

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas  DH  EOR

OG  GSW

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 EOR  Conv. to SWD  
 Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Date Reached TD Completion Date or  
Recompletion Date Recompletion Date

API No.: \_\_\_\_\_

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  Drill Stem Tests Received

Geologist Report / Mud Logs 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 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](mailto: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 Geologist Report / Mud Logs <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  <table style="width:100%; border: none;"> <tr> <td style="width:60%; border: none;">Name</td> <td style="width:20%; border: none;">Top</td> <td style="width:20%; border: none;">Datum</td> </tr> </table>	Name	Top	Datum
Name	Top	Datum		

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				

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

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> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top _____ Bottom _____
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	BOYE 1-9
Doc ID	1420789

All Electric Logs Run

CNL/CDL
DIL
MEL
BHCS

Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	BOYE 1-9
Doc ID	1420789

Tops

Name	Top	Datum
Topeka	2644	787
Heebner	2899	1042
Toronto	2918	1061
Douglas	2928	-1071
Lansiong	3016	1159
BKC	3287	1430
Simpson	3332	1475
Arbuckle	3350	1502





Services, Inc.

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

TICKET 27359

PAGE 1 OF 1

SERVICE LOCATIONS  
1. Hays, KS  
2. Ness City, KS  
3.  
4.

WELL/PROJECT NO. 1-9  
LEASE Boze  
COUNTY/PARISH Ellisworth  
RIG NAME/NO. Rig 4  
STATE KS  
CITY  
DATE 08/05/18  
OWNER

TICKET TYPE CONTRACTOR  
SALES SERVICE  
WELL TYPE D-1  
WELL CATEGORY Development  
JOB PURPOSE Cement Surface  
SHIPPED VIA CT  
DELIVERED TO Location  
WELL PERMIT NO.  
WELL LOCATION

INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.			UNIT PRICE	AMOUNT	
		LOC	ACCT	DF		QTY.	UM	QTY.			UM
575		1			MILEAGE #113	80	mi		5.00	400.00	
576.5		1			Pump Charge - Shallow Surface	1	EA		875.00	875.00	
290		1			D-Air	3	gal		42.00	126.00	
325		2			Standard Cement	250	SKS		13.00	3250.00	
278		2			Calcium Chloride	12	SKS		40.00	480.00	
279		2			Benovite Gel	5	SKS		30.00	150.00	
581		2			Service Charge Cement	250	SKS		1.75	437.50	
583		2			Drypack	80	mi		0.85	68.00	
<p>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.</p> <p>MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS</p> <p>DATE SIGNED _____ TIME SIGNED _____</p> <p>SWIFT OPERATOR _____ APPROVAL _____</p>											
REMIT PAYMENT TO:					SURVEY					PAGE TOTAL	
SWIFT SERVICES, INC.					OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?					437.50	
P.O. BOX 466					WE UNDERSTOOD AND MET YOUR NEEDS?					836.00	
NESS CITY, KS 67560					OUR SERVICE WAS PERFORMED WITHOUT DELAY?					750.00	
785-798-2300					WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?					300.45	
					ARE YOU SATISFIED WITH OUR SERVICE?					TOTAL	
					<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND					6855.00	

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

DATE SIGNED \_\_\_\_\_ TIME SIGNED \_\_\_\_\_

SWIFT OPERATOR \_\_\_\_\_ APPROVAL \_\_\_\_\_

Thank You!

SWIFT Services, Inc.

DATE 08/05/18 PAGE NO. 1

JOB LOG

CUSTOMER **AWI** WELL NO. **1-9** LEASE **Boye** JOB TYPE **Shallow Surface** TICKET NO. **27359**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0315							On location, set up trucks.
								430' of 8 5/8" x 23#
	0600							Break Circ on bottom.
	0615	5	5					Start water ahead
		5				200		Start Cmt, 250 SKS
		5	61					Fin Cmt, Start Displacement
		5	26 1/4			300		Fin Displacement
	0645					300		Shut in, Cmt Circ to Surface
								Release Truck
								Wash up
								Rack up
	0705							Job Complete
								Thanks
								Jon, Austin, Russell



Services, Inc.

