

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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Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	Houk B #1
Doc ID	1278202

All Electric Logs Run

Dual IND
Fracfinder
Dual Comp Prosimity
Micro
Sonis



DANIEL T. JOHNSON  
Consulting Geologist  
19749 121st Road, Winfield, Kansas 67156  
Cell 620-229-3258, [Daniel.johnson3258@gmail.com](mailto:Daniel.johnson3258@gmail.com)

**Geologic Report**  
**American Warrior, Inc.**  
**Houk B #1**  
**610 FSL, 2878 FWL 6-T34S-R3E**  
**Cowley County, Kansas**

The Houk B#1 was drilled to a Rotary Total Depth of 3800'(-2698). Arbuckle Ls was the deepest formation encountered at 3762'(-2660). Production casing was set to further test for commercial hydrocarbon production from the following intervals. Intervals are listed in ascending order and do not reflect an order of quality or importance.

**Recommended perforations:**

**Mississippian Ls. 3500'-3540'** Ls, dark brown- grey, fine- medium crystalline, slightly dolomitic, some packstone, fossil fragments in matrix, trace edge fluorescence, good halo residual fluorescence, no odor observed, no free oil in sample. E logs indicate fracturing, 250 ohms deep resistivity, 4-6% neutron-density porosity, permeability indicated by microlog crossover. This interval is a recently discovered reservoir in the area. Stimulation will be required.

**Mississippian Chert 3366'-3670'** Chert, white-lt brown stain, mostly weathered, good porosity, bright edge fluorescence, show of oil along fractured edges, light brown stain in weathered portion, faint- fair odor. E logs indicate 26-40% water saturations in the upper portion. Mudcake and Spontaneous Potential deflection and Microlog crossover indicate reservoir permeability. DST #2 results contradict these observations. Obviously, the formation will have to be stimulated to produce a sufficient volume to be commercial.

**Bartlesville Ss 3628'-3640'** Sandstone, light tan, fine grained, well sorted, poor- fair intergranular porosity, show of free oil, faint odor, bright spotty fluorescence in 20% sample, fair streaming cut. DST #1 covered this interval, recovering 121' GIP, 60 WCM(see attached DST report) which would appear to condemn the interval. E log analysis indicates a possibly productive formation.

**Other intervals with lesser shows:**

**Mississippian Ls 3630'-3670', 3556-3600'** Both intervals are similar to the recommended interval 3500'-3540', however, with decreased resistivities. If the recommended interval proves commercial, these intervals should be considered to test in this well, or future development.

**Cattleman Ss 3244-3248'** This interval has contained similar oil shows in the area. Good initial tests have all depleted rapidly, indicating lack of permeability, or limited reservoir.

**Peru Ss 3155-3164'** This interval has been observed to be similar to the Cattleman above.

**Summary:** The Houk B#1 revealed indications of hydrocarbons sufficient to warrant further testing through pipe. By comparison with previous test wells in the area, the captioned well has the potential to be commercially productive from three separate intervals.

In my opinion, the Mississippian Ls. 3500-3540 has the greatest potential to be commercially productive. Comparison to other wells currently producing from this interval supports this observation. There is much to learn about this reservoir as it is a relatively new producing interval in this area.

In addition to the above, the Bartlesville Sandstone appears to have good potential to produce. The nearest production from this formation came from the McNeish #1 Houk, approximately ½ mile south. 509,400mcf and 1194bo are attributed to the Houk lease. Structurally, the Houk B #1 encountered the Bartlesville at (-2226'subsea), 6' low to the Houk #1. If the two wells share a common reservoir, excessive water production would not be expected by this author.

The Mississippian Chert 3366-70'(-2264) appears to be in a reasonable structural position relative to surrounding wells. The nearest productive well is ½ mile away. Based on the sample show and E logs, the formation warrants further testing. The disappointing recovery from DST #2, 6' mud, is typical of the Chert in the area and will require stimulation to produce sufficient fluid quantity.

Overall, the results of drilling operations on the captioned well are encouraging to this author. A successful completion may warrant additional development in the area.

Respectfully submitted,

Daniel T. Johnson  
Consulting Geologist

Attachments:

B 1 Houk DST1.pdf  
B 2 Houk DST2.pdf  
B 3 Houk DST3.pdf

# BASIC

energy services, L.P.

