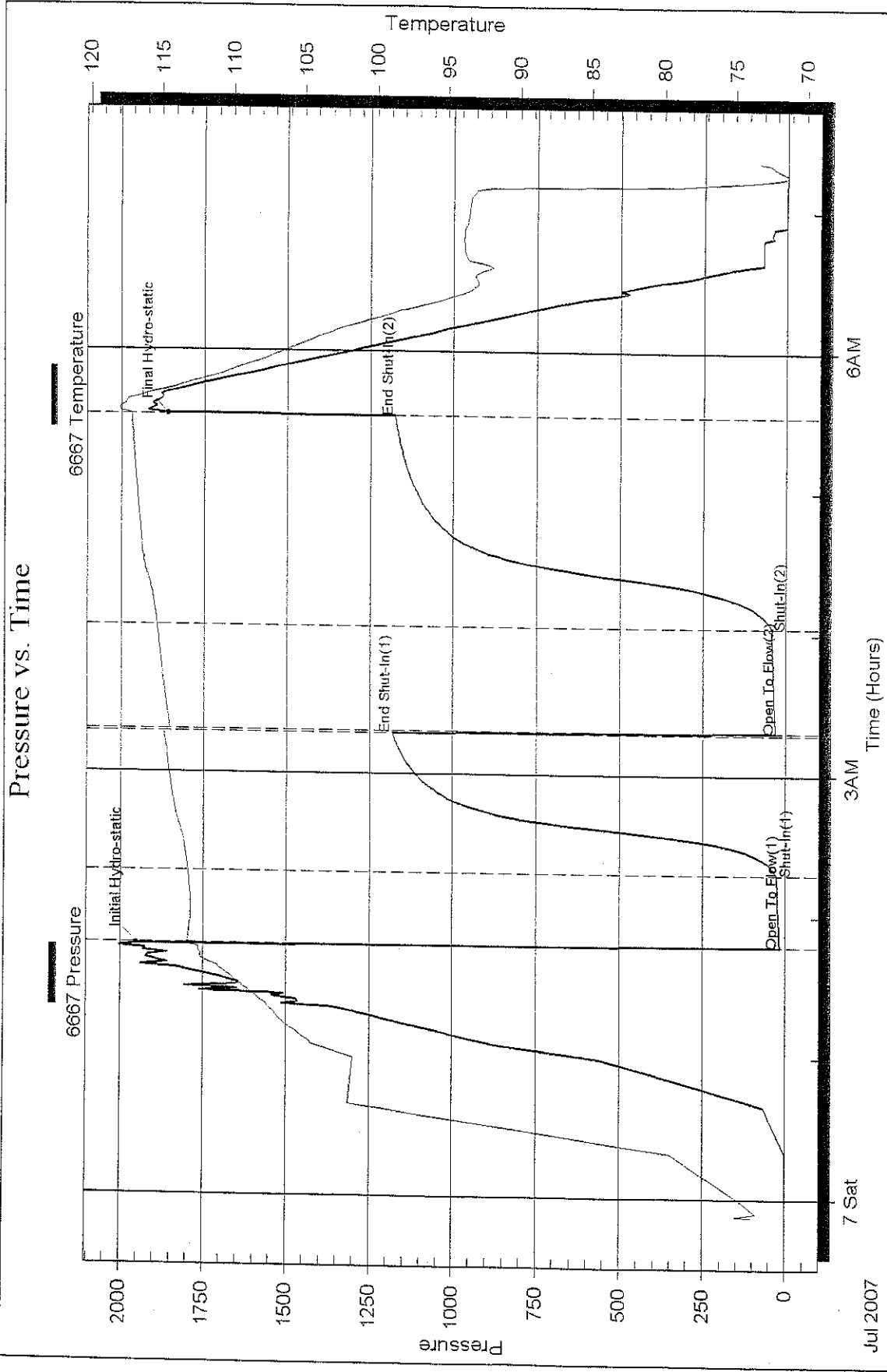
Total Length: 65.00 ft      Total Volume: 0.320 bbl

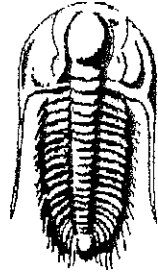
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