TICKET 031479

CHARGE TO: AMERICAN WARRIOR INC  
 ADDRESS  
 CITY, STATE, ZIP CODE

PAGE 1 OF 1

SERVICE LOCATIONS  
 1. Ness City, KS  
 2.  
 3.  
 4.

WELL/PROJECT NO. 1-9  
 LEASE BOYS  
 COUNTY/PARISH CUSWORTH  
 RIG NAME/NO.  
 STATE CITY KS  
 DATE 8-10-18  
 OWNER SAME

TICKET TYPE CONTRACTOR  
 SERVICE  
 SALES  
 Discovery Date # 4  
 WELL TYPE OIL  
 WELL CATEGORY ABANDONED  
 JOB PURPOSE P.T.A.  
 WELLS PERMIT NO.  
 WELL LOCATION S/ Warrson, Ks.

INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY. U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF		QTY.	U/M		
575					MILEAGE # 112	60	mi	\$600	300.00
576D					PUMP CHARGE - PTA	1	rod	875.00	875.00
410					TOP PLUG	1	ea	130.00	130.00
328-4					60/40 Pozmex (4% gel)	210	sls	10.60	2226.00
276					FLOCCIE	50	lbs	2.50	125.00
290					D-ADR	2	gal	42.00	84.00
581					SEAWICE CHARGE Cement	210	sls	1.75	367.50
583					DRYAGE	176	lbs	330.91	581.27

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.

DATE SIGNED 8-10-18 TIME SIGNED 1:00 PM

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

SURVEY

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	AGREE	UNDECIDED	DISAGREE
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?			
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND			

PAGE TOTAL 4558.97

TOTAL 4900.68

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

SWIFT OPERATOR WAYNE WARRSON APPROVAL

Thank You!







## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399  
Garden City, KS 67846

ATTN: Jason T Alm

### **Boye #1-9**

#### **9-16s-10w Ellsworth,KS**

Start Date: 2018.08.10 @ 04:22:58

End Date: 2018.08.10 @ 11:53:58

Job Ticket #: 57894                      DST #: 1

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.08.13 @ 13:35:12









**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior Inc  
PO Box 399  
Garden City, KS 67846  
ATTN: Jason T Alm

**9-16s-10w Ellsworth,KS**  
**Boye #1-9**  
Job Ticket: 57894      **DST#: 1**  
Test Start: 2018.08.10 @ 04:22:58

**Tool Information**

Drill Pipe:	Length: 3295.00 ft	Diameter: 3.80 inches	Volume: 46.22 bbl	Tool Weight:	2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	26000.00 lb
Drill Collar:	Length: 32.00 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 46.38 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3327.00 ft			Final	62000.00 lb
Depth to Bottom Packer:	3376.00 ft				
Interval between Packers:	49.00 ft				
Tool Length:	141.00 ft				
Number of Packers:	3	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>
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<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			3308.00	
Shut In Tool	5.00			3313.00	
Hydraulic tool	5.00			3318.00	
Packer	5.00			3323.00	20.00      Bottom Of Top Packer
Packer	4.00			3327.00	
Stubb	1.00			3328.00	
Perforations	8.00			3336.00	
Change Over Sub	1.00			3337.00	
Recorder	0.00	8671	Inside	3337.00	
Recorder	0.00	8792	Outside	3337.00	
Blank Spacing	32.00			3369.00	
Change Over Sub	1.00			3370.00	
Perforations	5.00			3375.00	
Blank Off Sub	1.00			3376.00	49.00      Tool Interval
Packer	3.00			3379.00	
Stubb	1.00			3380.00	
Perforations	1.00			3381.00	
Change Over Sub	1.00			3382.00	
Blank Spacing	32.00			3414.00	
Change Over Sub	1.00			3415.00	
Recorder	0.00	8931	Below	3415.00	
Perforations	30.00			3445.00	
Bullnose	3.00			3448.00	72.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>141.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior Inc  
PO Box 399  
Garden City, KS 67846  
ATTN: Jason T Alm

**9-16s-10w Ellsworth,KS**  
**Boye #1-9**  
Job Ticket: 57894      **DST#: 1**  
Test Start: 2018.08.10 @ 04:22:58

## 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:	4600 ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.17 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 4600.00 ppm			
Filter Cake: 0.20 inches			

