



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1163402  
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: \_\_\_\_\_



1163402

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:  Yes  No

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

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

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

Petroleum Geologist  
212 Main Street  
P.O. Box 215  
Claflin, KS 67525

Office (620) 588-4250

Res. Claflin (620) 587-3444

American Warrior  
Hofmeister #4-15  
NW-SE-SE-SW (350' FSL & 2305' FWL)  
Section 15-16s-12w  
Barton County, KS  
Page 1

**5 1/2" Production Casing Set**

**Contractor:** Duke Drilling Company (Rig #8)  
**Commenced:** September 14, 2013  
**Completed:** September 20, 2013  
**Elevation:** 1926' K.B; 1924' D.F; 1918' G.L.  
**Casing program:** Surface; 8 5/8" @ 420'  
Production 5 1/2" @ 3504'  
**Sample:** Samples saved and examined 2700' to the Rotary Total Depth.  
**Drilling time:** One (1) foot drilling time recorded and kept 2700 ft to the Rotary Total Depth.  
**Measurements:** All depths measured from the Kelly Bushing.  
**Drill Stem Tests:** There were two (2) Drill Stem Tests ran by Trilobite Testing Co.  
**Electric Log:** By Pioneer; Dual Induction, Dual Compensated Porosity Log and Sonic.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	809	+1117
Base Anhydrite	834	+1092
Heebner	2997	-1071
Toronto	3013	-1087
Douglas	3027	-1101
Brown Lime	3086	-1160
Lansing	3103	-1177
Base Kansas City	3357	-1431
Arbuckle	3364	-1438
Reagan Sand	3418	-1492
Granite Wash	3441	-1515
Rotary Total Depth	3505	-1579
Log Total Depth	3477	-1551

(All tops and zones corrected to Electric Log measurements).

**SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.**

**TOPEKA SECTION**

2944-2966' Limestone; cream, gray, tan, finely crystalline, fossiliferous, poorly scattered porosity, no shows.

**TORONTO SECTION**

3014-3022' Limestone; cream, white, finely crystalline, fossiliferous, poorly developed porosity, no shows.

**LANSING SECTION**

- 3103-3110' Limestone; cream, white, finely crystalline, oolitic, poorly developed porosity, trace stain, no free oil and faint odor in fresh samples.
- 3030-3036' Limestone; gray, tan, finely crystalline, oolitic, fossiliferous, poorly developed porosity, trace brown stain, no free oil and no odor.
- 3148-3156' Limestone; gray, cream, white, finely crystalline, fossiliferous, poor porosity, no shows, plus trace white/cream, chert.
- 3168-3178' Limestone; cream, white, oolitic, oomoldic, fair oomoldic porosity, trace stain, no free oil and no odor, chalky.
- 3184-3208' Limestone; as above.
- 3234-3244' Limestone; buff, brown, finely crystalline, finely vuggy porosity, no shows.
- 3256-3266' Limestone; cream, white, finely crystalline, oolitic, few sub oomoldic, trace dark brown stain, no free oil and no odor.
- 3270-3286' Limestone; cream, white, finely crystalline, oolitic/oomoldic, scattered oomoldic porosity, plus white cream, oolitic, boney chert.
- 3308-3320' Limestone; buff, tan, finely crystalline, dense.

**ARUBCKLE SECTION**

- 3364-3370' Dolomite; white/cream, fine and medium crystalline, sandy, granular, poor to fair intercrystalline porosity, golden brown stain, show of free oil and faint odor in fresh samples.

**Drill Stem Test #1** **3318-3370'**

**Times:** 30-30-30-30

**Blow:** Weak

**Recovery:** 30' mud

**Pressures:** ISIP 119 psi  
FSIP 71 psi  
IFP 30-33 psi  
FFP 34-33 psi  
HSH 1615-1588 psi

- 3370-3376' Dolomite; tan, cream, fine and medium crystalline, sandy, fair intercrystalline vuggy type porosity, golden dark brown stain, show of free oil and odor in fresh samples.

**Drill Stem Test #2** **3318-3376'**

**Times:** 30-30-45-45

**Blow:** Weak to strong

**Recovery:** 3255' gas in pipe  
60' oil and gas cut mud  
(5% gas, 20% oil, 75% mud)  
**Pressures:** ISIP 836 psi  
FSIP 932 psi  
IFP 31-35 psi  
FFP 39-46 psi  
HSH 1715-1617 psi

3376-3400' Dolomite; buff, tan, finely crystalline, poor porosity, trace black stain, no free oil and no odor.

3400-3418' Dolomite; as above.

