

DRILL STEM TEST REPORT

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

PO Box 292
Wahoo, NE 68066

ATTN: Clayton Erickson

32-3s-23w Norton, KS

Persinger #5-32

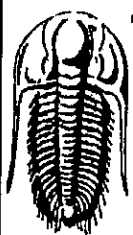
Start Date: 2010.10.22 @ 21:15:09

End Date: 2010.10.23 @ 04:11:39

Job Ticket #: 40876 DST #: 1

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

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Great Plains Energy, Inc.

PO Box 292
Wahoo, NE 68066

ATTN: Clayton Erickson

Persinger #5-32

32-3s-23w Norton, KS

Job Ticket: 40876

DST#: 1

Test Start: 2010.10.22 @ 21:15:09

GENERAL INFORMATION:

Formation: **Toronto-C**

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

Time Tool Opened: **22:36:39**

Time Test Ended: **04:11:39**

Interval: **3487.00 ft (KB) To 3575.00 ft (KB) (TVD)**

Total Depth: **3575.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Test Type: **Conventional Bottom Hole**

Tester: **Jason McLemore**

Unit No: **54**

Reference Elevations: **2440.00 ft (KB)**

2435.00 ft (CF)

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

Serial #: 6668

Inside

Press@RunDepth: **76.89 psig @ 3554.00 ft (KB)**

Start Date: **2010.10.22**

End Date:

2010.10.23

Start Time: **21:15:11**

End Time:

04:11:39

Capacity: **8000.00 psig**

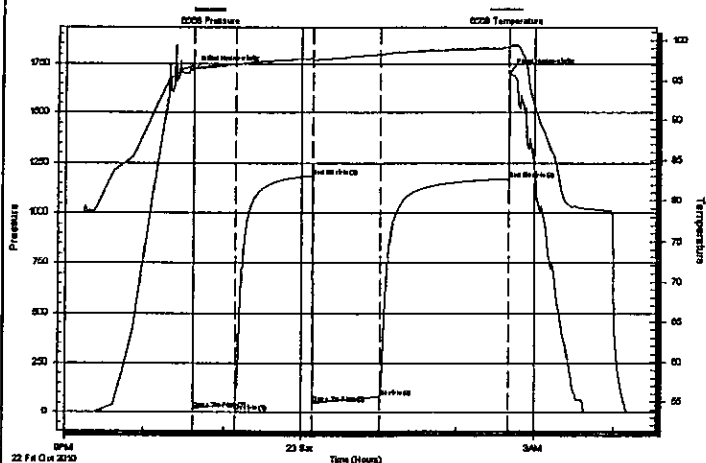
Last Calib.: **2010.10.23**

Time On Btm: **2010.10.22 @ 22:36:24**

Time Off Btm: **2010.10.23 @ 02:40:39**

TEST COMMENT: IFP-Weak Blow Built to 1"
ISI-Dead
FFP-Weak Blow Built to 1/2"
FSI-Dead

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1722.06	96.93	Initial Hydro-static
1	16.77	96.03	Open To Flow (1)
33	42.55	97.04	Shut-In(1)
92	1183.62	97.81	End Shut-In(1)
92	45.26	97.53	Open To Flow (2)
145	76.89	98.28	Shut-In(2)
244	1170.00	99.12	End Shut-In(2)
245	1710.53	99.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	Drilling Mud	0.63

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.

Persinger #5-32

PO Box 292
Wahoo, NE 68066

32-3s-23w Norton, KS

Job Ticket: 40876

DST#: 1

ATTN: Clayton Erickson

Test Start: 2010.10.22 @ 21:15:09

Tool Information

Drill Pipe:	Length: 3353.00 ft	Diameter: 3.80 inches	Volume: 47.03 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 40000.00 lb
		Total Volume: 47.63 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3487.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	88.00 ft			
Tool Length:	116.00 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			3460.00	
Shut In Tool	5.00			3465.00	
Hydraulic tool	5.00			3470.00	
Jars	5.00			3475.00	
Safety Joint	2.00			3477.00	
Packer	5.00			3482.00	28.00 Bottom Of Top Packer
Packer	5.00			3487.00	
Stubb	1.00			3488.00	
Perforations	2.00			3490.00	
Change Over Sub	1.00			3491.00	
Blank Spacing	62.00			3553.00	
Change Over Sub	1.00			3554.00	
Recorder	0.00	6668	Inside	3554.00	
Recorder	0.00	8673	Outside	3554.00	
Perforations	18.00			3572.00	
Bullnose	3.00			3575.00	88.00 Bottom Packers & Anchor
Total Tool Length:	116.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy, Inc.

Persinger #5-32

PO Box 292
Wahoo, NE 68066

32-3s-23w Norton, KS

Job Ticket: 40876

DST#: 1

ATTN: Clayton Erickson

Test Start: 2010.10.22 @ 21:15:09

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:

bbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	Drilling Mud	0.633

Total Length: 125.00 ft

Total Volume: 0.633 bbl

Num Fluid Samples: 0

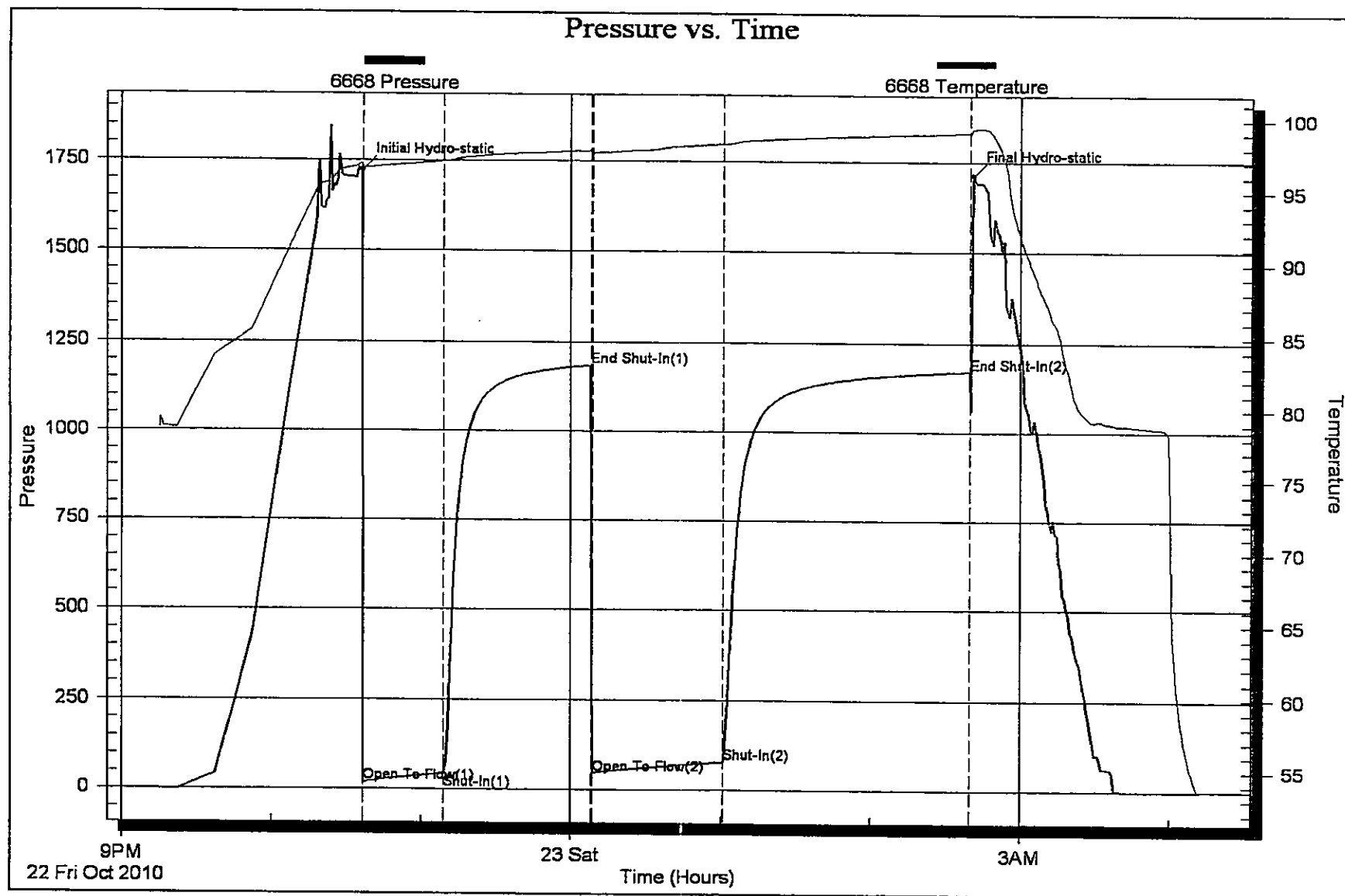
Num Gas Bombs: 0

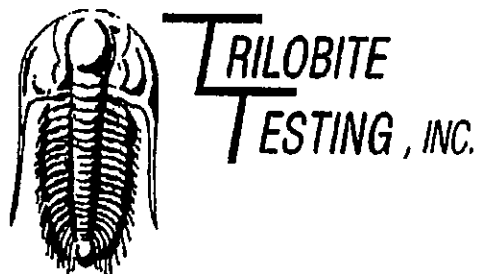
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

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

PO Box 292
Wahoo, NE 68066

ATTN: Clayton Erickson

32-3s-23w Norton, KS

Persinger #5-32

Start Date: 2010.10.23 @ 14:04:35

End Date: 2010.10.23 @ 22:01:20

Job Ticket #: 40877 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, Inc.

PO Box 292
Wahoo, NE 68066

ATTN: Clayton Erickson

Persinger #5-32

32-3s-23w Norton, KS

Job Ticket: 40877

DST#: 2

Test Start: 2010.10.23 @ 14:04:35

GENERAL INFORMATION:

Formation: E-F

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:28:50

Time Test Ended: 22:01:20

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 54

Interval: 3588.00 ft (KB) To 3628.00 ft (KB) (TVD)

Total Depth: 3628.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2440.00 ft (KB)

2435.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6668

Inside

Press@RunDepth: 169.12 psig @ 3625.00 ft (KB)

Start Date: 2010.10.23

End Date:

2010.10.23

Start Time: 14:04:37

End Time:

22:01:20

Capacity: 8000.00 psig

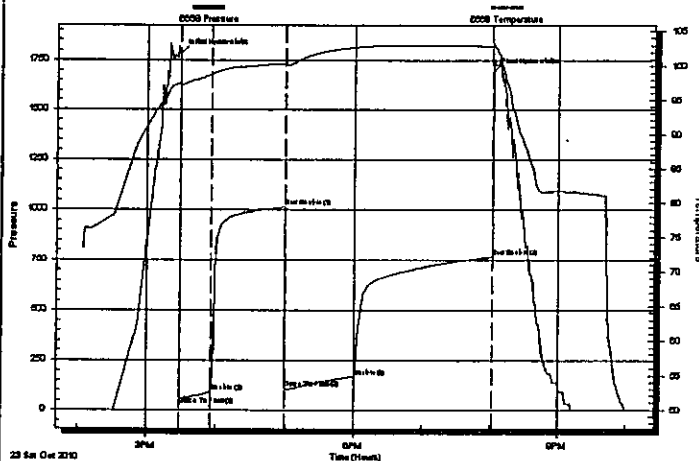
Last Calib.: 2010.10.23

Time On Btm: 2010.10.23 @ 15:28:35

Time Off Btm: 2010.10.23 @ 20:03:05

TEST COMMENT: IFF-Good Blow, BOB in 8 Min.
ISI-Blow back Built to 6"
FP-Good Blow, BOB in 11 Min.
FSI-Blow back Built to 5"

Pressure vs. Time



PRESSURE SUMMARY

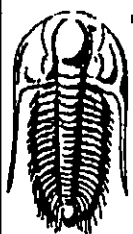
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1786.28	97.61	Initial Hydro-static
1	22.48	97.09	Open To Flow (1)
28	91.14	98.81	Shut-In (1)
90	1013.57	100.38	End Shut-In (1)
91	107.80	100.20	Open To Flow (2)
152	169.12	102.69	Shut-In (2)
274	766.07	102.88	End Shut-In (2)
275	1693.57	103.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Mud Cut Oil-50%O-50%M	0.59
270.00	Clean Oil	3.76
0.00	510' Gas In Pipe	0.00

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.

