



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1178474  
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 Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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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: \_\_\_\_\_

1178474

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 <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  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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# ALLIED OIL & GAS SERVICES, LLC 061114

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:  
Oakley, KS

DATE <u>10-2-13</u>	SEC. <u>25</u>	TWP. <u>14</u>	RANGE <u>30</u>	CALLED OUT <u>8:00AM</u>	ON LOCATION <u>9:00AM</u>	JOB START <u>1:30PM</u>	JOB FINISH <u>2:00PM</u>
LEASE <u>Groom</u>	WELL # <u>2</u>	LOCATION <u>Oakley south to Gove Rd E to Rd 22 S to Rd M E to 22</u>			COUNTY <u>Gove</u>	STATE <u>KS</u>	
OLD OR <input checked="" type="radio"/> NEW (Circle one)			South to Rd 1/2 S E N into				

CONTRACTOR Val # 4

TYPE OF JOB surface

HOLE SIZE 12 1/4 T.D. 229

CASING SIZE 8 5/8 DEPTH 229

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_

CEMENT LEFT IN CSG. 15'

PERFS. \_\_\_\_\_

DISPLACEMENT 13 1/4

OWNER Same

CEMENT AMOUNT ORDERED 160 SKS COM 3+2

**EQUIPMENT**

PUMP TRUCK CEMENTER Kelly Grabel

# 422 HELPER Paul Beaver

BULK TRUCK # 578 DRIVER David Sarcand

BULK TRUCK # \_\_\_\_\_ DRIVER \_\_\_\_\_

COMMON	<u>160 SKS @ 17<sup>00</sup></u>	<u>2848<sup>00</sup></u>
POZMIX	@	
GEL	<u>3 SKS @ 23<sup>00</sup></u>	<u>70<sup>00</sup></u>
CHLORIDE	<u>6 SKS @ 64<sup>00</sup></u>	<u>384<sup>00</sup></u>
ASC	@	
HANDLING	<u>1.73 cu/ft @ 24<sup>00</sup></u>	<u>429<sup>00</sup></u>
MILEAGE	<u>2.52 ton x 60mi x 26<sup>00</sup></u>	<u>977<sup>60</sup></u>
<b>TOTAL</b>		<u>4708<sup>60</sup></u>

REMARKS:  
Start to location, safety meeting  
rigged up  
mixed cement & displaced  
shut in  
cannot circulate  
Thank you Kelly Dow

**SERVICE**

DEPTH OF JOB 229'

PUMP TRUCK CHARGE 1512<sup>25</sup>

EXTRA FOOTAGE @ \_\_\_\_\_

MILEAGE 4.14 @ 60mi @ 440 2256<sup>00</sup>

MANIFOLD sledge @ 360<sup>00</sup>

MHV @ 60mi @ 70 385<sup>00</sup>

**TOTAL** 2477<sup>25</sup>

CHARGE TO: Ronnet Resources

STREET \_\_\_\_\_

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

**PLUG & FLOAT EQUIPMENT**

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

**TOTAL** \_\_\_\_\_

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 done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (if Any) \_\_\_\_\_

TOTAL CHARGES 7,186.09

DISCOUNT 1,652.80 IF PAID IN 30 DAYS

**5,533.28 Net.**

PRINTED NAME \_\_\_\_\_

SIGNATURE [Signature]

DU tool service # 57062 935-05



CONSOLIDATED Oil Well Services, LLC

TICKET NUMBER **44361**  
LOCATION Ochley #5  
FOREMAN Miles Shaw

263186

FIELD TICKET & TREATMENT REPORT

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

CEMENT

KS

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
10-12-13	6308	Green #2	25	14S	30W	Gove
CUSTOMER Pioneer Resources			Cove 45 South 1/4 R132 1/4 E.S.			
MAILING ADDRESS			TRUCK #	DRIVER	TRUCK #	DRIVER
CITY			4567118	Jeremy K		
STATE			5660	(Crew)		
ZIP CODE						

JOB TYPE 2 Stages HOLE SIZE 7 7/8 HOLE DEPTH 4472 CASING SIZE & WEIGHT 5 1/2" 15.5 #  
 CASING DEPTH 4471 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER Durol @ 2093.24  
 SLURRY WEIGHT 14.2 / SLURRY VOL 1.42 WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 19.33  
 DISPLACEMENT 106 1/2 / 50 # DISPLACEMENT PSI 700 / 500 MIX PSI 1800 RATE \_\_\_\_\_

REMARKS: Safety meeting and rig up on Val drilling rig #4 float equipment Centralizers on Jute # 1, 2, 4, 6, 8, 10, 12, 14, 21, 55 Baskets on Jute # 5, 22, 56 15' up from bottom DU tool on top of 56 @ 2093.24' Run casing to bottom circulate casing 1 1/2 hrs. Pump shot Water Mud Flush 5660s KCL mix 175 S/S mix with 5" Kol seal shut down released Plug cleared pump & lines displaced 5660s water & 5660s mud with 700 psi 1.1 ft pressure and held @ 1400 psi; 106 1/2 hbls total. Dropped dart and tool @ 800 psi; established circulation for 3 hrs. Pump 5660s water mud flush 5660s water mix 325 S/S 60/40 per 8% oil 1/4" flu seal down casing shut down released plug cleared pump & lines displaced 5660s water Plus stand ed but did not shut tool shut in with 700 psi 1.1 ft pressure seen Cement did circulate mix 305 S/S RH 205 S/S MH Thanks Miles & crew 30661.

