



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

6121 S. 58th St. Ste.B
Lincoln NE 68516

ATTN: Rich Bell

Moffet #2-32

32 2s 23w Norton,KS

Start Date: 2012.01.31 @ 15:40:00

End Date: 2012.01.31 @ 22:24:30

Job Ticket #: 042031 DST #: 1

Great Plains Energy Inc. 32 2s 23w Norton,KS Moffet #2-32 DST # 1 Toronto 2012.01.31

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

ORIGINAL

Printed: 2012.02.09 @ 10:43:44



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Great Plains Energy Inc.
6121 S. 58th St. Ste.B
Lincoln NE 68516
ATTN: Rich Bell

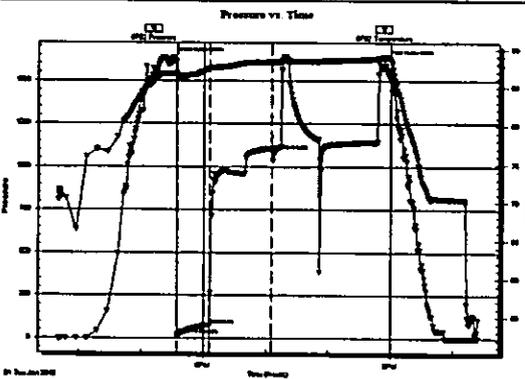
32 2s 23w Norton,KS
Moffet #2-32
Job Ticket: 042031 DST#: 1
Test Start: 2012.01.31 @ 15:40:00

GENERAL INFORMATION:

Formation: Toronto
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:34:30
Time Test Ended: 22:24:30
Test Type: Conventional Bottom Hole (Initial)
Tester: Chuck Kreuzer Jr.
Unit No: 36
Interval: 3330.00 ft (KB) To 3387.00 ft (KB) (TVD)
Total Depth: 3387.00 ft (KB) (TVD)
Reference Elevations: 2326.00 ft (KB)
2321.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good
KB to GRVCF: 5.00 ft

Serial #: 6752 Inside
Press@RunDepth: 78.38 psig @ 3333.00 ft (KB)
Start Date: 2012.01.31 End Date: 2012.01.31
Start Time: 15:40:05 End Time: 22:24:29
Capacity: 8000.00 psig
Last Calib.: 2012.01.31
Time On Btm: 2012.01.31 @ 17:30:30
Time Off Btm: 2012.01.31 @ 20:54:30

TEST COMMENT: IF: Weak blow, but to 5 in. over 30 mins.
IS: No blow back over 60 mins.
FF: no blow, flushed tool, weak blow died After sec.
FSI: No blow back over 60 mins.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1629.49	86.80	Initial Hydro-static
4	18.91	86.55	Open To Flow (1)
36	78.38	87.39	Shut-in(1)
95	1095.62	88.26	End Shut-in(1)
204	1617.06	89.01	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	w cm-50%w 50% m	0.59
7.00	mud-100%	0.10