Persinger #5-32

PO Box 292
Wahoo, NE 68066

32-3s-23w Norton, KS

Job Ticket: 40877

DST#: 2

ATTN: Clayton Erickson

Test Start: 2010.10.23 @ 14:04:35

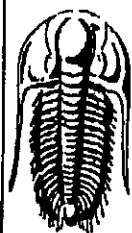
Tool Information

Drill Pipe:	Length: 3447.00 ft	Diameter: 3.80 inches	Volume: 48.35 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	45000.00 lb
		Total Volume:	48.95 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3588.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	40.00 ft				
Tool Length:	68.00 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			3561.00	
Shut In Tool	5.00			3566.00	
Hydraulic tool	5.00			3571.00	
Jars	5.00			3576.00	
Safety Joint	2.00			3578.00	
Packer	5.00			3583.00	28.00 Bottom Of Top Packer
Packer	5.00			3588.00	
Stubb	1.00			3589.00	
Perforations	2.00			3591.00	
Change Over Sub	1.00			3592.00	
Blank Spacing	32.00			3624.00	
Change Over Sub	1.00			3625.00	
Recorder	0.00	6668	Inside	3625.00	
Recorder	0.00	8673	Outside	3625.00	
Bullnose	3.00			3628.00	40.00 Bottom Packers & Anchor

Total Tool Length: 68.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy, Inc.

Persinger #5-32

PO Box 292
Wahoo, NE 68066

32-3s-23w Norton, KS

Job Ticket: 40877

DST#: 2

ATTN: Clayton Erickson

Test Start: 2010.10.23 @ 14:04:35

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil APt

30 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	Mud Cut Oil-50%O-50%M	0.590
270.00	Clean Oil	3.760
0.00	510' Gas In Pipe	0.000