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401C	1	PUMP CHARGE	3175.00	3175.00
5406	30	MILEAGE	5.25	157.50
5407A	24.35 tons	Ton mileage delivery	1.75	1278.37
1126	175 S/S	OLIC Cement	23.70	4147.50
1131	375	60/40 Puz Cement	15.86	5947.50
1107	93 #	Flu seal	2.98	276.21
1110A	875 #	Kol seal	.56	490.00
1119B	2550 #	Bentranite sol	.27	696.60
1142A	2 gal	KCL	41.10	82.20
1146	1000 gal	Mud Flush	1.00	1000.00
4104	3	5 1/2" Baskets	290.00	870.00
4130	10	5 1/2" Centralizers	61.00	610.00
4159	1	5 1/2" AFM Flat shoe	433.75	433.75
4277A	1	5 1/2" DU Tool "W"	4860.00	4860.00
4314	40	5 1/2" Reciprocating Scratchers	82.00	3280.00
4454	1	5 1/2" Latchdown plugs W	567.00	567.00
		Subtotal		27811.63
		less 10% disc cov		2781.16
		Subtotal		25030.47
		7.9%		
		SALES TAX		1649.56
		ESTIMATED TOTAL		26680.03

AUTHORIZATION [Signature] TITLE \_\_\_\_\_ DATE \_\_\_\_\_



I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Pioneer Resources  
80 Windmill Dr.  
Phillipsburg, Ks 67661  
ATTN: Steve Murphy

**25-14s-30w-Gove Co,Ks**

**Groom #2**

Job Ticket: 54515

**DST#: 1**

Test Start: 2013.10.06 @ 22:01:00

## GENERAL INFORMATION:

Formation: **Lkc "C"**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 00:44:15  
 Tester: Cornelio Landa III (  
 Time Test Ended: 05:36:30  
 Unit No: 46  
 Interval: **3796.00 ft (KB) To 3814.00 ft (KB) (TVD)**  
 Reference Elevations: 2693.00 ft (KB)  
 Total Depth: 3814.00 ft (KB) (TVD)  
 2684.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Good  
 KB to GR/CF: 9.00 ft

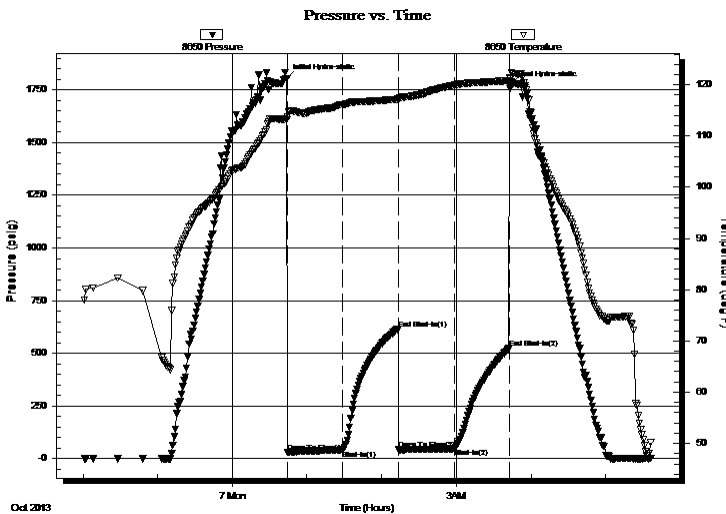
**Serial #: 8650**

**Outside**

Press @ Run Depth: 47.38 psig @ 3801.00 ft (KB)  
 Capacity: 8000.00 psig  
 Start Date: 2013.10.06 End Date: 2013.10.07 Last Calib.: 2013.10.07  
 Start Time: 22:01:15 End Time: 05:36:30 Time On Btm: 2013.10.07 @ 00:43:45  
 Time Off Btm: 2013.10.07 @ 03:43:00

**TEST COMMENT:** IF: 4 in. of blow  
 IS: Bled off in 1 1/2 mins.- No return  
 FF: Surface blow -Died in 15 mins.  
 FS: No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1804.82	113.25	Initial Hydro-static
1	28.38	113.77	Open To Flow (1)
45	39.31	116.10	Shut-In(1)
90	616.04	117.17	End Shut-In(1)
90	41.93	116.89	Open To Flow (2)
135	47.38	119.92	Shut-In(2)
179	523.92	120.82	End Shut-In(2)
180	1770.63	121.39	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
67.00	Ocm 20o 80m	0.94

## 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 Dr.  
Phillipsburg, Ks 67661

**Groom #2**

Job Ticket: 54515

**DST#: 1**

ATTN: Steve Murphy

Test Start: 2013.10.06 @ 22:01:00

## 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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.16 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
67.00	Ocm 20o 80m	0.940

