



**WELL COMPLETION FORM**  
**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date      Date Reached TD      Completion Date or Recompletion Date

API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**AFFIDAVIT**

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

**KCC Office Use ONLY**

- Letter of Confidentiality Received  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
---	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  
 Flowing    Pumping    Gas Lift    Other (Explain) \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
-----------------------------------	-----------	---------	-------------	---------------	---------

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
---	---	--

Form	ACO1 - Well Completion
Operator	Great Plains Energy, Inc.
Well Name	Moffett 3-32
Doc ID	1138559

Tops

Name	Top	Datum
Anhydrite	1920	+432
B/Anhydrite	1948	+404
Topeka	3172	-820
Heebner	3353	-1001
Toronto	3383	-1031
Lansing	3996	-1044
BKC	3575	-1223
Arbuckle	3613	-1261
Granite	3634	-1282

# ALLIED OIL & GAS SERVICES, LLC 050945

Federal Tax I.D.# 20-5976804

REMIT TO P.O. BOX 93999  
SOUTHLAKE, TEXAS 76092

SERVICE POINT  
Oakley

DATE	10-23-12	SEC	3-2	TWP.	2	RANGE	23	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE	<u>Mo #128</u>	WELL#	3-32	LOCATION	Norton	2#2	1/4 - 1/4 W	COUNTY	Norton	7:30	7:30
OLD OR NEW	(Circle one)			Sinto				STATE	Ks.		

CONTRACTOR Fritzler OWNER Same

HOLE SIZE 5 1/2 T.D. 1930  
CASING SIZE 2 3/8 DEPTH 1930  
TUBING SIZE 2 3/8 DEPTH 1930  
DRILL PIPE DEPTH

TOOL DEPTH  
PRES. MAX DEPTH  
MEAS. LINE MINIMUM  
CEMENT LEFT IN CSG. SHOE JOINT  
PERFS.  
DISPLACEMENT 7.52 EQUIPMENT

PUMP TRUCK CEMENTER A. Queen  
1428-281 HELPER Tyler Phillips  
3 BULK TRUCK DRIVER DJ Gray  
3 BULK TRUCK DRIVER

REMARKS:  
Load Hole - Pressure System 1000\*  
Spot Sand - Spot mud - Open Port Collar  
Wump Rest of mud - mix 225 sks Cement  
Wase port collar - Pressure System - Wash  
Reverse out - Wash Sand off Plug

CHARGE TO: Grant Plains Energy  
TREET \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

to: Allied Oil & Gas Services, LLC.  
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was one to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Reston A. King  
SIGNATURE \_\_\_\_\_

COMMON			
POZMIX			
GEL			
CHLORIDE			
ASC			
ALU	225 sks	\$15.95	\$3588.75
Flo Seal	56 #	\$2.92	\$166.32
Sand	2 sks	\$14.40	\$28.80
HANDLING	3% of 98 CFM	\$2.98	\$984.51
MILEAGE	16.95 x 85x	\$2.00	\$3614.25
			TOTAL \$8381.73

DEPTH OF JOB	1930'	
PUMP TRUCK CHARGE		\$2249.84
EXTRA FOOTAGE		
MILEAGE .85		\$17.70
MANIFOLD		
LU mileage		\$374.00
TOTAL		\$3278.34

PLUG & FLOAT EQUIPMENT	
TOTAL	

SALES TAX (if any) 266.26  
TOTAL CHARGES 11,660.07

DISCOUNT 356.91 IF PAID IN 30 DAYS

21576





**CONSOLIDATED**  
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

TICKET NUMBER 37251

LOCATION Oakley, KS

FOREMAN Kelly babe  
Walt Diakel

**FIELD TICKET & TREATMENT REPORT**  
**CEMENT**

DATE <u>01/20/12</u>	CUSTOMER # <u>3282</u>	WELL NAME & NUMBER <u>Mallet 3-32</u>	SECTION <u>32</u>	TOWNSHIP <u>2</u>	RANGE <u>83</u>	COUNTY <u>KS</u>
CUSTOMER <u>Great Plains Energy</u>	MAILING ADDRESS		TRUCK # <u>399</u>	DRIVER <u>Jerry P</u>	TRUCK #	DRIVER
CITY	STATE	ZIP CODE	<u>566</u>	<u>Mike M</u>		

