



**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
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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				

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
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<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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	IA Operating, Inc.
Well Name	T. W. Hall 17-1
Doc ID	1138682

All Electric Logs Run

Geologist's Well Report
Compensated Density/Neutron Log
Micro Log
Sonic Log
Dual Induction Log

Form	ACO1 - Well Completion
Operator	IA Operating, Inc.
Well Name	T. W. Hall 17-1
Doc ID	1138682

Tops

Name	Top	Datum
Anhydrite	1302	+684
Base Anhydrite	1347	+639
Topeka	2969	-983
Heebner Shale	3187	-1201
Toronto	3209	-1223
Lansing	3228	-1242
Arbuckle	3533	-1547
Total Depth	3650	

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

Home Office P.O. Box 32 Russell, KS 67665

No. 6144

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
10-3-12	17	11	19	Ellis	KS		1:30pm.

Location *Yocemento N River view Rd 1/2 mi N into*

Lease *T.W. HALL* Well No. *17-1* Owner

Contractor *Discovery #2*  
 Type Job *Protection String*  
 To Quality Oilwell Cementing, Inc.  
 You are hereby requested to rent cementing equipment and furnish  
 cementer and helper to assist owner or contractor to do work as listed.

Hole Size *7/8* T.D. *3650* Charge To *J.A. Operating*

Csg. *5/2 155\** Depth *3651* Street

Tbg. Size Depth City State

Tool *Port Collar #57* Depth *1322* The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. *45'* Shoe Joint *45'* Cement Amount Ordered *200 com 10% Salt 5% Gisonite*

Meas Line Displace *85 3/4 BCL* *500 gal mud clear*

**EQUIPMENT** Common *300*

Pumptrk *5* No. Cementer *Paul S* Poz. Mix

Bulktrk No. Driver *Brett* Gel.

Bulktrk *14* No. Driver *Lonnie W.* Calcium

**JOB SERVICES & REMARKS** Hulls

Remarks: Salt *18*

Rat Hole *30SK* Flowseal

Mouse Hole *15SK* Kol-Seal *1000#*

Centralizers Mud CLR 48 *500 gal*

Baskets CFL-117 or CD110 CAF *38*

D/V or Port Collar *#57 @ 1322'* Sand

*5/2 sev @ 3651 Invert 3606 Est.* Handling *228*

*Circulation Pump 500 gal mud clear & 100L* Mileage

*Spacer Cement Retriever mousehole.*

*Cement 5/2 with 155SK - Clear*

*Lines Displace Plug Plug landed*

*@ 1500# & held. Release Pressure*

*Dry.*

**FLOAT EQUIPMENT**

Guide Shoe *1* *5/2*

Centralizer *7*

Baskets *1*

AFU Inserts *1*

Float Shoe *Rubber Plug*

Latch Down *24 Recip. Scratchers*

*Port Collar*

Pumptrk Charge *prol long string*

Mileage *17*

Tax

Discount

Total Charge

X Signature *Mudd*

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 6155

Date	Sec.	Twp.	Range.	County	State	On Location	Finish
10-26-12	17	11	19	ELLIS	KANSAS		12:00AM
Lease T.W. HALL				Well No. #17-1		Location YOCEMENTO - N TO RIVERVIEW RO. - 1/4 W - N / INTD	
Contractor D.D. #2				Owner T.A. OPERATING		To Quality Oilwell Cementing, Inc.	
Type Job SURFACE				You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Hole Size 12 1/4"		T.D. 258'		Charge To T.A. OPERATING INC.			
Csg. 8 5/8"		Depth [REDACTED]		Street 9915 W 21ST STE B			
Tbg. Size		Depth 258'		City WICHITA		State KS, 167205	
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.			
Cement Left in Csg.		Shoe Joint 15'		Cement Amount Ordered 175 com - 3cc - 2 gcl			
Meas Line		Displace 15 Bbls					
<b>EQUIPMENT</b>				Common 175			
Pumptrk #15	No.	Cementer		Poz. Mix			
		Helper NICK					
Bulktrk #1	No.	Driver		Gel. 3			
		Driver LONNIE W.					
Bulktrk DW	No.	Driver		Calcium 6			
		Driver GISSO					
<b>JOB SERVICES &amp; REMARKS</b>				Hulls			
Remarks:				Salt			
Rat Hole				Flowseal			
Mouse Hole				Kol-Seal			
Centralizers				Mud CLR 48			
Baskets				CFL-117 or CD110 CAF 38			
D/V or Port Collar				Sand			
				Handling 184			
CEMENT DID CRAWLATE 1				Mileage			
				<b>FLOAT EQUIPMENT</b>			
				Guide Shoe			
				Centralizer			
				Baskets			
				AFU Inserts			
				Float Shoe			
				Latch Down			
				Pumptrk Charge SURFACE			
THANK YOU!				Mileage 17			
				Tax			
				Discount			
X Signature [Signature]				Total Charge			

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

Home Office P.O. Box 32 Russell, KS 67665

No. 6089

Cell 785-324-1041

Date	11-6-12	Sec.	17	Twp.	11	Range	19	County	Ellis	State	KS	On Location		Finish	1:30 PM
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Lease T-W Hall Well No. 17-1 Location Cemento N to River Road