Total Length: 67.00 ft      Total Volume: 0.940 bbl

Num Fluid Samples: 0

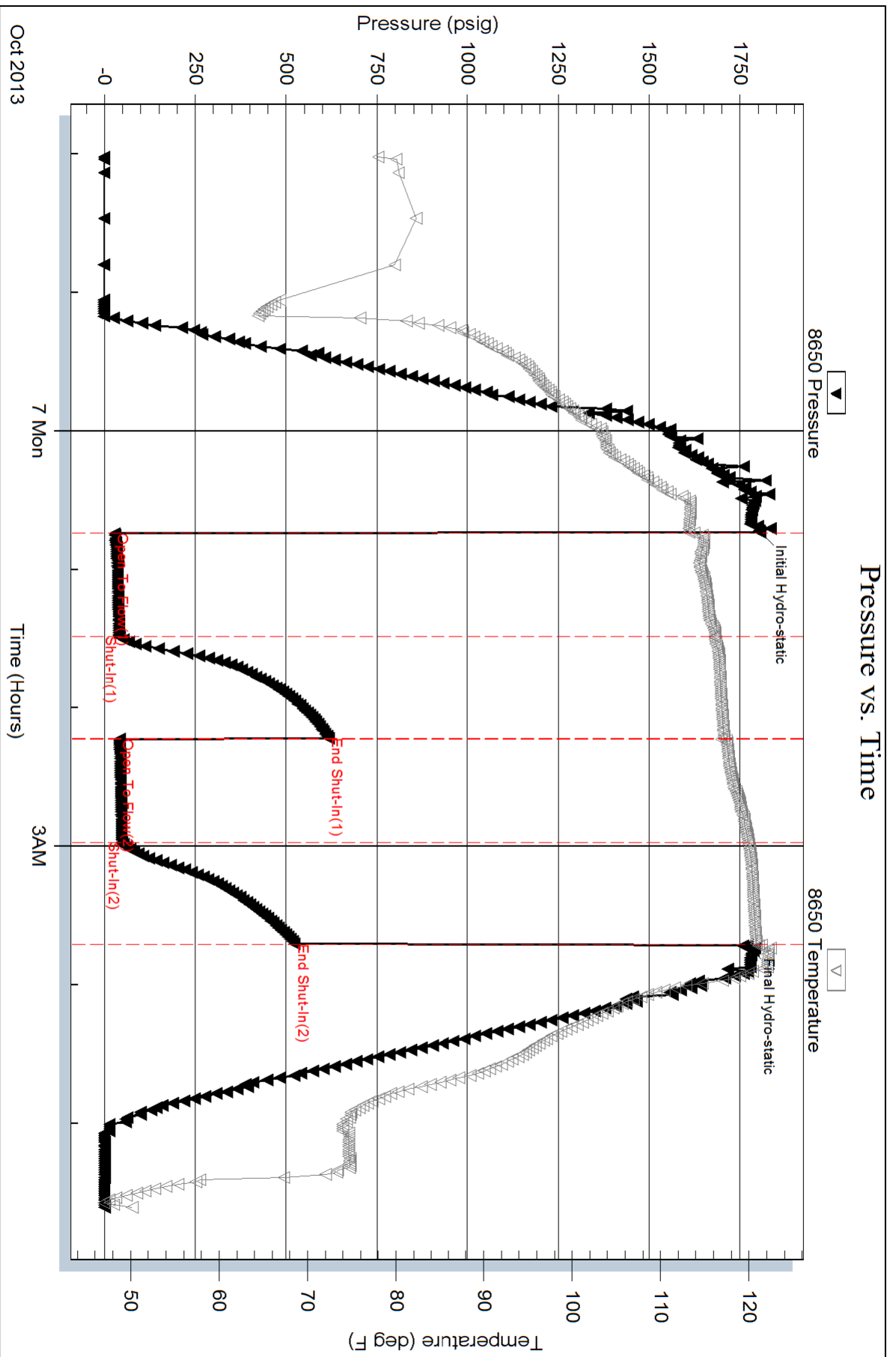
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Pioneer Resources  
 80 Windmill Dr.  
 Phillipsburg, Ks 67661  
 ATTN: Steve Murphy

**25-14s-30w-Gove Co,Ks**

**Groom #2**

Job Ticket: 54516

**DST#: 2**

Test Start: 2013.10.07 @ 14:25:00

## GENERAL INFORMATION:

Formation: **Lkc "D-E"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 16:58:45  
 Time Test Ended: 22:52:30  
 Interval: **3830.00 ft (KB) To 3868.00 ft (KB) (TVD)**  
 Total Depth: 3868.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Cornelio Landa III (  
 Unit No: 46  
 Reference Elevations: 2693.00 ft (KB)  
 2684.00 ft (CF)  
 KB to GR/CF: 9.00 ft