## Recovery Information

Recovery Table

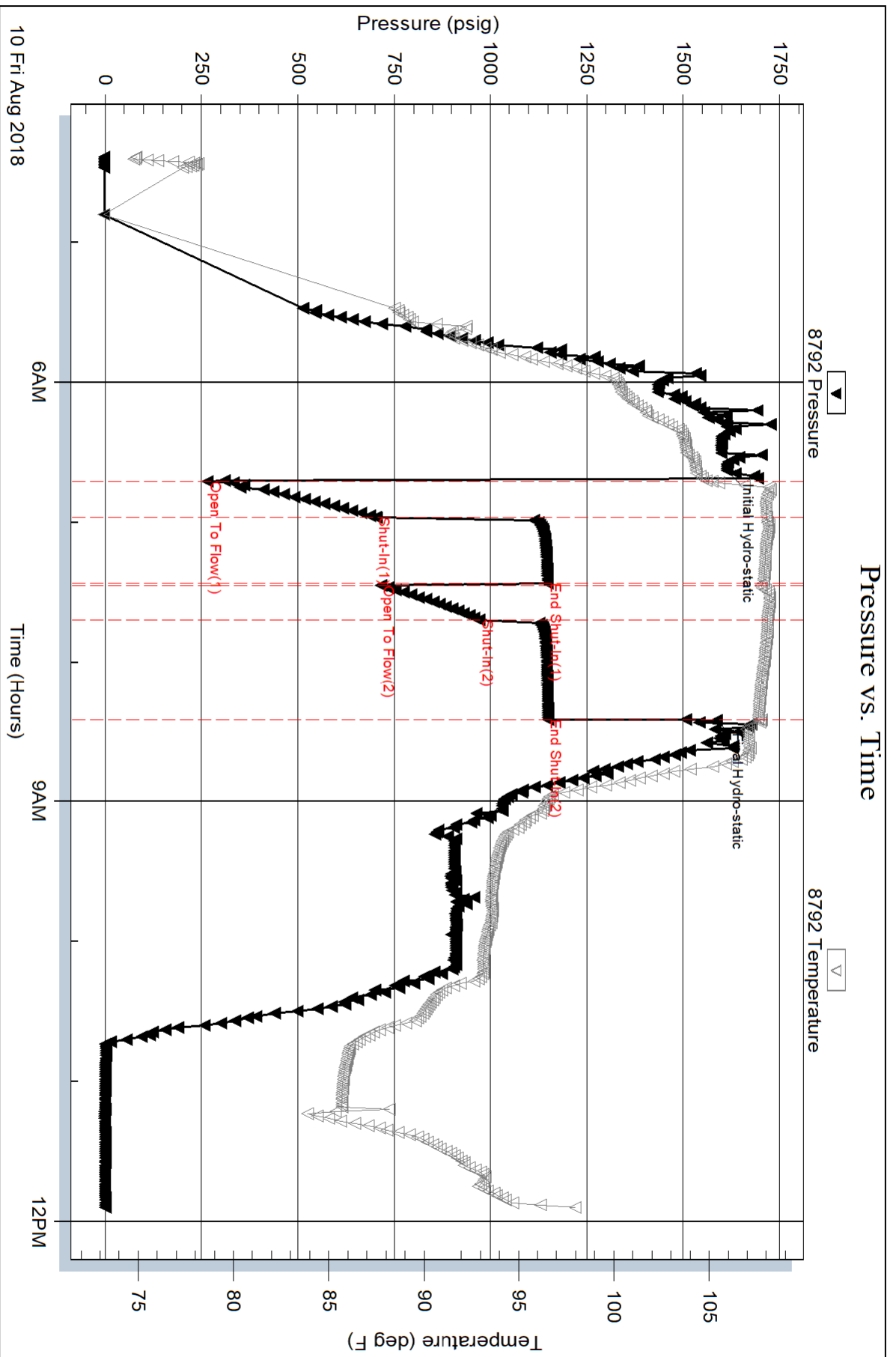
Length ft	Description	Volume bbl
1887.00	SW 100%w	26.178
256.00	MW 40%m 60%w	3.591
20.00	WM 40%w 60%m	0.281
0.00	104' GIP	0.000

Total Length: 2163.00 ft      Total Volume: 30.050 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #: none

Laboratory Name:      Laboratory Location:

Recovery Comments: Dropped the bar.