JOB TYPE Prod HOLE SIZE 7 7/8 HOLE DEPTH \_\_\_\_\_  
 CASING DEPTH 5683 DRILL PIPE \_\_\_\_\_ TUBING PCOP #43 OTHER PCO 1932  
 SLURRY WEIGHT 147 WATER gal/sk \_\_\_\_\_ CEMENT LEFT IN CASING 21,73 (Shae)  
 DISPLACEMENT 89.3 MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Safety meeting, Rigged up on 60x60 Rig #6 ran float equip, scratchers 3, 4, 5, 6, 7, 8, 9, 10 cent. 3, 5, 7, 9, 11, 13, 15, 42 baskets 4, 6, 43 ran pipe to bottom & circulated for 1 1/2 hr mixed 30 scks OWC 5# Kol-seal, pumped 50nl water, mud flush, 20 bbl KCL 8 1/2" water with 200# lift & Plug landed @ 1500 ft released pressure, float held, washed out truck, rigged down.

*Walt Diakel*  
*Kelly babe*

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401P	1	PUMP CHARGE	2700.00	2700.00
5404P	60	MILEAGE	5.00	300.00
1126	205 scks	OWC	22.55	4622.75
1102A	102.5#	Kol-seal	5.6	574.00
5407	9.63	Tan Mileage	1.67	964.00
4159	1	5 1/2 AFU float shoe (F)	413.00	413.00
4104	3	5 1/2 basket (w)	276.00	828.00
41130	8	5 1/2 centralizer (F)	58.00	464.00
41314	410	5 1/2 resin setting scratcher	78.00	3120.00
41454	1	5 1/2 latch down w/ plug (F)	303.00	303.00
11446	500 gal	Mud flush	1.00	500.00
1215	2 gal	KCL	35.20	71.00
4285	1	5 1/2 port collar (F)	207.50	207.50
		<b>COMP</b>		
			16,935.95	
			1693.60	
			15242.35	
		SALES TAX	818.49	
		ESTIMATED TOTAL	11000.84	

DATE 10-11-12  
 AUTHORIZATION  TITLE \_\_\_\_\_  
 SALES TAX \_\_\_\_\_  
 ESTIMATED TOTAL 11000.84  
 DATE 10-11-12

I acknowledge that the payment terms, unless specifically amended in writing on the back of this form, are subject to the standard terms and conditions of the form or in the customer's account records, at our office, and conditions of service on the back of this form.

253596



REMIT TO  
RR 1 BOX 90 D  
HOXIE, KS 67740

**SCHIPPERS OIL FIELD SERVICE L.L.C.**

IN 630

DATE	SEC.	RANGE/TWP.	2-22	CALLLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE	Moffatt	WELL #	3-32			COUNTY	STATE

CONTRACTOR	NW6	OWNER	Green Hill
TYPE OF JOB	Surf face	CEMENT	
HOLE SIZE	12 1/4	AMONT ORDERED	
CASING SIZE	8 5/8		
TUBING SIZE			
DRILL PIPE	4 1/2		
TOOL			
PRES. MAX		COMMON	@ 15'
DISPLACEMENT	1175	POZMIX	@
CEMENT LEFT IN CSG.		GEL	@ 26
PERFS		CHLORIDE	@ 52
EQUIPMENT		ASC	@
PUMP TRUCK			@
#	2		@
BULK TRUCK			@
#	1		@
BULK TRUCK			@
#			@
		HANDLING	@
		MILEAGE	@
		TOTAL	

REMARKS	SURFACE	SERVICE	
	High Down @ 5:30 PM	DEPT OF JOB	@
		PUMP TRUCK CHARGE	@
		EXTRA FOOTAGE	@
		MILEAGE	@ 6.5
		MANIFOLD	@
			@ 2.4
		TOTAL	

CHARGES TO:	Green Hill
STREET	
CITY	
	STATE
	ZIP

To: Schippers Oil Field Services L.L.C.