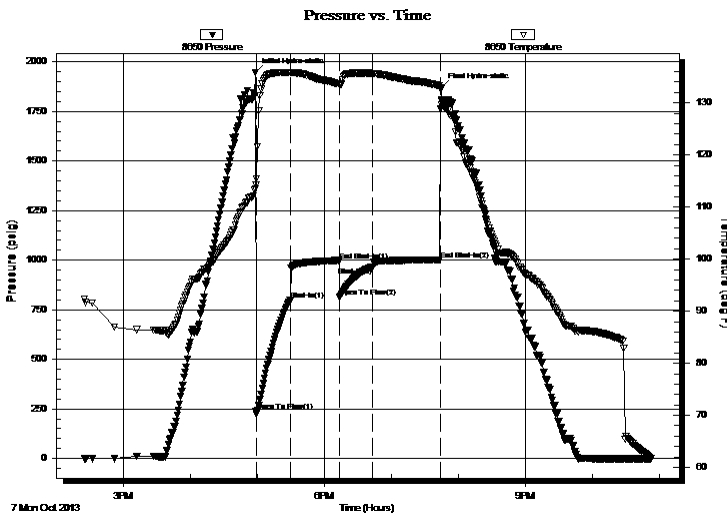
**Serial #: 8650**

**Outside**

Press @ Run Depth: 967.25 psig @ 3835.00 ft (KB)  
 Start Date: 2013.10.07 End Date: 2013.10.07  
 Start Time: 14:25:15 End Time: 22:52:30  
 Capacity: 8000.00 psig  
 Last Calib.: 2013.10.07  
 Time On Btm: 2013.10.07 @ 16:58:15  
 Time Off Btm: 2013.10.07 @ 19:44:45

**TEST COMMENT:** IF: B.o.b. in 45 seconds  
 IS: Bled off in 2 1/2 mins.- No return  
 FF: 3 in. of blow -died in 27 min.  
 FS: No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1946.68	113.50	Initial Hydro-static
1	238.49	114.29	Open To Flow (1)
31	797.38	135.82	Shut-In(1)
75	997.69	133.63	End Shut-In(1)
76	815.15	133.59	Open To Flow (2)
105	967.25	135.63	Shut-In(2)
166	1001.79	133.29	End Shut-In(2)
167	1868.42	130.52	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
310.00	Gw m 10g 30w 60m	4.35
992.00	Mgw 10m 20g 70w	13.92
744.00	Gw 20g 80w	10.44
0.00	RW.08@56=125000	0.00

## 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  
80 Windmill Dr.  
Phillipsburg, Ks 67661  
ATTN: Steve Murphy

**25-14s-30w-Gove Co,Ks**  
**Groom #2**  
Job Ticket: 54516      **DST#: 2**  
Test Start: 2013.10.07 @ 14:25:00

## Mud and Cushion Information

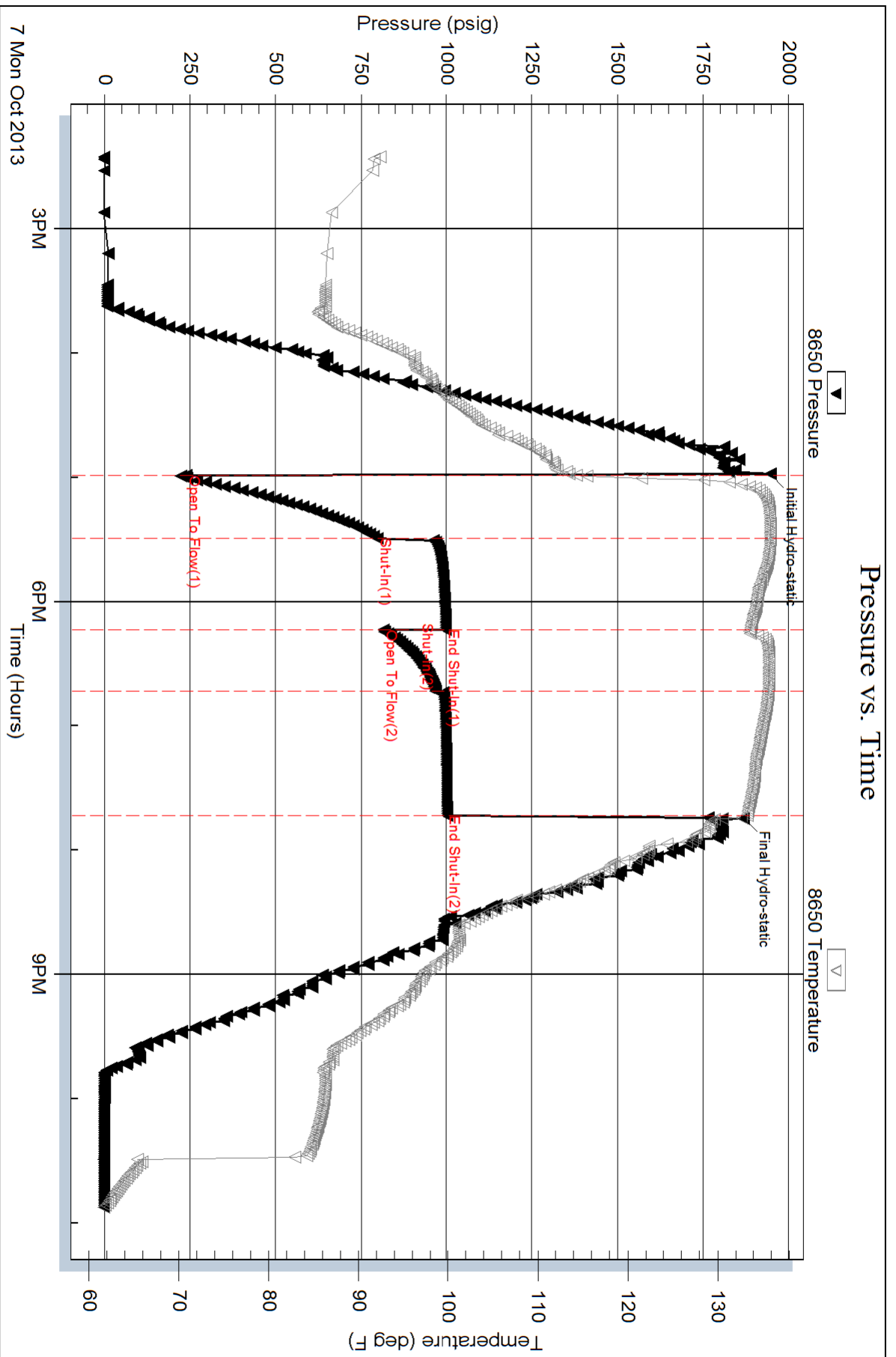
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 62.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.20 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
310.00	Gw m 10g 30w 60m	4.348
992.00	Mgw 10m 20g 70w	13.915
744.00	Gw 20g 80w	10.436
0.00	RW.08@56=125000	0.000

