



KANSAS CORPORATION COMMISSION 1161290
OIL & GAS CONSERVATION DIVISION

Form ACO-1

June 2009

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
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- 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

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
_____ 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
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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> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	Joseph 1-15
Doc ID	1161290

Tops

Name	Top	Datum
Anhy	1685'	+728
B/Anhy	1725'	+688
Heebner	3779'	-1366
Lansing	3821'	-1408
B/KC	4166'	-1753
Marmaton	4193'	-1780
Ft.Scott	4338'	-1925
Cherokee	4365'	-1952
Mississippian	4442'	-2029

Geological Report

American Warrior, Inc.

Joseph #1-15

1977' FSL & 823' FEL

Sec. 15, T19s, R25w

Ness County, Kansas



American Warrior, Inc.

General Data

Well Data: American Warrior, Inc.
Joseph #1-15
1977' FSL & 823' FEL
Sec. 15, T19s, R25w
Ness County, Kansas
API # 15-135-25652-00-00

Drilling Contractor: Duke Drilling Co. Rig #5

Geologist: Kevin Timson

Spud Date: August 21, 2013

Completion Date: August 29, 2013

Elevation 2402' G.L.
2413' K.B.

Directions: From Laird Elevator, Go South on J Rd. 3.5 miles.
West into location

Casing: 235' 8 5/8" #23 Surface Casing

Samples: 3750' to RTD 10' Wet & Dry

Drilling Time: 3750' to RTD

Electric Logs: None

Drillstem Tests: Four, Trilobite Testing, Inc. "Brandon Turley"

Problems: None

Formation Tops

	American Warrior, Inc. Joseph #1-15 Sec. 15, T19s, R25w 1977' FSL & 823' FEL
Formation	
Anhydrite	1685' +728
Base	1725' +688
Heebner	3779' -1366
Lansing	3821' -1408
Stark	4081' -1668
BKC	4166' -1753
Marmaton	4193' -1780
Pawnee	4256' -1843
Fort Scott	4338' -1925
Cherokee	4365' -1952
Mississippian	4442' -2029
RTD	4500' -2029

Sample Zone Descriptions

- Fort Scott** (4338', -1925): **Covered in DST #1**
 Ls – Sub-crystalline with fair oomoldic and oolycastic porosity. Fair intercrystalline porosity. Poor stain. No saturation. NSFO. No odor.
- Mississippian** (4442', -2029): **Covered in DST #2-4**
 Dolo – Fine to medium sucrosic crystalline with fair inter-crystalline and good vuggy porosity. Good stain. Good saturation. Good SFO. Strong odor. 100 Units hotwire.

Drill Stem Tests
Trilobite Testing Inc.
"Brandon Turley"

DST #1

Fort Scott Limestone

Interval (4310' – 4370') Anchor Length 60'

IHP	- 2213 #	
IFP	- 30" – WSB built to 1 ½"	24-34 #
ISI	- 30" – No Return	676 #
FFP	- 30" – No blow	42-49 #
FSIP	- 30" – No Return	580 #
FHP	- 2103 #	
BHT	- 123 ° F	

Recovery: 60' OCM (5% Oil)

DST #2

Mississippian Warsaw

Interval (4373' – 4465') Anchor Length 92'

IHP	- 2178 #	
IFP	- 30" – WSB died in 25 min	67-266 #
ISI	- 30" – No Return	653 #
FFP	- 30" – Flush tool blow died in 5 min	36-57 #
FSIP	- 30" – No Return	180 #
FHP	- 2118 #	
BHT	- 122 ° F	

Recovery: 82' OCM (20% Oil)

DST #3

Mississippian Warsaw

Interval (4465' – 4480') Anchor Length 15'

IHP	- 2231 #	
IFP	- 30" – WSB died in 4 min	20-22#
ISI	- 30" – No Return	1064#
FFP	- 10" – No blow	22-26#
FSIP	- Pull Tool	NA
FHP	- 2213 #	
BHT	- 121	

Recovery: 10' Mud

DST #4

Mississippian Warsaw

Interval (4480' – 4500') Anchor Length 20'

IHP	- 2244 #	
IFP	- 30" – WSB built to 7"	23-107#
ISI	- 30" – No Return	1226#
FFP	- 30" – WSB built to 5"	112-160#
FSIP	- 30" – No Return	1208#
FHP	- 2221 #	
BHT	- 127 ° F	

Recovery: 72' WCM
248' MCW

Structural Comparison

	American Warrior, Inc. Joseph #1-15 Sec. 15, T19s, R25w 1977' FSL & 823' FEL		Thunderbird Drilling Fitzgerald D #1 Sec. 14, T19s, R25w NW NW		American Warrior, Inc. Joseph #2-21 Sec 21, T19s, R25w 1753' FNL & 133' FEL
Formation					
Heebner	3799' -1366	FL	3773' -1366	+4	3852' -1370
Lansing	3821' -1408	+1	3816' -1409	-8	3882' -1400
Stark	4081' -1668	NA	NA	-13	4163' -1681
BKC	4166' -1753	NA	NA	-30	4265' -1783
Marmaton	4193' -1780	NA	NA	-12	4274' -1792
Pawnee	4256' -1843	+6	4256' -1849	+5	4330' -1848
Fort Scott	4338' -1925	+2	4334' -1927	+13	4420' -1938
Cherokee	4365' -1952	+1	4360' -1953	+12	4446' -1964
Miss.	4442' -2029	+2	4438' -2031	-17	4494' -2012

Summary

The location for the Joseph #1-15 well was found via 3-D seismic survey. The new well ran structurally lower than expected. Four drill stem tests were conducted, none of which recovered commercial quantities of oil. After all the gathered data had been examined the decision was made to plug and abandon the Joseph #1-15 well.

Respectfully Submitted,

Kevin Timson
American Warrior, Inc.



DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399
Garden City, KS 67846

ATTN: Kevin Timson

Joseph #1-15

15-19s-25w Ness,KS

Start Date: 2013.08.27 @ 06:33:15

End Date: 2013.08.27 @ 12:55:45

Job Ticket #: 54929 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.03 @ 10:07:01



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

American Warrior Inc
 PO Box 399
 Garden City, KS 67846
 ATTN: Kevin Timson

15-19s-25w Ness, KS
Joseph #1-15
 Job Ticket: 54929 **DST#: 1**
 Test Start: 2013.08.27 @ 06:33:15

GENERAL INFORMATION:

Formation: **Ft. Scott**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:29:45
 Time Test Ended: 12:55:45
 Interval: **4310.00 ft (KB) To 4370.00 ft (KB) (TVD)**
 Total Depth: 4370.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Brandon Turley
 Unit No: 60
 Reference Elevations: 2413.00 ft (KB)
 2403.00 ft (CF)
 KB to GR/CF: 10.00 ft

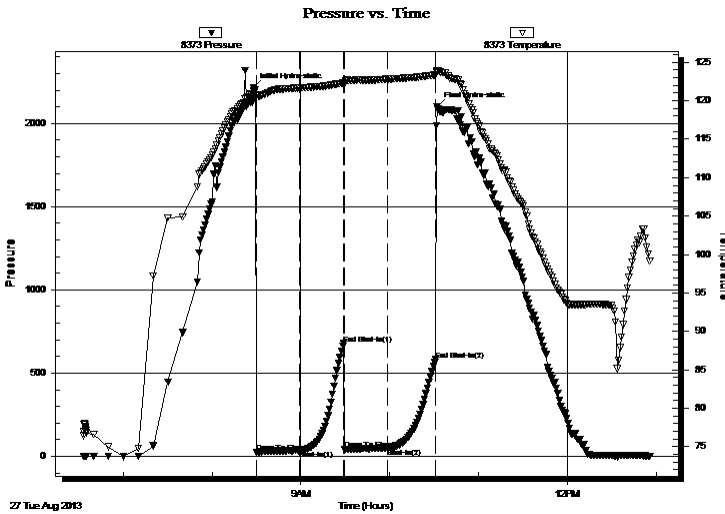
Serial #: 8373

Inside

Press @ Run Depth: 49.96 psig @ 4311.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.08.27 End Date: 2013.08.27 Last Calib.: 2013.08.27
 Start Time: 06:33:20 End Time: 12:55:44 Time On Btm: 2013.08.27 @ 08:27:45
 Time Off Btm: 2013.08.27 @ 10:31:45