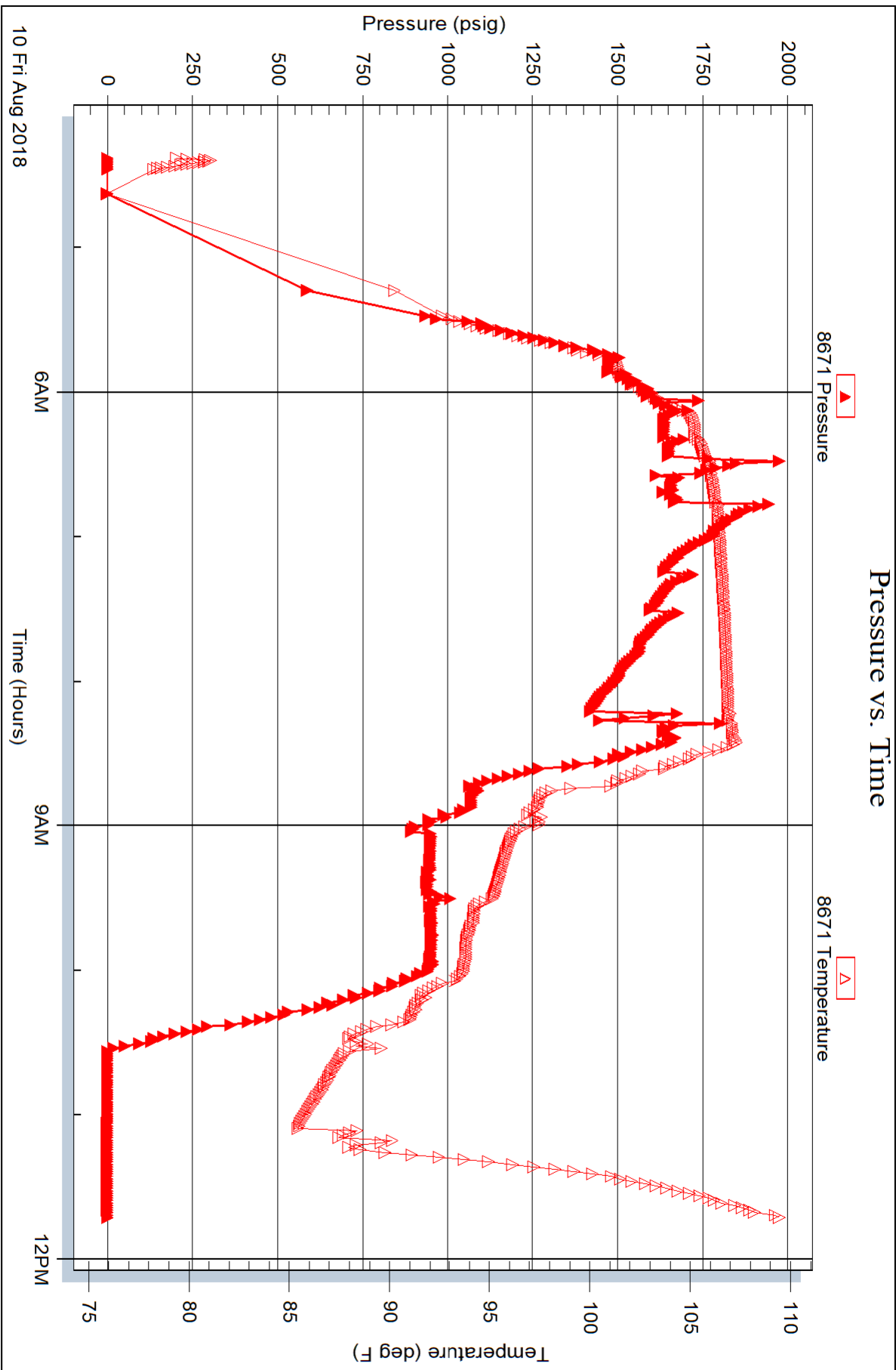
Serial #: 8671

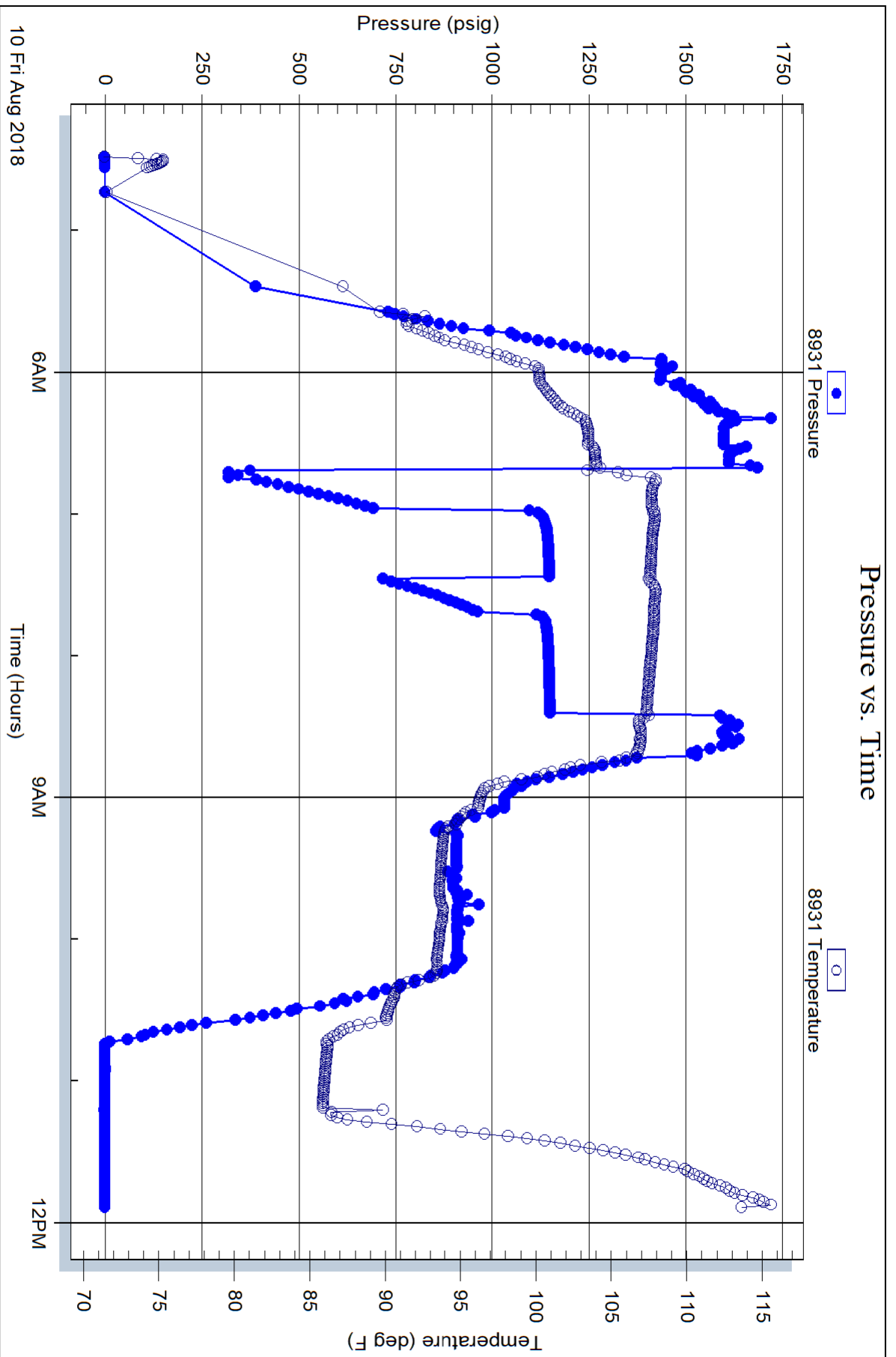
Inside

American Warrior Inc

Boye #1-9

DST Test Number: 1







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 57894

Name & No. Boye #1-9 Test No. 1 Date 8-10-18  
 Company American Warrior Inc. Elevation 1857 KB 1849 GL  
 Address P.O. Box 399, 3118 Cummings RD Garden City, KS. 67846  
 Rep / Geo. Jason T Alm Rig Discovery #4  
 Location: Sec. 9 Twp. 16S Rge. 10W Co. Ellis State KS.