## TREATMENT REPORT

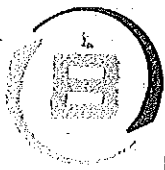
Customer American Warrior	Lease No.	Date 11-5-15
Lease Hout	Well # "8" # 1	
Field Order # 2880	Station Pratt, Kansas	Casing 5 1/2
		Depth 15.54b. 3770 Feet
Type Job C.N.W. Longstring	Formation	County Cowley
		State Kansas
		Legal Description 6-345-3E

PIPE DATA		PERFORATING DATA		CEMENT USED		TREATMENT RESUME		
Casing Size 5 1/2	Tubing Size 5 LB. 11 FT.	Shots/Ft	175 sacks	AA-2 with .28	Defoamer	RATE	PRESS	ISIP
Depth 3770 Feet	Depth	From	To 109 Sacks	38 Friction	Max	5.8 Fluid Loss	5 Min.	
Volume 89.7 Bbl.	Volume	From	To 5 Lb./5 R. Gilsonite		Min.		10 Min.	
Max Press 1700 P.S.I.	Max Press	From	To 19.3 Lb./7 Gal., 5.54 Gal./s		Avg	1.36 CU. FT./stk.	15 Min.	
Well Connection Plug Control	Annulus Vol. aliner	From	50 Sacks 60 Lb. Poz to plug Rat		HHP Used (30 Stks) and	Mouse (20 Stks)	Annulus Pressure	Notes
Plug Depth 2750 Feet	Packer Depth	From	To	Flush	89.25 Bbl. Fresh Water		Gas Volume	Total Load

Customer Representative Jason Bruns	Station Manager Tevin Gordley	Treater Clarence R. Messick
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Service Units	37,216	33,708	20,920	9,960	19,862				
Driver Names	Messick	Sullivan	Ernst						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
9:30	11-4-15				Tiverton location and hold safety meeting.
1:30	11-5-15				Duke Drilling start to run Auto Fill Float Shoe, Shoe Joint with Latch Down Baffle screwed into collar and a total of 90 Joints new 15.5 LB FT. 5 1/2 casing A Basket was installed above collars # 2, 11, and # 18. A Turbolizer was installed on collars # 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, and # 25.
3:30					Casing in well. Circulate for 45 minutes.
4:20	2,000			5	Shut in well. Pressure Test. Open well.
	500		5	5	start Fresh water Pre-Flush.
	)		5	5	start mud Flush.
			17	5	Start Fresh water spacer.
10:30	500		22	5	Start mixing 175 sacks AA-2 Blend cemen
	-0-		64		Stop pumping. Shut in well. Wash pump and lines. Release Latch Down Plug. Open well.
10:45	100			6.5	Start Fresh water Displacement.
			50	5	Start to lift cement.
5:00	1,200		89.25		Plug down.
	1,800				Pressure up.
	-0-				Release pressure. Float shoe held.
	-0-		7.5	3	Plug Rat and mouse holes.
					Wash up pump truck.
5:45					Job complete.
					Thank You.



**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61  
P.O. Box 8613  
Pratt, Kansas 67124  
Phone 620-672-1201

6-345-3E

FIELD SERVICE TICKET

1718 12880 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

DATE OF JOB 11-5-15		DISTRICT Pratt, Kansas		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/>		PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/>		CUSTOMER ORDER NO.:	
CUSTOMER American Warrior				LEASE Float "B"				WELL NO. 1	
ADDRESS				COUNTY Cowley		STATE Kansas			
CITY				STATE		SERVICE CREW C. Messiah, R. Sullivan, S. Ernst			
AUTHORIZED BY				JOB TYPE: C.A.W. Longstring					
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	TIME
20920	.5					11-4-15	11-4-15	PM	1:30
						ARRIVED AT JOB	11-4-15	AM	9:30
						START OPERATION	11-5-15	AM	4:30
19862	.25					FINISH OPERATION	11-5-15	AM	5:30
						RELEASED	11-5-15	AM	5:45
						MILES FROM STATION TO WELL			1.00

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: \_\_\_\_\_  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP105	AA 2 Cement	slr	175	\$	2,975 00
CP103	60/40 Poz	slr	50	\$	600 00
CC105	C-41P	Lb	33	\$	132 00
CC111	Salt	Lb	810	\$	405 00
CC112	Cement Friction Reducer	Lb	50	\$	300 00
CC129	FLA-322	Lb	83	\$	622 50
CC209	Gilsonite	Lb	875	\$	586 25
CF607	Latch Down Plug and Baffle, 5 1/2"	Eq	1	\$	400 00
CF1251	Auto Fill Float Shoe, 5 1/2"	Eq	1	\$	360 00
CF1691	Turbolizer, 5 1/2"	Eq	13	\$	1,430 00
CF1901	5 1/2" Basket	Eq	3	\$	870 00
CC151	Mud Flush	Gal	500	\$	750 00
E100	Pickup Mileage	Mi	100	\$	450 00
E101	Heavy Equipment Mileage	Mi	200	\$	1,500 00
E113	Bultr Delivery	Tm	1040	\$	2,600 00
CE204	Depth Charge: 3,000 Feet To 4,000 Feet	4 Hr	4	\$	2,160 00
CE240	Blending and Mixing	slr	225	\$	315 00
CE504	Plug container	Job	1	\$	250 00
S003	Service Supervisor	Eq	1	\$	175 00

SUB TOTAL \$ 16,880 75

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$
MATERIALS	%TAX ON \$

TOTAL \$ 18,440 38

SERVICE REPRESENTATIVE: R. M. [Signature]

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: [Signature]  
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.