Gas Rates

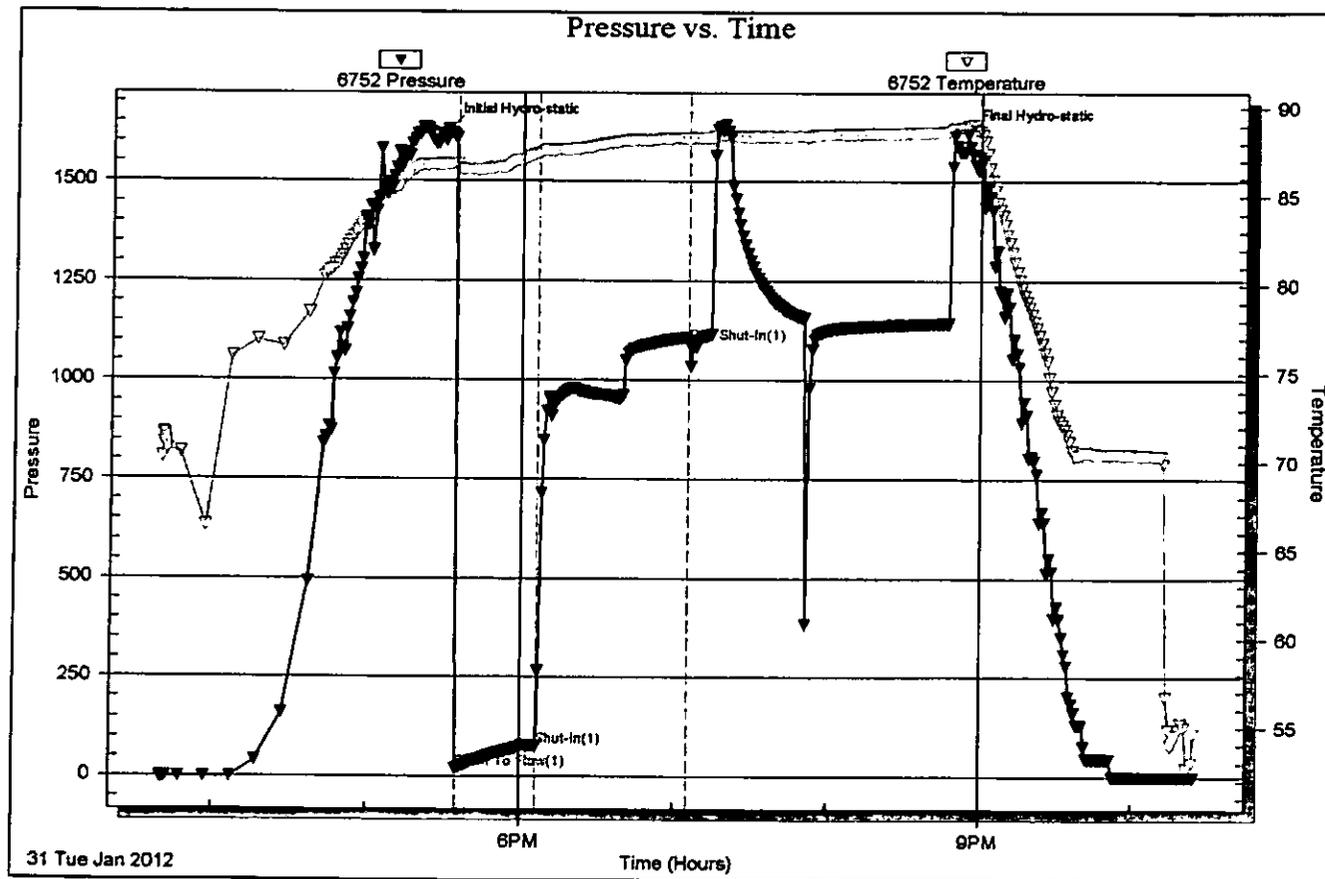
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

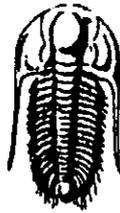
Serial #: 6752

Inside Great Plains Energy Inc.

Moffet #2-32

DST Test Number: 1





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

6121 S. 58th St. Ste.B
Lincoln NE 68516

ATTN: Rich Bell

Moffet #2-32

32 2s 23w Norton,KS

Start Date: 2012.02.01 @ 04:55:00

End Date: 2012.02.01 @ 11:47:00

Job Ticket #: 042032 DST #: 2

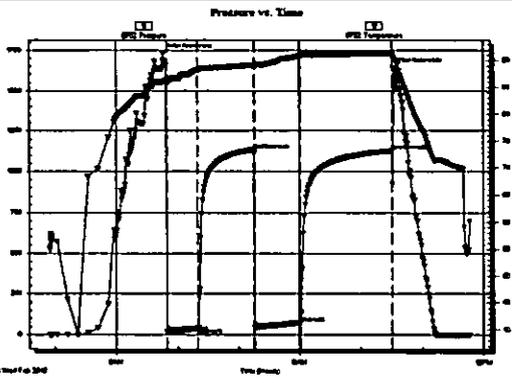
Great Plains Energy Inc. 32 2s 23w Norton,KS Moffet #2-32 DST # 2 LKC-C-0 2012.02.01