You are hereby requested to rent cementing equipment and furnish staff to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "TERMS AND CONDITIONS" listed on the reverse side.

PLUG & FLOAT EQUIPMENT	@
	@
	@
	@
	@
	@
TAX	TOTAL
TOTAL CHARGE	
DISCOUNT (IF PAID IN 20 DAYS)	

SIGNATURE *[Signature]* PRINTED NAME *Teresa Brown*

---

**GREAT PLAINS ENERGY, INC.**  
**6121 S. 58th St., Ste B**  
**Lincoln, NE 68516**

---

**MOFFET #3-32**  
**Sec 32, Twp 02S, R 23W**  
**Norton Co., KS**

## **Pipe Set**

*Prepared for:* Dan Blankenau

10/17/12

*Prepared by:*  
X-Hand Engineering, Inc.  
Harold Bellerive  
1269 F. Road  
Morland, KS 67650  
(785-627-4531)

GREAT PLAINS ENERGY, INC.  
Moffet #3-32  
October 10, 2012

T.D. at 3680'

Anhydrite at 1920'-1948'

Ran joint #1 as shoe joint (21.72'), joints #3 through #43 (port collar put on top of joint #43 at 1932'), joints #44 through #87, joint #89 then joint #2. Joints #88 and #90 are out (82.31'). Scratchers put on joints #3, #4, #5, #6, #7, #8, #9, #10, #11 and #12. Centralizers put on joints #3, #5, #7, #9, #11, #13, #15 and #42. Baskets put on joints #4, #16 and #43 (clamped 5' down from top collar).

Total 5½", 14#	3680.41'
Float Equipment	<u>3.00'</u>
Total	3683.41'

10:00 p.m. Started in hole with pipe.

11:20 p.m. Tagged bottom. Rigged up Consolidated.

11:45 p.m. Broke circulation.

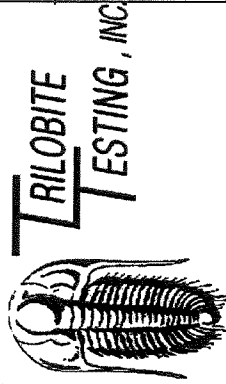
1:15 p.m. Viscosity down to 37.

1:25 p.m. Pumped mud flush and KCL. Plugged rat hole with 30 sacks. Mixed 175 sacks OWC. Washed up truck.

1:55 p.m. Started displacement—58 bbls caught cement, 60 bbls at 225#, 65 bbls at 325#, 70 bbls at 450#, 75 bbls at 575#, 80 bbls at 700# and 85 bbls at 775#.

2:15 a.m. Landed plug with 86¼ bbl at 1500#. Released—held.





**DRILL STEM TEST REPORT**

Great Plains Energy, Inc.