### REAGAN SAND SECTION

3418-3442' Sand; quartzitic, clear, yellow, orange, very fine to medium grained, sub angular to angular, trace questionable stain, no free oil and no odor.

### GRANITE WASH SECTION

3442-3450' Feldspar; pink, red, orange, micaceous, varied colored shales, no shows.

**Rotary Total Depth** 3505 (-1579)  
**Log Total Depth** 3477 (-1551)

### **Recommendations:**

5 1/2" production casing was set and cemented on the Hofmeister #4-15.

Respectfully submitted;



Kurt Talbott,  
Petroleum Geologist





CHARGE TO: American Warrior  
 ADDRESS:  
 CITY, STATE, ZIP CODE:

TICKET  
 N° 24728

PAGE 1 OF 2

SERVICE LOCATIONS  
 1. Lawrence, KS WELL/PROJECT NO. 4-15 LEASE Hofmeister COUNTY/PARISH BARTON STATE KS CITY Beaver DATE 20 SEP 13 OWNER  
 2. TICKET TYPE  SERVICE  SALES CONTRACTOR RIG NAME/NO. SHIPPED VIA CT DELIVERED TO location ORDER NO.  
 3. WELL TYPE oil WELL CATEGORY Development JOB PURPOSE cement log string WELL PERMIT NO. WELL LOCATION 15-16-12  
 4. REFERRAL LOCATION INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE TRK 114	60	mi			6.00	360.00
578		1			Pump Charge	1	ea			1500.00	1500.00
402		1			Controlizer	5 1/2	in	8	ea	70.00	560.00
403		1			Cement Basket	5 1/2	in	1	ea	285.00	285.00
406		1			Latch down Plug & Baffle	5 1/2	in	1	ea	275.00	275.00
407		1			Insert float shoe w/ fill up	5 1/2	in	1	ea	375.00	375.00

**LEGAL TERMS:** Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X  
 DATE SIGNED TIME SIGNED  A.M.  P.M.  
6:20

REMIT PAYMENT TO:  
 SWIFT SERVICES, INC.  
 P.O. BOX 466  
 NESS CITY, KS 67560  
 785-798-2300

SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL	AMOUNT
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				1	3355.00
WE UNDERSTOOD AND MET YOUR NEEDS?				2	5553.50
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				sub total	8908.50
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				Barton TAX 7.15%	439.64
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES	<input type="checkbox"/> NO		TOTAL	9348.14
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND					

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR Begall APPROVAL

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 20 SEP 13 PAGE NO. 7

CUSTOMER American Warrior WELL NO. 4-15 LEASE Hofmeister JOB TYPE cement log string TICKET NO. 24728

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								175 sk EA-2 w/ 4* flocc 85; + 5 1/2" x 14# casing 3503' Basket #5 TD 3505 Cmt 3, 5, 7, 9, 11, 13 sheets 20.56'
	2130							on loc TRK 114
	2220							start 5 1/2" x 14# casing in well
								Drop ball - circulate
	2350							
21 SEP	0045	4 3/4 7 1/4	12 20				300 300	Pump 50 gal mud flush Pump 20 bbl RCL flush
	0050		7					Plug RH 30 sks
	0100	4 3/4	35				300	MIX EA-2 145 sks @ 15.3 ppd
								Drop latchdown plug wash out pump & line
	0113	6 3/4 6 3/4	80				300 400	Displace plug
	0128	6 3/4	85				1600	Land plug
								Release pressure to truck - derrick
	0135							wash truck Rack up
	0210							job complete Thanks Russ Dave & Blaine





PO Box 466  
Ness City, KS 67560  
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 24728

CUSTOMER American Warrior WELL Hofmeister 4-15 DATE 20 SEP 13 PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF			QTY.	U/M	QTY.	U/M		
325		1				Standard cement (Fore-A-2)	175	sk			14.00	2450.00
284		1				Calseal	800	lb	8	sk	35.00	2800.00
283		1				salt	900	lb			0.20	180.00
292		1				halad-322	125	lb			7.75	968.75
276		1				Floco	50	lb			2.00	100.00
281		1				mud flush	500	gal			1.25	625.00
221		1				RCL liquid	2	gal			25.00	50.00
581		1				SERVICE CHARGE					2.00	350.00
583		1				MILEAGE CHARGE	18325	TOTAL WEIGHT	175	LOADED MILES	548.75	549.75

CONTINUATION TOTAL 5553.50



## DRILL STEM TEST REPORT

Prepared For: **American Warrior**

3118 Cummings Rd  
Garden City, KS 67846

ATTN: Kurt Talbott

### **Hofmeister #4-15**

### **15-16s-12w Barton,KS**

Start Date: 2013.09.19 @ 04:55:00

End Date: 2013.09.19 @ 10:16:30

Job Ticket #: 54439                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.21 @ 08:34:42