Trilobite Testing, Inc

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

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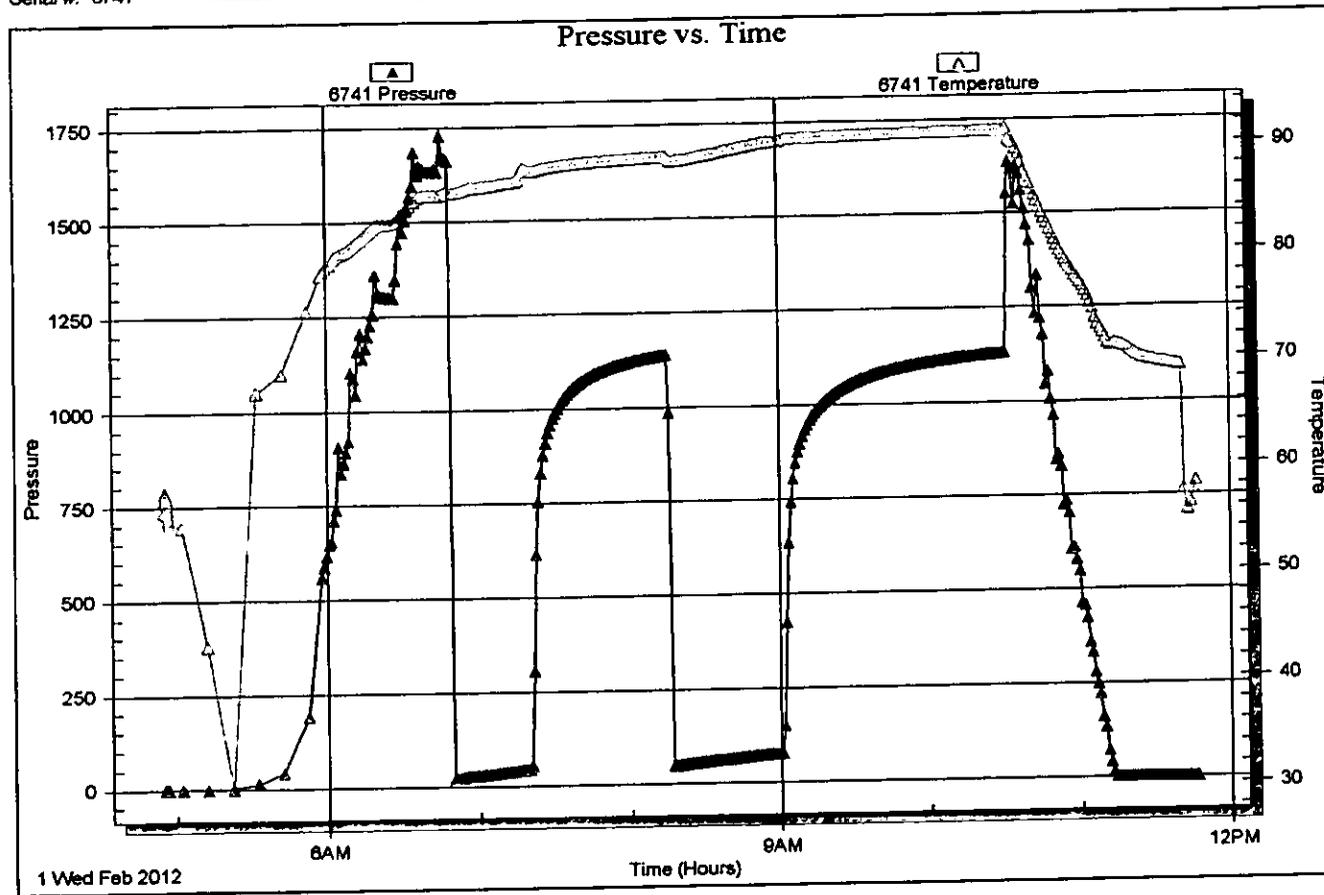
 TRILOBITE TESTING, INC	DRILL STEM TEST REPORT							
	Great Plains Energy Inc. 6121 S. 58th St. Ste.B Lincoln NE 68516 ATTN: Rich Bell	32 2s 23w Norton, KS Moffet #2-32 Job Ticket: 042032 DST#: 2 Test Start: 2012.02.01 @ 04:55:00						
GENERAL INFORMATION:								
Formation: LKC-C-D Deviated: No Whipstock ft (KB) Time Tool Opened: 06:49:30 Time Test Ended: 11:47:00		Test Type: Conventional Bottom Hole (Reset) Tester: Chuck Kreuzer Jr. Unit No. 36						
Interval: 3388.00 ft (KB) To 3420.00 ft (KB) (TVD) Total Depth: 3420.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Good		Reference Elevations: 2328.00 ft (KB) 2321.00 ft (CF) KB to GR/CF: 5.00 ft						
Serial #: 6752 Inside								
Press@RunDepth: 73.31 psig @ 3389.00 ft (KB) Start Date: 2012.02.01 End Date: 2012.02.01 Start Time: 04:55:05 End Time: 11:46:59		Capacity: 8000.00 psig Last Calib.: 2012.02.01 Time On Btm: 2012.02.01 @ 06:46:00 Time Off Btm: 2012.02.01 @ 10:32:00						
TEST COMMENT: IF: Weak blow, Built to 3 in. over 30 mins. IS: No blow back over 60 mins. FF: Weak blow, Built to 1/8 in. over 45 mins. FS: No blow back over 90 mins.								
	PRESSURE SUMMARY							
	Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation				
	0	1728.09	86.14	Initial Hydro-static				
	4	16.92	86.16	Open To Flow (1)				
	34	41.45	88.30	Shut-In(1)				
	89	1136.63	89.15	End Shut-In(1)				
	90	44.14	88.94	Open To Flow (2)				
	135	73.31	90.87	Shut-In(2)				
	225	1128.81	91.31	End Shut-In(2)				
	226	1639.49	90.54	Final Hydro-static				
Recovery				Gas Rates				
Length (ft)	Description	Volume (bbl)						
127.00	water	0.69						
* Recovery from multiple tests								