TEST COMMENT: IF: 1/4" blow built to 1 1/2"
 IS: No return.
 FF: No blow.
 FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2213.89	120.94	Initial Hydro-static
2	24.11	120.75	Open To Flow (1)
31	34.72	121.67	Shut-In(1)
61	676.35	122.28	End Shut-In(1)
62	42.31	122.10	Open To Flow (2)
91	49.96	122.80	Shut-In(2)
123	580.30	123.35	End Shut-In(2)
124	2103.26	123.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	ocm 5%o 95%m	0.30

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Inc
PO Box 399
Garden City, KS 67846
ATTN: Kevin Timson

15-19s-25w Ness, KS
Joseph #1-15
Job Ticket: 54929 **DST#: 1**
Test Start: 2013.08.27 @ 06:33:15

Tool Information

Drill Pipe:	Length: 4013.00 ft	Diameter: 3.80 inches	Volume: 56.29 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 279.00 ft	Diameter: 2.25 inches	Volume: 1.37 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 57.66 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	4310.00 ft			Final 75000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	88.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Stubb	1.00			4283.00	
Shut In Tool	5.00			4288.00	
Hydraulic tool	5.00			4293.00	
Jars	5.00			4298.00	
Safety Joint	3.00			4301.00	
Packer	5.00			4306.00	28.00 Bottom Of Top Packer
Packer	4.00			4310.00	
Stubb	1.00			4311.00	
Recorder	0.00	8373	Inside	4311.00	
Recorder	0.00	8356	Outside	4311.00	
Perforations	20.00			4331.00	
Change Over Sub	1.00			4332.00	
Drill Pipe	32.00			4364.00	
Change Over Sub	1.00			4365.00	
Bullnose	5.00			4370.00	60.00 Bottom Packers & Anchor

Total Tool Length: 88.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

American Warrior Inc
PO Box 399
Garden City, KS 67846
ATTN: Kevin Timson

15-19s-25w Ness, KS
Joseph #1-15
Job Ticket: 54929 **DST#: 1**
Test Start: 2013.08.27 @ 06:33:15

Mud and Cushion Information

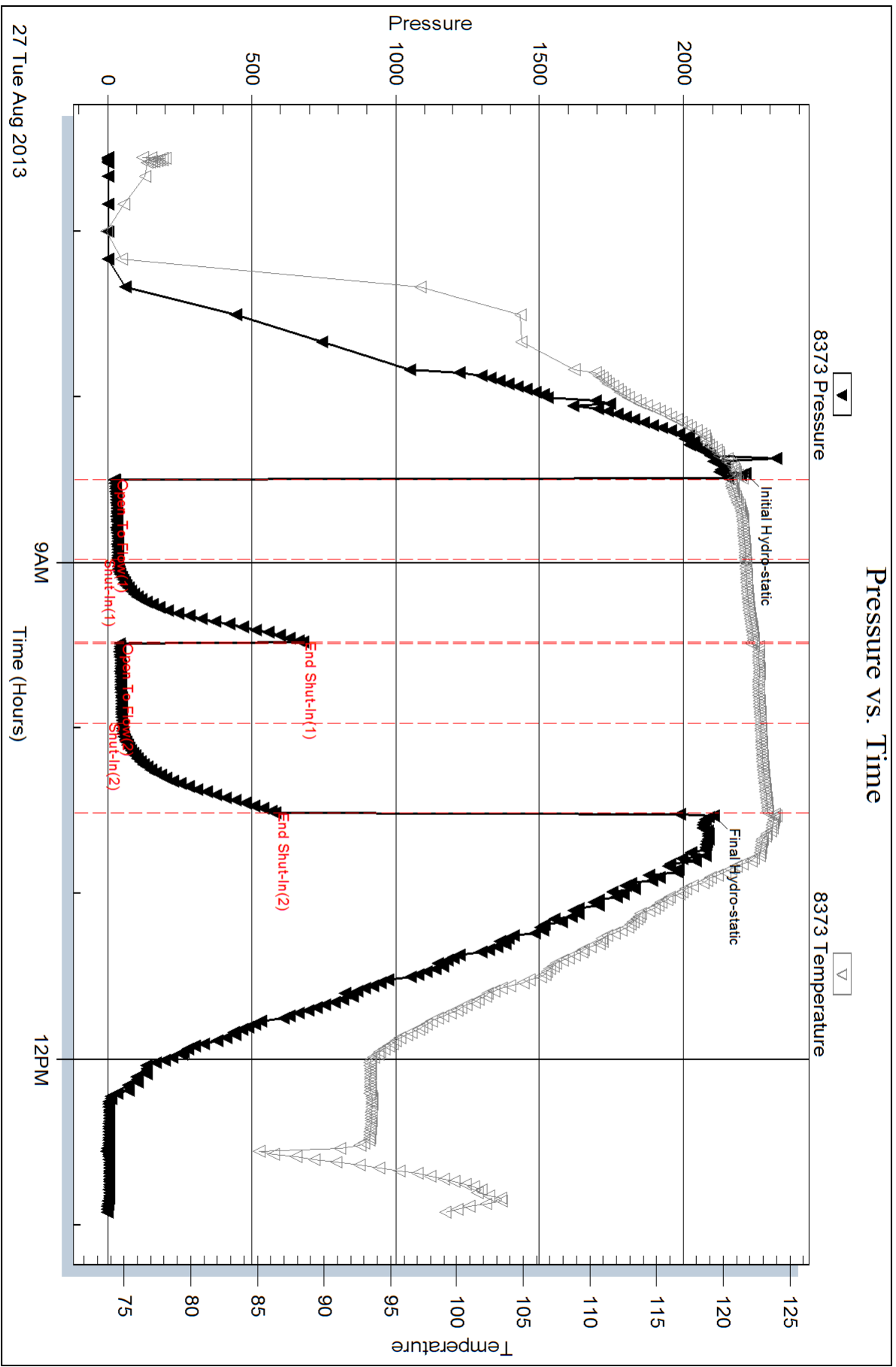
Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.37 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 4800.00 ppm			
Filter Cake: 1.00 inches			

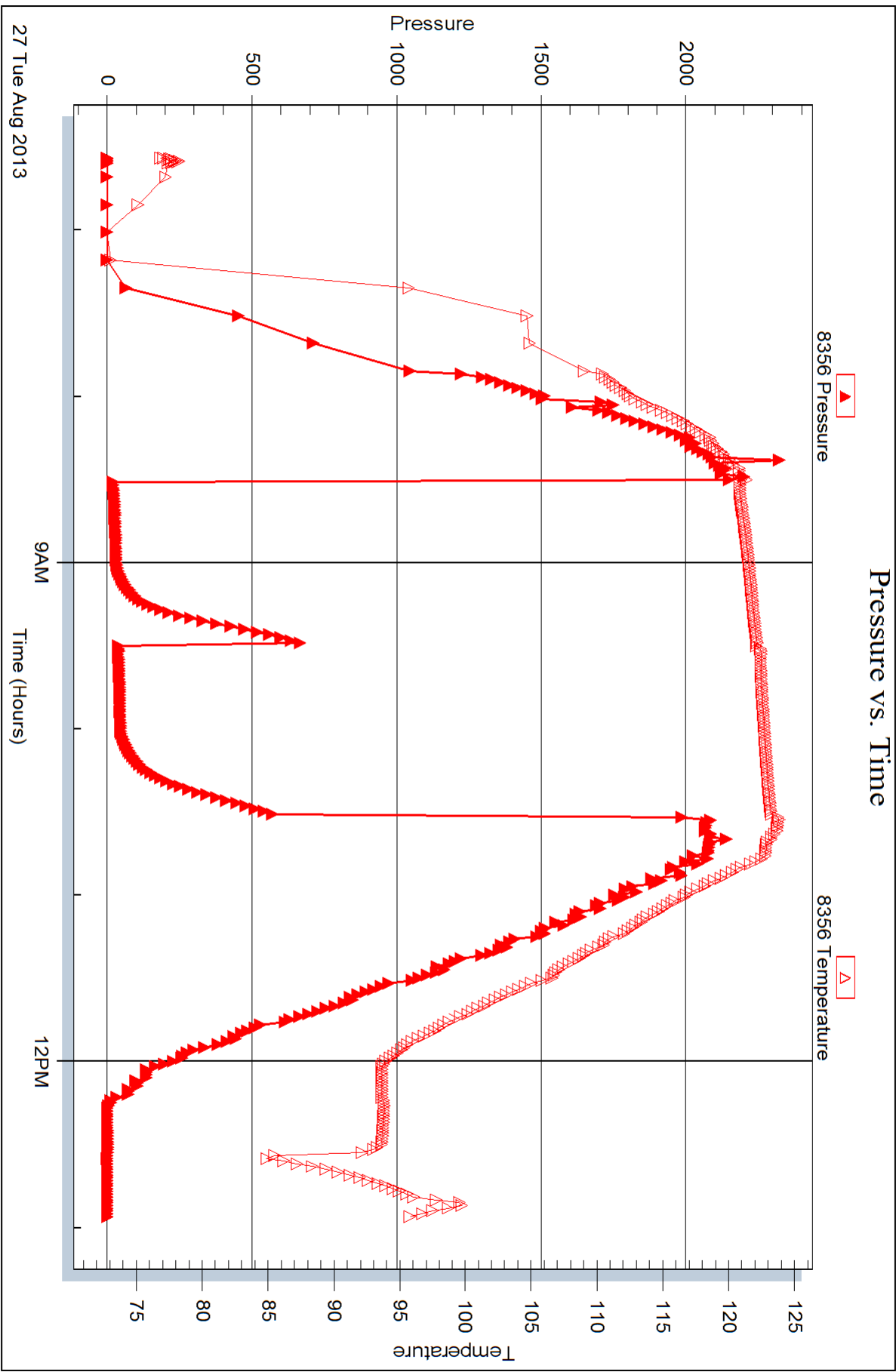
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	ocm 5%o 95%m	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399
Garden City, KS 67846