Total Length: 390.00 ft

Total Volume: 4.350 bbl

Num Fluid Samples: 0

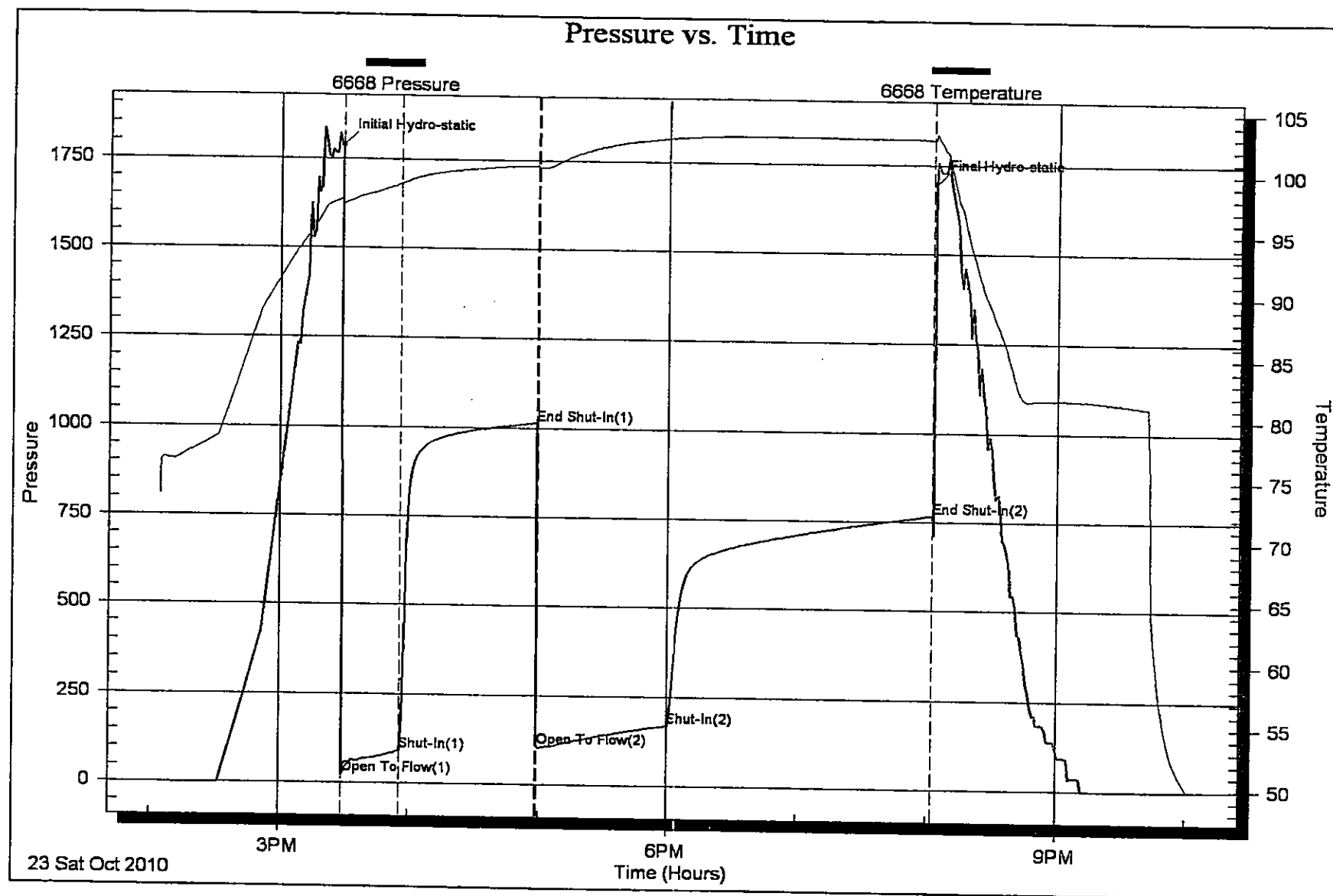
Num Gas Bombs: 0

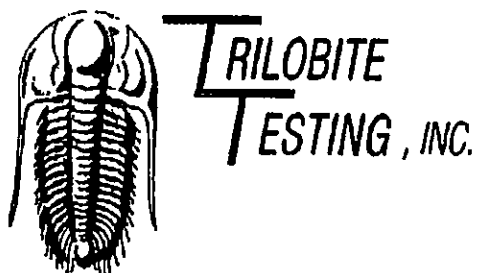
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

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

PO Box 292
Wahoo, NE 68066

ATTN: Clayton Erickson

32-3s-23w Norton, KS

Persinger #5-32

Start Date: 2010.10.24 @ 13:09:44

End Date: 2010.10.24 @ 20:23:29

Job Ticket #: 40878 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



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DRILL STEM TEST REPORT

Great Plains Energy, Inc.

PO Box 292
Wahoo, NE 68066

ATTN: Clayton Erickson

Persinger #5-32

32-3s-23w Norton, KS

Job Ticket: 40878

DST#: 3

Test Start: 2010.10.24 @ 13:09:44

GENERAL INFORMATION:

Formation: Gorham Sand

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:53:29

Time Test Ended: 20:23:29

Interval: 3754.00 ft (KB) To 3773.00 ft (KB) (TVD)

Total Depth: 3773.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 54

Reference Elevations: 2440.00 ft (KB)

2435.00 ft (CF)

KB to GRVCF: 5.00 ft

Serial #: 6668

Inside

Press@RunDepth: 44.83 psig @ 3757.00 ft (KB)

Start Date: 2010.10.24 End Date: 2010.10.24

Start Time: 13:09:46 End Time: 20:23:29

Capacity: 8000.00 psig

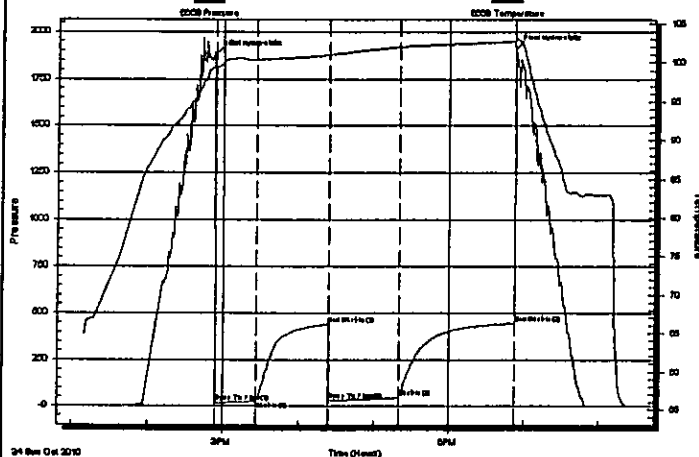
Last Calib.: 2010.10.24

Time On Btm: 2010.10.24 @ 14:52:59

Time Off Btm: 2010.10.24 @ 18:53:14

TEST COMMENT: FP-Weak Blow ,Built to 3"
ISI-Dead
FFP-Weak Blow ,Built to 3"
FSI-Dead

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1882.09	99.59	Initial Hydro-static
1	22.15	99.12	Open To Flow (1)
33	25.15	100.34	Shut-In(1)
91	439.91	100.92	End Shut-In(1)
91	31.79	100.88	Open To Flow (2)
148	44.83	102.02	Shut-In(2)
240	444.32	102.66	End Shut-In(2)
241	1912.48	103.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Muddy Oil-80%O-20%M	0.02
85.00	Clean Oil	0.42

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.

Persinger #5-32

PO Box 292
Wahoo, NE 68066

32-3s-23w Norton, KS

Job Ticket: 40878

DST#: 3

ATTN: Clayton Erickson

Test Start: 2010.10.24 @ 13:09:44

Tool Information

Drill Pipe:	Length: 3631.00 ft	Diameter: 3.80 inches	Volume: 50.93 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	45000.00 lb
			Total Volume: 51.53 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3754.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	19.00 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			3727.00	
Shut In Tool	5.00			3732.00	
Hydraulic tool	5.00			3737.00	
Jars	5.00			3742.00	
Safety Joint	2.00			3744.00	
Packer	5.00			3749.00	28.00 Bottom Of Top Packer
Packer	5.00			3754.00	
Stubb	1.00			3755.00	
Perforations	2.00			3757.00	
Recorder	0.00	6668	Inside	3757.00	
Recorder	0.00	8673	Outside	3757.00	
Perforations	13.00			3770.00	
Bullnose	3.00			3773.00	19.00 Bottom Packers & Anchor

Total Tool Length: 47.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy, Inc.

