

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

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  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				

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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# **Geological Report**

## **Krug #1-24**

1437' FNL & 708' FWL

Sec. 24 T13s R15w

Russell County, Kansas



**American Warrior, Inc.**

## General Data

Well Data: American Warrior, Inc.  
Krug #1-24  
1437' FNL & 708' FWL  
Sec. 24 T13s R15w  
Russell County, Kansas  
API # 15-167-24074-0000

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

Geologist: Jason T Alm

Spud Date: July 21, 2018

Completion Date: July 28, 2018

Elevation: 1836' Ground Level  
1844' Kelly Bushing

Directions: Gorham KS. East on Hwy 40 5 mi to 180<sup>th</sup> St.  
North 2 ¼ mi. East into location.

Casing: 631' 8 5/8" surface casing

Samples: 10' wet and dry, 2400' to RTD

Drilling Time: 2350' to RTD

Electric Logs: Pioneer Energy Services "Ian Mabb"  
CNL/CDL, DIL, MEL, BHCS

Drillstem Tests: Four, Trilobite Testing, Inc. "Jim Svaty, Ray Schwager"

Problems: DST #1 & 2 both slid to bottom

Remarks: Results from DST #2 are valid. There was only slight plugging during the beginning of the initial flow.

## Formation Tops

	American Warrior, Inc.
	<b>Krug #1-24</b>
	<b>Sec. 24 T13s R15w</b>
<b>Formation</b>	<b>1437' FNL &amp; 708' FWL</b>
Anhydrite	<b>902' +942</b>
Base	<b>936' +908</b>
Stotler	<b>2481' -637</b>
Tarkio	<b>2538' -694</b>
Howard	<b>2680' -836</b>
Topeka	<b>2739' -895</b>
Heebner	<b>2964' -1120</b>
Toronto	<b>2982' -1138</b>
Douglas	<b>2997' -1153</b>
Lansing	<b>3017' -1173</b>
BKC	<b>3266' -1422</b>
Arbuckle Rework	<b>3287' -1443</b>
Arbuckle	<b>3307' -1463</b>
LTD	<b>3378' -1534</b>
RTD	<b>3380' -1536</b>

## Sample Zone Descriptions

- Topeka (2739' -895): Not Tested**  
 Ls – Fine crystalline with poor to fair pinpoint inter-crystalline and vuggy porosity, light to fair oil stain, fair show of free oil when broken, good odor, fair cut fluorescents, 31 units hotwire.
- LKC C (3041' -1197): Covered in DST #1,2**  
 Ls – Fine crystalline, oolitic in part with fair oomoldic porosity, light to fair golden brown oil stain and saturation in porosity, slight show of free oil, few gas bubbles, light to fair odor, 58 units hotwire.
- LKC J (3193' -1349): Covered in DST #3**  
 Ls – Fine crystalline, oolitic with poor oomoldic porosity, light to good oil stain and saturation, fair show of free oil, many gas bubbles, good cut fluorescents, light odor, 51 units hotwire.

**Arbuckle Rework (3287' -1443): Covered in DST #4**

Dolo – Fine rhombic crystalline with fair inter-crystalline and scattered vuggy porosity, light spotted oil stain in porosity, slight show of free oil when broken, good odor, dull yellow fluorescents, 19 units hotwire.

**Drill Stem Tests**

Trilobite Testing, Inc.

“Jim Svaty, Ray Schwager”

**DST #1 Toronto thru LKC C zone**

Interval (2974' – 3055') Anchor Length 81'

Mis-run, tool slid 10 feet, landed 14 feet off of bottom

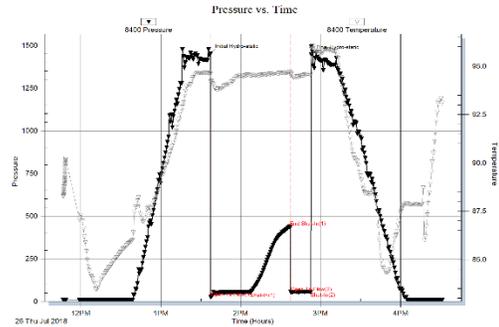
Recovery: 52' Mud

**DST #2 Toronto thru LKC C zone**

Interval (2974' – 3055') Anchor Length 81'

IHP	– 1450 #	
IFP	– 30” – W.S.B.	24-51 #
ISI	– 30” – Dead	440 #
FFP	– 10” – Dead	56-57 #
FHP	– 1445 #	
BHT	– 95°F	

Recovery: 72' Oil Spotted Mud

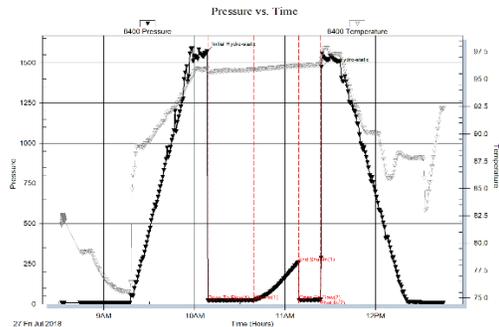


**DST #3 LKC I thru K zones**

Interval (3169' – 3251') Anchor Length 82'

IHP	– 1570 #	
IFP	– 30” – W.S.B.	22-25 #
ISI	– 30” – Dead	259 #
FFP	– 15” – B.O.B. 18 min.	23-26 #
FHP	– 1472 #	
BHT	– 96°F	

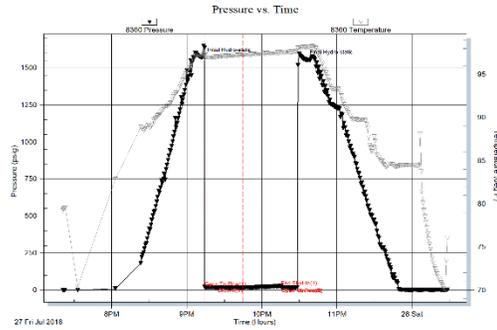
Recovery: 3' Oil Spotted Mud



**DST #4      Arbuckle Rework**

Interval (3267' – 3300') Anchor Length 33'

IHP    – 1570 #  
 IFP    – 30" – W.S.B.                      19-18 #  
 ISI    – 30" – Dead                         27 #  
 FFP    – 10" – Dead                         17-18 #  
 FHP    – 1556 #  
 BHT    – 98°F



Recovery:      1' Oil Spotted Mud

**Structural Comparison**

	American Warrior, Inc. Krug #1-24 Sec. 24 T13s R15w 1437' FNL & 708' FWL	Paleozoic Petroleum Kilian #1 Sec. 24 T13s R15w C N2 SW		Great Lakes Carbon McAllister #1 Sec. 24 T13s R15w SW SW NE	
<b>Formation</b>					
Anhydrite	902' +942	NA	NA	905' +938	(+4)
Base	936' +908	NA	NA	NA	NA
Stotler	2481' -637	NA	NA	NA	NA
Tarkio	2538' -694	NA	NA	NA	NA
Howard	2680' -836	NA	NA	NA	NA
Topeka	2739' -895	NA	NA	NA	NA
Heebner	2964' -1120	2965' -1121	(+1)	NA	NA
Toronto	2982' -1138	2983' -1139	(+1)	NA	NA
Douglas	2997' -1153	NA	NA	NA	NA
Lansing	3017' -1173	3017' -1173	FL	3014' -1171	(-2)
BKC	3266' -1422	3265' -1421	(-1)	NA	NA
Arbuckle Rework	3287' -1443	NA	NA	NA	NA
Arbuckle	3307' -1463	3273' -1429	(-34)	3279' -1436	(-27)

**Summary**

The location for the Krug #1-24 was found via 3-D seismic survey. The new well ran structurally slightly lower than expected via the survey. Four Drill Stem Tests were conducted, all of which were negative. After all gathered data had been examined the decision was made to plug and abandon the Krug #1-24 well.

Respectfully Submitted,

Jason T Alm  
 Hard Rock Consulting, Inc.



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

TICKET 031567

PAGE 1 OF 1

SERVICE LOCATIONS: Amw 4915

WELL/PROJECT NO. 1-24 LEASE Krug COUNTY/PARISH Russell STATE KS CITY Gorham DATE 22 Feb 18 OWNER

TICKET TYPE  SERVICE  SALES CONTRACTOR

WELL TYPE D11 WELL CATEGORY Discovery RIG NAME/NO. 4 SHIPPED YES DELIVERED TO location ORDER NO.

WELL PURPOSE Development JOB PURPOSE Cement deep surface WELL PERMIT NO.

WELL LOCATION 24-15-13

INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY. U/M			UNIT PRICE	AMOUNT
		LOC	ACCT	DF		QTY.	U/M	QTY.		
576D		1			MILEAGE TRK 110	30	mi		5.00	1500.00
325		1			Pump Charge (Deep survey)	1	ea		1300.00	1300.00
279		1			Standard cement	350	sk		13.00	4550.00
278		1			Benpenite gel	700	lb		30.00	21000.00
290		1			Calcium Chlorides	750	lb		15.00	11250.00
581		1			D-AIR	2	gal		42.00	84.00
583		1			Service Charge	30	sk		1.75	52.50
					Drillage	3430	lb		0.85	2915.50

**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.

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

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

A.M.  P.M.

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

SURVEY

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?

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?  YES  NO

CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL 8836.44

TOTAL 8699.18

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

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

Thank You!



JOB LOG

SWIFT Services, Inc.

DATE 22 Jul 18 PAGE NO. 1

CUSTOMER American Warrior WELL NO. 1-24 LEASE K rug JOB TYPE cement deep surface TICKET NO. 31567

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								350 sk standard cement w/ 2% gel 3/bcc 8 5/8" x 23# casing 15 jts TD = 632'
	2200							on loc TRK 110
	2230							start 8 5/8" x 23# casing in well
23 Jul	2345 <del>0000</del>	4 1/4					100	circulate well
23 Jul	0000	4 1/4	36				100	Mix STD 2% 30% 350sk @ 14.7 ppg w/ LSK hulls
	0028	5					100	Displace cement
	0040	5	38				450	→ cement to surface ← Kickout {25 sk to put}
	0046							shot in 8 5/8"
	0050							wash truck
								Rack up
	0125							job complete thanks
								Austin Blaine, Austin Base & 10ANC

DATE 5/18/18

SWIFT SURVEY, INC.

31261

SWIFT SURVEY, INC.

1-24

1-24

1-24

1-24

1-24

1-24

320 in standard count of 1200 5000  
87.125' depth - 127K 10.655

0.12 TRN 110

0.12 TRN 110

0.12 TRN 110

0.12 TRN 110

0.12 TRN 110

0.12 TRN 110

0.12 TRN 110

0.12 TRN 110

0.12 TRN 110

0.12 TRN 110

0.12 TRN 110



Services, Inc.

CHARGE TO:  
ADDRESS  
American Warrior

CITY, STATE, ZIP CODE

TICKET 27349

PAGE 1 OF

SERVICE LOCATIONS	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER
1. Plains KS	1817	plug	Russell	KS		7-28-18	
2. Ness City KS		Discover Drilling	Rig # 4	KS	LOUSTON	ORDER NO.	
3.							
4. REFERRAL LOCATION	WELL TYPE	WELL CATEGORY	JOB PURPOSE	WELL PERMIT NO.	WELL LOCATION		
	Oil	Development	PTA				

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	MILEAGE	QTY.			UNIT PRICE	AMOUNT
		LOC	ACCT	DF			QTY.	UM	QTY.		
575					TRK # 110	30	mi			5.00	150.00
576P					Pump Charge - PTA	1	EA			825.00	825.00
29D					D-AR	3	EA			42.00	126.00
410					TOP plug	1	EA			130.00	130.00
328-4					60/46 pozmix 4% gel	255	sls			10.60	2703.00
276					Fluore	64	lbs			2.50	160.00
581					Service Charge Ent	255	sls			1.75	446.25
583					Drayage	516	tm			85	43860

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

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

**SURVEY**

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	AGREE	UN-DECIDED	DIS-AGREE
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	

CUSTOMER DID NOT WISH TO RESPOND

**PAGE TOTAL**

TOTAL	15903.99
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DATE SIGNED: \_\_\_\_\_ TIME SIGNED: \_\_\_\_\_

SWIFT OPERATOR: David Edgeron APPROVAL: \_\_\_\_\_

DATE: 7-28-18

OWNER: Russell

AMOUNT: 414.95

AMOUNT: 2088.85

AMOUNT: 215.18

TOTAL: 5088.85

Thank You!



JOB LOG

SWIFT Services, Inc.

DATE

7-29-18

PAGE NO.

CUSTOMER

American Warrior

WELL NO.

1-24

LEASE

Krug

JOB TYPE

PTA

TICKET NO.