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior  
3118 Cummings Rd  
Garden City, KS 67846  
ATTN: Kurt Talbott

**15-16s-12w Barton,KS**  
**Hofmeister #4-15**  
Job Ticket: 54439 **DST#: 1**  
Test Start: 2013.09.19 @ 04:55:00

**Tool Information**

Drill Pipe:	Length: 3316.00 ft	Diameter: 3.75 inches	Volume: 45.30 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume:</u>	Tool Chased	5.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3318.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	52.00 ft				
Tool Length:	78.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Change Over Sub	1.00			3293.00	
Shut In Tool	5.00			3298.00	
Hydraulic tool	5.00			3303.00	
Jars	5.00			3308.00	
Packer	5.00			3313.00	26.00 Bottom Of Top Packer
Packer	5.00			3318.00	
Stubb	1.00			3319.00	
Perforations	14.00			3333.00	
Recorder	0.00	8897	Inside	3333.00	
Recorder	0.00	8898	Outside	3333.00	
Change Over Sub	1.00			3334.00	
Drill Pipe	32.00			3366.00	
Change Over Sub	1.00			3367.00	
Bullnose	3.00			3370.00	52.00 Bottom Packers & Anchor

**Total Tool Length: 78.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior

**15-16s-12w Barton,KS**

3118 Cummings Rd  
Garden City, KS 67846

**Hofmeister #4-15**

Job Ticket: 54439

**DST#: 1**

ATTN: Kurt Talbott

Test Start: 2013.09.19 @ 04:55:00

## 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: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	M with show of oil,100%M	0.410

Total Length: 30.00 ft      Total Volume: 0.410 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

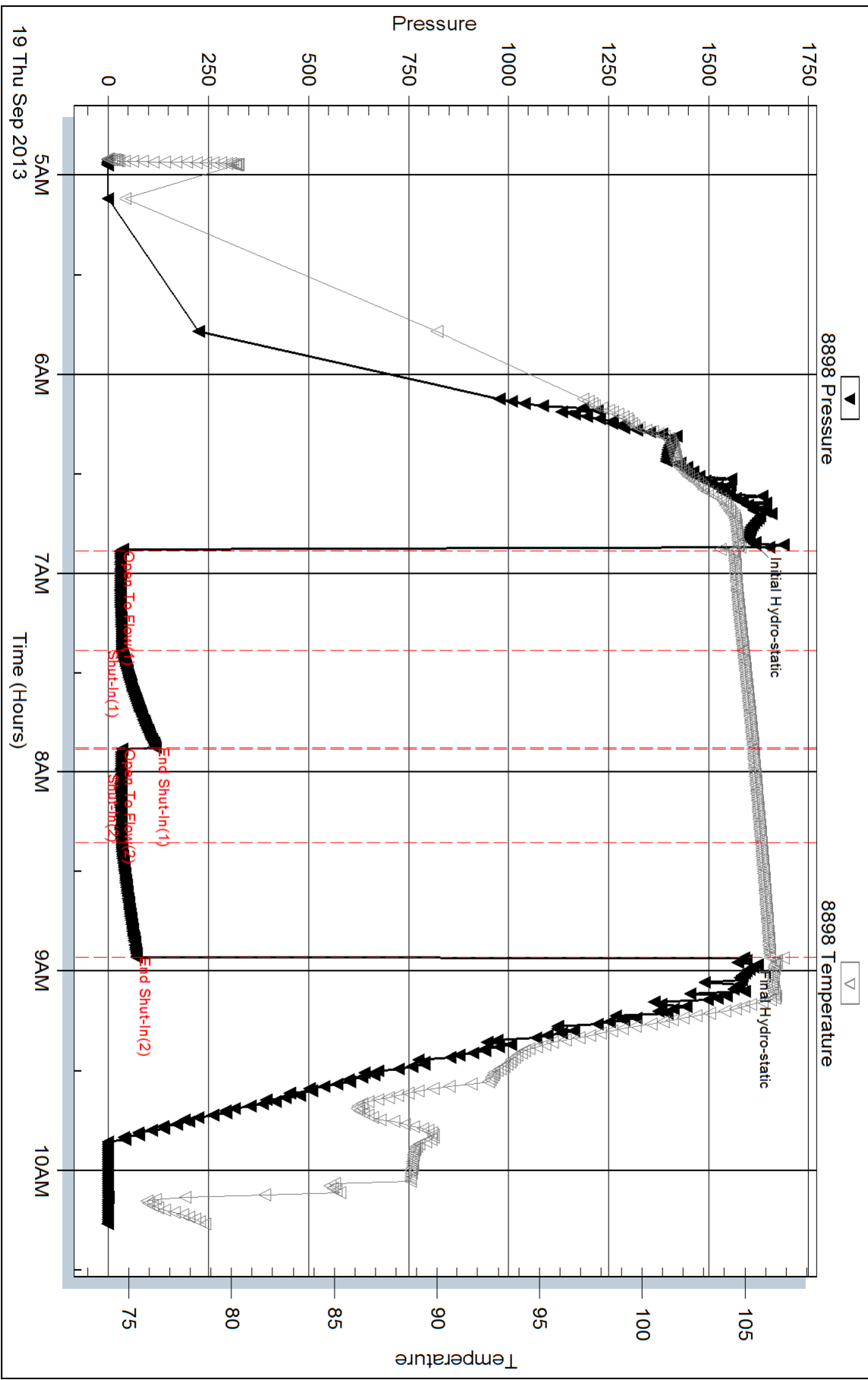
Laboratory Name:

Laboratory Location:

Recovery Comments:



### Pressure vs. Time



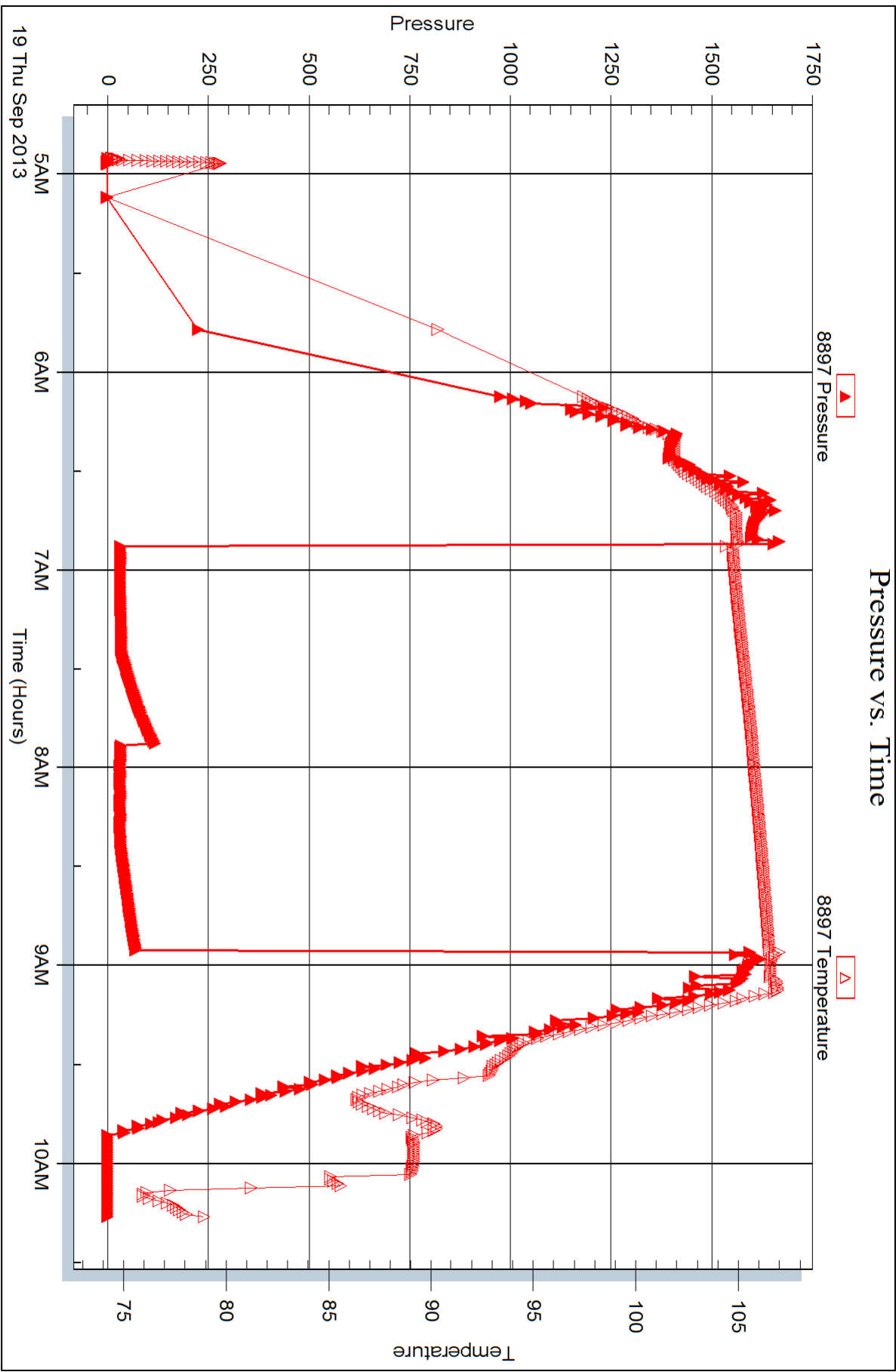
Serial #: 8897

Inside

American Warrior

Hofmeister #4-15

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **American Warrior**

3118 Cummings Rd  
Garden City, KS 67846

ATTN: Kurt Talbott

### **Hofmeister #4-15**

#### **15-16s-12w Barton,KS**

Start Date: 2013.09.19 @ 16:33:04

End Date: 2013.09.19 @ 22:45:34

Job Ticket #: 54440                      DST #: 2

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

Printed: 2013.09.21 @ 08:33:13



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

American Warrior  
3118 Cummings Rd  
Garden City, KS 67846  
ATTN: Kurt Talbott

**15-16s-12w Barton,KS**  
**Hofmeister #4-15**  
Job Ticket: 54440      **DST#: 2**  
Test Start: 2013.09.19 @ 16:33:04

## GENERAL INFORMATION:

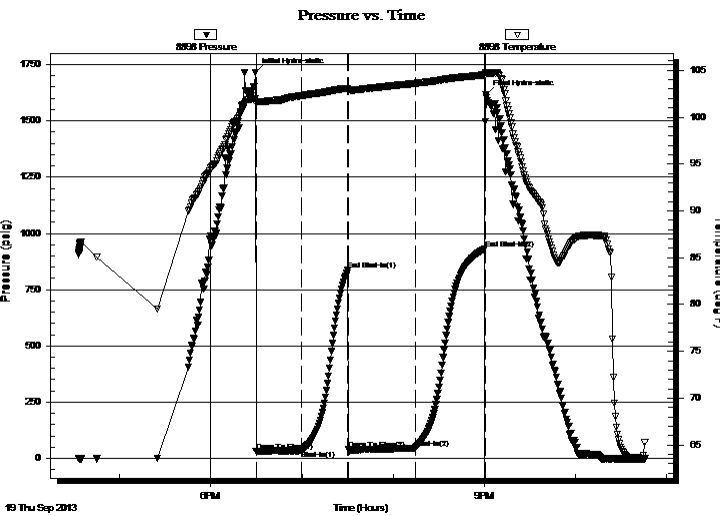
Formation: **Arbuckle**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 18:29:44  
Time Test Ended: 22:45:34  
Interval: **3318.00 ft (KB) To 3376.00 ft (KB) (TVD)**  
Total Depth: 3376.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Reference Elevations: 1926.00 ft (KB)  
1918.00 ft (CF)  
KB to GR/CF: 8.00 ft

## Serial #: 8898

**Outside**

Press @ Run Depth: 46.32 psig @ 3339.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2013.09.19      End Date: 2013.09.19      Last Calib.: 2013.09.19  
Start Time: 16:33:05      End Time: 22:45:34      Time On Btm: 2013.09.19 @ 18:29:24  
Time Off Btm: 2013.09.19 @ 21:01:04

TEST COMMENT: 30-IF- built slowly to 4 3/4"  
30-ISI-no blow  
45-FF-BOB in 41 minutes  
45-FSI-no blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1715.34	101.99	Initial Hydro-static
1	30.72	101.43	Open To Flow (1)
30	35.40	102.28	Shut-In(1)
61	836.15	103.10	End Shut-In(1)
62	39.02	102.84	Open To Flow (2)
105	46.32	103.59	Shut-In(2)
151	931.57	104.52	End Shut-In(2)
152	1617.12	104.72	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	GOCM, 5%G,20%O,75%M	0.82
0.00	3255 ft GIP	0.00

\* 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  
3118 Cummings Rd  
Garden City, KS 67846  
ATTN: Kurt Talbott

