



Confidentiality Requested:
 Yes  No

KANSAS CORPORATION COMMISSION 1193610
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

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
 Plug Back  Conv. to GSW  Conv. to Producer
 Commingled Permit #:
 Dual Completion Permit #:
 SWD Permit #:
 ENHR Permit #:
 GSW Permit #:

Spud Date or Date Reached TD Completion Date or
Recompletion Date 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

GPS Location: Lat: , Long:
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)
Datum:  NAD27  NAD83  WGS84

County:
Lease Name: Well #:
Field Name:

Producing Formation:
Elevation: Ground: Kelly Bushing:
Total Vertical 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

Confidentiality Requested
Date:
 Confidential Release Date:
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT  I  II  III Approved by: Date:

1193610

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

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

**INSTRUCTIONS:** Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

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

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
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Wells, Rodger D. dba Pioneer Resources
Well Name	GROOM 1
Doc ID	1193610

Tops

Name	Top	Datum
Anhydrite	2410	+584
Heeb	3704	-1016
Lansing	3740	-1052
Pawnee	4180	-1492
Ft. Scott	4201	-1513
Johnson	4316	-1628
Morrow	4330	-1642
Mississippian	4347	-1659
TD	4465	-1777



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Pioneer Resources

**25-14s-30w Gove Co. KS**

80 Windmill Drive  
Phillipsburg KS, 67661

**Groom #1**

Job Ticket: 53083

**DST#: 2**

ATTN: Charlie Strudavant

Test Start: 2013.06.29 @ 23:25:00

## GENERAL INFORMATION:

Formation: **Kansas City " H "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:02:45

Time Test Ended: 07:26:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

**Interval: 3896.00 ft (KB) To 3930.00 ft (KB) (TVD)**

Reference Elevations: 2688.00 ft (KB)

Total Depth: 3930.00 ft (KB) (TVD)

2679.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

**Serial #: 8675**

**Inside**

Press @ Run Depth: 29.32 psig @ 3897.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.06.29

End Date:

2013.06.30

Last Calib.: 2013.06.30

Start Time: 23:25:15

End Time:

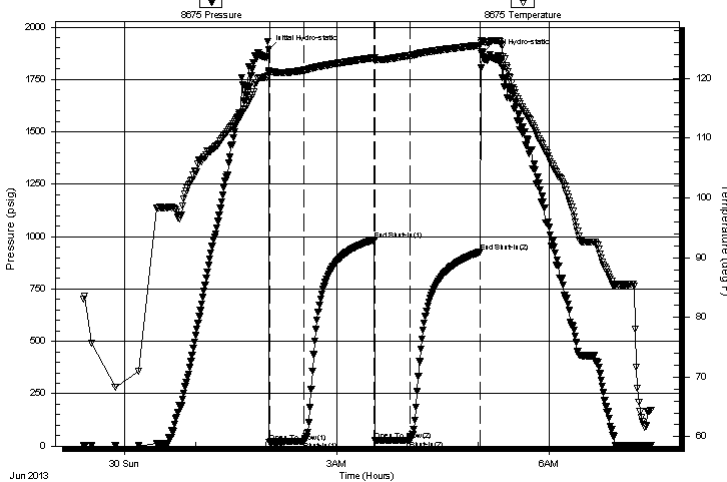
07:26:45

Time On Btm: 2013.06.30 @ 02:02:15

Time Off Btm: 2013.06.30 @ 05:03:00

**TEST COMMENT:** Built to 1" blow  
No return blow  
No blow  
No return blow

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1894.46	121.36	Initial Hydro-static
1	18.80	120.88	Open To Flow (1)
30	24.10	121.39	Shut-In(1)
90	984.72	123.47	End Shut-In(1)
90	25.70	123.09	Open To Flow (2)
120	29.32	123.85	Shut-In(2)
180	926.38	125.57	End Shut-In(2)
181	1871.52	126.26	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	100% Mud w ith oil scum	0.28

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Pioneer Resources

**25-14s-30w Gove Co. KS**

80 Windmill Drive  
Phillipsburg KS, 67661

**Groom #1**

Job Ticket: 53083

**DST#: 2**

ATTN: Charlie Strudavant

Test Start: 2013.06.29 @ 23:25:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.00 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	100% Mud with oil scum	0.281

Total Length: 20.00 ft      Total Volume: 0.281 bbl

Num Fluid Samples: 0

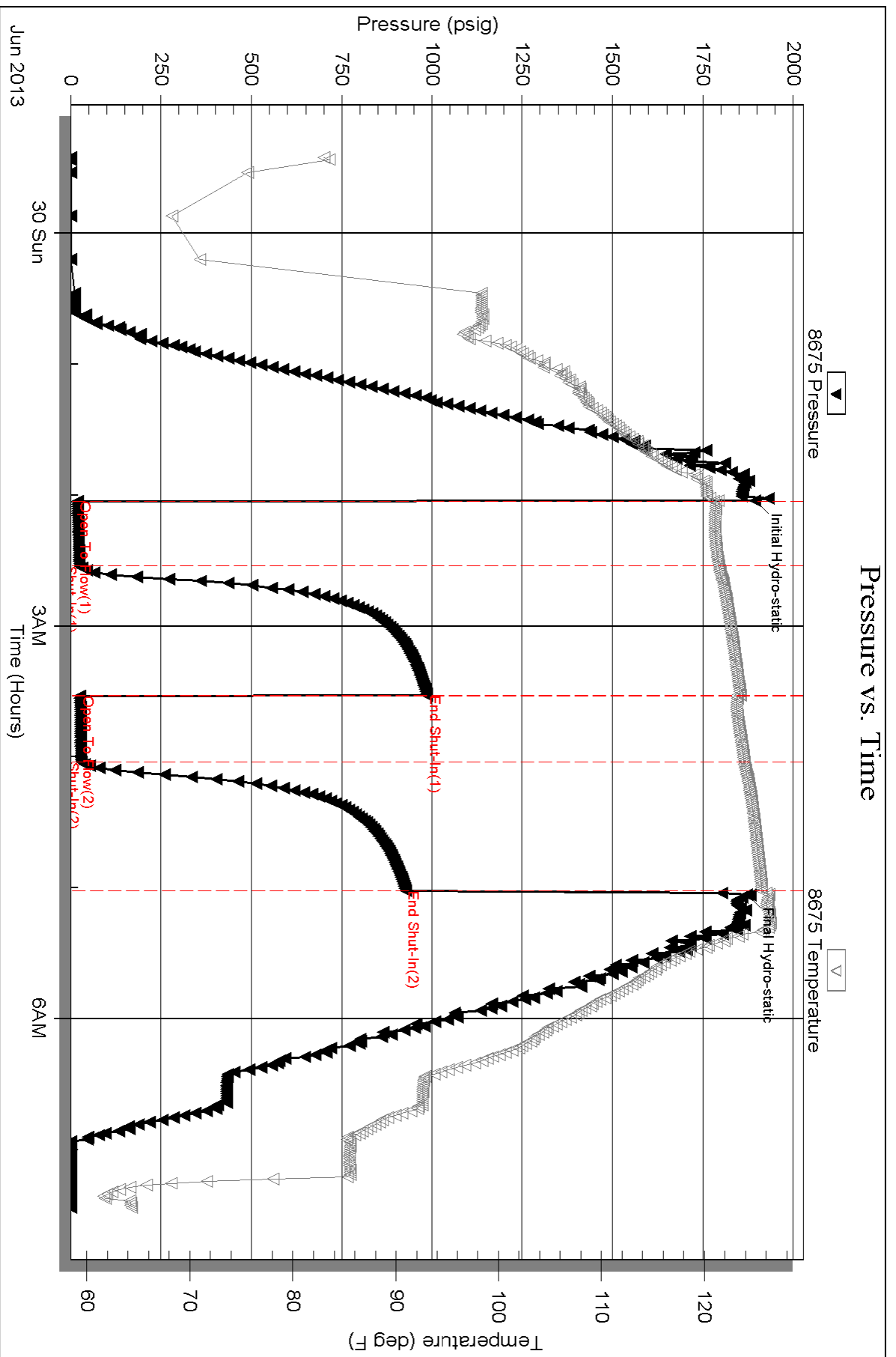
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Pioneer Resources