ATTN: Kevin Timson

Joseph #1-15

15-19s-25w Ness,KS

Start Date: 2013.08.28 @ 02:00:15

End Date: 2013.08.28 @ 08:08:45

Job Ticket #: 54930 DST #: 2

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

Printed: 2013.09.03 @ 10:06:20



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

American Warrior Inc
PO Box 399
Garden City, KS 67846
ATTN: Kevin Timson

15-19s-25w Ness, KS
Joseph #1-15
Job Ticket: 54930 **DST#: 2**
Test Start: 2013.08.28 @ 02:00:15

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:58:45
Time Test Ended: 08:08:45
Interval: **4373.00 ft (KB) To 4465.00 ft (KB) (TVD)**
Total Depth: 4465.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Reset)
Tester: Brandon Turley
Unit No: 60
Reference Elevations: 2413.00 ft (KB)
2403.00 ft (CF)
KB to GR/CF: 10.00 ft

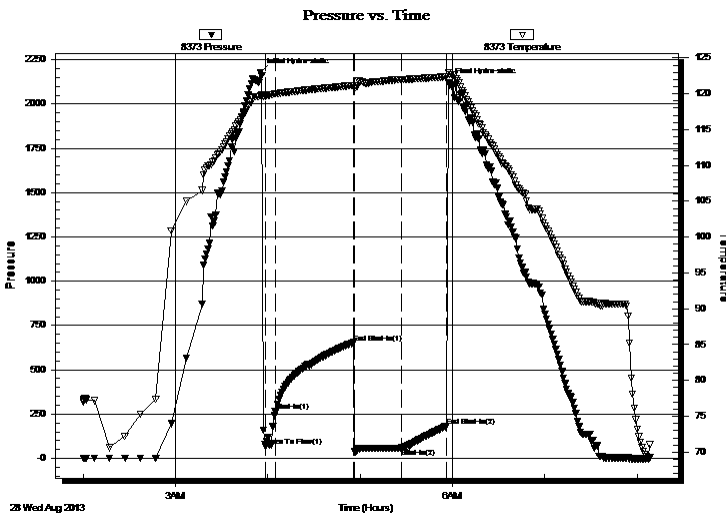
Serial #: 8373

Inside

Press @ Run Depth: 57.16 psig @ 4374.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.08.28 End Date: 2013.08.28 Last Calib.: 2013.08.28
Start Time: 02:00:20 End Time: 08:08:44 Time On Btm: 2013.08.28 @ 03:55:15
Time Off Btm: 2013.08.28 @ 05:57:15

TEST COMMENT: IF: 1/4" blow built to 1" and died in 25 min.
IS: No return.
FF: No blow. Flushed tool surface blow died in 5 min.
FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2178.31	119.73	Initial Hydro-static
4	67.47	119.63	Open To Flow (1)
10	266.15	119.99	Shut-In(1)
61	653.36	121.15	End Shut-In(1)
61	36.95	120.86	Open To Flow (2)
92	57.16	121.96	Shut-In(2)
121	180.86	122.38	End Shut-In(2)
122	2118.04	122.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
82.00	ocm 20%o 80%m	0.40

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Inc
PO Box 399
Garden City, KS 67846
ATTN: Kevin Timson

15-19s-25w Ness, KS
Joseph #1-15
Job Ticket: 54930 **DST#: 2**
Test Start: 2013.08.28 @ 02:00:15

Tool Information

Drill Pipe:	Length: 4076.00 ft	Diameter: 3.80 inches	Volume: 57.18 bbl	Tool Weight:	2000.00 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: 279.00 ft	Diameter: 2.25 inches	Volume: 1.37 bbl	Weight to Pull Loose:	85000.00 lb
			<u>Total Volume: 58.55 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	75000.00 lb
Depth to Top Packer:	4373.00 ft			Final	75000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	92.00 ft				
Tool Length:	120.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Stubb	1.00			4346.00	
Shut In Tool	5.00			4351.00	
Hydraulic tool	5.00			4356.00	
Jars	5.00			4361.00	
Safety Joint	3.00			4364.00	
Packer	5.00			4369.00	28.00 Bottom Of Top Packer
Packer	4.00			4373.00	
Stubb	1.00			4374.00	
Recorder	0.00	8373	Inside	4374.00	
Recorder	0.00	8356	Outside	4374.00	
Perforations	21.00			4395.00	
Change Over Sub	1.00			4396.00	
Drill Pipe	63.00			4459.00	
Change Over Sub	1.00			4460.00	
Bullnose	5.00			4465.00	92.00 Bottom Packers & Anchor

Total Tool Length: 120.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

American Warrior Inc
PO Box 399
Garden City, KS 67846
ATTN: Kevin Timson

15-19s-25w Ness, KS
Joseph #1-15
Job Ticket: 54930 **DST#: 2**
Test Start: 2013.08.28 @ 02:00:15

Mud and Cushion Information

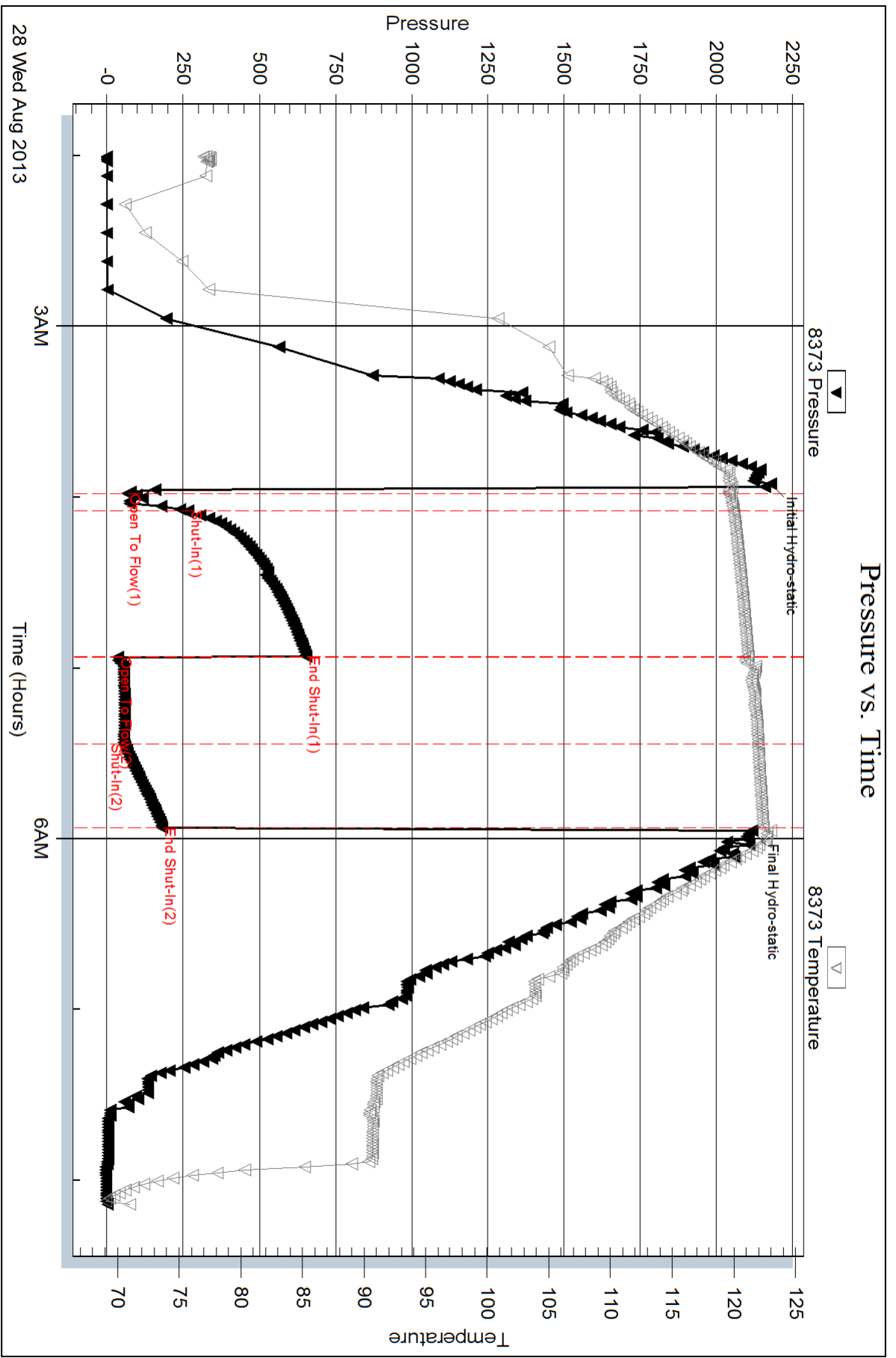
Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.58 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 1.00 inches			