Serial #: 6741

Outside Great Plains Energy Inc.

Moffet #2-32

DST Test Number: 2





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

6121 S. 58th St. Ste.B
Lincoln NE 68516

ATTN: Rich Bell

Moffet #2-32

32 2s 23w Norton,KS

Start Date: 2012.02.01 @ 20:15:00

End Date: 2012.02.02 @ 01:23:00

Job Ticket #: 042033 DST #: 3

Great Plains Energy Inc. 32 2s 23w Norton,KS Moffet #2-32 DST # 3 LKCH 2012.02.01

Trilobite Testing, Inc

PO Box 362 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.

32 2s 23w Norton, KS

6121 S. 58th St. Ste.B
Lincoln NE 68516

Moffat #2-32

Job Ticket: 042033 DST#: 3

ATTN: Rich Bel

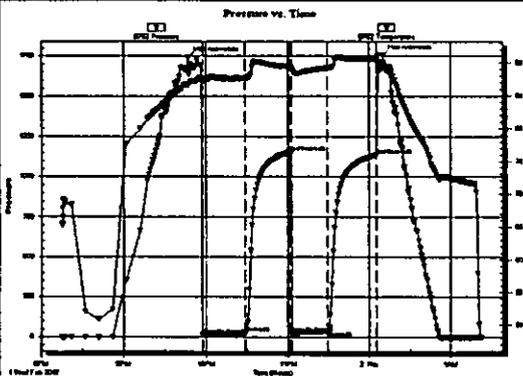
Test Start: 2012.02.01 @ 20:15:00

GENERAL INFORMATION:

Formation: LKC-H
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 21:57:30
 Time Test Ended: 01:23:00
 Interval: 3459.00 ft (KB) To 3488.00 ft (KB) (TVD)
 Total Depth: 3488.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Chuck Kreutzer Jr.
 Unit No: 36
 Reference Elevations: 2326.00 ft (KB)
 2321.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6752 Inside
 Press@RunDepth: 36.44 psig @ 3462.00 ft (KB)
 Start Date: 2012.02.01 End Date: 2012.02.02
 Start Time: 20:15:05 End Time: 01:22:59
 Capacity: 8000.00 psig
 Last Calib.: 2012.02.02
 Time On Btm: 2012.02.01 @ 21:47:00
 Time Off Btm: 2012.02.02 @ 00:10:30

TEST COMMENT: IF: Weak blow, Died in 5 mins.
 IS: No blow back over 30 mins.
 FF: No blow over 30 mins.
 FST: NO blow back over 30 mins.



PRESSURE SUMMARY			
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1739.00	86.71	Initial Hydro-static
11	14.74	87.40	Open To Flow (1)
42	25.60	87.69	Shut-In (1)
75	1155.02	89.50	End Shut-In (1)
76	28.47	89.07	Open To Flow (2)
102	36.44	89.19	Shut-In (2)
139	1135.21	90.67	End Shut-In (2)
144	1755.54	89.98	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
10.00	mud-100%rn	0.05

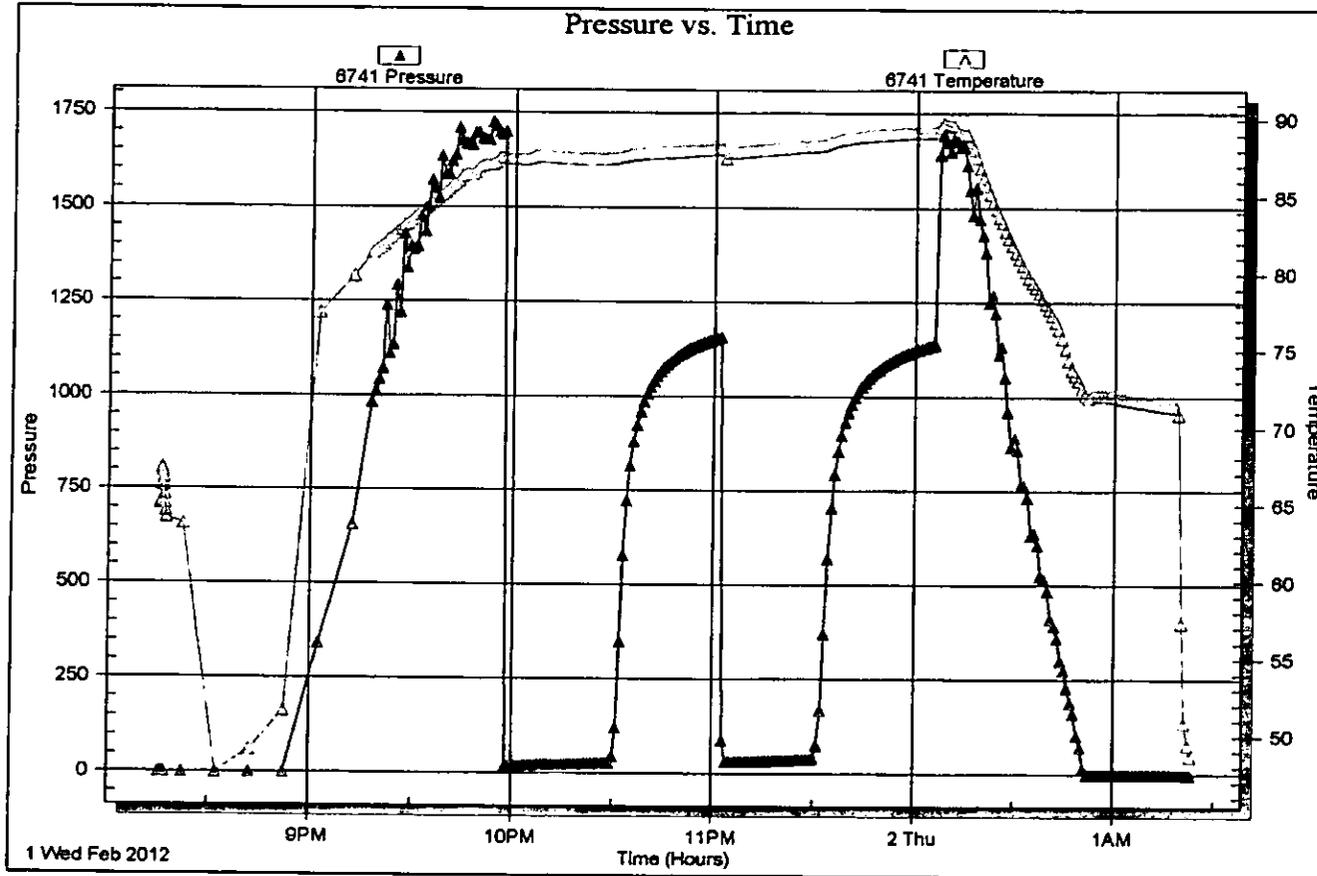
Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Serial #: 6741