Contractor Chetos Owner To Quality Oilwell Cementing, Inc.  
 Type Job port collar You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Hole Size 5 1/2 T.D. JA Operating  
 Csg. 5 1/2 Depth JA Operating  
 Tbg. Size 2 1/2 Depth JA Operating

Tool JA Operating Street JA Operating  
 City JA Operating State JA Operating

Cement Left in Csg. JA Operating Shoe Joint JA Operating  
 Cement Amount Ordered Qm DC 1/4 flow

Meas Line JA Operating Displace 6.5 BBL  
 Common Used 210

EQUIPMENT			
Pumptrk	5	No.	Cement/Helper <u>Matt</u>
Bulktrk	8	No.	Driver <u>port</u>
Bulktrk	<u>port</u>	No.	Driver <u>Doug</u>

**JOB SERVICES & REMARKS**

Remarks: TW Hall 17-1  
 Rat Hole 75#

Mouse Hole 75#  
 Centralizers 75#

Baskets 75#  
 D/V or Port Collar 1318

Handling 230  
 Mileage 230

**FLOAT EQUIPMENT**

Guide Shoe 230

Centralizer 230

Baskets 230

AFU Inserts 230

Float Shoe 230

Latch Down 230

Pumptrk Charge port collar  
 Mileage 17

Tax port collar  
 Discount port collar  
 Total Charge port collar

*Handwritten signature*







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

IA Operating, Inc

**17-11s-19w-Ellis**

9915 W. 21st Street  
Suite B  
Wichita, KS. 67205  
ATTN: Terry McLeod

**T W Hall #17-1**

Job Ticket: 48717

**DST#: 1**

Test Start: 2012.10.30 @ 12:50:52

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 47.00 sec/qt

Water Loss: 7.99 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 2900.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
105.00	GMO-15%G-60%O-25%M	1.200
0.00	255' Gas In Pipe	0.000

Total Length: 105.00 ft      Total Volume: 1.200 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8366