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

ATTN: Richard Bell

**35 4 30 Decatur KS**

**Sauvage #6**

Start Date: 2007.07.07 @ 14:25:22

End Date: 2007.07.07 @ 21:20:31

Job Ticket #: 27714                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Great Plains Energy Inc

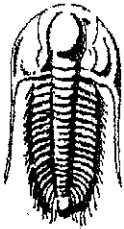
Sauvage #6

35 4 30 Decatur KS

DST # 3

F

2007.07.07



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Great Plains Energy Inc

**Sauvage #6**

PO Box 292  
Wahoo NE 68066

**35 4 30 Decatur KS**

ATTN: Richard Bell

Job Ticket: 27714

**DST#: 3**

Test Start: 2007.07.07 @ 14:25:22

## GENERAL INFORMATION:

Formation: F  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 15:48:17  
 Time Test Ended: 21:20:31

Test Type: Conventional Bottom Hole  
 Tester: Shane McBride  
 Unit No: 40

Interval: **3986.00 ft (KB) To 4006.00 ft (KB) (TVD)**  
 Total Depth: 4006.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2850.00 ft (KB)  
 2845.00 ft (CF)  
 KB to GR/CF: 5.00 ft

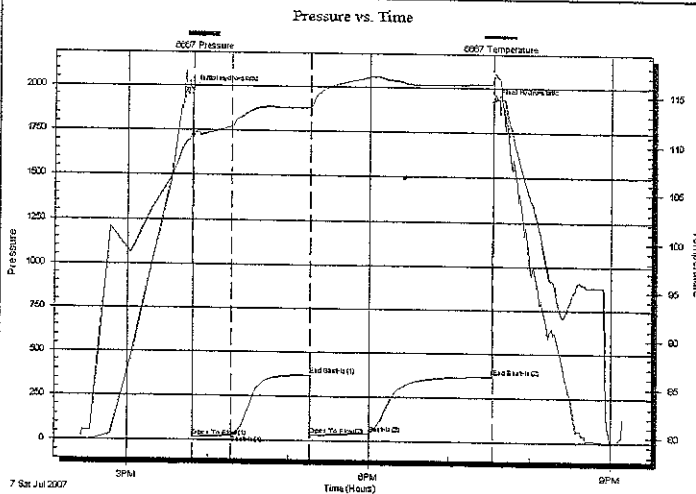
## Serial #: 6667

Inside

Press@RunDepth: 46.89 psig @ 3987.00 ft (KB)  
 Start Date: 2007.07.07 End Date: 2007.07.07  
 Start Time: 14:25:22 End Time: 21:08:31

Capacity: 7000.00 psig  
 Last Calib.: 2007.07.07  
 Time On Btm: 2007.07.07 @ 15:47:47  
 Time Off Btm: 2007.07.07 @ 19:33:02

TEST COMMENT: 2 1/2" blow  
 No return  
 4 1/2" blow  
 No return



## PRESSURE SUMMARY

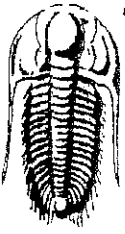
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1979.20	111.12	Initial Hydro-static
1	15.93	110.81	Open To Flow (1)
30	27.81	111.75	Shut-In (1)
88	372.75	113.76	End Shut-In (1)
89	32.53	113.88	Open To Flow (2)
133	46.89	116.91	Shut-In (2)
225	370.95	116.34	End Shut-In (2)
226	1920.66	117.03	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	Free Oil 100%O	0.30
50.00	HOCM 40%O 60%M	0.25

## Gas Rates

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



**TRILOBITE**  
TESTING, INC

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Great Plains Energy Inc

Sauvage #6

PO Box 292  
Wahoo NE 68066

35 4 30 Decatur KS

ATTN: Richard Bell

Job Ticket: 27714

DST#: 3

Test Start: 2007.07.07 @ 14:25:22

### Tool Information

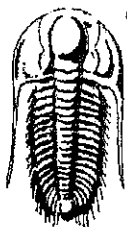
Drill Pipe:	Length: 3845.00 ft	Diameter: 3.80 inches	Volume: 53.94 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 54.53 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3986.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	47.00 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			3960.00	
Shut In Tool	5.00			3965.00	
Hydraulic tool	5.00			3970.00	
Jars	5.00			3975.00	
Safety Joint	2.00			3977.00	
Packer	5.00			3982.00	27.00 Bottom Of Top Packer
Packer	4.00		Inside	3986.00	
Stubb	1.00			3987.00	
Recorder	0.00	6667	Inside	3987.00	
Perforations	14.00			4001.00	
Recorder	0.00	11058	Inside	4001.00	
Bullnose	5.00			4006.00	20.00 Bottom Packers & Anchor