Total Length: 2046.00 ft      Total Volume: 28.699 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 Dr.  
 Phillipsburg, Ks 67661  
 ATTN: Steve Murphy

**25-14s-30w-Gove Co,Ks**

**Groom #2**

Job Ticket: 52980

**DST#: 3**

Test Start: 2013.10.08 @ 08:10:00

## GENERAL INFORMATION:

Formation: **Kansas City " H "**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 10:24:45  
 Time Test Ended: 16:11:30  
 Interval: **3896.00 ft (KB) To 3936.00 ft (KB) (TVD)**  
 Total Depth: 3936.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Jace McKinney  
 Unit No: 46  
 Reference Elevations: 2693.00 ft (KB)  
 2684.00 ft (CF)  
 KB to GR/CF: 9.00 ft

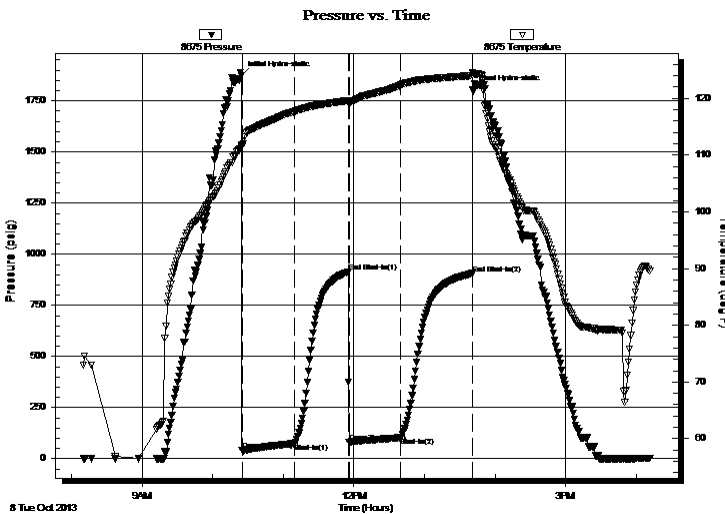
## Serial #: 8675

Inside

Press @ Run Depth: 103.19 psig @ 3897.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.10.08 End Date: 2013.10.08 Last Calib.: 2013.10.08  
 Start Time: 08:10:15 End Time: 16:11:30 Time On Btm: 2013.10.08 @ 10:24:15  
 Time Off Btm: 2013.10.08 @ 13:40:30

TEST COMMENT: B.O.B. in 20 min.  
 Bled off for 5 min. No return blow  
 B.O.B. in 22 min.  
 Bled off for 5 min. Weak return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1873.22	111.74	Initial Hydro-static
1	40.39	111.39	Open To Flow (1)
46	74.55	117.67	Shut-In(1)
91	913.89	119.56	End Shut-In(1)
92	80.81	119.27	Open To Flow (2)
136	103.19	122.29	Shut-In(2)
196	905.70	123.98	End Shut-In(2)
197	1805.53	124.55	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	175 Feet Weak Gas In Pipe	0.00
20.00	Clean Oil	0.28
63.00	mco 40%M 60%O	0.88
63.00	gcmo 10%G 40%M 50%O	0.88
63.00	w cgom 5%W 15%G 20%O 60%M	0.88