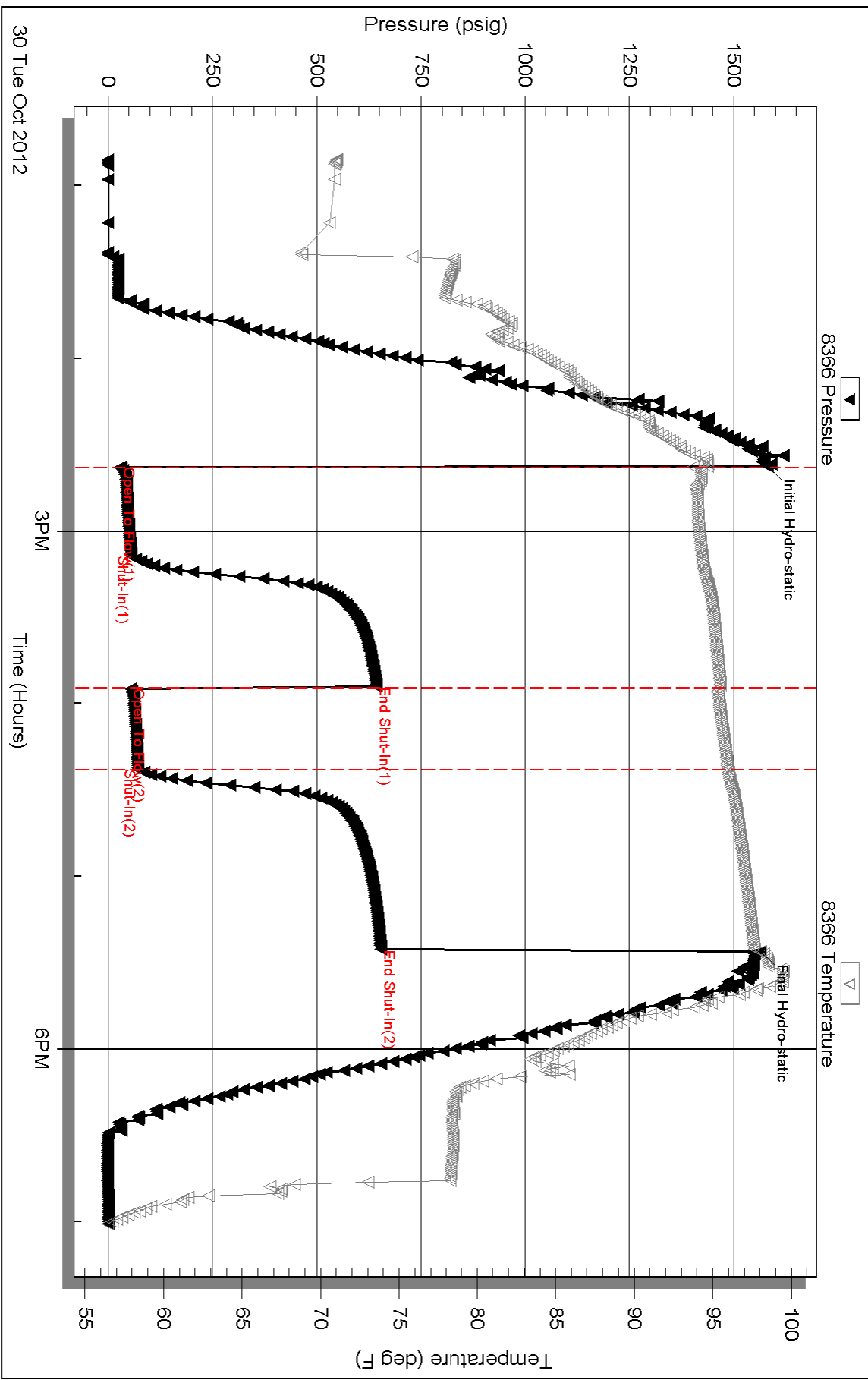
Inside

IA Operating, Inc

TW Hall #17-1

DST Test Number: 1

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

IA Operating, Inc  
9915 W. 21st Street  
Suite B  
Wichita, KS. 67205  
ATTN: Terry McLeod

**17-11s-19w-Ellis**  
**T W Hall #17-1**  
Job Ticket: 48718      **DST#: 2**  
Test Start: 2012.10.30 @ 23:59:20

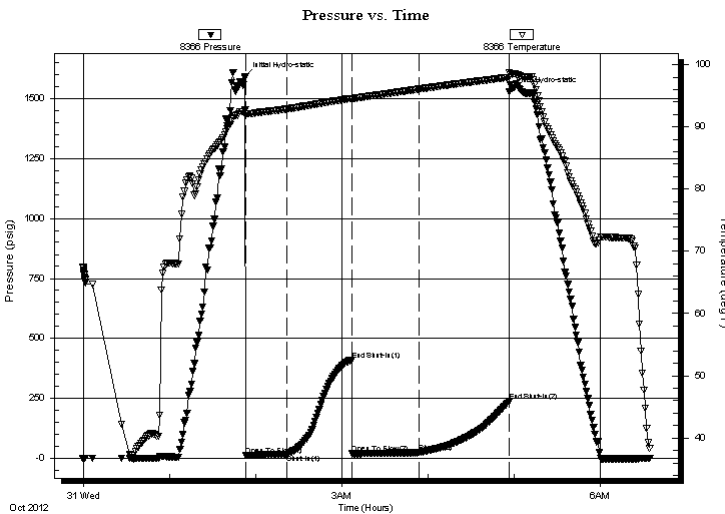
## GENERAL INFORMATION:

Formation: **E-F**  
Deviated: No    Whipstock: 0.00 ft (KB)  
Time Tool Opened: 01:52:50  
Time Test Ended: 06:34:05  
Interval: **3290.00 ft (KB) To 3317.00 ft (KB) (TVD)**  
Total Depth: 3317.00 ft (KB) (TVD)  
Hole Diameter: 7.80 inches    Hole Condition: Good  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Jason McLemore  
Unit No: 54  
Reference Elevations: 1996.00 ft (KB)  
1986.00 ft (CF)  
KB to GR/CF: 10.00 ft

**Serial #: 8366    Inside**  
Press @ Run Depth: 25.35 psig @ 3294.00 ft (KB)    Capacity: 8000.00 psig  
Start Date: 2012.10.30    End Date: 2012.10.31    Last Calib.: 2012.10.31  
Start Time: 23:59:22    End Time: 06:34:05    Time On Btm: 2012.10.31 @ 01:52:35  
Time Off Btm: 2012.10.31 @ 04:56:20

**TEST COMMENT:** IFP-Weak Blow , Built to 1-1/4"  
ISI-Dead  
FFP-Weak Blow , Built to 1"  
FSI-Dead

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1588.55	92.67	Initial Hydro-static
1	13.10	91.83	Open To Flow (1)
29	18.65	92.88	Shut-In(1)
74	410.87	94.58	End Shut-In(1)
75	20.56	94.43	Open To Flow (2)
122	25.35	96.08	Shut-In(2)
184	237.55	97.96	End Shut-In(2)
184	1526.32	98.76	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	OCM-25%O-75%M	0.05

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

IA Operating, Inc  
9915 W. 21st Street  
Suite B  
Wichita, KS. 67205  
ATTN: Terry McLeod