**25-14s-30w Gove Co. KS**

80 Windmill Drive  
Phillipsburg KS, 67661

**Groom #1**

Job Ticket: 53083

**DST#: 2**

ATTN: Charlie Strudavant

Test Start: 2013.06.29 @ 23:25:00

## GENERAL INFORMATION:

Formation: **Kansas City " H "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:02:45

Time Test Ended: 07:26:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

**Interval: 3896.00 ft (KB) To 3930.00 ft (KB) (TVD)**

Reference Elevations: 2688.00 ft (KB)

Total Depth: 3930.00 ft (KB) (TVD)

2679.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

**Serial #: 8675**

**Inside**

Press @ Run Depth: 29.32 psig @ 3897.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.06.29

End Date: 2013.06.30

Last Calib.: 2013.06.30

Start Time: 23:25:15

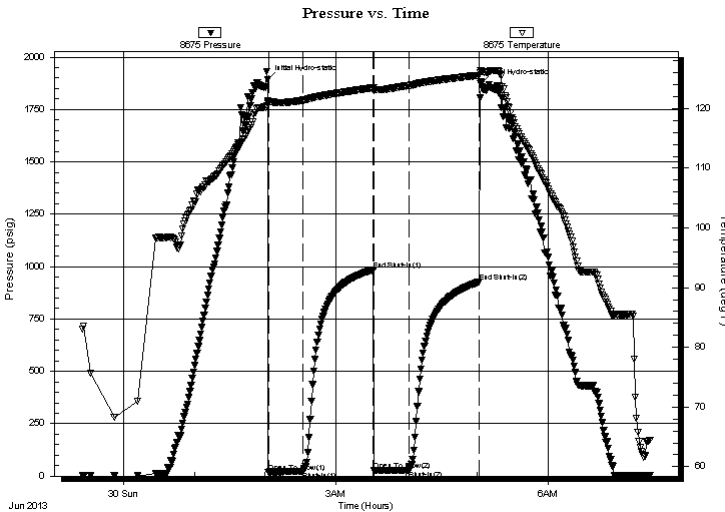
End Time: 07:26:45

Time On Btm: 2013.06.30 @ 02:02:15

Time Off Btm: 2013.06.30 @ 05:03:00

**TEST COMMENT:** Built to 1" blow  
No return blow  
No blow  
No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1894.46	121.36	Initial Hydro-static
1	18.80	120.88	Open To Flow (1)
30	24.10	121.39	Shut-In(1)
90	984.72	123.47	End Shut-In(1)
90	25.70	123.09	Open To Flow (2)
120	29.32	123.85	Shut-In(2)
180	926.38	125.57	End Shut-In(2)
181	1871.52	126.26	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	100% Mud w ith oil scum	0.28

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Pioneer Resources

**25-14s-30w Gove Co. KS**

80 Windmill Drive  
Phillipsburg KS, 67661

**Groom #1**

Job Ticket: 53083

**DST#: 2**

ATTN: Charlie Strudavant

Test Start: 2013.06.29 @ 23:25:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.00 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	100% Mud with oil scum	0.281

Total Length: 20.00 ft      Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

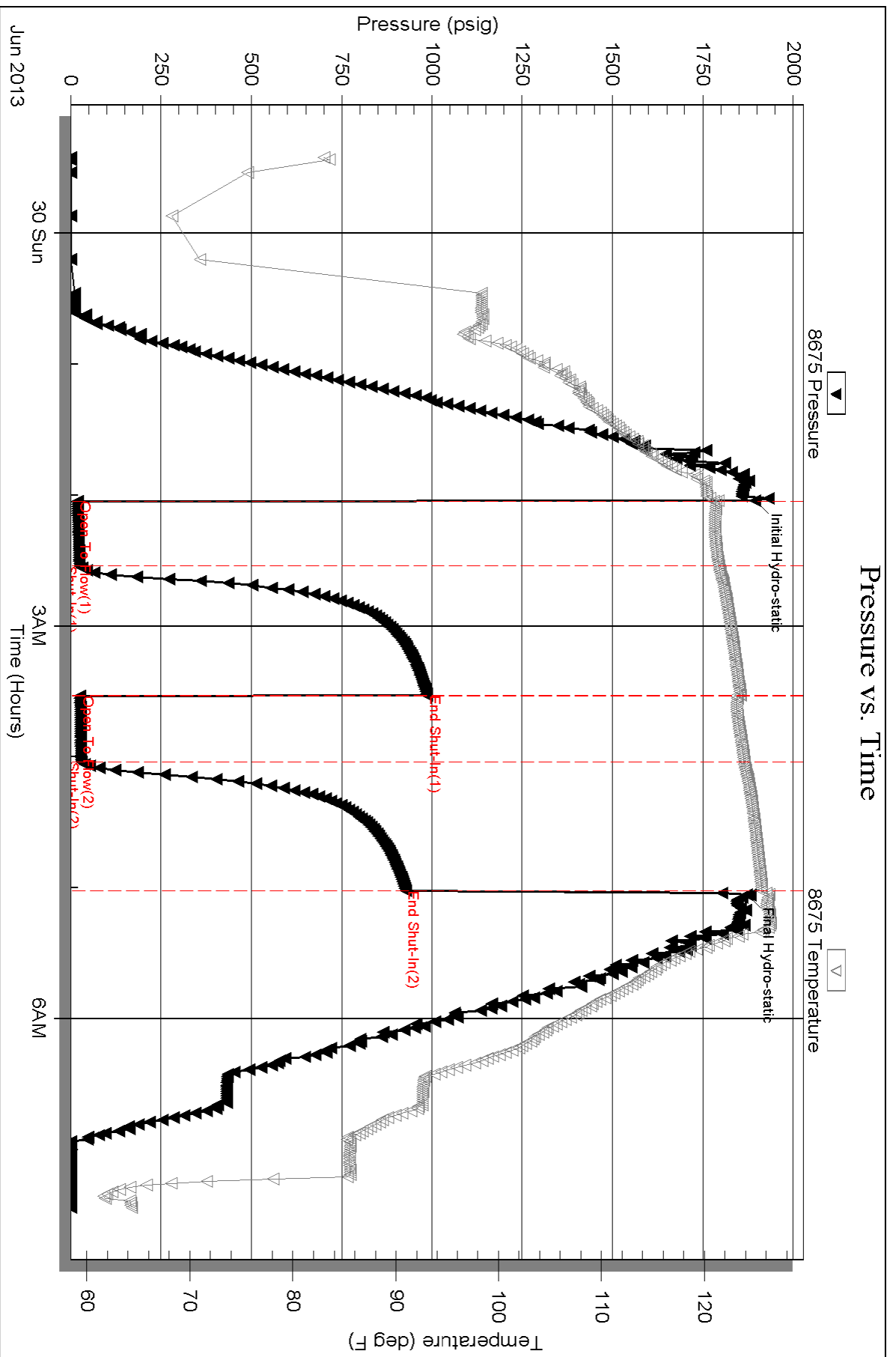
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Pioneer Resources  
 80 Windmill Drive  
 Phillipsburg KS, 67661  
 ATTN: Charlie Strudavant