\* Recovery from multiple tests

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Pioneer Resources

**25-14s-30w-Gove Co,Ks**

80 Windmill Dr.  
Phillipsburg, Ks 67661

**Groom #2**

Job Ticket: 52980

**DST#: 3**

ATTN: Steve Murphy

Test Start: 2013.10.08 @ 08:10:00

## 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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	175 Feet Weak Gas In Pipe	0.000
20.00	Clean Oil	0.281
63.00	mco 40%M 60%O	0.884
63.00	gcmo 10%G 40%M 50%O	0.884
63.00	w cgom 5%W 15%G 20%O 60%M	0.884

Total Length: 209.00 ft      Total Volume: 2.933 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

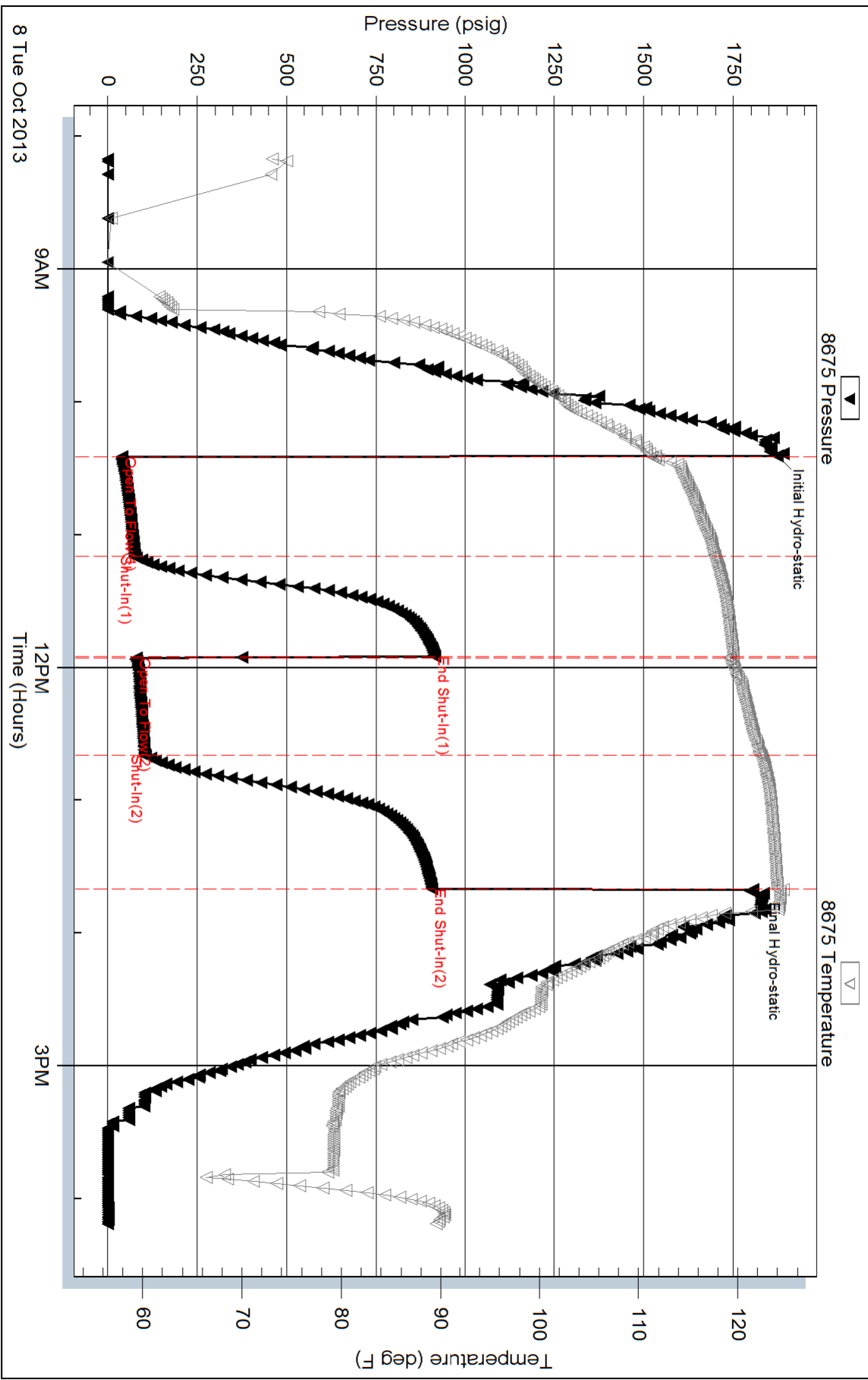
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: 31 @ 80 F = 29

### Pressure vs. Time





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Pioneer Resources  
 80 Windmill Dr.  
 Phillipsburg, Ks 67661  
 ATTN: Steve Murphy

**25-14s-30w-Gove Co, Ks**

**Groom #2**

Job Ticket: 52981

**DST#: 4**

Test Start: 2013.10.09 @ 01:50:00

## GENERAL INFORMATION:

Formation: **Kansas City " I & J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:40:00

Time Test Ended: 08:51:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

**Interval: 3956.00 ft (KB) To 3990.00 ft (KB) (TVD)**

Reference Elevations: 2693.00 ft (KB)

Total Depth: 3990.00 ft (KB) (TVD)

2684.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 9.00 ft

**Serial #: 8675**

**Inside**

Press @ Run Depth: 88.61 psig @ 3957.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.09