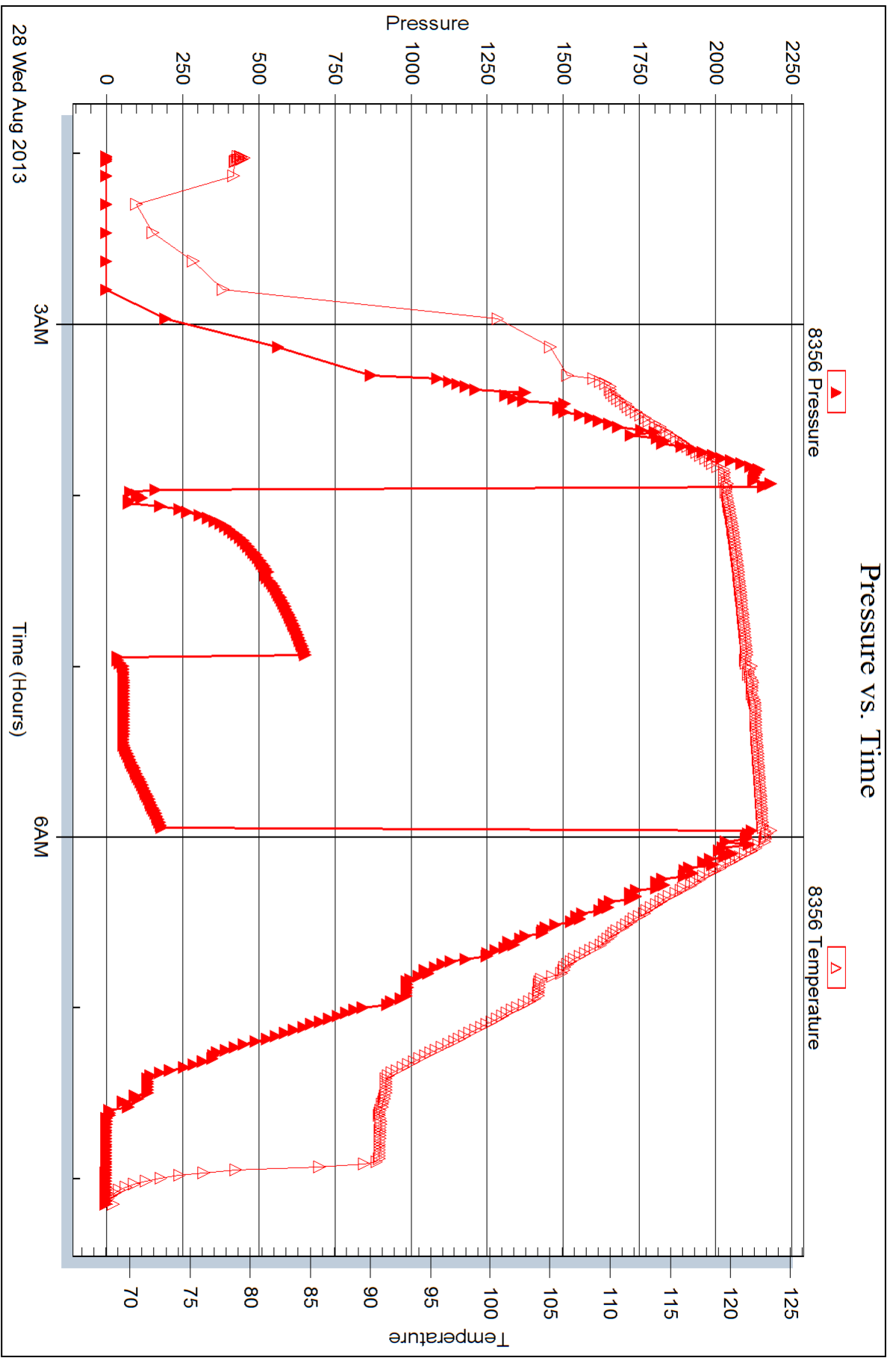
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
82.00	ocm 20%o 80%m	0.403

Total Length: 82.00 ft Total Volume: 0.403 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399
Garden City, KS 67846

ATTN: Kevin Timson

Joseph #1-15

15-19s-25w Ness,KS

Start Date: 2013.08.28 @ 16:23:59

End Date: 2013.08.28 @ 21:51:59

Job Ticket #: 54931 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.03 @ 10:05:41



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

American Warrior Inc
 PO Box 399
 Garden City, KS 67846
 ATTN: Kevin Timson

15-19s-25w Ness, KS
Joseph #1-15
 Job Ticket: 54931 **DST#: 3**
 Test Start: 2013.08.28 @ 16:23:59

GENERAL INFORMATION:

Formation: **Miss**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:21:59
 Time Test Ended: 21:51:59
 Interval: **4465.00 ft (KB) To 4480.00 ft (KB) (TVD)**
 Total Depth: 4480.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Brandon Turley
 Unit No: 60
 Reference Elevations: 2413.00 ft (KB)
 2403.00 ft (CF)
 KB to GR/CF: 10.00 ft

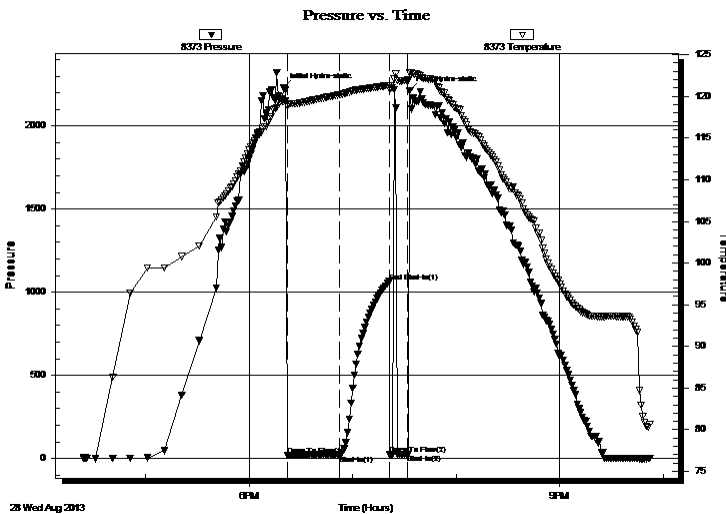
Serial #: 8373

Inside

Press @ Run Depth: 22.12 psig @ 4466.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.08.28 End Date: 2013.08.28 Last Calib.: 2013.08.28
 Start Time: 16:24:04 End Time: 21:51:58 Time On Btm: 2013.08.28 @ 18:19:59
 Time Off Btm: 2013.08.28 @ 19:32:59

TEST COMMENT: IF: Surface blow died in 4 min.
 IS: No return.
 FF: No blow . Flushed tool no blow .
 FS: Pulled tool.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2231.61	119.39	Initial Hydro-static
2	20.29	118.93	Open To Flow (1)
32	22.12	120.19	Shut-In(1)
61	1064.59	121.32	End Shut-In(1)
62	22.84	120.92	Open To Flow (2)
72	26.92	121.92	Shut-In(2)
73	2213.18	122.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud 100% m	0.05

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Inc
PO Box 399
Garden City, KS 67846
ATTN: Kevin Timson

15-19s-25w Ness, KS
Joseph #1-15
Job Ticket: 54931 **DST#: 3**
Test Start: 2013.08.28 @ 16:23:59