**25-14s-30w Gove Co. KS**  
**Groom #1**  
 Job Ticket: 53084      **DST#: 3**  
 Test Start: 2013.06.30 @ 21:05:00

## GENERAL INFORMATION:

Formation: **Kansas City " I, J**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 00:39:30  
 Time Test Ended: 05:42:00  
 Interval: **3928.00 ft (KB) To 4020.00 ft (KB) (TVD)**  
 Total Depth: 4020.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Jace McKinney  
 Unit No: 46  
 Reference Elevations: 2688.00 ft (KB)  
 2679.00 ft (CF)  
 KB to GR/CF: 9.00 ft

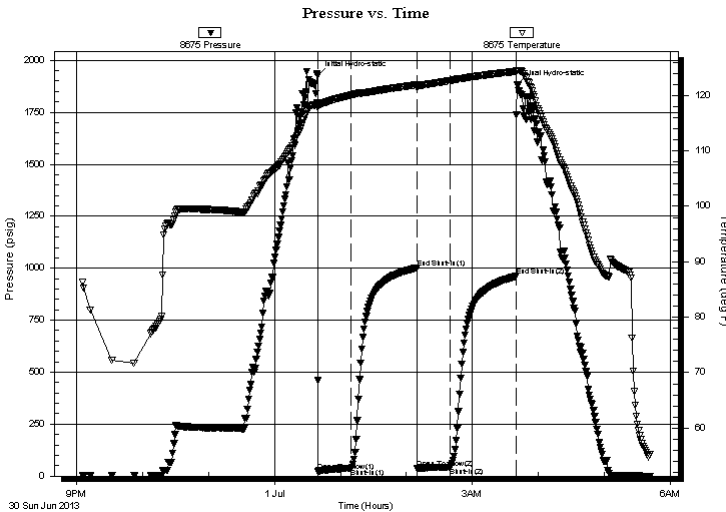
## Serial #: 8675

Inside

Press @ Run Depth: 43.67 psig @ 3929.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2013.06.30      End Date: 2013.07.01      Last Calib.: 2013.07.01  
 Start Time: 21:05:15      End Time: 05:42:00      Time On Btm: 2013.07.01 @ 00:39:00  
 Time Off Btm: 2013.07.01 @ 03:41:00

TEST COMMENT: Built to 2" blow  
 No return blow  
 weak surface blow  
 No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1928.08	118.61	Initial Hydro-static
1	23.35	118.05	Open To Flow (1)
31	37.88	120.03	Shut-In(1)
91	1001.33	121.91	End Shut-In(1)
91	38.28	121.40	Open To Flow (2)
121	43.67	122.66	Shut-In(2)
181	961.49	124.31	End Shut-In(2)
182	1884.12	124.49	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
50.00	100% Mud w ith few oil spots	0.70

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Pioneer Resources

**25-14s-30w Gove Co. KS**

80 Windmill Drive  
Phillipsburg KS, 67661

**Groom #1**

Job Ticket: 53084

**DST#: 3**

ATTN: Charlie Strudavant

Test Start: 2013.06.30 @ 21:05:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.80 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	100% Mud with few oil spots	0.701

Total Length: 50.00 ft      Total Volume: 0.701 bbl

Num Fluid Samples: 0

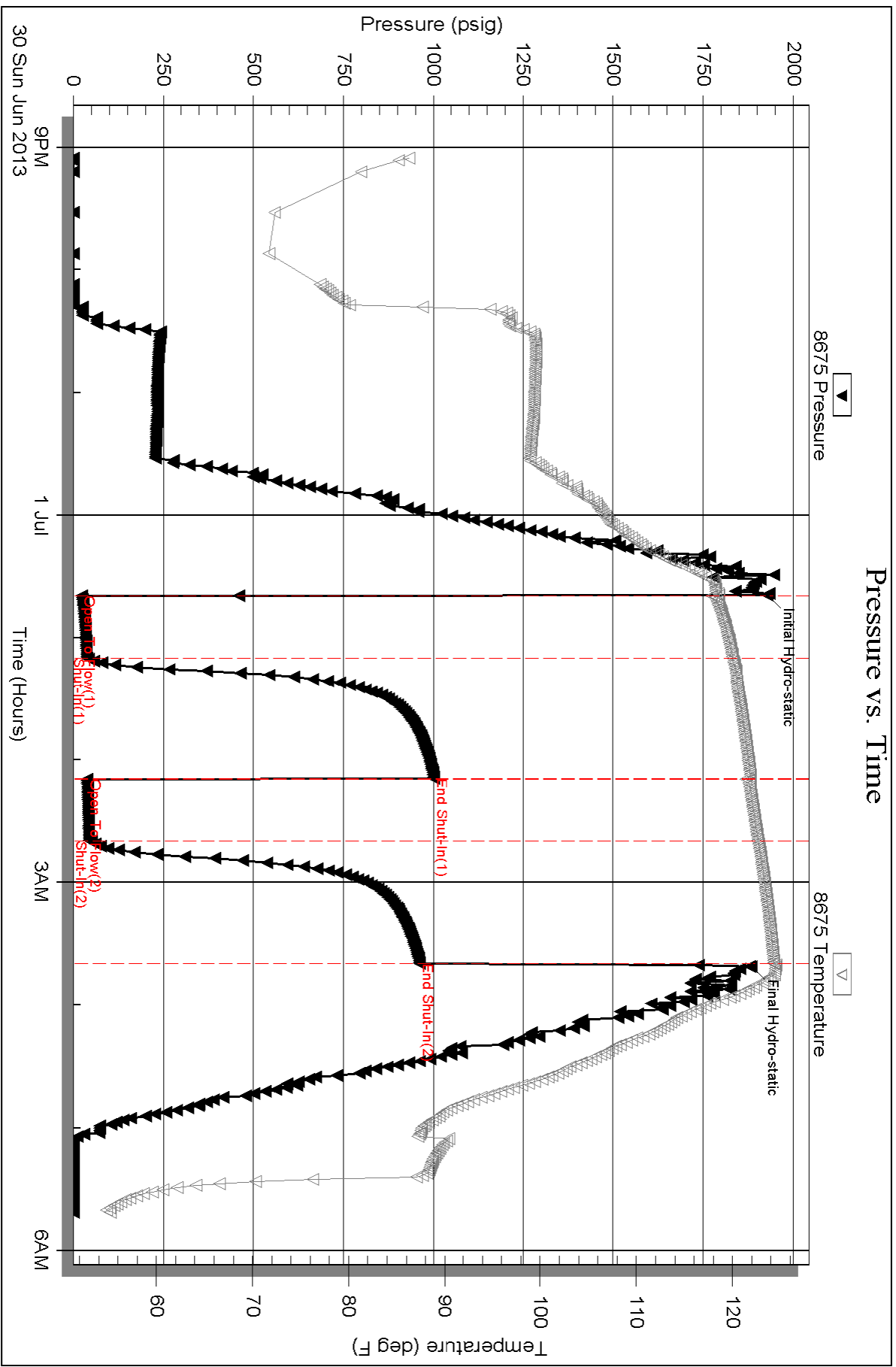
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Pioneer Resources  
 80 Windmill Drive  
 Phillipsburg KS, 67661  
 ATTN: Charlie Strudavant