27349

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1430							On location
								1st Plug - 3260'
								50 sks cmt
	1525	5	10			400		pump wtr spacer
		5	13			400		pump cmt @ 13 ppq
		5	7			150		pump wtr spacer
	1530	0						Disp w/ mud pump
								2nd Plug - 925'
								50 sks cmt
	1640	5	7			300		pump wtr spacer
		5	13			300		pump cmt @ 13 ppq
	1645	5	4			100		disp w/ wtr
								3rd plug @ 680
								100 sks cmt
	1720	5	5			300		pump wtr spacer
		5	26			300		pump cmt @ 13 ppq
	1725	5	2			100		disp w/ wtr
								<del>plug rat hole - 30 sks</del>
	1850	2	8			0		plug rat hole - 30 sks
	1855	2	4			0		plug mouse hole - 15 sks
	1900	1.5	3			0		Top off 8 5/8 - 10 sks
								Thanks
								David, Zach & Kirby





## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399  
Garden City KS 67846

ATTN: Jason T Alm

### **Krug #1-24**

#### **24-13s-15w Russell KS**

Start Date: 2018.07.26 @ 03:36:00

End Date: 2018.07.26 @ 07:48:00

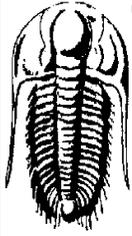
Job Ticket #: 63743                      DST #: 1

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

Printed: 2018.07.30 @ 13:38:47







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

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

**24-13s-15w Russell KS**  
**Krug #1-24**  
Job Ticket: 63743      **DST#: 1**  
Test Start: 2018.07.26 @ 03:36:00

**Tool Information**

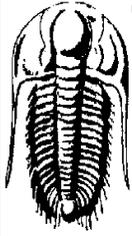
Drill Pipe:	Length: 2949.00 ft	Diameter: 3.80 inches	Volume: 41.37 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 41.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	2974.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	81.00 ft			
Tool Length:	102.00 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			2954.00	
Shut In Tool	5.00			2959.00	
Hydraulic tool	5.00			2964.00	
Packer	5.00			2969.00	21.00      Bottom Of Top Packer
Packer	5.00			2974.00	
Stubb	1.00			2975.00	
Recorder	0.00	8400	Outside	2975.00	
Recorder	0.00	8960	Inside	2975.00	
Perforations	12.00			2987.00	
Change Over Sub	1.00			2988.00	
Drill Pipe	63.00			3051.00	
Change Over Sub	1.00			3052.00	
Bullnose	3.00			3055.00	81.00      Bottom Packers & Anchor

**Total Tool Length: 102.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

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

**24-13s-15w Russell KS**  
**Krug #1-24**  
Job Ticket: 63743      **DST#: 1**  
Test Start: 2018.07.26 @ 03:36:00

## Mud and Cushion Information

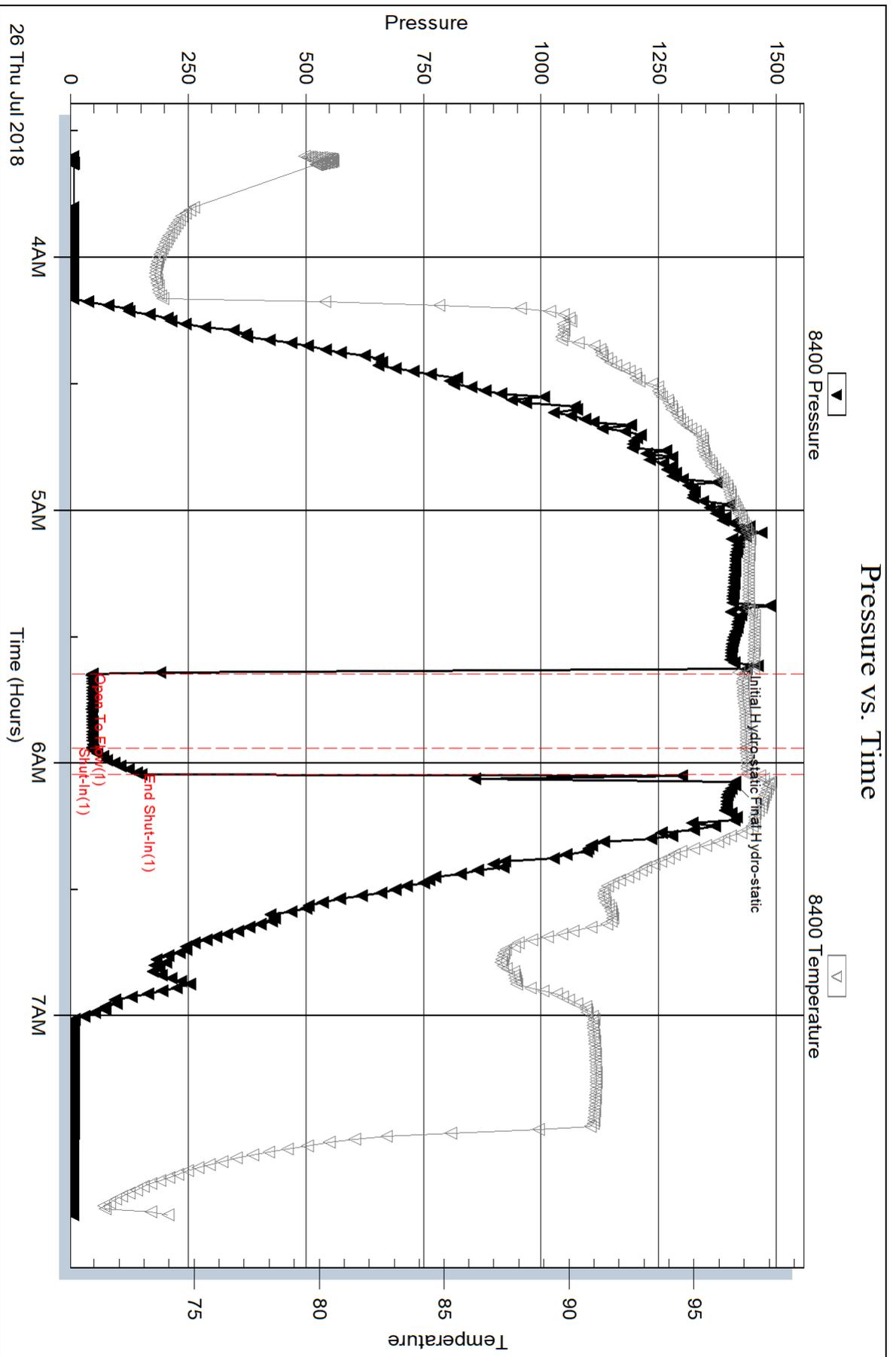
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 61.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.16 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2600.00 ppm			
Filter Cake: 2.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
52.00	Mud	0.447

Total Length: 52.00 ft      Total Volume: 0.447 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:



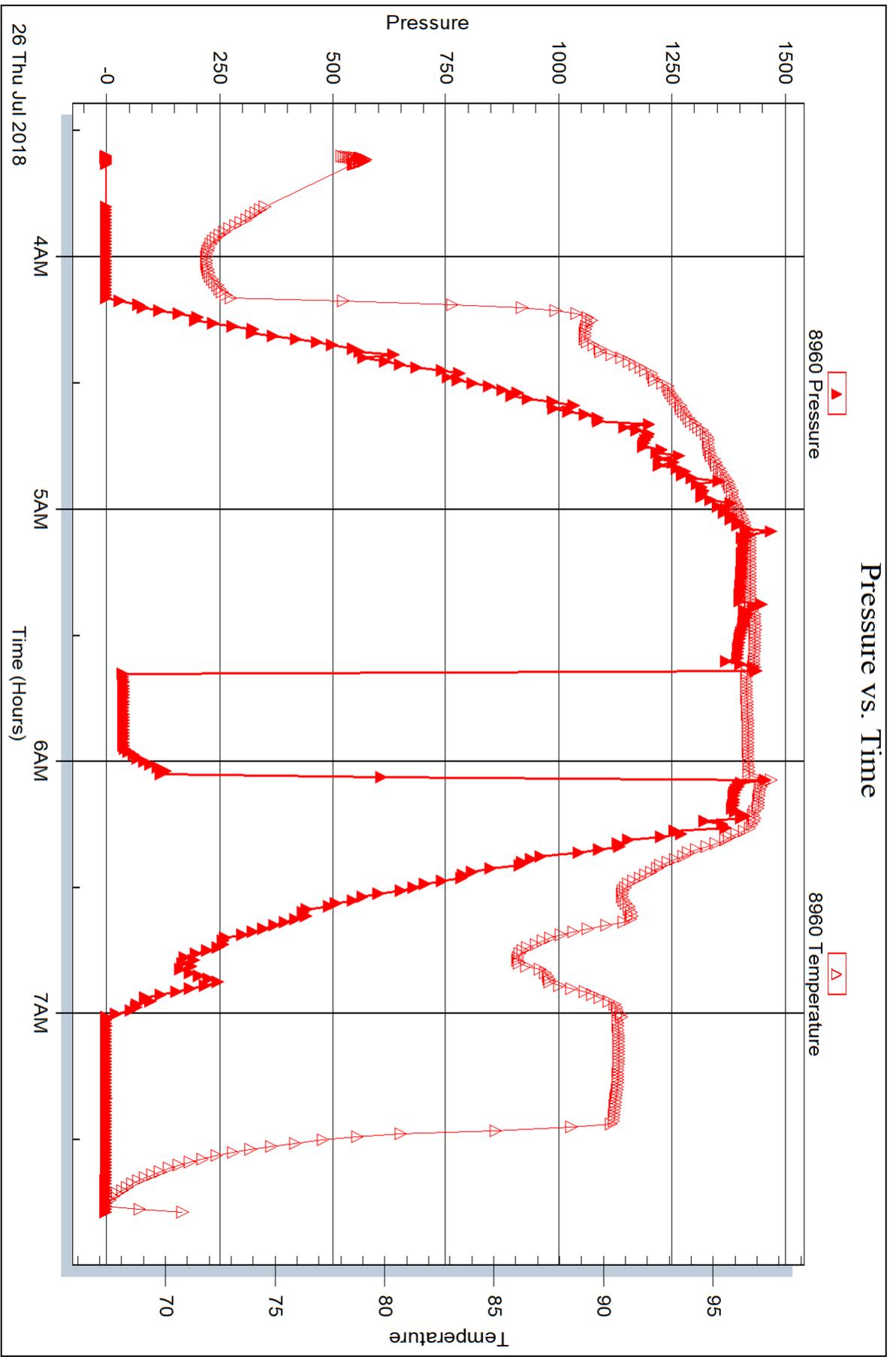
Serial #: 8960

Inside

American Warrior Inc

Krug #1-24

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399  
Garden City KS 67846

ATTN: Jason T Alm

### **Krug #1-24**

#### **24-13s-15w Russell KS**

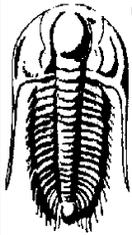
Start Date: 2018.07.26 @ 11:47:00

End Date: 2018.07.26 @ 16:32:00

Job Ticket #: 63744                      DST #: 2

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

Printed: 2018.07.30 @ 13:38:14



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

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

**24-13s-15w Russell KS**  
**Krug #1-24**  
Job Ticket: 63744      **DST#: 2**  
Test Start: 2018.07.26 @ 11:47:00

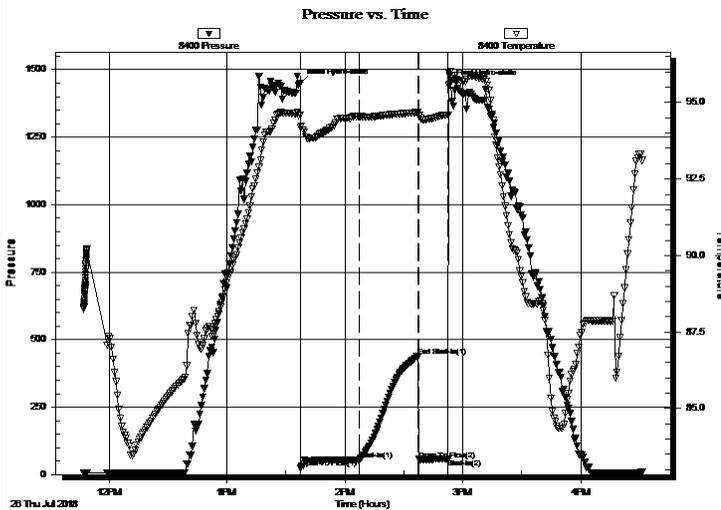
## GENERAL INFORMATION:

Formation: **Toronto - LKC " C "**  
Deviated: No Whipstock: ft (KB)      Test Type: Conventional Bottom Hole (Reset)  
Time Tool Opened: 13:37:31      Tester: Jim Svaty  
Time Test Ended: 16:32:00      Unit No: 76  
**Interval: 2974.00 ft (KB) To 3055.00 ft (KB) (TVD)**      Reference Elevations: 1844.00 ft (KB)  
Total Depth: 3055.00 ft (KB) (TVD)      1836.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Fair      KB to GR/CF: 8.00 ft

**Serial #: 8400      Outside**  
Press@RunDepth: 54.94 psig @ 2975.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2018.07.26      End Date: 2018.07.26      Last Calib.: 2018.07.26  
Start Time: 11:47:01      End Time: 16:31:46      Time On Btm: 2018.07.26 @ 13:37:16  
Time Off Btm: 2018.07.26 @ 14:53:16

**TEST COMMENT:** 30-IFP- Open Tool Slid 10'. Weak Surface Blow Died in 24 min.  
30-ISIP- No Blow  
15-FFP- No Blow  
Pulled

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1450.16	94.59	Initial Hydro-static
1	24.29	94.19	Open To Flow (1)
31	54.94	94.54	Shut-In(1)
60	439.40	94.68	End Shut-In(1)
61	56.32	94.54	Open To Flow (2)
76	56.71	94.58	Shut-In(2)
76	1444.52	95.85	Final Hydro-static

## Recovery

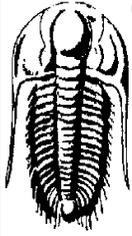
Length (ft)	Description	Volume (bbl)
72.00	Mud 100% Oil Spots in Tool	0.73

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

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

**24-13s-15w Russell KS**  
**Krug #1-24**  
Job Ticket: 63744      **DST#: 2**  
Test Start: 2018.07.26 @ 11:47:00

**Tool Information**

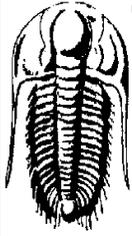
Drill Pipe:	Length: 2949.00 ft	Diameter: 3.80 inches	Volume: 41.37 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 41.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	2974.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	81.00 ft			
Tool Length:	102.00 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>
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Change Over Sub	1.00			2954.00	
Shut In Tool	5.00			2959.00	
Hydraulic tool	5.00			2964.00	
Packer	5.00			2969.00	21.00      Bottom Of Top Packer
Packer	5.00			2974.00	
Stubb	1.00			2975.00	
Recorder	0.00	8400	Outside	2975.00	
Recorder	0.00	8960	Inside	2975.00	
Perforations	12.00			2987.00	
Change Over Sub	1.00			2988.00	
Drill Pipe	63.00			3051.00	
Change Over Sub	1.00			3052.00	
Bullnose	3.00			3055.00	81.00      Bottom Packers & Anchor

**Total Tool Length: 102.00**



**TRILOBITE**  
TESTING, INC.

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

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

**24-13s-15w Russell KS**  
**Krug #1-24**  
Job Ticket: 63744      **DST#: 2**  
Test Start: 2018.07.26 @ 11:47:00

## Mud and Cushion Information

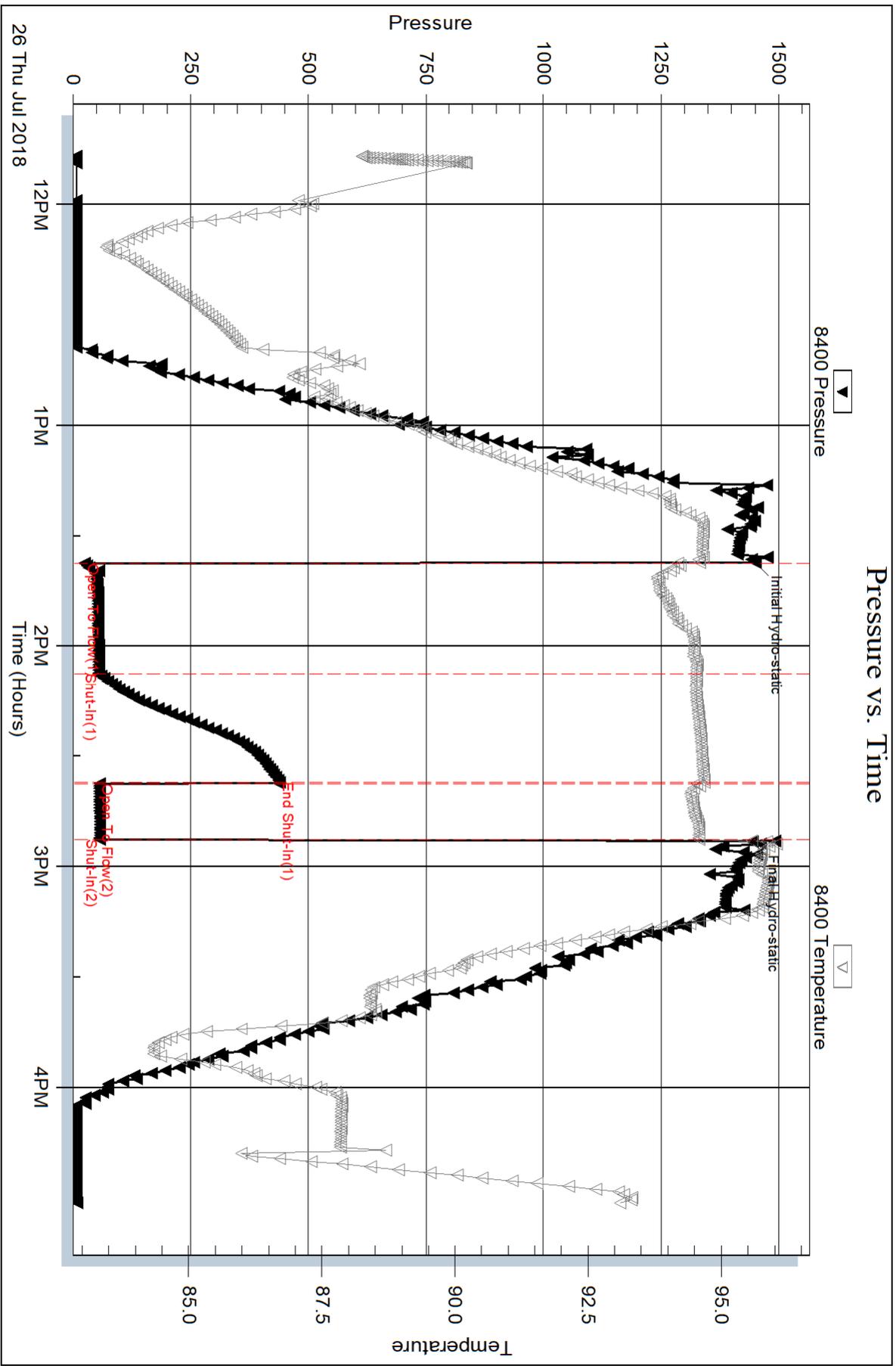
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 61.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.17 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2600.00 ppm			
Filter Cake: 2.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
72.00	Mud 100% Oil Spots in Tool	0.728

Total Length: 72.00 ft      Total Volume: 0.728 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:



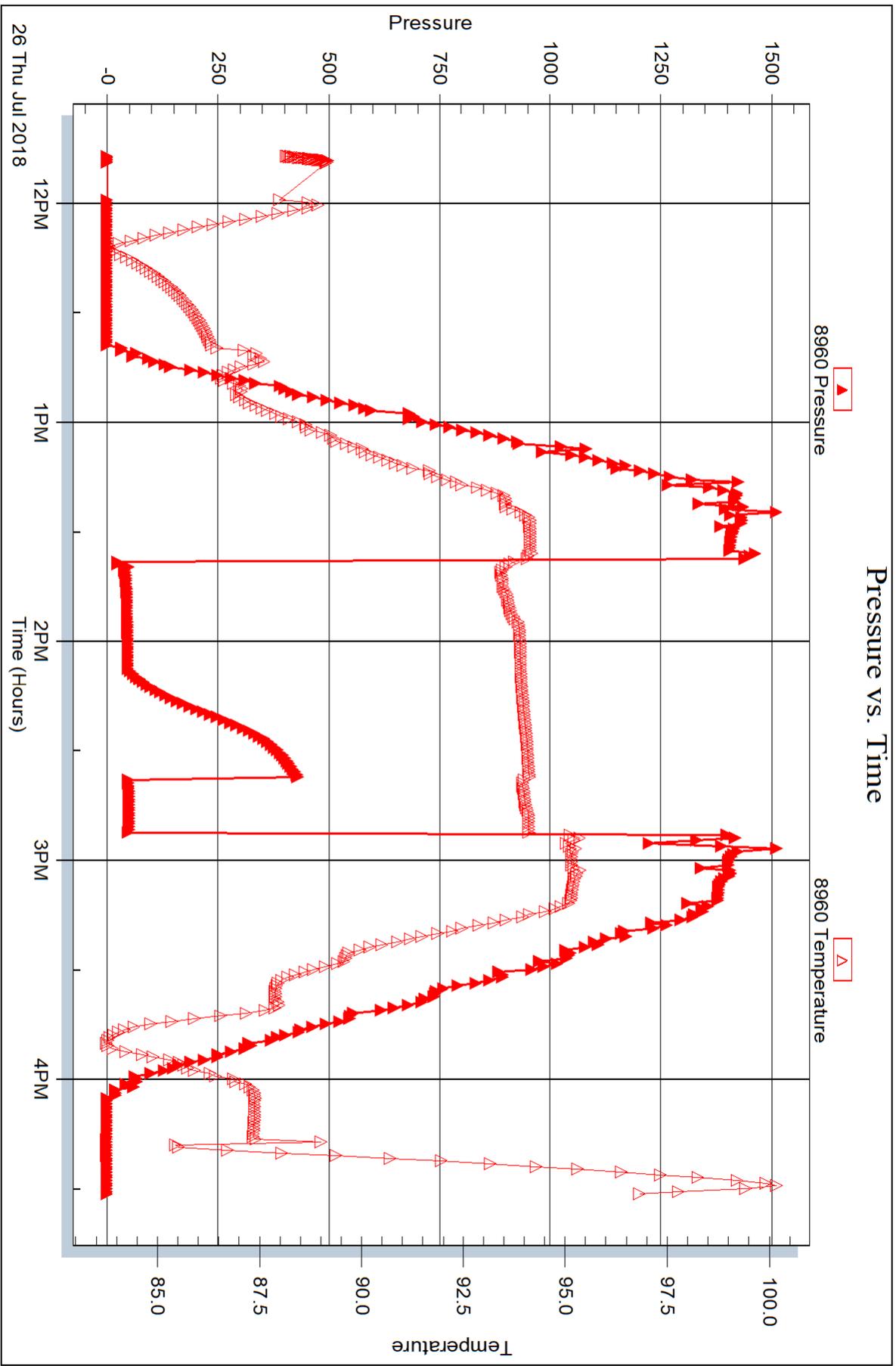
Serial #: 8960

Inside

American Warrior Inc

Krug #1-24

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 63744

Printed: 2018.07.30 @ 13:38:16



## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399  
Garden City KS 67846

ATTN: Jason T Alm

### **Krug #1-24**

#### **24-13s-15w Russell KS**

Start Date: 2018.07.27 @ 08:32:00

End Date: 2018.07.27 @ 12:45:00

Job Ticket #: 63745                      DST #: 3

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

Printed: 2018.07.30 @ 13:37:50



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

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

**24-13s-15w Russell KS**  
**Krug #1-24**  
Job Ticket: 63745      **DST#: 3**  
Test Start: 2018.07.27 @ 08:32:00

## GENERAL INFORMATION:

Formation: **LKC "I - K"**  
Deviated: No Whipstock: ft (KB)      Test Type: Conventional Bottom Hole (Reset)  
Time Tool Opened: 10:08:46      Tester: Jim Svaty  
Time Test Ended: 12:45:00      Unit No: 76  
**Interval: 3169.00 ft (KB) To 3251.00 ft (KB) (TVD)**      Reference Elevations: 1844.00 ft (KB)  
Total Depth: 3251.00 ft (KB) (TVD)      1836.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Fair      KB to GR/CF: 8.00 ft

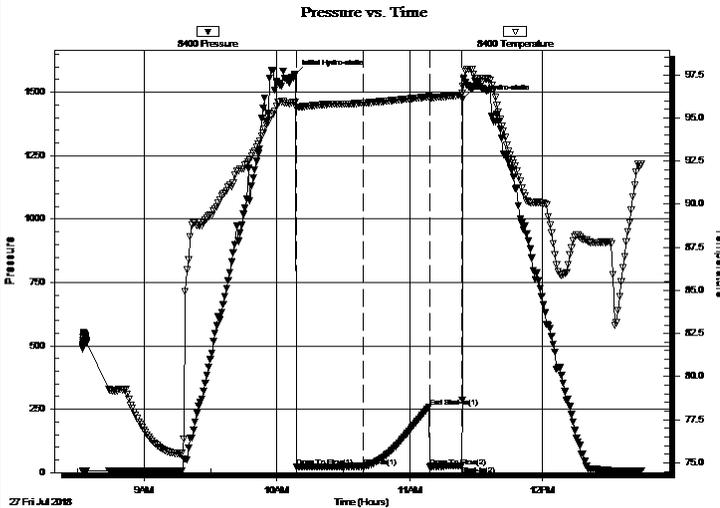
## Serial #: 8400

Outside

Press@RunDepth: 24.71 psig @ 3170.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2018.07.27      End Date: 2018.07.27      Last Calib.: 2018.07.27  
Start Time: 08:32:01      End Time: 12:44:46      Time On Btm: 2018.07.27 @ 10:08:16  
Time Off Btm: 2018.07.27 @ 11:24:01

TEST COMMENT: 30-IFP- Weak Surface Blow Dead in 7 min.  
30-ISIP- No Blow  
15-FFP- No Blow  
Pulled

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1569.95	95.93	Initial Hydro-static
1	22.03	95.58	Open To Flow (1)
31	24.71	95.87	Shut-In(1)
61	259.47	96.24	End Shut-In(1)
61	23.94	96.13	Open To Flow (2)
76	25.63	96.34	Shut-In(2)
76	1472.46	96.84	Final Hydro-static

## Recovery

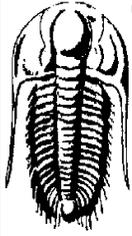
Length (ft)	Description	Volume (bbl)
3.00	Mud 100% Oil Spots in Tool	0.01

\* 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: Jason T Alm

**24-13s-15w Russell KS**  
**Krug #1-24**  
Job Ticket: 63745      **DST#: 3**  
Test Start: 2018.07.27 @ 08:32:00

**Tool Information**

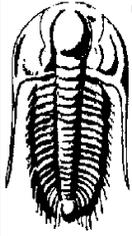
Drill Pipe:	Length: 3138.00 ft	Diameter: 3.80 inches	Volume: 44.02 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	52000.00 lb
			<u>Total Volume: 44.17 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial	49000.00 lb
Depth to Top Packer:	3169.00 ft			Final	49000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	82.00 ft				
Tool Length:	103.00 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>
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Change Over Sub	1.00			3149.00	
Shut In Tool	5.00			3154.00	
Hydraulic tool	5.00			3159.00	
Packer	5.00			3164.00	21.00      Bottom Of Top Packer
Packer	5.00			3169.00	
Stubb	1.00			3170.00	
Recorder	0.00	8400	Outside	3170.00	
Recorder	0.00	8960	Inside	3170.00	
Perforations	13.00			3183.00	
Change Over Sub	1.00			3184.00	
Drill Pipe	63.00			3247.00	
Change Over Sub	1.00			3248.00	
Bullnose	3.00			3251.00	82.00      Bottom Packers & Anchor

**Total Tool Length: 103.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

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

**24-13s-15w Russell KS**  
**Krug #1-24**  
Job Ticket: 63745      **DST#: 3**  
Test Start: 2018.07.27 @ 08:32:00

## 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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5500.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

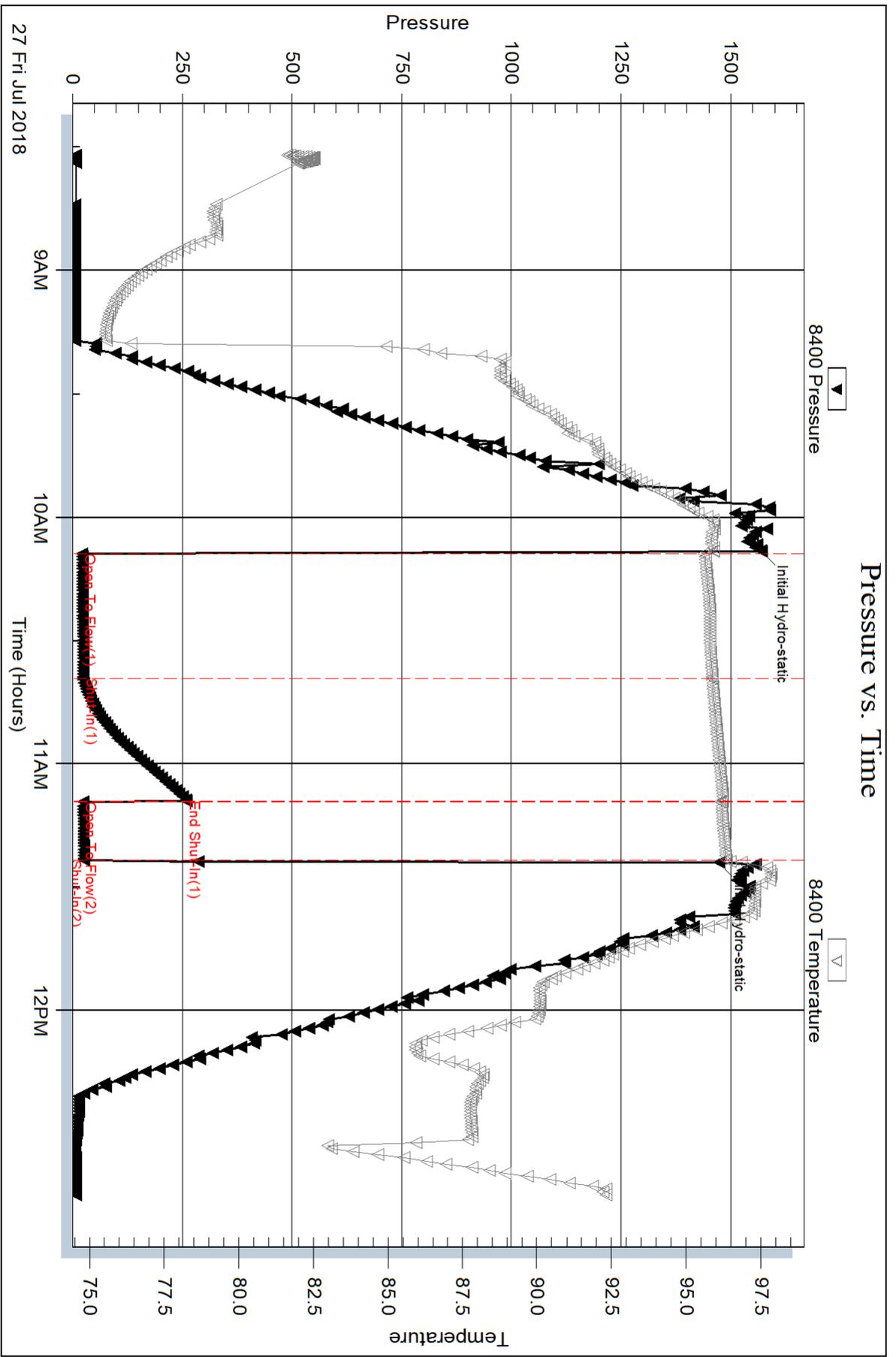
Length ft	Description	Volume bbl
3.00	Mud 100% Oil Spots in Tool	0.015

Total Length: 3.00 ft      Total Volume: 0.015 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:



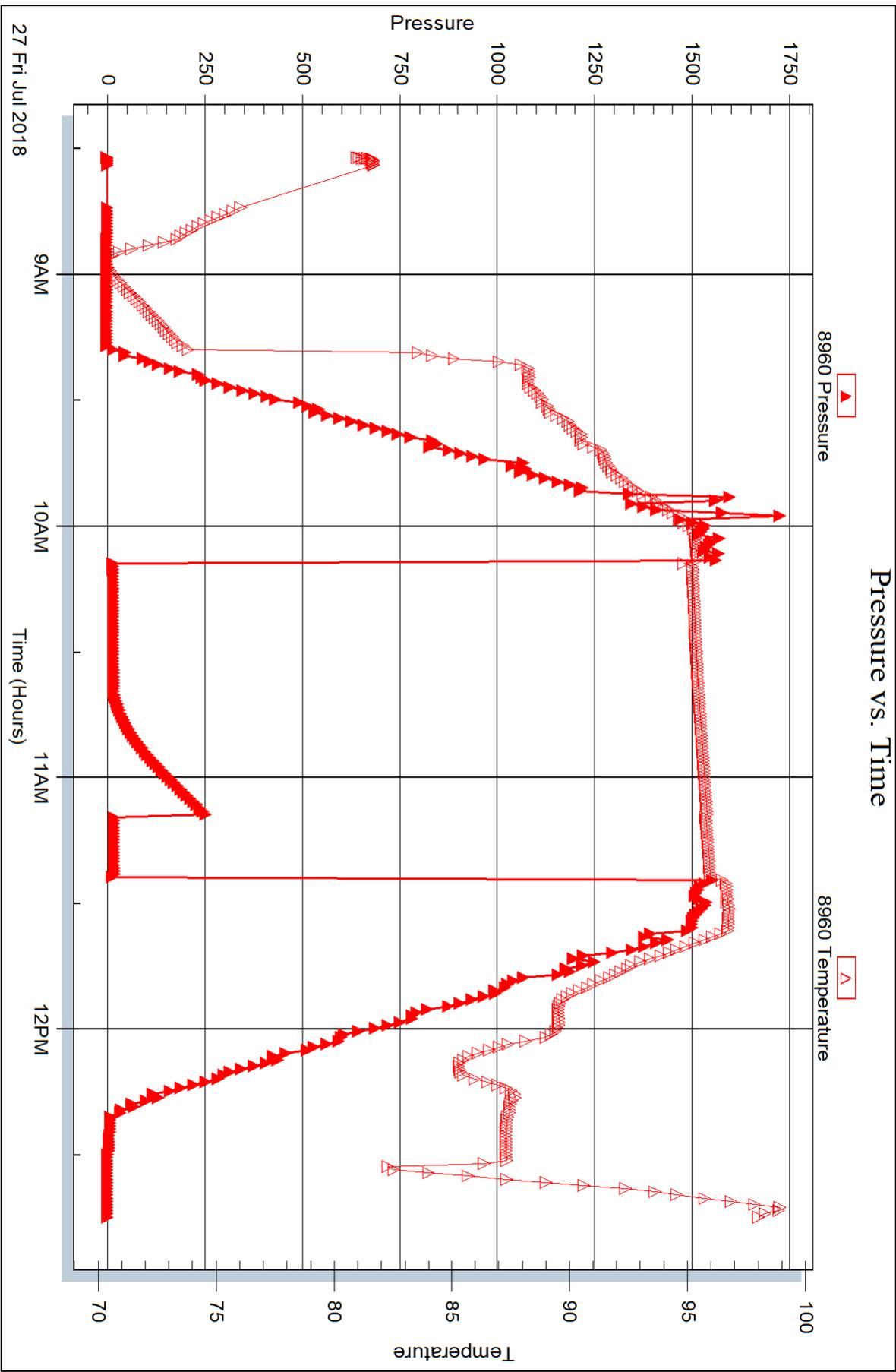
Serial #: 8960

Inside

American Warrior Inc

Krug #1-24

DST Test Number: 3





## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399  
Garden City KS 67846

ATTN: Jason T Alm

### **Krug #1-24**

#### **24-13s-15w Russell KS**

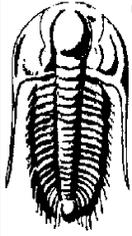
Start Date: 2018.07.27 @ 19:20:54

End Date: 2018.07.28 @ 00:28:18

Job Ticket #: 64240                      DST #: 4

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

Printed: 2018.07.30 @ 13:37:06



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

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

**24-13s-15w Russell KS**

**Krug #1-24**

Job Ticket: 64240

**DST#: 4**

Test Start: 2018.07.27 @ 19:20:54

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 21:14:19  
 Time Test Ended: 00:28:18  
 Interval: **3267.00 ft (KB) To 3300.00 ft (KB) (TVD)**  
 Total Depth: 3300.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Ray Schwager  
 Unit No: 77  
 Reference Elevations: 1844.00 ft (KB)  
 1836.00 ft (CF)  
 KB to GR/CF: 8.00 ft

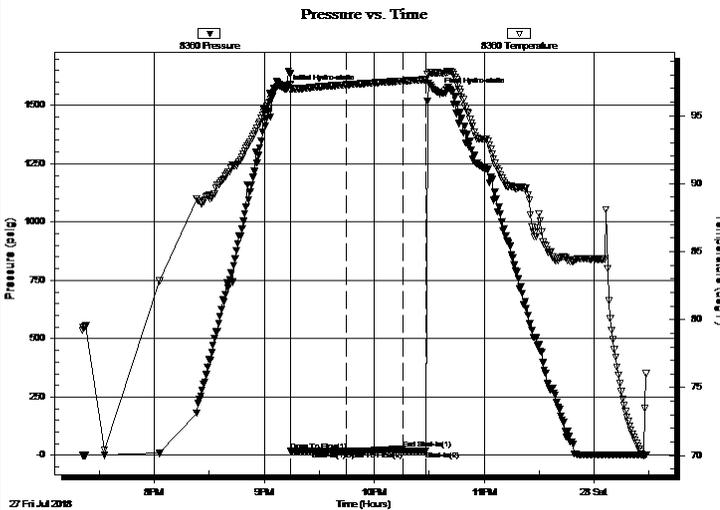
**Serial #: 8360**

**Inside**

Press@RunDepth: 18.31 psig @ 3272.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2018.07.27 End Date: 2018.07.28 Last Calib.: 2018.07.28  
 Start Time: 19:20:54 End Time: 00:28:18 Time On Btm: 2018.07.27 @ 21:12:19  
 Time Off Btm: 2018.07.27 @ 22:34:49

**TEST COMMENT:** 30-IFP-very weak surface blow died in 11 min  
 30-ISIP-no blow  
 10-FFP-no blow  
 pulled tool

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1569.91	97.19	Initial Hydro-static
2	19.72	96.88	Open To Flow (1)
33	18.31	97.27	Shut-In(1)
64	27.16	97.54	End Shut-In(1)
64	17.72	97.54	Open To Flow (2)
76	18.41	97.65	Shut-In(2)
83	1555.55	98.14	Final Hydro-static

## Recovery

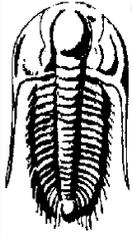
Length (ft)	Description	Volume (bbl)
1.00	Mud w / slight show of oil	0.00

\* 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 Inc  
PO Box 399  
Garden City KS 67846  
ATTN: Jason T Alm

**24-13s-15w Russell KS**  
**Krug #1-24**  
Job Ticket: 64240      **DST#: 4**  
Test Start: 2018.07.27 @ 19:20:54

**Tool Information**

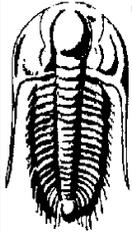
Drill Pipe:	Length: 3231.00 ft	Diameter: 3.80 inches	Volume: 45.32 bbl	Tool Weight:	2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 45.47 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3267.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	33.00 ft				
Tool Length:	54.00 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>
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Change Over Sub	1.00			3247.00	
Shut In Tool	5.00			3252.00	
Hydraulic tool	5.00			3257.00	
Packer	5.00			3262.00	21.00      Bottom Of Top Packer
Packer	5.00			3267.00	
Stubb	1.00			3268.00	
Perforations	4.00			3272.00	
Recorder	0.00	8360	Inside	3272.00	
Recorder	0.00	8673	Outside	3272.00	
Perforations	25.00			3297.00	
Bullnose	3.00			3300.00	33.00      Bottom Packers & Anchor

**Total Tool Length: 54.00**



**TRILOBITE**  
TESTING, INC.

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

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

**24-13s-15w Russell KS**  
**Krug #1-24**  
Job Ticket: 64240      **DST#: 4**  
Test Start: 2018.07.27 @ 19:20:54

## 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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5500.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Mud w / slight show of oil	0.005

Total Length: 1.00 ft      Total Volume: 0.005 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

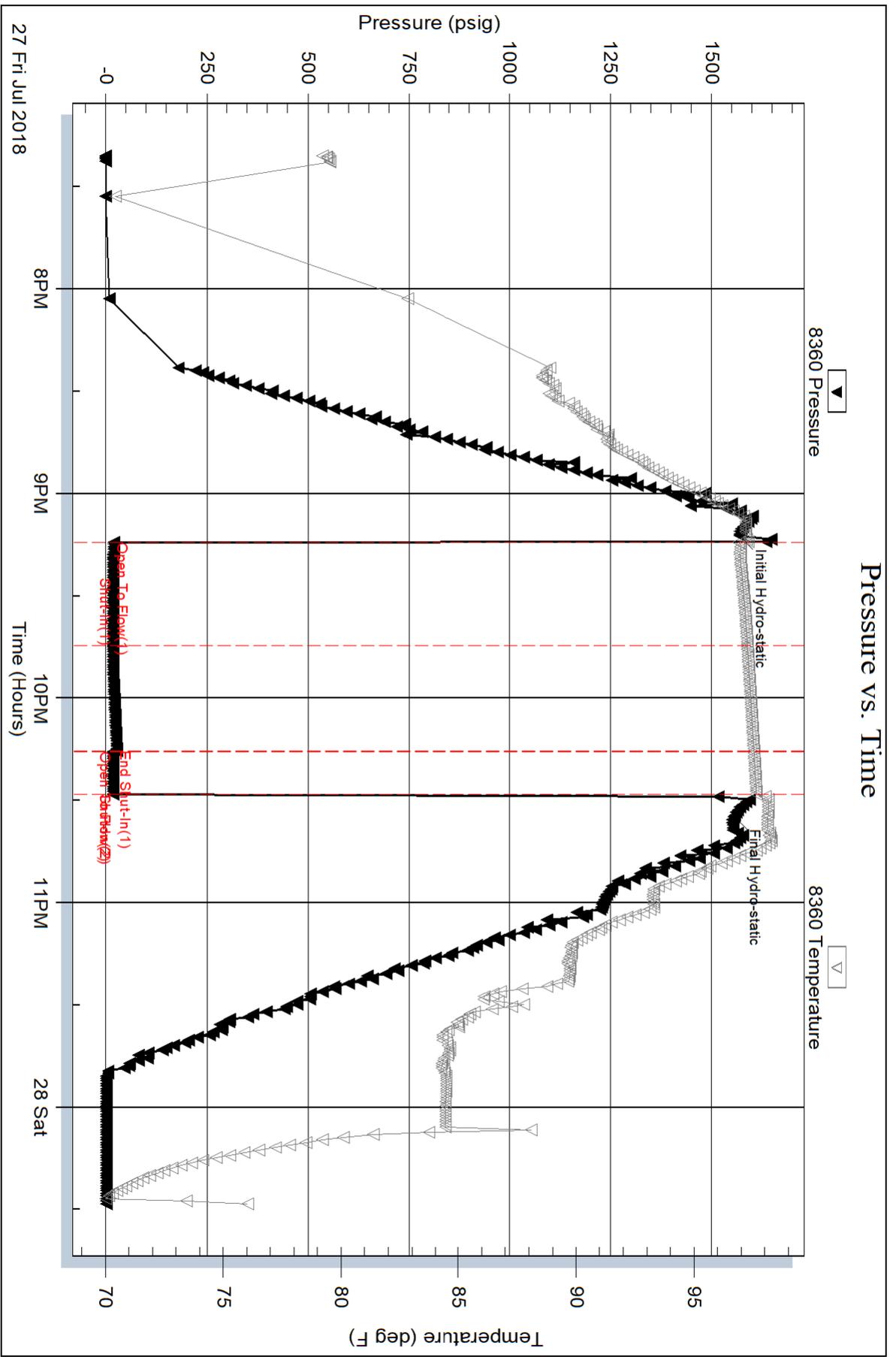
Serial #: 8360

Inside

American Warrior Inc

Krug #1-24

DST Test Number: 4



Triobite Testing, Inc

Ref. No: 64240

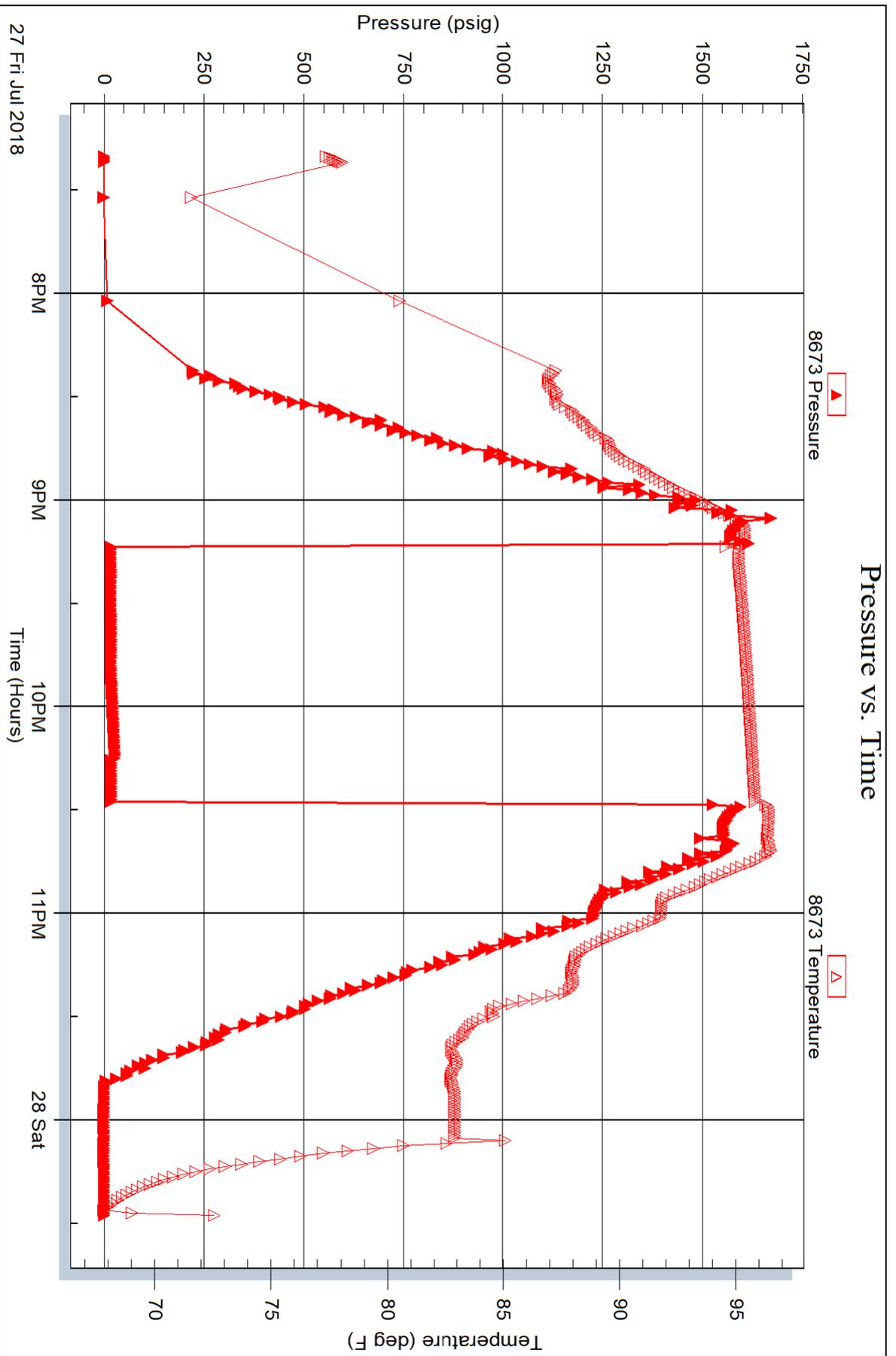
Printed: 2018.07.30 @ 13:37:07

Serial #: 8673

Outside American Warrior Inc

Krug #1-24

DST Test Number: 4





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 63743

Well Name & No. Krug 1-24 Test No. 1 Date 07-26-18  
 Company American Warrior Inc Elevation 1844 KB 18.36 GL  
 Address 3118 Cummings Rd. Box 399 Garden City KS 67846  
 Co. Rep / Geo. JASON T. ALUM Rig Discovery #4  
 Location: Sec. 24 Twp 13S Rge. 16W Co. Russell State KS

Interval Tested 2974 - 3055 Zone Tested Toronto - LKC "C"  
 Anchor Length 81 Drill Pipe Run 2949 Mud Wt. 8.9  
 Top Packer Depth 2969 Drill Collars Run 31 Vis 61  
 Bottom Packer Depth 2974 Wt. Pipe Run 0 WL 6.2  
 Total Depth 3055 Chlorides 2600 ppm System LCM 2  
 Blow Description IFP - WEAR SURFACE BLOW  
IFP - INVALID TEST TOOL NOT ON BOTTOM  
IFP - 14 FT. OFF.  
IFP - TOOL SLIDE 10 FT.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>52</u>	Feet of <u>mud</u>				<u>100</u>
Rec _____	Feet of _____				
Rec _____	Feet of _____				
Rec _____	Feet of _____				

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

(A) Initial Hydrostatic \_\_\_\_\_  Test 850 T-On Location 02:44  
 (B) First Initial Flow \_\_\_\_\_  Jars \_\_\_\_\_ T-Started 03:36  
 (C) First Final Flow \_\_\_\_\_  Safety Joint \_\_\_\_\_ T-Open 05:38  
 (D) Initial Shut-In \_\_\_\_\_  Circ Sub \_\_\_\_\_ T-Pulled 06:05  
 (E) Second Initial Flow \_\_\_\_\_  Hourly Standby \_\_\_\_\_ T-Out 07:48  
 (F) Second Final Flow \_\_\_\_\_  Mileage 45 Comments \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic \_\_\_\_\_  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Initial Open pulled  
 Initial Shut-In [Signature]  
 Final Flow \_\_\_\_\_  
 Final Shut-In \_\_\_\_\_

Sub Total 0  
 Total 895  
 MP/DST Disc't \_\_\_\_\_

Sub Total 895

Approved By \_\_\_\_\_ Our Representative [Signature]

Triobite 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. 63744

Well Name & No. Krug 1-24 Test No. 2 Date 7-26-18  
 Company American Warrior Inc. Elevation 1844 KB 1836 GL  
 Address 3118 Cummings Rd. Box 399 Garden City KS 67846  
 Co. Rep / Geo. Jason T Alm Rig Discovery #4  
 Location: Sec. 24 Twp 135 Rge. 16<sup>w</sup> Co. Russell State KS

Interval Tested 2974-3055 Zone Tested Toronto - LKC "C"  
 Anchor Length 81 Drill Pipe Run 2949 Mud Wt. 8.9  
 Top Packer Depth 2969 Drill Collars Run 31 Vis 61  
 Bottom Packer Depth 2974 Wt. Pipe Run 0 WL 6.2  
 Total Depth 3055 Chlorides 2600 ppm System LCM 2

Blow Description FFP - Open Tool Slide 10 Ft. Weak Surface Blow Died in 2 min.  
ISIP - No Blow  
FFP - No Blow  
FSIP - Pulled

Rec	Feet of	%gas	%oil	%water	%mud
<u>72</u>	<u>mmud</u>			<u>100</u>	
	<u>Oil Spots in Tool</u>				

Rec Total 72 BHT 96 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm  
 (A) Initial Hydrostatic 1450  Test 1050 T-On Location 10:47  
 (B) First Initial Flow 24  Jars \_\_\_\_\_ T-Started 11:47  
 (C) First Final Flow 54  Safety Joint \_\_\_\_\_ T-Open 13:38  
 (D) Initial Shut-In 439  Circ Sub \_\_\_\_\_ T-Pulled 14:53  
 (E) Second Initial Flow 56  Hourly Standby \_\_\_\_\_ T-Out 16:32  
 (F) Second Final Flow 56  Mileage \_\_\_\_\_ Comments \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  Sampler 45 \_\_\_\_\_  
 (H) Final Hydrostatic 1444  Straddle \_\_\_\_\_  
 Ruined Shale Packer \_\_\_\_\_

Initial Open 30  Shale Packer \_\_\_\_\_  
 Initial Shut-In 30  Ruined Packer \_\_\_\_\_  
 Final Flow 15  Extra Packer \_\_\_\_\_  
 Final Shut-In pulled  Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_ Sub Total 0  
 Accessibility \_\_\_\_\_ Total 1095  
 Sub Total 1095 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative [Signature]  
 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. 63745

Well Name & No. Krug 1-24 Test No. 3 Date 7-27-18  
 Company American Warrior Inc. Elevation 1844 KB 1836 GL  
 Address 3118 Cummings Rd. Box 399 Garden City KS 67846  
 Co. Rep / Geo. TASON T Allen Rig Discovery #4  
 Location: Sec. 24 Twp 13S Rge. 15W Co. Russell State KS

Interval Tested 3251 Zone Tested LKC "I-K"  
 Anchor Length 82 Drill Pipe Run 3138 Mud Wt. 9.2  
 Top Packer Depth 3164 Drill Collars Run 31 Vis 56  
 Bottom Packer Depth 3169 Wt. Pipe Run 0 WL 5.8  
 Total Depth 3251 Chlorides 5500 ppm System LCM 1

Blow Description IFP - Weak Surface Blow Dead in 7min.  
FSIP - No Blow  
FFP - NO Blow  
FSIP - pulled.

Rec	Feet of	%gas	%oil	%water	%mud
<u>3</u>	<u>Mud</u>			<u>100</u>	
	<u>Oil spots in Tool</u>				

Rec Total 3 BHT 97 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1569  Test 1050 T-On Location 07:47  
 (B) First Initial Flow 22  Jars \_\_\_\_\_ T-Started 08:32  
 (C) First Final Flow 24  Safety Joint \_\_\_\_\_ T-Open 10:09  
 (D) Initial Shut-In 259  Circ Sub \_\_\_\_\_ T-Pulled 11:24  
 (E) Second Initial Flow 23  Hourly Standby \_\_\_\_\_ T-Out 12:45  
 (F) Second Final Flow 25  Mileage 45 RT Comments \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1472  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Initial Open 30  Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Initial Shut-In 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Final Flow 15  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Shut-In pulled  Day Standby \_\_\_\_\_ Total 1095  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1095

Approved By \_\_\_\_\_ Our Representative [Signature]  
 Triobite 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. 64240

Well Name & No. Krug #1-24 Test No. 4 Date 7-27-18  
 Company American Warrior Co Inc Elevation 1844 KB 1836 GL  
 Address 3116 Cummings Rd Box 399 Garden City Ks 67846  
 Co. Rep / Geo. JASON ALM Rig Discovery rig  
 Location: Sec. 24 Twp 13<sup>s</sup> Rge. 15<sup>w</sup> Co. Russell State Ks

Interval Tested 3267-3300 Zone Tested Arbuckle  
 Anchor Length 33 Drill Pipe Run 3231 Mud Wt. 9.2  
 Top Packer Depth 3262 Drill Collars Run 31 Vis 56  
 Bottom Packer Depth 3267 Wt. Pipe Run — WL 5.8  
 Total Depth 3300 Chlorides 5500 ppm System LCM 1-H  
 Blow Description TFP - Very Weak Blow died in 11 min  
ISIP - NO Blow  
FFP - NO Blow  
FSIP - —

Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>Mud</u>				
	<u>w/slight show of oil</u>				

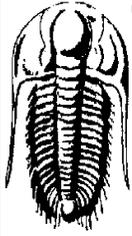
Rec Total 1 BHT 98 Gravity — API RW — @ — °F Chlorides — ppm  
 (A) Initial Hydrostatic 1569  Test 1050 T-On Location 1900  
 (B) First Initial Flow 19  Jars — T-Started 1920  
 (C) First Final Flow 18  Safety Joint — T-Open 2110  
 (D) Initial Shut-In 27  Circ Sub — T-Pulled 2220  
 (E) Second Initial Flow 17  Hourly Standby — T-Out 0020  
 (F) Second Final Flow 18  Mileage 45RT 45+45 Comments Released Loaded Tools  
 (G) Final Shut-In —  Sampler — 7-28 12pm  
 (H) Final Hydrostatic 1555  Straddle —  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 1140  
 Final Flow 10  Accessibility — MP/DST Disc't —  
 Final Shut-In pulled Tool Sub Total 1140

Approved By \_\_\_\_\_ Our Representative RAY SCHWAGER THANK YOU

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.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior Inc

**24 13s 16w Russell KS**

3116 Cummings Rd Box 399  
Garden City KS 67846

**Krug 1-24**

Job Ticket: 63743

**DST#: 1**

ATTN: Jason T Alm

Test Start: 2018.07.26 @ 03:36:00

## 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: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.20 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2600.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
52.00	Mud	0.447

Total Length: 52.00 ft      Total Volume: 0.447 bbl

Num Fluid Samples: 0

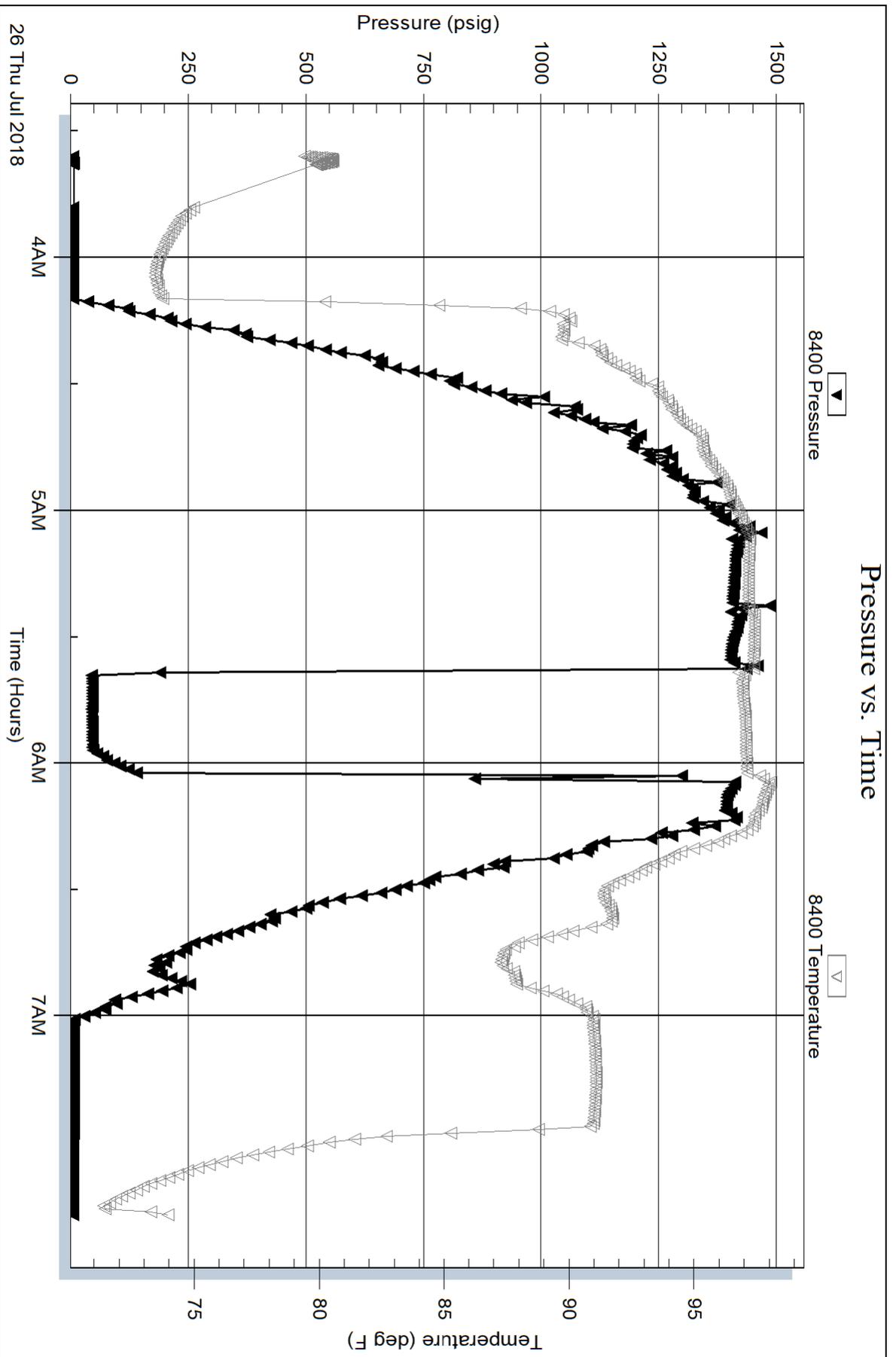
Num Gas Bombs: 0

Serial #:

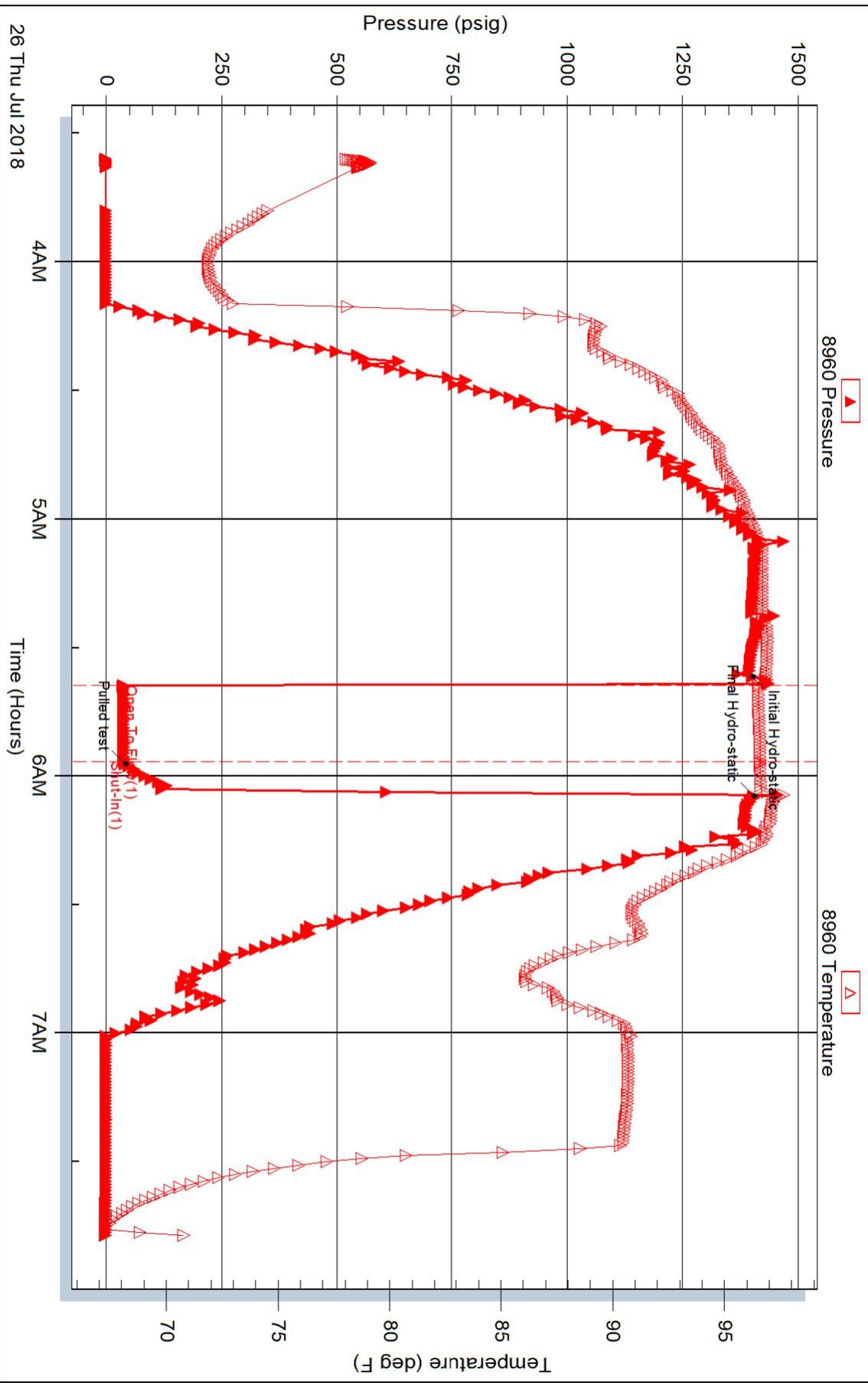
Laboratory Name:

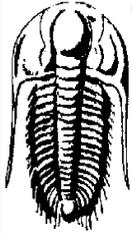
Laboratory Location:

Recovery Comments:



### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

American Warrior Inc  
3116 Cummings Rd Box 399  
Garden City KS 67846  
ATTN: Jason T Alm

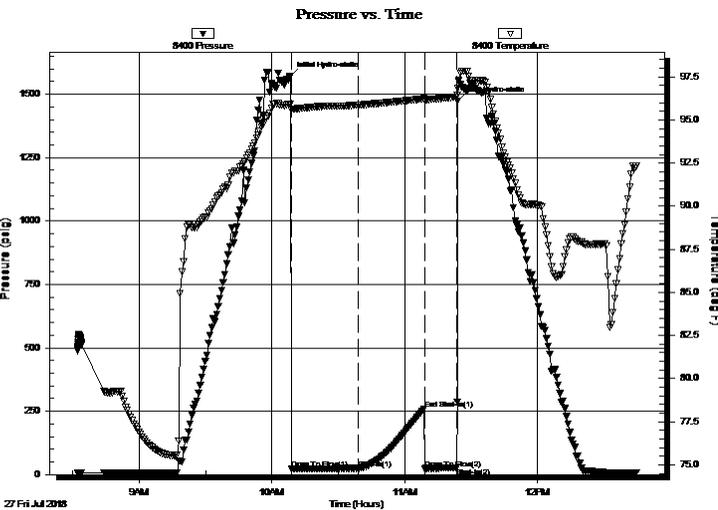
**24 13s 15w Russell KS**  
**Krug 1-24**  
Job Ticket: 63745      **DST#: 3**  
Test Start: 2018.07.27 @ 08:32:00

## GENERAL INFORMATION:

Formation: **LKC "I - K"**  
Deviated: No Whipstock: ft (KB)      Test Type: Conventional Bottom Hole (Reset)  
Time Tool Opened: 10:08:46      Tester: Jim Svaty  
Time Test Ended: 12:45:00      Unit No: 76  
**Interval: 3169.00 ft (KB) To 3251.00 ft (KB) (TVD)**      Reference Elevations: 1844.00 ft (KB)  
Total Depth: 3251.00 ft (KB) (TVD)      1836.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Fair      KB to GR/CF: 8.00 ft

**Serial #: 8400      Outside**  
Press@RunDepth: 24.71 psig @ 3170.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2018.07.27      End Date: 2018.07.27      Last Calib.: 2018.07.27  
Start Time: 08:32:01      End Time: 12:44:46      Time On Btm: 2018.07.27 @ 10:08:16  
Time Off Btm: 2018.07.27 @ 11:24:01

**TEST COMMENT:** 30-IFP- Weak Surface Blow Dead in 7min.  
30-ISIP- No Blow  
15-FFP- No Blow  
Pulled



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1569.95	95.93	Initial Hydro-static
1	22.03	95.58	Open To Flow (1)
31	24.71	95.87	Shut-In(1)
61	259.47	96.24	End Shut-In(1)
61	23.94	96.13	Open To Flow (2)
76	25.63	96.34	Shut-In(2)
76	1472.46	96.84	Final Hydro-static

## Recovery

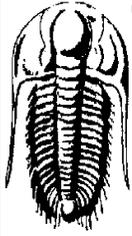
Length (ft)	Description	Volume (bbl)
3.00	Mud 100% Oil Spots in Tool	0.01

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior Inc

**24 13s 15w Russell KS**

3116 Cummings Rd Box 399  
Garden City KS 67846

**Krug 1-24**

Job Ticket: 63745

**DST#: 3**

ATTN: Jason T Alm

Test Start: 2018.07.27 @ 08:32:00

## 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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.80 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	Mud 100% Oil Spots in Tool	0.015

Total Length: 3.00 ft      Total Volume: 0.015 bbl

Num Fluid Samples: 0

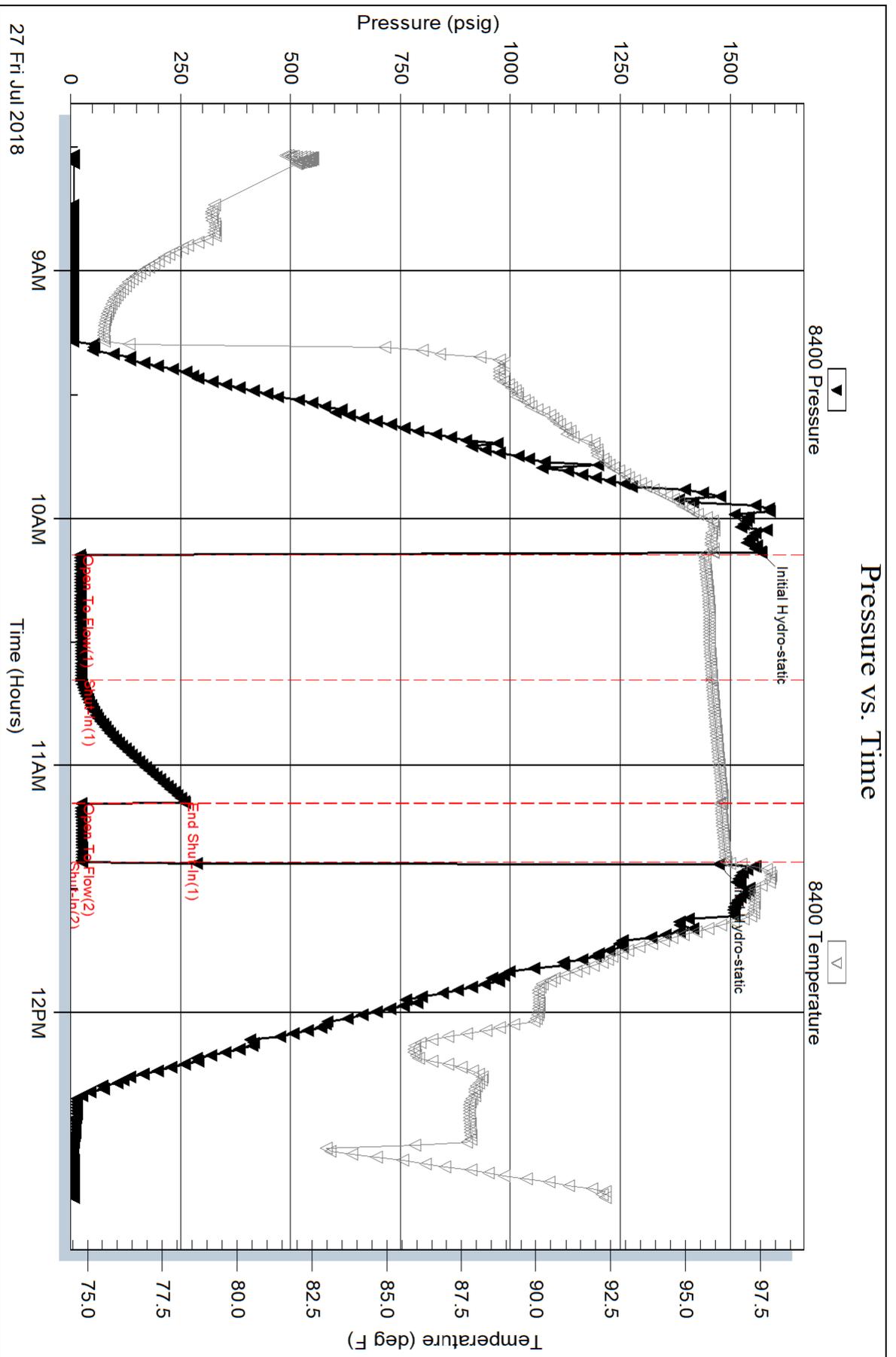
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



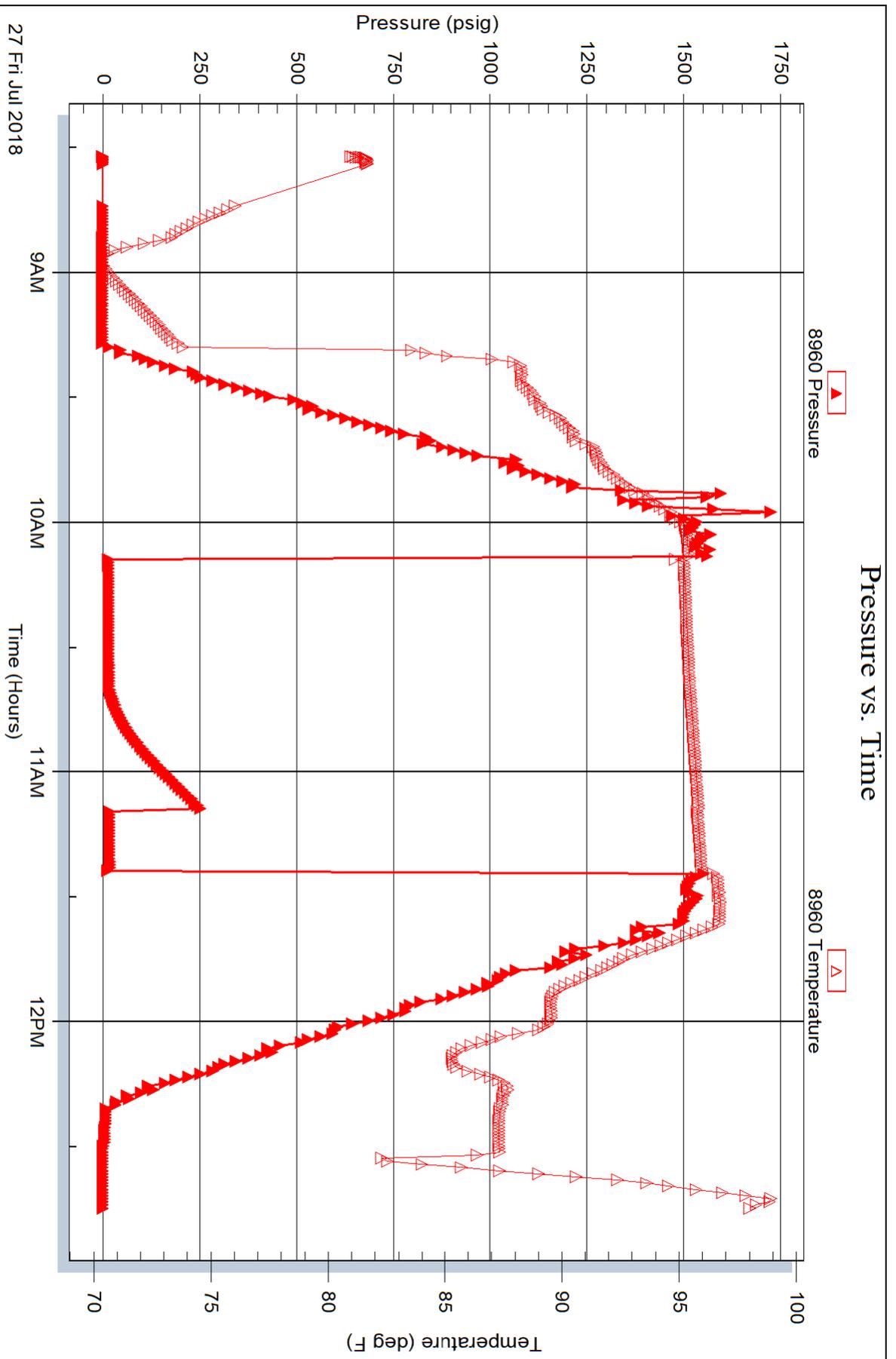
Serial #: 8960

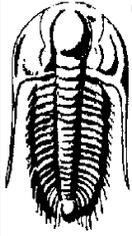
Inside

American Warrior Inc

Krug 1-24

DST Test Number: 3





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

American Warrior Inc  
 3116 Cummings Rd Box 399  
 Garden City KS 67846  
 ATTN: Jason T Alm

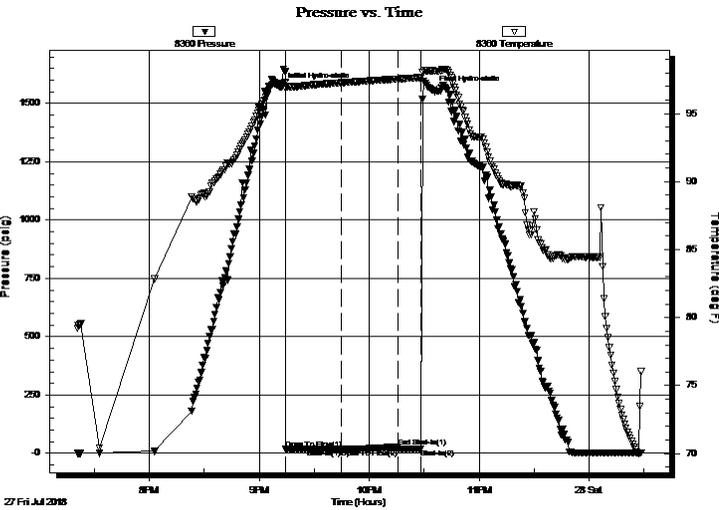
**24 13s 15w Russell KS**  
**Krug 1-24**  
 Job Ticket: 64240      **DST#: 4**  
 Test Start: 2018.07.27 @ 19:20:54

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 21:14:19  
 Time Test Ended: 00:28:18  
 Interval: **3267.00 ft (KB) To 3300.00 ft (KB) (TVD)**  
 Total Depth: 3300.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Ray Schwager  
 Unit No: 77  
 Reference Elevations: 1844.00 ft (KB)  
 1836.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8360**      **Inside**  
 Press@RunDepth: 18.31 psig @ 3272.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2018.07.27      End Date: 2018.07.28      Last Calib.: 2018.07.28  
 Start Time: 19:20:54      End Time: 00:28:18      Time On Btm: 2018.07.27 @ 21:12:19  
 Time Off Btm: 2018.07.27 @ 22:34:49

**TEST COMMENT:** 30-IFP-very weak surface blow died in 11 min  
 30-ISIP-no blow  
 10-FFP-no blow  
 pulled tool



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1569.91	97.19	Initial Hydro-static
2	19.72	96.88	Open To Flow (1)
33	18.31	97.27	Shut-In(1)
64	27.16	97.54	End Shut-In(1)
64	17.72	97.54	Open To Flow (2)
76	18.41	97.65	Shut-In(2)
83	1555.55	98.14	Final Hydro-static

## Recovery

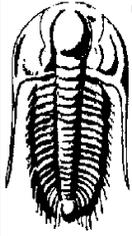
Length (ft)	Description	Volume (bbl)
1.00	Mud w / slight show of oil	0.00

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE**  
TESTING, INC.

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior Inc

**24 13s 15w Russell KS**

3116 Cummings Rd Box 399  
Garden City KS 67846

**Krug 1-24**

Job Ticket: 64240

**DST#: 4**

ATTN: Jason T Alm

Test Start: 2018.07.27 @ 19:20:54

## 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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Mud w / slight show of oil	0.005

Total Length: 1.00 ft      Total Volume: 0.005 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

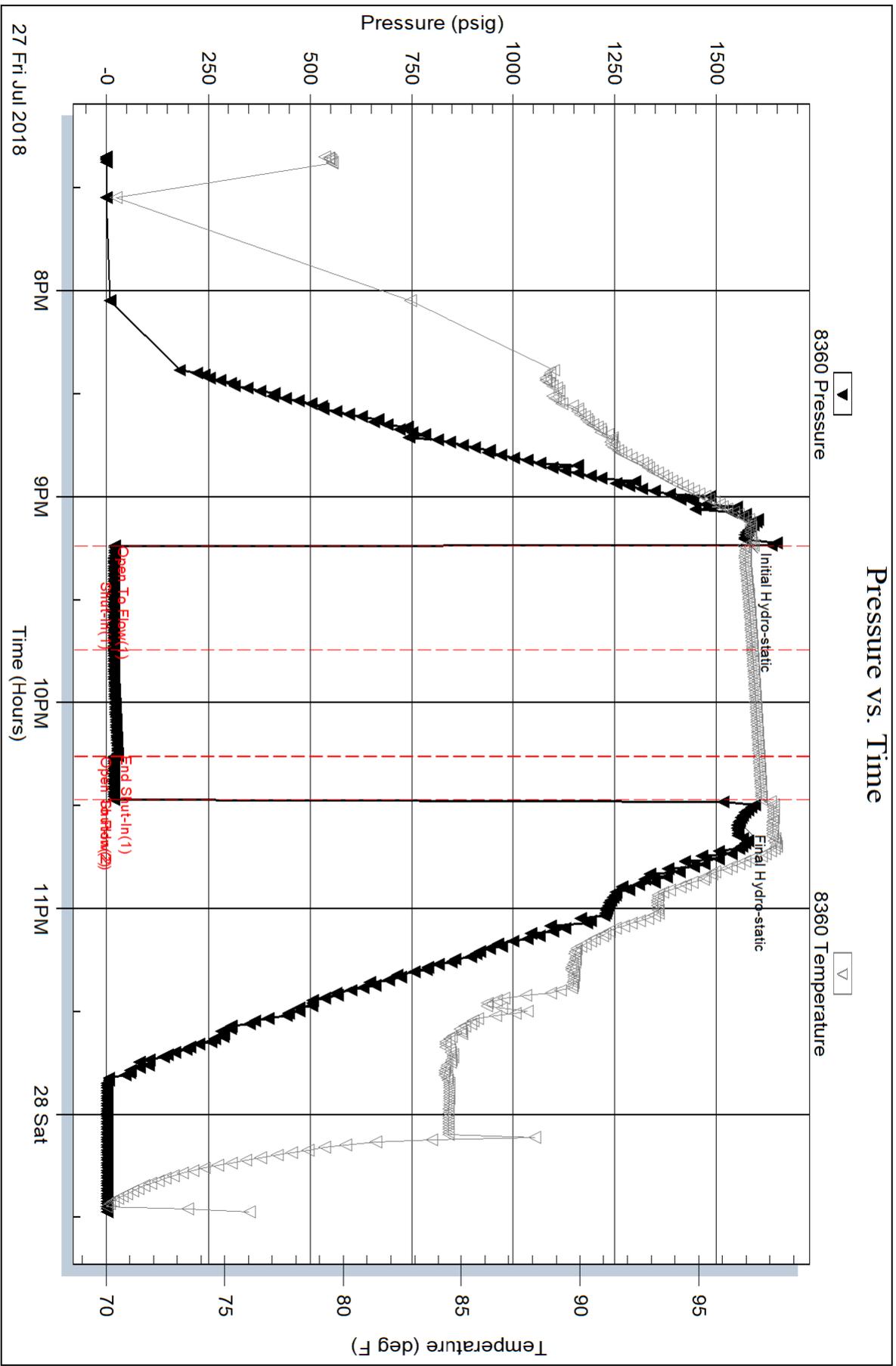
Serial #: 8360

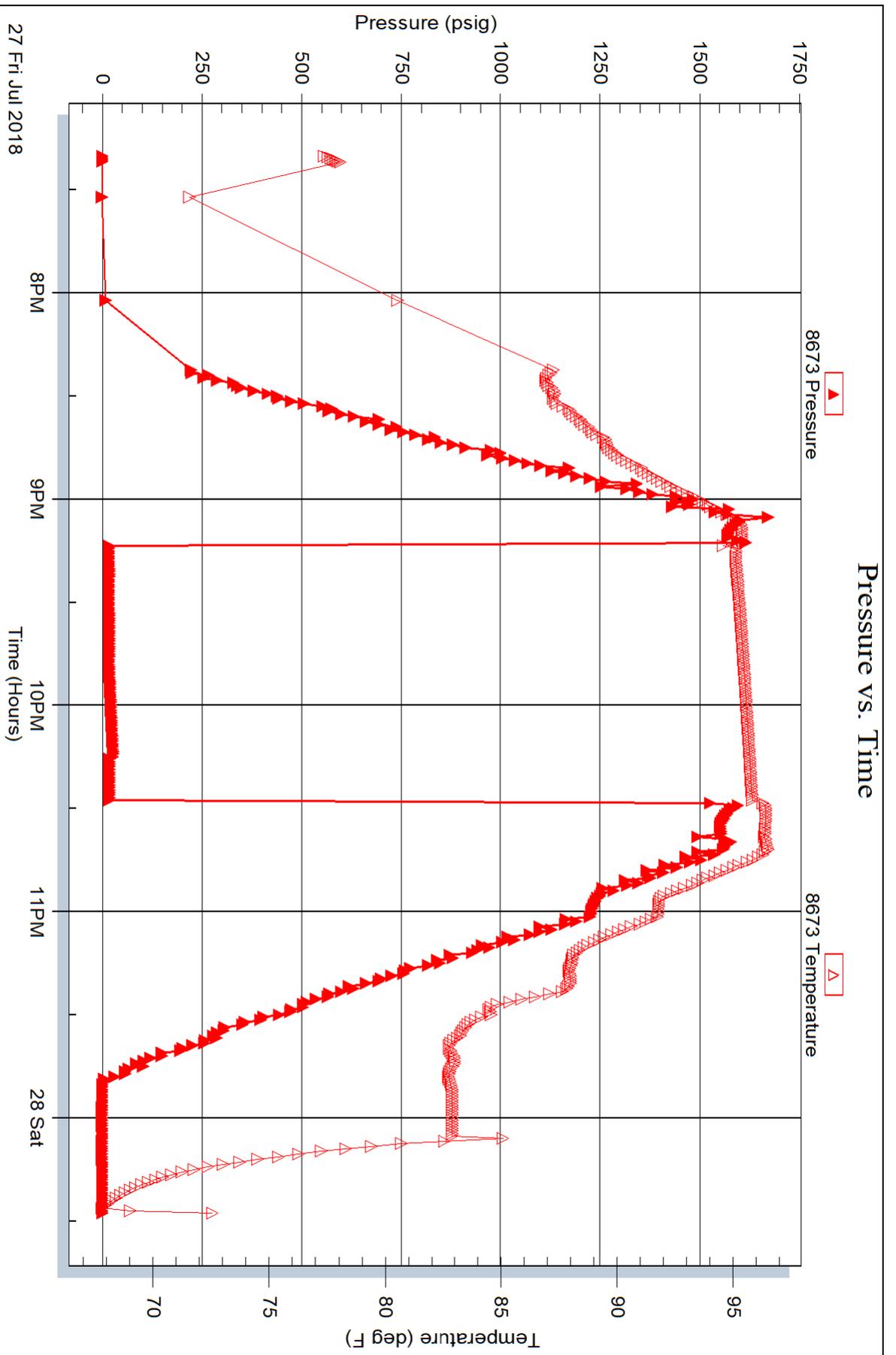
Inside

American Warrior Inc

Krug 1-24

DST Test Number: 4





# STATE OF KANSAS



CORPORATION COMMISSION  
CONSERVATION DIVISION  
266 N. MAIN ST., STE. 220  
WICHITA, KS 67202-1513

PHONE: 316-337-6200  
FAX: 316-337-6211  
<http://kcc.ks.gov/>

GOVERNOR JEFF COLYER, M.D.

SHARI FEIST ALBRECHT, CHAIR | JAY SCOTT EMLER, COMMISSIONER | DWIGHT D. KEEN, COMMISSIONER

December 07, 2018

Octavio D Morales  
American Warrior, Inc.  
PO BOX 399  
GARDEN CITY, KS 67846-0399

Re: ACO-1  
API 15-167-24074-00-00  
KRUG 1-24  
NW/4 Sec.24-13S-15W  
Russell County, Kansas

Dear Octavio D Morales:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 7/21/2018 and the ACO-1 was received on December 06, 2018 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department