Tool Information

Drill Pipe:	Length: 4170.00 ft	Diameter: 3.80 inches	Volume: 58.49 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 279.00 ft	Diameter: 2.25 inches	Volume: 1.37 bbl	Weight to Pull Loose:	90000.00 lb
			<u>Total Volume: 59.86 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial	78000.00 lb
Depth to Top Packer:	4465.00 ft			Final	78000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	15.00 ft				
Tool Length:	43.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Stubb	1.00			4438.00	
Shut In Tool	5.00			4443.00	
Hydraulic tool	5.00			4448.00	
Jars	5.00			4453.00	
Safety Joint	3.00			4456.00	
Packer	5.00			4461.00	28.00 Bottom Of Top Packer
Packer	4.00			4465.00	
Stubb	1.00			4466.00	
Recorder	0.00	8373	Inside	4466.00	
Recorder	0.00	8356	Outside	4466.00	
Perforations	9.00			4475.00	
Bullnose	5.00			4480.00	15.00 Bottom Packers & Anchor

Total Tool Length: 43.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

American Warrior Inc
PO Box 399
Garden City, KS 67846
ATTN: Kevin Timson

15-19s-25w Ness, KS
Joseph #1-15
Job Ticket: 54931 **DST#: 3**
Test Start: 2013.08.28 @ 16:23:59

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.38 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 6800.00 ppm			
Filter Cake: 1.00 inches			

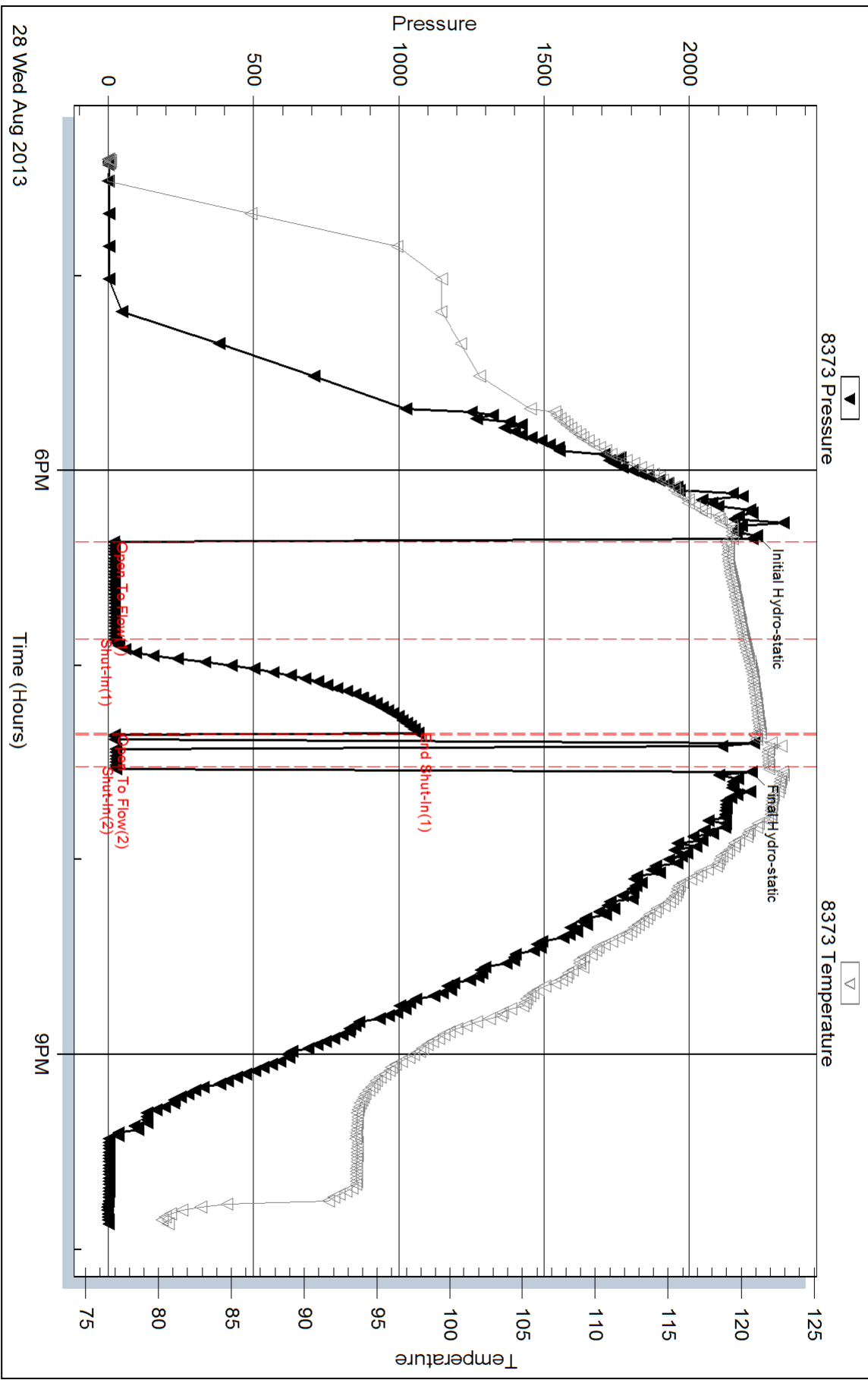
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	mud 100%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:

Pressure vs. Time

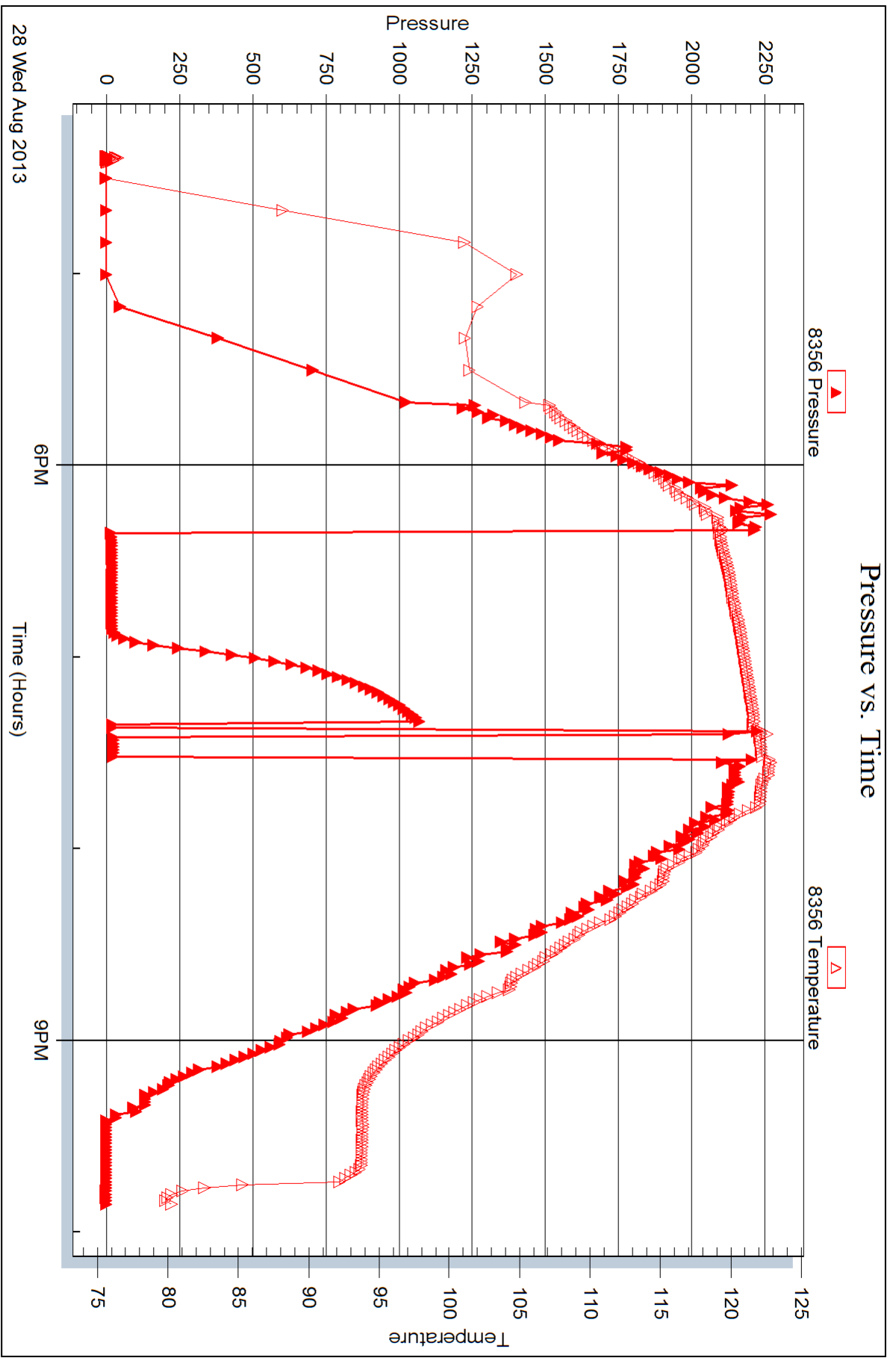


Serial #: 8356

Outside American Warrior Inc

Joseph #1-15

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 54931

Printed: 2013.09.03 @ 10:05:44



DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399
Garden City, KS 67846

ATTN: Kevin Timson

Joseph #1-15

15-19s-25w Ness,KS

Start Date: 2013.08.29 @ 05:36:20

End Date: 2013.08.29 @ 12:06:50

Job Ticket #: 54932 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.03 @ 10:05:03