32-2s-23w Norton,KS

6121 S 58th St. STE - B  
Lincoln, NE 68516

Moffett #3-32

Job Ticket: 48082

DST#: 3

ATTN: Clayton Erickson

Test Start: 2012.10.08 @ 18:11:00

**GENERAL INFORMATION:**

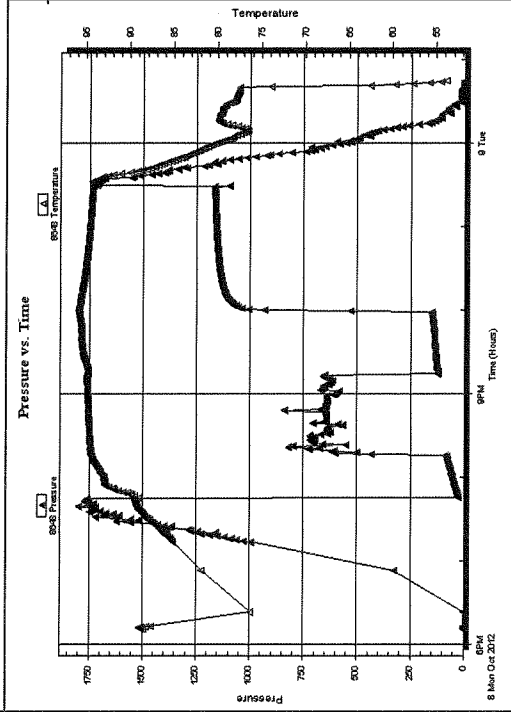
Formation: LKC "K"      Test Type: Conventional Bottom Hole (Initial)  
 Deviated: No    Whipstock:      Tester: Kevin Meck  
 Time Tool Opened: 19:46:15      Unit No: 43  
 Time Test Ended: 00:46:15      Reference Elevations: 2352.00 ft (KB)  
    2347.00 ft (CF)  
 Interval: 3534.00 ft (KB) To 3555.00 ft (KB) (TVD)      Hole Diameter: 7.88 inches-Hole Condition: Good  
 Total Depth: 3555.00 ft (KB) (TVD)      KB to GR/CF: 5.00 ft

**Serial #: 8648**

Press@RunDepth:      psig @      3535.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2012.10.08      End Date: 2012.10.09      Last Callb.: 2012.10.09  
 Start Time: 18:11:35      End Time: 00:45:14      Time On Btm: 00:45:14  
    Time Off Btm:

**TEST COMMENT:** 30 - IF- Surface Blow built to 5 3/4"  
 60 - IS- Surface Return started at 10 min. Built to 4 3/4"  
 45 - FF- Surface Blow built to 7"  
 90 - FS- No Return

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation



**Gas Rates**

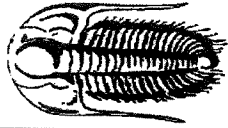
Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)

Length (ft)	Description	Volume (bbl)
120.00	MW 20M 80W	0.59
124.00	MW 10M 90W	1.74
1.00	OSMW 10M90W (oil spots)	0.01

TriLOBite Testing, Inc

Ref. No: 48082

Printed: 2012.10.15 @ 13:42:06



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Great Plains Energy, Inc.  
6121 S 58th St. STE - B  
Lincoln, NE 68516

32-2s-23w Norton, KS

Moffett #3-32

Job Ticket: 48082

DST#: 3

ATTN: Clayton Erickson

Test Start: 2012.10.08 @ 18:11:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 62.00 sec/qt  
Water Loss: 6.39 in<sup>3</sup>  
Resistivity: 0.00 ohm.m  
Salinity: 2000.00 ppm  
Filter Cake: 2.00 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type: psig  
Gas Cushion Pressure:

Oil API:  
Water Salinity: deg API  
43000 ppm

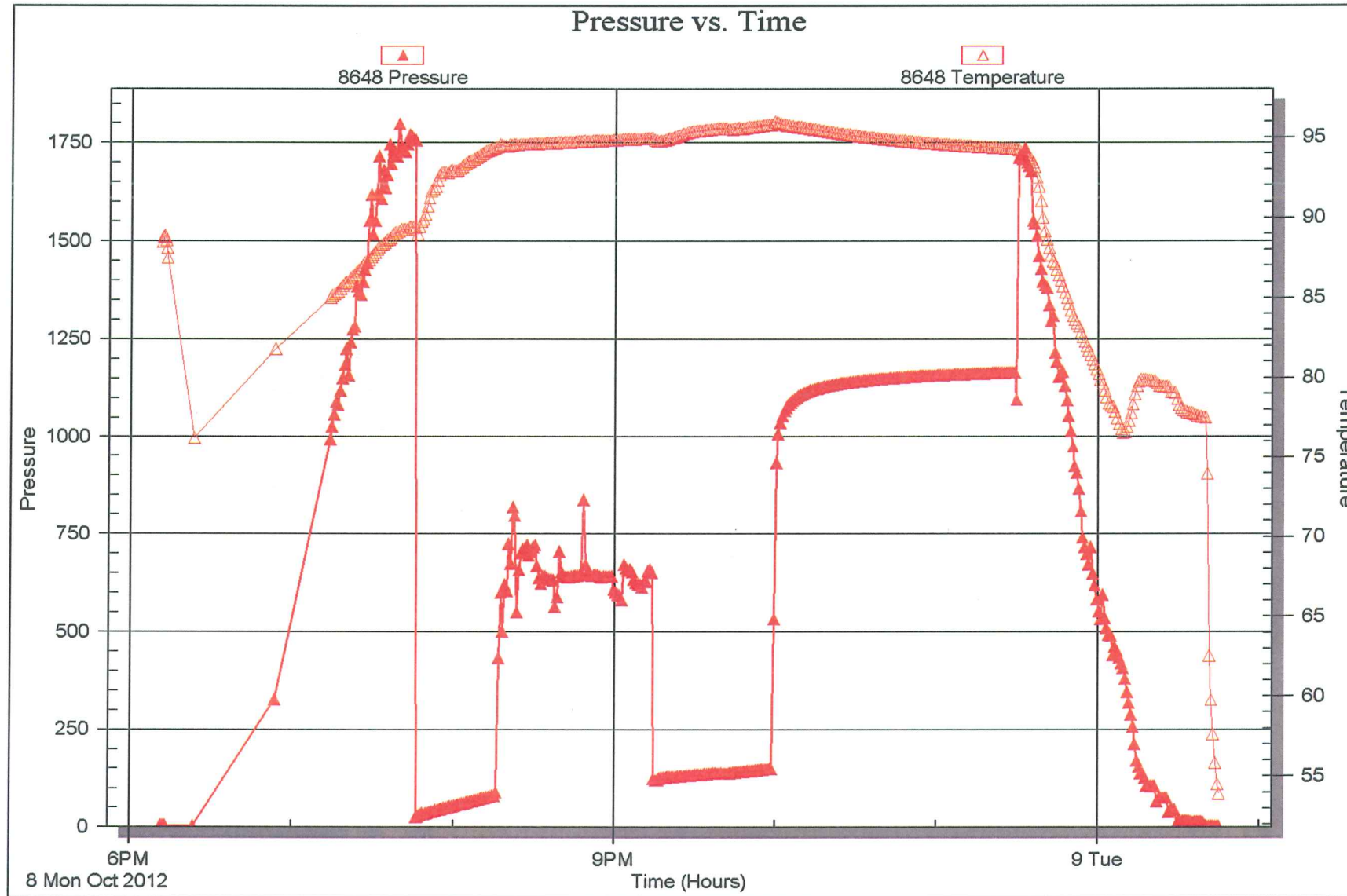
### Recovery Information

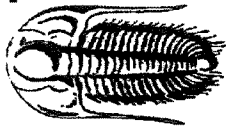
#### Recovery Table

Length ft	Description	Volume bbl
120.00	MW 20M 80W	0.590
124.00	MW 10M 90W	1.739
1.00	OSMW 10M 90W (oil spots)	0.014

Total Length: 245.00 ft    Total Volume: 2.343 bbl

Num Fluid Samples: 0    Num Gas Bombs: 0    Serial #:  
Laboratory Name:    Laboratory Location:  
Recovery Comments: RW . 175 @ 67 deg= 43000ppm





# 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

Moffett #3-32

Job Ticket: 48083

DST#: 4

ATTN: Clayton Erickson

Test Start: 2012.10.09 @ 08:16:00

### GENERAL INFORMATION:

Formation: Arbuckle  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 09:48:15  
 Time Test Ended: 14:51:15  
 Interval: 3572.00 ft (KB) To 3617.00 ft (KB) (TVD)  
 Total Depth: 3617.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good