**Total Tool Length: 47.00**



**TRILOBITE**  
TESTING, INC

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Great Plains Energy Inc

**Sauvage #6**

PO Box 292  
Wahoo NE 68066

**35 4 30 Decatur KS**

Job Ticket: 27714

**DST#: 3**

ATTN: Richard Bell

Test Start: 2007.07.07 @ 14:25:22

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API: 28 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 0 ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.77 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 1600.00 ppm		
Filter Cake: 2.00 inches		

**Recovery Information**

Recovery Table

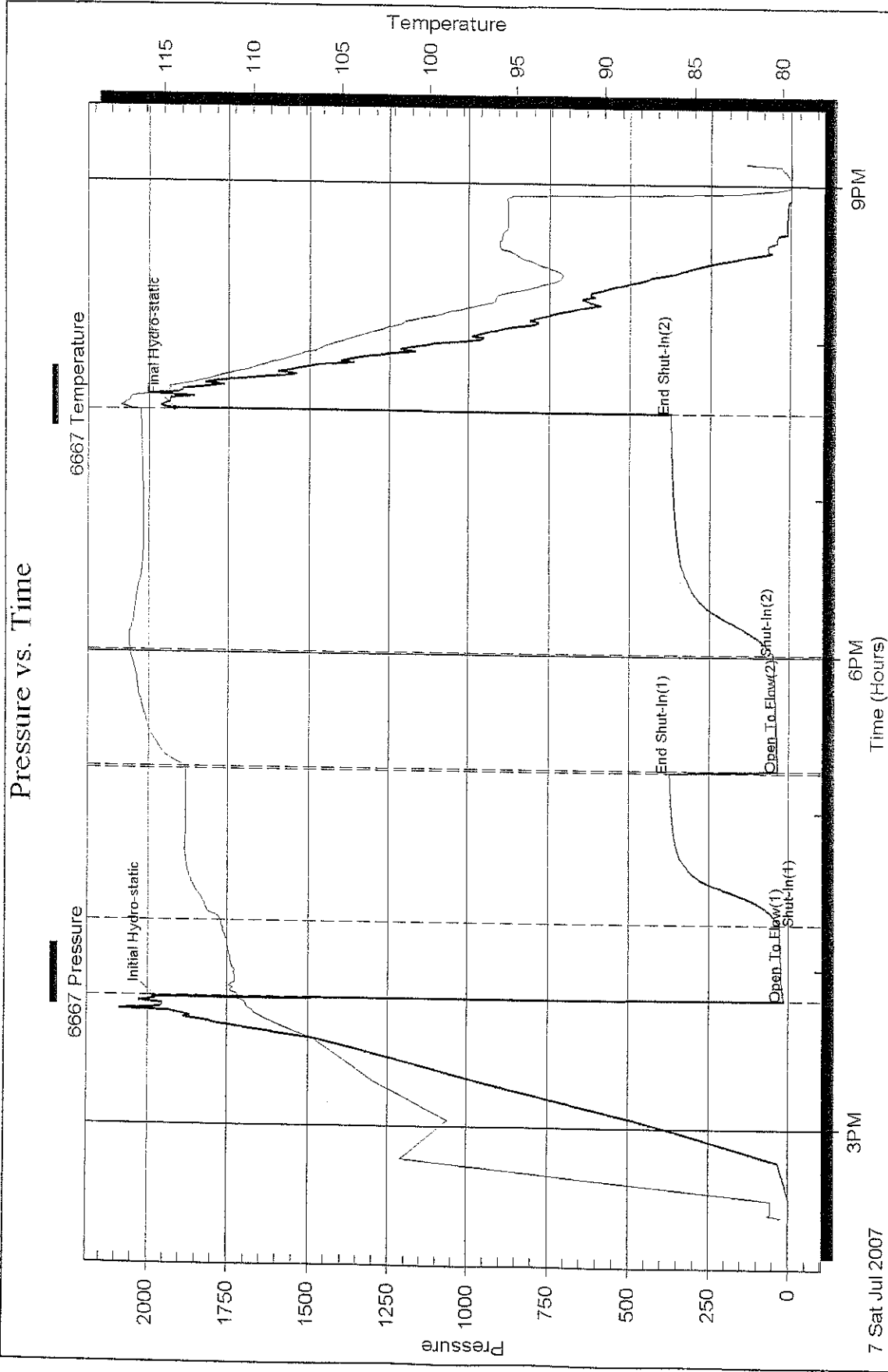
Length ft	Description	Volume bbl
60.00	Free Oil 100%O	0.295
50.00	HOCM 40%O 60%M	0.246