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

American Warrior Inc
PO Box 399
Garden City, KS 67846
ATTN: Kevin Timson

15-19s-25w Ness, KS
Joseph #1-15
Job Ticket: 54932 **DST#: 4**
Test Start: 2013.08.29 @ 05:36:20

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:49:20
Time Test Ended: 12:06:50
Interval: **4480.00 ft (KB) To 4500.00 ft (KB) (TVD)**
Total Depth: 4500.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Reset)
Tester: Brandon Turley
Unit No: 60
Reference Elevations: 2413.00 ft (KB)
2403.00 ft (CF)
KB to GR/CF: 10.00 ft

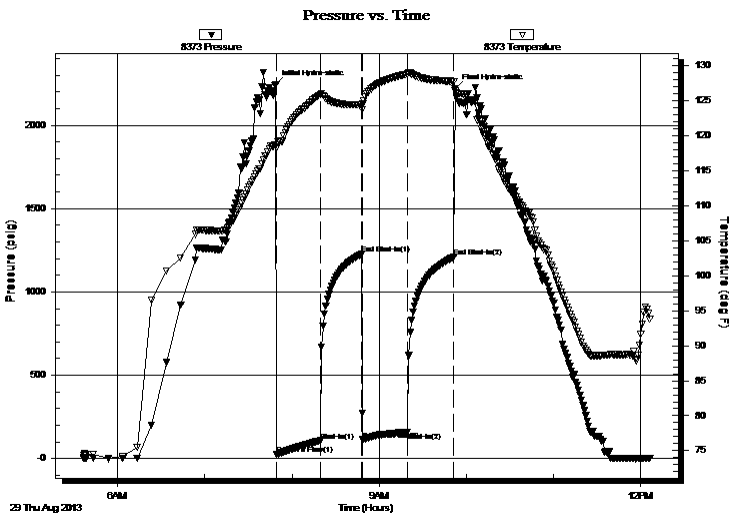
Serial #: 8373

Inside

Press @ Run Depth: 160.20 psig @ 4481.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.08.29 End Date: 2013.08.29 Last Calib.: 2013.08.29
Start Time: 05:36:25 End Time: 12:06:49 Time On Btm: 2013.08.29 @ 07:48:50
Time Off Btm: 2013.08.29 @ 09:52:20

TEST COMMENT: IF: 1/4" blow built to 7"
IS: No return.
FF: Surface blow built to 5"
FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2244.37	118.72	Initial Hydro-static
1	23.54	118.23	Open To Flow (1)
31	107.20	125.83	Shut-In(1)
59	1226.38	124.40	End Shut-In(1)
60	112.67	124.53	Open To Flow (2)
91	160.20	128.83	Shut-In(2)
123	1208.79	127.75	End Shut-In(2)
124	2221.63	126.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
248.00	mcw 80%w 20%m	1.22
72.00	w cm 30%w 70%m	0.73

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Inc
PO Box 399
Garden City, KS 67846
ATTN: Kevin Timson

15-19s-25w Ness, KS
Joseph #1-15
Job Ticket: 54932 **DST#: 4**
Test Start: 2013.08.29 @ 05:36:20

Tool Information

Drill Pipe:	Length: 4203.00 ft	Diameter: 3.80 inches	Volume: 58.96 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 279.00 ft	Diameter: 2.25 inches	Volume: 1.37 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 60.33 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	4480.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	48.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Stubb	1.00			4453.00	
Shut In Tool	5.00			4458.00	
Hydraulic tool	5.00			4463.00	
Jars	5.00			4468.00	
Safety Joint	3.00			4471.00	
Packer	5.00			4476.00	28.00 Bottom Of Top Packer
Packer	4.00			4480.00	
Stubb	1.00			4481.00	
Recorder	0.00	8373	Inside	4481.00	
Recorder	0.00	8356	Outside	4481.00	
Perforations	14.00			4495.00	
Bullnose	5.00			4500.00	20.00 Bottom Packers & Anchor

Total Tool Length: 48.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

American Warrior Inc
PO Box 399
Garden City, KS 67846
ATTN: Kevin Timson

15-19s-25w Ness, KS
Joseph #1-15
Job Ticket: 54932 **DST#: 4**
Test Start: 2013.08.29 @ 05:36:20

Mud and Cushion Information

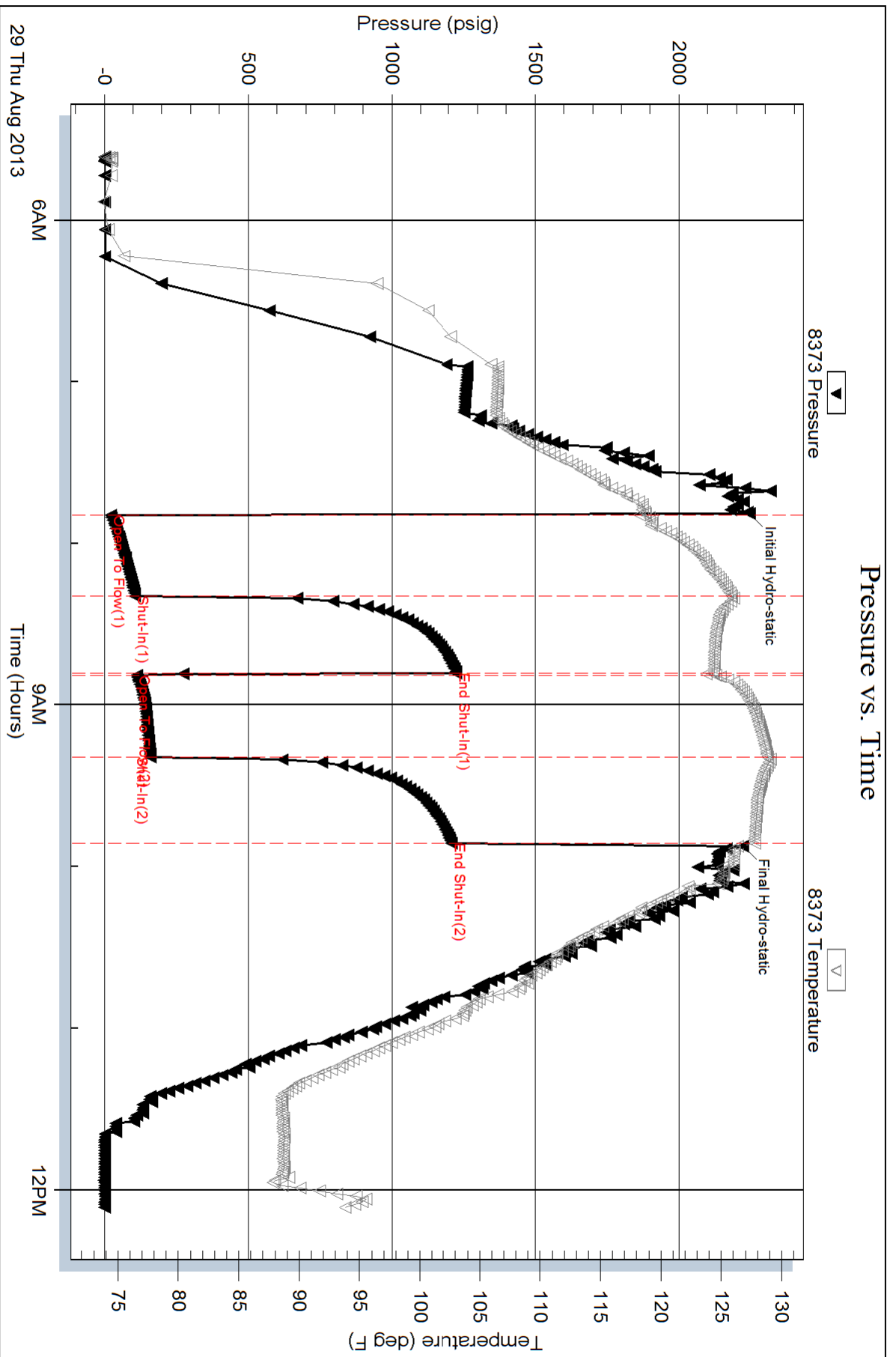
Mud Type: Gel Chem	Cushion Type:	Oil API: 0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 20000 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl	
Water Loss: 10.39 in ³	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 6800.00 ppm		
Filter Cake: 1.00 inches		