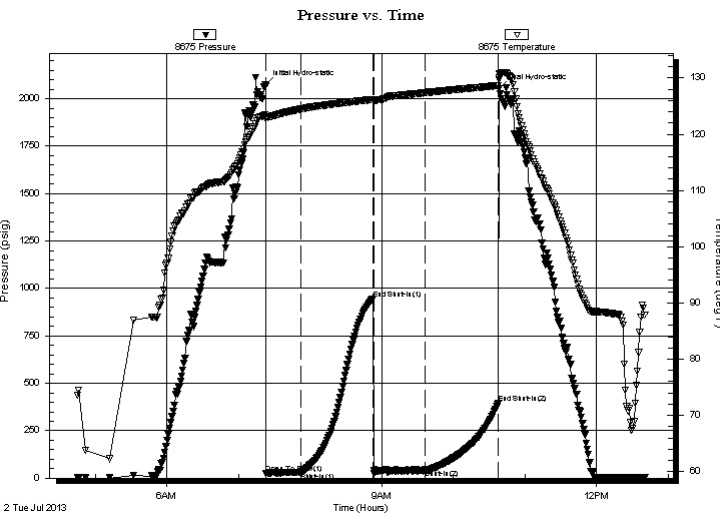
**25-14s-30w Gove Co. KS**  
**Groom #1**  
 Job Ticket: 53085 **DST#: 4**  
 Test Start: 2013.07.02 @ 04:45:00

## GENERAL INFORMATION:

Formation: **Altamont - Myric Sta**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 07:22:45  
 Time Test Ended: 12:40:15  
 Interval: **4132.00 ft (KB) To 4230.00 ft (KB) (TVD)**  
 Total Depth: 4230.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Jace McKinney  
 Unit No: 46  
 Reference Elevations: 2688.00 ft (KB)  
 2679.00 ft (CF)  
 KB to GR/CF: 9.00 ft

**Serial #: 8675 Inside**  
 Press @ Run Depth: 43.97 psig @ 4133.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.07.02 End Date: 2013.07.02 Last Calib.: 2013.07.02  
 Start Time: 04:45:15 End Time: 12:40:15 Time On Btm: 2013.07.02 @ 07:22:30  
 Time Off Btm: 2013.07.02 @ 10:38:30

**TEST COMMENT:** Built to 4" blow  
 No return blow  
 Built to 11" blow  
 No return blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2072.42	123.47	Initial Hydro-static
1	23.37	122.82	Open To Flow (1)
30	31.36	124.50	Shut-In(1)
90	945.17	126.18	End Shut-In(1)
91	26.19	125.97	Open To Flow (2)
134	43.97	127.39	Shut-In(2)
195	394.84	128.66	End Shut-In(2)
196	2052.66	130.15	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	186 Feet Gas In Pipe	0.00
50.00	ocm 30%O 70%M	0.70

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Pioneer Resources

**25-14s-30w Gove Co. KS**

80 Windmill Drive  
Phillipsburg KS, 67661

**Groom #1**

Job Ticket: 53085

**DST#: 4**

ATTN: Charlie Strudavant

Test Start: 2013.07.02 @ 04:45:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbf

Water Loss: 6.80 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
0.00	186 Feet Gas In Pipe	0.000
50.00	ocm 30%O 70%M	0.701

Total Length: 50.00 ft      Total Volume: 0.701 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

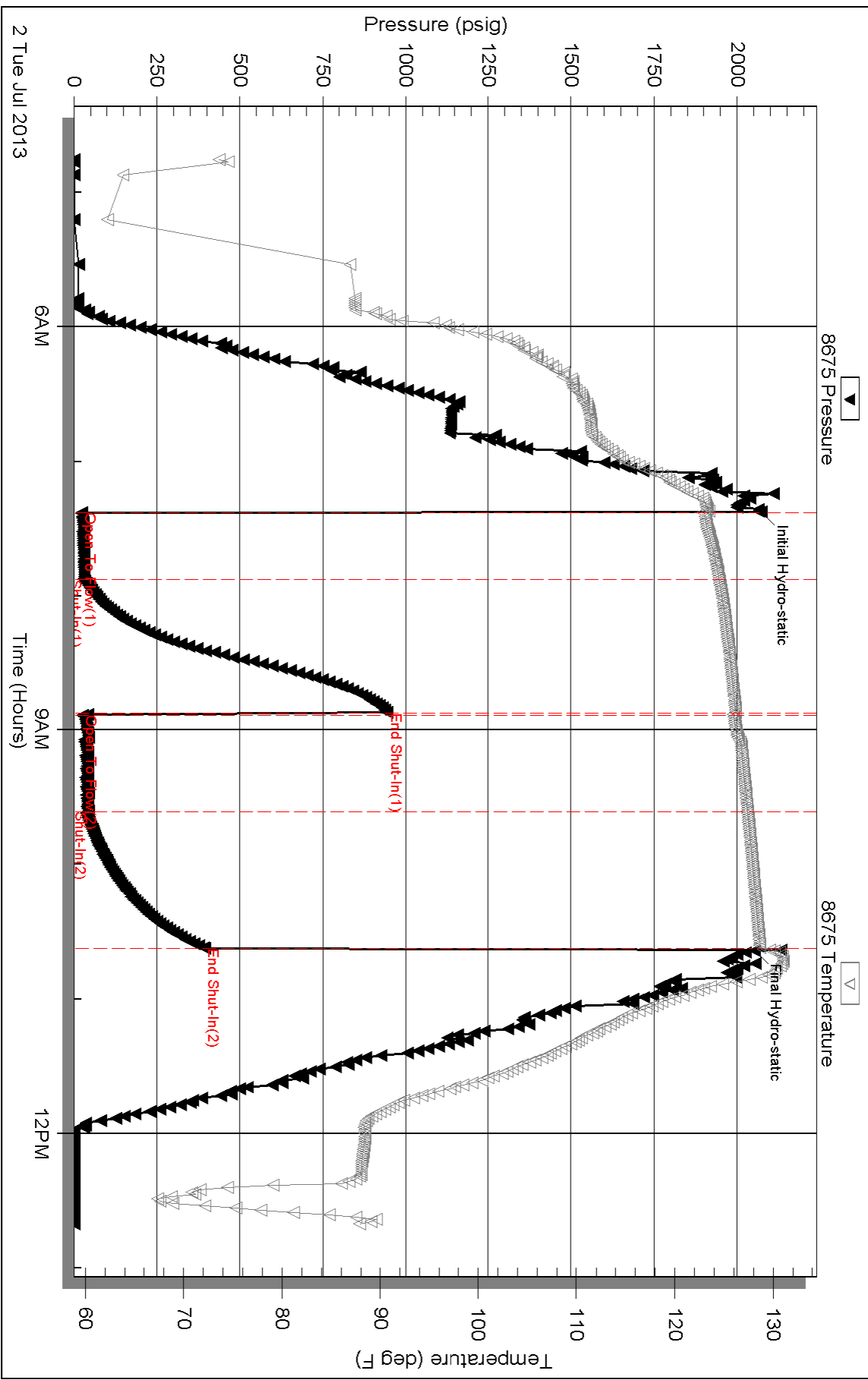
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Pioneer Resources  
 80 Windmill Drive  
 Phillipsburg KS, 67661  
 ATTN: Charlie Strudavant

**25-14s-30w Gove Co. KS**

**Groom #1**

Job Ticket: 53056

**DST#: 5**

Test Start: 2013.07.03 @ 04:05:00

## GENERAL INFORMATION:

Formation: **Cherokee - Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:07:15

Time Test Ended: 11:12:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

**Interval: 4228.00 ft (KB) To 4330.00 ft (KB) (TVD)**

Reference Elevations: 2688.00 ft (KB)

Total Depth: 4330.00 ft (KB) (TVD)

2679.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

**Serial #: 8675**

**Inside**

Press @ Run Depth: 52.09 psig @ 4229.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.03

End Date:

2013.07.03

Last Calib.: 2013.07.03

Start Time: 04:05:15

End Time:

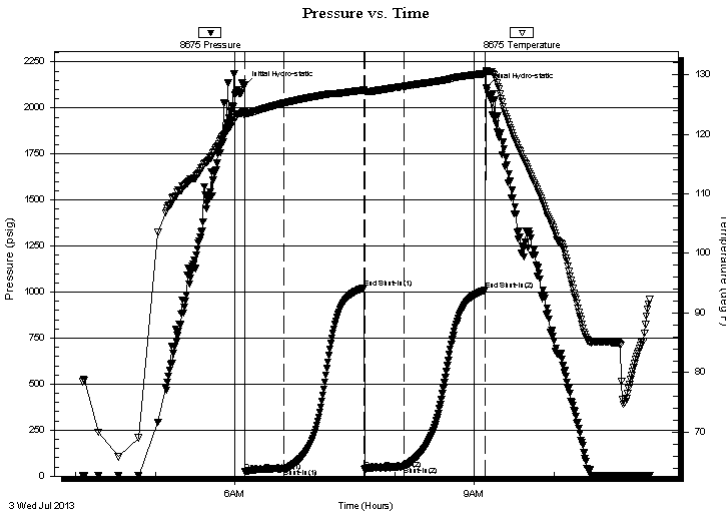
11:12:00

Time On Btm: 2013.07.03 @ 06:07:00

Time Off Btm: 2013.07.03 @ 09:09:15

**TEST COMMENT:** Built to 4" blow  
 No return blow  
 Built to 9 1/2" blow  
 No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2124.18	123.82	Initial Hydro-static
1	23.46	123.12	Open To Flow (1)
30	40.71	125.21	Shut-In(1)
90	1022.54	127.40	End Shut-In(1)
91	34.57	127.11	Open To Flow (2)
120	52.09	128.02	Shut-In(2)
182	1010.65	130.15	End Shut-In(2)
183	2111.56	130.69	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	174 Feet Gas In Pipe	0.00
70.00	gcom 10%G 40%O 50%M	0.98

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Pioneer Resources

**25-14s-30w Gove Co. KS**

80 Windmill Drive  
Phillipsburg KS, 67661

**Groom #1**

Job Ticket: 53056

**DST#: 5**

ATTN: Charlie Strudavant

Test Start: 2013.07.03 @ 04:05:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.00 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	174 Feet Gas In Pipe	0.000
70.00	gcom 10%G 40%O 50%M	0.982

Total Length: 70.00 ft      Total Volume: 0.982 bbl

Num Fluid Samples: 0

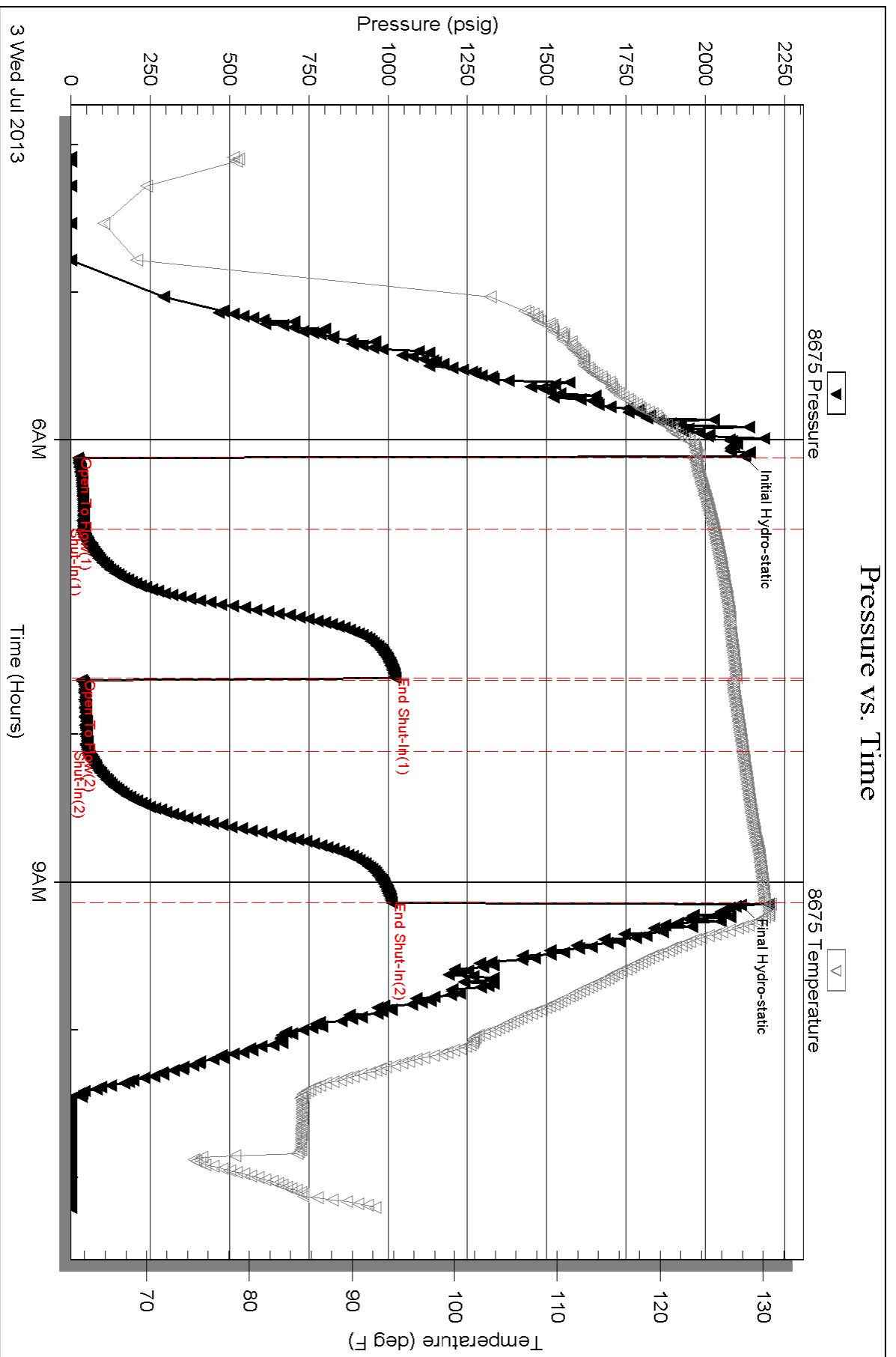
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Pioneer Resources

**25-14s-30w Gove Co. KS**

80 Windmill Drive  
Phillipsburg KS, 67661

**Groom #1**

Job Ticket: 53057

**DST#: 6**

ATTN: Charlie Strudavant

Test Start: 2013.07.03 @ 23:10:00

## GENERAL INFORMATION:

Formation: **Miss - Spergen**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:57:15

Time Test Ended: 07:59:45

Test Type: Conventional Straddle (Reset)

Tester: Jace McKinney

Unit No: 46

**Interval: 4394.00 ft (KB) To 4404.00 ft (KB) (TVD)**

Reference Elevations: 2688.00 ft (KB)

Total Depth: 4414.00 ft (KB) (TVD)

2679.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

**Serial #: 8675**

**Inside**

Press @ Run Depth: 33.65 psig @ 4395.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.03

End Date:

2013.07.04

Last Calib.: 2013.07.04

Start Time: 23:10:15

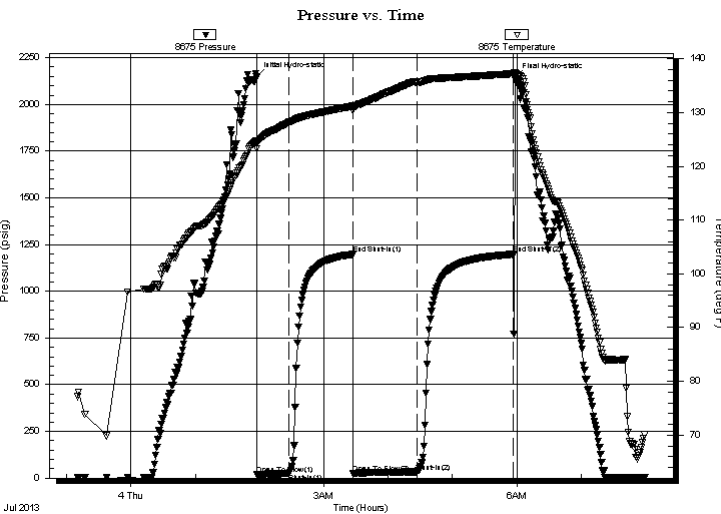
End Time:

07:59:45

Time On Btm: 2013.07.04 @ 01:57:00

Time Off Btm: 2013.07.04 @ 05:58:00

**TEST COMMENT:** Built to 1 1/2" blow  
No return blow  
Built to 1/4" blow  
No return blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2146.85	124.63	Initial Hydro-static
1	19.35	123.21	Open To Flow (1)
31	24.96	128.25	Shut-In(1)
90	1198.01	131.20	End Shut-In(1)
91	27.12	130.39	Open To Flow (2)
150	33.65	135.63	Shut-In(2)
240	1198.05	137.20	End Shut-In(2)
241	2141.24	137.45	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Clean Oil	0.07
35.00	ocm 5%O 95%M	0.49

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Pioneer Resources

**25-14s-30w Gove Co. KS**

80 Windmill Drive  
Phillipsburg KS, 67661

**Groom #1**

Job Ticket: 53057

**DST#: 6**

ATTN: Charlie Strudavant

Test Start: 2013.07.03 @ 23:10:00

## GENERAL INFORMATION:

Formation: **Miss - Spergen**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:57:15

Time Test Ended: 07:59:45

Test Type: Conventional Straddle (Reset)

Tester: Jace McKinney

Unit No: 46

**Interval: 4394.00 ft (KB) To 4404.00 ft (KB) (TVD)**

Reference Elevations: 2688.00 ft (KB)

Total Depth: 4414.00 ft (KB) (TVD)

2679.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

**Serial #: 8650 Outside**

Press @ Run Depth: psig @ 4395.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.03

End Date:

2013.07.04

Last Calib.:

2013.07.04

Start Time: 23:10:15

End Time:

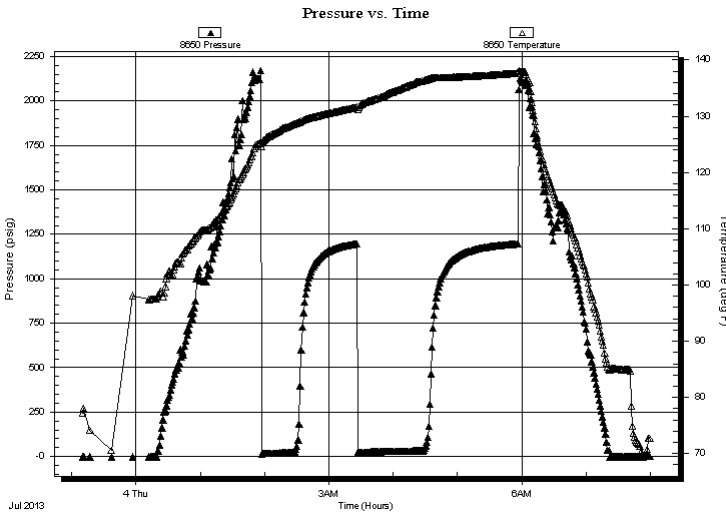
07:59:30

Time On Btm:

Time Off Btm:

**TEST COMMENT:** Built to 1 1/2" blow  
No return blow  
Built to 1/4" blow  
No return blow

## PRESSURE SUMMARY



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

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Clean Oil	0.07
35.00	ocm 5%O 95%M	0.49

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Pioneer Resources

**25-14s-30w Gove Co. KS**

80 Windmill Drive  
Phillipsburg KS, 67661

**Groom #1**

Job Ticket: 53057

**DST#: 6**

ATTN: Charlie Strudavant

Test Start: 2013.07.03 @ 23:10:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.00 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Clean Oil	0.070
35.00	ocm 5%O 95%M	0.491