End Date:

2013.10.09

Last Calib.: 2013.10.09

Start Time: 01:50:15

End Time:

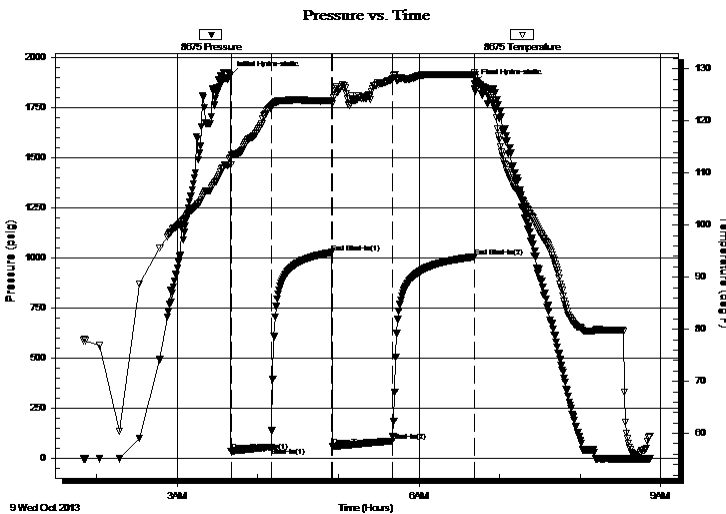
08:51:45

Time On Btm: 2013.10.09 @ 03:39:45

Time Off Btm: 2013.10.09 @ 06:41:30

**TEST COMMENT:** Built to 8" blow  
 No return blow  
 Built to 5" blow  
 No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1912.25	112.85	Initial Hydro-static
1	37.70	111.64	Open To Flow (1)
30	58.98	122.64	Shut-In(1)
76	1029.60	123.89	End Shut-In(1)
76	61.21	123.33	Open To Flow (2)
121	88.61	127.95	Shut-In(2)
182	1007.56	128.99	End Shut-In(2)
182	1870.51	128.98	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
31.00	100% Mud w ith oil scum	0.43
124.00	w cm 40%W 60%M	1.74

\* 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 Dr.  
Phillipsburg, Ks 67661

**Groom #2**

Job Ticket: 52981

**DST#: 4**

ATTN: Steve Murphy

Test Start: 2013.10.09 @ 01:50:00

## 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: 47.00 sec/qt

Cushion Volume:

bbbl

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

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
31.00	100% Mud with oil scum	0.435
124.00	w cm 40%W 60%M	1.739

Total Length: 155.00 ft      Total Volume: 2.174 bbl

Num Fluid Samples: 0

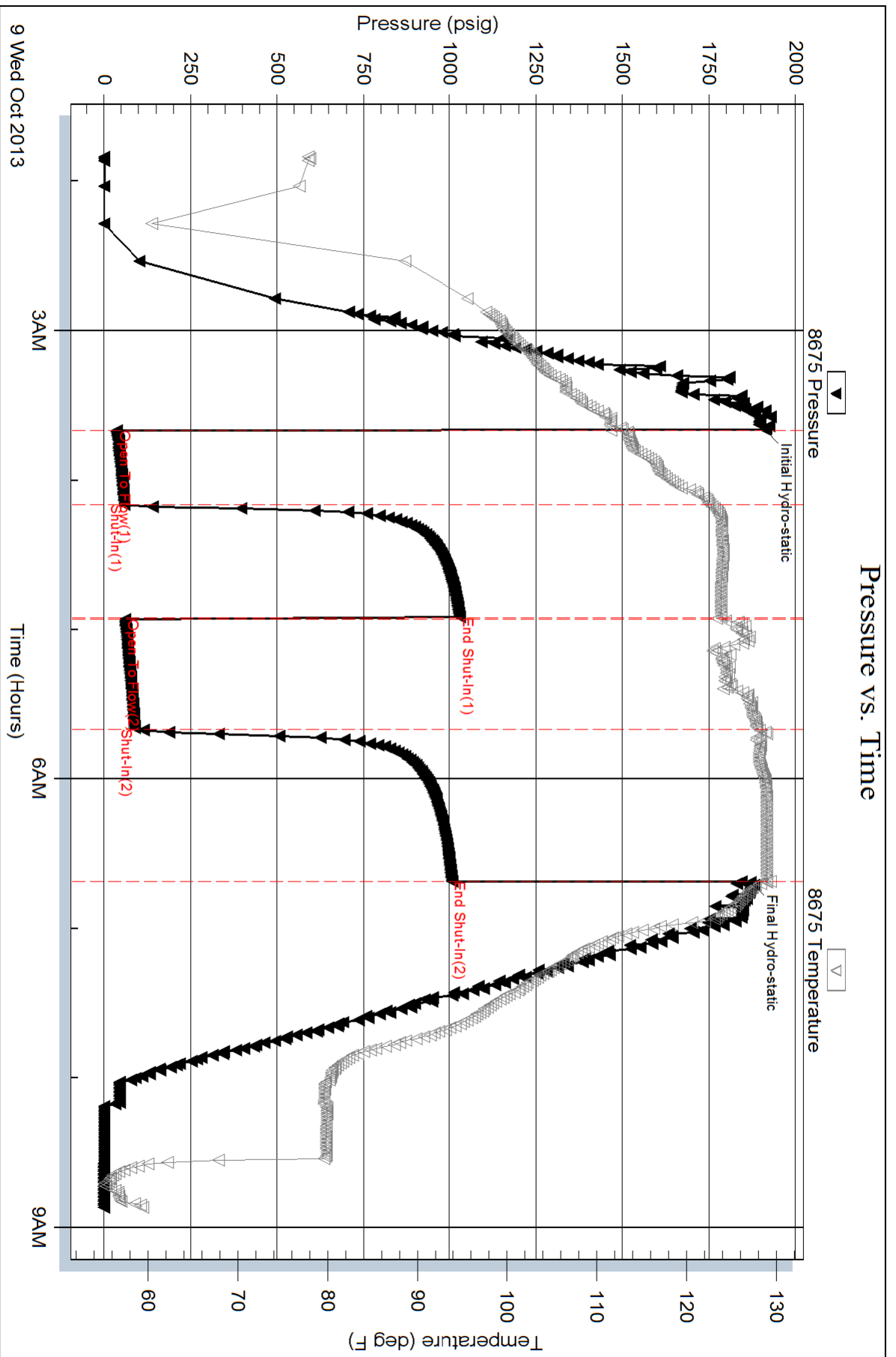
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API: .17 @ 55 F = 50,000