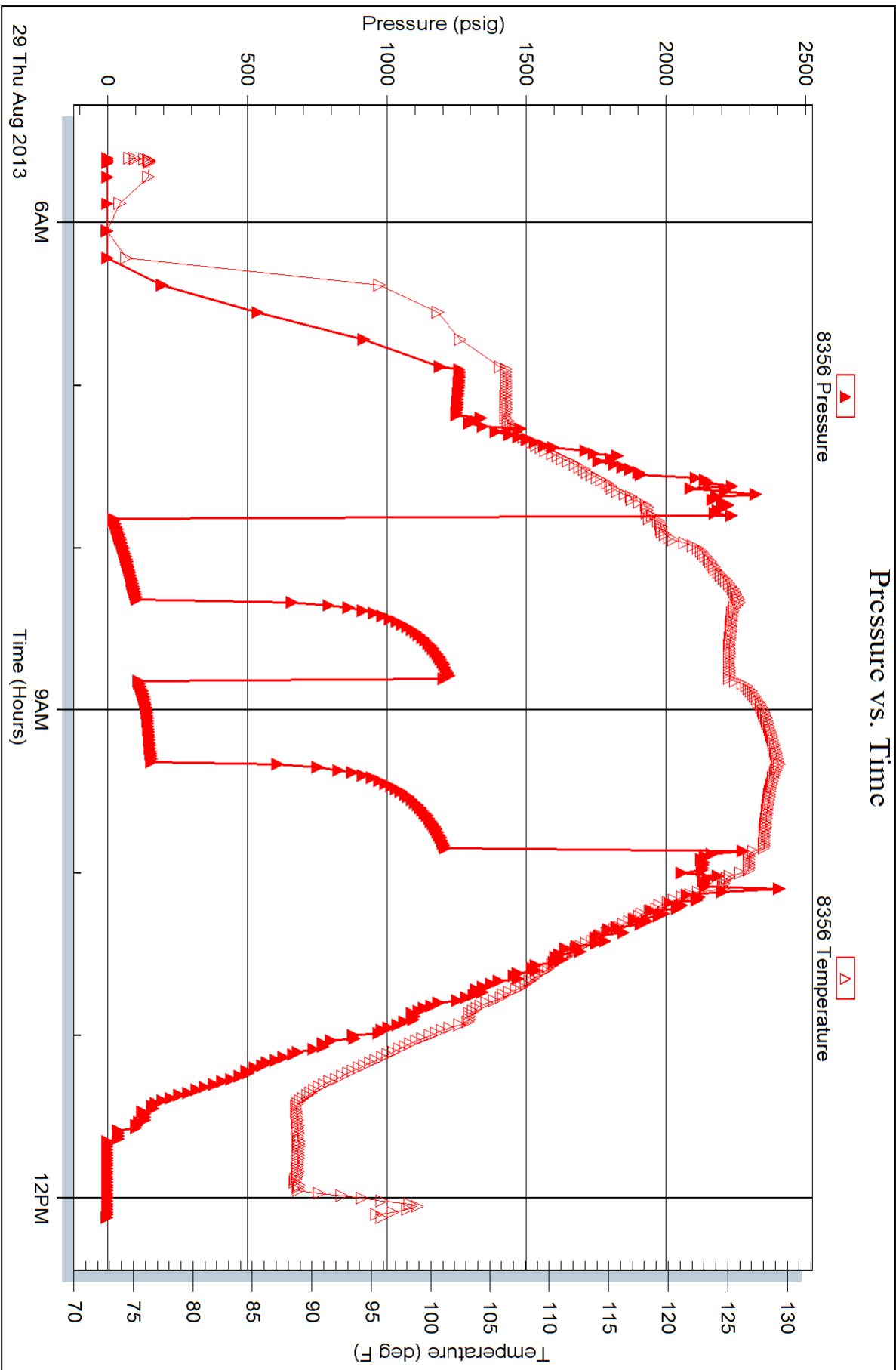
Recovery Information

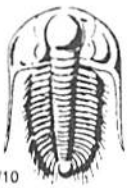
Recovery Table

Length ft	Description	Volume bbl
248.00	mcw 80%w 20%m	1.220
72.00	w cm 30%w 70%m	0.728

Total Length: 320.00 ft Total Volume: 1.948 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: .26@94=20000







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54929

Well Name & No. Joseph 1-15 Test No. 1 Date 8-27-13
 Company American warrior Elevation 2413 KB 2403 GL
 Address 3118 Cummings Rd Garden city, KS 67846
 Co. Rep / Geo. Kevin Timson Rig Duke B
 Location: Sec. 15 Twp. 19 Rge. 25 Co. Ness State KS

Interval Tested 4310 4370 Zone Tested Ft. Scott
 Anchor Length 60 Drill Pipe Run 4313 Mud Wt. 9.3
 Top Packer Depth 4305 Drill Collars Run 279 Vis 48
 Bottom Packer Depth 4310 Wt. Pipe Run — WL 10.4
 Total Depth 4370 Chlorides 4800 ppm System LCM 1

Blow Description IF: 1/4 blow built to 1 1/2.
IS: NO return.
FF: NO blow.
FS: NO return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>o/m</u>	<u>5</u>		<u>95</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 60 BHT 123 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2213</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>5:45</u>
(B) First Initial Flow <u>24</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>6:33</u>
(C) First Final Flow <u>34</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>8:28</u>
(D) Initial Shut-In <u>676</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIL</u>	T-Pulled <u>10:28</u>
(E) Second Initial Flow <u>42</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>12:55</u>
(F) Second Final Flow <u>49</u>	<input checked="" type="checkbox"/> Mileage <u>100-</u> 155	Comments
(G) Final Shut-In <u>580</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2103</u>	<input type="checkbox"/> Straddle	

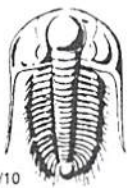
Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30

Ruined Shale Packer
 Ruined Packer
 Extra Copies
 Sub Total 0
 Total 1730
 MP/DST Disc't

Sub Total 1730

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54930

4/10

Well Name & No. Joseph 1-15 Test No. 2 Date 8-28-13
 Company American Warrior Elevation 2413 KB 2403 GL
 Address _____
 Co. Rep / Geo. Kevin Timson Rig Duke 5
 Location: Sec. 15 Twp. 19 Rge. 25 Co. Ness State KS

Interval Tested 4373 4465 Zone Tested M:SS
 Anchor Length 92 Drill Pipe Run 4076 Mud Wt. 9.4
 Top Packer Depth 4368 Drill Collars Run 279 Vis 50
 Bottom Packer Depth 4373 Wt. Pipe Run _____ WL 9.6
 Total Depth 4465 Chlorides 5000 ppm System LCM Ø

Blow Description IF: 1/4 blow built to 1. died in 25 min.
IS: No return.
FF: No blow, Flushed tool surface blow died in 5 min.
FS: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>82</u>	<u>OCM</u>	<u>20</u>		<u>80</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 82 BHT 122 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2178 Test 1250 T-On Location 11:30
 (B) First Initial Flow 67 Jars 250 T-Started 2:00
 (C) First Final Flow 266 Safety Joint 75 T-Open 3:56
 (D) Initial Shut-In 653 Circ Sub NIL T-Pulled 5:56
 (E) Second Initial Flow 36 Hourly Standby _____ T-Out 8:10
 (F) Second Final Flow 57 Mileage 100- 155 Comments _____
 (G) Final Shut-In 180 Sampler _____
 (H) Final Hydrostatic 2118 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

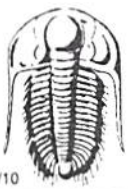
Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30

Sub Total 1730

MP/DST Disc't _____

Approved By _____ Our Representative

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54931

Well Name & No. Joseph 1-15 Test No. 3 Date 8-28-13
 Company American Warrior Elevation 2413 KB 2403 GL
 Address _____
 Co. Rep / Geo. Kevin Timson Rig Duke 5
 Location: Sec. 15 Twp. 19 Rge. 25 Co. Ness State KS

Interval Tested 4465 4480 Zone Tested Mis 5
 Anchor Length 15 Drill Pipe Run 4170 Mud Wt. 9.1
 Top Packer Depth 4460 Drill Collars Run 279 Vis 58
 Bottom Packer Depth 4465 Wt. Pipe Run — WL 10.4
 Total Depth 4480 Chlorides 6800 ppm System LCM 0

Blow Description IF: Surface blow died in 4 min.
IS: No return.
FF: No blow Flashed tool no blow.
FS: Pulled tool.