**17-11s-19w-Ellis**  
**T W Hall #17-1**  
Job Ticket: 48718      **DST#: 2**  
Test Start: 2012.10.30 @ 23:59:20

### Mud and Cushion Information

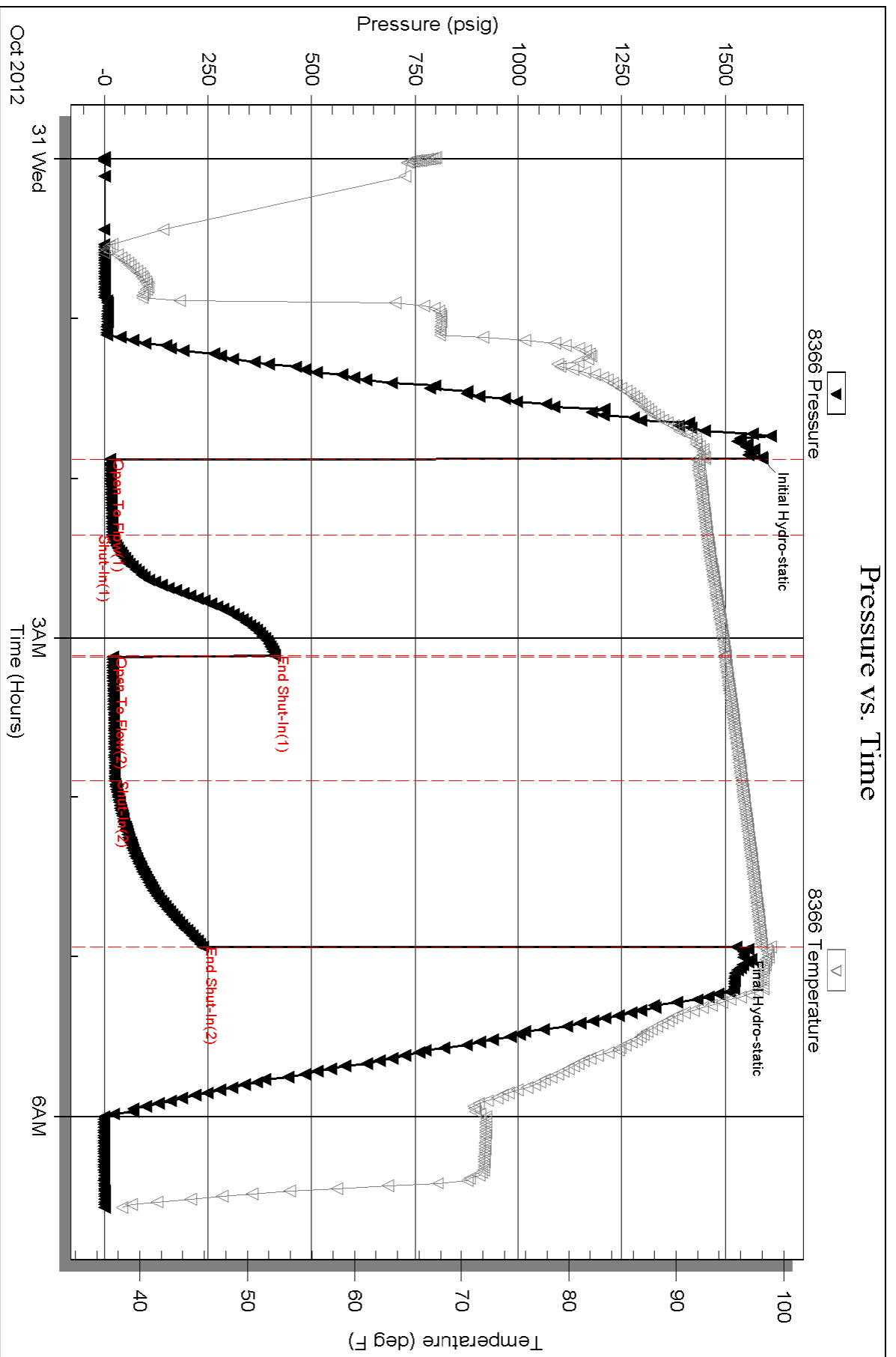
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.98 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2900.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	OCM-25%O-75%M	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

IA Operating, Inc  
9915 W. 21st Street  
Suite B  
Wichita, KS. 67205  
ATTN: Terry McLeod

**17-11s-19w-Ellis**  
**T W Hall #17-1**  
Job Ticket: 48719      **DST#: 3**  
Test Start: 2012.10.31 @ 11:20:56

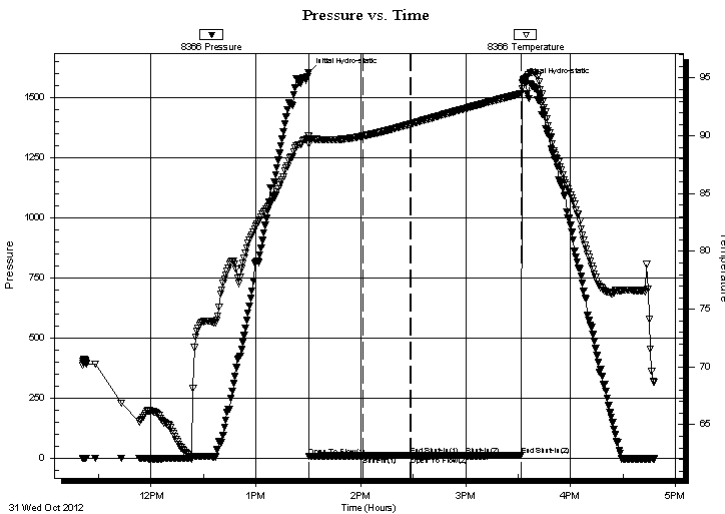
## GENERAL INFORMATION:

Formation: **G**  
Deviated: No      Whipstock: 0.00 ft (KB)  
Time Tool Opened: 13:30:26  
Time Test Ended: 16:48:11  
Interval: **3315.00 ft (KB) To 3335.00 ft (KB) (TVD)**  
Total Depth: 3335.00 ft (KB) (TVD)  
Hole Diameter: 7.80 inches      Hole Condition: Good  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Jason McLemore  
Unit No: 54  
Reference Elevations: 1996.00 ft (KB)  
1986.00 ft (CF)  
KB to GR/CF: 10.00 ft