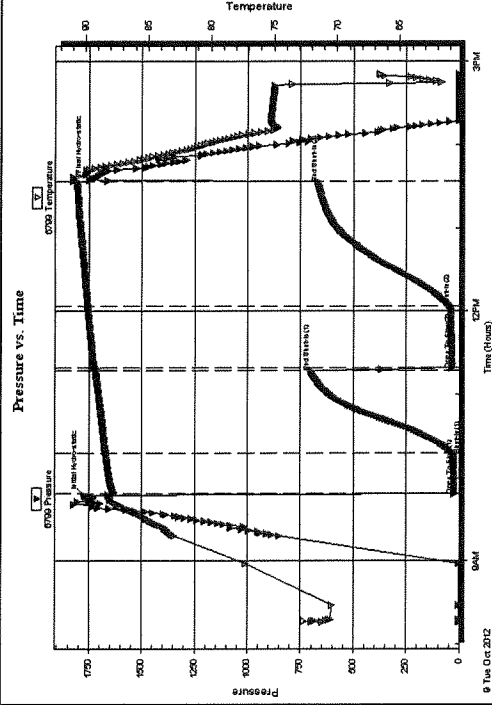
Test Type: Conventional Bottom Hole (Initial)  
 Tester: Kevin Mack  
 Unit No: 43  
 Reference Elevations: 2352.00 ft (KB)  
 2347.00 ft (CF)  
 KB to GR/CF: 5.00 ft

### Serial #: 6799

Inside  
 Press@RunDepth: 40.61 psig @ 3573.00 ft (KB)  
 Start Date: 2012.10.09 End Date: 2012.10.09  
 Start Time: 08:16:05 End Time: 14:51:14

Capacity: 8000.00 psig  
 Last Calib.: 2012.10.09  
 Time On Btm: 2012.10.09 @ 09:47:30  
 Time Off Btm: 2012.10.09 @ 13:34:45

TEST COMMENT: 30 - IF- Blow built to 2"  
 60 - IS- No Return  
 45 - FF- Surface Blow started at 25 min. Built to 1/4"  
 90 - FS- No Return



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1768.76	88.13	Initial Hydro-static
1	24.08	87.74	Open To Flow (1)
30	28.94	88.34	Shut-In(1)
90	703.22	89.16	End Shut-In(1)
92	34.52	89.18	Open To Flow (2)
136	40.61	89.80	Shut-In(2)
226	668.12	90.65	End Shut-In(2)
228	1747.73	90.93	Final Hydro-static

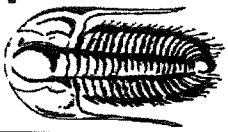
### Recovery

Length (ft)	Description	Volume (bbl)
15.00	OCWM 5W 5o 90M	0.07
5.00	Free oil 100o	0.02

### Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## TOOL DIAGRAM

Great Plains Energy, Inc.