Outside Great Plains Energy Inc.

Moffet #2-32

DST Test Number: 3





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

6121 S. 58th St. Ste.B
Lincoln NE 68516

ATTN: Rich Bell

Moffet #2-32

32 2s 23w Norton,KS

Start Date: 2012.02.02 @ 09:10:00

End Date: 2012.02.02 @ 15:37:30

Job Ticket #: 042034 DST #: 4

Great Plains Energy Inc. 32 2s 23w Norton,KS Moffet #2-32 DST # 4 LKC-JK 2012.02.02

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

Printed: 2012.02.09 @ 10:44:36



**TRIOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Great Plains Energy Inc.

32 2s 23w Norton, KS

6121 S. 58th St. Ste. B
Lincoln NE 68516

Moffet #2-32

Job Ticket: 042034

DST#: 4

ATTN: Rich Bell

Test Start: 2012.02.02 @ 09:10:00

GENERAL INFORMATION:

Formation: LKC-J,K

Deviated: No Whipstock: ft (KB)

Test Type: Conventional Bottom Hole (Reset)

Time Tool Opened: 10:34:30

Tester: Chuck Kreuzer Jr.

Time Test Ended: 15:37:30

Unit No: 36

Interval: 3488.00 ft (KB) To 3537.00 ft (KB) (TVD)

Reference Elevations: 2326.00 ft (KB)

Total Depth: 3537.00 ft (KB) (TVD)

2321.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6762

Inside

Press@RunDepth: 160.03 psig @ 3492.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.02.02 End Date:

2012.02.02

Last Calib.: 2012.02.02

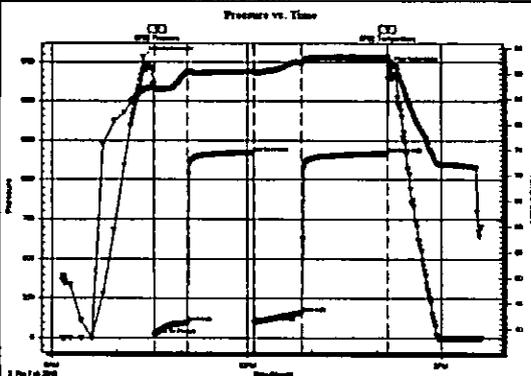
Start Time: 09:10:05 End Time:

15:37:29

Time On Btm: 2012.02.02 @ 10:24:30

Time Off Btm: 2012.02.02 @ 14:11:00

TEST COMMENT: IF: Weak blow built to 8 in. over 30 mins
IS: No blow back
FF: Weak blow built to 8 in. over 45 mins.
FS: No blow back