**Serial #: 8366      Inside**  
Press @ Run Depth: 11.74 psig @ 3317.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2012.10.31      End Date: 2012.10.31      Last Calib.: 2012.10.31  
Start Time: 11:20:58      End Time: 16:48:11      Time On Btm: 2012.10.31 @ 13:30:11  
Time Off Btm: 2012.10.31 @ 15:32:11

**TEST COMMENT:** IFP-Weak Intermittant Blow , 1/8"  
ISI-Dead  
FFP-Very Weak Surface Blow , Died in 5 Min.  
FSI-Dead

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1603.45	90.03	Initial Hydro-static
1	10.03	89.30	Open To Flow (1)
31	11.11	89.99	Shut-In(1)
58	12.71	91.02	End Shut-In(1)
59	11.19	91.03	Open To Flow (2)
90	11.74	92.39	Shut-In(2)
122	12.73	93.65	End Shut-In(2)
122	1561.90	94.11	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud W/Oil Specks	0.00

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

IA Operating, Inc  
9915 W. 21st Street  
Suite B  
Wichita, KS. 67205  
ATTN: Terry McLeod

**17-11s-19w-Ellis**  
**T W Hall #17-1**  
Job Ticket: 48719      **DST#: 3**  
Test Start: 2012.10.31 @ 11:20:56

### Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.99 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Mud W/Oil Specks	0.005

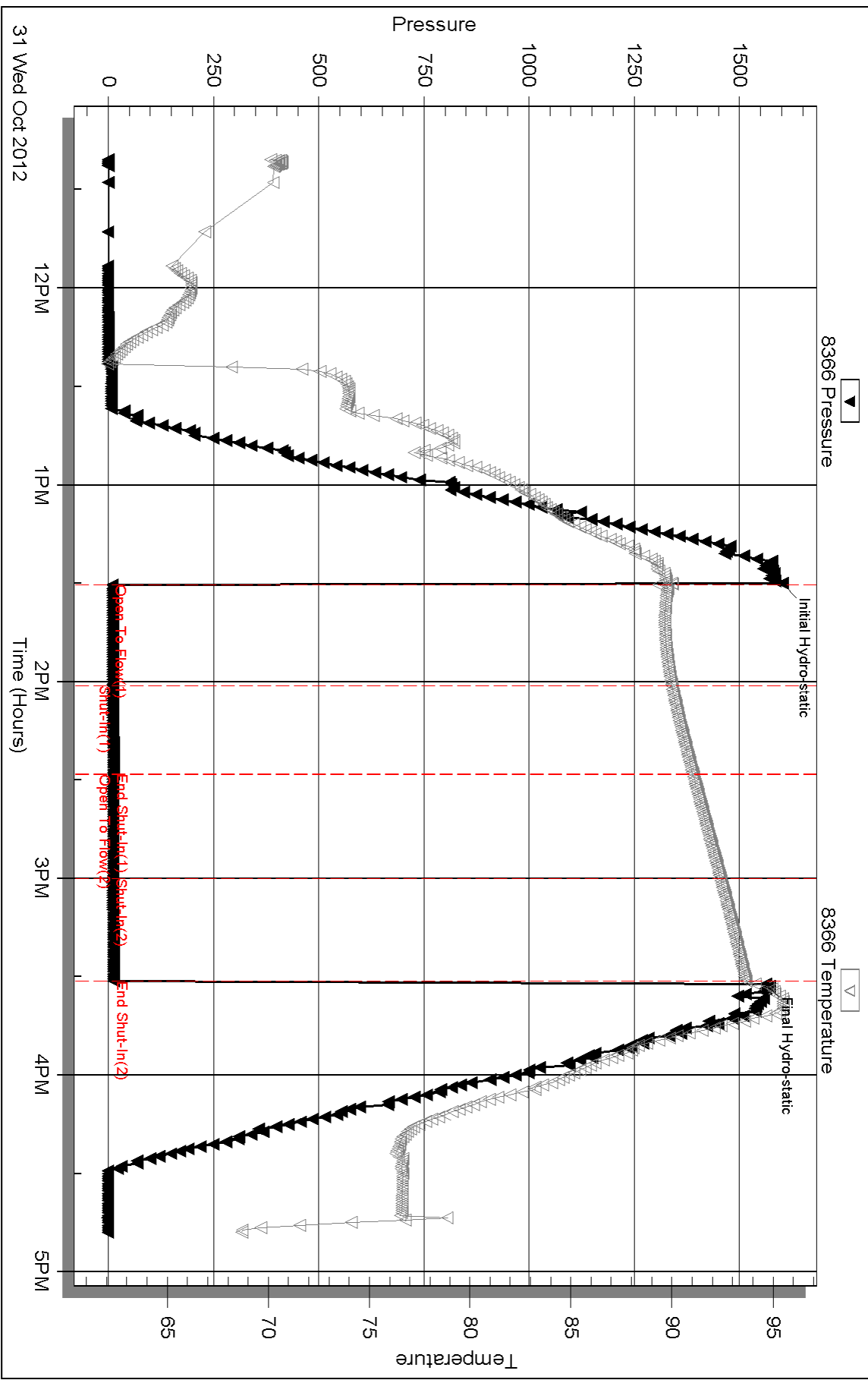
Total Length: 1.00 ft      Total Volume: 0.005 bbl