Total Length: 40.00 ft      Total Volume: 0.561 bbl

Num Fluid Samples: 0

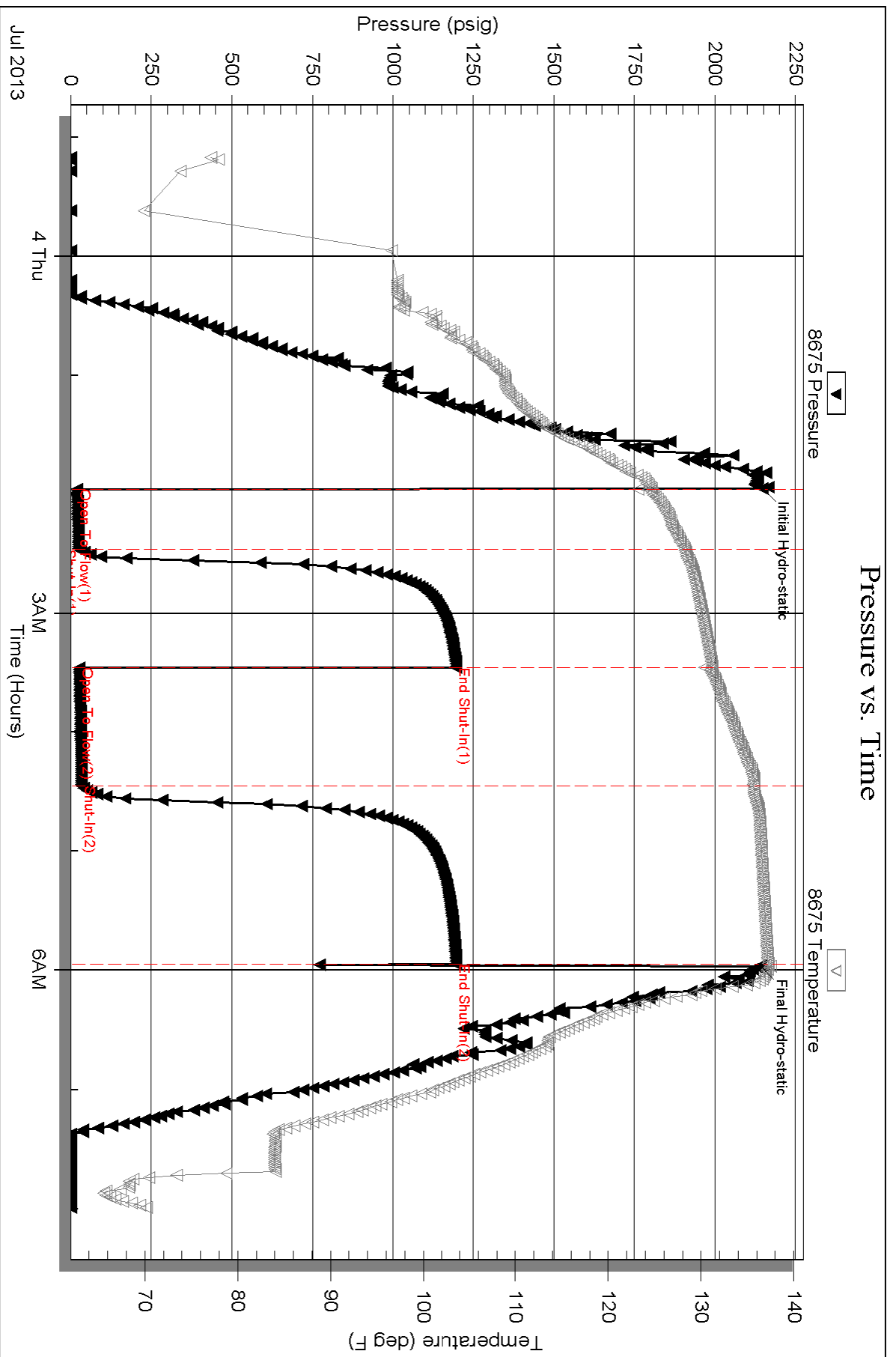
Num Gas Bombs: 0

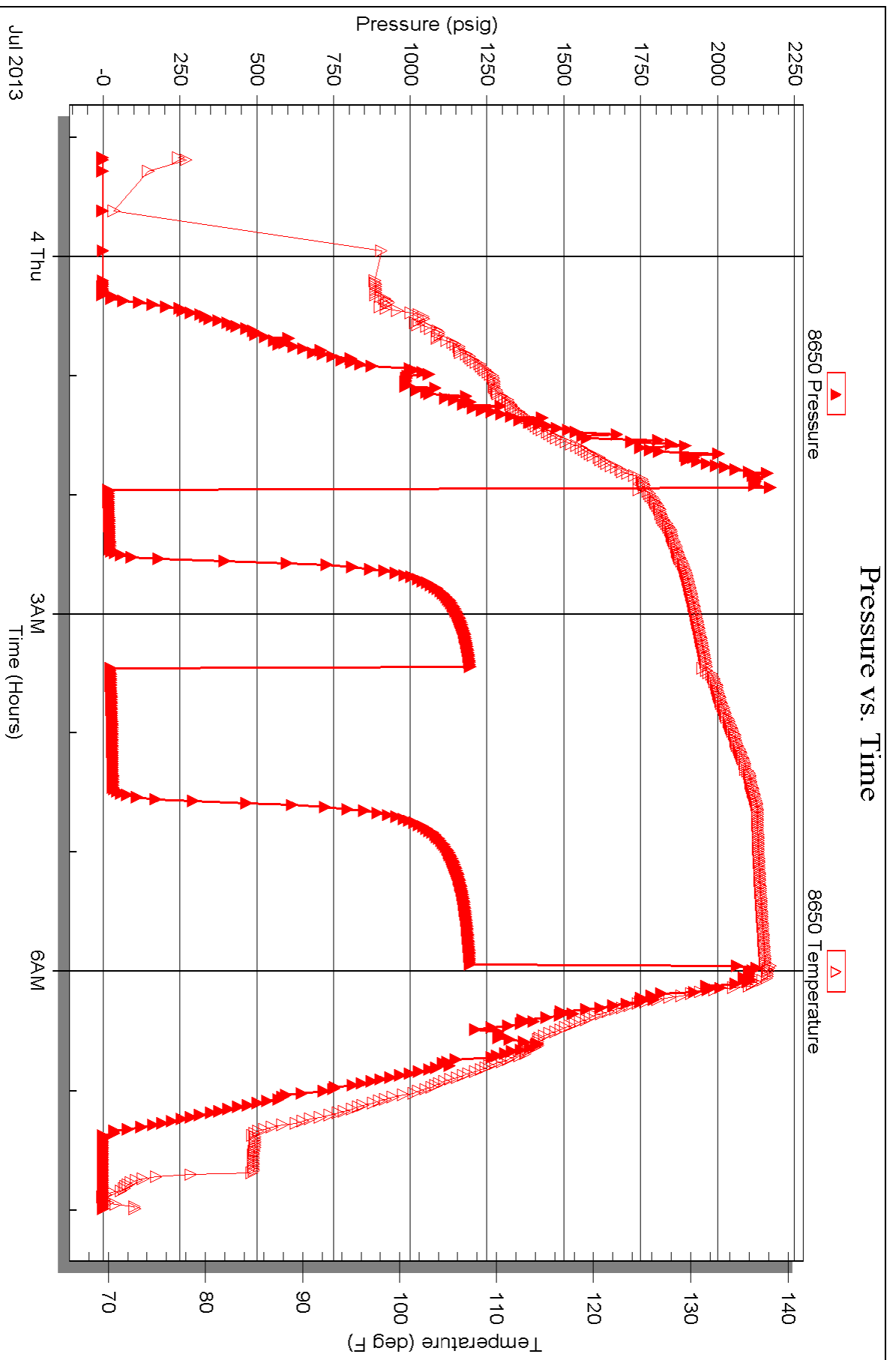
Serial #:

Laboratory Name:

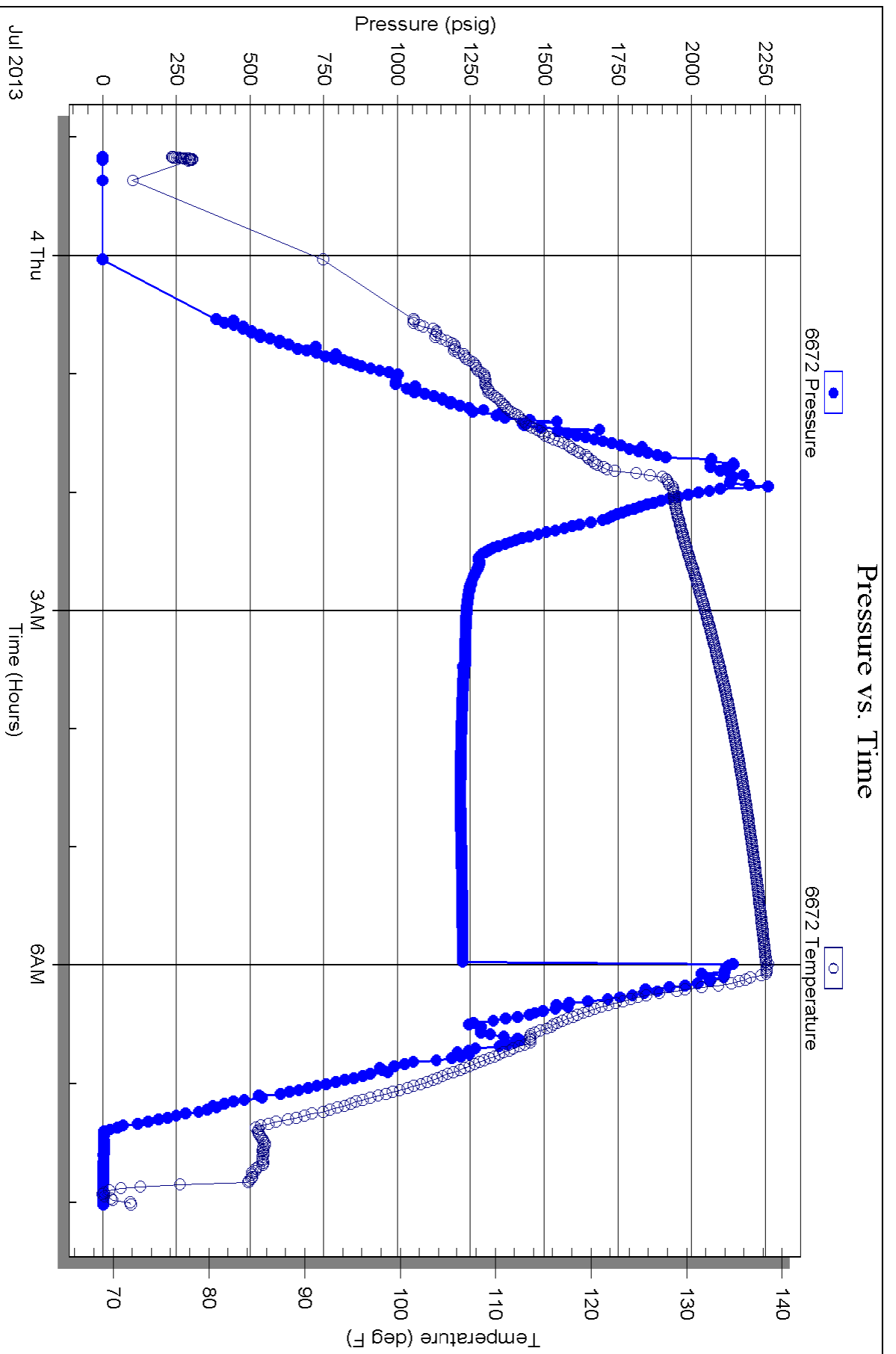
Laboratory Location:

Recovery Comments:









# ALLIED CEMENTING CO., LLC.

Federal Tax I.D.# 20-5975804

03274

MIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:

E 5-11-11	SEC 19	TWP. 16S	RANGE 21E	CALLED OUT	ON LOCATION	JOB START 9:30 AM	JOB FINISH 12:30 PM
SE	WELL # 1	LOCATION			COUNTY	STATE	
D OR NEW (Circle one)							

CONTRACTOR Wentworth

OWNER Wentworth

TYPE OF JOB Casing Plug

CEMENT

PIPE SIZE 7 7/8 T.D. 4600

AMOUNT ORDERED 776

CASING SIZE DEPTH

CASING SIZE DEPTH

WELL PIPE 4 1/2 DEPTH 2248

WELL DEPTH

CS. MAX MINIMUM

COMMON 132 @

AS. LINE SHOE JOINT

POZMIX 44 @

CEMENT LEFT IN CSG.

GEL 8 @

RFS.

CHLORIDE @

PLACEMENT fresh water / 1/2 cement

ASC @

**EQUIPMENT**

MP TRUCK CEMENTER 2 1/2

600 @

774 HELPER 2

@

LK TRUCK

@

4 DRIVER Terrell / Larry S

@

LK TRUCK

@

DRIVER

@

@

@

HANDLING @

MILEAGE

TOTAL

**REMARKS:**

4600 2750 1300 1300

1300 1300 1300 1300

1300 1300 1300 1300

1300 1300 1300 1300

1300 1300 1300 1300

**SERVICE**

DEPTH OF JOB 798

PUMP TRUCK CHARGE

EXTRA FOOTAGE @

MILEAGE @

MANIFOLD @

@

@

TOTAL

ORDER TO: Pioneer Resources

REET

Y STATE ZIP

**PLUG & FLOAT EQUIPMENT**

1 1/2 @

@

@

@

@

Allied Cementing Co., LLC.

You are hereby requested to rent cementing equipment

and furnish cementer and helper(s) to assist owner or

# ALLIED CEMENTING CO., LLC. 1043300

Federal Tax I.D.# 20-5975804

EMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
Oakley

DATE <u>5-3-11</u>	SEC <u>18</u>	TWP. <u>14</u>	RANGE <u>31</u>	CALLED OUT	ON LOCATION	JOB START <u>6:30am</u>	JOB FINISH <u>1:00pm</u>
FROM CASE	WELL # <u>1</u>	LOCATION <u>Oakley 20&lt; 2E</u>			COUNTY <u>Gove</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)		<u>NEW</u>					

CONTRACTOR W+U #2

TYPE OF JOB Surface

WELL SIZE 12 1/4 T.D. 221'

casing SIZE 8 1/2 DEPTH 221'

tubing SIZE DEPTH

well PIPE DEPTH

well DEPTH

ES. MAX MINIMUM

CAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

RFS.

PLACEMENT 13.12 BBL

OWNER same

CEMENT AMOUNT ORDERED 165 sks com

39% cl. 24% gel

COMMON	<u>165 sks</u>	@	<u>16.25</u>	<u>2681.25</u>
POZMIX		@		
GEL	<u>2 sks</u>	@	<u>21.25</u>	<u>42.50</u>
CHLORIDE	<u>1 sks</u>	@	<u>58.20</u>	<u>58.20</u>
ASC		@		

**EQUIPMENT**

PUMP TRUCK CEMENTER Andrew

122-251 HELPER Terry

TRUCK DRIVER Wes

TRUCK DRIVER

HANDLING	<u>174 sks</u>	@	<u>2.25</u>	<u>391.50</u>
MILEAGE	<u>119 sk/mile</u>			<u>431.08</u>
				TOTAL <u>3504.78</u>

**REMARKS:**

**SERVICE**

DEPTH OF JOB	<u>221'</u>			
PUMP TRUCK CHARGE				<u>1125.00</u>
EXTRA FOOTAGE		@		
MILEAGE	<u>22 mi. @ 15.42</u>	@	<u>710</u>	<u>307.20</u>
MANIFOLD	<u>heads</u>	@		<u>270.00</u>
	<u>light valves</u>	@	<u>4.00</u>	<u>176.00</u>

TOTAL

ORDER TO: Pioneer Resources

STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**PLUG & FLOAT EQUIPMENT**

	@		
	@		
	@		
	@		

Allied Cementing Co., LLC.  
I hereby requested to rent cementing equipment  
to furnish cementer and helper(s) to assist owner or

# ALLIED CEMENTING CO., LLC. 1043300

Federal Tax I.D.# 20-5975804

EMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
Oakley

DATE <u>5-3-11</u>	SEC <u>18</u>	TWP. <u>14</u>	RANGE <u>31</u>	CALLED OUT	ON LOCATION	JOB START <u>6:30am</u>	JOB FINISH <u>1:00pm</u>
FROM CASE	WELL # <u>1</u>	LOCATION <u>Oakley 20&lt; 2E</u>			COUNTY <u>Gove</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)		<u>NEW</u>					

CONTRACTOR W+U #2

TYPE OF JOB Surface

WELL SIZE 12 1/4 T.D. 221'

casing SIZE 8 1/2 DEPTH 221'

tubing SIZE DEPTH

drill PIPE DEPTH

tool DEPTH

ES. MAX MINIMUM

CAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

RFS.

PLACEMENT 13.12 BBL

OWNER same

CEMENT AMOUNT ORDERED 165 sks com

39% cl. 24% gel

COMMON	<u>165 sks</u>	@	<u>16.25</u>	<u>2681.25</u>
POZMIX		@		
GEL	<u>2 sks</u>	@	<u>21.25</u>	<u>42.50</u>
CHLORIDE	<u>1 sks</u>	@	<u>58.20</u>	<u>58.20</u>
ASC		@		

**EQUIPMENT**

PUMP TRUCK CEMENTER Andrew

122-251 HELPER Terry

TRUCK DRIVER Wies

TRUCK DRIVER

HANDLING	<u>174 sks</u>	@	<u>2.25</u>	<u>391.50</u>
MILEAGE	<u>119 sk/mile</u>			<u>431.02</u>
				TOTAL <u>3504.78</u>

**REMARKS:**

**SERVICE**

DEPTH OF JOB	<u>221'</u>			
PUMP TRUCK CHARGE				<u>1125.00</u>
EXTRA FOOTAGE		@		
MILEAGE	<u>22 mi. @ 15.42</u>	@	<u>710</u>	<u>307.00</u>
MANIFOLD	<u>heads</u>	@		<u>270.00</u>
	<u>light valves</u>	@	<u>4.00</u>	<u>176.00</u>

TOTAL

ORDER TO: Pioneer Resources

STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**PLUG & FLOAT EQUIPMENT**

	@		
	@		
	@		
	@		

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