Persinger #5-32

PO Box 292
Wahoo, NE 68066

32-3s-23w Norton, KS

Job Ticket: 40878

DST#: 3

ATTN: Clayton Erickson

Test Start: 2010.10.24 @ 13:09:44

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

29 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Muddy Oil-80%O-20%M	0.025
85.00	Clean Oil	0.418

Total Length: 90.00 ft

Total Volume: 0.443 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

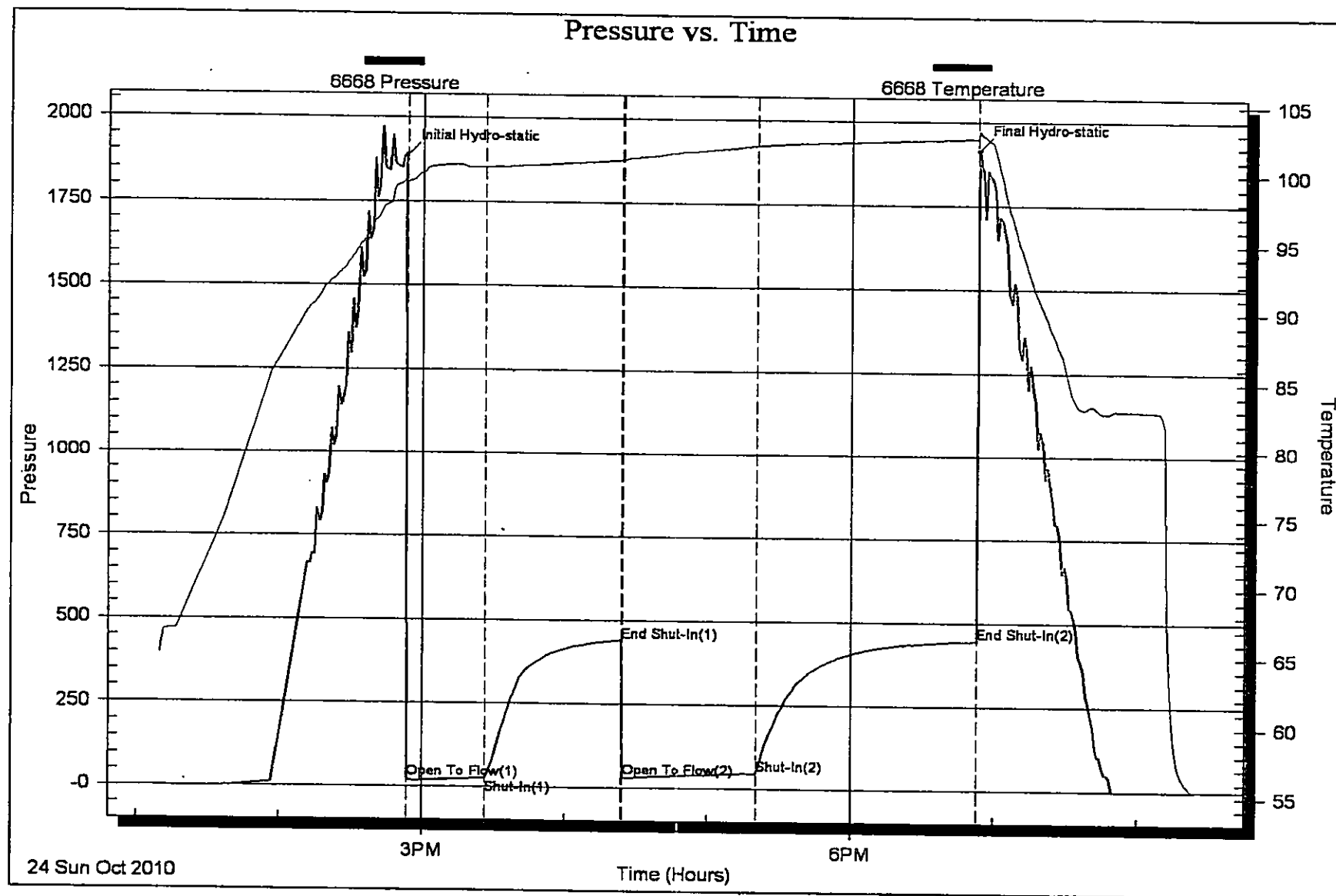
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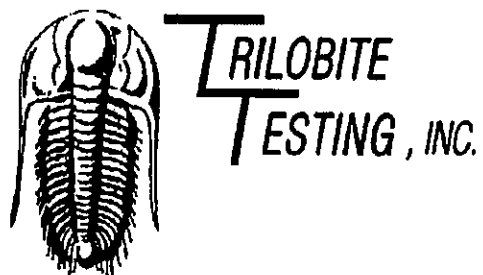
Serial #: 6668

Inside Great Plains Energy, Inc.

32-3s-23w Norton, KS

DST Test Number: 3





DRILL STEM TEST REPORT

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

PO Box 292
Wahoo, NE 68066

ATTN: Clayton Erickson

32-3s-23w Norton, KS

Persinger #5-32

Start Date: 2010.10.25 @ 01:14:15

End Date: 2010.10.25 @ 07:41:45

Job Ticket #: 40879 DST #: 4

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

ATTN: Clayton Erickson

Persinger #5-32

32-3s-23w Norton, KS

Job Ticket: 40879

DST#: 4

Test Start: 2010.10.25 @ 01:14:15

GENERAL INFORMATION:

Formation: **Arbuckle**

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

Time Tool Opened: **03:14:15**

Time Test Ended: **07:41:45**

Test Type: **Conventional Bottom Hole**

Tester: **Jason McLemore**

Unit No: **54**

Interval: **3774.00 ft (KB) To 3783.00 ft (KB) (TVD)**

Total Depth: **3783.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2440.00 ft (KB)**

2435.00 ft (CF)

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

Serial #: 6668

Inside

Press@RunDepth: **351.07 psig @ 3777.00 ft (KB)**

Start Date: **2010.10.25**

End Date:

2010.10.25

Capacity: **8000.00 psig**

Last Calib.: **2010.10.25**

Start Time: **01:14:17**

End Time:

07:41:45

Time On Btm: **2010.10.25 @ 03:14:00**

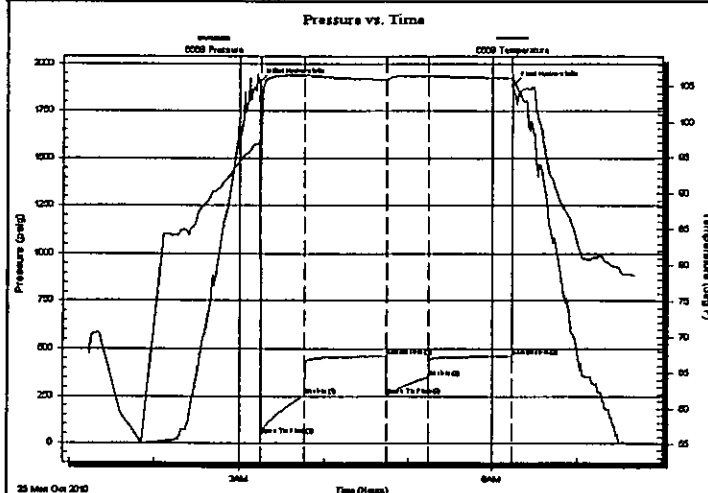
Time Off Btm: **2010.10.25 @ 06:14:45**

TEST COMMENT: IFP-Strong BOB in 5 Min.

ISI-Dead

FFP-Good Blow BOB in 11 Min.

FSI-Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1902.15	97.24	Initial Hydro-static
1	39.14	96.56	Open To Flow (1)
32	251.09	106.46	Shut-In(1)
90	458.60	105.81	End Shut-In(1)
91	254.70	105.78	Open To Flow (2)
121	351.07	106.39	Shut-In(2)
180	458.86	106.06	End Shut-In(2)
181	1885.85	106.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
660.00	Muddy Water-95%W-5%M	8.14
5.00	Clean Oil	0.07

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.

Persinger #5-32

PO Box 292
Wahoo, NE 68066

32-3s-23w Norton, KS

Job Ticket: 40879

DST#: 4

ATTN: Clayton Erickson

Test Start: 2010.10.25 @ 01:14:15

Tool Information

Drill Pipe:	Length: 3631.00 ft	Diameter: 3.80 inches	Volume: 50.93 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	50000.00 lb
		Total Volume:	51.53 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3774.00 ft			Final	44000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	9.00 ft				
Tool Length:	37.00 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			3747.00	
Shut In Tool	5.00			3752.00	
Hydraulic tool	5.00			3757.00	
Jars	5.00			3762.00	
Safety Joint	2.00			3764.00	
Packer	5.00			3769.00	28.00 Bottom Of Top Packer
Packer	5.00			3774.00	
Stubb	1.00			3775.00	
Perforations	2.00			3777.00	
Recorder	0.00	6668	Inside	3777.00	
Recorder	0.00	8673	Outside	3777.00	
Perforations	3.00			3780.00	
Bullnose	3.00			3783.00	9.00 Bottom Packers & Anchor
Total Tool Length:	37.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy, Inc.

Persinger #5-32

PO Box 292
Wahoo, NE 68066

32-3s-23w Norton, KS

Job Ticket: 40879

DST#: 4

ATTN: Clayton Erickson

Test Start: 2010.10.25 @ 01:14:15

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:

64000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
660.00	Muddy Water-95%W-5%M	8.138
5.00	Clean Oil	0.070