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

IA Operating, Inc  
 9915 W. 21st Street  
 Suite B  
 Wichita, KS. 67205  
 ATTN: Terry McLeod

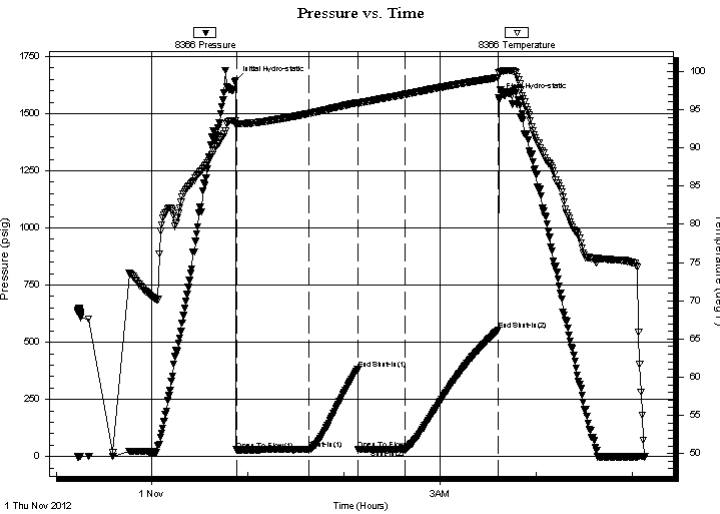
**17-11s-19w-Ellis**  
**T W Hall #17-1**  
 Job Ticket: 48720 **DST#: 4**  
 Test Start: 2012.10.31 @ 23:13:31

## GENERAL INFORMATION:

Formation: **H-I**  
 Deviated: No Whipstock: 0.00 ft (KB)  
 Time Tool Opened: 00:52:31  
 Time Test Ended: 05:08:01  
 Interval: **3340.00 ft (KB) To 3390.00 ft (KB) (TVD)**  
 Total Depth: 3390.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Jason McLemore  
 Unit No: 54  
 Reference Elevations: 1996.00 ft (KB)  
 1986.00 ft (CF)  
 KB to GR/CF: 10.00 ft

**Serial #: 8366 Inside**  
 Press @ Run Depth: 30.89 psig @ 3377.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.10.31 End Date: 2012.11.01 Last Calib.: 2012.11.01  
 Start Time: 23:13:33 End Time: 05:08:01 Time On Btm: 2012.11.01 @ 00:52:16  
 Time Off Btm: 2012.11.01 @ 03:36:31

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



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1646.09	93.53	Initial Hydro-static
1	29.10	93.00	Open To Flow (1)
46	30.61	94.50	Shut-In(1)
77	383.78	95.93	End Shut-In(1)
77	30.80	95.72	Open To Flow (2)
106	30.89	96.99	Shut-In(2)
164	552.66	99.19	End Shut-In(2)
165	1569.84	99.79	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud W/Oil Specks	0.00

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

IA Operating, Inc  
9915 W. 21st Street  
Suite B  
Wichita, KS. 67205  
ATTN: Terry McLeod

**17-11s-19w-Ellis**  
**T W Hall #17-1**  
Job Ticket: 48720      **DST#: 4**  
Test Start: 2012.10.31 @ 23:13:31

### 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: bbl		
Water Loss: 7.98 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2900.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