Well Tested 3327-3379 Zone Tested Stimpson / Arbuckle  
 True Length 52' tail 69' Drill Pipe Run 3295 Mud Wt. 9.35  
 Casing Depth ~~3327~~ 3322 Drill Collars Run 32' Vis 48  
 1 Packer Depth 3327 Wt. Pipe Run 2 WL 9.2  
 Depth ~~3327~~ 3450 Chlorides 4600 ppm System LCM TR

Description IF: Strong blow. B.O.B in 2 mins., Burt to 60" decreased to 10".  
No blow.  
Strong blow. B.O.B in 2 mins., Burt to 56" decreased to 11".  
No blow.

Feet of	%gas	%oil	%water	%mud
<u>104</u> Feet of <u>G.I.P.</u>	<u>100</u>			
<u>20'</u> Feet of <u>MW</u>			<u>40</u>	<u>60</u>
<u>256'</u> Feet of <u>MW</u>			<u>60</u>	<u>40</u>
<u>1887'</u> Feet of <u>SW</u>			<u>100</u>	
Feet of _____	%gas	%oil	%water	%mud

Well 2163' BHT 108° Gravity N/A API RW N/A @ 60 °F Chlorides 4,600 ppm  
 Initial Hydrostatic 1613  Test 1050 T-On Location 0218  
 Initial Flow 266  Jars \_\_\_\_\_ T-Started 0422  
 Final Flow 702  Safety Joint \_\_\_\_\_ T-Open 0642  
 Well Shut-In 1149  Circ Sub 50 T-Pulled 0821  
 Second Initial Flow 712  Hourly Standby \_\_\_\_\_ T-Out 1153  
 Second Final Flow 971  Mileage 158 30 Comments Dropped the Bar  
 Shut-In 972  Sampler \_\_\_\_\_  
 Hydrostatic 1150  Straddle 600  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Shut-In 30  Extra Recorder ? Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1730  
 Shut-In 30  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1730

Our Representative [Signature]

# **Geological Report**

## **Boye #1-9**

1218' FSL & 1728' FWL

Sec. 9 T16s R10w

Ellsworth County, Kansas



**American Warrior, Inc.**

## General Data

Well Data: American Warrior, Inc.  
Boye #1-9  
1218' FSL & 1728' FWL  
Sec. 9 T16s R10w  
Ellsworth County, Kansas  
API # 15-053-21365-0000

Drilling Contractor: Discovery Drilling Co, Inc. Rig #4

Geologist: Jason T Alm

Spud Date: August 4, 2018

Completion Date: August 10, 2018

Elevation: 1849' Ground Level  
1857' Kelly Bushing

Directions: Wilson KS. South 10 mi to N rd. East 2 mi. South  
¾ mi. East into location.

Casing: 432' 8 5/8" surface casing

Samples: 10' wet and dry, 2650' to RTD

Drilling Time: 2550' to RTD

Electric Logs: Pioneer Energy Services "Justin Hendrickson"  
CNL/CDL, DIL, MEL, BHCS

Drillstem Tests: One, Trilobite Testing, Inc. "Matt Smith"

Problems: None

Remarks: None

## Formation Tops

	American Warrior, Inc.
	Boye #1-9
	Sec. 9 T16s R10w
<b>Formation</b>	<b>1218' FSL &amp; 1728' FWL</b>
Anhydrite	<b>647' +1210</b>
Base	<b>666' +1191</b>
Topeka	<b>2644' -787</b>
Heebner	<b>2899' -1042</b>
Toronto	<b>2918' -1061</b>
Douglas	<b>2928' -1071</b>
Brown Lime	<b>3002' -1145</b>
Lansing	<b>3016' -1159</b>
BKC	<b>3287' -1430</b>
Simpson	<b>3332' -1475</b>
Arbuckle	<b>3359' -1502</b>
LTD	<b>3448' -1591</b>
RTD	<b>3450' -1593</b>