Total Length: 665.00 ft

Total Volume: 8.208 bbl

Num Fluid Samples: 0

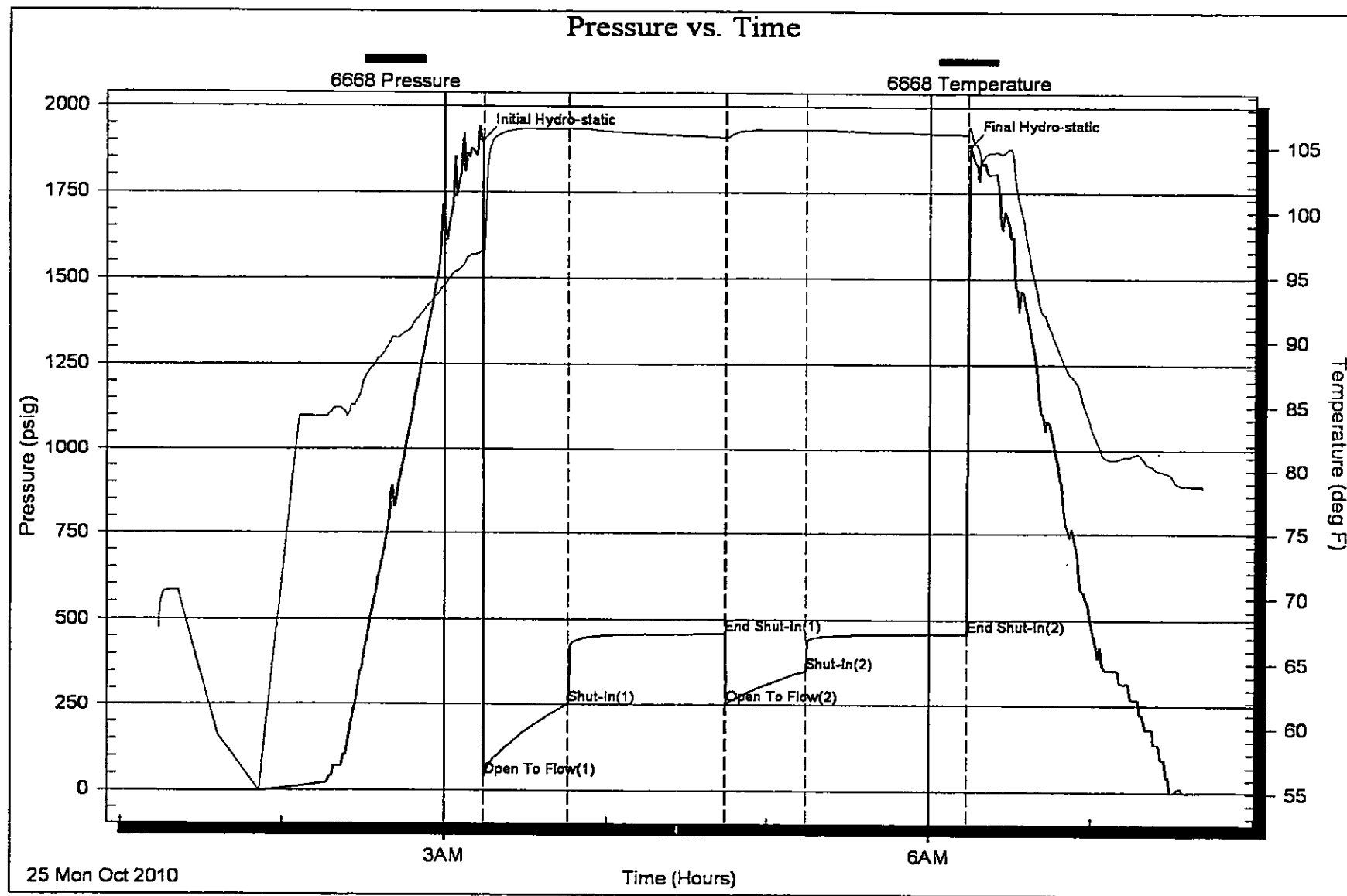
Num Gas Bombs: 0

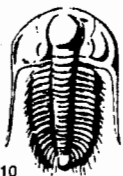
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

REC-000-1
OCT 26 2010

Test Ticket

NO. 04087614963

Well Name & No. Persinger #5-32 Test No. 1 Date 10-22-10
 Company Great Plains Energy, Inc. Elevation 2440 KB 2435 GL
 Address PO Box 292, Wahoo, NE 68066
 Co. Rep / Geo. Clayton Erickson Rig WW #8
 Location: Sec. 32 Twp. 3s Rge. 23w Co. Norton State KS

Interval Tested 3487-3575 Zone Tested Toronto - C
 Anchor Length 88 Drill Pipe Run 3353 Mud Wt. 9.1
 Top Packer Depth 3482 Drill Collars Run 123 Vis 55
 Bottom Packer Depth 3487 Wt. Pipe Run 0 WL 6.8
 Total Depth 3575 Chlorides 1,000 ppm System LCM trace
 Blow Description IFP - Weak Blow, Built to 1"
FSI - Dead
FFP - Weak Blow, Built to 1/2"
FSI - Dead

Rec	Feet of	%gas	%oil	%water	%mud
<u>125</u>	<u>Drilling Mud</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 125 BHT 99° Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

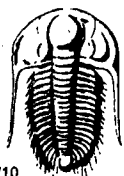
(A) Initial Hydrostatic <u>1722</u>	☒ Test <u>1125</u>	T-On Location <u>20:15</u>
(B) First Initial Flow <u>17</u>	☒ Jars <u>250</u>	T-Started <u>21:15</u>
(C) First Final Flow <u>43</u>	☒ Safety Joint <u>75</u>	T-Open <u>22:52</u>
(D) Initial Shut-In <u>1184</u>	☐ Circ Sub	T-Pulled <u>2:37</u>
(E) Second Initial Flow <u>45</u>	☐ Hourly Standby	T-Out <u>4:20</u>
(F) Second Final Flow <u>77</u>	☒ Mileage <u>80 RT 100</u>	Comments _____
(G) Final Shut-In <u>1170</u>	☐ Sampler	
(H) Final Hydrostatic <u>1711</u>	☐ Straddle	☐ Ruined Shale Packer
	☐ Shale Packer	☐ Ruined Packer
	☐ Extra Packer	☐ Extra Copies
	☐ Extra Recorder	Sub Total <u>0</u>
	☐ Day Standby	Total <u>1550</u>
	☐ Accessibility	MP/DST Disc't _____
	Sub Total <u>1550</u>	

Initial Open 30
 Initial Shut-In 60
 Final Flow 45
 Final Shut-In 90

Approved By _____

Our Representative _____

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RECEIVED
OCT 26 2010

Test Ticket

NO. 040877

BT.

Well Name & No. Persinger #5-32 Test No. 2 Date 10-23-10
Company Great Plains Energy, Inc. Elevation 2440 KB 2435 GL
Address PO Box 292, Wahoo, NE. 68066
Co. Rep / Geo. Clayton Erickson Rig WW#8
Location: Sec. 32 Twp. 35 Rge. 23~ Co. Norton State KS

Interval Tested 3588-3628 Zone Tested E-F
Anchor Length 40 Drill Pipe Run 3447 Mud Wt. 9.1
Top Packer Depth 3583 Drill Collars Run 123 Vis 55
Bottom Packer Depth 3588 Wt. Pipe Run 0 WL 6.8
Total Depth 3628 Chlorides 1400 ppm System LCM 1/2#

Blow Description IFP- Good Blow, BOB in 8 min.

ISI- Blowback Built to 6"

FFP- Good Blow, BOB in 11 min.