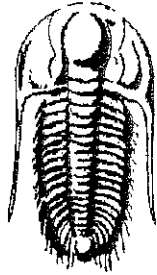
Total Length: 110.00ft      Total Volume: 0.541 bbl

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

ATTN: Richard Bell

**35 4 30 Decatur KS**

**Sauvage #6**

Start Date: 2007.07.08 @ 05:37:07

End Date: 2007.07.08 @ 11:43:16

Job Ticket #: 27715                      DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Great Plains Energy Inc

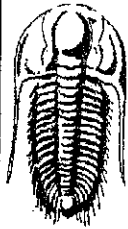
Sauvage #6

35 4 30 Decatur KS

DST # 4

H

2007.07.08



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Great Plains Energy Inc  
 PO Box 292  
 Wahoo NE 68066  
 ATTN: Richard Bell

**Sauvage #6**  
**35 4 30 Decatur KS**  
 Job Ticket: 27715      **DST#: 4**  
 Test Start: 2007.07.08 @ 05:37:07

## GENERAL INFORMATION:

Formation: **H**  
 Deviated: **No** Whipstock:                      ft (KB)  
 Time Tool Opened: 07:30:02  
 Time Test Ended: 11:43:16

Test Type: Conventional Bottom Hole  
 Tester: Shane McBride  
 Unit No: 40

Interval: **4028.00 ft (KB) To 4054.00 ft (KB) (TVD)**  
 Total Depth: 4054.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2850.00 ft (KB)  
 2845.00 ft (CF)  
 KB to GR/CF: 5.00 ft

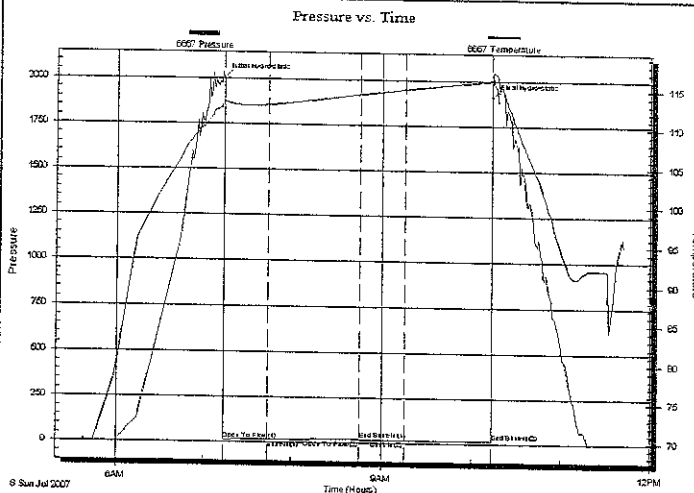
## Serial #: 6667

Inside

Press@RunDepth: 15.80 psig @ 4029.00 ft (KB)  
 Start Date: 2007.07.08      End Date: 2007.07.08  
 Start Time: 05:37:07      End Time: 11:43:16

Capacity: 7000.00 psig  
 Last Calib.: 2007.07.08  
 Time On Btm: 2007.07.08 @ 07:13:47  
 Time Off Btm: 2007.07.08 @ 10:13:47