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1782.46	85.80	Initial Hydro-static
10	20.31	87.03	Open To Flow (1)
41	96.26	90.28	Shut-in(1)
101	1171.50	90.49	End Shut-in(1)
102	97.80	90.34	Open To Flow (2)
146	160.03	92.15	Shut-in(2)
225	1165.01	83.24	End Shut-in(2)
227	1715.50	92.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	water	2.27

* Recovery from multiple tests

Gas Rates

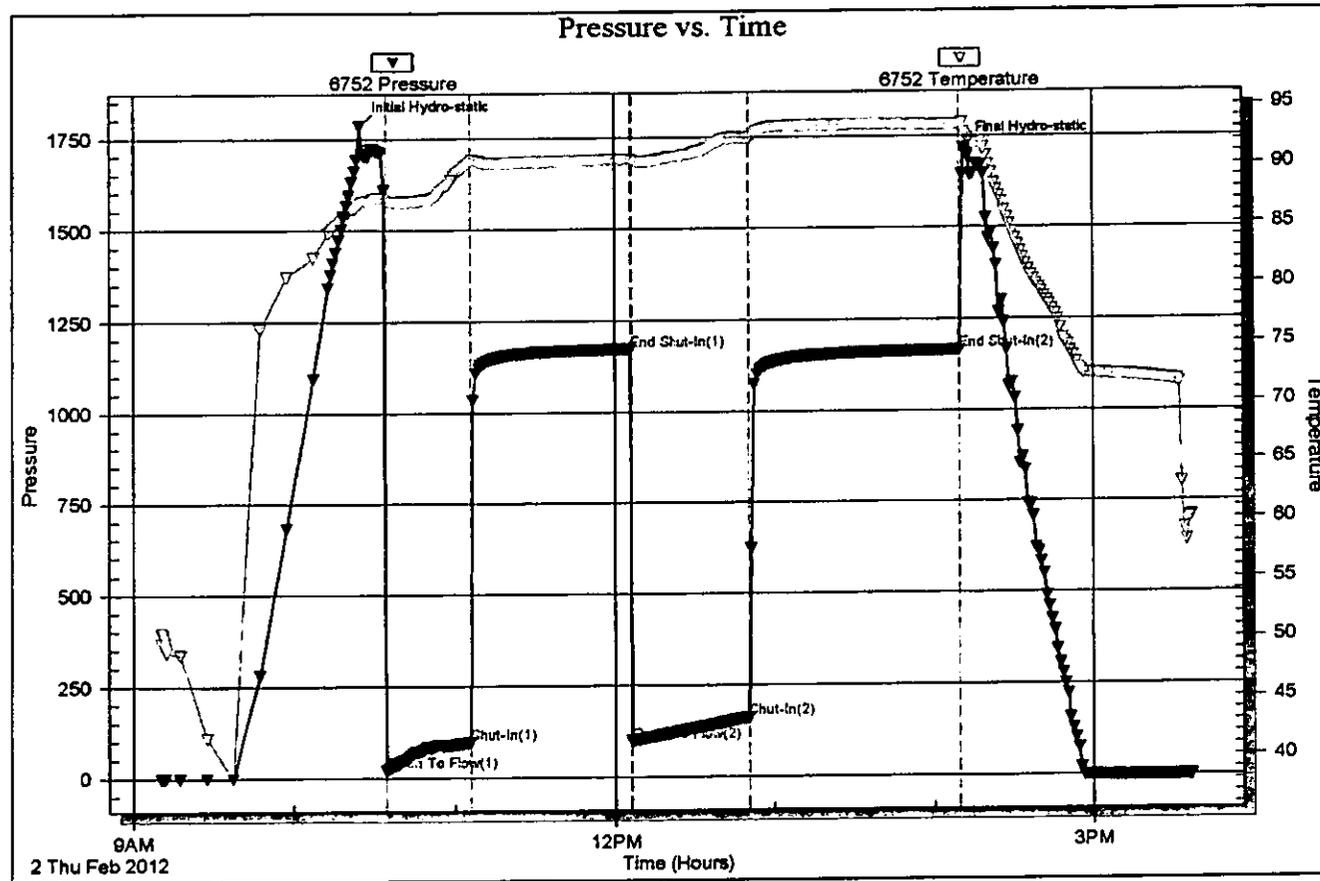
Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Serial #: 6752

Inside Great Plains Energy Inc.