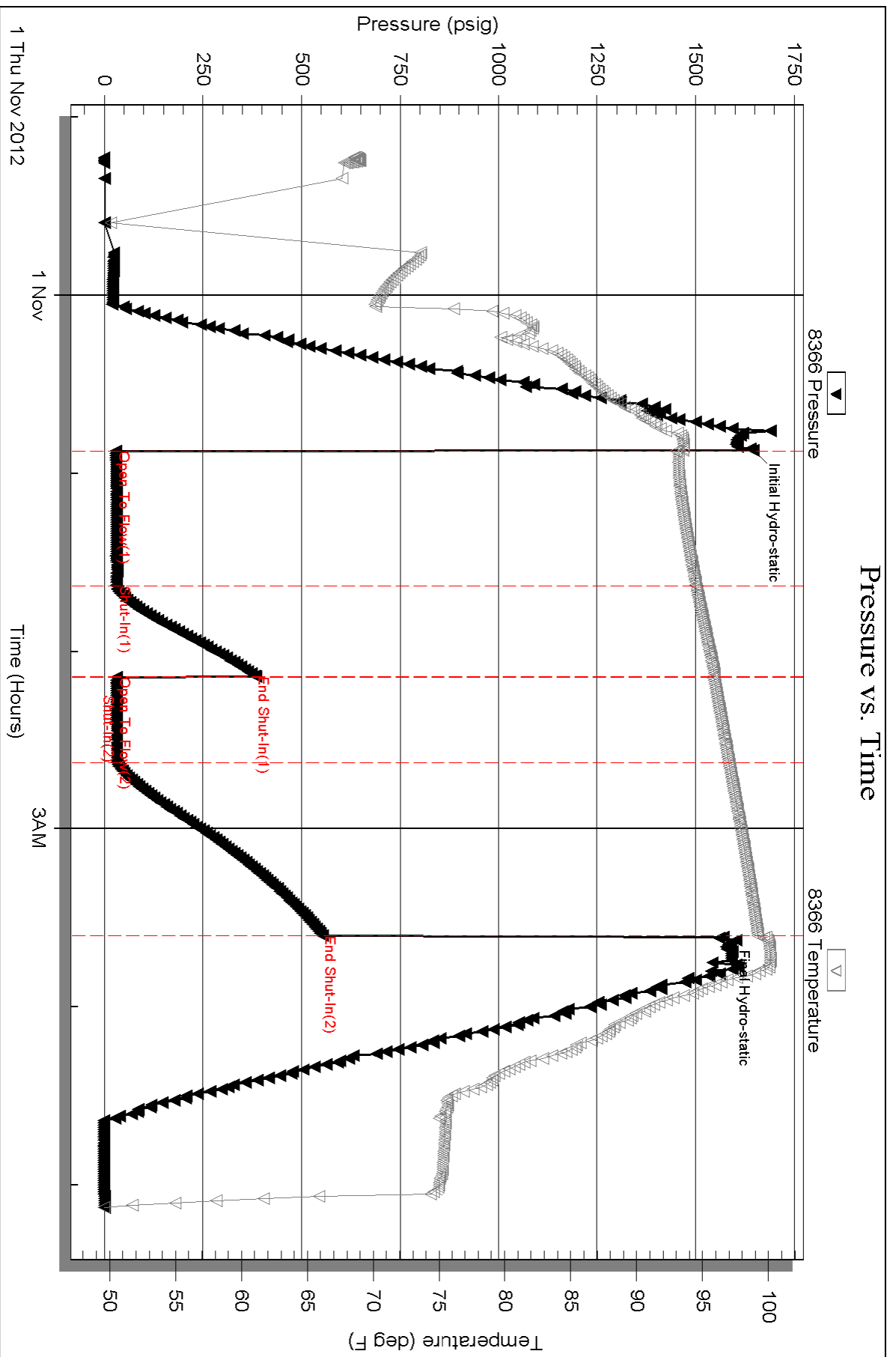
Length ft	Description	Volume bbl
1.00	Mud W/Oil Specks	0.005

Total Length: 1.00 ft      Total Volume: 0.005 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

IA Operating, Inc  
9915 W. 21st Street  
Suite B  
Wichita, KS. 67205  
ATTN: Terry McLeod

**17-11s-19w-Ellis**  
**T W Hall #17-1**  
Job Ticket: 48721      **DST#: 5**  
Test Start: 2012.11.01 @ 11:14:15

### Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 21 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.97 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 3000.00 ppm		
Filter Cake: inches		

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	OCM-25%O-75%M	0.098
50.00	Free Oil	0.610

Total Length: 70.00 ft      Total Volume: 0.708 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