TEST COMMENT: Weak blow died in 4 min.  
 No return  
 No blow  
 No return



## PRESSURE SUMMARY

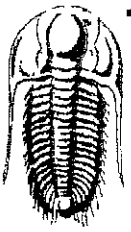
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2007.40	113.46	Initial Hydro-static
1	14.35	113.13	Open To Flow (1)
30	14.82	112.82	Shut-In(1)
91	24.37	114.28	End Shut-In(1)
92	15.08	114.28	Open To Flow (2)
121	15.80	114.95	Shut-In(2)
180	19.93	116.14	End Shut-In(2)
180	1906.96	116.86	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1.00	100%M	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 #6**

PO Box 292  
Wahoo NE 68066

**35 4 30 Decatur KS**

Job Ticket: 27715

**DST#: 4**

ATTN: Richard Bell

Test Start: 2007.07.08 @ 05:37:07

### Tool Information

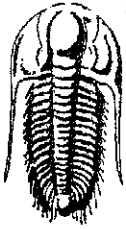
Drill Pipe:	Length: 3906.00 ft	Diameter: 3.80 inches	Volume: 54.79 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 55.38 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4028.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	53.00 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			4002.00	
Shut In Tool	5.00			4007.00	
Hydraulic tool	5.00			4012.00	
Jars	5.00			4017.00	
Safety Joint	2.00			4019.00	
Packer	5.00			4024.00	27.00 Bottom Of Top Packer
Packer	4.00		Inside	4028.00	
Stubb	1.00			4029.00	
Recorder	0.00	6667	Inside	4029.00	
Perforations	20.00			4049.00	
Recorder	0.00	11058	Inside	4049.00	
Bullnose	5.00			4054.00	26.00 Bottom Packers & Anchor

**Total Tool Length: 53.00**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Great Plains Energy Inc

**Sauvage #6**

PO Box 292  
Wahoo NE 68066

**35 4 30 Decatur KS**

Job Ticket: 27715

**DST#: 4**

ATTN: Richard Bell

Test Start: 2007.07.08 @ 05:37:07

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 54.00 sec/qt

Water Loss: 6.78 in<sup>3</sup>

Resistivity: 0.00 ohm.m

Salinity: 1600.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbbl

psig

Oil API:

Water Salinity:

0 deg API

0 ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	100%M	0.005

Total Length: 1.00 ft

Total Volume: 0.005 bbl

Num Fluid Samples: 0

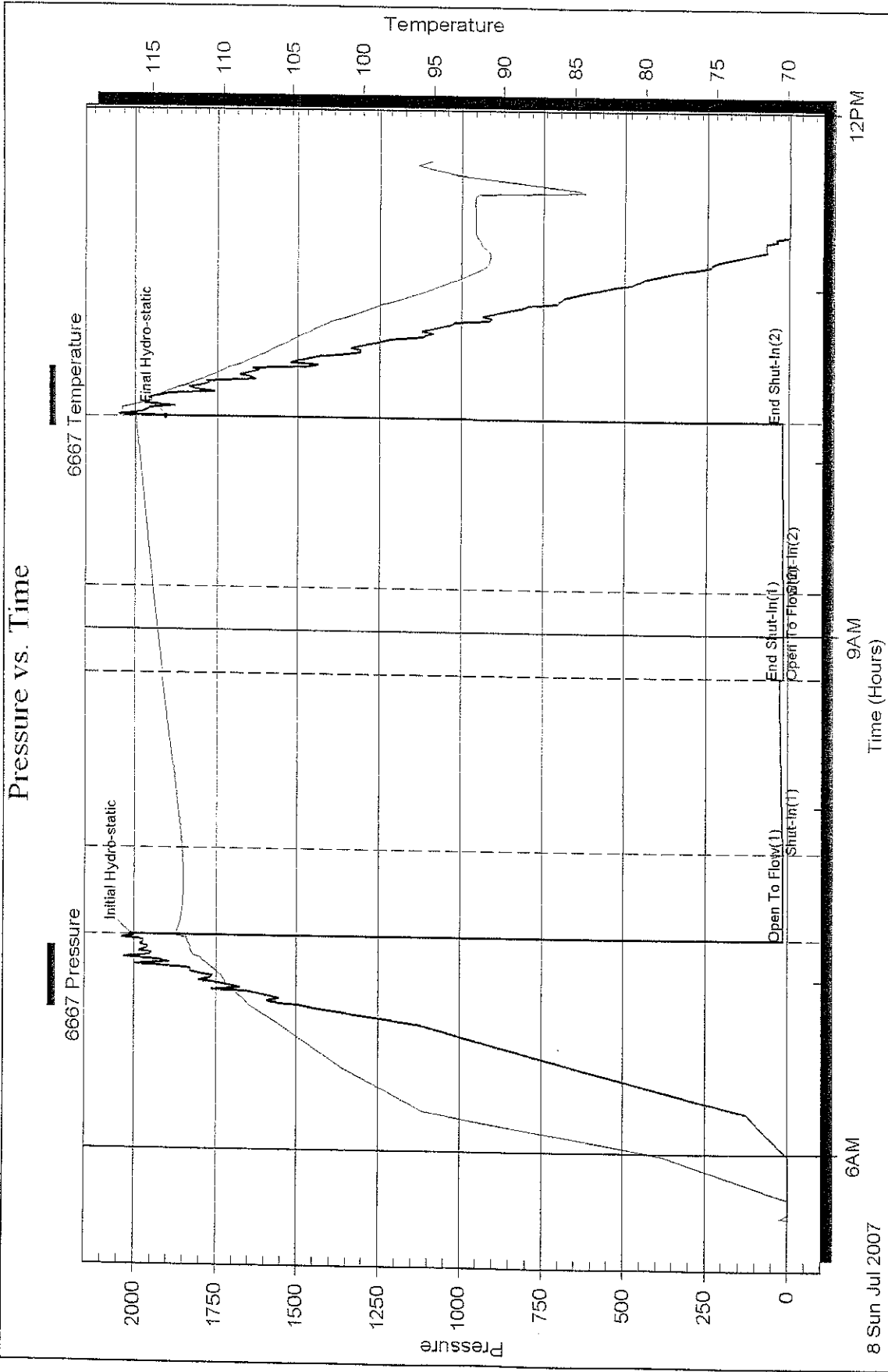
Num Gas Bombs: 0

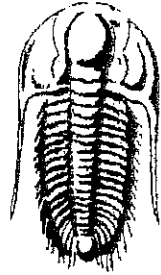
Serial #:

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

ATTN: Richard Bell

**35 4 30 Decatur KS**

**Sauvage #6**

Start Date: 2007.07.08 @ 19:56:02

End Date: 2007.07.09 @ 03:55:41

Job Ticket #: 27716                      DST #: 5

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

Great Plains Energy Inc

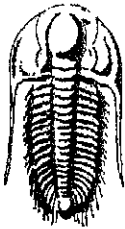
Sauvage #6

35 4 30 Decatur KS

DST # 5

G - K

2007.07.08



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Great Plains Energy Inc  
 PO Box 292  
 Wahoo NE 68066  
 ATTN: Richard Bell

**Sauvage #6**  
**35 4 30 Decatur KS**  
 Job Ticket: 27716      **DST#: 5**  
 Test Start: 2007.07.08 @ 19:56:02

## GENERAL INFORMATION:

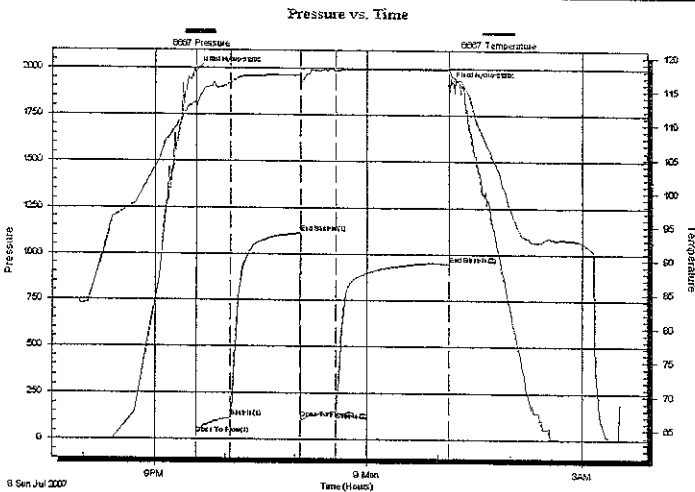
Formation: **G - K**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 21:34:57  
 Time Test Ended: 03:55:41  
 Interval: **4006.00 ft (KB) To 4119.00 ft (KB) (TVD)**  
 Total Depth: 4119.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole  
 Tester: Shane McBride  
 Unit No: 40  
 Reference Elevations: 2850.00 ft (KB)  
 2845.00 ft (CF)  
 KB to GR/CF: 5.00 ft

## Serial #: 6667

Inside

Press@RunDepth: 151.65 psig @ 4007.00 ft (KB)  
 Start Date: 2007.07.08 End Date: 2007.07.09  
 Start Time: 19:56:02 End Time: 03:32:41  
 Capacity: 7000.00 psig  
 Last Calib.: 2007.07.09  
 Time On Btm: 2007.07.08 @ 21:34:42  
 Time Off Btm: 2007.07.09 @ 01:09:12

TEST COMMENT: BOB in 17 min.  
 No return  
 BOB in 12 min.  
 No return



## PRESSURE SUMMARY

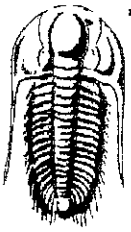
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1984.34	113.20	Initial Hydro-static
1	29.93	112.52	Open To Flow (1)
30	122.88	116.13	Shut-In (1)
89	1112.24	117.21	End Shut-In (1)
90	113.59	116.46	Open To Flow (2)
120	151.65	117.89	Shut-In (2)
214	947.87	118.15	End Shut-In (2)
215	1912.83	118.18	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
180.00	SOCM 15%O 85%M	1.43
160.00	OCM 35%O 65%M	2.24
20.00	Free Oil 100%O	0.28

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Great Plains Energy Inc

**Sauvage #6**

PO Box 292  
Wahoo NE 68066

**35 4 30 Decatur KS**

ATTN: Richard Bell

Job Ticket: 27716

DST#: 5

Test Start: 2007.07.08 @ 19:56:02

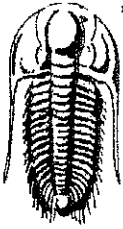
**Tool Information**

Drill Pipe:	Length: 3875.00 ft	Diameter: 3.80 inches	Volume: 54.36 bbl	Tool Weight: 1500.00 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 54.95 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	4006.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	113.00 ft			
Tool Length:	140.00 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			3980.00	
Shut In Tool	5.00			3985.00	
Hydraulic tool	5.00			3990.00	
Jars	5.00			3995.00	
Safety Joint	2.00			3997.00	
Packer	5.00			4002.00	27.00 Bottom Of Top Packer
Packer	4.00		Inside	4006.00	
Stubb	1.00			4007.00	
Recorder	0.00	6667	Inside	4007.00	
Perforations	11.00			4018.00	
Change Over Sub	1.00			4019.00	
Drill Pipe	94.00			4113.00	
Change Over Sub	1.00			4114.00	
Recorder	0.00	11058	Inside	4114.00	
Bullnose	5.00			4119.00	113.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>140.00</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Great Plains Energy Inc

**Sauvage #6**

PO Box 292  
Wahoo NE 68066

**35 4 30 Decatur KS**

Job Ticket: 27716

**DST#: 5**

ATTN: Richard Bell

Test Start: 2007.07.08 @ 19:56:02

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API: 30 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 0 ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.39 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 1200.00 ppm		
Filter Cake: 2.00 inches		

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
180.00	SOCM 15%O 85%M	1.432
160.00	OCM 35%O 65%M	2.244
20.00	Free Oil 100%O	0.281

Total Length: 360.00 ft      Total Volume: 3.957 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6667

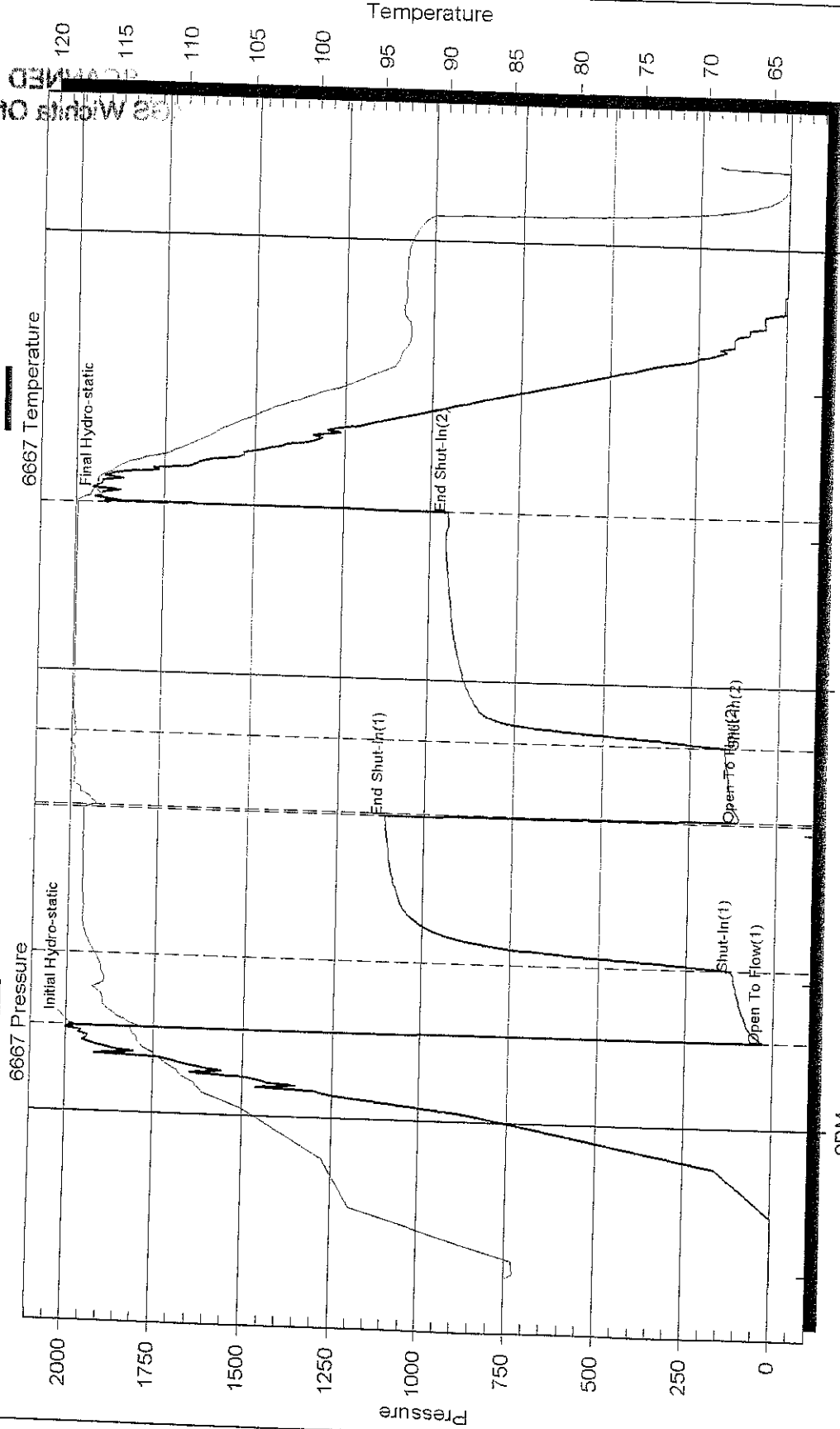
Inside

Great Plains Energy Inc

35 4 30 Decatur KS

DST Test Number: 5

### Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 27716

36-4-30W

15-039-20978

Great Plains Energy Inc

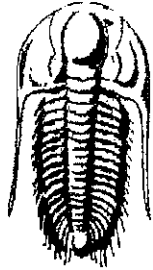
Wasson Brothers Farms #4

3 4 30W Decatur KS

DST # 1

LKC-F

2006.07.01



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **Great Plains Energy Inc** ✓  
429 N Linden Box 292  
Wahoo NE 68066

ATTN: Richard Bell

**36 4 30W Decatur KS** ✓

**Wasson Brothers Farms #4** ✓

Start Date: 2006.07.01 @ 19:25:30 ✓

End Date: 2006.07.02 @ 02:50:09 ✓

Job Ticket #: 23109 DST #: 1

15-039-20978-00-00 ✓

NW SW SE NW  
2305 FNL 1920 FWL

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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