Moffet #2-32

DST Test Number: 4





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

6121 S. 58th St. Ste.B
Lincoln NE 68516

ATTN: Rich Bell

Moffet #2-32

32 2s 23w Norton,KS

Start Date: 2012.02.02 @ 23:15:00

End Date: 2012.02.03 @ 04:26:00

Job Ticket #: 042035 DST #: 5

Great Plains Energy Inc. 32 2s 23w Norton,KS Moffet #2-32 DST # 5 Arduckle 2012.02.02

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

Printed: 2012.02.09 @ 10:44:54



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Great Plains Energy Inc.

32 2s 23w Norton, KS

6121 S. 58th St. Ste.B
Lincoln NE 68516

Moffet #2-32

Job Ticket: 042035 DST#: 5

ATTN: Rich Bell

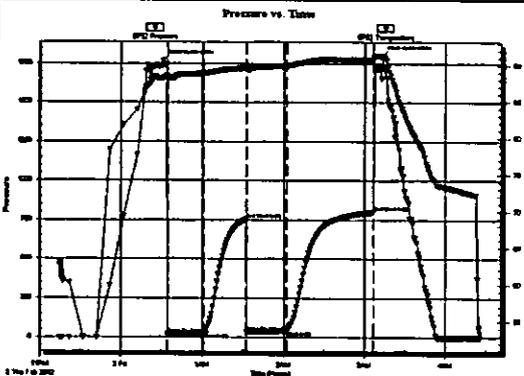
Test Start: 2012.02.02 @ 23:15:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: **No Whipstock** ft (KB)
 Test Type: **Conventional Bottom Hole (Reset)**
 Time Tool Opened: **00 34:30**
 Tester: **Chuck Kreutzer Jr.**
 Time Test Ended: **04:26:00**
 Unit No: **36**
 Interval: **3552.00 ft (KB) To 3596.00 ft (KB) (TVD)**
 Reference Elevations: **2326.00 ft (KB)**
 Total Depth: **3596.00 ft (KB) (TVD)**
2321.00 ft (CF)
 Hole Diameter: **7.88 inches** Hole Condition: **Good**
 KB to GR/CF: **5.00 ft**

Serial #: **6752** Inside
 Press@RunDepth: **43.46 psig @ 3555.00 ft (KB)** Capacity: **8000.00 psig**
 Start Date: **2012.02.02** End Date: **2012.02.03** Last Calib.: **2012.02.03**
 Start Time: **23:15:05** End Time: **04:25:59** Time On Btm: **2012.02.03 @ 00:31:00**
 Time Off Btm: **2012.02.03 @ 03:13:00**

TEST COMMENT: IF: Weak blow built to 1/4 in. over 30 mins.
 IS: No blow back over 30 mins.
 FF: No blow over 30 mins.
 FSI: No blow back over 30 mins.



PRESSURE SUMMARY

Time (Mn)	Pressure (psig)	Temp (deg F)	Annotation
0	1768.41	88.19	Initial Hydro-static
4	19.00	88.19	Open To Flow (1)
30	28.60	88.89	Shut-In (1)
61	755.99	89.60	End Shut-In (1)
62	32.99	89.45	Open To Flow (2)
92	43.46	89.90	Shut-In (2)
156	798.81	90.84	End Shut-In (2)
162	1801.81	91.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
63.00	Hocw m-50%o40%ml0%w	0.31

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mscfd)

Serial #: 6741

Outside Great Plains Energy Inc.

Moffet #2-32

DST Test Number: 5