## Sample Zone Descriptions

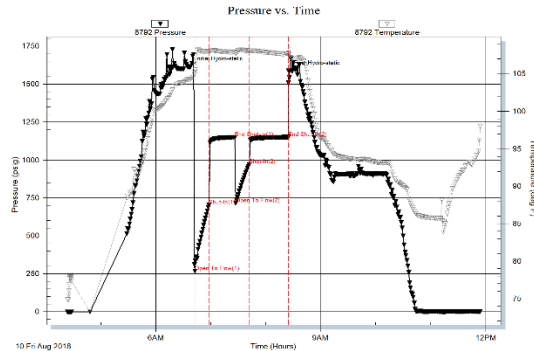
- LKC A**                    **(3016' -1159):            Not Tested**  
 Ls – Fine crystalline, oolitic packstone with fair oomoldic porosity, few rocks with very light oil stain, no show of free oil, few gas bubbles, no odor, scattered fair fluorescents, 32 units hotwire.
- LKC C**                    **(3042' -1185):            Not Tested**  
 Ls – Fine crystalline, oolitic packstone with good oomoldic porosity, few rocks with very light scattered oil stain, no show of free oil, few gas bubbles on break, no odor, dull to fair yellow fluorescents, 54 units hotwire.
- Simpson Sand**            **(3335' -1478):            Covered in DST #1**  
 Ss – Clear, fine grained, well sorted, fairly cemented, sub-rounded, with fair inter-granular porosity, light to fair oil stain in cluster, light yellow fluorescents, very slight odor, 65 units hotwire
- Arbuckle**                    **(3359' -1502):            Covered in DST #1**  
 Dolo – Fine rhombic crystalline with fair inter-crystalline and scattered vuggy porosity, light spotted oil stain, slight show of free oil when broken, good odor, fair yellow fluorescents, 50 units hotwire.

**Drill Stem Tests**  
Trilobite Testing, Inc.  
"Matt Smith"

**DST #1 Simpson / Arbuckle**

Interval (3327' – 3379') Anchor 52', Tail 69'

IHP – 1630 #  
IFP – 15" – B.O.B. 2 min. 265-702 #  
ISI – 30" – Dead 1149 #  
FFP – 15" – B.O.B. 2 min. 714-972 #  
FSI – 30" – Dead 1150 #  
FHP – 1586 #  
BHT – 108°F  
Recovery: 104' GIP  
276' Muddy Water  
1887' Water



**Structural Comparison**

	American Warrior, Inc. Boye #1-9 Sec. 9 T16s R10w 1218' FSL & 1728' FWL	Alexander H.E. Boye #1 Sec. 9 T16s R10w 1200' FSL & 450' FWL		Boye #1 Bergman Oil Sec. 9 T16s R10w 2310' FSL & 4620' FEL	
<b>Formation</b>					
Anhydrite	647' +1210	NA	NA	NA	NA
Base	666' +1191	NA	NA	NA	NA
Topeka	2644' -787	NA	NA	NA	NA
Heebner	2899' -1042	2935' -1043	(+1)	2894' -1019	(-23)
Toronto	2918' -1061	2954' -1062	(+1)	2912' -1037	(-24)
Douglas	2928' -1071	NA	NA	NA	NA
Brown Lime	3002' -1145	3035' -1143	(-2)	2996' -1121	(-24)
Lansing	3016' -1159	3053' -1161	(-2)	3012' -1137	(-22)
BKC	3287' -1430	NA	NA	NA	NA
Simpson	3332' -1475	NA	NA	NA	NA
Arbuckle	3359' -1502	3382' -1490	(-12)	3318' -1443	(-59)

**Summary**

The location for the Boye #1-9 was found via 3-D seismic survey. The new well ran structurally lower than expected via the survey. One Drill Stem Test was conducted which was negative. After all gathered data had been examined the decision was made to plug and abandon the Boye #1-9 well.

Respectfully Submitted,

Jason T Alm  
Hard Rock Consulting, Inc.