*Depend On Us*

# Post Job Report

## Ammerican Warrior

Houk B-1

Rig Name

10/28/2015

Conductor





Cementing Services  
Field Ticket

Field Ticket Number: MLK10153012      Field Ticket Date: Friday, October 30, 2015

**BUYER:**  
AMERICAN WARRIOR  
GARDEN CITY, KS 67848  
P.O. BOX 399

**Job Name:** 07 Conductor  
**Well Location:** COWLEY, KANSAS  
**Well Name:** HOUK  
**Well Number:** B-1  
**Well Type:** New Well  
**Rig Number:** DUKE 7 #  
**Shipping Point:** Medicine Lodge, KS  
**Sales Office:** Mid Con

PERSONEL		EQUIPMENT	
JAKE HEARD		CEMENTERS PICK-UP 717	
ROGER SMITH		CEMENTERS PICK-UP 920	
KINDEL HOLIMAN		PUMP TRUCK 088-489	
WAYNE RUCKER		BULK TRUCK 950-843	

**SERVICES - SERVICES - SERVICES**

Description	Qty	UOM	Unit Amt	Gross Amt	Unit Net	Discount	Net Amount
PUMP,CASING CEMENT 0-500 FT	1.00	min. 4 hr	1,512.25	1512.25	907.35	40.0%	907.35
PHDL	229.00	per cu. Ft.	2.48	567.92	1.49	40.0%	340.75
DRYG	519.00	ton-mile	2.76	1427.25	1.65	40.0%	856.35
MILV	50.00	per mile	4.40	220.00	2.04	40.0%	132.00
MIHV	50.00	per mile	7.70	385.00	4.62	40.0%	231.00

**MATERIALS - MATERIALS - MATERIALS**

CCAC	210.00	sack	17.90	3,759.00	10.74	40.0%	2,255.40
CA-100	593.00	pound	1.10	652.30	0.66	40.0%	391.38
GGEL	395.00	pound	1.05	414.75	0.63	40.0%	248.85

**ADDITIONAL ITEMS - ADDITIONAL ITEMS - ADDITIONAL ITEMS**

Additional hours, in excess of sol hours		per hour	440.00	0.00	264.00	40.0%	0.00
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	Gross	Discount	Final
Services Total	4,112.42	1,644.97	2,467.45
Equipment Total	0.00	0.00	0.00
Materials Total	4,826.05	1,930.42	2,895.63
Additional Items	0.00	0.00	0.00
<b>Final Total</b>	<b>8,938.47</b>	<b>3,575.39</b>	<b>5,363.08</b>

Attest Rep: JAKE HEARD  
Customer Agent:

This output does NOT include taxes. Applicable sales tax will be billed on the final invoice.  
Customer hereby acknowledges receipt of the materials and services described above and on the attached documents.  
I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the following page.

x *Robert D. Rouch*  
Customer Signature

Field Ticket Total (USD):

**\$5,363.08**

**GENERAL TERMS AND CONDITIONS**

**DEFINITIONS:** In these terms and conditions, "ALLIED" shall mean Allied Oil & Gas Services, LLC, and "CUSTOMER" shall refer to the party identified by that term on the front of this contract. As applicable, "JOB" relates to the services described on the front side of this contract. "MERCHANDISE" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

**TERMS:** Unless satisfactory credit has been established, CUSTOMER must tender full cash payment to ALLIED before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, CUSTOMER agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing, in no event shall this Contract provide for interest exceeding the maximum rate of interest that CUSTOMER may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate. Any amounts previously paid as excess interest shall be deducted from the amounts owing from the CUSTOMER or at the option of ALLIED, refunded directly to CUSTOMER. For purposes of this paragraph, ALLIED and CUSTOMER agree that Kansas law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

Cement Treatment Summary



Slurry Details										
<b>SPACER</b>		Water Req gal/sk		0	Yield ft <sup>3</sup> /sk		0	# Sacks		0
Fluid Composition										
Water										
Total BBL	Average Dens PPG	Average Rate Bpm	Average Press PSI	Max Rate Bpm	Max Press PSI	Planned Dens PPG	Density Accuracy %	Start Time	End Time	
3.25	0	2.1	40	2.24	46	0	100	12:54 AM	12:56 AM	

<b>CEMENT</b>		Water Req gal/sk		0	Yield ft <sup>3</sup> /sk		0	# Sacks		0
Fluid Composition										
Cement										
Total BBL	Average Dens PPG	Average Rate Bpm	Average Press PSI	Max Rate Bpm	Max Press PSI	Planned Dens PPG	Density Accuracy %	Start Time	End Time	
46.09	15.02	2.59	109	3.64	215	0	0	1:00 AM	1:17 AM	