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10 BHT 121 Gravity — API RW — @ — °F Chlorides — ppm

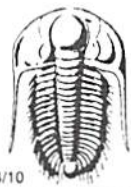
(A) Initial Hydrostatic <u>2231</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>14:50</u>
(B) First Initial Flow <u>20</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>18:22 16:23</u>
(C) First Final Flow <u>22</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>18:22</u>
(D) Initial Shut-In <u>1064</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>19:32</u>
(E) Second Initial Flow <u>22</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>21:55</u>
(F) Second Final Flow <u>26</u>	<input checked="" type="checkbox"/> Mileage <u>100 -</u> 155	Comments _____
(G) Final Shut-In _____	<input type="checkbox"/> Sampler _____	_____
(H) Final Hydrostatic <u>2213</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
	<input type="checkbox"/> Day Standby _____	Total <u>1730</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____

Initial Open 30
 Initial Shut-In 30
 Final Flow 10
 Final Shut-In —

Sub Total 1730

Approved By _____ Our Representative

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54932

Well Name & No. Joseph 1-15 Test No. 4 Date 8-29-13
 Company American Warrior Elevation 2413 KB 2403 GL
 Address _____
 Co. Rep / Geo. Kevin Timson Rig Duke 5
 Location: Sec. 15 Twp. 19 Rge. 25 Co. Ness State KS

Interval Tested 4480 4500 Zone Tested MISS
 Anchor Length _____ Drill Pipe Run 4203 Mud Wt. 9.1
 Top Packer Depth _____ Drill Collars Run 279 Vis 58
 Bottom Packer Depth _____ Wt. Pipe Run _____ WL 10.4
 Total Depth 4500 Chlorides 6800 ppm System LCM 0


Blow Description IF: 1/4 blow built to 73.
IS: No return,
FF: surface blow built to 5.
FS: No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>72</u>	<u>WCM</u>		<u>30</u>	<u>70</u>	
<u>248</u>	<u>MCW</u>		<u>80</u>	<u>20</u>	
____	____				
____	____				
____	____				

Rec Total 320 BHT 127 Gravity _____ API RW .26 @ 94° F Chlorides 20,000 ppm

(A) Initial Hydrostatic 2244 Test 1250 T-On Location 5:10
 (B) First Initial Flow 23 Jars 250 T-Started 5:36
 (C) First Final Flow 107 Safety Joint 75 T-Open 7:48
 (D) Initial Shut-In 1226 Circ Sub W/L T-Pulled 9:48
 (E) Second Initial Flow 112 Hourly Standby _____ T-Out 12:06
 (F) Second Final Flow 160 Mileage 106- 155 Comments _____
 (G) Final Shut-In 1208 Sampler _____
 (H) Final Hydrostatic 2221 Straddle _____
 Ruined Shale Packer _____
 Ruined Packer _____

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1730
 Total 1730
 MP/DST Disc't _____

Approved By _____ Our Representative 

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CEMENTING LOG

STAGE NO.

Date 8-29-13 District Great Bend Ticket No. 61766
 Company American Warrior Rig Duke 5
 Lease Joseph Well No. 1-15
 County Nes State Ks
 Location Laired Field 15.19-25

CEMENT DATA:

Spacer Type: Fresh water
 Amt. 5 bbls Sks Yield _____ ft³/sk Density _____ PPG

LEAD: Pump Time _____ hrs. Type _____
 Excess _____

Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG

TAIL: Pump Time Thicken Time hrs. Type 60/40 4% gel
4% flo Excess _____

Amt. 200 Sks Yield 1.41 ft³/sk Density 140 PPG

WATER: Lead _____ gals/sk Tail _____ gals/sk Total _____ Bbls.

Pump Trucks Used 398 - mike scottern

Bulk Equip. 3421-170 - marlyn Si

CASING DATA: Conductor PT&A Squeeze Misc
 Surface Intermediate Production Liner
 Size _____ Type _____ Weight _____ Collar _____

Casing Depths: Top _____ Bottom _____

Drill Pipe: Size 4 1/2 Weight 16# Collars X-hole

Open Hole: Size 12 1/2 T.D. _____ ft. P.B. to _____ ft.

CAPACITY FACTORS:

Casing: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Open Holes: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Drill Pipe: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Annulus: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Bbls/Lin. ft. _____ Lin. ft./Bbl. _____

Perforations: From _____ ft. to _____ ft. Amt. _____

Float Equip: Manufacturer _____

Shoe: Type _____ Depth _____

Float: Type _____ Depth _____

Centralizers: Quantity _____ Plugs Top _____ Btm. _____

Stage Collars _____

Special Equip. _____

Disp. Fluid Type Freshwater Amt. _____ Bbls. Weight 8.34 PPG

Mud Type Native Weight _____ PPG

COMPANY REPRESENTATIVE _____

CEMENTER Josh Isaac

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	AM/PM	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	
						On location - Rig up
						Had safety meeting
						Run drill pipe
						Fill Backside
						Hook up cement pump
						Pressure Test 500 psi
						#1 - 1700 ft - 50 SKS
						#2 - 860 - 80
						#3 - 400 - 40
						#4 - 260 - 50
						#5 60 - 20
						PH - 30
						MH - 20
						plug down 1130pm
						Rig down

FINAL DISP. PRESS: _____ PSI BUMP PLUG TO _____ PSI BLEEDBACK _____ BBLs. THANK YOU



CEMENTING LOG

STAGE NO.

Date 8-21-13 District Great Bend, KS Ticket No. 60573
 Company American Worker Rig Duke 25
 Lease Joseph Well No. F15
 County Ness State KS
 Location Land Rd 3 1/2 W of

CEMENT DATA:
 Spacer Type: Freshwater
 Amt. 566 1/2 Sks Yield _____ ft³/sk Density 8.34 PPG

CASING DATA: Conductor PTA Squeeze Misc
 Surface Intermediate Production Liner
 Size 4 5/8 Type NEU Weight 24.5 Collar GRD

LEAD: Pump Time _____ hrs. Type _____
 Excess _____
 Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG

TAIL: Pump Time _____ hrs. Type Class A 37cc
 Excess _____
 Amt. 150 Sks Yield 1.34 ft³/sk Density 15.2 PPG
 WATER: Lead _____ gals/sk Tail _____ gals/sk Total _____ Bbls.

Casing Depths: Top K13 Bottom 235.15

Pump Trucks Used 398 - Miller S
 Bulk Equip. 544-198 - Rental

Drill Pipe: Size 4 1/2 Weight 16.6 Collars GRD
 Open Hole: Size 12 1/4 T.D. _____ ft. P.B. to _____ ft.

CAPACITY FACTORS:
 Casing: Bbbls/Lin. ft. 0.0637 Lin. ft./Bbl. 15.70
 Open Holes: Bbbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Drill Pipe: Bbbls/Lin. ft. 0.0142 Lin. ft./Bbl. 70.32
 Annulus: Bbbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Perforations: From _____ ft. to _____ ft. Amt. _____

Float Equip: Manufacturer _____
 Shoe: Type _____ Depth _____
 Float: Type _____ Depth _____
 Centralizers: Quantity _____ Plugs Top _____ Btm. _____
 Stage Collars _____
 Special Equip. _____
 Disp. Fluid Type Freshwater Amt. _____ Bbbls. Weight 8.34 PPG
 Mud Type Nortec Weight 9.2 PPG

COMPANY REPRESENTATIVE _____

CEMENTER Dustin C

TIME AM/PM	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbbls Min.	
						ON location - Rig up Had safety meeting
						Run 8 5/8 casing Break circulation with Rig mud Hook up cement pump
				566 1/2		pump 566 1/2 Freshwater ahead
			10.79	35.79		mix 150 Sks class A 37cc 27 gal
			59.41	1402		Displace 14.02 bbls Freshwater & shut in
						Cement did circulate
						plug down 2:50 PM
						Rig down

FINAL DISP. PRESS: _____ PSI BUMP PLUG TO _____ PSI BLEEDBACK _____ BBLs. THANK YOU