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Pioneer Resources  
80 Windmill Dr.  
Phillipsburg, Ks 67661  
ATTN: Steve Murphy

**25-14s-30w-Gove Co, Ks**

**Groom #2**

Job Ticket: 52982

**DST#: 5**

Test Start: 2013.10.10 @ 23:15:00

## GENERAL INFORMATION:

Formation: **Miss Spergen**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:35:00

Time Test Ended: 07:38:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

**Interval: 4386.00 ft (KB) To 4406.00 ft (KB) (TVD)**

Total Depth: 4406.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2693.00 ft (KB)

2684.00 ft (CF)

KB to GR/CF: 9.00 ft

**Serial #: 8675**

**Inside**

Press @ Run Depth: 162.71 psig @ 4387.00 ft (KB)

Start Date: 2013.10.10

End Date:

2013.10.11

Start Time: 23:15:15

End Time:

07:38:30

Capacity: 8000.00 psig

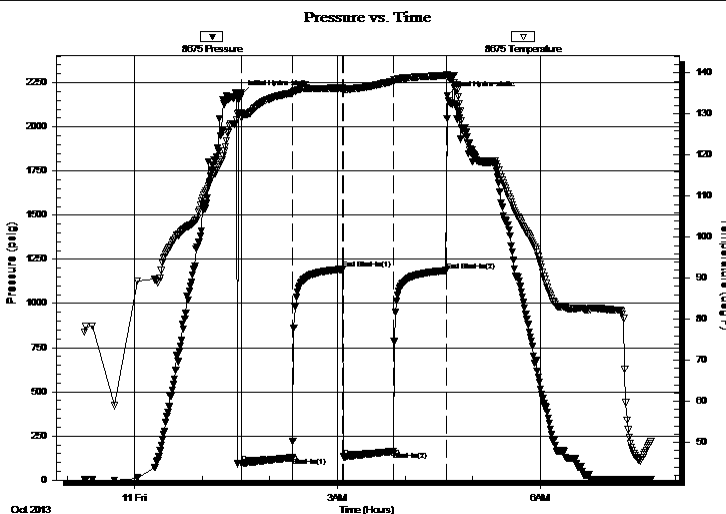
Last Calib.: 2013.10.11

Time On Btm: 2013.10.11 @ 01:34:45

Time Off Btm: 2013.10.11 @ 04:37:30

**TEST COMMENT:** Built to 8 1/2" blow  
Bled off for 5 min. No return blow  
Built to 8 1/2" blow  
Bled off for 5 min. Built to 1/4" return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2183.10	130.29	Initial Hydro-static
1	93.28	129.06	Open To Flow (1)
46	127.21	135.11	Shut-In(1)
90	1193.63	136.35	End Shut-In(1)
91	132.15	136.05	Open To Flow (2)
135	162.71	138.00	Shut-In(2)
182	1186.39	139.38	End Shut-In(2)
183	2178.79	139.58	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	93 Feet of weak gas in pipe	0.00
63.00	gco 10%G 90%O	0.88
189.00	mco 50%m 50%O	2.65
98.00	gcom 10%G 20%O 70%M	1.37

## 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 Dr.  
Phillipsburg, Ks 67661

**Groom #2**

Job Ticket: 52982

**DST#: 5**

ATTN: Steve Murphy

Test Start: 2013.10.10 @ 23:15:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.60 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	93 Feet of weak gas in pipe	0.000
63.00	gco 10%G 90%O	0.884
189.00	mco 50%m 50%O	2.651
98.00	gcom 10%G 20%O 70%M	1.375

Total Length: 350.00 ft      Total Volume: 4.910 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API: 35 @ 40 F = 37