Serial #: 8366

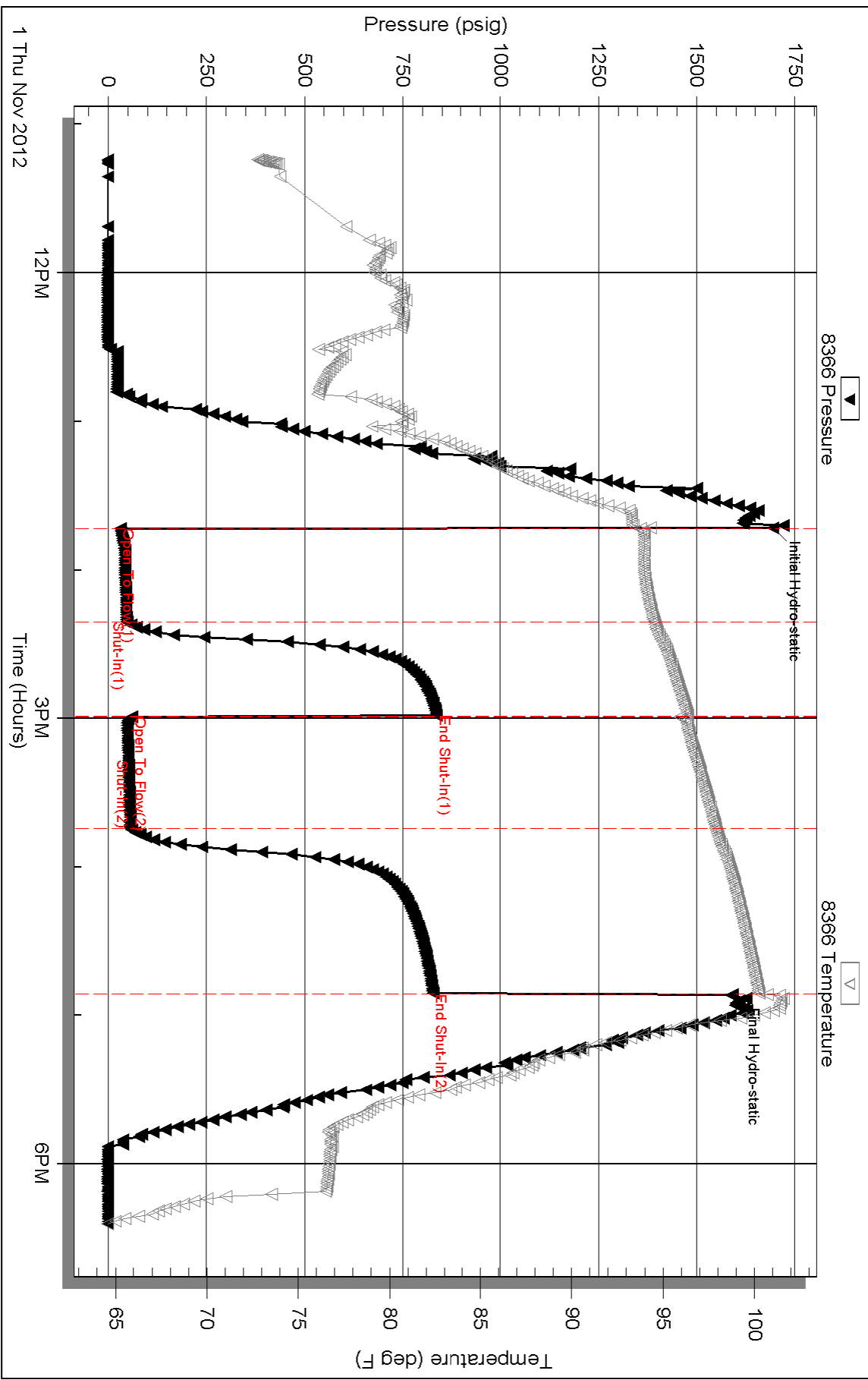
Inside

IA Operating, Inc

TW Hall #17-1

DST Test Number: 5

# Pressure vs. Time



Triobite Testing, Inc

Ref. No: 48721

Printed: 2012.11.01 @ 23:15:56



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

IA Operating, Inc  
9915 W. 21st Street  
Suite B  
Wichita, KS. 67205  
ATTN: Terry McLeod

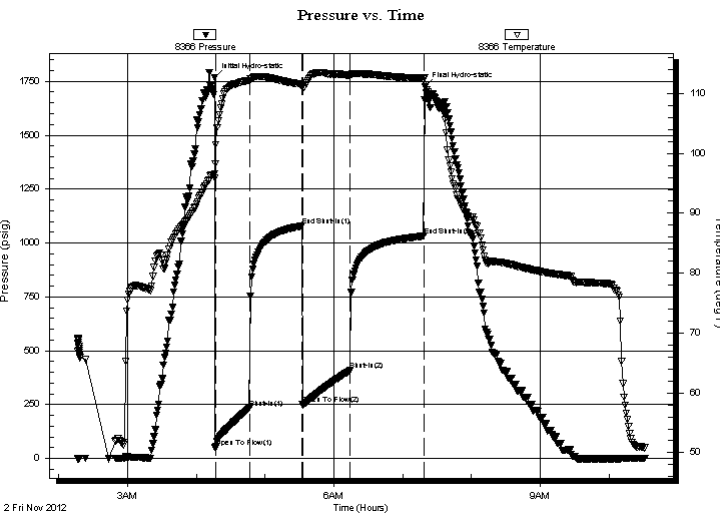
**17-11s-19w-Ellis**  
**T W Hall #17-1**  
Job Ticket: 48722      **DST#: 6**  
Test Start: 2012.11.02 @ 02:16:26

## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No Whipstock: 0.00 ft (KB)  
Time Tool Opened: 04:16:41  
Time Test Ended: 10:31:26  
Interval: **3525.00 ft (KB) To 3543.00 ft (KB) (TVD)**  
Total Depth: 3543.00 ft (KB) (TVD)  
Hole Diameter: 7.80 inches Hole Condition: Good  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Jason McLemore  
Unit No: 54  
Reference Elevations: 1996.00 ft (KB)  
1986.00 ft (CF)  
KB to GR/CF: 10.00 ft

**Serial #: 8366      Inside**  
Press @ Run Depth: 408.88 psig @ 3527.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2012.11.02      End Date: 2012.11.02      Last Calib.: 2012.11.02  
Start Time: 02:16:28      End Time: 10:31:26      Time On Btm: 2012.11.02 @ 04:15:56  
Time Off Btm: 2012.11.02 @ 07:19:26

**TEST COMMENT:** IFP-Strong, Bob in 4 Min.  
ISI-Weak Surface Blow back for 8 Min.  
FFP-Strong, BOB in 6 Min.  
FSI-Dead



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1767.22	96.61	Initial Hydro-static
1	49.95	98.28	Open To Flow (1)
31	233.29	112.16	Shut-In(1)
77	1079.11	111.56	End Shut-In(1)
77	252.12	111.17	Open To Flow (2)
119	408.88	113.01	Shut-In(2)
183	1031.74	112.54	End Shut-In(2)
184	1723.33	112.63	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
993.00	Gassy Heavy Oil-30%G-70%O	13.66
0.00	Trace of Water in Last 10'	0.00

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

IA Operating, Inc

**17-11s-19w-Ellis**

9915 W. 21st Street  
Suite B  
Wichita, KS. 67205  
ATTN: Terry McLeod

**T W Hall #17-1**

Job Ticket: 48722

**DST#: 6**

Test Start: 2012.11.02 @ 02:16:26

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

19 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2900.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
993.00	Gassy Heavy Oil-30%G-70%O	13.656
0.00	Trace of Water in Last 10'	0.000

Total Length: 993.00 ft      Total Volume: 13.656 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