**15-16s-12w Barton,KS**  
**Hofmeister #4-15**  
Job Ticket: 54440      **DST#: 2**  
Test Start: 2013.09.19 @ 16:33:04

**Tool Information**

Drill Pipe:	Length: 3316.00 ft	Diameter: 3.75 inches	Volume: 45.30 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 3.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3318.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	86.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
Change Over Sub	1.00			3291.00	
Shut In Tool	5.00			3296.00	
Hydraulic tool	5.00			3301.00	
Jars	5.00			3306.00	
Safety Joint	2.00			3308.00	
Packer	5.00			3313.00	28.00      Bottom Of Top Packer
Packer	5.00			3318.00	
Stubb	1.00			3319.00	
Perforations	20.00			3339.00	
Recorder	0.00	8897	Inside	3339.00	
Recorder	0.00	8898	Outside	3339.00	
Change Over Sub	1.00			3340.00	
Drill Pipe	32.00			3372.00	
Change Over Sub	1.00			3373.00	
Bullnose	3.00			3376.00	58.00      Bottom Packers & Anchor

**Total Tool Length: 86.00**





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior

**15-16s-12w Barton,KS**

3118 Cummings Rd  
Garden City, KS 67846

**Hofmeister #4-15**

Job Ticket: 54440

**DST#: 2**

ATTN: Kurt Talbott

Test Start: 2013.09.19 @ 16:33:04

## 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: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8300.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GOCM, 5%G,20%O,75%M	0.820
0.00	3255 ft GIP	0.000

Total Length: 60.00 ft      Total Volume: 0.820 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

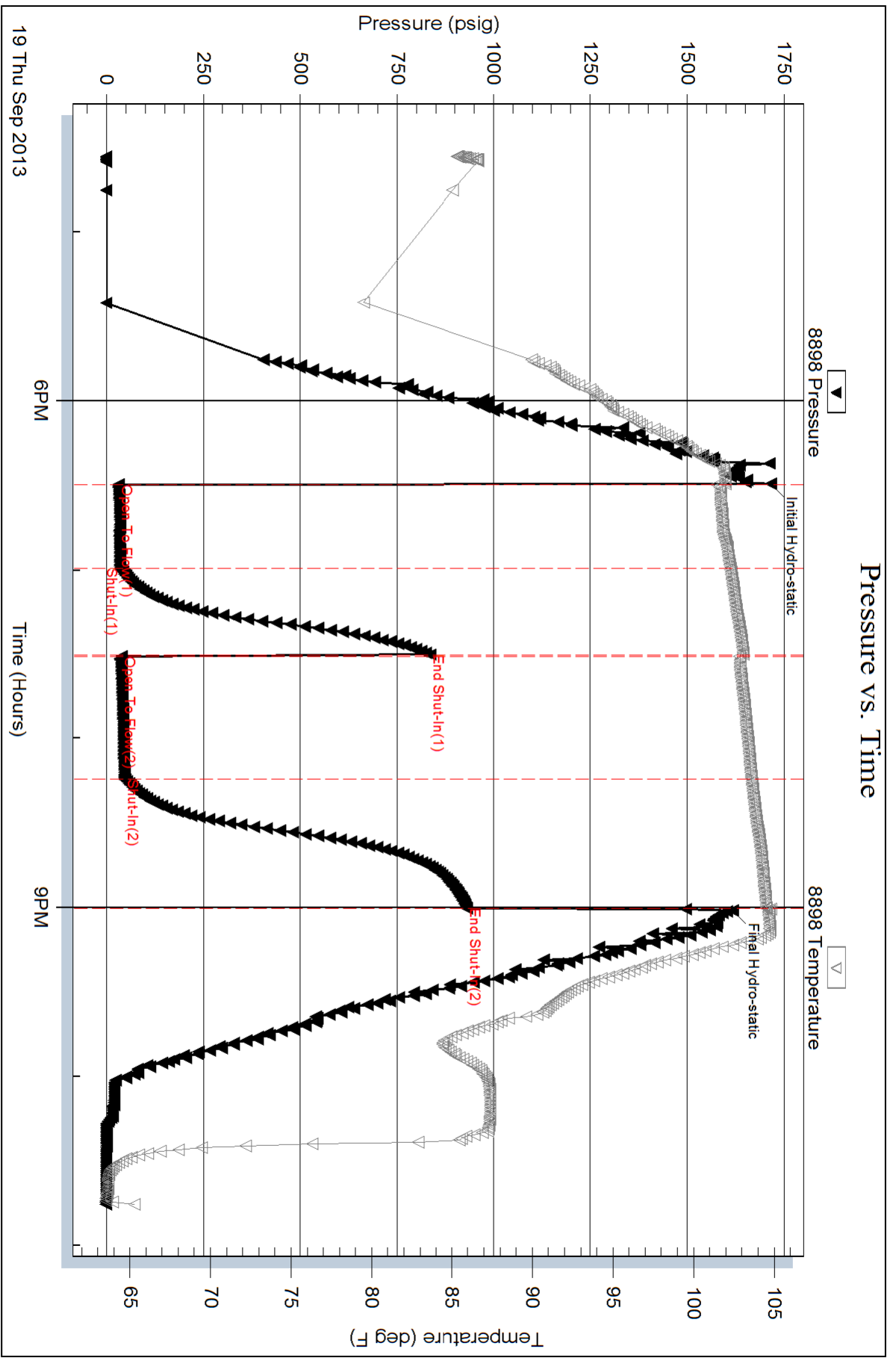
Recovery Comments:

Serial #: 8898

Outside American Warrior

Hofmeister #4-15

DST Test Number: 2



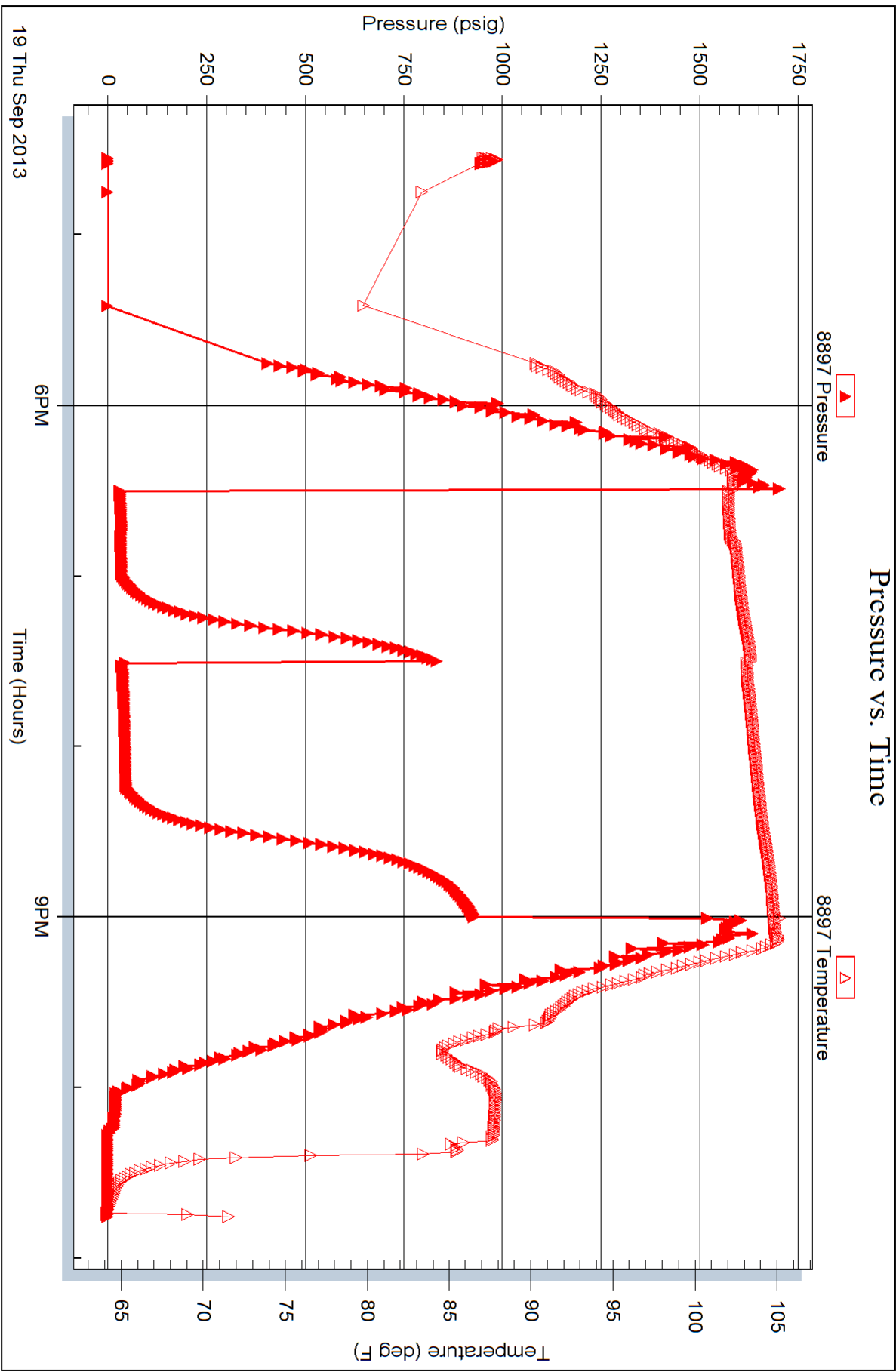
Serial #: 8897

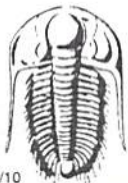
Inside

American Warrior

Hofmeister #4-15

DST Test Number: 2





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 54439

Well Name & No. Hofmeister 4-15 Test No. 1 Date 09/19/2015  
 Company American Warrior Elevation 1918 KB 1926 GL  
 Address 3118 Cummings Rd Garden City, KS 67846  
 Co. Rep / Geo. Kurt Talbott Rig Duke #8  
 Location: Sec. 15 Twp. 16S Rge. 12W Co. BARTON State KS

Interval Tested 3318 - 3370 Zone Tested Arbuckle  
 Anchor Length 52 Drill Pipe Run 3316 Mud Wt. 9.2  
 Top Packer Depth 3313 Drill Collars Run 0 Vis 49  
 Bottom Packer Depth 3318 Wt. Pipe Run \_\_\_\_\_ WL 9.2  
 Total Depth 3370 Chlorides 7000 ppm System LCM 1/2

Blow Description IF: Built quickly to 1.5" MAINTAINED blow throughout  
ISI no blow  
FF no blow  
FSE no blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>M with show of oil</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

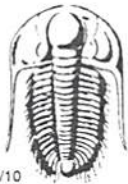
Rec Total 30 BHT 106 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1615  Test 1150 T-On Location 0115  
 (B) First Initial Flow 30  Jars 250 T-Started 0455  
 (C) First Final Flow 33  Safety Joint \_\_\_\_\_ T-Open 0653  
 (D) Initial Shut-In 119  Circ Sub \_\_\_\_\_ T-Pulled 0853  
 (E) Second Initial Flow 34  Hourly Standby \_\_\_\_\_ T-Out 10:17  
 (F) Second Final Flow 33  Mileage 5118 RT 182.90 Comments \_\_\_\_\_  
 (G) Final Shut-In 71  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1588  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_

Initial Open 30  Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Initial Shut-In 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Final Flow 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Shut-In 30  Day Standby \_\_\_\_\_ Total 1582.90  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1582.90

Approved By \_\_\_\_\_ Our Representative Brannan L. Jim Phillips

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **54440**

Well Name & No. Hofmiestee 4-15 Test No. 2 Date 09/19/2013  
 Company AMERICAN WARRIOR Elevation 1918 KB 1926 GL  
 Address 3118 Cummings Rd Garden City KS 67846  
 Co. Rep / Geo. Kurt Talbott Rig Duke #8  
 Location: Sec. 15 Twp. 16S Rge. 12W Co. Barton State KS

Interval Tested 3318 - 3376 Zone Tested Arbuckle  
 Anchor Length 58 Drill Pipe Run 3316 Mud Wt. 9.3  
 Top Packer Depth 3313 Drill Collars Run 0 Vis 59  
 Bottom Packer Depth 3318 Wt. Pipe Run \_\_\_\_\_ WL 9.2  
 Total Depth 3376 Chlorides 8300 ppm System LCM 2

Blow Description IF-30-built to 4.75" slowly  
ISI - No blow  
FF-45-BOB in 41 minutes  
FSI-45-No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>GDGM</u>	<u>5</u>	<u>20</u>	<u>75</u>	
Rec	Feet of <u>3255 GIP</u>	%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 60 BHT 105 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1715  Test 1150 T-On Location 1630  
 (B) First Initial Flow 31  Jars 250 T-Started 1633  
 (C) First Final Flow 35  Safety Joint 75 T-Open 1829  
 (D) Initial Shut-In 836  Circ Sub \_\_\_\_\_ T-Pulled 2059  
 (E) Second Initial Flow 39  Hourly Standby \_\_\_\_\_ T-Out 2245  
 (F) Second Final Flow 46  Mileage 118 RT 182.90 Comments Tate loaded tools  
 (G) Final Shut-In 932  Sampler \_\_\_\_\_ 9/20 16:00  
 (H) Final Hydrostatic 1617  Straddle \_\_\_\_\_ 182.90  
 Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Initial Shut-In 30  Day Standby \_\_\_\_\_ Total 1582.90 + 182.90  
 Final Flow 45  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In 45 Sub Total 1582.90

Approved By \_\_\_\_\_ Our Representative Brennan L. Jim Phillips  
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Mark Sievers, Chairman  
Thomas E. Wright, Commissioner  
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

October 16, 2013

Kevin Wiles SR  
American Warrior, Inc.  
3118 Cummings Rd  
PO BOX 399  
GARDEN CITY, KS 67846

Re: ACO1  
API 15-009-25883-00-00  
Hofmeister 4-15  
SW/4 Sec.15-16S-12W  
Barton County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
Kevin Wiles SR