32-2s-23w Norton, KS

6121 S 58th St. STE - B  
Lincoln, NE 68516

Moffett #3-32

Job Ticket: 48083

DST#: 4

ATTN: Clayton Erickson

Test Start: 2012.10.09 @ 08:16:00

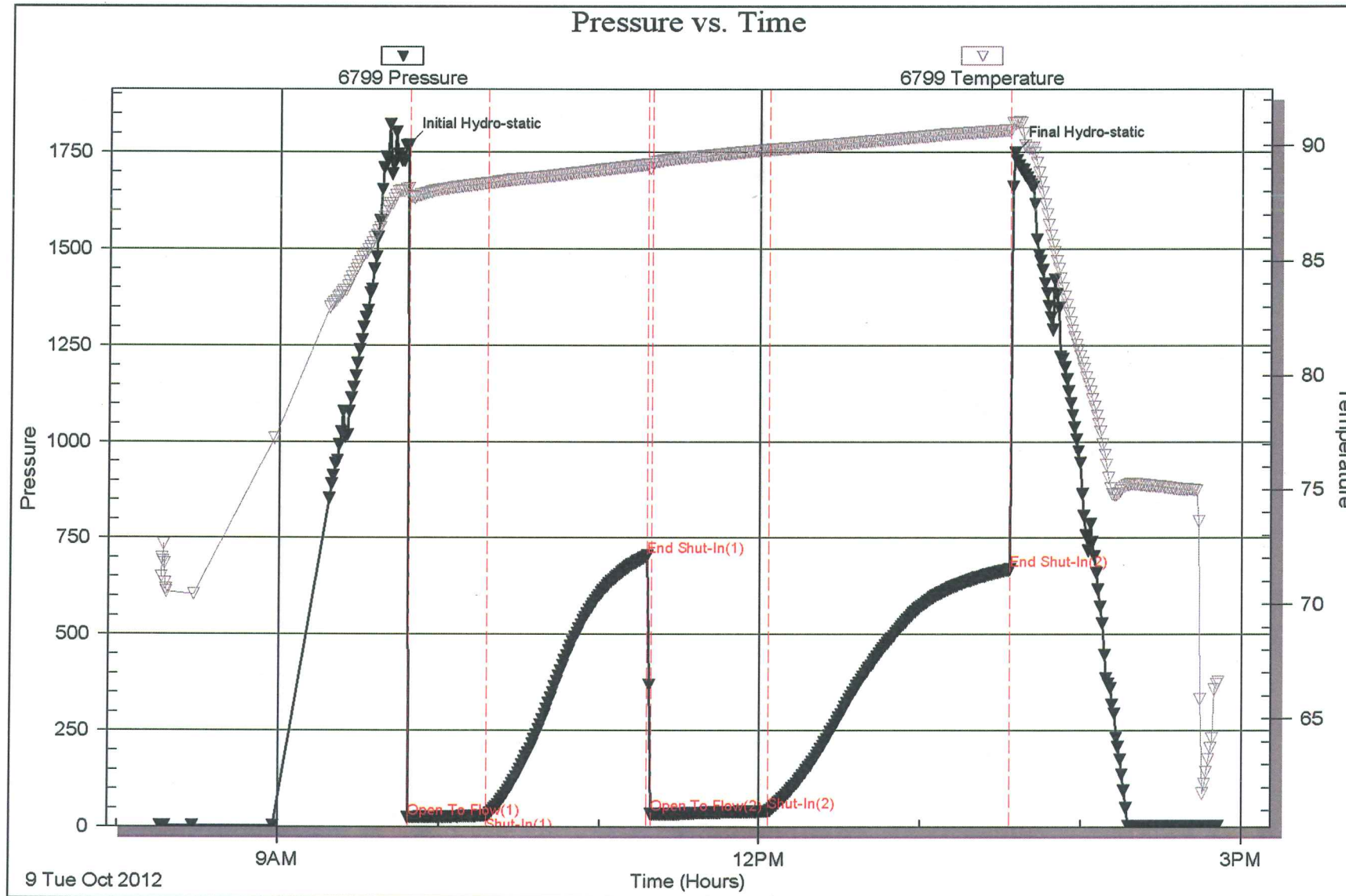
### Tool Information

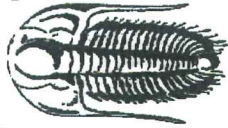
Drill Pipe:	Length: 3430.00 ft	Diameter: 3.80 inches	Volume: 48.11 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 42000.00 lb
Drill Pipe Above KB:	7.00 ft	Total Volume: 48.70 bbl		Tool Chased ft
Depth to Top Packer:	3572.00 ft			String Weight: Initial 35000.00 lb
Depth to Bottom Packer:	ft			Final 35000.00 lb
Interval between Packers:	45.00 ft			
Tool Length:	74.00 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			3544.00	
Shut In Tool	5.00			3549.00	
Hydraulic tool	5.00			3554.00	
Jars	5.00			3559.00	
Safety Joint	3.00			3562.00	
Packer	5.00			3567.00	29.00
Packer	5.00			3572.00	Bottom Of Top Packer
Stubb	1.00			3573.00	
Recorder	0.00	8648	Inside	3573.00	
Recorder	0.00	6799	Inside	3573.00	
Perforations	8.00			3581.00	
Drill Pipe	31.00			3612.00	
Bullnose	5.00			3617.00	45.00
<b>Total Tool Length:</b>					<b>74.00</b>
					Bottom Packers & Anchor





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Great Plains Energy, Inc.  
6121 S 58th St. STE - B  
Lincoln, NE 68516  
ATTN: Clayton Erickson