<b>DISPLACEMENT</b>		Water Req gal/sk		0	Yield ft <sup>3</sup> /sk		0	# Sacks		0
Fluid Composition										
Water										
Total BBL	Average Dens PPG	Average Rate Bpm	Average Press PSI	Max Rate Bpm	Max Press PSI	Planned Dens PPG	Density Accuracy %	Start Time	End Time	
2.25	14.22	2.06	46	2.33	62	0	0	1:19 AM	1:20 AM	

Event Summary					
Activity Description (Job Marker)	Dens PPG	Press PSI	Rate bpm	Total bbl	Time
Paused 00:30:45-00:47:55	0.00	24.00	0.00	0.00	12:30:45 AM
PSI TEST 1000	0.00	24.00	0.70	0.00	12:52:31 AM
PUMP SPACER 3 BBL	0.00	24.00	0.00	0.20	12:54:19 AM
START MIX CEMENT	9.10	24.00	0.00	0.00	12:58:28 AM
Pump cement	13.38	24.00	0.00	0.00	12:59:58 AM
DISPLACE 4.25 BBL	15.80	29.00	1.06	47.20	1:18:56 AM
SHUT DOWN	11.90	24.00	0.01	4.10	1:21:17 AM
Paused 01:26:15	13.07	79.00	3.13	5.50	1:26:14 AM



**Cement Job Summary**

Job Number: **MLK151029000** Job Purpose **07 Conductor**

Customer: **AMERICAN WARRIOR** Date: **10/29/2015**

Well Name: **HOUK** Number: **B-1** API/UWI:

County: **COWLEY** City: **GEUDA SPRINGS** State: **KANSAS**

Cust. Rep: Phone: Rig Phone:

Distance **50 miles (one way)** Supervisor **Jake Heard**

Employees:	Emp. ID:	Employees:	Emp. ID:
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JAKE HEARD	#N/A		
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ROGER SMITH	#N/A		
-------------	------	--	--

KINDEL HOLIMAN	0		
----------------	---	--	--

WAYNE RUCKER	#N/A		
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**Equipment:**

CEMENTERS PICK-UP 717

CEMENTERS PICK-UP 929

PUMP TRUCK 986-469

BULK TRUCK 950-643

**Materials - Pumping Schedule**

**STAGE #1**

Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
------------	-------------	-----------	---------	-------	----------------

Spacer 1	FRESH WATER	5	0.00	n/a	n/a
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Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
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Tail 1	CLASS A COMMON	165	14.96	1.34	6.20
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**Slurry: Tail 1** Slurry Name: **CLASS A COMMON**

<b>Quantity:</b> 165 sacks	<b>Blend Vol:</b> 179.39 cu.ft. cu.ft.	<b>Blend Weight:</b> 16285.5 lbs
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Material	Description	Conc. (lb/sk)	Determined by	Load Volume	UOM
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CCAC	CLASS A COMMON	94	% Base Material	15510.0	lbm
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CA-100	CALCIUM CHLORIDE, PELLETS OR FLAKE	2.82	% BWOC	465.3	lbm
--------	------------------------------------	------	--------	-------	-----

CGEL	GEL - BENTONITE	1.88	% BWOC	310.2	lbm
------	-----------------	------	--------	-------	-----

Water	Mixing Water	6.20	gal/sk	1023.0	gal
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Job Number: **MLK151029000** Job Purpose **07 Conductor**

Customer: **AMERICAN WARRIOR** Date: **10/29/2015**

Well Name: **HOUK** Number: **B-1** API/UWI:

County: **COWLEY** City: **GEUDA SPRINGS** State: **KANSAS**

Cust. Rep: Phone: Rig Phone: **0**

Distance **50 miles (one way)** Supervisor **Jake Heard**

DATE	TIME	PRESSURE - (PSI)		FLUID PUMPED DATA		COMMENTS
		CASING	ANNULUS	VOLUME	RATE (BPM)	

10/29/2015	12:00:00 AM					ARRIVE ON LOCATION
------------	-------------	--	--	--	--	--------------------

						SAFETY MEETING
--	--	--	--	--	--	----------------

						SPOT IN RIG UP
--	--	--	--	--	--	----------------

						SAFETY MEETING
--	--	--	--	--	--	----------------

		1000				PRESSURE TEST
--	--	------	--	--	--	---------------

		100		3	3	PUMP SPACER
--	--	-----	--	---	---	-------------

		130		39.37	3.5	MIX AND PUMP CEMENT
--	--	-----	--	-------	-----	---------------------

		80		4.25	2	DISPLACE
--	--	----	--	------	---	----------

						STOP
--	--	--	--	--	--	------

	1:15:00 AM					SHUT IN
--	------------	--	--	--	--	---------

						WASH UP
--	--	--	--	--	--	---------



*Depend On Us*

# Post Job Report

## AMERICAN WARRIOR

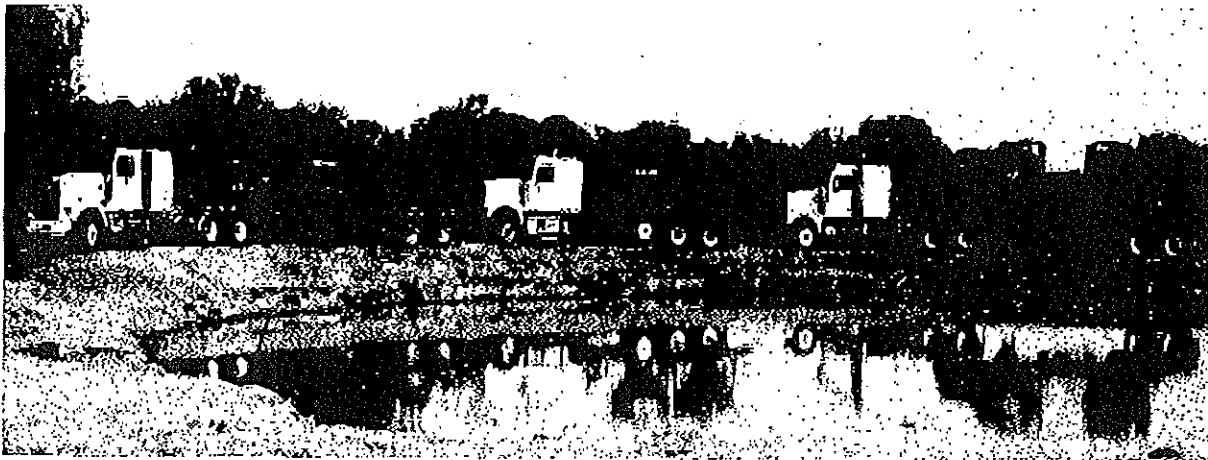
HOUNK SURFACE B1

Rig Name

10/29/2015

Surface

COWLEY, Kansas





Field Ticket Number: **MLK10163012** Field Ticket Date: **Thursday, October 30, 2015**

**Bill To:**  
AMERICAN WARRIOR  
GARDEN CITY, KS 67846  
P.O. BOX 399

**Job Name:** 01 Surface  
**Well Location:** COWLEY, KANSAS  
**Well Name:** HOUK  
**Well Number:** B-1  
**Well Type:** New Well  
**Rig Number:** DUKE 7 #  
**Shipping Point:** Medicine Lodge, KS  
**Sales Office:** Mid Con

PERSONEL		EQUIPMENT	
JAKE HEARD		CEMENTERS PICK-UP 717	
ROGER SMITH		CEMENTERS PICK-UP 929	
KINDEL HOLIMAN		PUMP TRUCK 986-469	
WAYNE RUCKER		BULK TRUCK 950-643	

**SERVICES - SERVICES - SERVICES**

Description	Qty	UOM	Unit Amt	Gross Amt	Unit Price	Discount	Net Amount
PUMP,CASING CEMENT 0-500 FT	1.00	min. 4 hr	1,512.25	1512.25	907.35	40.0%	907.35
CMLP	1.00	per day	275.00	275.00	165.00	40.0%	165.00
PHDL	229.00	per cu. Ft.	2.48	567.92	1.49	40.0%	340.75
DRYG	519.00	ton-mile	2.75	1427.25	1.65	40.0%	856.35
MILV	50.00	per mile	4.40	220.00	2.64	40.0%	132.00
MIHV	50.00	per mile	7.70	385.00	4.62	40.0%	231.00

**FLOAT EQUIPMENT -- FLOAT EQUIPMENT -- FLOAT EQUIPMENT**

TRP-8.625	1.00	each	131.00	131.00	78.60	40.0%	78.60
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**MATERIALS - MATERIALS - MATERIALS**

CCAC	210.00	sack	17.90	3,759.00	10.74	40.0%	2,255.40
CA-100	593.00	pound	1.10	652.30	0.66	40.0%	391.38
CGEL	395.00	pound	1.05	414.75	0.63	40.0%	248.85

**ADDITIONAL ITEMS - ADDITIONAL ITEMS - ADDITIONAL ITEMS**

Additional hours, in excess of set hours		per hour	440.00	0.00	264.00	40.0%	0.00
--	--	----------	--------	------	--------	-------	------

	Gross	Discount	Final
Services Total	4,387.42	1,754.97	2,632.45
Equipment Total	131.00	52.40	78.60
Materials Total	4,826.05	1,930.42	2,895.63
Additional Items	0.00	0.00	0.00
<b>Final Total</b>	<b>9,344.47</b>	<b>3,737.79</b>	<b>5,606.68</b>

Allied Rep: JAKE HEARD  
Customer Agent: GALEN D. ROACH

This output does NOT include taxes. Applicable sales tax will be billed on the final invoice.  
Customer hereby acknowledges receipt of the materials and services described above and on the attached documents.  
I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the following page.

X \_\_\_\_\_ Field Ticket Total (USD): **\$5,606.68**  
Customer Signature

**GENERAL TERMS AND CONDITIONS**

DEFINITIONS: In these terms and conditions, "ALLIED" shall mean Allied Oil & Gas Services, LLC, and "CUSTOMER" shall refer to the party identified by that term on the front of this contract. As applicable, "JOB" relates to the services described on the front side of this contract, "MERCHANDISE" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.



CEMENTING - DISPATCH SHEET

Job Number	By Kevin Brungardt	Field	Date 10/29/2015
Company American Warrior	Rep Galen Roach	Phone 620-786-1728	
Lease Name and Number Houk B-1	Drilling Contractor Duke Drilling #7		
County Cowley	State Kansas	Township 34S	
Formation	Section 6	Range 03E	
Tubing Size & Weight	Depth	Casing Size & Weight 8.625" x 24.0#	Depth 325'
Type Job Surface Casing	Pre Flush Fresh Water	Hole Size 12.25"	

**1st Stage** 175 sacks Class A + 3% Calcium Chloride + 2% Gel

Lead	Yield 1.94	Weight 15.2	Water 6.51	Tail	Yield	Weight	Water
------	------------	-------------	------------	------	-------	--------	-------

**2nd Stage**

Lead	Yield	Weight	Water	Tail	Yield	Weight	Water
------	-------	--------	-------	------	-------	--------	-------

Location	Pump Time	Call in Time	Yard Time
Top Plug	Bottom Plug	Displacement Fresh Water	Type (Fluid)

They will have 45' of 13 3/8" conductor set  
 OR GO TO MM#13 ON HWY. 166, then North 5.0 miles, East 1.0 miles, South 1.0 miles, East 0.75 miles, S/E into

Cementer Roger Smith	Unit #	Directions
Kindel Holman		Gaude Springs, Kansas
Wayne Rucker		West 1.0 miles
		North 1.0 miles
		East 1.0 miles
		South 1.0 miles
		East 0.75 miles
		S/E into

Front Pot	Unit No.	Back Pot	Front Pot	Unit No.	Back Pot
Materials	Pounds	Materials	Pounds	Materials	Pounds
Class A	16450				
Calcium Chloride	329				
Gel	329				
175 sacks					
<b>Total Pounds</b>	<b>17108</b>	<b>Total Pounds</b>	<b>Total Pounds</b>	<b>Total Pounds</b>	<b>Total Pounds</b>





Cement Treatment Summary



Slurry Details										
<b>ESPACER</b>		Water Req gal/sk		0	Yield ft <sup>3</sup> /sk		0	# Sacks		0
Fluid Composition										
WATER										
Total BBL	Average Dens PPG	Average Rate Bpm	Average Press PSI	Max Rate Bpm	Max Press PSI	Planned Dens PPG	Density Accuracy %	Start Time	End Time	
2.56	7.61	2	74	3.08	129	0	0	12:49 AM	12:50 AM	

<b>CEMENT</b>		Water Req gal/sk		6.51	Yield ft <sup>3</sup> /sk		1.34	# Sacks		2.10
Fluid Composition										
CEMENT										
Total BBL	Average Dens PPG	Average Rate Bpm	Average Press PSI	Max Rate Bpm	Max Press PSI	Planned Dens PPG	Density Accuracy %	Start Time	End Time	
63.33	14.7	5.31	265	5.66	306	0	0	12:52 AM	1:04 AM	

<b>DISPLACEMENT</b>		Water Req gal/sk		0	Yield ft <sup>3</sup> /sk		0	# Sacks		0
Fluid Composition										
WATER										
Total BBL	Average Dens PPG	Average Rate Bpm	Average Press PSI	Max Rate Bpm	Max Press PSI	Planned Dens PPG	Density Accuracy %	Start Time	End Time	
17.5	5.2	3.51	77	4.91	203	0	11.22	1:07 AM	1:15 AM	

Event Summary					
Activity Description (Job Marker)	Dens PPG	Press PSI	Rate bpm	Total bbl	Time
PSI TEST	8.26	875.00	1.40	8.60	12:47:24 AM
PUMP SPACER 3 BBL	8.08	46.00	1.52	0.00	12:49:39 AM
Pump cement	14.17	40.00	0.78	1.20	12:52:22 AM
SHUT DOWN	11.38	64.00	1.85	66.70	1:04:29 AM
Drop plug	12.30	24.00	0.00	66.70	1:05:57 AM
STAER DISPLMENT	12.09	50.00	0.65	66.70	1:07:35 AM
SHUT DOWN	7.36	139.00	2.50	21.50	1:15:53 AM
Paused 01:26:01	7.34	24.00	0.00	21.90	1:26:01 AM



COMPANY: \_\_\_\_\_ DATE: \_\_\_\_\_

WELL NAME: \_\_\_\_\_

LEGALS: 6-345-3E

Clarksburg, WV  
(304) 626-3078

Russell, KS  
(785) 483-2627

Great Bend, KS  
(620) 793-5861

Oakley, KS  
(785) 672-3452

Muncy, PA  
(570) 546-0357

Medicine Lodge, KS  
(620) 886-5926

Liberal, KS  
(620) 624-5937

VOL. BETWEEN PIPE & HOLE GAP

	DBUFT	FT/DBL	CF/LF
4 1/2 - 7 7/8	.0105	24.85	.2278
5 1/2 - 7 7/8	.0099	32.41	.1733
6 0/8 - 12 1/4	.0735	10.01	.4127
8 5/8 - 12 1/4	.0523	17.93	.3132
13 3/8 - 17 1/2	.1924	8.03	.8246

TUBING & CASING SIZE & GAP

	WT.	DBUFT	FT/DBL
2 3/8	4.6	.0039	258.61
2 7/8	6.5	.0038	172.78
3 1/2	9.3	.0047	114.93
4 1/2	10.3	.0159	62.70
4 1/2	11.6	.0155	64.34
5 1/2	15.5	.0238	42.01
5 1/2	17.0	.0232	43.02
5 1/2	20.0	.0222	45.09
6 1/2	23.9	.0212	47.20
6 5/8	32.0	.0209	16.41
6 5/8	36.0	.0773	12.94

D.P. SIZE: \_\_\_\_\_ TUBING SIZE: \_\_\_\_\_ CASING SIZE: \_\_\_\_\_

HOLE SIZE: \_\_\_\_\_ PERFS: \_\_\_\_\_

PACKER SETTING: \_\_\_\_\_ BP SETTING: \_\_\_\_\_ MAX RATE: \_\_\_\_\_

MAX PSI: \_\_\_\_\_ BHST: \_\_\_\_\_ FORM: \_\_\_\_\_ TAIL PIPE: \_\_\_\_\_

VOL. BETWEEN PIPE & PIPE GAP

	WT.	DBUFT	FT/DBL	CF/LF
2 3/8 - 4 1/2	11.6	.0101	89.37	.0555
2 3/8 - 6 1/2	17.0	.0178	56.28	.0358
2 7/8 - 5 1/2	17.0	.0152	65.71	.0154
2 7/8 - 7	23.0	.0313	31.91	.1760

12 1/4" 315'

8 5/8 2 1/4" .0636

P.P.C. 295.4' 20' Shoe Joint

275.4 x .0636 = 17.5 BBL DISPL

.4127 x 295' = 121.7

1.34 15.2 6.51

265 ft

3575 7.15 ft

128.85 ft

31 BBL mix H2O

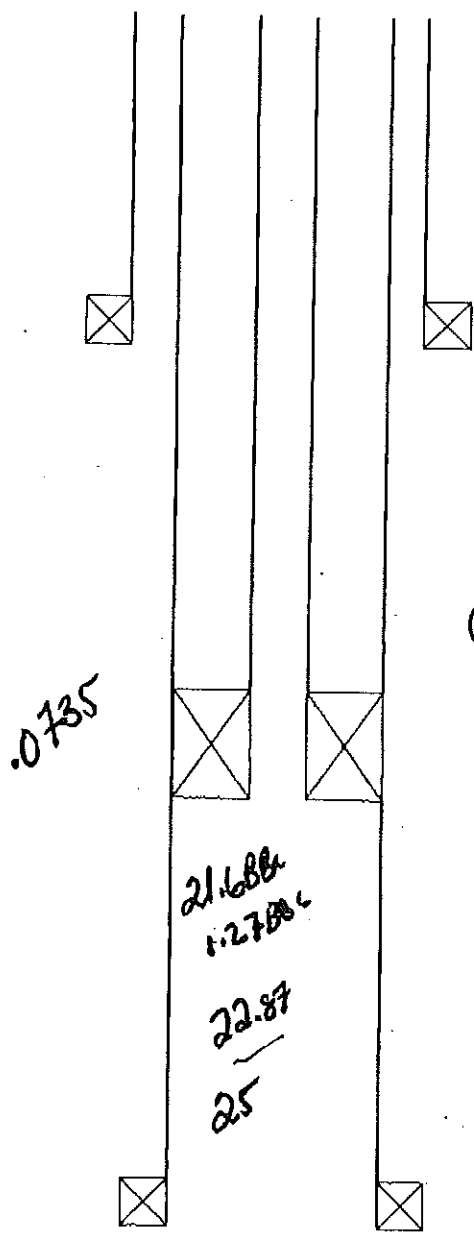
47.7 BBL CMF

1048 PSI

.7896

.483 v

.3566







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior

**6-34S-3E Cowley**

PO Box 399  
Garden City, KS 67846

**1 B Houk**

Job Ticket: 57921

**DST#: 3**

ATTN: Dan Johnson

Test Start: 2015.11.03 @ 19:23:47

## 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: 51.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
2.00	Mud	0.010

Total Length: 2.00 ft      Total Volume: 0.010 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

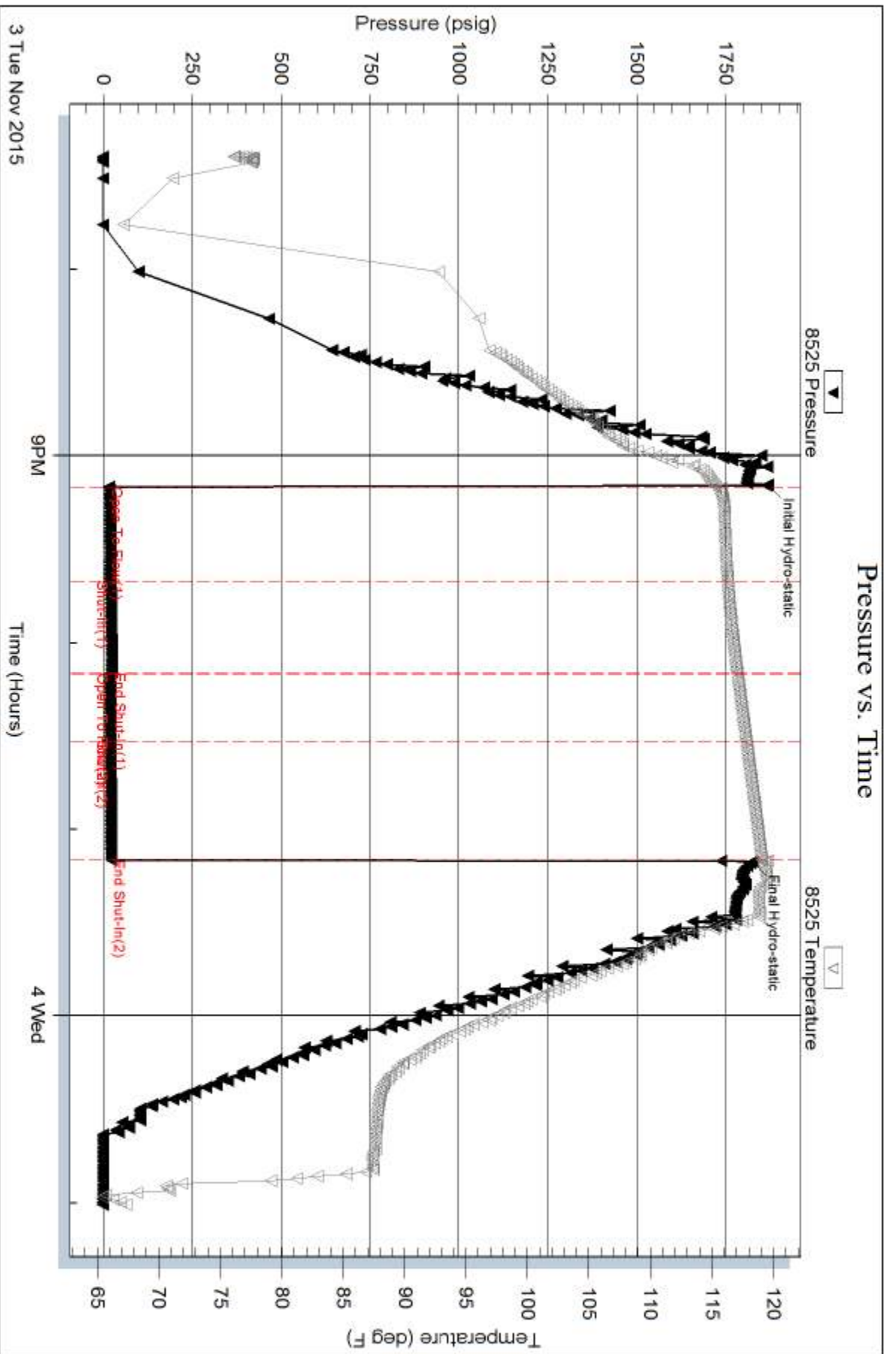
Serial #: 8525

Inside

American Warrior

1 B Houk

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 57921

Printed: 2015.11.04 @ 08:20:20