FSI- Blowback Built to 5"

Rec	Feet of	%gas	%oil	%water	%mud
<u>220</u>	<u>Clear Oil</u>		50		
<u>120</u>	<u>Mud Cut Oil</u>		<u>50</u>		<u>50</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
<u>510'</u>	<u>GIP</u>	%gas	%oil	%water	%mud

Rec Total 390 BHT 103 Gravity 30 API RW @ ° F Chlorides ppm

(A) Initial Hydrostatic 1786 ~~1125~~ Test 1125
(B) First Initial Flow 22 ~~250~~ Jars 250
(C) First Final Flow 91 ~~75~~ Safety Joint 75
(D) Initial Shut-In 1014 ☐ Circ Sub
(E) Second Initial Flow 108 ☐ Hourly Standby
(F) Second Final Flow 169 ~~80 RT~~ Mileage 100
(G) Final Shut-In 766 ☐ Sampler
(H) Final Hydrostatic 1694 ☐ Straddle

T-On Location 13:31
T-Started 14:04
T-Open 15:36
T-Pulled 20:06
T-Out 22:02

Comments

Initial Open 30
Initial Shut-In 60
Final Flow 60
Final Shut-In 120

☐ Shale Packer
☐ Extra Packer
☐ Extra Recorder
☐ Day Standby
☐ Accessibility
Sub Total 1550

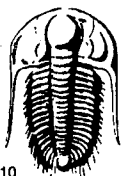
☐ Ruined Shale Packer
☐ Ruined Packer
☐ Extra Copies
Sub Total 0
Total 1550

MP/DST Disc't

Approved By

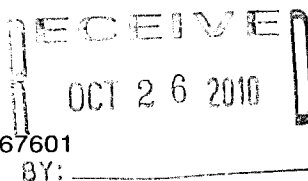
Our Representative Jason McLenore *Thank You*

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**TRILOBITE
TESTING INC.**

P.O. Box 1733 • Hays, Kansas 67601



Test Ticket

NO. 040878

Well Name & No. Persinger #5-32 Test No. 3 Date 10-24-10
Company Great Plains Energy, Inc. Elevation 2440 KB 2435 GL
Address PO Box 292, Wahoo, NE 68066
Co. Rep / Geo. Rich Bell Rig WW #8
Location: Sec. 32 Twp. 3s Rge. 23w Co. Norton State KS

Interval Tested 3754-3773 Zone Tested Gorham Sand
Anchor Length 19' Drill Pipe Run 3631 Mud Wt. 9.2
Top Packer Depth 3749 Drill Collars Run 123 Vis 56
Bottom Packer Depth 3754 Wt. Pipe Run 0 WL 6.8
Total Depth 3773 Chlorides 1400 ppm System LCM 1/2"
Blow Description IFP- Weak Blow, Built to 3"
ISI- Dead
FFP- Weak Blow, Built to 3"
FSI- Dead

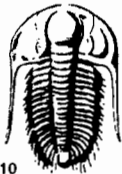
Rec	Feet of	%gas	%oil	%water	%mud
<u>85</u>	<u>Clean Oil</u>				
<u>5</u>	<u>Muddy Oil</u>	<u>80</u>		<u>20</u>	

Rec Total 90 BHT 103 Gravity 29 API RW @ °F Chlorides ppm
(A) Initial Hydrostatic 1882 ☒ Test 1125' T-On Location 13:05
(B) First Initial Flow 22 ☒ Jars 230' T-Started 13:29
(C) First Final Flow 25 ☒ Safety Joint 75' T-Open 15:01
(D) Initial Shut-In 440 ☐ Circ Sub T-Pulled 19:01
(E) Second Initial Flow 32 ☐ Hourly Standby T-Out 20:25
(F) Second Final Flow 45 ☒ Mileage 80 RT 100' Comments
(G) Final Shut-In 444 ☐ Sampler
(H) Final Hydrostatic 1912 ☐ Straddle

Initial Open 30 ☐ Shale Packer ☐ Ruined Shale Packer
Initial Shut-In 60 ☐ Extra Packer ☐ Ruined Packer
Final Flow 60 ☐ Extra Recorder ☐ Extra Copies
Final Shut-In 90 ☐ Day Standby Sub Total 1550'
☐ Accessibility Total 1550'
Sub Total 1550' MP/DST Disc't

Approved By _____ Our Representative _____

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RECEIVED
OCT 26 2010

Test Ticket

NO. 040874

Well Name & No. Persinger #5-32 Test No. 4 Date 10-25-10
Company Great Plains Energy, Inc. Elevation 2440 KB 2435 GL
Address PO Box 292, Wahoo, NE. 68066
Co. Rep / Geo. Rich Bell Rig WW #8
Location: Sec. 32 Twp. 3S Rge. 23W Co. Norton State KS

Interval Tested 3774-3783 Zone Tested Arbuckle
Anchor Length 9' Drill Pipe Run 3631 Mud Wt. 9.2
Top Packer Depth 3769 Drill Collars Run 123 Vis 56
Bottom Packer Depth 3774 Wt. Pipe Run 0 WL 6.8
Total Depth 3783 Chlorides 1400 ppm System LCM 1/2 #
Blow Description IFP- Strong, BOB in 5 min.
ISI- Dead

FFP- Good Blow, BOB in 11 min
FSI- Dead

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Clean Oil</u>				
<u>660</u>	<u>Muddy Water</u>		<u>95</u>	<u>5</u>	

Rec Total 665 BHT 106 Gravity 28 API RW 0.120 @ 56 °F Chlorides _____ ppm

(A) Initial Hydrostatic 1902 ☒ Test 125
(B) First Initial Flow 39 ☒ Jars 250
(C) First Final Flow 251 ☒ Safety Joint 75
(D) Initial Shut-In 459 ☐ Circ Sub _____
(E) Second Initial Flow 255 ☐ Hourly Standby _____
(F) Second Final Flow 351 ☒ Mileage 80 RT 100
(G) Final Shut-In 459 ☐ Sampler _____
(H) Final Hydrostatic 1886 ☐ Straddle _____

T-On Location 1:10
T-Started 1:14
T-Open 3:15
T-Pulled 6:15
T-Out 8:06

Comments _____

Initial Open 30
Initial Shut-In 60
Final Flow 30
Final Shut-In 60

☐ Extra Packer _____
☐ Extra Recorder _____
☐ Day Standby _____
☐ Accessibility _____
Sub Total 1550

☐ Ruined Shale Packer _____
☐ Ruined Packer _____
☐ Extra Copies _____
Sub Total 0
Total 1550
MP/DST Disc't _____

Approved By _____

Our Representative Jason McJannet

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Thank
7/3/11