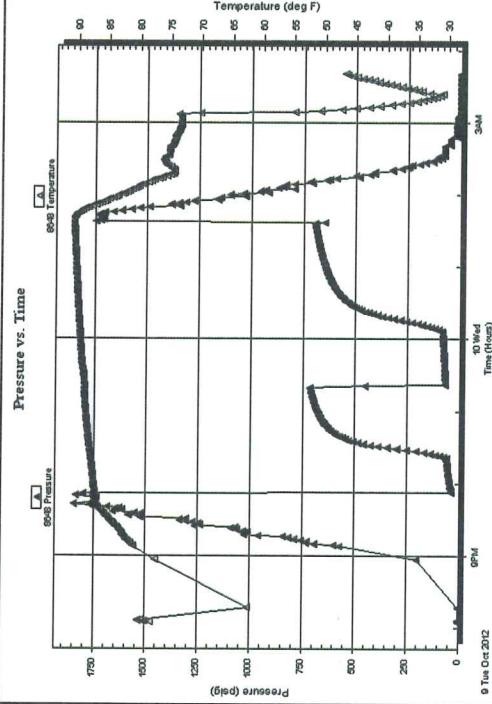
**32-2s-23w Norton, KS**  
**Moffett #3-32**  
Job Ticket: 48084      **DST#: 5**  
Test Start: 2012.10.09 @ 20:05:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: **No** Whipstock: **ft (KB)**  
Time Tool Opened: 21:52:45  
Time Test Ended: 03:43:00  
**Interval: 3570.00 ft (KB) To 3621.00 ft (KB) (TVD)**  
Total Depth: 3621.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inchesHole Condition: **Good**  
Test Type: **Conventional Bottom Hole (Initial)**  
Tester: **Kevin Mack**  
Unit No: **43**  
Reference Elevations: 2352.00 ft (KB)  
2347.00 ft (CF)  
5.00 ft  
KB to GRVCF:

**Serial #: 8648**      **Inside**  
Press@RunDepth:      psig @      3571.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2012.10.09      End Date: 2012.10.10      Last Calib.: 2012.10.10  
Start Time: 20:05:05      End Time: 03:41:14      Time On Btm: 03:41:14  
Time Off Btm:

**TEST COMMENT:** 30 - IF- 1/4" Blow built to 5 1/2"  
60 - IS- No Return  
45 - FF- Blow started at 3 min. Built to 8"  
90 - FS- Weak surface Return started at 10 min. Did not build or die.



## PRESSURE SUMMARY

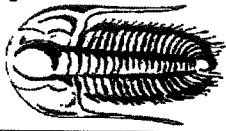
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
-------------	-----------------	--------------	------------

## Recovery

Length (ft)	Description	Volume (bbl)
92.00	OCM 35o 65M	0.45
60.00	Free oil 100o	0.59

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

### FLUID SUMMARY

Great Plains Energy, Inc.  
 6121 S 58th St. STE-B  
 Lincoln, NE 68516  
 ATTN: Clayton Erickson  
 32-2s-23w Norton, KS  
 Moffett #3-32  
 Job Ticket: 48084  
 Test Start: 2012.10.09 @ 20:05:00  
 DST#: 5

### Mud and Cushion Information

Mud Type: Gel Chem  
 Mud Weight: 9.00 lb/gal  
 Viscosity: 62.00 sec/qt  
 Water Loss: 6.79 in<sup>3</sup>  
 Resistivity: 0.00 ohm.m  
 Salinity: 2200.00 ppm  
 Filter Cake: 2.00 inches

Cushion Type:  
 Cushion Length: ft  
 Cushion Volume: bbl  
 Gas Cushion Type:  
 Gas Cushion Pressure: psig  
 Oil API: 30 deg API  
 Water Salinity: ppm

### Recovery Information

#### Recovery Table

Length ft	Description	Volume bbl
92.00	OCM 350 65M	0.452
60.00	Free oil 1000	0.587

Total Length: 152.00 ft      Total Volume: 1.039 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:  
 Recovery Comments: Oil API 32 @ 80 deg = 30 cor.      Laboratory Location:



